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TABULATED COMMUNICATION CHARACTERISTICS OF A STEADY-STATE MODEL OF INTERPLANETARY SPACE

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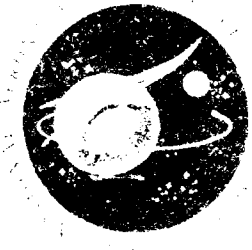

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TABULATED COMMUNICATION CHARACTERISTICS OF A STEADY-STATE MODEL OF INTERPLANETARY SPACE

Ronald J. Hruby, Austin H. Somes,
John Dimeff, and Howard Tashjian

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TABULATED COMMUNICATION CHARACTERISTICS OF A STEADY-STATE MODEL OF INTERPLANETARY SPACE

By Ronald J. Hruby, Austin H. Somes,
John Dimeff, and Howard Tashjian

Ames Research Center

SUMMARY

The changes in an electromagnetic wave as it passes through interplanetary and coronal space depend on the intervening plasma and magnetic fields. These changes are presented here as a function of the transmission range and the view angle relative to the Earth-Sun line in the ecliptic plane. This information can be used to determine the total change in an electromagnetic wave between any two points in the Earth-Sun volume excluding the magnetosphere.

Models for the electron density, the magnetic fields, and the solar wind were derived from the best available estimates and experimental data. Tabulated data are derived from a steady-state model of the coronal space corresponding to a simplified quiet Sun. The spiral pattern of the magnetic field model is considered to have no disordering effects, and the model of the electron density is a function of solar radial distance only. The interplanetary space is considered to be a neutral plasma with equal densities of electrons and protons. The data supporting the physical models will probably not be changed significantly until solar probes have functioned in the corona. Transient changes or considerations of high solar activity are not included in the main tables, and applications of the tabulated data are limited by the sensitivity of the steady model to dynamic perturbations. Changes in the tabulated data due to solar activity can be estimated from table II of partial derivatives.

Communication between any two points within the Earth's orbit and in the ecliptic plane can be analyzed from the tabulated data in this report.

INTRODUCTION

Minute changes in the carrier frequency, phase, and amplitude of signals received from interplanetary probes have been used for measuring the properties of interplanetary and coronal space. For these measurements, data are needed for reference and planning purposes. It is the purpose here to provide a set of reference data that can be used for communication experiments in space.

The quasi-longitudinal approximation was used to compute the signal data (ref. 1). The propagation parameters (group velocity, phase velocity, attenuation, doppler shift, and refraction angle) were derived from the

quasi-longitudinal approximation to the ordinary and extraordinary indexes of refraction. The relative motion between the transmitter and the receiver causes a longitudinal (range rate) doppler shift and a normal (view angle rate) doppler shift. The solar wind causes a phase shift similar to an integrated doppler shift when the solar particle velocities are relativistic.

The tabulated data are organized into three sections. Table I includes information that is only a function of solar radial distance. Table II includes information that is a function of solar radial distance and propagation frequency. Table III, comprising the main body of data, presents the integrated communication characteristics along the curved propagation paths for several different frequencies. (Curvature of the propagating path is the result of the variation of electron density which makes the corona appear to be a large divergent lens.)

The following frequencies have been chosen for the computation of propagation parameters:

49.8 MHz
166.0 MHz
423.3 MHz
1,420.0 MHz
2,295.0 MHz
7,750.0 MHz
15,500.0 MHz

These frequencies were chosen because they are commonly used by more than one facility and they form a geometric progression of about a factor of 3. The Stanford-Pioneer VI communication experimental frequencies are 49.8 and 423.3 MHz. With the table of partial derivatives, one of Arecibo's operating frequencies (430 MHz) can be evaluated (Air Force Cambridge Research Laboratory Ionospheric Research Facility). The frequencies 166.0 and 1,420.0 MHz correspond to hydrogen and hydroxal ion absorption. The Pioneer VI DSIF command frequency is 2,295 MHz. The M.I.T. Haystack radar frequency, 7,750 MHz, can be extrapolated to Haystack's radiometry frequency (8,000 MHz) with the table of partial derivatives; 15,500 MHz is also an M.I.T. Haystack radiometry frequency.

To provide data related to small changes in transmitter and receiver positions, the tabulated data are listed to four significant figures even though the physical variables are generally known from experimental measurements only to one significant figure. The local magnetic field differs drastically from the spiral field in direction, but the integrated differences approach zero over large distances. The accuracy of the tabulated data is related to the accuracy of the hypothetical model selected. To provide for variability, a complete set of partial derivatives is listed in table II so that the user can change the tables in accordance with physical constants different from those used in the present paper.

ELECTROMAGNETIC PROPAGATION MODEL FOR INTERPLANETARY SPACE

Model of the Interplanetary Plasma

It is believed that the interplanetary gas is a completely ionized neutral plasma (ref. 2). The basis for assuming complete ionization is that the gas temperature is about 50,000° K at the Earth's orbit (ref. 3) and ranges upward to about 1,000,000° K at the Sun's corona (ref. 4).

The propagation characteristics depend upon the plasma frequency which, in turn, is related to the free electron density, N, by the equation (ref. 1):

$$f_N = \frac{1}{2\pi}\left(\frac{Ne^2}{\epsilon_o m}\right)^{1/2} \tag{1}$$

The value of electron density as a function of distance from the Sun is included in table I. For distances within 20 solar radii of the Sun, the electron density has been estimated by measurements made during solar eclipses (ref. 4). From these measurements, Baumbach (ref. 5) derived the following formula for the electron density which is applicable from 1 to 3 solar radii from the center of the Sun.

$$N = 10^{14}(1.55\rho^{-6} + 2.99\rho^{-16}), \quad \text{electrons/m}^3 \tag{2}$$

From about 3 to 20 solar radii, the electron density distribution has been computed by Blackwell (ref. 6) from measurements of the polarization of light emitted from the solar corona. The specific value for electron density at 3 solar radii has been matched to Baumbach's formula and the corrected data are included in table I.

Beyond 20 solar radii, past the Earth's orbit, the electron density has been estimated from polarization measurements made by Blackwell and Ingham (ref. 7) on zodiacal light, and also from estimates of light pressure acting on comet tails (refs. 8, 9, and 10). The original data from the zodiacal light measurement indicate an electron density at the Earth's orbit of about 600×10^6 electrons/m^3; other data, however, including satellite measurements, have indicated a much lower value (ref. 11). The data from the Mariner probe indicate an electron density of from 5×10^6 to 20×10^6 electrons/m^3 (ref. 3). Recent satellite measurements from the Pioneer VI Radio Propagation Experiment indicate a density of 8 to 9 electrons/cm^3 (ref. 12). The value used in the present paper, 7.9×10^6 electrons/m^3, is consistent with Mariner, IMP-I (ref. 13), and Pioneer VI data. Between 20 solar radii and the Earth's orbit, a constant exponential interpolation connects the satellite data with Blackwell's polarization measurements.

A second property of the interplanetary plasma of interest is the collision frequency of the free electrons with positive ions. This quantity cannot be measured directly but is a function of the electron gas temperature and the particle density. The collision frequency as given by reference 14 is

$$\nu = 5.26\times10^{-6}T^{-3/2}N \log_e(1.24\times10^{7}T^{3/2}N^{-1/2}), \quad \text{rad/sec} \tag{3}$$

As previously mentioned, the temperature of the corona near the Sun is approximately 1,000,000° K (ref. 4), while at the vicinity of the Earth's orbit it is about 50,000° K (ref. 3). In table I, values for the temperatu are given for various distances from the Sun within 20 solar radii, as presented by Pottasch (ref. 15), and are extrapolated to the Earth's orbit to complete the table. The extrapolated values are within the same order of magnitude as those measured from line broadening in the corona (ref. 4) and from satellite measurements at 1 AU (ref. 3).

Quiet Model of the Interplanetary Magnetic Field

There is much uncertainty as to the magnitude and direction of the interplanetary magnetic field. At the surface of the Sun, the strength of the steady magnetic field is considered to be between 10^{-4} and 50×10^{-4} Wb/m^2, and evidence suggests that it reverses after every sunspot cycle (ref. 16). The magnitude of the tabulated data does not depend upon the magnetic field direction.

Initial measurements of the field at the Earth's distance from the Sun were obtained by Pioneer V (1960) and confirmed by IMP-I (1964) with an indicated accuracy of $\pm0.258\gamma$ (ref. 13). From these data, the steady magnetic field component parallel to the ecliptic plane was estimated to be $4.58 \pm 1.58\gamma$ with an angle of 45° with respect to the radial vector from the Sun (ref. 13). Data from reference 13 indicate that the magnetic field vector tends to be parallel or antiparallel to the 45° line at the Earth's orbit. This tends to confirm the latest theories of the interplanetary magnetic field which indicate that the Sun's magnetic field is trapped in the radial solar wind. Because of the rotation of the Sun, this field would assume a spiral shape except for solar flare-induced disordering (refs. 2 and 17). In 1958, E. Parker of the University of Chicago first proposed a large-scale model of the interplanetary magnetic field on the basis of the supersonic character of the solar wind and the Sun's magnetic dipole moment (ref. 17). This model has been confirmed by Pioneer VI measurements (ref. 18).

For this paper, it will be assumed that the solar field is in the form of an Archimedes' spiral as originally proposed by Parker and confirmed by satellite measurements. This field has the form

$$B = B_0\left(\frac{R_0}{\rho}\right)^2\left\{1 + \Omega^2[\rho - F(\rho)]^2/V^2\right\}^{1/2} \tag{4}$$

Due to the rotation of the corona, $F(\rho)$ is a function of distance from the Sun; it has not been determined accurately but is known to be small at the Earth's orbit (ref. 14). The assumption of a field in the form of an Archimedes' spiral is equivalent to assuming that $F(\rho) = 0$ and V is a constant.

The general model of the solar field is supported by experimental data from several sources. Reevaluated data from Pioneer V (1960) indicate an initial value of 5 γ for the field at the Earth's orbit (ref. 2). This was further supported by data from the Mariner II Venus probe. McCracken substantiated these measurements by correlation studies of solar proton events monitored by a worldwide system of neutron monitors (ref. 9). Ness and Wilcox (1964), with IMP-I data, confirmed the 3 to 6 level of field strength and showed that the spiral, large-scale structure of the magnetic field (ecliptic plane component) is consistent with the tendency of the vector direction of the field to be parallel or antiparallel with the 45° theoretical line at the Earth's radius with respect to the solar radial vector (ref. 13). This picture has been substantiated by the initial results of Pioneer VI (ref. 18).

For this paper, the total magnetic field is separated into components parallel and perpendicular to the radial vector from the Sun in the ecliptic plane. The field components are

$$\left.\begin{aligned} B_r &= B_o\left(\frac{R_o}{\rho}\right)^2 \\ B_\varphi &= B_o\,\frac{R_o^2\Omega}{\rho V} \end{aligned}\right\} \qquad (5)$$

At the Earth's orbit,

$$B_r = 3.526\ \gamma\ ; \qquad B_\varphi = 3.527\,\gamma; \qquad B = 5.000\ \gamma$$

Propagation Path Equations

The physical system considered is that of an electromagnetic wave traveling from a source point, T, on the orbit of the Earth's center to a receiving point, R, in the ecliptic plane as shown in figure 1. Between points T and R is the interplanetary medium of free electrons, heavier ions, and the magnetic field that the wave must traverse. Situations of this type have been analyzed in terms of magnetoionic theory (ref. 1). The more important fundamental relations from that theory are summarized here.

A wave propagating from T is related in time and space by the exponential term $\exp[i(2\pi f_o t - \overline{k}_f \cdot \overline{Z})]$. This defines a phase velocity as

$$\text{Phase velocity} = 2\pi f_o/(\text{real part of } k_f) = v_\varphi \qquad (6)$$

and a related index of refraction as

$$\text{Index of refraction} = c/(2\pi f_o/k_f) = n_\varphi \qquad (7)$$

For a magnetoionic medium that includes the effects of collisions between particles, the index of refraction, which includes the quasi-longitudinal approximation, is given by

$$(\mu - i\chi)^2 = 1 - \frac{(f_N/f_o)^2}{1 - i\nu/2\pi f_o \pm \omega_L/2\pi f_o} = (n_\varphi)^2 \qquad (8)$$

The (+) indicates the index for the ordinary wave, (-) the index for the extraordinary wave. Figure 1 shows the magnetostatic field vector, B, and its components normal and parallel to the Sun-receiver and Sun-transmitter lines.

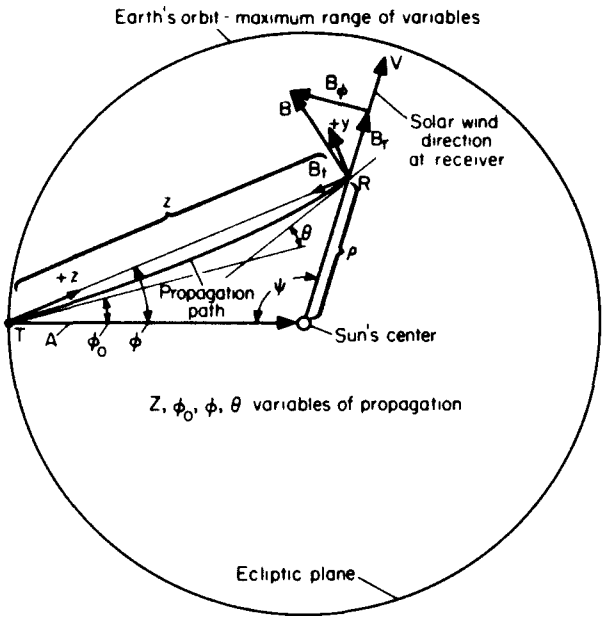


Figure 1.- Coordinate system for propagation data.

All data presented in this paper are based on the coordinate system shown in figure 1. The range coordinate Z is measured from the point T in the Earth's orbit, and φ is the angle between the line from T to the Sun and the line from T to the receiving point R. The propagation path length Z_r is measured along the actual path between T and R.

The actual transmission path is curved; hence, the initial look angle is denoted by φ_o and the look angle along the ray path from T is φ. These coordinates are shown in figure 1.

The communication parameters θ, Z, and φ are chosen to be functions of ρ and ψ (ρ and ψ then become the propagation path independent variables). The propagation path variables Z_r and ψ are line integral functions between the receiver and the transmitter. The independent variables of propagation path synthesis are the solar radial distance and the index of refraction μ. The path synthesis equations are derived from symmetrical spherical shell refraction. The angle of refraction at the (n + 1) shell (counting toward the center) is related to the angle of incidence at the nth shell (wave front lies in the n - 1 shell) by Snell's law, which gives the angle of refraction in the nth shell, and by the law of cosines for triangles which gives the angle of incidence of the (n + 1) shell for the nth propagation path differential length dZ_r and the angle of refraction of the nth shell. These relations are shown in equations (9) (ref. 19).

The ratio of the orthogonal components of either the electric vector or the magnetic vector is the polarization for either the ordinary or extraordinary wave (ref. 1). The polarization for the two waves is also given in equations (9), which reflect the simplification of the quasi-longitudinal approximation and show that the two waves are circularly polarized in opposite senses.

$$
\left.
\begin{aligned}
\theta &= \sin^{-1}[A(\mu_A/\mu\rho)\sin\varphi_o] - \varphi_o - \psi \\
Z &= \sqrt{(A^2 + \rho^2 - 2A\rho\cos\psi)} \\
\varphi &= \sin^{-1}[(\rho/Z)\sin\psi] \\
Z_r &= \int_\rho^A (1 - \mu_A{}^2A^2\sin^2\varphi_o/\mu^2\rho^2)^{-1/2}\,d\rho \\
\varphi &= \int_\rho^A (\mu_A A\sin\varphi_o/\rho)(\mu^2\rho^2 - \mu_A{}^2A^2\sin^2\varphi_o)^{-1/2}\,d\rho \\
\text{Polarization - ordinary} &= {}_o(E_x/E_y) = -{}_o(H_y/H_x) = -i \\
\text{Polarization - extraordinary} &= {}_x(E_x/E_y) = {}_x(H_y/H_x) = +i
\end{aligned}
\right\} \qquad (9)
$$

In general, there are two paths for both the ordinary and extraordinary waves between the transmitter and the receiver in coronal space. These paths are analogous to the "high" and "low" paths of propagation in the Earth's ionosphere. In appendix B, a method for locating the specific paths is outlined. Once these paths are known, the relative signal strengths and phase shifts can be obtained using data tabulated in table III. To determine whether the multipath problem induces serious fading, the relative signal strength and phase for the two paths should be compared. The signal strength density along a specific path is proportional to $(1/\beta Z_r)^2$. If noncircular polarization is used, a Faraday rotation signal strength factor must also be included (see Phase Propagation). The total phase shift can be calculated readily from ${}_oT_t$ and ${}_xT_t$ for each path; hence, the net phase shift can be determined. Data for the dispersion in the rate of phase change along the path can be read from the frequency of the periodic fading.

The Quasi-Longitudinal Approximation

In applying the equation for the complex refractive index to the calculation of electromagnetic transmission parameters, a considerable simplification was obtained by using the quasi-longitudinal approximation (ref. 1). The approximation becomes inaccurate near the surface of the Sun. The tabulated data list only those points where the quasi-longitudinal approximation given in reference 1 is valid.

The transmitter emits a plane wave that is separated into two circularly polarized waves. The electric vector is normal to the Z direction and rotates around it. The maximum coupling occurs between the static magnetic field via the electron gas to the propagation coefficients of the ordinary and extraordinary wave when the electric vector is perpendicular to the magnetostatic field. The electric field of the two traveling waves is always perpendicular to the magnetic field component which is parallel to the direction of propagation (along Z) in the ecliptic plane. This is the component used in the quasi-longitudinal approximation. The magnetostatic component perpendicular to the Z direction is sequentially parallel, antiparallel, perpendicular,

and antiperpendicular to the electric vector; hence, its integrated effect tends to be zero for circular polarization.

Phase Propagation

A constant phase point in an electromagnetic wave travels at a velocity defined by equation (6).

The wave is attenuated if the imaginary part of the index of refraction is not zero. The attenuation for a magnetoionic medium is

$$\frac{\text{Field magnitude at } Z_r}{\text{Field magnitude at } Z_{r=o}} = \begin{cases} \exp(-{}_o\kappa_t) = \int_o^{Z_r} \exp(-{}_o\kappa Z_r)dZ_r \\ \exp(-{}_x\kappa_t) = \int_o^{Z_r} \exp(-{}_x\kappa Z_r)dZ_r \end{cases} \tag{10}$$

$$\left.{}_o\kappa = 2\pi f_{o_o}\chi/c\right\} \text{ ordinary}$$

$$\left.{}_x\kappa = 2\pi f_{o_x}\chi/c\right\} \text{ extraordinary}$$

The ordinary wave and the extraordinary wave have different values for the real (μ) and imaginary (χ) parts of the index of refraction. They are functions of the plasma frequency, the excitation frequency, the collision frequency, and the normal and transverse gyromagnetic frequencies.

The general relation for the phase transmission time between two points is

$$\left.\begin{aligned} {}_oT_t &= \int_o^{Z_r} ({}_o\mu/c)dZ_r \\ {}_xT_t &= \int_o^{Z_r} ({}_x\mu/c)dZ_r \end{aligned}\right\} \tag{11}$$

The Faraday rotation is the angle between the major axis of the polarization ellipse at Z and its value in a vacuum. The Faraday rotation angle is a function of the differential phase transmission time as shown in equation (12) (viewed toward positive Z).

The tabulated data include the real component of the index of refraction, the attenuation per meter and total attenuation, and the phase transmission time for both the ordinary and extraordinary wave. The Faraday rotation, as a function of the differential phase transmission time, is (ref. 20)

$$\text{Faraday rotation angle} = 180\ f_o({}_oT_t - {}_xT_t) = \alpha_F\ ,\ \text{deg} \tag{12}$$

The Faraday rotation angle is not listed in table III because it can be calculated readily from ${}_oT_t$ and ${}_xT_t$.

Group Propagation

Discontinuities in electromagnetic wave fronts are transmitted at a group velocity equivalent to frequency, amplitude, or phase modulation transmission velocity for the order of accuracy of the quasi-longitudinal approximation. Power (hence, information) is generally considered to be transmitted at the group velocity; however, in a magnetoionic medium the rate of energy propagation is different from the group velocity (ref. 21). The two propagation rates are nearly equal in a normally dispersive medium and are asymptotic at very high frequency. For the conditions of this study, the communication carrier frequency is much higher than the plasma frequency and the two propagation rates are essentially the same. The mathematical definition for group velocity (ref. 1) is

$$\text{Group velocity} = \left(\frac{d\omega}{dk_f}\right)\Bigg|_{\omega = \frac{2\pi c}{\lambda\mu}} = \left\{\frac{c}{\mu} - \lambda\left[\frac{\partial(c/\mu)}{\partial\lambda}\right]\right\} \tag{13}$$

The group index of refraction and the group transmission time are parameters which give a measure of the time required for transmitting a given change in the carrier envelope or a change in transmitted power level. The defining equation for group index of refraction is

$$\text{Group index of refraction} = \frac{c}{\text{group velocity}} = \begin{cases} {}_o\mu' \Rightarrow \text{ordinary} \\ {}_x\mu' \Rightarrow \text{extraordinary} \end{cases} \tag{14}$$

The transmission time for a wave packet or any discontinuity in the carrier envelope or phase is

$$\left.\begin{aligned} \text{Transmission time} = T_g &= \int_T^R \frac{dZ}{\text{group velocity}} \\ {}_oT_g &= \int^Z \frac{{}_o\mu'}{c}\, dZ \Rightarrow \text{ordinary wave} \\ {}_xT_g &= \int^Z \frac{{}_x\mu'}{c}\, dZ \Rightarrow \text{extraordinary wave} \end{aligned}\right\} \tag{15}$$

The tabulated data list the group index of refraction and the group transmission time for both the ordinary and extraordinary waves. The group transmission time is an integral from the transmitting point to the receiving point along the ray path.

Doppler Shift

Variations in the local index of refraction will produce changes in the apparent local wavelength, but as long as the system remains constant, the received frequency remains the same. The received carrier frequency will differ from the transmitted frequency in any dynamic situation which produces a changing total phase path length. This can occur if there is relative motion between the transmitter and receiver, or if the index of refraction changes during the transmission interval. The relation for nonrelativistic doppler shift in frequency (ref. 22) is

$$\left.\begin{aligned} \text{Doppler shift} = f_o|_T - f_o|_R &= \frac{f_o}{c}\frac{d}{dt}\left(\int^{Z_r} \mu \, dZ_r\right) \\ {}_oD_z &= \frac{f_o}{c}\,{}_o\mu \\ {}_xD_z &= \frac{f_o}{c}\,{}_x\mu \\ {}_oD_y &= \frac{f_o}{c}\frac{1}{Z}\int^{Z_r}\frac{\partial_o\mu}{\partial\varphi}\,dZ_r \\ {}_xD_y &= \frac{f_o}{c}\frac{1}{Z}\int^{Z_r}\frac{\partial_x\mu}{\partial\varphi}\,dZ_r \end{aligned}\right\} \tag{16}$$

Four normalized doppler components arising from the relative velocity normal and parallel to Z_r, respectively, are listed in the tabulated data. The doppler shift due to motion normal to the propagation path is zero if there is no gradient in the index of refraction; consequently, the doppler shift introduced by this effect is a measure of the integrated gradient of the electron density.

Plane Wave Relativistic Phase Shift

The relativistic phase shift (α) has been considered theoretically for zero magnetic field in reference 23. That study considered a plane wave (electric and magnetic vector normal to Z direction) separated into two plane components of constant polarization and propagating through an ionic medium in which the electrons move outward from the Sun with a relativistic velocity. One wave, the "ordinary" wave, is polarized linearly normal to the electron stream direction, and normal to the ecliptic plane. The second wave, the "extraordinary" wave, is polarized linearly normal to the ordinary wave; hence, it lies in the ecliptic plane and makes an angle $((\pi/2) - \varphi - \psi)$ with respect to the electron stream direction. At the receiver, the two waves combine to give a net phase shift relative to propagation in a nonstreaming plasma. Propagation of the ordinary wave is identical to a plane wave in a

low energy plasma except the electron mass has a relativistic correction. The extraordinary wave is affected in three ways: (1) The electron interaction with the magnetic field is no longer negligible compared to the acceleration by the electric field; (2) Motion of the electron relative to the field causes the electrons to "see" a doppler shift; and (3) The relativistic mass-momentum effects cause unsymmetrical accelerations normal and parallel to the electron stream. The data presented herein are the net phase shifts of the combined waves. As shown in reference 23, these effects are small.

The solar wind direction is assumed to be radial from the Sun's center and to make an angle $(\pi - \psi - \varphi_o - \theta)$ with respect to the direction of propagation. The integrated relativistic phase shift per meter is

$$\text{Integrated relativistic phase shift} = \int_T^R {}_ok_r - {}_xk_r \, dZ \qquad (17)$$

$$\alpha = {}_ok_r - {}_xk_r \; ; \qquad \overline{\theta} = \frac{\pi}{2} - \psi - \varphi - \varphi_o$$

$$b = v/c \; ; \qquad N\eta(v) = \text{number of electrons with velocity } v$$

$${}_ok_r = \frac{180\ f_o}{c}\left\{1 - \left(\frac{eN^2}{4\pi^2 f_o{}^2 m\epsilon_o}\right)\left[\int^V (1 - b^2)^{1/2}\eta(v)dv\right]\right\}^{1/2}$$

$${}_xk_r = \frac{180\ f_o}{c}\left(1 - F_1 + \frac{F_2 \cdot F_3}{F_4}\right)^{1/2}$$

$$F_1 = \frac{e^2N}{4\pi f_o{}^2 m\epsilon_o}\int^V \eta(v)(1 - b^2)^{1/2}\left(1 - b^2 + b^2 \sin\overline{\theta} - \frac{b^3 \sin\overline{\theta}\cos^2\overline{\theta}}{1 - b\sin\overline{\theta}}\right)dv$$

$$F_2 = \frac{e^2N}{4\pi^2 f_o{}^2 m\epsilon_o}\int^V \frac{\eta(v)(1-b^2)^{1/2}[b\cos\overline{\theta}(1-b^2+b^2\cos^2\overline{\theta})-b^3\sin\overline{\theta}\cos\overline{\theta}]dv}{1 - b\sin\overline{\theta}}$$

$$F_3 = \frac{e^2N}{4\pi^2 f_o{}^2 m\epsilon_o}\int^V \frac{\eta(v)(1 - b^2)^{1/2}b^2 \sin\overline{\theta}\cos\overline{\theta}\, dv}{1 - b\sin\overline{\theta}}$$

$$F_4 = 1 - \frac{e^2N}{4\pi^2 f_o{}^2 m\epsilon_o}\int^V \frac{\eta(v)(1 - b^2)^{1/2}(1 - b^2 + b^2\cos^2\overline{\theta})dv}{1 - b\sin\overline{\theta}}$$

Divergence and Refraction

For each angle φ_o, there is a total turning angle θ_D and a radial length of closest approach to the Sun ρ_a (which is listed in table III). These two parameters define the asymptotes of a ray path whose initial propagation angle is φ_o and whose initial propagation direction is along Z. The geometry of the refraction process is shown in figure 2. The symbol T is the actual position of the transmitter and T' is the apparent position for no refraction relative to the final path.

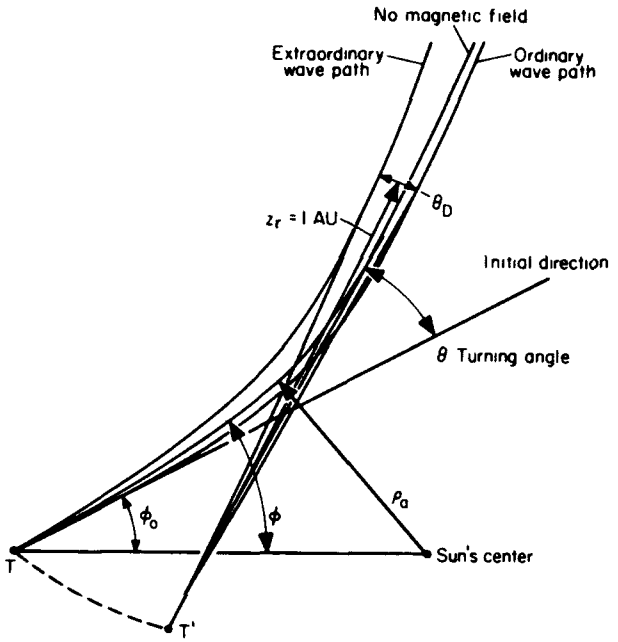


Figure 2.- Geometry of coronal double refraction.

The electron distribution in the corona is similar in its action to a large divergent lens. Without an interplanetary magnetic field, a ray from T would be refracted to a single line. The magnetic field causes the plane wave to split into two circular waves, each having a slightly different refraction angle. The ordinary wave is refracted to a point opposite the point for the extraordinary wave relative to the zero magnetic field point. The extraordinary wave has an image point with the largest refraction angle as shown in figure 2.

The divergent properties of the corona are measured by the angular divergence ratio β (ratio of the initial beam width to the effective beam width at the receiving point as shown in eqs. (18)), which is listed in table II for each Z and φ. The increase in effective beam width causes an additional signal attenuation proportional to the square of β.

The maximum angular separation between the extraordinary and ordinary ray path θ_D is listed in table I for each φ_o and is defined in equations (18). The physical separation of the image points of the ordinary and extraordinary wave is important for highly collimated transmission through the corona. The separation between the two wave asymptotes is on the order of 10^{-4} radian over a range of 2 AU, which is about 10^7 meters in linear distance ($\rho = A$). These computations are based on spherical shell refraction (ref. 24).

$$\left.\begin{aligned} \beta &= \frac{\rho}{Z_r} \cos\left[\sin^{-1}\left(\frac{\mu_A A}{\mu\rho}\sin\varphi_o\right)\right]\left[\frac{\psi(\rho,\varphi_o,Z_r) - \psi(\rho,\varphi_o+\delta\varphi_o,Z_r)}{\delta\varphi_o}\right] \\ \theta_D &= \frac{A}{Z_r}\cos\varphi_o\left[\psi(\text{ordinary})\Big|_{\rho=A} - \psi(\text{extraordinary})\Big|_{\rho=A}\right] \end{aligned}\right\} \quad (18)$$

Sensitivity of the Model to Static and Dynamic Errors

Solar flares cause large quantities of ionized particles to be ejected from the Sun. These particles are an addition to an average solar efflux (solar wind) which is the only component considered in the model for the charged particle distribution in interplanetary space. Since the particles emitted by solar flares contribute to the average particle density, the properties of the interplanetary space model account for solar flares only to the extent of their influence on the solar flux average; all other effects are ignored (ref. 24).

The average level of solar flare activity has been found to vary almost sinusoidally with an 11-year cycle. However, the average dipole moment of the Sun reverses with every sunspot activity cycle; hence, the magnetic field distribution on the Sun varies with an approximate 22-year period. Since the tabulated model characteristics depend upon the component of the magnetostatic field of the Sun parallel to the propagating direction, a reversal of field direction changes the sense of rotation of the extraordinary and ordinary waves, but does not change the tabulated characteristics. Therefore, the data presented in this paper are not dependent on the sign of the Sun's magnetic field, but only on its magnitude.

Solar flares produce a random disordering of the Sun's magnetostatic field such that the spiral pattern is barely discernible. While these disordering effects are ignored in this paper, the communication parameters that depend upon the magnetostatic vector direction (i.e., Faraday rotation) will approach more nearly the spiral field values as the transmission range increases. Until a suitable disordering model is available, the tables can be assumed valid for time-average values in the presence of small disorders. There is not enough information available to define the disordering characteristics of the magnetic field except that the crude mean length within which the effects of a spiral field are not detectable (because of local disordering effects) is approximately 25,000 to 75,000 miles near the Earth's orbit (unpublished Mariner II data).

All the tabulated data depend strongly upon changes in electron density. As noted earlier, however, the value of the electron density, N, in the chromosphere has been determined by several experimenters and there is essential agreement among them. In the vicinity of Earth, the electron density has been determined from proton analyzer measurements aboard space vehicles. The maximum and minimum values of N do not change appreciably, and the region of greatest uncertainty lies between 20 solar radii and Earth's orbital radius.

The plasma frequency varies as the square root of the electron density. Since the electron density varies over a ratio of 10^8 from the chromosphere to 1 AU, the plasma frequency varies over a ratio of 10^4 for the same range. If one assumes that the largest probable ratio of the real local electron density to the density derived from the theoretical model used in this paper is about one order of magnitude, the real plasma frequency could differ by an approximate factor of 3 from that used to construct the tables. As noted

above, an order of magnitude uncertainty in the electron density is entirely possible in the region from 20 solar radii to the Earth's orbital radius.

A basic assumption made in determining the steady-state thermodynamic properties of the model of the solar wind is charge neutrality. Since this assumption becomes increasingly erroneous for distances shorter than the local Debye length, propagation distances less than a Debye length are considered outside the boundary conditions for the model. Local Debye lengths as a function of radial distance were calculated from equation (19) and listed in table I.

$$h_d = \text{Debye length} = (\epsilon_o kT/Ne^2)^{1/2} \tag{19}$$

To provide flexibility in the interpretation and use of the tabulated data, a complete set of partial derivatives of the tabulated dependent variables taken with respect to the five independent variables (electron density, magnetic field strength, temperature, solar wind velocity, and frequency of propagation) is included in table II. Values for these partial derivatives are listed as a function of distance from the Sun. The effects of a different electron distribution upon the communication properties can be studied by using table II to adjust the values listed in table III. The partial derivatives listed in table II are defined as follows:

$$PD1 = (\partial f_N/\partial N)(N/f_N) = 0.5$$

$$PD2 = (\partial B_r/\partial N)(N/B_r) = 0$$

$$PD3 = (\partial B_\varphi/\partial N)(N/B_\varphi) = 0$$

$$PD4 = (\partial \nu/\partial N)(N/\nu)$$

$$PD5 = [\partial({}_o\mu - 1.0)/\partial N][N/({}_o\mu - 1.0)] = PD12$$

$$PD6 = [\partial({}_x\mu - 1.0)/\partial N][N/({}_x\mu - 1.0)] = PD13$$

$$PD7 = [\partial({}_o\mu' - 1.0)/\partial N][N/({}_o\mu' - 1.0)]$$

$$PD8 = [\partial({}_x\mu' - 1.0)/\partial N][N/({}_x\mu' - 1.0)]$$

$$PD9 = (\partial {}_o\kappa/\partial N)(N/{}_o\kappa)$$

$$PD10 = (\partial {}_x\kappa/\partial N)(N/{}_x\kappa)$$

$$PD11 = (\partial \alpha/\partial N)(N/\alpha)$$

$$PD12 = [\partial({}_oD_z - f_o/c)/\partial N][N/({}_oD_z - f_o/c)]$$

$$PD13 = [\partial({}_xD_z - f_o/c)/\partial N][N/({}_xD_z - f_o/c)]$$

$$PD14 = (\partial f_N/\partial T)(T/f_N) = 0$$

$$PD15 = (\partial B_r/\partial T)(T/B_r) = 0$$

$$PD16 = (\partial B_\varphi/\partial T)(T/B_\varphi) = 0$$

$$PD17 = (\partial \nu/\partial T)(T/\nu)$$

$$PD18 = [\partial({}_o\mu - 1.0)/\partial T][T/({}_o\mu - 1.0)] = PD25 = 0$$

$$PD19 = [\partial({}_x\mu - 1.0)/\partial T][T/({}_x\mu - 1.0)] = PD26 = 0$$

$$PD20 = [\partial({}_o\mu' - 1.0)/\partial T][T/({}_o\mu' - 1.0)] = 0$$

$$PD21 = [\partial({}_x\mu' - 1.0)/\partial T][T/({}_x\mu' - 1.0)] = 0$$

$$PD22 = (\partial {}_o\kappa/\partial T)(T/{}_o\kappa)$$

$$PD23 = (\partial {}_x\kappa/\partial T)(T/{}_x\kappa)$$

$$PD24 = (\partial \alpha/\partial T)(T/\alpha) = 0$$

$$PD25 = [\partial({}_oD_z - f_o/c)/\partial T][T/({}_oD_z - f_o/c)] = 0$$

$$PD26 = [\partial({}_xD_z - f_o/c)/\partial T][T/({}_xD_z - f_o/c)] = 0$$

$$PD27 = (\partial f_N/\partial V)(V/f_N) = 0$$

$$PD28 = (\partial B_r/\partial V)(V/B_r) = 0$$

$$PD29 = (\partial B_\varphi/\partial V)(V/B_\varphi) = -1.0$$

$$PD30 = (\partial \nu/\partial V)(V/\nu) = 0$$

$$PD31 = [\partial({}_o\mu - 1.0)/\partial V][V/({}_o\mu - 1.0)] = PD38$$

$$PD32 = [\partial({}_x\mu - 1.0)/\partial V][V/({}_x\mu - 1.0)] = PD39$$

$$PD33 = [\partial({}_o\mu' - 1.0)/\partial V][V/({}_o\mu' - 1.0)]$$

$$PD34 = [\partial({}_x\mu' - 1.0)/\partial V][V/({}_x\mu' - 1.0)]$$

$$PD35 = (\partial {}_o\kappa/\partial V)(V/{}_o\kappa)$$

$$PD36 = (\partial {}_x\kappa/\partial V)(V/{}_x\kappa)$$

$$PD37 = (\partial \alpha/\partial V)(V/\alpha)$$

$$PD38 = [\partial({}_oD_z - f_o/c)/\partial V][V/({}_oD_z - f_o/c)]$$

$$PD39 = [\partial({}_xD_z - f_o/c)/\partial V][V/({}_xD_z - f_o/c)]$$

$$PD40 = (\partial f_N/\partial B_o)(B_o/f_N) = 0$$

$$PD41 = (\partial B_r/\partial B_o)(B_o/B_r) = 1.0$$

$$PD42 = (\partial B_\varphi/\partial B_o)(B_o/B_\varphi) = 1.0$$

$$PD43 = (\partial \nu/\partial B_o)(B_o/\nu) = 0$$

$$PD44 = [\partial({}_o\mu - 1.0)/\partial B_o][B_o/({}_o\mu - 1.0)] = PD51$$

$$PD45 = [\partial({}_x\mu - 1.0)/\partial B_o][B_o/({}_x\mu - 1.0)] = PD52$$

$$PD46 = [\partial({}_o\mu' - 1.0)/\partial B_o][B_o/({}_o\mu' - 1.0)]$$

$$PD47 = [\partial({}_x\mu' - 1.0)/\partial B_o][B_o/({}_x\mu' - 1.0)]$$

$$PD48 = (\partial {}_o\kappa/\partial B_o)(B_o/{}_o\kappa)$$

$$PD49 = (\partial {}_x\kappa/\partial B_o)(B_o/{}_x\kappa)$$

$$PD50 = (\partial \alpha/\partial B_o)(B_o/\alpha) = 0$$

$$PD51 = [\partial({}_oD_z - f_o/c)/\partial B_o][B_o/({}_oD_z - f_o/c)]$$

$$PD52 = [\partial({}_xD_z - f_o/c)/\partial B_o][B_o/({}_xD_z - f_o/c)]$$

$$PD53 = (\partial f_N/\partial f)(f/f_N) = 0$$

$$PD54 = (\partial B_r/\partial f)(f/B_r) = 0$$

$$PD55 = (\partial B_\varphi/\partial f)(f/B_\varphi) = 0$$

$$PD56 = (\partial \nu/\partial f)(f/\nu) = 0$$

$$PD57 = [\partial({}_o\mu - 1.0)/\partial f][f/({}_o\mu - 1.0)] = PD64$$

$$PD58 = [\partial({}_x\mu - 1.0)/\partial f][f/({}_x\mu - 1.0)] = PD65$$

$$PD59 = [\partial({}_o\mu' - 1.0)/\partial f][f/({}_o\mu' \quad 1.0)]$$

$$PD60 = [\partial({}_x\mu' - 1.0)/\partial f][f/({}_x\mu' - 1.0)]$$

$$PD61 = (\partial {}_o\kappa/\partial f)(f/{}_o\kappa)$$

$$PD62 = (\partial {}_x\kappa/\partial f)(f/{}_x\kappa)$$

$$PD63 = (\partial \alpha/\partial f)(f/\alpha)$$

$$PD64 = [\partial({}_oD_z - f_o/c)/\partial f][f/({}_oD_z - f_o/c)]$$

$$PD65 = [\partial({}_xD_z - f_o/c)/\partial f][f/({}_xD_z - f_o/c)]$$

The partial derivatives of the dependent variables listed in tables I and II will be most affected by changes in the electron density. The significant partial derivatives are PD1 and PD5-PD13. The magnetic field has a very small effect on the propagation parameters compared to the electron density. The effects of N, B_0, T, and V on the propagation parameters decrease in the order of their listing. The partial derivatives are normalized so that the numbers in table II are dimensionless. For example, if the plasma frequency is 97.36 MHz and the corresponding electron density is 1.176×10^{14} electrons/m^3, then a new plasma frequency of 92.5 MHz corresponds to 1.076×10^{14} electrons/m^3 by the simple calculation procedure shown in equations (20). The values of PDn are given in table I as a function of ρ or in equations (20) if the value is constant.

$$\left.\begin{aligned}
f_N(\text{new}) &= f_N(\text{old}) + \frac{\partial f_N}{\partial N}(\text{old})[N(\text{new}) - N(\text{old})] \\
f_N(\text{new}) &= f_N(\text{old}) + \left(\frac{\partial f_N}{\partial N}\frac{N}{f_N}\right)(\text{old})\,\frac{f_N(\text{old})}{N(\text{old})}\,[N(\text{new}) - N(\text{old})] \\
f_N(\text{new}) &= f_N(\text{old}) + \text{PD1(old)}\,\frac{f_N(\text{old})}{N(\text{old})}\,[N(\text{new}) - N(\text{old})] \\
f_N(\text{new}) &= 9.736\times10^7 + \frac{1}{2}\,\frac{9.736\times10^7}{1.176\times10^{14}}\,[1.076\times10^{14} - 1.176\times10^{14}] \\
f_N(\text{new}) &= 9.736\times10^7 + \frac{1}{2}\,9.736\times10^7(-0.1) = 9.25\times10^7 \text{ Hz}
\end{aligned}\right\} \quad (20)$$

Using the procedure outlined in equations (20), one can calculate new values for any of the other dependent variables. The partial derivatives with respect to propagation frequency are included so that small differences between a specific experimental frequency and the closest tabulated frequency can be corrected.

DISCUSSION

The data in the tables are useful when carrier phase shift and/or doppler shift is measurable. If the transmission time is available, the actual curved propagation path can be estimated from extrapolation of the data in table III. If the charged particle velocity is known, then the relativistic phase shift can be determined. A polarizing antenna on the receiver can provide the information to estimate the integrated spiraling effect of the interplanetary magnetic field by separating the ordinary and extraordinary components of the received signal. It is possible with data in table III to correlate the

changes in the transmitted carrier to the changes in the modulating signal by comparing the corresponding characteristics of the phase velocity with the group velocity.

An important feature of the relative motion between the transmitter and the receiver is the normal and longitudinal doppler shift. This information, normalized with respect to velocity, is available in table III. At certain ranges and view angles, the doppler shift is predominantly a normal component (with respect to propagation path), making it possible to study the interplanetary electron density by measuring changes in the doppler shift components. The longitudinal doppler shift, normalized with respect to propagation range rate, is a measure of changes in the electron density due to changes in the propagation path. The normal doppler shift, normalized with respect to the instantaneous lateral velocity, is a measure of the integrated electron density gradient. The relativistic phase shift is a measure of the velocity of the solar wind (or electron velocity). Multiple carrier frequency systems can be evaluated by interpolating the frequencies used in this study. The divergence ratio and the propagation range are the necessary parameters to evaluate signal-strength fading caused by inhomogeneities in the solar corona.

As an example of the usefulness of the tabulated data in table III, consider the discussion of Shapiro (ref. 25) in which a test of the general relativity is proposed by utilizing the M.I.T. Lincoln Laboratory Haystack Microwave Research Facility and the Air Force Cambridge Research Laboratory Ionospheric Research Facility at Arecibo, Puerto Rico. Time delay measurements would be made at two frequencies, Haystack's 8000 MHz and Arecibo's 430 MHz, of a transmitted wave that is reflected from a suitable planet (either Venus or Mercury) during passage of the target planet behind the Sun. The time delay due to the presence of the intervening interplanetary plasma at the two frequencies is listed in table III for any point along the two inner planet orbits; hence, the actual time delay due solely to gravitational relativistic effects can be compared with the plasma-induced error, and the optimum orbital points can be determined for maximum probability of experimental success.

Ames Research Center
National Aeronautics and Space Administration
Moffett Field, Calif., 94035, March 22, 1967

APPENDIX A

SYMBOLS AND CONSTANTS

The International System of Units (MKS) is used throughout except where noted.

A distance from Sun to Earth, 1 AU = 1.496×10^{11}, m

B_o magnetic field at surface of the Sun, 1.63×10^{-4}, Wb/m^2

B_r component of interplanetary magnetic field parallel to the radius vector from the Sun, Wb/m^2

B_t component of magnetic field in interplanetary space along Earth-probe line, Wb/m^2

B_φ component of interplanetary magnetic field perpendicular to radius vector from the Sun, Wb/m^2

b V/c, solar wind velocity/velocity of light

c velocity of light in vacuum, 2.997926×10^8, m/sec

D_o f_o/c, normalized vacuum doppler shift for position closing velocity, cycles/m

${}_oD_y$ doppler shift in the ordinary wave due to a velocity component at right angles to the direction of propagation divided by the velocity component, cycles/m

${}_oD_z$ doppler shift in the ordinary wave due to path change in the direction of propagation divided by the velocity of the probe in the direction of propagation, cycles/m

${}_xD_y$ doppler shift in the extraordinary wave due to a velocity component at right angles to the direction of propagation divided by the velocity component, cycles/m

${}_xD_z$ doppler shift in the extraordinary wave due to path change in the direction of propagation divided by the velocity of the probe in the direction of propagation, cycles/m

E_x x-coordinate component of traveling electric vector, V/m

E_y y-coordinate component of traveling electric vector, V/m

e electronic charge, 1.6019×10^{-19}, C

f_N plasma frequency as a function of coordinate position, Hz

f_o	frequency of propagation, cycles/sec
H_x	x-coordinate component of traveling magnetic vector, amperes/m
H_y	y-coordinate component of traveling magnetic vector, amperes/m
h_d	Debye length, m
k	Boltzmann's constant, 1.38041×10^{-23}, J/deg
k_f	wave number for unspecified medium
${}_ok_r$	wave number for ordinary wave for relativistic electron motion
${}_xk_r$	wave number for extraordinary wave for relativistic electron motion
m	mass of electron, 9.1084×10^{-31}, kg
N	electron density as a function of distance from the Sun, m^{-3}
n_φ	index of refraction
PDn	partial derivatives of dependent variables w/r to N, V, T, and B_t; partial derivatives are defined on pages 14 to 16
R_o	radius of the Sun, 6.593×10^8, m
T	electron temperature in interplanetary space as function of distance from the Sun, ^oK
T_o	Z/c, vacuum propagation time, sec
${}_oT_g$	group propagation time for the ordinary wave, sec
${}_oT_t$	phase propagation time for the ordinary wave, sec
${}_xT_g$	group propagation time for the extraordinary wave, sec
${}_xT_t$	phase propagation time for the extraordinary wave, sec
V	velocity of the solar wind (a function of ρ), m/sec
v_φ	phase velocity, m/sec
y	distance normal to Z at receiver point, m
Z	distance from Earth along Earth-probe line, AU
Z_r	distance from Earth along propagation path, AU
α	phase difference between relativistic ordinary and extraordinary waves relative to a nonstreaming electron distribution, deg/m

α_F Faraday rotation, deg

β angular dispersion ratio, deg/deg

γ 10^{-9}, Wb/m^2

ϵ_o permittivity of vacuum, 8.85434×10^{-12}, F/m

$\eta(v)$ normalized electron velocity distribution

θ turning angle due to refraction for the ordinary wave with an initial value of zero for each φ_o, deg

$\overline{\theta}$ angle between solar wind velocity V and electric vector of extraordinary wave

θ_D θ (ordinary) - θ (extraordinary) at ρ = 1 AU, deg

$_o\kappa$ attenuation of the ordinary wave per unit length, Np/m

$_o\kappa_t$ total amount of attenuation of the ordinary wave between R and T, Np

$_x\kappa$ attenuation of the extraordinary wave per unit length, Np/m

$_x\kappa_t$ same as $_o\kappa_t$ except for extraordinary wave, Np

λ wavelength of f_o in medium, m

μ index of refraction for zero magnetic field

μ_A μ evaluated at ρ = A

$_o\mu$ real part of the index of refraction for the ordinary wave

$_o\mu'$ group refractive index for ordinary wave

$_x\mu$ real part of the index of refraction for the extraordinary wave

$_x\mu'$ group refraction index for extraordinary wave

ν collision frequency as a function of coordinate position, collisions/sec

ρ distance from the Sun's center to a point on the Earth-probe line, solar radii

ρ_a distance of closest approach to the Sun for a signal with an initial view angle φ_o that is refracted by the corona, AU

φ angle between the Earth-probe line and the Earth-Sun line, deg

φ_o initial angle between the Earth-probe line and the Earth-Sun line, deg

$_o\chi$ imaginary part of the index of refraction for the ordinary wave

$_{x}\chi$ imaginary part of the index of refraction for the extraordinary wave

ψ angle measured at the Sun between Earth-Sun line and a point on the Earth-probe line, deg

Ω angular velocity of the corona at the Sun, 2.95×10^{-6}, rad/sec

ω_L component of gyromagnetic frequency in the direction of propagation, rad/sec

APPENDIX B

HOW TO USE THE TABULATED DATA

Table I includes those propagation characteristics dependent only upon the distance from the Sun. Table III includes all the integrated path characteristics that depend upon the distance from the Sun ρ, the initial look angle φ_o (the initial ρ is A (1 AU)), range Z, and the propagation path for the transmitting and receiving points.

Figure 3 illustrates the method of locating the appropriate ray (or initial look angle φ_o) for two communication points inside the Earth's orbit. A fixed triangle consisting of the points T, R, and Sun S is rotated about its Sun S vertex until T and R lie upon a common propagation ray or lie upon the same interpolation of two consecutive rays. (Each ray is uniquely determined by its initial look angle φ_o.) Figure 4 has the actual propagation rays for all seven frequencies which are used in the manner illustrated in figure 3.

In table I, the user correlates the magnitude of the variables with the probe Sun distance ρ. In table II, the user must correlate the probe Sun distance ρ and the propagation frequency f. In table III, the user must first determine the particular propagation ray (or the initial look angle φ_o) that is appropriate to the specific triangle for the transmitting and receiving points T and R and the Sun S. The correct initial look angle φ_o for the R,S,T triangle is determined from the common propagation ray that passes through R and T when the triangle is rotated about its vertex S. In general, there are two ray paths between T and R. For each frequency, the region outside the envelope of all the rays cannot be reached from the Earth's orbit for any value of φ_o.

When a transmitter is at the Earth's orbit, the transmitter point T is coincident with E (fig. 3); hence, the location of the R,S,T triangle is fixed and φ_o can be immediately determined.

These procedures must be repeated until the possible propagation paths have been determined. The actual orientation of the T,R,S triangle relative to the Earth-Sun line (ES), is not important and it will be different for each propagation path.

Each value in the tables is presented as a factor multiplied by an exponent to the base 10. The following identities illustrate the print code of the data:

$$-1.616\text{E-}17 = (-1)\times 1.616\times 10^{-17}$$

$$0.638\text{E }02 = (+1)\times 0.638\times 10^{2}$$

$$9.999\text{E-}07 = (+1)\times 9.999\times 10^{-7}$$

$$-0.100\text{E }21 = (-1)\times 0.1\times 10^{21}$$

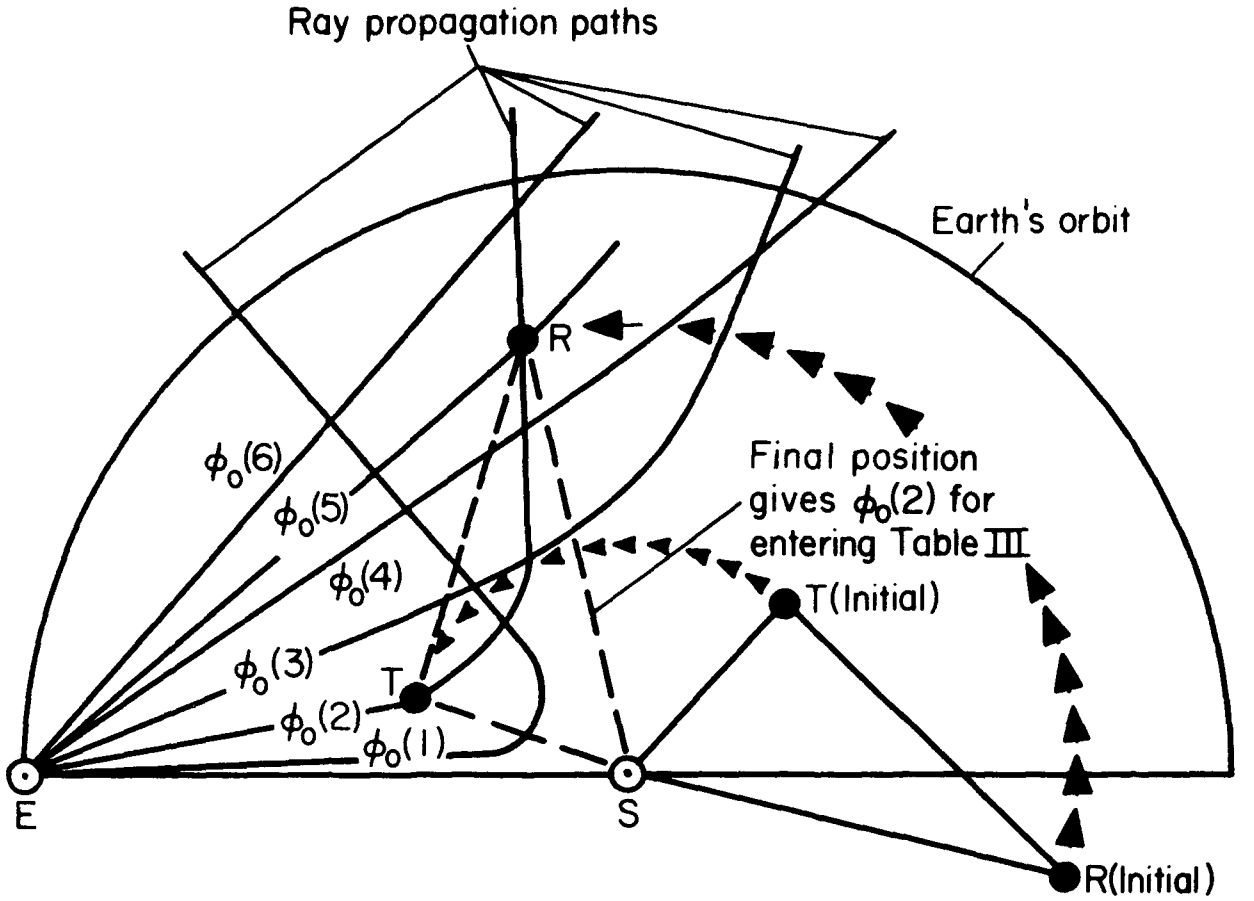
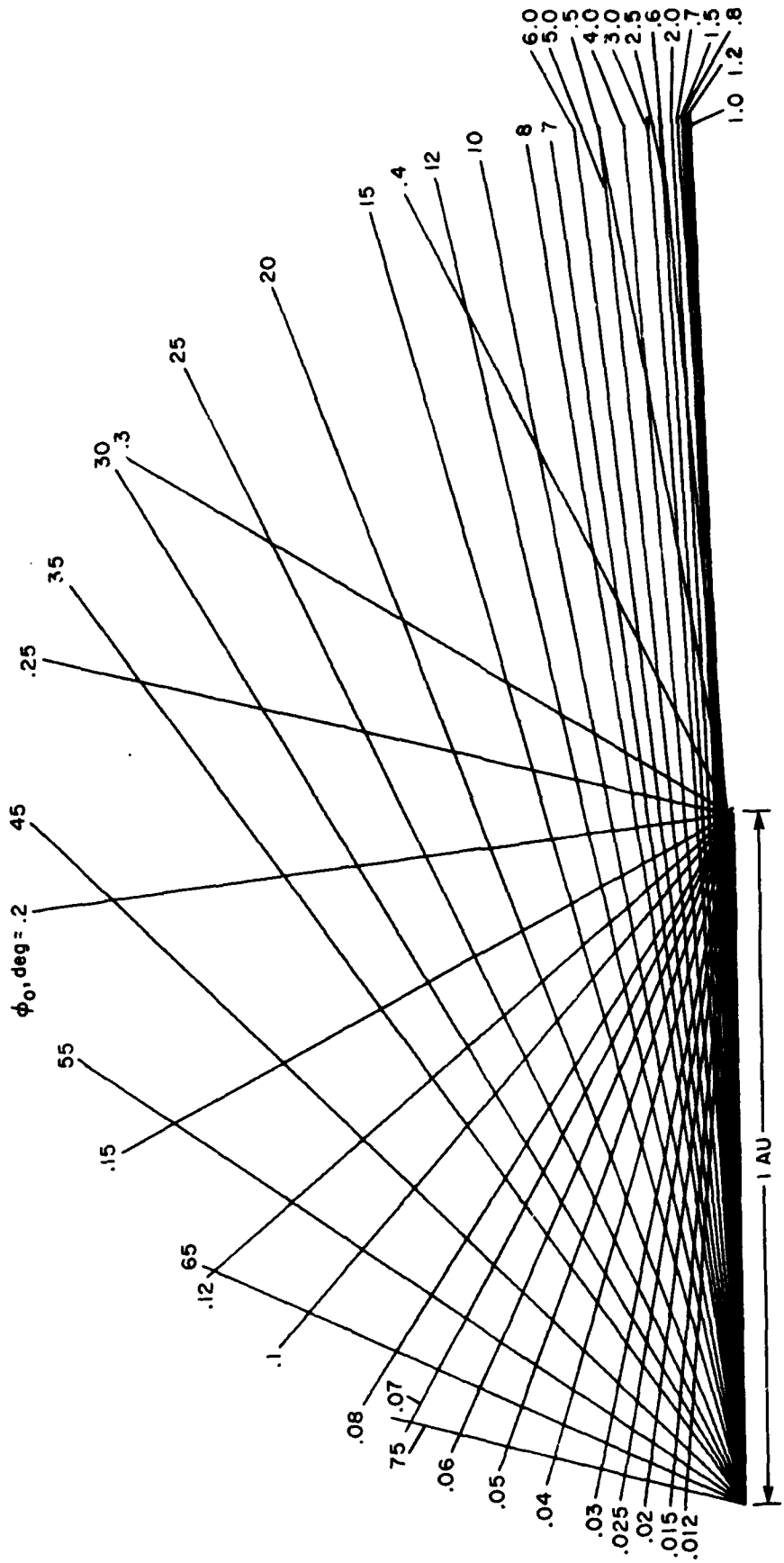
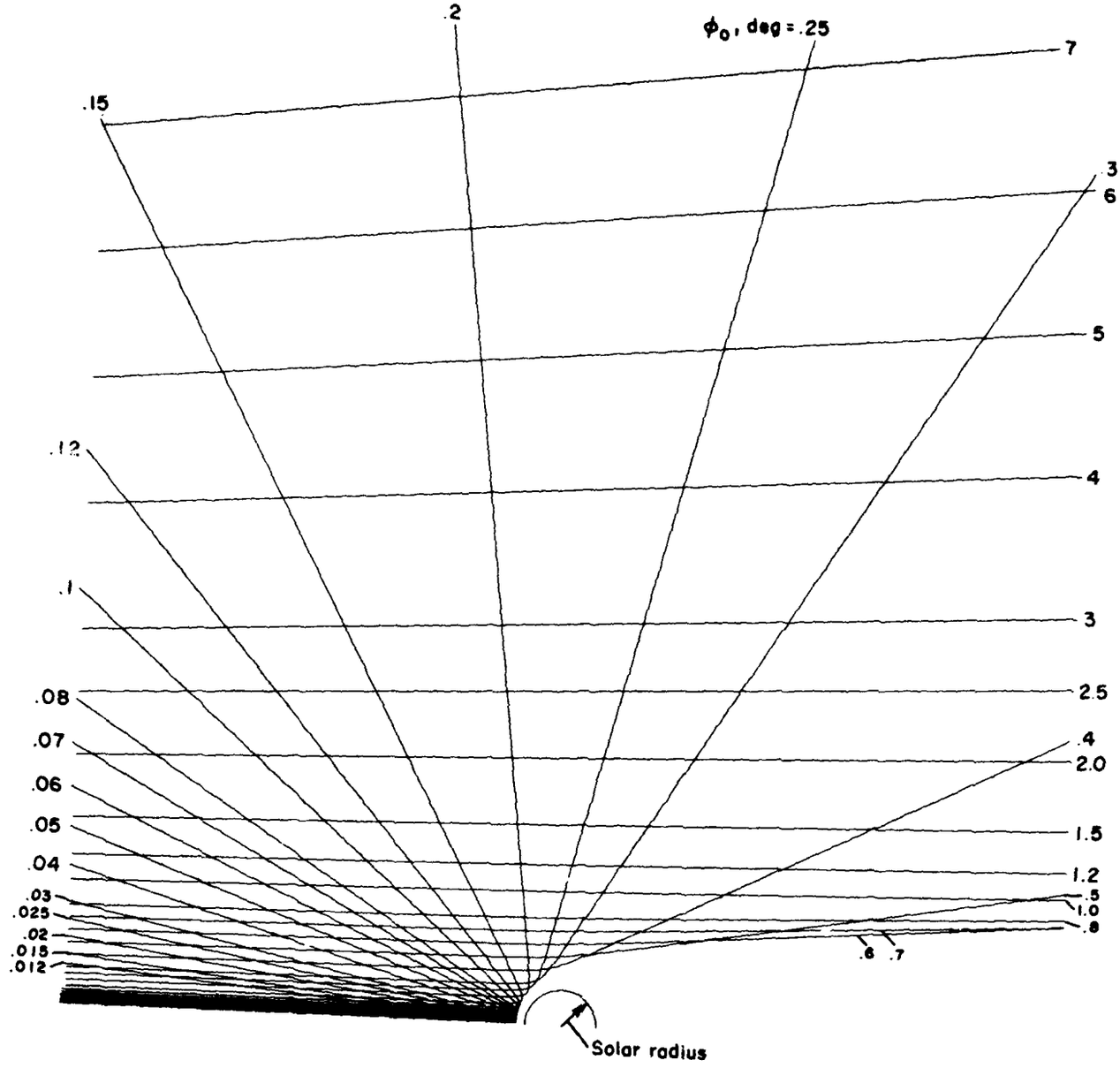


Figure 3.- Geometrical construction for determining φ_o for propagation triangle (T,R,S).



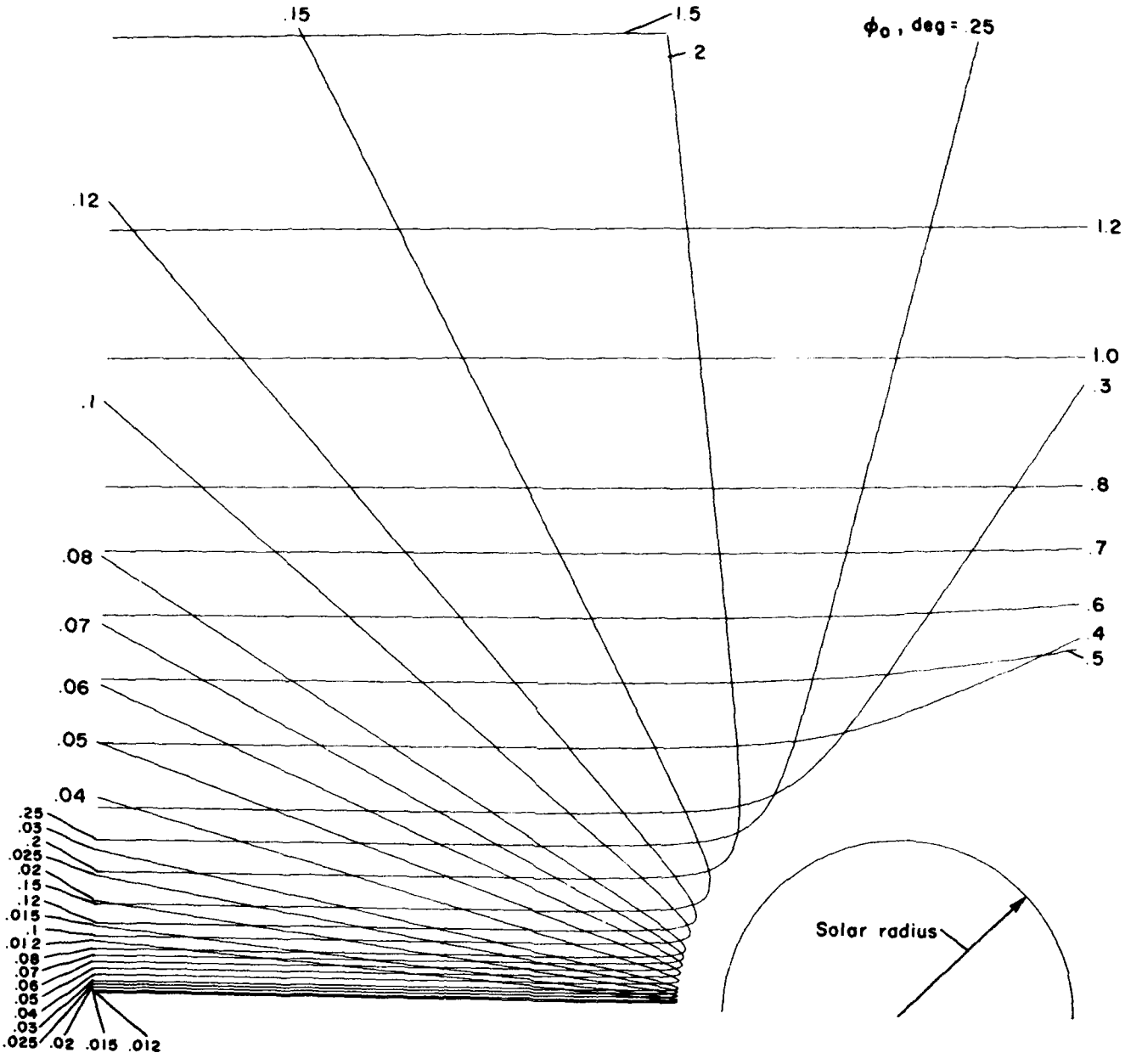
(a) 49.8 MHz

Figure 4.- Propagation paths.



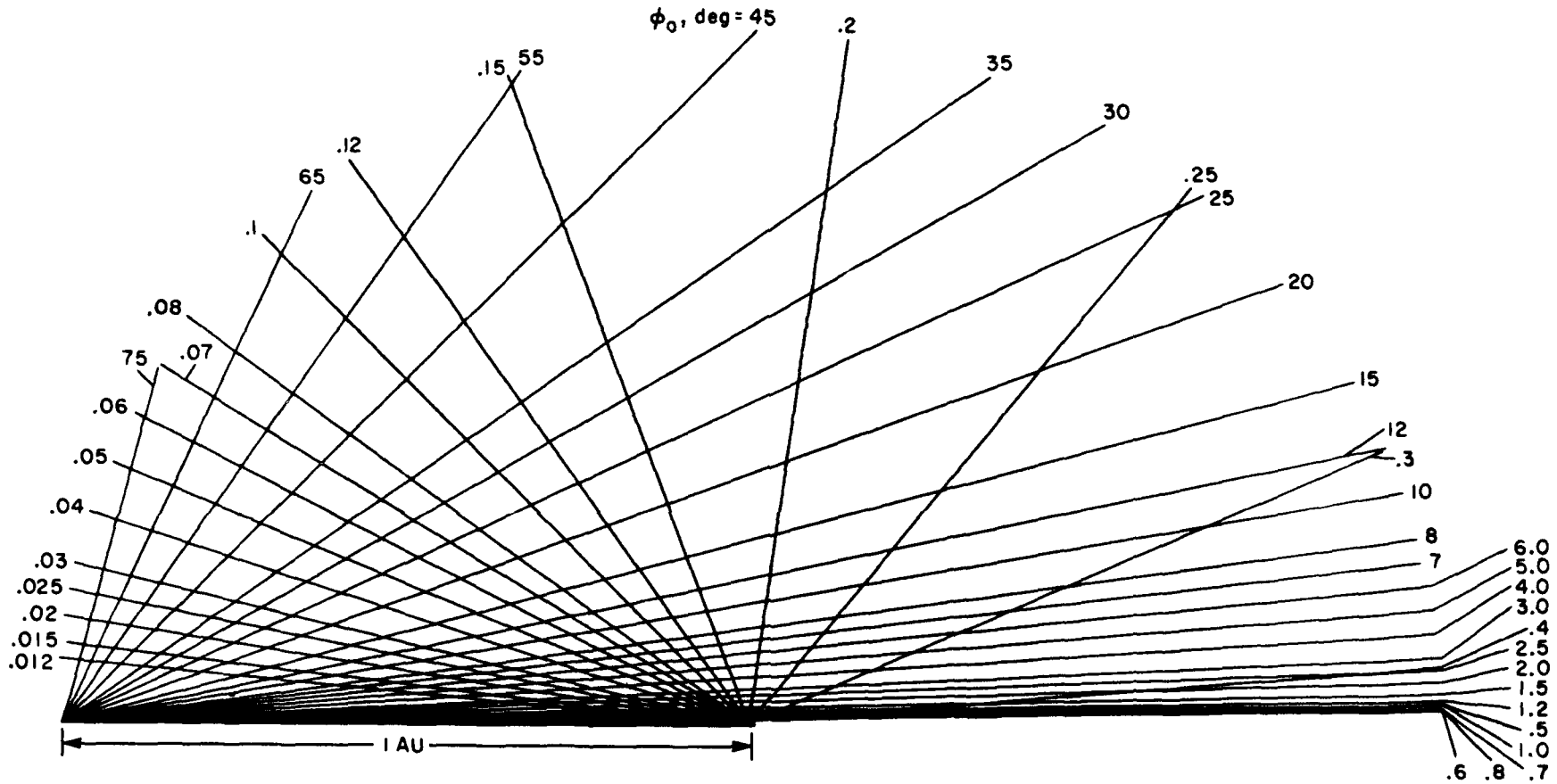
(a) 49.8 MHz - continued.

Figure 4.- Continued.



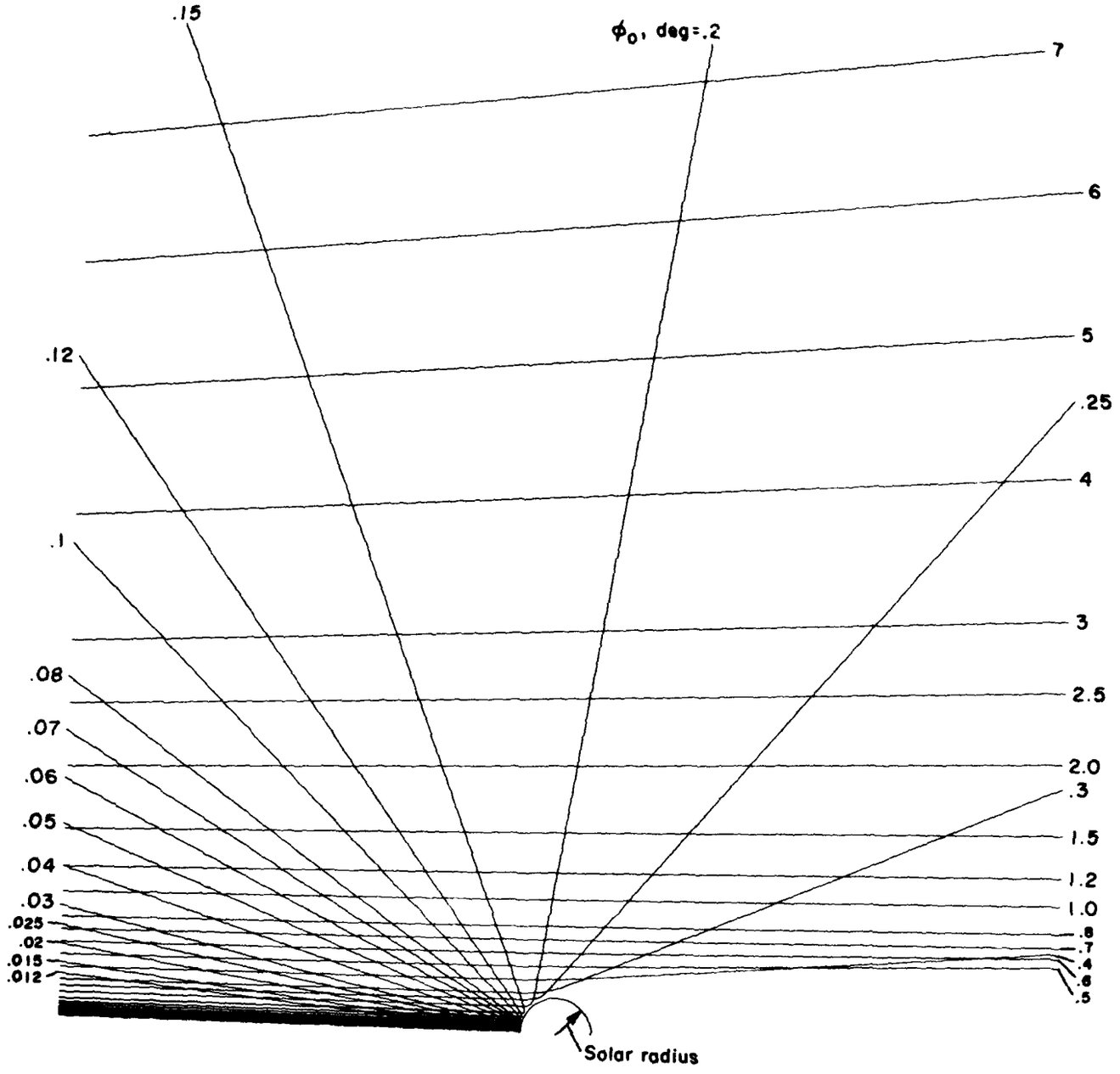
(a) 49.8 MHz - concluded.

Figure 4.- Continued.



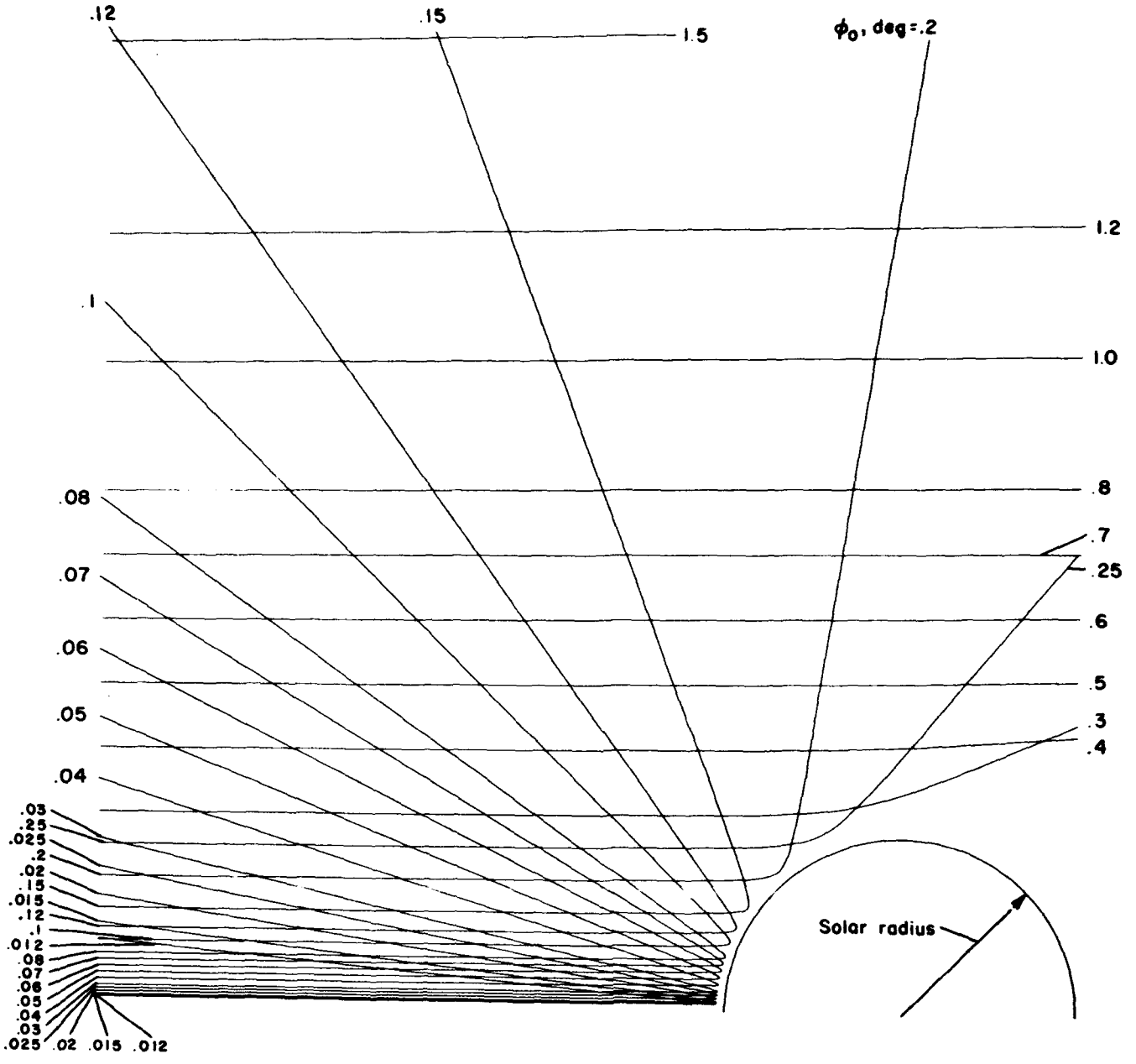
(b) 166 MHz

Figure 4.- Continued.



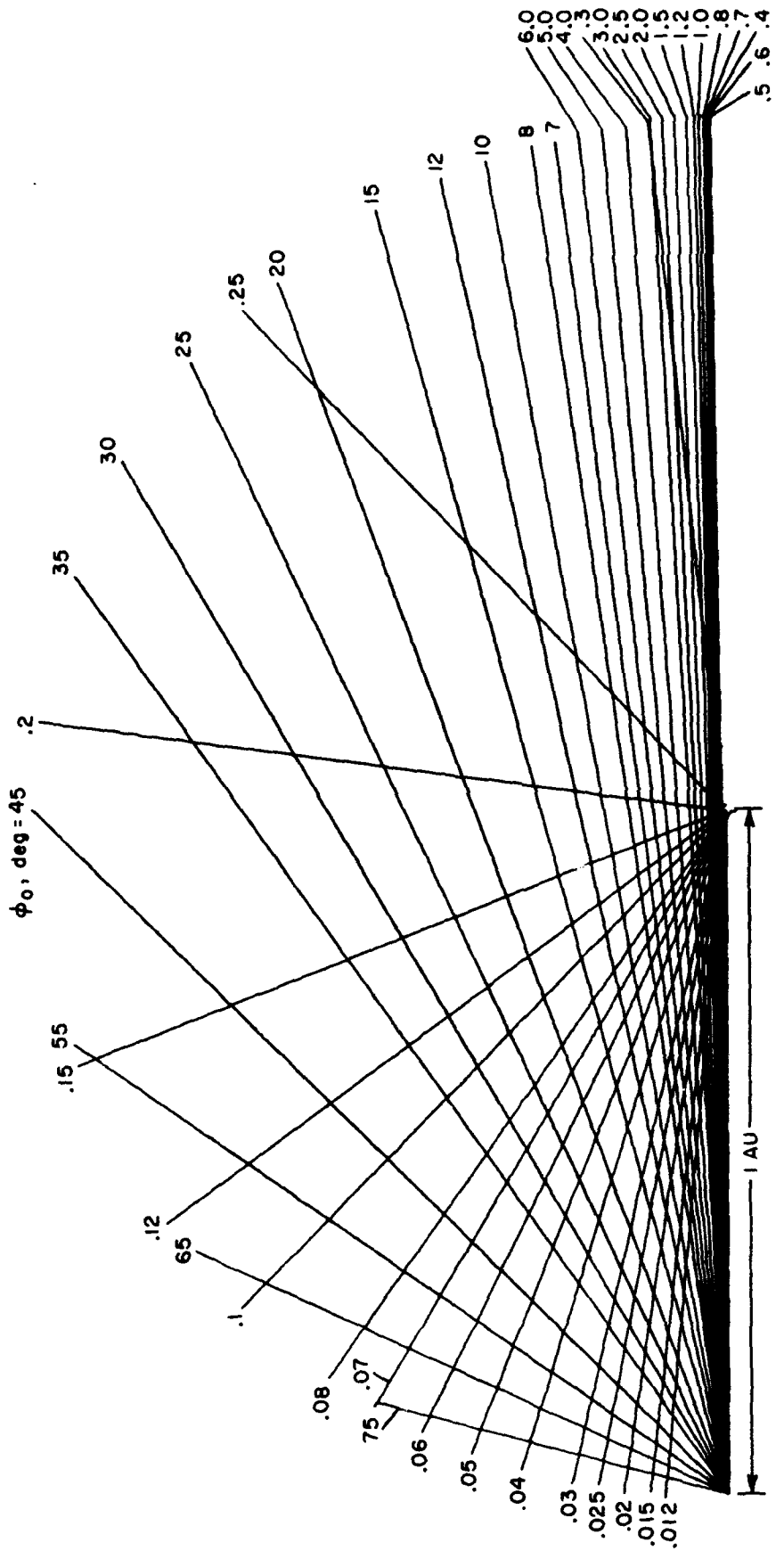
(b) 166 MHz - continued.

Figure 4.- Continued.



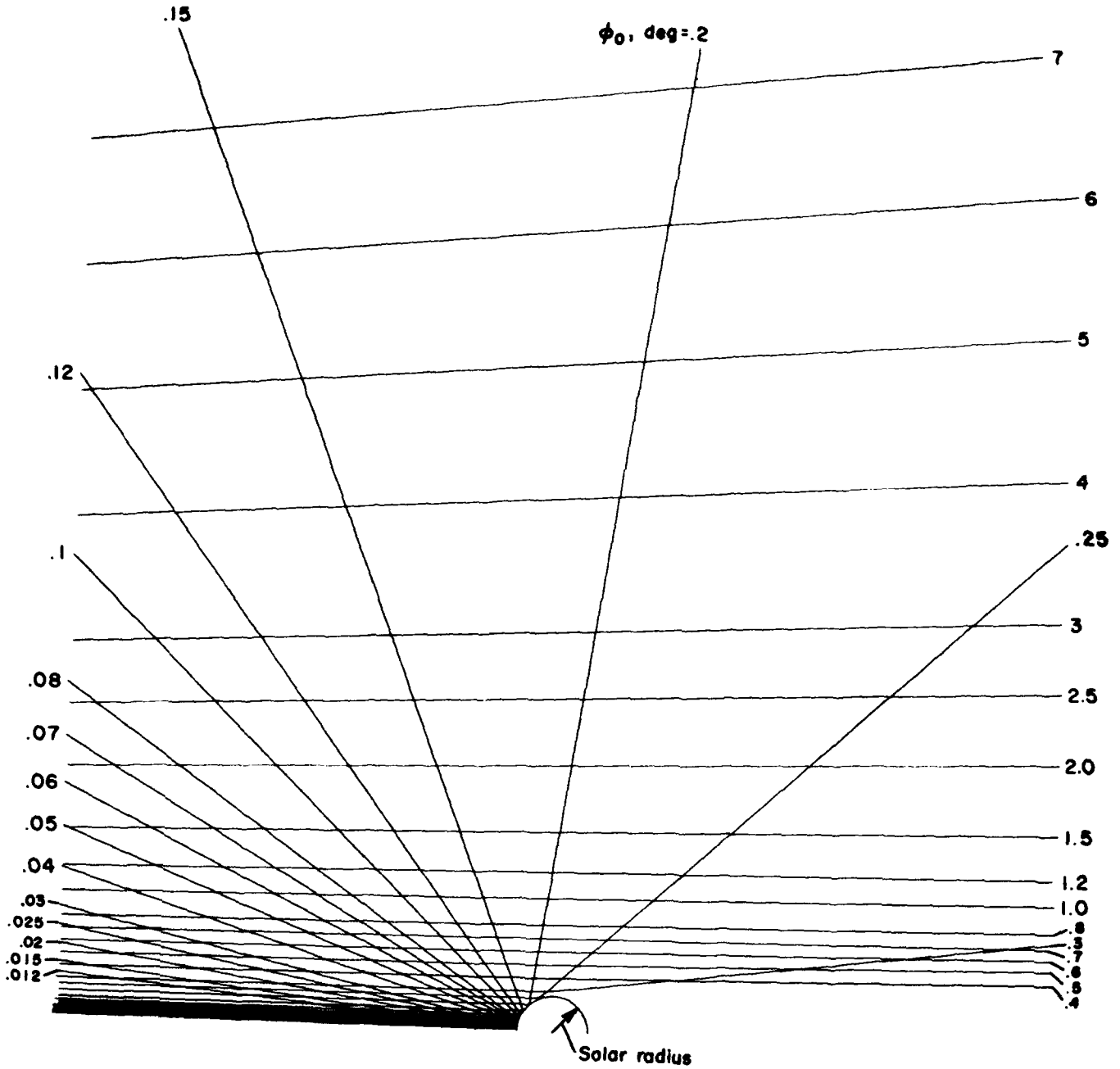
(b) 166 MHz - concluded.

Figure 4.- Continued.



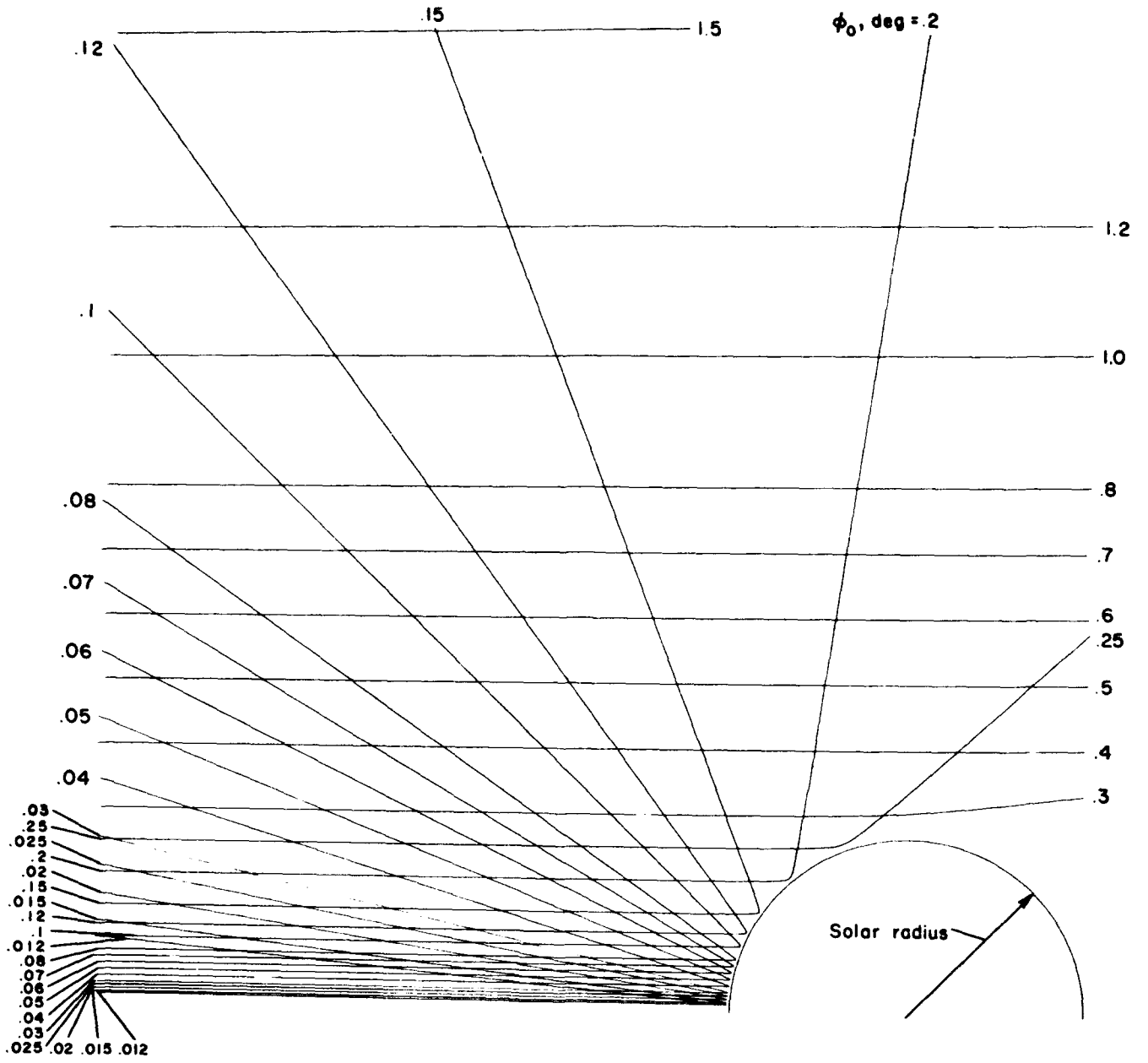
(c) 423.3 MHz

Figure 4.- Continued.



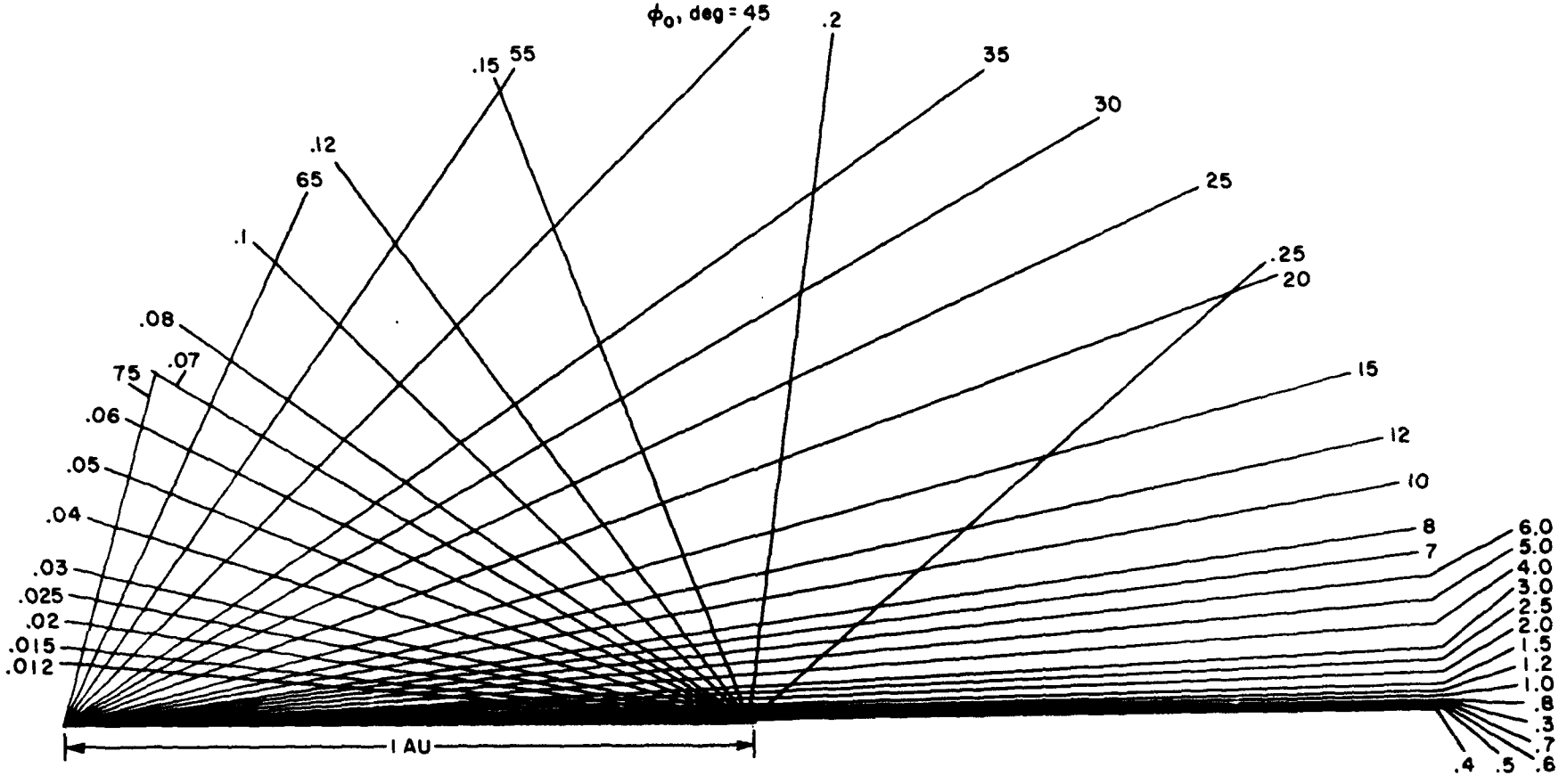
(c) 423.3 MHz - continued.

Figure 4.- Continued.



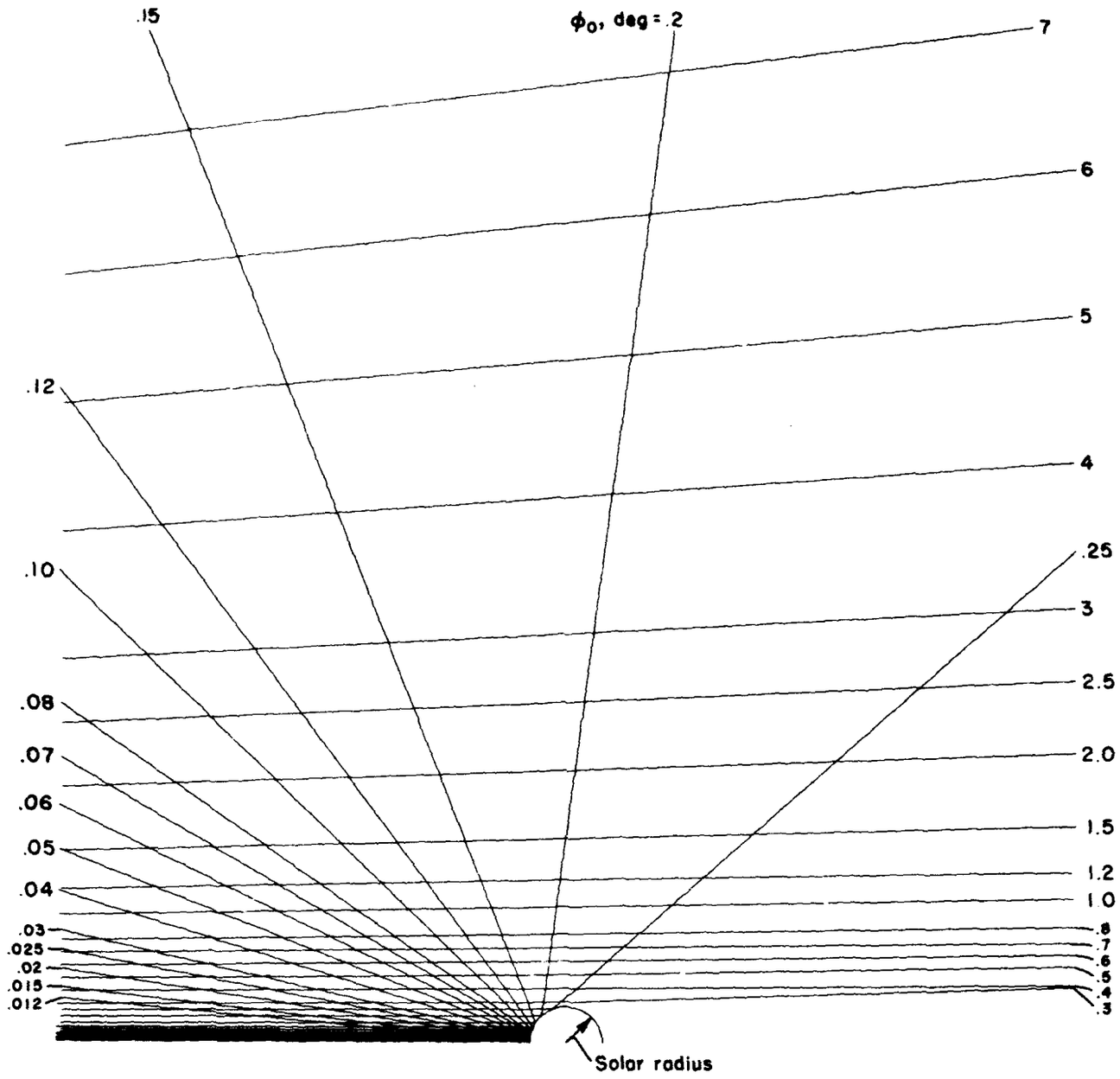
(c) 423.3 MHz - concluded.

Figure 4.- Continued.



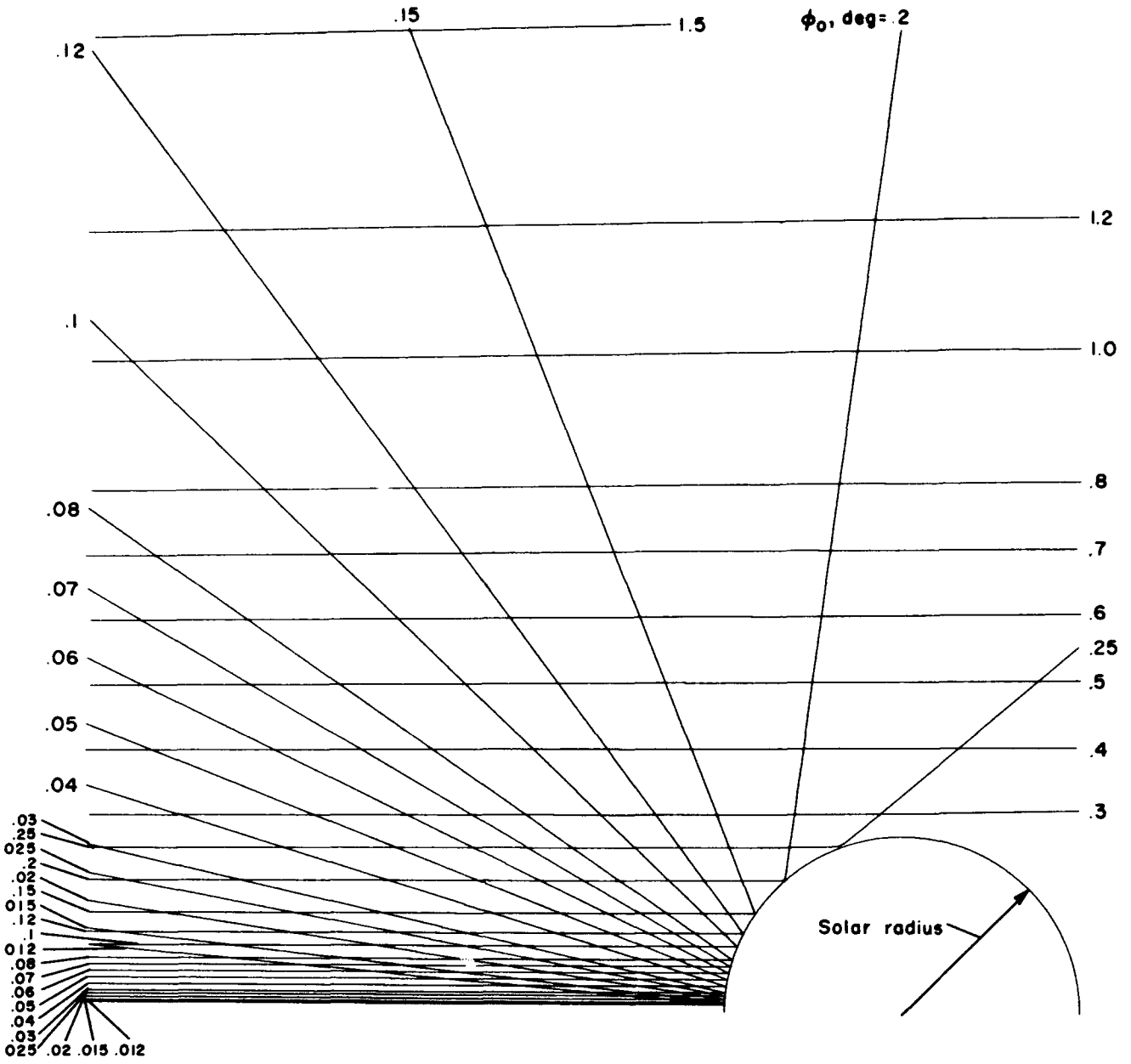
(d) 1.42 GHz

Figure 4.- Continued.



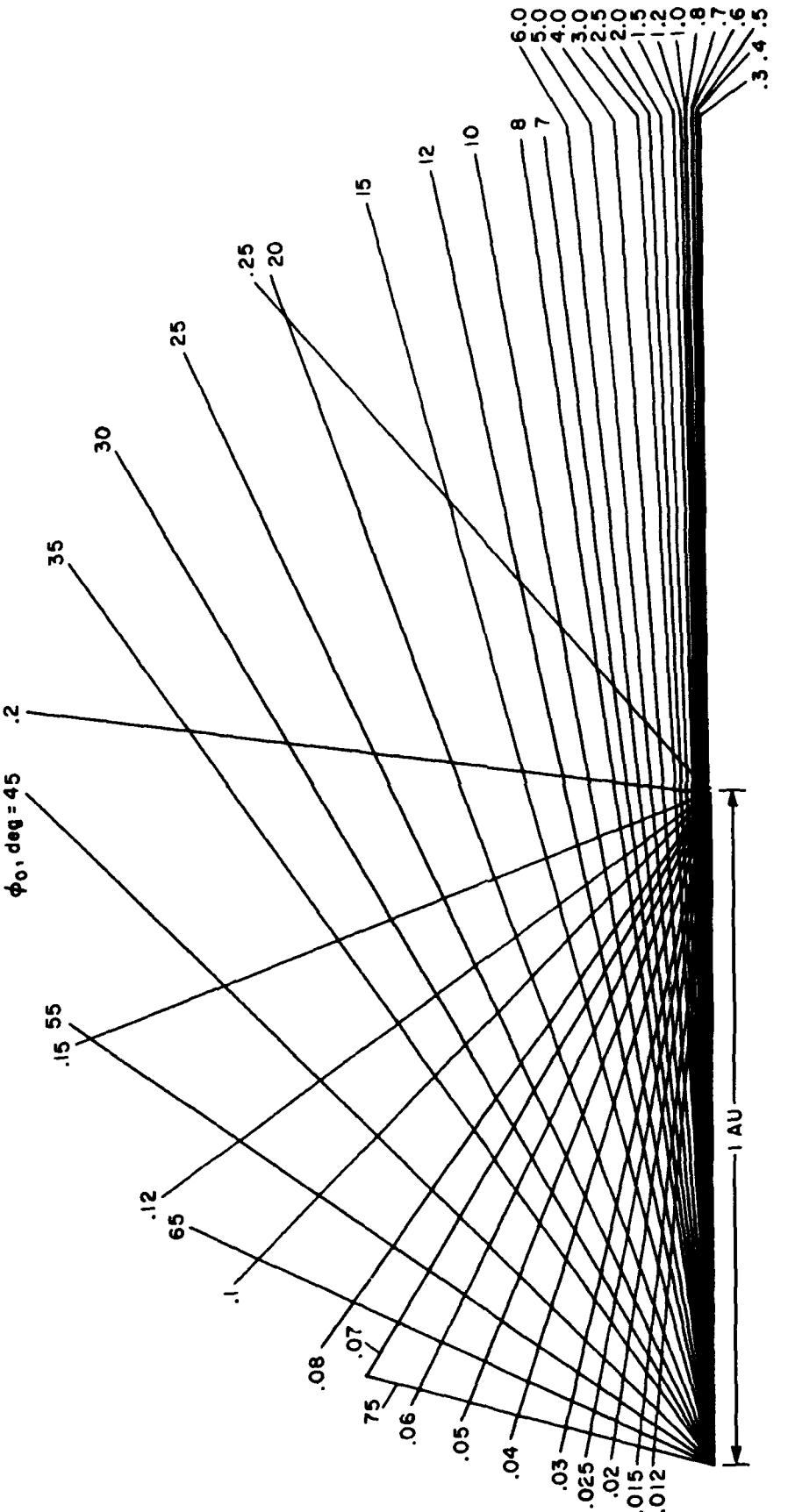
(d) 1.42 GHz - continued.

Figure 4.- Continued.



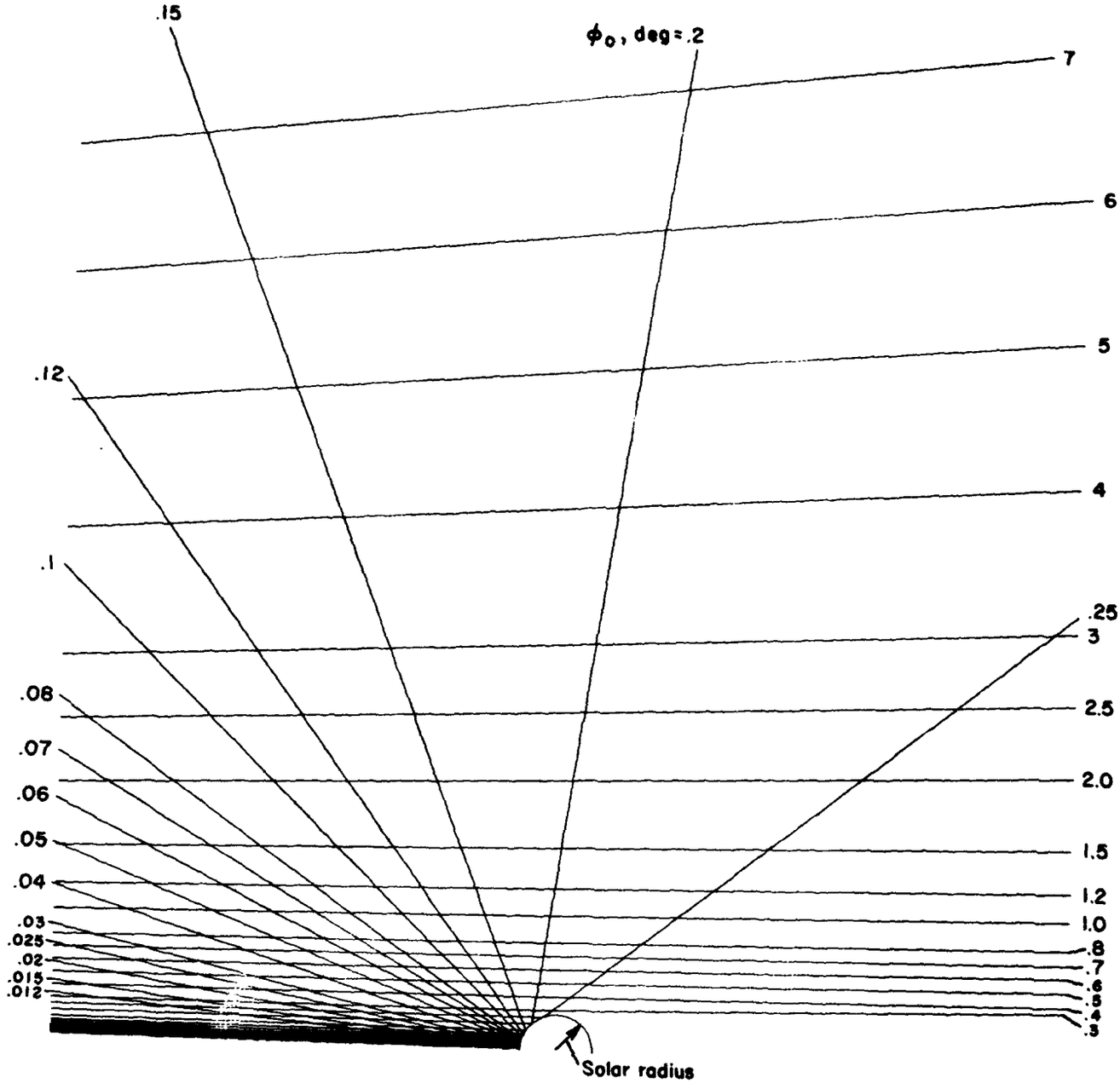
(d) 1.42 GHz - concluded.

Figure 4.- Continued.



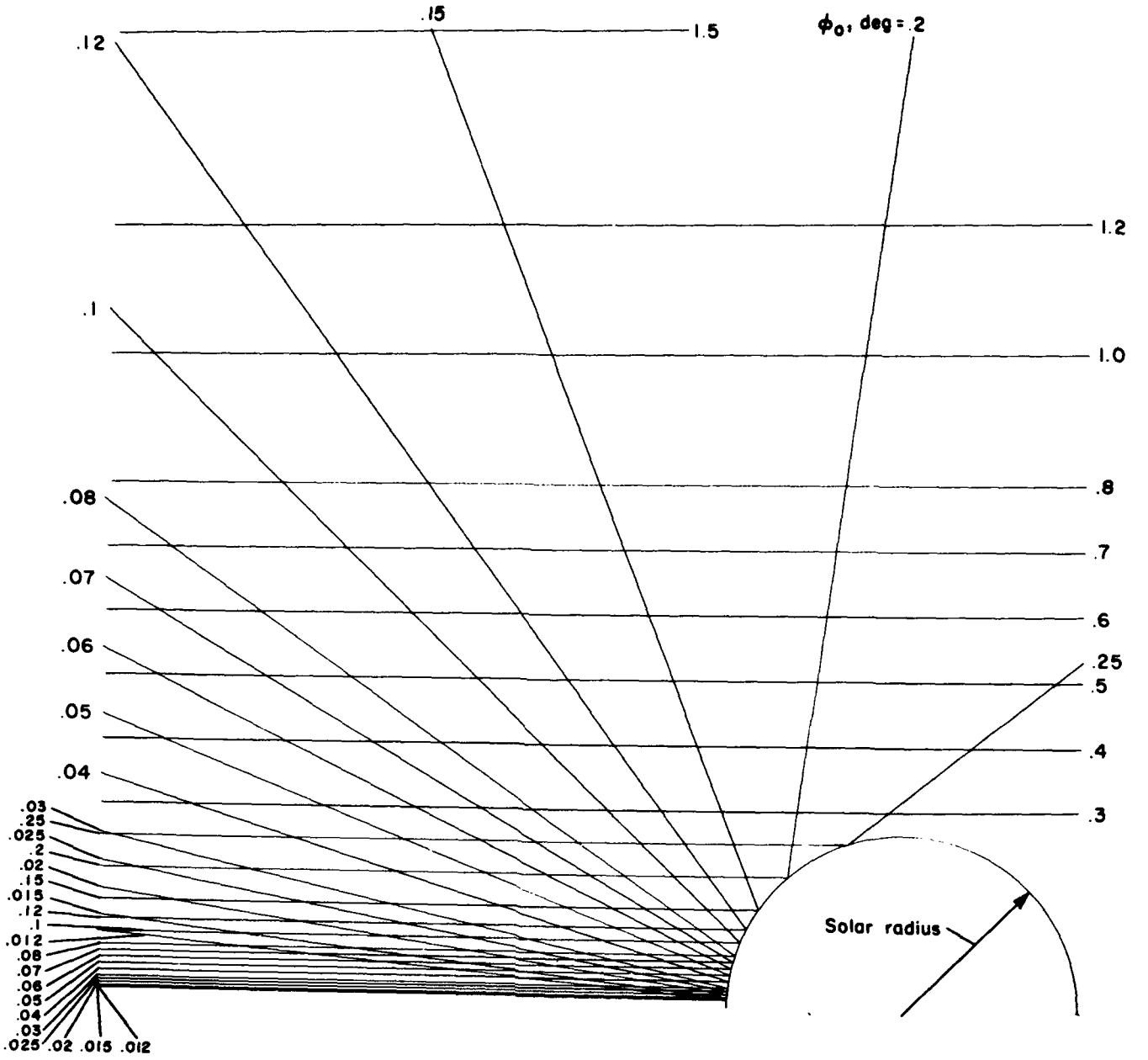
(e) 2.292 GHz

Figure 4.- Continued.



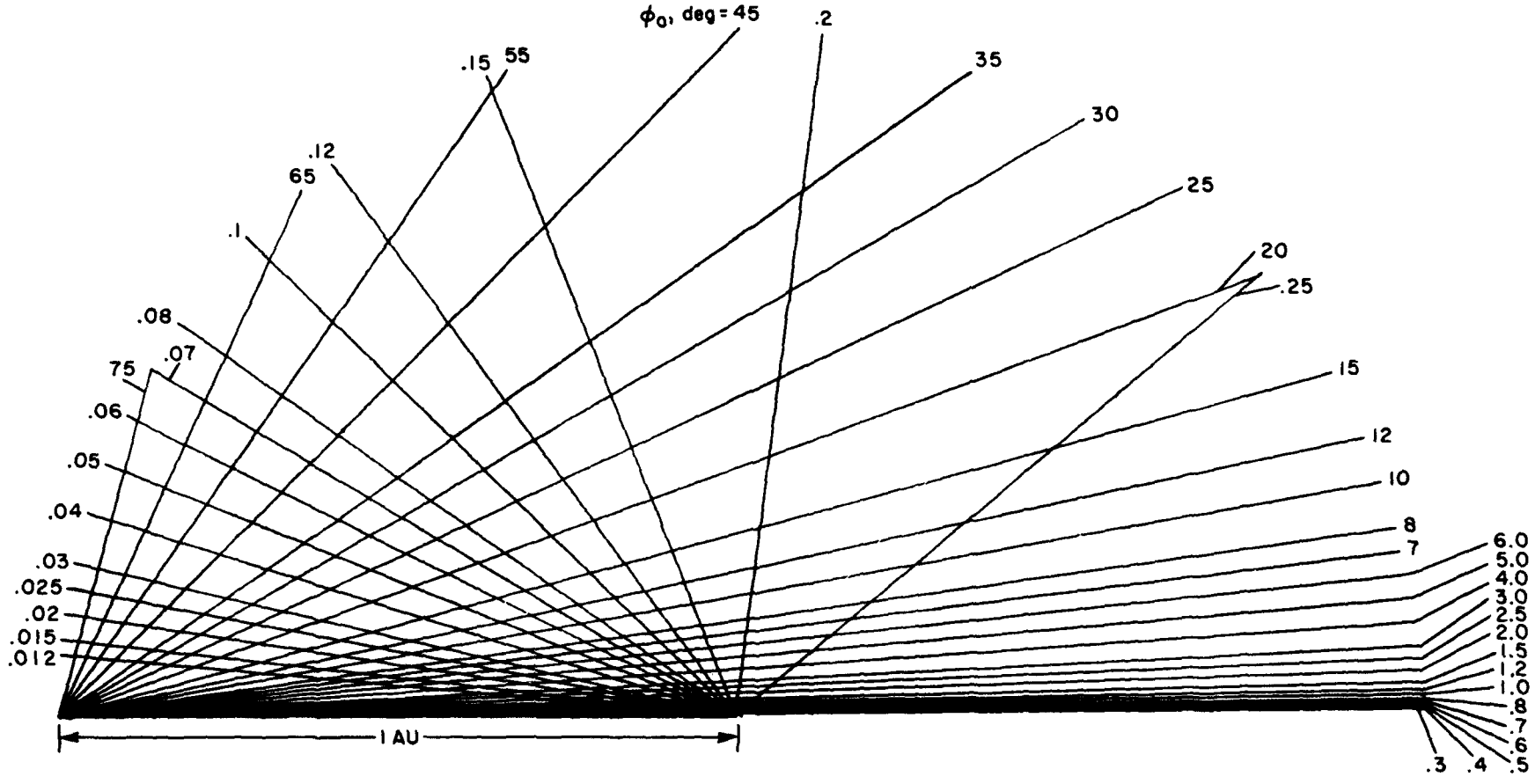
(e) 2.292 GHz - continued.

Figure 4.- Continued.



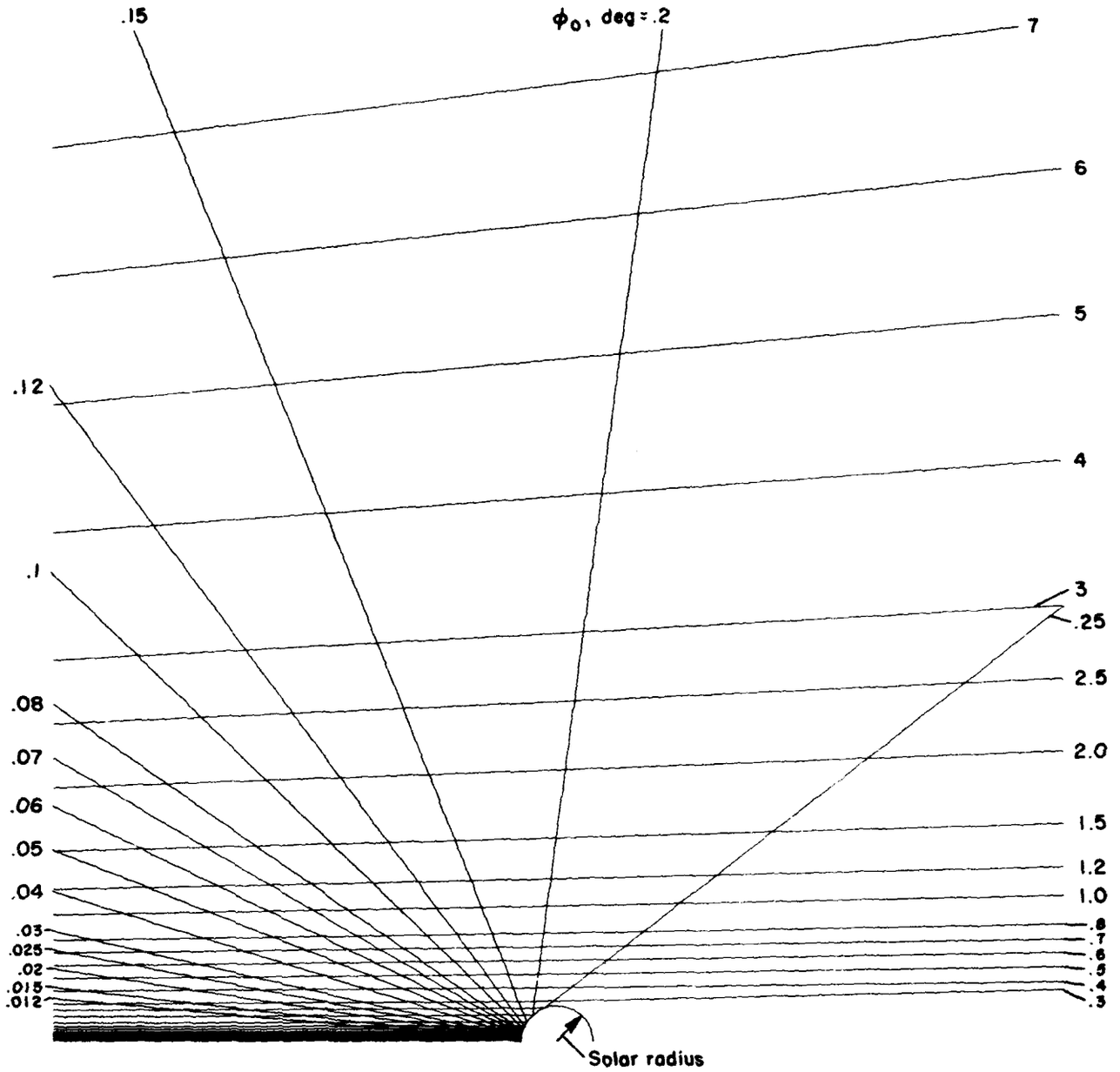
(e) 2.292 GHz - concluded.

Figure 4.- Continued.



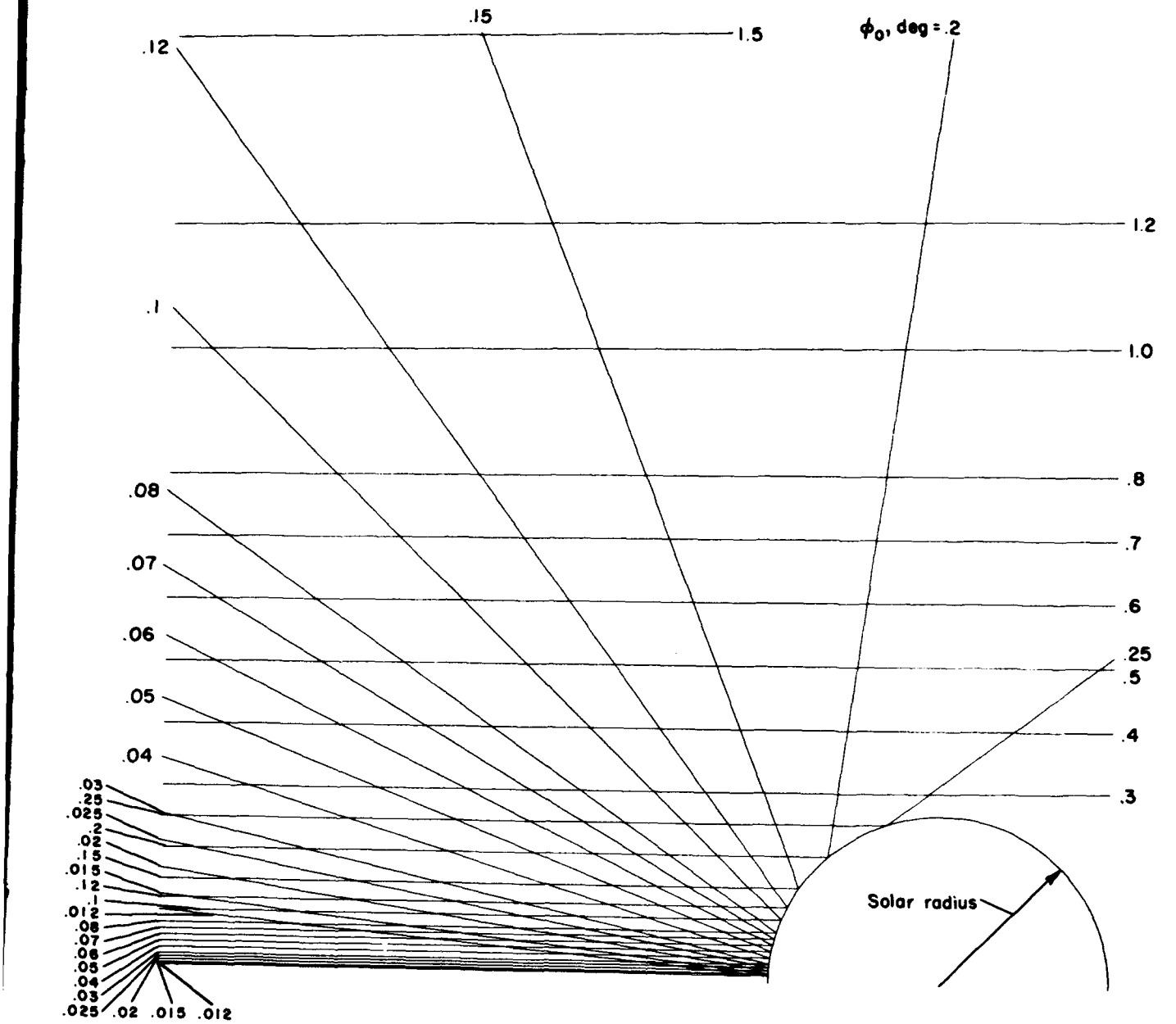
(f) 7.75 GHz

Figure 4.- Continued.



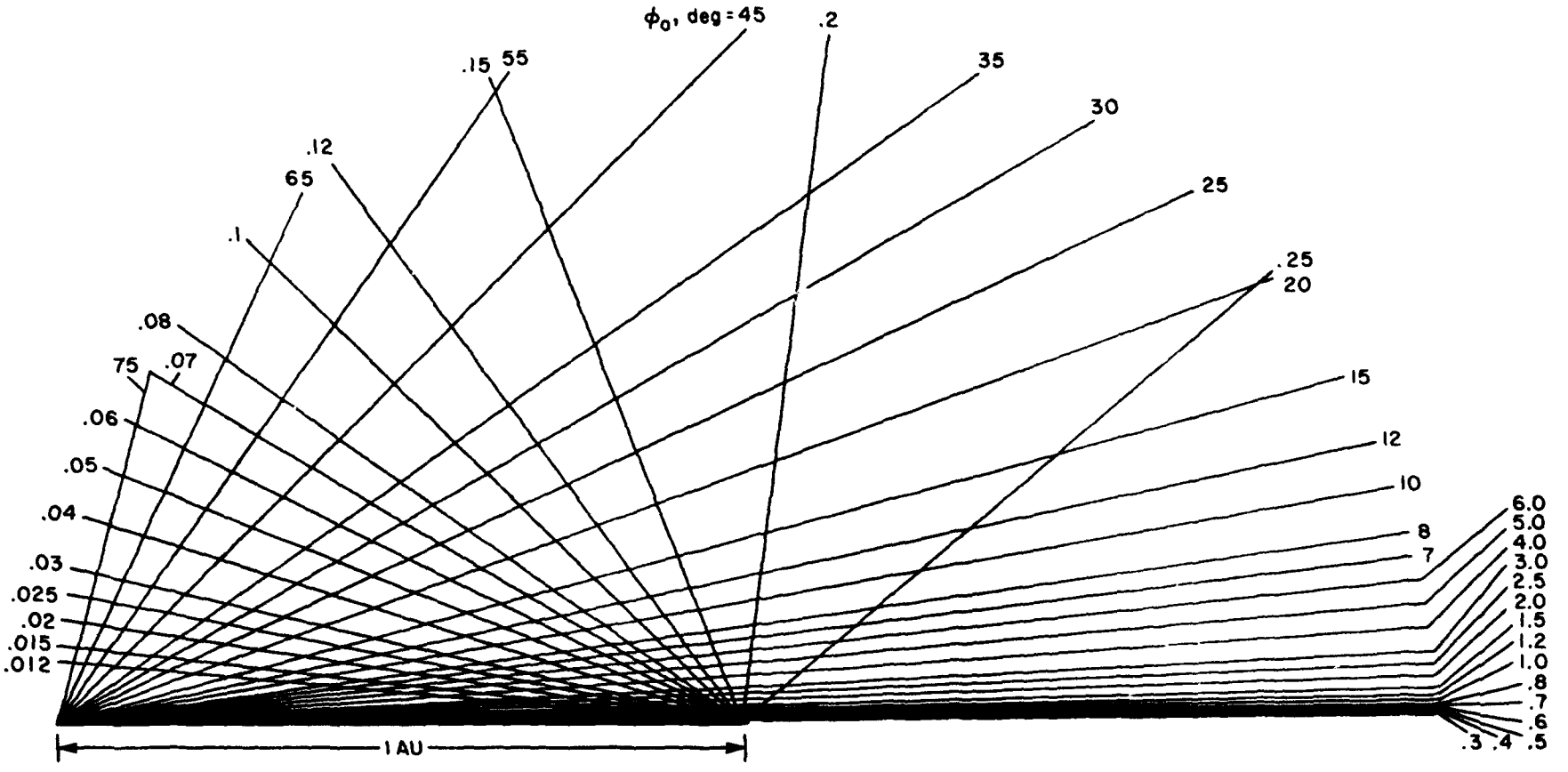
(f) 7.75 GHz - continued.

Figure 4.- Continued.



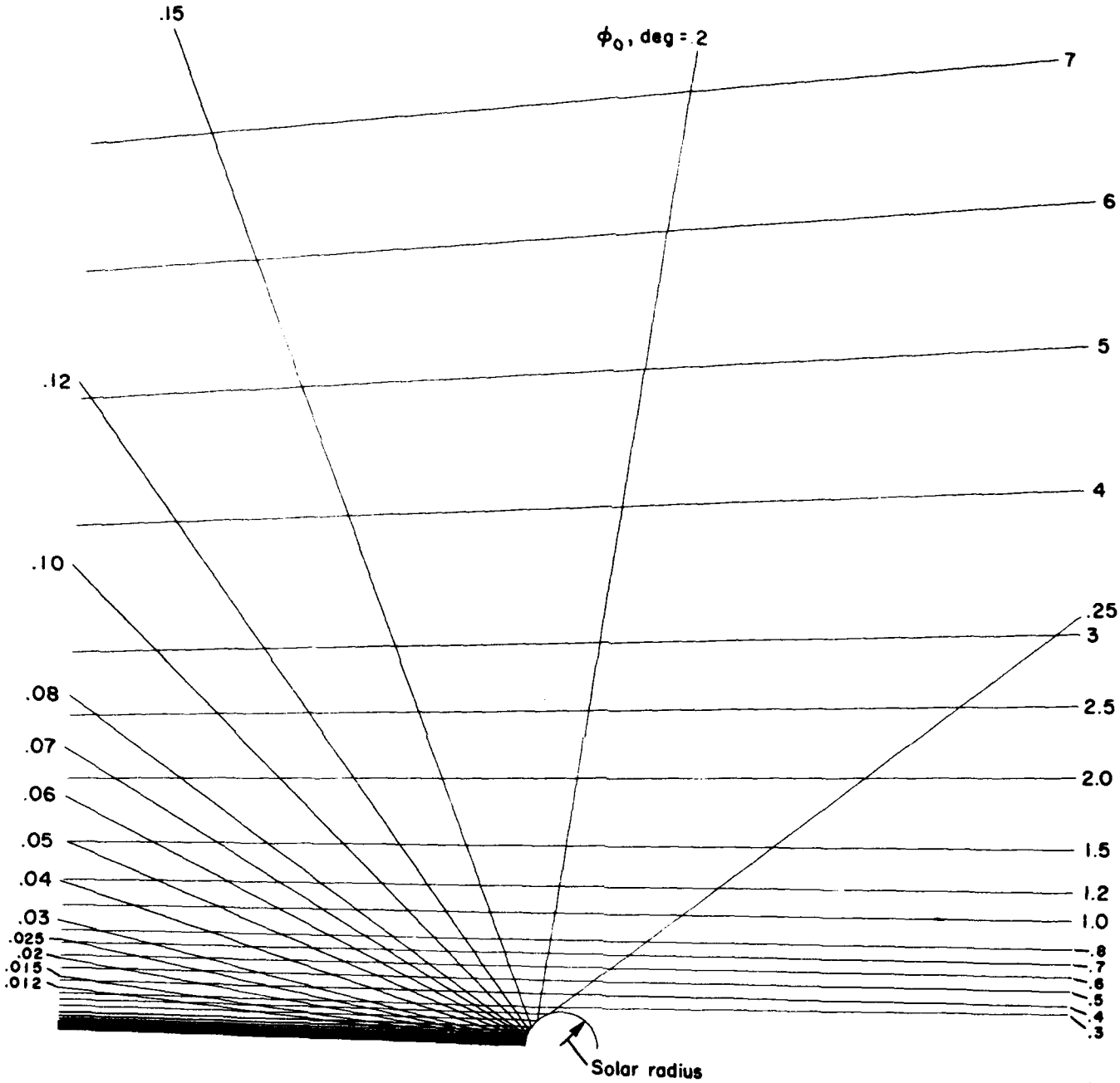
(f) 7.75 GHz - concluded.

Figure 4.- Continued.



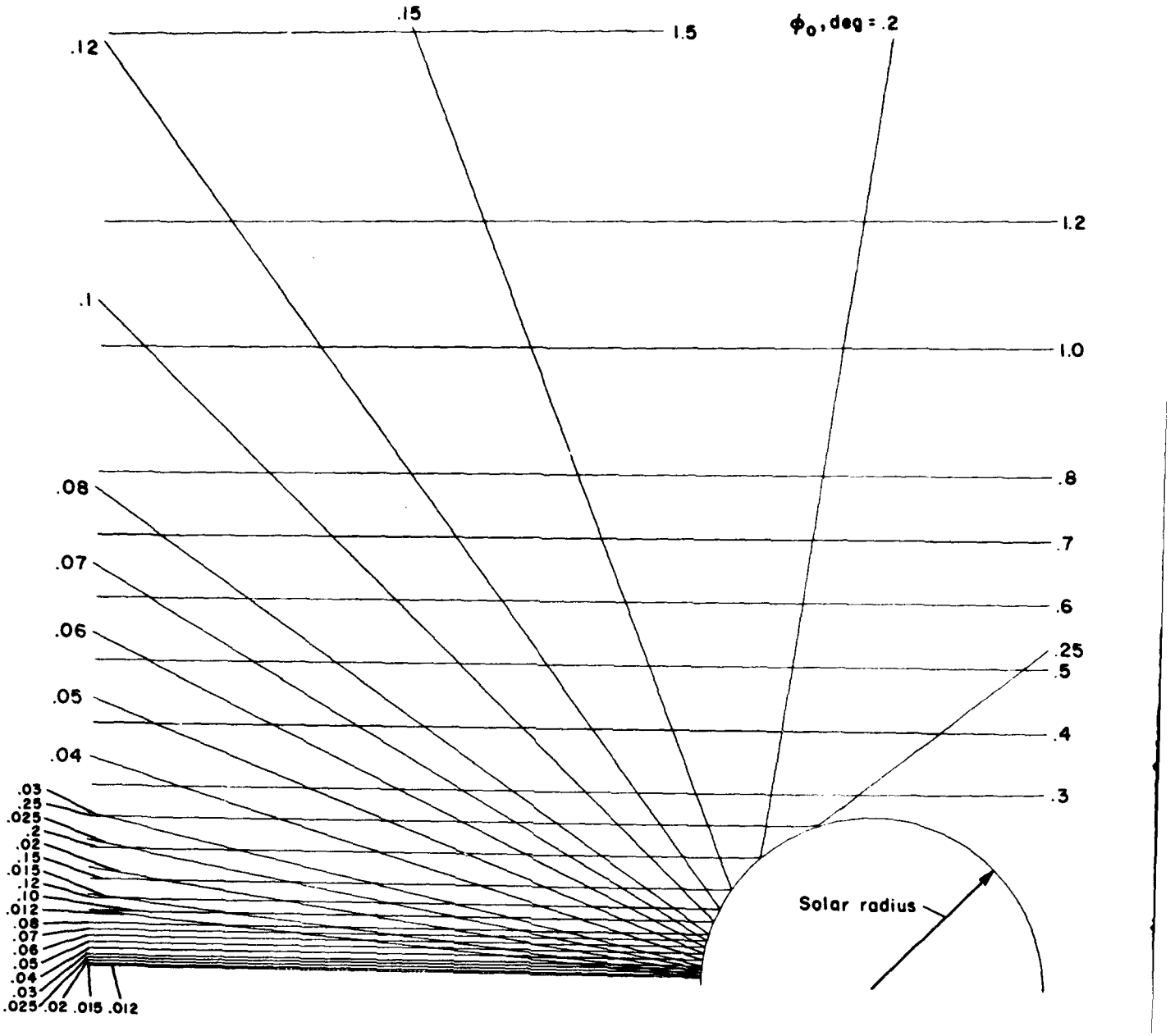
(g) 15.5 GHz

Figure 4.- Continued.



(g) 15.5 GHz - continued.

Figure 4.- Continued.



(g) 15.5 GHz - concluded.

Figure 4.- Concluded.

PARAMETERS PRESENTED IN TABLES

In table I the following physical parameters are listed as a function of the distance from the Sun ρ:

B_r parallel component of magnetic field

B_φ perpendicular component of magnetic field

f_N plasma frequency

h_d Debye length

N electron density

T electron temperature

V solar wind velocity

ν collision frequency

In table III the following propagation parameters are listed as a function of the line-of-sight distance Z from the Earth to the receiving point on the propagation path for selected propagation frequencies f and initial look angles φ_o.

$_oD_y$ normal doppler shift, ordinary wave

$_oD_z-D_o$ longitudinal doppler shift minus vacuum doppler shift, ordinary wave

$_xD_y$ normal doppler shift, extraordinary wave

$_xD_z-D_o$ longitudinal doppler shift minus vacuum doppler shift, extraordinary wave

T_o phase propagation time for vacuum

$_oT_g-T_o$ group propagation time minus vacuum propagation time, ordinary wave

$_oT_t-T_o$ phase propagation time minus vacuum propagation time, ordinary wave

$_xT_g-T_o$ group propagation time minus vacuum propagation time, extraordinary wave

$_xT_t-T_o$ phase propagation time minus vacuum propagation time, extraordinary wave

Z_r distance along propagation path to path point

α	relativistic phase difference
β	angular dispersion
θ	refractive turning angle
${}_{o}\kappa$	attenuation ratio, ordinary wave
${}_{o}\kappa_{t}$	total propagation path attenuation, ordinary wave
${}_{x}\kappa$	attenuation ratio, extraordinary wave
${}_{x}\kappa_{t}$	total propagation path attenuation, extraordinary wave
${}_{o}\mu$-1.0	real part index of refraction minus 1, ordinary wave
${}_{o}\mu'$-1.0	imaginary part index of refraction minus 1, ordinary wave
${}_{x}\mu$-1.0	real part index of refraction minus 1, extraordinary wave
${}_{x}\mu'$-1.0	imaginary part index of refraction minus 1, extraordinary wave
ρ	radial distance to the path point
φ	angle between the Sun and path point at Earth

TABLE I.- PHYSICAL PARAMETERS DEPENDENT UPON DISTANCE FROM THE SUN

ρ	N	T	V	f_N	υ	B_r	B_ϕ	h_d
1.1C	1.176E 14	9.156E C5	1.C74E 03	9.736E 07	1.463E 01	1.347E-C4	6.893E-07	6.09CE-C3
1.2C	4.677E 13	1.318E C6	2.268E 03	6.140E C7	3.535E CC	1.132E-C4	6.318E-C7	1.158E-02
1.3C	2.353E 13	1.43CE 06	3.842E C3	4.355E C7	1.606E 00	9.645E-05	5.832E-C7	1.701E-C2
1.4C	1.475E 13	1.43CE 06	5.285E 03	3.448E 07	1.018E 00	8.316E-05	5.416E-C7	2.149E-02
1.5C	9.533E 12	1.43CE 06	7.123E C3	2.772E 07	6.641E-01	7.244E-C5	5.C55E-C7	2.673E-C2
1.6C	6.252E 12	1.43CE C6	9.546E 03	2.245E C7	4.396E-01	6.367E-05	4.739E-C7	3.301E-C2
1.8C	3.156E 12	1.415E 06	1.494E 04	1.595E C7	2.287E-C1	5.031E-05	4.212E-07	4.621E-02
2.00	2.006E 12	1.378E 06	1.9C4E C4	1.271E 07	1.525E-01	4.075E-05	3.791E-C7	5.720E-02
2.2C	1.275E 12	1.342E 06	2.476E 04	1.014E 07	1.016E-01	3.368E-05	3.446E-07	7.081E-C2
2.4C	8.102E 11	1.307E 06	3.274E C4	8.081E C6	6.774E-C2	2.83CE-C5	3.159E-07	8.765E-02
2.6C	5.975E 11	1.246E 06	3.782E 04	6.939E C6	5.386E-02	2.411E-05	2.916E-07	9.966E-C2
2.8C	4.573E 11	1.181E 06	4.261E 04	6.071E 06	4.475E-02	2.079E-05	2.708E-07	1.1C9E-C1
3.0C	3.500E 11	1.120E 06	4.85CE 04	5.311E C6	3.718E-02	1.811E-05	2.527E-07	1.235E-01
3.3C	2.552E 11	1.C43E 06	5.497E 04	4.535E 06	3.024E-02	1.497E-C5	2.298E-07	1.395E-01
3.6C	1.860E 11	9.7C6E 05	6.336E 04	3.872E C6	2.460E-02	1.258E-C5	2.1C6E-07	1.576E-01
4.0C	1.280E 11	8.85CE 05	7.459E 04	3.212E C6	1.948E-02	1.019E-05	1.896E-07	1.815E-01
4.5C	9.327E 10	8.185E 05	8.088E 04	2.742E 06	1.599E-02	8.049E-C6	1.685E-07	2.044E-01
5.0C	6.796E 10	7.569E 05	8.991E 04	2.340E 06	1.312E-02	6.520E-06	1.516E-C7	2.303E-C1
5.5C	5.055E 10	7.C02E 05	9.99CE 04	2.018E C6	1.098E-02	5.388E-C6	1.379E-07	2.569E-01
6.0C	3.9CCE 10	6.48CE C5	1.088E 05	1.773E 06	9.522E-03	4.528E-C6	1.264E-C7	2.813E-01
6.5C	3.224E 10	6.161E 05	1.122E 05	1.612E 06	8.497E-03	3.858E-06	1.166E-07	3.017E-C1
7.0C	2.665E 10	5.858E C5	1.17CE 05	1.465E 06	7.582E-03	3.327E-06	1.C83E-C7	3.236E-01
7.5C	2.203E 10	5.569E 05	1.233E 05	1.332E 06	6.765E-03	2.898E-06	1.011E-C7	3.47CE-01
8.0C	1.821E 10	5.295E 05	1.311E 05	1.211E 06	6.037E-C3	2.547E-06	9.478E-C8	3.722E-01
9.0C	1.356E 10	4.877E 05	1.390E 05	1.046E C6	5.094E-03	2.012E-06	8.424E-C8	4.138E-C1
10.0C	1.030E 10	4.51CE 05	1.483E 05	9.111E 05	4.353E-03	1.630E-06	7.582E-C8	4.567E-01
11.CC	8.613E 09	4.28CE 05	1.466E 05	8.332E 05	3.939E-03	1.347E-06	6.893E-C8	4.865E-C1
12.0C	7.2C2E 09	4.062E 05	1.473E 05	7.619E 05	3.564E-03	1.132E-06	6.318E-08	5.183E-C1
13.0C	6.C22E 09	3.855E 05	1.501E 05	6.967E 05	3.225E-03	9.645E-07	5.832E-C8	5.522E-C1
14.0C	5.036E 09	3.658E 05	1.548E 05	6.371E 05	2.918E-03	8.316E-07	5.416E-08	5.883E-01
15.0C	4.211E 09	3.472E 05	1.612E 05	5.826E 05	2.641E-03	7.244E-C7	5.C55E-C8	6.267E-C1
16.0C	3.600E 09	3.16CE C5	1.658E 05	5.387E 05	2.593E-03	6.367E-07	4.739E-C8	6.466E-C1
18.00	2.868E 09	2.87CE 05	1.644E 05	4.808E 05	2.384E-03	5.031E-C7	4.212E-C8	6.904E-01
20.0C	2.285E 09	2.607E 05	1.672E 05	4.291E C5	2.191E-03	4.075E-07	3.791E-C8	7.372E-01
22.0C	1.820E 09	2.367E 05	1.734E 05	3.830E 05	2.014E-03	3.368E-07	3.446E-08	7.871E-01
24.0C	1.501E C9	2.229E C5	1.767E C5	3.478E C5	1.818E-03	2.830E-07	3.159E-08	8.411E-C1
26.0C	1.256E 09	2.132E 05	1.799E 05	3.182E 05	1.629E-03	2.411E-07	2.916E-08	8.991E-01
28.0C	1.C51E C9	2.039E 05	1.853E 05	2.911E C5	1.459E-03	2.079E-C7	2.708E-C8	9.611E-C1
30.0C	8.8CCE 08	1.95CE 05	1.929E 05	2.663E 05	1.307E-03	1.811E-07	2.527E-C8	1.027E 00
33.0C	7.22CE 08	1.82CE 05	1.943E 05	2.412E 05	1.188E-03	1.497E-07	2.298E-C8	1.096E CO
36.00	5.924E 08	1.699E 05	1.990E C5	2.185E 05	1.081E-03	1.258E-07	2.106E-08	1.169E 00
40.0C	4.550E 08	1.55CE 05	2.C98E C5	1.915E C5	9.527E-04	1.019E-07	1.896E-08	1.274E CO
45.0C	3.537E 08	1.42CE 05	2.133E 05	1.688E 05	8.449E-04	8.C49E-08	1.685E-C8	1.383E 00
50.00	2.750E 08	1.30CE 05	2.222E 05	1.489E 05	7.493E-04	6.520E-08	1.516E-C8	1.501E CO
55.0C	2.225E C8	1.217E 05	2.27CE 05	1.339E 05	6.692E-04	5.388E-08	1.379E-08	1.614E CO
60.0C	1.8C0E 08	1.14CE 05	2.358E 05	1.204E 05	5.976E-04	4.528E-C8	1.264E-C8	1.737E 00
65.00	1.530E C8	1.078E 05	2.363E 05	1.111E C5	5.527E-04	3.858E-C8	1.166E-08	1.831E 00
7C.0C	1.301E C8	1.019E 05	2.397E 05	1.024E 05	5.112E-04	3.327E-08	1.083E-08	1.931E 00
75.00	1.1C6E 08	9.627E 04	2.456E 05	9.440E 04	4.729E-04	2.898E-C8	1.011E-08	2.036E 00
80.0C	9.4C0E 07	9.10CE 04	2.539E 05	8.704E 04	4.374E-04	2.547E-08	9.478E-09	2.147E 00
90.0C	7.320E C7	8.316E 04	2.577E 05	7.681E 04	3.897E-04	2.012E-08	8.424E-09	2.326E 00
100.0C	5.70CE 07	7.6CCE 04	2.680E C5	6.778E 04	3.472E-04	1.630E-C8	7.582E-09	2.520E CO
110.0C	4.733E 07	7.150E C4	2.668E 05	6.176E 04	3.160E-04	1.347E-08	6.893E-09	2.682E CO
120.0C	3.93CE 07	6.726E 04	2.699E 05	5.628E 04	2.875E-04	1.132E-08	6.318E-09	2.855E CO
130.0C	3.263E C7	6.328E 04	2.770E 05	5.128E 04	2.617E-04	9.645E-09	5.832E-C9	3.039E 00
140.0C	2.710E 07	5.953E C4	2.876E 05	4.673E C4	2.382E-04	8.316E-09	5.416E-09	3.235E CO
150.0C	2.25CE 07	5.60CE 04	3.018E 05	4.258E 04	2.167E-04	7.244E-09	5.055E-09	3.443E 00
160.0C	1.913E C7	5.36CE 04	3.119E 05	3.927E 04	1.969E-04	6.367E-C9	4.739E-09	3.653E CO
180.0C	1.383E C7	4.911E 04	3.4C9E 05	3.339E 04	1.625E-04	5.031E-09	4.212E-09	4.113E CO
200.0C	1.000E C7	4.5CCE 04	3.819E 05	2.839E 04	1.342E-04	4.075E-09	3.791E-09	4.630E 00
215.0C	7.922E C6	4.277E 04	4.172E 05	2.527E 04	1.149E-04	3.526E-09	3.527E-09	5.071E 00

TABLE II.- NORMALIZED PARTIAL DERIVATIVES DEPENDENT UPON DISTANCE FROM THE SUN AND PROPAGATION FREQUENCY

[All normalized partial derivatives defined and listed on pages 14-16 are tabulated here as a function of the distance from the Sun ρ and propagation frequency.]

NORMALIZED DERIVATIVES WITH RESPECT TO ELECTRON DENSITY

PD1=+C.5 PD2=C.C PD3=C.0

PROPAGATION FREQUENCY= 4.980CE 07

ρ	PD4	PD5=PD12	PD6=PD13	PD7	PD8	PD9	PD10	PD11
1.3C	9.775E-01	1.454E GC	1.642E 00	2.792E JO	3.894E 00	3.297E 00	4.C87E 00	-1.982E-04
1.4C	9.777E-01	1.179E 0C	1.2C9E 00	1.609E 00	1.747E C0	2.400E 0C	2.483E C0	-4.626E-05
1.5C	9.779E-01	1.C97E 0C	1.1C8E 00	1.312E GC	1.360E C0	2.190E 0C	2.216E 00	-3.257E-05
1.6C	9.781E-01	1.058E 0C	1.C63E 00	1.182E 0C	1.203E 00	2.10CE 00	2.112E C0	-2.983E-05
1.8C	9.784E-01	1.027E CC	1.029E 00	1.C83E CC	1.090E 00	2.034E 00	2.037E C0	-3.401E-05
2.6C	9.786E-01	1.017E 0C	1.018E 00	1.C51E 0C	1.055E 0C	2.013E 0C	2.C14E C0	-3.857E-05
2.2C	9.788E-01	1.01CE 00	1.011E 00	1.032E CC	1.034E 00	2.000E 0C	2.C01E C0	-4.677E-05
2.4C	9.789E-01	1.C07E 0C	1.C07E 00	1.02CE CC	1.021E 00	1.992E C0	1.993E 00	-5.908E-05
2.6C	9.790E-01	1.C05E 0C	1.C05E 00	1.015E 0C	1.015E C0	1.989E 0C	1.989E 00	-6.686E-05
2.8C	9.791E-01	1.004E 0C	1.C04E C0	1.C11E JC	1.012E 00	1.987E 00	1.987E C0	-7.431E-05
3.0C	9.791E-01	1.C03E 0C	1.CC3E C0	1.C09E C0	1.009E C0	1.985E 0C	1.985E 00	-8.369E-05
3.3C	9.792E-01	1.CC2E 0C	1.CC2E 00	1.006E 0C	1.C06E 00	1.983E 0C	1.983E 00	-9.400E-05
3.6C	9.792E-01	1.C02E CC	1.C02E 00	1.005E 00	1.005E 00	1.982E 0C	1.982E C0	-1.076E-04
4.0C	9.792E-01	1.C01E 0C	1.C01E 00	1.003E 00	1.003E 00	1.981E C0	1.981E C0	-1.260E-04
4.5C	9.793E-01	1.C01E 0C	1.CC1E 00	1.CC2E C0	1.002E 00	1.981E CC	1.981E 00	-1.361E-04
5.0C	9.793E-01	1.C01E 0C	1.CC1E C0	1.002E 0C	1.002E C0	1.980E CC	1.980E 00	-1.510E-04
5.5C	9.793E-01	1.CCCE 0C	1.CC0E 00	1.001E JC	1.001E 00	1.980E 0C	1.980E 00	-1.674E-04
6.0C	9.793E-01	1.00CE 0C	1.CC0E 00	1.001E 0C	1.001E 00	1.980E C0	1.980E 00	-1.822E-04
6.5C	9.794E-01	1.0CCE 0C	1.CC0E 00	1.C01E 00	1.001E C0	1.980E 0C	1.980E C0	-1.877E-04
7.0C	9.794E-01	1.CCCE 0C	1.CC0E C0	1.C01E 00	1.001E 0C	1.980E 00	1.980E 00	-1.956E-04
7.5C	9.794E-01	1.00CE 0C	1.CC0E 00	1.001E 00	1.001E 00	1.98CE 00	1.980E 00	-2.061E-04
8.0C	9.794E-01	1.00CE 0C	1.C00E 00	1.C00E 0C	1.C00E 00	1.980E CC	1.980E C0	-2.191E-04
9.0C	9.794E-01	1.00CE 00	1.C0CE C0	1.000E 0C	1.0C0E C0	1.980E CC	1.980E C0	-2.322E-04
10.0C	9.795E-01	1.CCCE 00	1.CC0E 00	1.CC0E 0C	1.000E 0C	1.980E 0C	1.980E C0	-2.476E-04
11.0C	9.795E-01	1.0CCE 0C	1.CC0E 00	1.000E CC	1.C00E 00	1.98CE C0	1.980E 00	-2.447E-04
12.0C	9.795E-01	1.C0CE 00	1.CC0E 00	1.C00E 00	1.0C0E 00	1.980E 0C	1.980E 00	-2.459E-04
13.0C	9.795E-01	1.00CE 0C	1.CC0E C0	1.CC0E C0	1.0C0E C0	1.980E CC	1.980E C0	-2.505E-04
14.0C	9.795E-01	1.C0CE CC	1.CCCE C0	1.C00E 0C	1.000E 00	1.98CE 0C	1.980E C0	-2.583E-04
15.0C	9.795E-01	1.CCCE 0C	1.C00E 00	1.C00E 00	1.000E 00	1.980E 0C	1.980E 0C	-2.690E-04
16.0C	9.794E-01	1.0CCE 0C	1.C00E C0	1.CC0E C0	1.C00E 00	1.98CE C0	1.980E C0	-2.766E-04
18.0C	9.794E-01	1.CCCE 0C	1.CC0E C0	1.C00E 0C	1.000E 00	1.979E CC	1.979E C0	-2.743E-04
20.0C	9.794E-01	1.CCCE 00	1.C00E 00	1.C00E C0	1.000E C0	1.979E C0	1.979E C0	-2.789E-04
22.0C	9.794E-01	1.0CCE 00	1.C00E 00	1.C00E 00	1.000E CC	1.979E 0C	1.979E 00	-2.893E-04
24.0C	9.794E-01	1.C0CE 0C	1.C00E 00	1.C00E 00	1.000E C0	1.979E 0C	1.979E 00	-2.948E-04
26.0C	9.794E-01	1.00CE CC	1.0CCE C0	1.C00E C0	1.C00E C0	1.979E C0	1.979E 0C	-3.0C1E-04
28.0C	9.794E-01	1.CCCE 0C	1.CC0E 00	1.CC0E CC	1.0C0E 00	1.979E 00	1.979E 00	-3.091E-04
30.0C	9.794E-01	1.C0CE 0C	1.CC0E 00	1.C00E 00	1.C00E 00	1.979E 0C	1.979E 00	-3.217E-04
33.0C	9.794E-01	1.0CCE 0C	1.C00E C0	1.CC0E 00	1.000E C0	1.979E C0	1.979E 00	-3.241E-04
36.0C	9.794E-01	1.C0CE 0C	1.C00E 00	1.CC0E 00	1.000E 00	1.979E 0C	1.979E C0	-3.319E-04
40.0C	9.794E-01	1.00CE CC	1.CC0E C0	1.000E CC	1.000E C0	1.979E 00	1.979E C0	-3.5CCE-04
45.0C	9.794E-01	1.C0CE 00	1.CC0E 00	1.000E 00	1.000E C0	1.979E C0	1.979E C0	-3.557E-04
50.0C	9.794E-01	1.000E 0C	1.000E C0	1.C00E 00	1.000E 00	1.979E 00	1.979E C0	-3.706E-04
55.0C	9.794E-01	1.C0CE 0C	1.CC0E 00	1.C00E C0	1.000E 0C	1.979E 0C	1.979E C0	-3.786E-04
60.0C	9.794E-01	1.C0CE 0C	1.CC0E 00	1.CC0E 0C	1.000E 00	1.979E C0	1.979E 00	-3.932E-04
65.0C	9.794E-01	1.00CE 0C	1.0C0E 00	1.C00E 00	1.000E 00	1.979E CC	1.979E 00	-3.941E-04
70.0C	9.794E-01	1.00CE 0C	1.CC0E 00	1.000E 00	1.000E 00	1.979E 0C	1.979E 00	-3.^98E-04
75.0C	9.794E-01	1.C0CE 00	1.CC0E 0C	1.C00E CC	1.000E C0	1.979E C0	1.979E C0	-4.C96E-04
80.0C	9.794E-01	1.CCCE 00	1.CC0E C0	1.000E CC	1.000E 00	1.979E C0	1.979E 00	-4.235E-04
90.0C	9.794E-01	1.00CE 0C	1.CC0E 00	1.C00E 0C	1.000E 00	1.979E CC	1.979E 00	-4.297E-04
100.0C	9.794E-01	1.000E C0	1.C00E 00	1.C00E CC	1.000E 00	1.979E 00	1.979E 00	-4.470E-04
110.0C	9.794E-01	1.00CE 00	1.CCCE 0C	1.C00E 00	1.000E 00	1.979E 00	1.979E C0	-4.449E-04
120.0C	9.794E-01	1.C0CE 00	1.C0CE 00	1.000E CC	1.000E 00	1.979E 00	1.979E 00	-4.5C2E-04
130.0C	9.794E-01	1.CCCE 00	1.C00E 00	1.000E 00	1.C00E C0	1.979E 0C	1.979E C0	-4.620E-04
140.0C	9.794E-01	1.C0CE CC	1.0C0E C0	1.C00E C0	1.000E 00	1.979E 00	1.979E 00	-4.797E-04
150.0C	9.794E-01	1.00CE CC	1.0C0E C0	1.000E 00	1.0C0E 00	1.979E 00	1.979E 00	-5.C33E-04
160.0C	9.794E-01	1.00CE 0C	1.CC0E 00	1.C00E 0C	1.C00E 00	1.979E 0C	1.979E 00	-5.202E-04
180.0C	9.794E-01	1.C0CE 00	1.CC0E C0	1.000E C0	1.0C0E 00	1.979E 0C	1.979E C0	-5.685E-04
200.0C	9.795E-01	1.00CE 00	1.C00E 00	1.C00E C0	1.000E 00	1.979E 00	1.979E C0	-6.37CE-04
215.00	9.795E-01	1.C0CE 00	1.C00E 00	1.C00E C0	1.0C0E 00	1.979E C0	1.979E C0	-6.958E-04

NORMALIZED DERIVATIVES WITH RESPECT TO TEMPERATURE

PD14=C.C PD15=C.C PD16=C.C PD18=PD25=0.C
PD20=C.C PD21=C.C PD24=C.C PD19=PD26=C.C

PROPAGATION FREQUENCY= 4.98COE C7

ρ	PD17	PD22	PD23
1.3C	-1.432E 00	-1.432E 00	-1.432E 00
1.4C	-1.433E CO	-1.433E CO	-1.433E 00
1.5C	-1.434E CO	-1.434E OC	-1.434E OC
1.6C	-1.434E CO	-1.434E OC	-1.434E 00
1.8C	-1.435E 00	-1.435E OC	-1.435E 00
2.0C	-1.436E CO	-1.436E OC	-1.436E 00
2.2C	-1.436E CC	-1.436E OC	-1.436E OC
2.4C	-1.437E CO	-1.437E OC	-1.437E 00
2.6C	-1.437E CO	-1.437E 00	-1.437E 00
2.8C	-1.437E CO	-1.437E OC	-1.437E 00
3.0C	-1.437E 00	-1.437E OC	-1.437E CO
3.3C	-1.437E 00	-1.437E OC	-1.437E 00
3.6C	-1.438E CO	-1.438E OC	-1.438E 00
4.0C	-1.438E CO	-1.438E CO	-1.438E 00
4.5C	-1.438E CC	-1.438E OC	-1.438E 00
5.0C	-1.438E CO	-1.438E 00	-1.438E 00
5.5C	-1.438E CO	-1.438E 00	-1.438E CO
6.0C	-1.438E CO	-1.438E CC	-1.438E CO
6.5C	-1.438E CO	-1.438E OC	-1.438E 00
7.0C	-1.438E CO	-1.438E 00	-1.438E CO
7.5C	-1.438E 00	-1.438E 00	-1.438E 00
8.0C	-1.438E CC	-1.438E OC	-1.438E 00
9.0C	-1.438E CO	-1.438E OC	-1.438E 00
10.0C	-1.438E CO	-1.438E OC	-1.438E 00
11.0C	-1.438E CO	-1.438E 00	-1.438E 00
12.0C	-1.438E CO	-1.438E 00	-1.438E CO
13.0C	-1.438E CC	-1.438E OC	-1.438E 00
14.0C	-1.438E CC	-1.438E 00	-1.438E 00
15.0C	-1.438E CO	-1.438E OC	-1.438E CO
16.0C	-1.438E CO	-1.438E 00	-1.438E 00
18.0C	-1.438E CO	-1.438E 00	-1.438E CO
20.0C	-1.438E 00	-1.438E 00	-1.438E 00
22.0C	-1.438E CO	-1.438E OC	-1.438E CO
24.0C	-1.438E CO	-1.438E 00	-1.438E 00
26.0C	-1.438E CC	-1.438E OC	-1.438E 00
28.0C	-1.438E CC	-1.438E 00	-1.438E 00
30.0C	-1.438E CO	-1.438E OC	-1.438E CO
33.0C	-1.438E CC	-1.438E OC	-1.438E CO
36.0C	-1.438E CC	-1.438E CC	-1.438E CO
40.0C	-1.438E CC	-1.438E OC	-1.438E 00
45.0C	-1.438E 00	-1.438E OC	-1.438E 00
50.0C	-1.438E CO	-1.438E OC	-1.438E 00
55.0C	-1.438E CC	-1.438E 00	-1.438E 00
60.0C	-1.438E CC	-1.438E 00	-1.438E 00
65.0C	-1.438E CO	-1.438E 00	-1.438E 00
70.0C	-1.438E CO	-1.438E OC	-1.438E OC
75.0C	-1.438E CO	-1.438E CC	-1.438E 00
80.CC	-1.438E CO	-1.438E OC	-1.438E 00
90.0C	-1.438E OC	-1.438E CO	-1.438E 00
100.0C	-1.438E CC	-1.438E CC	-1.438E CO
110.0C	-1.438E CO	-1.438E OC	-1.438E 00
120.0C	-1.438E CO	-1.438E CC	-1.438E 00
130.0C	-1.438E CO	-1.438E OC	-1.438E 00
140.CC	-1.438E CO	-1.438E OC	-1.438E 00
150.CC	-1.438E CC	-1.438E CC	-1.438E 00
160.0C	-1.438E CO	-1.438E OC	-1.438E 00
180.CC	-1.438E CO	-1.438E CO	-1.438E CO
200.CC	-1.438E CO	-1.438E CC	-1.438E CO
215.0C	-1.438E CC	-1.438E OC	-1.438E CO

NORMALIZED DERIVATIVES WITH RESPECT TO SOLAR WIND VELOCITY

PD27=C.C PD28=0.0 PD29=-1.0 PD30=0.0

PROPAGATION FREQUENCY= 4.980CE 07

ρ	PD31=PD38	PD32=PD39	PD33	PD34	PD35	PD36	PD37
1.3C	7.477E-C2	-8.445E-C2	1.823E-01	-2.418E-01	1.7C7E-01	-2.231E-01	3.CC0E CC
1.4C	5.265E-02	-5.395E-C2	1.104E-01	-1.256E-01	1.C82E-C1	-1.206E-01	3.CC0E 00
1.5C	4.291E-C2	-4.334E-C2	8.718E-02	-9.729E-02	8.654E-C2	-9.423E-C2	3.CCCE CC
1.6C	3.654E-C2	-3.672E-C2	7.353E-C2	-8.114E-02	7.332E-C2	-7.885E-02	3.C00E CC
1.8C	2.824E-C2	-2.829E-C2	5.656E-02	-6.129E-02	5.652E-C2	-5.982E-02	3.CCCE CC
2.0C	2.277E-02	-2.279E-C2	4.556E-02	-4.867E-02	4.555E-02	-4.768E-C2	3.CCCE CC
2.2C	1.877E-C2	-1.878E-02	3.755E-02	-3.969E-02	3.755E-02	-3.900E-C2	3.CC0E CC
2.4C	1.576E-C2	-1.576E-C2	3.152E-02	-3.303E-02	3.152E-02	-3.254E-02	3.C00E CC
2.6C	1.344E-02	-1.344E-C2	2.688E-02	-2.797E-02	2.688E-C2	-2.761E-02	3.CCCE CC
2.8C	1.159E-02	-1.160E-C2	2.319E-02	-2.401E-02	2.319E-02	-2.374E-02	3.CCCE CC
3.CC	1.011E-C2	-1.011E-C2	2.021E-02	-2.083E-02	2.021E-02	-2.063E-02	3.CC0E CC
3.3C	8.361E-03	-8.361E-C3	1.672E-02	-1.715E-02	1.672E-02	-1.701E-02	3.CCCE CC
3.6C	7.C31E-C3	-7.C31E-03	1.406E-02	-1.436E-02	1.406E-02	-1.426E-02	3.CC0E 00
4.0C	5.7C0E-03	-5.7C0E-C3	1.140E-02	-1.160E-02	1.140E-02	-1.153E-02	3.CCCE CC
4.5C	4.5C8E-03	-4.5C8E-C3	9.C17E-C3	-9.139E-C3	9.C17E-03	-9.099E-03	3.CCCE CC
5.0C	3.654E-03	-3.654E-C3	7.309E-03	-7.389E-03	7.309E-03	-7.362E-03	3.CC0E CC
5.5C	3.C22E-03	-3.022E-C3	6.043E-03	-6.098E-03	6.C43E-03	-6.080E-03	3.CCCE CC
6.0C	2.540E-C3	-2.540E-C3	5.C80E-C3	-5.119E-03	5.080E-03	-5.106E-03	3.CC0E CC
6.5C	2.165E-C3	-2.165E-03	4.331E-03	-4.359E-03	4.331E-03	-4.349E-03	3.CCCE CC
7.0C	1.868E-C3	-1.868E-C3	3.735E-03	-3.756E-03	3.735E-03	-3.749E-03	3.000E CC
7.5C	1.627E-C3	-1.627E-03	3.255E-03	-3.271E-03	3.255E-03	-3.265E-C3	3.000E 00
8.0C	1.431E-03	-1.431E-03	2.861E-C3	-2.874E-03	2.861E-03	-2.870E-C3	3.CC0E CC
9.0C	1.131E-03	-1.131E-C3	2.262E-03	-2.269E-C3	2.262E-03	-2.267E-C3	3.CCCE CC
10.0C	9.164E-04	-9.164E-C4	1.833E-03	-1.838E-C3	1.833E-03	-1.836E-03	3.CC0E CC
11.0C	7.576E-04	-7.576E-04	1.515E-03	-1.519E-03	1.515E-03	-1.518E-C3	3.000E CC
12.CC	6.368E-04	-6.368E-C4	1.274E-C3	-1.276E-03	1.274E-03	-1.275E-03	3.000E CC
13.CC	5.428E-04	-5.428E-C4	1.C86E-03	-1.087E-03	1.086E-03	-1.087E-03	2.999E 00
14.0C	4.682E-04	-4.682E-C4	9.364E-04	-9.378E-04	9.364E-C4	-9.373E-C4	2.999E CC
15.0C	4.C80E-C4	-4.C8CE-04	8.160E-04	-8.170E-04	8.160E-04	-8.167E-04	2.999E CC
16.0C	3.587E-04	-3.587E-04	7.175E-04	-7.183E-04	7.175E-04	-7.18CE-04	2.999E CC
18.CC	2.837E-04	-2.837E-04	5.674E-C4	-5.678E-04	5.674E-04	-5.677E-C4	2.999E CC
20.0C	2.3C0E-04	-2.3C0E-C4	4.6C0E-04	-4.603E-04	4.6C0E-04	-4.602E-04	2.999E CC
22.0C	1.9C2E-04	-1.9C2E-04	3.805E-04	-3.807E-04	3.805E-04	-3.806E-04	2.999E CC
24.0C	1.6C0E-04	-1.6C0E-04	3.200E-C4	-3.202E-04	3.200E-C4	-3.201E-C4	2.999E CC
26.0C	1.365E-04	-1.365E-C4	2.730E-04	-2.731E-04	2.730E-04	-2.731E-C4	2.999E CC
28.0C	1.178E-04	-1.178E-C4	2.357E-04	-2.357E-04	2.357E-04	-2.357E-04	2.999E CC
30.0C	1.028E-04	-1.028E-C4	2.C55E-04	-2.056E-04	2.055E-04	-2.056E-04	2.999E CC
33.0C	8.511E-05	-8.511E-C5	1.702E-C4	-1.703E-04	1.7C2E-04	-1.702E-04	2.999E CC
36.0C	7.167E-C5	-7.167E-05	1.433E-04	-1.434E-04	1.433E-04	-1.434E-04	2.999E CC
40.0C	5.824E-05	-5.824E-05	1.165E-04	-1.165E-04	1.165E-04	-1.165E-04	2.999E 00
45.0C	4.622E-05	-4.622E-C5	9.244E-05	-9.245E-05	9.244E-05	-9.245E-05	2.999E CC
50.0C	3.762E-C5	-3.762E-C5	7.525E-05	-7.525E-05	7.525E-C5	-7.525E-C5	2.999E CC
55.0C	3.126E-05	-3.126E-C5	6.252E-05	-6.253E-05	6.252E-05	-6.253E-05	2.999E CC
60.0C	2.642E-C5	-2.642E-C5	5.284E-05	-5.285E-05	5.284E-C5	-5.284E-05	2.999E 00
65.0C	2.265E-05	-2.265E-C5	4.531E-05	-4.531E-05	4.531E-05	-4.531E-C5	2.999E CC
70.0C	1.966E-C5	-1.966E-C5	3.933E-05	-3.933E-05	3.933E-05	-3.933E-05	2.999E 00
75.0C	1.725E-C5	-1.725E-C5	3.450E-05	-3.450E-05	3.450E-C5	-3.450E-05	2.999E 00
80.0C	1.527E-05	-1.527E-C5	3.055E-C5	-3.055E-05	3.055E-05	-3.055E-05	2.999E CC
90.0C	1.226E-05	-1.226E-05	2.452E-05	-2.452E-05	2.452E-05	-2.452E-C5	2.999E CC
100.0C	1.C10E-C5	-1.01CE-C5	2.021E-C5	-2.021E-05	2.021E-05	-2.021E-05	2.999E CC
110.00	8.5C5E-06	-8.5C5E-C6	1.701E-C5	-1.701E-05	1.701E-C5	-1.701E-05	2.999E 00
120.0C	7.286E-C6	-7.286E-C6	1.457E-05	-1.457E-05	1.457E-05	-1.457E-05	2.999E CC
130.0C	6.335E-06	-6.335E-C6	1.267E-C5	-1.267E-05	1.267E-C5	-1.267E-05	2.999E CC
140.0C	5.578E-C6	-5.578E-C6	1.116E-C5	-1.116E-05	1.116E-05	-1.116E-C5	2.999E 00
150.CC	4.965E-C6	-4.965E-C6	9.930E-C6	-9.930E-C6	9.930E-06	-9.93CE-C6	2.999E CC
160.CC	4.461E-C6	-4.461E-C6	8.922E-06	-8.922E-06	8.922E-C6	-8.922E-06	2.999E CC
180.CC	3.688E-06	-3.688E-C6	7.376E-06	-7.376E-06	7.376E-06	-7.376E-06	2.999E CC
200.0C	3.128E-C6	-3.128E-C6	6.257E-06	-6.257E-C6	6.257E-C6	-6.257E-C6	2.999E CC
215.CC	2.803E-C6	-2.8C3E-C6	5.6C6E-C6	-5.6C6E-06	5.6C6E-C6	-5.6C6E-C6	2.999E CC

NORMALIZED DERIVATIVES WITH RESPECT TO MAGNETIC FIELD STRENGTH

PD40=C.0 PD41=1.0 PD42=1.C PD43=C.C PD50=C.0

PROPAGATICN FREQLENCY= 4.98COE 07

ρ	PD44=PD51	PD45=PD52	PD46	PD47	PD48	PD49
1.3C	-7.477E-02	9.4138-C2	-1.823E-01	2.554E-C1	-1.7C7E-C1	2.356E-C1
1.4C	-5.265E-02	5.929G-02	-1.104E-01	1.258E-01	-1.082E-C1	1.229E-01
1.5C	-4.291E-C2	4.7C28-02	-8.718E-02	9.580E-02	-8.654E-02	9.502E-02
1.6C	-3.654E-02	3.945E-C2	-7.353E-C2	7.944E-02	-7.332E-C2	7.919E-02
1.8C	-2.824E-02	2.993E-C2	-5.656E-02	5.996E-02	-5.652E-C2	5.992E-02
2.CC	-2.277E-02	2.3856-C2	-4.556E-02	4.774E-C2	-4.555E-C2	4.772E-C2
2.2C	-1.877E-C2	1.9518-C2	-3.755E-02	3.902E-02	-3.755E-02	3.902E-02
2.4C	-1.576E-02	1.627E-C2	-3.152E-02	3.255E-02	-3.152E-C2	3.255E-02
2.6C	-1.344E-02	1.381E-C2	-2.688E-02	2.762E-02	-2.688E-C2	2.762E-02
2.8C	-1.159E-02	1.187E-02	-2.319E-02	2.374E-02	-2.319E-02	2.374E-02
3.0C	-1.011E-02	1.C32E-C2	-2.021E-02	2.063E-02	-2.021E-02	2.063E-02
3.3C	-8.361E-03	8.5C3E-C3	-1.672E-C2	1.701E-C2	-1.672E-02	1.7C1E-02
3.6C	-7.C31E-03	7.131E-03	-1.406E-02	1.426E-C2	-1.406E-C2	1.426E-02
4.0C	-5.700E-03	5.766E-C3	-1.14CE-02	1.153E-02	-1.140E-C2	1.153E-C2
4.5C	-4.508E-03	4.549E-C3	-9.017E-C3	9.099E-03	-9.017E-03	9.099E-C3
5.GC	-3.654E-C3	3.681E-C3	-7.309E-C3	7.362E-C3	-7.309E-C3	7.362E-C3
5.5C	-3.C22E-03	3.04CE-C3	-6.043E-03	6.080E-C3	-6.043E-C3	6.080E-03
6.0C	-2.540E-03	2.553E-C3	-5.080E-C3	5.106E-03	-5.080E-03	5.106E-03
6.5C	-2.165E-03	2.175E-03	-4.331E-C3	4.349E-C3	-4.331E-03	4.349E-C3
7.00	-1.868E-03	1.875E-C3	-3.735E-C3	3.749E-C3	-3.735E-03	3.749E-03
7.5C	-1.627E-03	1.633E-C3	-3.255E-C3	3.265E-03	-3.255E-03	3.265E-03
8.CC	-1.431E-03	1.435E-C3	-2.861E-03	2.870E-03	-2.861E-C3	2.870E-03
9.0C	-1.131E-C3	1.133E-C3	-2.262E-03	2.267E-03	-2.262E-03	2.267E-03
10.0C	-9.164E-04	9.181E-C4	-1.833E-C3	1.836E-03	-1.833E-C3	1.836E-C3
11.0C	-7.576E-04	7.588E-C4	-1.515E-03	1.518E-03	-1.515E-C3	1.518E-C3
12.0C	-6.368E-04	6.377E-C4	-1.274E-03	1.275E-C3	-1.274E-C3	1.275E-03
13.0C	-5.428E-04	5.434E-C4	-1.086E-03	1.087E-03	-1.086E-C3	1.087E-03
14.0C	-4.682E-04	4.687E-C4	-9.364E-C4	9.373E-04	-9.364E-04	9.373E-C4
15.GC	-4.C80E-04	4.084E-C4	-8.160E-04	8.167E-04	-8.160E-C4	8.167E-C4
16.CC	-3.587E-04	3.590E-04	-7.175E-C4	7.180E-04	-7.175E-04	7.180E-04
18.0C	-2.837E-04	2.838E-C4	-5.674E-C4	5.677E-04	-5.674E-04	5.677E-C4
20.0C	-2.300E-04	2.3C1E-C4	-4.600E-04	4.602E-04	-4.600E-04	4.602E-C4
22.GC	-1.902E-04	1.9C3E-04	-3.805E-04	3.806E-04	-3.8C5E-04	3.806E-04
24.0C	-1.600E-04	1.6C1E-C4	-3.200E-04	3.201E-04	-3.200E-04	3.201E-04
26.0C	-1.365E-04	1.365E-C4	-2.73CE-C4	2.731E-C4	-2.730E-04	2.731E-04
28.0C	-1.178E-04	1.179E-C4	-2.357E-04	2.357E-C4	-2.357E-04	2.357E-04
30.0C	-1.028E-04	1.028E-04	-2.055E-04	2.056E-04	-2.055E-04	2.056E-04
33.0C	-8.511E-05	8.512E-C5	-1.702E-04	1.702E-04	-1.702E-04	1.702E-C4
36.0C	-7.167E-05	7.168E-C5	-1.433E-04	1.434E-04	-1.433E-04	1.434E-C4
40.GC	-5.824E-05	5.825E-05	-1.165E-04	1.165E-04	-1.165E-C4	1.165E-04
45.0C	-4.622E-05	4.623E-C5	-9.244E-C5	9.245E-C5	-9.244E-05	9.245E-C5
50.00	-3.762E-05	3.763E-C5	-7.525E-05	7.525E-C5	-7.525E-C5	7.525E-05
55.0C	-3.126E-05	3.126E-C5	-6.252E-C5	6.253E-05	-6.252E-C5	6.253E-05
60.0C	-2.642E-05	2.642E-C5	-5.284E-C5	5.284E-05	-5.284E-C5	5.284E-C5
65.0C	-2.265E-05	2.265E-C5	-4.531E-05	4.531E-05	-4.531E-C5	4.531E-05
70.0C	-1.966E-05	1.966E-C5	-3.933E-05	3.933E-05	-3.933E-C5	3.933E-05
75.0C	-1.725E-05	1.725E-C5	-3.45CE-05	3.450E-05	-3.450E-C5	3.450E-C5
80.0C	-1.527E-05	1.527E-C5	-3.055E-05	3.055E-C5	-3.055E-05	3.055E-05
90.0C	-1.226E-05	1.226E-C5	-2.452E-C5	2.452E-C5	-2.452E-C5	2.452E-05
100.0C	-1.010E-05	1.010E-C5	-2.021E-05	2.021E-05	-2.021E-05	2.021E-05
110.0C	-8.505E-06	8.5C5E-C6	-1.701E-C5	1.701E-05	-1.701E-C5	1.701E-C5
120.0C	-7.286E-06	7.286E-C6	-1.457E-05	1.457E-05	-1.457E-C5	1.457E-05
130.0C	-6.335E-06	6.335E-C6	-1.267E-05	1.267E-05	-1.267E-C5	1.267E-05
140.0C	-5.578E-06	5.578E-C6	-1.116E-05	1.116E-05	-1.116E-C5	1.116E-C5
150.00	-4.965E-06	4.965E-C6	-9.930E-C6	9.930E-06	-9.930E-06	9.930E-06
160.0C	-4.461E-06	4.461E-C6	-8.922E-C6	8.922E-C6	-8.922E-C6	8.922E-C6
18C.0C	-3.688E-06	3.688E-C6	-7.376E-C6	7.376E-06	-7.376E-06	7.376E-06
200.0C	-3.128E-06	3.128E-C6	-6.257E-C6	6.257E-06	-6.257E-06	6.257E-C6
215.CC	-2.8C3E-06	2.8C3E-C6	-5.606E-C6	5.606E-C6	-5.606E-C6	5.606E-C6

NORMALIZED DERIVATIVES WITH RESPECT TO PROPAGATING FREQUENCY

PD53=C.0 PD54=C.0 PD55=0.C PD56=C.0

PROPAGATION FREQUENCY= 4.980CE 07

ρ	PD57=PD64	PD58=PD65	PD59	PD60	PD61	PD62	PD63
1.3C	-2.833E 0C	-3.379E C0	-9.377E C0	-1.387E 01	-4.469E 0C	-6.455E 0C	1.000E 00
1.4C	-2.3C5E 0C	-2.477E 00	-4.565E C0	-5.275E C0	-2.736E 00	-3.134E 00	1.C00E 0C
1.5C	-2.15CE 0C	-2.262E 00	-3.314E C0	-3.653E 00	-2.337E 0C	-2.572E 0C	1.00CE 0C
1.6C	-2.C79E 0C	-2.165E 00	-2.752E C0	-2.973E 00	-2.171E C0	-2.346E 0C	1.C00E C0
1.8C	-2.026E 0C	-2.C87E C0	-2.325E C0	-2.464E C0	-2.054E 00	-2.178E C0	1.C00E C0
2.0C	-2.C11E CC	-2.C59E C0	-2.191E CC	-2.294E C0	-2.023E 0C	-2.119E 0C	1.0C0E C0
2.2C	-2.C02E 0C	-2.C41E CC	-2.110E C0	-2.192E C0	-2.005E C0	-2.C83E C0	1.000E 0C
2.4C	-1.997E 0C	-2.C30E 00	-2.061E C0	-2.128E C0	-1.995E 0C	-2.060E 0C	1.000E C0
2.6C	-1.996E 0C	-2.024E 00	-2.041E CC	-2.098E C0	-1.993E 00	-2.048E C0	1.000E C0
2.8C	-1.996E 0C	-2.C19E C0	-2.029E C0	-2.077E C0	-1.992E 00	-2.C39E C0	1.000E 00
3.0C	-1.996E 0C	-2.C16E C0	-2.020E C0	-2.061E C0	-1.991E 00	-2.032E 00	1.C00E 0C
3.3C	-1.996E 0C	-2.013E 00	-2.012E C0	-2.046E 00	-1.992E 00	-2.025E C0	1.C00E C0
3.6C	-1.996E C0	-2.C10E 00	-2.007E C0	-2.036E C0	-1.992E 00	-2.C2CE 0C	1.000E C0
4.0C	-1.996E 0C	-2.CC8E 00	-2.003E C0	-2.026E C0	-1.993E 0C	-2.C16E 0C	1.000E 00
4.5C	-1.997E CC	-2.CC6E C0	-2.002E C0	-2.020E C0	-1.994E 00	-2.012E C0	1.000E 00
5.CC	-1.997E CC	-2.CC5E C0	-2.000E C0	-2.015E C0	-1.995E 00	-2.C10E C0	1.000E C0
5.5C	-1.998E 0C	-2.CC4E 0C	-2.000E C0	-2.012E 0C	-1.996E CC	-2.C08E 0C	1.000E C0
6.0C	-1.998E 0C	-2.CC3E CC	-1.999E C0	-2.01CE C0	-1.996E C0	-2.CC6E 0C	1.000E 0C
6.5C	-1.998E 0C	-2.CC3E C0	-1.999E C0	-2.008E C0	-1.997E C0	-2.C05E C0	1.C00E C0
7.0C	-1.999E 0C	-2.CC2E 00	-1.999E C0	-2.007E 0C	-1.997E 00	-2.C05E C0	1.CC0E 0C
7.5C	-1.999E 0C	-2.CC2E C0	-1.999E CC	-2.006E 00	-1.997E 0C	-2.C04E 00	1.000E C0
8.0C	-1.999E 0C	-2.CC2E 00	-1.999E CC	-2.005E C0	-1.998E C0	-2.C03E 00	1.C0CE C0
9.0C	-1.999E 0C	-2.CC1E C0	-1.999E C0	-2.C04E 00	-1.998E 00	-2.C03E 0C	1.000E 00
10.0C	-1.999E 0C	-2.CC1E C0	-1.999E C0	-2.003E C0	-1.999E 00	-2.CC2E C0	1.C00E 0C
11.0C	-1.999E 0C	-2.CC1E C0	-1.999E C0	-2.002E 00	-1.999E 0C	-2.C02E 0C	1.C00E 00
12.CC	-1.999E 0C	-2.CC1E C0	-2.0C0E C0	-2.002E C0	-1.999E CC	-2.C02E 00	1.000E CC
13.0C	-2.C00E 0C	-2.CC1E 00	-2.0C0E C0	-2.002E 00	-1.999E 00	-2.CC1E 00	1.C01E C0
14.0C	-2.C00E 0C	-2.CC1E 00	-2.000E C0	-2.002E C0	-1.999E 0C	-2.CC1E C0	1.C01E 0C
15.0C	-2.C00E 0C	-2.C00E 0C	-2.0C0E CC	-2.CC1E CC	-1.999E CC	-2.CC1E C0	1.C01E 00
16.0C	-2.C00E 0C	-2.CC0E C0	-2.C00E C0	-2.CC1E C0	-1.999E CC	-2.CC1E 00	1.C01E 00
18.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.CC1E 00	-2.000E 0C	-2.CC1E 0C	1.C01E 00
20.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.001E 00	-2.000E 00	-2.CC1E 0C	1.001E C0
22.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E C0	-2.001E 0C	-2.000E 00	-2.C00E C0	1.001E C0
24.0C	-2.C00E 0C	-2.C00E 0C	-2.0C0E CC	-2.00CE C0	-2.000E 00	-2.C00E 0C	1.001E CC
26.0C	-2.C00E C0	-2.C00E 00	-2.0C0E C0	-2.000E C0	-2.000E 0C	-2.C00E 00	1.001E 00
28.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.000E 00	-2.000E 00	-2.C00E 00	1.001E 00
30.0C	-2.C00E 0C	-2.CC0E 00	-2.000E C0	-2.C00E 00	-2.000E C0	-2.CC0E 00	1.001E C0
33.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E CC	-2.0C0E C0	-2.000E 00	-2.C00E 0C	1.001E CC
36.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.C00E 00	-2.000E 0C	-2.CC0E 0C	1.C01E 00
40.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.0C0E 00	-2.00CE 0C	-2.C00E 0C	1.001E C0
45.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.0C0E C0	-2.C00E 0C	-2.C00E C0	1.001E C0
50.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.0C0E C0	-2.000E 0C	-2.000E 00	1.001E C0
55.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.00CE C0	-2.00CE 00	-2.C00E 0C	1.001E 00
60.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E C0	-2.000E 0C	-2.00CE C0	-2.C00E C0	1.001E 0C
65.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.C00E C0	-2.000E 00	-2.C00E 0C	1.001E 00
70.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E C0	-2.0C0E C0	-2.0C0E 00	-2.C00E C0	1.001E CC
75.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.000E 0C	-2.000E 00	-2.C00E 0C	1.001E C0
80.0C	-2.C00E 0C	-2.CC0E 0C	-2.0C0E C0	-2.000E C0	-2.0C0E 00	-2.CC0E C0	1.001E 0C
90.0C	-2.C00E 0C	-2.CC0E 0C	-2.0C0E C0	-2.C00E C0	-2.C00E 00	-2.C00E C0	1.001E C0
100.00	-2.C00E 0C	-2.CC0E 00	-2.0C0E C0	-2.0C0E C0	-2.000E 0C	-2.000E 00	1.001E C0
110.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.C00E C0	-2.000E 00	-2.C00E C0	1.001E C0
120.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E C0	-2.C00E 0C	-2.C00E 0C	-2.CC0E 0C	1.001E C0
130.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.0C0E C0	-2.C00E 0C	-2.C00E 0C	1.001E C0
140.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E C0	-2.C0CE C0	-2.000E 0C	-2.C00E 00	1.001E 00
150.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E C0	-2.000E C0	-2.000E 00	-2.C00E 0C	1.001E C0
160.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E C0	-2.0C0E 00	-2.0CCE 00	-2.CC0E 0C	1.001E C0
180.0C	-2.C00E 0C	-2.CC0E C0	-2.0C0E CC	-2.00CE 00	-2.00CE 00	-2.0C0E 0C	1.C01E 00
200.0C	-2.C00E 0C	-2.CC0E 0C	-2.0C0E C0	-2.000E C0	-2.000E 00	-2.C0CE 0C	1.C01E 0C
215.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E C0	-2.0C0E C0	-2.00CE 00	-2.CC0E 0C	1.001E 0C

NORMALIZED DERIVATIVES WITH RESPECT TO ELECTRON DENSITY

PC1=+C.5 PC2=C.C PD3=C.C

PROPAGATION FREQUENCY= 1.66CCE C8

ρ	PD4	PC5=PC12	PD6=PD13	PD7	PD8	PD9	PD1C	PC11
1.1C	9.759E-C1	1.114E CC	1.121E CO	1.369E CC	1.4C1E CO	2.229E CC	2.247E CC	C.
1.2C	9.77CE-01	1.C37E CC	1.C39E CC	1.116E CC	1.122E CO	2.C55E CC	2.C58E CC	1.647E-06
1.3C	9.775E-C1	1.C18E CC	1.C18E CC	1.C54E CC	1.057E CO	2.C14E CC	2.C15E CC	-6.517E-C6
1.4C	9.777E-C1	1.C11E CC	1.C11E CO	1.033E CO	1.035E CO	2.CCCE CC	2.CC1E CC	-9.114E-C6
1.5C	9.779E-01	1.CC7E CC	1.CC7E CC	1.C21E CC	1.022E CO	1.992E CC	1.992E CC	-1.239E-05
1.6C	9.781E-01	1.CC5E CC	1.CC5E CO	1.C14E CC	1.C14E CC	1.987E CC	1.988E CC	-1.66CE-05
1.8C	9.784E-C1	1.CC2E CC	1.CC2E CO	1.CC7E CC	1.CC7E CO	1.983E CC	1.983E CC	-2.557E-C5
2.0C	9.786E-C1	1.CC1E CC	1.CC1E CO	1.CC4E CO	1.CC4E CO	1.982E CC	1.982E CC	-3.228E-C5
2.2C	9.788E-C1	1.CC1E CC	1.CC1E CC	1.CC3E CC	1.CC3E CO	1.981E CC	1.981E CC	-4.174E-C5
2.4C	9.789E-C1	1.CC1E CC	1.CC1E CC	1.CC2E CC	1.CC2E CC	1.98CE CC	1.98CE CC	-5.495E-05
2.6C	9.79CE-C1	1.CCCE CC	1.CCCE CC	1.CC1E CC	1.CC1E CC	1.98CE CC	1.98CE CC	-6.341E-05
2.8C	9.791E-C1	1.CCCE CC	1.CCCE CC	1.CC1E CC	1.CC1E CC	1.98CE CC	1.98CE CC	-7.134E-C5
3.0C	9.791E-01	1.CCCE CC	1.CCCE CC	1.CC1E CC	1.CC1E CC	1.98CE CC	1.98CE CC	-8.113E-C5
3.3C	9.792E-C1	1.CCCE CC	1.CCCE CC	1.CC1E CC	1.CC1E CC	1.98CE CC	1.98CE CC	-9.189E-05
3.6C	9.792E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.058E-04
4.0C	9.792E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.245E-04
4.5C	9.793E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.350E-04
5.0C	9.793E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.50CE-C4
5.5C	9.793E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.667E-04
6.0C	9.793E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.815E-04
6.5C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.871E-C4
7.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.952E-C4
7.5C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.C57E-04
8.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.187E-04
9.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.319E-04
10.0C	9.795E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.474E-04
11.CC	9.795E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.445E-04
12.0C	9.795E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.457E-04
13.0C	9.795E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.504E-04
14.0C	9.795E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.582E-04
15.0C	9.795E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.98CE CC	1.98CE CC	-2.689E-04
16.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.765E-04
18.CC	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.742E-04
20.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.788E-04
22.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.892E-04
24.CC	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.947E-C4
26.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.CCCE-04
28.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.091E-04
30.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.217E-04
33.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.241E-04
36.CC	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.319E-04
40.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.500E-04
45.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.557E-04
50.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.706E-04
55.00	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.786E-04
60.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.932E-04
65.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.941E-04
70.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.997E-04
75.CC	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.C96E-04
80.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.235E-04
90.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.297E-04
100.CC	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.470E-04
110.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.449E-04
120.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.502E-04
130.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.62CE-04
140.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.797E-04
150.CC	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-5.C33E-04
160.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-5.2C2E-04
180.CC	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-5.685E-C4
200.0C	9.795E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-6.37CE-04
215.0C	9.795E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-6.958E-04

NORMALIZED DERIVATIVES WITH RESPECT TO TEMPERATURE

PD14=C.C PD15=C.C PD16=0.C PD18=PD25=0.0
PD20=C.C PD21=C.C PD24=0.0 PD19=PD26=0.0

PROPAGATION FREQUENCY= 1.6600E 08

P	PD17	PD22	PD23
1.1C	-1.428E CC	-1.428E CC	-1.428E 00
1.2C	-1.431E CC	-1.431E CC	-1.431E 00
1.3C	-1.432E CC	-1.432E CC	-1.432E CC
1.4C	-1.433E CC	-1.433E CC	-1.433E CC
1.5C	-1.434E CC	-1.434E CC	-1.434E CC
1.6C	-1.434E CC	-1.434E CC	-1.434E CC
1.8C	-1.435E CC	-1.435E CC	-1.435E 00
2.0C	-1.436E CC	-1.436E CC	-1.436E 00
2.2C	-1.436E CC	-1.436E CC	-1.436E 00
2.4C	-1.437E CC	-1.437E CC	-1.437E 00
2.6C	-1.437E CC	-1.437E CC	-1.437E 00
2.8C	-1.437E CC	-1.437E CC	-1.437E 00
3.0C	-1.437E CC	-1.437E CC	-1.437E CC
3.3C	-1.437E CC	-1.437E CC	-1.437E 00
3.6C	-1.438E CC	-1.438E CC	-1.438E 00
4.0C	-1.438E CC	-1.438E CC	-1.438E CC
4.5C	-1.438E CC	-1.438E CC	-1.438E CC
5.0C	-1.438E CC	-1.438E CC	-1.438E 00
5.5C	-1.438E CC	-1.438E CC	-1.438E CC
6.0C	-1.438E CC	-1.438E CC	-1.438E 00
6.5C	-1.438E CC	-1.438E CC	-1.438E 00
7.0C	-1.438E CC	-1.438E CC	-1.438E 00
7.5C	-1.438E CC	-1.438E 00	-1.438E 00
8.0C	-1.438E CC	-1.438E CC	-1.438E 00
9.0C	-1.438E CC	-1.438E CC	-1.438E CC
10.0C	-1.438E CC	-1.438E CC	-1.438E 00
11.0C	-1.438E CC	-1.438E 00	-1.438E 00
12.0C	-1.438E CC	-1.438E 00	-1.438E 00
13.0C	-1.438E CC	-1.438E CC	-1.438E 00
14.0C	-1.438E CC	-1.438E CC	-1.438E 00
15.0C	-1.438E CC	-1.438E 00	-1.438E CC
16.0C	-1.438E CC	-1.438E CC	-1.438E 00
18.0C	-1.438E CC	-1.438E CC	-1.438E CC
20.0C	-1.438E CC	-1.438E CC	-1.438E 00
22.0C	-1.438E CC	-1.438E 00	-1.438E 00
24.0C	-1.438E CC	-1.438E CC	-1.438E 00
26.0C	-1.438E CC	-1.438E CC	-1.438E CC
28.0C	-1.438E CC	-1.438E CC	-1.438E 00
30.0C	-1.438E CC	-1.438E CC	-1.438E 00
33.0C	-1.438E CC	-1.438E CC	-1.438E CC
36.0C	-1.438E CC	-1.438E CC	-1.438E 00
40.0C	-1.438E CC	-1.438E CC	-1.438E 00
45.0C	-1.438E CC	-1.438E CC	-1.438E CC
50.0C	-1.438E CC	-1.438E CC	-1.438E 00
55.0C	-1.438E CC	-1.438E CC	-1.438E CC
60.0C	-1.438E CC	-1.438E CC	-1.438E 00
65.0C	-1.438E CC	-1.438E 00	-1.438E 00
70.0C	-1.438E CC	-1.438E CC	-1.438E CC
75.0C	-1.438E CC	-1.438E CC	-1.438E CC
80.0C	-1.438E CC	-1.438E 00	-1.438E 00
90.0C	-1.438E CC	-1.438E CC	-1.438E 00
100.0C	-1.438E CC	-1.438E CC	-1.438E CC
110.0C	-1.438E CC	-1.438E CC	-1.438E CC
120.0C	-1.438E CC	-1.438E 00	-1.438E 00
130.0C	-1.438E CC	-1.438E CC	-1.438E 00
140.0C	-1.438E CC	-1.438E CC	-1.438E CC
150.0C	-1.438E CC	-1.438E CC	-1.438E CC
160.0C	-1.438E CC	-1.438E CC	-1.438E CC
180.0C	-1.438E CC	-1.438E CC	-1.438E CC
200.0C	-1.438E CC	-1.438E CC	-1.438E 00
215 0C	-1.438E CC	-1.438E CC	-1.438E 00

NORMALIZED DERIVATIVES WITH RESPECT TO SOLAR WIND VELOCITY

PD27=C.C PD28=C.C PD29=-1.0 PD30=0.0

PROPAGATION FREQUENCY= 1.66C0E 08

ρ	PD31=PD38	PD32=PD39	PD33	PD34	PD35	PD36	PD37
1.1C	2.474E-C2	-2.49CE-C2	5.C53E-02	-5.375E-02	5.005E-C2	-5.252E-C2	3.0C0E 0C
1.2C	1.943E-C2	-1.946E-C2	3.896E-C2	-4.112E-02	3.891E-C2	-4.043E-02	3.0CCE 0C
1.3C	1.629E-02	-1.63CE-C2	3.260E-C2	-3.417E-C2	3.259E-02	-3.367E-C2	3.0CCE 0C
1.4C	1.398E-C2	-1.399E-C2	2.797E-C2	-2.914E-02	2.797E-02	-2.876E-02	3.CCCE 0C
1.5C	1.215E-02	-1.216E-C2	2.431E-02	-2.520E-02	2.431E-02	-2.491E-02	3.CCCE CC
1.6C	1.067E-02	-1.067E-C2	2.134E-C2	-2.203E-02	2.134E-02	-2.181E-02	3.CCCE CC
1.8C	8.431E-03	-8.432E-C3	1.686E-C2	-1.729E-02	1.686E-02	-1.715E-02	3.CCCE CC
2.0C	6.835E-C3	-6.835E-C3	1.367E-C2	-1.395E-02	1.367E-C2	-1.386E-02	3.CCCE 0C
2.2C	5.652E-03	-5.652E-03	1.130E-02	-1.150E-02	1.13CE-C2	-1.143E-02	3.CCCE CC
2.4C	4.752E-C3	-4.752E-C3	9.504E-03	-9.641E-03	9.504E-C3	-9.595E-03	3.0CCE 0C
2.6C	4.C51E-03	-4.C51E-C3	8.103E-03	-8.202E-03	8.103E-03	-8.169E-03	3.0CCE CC
2.8C	3.495E-C3	-3.495E-C3	6.990E-03	-7.064E-03	6.990E-03	-7.039E-C3	3.0C0E 0C
3.0C	3.C46E-C3	-3.C46E-C3	6.091E-03	-6.147E-C3	6.C91E-C3	-6.129E-C3	3.CCCE 0C
3.3C	2.518E-03	-2.518E-C3	5.C37E-03	-5.075E-03	5.C37E-03	-5.C62E-03	3.0CCE CC
3.6C	2.117E-C3	-2.117E-C3	4.234E-C3	-4.261E-03	4.234E-03	-4.252E-C3	3.CCCE CC
4.0C	1.715E-03	-1.715E-C3	3.431E-C3	-3.448E-03	3.431E-03	-3.442E-03	3.CCCE 0C
4.5C	1.356E-C3	-1.356E-C3	2.712E-C3	-2.723E-03	2.712E-03	-2.719E-03	3.0CCE 0C
5.0C	1.C99E-03	-1.099E-C3	2.197E-03	-2.204E-03	2.197E-C3	-2.2C2E-C3	3.0C0E CC
5.5C	9.081E-04	-9.081E-C4	1.816E-03	-1.821E-C3	1.816E-03	-1.819E-C3	3.CCCE CC
6.0C	7.632E-C4	-7.632E-04	1.526E-03	-1.530E-03	1.526E-03	-1.529E-C3	3.CCCE CC
6.5C	6.5C4E-C4	-6.5C4E-04	1.301E-03	-1.303E-03	1.301E-03	-1.303E-03	3.0C0E 0C
7.0C	5.609E-04	-5.6C9E-C4	1.122E-03	-1.124E-03	1.122E-03	-1.123E-03	3.0CCE CC
7.5C	4.887E-04	-4.887E-C4	9.774E-C4	-9.788E-04	9.774E-C4	-9.783E-C4	3.000E CC
8.0C	4.296E-C4	-4.296E-C4	8.591E-C4	-8.602E-04	8.591E-04	-8.599E-04	3.000E 0C
9.0C	3.395E-C4	-3.395E-04	6.790E-04	-6.797E-C4	6.790E-04	-6.795E-04	3.000E 0C
10.0C	2.751E-04	-2.751E-C4	5.501E-C4	-5.506E-C4	5.501E-04	-5.504E-C4	3.000E 0C
11.0C	2.274E-04	-2.274E-C4	4.548E-04	-4.551E-C4	4.548E-C4	-4.55CE-C4	3.0CCE CC
12.0C	1.911E-C4	-1.911E-C4	3.823E-C4	-3.825E-04	3.823E-04	-3.824E-C4	3.CCCE 0C
13.0C	1.629E-C4	-1.629E-04	3.258E-04	-3.260E-04	3.258E-04	-3.259E-C4	2.999E 0C
14.0C	1.405E-04	-1.4C5E-C4	2.810E-04	-2.811E-04	2.81CE-C4	-2.811E-04	2.999E CC
15.0C	1.224E-04	-1.224E-C4	2.449E-C4	-2.450E-04	2.449E-C4	-2.449E-04	2.999E 0C
16.0C	1.C76E-C4	-1.C76E-C4	2.153E-04	-2.154E-04	2.153E-C4	-2.153E-04	2.999E 0C
18.00	8.512E-05	-8.512E-05	1.702E-04	-1.703E-04	1.702E-04	-1.7C3E-C4	2.999E CC
20.0C	6.9C0E-05	-6.9C0E-C5	1.380E-C4	-1.380E-04	1.380E-04	-1.38CE-04	2.999E CC
22.0C	5.7C8E-C5	-5.7C8E-05	1.142E-C4	-1.142E-04	1.142E-C4	-1.142E-04	2.999E CC
24.0C	4.801E-C5	-4.8C1E-C5	9.602E-05	-9.604E-05	9.602E-C5	-9.6C3E-05	2.999E CC
26.0C	4.C95E-05	-4.095E-05	8.191E-C5	-8.192E-05	8.191E-05	-8.191E-05	2.999E 0C
28.0C	3.535E-05	-3.535E-C5	7.C70E-C5	-7.071E-05	7.07CE-05	-7.071E-05	2.999E CC
30.0C	3.C83E-C5	-3.C83E-C5	6.167E-05	-6.167E-05	6.167E-05	-6.167E-05	2.999E 0C
33.0C	2.553E-05	-2.553E-C5	5.1C7E-C5	-5.107E-05	5.107E-05	-5.1C7E-C5	2.999E 0C
36.0C	2.150E-05	-2.15CE-C5	4.3C0E-05	-4.301E-05	4.3C0E-C5	-4.301E-C5	2.999E CC
40.0C	1.747E-05	-1.747E-C5	3.495E-C5	-3.495E-05	3.495E-05	-3.495E-C5	2.999E CC
45.0C	1.387E-C5	-1.387E-05	2.773E-C5	-2.773E-05	2.773E-C5	-2.773E-C5	2.999E CC
50.0C	1.129E-05	-1.129E-C5	2.257E-C5	-2.258E-05	2.257E-C5	-2.257E-05	2.999E CC
55.0C	9.378E-C6	-9.378E-C6	1.87oE-05	-1.876E-05	1.876E-C5	-1.876E-C5	2.999E CC
60.0C	7.926E-06	-7.926E-C6	1.585E-05	-1.585E-05	1.585E-05	-1.585E-05	2.999E CC
65.0C	6.796E-06	-6.796E-C6	1.359E-C5	-1.359E-05	1.359E-C5	-1.359E-C5	2.999E CC
70.0C	5.899E-06	-5.899E-06	1.18CE-C5	-1.180E-05	1.180E-C5	-1.180E-C5	2.999E CC
75.0C	5.175E-C6	-5.175E-C6	1.035E-05	-1.035E-05	1.035E-05	-1.035E-05	2.999E 0C
80.00	4.582E-C6	-4.582E-C6	9.164E-06	-9.165E-06	9.164E-C6	-9.164E-06	2.999E CC
90.0C	3.679E-C6	-3.679E-C6	7.357E-C6	-7.357E-06	7.357E-C6	-7.357E-06	2.999E CC
100.0C	3.C31E-C6	-3.C31E-C6	6.C63E-06	-6.C63E-C6	6.063E-C6	-6.0o3E-C6	2.999E CC
110.	2.552E-C6	-2.552E-C6	5.103E-06	-5.103E-06	5.103E-C6	-5.103E-C6	2.999E CC
120.0C	2.186E-06	-2.186E-C6	4.372E-C6	-4.372E-C6	4.372E-C6	-4.372E-C6	2.999E.CC
130.0C	1.9C1E-06	-1.9C1E-C6	3.801E-06	-3.801E-06	3.801E-C6	-3.801E-06	2.999E 0C
140.0C	1.673E-06	-1.673E-C6	3.347E-C6	-3.347E-06	3.347E-06	-3.347E-06	2.999E CC
150.0C	1.490E-C6	-1.49CE-C6	2.979E-C6	-2.979E-C6	2.979E-C6	-2.979E-06	2.999E CC
160.0C	1.338E-06	-1.338E-C6	2.677E-C6	-2.677E-C6	2.677E-C6	-2.677E-06	2.999E CC
180.0C	1.1C6E-06	-1.1C6E-C6	2.213E-C6	-2.213E-06	2.213E-C6	-2.213E-C6	2.999E CC
200.0C	9.385E-C7	-9.385E-C7	1.877E-C6	-1.877E-C6	1.877E-C6	-1.877E-06	2.999E 0C
215.0C	8.4C9E-C7	-8.409E-C7	1.682E-06	-1.682E-06	1.682E-C6	-1.682E-06	2.999E CC

NORMALIZED DERIVATIVES WITH RESPECT TO MAGNETIC FIELD STRENGTH

PD40=C.0 PD41=1.0 PD42=1.C PD43=C.0 PD50=C.0

PROPAGATION FREQUENCY= 1.660CE C8

ρ	PD44=PD51	PD45=PD52	PD46	PD47	PD48	PD49
1.1C	-2.474E-02	2.6C6E-02	-5.C53E-C2	5.334E-02	-5.CC5E-C2	5.28CE-C2
1.2C	-1.943E-02	2.C22E-02	-3.896E-02	4.055E-02	-3.891E-02	4.049E-02
1.3C	-1.629E-02	1.684E-02	-3.26CE-C2	3.37CE-C2	-3.259E-02	3.369E-C2
1.4C	-1.398E-02	1.438E-02	-2.797E-02	2.877E-02	-2.797E-C2	2.877E-02
1.5C	-1.215E-02	1.246E-02	-2.431E-02	2.491E-02	-2.431E-02	2.491E-02
1.6C	-1.C67E-02	1.09C6-02	-2.134E-02	2.181E-02	-2.134E-C2	2.181E-02
1.8C	-8.431E-03	8.576E-03	-1.686E-02	1.715E-02	-1.686E-C2	1.715E-02
2.0C	-6.835E-03	6.929E-C3	-1.367E-C2	1.386E-02	-1.367E-C2	1.386E-02
2.2C	-5.652E-03	5.717E-03	-1.13CE-02	1.143E-02	-1.13CE-C2	1.143E-02
2.4C	-4.752E-03	4.798E-03	-9.504E-03	9.595E-03	-9.504E-03	9.595E-C3
2.6C	-4.C51E-03	4.084E-03	-8.103E-C3	8.169E-03	-8.103E-03	8.169E-03
2.8C	-3.495E-03	3.52CE-03	-6.99CE-C3	7.039E-03	-6.99CE-C3	7.039E-03
3.0C	-3.046E-03	3.C64E-C3	-6.091E-C3	6.129E-03	-6.091E-03	6.129E-C3
3.3C	-2.518E-03	2.531E-C3	-5.037E-03	5.062E-03	-5.037E-C3	5.062E-C3
3.6C	-2.117E-03	2.126E-C3	-4.234E-03	4.252E-03	-4.234E-C3	4.252E-C3
4.0C	-1.715E-03	1.721E-03	-3.431E-C3	3.442E-03	-3.431E-03	3.442E-03
4.5C	-1.356E-03	1.36CE-03	-2.712E-C3	2.719E-03	-2.712E-03	2.719E-03
5.0C	-1.099E-03	1.1C1E-C3	-2.197E-03	2.202E-03	-2.197E-C3	2.202E-03
5.5C	-9.C81E-C4	9.097E-C4	-1.816E-03	1.819E-03	-1.816E-03	1.819E-C3
6.0C	-7.632E-04	7.644E-C4	-1.526E-C3	1.529E-03	-1.526E-03	1.529E-03
6.5C	-6.504E-C4	6.513E-C4	-1.3C1E-C3	1.303E-03	-1.301E-C3	1.303E-03
7.0C	-5.609E-C4	5.615E-C4	-1.122E-C3	1.123E-03	-1.122E-03	1.123E-03
7.5C	-4.887E-C4	4.892E-C4	-9.774E-C4	9.783E-04	-9.774E-04	9.783E-C4
8.0C	-4.296E-04	4.299E-04	-8.591E-C4	8.599E-04	-8.591E-04	8.599E-04
9.0C	-3.395E-C4	3.397E-C4	-6.79CE-C4	6.795E-04	-6.79CE-C4	6.795E-04
10.0C	-2.751E-C4	2.752E-04	-5.501E-C4	5.504E-04	-5.501E-04	5.504E-04
11.0C	-2.274E-04	2.275E-C4	-4.548E-C4	4.55CE-04	-4.548E-C4	4.550E-C4
12.0C	-1.911E-04	1.912E-C4	-3.823E-04	3.824E-C4	-3.823E-C4	3.824E-C4
13.0C	-1.629E-04	1.63CE-C4	-3.258E-C4	3.259E-04	-3.258E-C4	3.259E-04
14.0C	-1.405E-C4	1.4C5E-C4	-2.81CE-04	2.811E-04	-2.81CE-04	2.811E-C4
15.CC	-1.224E-04	1.225E-C4	-2.449E-C4	2.449E-04	-2.449E-04	2.449E-C4
16.0C	-1.C76E-04	1.C77E-C4	-2.153E-C4	2.153E-C4	-2.153E-C4	2.153E-C4
18.0C	-8.512E-C5	8.513E-C5	-1.702E-C4	1.703E-04	-1.702E-04	1.703E-04
20.0C	-6.9CCE-05	6.9C1E-05	-1.380E-04	1.380E-04	-1.380E-C4	1.380E-04
22.0C	-5.708E-05	5.7C9E-C5	-1.142E-C4	1.142E-04	-1.142E-04	1.142E-C4
24.0C	-4.8C1E-05	4.8C2E-C5	-9.602E-05	9.603E-05	-9.602E-C5	9.603E-05
26.0C	-4.C95E-05	4.096E-C5	-8.191E-05	8.191E-05	-8.191E-05	8.191E-C5
28.00	-3.535E-05	3.535E-05	-7.07CE-05	7.071E-05	-7.07CE-05	7.071E-05
30.0C	-3.C83E-C5	3.084E-C5	-6.167E-C5	6.167E-05	-6.167E-05	6.167E-05
33.0C	-2.553E-05	2.553E-C5	-5.1C7E-C5	5.107E-C5	-5.1C7E-C5	5.107E-C5
36.0C	-2.15CE-05	2.15CE-C5	-4.30CE-C5	4.301E-05	-4.30CE-05	4.301E-05
4C.0C	-1.747E-C5	1.747E-C5	-3.495E-05	3.495E-C5	-3.495E-C5	3.495E-C5
45.0C	-1.387E-05	1.387E-C5	-2.773E-05	2.773E-05	-2.773E-C5	2.773E-C5
50.00	-1.129E-05	1.129E-C5	-2.257E-C5	2.257E-05	-2.257E-C5	2.257E-C5
55.0C	-9.378E-06	9.379E-C6	-1.876E-05	1.876E-05	-1.876E-05	1.876E-05
60.0C	-7.926E-06	7.927E-06	-1.585E-05	1.585E-05	-1.585E-05	1.585E-05
65.0C	-6.796E-06	6.796E-C6	-1.359E-C5	1.359E-05	-1.359E-05	1.359E-05
70.0C	-5.899E-06	5.899E-C6	-1.18CE-05	1.180E-05	-1.180E-C5	1.180E-05
75.0C	-5.175E-06	5.175E-C6	-1.035E-05	1.035E-05	-1.035E-05	1.035E-05
80.0C	-4.582E-06	4.582E-C6	-9.164E-06	9.164E-06	-9.164E-C6	9.164E-06
90.0C	-3.679E-06	3.679E-C6	-7.357E-C6	7.357E-06	-7.357E-C6	7.357E-06
100.0C	-3.C31E-C6	3.C31E-C6	-6.C63E-06	6.063E-06	-6.063E-06	6.063E-C6
110.0C	-2.552E-06	2.552E-C6	-5.103E-C6	5.103E-06	-5.103E-06	5.103E-06
120.GC	-2.186E-C6	2.186E-C6	-4.372E-06	4.372E-C6	-4.372E-C6	4.372E-C6
130.0C	-1.9C1E-06	1.9C1E-06	-3.801E-C6	3.801E-06	-3.801E-C6	3.8C1E-06
140.00	-1.673E-06	1.673E-C6	-3.347E-C6	3.347E-06	-3.347E-C6	3.347E-C6
150.0C	-1.49CE-06	1.49CE-C6	-2.979E-C6	2.979E-06	-2.979E-C6	2.979E-C6
160.0C	-1.338E-06	1.338E-06	-2.677E-06	2.677E-06	-2.677E-C6	2.677E-C6
180.0C	-1.106E-06	1.1C6E-C6	-2.213E-06	2.213E-C6	-2.213E-06	2.213E-C6
200.CC	-9.385E-07	9.385E-C7	-1.877E-06	1.877E-06	-1.877E-C6	1.877E-06
215.00	-8.4C9E-C7	8.4C9E-C7	-1.682E-06	1.682E-C6	-1.682E-06	1.682E-06

NORMALIZED DERIVATIVES WITH RESPECT TO PROPAGATING FREQUENCY

PD53=C.C PD54=C.C PD55=C.C PD56=C.C

PROPAGATION FREQUENCY= 1.66CCE C8

ρ	PD57=PD64	PD58=PD65	PD59	PD60	PD61	PD62	PD63
1.1C	-2.203E 0C	-2.268E CC	-3.606E CC	-3.816E CO	-2.457E CC	-2.596E 0C	1.000E-0C
1.2C	-2.C55E 0C	-2.098E CO	-2.491E CO	-2.592E CO	-2.116E CC	-2.203E 0C	1.000E-0C
1.3C	-2.019E CC	-2.C54E CO	-2.219E CO	-2.293E CO	-2.04CE 00	-2.109E 00	1.000E CC
1.4C	-2.C08E 0C	-2.C37E CO	-2.127E CO	-2.187E CO	-2.016E 00	-2.C75E 00	1.000E 0C
1.5C	-2.002E 0C	-2.C27E CO	-2.075E CO	-2.126E CO	-2.0C4E CO	-2.C54E 00	1.000E 00
1.6C	-1.998E 0C	-2.C20E 00	-2.043E CO	-2.087E 00	-1.997E CC	-2.C41E CO	1.000E 00
1.8C	-1.996E 0C	-2.C13E CO	-2.015E CO	-2.05CE 00	-1.992E CO	-2.C27E 0C	1.000E 00
2.0C	-1.996E 0C	-2.C10E CO	-2.007E CO	-2.035E 00	-1.992E 00	-2.C20E CO	1.000E CC
2.2C	-1.996E 0C	-2.CC8E CO	-2.002E CO	-2.025E CO	-1.992E 0C	-2.C15E 00	1.000E CC
2.4C	-1.996E 0C	-2.CC6E CO	-1.999E CO	-2.018E CO	-1.993E CO	-2.C12E CC	1.000E CC
2.6C	-1.997E 0C	-2.CC5E CO	-1.998E CO	-2.014E 00	-1.994E CC	-2.C10E 0C	1.000E CC
2.8C	-1.997E 0C	-2.CC4E 00	-1.998E CO	-2.012E CC	-1.994E 00	-2.C08E CO	1.000E 0C
3.0C	-1.997E 0C	-2.CC4E CC	-1.997E CO	-2.01CE CO	-1.995E CC	-2.C07E CC	1.000E CC
3.3C	-1.998E CC	-2.CC3E CO	-1.998E CC	-2.CC8E 00	-1.996E CC	-2.C06E CC	1.000E 0C
3.6C	-1.998E 0C	-2.CC2E CO	-1.998E CO	-2.CC6E CO	-1.996E 0C	-2.C05E 00	1.000E CC
4.0C	-1.998E 0C	-2.0C2E CO	-1.998E CO	-2.005E CO	-1.997E 0C	-2.CC4E CC	1.000E 00
4.5C	-1.999E CC	-2.CC1E CO	-1.998E CO	-2.004E CO	-1.998E CC	-2.C03E 00	1.000E 00
5.0C	-1.999E 0C	-2.CC1E CO	-1.998E CO	-2.003E 0C	-1.998E CO	-2.C02E 00	1.000E 00
5.5C	-1.999E 0C	-2.CC1E 00	-1.999E CO	-2.002E CO	-1.998E CO	-2.C02E 0C	1.000E 00
6.0C	-1.999E 0C	-2.C01E CO	-1.999E CO	-2.002E CO	-1.999E 0C	-2.C02E CO	1.000E 0C
6.5C	-1.999E 0C	-2.CC1E CO	-1.999E CC	-2.002E CO	-1.999E 00	-2.C01E CC	1.000E 0C
7.0C	-1.999E 0C	-2.C01E CC	-1.999E CO	-2.001E 00	-1.999E CO	-2.C01E CO	1.000E 00
7.5C	-2.CCCE 0C	-2.0C1E 00	-1.999E CO	-2.001E CO	-1.999E 00	-2.001E CO	1.000E CO
8.0C	-2.000E 0C	-2.0C0E CO	-1.999E CO	-2.001E CO	-1.999E CO	-2.C01E CO	1.000E 00
9.0C	-2.000E 00	-2.CC0E 00	-1.999E CO	-2.001E CO	-1.999E 0C	-2.001E 0C	1.000E 0C
10.0C	-2.000E CC	-2.0C0E 0C	-2.0C0E CC	-2.001E CO	-1.999E CO	-2.001E 00	1.000E 00
11.0C	-2.0C0E 00	-2.CC0E CO	-2.000E CO	-2.001E CO	-2.000E 00	-2.000E CC	1.000E CO
12.0C	-2.000E 0C	-2.0C0E 0C	-2.0C0E CO	-2.CC0E CO	-2.000E 0C	-2.000E CC	1.000E 0C
13.0C	-2.000E 0C	-2.CC0E 0C	-2.0C0E CO	-2.0C0E CO	-2.000E 0C	-2.000E CC	1.001E 0C
14.0C	-2.0C0E CO	-2.CC0E 0C	-2.0C0E CO	-2.CC0E CO	-2.000E 00	-2.000E 00	1.001E 00
15.0C	-2.0C0E 00	-2.C00E CO	-2.0C0E CO	-2.CC0E CO	-2.CC0E CO	-2.000E CO	1.001E 00
16.0C	-2.000E 0C	-2.CC0E 0C	-2.0C0E CO	-2.0C0E CO	-2.0C0E 00	-2.0C0E CO	1.001E 00
18.0C	-2.000E 0C	-2.CC0E CO	-2.0C0E CO	-2.000E CO	-2.0C0E 00	-2.CC0E 00	1.001E 0C
20.0C	-2.000E CC	-2.CC0E 00	-2.0C0E CC	-2.CC0E CO	-2.0C0E CC	-2.000E CC	1.001E 0C
22.0C	-2.000E 0C	-2.CC0E 00	-2.0C0E CO	-2.C00E CC	-2.0C0E 0C	-2.CC0E CO	1.001E CO
24.0C	-2.000E 0C	-2.CC0E 0C	-2.000E CC	-2.C00E CO	-2.C00E CO	-2.CCCE CC	1.001E 0C
26.0C	-2.000E 0C	-2.CC0E 00	-2.0C0E CC	-2.CCCE CO	-2.C00E CO	-2.C00E 00	1.001E 0C
28.0C	-2.000E CC	-2.CC0E CO	-2.0C0E CO	-2.CCCE CO	-2.000E 0C	-2.C00E CC	1.001E CO
30.0C	-2.C00E CC	-2.CC0E CO	-2.CC0E CC	-2.0C0E 00	-2.000E 00	-2.C0CE CC	1.C01E CO
33.0C	-2.C0CE 00	-2.C00E CO	-2.0C0E CO	-2.CC0E CO	-2.0C0E 00	-2.C0CE 0C	1.C01E CO
36.0C	-2.0C0E 0C	-2.CC0E 0C	-2.CC0E CO	-2.C00E CO	-2.0CCE CC	-2.C00E CC	1.001E CO
40.0C	-2.CCCE 0C	-2.CC0E 00	-2.0C0E CC	-2.C0CE CO	-2.000E 0C	-2.000E CO	1.001E CC
45.0C	-2.C00E CC	-2.CC0E CO	-2.000E CC	-2.CCCE CO	-2.CC0E CC	-2.CCCE CO	1.001E 00
50.0C	-2.000E 0C	-2.CC0E 00	-2.0C0E CO	-2.C00E CO	-2.0C0E CC	-2.CCCE 0C	1.C01E 00
55.0C	-2.000E 0C	-2.CC0E 00	-2.0C0E CO	-2.00CE CO	-2.CCCE CC	-2.C00E 00	1.001E 0C
60.0C	-2.C00E 0C	-2.CC0E 00	-2.000E CO	-2.C00E CO	-2.000E 00	-2.000E CO	1.001E 00
65.00	-2.000E 0C	-2.CC0E 00	-2.0C0E CC	-2.0CCE CO	-2.0C0E CC	-2.CCCE CO	1.001E 00
7C.00	-2.C0CE 0C	-2.C00E 0C	-2.CC0E CC	-2.C00E CO	-2.C0CE 00	-2.C00E CO	1.001E 00
75.0C	-2.000E 0C	-2.CC0E CC	-2.0CCE CC	-2.CCCE CO	-2.C00E CO	-2.000E CO	1.001E 00
80.0C	-2.C0CE 0C	-2.CC0E 0C	-2.0C0E CC	-2.00CE CO	-2.0C0E 0C	-2.C0CE CC	1.001E CO
90.0C	-2.C0CE 0C	-2.CC0E 00	-2.0C0E CO	-2.C0CE CO	-2.000E CC	-2.CCCE CO	1.001E 00
100.00	-2.C00E CO	-2.CC0E CO	-2.0C0E CO	-2.C00E CO	-2.0C0E 00	-2.C0CE 0C	1.C01E CO
110.0C	-2.0CCE 0C	-2.CC0E CC	-2.0C0E CO	-2.0CCE CO	-2.000E 0C	-2.C00E 0C	1.C01E 00
120.0C	-2.C00E 0C	-2.CC0E CO	-2.000E CO	-2.000E 00	-2.0CCE 00	-2.C00E 0C	1.001E 00
130.0C	-2.000E 0C	-2.C00E 00	-2.000E CO	-2.000E CO	-2.CC0E CO	-2.C0CE CO	1.001E 0C
140.00	-2.00CE 0C	-2.0C0E 00	-2.000E CO	-2.0C0E CC	-2.000E 00	-2.C00E 0C	1.C01E 0C
150.0C	-2.000E 0C	-2.CC0E CC	-2.0CCE CO	-2.0CCE CO	-2.0C0E 00	-2.C00E CO	1.001E 00
160.0C	-2.00CE 0C	-2.CC0E CO	-2.0C0E CO	-2.0CCE CO	-2.000E 00	-2.C0CE CO	1.001E CO
180.0C	-2.0CCE 0C	-2.CC0E 00	-2.0C0E CO	-2.000E CO	-2.0C0E CO	-2.C00E 00	1.C01E 00
200.0C	-2.C00E 00	-2.CC0E CO	-2.0C0E CO	-2.00CE CO	-2.0C0E CO	-2.C00E 00	1.001E CO
215.0C	-2.C0CE 0C	-2.CC0E CO	-2.0C0E CO	-2.00CE CO	-2.000E CC	-2.C00E 0C	1.001E CO

NORMALIZED DERIVATIVES WITH RESPECT TO ELECTRON DENSITY

PD1=+C.5 PD2=C.0 PD3=C.0

PROPAGATION FREQUENCY= 4.2330E 08

ρ	PD4	PD5=PD12	PD6=PD13	PD7	PD8	PD9	PD10	PD11
1.1C	9.759E-C1	1.C14E CC	1.C14E CC	1.C41E CC	1.042E CC	2.004E CC	2.C04E CC	9.955E-06
1.2C	9.77CE-01	1.C05E CC	1.CC5E CC	1.C16E CC	1.016E CC	1.988E CC	1.988E CC	0.
1.3C	9.775E-C1	1.C03E CC	1.C03E CC	1.C08E CC	1.008E CC	1.983E CC	1.983E CC	-5.956E-06
1.4C	9.777E-C1	1.C02E CC	1.C02E CC	1.C05E CC	1.005E CC	1.981E CC	1.981E CC	-8.386E-06
1.5C	9.779E-01	1.C01E CC	1.C01E CC	1.C03E CC	1.003E CC	1.980E CC	1.980E CC	-1.162E-05
1.6C	9.781E-C1	1.C01E CC	1.C01E CC	1.C02E CC	1.002E CC	1.980E CC	1.980E CC	-1.595E-05
1.8C	9.784E-C1	1.CCCE CC	1.CC0E CC	1.C01E CC	1.001E CC	1.979E CC	1.979E CC	-2.504E-05
2.0C	9.786E-C1	1.CCCE CC	1.CCCE CC	1.C01E CC	1.001E CC	1.979E CC	1.979E CC	-3.178E-05
2.2C	9.788E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.128E-05
2.4C	9.789E-01	1.CCCE CC	1.CC0E CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-5.465E-05
2.6C	9.790E-C1	1.CCCE CC	1.CC0E CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-6.312E-05
2.8C	9.791E-C1	1.CCCE CC	1.CC0E CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-7.110E-05
3.0C	9.791E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CC0E CC	1.979E CC	1.979E CC	-8.092E-05
3.3C	9.792E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-9.171E-05
3.6C	9.792E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.057E-04
4.0C	9.792E-C1	1.CCCE CC	1.CC0E CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.244E-04
4.5C	9.793E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.349E-04
5.0C	9.793E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.500E-04
5.5C	9.793E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.666E-04
6.0C	9.793E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.815E-04
6.5C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.871E-04
7.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-1.951E-04
7.5C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.057E-04
8.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.187E-04
9.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.319E-04
10.0C	9.795E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.474E-04
11.0C	9.795E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.445E-04
12.0C	9.795E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.457E-04
13.0C	9.795E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.503E-04
14.0C	9.795E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.581E-04
15.0C	9.795E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.980E CC	1.980E CC	-2.689E-04
16.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.765E-04
18.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.742E-04
20.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.788E-04
22.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.892E-04
24.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-2.947E-04
26.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.000E-04
28.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.091E-04
30.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.217E-04
33.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.241E-04
36.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.319E-04
40.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.500E-04
45.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.557E-04
50.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.706E-04
55.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.786E-04
60.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.932E-04
65.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.941E-04
70.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-3.997E-04
75.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.096E-04
80.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.235E-04
90.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.297E-04
100.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.470E-04
110.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.449E-04
120.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.502E-04
130.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.620E-04
140.0C	9.794E-01	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-4.797E-04
150.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-5.033E-04
160.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-5.202E-04
180.0C	9.794E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-5.685E-04
200.0C	9.795E-C1	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.CCCE CC	1.979E CC	1.979E CC	-6.370E-04
215.0C	9.795E-C1	1.CCCE CC	1.CCCE CC	1.CCCE-CC	1.CCCE CC	1.979E CC	1.979E CC	-6.958E-04

NORMALIZED DERIVATIVES WITH RESPECT TO TEMPERATURE

PD14=C.0 PD15=C.0 PD16=0.C PD18=PD25=0.0
PD20=0.0 PD21=0.0 PD24=0.0 PD19=PD26=0.0

PROPAGATICN FREQLENCY= 4.233CE 08

ρ	PD17	PD22	PD23
1.1C	-1.428E 0C	-1.428E 0C	-1.428E 00
1.2C	-1.431E 0C	-1.431E 00	-1.431E 00
1.3C	-1.432E C0	-1.432E 00	-1.432E 00
1.4C	-1.433E CC	-1.433E 0C	-1.433E C0
1.5C	-1.434E 00	-1.434E 0C	-1.434E 00
1.6C	-1.434E 00	-1.434E 0C	-1.434E 00
1.8C	-1.435E 00	-1.435E 0C	-1.435E 00
2.0C	-1.436E C0	-1.436E 00	-1.436E 00
2.2C	-1.436E 0C	-1.436E C0	-1.436E 00
2.4C	-1.437E 0C	-1.437E 0C	-1.437E C0
2.60	-1.437E 00	-1.437E 0C	-1.437E 00
2.80	-1.437E 0C	-1.437E 00	-1.437E 00
3.0C	-1.437E 00	-1.437E 0C	-1.437E 00
3.3C	-1.437E CC	-1.437E 0C	-1.437E 00
3.6C	-1.438E 0C	-1.438E 0C	-1.438E 00
4.00	-1.438E C0	-1.438E 0C	-1.438E 00
4.5C	-1.438E 0C	-1.438E 0C	-1.438E 0C
5.0C	-1.438E 00	-1.438E 0C	-1.438E C0
5.5C	-1.438E C0	-1.438E 00	-1.438E C0
6.0C	-1.438E 0C	-1.438E 0C	-1.438E 00
6.5C	-1.438E CC	-1.438E 0C	-1.438E 00
7.0C	-1.438E C0	-1.438E 0C	-1.438E 0C
7.5C	-1.438E C0	-1.438E 0C	-1.438E 00
8.00	-1.438E 00	-1.438E 0C	-1.438E C0
9.0C	-1.438E C0	-1.438E CC	-1.438E 00
10.0C	-1.438E C0	-1.438E 0C	-1.438E 0C
11.0C	-1.438E C0	-1.438E 00	-1.438E C0
12.C0	-1.438E CC	-1.438E 00	-1.438E C0
13.0C	-1.438E CC	-1.438E 0C	-1.438E 00
14.0C	-1.438E 00	-1.438E 0C	-1.438E C0
15.0C	-1.438E CC	-1.438E C0	-1.438E 00
16.0C	-1.438E C0	-1.438E 0C	-1.438E 00
18.CC	-1.438E CC	-1.438E 0C	-1.438E C0
20.0C	-1.438E C0	-1.438E 0C	-1.438E 00
22.0C	-1.438E CC	-1.438E 00	-1.438E C0
24.0C	-1.438E CC	-1.438E 00	-1.438E 00
26.0C	-1.438E 0C	-1.438E 0C	-1.438E 00
28.0C	-1.438E C0	-1.438E 0C	-1.438E C0
30.0C	-1.438E CC	-1.438E C0	-1.438E C0
33.0C	-1.438E C0	-1.438E 00	-1.438E C0
36.0C	-1.438E 0C	-1.438E 00	-1.438E 0C
40.0C	-1.438E C0	-1.438E 0C	-1.438E 00
45.0C	-1.438E 0C	-1.438E 00	-1.438E C0
50.0C	-1.438E C0	-1.438E CC	-1.438E C0
55.0C	-1.438E 0C	-1.438E 0C	-1.438E C0
60.0C	-1.438E 0C	-1.438E C0	-1.438E 00
65.0C	-1.438E C0	-1.438E 00	-1.438E 00
70.0C	-1.438E C0	-1.438E C0	-1.438E 00
75.0C	-1.438E 00	-1.438E 00	-1.438E 00
80.0C	-1.438E C0	-1.438E 00	-1.438E 00
90.0C	-1.438E 0C	-1.438E 00	-1.438E C0
100.0C	-1.438E CC	-1.438E 0C	-1.438E C0
110.0C	-1.438E CC	-1.438E 0C	-1.438E 00
120.0C	-1.438E 0C	-1.438E 0C	-1.438E 00
130.0C	-1.438E C0	-1.438E 00	-1.438E 00
140.0C	-1.438E 0C	-1.438E CC	-1.438E 00
150.0C	-1.438E C0	-1.438E 0C	-1.438E C0
160.0C	-1.438E CC	-1.438E CC	-1.438E C0
180.0C	-1.438E CC	-1.438E 00	-1.438E C0
200.0C	-1.438E C0	-1.438E 0C	-1.438E 00
215.0C	-1.438E CC	-1.438E CC	-1.438E 00

NORMALIZED DERIVATIVES WITH RESPECT TO SOLAR WIND VELOCITY

PD27=C.C PD28=C.C PD29=-1.C PD30=C.C

PROPAGATION FREQUENCY= 4.2330E 08

ρ	PD31=PD38	PD32=PD39	PD33	PD34	PD35	PD36	PD37
1.10	8.950E-03	-8.952E-C3	1.791E-02	-1.838E-C2	1.790E-02	-1.822E-02	3.CCCE CC
1.2C	7.469E-03	-7.469E-C3	1.494E-02	-1.527E-02	1.494E-02	-1.516E-02	3.CCCE CC
1.3C	6.354E-03	-6.354E-C3	1.271E-02	-1.295E-02	1.271E-02	-1.287E-02	3.CCCE CC
1.4C	5.478E-03	-5.478E-C3	1.096E-02	-1.114E-C2	1.096E-02	-1.108E-02	3.CCCE CC
1.5C	4.773E-03	-4.773E-C3	9.546E-03	-9.683E-03	9.546E-03	-9.637E-03	3.CCCE CC
1.6C	4.196E-03	-4.196E-C3	8.391E-03	-8.498E-03	8.391E-03	-8.462E-03	3.CCCE CC
1.8C	3.317E-03	-3.317E-C3	6.634E-03	-6.700E-03	6.634E-03	-6.678E-03	3.CCCE CC
2.00	2.688E-03	-2.688E-C3	5.376E-03	-5.420E-03	5.376E-03	-5.405E-03	3.CCCE CC
2.2C	2.222E-03	-2.222E-C3	4.445E-03	-4.475E-03	4.445E-03	-4.465E-03	3.CCCE CC
2.4C	1.868E-03	-1.868E-03	3.736E-03	-3.757E-03	3.736E-03	-3.750E-03	3.CCCE CC
2.6C	1.592E-03	-1.592E-C3	3.184E-03	-3.199E-03	3.184E-03	-3.194E-03	3.CCCE CC
2.8C	1.373E-03	-1.373E-C3	2.746E-03	-2.758E-03	2.746E-03	-2.754E-03	3.CCCE CC
3.0C	1.196E-03	-1.196E-C3	2.393E-03	-2.401E-03	2.393E-03	-2.398E-03	3.CCCE CC
3.3C	9.889E-04	-9.889E-C4	1.978E-03	-1.984E-03	1.978E-03	-1.982E-03	3.CCCE CC
3.6C	8.311E-04	-8.311E-C4	1.662E-03	-1.666E-03	1.662E-03	-1.665E-03	3.CCCE CC
4.0C	6.733E-04	-6.733E-C4	1.347E-03	-1.349E-03	1.347E-03	-1.348E-03	3.CCCE CC
4.5C	5.321E-04	-5.321E-C4	1.064E-03	-1.066E-03	1.064E-03	-1.065E-03	3.CCCE CC
5.0C	4.311E-04	-4.311E-C4	8.621E-04	-8.633E-04	8.621E-04	-8.629E-04	3.CCCE CC
5.5C	3.563E-04	-3.563E-C4	7.126E-04	-7.134E-C4	7.126E-04	-7.131E-04	3.CCCE CC
6.0C	2.994E-04	-2.994E-C4	5.989E-04	-5.994E-04	5.989E-04	-5.992E-04	3.CCCE CC
6.5C	2.552E-04	-2.552E-04	5.103E-04	-5.107E-04	5.103E-04	-5.106E-04	3.CCCE CC
7.0C	2.200E-04	-2.2CCE-C4	4.401E-04	-4.404E-04	4.401E-04	-4.403E-04	3.CCCE CC
7.5C	1.917E-04	-1.917E-C4	3.834E-04	-3.836E-04	3.834E-04	-3.835E-04	3.CCCE CC
8.0C	1.685E-04	-1.685E-C4	3.370E-04	-3.372E-04	3.370E-04	-3.371E-04	3.CCCE CC
9.0C	1.332E-04	-1.332E-04	2.663E-04	-2.664E-04	2.663E-04	-2.664E-04	3.CCCE CC
10.0C	1.079E-04	-1.079E-04	2.158E-04	-2.158E-04	2.158E-04	-2.158E-04	3.CCCE CC
11.0C	8.919E-05	-8.919E-C5	1.784E-04	-1.784E-04	1.784E-04	-1.784E-04	3.CCCE CC
12.0C	7.496E-05	-7.496E-C5	1.499E-04	-1.500E-04	1.499E-04	-1.499E-04	3.CCCE CC
13.00	6.389E-05	-6.389E-05	1.278E-04	-1.278E-04	1.278E-04	-1.278E-C4	2.999E CC
14.0C	5.511E-05	-5.511E-C5	1.102E-04	-1.102E-C4	1.102E-C4	-1.102E-04	2.999E CC
15.00	4.802E-05	-4.8C2E-C5	9.6C4E-C5	-9.605E-C5	9.604E-05	-9.6C5E-C5	2.999E CC
16.0C	4.222E-05	-4.222E-05	8.444E-05	-8.445E-05	8.444E-05	-8.444E-C5	2.999E CC
18.00	3.338E-05	-3.338E-05	6.676E-C5	-6.677E-C5	6.676E-05	-6.677E-05	2.999E CC
20.0C	2.7C6E-05	-2.7C6E-05	5.412E-05	-5.413E-05	5.412E-05	-5.413E-05	2.999E CC
22.0C	2.239E-05	-2.239E-C5	4.477E-05	-4.477E-C5	4.477E-05	-4.477E-05	2.999E CC
24.0C	1.883E-05	-1.883E-05	3.766E-05	-3.766E-05	3.766E-05	-3.766E-05	2.999E CC
26.0C	1.6C6E-05	-1.6C6E-C5	3.212E-05	-3.212E-05	3.212E-05	-3.212E-05	2.999E CC
28.00	1.386E-05	-1.386E-05	2.773E-05	-2.773E-05	2.773E-05	-2.773E-05	2.999E CC
30.0C	1.209E-05	-1.2C9E-C5	2.418E-05	-2.418E-C5	2.418E-05	-2.418E-C5	2.999E CC
33.00	1.001E-05	-1.0C1E-C5	2.C03E-05	-2.003E-C5	2.C03E-C5	-2.C03E-C5	2.999E CC
36.00	8.432E-06	-8.432E-C6	1.686E-05	-1.687E-C5	1.686E-05	-1.687E-05	2.999E CC
40.0C	6.852E-06	-6.852E-C6	1.37CE-05	-1.370E-05	1.370E-05	-1.370E-C5	2.999E CC
45.0C	5.438E-06	-5.438E-C6	1.088E-05	-1.088E-05	1.088E-05	-1.088E-05	2.999E CC
50.00	4.426E-06	-4.426E-06	8.853E-06	-8.853E-06	8.853E-06	-8.853E-06	2.999E CC
55.0C	3.678E-06	-3.678E-C6	7.356E-06	-7.356E-C6	7.356E-06	-7.356E-06	2.999E CC
60.0C	3.108E-06	-3.1C8E-06	6.217E-06	-6.217E-06	6.217E-06	-6.217E-C6	2.999E CC
65.0C	2.665E-06	-2.665E-C6	5.330E-06	-5.330E-06	5.330E-06	-5.330E-06	2.999E CC
70.0C	2.313E-06	-2.313E-06	4.627E-06	-4.627E-06	4.627E-06	-4.627E-06	2.999E CC
75.00	2.029E-06	-2.029E-06	4.059E-06	-4.059E-06	4.059E-06	-4.059E-06	2.999E CC
80.0C	1.797E-06	-1.797E-C6	3.594E-06	-3.594E-06	3.594E-06	-3.594E-06	2.999E CC
90.0C	1.443E-06	-1.443E-06	2.885E-06	-2.885E-06	2.885E-06	-2.885E-C6	2.999E CC
100.00	1.189E-06	-1.189E-06	2.377E-06	-2.377E-06	2.377E-06	-2.377E-06	2.999E CC
110.0C	1.001E-06	-1.0C1E-06	2.C01E-06	-2.C01E-06	2.001E-06	-2.0C1E-06	2.999E CC
120.CC	8.572E-07	-8.572E-C7	1.714E-06	-1.714E-06	1.714E-06	-1.714E-06	2.999E CC
130.0C	7.453E-07	-7.453E-07	1.491E-06	-1.491E-06	1.491E-06	-1.491E-06	2.999E CC
140.00	6.562E-07	-6.562E-07	1.312E-06	-1.312E-06	1.312E-06	-1.312E-C6	2.999E CC
150.00	5.841E-07	-5.841E-C7	1.168E-06	-1.168E-06	1.168E-06	-1.168E-06	2.999E CC
160.00	5.248E-07	-5.248E-07	1.050E-06	-1.050E-06	1.050E-06	-1.050E-06	2.999E CC
180.00	4.339E-07	-4.339E-07	8.677E-07	-8.678E-07	8.677E-07	-8.678E-07	2.999E CC
200.0C	3.680E-07	-3.680E-07	7.361E-07	-7.361E-C7	7.361E-07	-7.361E-07	2.999E CC
215.0C	3.298E-07	-3.298E-07	6.595E-07	-6.595E-07	6.595E-07	-6.595E-07	2.999E CC

NORMALIZED DERIVATIVES WITH RESPECT TO MAGNETIC FIELD STRENGTH

PD40=C.C PC41=1.C PD42=1.C PU43=0.0 PD50=0.C

PROPAGATICN FREGLENCY= 4.2330E 08

ρ	PC44=PD51	PD45=PD52	PD46	PD47	PD48	PC49
1.1C	-8.950E-03	9.113E-03	-1.791E-02	1.823E-G2	-1.790E-02	1.823E-02
1.2C	-7.469E-03	7.582E-C3	-1.494E-C2	1.517E-02	-1.494E-C2	1.516E-02
1.3C	-6.354E-03	6.436E-C3	-1.271E-02	1.287E-02	-1.271E-02	1.287E-02
1.4C	-5.478E-03	5.539E-03	-1.C96E-C2	1.108E-02	-1.C96E-02	1.108E-02
1.5C	-4.773E-03	4.819E-03	-9.546E-03	9.638E-03	-9.546E-C3	9.638E-03
1.6C	-4.196E-03	4.231E-C3	-8.391E-03	8.462E-03	-8.391E-03	8.462E-03
1.8C	-3.317E-03	3.339E-C3	-6.634E-C3	6.678E-03	-6.634E-03	6.678E-03
2.0C	-2.688E-03	2.7C3E-C3	-5.376E-03	5.4C5E-03	-5.376E-03	5.405E-C3
2.2C	-2.222E-03	2.232E-C3	-4.445E-C3	4.465E-03	-4.445E-03	4.465E-03
2.4C	-1.868E-03	1.875E-C3	-3.736E-03	3.750E-03	-3.736E-03	3.750E-03
2.6C	-1.592E-03	1.597E-C3	-3.184E-03	3.194E-C3	-3.184E-03	3.194E-03
2.8C	-1.373E-03	1.377E-C3	-2.746E-03	2.754E-03	-2.746E-03	2.754E-03
3.0C	-1.196E-03	1.199E-03	-2.393E-03	2.398E-03	-2.393E-03	2.398E-03
3.3C	-9.889E-04	9.909E-04	-1.978E-03	1.982E-03	-1.978E-03	1.982E-03
3.6C	-8.311E-04	8.325E-04	-1.662E-03	1.665E-C3	-1.662E-C3	1.665E-03
4.0C	-6.733E-04	6.742E-C4	-1.347E-03	1.348E-C3	-1.347E-C3	1.348E-03
4.5C	-5.321E-04	5.327E-C4	-1.064E-03	1.065E-03	-1.064E-03	1.065E-03
5.00	-4.311E-04	4.314E-C4	-8.621E-04	8.629E-C4	-8.621E-04	8.629E-04
5.5C	-3.563E-04	3.566E-C4	-7.126E-04	7.131E-C4	-7.126E-04	7.131E-04
6.0C	-2.994E-04	2.996E-04	-5.989E-C4	5.992E-04	-5.989E-C4	5.992E-04
6.5C	-2.552E-04	2.553E-C4	-5.103E-C4	5.106E-04	-5.103E-C4	5.106E-04
7.0C	-2.200E-04	2.2C1E-04	-4.401E-C4	4.403E-04	-4.401E-04	4.4C3E-04
7.5C	-1.917E-04	1.918E-04	-3.834E-04	3.835E-04	-3.834E-C4	3.835E-04
8.0C	-1.685E-04	1.686E-C4	-3.37CE-04	3.371E-04	-3.37CE-C4	3.371E-04
9.0C	-1.332E-04	1.332E-04	-2.663E-04	2.664E-04	-2.663E-C4	2.664E-04
10.00	-1.C79E-04	1.079E-C4	-2.158E-04	2.158E-04	-2.158E-04	2.158E-04
11.0C	-8.919E-05	8.92CE-C5	-1.784E-C4	1.784E-C4	-1.784E-04	1.784E-04
12.00	-7.496E-05	7.497E-05	-1.499E-C4	1.499E-04	-1.499E-04	1.499E-C4
13.00	-6.389E-05	6.390E-05	-1.278E-04	1.278E-C4	-1.278E-04	1.278E-04
14.0C	-5.511E-05	5.511E-C5	-1.102E-04	1.102E-04	-1.102E-04	1.102E-04
15.0C	-4.802E-05	4.8C2E-C5	-9.604E-05	9.605E-05	-9.604E-C5	9.605E-05
16.0C	-4.222E-05	4.222E-C5	-8.444E-05	8.444E-05	-8.444E-C5	8.444E-05
18.0C	-3.338E-C5	3.338E-05	-6.676E-05	6.677E-C5	-6.676E-05	6.677E-05
20.00	-2.7C6E-05	2.7C6E-C5	-5.412E-05	5.413E-C5	-5.412E-05	5.413E-05
22.0C	-2.239E-05	2.239E-C5	-4.477E-05	4.477E-C5	-4.477E-05	4.477E-05
24.0C	-1.883E-05	1.883E-C5	-3.766E-05	3.766E-C5	-3.766E-05	3.766E-05
26.00	-1.606E-05	1.6C6E-05	-3.212E-05	3.212E-C5	-3.212E-05	3.212E-05
28.0C	-1.386E-05	1.386E-05	-2.773E-05	2.773E-05	-2.773E-05	2.773E-05
30.00	-1.2C9E-05	1.2C9E-C5	-2.418E-05	2.418E-05	-2.418E-05	2.418E-05
33.0C	-1.C01E-05	1.0C1E-C5	-2.C03E-05	2.003E-05	-2.003E-05	2.003E-05
36.0C	-8.432E-C6	8.433E-C6	-1.686E-05	1.687E-05	-1.686E-C5	1.687E-C5
40.00	-6.852E-06	6.852E-06	-1.37CE-05	1.370E-05	-1.37CE-C5	1.37CE-05
45.0C	-5.438E-C6	5.438E-C6	-1.088E-05	1.088E-05	-1.088E-C5	1.088E-05
50.00	-4.426E-G6	4.426E-C6	-8.853E-06	8.853E-06	-8.853E-06	8.853E-C6
55.C0	-3.678E-06	3.678E-C6	-7.356E-06	7.356E-06	-7.356E-06	7.356E-06
60.00	-3.108E-06	3.1C8E-06	-6.217E-06	6.217E-06	-6.217E-06	6.217E-06
65.0C	-2.665E-06	2.665E-C6	-5.33CE-06	5.330E-06	-5.330E-06	5.330E-06
70.00	-2.313E-06	2.313E-06	-4.627E-06	4.627E-06	-4.627E-06	4.627E-06
75.0C	-2.C29E-06	2.029E-C6	-4.059E-06	4.059E-06	-4.059E-06	4.059E-C6
80.00	-1.797E-06	1.797E-06	-3.594E-06	3.594E-C6	-3.594E-C6	3.594E-06
90.0C	-1.443E-06	1.443E-C6	-2.885E-06	2.885E-06	-2.885E-06	2.885E-06
100.0C	-1.189E-C6	1.189E-C6	-2.377E-C6	2.377E-06	-2.377E-06	2.377E-06
110.00	-1.001E-06	1.CC1E-C6	-2.001E-06	2.001E-C6	-2.001E-06	2.001E-06
120.00	-8.572E-07	8.572E-C7	-1.714E-06	1.714E-06	-1.714E-06	1.714E-06
130.0C	-7.453E-07	7.453E-C7	-1.491E-06	1.491E-06	-1.491E-06	1.491E-06
140.00	-6.562E-07	6.562E-07	-1.312E-06	1.312E-C6	-1.312E-C6	1.312E-06
150.0C	-5.841E-07	5.841E-C7	-1.168E-06	1.168E-06	-1.168E-06	1.168E-06
160.0C	-5.248E-07	5.248E-C7	-1.05CE-06	1.050E-06	-1.C50E-06	1.050E-06
180.0C	-4.339E-07	4.339E-07	-8.677E-07	8.678E-07	-8.677E-07	8.678E-C7
200.0C	-3.68CE-07	3.680E-C7	-7.361E-C7	7.361E-07	-7.361E-07	7.361E-07
215.0C	-3.298E-07	3.298E-07	-6.595E-07	6.595E-07	-6.595E-07	6.595E-07

NORMALIZED DERIVATIVES WITH RESPECT TO PROPAGATING FREQUENCY

PD53=0.0 PD54=0.0 PD55=0.0 PD56=0.0

PROPAGATION FREQUENCY= 4.2330E 08

ρ	PD57=PD64	PD58=PD65	PD59	PD60	PD61	PD62	PD63
1.10	-2.018E 00	-2.037E 00	-2.174E 00	-2.213E 00	-2.037E 00	-2.075E 00	9.999E-01
1.20	-2.003E 00	-2.018E 00	-2.060E 00	-2.091E 00	-2.006E 00	-2.037E 00	1.000E 00
1.30	-1.999E 00	-2.012E 00	-2.024E 00	-2.050E 00	-1.998E 00	-2.024E 00	1.000E 00
1.40	-1.998E 00	-2.009E 00	-2.012E 00	-2.035E 00	-1.996E 00	-2.018E 00	1.000E 00
1.50	-1.997E 00	-2.007E 00	-2.005E 00	-2.025E 00	-1.995E 00	-2.014E 00	1.000E 00
1.60	-1.997E 00	-2.006E 00	-2.001E 00	-2.018E 00	-1.994E 00	-2.011E 00	1.000E 00
1.80	-1.997E 00	-2.004E 00	-1.998E 00	-2.012E 00	-1.995E 00	-2.008E 00	1.000E 00
2.00	-1.998E 00	-2.003E 00	-1.998E 00	-2.009E 00	-1.996E 00	-2.006E 00	1.000E 00
2.20	-1.998E 00	-2.003E 00	-1.998E 00	-2.006E 00	-1.996E 00	-2.005E 00	1.000E 00
2.40	-1.998E 00	-2.002E 00	-1.998E 00	-2.005E 00	-1.997E 00	-2.004E 00	1.000E 00
2.60	-1.999E 00	-2.002E 00	-1.998E 00	-2.004E 00	-1.997E 00	-2.003E 00	1.000E 00
2.80	-1.999E 00	-2.001E 00	-1.998E 00	-2.003E 00	-1.997E 00	-2.003E 00	1.000E 00
3.00	-1.999E 00	-2.001E 00	-1.998E 00	-2.003E 00	-1.998E 00	-2.003E 00	1.000E 00
3.30	-1.999E 00	-2.001E 00	-1.998E 00	-2.002E 00	-1.998E 00	-2.002E 00	1.000E 00
3.60	-1.999E 00	-2.001E 00	-1.999E 00	-2.002E 00	-1.998E 00	-2.002E 00	1.000E 00
4.00	-1.999E 00	-2.001E 00	-1.999E 00	-2.002E 00	-1.999E 00	-2.001E 00	1.000E 00
4.50	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	1.000E 00
5.00	-2.000E 00	-2.000E 00	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	1.000E 00
5.50	-2.000E 00	-2.000E 00	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	1.000E 00
6.00	-2.000E 00	-2.000E 00	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	1.000E 00
6.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.001E 00	-2.000E 00	-2.001E 00	1.000E 00
7.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
7.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
8.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
9.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
10.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
11.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
12.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
13.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
14.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
15.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
16.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
18.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
20.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
22.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
24.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
26.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
28.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
30.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
33.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
36.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
40.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
45.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
50.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
55.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
60.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
65.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
70.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
75.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
80.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
90.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
100.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
110.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
120.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
130.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
140.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
150.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
160.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
180.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
200.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
215.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00

ORMALIZED DERIVATIVES WITH RESPECT TO ELECTRON DENSITY

D1=4C.5 PD2=C.C PD3=C.0

ROPAGATICN FREQLENCY= 1.42CCE 09

ρ	PD4	PD5=PD12	PD6=PD13	PD7	PD8	PD9	PD10	PD11
1.1C	9.759E-01	1.C01E 0C	1.C01E 00	1.0C4E 00	1.C04E 00	1.978E 00	1.978E 0C	2.871E-05
1.2C	9.77CE-01	1.CCCE CC	1.CCCE 00	1.C01E 0C	1.001E 00	1.978E 00	1.978E 00	-2.024E-06
1.3C	9.775E-01	1.C0CE 0C	1.CC0E 00	1.C01E 0C	1.001E 00	1.978E C0	1.978E G0	-7.016E-06
1.4C	9.777E-01	1.C0CE 0C	1.0C0E C0	1.CC0E 0C	1.000E 00	1.978E 0C	1.978E 00	-8.874E-06
1.5C	9.779E-C1	1.C0CE 0C	1.CC0E 00	1.C00E C0	1.0C0E 00	1.978E C0	1.978E C0	-1.184E-05
1.6C	9.781E-01	1.00CE 0C	1.CC0E C0	1.C00E 00	1.000E 00	1.978E 0C	1.978E G0	-1.562E-05
1.8C	9.784E-C1	1.00CE 00	1.CC0E 00	1.000E 00	1.000E C0	1.978E 0C	1.978E G0	-2.491E-05
2.0C	9.786E-C1	1.C00E 00	1.0C0E 0C	1.C00E 0C	1.000E C0	1.979E 0C	1.979E C0	-3.170E-05
2.2C	9.788E-01	1.00CE 00	1.0C0E 00	1.000E C0	1.000E CC	1.979E 00	1.979E C0	-4.127E-05
2.4C	9.789E-01	1.00CE 0C	1.CC0E 00	1.C00E 0C	1.00GE 00	1.979E C0	1.979E 00	-5.458E-05
2.6C	9.790E-C1	1.0CCE GC	1.0C0E C0	1.C00E 0C	1.0C0E 00	1.979E 0C	1.979E 00	-6.307E-C5
2.8C	9.791E-C1	1.C0CE 00	1.CC0E 00	1.C00E 0C	1.000E 00	1.979E 0C	1.979E 00	-7.105E-05
3.0C	9.791E-01	1.CCCE 0C	1.CC0E 00	1.000E C0	1.000E 0C	1.979E 00	1.979E 00	-8.088E-05
3.3C	9.792E-C1	1.CCCE 0C	1.CC0E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-9.169E-05
3.6C	9.792E-C1	1.0CCE C0	1.CC0E 00	1.0C0E 0C	1.000E 00	1.979E C0	1.979E G0	-1.057E-C4
4.00	9.792E-01	1.000E 0C	1.C00E 00	1.000E CC	1.000E 00	1.979E CC	1.979E 00	-1.244E-04
4.5C	9.793E-01	1.C0CE C0	1.000E C0	1.000E C0	1.0C0E C0	1.979E C0	1.979E 00	-1.349E-04
5.0C	9.793E-01	1.C0CE GC	1.CCCE 00	1.C00E CC	1.000E 00	1.979E 0C	1.979E CC	-1.5C0E-04
5.5C	9.793E-C1	1.0CCE 0C	1.0C0E 0C	1.0C0E 00	1.000E 00	1.979E 0C	1.979E 00	-1.666E-04
6.0C	9.793E-C1	1.C0CE 0C	1.0C0E 00	1.0C0E 0C	1.0C0E 00	1.979E 00	1.979E C0	-1.815E-04
6.5C	9.794E-01	1.C0CE CC	1.CC0E C0	1.CC0E 00	1.000E 00	1.979E 00	1.979E 00	-1.871E-04
7.0C	9.794E-C1	1.0CCE C0	1.C00E C0	1.C00E 0C	1.000E 00	1.979E 00	1.979E G0	-1.951E-04
7.5C	9.794E-C1	1.GCCE 0C	1.CCCE 00	1.0C0E 0C	1.000E 00	1.979E 0C	1.979E C0	-2.056E-04
8.0C	9.794E-C1	1.0CCE C0	1.CC0E 00	1.0C0E 00	1.000E C0	1.979E C0	1.979E C0	-2.187E-C4
9.00	9.794E-01	1.00CE 0C	1.0C0E 00	1.CC0E 00	1.000E 00	1.979E 0C	1.979E 00	-2.319E-04
10.0C	9.795E-01	1.CCCE GC	1.CCCE 00	1.C00E 00	1.000E C0	1.979E C0	1.979E C0	-2.474E-04
11.0C	9.795E-01	1.C0CE 0C	1.CCCE 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.445E-04
12.0C	9.795E-01	1.CCCE CC	1.CC0E 00	1.000E 00	1.000E 00	1.979E 00	1.979E GC	-2.457E-04
13.0C	9.795E-01	1.00CE 0C	1.CC0E C0	1.CC0E 00	1.000E 00	1.979E 0C	1.979E C0	-2.503E-04
14.0C	9.795E-01	1.CCCE 0C	1.0C0E C0	1.0C0E 00	1.000E 00	1.979E 0C	1.979E C0	-2.581E-04
15.0C	9.795E-01	1.C0CE 00	1.CC0E 00	1.CC0E 00	1.000E C0	1.979E 0C	1.979E 0C	-2.689E-04
16.0C	9.794E-C1	1.C0CE 00	1.CC0E C0	1.000E 00	1.000E C0	1.979E 0C	1.979E C0	-2.765E-04
18.0C	9.794E-01	1.00CE CC	1.C00E 00	1.0C0E G0	1.000E 00	1.979E C0	1.979E C0	-2.742E-04
20.0C	9.794E-01	1.C0CE 00	1.CC0E 00	1.0C0E 0C	1.00CE 00	1.979E 00	1.979E C0	-2.788E-04
22.00	9.794E-C1	1.CCCE 0C	1.CC0E 00	1.000E 00	1.000E 00	1.979E 00	1.979E C0	-2.892E-04
24.00	9.794E-C1	1.C0CE 00	1.000E 00	1.000E 00	1.C00E 00	1.979E 0C	1.979E C0	-2.947E-04
26.00	9.794E-C1	1.00CE 00	1.0C0E 00	1.000E 00	1.0C0E 00	1.979E CC	1.979E C0	-3.0C0E-04
28.0C	9.794E-01	1.C0CE 0C	1.0C0E 00	1.0C0E GC	1.000E 00	1.979E C0	1.979E C0	-3.091E-04
30.0C	9.794E-C1	1.C0CE 00	1.CC0E 00	1.000E 00	1.000E 00	1.979E 00	1.979E C0	-3.217E-04
33.0C	9.794E-01	1.00CE C0	1.0C0E 00	1.0C0E 00	1.000E 00	1.979E 00	1.979E C0	-3.241E-04
36.0C	9.794E-01	1.C0CE CC	1.CC0E C0	1.000E 00	1.000E C0	1.979E C0	1.979E C0	-3.319E-04
40.00	9.794E-01	1.C0CE 0C	1.C00E 00	1.C00E GC	1.000E C0	1.979E 00	1.979E C0	-3.50CE-04
45.0C	9.794E-C1	1.0CCE 0C	1.CC0E 00	1.00CE 00	1.000E 00	1.979E 00	1.979E C0	-3.557E-04
50.0C	9.794E-01	1.C0CE 00	1.0C0E 00	1.0C0E 00	1.000E C0	1.979E 0C	1.979E C0	-3.706E-04
55.0C	9.794E-C1	1.00CE 00	1.000E C0	1.0C0E CC	1.000E C0	1.979E 00	1.979E 00	-3.786E-04
60.0C	9.794E-01	1.C0CE 00	1.CC0E 00	1.C00E 00	1.000E 00	1.979E C0	1.979E C0	-3.932E-04
65.0C	9.794E-01	1.00CE 00	1.CC0E 00	1.000E 00	1.000E 00	1.979E 0C	1.979E 00	-3.941E-04
70.00	9.794E-01	1.C0CE 00	1.0C0E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 0C	-3.997E-04
75.00	9.794E-C1	1.00CE 00	1.CC0E 00	1.000E 00	1.000E 00	1.979E 0C	1.979E 00	-4.C96E-04
80.00	9.794E-01	1.CCCE 0G	1.C00E 00	1.C00E 00	1.000E 00	1.979E CC	1.979E C0	-4.235E-04
90.0C	9.794E-01	1.000E 00	1.C00E 00	1.000E 0C	1.000E 00	1.979E 0C	1.979E 00	-4.297E-04
00.00	9.794E-01	1.000E 0C	1.C00E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.47CE-04
10.0C	9.794E-01	1.C0CE CC	1.CC0E 00	1.0C0E 0C	1.000E 0C	1.979E 0C	1.979E 00	-4.449E-04
20.0C	9.794E-01	1.CCCE 00	1.C00E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 0C	-4.502E-04
30.0C	9.794E-01	1.C0CE 00	1.CC0E 00	1.000E 00	1.C00E 00	1.979E 00	1.979E C0	-4.620E-04
40.00	9.794E-01	1.00CE 00	1.CC0E 00	1.000E C0	1.000E 00	1.979E C0	1.979E C0	-4.797E-04
50.00	9.794E-01	1.00CE 00	1.C00E 00	1.C00E 0C	1.000E 00	1.979E 00	1.979E 00	-5.033E-04
60.0C	9.794E-01	1.0CCE C0	1.CCCE 00	1.000E 00	1.000E 00	1.979E 00	1.979E C0	-5.202E-04
80.0C	9.794E-C1	1.00CE C0	1.CCCE 00	1.000E 00	1.C00E C0	1.979E 0C	1.979E C0	-5.685E-04
00.00	9.795E-01	1.000E 00	1.000E 00	1.0C0E C0	1.000E C0	1.979E 0C	1.979E 30	-6.370E-04
15.0C	9.795E-C1	1.00CE 0C	1.CC0E 0C	1.C00E 00	1.0C0E 00	1.979E 00	1.979E 00	-6.958E-04

NORMALIZED DERIVATIVES WITH RESPECT TO TEMPERATURE

PD14=C.C PD15=C.C PD16=0.C PD18=PD25=0.C
PD20=C.C PD21=C.C PD24=0.C PD19=PD26=0.C

PROPAGATION FREQUENCY= 1.420CE C9

ρ	PD17	PD22	PD23
1.1C	-1.428E CC	-1.428E CO	-1.428E CO
1.2C	-1.431E CC	-1.431E OC	-1.431E OC
1.3C	-1.432E CO	-1.432E OC	-1.432E OO
1.4C	-1.433E CO	-1.433E OO	-1.433E CO
1.5C	-1.434E CO	-1.434E CC	-1.434E CO
1.6C	-1.434E CO	-1.434E OC	-1.434E OC
1.8C	-1.435E CO	-1.435E OO	-1.435E OO
2.0C	-1.436E OO	-1.436E OC	-1.436E OO
2.2C	-1.436E OO	-1.436E OC	-1.436E OC
2.4C	-1.437E OO	-1.437E OC	-1.437E OO
2.6C	-1.437E OO	-1.437E OO	-1.437E OO
2.8C	-1.437E CO	-1.437E OC	-1.437E CO
3.0C	-1.437E OO	-1.437E OC	-1.437E CC
3.3C	-1.437E CC	-1.437E OO	-1.437E CC
3.6C	-1.438E CO	-1.438E CO	-1.438E OC
4.0C	-1.438E CO	-1.438E OC	-1.438E CO
4.5C	-1.438E CC	-1.438E OO	-1.438E CC
5.0C	-1.438E OC	-1.438E OC	-1.438E OO
5.5C	-1.438E CO	-1.438E CC	-1.438E OC
6.0C	-1.438E CC	-1.438E OC	-1.438E CO
6.5C	-1.438E CO	-1.438E OO	-1.438E OO
7.0C	-1.438E OO	-1.438E OO	-1.438E CO
7.5C	-1.438E CC	-1.438E OO	-1.438E OC
8.0C	-1.438E CC	-1.438E OC	-1.438E OO
9.0C	-1.438E CO	-1.438E OO	-1.438E OO
10.0C	-1.438E CC	-1.438E OO	-1.438E OC
11.0C	-1.438E OO	-1.438E OC	-1.438E CC
12.0C	-1.438E CC	-1.438E OC	-1.438E CC
13.0C	-1.438E CC	-1.438E CO	-1.438E OO
14.0C	-1.438E OO	-1.438E OC	-1.438E CO
15.0C	-1.438E CO	-1.438E CC	-1.438E OC
16.0C	-1.438E CC	-1.438E OC	-1.438E OO
18.0C	-1.438E OC	-1.438E OO	-1.438E OO
20.0C	-1.438E OO	-1.438E OO	-1.438E OO
22.0C	-1.438E CO	-1.438E OO	-1.438E CO
24.0C	-1.438E CO	-1.438E CO	-1.438E OO
26.0C	-1.438E OO	-1.438E OC	-1.438E OO
28.0C	-1.438E CO	-1.438E CO	-1.438E OC
30.0C	-1.438E OO	-1.438E CO	-1.438E OC
33.0C	-1.438E OC	-1.438E OC	-1.438E CC
36.0C	-1.438E OO	-1.438E OO	-1.438E OO
40.0C	-1.438E CO	-1.438E OO	-1.438E OC
45.0C	-1.438E OO	-1.438E CC	-1.438E OO
50.0C	-1.438E CO	-1.438E OC	-1.438E OO
55.0C	-1.438E OC	-1.438E OO	-1.438E OO
60.0C	-1.438E OO	-1.438E OC	-1.438E CO
65.0C	-1.438E CO	-1.438E OC	-1.438E OO
70.0C	-1.438E CC	-1.438E OO	-1.438E OO
75.0C	-1.438E OC	-1.438E OO	-1.438E CO
80.0C	-1.438E OO	-1.438E OO	-1.438E OO
90.0C	-1.438E OC	-1.438E OC	-1.438E OO
100.0C	-1.438E OO	-1.438E OC	-1.438E OC
110.0C	-1.438E CC	-1.438E OC	-1.438E OC
120.0C	-1.438E OO	-1.438E OC	-1.438E OO
130.0C	-1.438E CO	-1.438E CO	-1.438E OC
140.0C	-1.438E CC	-1.438E OO	-1.438E OO
150.0C	-1.438E CO	-1.438E OC	-1.438E OO
160.0C	-1.438E OO	-1.438E OC	-1.438E OO
180.0C	-1.438E CO	-1.438E OC	-1.438E OC
200.0C	-1.438E CC	-1.438E OC	-1.438E OO
215.0C	-1.438E CO	-1.438E OC	-1.438E OO

NORMALIZED DERIVATIVES WITH RESPECT TO SOLAR WIND VELOCITY

PD27=C.0 PD28=C.0 PD29=-1.0 PD30=C.0

PROPAGATION FREQUENCY= 1.4200E 09

ρ	PD31=PD38	PD32=PD39	PD33	PD34	PD35	PD36	PD37
1.1C	2.652E-03	-2.652E-03	5.303E-03	-5.345E-03	5.303E-03	-5.331E-03	3.000E CC
1.2C	2.227E-03	-2.227E-03	4.455E-03	-4.485E-03	4.455E-03	-4.475E-03	3.CCOE CC
1.3C	1.898E-03	-1.898E-03	3.796E-03	-3.818E-03	3.796E-03	-3.811E-03	3.CCOE CC
1.4C	1.637E-03	-1.637E-03	3.274E-03	-3.290E-03	3.274E-03	-3.285E-03	3.CCOE 00
1.5C	1.426E-03	-1.426E-03	2.852E-03	-2.865E-03	2.852E-03	-2.860E-03	3.CCOE CC
1.6C	1.254E-03	-1.254E-03	2.507E-03	-2.517E-03	2.507E-03	-2.514E-03	3.CCOE CC
1.8C	9.9C8E-04	-9.9C8E-04	1.982E-03	-1.987E-03	1.982E-03	-1.985E-03	3.0CCE CC
2.0C	8.027E-04	-8.027E-04	1.605E-03	-1.609E-03	1.605E-03	-1.608E-03	3.CCCE CC
2.2C	6.634E-04	-6.634E-04	1.327E-03	-1.330E-03	1.327E-03	-1.329E-03	3.0C0E CC
2.4C	5.575E-04	-5.575E-04	1.115E-03	-1.117E-03	1.115E-03	-1.116E-03	3.CCCE CC
2.6C	4.751E-04	-4.751E-04	9.502E-04	-9.516E-04	9.502E-04	-9.511E-04	3.CCCE CC
2.8C	4.C97E-04	-4.C97E-04	8.194E-04	-8.204E-04	8.194E-04	-8.201E-04	3.CCCE CC
3.CC	3.569E-04	-3.569E-04	7.138E-04	-7.146E-04	7.138E-04	-7.143E-04	3.CCOE CC
3.3C	2.95CE-04	-2.95CE-04	5.9C0E-04	-5.905E-04	5.90CE-04	-5.903E-04	3.CCCE CC
3.6C	2.479E-04	-2.479E-04	4.958E-04	-4.962E-04	4.958E-04	-4.960E-04	3.CCOE CC
4.0C	2.CC8E-04	-2.CC8E-04	4.C16E-04	-4.019E-04	4.016E-04	-4.018E-04	3.0CCE 00
4.5C	1.587E-04	-1.587E-04	3.174E-04	-3.175E-04	3.174E-04	-3.175E-04	3.CC0E CC
5.0C	1.285E-04	-1.285E-04	2.571E-04	-2.572E-04	2.571E-04	-2.571E-04	3.CC0E CC
5.5C	1.062E-04	-1.062E-04	2.125E-04	-2.125E-04	2.125E-04	-2.125E-04	3.CCOE CC
6.0C	8.928E-05	-8.928E-05	1.786E-04	-1.786E-04	1.786E-04	-1.786E-04	3.CCOE CC
6.5C	7.608E-05	-7.608E-05	1.522E-04	-1.522E-04	1.522E-04	-1.522E-04	3.0CCE CC
7.0C	6.560E-05	-6.560E-05	1.312E-04	-1.312E-04	1.312E-04	-1.312E-04	3.0CCE CC
7.5C	5.715E-05	-5.715E-05	1.143E-04	-1.143E-04	1.143E-04	-1.143E-04	3.CCOE CC
8.0C	5.024E-05	-5.024E-05	1.005E-04	-1.005E-04	1.005E-04	-1.005E-04	3.CCOE CC
9.0C	3.970E-05	-3.970E-05	7.940E-05	-7.941E-05	7.940E-05	-7.941E-05	3.CCCE CC
10.0C	3.216E-05	-3.216E-05	6.433E-05	-6.433E-05	6.433E-05	-6.433E-05	3.CCCE CC
11.0C	2.659E-05	-2.659E-05	5.318E-05	-5.318E-05	5.318E-05	-5.318E-05	3.CCOE CC
12.0C	2.235E-05	-2.235E-05	4.469E-05	-4.470E-05	4.469E-05	-4.470E-05	3.0CCE CC
13.0C	1.905E-05	-1.905E-05	3.809E-05	-3.809E-05	3.809E-05	-3.809E-05	2.999E CC
14.0C	1.643E-05	-1.643E-05	3.285E-05	-3.286E-05	3.285E-05	-3.286E-05	2.999E CC
15.0C	1.431E-05	-1.431E-05	2.863E-05	-2.863E-05	2.863E-05	-2.863E-05	2.999E CC
16.0C	1.259E-05	-1.259E-05	2.517E-05	-2.517E-05	2.517E-05	-2.517E-05	2.999E 00
18.0C	9.951E-06	-9.951E-06	1.990E-05	-1.990E-05	1.990E-05	-1.990E-05	2.999E CC
20.0C	8.067E-06	-8.067E-06	1.613E-05	-1.613E-05	1.613E-05	-1.613E-05	2.999E 00
22.0C	6.673E-06	-6.673E-06	1.335E-05	-1.335E-05	1.335E-05	-1.335E-05	2.999E 00
24.0C	5.613E-06	-5.613E-06	1.123E-05	-1.123E-05	1.123E-05	-1.123E-05	2.999E 00
26.0C	4.788E-06	-4.788E-06	9.575E-06	-9.575E-06	9.575E-06	-9.575E-06	2.999E 00
28.0C	4.133E-06	-4.133E-06	8.266E-06	-8.266E-06	8.266E-06	-8.266E-06	2.999E CC
30.0C	3.6C5E-06	-3.6C5E-06	7.209E-06	-7.209E-06	7.209E-06	-7.209E-06	2.999E 00
33.CC	2.985E-06	-2.985E-06	5.970E-06	-5.970E-06	5.97CE-06	-5.970E-06	2.999E CC
36.0C	2.514E-06	-2.514E-06	5.C27E-06	-5.027E-06	5.C27E-06	-5.027E-06	2.999E CC
40.0C	2.C43E-06	-2.043E-06	4.C85E-06	-4.085E-06	4.C85E-06	-4.085E-06	2.999E 00
45.0C	1.621E-06	-1.621E-06	3.242E-06	-3.242E-06	3.242E-06	-3.242E-06	2.999E 00
50.0C	1.320E-06	-1.32CE-06	2.639E-06	-2.639E-06	2.639E-06	-2.639E-06	2.999E 00
55.0C	1.C96E-06	-1.096E-06	2.193E-06	-2.193E-06	2.193E-06	-2.193E-06	2.999E 00
60.0C	9.266E-07	-9.266E-07	1.853E-06	-1.853E-06	1.853E-06	-1.853E-06	2.999E CC
65.0C	7.945E-07	-7.945E-07	1.589E-06	-1.589E-06	1.589E-06	-1.589E-06	2.999E CC
70.CC	6.896E-07	-6.896E-07	1.379E-06	-1.379E-06	1.379E-06	-1.379E-06	2.999E CC
75.0C	6.050E-07	-6.050E-07	1.210E-06	-1.210E-06	1.21CE-06	-1.210E-06	2.999E CC
80.0C	5.357E-07	-5.357E-07	1.C71E-06	-1.C71E-06	1.071E-06	-1.071E-06	2.999E 00
90.0C	4.3C0E-07	-4.3CCE-07	8.601E-07	-8.601E-07	8.601E-07	-8.601E-07	2.999E 00
100.0C	3.544E-07	-3.544E-07	7.C87E-07	-7.087E-07	7.087E-07	-7.087E-07	2.999E 00
110.0C	2.983E-07	-2.983E-07	5.966E-07	-5.966E-07	5.966E-07	-5.966E-07	2.999E 00
120.0C	2.555E-07	-2.555E-07	5.111E-07	-5.111E-07	5.111E-07	-5.111E-07	2.999E 00
130.0C	2.222E-07	-2.222E-07	4.444E-07	-4.444E-07	4.444E-07	-4.444E-07	2.999E CC
140.0C	1.956E-07	-1.956E-07	3.913E-07	-3.913E-07	3.913E-07	-3.913E-07	2.999E 00
150.0C	1.741E-07	-1.741E-07	3.482E-07	-3.483E-07	3.482E-07	-3.483E-07	2.999E CC
160.0C	1.565E-07	-1.565E-07	3.129E-07	-3.129E-07	3.129E-07	-3.129E-07	2.999E CC
180.0C	1.293E-07	-1.293E-07	2.587E-07	-2.587E-07	2.587E-07	-2.587E-07	2.999E 00
200.0C	1.C97E-07	-1.097E-07	2.194E-07	-2.194E-07	2.194E-07	-2.194E-07	2.999E CC
215.0C	9.83CE-08	-9.83CE-08	1.966E-07	-1.966E-07	1.966E-07	-1.966E-07	2.999E CC

NORMALIZED DERIVATIVES WITH RESPECT TO MAGNETIC FIELD STRENGTH

PD40=C.0 PD41=1.0 PD42=1.0 PD43=0.0 PD50=0.0

PROPAGATION FREQUENCY= 1.4200E 09

ρ	PD44=PD51	PD45=PD52	PD46	PD47	PD48	PD49
1.1C	-2.652E-03	2.666E-C3	-5.303E-03	5.331E-03	-5.303E-03	5.331E-03
1.2C	-2.227E-03	2.237E-C3	-4.455E-03	4.475E-03	-4.455E-03	4.475E-03
1.3C	-1.898E-03	1.9C5E-C3	-3.796E-03	3.811E-03	-3.796E-03	3.811E-03
1.4C	-1.637E-03	1.642E-C3	-3.274E-03	3.285E-03	-3.274E-03	3.285E-03
1.5C	-1.426E-03	1.430E-C3	-2.852E-03	2.860E-03	-2.852E-03	2.86CE-03
1.6C	-1.254E-03	1.257E-C3	-2.507E-03	2.514E-03	-2.507E-03	2.514E-03
1.8C	-9.908E-04	9.927E-C4	-1.982E-03	1.985E-03	-1.982E-03	1.985E-03
2.0C	-8.027E-C4	8.04CE-C4	-1.605E-03	1.608E-03	-1.605E-03	1.608E-03
2.2C	-6.634E-04	6.643E-04	-1.327E-03	1.329E-03	-1.327E-03	1.329E-03
2.4C	-5.575E-C4	5.582E-04	-1.115E-C3	1.116E-03	-1.115E-03	1.116E-03
2.6C	-4.751E-04	4.756E-C4	-9.502E-C4	9.511E-04	-9.502E-04	9.511E-04
2.8C	-4.097E-04	4.1CCE-C4	-8.194E-04	8.201E-04	-8.194E-04	8.201E-04
3.0C	-3.569E-04	3.572E-C4	-7.138E-04	7.143E-04	-7.138E-04	7.143E-04
3.3C	-2.950E-04	2.952E-C4	-5.900E-C4	5.9C3E-04	-5.900E-04	5.903E-04
3.6C	-2.479E-04	2.48CE-C4	-4.958E-04	4.960E-04	-4.958E-04	4.960E-04
4.0C	-2.C08E-04	2.0C9E-C4	-4.016E-04	4.018E-04	-4.016E-04	4.018E-04
4.5C	-1.587E-04	1.587E-04	-3.174E-04	3.175E-04	-3.174E-04	3.175E-04
5.0C	-1.285E-04	1.286E-04	-2.571E-04	2.571E-04	-2.571E-04	2.571E-04
5.5C	-1.C62E-04	1.C63E-04	-2.125E-C4	2.125E-04	-2.125E-04	2.125E-04
6.0C	-8.928E-05	8.929E-C5	-1.786E-04	1.786E-04	-1.786E-04	1.786E-04
6.5C	-7.608E-05	7.6C9E-C5	-1.522E-04	1.522E-04	-1.522E-C4	1.522E-04
7.0C	-6.560E-05	6.561E-C5	-1.312E-04	1.312E-04	-1.312E-C4	1.312E-04
7.5C	-5.715E-05	5.716E-C5	-1.143E-04	1.143E-04	-1.143E-C4	1.143E-04
8.0C	-5.C24E-05	5.024E-C5	-1.C05E-04	1.005E-C4	-1.005E-C4	1.C05E-04
9.0C	-3.97CE-05	3.97CE-05	-7.94CE-05	7.941E-05	-7.94CE-05	7.941E-05
10.0C	-3.216E-05	3.217E-C5	-6.433E-05	6.433E-05	-6.433E-05	6.433E-05
11.0C	-2.659E-C5	2.659E-C5	-5.318E-05	5.318E-05	-5.318E-05	5.318E-05
12.0C	-2.235E-05	2.235E-C5	-4.469E-05	4.470E-05	-4.469E-05	4.470E-05
13.0C	-1.905E-05	1.9C5E-C5	-3.809E-05	3.809E-05	-3.809E-05	3.809E-05
14.0C	-1.643E-05	1.643E-C5	-3.285E-05	3.286E-05	-3.285E-05	3.286E-05
15.0C	-1.431E-05	1.431E-C5	-2.863E-05	2.863E-05	-2.863E-05	2.863E-05
16.0C	-1.259E-05	1.259E-05	-2.517E-05	2.517E-05	-2.517E-05	2.517E-05
18.0C	-9.951E-06	9.952E-C6	-1.99CE-C5	1.990E-05	-1.990E-05	1.990E-05
20.0C	-8.C67E-06	8.067E-06	-1.613E-05	1.613E-05	-1.613E-05	1.613E-05
22.0C	-6.673E-C6	6.673E-C6	-1.335E-05	1.335E-05	-1.335E-05	1.335E-05
24.0C	-5.613E-06	5.613E-06	-1.123E-05	1.123E-05	-1.123E-05	1.123E-05
26.0C	-4.788E-06	4.788E-06	-9.575E-06	9.575E-06	-9.575E-06	9.575E-06
28.0C	-4.133E-06	4.133E-06	-8.266E-C6	8.266E-06	-8.266E-06	8.266E-06
30.0C	-3.605E-06	3.6C5E-C6	-7.209E-06	7.209E-06	-7.209E-06	7.209E-06
33.0C	-2.985E-06	2.985E-C6	-5.97CE-06	5.970E-06	-5.970E-06	5.970E-06
36.0C	-2.514E-06	2.514E-C6	-5.027E-06	5.027E-06	-5.027E-06	5.027E-06
40.0C	-2.C43E-C6	2.C43E-C6	-4.C85E-C6	4.085E-06	-4.085E-C6	4.085E-06
45.0C	-1.621E-06	1.621E-C6	-3.242E-06	3.242E-06	-3.242E-06	3.242E-06
50.0C	-1.320E-06	1.32CE-C6	-2.639E-06	2.639E-06	-2.639E-06	2.639E-06
55.0C	-1.096E-06	1.096E-C6	-2.193E-06	2.193E-06	-2.193E-06	2.193E-06
60.0C	-9.266E-07	9.266E-07	-1.853E-06	1.853E-06	-1.853E-06	1.853E-06
65.0C	-7.945E-07	7.945E-07	-1.589E-06	1.589E-06	-1.589E-06	1.589E-06
70.0C	-6.896E-07	6.896E-07	-1.379E-06	1.379E-06	-1.379E-06	1.379E-06
75.0C	-6.C5CE-07	6.050E-07	-1.21CE-06	1.210E-06	-1.210E-06	1.210E-06
80.0C	-5.357E-07	5.357E-07	-1.C71E-06	1.071E-06	-1.071E-06	1.C71E-06
90.0C	-4.300E-07	4.300E-07	-8.601E-07	8.601E-07	-8.601E-07	8.601E-07
100.0C	-3.544E-07	3.544E-07	-7.087E-07	7.087E-07	-7.087E-07	7.087E-07
110.0C	-2.983E-07	2.983E-07	-5.966E-07	5.966E-07	-5.966E-07	5.966E-07
120.0C	-2.555E-07	2.555E-07	-5.111E-07	5.111E-07	-5.111E-07	5.111E-07
130.0C	-2.222E-07	2.222E-07	-4.444E-07	4.444E-07	-4.444E-07	4.444E-07
140.0C	-1.956E-07	1.956E-07	-3.913E-07	3.913E-07	-3.913E-07	3.913E-07
150.0C	-1.741E-07	1.741E-07	-3.482E-07	3.483E-07	-3.482E-07	3.483E-07
160.0C	-1.565E-07	1.565E-07	-3.129E-07	3.129E-07	-3.129E-07	3.129E-07
180.0C	-1.293E-07	1.293E-07	-2.587E-07	2.587E-07	-2.587E-07	2.587E-07
200.0C	-1.097E-07	1.097E-07	-2.194E-07	2.194E-07	-2.194E-07	2.194E-07
215.0C	-9.830E-08	9.83CE-08	-1.966E-07	1.966E-07	-1.966E-07	1.966E-07

NORMALIZED DERIVATIVES WITH RESPECT TO PROPAGATING FREQUENCY

PD53=0.0 PD54=0.0 PD55=0.0 PD56=0.0

PROPAGATION FREQUENCY= 1.420OE 09

ρ	PD57=PD64	PD58=PD65	PD59	PD60	PD61	PD62	PD63
1.10	-2.000E 00	-2.005E 00	-2.011E 00	-2.022E 00	-1.999E 00	-2.010E 00	9.999E-01
1.20	-1.999E 00	-2.003E 00	-2.002E 00	-2.011E 00	-1.997E 00	-2.006E 00	1.000E 00
1.30	-1.999E 00	-2.002E 00	-1.999E 00	-2.007E 00	-1.997E 00	-2.005E 00	1.000E 00
1.40	-1.999E 00	-2.002E 00	-1.999E 00	-2.005E 00	-1.997E 00	-2.004E 00	1.000E 00
1.50	-1.999E 00	-2.002E 00	-1.998E 00	-2.004E 00	-1.998E 00	-2.003E 00	1.000E 00
1.60	-1.999E 00	-2.001E 00	-1.998E 00	-2.003E 00	-1.998E 00	-2.003E 00	1.000E 00
1.80	-1.999E 00	-2.001E 00	-1.998E 00	-2.002E 00	-1.998E 00	-2.002E 00	1.000E 00
2.00	-1.999E 00	-2.001E 00	-1.999E 00	-2.002E 00	-1.998E 00	-2.002E 00	1.000E 00
2.20	-1.999E 00	-2.001E 00	-1.999E 00	-2.002E 00	-1.999E 00	-2.001E 00	1.000E 00
2.40	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	1.000E 00
2.60	-2.000E 00	-2.000E 00	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	1.000E 00
2.80	-2.000E 00	-2.000E 00	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	1.000E 00
3.00	-2.000E 00	-2.000E 00	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	1.000E 00
3.30	-2.000E 00	-2.000E 00	-1.999E 00	-2.001E 00	-1.999E 00	-2.001E 00	1.000E 00
3.60	-2.000E 00	-2.000E 00	-2.000E 00	-2.001E 00	-2.000E 00	-2.001E 00	1.000E 00
4.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
4.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
5.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
5.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
6.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
6.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
7.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
7.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
8.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
9.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
10.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
11.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
12.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
13.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
14.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
15.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
16.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
18.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
20.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
22.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
24.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
26.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
28.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
30.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
33.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
36.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
40.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
45.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
50.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
55.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
60.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
65.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
70.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
75.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
80.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
90.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
100.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
110.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
120.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
130.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
140.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
150.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
160.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
180.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
200.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
215.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00

NORMALIZED DERIVATIVES WITH RESPECT TO ELECTRON DENSITY

PD1=+C.5 PD2=C.0 PD3=C.C

PROPAGATION FREQUENCY= 2.2920E 09

ρ	PD4	PD5=PD12	PD6=PD13	PD7	PD8	PD9	PD10	PD11
1.10	9.759E-01	1.CCCE CC	1.0C0E 00	1.C01E CC	1.001E 00	1.977E CC	1.977E CO	0.
1.20	9.770E-01	1.COCE CC	1.CCCE 00	1.C01E 00	1.001E 00	1.977E 0C	1.977E 00	-2.639E-06
1.3C	9.775E-01	1.00CE 00	1.C00E 00	1.000E 00	1.0CCE 00	1.978E 0C	1.978E CO	-5.485E-06
1.4C	9.777E-01	1.0CCE 0C	1.0CCE 0C	1.C00E 00	1.0C0E 00	1.978E CO	1.978E CO	-8.094E-06
1.5C	9.779E-01	1.CCCE 0C	1.CCCE CO	1.000E 00	1.0C0E 0C	1.978E 0C	1.978E 00	-1.182E-05
1.60	9.781E-01	1.000E 0C	1.000E 00	1.000E CC	1.0C0E 00	1.978E 0C	1.978E CO	-1.589E-05
1.8C	9.784E-01	1.00CE 0C	1.0C0E 00	1.C00E 0C	1.000E 0C	1.978E 0C	1.978E 00	-2.479E-05
2.0C	9.786E-01	1.COCE 00	1.CC0E 00	1.C00E CC	1.000E 00	1.979E CC	1.979E 00	-3.177E-05
2.20	9.788E-01	1.COCE 0C	1.0C0E 00	1.C00E 00	1.000E 00	1.979E CC	1.979E 00	-4.131E-05
2.4C	9.789E-01	1.COCE 0C	1.CC0E 00	1.C00E 00	1.000E 00	1.979E C0	1.979E 00	-5.459E-05
2.6C	9.790E-01	1.C00E 00	1.0CCE CO	1.000E 0C	1.000E 00	1.979E CC	1.979E 00	-6.308E-05
2.8C	9.791E-01	1.COCE 0C	1.C00E 00	1.C00E 00	1.000E 00	1.979E 0C	1.979E CO	-7.106E-05
3.0C	9.791E-01	1.C00E 0C	1.000E CO	1.000E 00	1.000E 00	1.979E 0C	1.979E CO	-8.087E-05
3.3C	9.792E-01	1.CCCE 0C	1.00CE CO	1.C00E 0C	1.000E CO	1.979E C0	1.979E 00	-9.168E-05
3.6C	9.792E-01	1.0CCE 00	1.CCCE 00	1.C00E 00	1.000E 00	1.979E CC	1.979E CO	-1.057E-04
4.0C	9.792E-01	1.COCE CC	1.CC0E 00	1.CC0E 00	1.00CE 00	1.979E 00	1.979E 00	-1.244E-04
4.5C	9.793E-01	1.0CCE 00	1.0C0E 00	1.000E CC	1.000E 00	1.979E CO	1.979E 00	-1.349E-04
5.0C	9.793E-01	1.COCE CC	1.C00E 00	1.000E CO	1.000E CO	1.979E 0C	1.979E 00	-1.500E-04
5.5C	9.793E-01	1.COCE 0C	1.CC0E 00	1.C00E 00	1.0C0E 00	1.979E 0C	1.979E CO	-1.666E-04
6.00	9.793E-01	1.00CE 0C	1.CC0E 00	1.CC0E 00	1.0C0E 00	1.979E CO	1.979E 00	-1.815E-04
6.5C	9.794E-01	1.0CCE 0C	1.0C0E CO	1.CC0E CC	1.000E 00	1.979E 0C	1.979E CO	-1.871E-04
7.0C	9.794E-01	1.0CCE 0C	1.000E CO	1.000E 00	1.000E CC	1.979E CO	1.979E 00	-1.951E-04
7.5C	9.794E-01	1.COCE 00	1.C00E 00	1.C00E 0C	1.000E 00	1.979E 0C	1.979E CO	-2.056E-04
8.0C	9.794E-01	1.00CE 00	1.0C0E 00	1.CC0E 00	1.000E 0C	1.979E CC	1.979E 00	-2.187E-04
9.0C	9.794E-01	1.C00E 00	1.0C0E CO	1.000E 00	1.C00E 00	1.979E CO	1.979E CO	-2.319E-04
10.00	9.795E-01	1.COCE 00	1.CC0E 00	1.C00E 00	1.000E 00	1.979E 0C	1.979E 00	-2.474E-04
11.0C	9.795E-01	1.00CE 00	1.0C0E 00	1.0C0E CC	1.C00E CO	1.979E 0C	1.979E 00	-2.445E-04
12.0C	9.795E-01	1.0CCE 0C	1.C00E 00	1.C00E 00	1.C00E 00	1.979E 00	1.979E CO	-2.457E-04
13.0C	9.795E-01	1.C00E 00	1.C00E CO	1.000E 00	1.C00E 00	1.979E CC	1.979E 00	-2.503E-04
14.0C	9.795E-01	1.0CCE 00	1.CC0E 00	1.000E CC	1.C00E CC	1.979E CC	1.979E 00	-2.581E-04
15.0C	9.795E-01	1.0CCE 00	1.CC0E 00	1.000E 0C	1.000E CO	1.979E 00	1.979E CO	-2.689E-04
16.0C	9.794E-01	1.00CE CC	1.000E 00	1.000E 0C	1.0C0E 00	1.979E 0C	1.979E 00	-2.765E-04
18.0C	9.794E-01	1.00CE 00	1.0C0E 00	1.C00E 00	1.000E 0C	1.979E 0C	1.979E CO	-2.742E-04
20.0C	9.794E-01	1.COCE 0C	1.CC0E CC	1.000E 00	1.000E 00	1.979E 0C	1.979E CO	-2.788E-04
22.0C	9.794E-01	1.00CE 00	1.0C0E 00	1.000E CO	1.000E 00	1.979E 0C	1.979E CO	-2.892E-04
24.0C	9.794E-01	1.0CCE 00	1.0C0E 00	1.000E 00	1.000E 0C	1.979E 0C	1.979E CO	-2.947E-04
26.0C	9.794E-01	1.00CE 00	1.CC0E CO	1.0C0E 00	1.0C0E 00	1.979E CC	1.979E CO	-3.000E-04
28.0C	9.794E-01	1.00CE CC	1.C00E CO	1.000E 0C	1.000E 0C	1.979E C0	1.979E 00	-3.091E-04
30.0C	9.794E-01	1.COCE 00	1.CC0E CO	1.000E CO	1.000E 00	1.979E 00	1.979E 00	-3.217E-04
33.0C	9.794E-01	1.CCCE 00	1.0C0E CO	1.000E 00	1.0C0E 00	1.979E 00	1.979E CO	-3.241E-04
36.0C	9.794E-01	1.CCCE 00	1.C00E 00	1.0C0E 00	1.0C0E CO	1.979E CC	1.979E CO	-3.319E-04
40.0C	9.794E-01	1.CCCE 0C	1.C00E CC	1.CC0E 00	1.000E 00	1.979E 0C	1.979E 00	-3.500E-04
46.0C	9.794E-01	1.CCCE CC	1.C00E 00	1.0C0E 0C	1.000E 00	1.979E 0C	1.979E CO	-3.557E-04
50.0C	9.794E-01	1.COCE 00	1.CC0E 00	1.000E 0C	1.000E CO	1.979E CC	1.979E CO	-3.706E-04
56.00	9.794E-01	1.00CE 0C	1.CC0E 00	1.CC0E CO	1.C00E 00	1.979E 0C	1.979E 00	-3.786E-04
60.0C	9.794E-01	1.00CE 00	1.C00E 0C	1.C00E CO	1.000E 00	1.979E CC	1.979E 00	-3.932E-04
65.0C	9.794E-01	1.CC0E 00	1.0C0E 00	1.CC0E 0C	1.000E CO	1.979E C0	1.979E CO	-3.941E-04
70.0C	9.794E-01	1.00CE 00	1.0C0E 00	1.000E 00	1.0C0E 0C	1.979E C0	1.979E 00	-3.997E-04
75.00	9.794E-01	1.00CE 00	1.C00E 00	1.0C0E CO	1.000E 00	1.979E 00	1.979E CO	-4.096E-04
80.0C	9.794E-01	1.00CE CC	1.CC0E 00	1.C00E 00	1.0C0E 00	1.979E 0C	1.979E CO	-4.235E-04
90.0C	9.794E-01	1.0CCE 0C	1.0C0E CO	1.000E 00	1.000E 00	1.979E 0C	1.979E 00	-4.297E-04
100.0C	9.794E-01	1.CCCE 0C	1.0C0E 00	1.000E 0C	1.000E 00	1.979E 00	1.979E 00	-4.470E-04
110.00	9.794E-01	1.COCE 0C	1.C00E 00	1.C00E CO	1.0C0E CO	1.979E CC	1.979E 00	-4.449E-04
120.0C	9.794E-01	1.0CCE 0C	1.0C0E CO	1.CC0E 00	1.000E 00	1.979E C0	1.979E 00	-4.502E-04
130.0C	9.794E-01	1.COCE 00	1.CC0E 00	1.C00E CC	1.000E 00	1.979E CC	1.979E 00	-4.620E-04
140.0C	9.794E-01	1.0CCE 0C	1.CC0E 00	1.0C0E 00	1.C00E 00	1.979E 00	1.979E 00	-4.797E-04
150.0C	9.794E-01	1.00CE 0C	1.CC0E CO	1.C00E 00	1.C00E 00	1.979E C0	1.979E 00	-5.033E-04
160.0C	9.794E-01	1.00CE 0C	1.CC0E 00	1.000E 00	1.000E 00	1.979E CC	1.979E 00	-5.202E-04
180.0C	9.794E-01	1.COCE CC	1.0C0E 00	1.C00E 00	1.00CE 0C	1.979E 0C	1.979E CO	-5.685E-04
200.0C	9.795E-01	1.0CCE 0C	1.CC0E CO	1.0C0E 0C	1.000E 00	1.979E CC	1.979E 00	-6.37CE-04
215.0C	9.795E-01	1.000E CO	1.0C0E 00	1.C00E 00	1.000E 00	1.979E CO	1.979E 00	-6.958E-04

NORMALIZED DERIVATIVES WITH RESPECT TO TEMPERATURE

PD14=C.C PD15=C.C PD16=0.0 PD18=PD25=0.0
PD20=0.0 PD21=0.0 PD24=0.C PD19=PD26=0.0

PROPAGATION FREQUENCY= 2.292CE 09

ρ	PD17	PD22	PD23
1.10	-1.428E 00	-1.428E 00	-1.428E 00
1.20	-1.431E 00	-1.431E 00	-1.431E 00
1.30	-1.432E 00	-1.432E 00	-1.432E 00
1.40	-1.433E 00	-1.433E 00	-1.433E 00
1.50	-1.434E 00	-1.434E 00	-1.434E 00
1.60	-1.434E 00	-1.434E 00	-1.434E 00
1.80	-1.435E 00	-1.435E 00	-1.435E 00
2.00	-1.436E 00	-1.436E 00	-1.436E 00
2.20	-1.436E 00	-1.436E 00	-1.436E 00
2.40	-1.437E 00	-1.437E 00	-1.437E 00
2.60	-1.437E 00	-1.437E 00	-1.437E 00
2.80	-1.437E 00	-1.437E 00	-1.437E 00
3.00	-1.437E 00	-1.437E 00	-1.437E 00
3.30	-1.437E 00	-1.437E 00	-1.437E 00
3.60	-1.438E 00	-1.438E 00	-1.438E 00
4.00	-1.438E 00	-1.438E 00	-1.438E 00
4.50	-1.438E 00	-1.438E 00	-1.438E 00
5.00	-1.438E 00	-1.438E 00	-1.438E 00
5.50	-1.438E 00	-1.438E 00	-1.438E 00
6.00	-1.438E 00	-1.438E 00	-1.438E 00
6.50	-1.438E 00	-1.438E 00	-1.438E 00
7.00	-1.438E 00	-1.438E 00	-1.438E 00
7.50	-1.438E 00	-1.438E 00	-1.438E 00
8.00	-1.438E 00	-1.438E 00	-1.438E 00
9.00	-1.438E 00	-1.438E 00	-1.438E 00
10.00	-1.438E 00	-1.438E 00	-1.438E 00
11.00	-1.438E 00	-1.438E 00	-1.438E 00
12.00	-1.438E 00	-1.438E 00	-1.438E 00
13.00	-1.438E 00	-1.438E 00	-1.438E 00
14.00	-1.438E 00	-1.438E 00	-1.438E 00
15.00	-1.438E 00	-1.438E 00	-1.438E 00
16.00	-1.438E 00	-1.438E 00	-1.438E 00
18.00	-1.438E 00	-1.438E 00	-1.438E 00
20.00	-1.438E 00	-1.438E 00	-1.438E 00
22.00	-1.438E 00	-1.438E 00	-1.438E 00
24.00	-1.438E 00	-1.438E 00	-1.438E 00
26.00	-1.438E 00	-1.438E 00	-1.438E 00
28.00	-1.438E 00	-1.438E 00	-1.438E 00
30.00	-1.438E 00	-1.438E 00	-1.438E 00
33.00	-1.438E 00	-1.438E 00	-1.438E 00
36.00	-1.438E 00	-1.438E 00	-1.438E 00
40.00	-1.438E 00	-1.438E 00	-1.438E 00
45.00	-1.438E 00	-1.438E 00	-1.438E 00
50.00	-1.438E 00	-1.438E 00	-1.438E 00
55.00	-1.438E 00	-1.438E 00	-1.438E 00
60.00	-1.438E 00	-1.438E 00	-1.438E 00
65.00	-1.438E 00	-1.438E 00	-1.438E 00
70.00	-1.438E 00	-1.438E 00	-1.438E 00
75.00	-1.438E 00	-1.438E 00	-1.438E 00
80.00	-1.438E 00	-1.438E 00	-1.438E 00
90.00	-1.438E 00	-1.438E 00	-1.438E 00
100.00	-1.438E 00	-1.438E 00	-1.438E 00
110.00	-1.438E 00	-1.438E 00	-1.438E 00
120.00	-1.438E 00	-1.438E 00	-1.438E 00
130.00	-1.438E 00	-1.438E 00	-1.438E 00
140.00	-1.438E 00	-1.438E 00	-1.438E 00
150.00	-1.438E 00	-1.438E 00	-1.438E 00
160.00	-1.438E 00	-1.438E 00	-1.438E 00
180.00	-1.438E 00	-1.438E 00	-1.438E 00
200.00	-1.438E 00	-1.438E 00	-1.438E 00
215.00	-1.438E 00	-1.438E 00	-1.438E 00

NORMALIZED DERIVATIVES WITH RESPECT TO SOLAR WIND VELOCITY

PD27=C.0 PD28=C.0 PD29=-1.0 PD30=0.0

PROPAGATICN FREQLENCY= 2.2920E 09

ρ	PD31=PD38	PD32=PD39	PD33	PD34	PD35	PD36	PD37
1.1C	1.643E-03	-1.643E-C3	3.286E-03	-3.303E-03	3.286E-03	-3.297E-03	3.CCCE CC
1.2C	1.381E-03	-1.381E-03	2.761E-C3	-2.773E-03	2.761E-03	-2.769E-03	3.CCCE CC
1.3C	1.177E-C3	-1.177E-C3	2.353E-C3	-2.362E-C3	2.353E-03	-2.359E-C3	3.CCCE CC
1.4C	1.C15E-03	-1.015E-C3	2.C29E-C3	-2.036E-03	2.029E-03	-2.033E-C3	3.CCCE CC
1.5C	8.840E-C4	-8.84CE-C4	1.768E-03	-1.773E-03	1.768E-C3	-1.771E-C3	3.CCCE CC
1.6C	7.770E-C4	-7.77CE-C4	1.554E-C3	-1.558E-03	1.554E-03	-1.556E-C3	3.CCCE CC
1.8C	6.140E-04	-6.140E-C4	1.228E-03	-1.230E-03	1.228E-03	-1.230E-C3	3.CCCE CC
2.00	4.974E-04	-4.974E-C4	9.949E-04	-9.963E-04	9.949E-C4	-9.959E-C4	3.CCCE CC
2.2C	4.111E-04	-4.111E-C4	8.223E-04	-8.233E-C4	8.223E-C4	-8.230E-04	3.CCCE CC
2.4C	3.455E-04	-3.455E-C4	6.910E-04	-6.917E-C4	6.91CE-C4	-6.915E-C4	3.CCCE CC
2.6C	2.944E-C4	-2.944E-C4	5.888E-04	-5.893E-C4	5.888E-04	-5.892E-04	3.CCCE CC
2.8C	2.539E-C4	-2.539E-C4	5.C77E-04	-5.081E-04	5.077E-04	-5.080E-C4	3.CCCE CC
3.0C	2.212E-C4	-2.212E-C4	4.423E-04	-4.426E-04	4.423E-04	-4.425E-04	3.CCCE CC
3.3C	1.828E-04	-1.828E-C4	3.656E-04	-3.658E-04	3.656E-C4	-3.657E-C4	3.CCCE CC
3.6C	1.536E-04	-1.536E-C4	3.C72E-04	-3.073E-04	3.072E-04	-3.073E-04	3.CCCE CC
4.0C	1.244E-04	-1.244E-C4	2.488E-C4	-2.489E-04	2.488E-04	-2.489E-04	3.CCCE CC
4.5C	9.831E-C5	-9.831E-C5	1.966E-C4	-1.967E-04	1.966E-04	-1.967E-C4	3.CCCE CC
5.0C	7.964E-05	-7.964E-C5	1.593E-04	-1.593E-04	1.593E-04	-1.593E-04	3.CCCE CC
5.5C	6.582E-05	-6.582E-C5	1.316E-04	-1.317E-04	1.316E-04	-1.317E-04	3.CCCE CC
6.0C	5.531E-05	-5.531E-C5	1.106E-04	-1.106E-04	1.106E-04	-1.106E-04	3.CCCE CC
6.5C	4.713E-C5	-4.713E-05	9.427E-05	-9.428E-05	9.427E-05	-9.428E-05	3.CCCE CC
7.0C	4.C64E-05	-4.064E-05	8.129E-C5	-8.130E-05	8.129E-C5	-8.130E-05	3.CCCE CC
7.5C	3.541E-05	-3.541E-05	7.C82E-05	-7.083E-05	7.082E-05	-7.082E-05	3.CCCE CC
8.0C	3.112E-05	-3.112E-05	6.225E-05	-6.225E-05	6.225E-05	-6.225E-05	3.CCCE CC
9.0C	2.460E-05	-2.46CE-C5	4.919E-05	-4.920E-05	4.919E-05	-4.92CE-05	3.CCCE CC
10.0C	1.993E-C5	-1.993E-C5	3.985E-05	-3.986E-05	3.985E-05	-3.986E-C5	3.CCCE CC
11.0C	1.647E-05	-1.647E-C5	3.295E-05	-3.295E-05	3.295E-05	-3.295E-05	3.CCCE CC
12.0C	1.385E-05	-1.385E-05	2.769E-05	-2.769E-05	2.769E-05	-2.769E-05	3.CCCE CC
13.0C	1.18CE-05	-1.180E-05	2.360E-05	-2.360E-05	2.360E-05	-2.360E-05	2.999E CC
14.0C	1.C18E-05	-1.018E-C5	2.036E-05	-2.036E-05	2.036E-05	-2.C36E-05	2.999E CC
15.0C	8.869E-06	-8.869E-06	1.774E-05	-1.774E-05	1.774E-05	-1.774E-05	2.999E CC
16.0C	7.797E-06	-7.797E-C6	1.559E-05	-1.559E-05	1.559E-05	-1.559E-05	2.999E CC
18.0C	6.165E-C6	-6.165E-06	1.233E-05	-1.233E-05	1.233E-05	-1.233E-05	2.999E CC
20.00	4.998E-C6	-4.998E-C6	9.996E-C6	-9.996E-06	9.996E-06	-9.996E-06	2.999E CC
22.0C	4.134E-C6	-4.134E-C6	8.269E-06	-8.269E-06	8.269E-06	-8.269E-06	2.999E CC
24.0C	3.477E-06	-3.477E-C6	6.955E-C6	-6.955E-06	6.955E-C6	-6.955E-06	2.999E CC
26.00	2.966E-06	-2.966E-C6	5.932E-06	-5.932E-06	5.932E-06	-5.932E-06	2.999E CC
28.0C	2.56CE-C6	-2.56CE-C6	5.121E-06	-5.121E-06	5.121E-06	-5.121E-06	2.999E CC
30.00	2.233E-C6	-2.233E-C6	4.466E-06	-4.466E-06	4.466E-C6	-4.466E-06	2.999E CC
33.00	1.849E-C6	-1.849E-C6	3.699E-C6	-3.699E-06	3.699E-06	-3.699E-06	2.999E CC
36.0C	1.557E-06	-1.557E-C6	3.115E-C6	-3.115E-06	3.115E-06	-3.115E-06	2.999E CC
40.0C	1.265E-06	-1.265E-06	2.531E-06	-2.531E-06	2.531E-C6	-2.531E-06	2.999E CC
45.0C	1.CC4E-06	-1.CC4E-06	2.CC9E-06	-2.009E-06	2.CC9E-C6	-2.CC9E-06	2.999E CC
50.00	8.175E-07	-8.175E-07	1.635E-C6	-1.635E-06	1.635E-06	-1.635E-C6	2.999E CC
55.0C	6.792E-07	-6.792E-C7	1.358E-06	-1.358E-C6	1.358E-06	-1.358E-C6	2.999E CC
60.00	5.741E-07	-5.741E-C7	1.148E-06	-1.148E-06	1.148E-06	-1.148E-06	2.999E CC
65.0C	4.922E-07	-4.922E-C7	9.844E-07	-9.844E-07	9.844E-07	-9.844E-07	2.999E CC
70.00	4.272E-07	-4.272E-C7	8.545E-07	-8.545E-07	8.545E-07	-8.545E-07	2.999E CC
75.0C	3.748E-07	-3.748E-C7	7.496E-07	-7.496E-07	7.496E-07	-7.496E-07	2.999E CC
80.0C	3.319E-07	-3.319E-C7	6.637E-07	-6.637E-07	6.637E-C7	-6.637E-07	2.999E CC
90.0C	2.664E-07	-2.664E-C7	5.328E-07	-5.328E-07	5.328E-07	-5.328E-07	2.999E CC
100.00	2.195E-07	-2.195E-C7	4.391E-07	-4.391E-07	4.391E-07	-4.391E-07	2.999E CC
110.0C	1.848E-07	-1.848E-C7	3.696E-07	-3.696E-07	3.696E-07	-3.696E-07	2.999E CC
120.0C	1.583E-07	-1.583E-C7	3.166E-07	-3.166E-07	3.166E-C7	-3.166E-07	2.999E CC
130.0C	1.376E-07	-1.376E-C7	2.753E-07	-2.753E-07	2.753E-C7	-2.753E-07	2.999E CC
140.0C	1.212E-07	-1.212E-07	2.424E-07	-2.424E-07	2.424E-07	-2.424E-07	2.999E CC
150.0C	1.C79E-07	-1.C79E-C7	2.158E-07	-2.158E-07	2.158E-07	-2.158E-C7	2.999E CC
160.00	9.693E-08	-9.693E-08	1.939E-C7	-1.939E-07	1.939E-07	-1.939E-C7	2.999E CC
180.0C	8.C13E-08	-8.013E-08	1.603E-07	-1.603E-07	1.603E-07	-1.603E-07	2.999E CC
200.0C	6.797E-08	-6.797E-08	1.359E-07	-1.359E-07	1.359E-07	-1.359E-07	2.999E CC
215.0C	6.C90E-08	-6.09CE-C8	1.218E-07	-1.218E-07	1.218E-07	-1.218E-07	2.999E CC

NORMALIZED DERIVATIVES WITH RESPECT TO MAGNETIC FIELD STRENGTH

PD40=C.0 PD41=1.0 PD42=1.0 PD43=C.0 PD5C=C.0

PROPAGATICN FREQUENCY= 2.292CE 09

ρ	PC44=PD51	PC45=PD52	PD46	PD47	PD48	PD49
1.1C	-1.643E-03	1.649E-03	-3.286E-C3	3.297E-03	-3.286E-03	3.297E-03
1.2C	-1.381E-03	1.385E-03	-2.761E-03	2.769E-03	-2.761E-03	2.769E-03
1.3C	-1.177E-03	1.179E-03	-2.353E-03	2.359E-03	-2.353E-03	2.359E-03
1.4C	-1.015E-03	1.017E-03	-2.029E-03	2.033E-03	-2.029E-03	2.033E-03
1.5C	-8.84CE-04	8.856E-04	-1.768E-03	1.771E-03	-1.768E-03	1.771E-03
1.60	-7.77CE-04	7.782E-04	-1.554E-03	1.556E-03	-1.554E-03	1.556E-03
1.8C	-6.14CE-04	6.148E-04	-1.228E-03	1.230E-03	-1.228E-03	1.230E-03
2.0C	-4.974E-04	4.979E-04	-9.949E-04	9.959E-04	-9.949E-04	9.959E-04
2.2C	-4.111E-04	4.115E-04	-8.223E-04	8.230E-04	-8.223E-04	8.230E-04
2.4C	-3.455E-04	3.457E-04	-6.910E-04	6.915E-04	-6.910E-04	6.915E-04
2.60	-2.944E-04	2.946E-04	-5.888E-04	5.892E-04	-5.888E-04	5.892E-04
2.8C	-2.539E-04	2.54CE-04	-5.077E-04	5.080E-04	-5.077E-04	5.080E-04
3.0C	-2.212E-04	2.212E-04	-4.423E-04	4.425E-04	-4.423E-04	4.425E-04
3.30	-1.828E-04	1.828E-04	-3.656E-04	3.657E-04	-3.656E-04	3.657E-04
3.60	-1.536E-04	1.536E-04	-3.072E-04	3.073E-04	-3.072E-04	3.073E-04
4.0C	-1.244E-04	1.245E-04	-2.488E-04	2.489E-04	-2.488E-04	2.489E-04
4.5C	-9.831E-05	9.833E-05	-1.966E-04	1.967E-04	-1.966E-04	1.967E-04
5.0C	-7.964E-05	7.965E-05	-1.593E-04	1.593E-04	-1.593E-04	1.593E-04
5.5C	-6.582E-05	6.583E-05	-1.316E-04	1.317E-04	-1.316E-04	1.317E-04
6.0C	-5.531E-05	5.532E-05	-1.106E-04	1.106E-04	-1.106E-04	1.106E-04
6.5C	-4.713E-05	4.714E-05	-9.427E-05	9.428E-05	-9.427E-05	9.428E-05
7.0C	-4.064E-05	4.065E-05	-8.129E-05	8.130E-05	-8.129E-05	8.130E-05
7.5C	-3.541E-05	3.541E-05	-7.082E-05	7.082E-05	-7.082E-05	7.082E-05
8.0C	-3.112E-05	3.113E-05	-6.225E-05	6.225E-05	-6.225E-05	6.225E-05
9.0C	-2.460E-05	2.46CE-05	-4.919E-05	4.920E-05	-4.919E-05	4.920E-05
10.0C	-1.993E-05	1.993E-05	-3.985E-05	3.986E-05	-3.985E-05	3.986E-05
11.00	-1.647E-05	1.647E-05	-3.295E-05	3.295E-05	-3.295E-05	3.295E-05
12.0C	-1.385E-05	1.385E-05	-2.769E-05	2.769E-05	-2.769E-05	2.769E-05
13.0C	-1.180E-05	1.180E-05	-2.36CE-05	2.36CE-05	-2.36CE-05	2.360E-05
14.0C	-1.018E-05	1.018E-05	-2.036E-05	2.036E-05	-2.036E-05	2.036E-05
15.00	-8.869E-06	8.869E-06	-1.774E-05	1.774E-05	-1.774E-05	1.774E-05
16.0C	-7.797E-06	7.797E-06	-1.559E-05	1.559E-05	-1.559E-05	1.559E-05
18.00	-6.165E-06	6.165E-06	-1.233E-05	1.233E-05	-1.233E-05	1.233E-05
20.0C	-4.998E-06	4.998E-06	-9.996E-06	9.996E-06	-9.996E-06	9.996E-06
22.0C	-4.134E-06	4.134E-06	-8.269E-06	8.269E-06	-8.269E-06	8.269E-06
24.0C	-3.477E-06	3.477E-06	-6.955E-06	6.955E-06	-6.955E-06	6.955E-06
26.0C	-2.966E-06	2.966E-06	-5.932E-06	5.932E-06	-5.932E-06	5.932E-06
28.00	-2.560E-06	2.560E-06	-5.121E-06	5.121E-06	-5.121E-06	5.121E-06
30.00	-2.233E-06	2.233E-06	-4.466E-06	4.466E-06	-4.466E-06	4.466E-06
33.00	-1.849E-06	1.849E-06	-3.699E-06	3.699E-06	-3.699E-06	3.699E-06
36.0C	-1.557E-06	1.557E-06	-3.115E-06	3.115E-06	-3.115E-06	3.115E-06
40.00	-1.265E-06	1.265E-06	-2.531E-06	2.531E-06	-2.531E-06	2.531E-06
45.00	-1.004E-06	1.004E-06	-2.009E-06	2.009E-06	-2.009E-06	2.009E-06
50.00	-8.175E-07	8.175E-07	-1.635E-06	1.635E-06	-1.635E-06	1.635E-06
55.0C	-6.792E-07	6.792E-07	-1.358E-06	1.358E-06	-1.358E-06	1.358E-06
60.00	-5.741E-07	5.741E-07	-1.148E-06	1.148E-06	-1.148E-06	1.148E-06
65.0C	-4.922E-07	4.922E-07	-9.844E-07	9.844E-07	-9.844E-07	9.844E-07
70.0C	-4.272E-07	4.272E-07	-8.545E-07	8.545E-07	-8.545E-07	8.545E-07
75.00	-3.748E-07	3.748E-07	-7.496E-07	7.496E-07	-7.496E-07	7.496E-07
80.00	-3.319E-07	3.319E-07	-6.637E-07	6.637E-07	-6.637E-07	6.637E-07
90.00	-2.664E-07	2.664E-07	-5.328E-07	5.328E-07	-5.328E-07	5.328E-07
100.00	-2.195E-07	2.195E-07	-4.391E-07	4.391E-07	-4.391E-07	4.391E-07
110.0C	-1.848E-07	1.848E-07	-3.696E-07	3.696E-07	-3.696E-07	3.696E-07
120.0C	-1.583E-07	1.583E-07	-3.166E-07	3.166E-07	-3.166E-07	3.166E-07
130.00	-1.376E-07	1.376E-07	-2.753E-07	2.753E-07	-2.753E-07	2.753E-07
140.00	-1.212E-07	1.212E-07	-2.424E-07	2.424E-07	-2.424E-07	2.424E-07
150.0C	-1.079E-07	1.079E-07	-2.158E-07	2.158E-07	-2.158E-07	2.158E-07
160.0C	-9.693E-08	9.693E-08	-1.939E-07	1.939E-07	-1.939E-07	1.939E-07
180.00	-8.013E-08	8.013E-08	-1.603E-07	1.603E-07	-1.603E-07	1.603E-07
200.0C	-6.797E-08	6.797E-08	-1.359E-07	1.359E-07	-1.359E-07	1.359E-07
215.00	-6.090E-08	6.090E-08	-1.218E-07	1.218E-07	-1.218E-07	1.218E-07

NORMALIZED DERIVATIVES WITH RESPECT TO PROPAGATING FREQUENCY

PD53=C.0 PD54=C.0 PD55=C.C PD56=C.0

PROPAGATICN FREQLENCY= 2.2920E 09

ρ	PD57=PD64	PD58=PD65	PC59	PD60	PD61	PD62	PD63
1.10	-1.999E 00	-2.C03E CO	-2.003E CO	-2.01CE 00	-1.999E CO	-2.C05E 0C	1.00CE CO
1.2C	-1.999E 0C	-2.CC2E CC	-2.0C0E CC	-2.005E CO	-1.998E 00	-2.CC3E 00	1.000E 00
1.30	-1.999E CC	-2.CC1E 00	-1.999E CO	-2.004E CO	-1.998E 00	-2.003E 0C	1.000E 00
1.4C	-1.999E 0C	-2.CC1E CC	-1.999E CO	-2.0C3E CO	-1.998E CC	-2.C02E 0C	1.000E 00
1.50	-1.999E 0C	-2.CC1E CO	-1.999E 0C	-2.002E CO	-1.998E CO	-2.C02E 00	1.000E 00
1.6C	-1.999E 00	-2.CC1E CO	-1.999E CO	-2.002E CO	-1.999E 00	-2.C02E 0C	1.000E 00
1.80	-1.999E 0C	-2.CC1E CC	-1.999E CO	-2.001E 00	-1.999E 00	-2.C01E 0C	1.00CE CO
2.0C	-2.000E 0C	-2.CC1E 0C	-1.999E CO	-2.001E CO	-1.999E 00	-2.001E CO	1.000E 00
2.20	-2.000E 0C	-2.CC0E CO	-1.999E CO	-2.001E 00	-1.999E CC	-2.C01E CO	1.000E 00
2.4C	-2.000E CC	-2.CCCE 00	-1.999E CC	-2.001E CO	-1.999E 00	-2.C01E 00	1.00CE 00
2.6C	-2.000E 0C	-2.CC0E 0C	-1.999E CO	-2.0C1E CO	-1.999E 0C	-2.C01E 00	1.00CE 00
2.8C	-2.000E 00	-2.0C0E 00	-2.000E 00	-2.001E CC	-1.999E CC	-2.C01E 0C	1.000E 00
3.00	-2.000E 00	-2.CC0E 00	-2.000E CO	-2.00CE 00	-2.000E 00	-2.00CE 0C	1.00CE CO
3.3C	-2.000E 0C	-2.CC0E 0C	-2.00CE CO	-2.000E CO	-2.000E CO	-2.C00E 00	1.000E 00
3.6C	-2.00CE 0C	-2.C00E 00	-2.000E CC	-2.C00E CO	-2.C00E CO	-2.000E 0C	1.00CE 00
4.0C	-2.000E 0C	-2.CCCE 00	-2.000E CC	-2.000E CO	-2.000E 00	-2.000E 0C	1.C00E CO
4.5C	-2.000E CO	-2.CC0E CC	-2.000E CO	-2.000E CO	-2.C00E CO	-2.000E 0C	1.000E CO
5.0C	-2.CCCE CC	-2.CC0E CO	-2.0C0E CO	-2.00CE CO	-2.C00E 00	-2.C00E CO	1.000E CO
5.5C	-2.CCCE CC	-2.CC0E 00	-2.C00E CO	-2.00CE CO	-2.000E 0C	-2.C00E 0C	1.00CE 00
6.0C	-2.C00E CC	-2.0C0E 00	-2.000E CO	-2.C0CE CC	-2.000E CC	-2.000E 0C	1.000E 00
6.50	-2.000E CO	-2.CC0E CO	-2.00CE CC	-2.000E 00	-2.000E CO	-2.C00E 0C	1.000E CO
7.0C	-2.CC0E 0C	-2.CC0E CC	-2.CC0E CC	-2.C00E CO	-2.000E 00	-2.C00E CO	1.000E CO
7.5C	-2.C0CE CC	-2.CC0E 0C	-2.0C0E CO	-2.00CE CC	-2.C00E 00	-2.000E 0C	1.000E CO
8.0C	-2.C0CE 0C	-2.C00E CC	-2.000E CO	-2.000E CO	-2.0C0E CO	-2.C00E CO	1.000E 00
9.00	-2.C00E 0C	-2.CCCE CO	-2.C00E CO	-2.000E CO	-2.0C0E 00	-2.000E 0C	1.00CE 00
10.0C	-2.CC0E 0C	-2.C00E CC	-2.CC0E CO	-2.00CE CO	-2.000E CC	-2.CC0E 0C	1.00CE CO
11.0C	-2.000E 0C	-2.C0CE CC	-2.CC0E CO	-2.00CE CO	-2.00CE 00	-2.000E CC	1.000E 00
12.00	-2.CC0E 0C	-2.CC0E CO	-2.000E CO	-2.000E CC	-2.00CE 00	-2.0C0E CC	1.000E CO
13.0C	-2.C00E CO	-2.CC0E 0C	-2.00CE CO	-2.00CE CO	-2.0C0E 00	-2.000E 0C	1.001E CO
14.0C	-2.C00E 00	-2.CC0E CO	-2.C00E CO	-2.C0CE CO	-2.000E 0C	-2.C00E CO	1.001E CO
15.0C	-2.000E 0C	-2.C00E CC	-2.000E CO	-2.000E 00	-2.000E CO	-2.C00E 00	1.001E CC
16.0C	-2.0C0E CC	-2.CC0E CO	-2.00CE CO	-2.000E CO	-2.000E 00	-2.C00E 00	1.001E CO
18.0C	-2.000E 0C	-2.CC0E CO	-2.0C0E CO	-2.C00E 0C	-2.0C0E 00	-2.CC0E CC	1.001E CO
20.0C	-2.C00E 0C	-2.CC0E CO	-2.0C0E CC	-2.000E CO	-2.000E 00	-2.C00E 0C	1.001E 00
22.0C	-2.CC0E 0C	-2.CC0E CO	-2.CC0E CO	-2.00CE CO	-2.00CE CO	-2.C00E 00	1.001E CO
24.0C	-2.C00E 0C	-2.CC0E CC	-2.000E CO	-2.C00E CO	-2.CC0E 00	-2.C00E 00	1.001E 00
26.00	-2.CC0E 0C	-2.CC0E CC	-2.0C0E CO	-2.00CE 00	-2.0C0E 00	-2.C00E CO	1.001E 00
28.0C	-2.C00E 0C	-2.CC0E CO	-2.000E CO	-2.C00E CO	-2.000E 00	-2.C00E 0C	1.001E 00
30.0C	-2.C00E CC	-2.CC0E CO	-2.C00E CO	-2.000E CO	-2.000E 00	-2.C00E 00	1.001E 00
33.0C	-2.CCCE CC	-2.CC0E CO	-2.000E CO	-2.00CE 00	-2.000E 00	-2.C00E 00	1.001E 00
36.00	-2.CC0E CC	-2.CC0E 00	-2.0C0E CO	-2.C00E CO	-2.0C0E 00	-2.C0CE CO	1.001E CO
40.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E CO	-2.C00E CO	-2.CC0E 00	-2.CC0E CC	1.001E 00
45.0C	-2.C00E 0C	-2.C00E CO	-2.0C0E CO	-2.000E CO	-2.0C0E 00	-2.C00E CO	1.001E 00
50.0C	-2.C0CE 0C	-2.C00E CO	-2.0C0E CO	-2.C00E 00	-2.000E 00	-2.C00E CO	1.001E CO
55.0C	-2.C00E 0C	-2.CC0E CO	-2.0C0E CO	-2.000E CO	-2.000E 0C	-2.C00E 00	1.001E CO
60.0C	-2.0C0E 0C	-2.CC0E CO	-2.CC0E CO	-2.00CE CO	-2.000E 00	-2.C00E CC	1.001E 00
65.0C	-2.C00E 0C	-2.CC0E 0C	-2.0C0E CO	-2.00CE CO	-2.000E 00	-2.C00E 00	1.001E 00
70.00	-2.CC0E 0C	-2.CC0E CO	-2.000E CO	-2.00CE CO	-2.00CE CO	-2.C00E CO	1.001E 00
75.00	-2.C00E 00	-2.C00E CO	-2.0C0E CO	-2.000E CO	-2.000E CO	-2.C00E 0C	1.001E CO
80.0C	-2.C00E 0C	-2.CC0E CO	-2.00CE CC	-2.CC0E 00	-2.00CE 00	-2.C00E 00	1.001E 00
90.0C	-2.C00E CC	-2.CC0E 00	-2.0C0E CO	-2.CCCE 00	-2.000E CO	-2.C00E 00	1.001E 00
100.0C	-2.C00E 00	-2.CC0E 00	-2.C00E CO	-2.0C0E 0C	-2.00CE 00	-2.C00E CO	1.001E CO
110.0C	-2.C00E 0C	-2.CC0E 0C	-2.0C0E CO	-2.C00E CO	-2.000E 00	-2.CC0E CC	1.C01E 00
120.0C	-2.0C0E 0C	-2.CC0E 00	-2.CC0E CO	-2.00CE CO	-2.00CE 00	-2.000E 0C	1.001E 00
130.0C	-2.C00E 0C	-2.CC0E 00	-2.0C0E CO	-2.00CE 00	-2.000E 0C	-2.C00E 00	1.001E CO
140.0C	-2.C00E 0C	-2.CC0E CO	-2.C00E 0C	-2.000E 00	-2.000E CO	-2.000E CO	1.C01E CO
150.00	-2.C00E 0C	-2.CC0E 0C	-2.0C0E CO	-2.00CE 00	-2.C00E 00	-2.CCCE 0C	1.C01E 00
160.00	-2.C00E 0C	-2.CCCE CO	-2.0CCE CO	-2.000E CC	-2.C00E 0C	-2.C00E 0C	1.C01E CO
180.0C	-2.CC0E 0C	-2.C00E 00	-2.00CE CO	-2.000E 00	-2.000E 00	-2.C0CE 00	1.001E 00
200.0C	-2.C00E 0C	-2.C00E 00	-2.CC0E CO	-2.0C0E 00	-2.000E 00	-2.C00E CO	1.001E 00
215.0C	-2.C00E 0C	-2.CC0E 0C	-2.0C0E CO	-2.00CE 00	-2.000E 00	-2.C0CE 0C	1.C01E 00

NORMALIZED DERIVATIVES WITH RESPECT TO ELECTRON DENSITY

PD1=40.5 PD2=C.0 PD3=C.0

PROPAGATION FREQUENCY= 7.750C0E 09

ρ	PD4	PC5=PC12	PC6=PD13	PD7	PD8	PD9	PD10	PD11
1.1C	9.759E-01	1.0CCE 00	1.CC0E 00	1.C00E C0	1.000E 00	1.976E 00	1.976E C0	-1.339E-05
1.2C	9.770E-01	1.C0CE 0C	1.000E 00	1.C00E 00	1.000E 00	1.977E 00	1.977E C0	3.772E-06
1.3C	9.775E-01	1.00CE 00	1.CC0E 0C	1.CC0E 00	1.000E C0	1.977E C0	1.977E C0	-3.920E-06
1.4C	9.777E-01	1.00CE 0C	1.0CCE 0C	1.C00E 0C	1.C00E 0C	1.978E 00	1.978E 00	-7.161E-06
1.5C	9.779E-01	1.00CE 0C	1.CC0E 00	1.000E 00	1.000E 00	1.978E C0	1.978E C0	-1.173E-05
1.6C	9.781E-01	1.C0CE 0C	1.CC0E 00	1.C00E 0C	1.000E C0	1.978E 00	1.978E 00	-1.594E-05
1.8C	9.784E-01	1.0CCE 0C	1.C00E C0	1.000E 0C	1.000E 00	1.978E 0C	1.978E C0	-2.480E-05
2.0C	9.786E-01	1.CCCE 0C	1.CC0E 00	1.C00E 00	1.000E 00	1.979E 00	1.979E 00	-3.167E-05
2.2C	9.788E-01	1.0CCE CC	1.C00E C0	1.C00E 00	1.000E 0C	1.979E C0	1.979E 00	-4.127E-05
2.4C	9.789E-01	1.C0CE 0C	1.C00E C0	1.CC0E 00	1.C00E 00	1.979E 00	1.979E C0	-5.456E-05
2.6C	9.790E-01	1.C0CE 0C	1.000E C0	1.000E 00	1.C00E 00	1.979E 00	1.979E 00	-6.307E-05
2.8C	9.791E-01	1.C0CE 0C	1.000E C0	1.CC0E 00	1.0CCE C0	1.979E C0	1.979E 00	-7.106E-05
3.0C	9.791E-01	1.00CE C0	1.CC0E 00	1.C00E 00	1.C00E 00	1.979E 00	1.979E 00	-8.088E-05
3.3C	9.792E-01	1.C00E 0C	1.CC0E 00	1.C00E 0C	1.000E C0	1.979E 00	1.979E 00	-9.168E-05
3.6C	9.792E-01	1.C0CE CC	1.CC0E C0	1.C00E 0C	1.000E C0	1.979E CC	1.979E 00	-1.057E-04
4.0C	9.792E-01	1.C0CE 0C	1.CC0E 00	1.C00E CC	1.000E 00	1.979E 0C	1.979E 00	-1.244E-04
4.5C	9.793E-01	1.C0CE 0C	1.CC0E 00	1.C00E 00	1.C00E C0	1.979E 0C	1.979E 00	-1.349E-04
5.0C	9.793E-01	1.00CE 0C	1.0C0E 00	1.CC0E 00	1.000E C0	1.979E 00	1.979E 00	-1.500E-04
5.5C	9.793E-01	1.CCCE 00	1.0C0E 00	1.C00E C0	1.00CE 0C	1.979E 00	1.979E C0	-1.666E-04
6.0C	9.793E-01	1.0CCE 00	1.0C0E 00	1.C00E 00	1.C0CE 00	1.979E 0C	1.979E C0	-1.815E-04
6.5C	9.794E-01	1.C0CE 0C	1.0C0E 00	1.000E 0C	1.000E 0C	1.979E 00	1.979E C0	-1.871E-04
7.0C	9.794E-01	1.0CCE 00	1.0C0E 00	1.C00E 0C	1.0C0E 00	1.979E 00	1.979E C0	-1.951E-04
7.5C	9.794E-01	1.0CCE 0C	1.0C0E C0	1.0C0E 0C	1.000E 00	1.979E C0	1.979E 00	-2.056E-04
8.00	9.794E-01	1.0CCE 00	1.CC0E CC	1.C00E 00	1.000E 00	1.979E C0	1.979E 00	-2.187E-04
9.0C	9.794E-01	1.0CCE CC	1.0C0E C0	1.C00E 0C	1.000E 00	1.979E C0	1.979E C0	-2.319E-04
10.00	9.795E-01	1.00CE 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.474E-04
11.00	9.795E-01	1.00CE 0C	1.000E CC	1.0C0E C0	1.000E CC	1.979E C0	1.979E 00	-2.445E-04
12.0C	9.795E-01	1.C0CE CC	1.C00E C0	1.C00E 00	1.00CE 0C	1.979E 00	1.979E 00	-2.457E-04
13.00	9.795E-01	1.00CE CC	1.CC0E 00	1.000E 0C	1.C00E 0C	1.979E 00	1.979E 00	-2.503E-04
14.0C	9.795E-01	1.000E 00	1.C00E C0	1.C00E C0	1.000E 00	1.979E 0C	1.979E C0	-2.581E-04
15.00	9.795E-01	1.00CE CC	1.0C0E C0	1.C00E C0	1.0C0E 00	1.979E C0	1.979E 00	-2.689E-04
16.0C	9.794E-01	1.C0CE 0C	1.0C0E 00	1.CC0E 00	1.000E C0	1.979E 0C	1.979E 00	-2.765E-04
18.0C	9.794E-01	1.0CCE 0C	1.C00E 0C	1.000E 0C	1.0C0E 0C	1.979E 0C	1.979E 00	-2.742E-04
20.0C	9.794E-01	1.0C0E C0	1.0C0E 00	1.000E-00	1.C00E 00	1.979E 0C	1.979E C0	-2.788E-04
22.0C	9.794E-01	1.C0CE 0C	1.0C0E 0C	1.0C0E 0C	1.000E CC	1.979E C0	1.979E C0	-2.892E-04
24.0C	9.794E-01	1.CCCE C0	1.0C0E 0C	1.000E 00	1.000E 00	1.979E 00	1.979E C0	-2.947E-04
26.0C	9.794E-01	1.0CCE 0C	1.C0CE 00	1.000E CC	1.0C0E 0C	1.979E 0C	1.979E 00	-3.000E-04
28.CC	9.794E-01	1.00CE 0C	1.0C0E C0	1.000E 0C	1.0C0E C0	1.979E 00	1.979E C0	-3.091E-04
30.0C	9.794E-01	1.C0CE 0C	1.CC0E 00	1.C00E 0C	1.000E C0	1.979E 0C	1.979E C0	-3.217E-04
33.00	9.794E-01	1.0CCE 0C	1.CC0E C0	1.0C0E CC	1.000E 0C	1.979E 00	1.979E C0	-3.241E-04
36.00	9.794E-01	1.CCCE CC	1.0C0E 0C	1.C00E 0C	1.00CE 00	1.979E 0C	1.979E C0	-3.319E-04
40.0C	9.794E-01	1.0C0E C0	1.000E 0C	1.0C0E C0	1.0C0E C0	1.979E CC	1.979E 00	-3.500E-04
45.0C	9.794E-01	1.0CCE C0	1.000E 00	1.C00E 00	1.0C0E C0	1.979E 0C	1.979E C0	-3.557E-04
50.0C	9.794E-01	1.0CCE CC	1.CC0E C0	1.C00E 0C	1.000E-00	1.979E 0C	1.979E C0	-3.706E-04
55.0C	9.794E-01	1.0CCE 0C	1.C00E 00	1.000E 0C	1.000E 00	1.979E C0	1.979E C0	-3.786E-04
60.00	9.794E-01	1.00CE C0	1.000E 00	1.C00E 00	1.000E 00	1.979E 0C	1.979E C0	-3.932E-04
65.0C	9.794E-01	1.0CCE 0C	1.CC0E 0C	1.CC0E C0	1.000E C0	1.979E CC	1.979E C0	-3.941E-04
70.0C	9.794E-01	1.CCCE 0C	1.0C0E C0	1.C00E CC	1.0C0E C0	1.979E C0	1.979E C0	-3.997E-04
75.0C	9.794E-01	1.00CE 00	1.0C0E 00	1.C00E 00	1.000E 0C	1.979E 00	1.979E 00	-4.096E-04
80.0C	9.794E-01	1.0C0E 00	1.000E 00	1.C00E 0C	1.000E 00	1.979E 0C	1.979E C0	-4.235E-04
90.0C	9.794E-01	1.0CCE 00	1.000E C0	1.0C0E 00	1.0C0E C0	1.979E 0C	1.979E C0	-4.297E-04
100.0C	9.794E-01	1.C0CE 00	1.0C0E C0	1.CC0E C0	1.000E 00	1.979E 00	1.979E 00	-4.470E-04
110.0C	9.794E-01	1.0CCE CC	1.0C0E 00	1.C00E 00	1.000E 00	1.979E CC	1.979E 00	-4.449E-04
120.0C	9.794E-01	1.00CE 0C	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.502E-04
130.0C	9.794E-01	1.0CCE 0C	1.CCCE C0	1.0C0E CC	1.0C0E 00	1.979E 0C	1.979E C0	-4.620E-04
140.0C	9.794E-01	1.00CE 00	1.CC0E C0	1.00CE CC	1.000E 00	1.979E C0	1.979E 00	-4.797E-04
150.0C	9.794E-01	1.CCCE 00	1.CC0E 00	1.C00E 00	1.000E C0	1.979E C0	1.979E 00	-5.033E-04
160.0C	9.794E-01	1.0CCE CC	1.C00E C0	1.C00E-00	1.0C0E 00	1.979E 00	1.979E 00	-5.202E-04
180.0C	9.794E-01	1.00CE 00	1.0C0E C0	1.000E 0C	1.0C0E C0	1.979E C0	1.979E 00	-5.685E-04
200.0C	9.795E-01	1.C0CE 0C	1.CC0E C0	1.C00E CC	1.00CE 00	1.979E 00	1.979E C0	-6.370E-04
215.0C	9.795E-01	1.00CE 0C	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-6.958E-04

NORMALIZED DERIVATIVES WITH RESPECT TO TEMPERATURE

PD14=C.0 PD15=0.C PD16=0.C PD18=PD25=0.0
PD20=C.0 PD21=C.C PD24=0.C PD19=PD26=0.C

PROPAGATICN FREQUENCY= 7.75C0E 09

ρ	PD17	PD22	PD23
1.1C	-1.428E CO	-1.428E OC	-1.428E 00
1.2C	-1.431E CO	-1.431E OC	-1.431E 00
1.3C	-1.432E CC	-1.432E OC	-1.432E 00
1.4C	-1.433E OO	-1.433E CC	-1.433E CO
1.5C	-1.434E OO	-1.434E OC	-1.434E 00
1.6C	-1.434E CO	-1.434E OC	-1.434E CO
1.8C	-1.435E CO	-1.435E OC	-1.435E CO
2.0C	-1.436E OC	-1.436E OC	-1.436E 00
2.2C	-1.436E CO	-1.436E OC	-1.436E 00
2.4C	-1.437E CO	-1.437E CC	-1.437E 00
2.6C	-1.437E OC	-1.437E OO	-1.437E CO
2.8C	-1.437E CO	-1.437E OC	-1.437E CO
3.0C	-1.437E CO	-1.437E OC	-1.437E 00
3.3C	-1.437E CO	-1.437E OO	-1.437E 00
3.6C	-1.438E CO	-1.438E CC	-1.438E OC
4.0C	-1.438E CO	-1.438E OC	-1.438E CO
4.5C	-1.438E CO	-1.438E CC	-1.438E 00
5.0C	-1.438E CO	-1.438E OC	-1.438E 00
5.5C	-1.438E CC	-1.438E OC	-1.438E 00
6.0C	-1.438E OO	-1.438E CC	-1.438E 00
6.5C	-1.438E CO	-1.438E OO	-1.438E 00
7.0C	-1.438E CO	-1.438E OC	-1.438E CO
7.5C	-1.438E CO	-1.438E OC	-1.438E 00
8.0C	-1.438E CC	-1.438E OO	-1.438E 00
9.0C	-1.438E CO	-1.438E OC	-1.438E 00
10.0C	-1.438E OO	-1.438E CC	-1.438E 00
11.0C	-1.438E OC	-1.438E OC	-1.438E 00
12.0C	-1.438E CC	-1.438E CC	-1.438E 00
13.0C	-1.438E CC	-1.438E OO	-1.438E 00
14.0C	-1.438E OO	-1.438E OC	-1.438E CO
15.0C	-1.438E CO	-1.438E CC	-1.438E 00
16.0C	-1.438E CO	-1.438E OC	-1.438E 00
18.0C	-1.438E CO	-1.438E OO	-1.438E 00
20.0C	-1.438E OO	-1.438E CC	-1.438E CO
22.0C	-1.438E CO	-1.438E CC	-1.438E CO
24.0C	-1.438E CO	-1.438E OC	-1.438E 00
26.0C	-1.438E CO	-1.438E CC	-1.438E 00
28.0C	-1.438E OC	-1.438E OC	-1.438E CO
30.0C	-1.438E OO	-1.438E OO	-1.438E 00
33.0C	-1.438E CC	-1.438E OC	-1.438E 00
36.0C	-1.438E CO	-1.438E OO	-1.438E 00
40.0C	-1.438E CO	-1.438E OO	-1.438E CO
45.0C	-1.438E CO	-1.438E OC	-1.438E CO
50.0C	-1.438E CO	-1.438E OC	-1.438E 00
55.0C	-1.438E OO	-1.438E OO	-1.438E CO
60.0C	-1.438E CO	-1.438E OC	-1.438E 00
65.0C	-1.438E CO	-1.438E OC	-1.438E OC
70.0C	-1.438E CO	-1.438E OC	-1.438E 00
75.0C	-1.438E CO	-1.438E OO	-1.438E 00
80.0C	-1.438E CO	-1.438E OO	-1.438E 00
90.0C	-1.438E CO	-1.438E OC	-1.438E 00
100.0C	-1.438E CC	-1.438E OO	-1.438E 00
110.0C	-1.438E CO	-1.438E OO	-1.438E 00
120.0C	-1.438E OO	-1.438E OC	-1.438E CO
130.0C	-1.438E CO	-1.438E OO	-1.438E 00
140.0C	-1.438E CO	-1.438E OO	-1.438E 00
150.00	-1.438E CO	-1.438E OO	-1.438E 00
160.0C	-1.438E CO	-1.438E OO	-1.438E 00
180.0C	-1.438E CO	-1.438E OO	-1.438E 00
200.0C	-1.438E OC	-1.438E OO	-1.438E 00
215.00	-1.438E CO	-1.438E OO	-1.438E 00

NORMALIZED DERIVATIVES WITH RESPECT TO SOLAR WIND VELOCITY

PD27=C.0 PD28=C.C PD29=-1.0 PD30=0.0

PROPAGATION FREQUENCY= 7.750CE 09

ρ	PD31=PD38	PD32=PD39	PD33	PD34	PD35	PD36	PD37
1.1C	4.863E-04	-4.863E-C4	9.726E-C4	-9.741E-04	9.726E-04	-9.736E-04	3.0C0E C0
1.2C	4.C87E-04	-4.C87E-C4	8.173E-04	-8.183E-04	8.173E-04	-8.180E-04	3.CCCE 0C
1.3C	3.482E-04	-3.482E-04	6.965E-04	-6.972E-04	6.9o5E-04	-6.97CE-04	3.0CCE C0
1.4C	3.C03E-04	-3.CC3E-C4	6.C06E-04	-6.011E-04	6.006E-04	-6.C09E-C4	3.CC0E C0
1.5C	2.616E-04	-2.616E-04	5.232E-04	-5.236E-04	5.232E-04	-5.234E-C4	3.CC0E 0C
1.6C	2.299E-04	-2.299E-C4	4.598E-C4	-4.602E-04	4.598E-04	-4.60CE-04	3.C00E 00
1.8C	1.817E-04	-1.817E-04	3.633E-04	-3.635E-04	3.633E-04	-3.635E-04	3.0CCE 00
2.0C	1.472E-04	-1.472E-C4	2.943E-04	-2.945E-04	2.943E-04	-2.944E-C4	3.0CCE C0
2.2C	1.216E-04	-1.216E-C4	2.433E-04	-2.433E-04	2.433E-04	-2.433E-04	3.C00E 0C
2.4C	1.022E-C4	-1.C22E-04	2.C44E-04	-2.C45E-C4	2.C44E-C4	-2.044E-04	3.0CCE 0C
2.6C	8.709E-05	-8.7C9E-C5	1.742E-04	-1.742E-04	1.742E-04	-1.742E-04	3.C00E C0
2.8C	7.509E-05	-7.5C9E-C5	1.502E-C4	-1.502E-04	1.502E-04	-1.502E-04	3.CC0E C0
3.0C	6.541E-05	-6.541E-C5	1.308E-04	-1.309E-04	1.308E-04	-1.308E-C4	3.0CCE 0C
3.3C	5.4C6E-05	-5.4C6E-C5	1.C81E-04	-1.081E-04	1.081E-04	-1.081E-04	3.0CCE 00
3.6C	4.543E-05	-4.543E-C5	9.C86E-05	-9.087E-05	9.086E-05	-9.087E-05	3.000E C0
4.0C	3.680E-05	-3.68CE-C5	7.360E-05	-7.361E-05	7.360E-05	-7.360E-05	3.000E C0
4.5C	2.908E-05	-2.9C8E-C5	5.815E-05	-5.816E-05	5.815E-05	-5.816E-05	3.00CE 0C
5.0C	2.355E-05	-2.355E-C5	4.711E-05	-4.711E-05	4.711E-05	-4.711E-05	3.C0CE CC
5.5C	1.947E-C5	-1.947E-C5	3.893E-05	-3.894E-05	3.893E-05	-3.894E-05	3.0C0E 00
6.0C	1.636E-05	-1.636E-C5	3.272E-C5	-3.272E-05	3.272E-05	-3.272E-05	3.CCCE C0
6.5C	1.394E-05	-1.394E-C5	2.788E-05	-2.788E-05	2.788E-05	-2.788E-05	3.CC0E 0C
7.0C	1.202E-05	-1.2C2E-C5	2.404E-05	-2.404E-05	2.404E-05	-2.404E-05	3.000E 00
7.5C	1.C47E-05	-1.047E-C5	2.094E-05	-2.094E-05	2.094E-05	-2.094E-05	3.0C0E C0
8.00	9.205E-06	-9.2C5E-C6	1.841E-05	-1.841E-05	1.841E-C5	-1.841E-05	3.000E 00
9.0C	7.274E-06	-7.274E-C6	1.455E-05	-1.455E-05	1.455E-05	-1.455E-05	3.CC0E 0C
10.0C	5.893E-06	-5.893E-C6	1.179E-05	-1.179E-05	1.179E-05	-1.179E-05	3.0CCE C0
11.0C	4.872E-06	-4.872E-C6	9.743E-C6	-9.744E-06	9.743E-06	-9.743E-06	3.0C0E 00
12.00	4.095E-06	-4.095E-C6	8.189E-C6	-8.189E-06	8.189E-06	-8.189E-06	3.000E C0
13.0C	3.490E-06	-3.49CE-C6	6.980E-06	-6.980E-06	6.980E-06	-6.980E-06	2.999E 00
14.00	3.C10E-06	-3.C1CE-C6	6.C20E-06	-6.020E-06	6.020E-06	-6.020E-06	2.999E 0C
15.0C	2.623E-06	-2.623E-C6	5.246E-06	-5.246E-06	5.246E-06	-5.246E-06	2.999E 0C
16.00	2.306E-06	-2.306E-C6	4.612E-06	-4.612E-06	4.612E-06	-4.612E-06	2.999E C0
18.00	1.823E-06	-1.823E-C6	3.647E-06	-3.647E-06	3.647E-06	-3.647E-06	2.999E 00
20.00	1.478E-06	-1.478E-C6	2.956E-06	-2.956E-06	2.956E-06	-2.956E-06	2.999E 00
22.0C	1.223E-06	-1.223E-C6	2.445E-06	-2.445E-06	2.445E-06	-2.445E-06	2.999E 00
24.00	1.028E-06	-1.028E-06	2.C57E-C6	-2.057E-C6	2.057E-C6	-2.057E-06	2.999E C0
26.0C	8.772E-C7	-8.772E-C7	1.754E-06	-1.754E-06	1.754E-06	-1.754E-06	2.999E C0
28.0C	7.572E-C7	-7.572E-C7	1.514E-06	-1.514E-06	1.514E-06	-1.514E-06	2.999E 00
30.0C	6.6C5E-07	-6.6C5E-C7	1.321E-06	-1.321E-C6	1.321E-06	-1.321E-06	2.999E 00
33.00	5.469E-07	-5.469E-C7	1.C94E-06	-1.C94E-06	1.094E-06	-1.094E-C6	2.999E C0
36.0C	4.606E-07	-4.6C6E-07	9.211E-07	-9.211E-07	9.211E-07	-9.211E-07	2.999E 0C
40.0C	3.743E-07	-3.743E-C7	7.485E-C7	-7.485E-07	7.485E-07	-7.485E-07	2.999E 00
45.00	2.970E-07	-2.97CE-C7	5.940E-07	-5.940E-07	5.940E-07	-5.940E-07	2.999E 00
50.00	2.418E-07	-2.418E-07	4.835E-07	-4.835E-07	4.835E-C7	-4.835E-07	2.999E 0C
55.0C	2.009E-07	-2.0C9E-C7	4.018E-07	-4.018E-07	4.018E-07	-4.018E-07	2.999E 0C
60.0C	1.698E-07	-1.698E-C7	3.396E-07	-3.396E-07	3.396E-07	-3.396E-07	2.999E 0C
65.00	1.456E-07	-1.456E-C7	2.911E-07	-2.911E-07	2.911E-07	-2.911E-C7	2.999E 00
70.0C	1.264E-07	-1.264E-07	2.527E-07	-2.527E-07	2.527E-07	-2.527E-C7	2.999E C0
75.0C	1.108E-07	-1.1C8E-07	2.217E-07	-2.217E-07	2.217E-07	-2.217E-07	2.999E 00
80.00	9.815E-08	-9.815E-C8	1.963E-07	-1.963E-07	1.963E-07	-1.963E-07	2.999E 00
90.0C	7.879E-08	-7.879E-08	1.576E-07	-1.576E-07	1.576E-07	-1.576E-07	2.999E 00
100.0C	6.493E-08	-6.493E-C8	1.299E-07	-1.299E-07	1.299E-C7	-1.299E-07	2.999E C0
110.00	5.465E-08	-5.465E-C8	1.093E-07	-1.093E-07	1.093E-07	-1.093E-07	2.999E 0C
120.0C	4.682E-08	-4.682E-C8	9.364E-08	-9.364E-08	9.364E-08	-9.364E-08	2.999E 0C
130.0C	4.071E-08	-4.071E-C8	8.142E-08	-8.142E-08	8.142E-08	-8.142E-08	2.999E 00
140.0C	3.584E-08	-3.584E-C8	7.169E-08	-7.169E-08	7.169E-08	-7.169E-08	2.999E 00
150.0C	3.190E-08	-3.190E-C8	6.381E-08	-6.381E-C8	6.381E-08	-6.381E-08	2.999E C0
160.0C	2.867E-08	-2.867E-C8	5.733E-08	-5.733E-08	5.733E-08	-5.733E-08	2.999E 0C
180.0C	2.370E-08	-2.37CE-C8	4.740E-08	-4.740E-08	4.740E-08	-4.740E-08	2.999E C0
200.00	2.010E-08	-2.C10E-C8	4.020E-08	-4.020E-08	4.020E-C8	-4.020E-08	2.999E C0
215.0C	1.801E-08	-1.8C1E-08	3.602E-08	-3.602E-08	3.602E-08	-3.6C2E-08	2.999E 0C

NORMALIZED DERIVATIVES WITH RESPECT TO MAGNETIC FIELD STRENGTH

PD40=0.0 PD41=1.0 PD42=1.0 PD43=0.0 PD50=0.0

PROPAGATION FREQUENCY= 7.750CE 09

ρ	PD44=PD51	PD45=PD52	PD46	PD47	PD48	PD49
1.10	-4.863E-04	4.868E-04	-9.726E-04	9.736E-04	-9.726E-04	9.736E-04
1.20	-4.087E-04	4.090E-04	-8.173E-04	8.180E-04	-8.173E-04	8.180E-04
1.30	-3.482E-04	3.485E-04	-6.965E-04	6.970E-04	-6.965E-04	6.970E-04
1.40	-3.003E-04	3.005E-04	-6.006E-04	6.009E-04	-6.006E-04	6.009E-04
1.50	-2.616E-04	2.617E-04	-5.232E-04	5.234E-04	-5.232E-04	5.234E-04
1.60	-2.299E-04	2.300E-04	-4.598E-04	4.600E-04	-4.598E-04	4.600E-04
1.80	-1.817E-04	1.817E-04	-3.633E-04	3.635E-04	-3.633E-04	3.635E-04
2.00	-1.472E-04	1.472E-04	-2.943E-04	2.944E-04	-2.943E-04	2.944E-04
2.20	-1.216E-04	1.217E-04	-2.433E-04	2.433E-04	-2.433E-04	2.433E-04
2.40	-1.022E-04	1.022E-04	-2.044E-04	2.044E-04	-2.044E-04	2.044E-04
2.60	-8.709E-05	8.710E-05	-1.742E-04	1.742E-04	-1.742E-04	1.742E-04
2.80	-7.509E-05	7.510E-05	-1.502E-04	1.502E-04	-1.502E-04	1.502E-04
3.00	-6.541E-05	6.542E-05	-1.308E-04	1.308E-04	-1.308E-04	1.308E-04
3.30	-5.406E-05	5.407E-05	-1.081E-04	1.081E-04	-1.081E-04	1.081E-04
3.60	-4.543E-05	4.543E-05	-9.086E-05	9.087E-05	-9.086E-05	9.087E-05
4.00	-3.680E-05	3.680E-05	-7.360E-05	7.360E-05	-7.360E-05	7.360E-05
4.50	-2.908E-05	2.908E-05	-5.815E-05	5.816E-05	-5.815E-05	5.816E-05
5.00	-2.355E-05	2.356E-05	-4.711E-05	4.711E-05	-4.711E-05	4.711E-05
5.50	-1.947E-05	1.947E-05	-3.893E-05	3.894E-05	-3.893E-05	3.894E-05
6.00	-1.636E-05	1.636E-05	-3.272E-05	3.272E-05	-3.272E-05	3.272E-05
6.50	-1.394E-05	1.394E-05	-2.788E-05	2.788E-05	-2.788E-05	2.788E-05
7.00	-1.202E-05	1.202E-05	-2.404E-05	2.404E-05	-2.404E-05	2.404E-05
7.50	-1.047E-05	1.047E-05	-2.094E-05	2.094E-05	-2.094E-05	2.094E-05
8.00	-9.205E-06	9.205E-06	-1.841E-05	1.841E-05	-1.841E-05	1.841E-05
9.00	-7.274E-06	7.274E-06	-1.455E-05	1.455E-05	-1.455E-05	1.455E-05
10.00	-5.893E-06	5.893E-06	-1.179E-05	1.179E-05	-1.179E-05	1.179E-05
11.00	-4.872E-06	4.872E-06	-9.743E-06	9.743E-06	-9.743E-06	9.743E-06
12.00	-4.095E-06	4.095E-06	-8.189E-06	8.189E-06	-8.189E-06	8.189E-06
13.00	-3.490E-06	3.490E-06	-6.980E-06	6.980E-06	-6.980E-06	6.980E-06
14.00	-3.010E-06	3.010E-06	-6.020E-06	6.020E-06	-6.020E-06	6.020E-06
15.00	-2.623E-06	2.623E-06	-5.246E-06	5.246E-06	-5.246E-06	5.246E-06
16.00	-2.306E-06	2.306E-06	-4.612E-06	4.612E-06	-4.612E-06	4.612E-06
18.00	-1.823E-06	1.823E-06	-3.647E-06	3.647E-06	-3.647E-06	3.647E-06
20.00	-1.478E-06	1.478E-06	-2.956E-06	2.956E-06	-2.956E-06	2.956E-06
22.00	-1.223E-06	1.223E-06	-2.445E-06	2.445E-06	-2.445E-06	2.445E-06
24.00	-1.028E-06	1.028E-06	-2.057E-06	2.057E-06	-2.057E-06	2.057E-06
26.00	-8.772E-07	8.772E-07	-1.754E-06	1.754E-06	-1.754E-06	1.754E-06
28.00	-7.572E-07	7.572E-07	-1.514E-06	1.514E-06	-1.514E-06	1.514E-06
30.00	-6.605E-07	6.605E-07	-1.321E-06	1.321E-06	-1.321E-06	1.321E-06
33.00	-5.469E-07	5.469E-07	-1.094E-06	1.094E-06	-1.094E-06	1.094E-06
36.00	-4.606E-07	4.606E-07	-9.211E-07	9.211E-07	-9.211E-07	9.211E-07
40.00	-3.743E-07	3.743E-07	-7.485E-07	7.485E-07	-7.485E-07	7.485E-07
45.00	-2.970E-07	2.970E-07	-5.940E-07	5.940E-07	-5.940E-07	5.940E-07
50.00	-2.418E-07	2.418E-07	-4.835E-07	4.835E-07	-4.835E-07	4.835E-07
55.00	-2.009E-07	2.009E-07	-4.018E-07	4.018E-07	-4.018E-07	4.018E-07
60.00	-1.698E-07	1.698E-07	-3.396E-07	3.396E-07	-3.396E-07	3.396E-07
65.00	-1.456E-07	1.456E-07	-2.911E-07	2.911E-07	-2.911E-07	2.911E-07
70.00	-1.264E-07	1.264E-07	-2.527E-07	2.527E-07	-2.527E-07	2.527E-07
75.00	-1.108E-07	1.108E-07	-2.217E-07	2.217E-07	-2.217E-07	2.217E-07
80.00	-9.815E-08	9.815E-08	-1.963E-07	1.963E-07	-1.963E-07	1.963E-07
90.00	-7.879E-08	7.879E-08	-1.576E-07	1.576E-07	-1.576E-07	1.576E-07
100.00	-6.493E-08	6.493E-08	-1.299E-07	1.299E-07	-1.299E-07	1.299E-07
110.00	-5.465E-08	5.465E-08	-1.093E-07	1.093E-07	-1.093E-07	1.093E-07
120.00	-4.682E-08	4.682E-08	-9.364E-08	9.364E-08	-9.364E-08	9.364E-08
130.00	-4.071E-08	4.071E-08	-8.142E-08	8.142E-08	-8.142E-08	8.142E-08
140.00	-3.584E-08	3.584E-08	-7.169E-08	7.169E-08	-7.169E-08	7.169E-08
150.00	-3.190E-08	3.190E-08	-6.381E-08	6.381E-08	-6.381E-08	6.381E-08
160.00	-2.867E-08	2.867E-08	-5.733E-08	5.733E-08	-5.733E-08	5.733E-08
180.00	-2.370E-08	2.370E-08	-4.740E-08	4.740E-08	-4.740E-08	4.740E-08
200.00	-2.010E-08	2.010E-08	-4.020E-08	4.020E-08	-4.020E-08	4.020E-08
215.00	-1.801E-08	1.801E-08	-3.602E-08	3.602E-08	-3.602E-08	3.602E-08

NORMALIZED DERIVATIVES WITH RESPECT TO PROPAGATING FREQUENCY

PD53=C.C PD54=C.C PD55=C.C PD56=C.C

PROPAGATION FREQUENCY= 7.750CE 09

ρ	PD57=PD64	PD58=PD65	PD59	PD60	PD61	PD62	PD63
1.1C	-2.CCCE CC	-2.CC1E 00	-2.0CCE CC	-2.CC2E CC	-1.999E 00	-2.CC1E CC	1.CCCE CC
1.2C	-2.CCCE CC	-2.CCCE 00	-1.999E CC	-2.CC1E 00	-1.999E CC	-2.CC1E CC	1.CCCE CC
1.3C	-2.CCCE CC	-2.CCCE CC	-1.999E CC	-2.CC1E CC	-1.999E CC	-2.CC1E CC	1.CCCE CC
1.4C	-2.CCCE CC	-2.CCCE 00	-1.999E CC	-2.CC1E 00	-1.999E 00	-2.CC1E CC	1.CCCE 00
1.5C	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CC1E 00	-1.999E 00	-2.CC1E 00	1.CCCE CC
1.6C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	1.CCCE CC
1.8C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	1.CCCE CC
2.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
2.2C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
2.4C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE 00	-2.CCCE 00	1.CCCE 00
2.6C	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
2.8C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
3.0C	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
3.3C	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
3.6C	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	1.CCCE 00
4.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
4.5C	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	1.CCCE CC
5.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
5.5C	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
6.0C	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	1.CCCE CC
6.5C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
7.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
7.5C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
8.0C	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE 00	-2.CCCE CC	-2.CCCE CC	1.CCCE 00
9.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
10.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
11.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
12.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
13.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
14.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
15.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
16.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
18.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
20.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
22.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
24.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
26.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
28.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
30.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
33.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
36.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
40.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
45.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
50.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
55.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
60.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
65.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
70.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
75.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
80.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
90.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
100.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
110.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
120.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
130.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
140.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
150.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
160.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
180.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
200.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC
215.0C	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	-2.CCCE CC	1.CCCE CC

NORMALIZED DERIVATIVES WITH RESPECT TO ELECTRON DENSITY

PD1=+0.5 PD2=0.0 PD3=0.0

PROPAGATION FREQUENCY= 1.5500E 10

ρ	PD4	PD5=PD12	PD6=PD13	PD7	PD8	PD9	PD10	PD11
1.10	9.759E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.976E 00	1.976E 00	-1.339E-05
1.20	9.770E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.977E 00	1.977E 00	3.772E-06
1.30	9.775E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.977E 00	1.977E 00	-5.227E-06
1.40	9.777E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.978E 00	1.978E 00	-7.712E-06
1.50	9.779E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.978E 00	1.978E 00	-1.150E-05
1.60	9.781E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.978E 00	1.978E 00	-1.594E-05
1.80	9.784E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.978E 00	1.978E 00	-2.480E-05
2.00	9.786E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.167E-05
2.20	9.788E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.127E-05
2.40	9.789E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-5.458E-05
2.60	9.790E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-6.309E-05
2.80	9.791E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-7.106E-05
3.00	9.791E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-8.088E-05
3.30	9.792E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-9.169E-05
3.60	9.792E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-1.057E-04
4.00	9.792E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-1.244E-04
4.50	9.793E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-1.349E-04
5.00	9.793E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-1.500E-04
5.50	9.793E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-1.666E-04
6.00	9.793E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-1.815E-04
6.50	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-1.871E-04
7.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-1.951E-04
7.50	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.056E-04
8.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.187E-04
9.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.319E-04
10.00	9.795E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.474E-04
11.00	9.795E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.445E-04
12.00	9.795E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.457E-04
13.00	9.795E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.503E-04
14.00	9.795E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.581E-04
15.00	9.795E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.689E-04
16.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.765E-04
18.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.742E-04
20.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.788E-04
22.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.892E-04
24.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-2.947E-04
26.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.000E-04
28.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.091E-04
30.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.217E-04
33.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.241E-04
36.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.319E-04
40.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.500E-04
45.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.557E-04
50.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.706E-04
55.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.786E-04
60.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.932E-04
65.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.941E-04
70.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-3.997E-04
75.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.096E-04
80.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.235E-04
90.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.297E-04
100.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.470E-04
110.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.449E-04
120.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.502E-04
130.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.620E-04
140.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-4.797E-04
150.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-5.033E-04
160.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-5.202E-04
180.00	9.794E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-5.685E-04
200.00	9.795E-01	1.000E 00	1.000E 00	1.000E 00	1.000E 00	1.979E 00	1.979E 00	-6.370E-04
215.00	9.795E-01	1.000E 00	1.000E 00	1.000E-00	1.000E 00	1.979E 00	1.979E 00	-6.958E-04

NORMALIZED DERIVATIVES WITH RESPECT TO TEMPERATURE

PD14=C.0 PD15=C.C PD16=0.C PD18=PD25=C.0
PD20=C.0 PD21=C.C PD24=0.C PD19=PD26=0.0

GATICN FREQUENCY= 1.5500E 10

ρ	PD17	PD22	PD23
1.1C	-1.428E 00	-1.428E 00	-1.428E 00
1.2C	-1.431E CO	-1.431E OC	-1.431E 00
1.3C	-1.432E 00	-1.432E OC	-1.432E 00
1.4C	-1.433E GO	-1.433E 00	-1.433E 00
1.5C	-1.434E CO	-1.434E OC	-1.434E 00
1.6C	-1.434E 00	-1.434E OC	-1.434E 00
1.8C	-1.435E CO	-1.435E CC	-1.435E 00
2.00	-1.436E CO	-1.436E 00	-1.436E 00
2.2C	-1.436E CO	-1.436E OC	-1.436E 00
2.4C	-1.437E CC	-1.437E 00	-1.437E 00
2.6C	-1.437E 00	-1.437E 00	-1.437E 00
2.8C	-1.437E CO	-1.437E OC	-1.437E 00
3.0C	-1.437E CO	-1.437E OC	-1.437E 00
3.3C	-1.437E OC	-1.437E 00	-1.437E 00
3.6C	-1.438E OC	-1.438E OC	-1.438E 00
4.0C	-1.438E OC	-1.438E GO	-1.438E 00
4.5C	-1.438E CO	-1.438E OC	-1.438E OC
5.0C	-1.438E GO	-1.438E CC	-1.438E 00
5.5C	-1.438E 00	-1.438E 00	-1.438E CO
6.00	-1.438E CO	-1.438E 00	-1.438E 00
6.5C	-1.438E CO	-1.438E OC	-1.438E OC
7.0C	-1.438E CO	-1.438E GO	-1.438E 00
7.5C	-1.438E CO	-1.438E 00	-1.438E CO
8.0C	-1.438E OC	-1.438E 00	-1.438E CC
9.0C	-1.438E CC	-1.438E OC	-1.438E 00
10.0C	-1.438E CC	-1.438E 00	-1.438E 00
11.0C	-1.438E OC	-1.438E 00	-1.438E CO
12.0C	-1.438E CO	-1.438E GC	-1.438E CO
13.0C	-1.438E CO	-1.438E CC	-1.438E CO
14.0C	-1.438E CO	-1.438E OC	-1.438E 00
15.0C	-1.438E CC	-1.438E 00	-1.438E CO
16.0C	-1.438E CO	-1.438E 00	-1.438E 00
18.0C	-1.438E CC	-1.438E 00	-1.438E OC
20.0C	-1.438E CC	-1.438E 00	-1.438E 00
22.0C	-1.438E CO	-1.438E 00	-1.438E 00
24.0C	-1.438E CC	-1.438E GO	-1.438E 00
26.0C	-1.438E CC	-1.438E CC	-1.438E CO
28.0C	-1.438E CC	-1.438E CC	-1.438E CO
30.0C	-1.438E CC	-1.438E GO	-1.438E CO
33.0C	-1.438E CO	-1.438E 00	-1.438E CO
36.0C	-1.438E CC	-1.438E 00	-1.438E CO
40.0C	-1.438E CC	-1.438E 00	-1.438E 00
45.0C	-1.438E 00	-1.438E 00	-1.438E 00
50.0C	-1.438E 00	-1.438E 00	-1.438E 00
55.0C	-1.438E CC	-1.438E CO	-1.438E OC
60.0C	-1.438E CC	-1.438E 00	-1.438E 00
65.0C	-1.438E CO	-1.438E OC	-1.438E 00
70.0C	-1.438E CC	-1.438E 00	-1.438E GO
75.0C	-1.438E CC	-1.438E OC	-1.438E 00
80.00	-1.438E CO	-1.438E 00	-1.438E 00
90.0C	-1.438E CO	-1.438E CO	-1.438E 00
100.0C	-1.438E CO	-1.438E OC	-1.438E 00
110.0C	-1.438E CC	-1.438E OC	-1.438E CO
120.0C	-1.438E CO	-1.438E CC	-1.438E CO
130.0C	-1.438E CC	-1.438E 00	-1.438E CO
140.0C	-1.438E 00	-1.438E OC	-1.438E CO
150.00	-1.438E CC	-1.438E OC	-1.438E CO
160.0C	-1.438E CC	-1.438E CC	-1.438E 00
180.0C	-1.438E 00	-1.438E 00	-1.438E 00
200.0C	-1.438E 00	-1.438E OC	-1.438E 00
215.0C	-1.438E CO	-1.438E OC	-1.438E 00

NORMALIZED DERIVATIVES WITH RESPECT TO SOLAR WIND VELOCITY

PD27=C.0 PD28=C.0 PD29=-1.0 PD30=C.0

PROPAGATION FREQUENCY= 1.5500E 10

ρ	PD31=PD38	PD32=PD39	PD33	PD34	PD35	PD36	PD37
1.1C	2.432E-04	-2.432E-C4	4.864E-04	-4.868E-04	4.864E-04	-4.867E-04	3.CCOE CO
1.2C	2.044E-04	-2.044E-C4	4.087E-04	-4.090E-04	4.087E-04	-4.089E-04	3.CCOE OC
1.3C	1.741E-04	-1.741E-04	3.483E-04	-3.485E-04	3.483E-04	-3.484E-04	3.CCOE OC
1.4C	1.502E-04	-1.5C2E-04	3.003E-04	-3.005E-04	3.003E-04	-3.004E-04	3.CCOE OO
1.5C	1.3C8E-04	-1.3C8E-04	2.616E-04	-2.617E-04	2.616E-04	-2.617E-04	3.CCOE OO
1.6C	1.15CE-04	-1.15CE-C4	2.299E-04	-2.300E-04	2.299E-04	-2.300E-04	3.CCOE OC
1.8C	9.C84E-C5	-9.C84E-05	1.817E-04	-1.817E-04	1.817E-04	-1.817E-04	3.CCOE OC
2.CC	7.359E-C5	-7.359E-05	1.472E-04	-1.472E-04	1.472E-04	-1.472E-04	3.CCOE OO
2.2C	6.C82E-05	-6.C82E-05	1.216E-04	-1.217E-04	1.216E-04	-1.216E-04	3.CCOE OO
2.4C	5.11CE-C5	-5.11CE-05	1.022E-04	-1.022E-04	1.022E-04	-1.022E-04	3.CCOE CO
2.6C	4.354E-05	-4.354E-C5	8.7C9E-05	-8.71CE-05	8.709E-05	-8.71CE-05	3.CCOE OC
2.8C	3.755E-05	-3.755E-05	7.509E-05	-7.51CE-05	7.509E-05	-7.51CE-05	3.CCOE OC
3.0C	3.271E-C5	-3.271E-05	6.542E-05	-6.542E-05	6.542E-C5	-6.542E-05	3.CCCE OO
3.3C	2.7C3E-05	-2.7C3E-05	5.406E-05	-5.407E-05	5.406E-05	-5.4C7E-C5	3.CCOE CO
3.6C	2.272E-05	-2.272E-05	4.543E-05	-4.543E-05	4.543E-05	-4.543E-05	3.CCOE OO
4.0C	1.84CE-05	-1.84CE-C5	3.68CE-05	-3.68CE-05	3.68CE-05	-3.68CE-05	3.CCOE OC
4.5C	1.454E-05	-1.454E-05	2.908E-05	-2.9C8E-05	2.908E-05	-2.908E-05	3.CCCE OO
5.0C	1.178E-05	-1.178E-C5	2.355E-05	-2.356E-05	2.355E-05	-2.355E-05	3.CCOE OC
5.5C	9.734E-06	-9.734E-C6	1.947E-05	-1.947E-C5	1.947E-05	-1.947E-05	3.CCOE OO
6.0C	8.18CE-06	-8.18CE-C6	1.636E-05	-1.636E-05	1.636E-05	-1.636E-05	3.CCCE OO
6.5C	6.97CE-06	-6.97CE-C6	1.394E-05	-1.394E-05	1.394E-05	-1.394E-05	3.CCCE CO
7.0C	6.01CE-06	-6.01CE-C6	1.202E-05	-1.202E-C5	1.202E-05	-1.202E-05	3.CCOE OO
7.5C	5.236E-06	-5.236E-06	1.047E-05	-1.047E-05	1.047E-05	-1.047E-05	3.CCOE CO
8.0C	4.6C2E-06	-4.6C2E-C6	9.205E-06	-9.205E-06	9.205E-06	-9.205E-06	3.CCCE OC
9.0C	3.637E-06	-3.637E-C6	7.274E-06	-7.274E-C6	7.274E-06	-7.274E-06	3.CCOE OO
10.0C	2.947E-06	-2.947E-C6	5.893E-06	-5.893E-06	5.893E-06	-5.893E-06	3.CCOE OO
11.0C	2.436E-06	-2.436E-C6	4.872E-06	-4.872E-06	4.872E-06	-4.872E-06	3.CCCE OO
12.0C	2.C47E-06	-2.047E-C6	4.095E-06	-4.095E-06	4.095E-06	-4.095E-06	3.CCCE OO
13.0C	1.745E-06	-1.745E-06	3.490E-06	-3.490E-06	3.490E-06	-3.490E-06	2.999E CO
14.0C	1.5C5E-06	-1.5C5E-06	3.C10E-06	-3.010E-06	3.010E-06	-3.010E-06	2.999E OC
15.0C	1.311E-06	-1.311E-C6	2.623E-06	-2.623E-C6	2.623E-06	-2.623E-C6	2.999E OC
16.0C	1.153E-06	-1.153E-06	2.3C6E-06	-2.306E-06	2.306E-06	-2.3C6E-06	2.999E OC
18.0C	9.117E-07	-9.117E-07	1.823E-06	-1.823E-06	1.823E-06	-1.823E-06	2.999E CO
20.0C	7.391E-07	-7.391E-C7	1.478E-06	-1.478E-06	1.478E-06	-1.478E-06	2.999E OC
22.0C	6.113E-07	-6.113E-C7	1.223E-06	-1.223E-06	1.223E-06	-1.223E-06	2.999E OC
24.0C	5.142E-07	-5.142E-C7	1.C28E-06	-1.028E-06	1.028E-06	-1.028E-06	2.999E OO
26.CC	4.386E-07	-4.386E-07	8.772E-07	-8.772E-07	8.772E-07	-8.772E-07	2.999E CC
28.0C	3.786E-07	-3.786E-C7	7.572E-07	-7.572E-07	7.572E-C7	-7.572E-C7	2.999E OC
30.0C	3.3C2E-07	-3.3C2E-C7	6.605E-07	-6.605E-07	6.605E-07	-6.605E-07	2.999E CO
33.0C	2.735E-07	-2.735E-07	5.469E-07	-5.469E-07	5.469E-07	-5.469E-07	2.999E OC
36.0C	2.303E-07	-2.3C3E-C7	4.606E-07	-4.606E-07	4.606E-07	-4.606E-C7	2.999E CO
40.00	1.871E-07	-1.871E-C7	3.743E-07	-3.743E-07	3.743E-C7	-3.743E-07	2.999E OC
45.00	1.485E-C7	-1.485E-C7	2.970E-07	-2.970E-07	2.970E-07	-2.970E-07	2.999E CO
50.0C	1.2C9E-07	-1.2C9E-C7	2.418E-07	-2.418E-07	2.418E-07	-2.418E-07	2.999E OC
55.0C	1.004E-07	-1.CC4E-07	2.009E-07	-2.009E-07	2.009E-07	-2.009E-07	2.999E OC
60.00	8.489E-08	-8.489E-C8	1.698E-07	-1.698E-07	1.698E-07	-1.698E-07	2.999E OC
65.00	7.278E-08	-7.278E-08	1.456E-07	-1.456E-07	1.456E-C7	-1.456E-C7	2.999E CC
70.0C	6.318E-08	-6.318E-08	1.264E-07	-1.264E-07	1.264E-07	-1.264E-07	2.999E OO
75.0C	5.542E-08	-5.542E-08	1.108E-07	-1.108E-07	1.108E-07	-1.108E-C7	2.999E OO
80.0C	4.907E-08	-4.907E-08	9.815E-08	-9.815E-08	9.815E-08	-9.815E-08	2.999E OC
90.0C	3.940E-08	-3.94CE-08	7.879E-08	-7.879E-C8	7.879E-08	-7.879E-08	2.999E OC
100.0C	3.246E-08	-3.246E-08	6.493E-08	-6.493E-C8	6.493E-C8	-6.493E-08	2.999E OC
110.0C	2.733E-C8	-2.733E-08	5.465E-08	-5.465E-08	5.465E-08	-5.465E-08	2.999E OC
120.0C	2.341E-08	-2.341E-C8	4.682E-08	-4.682E-08	4.682E-C8	-4.682E-C8	2.999E CO
130.0C	2.035E-08	-2.C35E-08	4.071E-08	-4.071E-08	4.071E-08	-4.071E-08	2.999E OO
140.00	1.792E-C8	-1.792E-C8	3.584E-C8	-3.584E-08	3.584E-08	-3.584E-08	2.999E OO
150.0C	1.595E-08	-1.595E-08	3.190E-08	-3.190E-08	3.190E-08	-3.19CE-08	2.999E CO
160.00	1.433E-08	-1.433E-C8	2.867E-08	-2.867E-08	2.867E-08	-2.867E-08	2.999E CC
180.0C	1.185E-08	-1.185E-C8	2.370E-08	-2.370E-08	2.370E-08	-2.37CE-08	2.999E CO
200.0C	1.C05E-08	-1.0C5E-C8	2.C10E-08	-2.010E-08	2.010E-C8	-2.010E-08	2.999E OC
215.0C	9.C06E-C9	-9.CC6E-C9	1.801E-08	-1.801E-08	1.801E-08	-1.801E-08	2.999E CO

NORMALIZED DERIVATIVES WITH RESPECT TO MAGNETIC FIELD STRENGTH

PD40=C.0 PD41=1.0 PD42=1.C PD43=0.0 PD5C=C.0

PROPAGATICN FREQLENCY= 1.550CE 10

ρ	PD44=PD51	PD45=PD52	PD46	PD47	PD48	PD49
1.1C	-2.432E-04	2.433E-04	-4.864E-04	4.867E-04	-4.864E-04	4.867E-04
1.2C	-2.C44E-04	2.C45E-C4	-4.087E-04	4.089E-04	-4.087E-04	4.089E-C4
1.3C	-1.741E-04	1.742E-04	-3.483E-04	3.484E-04	-3.483E-04	3.484E-04
1.4C	-1.502E-04	1.5C2E-C4	-3.CC3E-04	3.CC4E-C4	-3.003E-04	3.004E-04
1.5C	-1.308E-04	1.3C8E-C4	-2.616E-04	2.617E-04	-2.616E-04	2.617E-04
1.6C	-1.15CE-04	1.15CE-04	-2.299E-04	2.300E-04	-2.299E-04	2.300E-04
1.8C	-9.C84E-05	9.C86E-C5	-1.817E-04	1.817E-04	-1.817E-04	1.817E-04
2.0C	-7.359E-05	7.36CE-C5	-1.472E-04	1.472E-04	-1.472E-04	1.472E-04
2.2C	-6.082E-05	6.C82E-C5	-1.216E-04	1.216E-04	-1.216E-04	1.216E-04
2.4C	-5.11CE-05	5.111E-C5	-1.022E-04	1.022E-04	-1.022E-04	1.022E-04
2.6C	-4.354E-05	4.355E-C5	-8.709E-05	8.710E-05	-8.709E-05	8.710E-05
2.8C	-3.755E-05	3.755E-C5	-7.509E-C5	7.510E-05	-7.509E-05	7.510E-05
3.0C	-3.271E-05	3.271E-C5	-6.542E-C5	6.542E-05	-6.542E-C5	6.542E-C5
3.3C	-2.703E-05	2.7C3E-05	-5.406E-05	5.407E-05	-5.406E-05	5.407E-C5
3.6C	-2.272E-05	2.272E-05	-4.543E-05	4.543E-05	-4.543E-05	4.543E-C5
4.0C	-1.840E-05	1.84CE-C5	-3.680E-C5	3.680E-05	-3.680E-05	3.68CE-C5
4.5C	-1.454E-05	1.4548-C5	-2.908E-C5	2.908E-05	-2.908E-05	2.908E-05
5.0C	-1.178E-C5	1.178E-C5	-2.355E-05	2.355E-05	-2.355E-05	2.355E-C5
5.5C	-9.734E-06	9.734E-C6	-1.947E-C5	1.947E-05	-1.947E-C5	1.947E-05
6.0C	-8.180E-06	8.18CE-06	-1.636E-05	1.636E-05	-1.636E-05	1.636E-05
6.5C	-6.970E-06	6.97CE-C6	-1.394E-05	1.394E-05	-1.394E-C5	1.394E-05
7.0C	-6.C10E-06	6.C10E-06	-1.202E-05	1.202E-05	-1.202E-05	1.202E-05
7.5C	-5.236E-06	5.236E-C6	-1.047E-05	1.047E-05	-1.047E-05	1.047E-05
8.0C	-4.602E-06	4.6C2E-06	-9.205E-C6	9.205E-06	-9.205E-06	9.205E-06
9.0C	-3.637E-06	3.637E-C6	-7.274E-C6	7.274E-06	-7.274E-06	7.274E-06
10.0C	-2.947E-06	2.947E-C6	-5.893E-C6	5.893E-06	-5.893E-06	5.893E-C6
11.0C	-2.436E-06	2.436E-C6	-4.872E-C6	4.872E-C6	-4.872E-06	4.872E-06
12.0C	-2.C47E-06	2.047E-C6	-4.095E-C6	4.095E-06	-4.095E-06	4.095E-06
13.0C	-1.745E-06	1.745E-C6	-3.49CE-C6	3.490E-06	-3.490E-06	3.490E-06
14.0C	-1.505E-06	1.5C5E-C6	-3.C10E-C6	3.010E-06	-3.C10E-C6	3.C10E-06
15.0C	-1.311E-06	1.311E-C6	-2.623E-06	2.623E-06	-2.623E-06	2.623E-06
16.0C	-1.153E-06	1.153E-C6	-2.306E-06	2.306E-06	-2.306E-06	2.306E-06
18.0C	-9.117E-07	9.117E-C7	-1.823E-C6	1.823E-C6	-1.823E-06	1.823E-06
20.0C	-7.391E-07	7.391E-C7	-1.478E-06	1.478E-06	-1.478E-06	1.478E-06
22.0C	-6.113E-07	6.113E-C7	-1.223E-06	1.223E-06	-1.223E-06	1.223E-06
24.0C	-5.142E-07	5.142E-C7	-1.C28E-06	1.028E-06	-1.028E-06	1.028E-06
26.0C	-4.386E-07	4.386E-C7	-8.772E-C7	8.772E-07	-8.772E-07	8.772E-07
28.0C	-3.786E-07	3.786E-C7	-7.572E-C7	7.572E-07	-7.572E-07	7.572E-07
30.0C	-3.302E-07	3.3C2E-C7	-6.605E-C7	6.605E-07	-6.605E-07	6.605E-07
33.0C	-2.735E-07	2.735E-C7	-5.469E-07	5.469E-07	-5.469E-C7	5.469E-07
36.0C	-2.303E-07	2.3C3E-C7	-4.606E-C7	4.606E-07	-4.606E-07	4.606E-07
40.0C	-1.871E-07	1.871E-C7	-3.743E-07	3.743E-07	-3.743E-07	3.743E-07
45.0C	-1.485E-07	1.485E-07	-2.970E-C7	2.970E-07	-2.970E-07	2.97CE-07
5C.CC	-1.2C9E-07	1.2C9E-C7	-2.418E-07	2.418E-07	-2.418E-C7	2.418E-07
55.0C	-1.CC4E-07	1.0C4E-C7	-2.C09E-C7	2.009E-07	-2.009E-07	2.009E-07
6C.0C	-8.489E-08	8.489E-08	-1.698E-07	1.698E-07	-1.698E-07	1.698E-07
65.0C	-7.278E-08	7.278E-08	-1.456E-C7	1.456E-07	-1.456E-07	1.456E-07
70.0C	-6.318E-08	6.318E-C8	-1.264E-C7	1.264E-07	-1.264E-07	1.264E-07
75.0C	-5.542E-08	5.542E-C8	-1.108E-07	1.108E-07	-1.108E-07	1.108E-07
80.0C	-4.907E-08	4.9C7E-C8	-9.815E-08	9.815E-08	-9.815E-C8	9.815E-08
90.0C	-3.94CE-08	3.940E-08	-7.879E-08	7.879E-08	-7.879E-C8	7.879E-08
100.0C	-3.246E-08	3.246E-C8	-6.493E-08	6.493E-08	-6.493E-08	6.493E-08
110.0C	-2.733E-08	2.733E-C8	-5.465E-08	5.465E-08	-5.465E-08	5.465E-08
120.0C	-2.341E-08	2.341E-C8	-4.682E-08	4.682E-08	-4.682E-08	4.682E-08
130.0C	-2.C35E-08	2.035E-C8	-4.C71E-08	4.071E-08	-4.071E-08	4.071E-08
140.0C	-1.792E-08	1.792E-C8	-3.584E-C8	3.584E-C8	-3.584E-08	3.584E-08
150.0C	-1.595E-08	1.595E-C8	-3.19CE-C8	3.190E-08	-3.190E-C8	3.190E-08
160.CC	-1.433E-08	1.433E-C8	-2.867E-08	2.867E-08	-2.867E-C8	2.867E-08
180.CC	-1.185E-08	1.185E-08	-2.370E-08	2.370E-08	-2.370E-08	2.370E-08
200.0C	-1.005E-08	1.CC5E-C8	-2.C10E-C8	2.C10E-08	-2.010E-C8	2.010E-C8
215.0C	-9.CC6E-09	9.0C6E-C9	-1.801E-C8	1.801E-C8	-1.801E-C8	1.801E-08

NORMALIZED DERIVATIVES WITH RESPECT TO PROPAGATING FREQUENCY

PD53=0.0 PD54=0.0 PD55=0.0 PD56=0.0

PROPAGATION FREQUENCY= 1.55000E 10

ρ	PD57=PD64	PD58=PD65	PD59	PD60	PD61	PD62	PD63
1.10	-2.000E 00	-2.000E 00	-2.000E 00	-2.001E 00	-2.000E 00	-2.001E 00	1.000E 00
1.20	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E-00
1.30	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
1.40	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
1.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
1.60	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
1.80	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
2.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
2.20	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
2.40	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
2.60	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
2.80	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
3.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
3.30	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
3.60	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
4.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
4.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
5.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
5.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
6.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
6.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
7.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
7.50	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
8.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
9.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
10.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
11.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
12.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.000E 00
13.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
14.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
15.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
16.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
18.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
20.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
22.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
24.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
26.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
28.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
30.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
33.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
36.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
40.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
45.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
50.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
55.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
60.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
65.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
70.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
75.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
80.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
90.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
100.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
110.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
120.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
130.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
140.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
150.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
160.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
180.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
200.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00
215.00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	-2.000E 00	1.001E 00

TABLE III.- COMMUNICATION PROPERTIES DEPENDENT UPON PROPAGATION PATH AND PROPAGATION FREQUENCY

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.012 θ_D=1.552E-04 ρ_a=1.258

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0120	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.0120	0.10000	193.643	1.889E-09	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0120	0.20000	172.127	3.726E-09	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0120	0.30000	150.611	6.305E-09	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0120	0.40000	129.095	1.146E-08	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0120	0.50000	107.579	1.897E-08	1.000E 00	-8.045E-07	-8.045E-07	8.044E-07
0.60000	0.0120	0.60000	86.064	3.356E-08	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0120	0.70000	64.548	9.755E-08	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0120	0.80000	43.032	3.602E-07	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0120	0.85000	32.274	9.355E-07	1.000E 00	-1.231E-05	-1.231E-05	1.231E-05
0.90000	0.0120	0.90000	21.516	3.491E-06	1.000E 00	-3.124E-05	-3.125E-05	3.123E-05
0.92500	0.0120	0.92500	16.137	8.456E-06	1.000E 00	-5.757E-05	-5.761E-05	5.755E-05
0.95000	0.0120	0.95000	10.758	3.151E-05	1.000E 00	-1.460E-04	-1.463E-04	1.459E-04
0.96250	0.0120	0.96250	8.069	8.211E-05	1.000E 00	-2.878E-04	-2.886E-04	2.875E-04
0.97500	0.0120	0.97500	5.380	3.642E-04	1.000E 00	-8.717E-04	-8.773E-04	8.698E-04
0.98124	0.0120	0.98125	4.036	1.103E-03	1.001E 00	-2.024E-03	-2.047E-03	2.017E-03
0.98749	0.0120	0.98750	2.692	6.964E-03	1.003E 00	-8.516E-03	-8.735E-03	8.482E-03
0.99373	0.0127	0.99375	1.350	1.031E 00	1.065E 00	-3.501E-01	-3.988E-01	5.176E-01
0.98837	0.0446	1.00000	2.607	1.752E 02	3.669E 00	-1.121E-02	-1.089E-02	1.151E-02
0.98215	0.0754	1.00625	3.851	1.752E 02	6.130E 00	-2.338E-03	-2.309E-03	2.358E-03
0.97592	0.1067	1.01250	5.195	1.752E 02	8.562E 00	-9.796E-04	-9.730E-04	9.839E-04
0.96970	0.1383	1.01875	6.540	1.752E 02	1.097E 01	-5.171E-04	-5.149E-04	5.185E-04
0.96347	0.1704	1.02500	7.885	1.752E 02	1.334E 01	-3.096E-04	-3.087E-04	3.102E-04
0.95102	0.2358	1.03750	10.574	1.752E 02	1.800E 01	-1.512E-04	-1.509E-04	1.513E-04
0.93857	0.3029	1.05000	13.263	1.752E 02	2.255E 01	-9.341E-05	-9.331E-05	9.346E-05
0.91367	0.4427	1.07500	18.642	1.752E 02	3.134E 01	-4.333E-05	-4.331E-05	4.335E-05
0.88878	0.5902	1.10000	24.021	1.752E 02	3.972E 01	-2.435E-05	-2.434E-05	2.435E-05
0.83902	0.9117	1.15000	34.779	1.752E 02	5.540E 01	-1.043E-05	-1.043E-05	1.043E-05
0.78928	1.2736	1.20000	45.537	1.752E 02	6.977E 01	-5.595E-06	-5.594E-06	5.595E-06
0.68993	2.1540	1.30000	67.053	1.752E 02	9.520E 01	-2.326E-06	-2.326E-06	2.326E-06
0.59079	3.3302	1.40000	88.568	1.752E 02	1.170E 02	-1.233E-06	-1.233E-06	1.233E-06
0.49200	4.9797	1.50000	110.084	1.752E 02	1.359E 02	-7.679E-07	-7.679E-07	7.679E-07
0.39383	7.4546	1.60000	131.600	1.752E 02	1.524E 02	-5.147E-07	-5.147E-07	5.147E-07
0.29687	11.5584	1.70000	153.116	1.752E 02	1.670E 02	-3.476E-07	-3.476E-07	3.476E-07
0.20289	19.5433	1.80000	174.632	1.752E 02	1.800E 02	-2.452E-07	-2.452E-07	2.452E-07
0.11915	39.7922	1.90000	196.148	1.752E 02	1.916E 02	-1.730E-07	-1.730E-07	1.730E-07
0.08503	84.5373	2.00000	217.664	1.752E 02	2.020E 02	-1.235E-07	-1.235E-07	1.235E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.012 θ_D=1.552E-04 ρ_a=1.258

z	$_x\mu'$-1.0	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.307E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.517E-04	6.516E-04	6.517E-04	-2.044E-06	-2.045E-06
0.90000	3.126E-05	449.110	-1.143E-03	-1.143E-03	1.143E-03	1.143E-03	-5.189E-06	-5.191E-06
0.92500	5.764E-05	461.585	-1.680E-03	-1.681E-03	1.680E-03	1.681E-03	-9.564E-06	-9.570E-06
0.95000	1.464E-04	474.060	-2.852E-03	-2.853E-03	2.851E-03	2.854E-03	-2.426E-05	-2.429E-05
0.96250	2.891E-04	480.297	-4.116E-03	-4.120E-03	4.114E-03	4.123E-03	-4.780E-05	-4.794E-05
0.97500	8.808E-04	486.534	-7.289E-03	-7.308E-03	7.282E-03	7.320E-03	-1.448E-04	-1.457E-04
0.98124	2.063E-03	489.652	-1.154E-02	-1.160E-02	1.152E-02	1.164E-02	-3.362E-04	-3.400E-04
0.98749	8.924E-03	492.769	-2.483E-02	-2.514E-02	2.476E-02	2.537E-02	-1.415E-03	-1.451E-03
0.99373	6.914E-01	495.884	-2.087E-01	-2.256E-01	2.569E-01	3.012E-01	-5.816E-02	-6.625E-02
0.98837	1.085E-02	493.209	5.145E 00	5.145E 00	9.521E 05	9.390E 05	-1.863E-03	-1.809E-03
0.98215	2.300E-03	490.103	1.135E 01	1.135E 01	9.521E 05	9.390E 05	-3.883E-04	-3.835E-04
0.97592	9.706E-04	486.997	1.757E 01	1.757E 01	9.522E 05	9.390E 05	-1.627E-04	-1.616E-04
0.96970	5.141E-04	483.890	2.380E 01	2.380E 01	9.522E 05	9.390E 05	-8.591E-05	-8.554E-05
0.96347	3.084E-04	480.783	3.002E 01	3.002E 01	9.522E 05	9.391E 05	-5.144E-05	-5.128E-05
0.95102	1.508E-04	474.570	4.247E 01	4.247E 01	9.522E 05	9.391E 05	-2.511E-05	-2.507E-05
0.93857	9.327E-05	468.357	5.492E 01	5.492E 01	9.522E 05	9.391E 05	-1.552E-05	-1.550E-05
0.91367	4.330E-05	455.933	7.982E 01	7.982E 01	9.522E 05	9.391E 05	-7.198E-06	-7.194E-06
0.88878	2.434E-05	443.512	1.047E 02	1.047E 02	9.522E 05	9.391E 05	-4.044E-06	-4.043E-06
0.83902	1.043E-05	418.679	1.546E 02	1.545E 02	9.523E 05	9.392E 05	-1.733E-06	-1.733E-06
0.78928	5.594E-06	393.861	2.043E 02	2.043E 02	9.523E 05	9.392E 05	-9.294E-07	-9.293E-07
0.68993	2.326E-06	344.281	3.037E 02	3.037E 02	9.524E 05	9.393E 05	-3.864E-07	-3.864E-07
0.59079	1.233E-06	294.811	4.031E 02	4.031E 02	9.525E 05	9.394E 05	-2.048E-07	-2.048E-07
0.49200	7.678E-07	245.514	5.023E 02	5.023E 02	9.526E 05	9.395E 05	-1.276E-07	-1.276E-07
0.39383	5.147E-07	196.523	6.012E 02	6.012E 02	9.527E 05	9.396E 05	-8.550E-08	-8.550E-08
0.29687	3.476E-07	148.141	6.995E 02	6.995E 02	9.528E 05	9.397E 05	-5.774E-08	-5.774E-08
0.20289	2.452E-07	101.244	7.963E 02	7.963E 02	9.529E 05	9.398E 05	-4.073E-08	-4.073E-08
0.11915	1.730E-07	59.459	8.880E 02	8.880E 02	9.530E 05	9.399E 05	-2.873E-08	-2.873E-08
0.08503	1.235E-07	42.432	9.549E 02	9.549E 02	9.531E 05	9.400E 05	-2.052E-08	-2.052E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.012 θ_D= 1.552E-04 ρ_a= 1.258

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-6.526E-19
0.10000	-4.241E-12	9.303E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-8.755E-19
0.20000	-1.641E-12	-3.393E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-1.252E-18
0.30000	-4.375E-12	-3.721E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-1.968E-18
0.40000	-9.631E-11	-4.377E-11	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-3.332E-18
0.50000	-6.172E-11	-1.729E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-6.670E-18
0.60000	-2.113E-11	-7.075E-11	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-1.560E-17
0.70000	-1.546E-10	-7.309E-11	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-4.559E-17
0.80000	3.036E-10	3.101E-10	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-2.065E-16
0.85000	7.015E-10	9.054E-10	-4.335E-16	-4.337E-16	-4.001E-06	-4.002E-06	-5.982E-16
0.90000	4.705E-09	4.343E-09	-1.860E-15	-1.862E-15	-1.103E-05	-1.104E-05	-2.684E-15
0.92500	1.224E-08	1.217E-08	-4.299E-15	-4.305E-15	-2.192E-05	-2.194E-05	-8.183E-15
0.95000	4.938E-08	4.801E-08	-1.706E-14	-1.711E-14	-5.510E-05	-5.520E-05	-3.674E-14
0.96250	1.324E-07	1.330E-07	-4.948E-14	-4.976E-14	-1.094E-04	-1.097E-04	-1.047E-13
0.97500	6.402E-07	6.397E-07	-2.862E-13	-2.899E-13	-3.492E-04	-3.518E-04	-3.936E-13
0.98124	2.025E-06	2.037E-06	-1.121E-12	-1.147E-12	-9.181E-04	-9.310E-04	-9.533E-13
0.98749	1.415E-05	1.451E-05	-1.210E-11	-1.273E-11	-4.815E-03	-4.984E-03	-2.615E-12
0.99373	1.473E-03	1.741E-03	-1.571E-08	-2.076E-08	-1.101E 00	-1.356E 00	-1.841E-11
0.98837	-2.293E-03	-2.499E-03	-1.946E-11	-1.835E-11	-8.489E 06	-8.376E 06	-3.153E-12
0.98215	-1.392E-03	-1.517E-03	-1.412E-12	-1.378E-12	-8.489E 06	-8.376E 06	-1.108E-12
0.97592	-9.936E-04	-1.083E-03	-3.460E-13	-3.413E-13	-8.489E 06	-8.376E 06	-4.352E-13
0.96970	-7.728E-04	-8.422E-04	-1.265E-13	-1.254E-13	-8.489E 06	-8.376E 06	-2.067E-13
0.96347	-6.317E-04	-6.885E-04	-5.569E-14	-5.536E-14	-8.489E 06	-8.376E 06	-1.123E-13
0.95102	-4.626E-04	-5.042E-04	-1.802E-14	-1.796E-14	-8.489E 06	-8.376E 06	-3.948E-14
0.93857	-3.649E-04	-3.977E-04	-8.508E-15	-8.488E-15	-8.489E 06	-8.376E 06	-1.640E-14
0.91367	-2.565E-04	-2.796E-04	-2.914E-15	-2.911E-15	-8.489E 06	-8.376E 06	-4.582E-15
0.88878	-1.978E-04	-2.156E-04	-1.281E-15	-1.280E-15	-8.489E 06	-8.376E 06	-1.782E-15
0.83902	-1.356E-04	-1.478E-04	-3.397E-16	-3.396E-16	-8.489E 06	-8.376E 06	-4.513E-16
0.78928	-1.032E-04	-1.125E-04	-1.352E-16	-1.352E-16	-8.489E 06	-8.376E 06	-1.670E-16
0.68993	-6.983E-05	-7.611E-05	-3.608E-17	-3.607E-17	-8.489E 06	-8.376E 06	-3.942E-17
0.59079	-5.276E-05	-5.751E-05	-1.415E-17	-1.415E-17	-8.489E 06	-8.376E 06	-1.400E-17
0.49200	-4.240E-05	-4.621E-05	-7.024E-18	-7.024E-18	-8.489E 06	-8.376E 06	-6.098E-18
0.39383	-3.544E-05	-3.863E-05	-3.844E-18	-3.844E-18	-8.489E 06	-8.376E 06	-3.117E-18
0.29687	-3.044E-05	-3.318E-05	-2.118E-18	-2.118E-18	-8.489E 06	-8.376E 06	-1.861E-18
0.20289	-2.668E-05	-2.908E-05	-1.216E-18	-1.216E-18	-8.489E 06	-8.376E 06	-1.199E-18
0.11915	-2.374E-05	-2.588E-05	-6.976E-19	-6.976E-19	-8.489E 06	-8.376E 06	-8.463E-19
0.08503	-2.139E-05	-2.332E-05	-3.998E-19	-3.998E-19	-8.489E 06	-8.376E 06	-6.348E-19

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.015 θ_D= 1.942E-04 ρ_a= 1.258

z	ϕ	z_r	ρ	θ	θ	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0150	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.0150	0.10000	193.643	2.436E-09	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0150	0.20000	172.127	4.690E-09	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0150	0.30000	150.611	8.077E-09	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0150	0.40000	129.095	1.407E-08	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0150	0.50000	107.579	2.376E-08	1.000E 00	-8.045E-07	-8.045E-07	8.044E-07
0.60000	0.0150	0.60000	86.064	4.231E-08	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0150	0.70000	64.548	1.226E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0150	0.80000	43.032	4.486E-07	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0150	0.85000	32.274	1.171E-06	1.000E 00	-1.231E-05	-1.231E-05	1.231E-05
0.90000	0.0150	0.90000	21.516	4.357E-06	1.000E 00	-3.124E-05	-3.125E-05	3.123E-05
0.92500	0.0150	0.92500	16.137	1.055E-05	1.000E 00	-5.757E-05	-5.761E-05	5.755E-05
0.95000	0.0150	0.95000	10.759	3.936E-05	1.000E 00	-1.460E-04	-1.463E-04	1.459E-04
0.96250	0.0150	0.96250	8.069	1.025E-04	1.000E 00	-2.878E-04	-2.886E-04	2.874E-04
0.97500	0.0150	0.97500	5.380	4.550E-04	1.000E 00	-8.717E-04	-8.772E-04	8.697E-04
0.98124	0.0150	0.98125	4.036	1.378E-03	1.001E 00	-2.024E-03	-2.047E-03	2.017E-03
0.98749	0.0150	0.98750	2.692	8.701E-03	1.003E 00	-8.514E-03	-8.733E-03	8.480E-03
0.99373	0.0159	0.99375	1.350	1.283E 00	1.063E 00	-3.492E-01	-3.977E-01	5.155E-01
0.98840	0.0556	1.00000	2.506	1.740E 02	3.667E 00	-1.124E-02	-1.092E-02	1.154E-02
0.98218	0.0942	1.00625	3.849	1.740E 02	6.130E 00	-2.343E-03	-2.314E-03	2.363E-03
0.97597	0.1332	1.01250	5.193	1.740E 02	8.564E 00	-9.810E-04	-9.743E-04	9.853E-04
0.96976	0.1728	1.01875	6.538	1.740E 02	1.097E 01	-5.176E-04	-5.154E-04	5.190E-04
0.96355	0.2128	1.02500	7.882	1.740E 02	1.334E 01	-3.099E-04	-3.090E-04	3.105E-04
0.95112	0.2945	1.03750	10.571	1.740E 02	1.801E 01	-1.512E-04	-1.510E-04	1.514E-04
0.93870	0.3784	1.05000	13.261	1.740E 02	2.256E 01	-9.345E-05	-9.335E-05	9.350E-05
0.91386	0.5529	1.07500	18.640	1.740E 02	3.136E 01	-4.334E-05	-4.332E-05	4.336E-05
0.88903	0.7372	1.10000	24.018	1.740E 02	3.975E 01	-2.435E-05	-2.434E-05	2.436E-05
0.83940	1.1386	1.15000	34.776	1.740E 02	5.544E 01	-1.044E-05	-1.043E-05	1.044E-05
0.78981	1.5903	1.20000	45.534	1.740E 02	6.982E 01	-5.595E-06	-5.595E-06	5.596E-06
0.69082	2.6882	1.30000	67.050	1.740E 02	9.527E 01	-2.326E-06	-2.326E-06	2.326E-06
0.59216	4.1526	1.40000	88.566	1.740E 02	1.171E 02	-1.233E-06	-1.233E-06	1.233E-06
0.49405	6.2704	1.50000	110.082	1.740E 02	1.360E 02	-7.679E-07	-7.679E-07	7.679E-07
0.39688	9.2567	1.60000	131.598	1.740E 02	1.525E 02	-5.147E-07	-5.147E-07	5.147E-07
0.30156	14.2677	1.70000	153.113	1.740E 02	1.671E 02	-3.476E-07	-3.476E-07	3.476E-07
0.21064	23.7406	1.80000	174.629	1.740E 02	1.801E 02	-2.452E-07	-2.452E-07	2.452E-07
0.13340	45.5827	1.90000	196.145	1.740E 02	1.917E 02	-1.730E-07	-1.730E-07	1.730E-07
0.10594	86.7063	2.00000	217.661	1.740E 02	2.021E 02	-1.235E-07	-1.235E-07	1.235E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.015 θ_D= 1.942E-04 ρ_a= 1.258

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.048E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.212E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.307E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-06	424.160	-6.516E-04	-6.517E-04	6.516E-04	6.517E-04	-2.044E-06	-2.045E-06
0.90000	3.126E-06	449.110	-1.143E-03	-1.143E-03	1.143E-03	1.143E-03	-5.189E-06	-5.191E-06
0.92500	5.764E-05	461.585	-1.680E-03	-1.681E-03	1.680E-03	1.681E-03	-9.563E-06	-9.570E-06
0.95000	1.464E-04	474.060	-2.852E-03	-2.853E-03	2.851E-03	2.854E-03	-2.426E-05	-2.429E-05
0.96250	2.891E-04	480.297	-4.116E-03	-4.120E-03	4.114E-03	4.123E-03	-4.780E-05	-4.794E-05
0.97500	8.808E-04	486.534	-7.289E-03	-7.308E-03	7.282E-03	7.320E-03	-1.448E-04	-1.457E-04
0.98124	2.063E-03	489.652	-1.154E-02	-1.160E-02	1.152E-02	1.164E-02	-3.362E-04	-3.400E-04
0.98749	8.922E-03	492.769	-2.483E-02	-2.513E-02	2.475E-02	2.537E-02	-1.414E-03	-1.451E-03
0.99373	6.880E-01	495.884	-2.084E-01	-2.253E-01	2.564E-01	3.006E-01	-5.801E-02	-6.606E-02
0.98840	1.088E-02	493.221	5.133E 00	5.132E 00	9.115E 05	9.190E 05	-1.867E-03	-1.813E-03
0.98218	2.305E-03	490.122	1.133E 01	1.133E 01	9.115E 05	9.190E 05	-3.892E-04	-3.844E-04
0.97597	9.720E-04	487.022	1.755E 01	1.755E 01	9.115E 05	9.190E 05	-1.630E-04	-1.618E-04
0.96976	5.145E-04	483.922	2.376E 01	2.376E 01	9.115E 05	9.190E 05	-8.598E-05	-8.561E-05
0.96355	3.086E-04	480.821	2.998E 01	2.998E 01	9.115E 05	9.190E 05	-5.148E-05	-5.133E-05
0.95112	1.509E-04	474.622	4.242E 01	4.242E 01	9.115E 05	9.190E 05	-2.512E-05	-2.508E-05
0.93870	9.331E-05	468.423	5.485E 01	5.485E 01	9.115E 05	9.190E 05	-1.552E-05	-1.551E-05
0.91386	4.331E-05	456.027	7.972E 01	7.972E 01	9.116E 05	9.190E 05	-7.200E-06	-7.196E-06
0.88903	2.434E-05	443.636	1.046E 02	1.046E 02	9.116E 05	9.191E 05	-4.045E-06	-4.044E-06
0.83940	1.043E-05	418.869	1.543E 02	1.543E 02	9.116E 05	9.191E 05	-1.734E-06	-1.733E-06
0.78981	5.595E-06	394.125	2.040E 02	2.040E 02	9.117E 05	9.192E 05	-9.295E-07	-9.294E-07
0.69082	2.326E-06	344.727	3.033E 02	3.033E 02	9.118E 05	9.193E 05	-3.864E-07	-3.864E-07
0.59216	1.233E-06	295.497	4.024E 02	4.024E 02	9.119E 05	9.194E 05	-2.048E-07	-2.048E-07
0.49405	7.679E-07	246.537	5.013E 02	5.013E 02	9.120E 05	9.195E 05	-1.276E-07	-1.276E-07
0.39688	5.147E-07	198.047	5.997E 02	5.997E 02	9.121E 05	9.196E 05	-8.551E-08	-8.550E-08
0.30156	3.476E-07	150.484	6.971E 02	6.971E 02	9.122E 05	9.197E 05	-5.774E-08	-5.774E-08
0.21064	2.452E-07	105.110	7.924E 02	7.924E 02	9.123E 05	9.197E 05	-4.073E-08	-4.073E-08
0.13340	1.730E-07	66.568	8.809E 02	8.809E 02	9.124E 05	9.198E 05	-2.873E-08	-2.873E-08
0.10594	1.236E-07	52.864	9.445E 02	9.445E 02	9.124E 05	9.199E 05	-2.052E-08	-2.052E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o=0.015 θ_D=1.942E-04 ρ_a=1.258

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.020E-18
0.10000	-3.735E-12	7.814E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-1.368E-18
0.20000	-6.895E-13	-2.988E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-1.957E-18
0.30000	-1.839E-12	-3.126E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-3.076E-18
0.40000	-7.952E-11	-3.402E-11	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-5.207E-18
0.50000	-4.468E-11	-1.414E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-1.042E-17
0.60000	1.531E-12	-4.015E-11	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-2.437E-17
0.70000	-7.381E-11	-3.942E-12	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-7.123E-17
0.80000	5.180E-10	5.208E-10	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-3.226E-16
0.85000	1.294E-09	1.468E-09	-4.335E-16	-4.337E-16	-4.001E-06	-4.002E-06	-9.347E-16
0.90000	6.753E-09	6.434E-09	-1.860E-15	-1.862E-15	-1.103E-05	-1.104E-05	-4.194E-15
0.92500	1.725E-08	1.716E-08	-4.299E-15	-4.305E-15	-2.192E-05	-2.194E-05	-1.279E-14
0.95000	6.841E-08	6.721E-08	-1.706E-14	-1.711E-14	-5.510E-05	-5.520E-05	-5.741E-14
0.96250	1.836E-07	1.843E-07	-4.948E-14	-4.976E-14	-1.094E-04	-1.097E-04	-1.636E-13
0.97500	8.811E-07	8.627E-07	-2.862E-13	-2.899E-13	-3.492E-04	-3.518E-04	-6.150E-13
0.98124	2.781E-06	2.805E-06	-1.121E-12	-1.146E-12	-9.180E-04	-9.309E-04	-1.489E-12
0.98749	1.908E-05	1.961E-05	-1.210E-11	-1.273E-11	-4.813E-03	-4.982E-03	-4.086E-12
0.99373	1.879E-03	2.211E-03	-1.562E-08	-2.062E-08	-1.097E 00	-1.350E 00	-2.863E-11
0.98840	-2.361E-03	-2.533E-03	-1.954E-11	-1.843E-11	-8.140E 06	-8.205E 06	-4.936E-12
0.98218	-1.437E-03	-1.540E-03	-1.417E-12	-1.383E-12	-8.140E 06	-8.205E 06	-1.733E-12
0.97597	-1.026E-03	-1.099E-03	-3.468E-13	-3.421E-13	-8.140E 06	-8.205E 06	-6.808E-13
0.96976	-7.977E-04	-8.651E-04	-1.266E-13	-1.255E-13	-8.140E 06	-8.205E 06	-3.233E-13
0.96355	-6.520E-04	-6.989E-04	-5.577E-14	-5.544E-14	-8.140E 06	-8.205E 06	-1.756E-13
0.95112	-4.775E-04	-5.119E-04	-1.803E-14	-1.797E-14	-8.140E 06	-8.205E 06	-6.174E-14
0.93870	-3.766E-04	-4.037E-04	-8.512E-15	-8.494E-15	-8.140E 06	-8.205E 06	-2.564E-14
0.91386	-2.648E-04	-2.838E-04	-2.915E-15	-2.912E-15	-8.140E 06	-8.205E 06	-7.163E-15
0.88903	-2.041E-04	-2.188E-04	-1.282E-15	-1.281E-15	-8.140E 06	-8.205E 06	-2.785E-15
0.83940	-1.400E-04	-1.501E-04	-3.398E-16	-3.397E-16	-8.140E 06	-8.205E 06	-7.053E-16
0.78981	-1.065E-04	-1.142E-04	-1.352E-16	-1.352E-16	-8.140E 06	-8.205E 06	-2.610E-16
0.69082	-7.207E-05	-7.725E-05	-3.608E-17	-3.608E-17	-8.140E 06	-8.205E 06	-6.160E-17
0.59216	-5.445E-05	-5.837E-05	-1.415E-17	-1.415E-17	-8.140E 06	-8.205E 06	-2.188E-17
0.49405	-4.376E-05	-4.691E-05	-7.024E-18	-7.024E-18	-8.140E 06	-8.205E 06	-9.529E-18
0.39688	-3.657E-05	-3.921E-05	-3.844E-18	-3.844E-18	-8.140E 06	-8.205E 06	-4.870E-18
0.30156	-3.142E-05	-3.368E-05	-2.118E-18	-2.118E-18	-8.140E 06	-8.205E 06	-2.908E-18
0.21064	-2.753E-05	-2.951E-05	-1.216E-18	-1.216E-18	-8.140E 06	-8.205E 06	-1.873E-18
0.13340	-2.451E-05	-2.627E-05	-6.976E-19	-6.976E-19	-8.140E 06	-8.205E 06	-1.322E-18
0.10594	-2.208E-05	-2.367E-05	-3.999E-19	-3.999E-19	-8.140E 06	-8.205E 06	-9.919E-19

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.020 θ_D= 2.586E-04 ρ_a= 1.259

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0200	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.0200	0.10000	193.643	3.856E-09	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0200	0.20000	172.127	7.348E-09	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0200	0.30000	150.611	1.178E-08	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0200	0.40000	129.095	2.064E-08	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0200	0.50000	107.579	3.418E-08	1.000E 00	-8.045E-07	-8.045E-07	8.044E-07
0.60000	0.0200	0.60000	86.064	6.[illegible]16E-08	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0200	0.70000	64.548	1.722E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0200	0.80000	43.032	6.328E-07	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0200	0.85000	32.274	1.636E-06	1.000E 00	-1.231E-05	-1.231E-05	1.231E-05
0.90000	0.0200	0.90000	21.516	6.071E-06	1.000E 00	-3.124E-05	-3.125E-05	3.123E-05
0.92500	0.0200	0.92500	16.137	1.470E-05	1.000E 00	-5.757E-05	-5.761E-05	5.755E-05
0.95000	0.0200	0.95000	10.759	5.457E-05	1.000E 00	-1.460E-04	-1.462E-04	1.459E-04
0.96250	0.0200	0.96250	8.070	1.417E-04	1.000E 00	-2.877E-04	-2.886E-04	2.874E-04
0.97499	0.0200	0.97500	5.381	6.234E-04	1.000E 00	-8.715E-04	-8.771E-04	8.695E-04
0.98124	0.0200	0.98125	4.036	1.876E-03	1.001E 00	-2.023E-03	-2.046E-03	2.016E-03
0.98749	0.0200	0.98750	2.693	1.172E-02	1.002E 00	-8.505E-03	-8.723E-03	8.471E-03
0.99373	0.0212	0.99375	1.352	1.684E 00	1.060E 00	-3.458E-01	-3.934E-01	5.078E-01
0.98844	0.0740	1.00000	2.502	1.719E 02	3.662E 00	-1.130E-02	-1.097E-02	1.159E-02
0.98226	0.1253	1.00625	3.845	1.720E 02	6.130E 00	-2.352E-03	-2.323E-03	2.372E-03
0.97608	0.1773	1.01250	5.190	1.720E 02	8.567E 00	-9.833E-04	-9.766E-04	9.876E-04
0.96989	0.2300	1.01875	6.534	1.720E 02	1.097E 01	-5.183E-04	-5.161E-04	5.197E-04
0.96371	0.2833	1.02500	7.878	1.720E 02	1.335E 01	-3.104E-04	-3.095E-04	3.109E-04
0.95134	0.3921	1.03750	10.568	1.720E 02	1.802E 01	-1.513E-04	-1.511E-04	1.515E-04
0.93898	0.5037	1.05000	13.257	1.720E 02	2.258E 01	-9.351E-05	-9.342E-05	9.357E-05
0.91426	0.7360	1.07500	18.636	1.720E 02	3.139E 01	-4.336E-05	-4.334E-05	4.338E-05
0.88956	0.9812	1.10000	24.014	1.720E 02	3.979E 01	-2.436E-05	-2.435E-05	2.437E-05
0.84022	1.5149	1.15000	34.772	1.720E 02	5.550E 01	-1.044E-05	-1.044E-05	1.044E-05
0.79095	2.1151	1.20000	45.530	1.720E 02	6.990E 01	-5.597E-06	-5.596E-06	5.597E-06
0.69274	3.5712	1.30000	67.046	1.720E 02	9.537E 01	-2.327E-06	-2.326E-06	2.327E-06
0.59512	5.5066	1.40000	88.562	1.720E 02	1.172E 02	-1.233E-06	-1.233E-06	1.233E-06
0.49844	8.1969	1.50000	110.078	1.720E 02	1.361E 02	-7.680E-07	-7.679E-07	7.680E-07
0.40339	12.1677	1.60000	131.594	1.720E 02	1.527E 02	-5.148E-07	-5.148E-07	5.148E-07
0.31145	18.5303	1.70000	153.109	1.720E 02	1.673E 02	-3.476E-07	-3.476E-07	3.476E-07
0.22646	29.9155	1.80000	174.625	1.720E 02	1.803E 02	-2.452E-07	-2.452E-07	2.452E-07
0.15989	52.5306	1.90000	196.141	1.720E 02	1.919E 02	-1.730E-07	-1.730E-07	1.730E-07
0.14087	89.2875	2.00000	217.657	1.720E 02	2.024E 02	-1.235E-07	-1.235E-07	1.235E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.020 θ_D= 2.586E-04 ρ_a= 1.259

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.307E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.517E-04	6.516E-04	6.517E-04	-2.044E-06	-2.045E-06
0.90000	3.126E-05	449.110	-1.143E-03	-1.143E-03	1.143E-03	1.143E-03	-5.189E-06	-5.191E-06
0.92500	5.763E-05	461.585	-1.680E-03	-1.681E-03	1.680E-03	1.681E-03	-9.563E-06	-9.570E-06
0.95000	1.464E-04	474.060	-2.852E-03	-2.853E-03	2.851E-03	2.854E-03	-2.426E-05	-2.429E-05
0.96250	2.890E-04	480.297	-4.116E-03	-4.120E-03	4.114E-03	4.123E-03	-4.780E-05	-4.793E-05
0.97499	8.806E-04	486.534	-7.288E-03	-7.307E-03	7.281E-03	7.319E-03	-1.448E-04	-1.457E-04
0.98124	2.062E-03	489.652	-1.154E-02	-1.160E-02	1.152E-02	1.163E-02	-3.361E-04	-3.399E-04
0.98749	8.912E-03	492.769	-2.481E-02	-2.512E-02	2.474E-02	2.536E-02	-1.413E-03	-1.449E-03
0.99373	6.757E-01	495.882	-2.057E-01	-2.223E-01	2.563E-01	2.997E-01	-5.744E-02	-6.534E-02
0.98844	1.093E-02	493.244	5.107E 00	5.106E 00	8.744E 05	8.602E 05	-1.876E-03	-1.822E-03
0.98226	2.314E-03	490.159	1.129E 01	1.129E 01	8.745E 05	8.602E 05	-3.907E-04	-3.859E-04
0.97608	9.743E-04	487.073	1.749E 01	1.749E 01	8.745E 05	8.602E 05	-1.633E-04	-1.622E-04
0.96989	5.153E-04	483.987	2.370E 01	2.370E 01	8.745E 05	8.602E 05	-8.611E-05	-8.574E-05
0.96371	3.091E-04	480.901	2.990E 01	2.990E 01	8.745E 05	8.602E 05	-5.156E-05	-5.141E-05
0.95134	1.510E-04	474.730	4.231E 01	4.231E 01	8.745E 05	8.602E 05	-2.514E-05	-2.510E-05
0.93898	9.338E-05	468.561	5.471E 01	5.471E 01	8.745E 05	8.602E 05	-1.553E-05	-1.552E-05
0.91426	4.333E-05	456.227	7.952E 01	7.952E 01	8.745E 05	8.602E 05	-7.203E-06	-7.200E-06
0.88956	2.435E-05	443.902	1.043E 02	1.043E 02	8.745E 05	8.603E 05	-4.047E-06	-4.045E-06
0.84022	1.044E-05	419.277	1.539E 02	1.539E 02	8.746E 05	8.603E 05	-1.734E-06	-1.734E-06
0.79095	5.596E-06	394.693	2.034E 02	2.034E 02	8.746E 05	8.604E 05	-9.297E-07	-9.296E-07
0.69274	2.326E-06	345.683	3.023E 02	3.023E 02	8.747E 05	8.605E 05	-3.865E-07	-3.865E-07
0.59512	1.233E-06	296.970	4.010E 02	4.010E 02	8.748E 05	8.606E 05	-2.048E-07	-2.048E-07
0.49844	7.679E-07	248.728	4.991E 02	4.991E 02	8.749E 05	8.607E 05	-1.276E-07	-1.276E-07
0.40339	5.148E-07	201.296	5.964E 02	5.964E 02	8.750E 05	8.608E 05	-8.551E-08	-8.551E-08
0.31145	3.476E-07	155.419	6.922E 02	6.922E 02	8.751E 05	8.609E 05	-5.775E-08	-5.774E-08
0.22646	2.452E-07	113.[illegible]05	7.845E 02	7.845E 02	8.752E 05	8.609E 05	-4.073E-08	-4.073E-08
0.15989	1.730E-07	79.785	8.676E 02	8.676E 02	8.753E 05	8.610E 05	-2.874E-08	-2.874E-08
0.14087	1.235E-07	70.294	9.270E 02	9.270E 02	8.754E 05	8.611E 05	-2.052E-08	-2.052E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.020 θ_D= 2.586E-04 ρ_a= 1.259

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.813E-18
0.10000	-2.891E-12	5.333E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-2.432E-18
0.20000	8.957E-13	-2.312E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-3.479E-18
0.30000	2.389E-12	-2.133E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-5.468E-18
0.40000	-5.154E-11	-1.775E-11	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-9.257E-18
0.50000	-1.628E-11	-8.885E-11	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-1.853E-17
0.60000	3.930E-11	1.086E-11	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-4.333E-17
0.70000	6.049E-11	1.113E-10	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-1.266E-16
0.80000	8.755E-10	8.719E-10	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-5.735E-16
0.85000	2.283E-09	2.406E-09	-4.335E-16	-4.337E-16	-4.001E-06	-4.002E-06	-1.662E-15
0.90000	1.017E-08	9.920E-09	-1.860E-15	-1.862E-15	-1.103E-05	-1.104E-05	-7.456E-15
0.92500	2.559E-08	2.549E-08	-4.299E-15	-4.305E-15	-2.192E-05	-2.194E-05	-2.273E-14
0.95000	1.001E-07	9.920E-08	-1.706E-14	-1.711E-14	-5.510E-05	-5.520E-05	-1.021E-13
0.96250	2.689E-07	2.696E-07	-4.947E-14	-4.975E-14	-1.094E-04	-1.097E-04	-2.908E-13
0.97499	1.283E-06	1.288E-06	-2.861E-13	-2.898E-13	-3.491E-04	-3.517E-04	-1.093E-12
0.98124	4.041E-06	4.084E-06	-1.120E-12	-1.146E-12	-9.177E-04	-9.306E-04	-2.646E-12
0.98749	2.729E-05	2.810E-05	-1.208E-11	-1.271E-11	-4.808E-03	-4.976E-03	-7.258E-12
0.99373	2.558E-03	2.995E-03	-1.531E-08	-2.015E-08	-1.080E 00	-1.328E 00	-5.001E-11
0.98844	-2.476E-03	-2.589E-03	-1.970E-11	-1.857E-11	-7.816E 06	-7.693E 06	-8.810E-12
0.98226	-1.511E-03	-1.578E-03	-1.426E-12	-1.391E-12	-7.816E 06	-7.693E 06	-3.086E-12
0.97608	-1.079E-03	-1.127E-03	-3.481E-13	-3.434E-13	-7.816E 06	-7.693E 06	-1.213E-12
0.96989	-8.392E-04	-8.764E-04	-1.269E-13	-1.258E-13	-7.816E 06	-7.693E 06	-5.759E-13
0.96371	-6.859E-04	-7.164E-04	-5.590E-14	-5.557E-14	-7.816E 06	-7.693E 06	-3.126E-13
0.95134	-5.023E-04	-5.246E-04	-1.805E-14	-1.799E-14	-7.816E 06	-7.693E 06	-1.099E-13
0.93898	-3.962E-04	-4.137E-04	-8.521E-15	-8.503E-15	-7.816E 06	-7.693E 06	-4.562E-14
0.91426	-2.785E-04	-2.908E-04	-2.917E-15	-2.913E-15	-7.816E 06	-7.693E 06	-1.275E-14
0.88956	-2.147E-04	-2.242E-04	-1.282E-15	-1.282E-15	-7.816E 06	-7.693E 06	-4.954E-15
0.84022	-1.472E-04	-1.538E-04	-3.399E-16	-3.398E-16	-7.816E 06	-7.693E 06	-1.254E-15
0.79095	-1.120E-04	-1.170E-04	-1.353E-16	-1.353E-16	-7.816E 06	-7.693E 06	-4.642E-16
0.69274	-7.579E-05	-7.915E-05	-3.609E-17	-3.608E-17	-7.816E 06	-7.693E 06	-1.095E-16
0.59512	-5.727E-05	-5.981E-05	-1.415E-17	-1.415E-17	-7.816E 06	-7.693E 06	-3.891E-17
0.49844	-4.602E-05	-4.806E-05	-7.025E-18	-7.025E-18	-7.816E 06	-7.693E 06	-1.694E-17
0.40339	-3.846E-05	-4.017E-05	-3.845E-18	-3.845E-18	-7.816E 06	-7.693E 06	-8.660E-18
0.31145	-3.304E-05	-3.451E-05	-2.119E-18	-2.119E-18	-7.816E 06	-7.693E 06	-5.169E-18
0.22646	-2.896E-05	-3.024E-05	-1.216E-18	-1.216E-18	-7.816E 06	-7.693E 06	-3.330E-18
0.15989	-2.577E-05	-2.691E-05	-6.977E-19	-6.977E-19	-7.816E 06	-7.693E 06	-2.351E-18
0.14087	-2.322E-05	-2.425E-05	-3.999E-19	-3.999E-19	-7.816E 06	-7.693E 06	-1.763E-18

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.025 θ_D= 3.232E-04 ρ_a= 1.259

z	ϕ	z_r	ρ	ϑ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0250	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.0250	0.10000	193.643	5.029E-09	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0250	0.20000	172.127	8.129E-09	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0250	0.30000	150.611	1.407E-08	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0250	0.40000	129.095	2.501E-08	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0250	0.50000	107.579	4.148E-08	1.000E 00	-8.045E-07	-8.045E-07	8.044E-07
0.60000	0.0250	0.60000	86.064	7.129E-08	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0250	0.70000	64.648	2.068E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0250	0.80000	43.032	7.521E-07	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0250	0.85000	32.274	1.963E-06	1.000E 00	-1.231E-05	-1.231E-05	1.231E-05
0.90000	0.0250	0.90000	21.516	7.304E-06	1.000E 00	-3.124E-05	-3.125E-05	3.123E-05
0.92500	0.0250	0.92500	16.137	1.768E-05	1.000E 00	-5.757E-05	-5.761E-05	5.755E-05
0.95000	0.0250	0.95000	10.759	6.588E-05	1.000E 00	-1.460E-04	-1.462E-04	1.459E-04
0.96250	0.0250	0.96250	8.070	1.716E-04	1.000E 00	-2.877E-04	-2.885E-04	2.874E-04
0.97500	0.0250	0.97500	5.381	7.604E-04	1.000E 00	-8.715E-04	-8.770E-04	8.695E-04
0.98124	0.0250	0.98125	4.037	2.300E-03	1.001E 00	-2.023E-03	-2.046E-03	2.016E-03
0.98749	0.0251	0.98750	2.693	1.450E-02	1.002E 00	-8.502E-03	-8.720E-03	8.468E-03
0.99373	0.0265	0.99375	1.352	2.090E 00	1.058E 00	-3.444E-01	-3.915E-01	5.047E-01
0.98849	0.0922	1.00000	2.500	1.699E 02	3.659E 00	-1.133E-02	-1.100E-02	1.163E-02
0.98234	0.1563	1.00625	3.843	1.699E 02	6.132E 00	-2.357E-03	-2.328E-03	2.377E-03
0.97619	0.2212	1.01250	5.187	1.699E 02	8.572E 00	-9.846E-04	-9.779E-04	9.889E-04
0.97005	0.2868	1.01875	6.532	1.699E 02	1.098E 01	-5.188E-04	-5.165E-04	5.201E-04
0.96390	0.3534	1.02500	7.876	1.699E 02	1.336E 01	-3.106E-04	-3.097E-04	3.112E-04
0.95161	0.4890	1.03750	10.565	1.699E 02	1.804E 01	-1.514E-04	-1.511E-04	1.515E-04
0.93932	0.6282	1.05000	13.255	1.699E 02	2.261E 01	-9.355E-05	-9.345E-05	9.361E-05
0.91476	0.9177	1.07500	18.633	1.699E 02	3.142E 01	-4.337E-05	-4.335E-05	4.339E-05
0.89023	1.2232	1.10000	24.012	1.699E 02	3.983E 01	-2.437E-05	-2.436E-05	2.437E-05
0.84125	1.8877	1.15000	34.770	1.699E 02	5.556E 01	-1.044E-05	-1.044E-05	1.044E-05
0.79239	2.6343	1.20000	45.528	1.699E 02	6.998E 01	-5.597E-06	-5.597E-06	5.597E-06
0.69517	4.4413	1.30000	67.044	1.699E 02	9.548E 01	-2.327E-06	-2.327E-06	2.327E-06
0.59886	6.8326	1.40000	88.560	1.699E 02	1.173E 02	-1.233E-06	-1.233E-06	1.233E-06
0.50400	10.1319	1.50000	110.076	1.699E 02	1.363E 02	-7.680E-07	-7.680E-07	7.680E-07
0.41157	14.9354	1.60000	131.591	1.699E 02	1.529E 02	-5.148E-07	-5.148E-07	5.148E-07
0.32368	22.4277	1.70000	153.107	1.699E 02	1.675E 02	-3.476E-07	-3.476E-07	3.476E-07
0.24524	35.0678	1.80000	174.623	1.699E 02	1.805E 02	-2.452E-07	-2.452E-07	2.452E-07
0.18847	57.1429	1.90000	196.139	1.699E 02	1.921E 02	-1.730E-07	-1.730E-07	1.730E-07
0.17577	88.7668	2.00000	217.655	1.699E 02	2.026E 02	-1.235E-07	-1.235E-07	1.235E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.025 θ_D= 3.232E-04 ρ_a= 1.259

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.307E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.517E-04	6.516E-04	6.517E-04	-2.044E-06	-2.045E-06
0.90000	3.126E-05	449.110	-1.143E-03	-1.143E-03	1.143E-03	1.143E-03	-5.189E-06	-5.191E-06
0.92500	5.763E-05	461.585	-1.680E-03	-1.681E-03	1.680E-03	1.681E-03	-9.563E-06	-9.570E-06
0.95000	1.464E-04	474.060	-2.852E-03	-2.853E-03	2.851E-03	2.854E-03	-2.426E-05	-2.429E-05
0.96250	2.890E-04	480.297	-4.116E-03	-4.120E-03	4.114E-03	4.123E-03	-4.780E-05	-4.793E-05
0.97500	8.806E-04	486.534	-7.288E-03	-7.307E-03	7.281E-03	7.319E-03	-1.448E-04	-1.457E-04
0.98124	2.062E-03	489.652	-1.154E-02	-1.160E-02	1.152E-02	1.163E-02	-3.360E-04	-3.398E-04
0.98749	8.909E-03	492.769	-2.481E-02	-2.511E-02	2.474E-02	2.535E-02	-1.412E-03	-1.448E-03
0.99373	6.705E-01	495.883	-2.066E-01	-2.232E-01	2.542E-01	2.974E-01	-5.721E-02	-6.504E-02
0.98849	1.096E-02	493.269	5.080E 00	5.079E 00	8.084E 05	8.014E 05	-1.882E-03	-1.827E-03
0.98234	2.319E-03	490.201	1.125E 01	1.125E 01	8.084E 05	8.014E 05	-3.915E-04	-3.867E-04
0.97619	9.756E-04	487.132	1.743E 01	1.743E 01	8.084E 05	8.015E 05	-1.636E-04	-1.624E-04
0.97005	5.157E-04	484.064	2.362E 01	2.362E 01	8.085E 05	8.015E 05	-8.617E-05	-8.581E-05
0.96390	3.093E-04	480.996	2.980E 01	2.980E 01	8.085E 05	8.015E 05	-5.160E-05	-5.145E-05
0.95161	1.510E-04	474.862	4.217E 01	4.217E 01	8.085E 05	8.015E 05	-2.515E-05	-2.511E-05
0.93932	9.341E-05	468.731	5.454E 01	5.454E 01	8.085E 05	8.015E 05	-1.554E-05	-1.552E-05
0.91476	4.334E-05	456.477	7.927E 01	7.927E 01	8.085E 05	8.015E 05	-7.205E-06	-7.201E-06
0.89023	2.435E-05	444.235	1.040E 02	1.040E 02	8.085E 05	8.015E 05	-4.047E-06	-4.046E-06
0.84125	1.044E-05	419.793	1.534E 02	1.534E 02	8.086E 05	8.016E 05	-1.734E-06	-1.734E-06
0.79239	5.596E-06	395.413	2.027E 02	2.027E 02	8.086E 05	8.016E 05	-9.298E-07	-9.297E-07
0.69517	2.327E-06	346.898	3.011E 02	3.011E 02	8.087E 05	8.017E 05	-3.865E-07	-3.865E-07
0.59886	1.233E-06	298.841	3.991E 02	3.991E 02	8.088E 05	8.018E 05	-2.048E-07	-2.048E-07
0.50400	7.680E-07	251.501	4.963E 02	4.963E 02	8.089E 05	8.019E 05	-1.276E-07	-1.276E-07
0.41157	5.148E-07	205.379	5.923E 02	5.923E 02	8.090E 05	8.020E 05	-8.552E-08	-8.551E-08
0.32368	3.476E-07	161.519	6.861E 02	6.861E 02	8.091E 05	8.021E 05	-5.775E-08	-5.775E-08
0.24524	2.452E-07	122.378	7.752E 02	7.751E 02	8.092E 05	8.022E 05	-4.074E-08	-4.074E-08
0.18847	1.730E-07	94.047	8.534E 02	8.534E 02	8.093E 05	8.023E 05	-2.874E-08	-2.874E-08
0.17577	1.235E-07	87.712	9.096E 02	9.096E 02	8.093E 05	8.023E 05	-2.052E-08	-2.052E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.025 θ_D= 3.232E-04 ρ_a= 1.259

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.833E-18
0.10000	-2.046E-12	2.852E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-3.800E-18
0.20000	2.481E-12	-1.637E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-5.435E-18
0.30000	6.616E-12	-1.141E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-8.544E-18
0.40000	-2.356E-11	-1.485E-12	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-1.446E-17
0.50000	1.211E-11	-3.630E-11	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-2.895E-17
0.60000	7.707E-11	6.186E-11	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-6.770E-17
0.70000	1.948E-10	2.265E-10	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-1.979E-16
0.80000	1.233E-09	1.223E-09	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-8.961E-16
0.85000	3.271E-09	3.344E-09	-4.335E-16	-4.337E-16	-4.001E-06	-4.002E-06	-2.596E-15
0.90000	1.358E-08	1.341E-08	-1.860E-15	-1.862E-15	-1.103E-05	-1.104E-05	-1.165E-14
0.92500	3.394E-08	3.381E-08	-4.299E-15	-4.305E-15	-2.192E-05	-2.194E-05	-3.552E-14
0.95000	1.319E-07	1.312E-07	-1.706E-14	-1.711E-14	-5.510E-05	-5.520E-05	-1.595E-13
0.96250	3.542E-07	3.550E-07	-4.947E-14	-4.975E-14	-1.094E-04	-1.097E-04	-4.544E-13
0.97500	1.684E-06	1.693E-06	-2.861E-13	-2.897E-13	-3.491E-04	-3.517E-04	-1.708E-12
0.98124	5.301E-06	5.364E-06	-1.120E-12	-1.146E-12	-9.176E-04	-9.305E-04	-4.134E-12
0.98749	3.551E-05	3.660E-05	-1.207E-11	-1.270E-11	-4.806E-03	-4.974E-03	-1.134E-11
0.99373	3.242E-03	3.785E-03	-1.518E-08	-1.995E-08	-1.074E 00	-1.319E 00	-7.756E-11
0.98849	-2.590E-03	-2.644E-03	-1.979E-11	-1.866E-11	-7.232E 06	-7.176E 06	-1.380E-11
0.98234	-1.585E-03	-1.616E-03	-1.432E-12	-1.396E-12	-7.232E 06	-7.176E 06	-4.827E-12
0.97619	-1.132E-03	-1.154E-03	-3.489E-13	-3.442E-13	-7.232E 06	-7.176E 06	-1.897E-12
0.97005	-8.804E-04	-8.975E-04	-1.271E-13	-1.260E-13	-7.232E 06	-7.176E 06	-9.009E-13
0.96390	-7.196E-04	-7.336E-04	-5.597E-14	-5.564E-14	-7.232E 06	-7.176E 06	-4.888E-13
0.95161	-5.270E-04	-5.372E-04	-1.806E-14	-1.800E-14	-7.232E 06	-7.176E 06	-1.719E-13
0.93932	-4.156E-04	-4.237E-04	-8.526E-15	-8.508E-15	-7.232E 06	-7.176E 06	-7.133E-14
0.91476	-2.921E-04	-2.978E-04	-2.918E-15	-2.914E-15	-7.232E 06	-7.176E 06	-1.992E-14
0.89023	-2.252E-04	-2.296E-04	-1.283E-15	-1.282E-15	-7.232E 06	-7.176E 06	-7.743E-15
0.84125	-1.545E-04	-1.575E-04	-3.400E-16	-3.399E-16	-7.232E 06	-7.176E 06	-1.960E-15
0.79239	-1.175E-04	-1.198E-04	-1.353E-16	-1.353E-16	-7.232E 06	-7.176E 06	-7.255E-16
0.69517	-7.950E-05	-8.105E-05	-3.609E-17	-3.609E-17	-7.232E 06	-7.176E 06	-1.712E-16
0.59886	-6.007E-05	-6.124E-05	-1.415E-17	-1.415E-17	-7.232E 06	-7.176E 06	-6.080E-17
0.50400	-4.827E-05	-4.921E-05	-7.025E-18	-7.025E-18	-7.232E 06	-7.176E 06	-2.647E-17
0.41157	-4.035E-05	-4.113E-05	-3.845E-18	-3.845E-18	-7.232E 06	-7.176E 06	-1.353E-17
0.32368	-3.466E-05	-3.533E-05	-2.119E-18	-2.119E-18	-7.232E 06	-7.176E 06	-8.078E-18
0.24524	-3.037E-05	-3.096E-05	-1.216E-18	-1.216E-18	-7.232E 06	-7.176E 06	-5.203E-18
0.18847	-2.703E-05	-2.756E-05	-6.977E-19	-6.977E-19	-7.232E 06	-7.176E 06	-3.673E-18
0.17577	-2.435E-05	-2.483E-05	-3.999E-19	-3.999E-19	-7.232E 06	-7.176E 06	-2.755E-18

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.030 θ_0= 3.880E-04 ρ_0= 1.259

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0300	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.0300	0.10000	193.643	6.566E-09	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0300	0.20000	172.127	1.063E-08	1.000E-00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0300	0.30000	150.611	1.709E-08	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0300	0.40000	129.095	2.981E-08	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0300	0.50000	107.579	4.961E-08	1.000E 00	-8.045E-07	-8.045E-07	8.044E-07
0.60000	0.0300	0.60000	86.064	8.421E-08	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0300	0.70000	64.548	2.418E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0300	0.80000	43.032	8.888E-07	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0300	0.85000	32.274	2.303E-06	1.000E 00	-1.231E-05	-1.231E-05	1.231E-05
0.90000	0.0300	0.90000	21.516	8.588E-06	1.000E 00	-3.124E-05	-3.125E-05	3.123E-05
0.92500	0.0300	0.92500	16.138	2.081E-05	1.000E 00	-5.757E-05	-5.761E-05	5.755E-05
0.95000	0.0300	0.95000	10.759	7.766E-05	1.000E 00	-1.460E-04	-1.462E-04	1.459E-04
0.96250	0.0300	0.96250	8.070	2.025E-04	1.000E 00	-2.877E-04	-2.885E-04	2.874E-04
0.97500	0.0300	0.97500	5.381	9.011E-04	1.000E 00	-8.713E-04	-8.769E-04	8.693E-04
0.98124	0.0300	0.98125	4.037	2.733E-03	1.001E 00	-2.022E-03	-2.045E-03	2.015E-03
0.98749	0.0301	0.98750	2.694	1.729E-02	1.002E 00	-8.495E-03	-8.713E-03	8.462E-03
0.99373	0.0318	0.99375	1.354	2.476E 00	1.056E 00	-3.418E-01	-3.883E-01	4.990E-01
0.98856	0.1103	1.00000	2.496	1.679E 02	3.655E 00	-1.139E-02	-1.106E-02	1.169E-02
0.98245	0.1870	1.00625	3.839	1.679E 02	6.131E 00	-2.368E-03	-2.338E-03	2.388E-03
0.97635	0.2647	1.01250	5.183	1.679E 02	8.574E 00	-9.874E-04	-9.806E-04	9.917E-04
0.97024	0.3433	1.01875	6.527	1.679E 02	1.099E 01	-5.196E-04	-5.174E-04	5.210E-04
0.96414	0.4230	1.02500	7.872	1.679E 02	1.337E 01	-3.112E-04	-3.102E-04	3.117E-04
0.95194	0.5853	1.03750	10.561	1.679E 02	1.806E 01	-1.515E-04	-1.513E-04	1.517E-04
0.93975	0.7518	1.05000	13.250	1.679E 02	2.263E 01	-9.363E-05	-9.353E-05	9.368E-05
0.91538	1.0982	1.07500	18.629	1.679E 02	3.145E 01	-4.340E-05	-4.337E-05	4.341E-05
0.89106	1.4636	1.10000	24.008	1.679E 02	3.987E 01	-2.438E-05	-2.437E-05	2.438E-05
0.84252	2.2575	1.15000	34.765	1.679E 02	5.562E 01	-1.044E-05	-1.044E-05	1.044E-05
0.79416	3.1482	1.20000	45.523	1.679E 02	7.005E 01	-5.599E-06	-5.598E-06	5.599E-06
0.69815	5.2985	1.30000	67.039	1.679E 02	9.559E 01	-2.327E-06	-2.327E-06	2.327E-06
0.60343	8.1291	1.40000	88.555	1.679E 02	1.175E 02	-1.233E-06	-1.233E-06	1.233E-06
0.51072	11.9997	1.50000	110.071	1.679E 02	1.364E 02	-7.681E-07	-7.680E-07	7.681E-07
0.42137	17.5471	1.60000	131.587	1.679E 02	1.530E 02	-5.148E-07	-5.148E-07	5.148E-07
0.33803	25.9456	1.70000	153.103	1.679E 02	1.677E 02	-3.477E-07	-3.477E-07	3.477E-07
0.26642	39.3018	1.80000	174.618	1.679E 02	1.807E 02	-2.452E-07	-2.452E-07	2.452E-07
0.21838	60.2524	1.90000	196.134	1.679E 02	1.924E 02	-1.730E-07	-1.730E-07	1.730E-07
0.21073	87.1282	2.00000	217.650	1.679E 02	2.028E 02	-1.235E-07	-1.235E-07	1.235E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.030 θ_0= 3.880E-04 ρ_0= 1.259

z	$_x\mu'$-1.0	T_o	$_oT_1$-T_o	$_xT_1$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.046E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.307E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.517E-04	6.516E-04	6.517E-04	-2.044E-06	-2.045E-06
0.90000	3.126E-05	449.110	-1.143E-03	-1.143E-03	1.143E-03	1.143E-03	-5.189E-06	-5.191E-06
0.92500	5.763E-05	461.585	-1.680E-03	-1.681E-03	1.680E-03	1.681E-03	-9.563E-06	-9.570E-06
0.95000	1.464E-04	474.060	-2.852E-03	-2.853E-03	2.851E-03	2.854E-03	-2.425E-05	-2.429E-05
0.96250	2.890E-04	480.297	-4.116E-03	-4.120E-03	4.114E-03	4.123E-03	-4.779E-05	-4.793E-05
0.97500	8.804E-04	486.534	-7.288E-03	-7.307E-03	7.281E-03	7.319E-03	-1.447E-04	-1.457E-04
0.98124	2.061E-03	489.652	-1.154E-02	-1.160E-02	1.152E-02	1.163E-02	-3.360E-04	-3.398E-04
0.98749	8.902E-03	492.770	-2.480E-02	-2.510E-02	2.473E-02	2.536E-02	-1.411E-03	-1.447E-03
0.99373	6.613E-01	495.884	-2.064E-01	-2.229E-01	2.523E-01	2.950E-01	-5.678E-02	-6.450E-02
0.98856	1.102E-02	493.302	5.044E 00	5.044E 00	7.350E 05	7.366E 05	-1.891E-03	-1.836E-03
0.98245	2.329E-03	490.255	1.119E 01	1.119E 01	7.350E 05	7.366E 05	-3.933E-04	-3.884E-04
0.97635	9.783E-04	487.209	1.735E 01	1.735E 01	7.350E 05	7.367E 05	-1.640E-04	-1.629E-04
0.97024	5.166E-04	484.162	2.352E 01	2.352E 01	7.350E 05	7.367E 05	-8.632E-05	-8.595E-05
0.96414	3.099E-04	481.117	2.968E 01	2.968E 01	7.350E 05	7.367E 05	-5.169E-05	-5.154E-05
0.95194	1.512E-04	475.029	4.200E 01	4.200E 01	7.350E 05	7.367E 05	-2.517E-05	-2.513E-05
0.93975	9.349E-05	468.944	5.433E 01	5.433E 01	7.350E 05	7.367E 05	-1.555E-05	-1.554E-05
0.91538	4.336E-05	456.787	7.896E 01	7.896E 01	7.350E 05	7.367E 05	-7.209E-06	-7.205E-06
0.89106	2.436E-05	444.647	1.036E 02	1.036E 02	7.351E 05	7.367E 05	-4.049E-06	-4.048E-06
0.84252	1.044E-05	420.427	1.527E 02	1.527E 02	7.351E 05	7.368E 05	-1.735E-06	-1.734E-06
0.79416	5.598E-06	396.297	2.018E 02	2.018E 02	7.352E 05	7.368E 05	-9.300E-07	-9.299E-07
0.69815	2.327E-06	348.383	2.996E 02	2.996E 02	7.353E 05	7.369E 05	-3.866E-07	-3.865E-07
0.60343	1.233E-06	301.117	3.968E 02	3.968E 02	7.353E 05	7.370E 05	-2.049E-07	-2.048E-07
0.51072	7.680E-07	254.856	4.930E 02	4.930E 02	7.354E 05	7.371E 05	-1.276E-07	-1.276E-07
0.42137	5.148E-07	210.267	5.875E 02	5.875E 02	7.355E 05	7.372E 05	-8.552E-08	-8.552E-08
0.33803	3.477E-07	168.681	6.789E 02	6.789E 02	7.356E 05	7.373E 05	-5.775E-08	-5.775E-08
0.26642	2.452E-07	132.945	7.646E 02	7.646E 02	7.357E 05	7.374E 05	-4.074E-08	-4.074E-08
0.21838	1.730E-07	108.977	8.385E 02	8.385E 02	7.358E 05	7.375E 05	-2.874E-08	-2.874E-08
0.21073	1.235E-07	105.155	8.922E 02	8.922E 02	7.358E 05	7.375E 05	-2.052E-08	-2.052E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o=0.030 θ_D=3.880E-04 ρ_a=1.259

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-4.079E-18
0.10000	-0.	7.972E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-5.472E-18
0.20000	3.698E-12	-1.202E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-7.827E-18
0.30000	9.708E-12	-6.141E-13	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-1.230E-17
0.40000	6.014E-12	2.173E-11	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-2.083E-17
0.50000	6.564E-11	2.774E-11	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-4.169E-17
0.60000	1.063E-10	1.168E-10	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-9.748E-17
0.70000	3.513E-10	3.149E-10	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-2.849E-16
0.80000	1.556E-09	1.621E-09	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-1.290E-15
0.85000	4.383E-09	4.384E-09	-4.335E-16	-4.337E-16	-4.001E-06	-4.002E-06	-3.[illegible]9E-15
0.90000	1.713E-08	1.714E-08	-1.860E-15	-1.862E-15	-1.103E-05	-1.103E-05	-1.[illegible]6E-14
0.92500	4.240E-08	4.252E-08	-4.299E-15	-4.305E-15	-2.192E-05	-2.194E-05	-5.114E-14
0.95000	1.646E-07	1.642E-07	-1.706E-14	-1.711E-14	-5.510E-05	-5.519E-05	-2.296E-13
0.96250	4.425E-07	4.428E-07	-4.946E-14	-4.974E-14	-1.094E-04	-1.097E-04	-6.543E-13
0.97500	2.098E-06	2.109E-06	-2.860E-13	-2.897E-13	-3.490E-04	-3.516E-04	-2.459E-12
0.98124	6.596E-06	6.679E-06	-1.120E-12	-1.145E-12	-9.173E-04	-9.302E-04	-5.952E-12
0.98749	4.395E-05	4.532E-05	-1.205E-11	-1.268E-11	-4.802E-03	-4.970E-03	-1.632E-11
0.99373	3.952E-03	4.607E-03	-1.494E-08	-1.960E-08	-1.062E 00	-1.302E 00	-1.102E-10
0.98856	-2.702E-03	-2.706E-03	-1.997E-11	-1.882E-11	-6.569E 06	-6.588E 06	-1.995E-11
0.98245	-1.656E-03	-1.655E-03	-1.442E-12	-1.407E-12	-6.569E 06	-6.588E 06	-6.966E-12
0.97635	-1.183E-03	-1.183E-03	-3.505E-13	-3.457E-13	-6.569E 06	-6.588E 06	-2.738E-12
0.97024	-9.197E-04	-9.194E-04	-1.274E-13	-1.263E-13	-6.569E 06	-6.588E 06	-1.300E-12
0.96414	-7.518E-04	-7.515E-04	-5.613E-14	-5.580E-14	-6.569E 06	-6.588E 06	-7.050E-13
0.95194	-5.504E-04	-5.502E-04	-1.808E-14	-1.802E-14	-6.569E 06	-6.588E 06	-2.480E-13
0.93975	-4.341E-04	-4.339E-04	-8.537E-15	-8.519E-15	-6.569E 06	-6.588E 06	-1.028E-13
0.91538	-3.051E-04	-3.050E-04	-2.920E-15	-2.917E-15	-6.569E 06	-6.588E 06	-2.872E-14
0.89106	-2.352E-04	-2.351E-04	-1.284E-15	-1.283E-15	-6.569E 06	-6.588E 06	-1.116E-14
0.84252	-1.613E-04	-1.612E-04	-3.401E-16	-3.400E-16	-6.569E 06	-6.588E 06	-2.824E-15
0.79416	-1.227E-04	-1.227E-04	-1.353E-16	-1.353E-16	-6.569E 06	-6.588E 06	-1.045E-15
0.69815	-8.302E-05	-8.299E-05	-3.610E-17	-3.610E-17	-6.569E 06	-6.588E 06	-2.465E-16
0.60343	-6.272E-05	-6.270E-05	-1.416E-17	-1.416E-17	-6.569E 06	-6.588E 06	-8.757E-17
0.51072	-5.040E-05	-5.039E-05	-7.026E-18	-7.026E-18	-6.569E 06	-6.588E 06	-3.813E-17
0.42137	-4.213E-05	-4.211E-05	-3.846E-18	-3.845E-18	-6.569E 06	-6.588E 06	-1.949E-17
0.33803	-3.619E-05	-3.617E-05	-2.119E-18	-2.119E-18	-6.569E 06	-6.588E 06	-1.163E-17
0.26642	-3.171E-05	-3.170E-05	-1.216E-18	-1.216E-18	-6.569E 06	-6.588E 06	-7.493E-18
0.21838	-2.823E-05	-2.822E-05	-6.978E-19	-6.978E-19	-6.569E 06	-6.588E 06	-5.290E-18
0.21073	-2.543E-05	-2.542E-05	-4.000E-19	-4.000E-19	-6.569E 06	-6.588E 06	-3.968E-18

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.040 θ_D= 5.172E-04 ρ_a= 1.260

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu$-1.0
0.10000	0.0400	0.10000	193.643	1.032E-08	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0400	0.20000	172.127	1.626E-08	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0400	0.30000	150.611	2.418E-08	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0400	0.40000	129.095	4.044E-08	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0400	0.50000	107.580	6.795E-08	1.000E 00	-8.045E-07	-8.045E-07	8.044E-07
0.60000	0.0400	0.60000	86.064	1.192E-07	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0400	0.70000	64.548	3.368E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0400	0.80000	43.032	1.219E-06	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0400	0.85000	32.274	3.155E-06	1.000E 00	-1.231E-05	-1.231E-05	1.231E-05
0.90000	0.0400	0.90000	21.517	1.175E-05	1.000E 00	-3.124E-05	-3.125E-05	3.123E-05
0.92500	0.0400	0.92500	16.138	2.842E-05	1.000E 00	-5.757E-05	-5.761E-05	5.755E-05
0.95000	0.0400	0.95000	10.759	1.058E-04	1.000E 00	-1.460E-04	-1.462E-04	1.459E-04
0.96250	0.0400	0.96250	8.070	2.754E-04	1.000E 00	-2.876E-04	-2.884E-04	2.873E-04
0.97500	0.0400	0.97500	5.382	1.219E-03	1.000E 00	-8.709E-04	-8.764E-04	8.689E-04
0.98124	0.0400	0.98125	4.038	3.684E-03	1.001E 00	-2.021E-03	-2.044E-03	2.014E-03
0.98749	0.0401	0.98750	2.696	2.314E-02	1.002E 00	-8.473E-03	-8.690E-03	8.439E-03
0.99373	0.0423	0.99375	1.358	3.168E 00	1.052E 00	-3.333E-01	-3.775E-01	4.805E-01
0.98873	0.1459	1.00000	2.486	1.639E 02	3.642E 00	-1.155E-02	-1.121E-02	1.186E-02
0.98273	0.2477	1.00625	3.828	1.639E 02	6.124E 00	-2.396E-03	-2.366E-03	2.417E-03
0.97674	0.3506	1.01250	5.171	1.639E 02	8.574E 00	-9.947E-04	-9.879E-04	9.991E-04
0.97075	0.4549	1.01875	6.515	1.639E 02	1.099E 01	-5.220E-04	-5.198E-04	5.234E-04
0.96476	0.5604	1.02500	7.860	1.639E 02	1.338E 01	-3.126E-04	-3.117E-04	3.131E-04
0.95279	0.7754	1.03750	10.549	1.639E 02	1.808E 01	-1.519E-04	-1.516E-04	1.520E-04
0.94083	0.9960	1.05000	13.238	1.639E 02	2.266E 01	-9.383E-05	-9.373E-05	9.389E-05
0.91696	1.4542	1.07500	18.616	1.639E 02	3.151E 01	-4.346E-05	-4.344E-05	4.347E-05
0.89315	1.9370	1.10000	23.995	1.639E 02	3.995E 01	-2.440E-05	-2.439E-05	2.441E-05
0.84574	2.9839	1.15000	34.753	1.639E 02	5.573E 01	-1.045E-05	-1.045E-05	1.045E-05
0.79865	4.1546	1.20000	45.511	1.639E 02	7.020E 01	-5.602E-06	-5.602E-06	5.602E-06
0.70565	6.9620	1.30000	67.026	1.639E 02	9.581E 01	-2.328E-06	-2.328E-06	2.328E-06
0.61487	10.6094	1.40000	88.542	1.639E 02	1.177E 02	-1.234E-06	-1.234E-06	1.234E-06
0.52742	15.4920	1.50000	110.058	1.639E 02	1.368E 02	-7.682E-07	-7.682E-07	7.682E-07
0.44530	22.2413	1.60000	131.574	1.639E 02	1.534E 02	-5.150E-07	-5.150E-07	5.150E-07
0.37203	31.8324	1.70000	153.090	1.639E 02	1.681E 02	-3.477E-07	-3.477E-07	3.477E-07
0.31388	45.5064	1.80000	174.606	1.639E 02	1.811E 02	-2.453E-07	-2.453E-07	2.453E-07
0.28041	63.7822	1.90000	196.122	1.639E 02	1.928E 02	-1.730E-07	-1.730[illegible]-07	1.730E-07
0.28062	84.3172	2.00000	217.637	1.639E 02	2.033E 02	-1.236E-07	-1.236E-07	1.236E-07

PROPAGATION FREQUENCY= 4.980DE 07 ϕ_0= 0.040 θ_D=5.172E-04 ρ_a=1.260

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.212E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.307E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.516E-04	6.516E-04	6.517E-04	-2.044E-06	-2.045E-06
0.90000	3.126E-05	449.110	-1.143E-03	-1.143E-03	1.143E-03	1.143E-03	-5.189E-06	-5.191E-06
0.92500	5.763E-05	461.585	-1.680E-03	-1.681E-03	1.680E-03	1.681E-03	-9.563E-06	-9.570E-06
0.95000	1.464E-04	474.060	-2.851E-03	-2.853E-03	2.851E-03	2.854E-03	-2.425E-05	-2.429E-05
0.96250	2.889E-04	480.297	-4.115E-03	-4.120E-03	4.113E-03	4.123E-03	-4.778E-05	-4.792E-05
0.97500	8.800E-04	486.534	-7.286E-03	-7.305E-03	7.279E-03	7.317E-03	-1.447E-04	-1.456E-04
0.98124	2.059E-03	489.652	-1.153E-02	-1.159E-02	1.152E-02	1.163E-02	-3.357E-04	-3.395E-04
0.98749	8.877E-03	492.769	-2.476E-02	-2.507E-02	2.471E-02	2.532E-02	-1.407E-03	-1.443E-03
0.99373	6.318E-01	495.883	-2.026E-01	-2.186E-01	2.489E-01	2.900E-01	-5.537E-02	-6.272E-02
0.98873	1.117E-02	493.387	4.953E 00	4.953E 00	4.343E 05	4.584E 05	-1.918E-03	-1.862E-03
0.98273	2.357E-03	490.395	1.105E 01	1.105E 01	4.343E 05	4.584E 05	-3.980E-04	-3.931E-04
0.97674	9.855E-04	487.404	1.715E 01	1.715E 01	4.343E 05	4.584E 05	-1.652E-04	-1.641E-04
0.97075	5.189E-04	484.413	2.326E 01	2.326E 01	4.343E 05	4.585E 05	-8.671E-05	-8.634E-05
0.96476	3.113E-04	481.425	2.937E 01	2.936E 01	4.343E 05	4.585E 05	-5.193E-05	-5.177E-05
0.95279	1.515E-04	475.451	4.157E 01	4.157E 01	4.343E 05	4.585E 05	-2.523E-05	-2.518E-05
0.94083	9.369E-05	469.485	5.378E 01	5.378E 01	4.343E 05	4.585E 05	-1.559E-05	-1.557E-05
0.91696	4.343E-05	457.574	7.816E 01	7.816E 01	4.343E 05	4.585E 05	-7.219E-06	-7.215E-06
0.89315	2.439E-05	445.693	1.025E 02	1.025E 02	4.344E 05	4.585E 05	-4.054E-06	-4.052E-06
0.84574	1.045E-05	422.034	1.511E 02	1.511E 02	4.344E 05	4.586E 05	-1.736E-06	-1.736E-06
0.79865	5.601E-06	398.533	1.996E 02	1.996E 02	4.345E 05	4.586E 05	-9.306E-07	-9.305E-07
0.70565	2.328E-06	352.130	2.959E 02	2.959E 02	4.346E 05	4.587E 05	-3.867E-07	-3.867E-07
0.61487	1.234E-06	306.826	3.911E 02	3.911E 02	4.347E 05	4.588E 05	-2.049E-07	-2.049E-07
0.52742	7.682E-07	263.191	4.846E 02	4.846E 02	4.348E 05	4.589E 05	-1.276E-07	-1.276E-07
0.44530	5.150E-07	222.209	5.755E 02	5.755E 02	4.348E 05	4.590E 05	-8.554E-08	-8.554E-08
0.37203	3.477E-07	185.646	6.620E 02	6.620E 02	4.349E 05	4.591E 05	-5.776E-08	-5.776E-08
0.31388	2.453E-07	156.627	7.409E 02	7.409E 02	4.350E 05	4.592E 05	-4.075E-08	-4.075E-08
0.28041	1.730E-07	139.929	8.075E 02	8.075E 02	4.351E 05	4.592E 05	-2.874E-08	-2.874E-08
0.28062	1.236E-07	140.031	8.573E 02	8.573E 02	4.351E 05	4.593E 05	-2.052E-08	-2.052E-08

PROPAGATION FREQUENCY= 4.980DE 07 ϕ_0= 0.040 θ_D=5.172E-04 ρ_a=1.260

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-7.252E-18
0.10000	-1.715E-12	-9.406E-14	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-9.728E-18
0.20000	2.102E-12	1.338E-12	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-1.391E-17
0.30000	1.221E-11	1.437E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-2.187E-17
0.40000	3.548E-11	3.548E-11	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-3.703E-17
0.50000	6.136E-11	6.136E-11	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-7.412E-17
0.60000	1.582E-10	1.775E-10	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-1.733E-16
0.70000	5.167E-10	5.058E-10	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-5.065E-16
0.80000	2.175E-09	2.195E-09	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-2.294E-15
0.85000	5.832E-09	5.844E-09	-4.335E-16	-4.337E-16	-4.001E-06	-4.002E-06	-6.647E-15
0.90000	2.332E-08	2.323E-08	-1.860E-15	-1.862E-15	-1.103E-05	-1.103E-05	-2.982E-14
0.92500	5.781E-08	5.781E-08	-4.299E-15	-4.305E-15	-2.192E-05	-2.194E-05	-9.091E-14
0.95000	2.236E-07	2.237E-07	-1.705E-14	-1.711E-14	-5.510E-05	-5.519E-05	-4.081E-13
0.96250	6.012E-07	6.023E-07	-4.945E-14	-4.972E-14	-1.094E-04	-1.097E-04	-1.163E-12
0.97500	2.849E-06	2.869E-06	-2.858E-13	-2.895E-13	-3.489E-04	-3.515E-04	-4.369E-12
0.98124	8.961E-06	9.081E-06	-1.118E-12	-1.144E-12	-9.165E-04	-9.294E-04	-1.057E-11
0.98749	5.931E-05	6.119E-05	-1.200E-11	-1.262E-11	-4.787E-03	-4.955E-03	-2.896E-11
0.99373	5.245E-03	6.093E-03	-1.417E-08	-1.846E-08	-1.021E 00	-1.248E 00	-1.876E-10
0.98873	-2.817E-03	-2.793E-03	-2.045E-11	-1.927E-11	-3.883E 06	-4.097E 06	-3.589E-11
0.98273	-1.737E-03	-1.720E-03	-1.471E-12	-1.435E-12	-3.883E 06	-4.097E 06	-1.246E-11
0.97674	-1.242E-03	-1.229E-03	-3.547E-13	-3.499E-13	-3.883E 06	-4.097E 06	-4.898E-12
0.97075	-9.651E-04	-9.554E-04	-1.284E-13	-1.273E-13	-3.883E 06	-4.097E 06	-2.327E-12
0.96476	-7.888E-04	-7.808E-04	-5.654E-14	-5.621E-14	-3.883E 06	-4.097E 06	-1.259E-12
0.95279	-5.774E-04	-5.716E-04	-1.815E-14	-1.809E-14	-3.883E 06	-4.097E 06	-4.430E-13
0.94083	-4.552E-04	-4.507E-04	-8.566E-15	-8.549E-15	-3.883E 06	-4.097E 06	-1.835E-13
0.91696	-3.199E-04	-3.167E-04	-2.925E-15	-2.922E-15	-3.883E 06	-4.097E 06	-5.119E-14
0.89315	-2.466E-04	-2.441E-04	-1.286E-15	-1.285E-15	-3.883E 06	-4.097E 06	-1.988E-14
0.84574	-1.691E-04	-1.674E-04	-3.405E-16	-3.404E-16	-3.883E 06	-4.097E 06	-5.028E-15
0.79865	-1.286E-04	-1.273E-04	-1.355E-16	-1.354E-16	-3.883E 06	-4.097E 06	-1.860E-15
0.70565	-8.701E-05	-8.614E-05	-3.612E-17	-3.612E-17	-3.883E 06	-4.097E 06	-4.386E-16
0.61487	-6.574E-05	-6.508E-05	-1.416E-17	-1.416E-17	-3.883E 06	-4.097E 06	-1.558E-16
0.52742	-5.283E-05	-5.229E-05	-7.029E-18	-7.029E-18	-3.883E 06	-4.097E 06	-6.782E-17
0.44530	-4.415E-05	-4.371E-05	-3.847E-18	-3.847E-18	-3.883E 06	-4.097E 06	-3.466E-17
0.37203	-3.793E-05	-3.754E-05	-2.120E-18	-2.120E-18	-3.883E 06	-4.097E 06	-2.069E-17
0.31388	-3.324E-05	-3.290E-05	-1.216E-18	-1.216E-18	-3.883E 06	-4.097E 06	-1.332E-17
0.28041	-2.958E-05	-2.928E-05	-6.981E-19	-6.980E-19	-3.883E 06	-4.097E 06	-9.406E-18
0.28062	-2.665E-05	-2.638E-05	-4.001E-19	-4.001E-19	-3.883E 06	-4.097E 06	-7.055E-18

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.050 θ_D= 6.458E-04 ρ_a= 1.26

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0500	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.0500	0.10000	193.643	1.480E-08	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0500	0.20000	172.127	2.126E-08	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0500	0.30800	150.611	3.273E-08	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0500	0.40000	129.095	5.294E-08	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0500	0.50000	107.580	8.713E-08	1.000E 00	-8.045E-07	-8.045E-07	8.044E-07
0.60000	0.0500	0.60000	86.064	1.451E-07	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0500	0.70000	64.548	4.152E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0500	0.80000	43.032	1.497E-06	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0500	0.85000	32.274	3.899E-06	1.000E 00	-1.231E-05	-1.231E-05	1.231E-05
0.90000	0.0500	0.90000	21.517	1.451E-05	1.000E 00	-3.124E-05	-3.125E-05	3.123E-05
0.92500	0.0500	0.92500	16.138	3.514E-05	1.000E 00	-5.757E-05	-5.761E-05	5.755E-05
0.95000	0.0500	0.95000	10.760	1.309E-04	1.000E 00	-1.460E-04	-1.462E-04	1.459E-04
0.96250	0.0500	0.96250	8.071	3.410E-04	1.000E 00	-2.876E-04	-2.884E-04	2.872E-04
0.97500	0.0500	0.97500	5.383	1.512E-03	1.000E 00	-8.704E-04	-8.759E-04	8.684E-04
0.98124	0.0500	0.98125	4.040	4.575E-03	1.001E 00	-2.019E-03	-2.042E-03	2.012E-03
0.98749	0.0501	0.98750	2.698	2.874E-02	1.002E 00	-8.447E-03	-8.663E-03	8.414E-03
0.99373	0.0528	0.99375	1.363	3.781E 00	1.047E 00	-3.240E-01	-3.659E-01	4.608E-01
0.98894	0.1806	1.00000	2.474	1.598E 02	3.630E 00	-1.173E-02	-1.138E-02	1.205E-02
0.98308	0.3069	1.00625	3.816	1.598E 02	6.121E 00	-2.427E-03	-2.397E-03	2.448E-03
0.97723	0.4346	1.01250	5.159	1.599E 02	8.579E 00	-1.003E-03	-9.957E-04	1.007E-03
0.97138	0.5639	1.01875	6.503	1.599E 02	1.101E 01	-5.245E-04	-5.223E-04	5.260E-04
0.96553	0.6947	1.02500	7.847	1.599E 02	1.340E 01	-3.141E-04	-3.132E-04	3.147E-04
0.95386	0.9612	1.03750	10.536	1.599E 02	1.811E 01	-1.522E-04	-1.520E-04	1.524E-04
0.94220	1.2343	1.05000	13.225	1.599E 02	2.271E 01	-9.405E-05	-9.395E-05	9.411E-05
0.91896	1.8013	1.07500	18.603	1.599E 02	3.159E 01	-4.352E-05	-4.350E-05	4.354E-05
0.89581	2.3976	1.10000	23.982	1.599E 02	4.006E 01	-2.443E-05	-2.442E-05	2.444E-05
0.84983	3.6873	1.15000	34.739	1.599E 02	5.589E 01	-1.046E-05	-1.046E-05	1.046E-05
0.80433	5.1237	1.20000	45.497	1.599E 02	7.041E 01	-5.606E-06	-5.605E-06	5.606E-06
0.71513	8.5394	1.30000	67.013	1.599E 02	9.610E 01	-2.329E-06	-2.329E-06	2.329E-06
0.62919	12.9075	1.40000	88.529	1.599E 02	1.181E 02	-1.234E-06	-1.234E-06	1.234E-06
0.54804	18.6113	1.50000	110.045	1.599E 02	1.372E 02	-7.684E-07	-7.684E-07	7.684E-07
0.47414	26.1899	1.60000	131.560	1.599E 02	1.539E 02	-5.151E-07	-5.151E-07	5.151E-07
0.41143	36.3078	1.70000	153.076	1.599E 02	1.686E 02	-3.478E-07	-3.478E-07	3.478E-07
0.36571	49.4731	1.80000	174.592	1.599E 02	1.817E 02	-2.454E-07	-2.454E-07	2.454E-07
0.34382	65.2893	1.90000	196.108	1.599E 02	1.934E 02	-1.731E-07	-1.731E-07	1.731E-07
0.35025	81.8231	2.00000	217.624	1.599E 02	2.040E 02	-1.236E-07	-1.236E-07	1.236E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.050 θ_D= 6.458E-04 ρ_a= 1.261

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.307E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.516E-04	6.516E-04	6.517E-04	-2.044E-06	-2.045E-06
0.90000	3.126E-05	449.110	-1.143E-03	-1.143E-03	1.143E-03	1.143E-03	-5.189E-06	-5.191E-06
0.92500	5.763E-05	461.585	-1.680E-03	-1.681E-03	1.680E-03	1.681E-03	-9.562E-06	-9.569E-06
0.95000	1.464E-04	474.060	-2.851E-03	-2.853E-03	2.851E-03	2.854E-03	-2.425E-05	-2.429E-05
0.96250	2.889E-04	480.297	-4.115E-03	-4.120E-03	4.113E-03	4.122E-03	-4.777E-05	-4.790E-05
0.97500	8.795E-04	486.534	-7.285E-03	-7.304E-03	7.278E-03	7.316E-03	-1.446E-04	-1.455E-04
0.98124	2.057E-03	489.652	-1.153E-02	-1.159E-02	1.151E-02	1.162E-02	-3.354E-04	-3.391E-04
0.98749	8.850E-03	492.770	-2.472E-02	-2.503E-02	2.468E-02	2.529E-02	-1.403E-03	-1.439E-03
0.99373	6.009E-01	495.883	-1.998E-01	-2.152E-01	2.440E-01	2.833E-01	-5.382E-02	-6.078E-02
0.98894	1.134E-02	493.490	4.845E 00	4.844E 00	7.024E 00	7.248E 00	-1.948E-03	-1.891E-03
0.98308	2.387E-03	490.568	1.087E 01	1.087E 01	1.308E 01	1.331E 01	-4.031E-04	-3.981E-04
0.97723	9.933E-04	487.647	1.690E 01	1.690E 01	1.913E 01	1.935E 01	-1.665E-04	-1.654E-04
0.97138	5.214E-04	484.728	2.294E 01	2.294E 01	2.517E 01	2.539E 01	-8.714E-05	-8.676E-05
0.96553	3.128E-04	481.811	2.897E 01	2.897E 01	3.120E 01	3.143E 01	-5.218E-05	-5.203E-05
0.95386	1.519E-04	475.985	4.104E 01	4.104E 01	4.327E 01	4.349E 01	-2.528E-05	-2.524E-05
0.94220	9.391E-05	470.170	5.309E 01	5.309E 01	5.532E 01	5.555E 01	-1.562E-05	-1.561E-05
0.91896	4.349E-05	458.572	7.716E 01	7.716E 01	7.940E 01	7.962E 01	-7.230E-06	-7.226E-06
0.89581	2.442E-05	447.021	1.012E 02	1.012E 02	1.034E 02	1.036E 02	-4.058E-06	-4.057E-06
0.84983	1.046E-05	424.076	1.491E 02	1.491E 02	1.513E 02	1.515E 02	-1.738E-06	-1.737E-06
0.80433	5.605E-06	401.370	1.967E 02	1.967E 02	1.990E 02	1.992E 02	-9.312E-07	-9.311E-07
0.71513	2.329E-06	356.859	2.911E 02	2.911E 02	2.934E 02	2.936E 02	-3.869E-07	-3.869E-07
0.62919	1.234E-06	313.973	3.839E 02	3.839E 02	3.862E 02	3.864E 02	-2.050E-07	-2.050E-07
0.54804	7.684E-07	273.477	4.743E 02	4.743E 02	4.766E 02	4.768E 02	-1.276E-07	-1.276E-07
0.47414	5.151E-07	236.603	5.611E 02	5.611E 02	5.633E 02	5.636E 02	-8.556E-08	-8.556E-08
0.41143	3.478E-07	205.311	6.423E 02	6.423E 02	6.445E 02	6.448E 02	-5.778E-08	-5.778E-08
0.36571	2.453E-07	182.494	7.150E 02	7.150E 02	7.173E 02	7.175E 02	-4.076E-08	-4.076E-08
0.34382	1.731E-07	171.569	7.758E 02	7.758E 02	7.781E 02	7.783E 02	-2.875E-08	-2.875E-08
0.35025	1.236E-07	174.781	8.225E 02	8.225E 02	8.248E 02	8.250E 02	-2.053E-08	-2.053E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.050 θ_D= 6.458E-04 ρ_a= 1.261

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.133E-17
0.10000	1.918E-12	2.847E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-1.520E-17
0.20000	1.022E-11	7.492E-12	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-2.174E-17
0.30000	2.114E-11	2.353E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-3.418E-17
0.40000	4.842E-11	4.842E-11	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-5.786E-17
0.50000	9.828E-11	1.040E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-1.158E-16
0.60000	2.355E-10	2.359E-10	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-2.708E-16
0.70000	6.842E-10	6.754E-10	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-7.915E-16
0.80000	2.847E-09	2.840E-09	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-3.584E-15
0.85000	7.548E-09	7.625E-09	-4.335E-16	-4.337E-16	-4.001E-06	-4.002E-06	-1.039E-14
0.90000	2.933E-08	2.946E-08	-1.860E-15	-1.861E-15	-1.103E-05	-1.103E-05	-4.660E-14
0.92500	7.323E-08	7.314E-08	-4.299E-15	-4.305E-15	-2.192E-05	-2.194E-05	-1.420E-13
0.95000	2.831E-07	2.832E-07	-1.705E-14	-1.711E-14	-5.509E-05	-5.519E-05	-6.375E-13
0.96250	7.610E-07	7.626E-07	-4.942E-14	-4.970E-14	-1.093E-04	-1.097E-04	-1.817E-12
0.97500	3.603E-06	3.629E-06	-2.856E-13	-2.892E-13	-3.487E-04	-3.513E-04	-6.822E-12
0.98124	1.124E-05	1.140E-05	-1.116E-12	-1.142E-12	-9.156E-04	-9.284E-04	-1.649E-11
0.98749	7.404E-05	7.641E-05	-1.194E-11	-1.256E-11	-4.772E-03	-4.938E-03	-4.515E-11
0.99373	6.405E-03	7.413E-03	-1.336E-08	-1.727E-08	-9.776E-01	-1.190E 00	-2.799E-10
0.98894	-2.865E-03	-2.854E-03	-2.099E-11	-1.977E-11	-1.247E 01	-1.453E 01	-5.680E-11
0.98308	-1.779E-03	-1.769E-03	-1.502E-12	-1.465E-12	-1.247E 01	-1.453E 01	-1.959E-11
0.97723	-1.272E-03	-1.265E-03	-3.593E-13	-3.544E-13	-1.247E 01	-1.453E 01	-7.703E-12
0.97138	-9.886E-04	-9.826E-04	-1.294E-13	-1.282E-13	-1.247E 01	-1.453E 01	-3.661E-12
0.96553	-8.078E-04	-8.030E-04	-5.699E-14	-5.665E-14	-1.247E 01	-1.453E 01	-1.977E-12
0.95386	-5.912E-04	-5.876E-04	-1.821E-14	-1.815E-14	-1.247E 01	-1.453E 01	-6.957E-13
0.94220	-4.660E-04	-4.632E-04	-8.598E-15	-8.580E-15	-1.247E 01	-1.453E 01	-2.877E-13
0.91896	-3.274E-04	-3.254E-04	-2.931E-15	-2.928E-15	-1.247E 01	-1.453E 01	-8.020E-14
0.89581	-2.523E-04	-2.508E-04	-1.288E-15	-1.288E-15	-1.247E 01	-1.453E 01	-3.113E-14
0.84983	-1.730E-04	-1.719E-04	-3.410E-16	-3.409E-16	-1.247E 01	-1.453E 01	-7.867E-15
0.80433	-1.316E-04	-1.308E-04	-1.356E-16	-1.356E-16	-1.247E 01	-1.453E 01	-2.909E-15
0.71513	-8.901E-05	-8.847E-05	-3.615E-17	-3.614E-17	-1.247E 01	-1.453E 01	-6.858E-16
0.62919	-6.725E-05	-6.684E-05	-1.417E-17	-1.417E-17	-1.247E 01	-1.453E 01	-2.435E-16
0.54804	-5.403E-05	-5.371E-05	-7.032E-18	-7.031E-18	-1.247E 01	-1.453E 01	-1.060E-16
0.47414	-4.516E-05	-4.489E-05	-3.848E-18	-3.848E-18	-1.247E 01	-1.453E 01	-5.417E-17
0.41143	-3.879E-05	-3.856E-05	-2.121E-18	-2.120E-18	-1.247E 01	-1.453E 01	-3.233E-17
0.36571	-3.400E-05	-3.379E-05	-1.217E-18	-1.217E-18	-1.247E 01	-1.453E 01	-2.082E-17
0.34382	-3.026E-05	-3.007E-05	-6.983E-19	-6.983E-19	-1.247E 01	-1.453E 01	-1.470E-17
0.35025	-2.726E-05	-2.709E-05	-4.003E-19	-4.003E-19	-1.247E 01	-1.453E 01	-1.103E-17

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.060 θ_D= 7.749E-04 ρ_a= 1.263

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0600	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E 7
0.10000	0.0600	0.10000	193.643	2.017E-08	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0600	0.20000	172.127	2.814E-08	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0600	0.30000	150.611	4.211E-08	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0600	0.40000	129.095	6.628E-08	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0600	0.50000	107.580	1.059E-07	1.000E 00	-8.045E-07	-8.045E-07	8.044E-07
0.60000	0.0600	0.60000	86.064	1.759E-07	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0600	0.70000	64.548	4.836E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0600	0.80000	43.032	1.764E-06	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0600	0.85000	32.275	4.596E-06	1.000E 00	-1.231E-05	-1.231E-05	1.230E-05
0.90000	0.0600	0.90000	21.517	1.715E-05	1.000E 00	-3.124E-05	-3.125E-05	3.123E-05
0.92500	0.0600	0.92500	16.139	4.149E-05	1.000E 00	-5.756E-05	-5.760E-05	5.755E-05
0.95000	0.0600	0.95000	10.761	1.548E-04	1.000E 00	-1.460E-04	-1.462E-04	1.459E-04
0.96250	0.0600	0.96250	8.072	4.037E-04	1.000E 00	-2.875E-04	-2.883E-04	2.871E-04
0.97500	0.0600	0.97500	5.384	1.795E-03	1.000E 00	-8.698E-04	-8.753E-04	8.678E-04
0.98124	0.0600	0.98125	4.042	5.441E-03	1.000E 00	-2.017E-03	-2.039E-03	2.009E-03
0.98749	0.0601	0.98750	2.701	3.421E-02	1.002E 00	-8.417E-03	-8.631E-03	8.384E-03
0.99373	0.0633	0.99375	1.369	4.298E 00	1.042E 00	-3.132E-01	-3.526E-01	4.387E-01
0.98919	0.2142	1.00000	2.460	1.557E 02	3.616E 00	-1.195E-02	-1.159E-02	1.228E-02
0.98350	0.3644	1.00625	3.801	1.558E 02	6.118E 00	-2.466E-03	-2.435E-03	2.488E-03
0.97782	0.5163	1.01250	5.143	1.558E 02	8.588E 00	-1.013E-03	-1.006E-03	1.017E-03
0.97214	0.6699	1.01875	6.487	1.558E 02	1.103E 01	-5.277E-04	-5.255E-04	5.292E-04
0.96647	0.8254	1.02500	7.831	1.558E 02	1.344E 01	-3.161E-04	-3.151E-04	3.166E-04
0.95516	1.1418	1.03750	10.519	1.558E 02	1.817E 01	-1.527E-04	-1.524E-04	1.528E-04
0.94387	1.4659	1.05000	13.208	1.558E 02	2.278E 01	-9.433E-05	-9.423E-05	9.439E-05
0.92139	2.1377	1.07500	18.586	1.558E 02	3.170E 01	-4.361E-05	-4.358E-05	4.362E-05
0.89904	2.8431	1.10000	23.965	1.558E 02	4.021E 01	-2.447E-05	-2.446E-05	2.447E-05
0.85478	4.3639	1.15000	34.723	1.558E 02	5.611E 01	-1.047E-05	-1.047E-05	1.047E-05
0.81120	6.0494	1.20000	45.480	1.558E 02	7.070E 01	-5.611E-06	-5.610E-06	5.611E-06
0.72650	10.0183	1.30000	66.996	1.558E 02	9.650E 01	-2.330E-06	-2.330E-06	2.330E-06
0.64620	15.0030	1.40000	88.512	1.558E 02	1.186E 02	-1.235E-06	-1.234E-06	1.235E-06
0.57213	21.3375	1.50000	110.028	1.558E 02	1.378E 02	-7.687E-07	-7.687E-07	7.687E-07
0.50705	29.4207	1.60000	131.543	1.558E 02	1.545E 02	-5.153E-07	-5.153E-07	5.153E-07
0.45482	39.6087	1.70000	153.059	1.558E 02	1.693E 02	-3.479E-07	-3.479E-07	3.479E-07
0.42027	51.9304	1.80000	174.575	1.558E 02	1.825E 02	-2.454E-07	-2.454E-07	2.454E-07
0.40791	65.6954	1.90000	196.091	1.558E 02	1.943E 02	-1.731E-07	-1.731E-07	1.731E-07
0.41971	79.4791	2.00000	217.607	1.558E 02	2.049E 02	-1.236E-07	-1.236E-07	1.236E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.060 θ_D= 7.749E-04 ρ_a= 1.263

z	$_x\mu'$-1.0	T_0	$_oT_t$-T_0	$_xT_t$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.307E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.516E-04	6.516E-04	6.517E-04	-2.044E-06	-2.045E-06
0.90000	3.126E-05	449.110	-1.143E-03	-1.143E-03	1.143E-03	1.143E-03	-5.189E-06	-5.191E-06
0.92500	5.763E-05	461.585	-1.680E-03	-1.681E-03	1.680E-03	1.681E-03	-9.562E-06	-9.569E-06
0.95000	1.463E-04	474.060	-2.851E-03	-2.853E-03	2.850E-03	2.854E-03	-2.425E-05	-2.429E-05
0.96250	2.888E-04	480.297	-4.115E-03	-4.119E-03	4.113E-03	4.122E-03	-4.775E-05	-4.789E-05
0.97500	8.788E-04	486.534	-7.283E-03	-7.302E-03	7.276E-03	7.314E-03	-1.445E-04	-1.454E-04
0.98124	2.055E-03	489.652	-1.152E-02	-1.158E-02	1.150E-02	1.162E-02	-3.350E-04	-3.388E-04
0.98749	8.816E-03	492.770	-2.468E-02	-2.498E-02	2.465E-02	2.525E-02	-1.398E-03	-1.436E-03
0.99373	5.668E-01	495.884	-1.966E-01	-2.115E-01	2.381E-01	2.755E-01	-5.203E-02	-5.857E-02
0.98919	1.156E-02	493.615	4.715E 00	4.714E 00	6.656E 00	6.662E 00	-1.985E-03	-1.926E-03
0.98350	2.425E-03	490.778	1.065E 01	1.065E 01	1.263E 01	1.264E 01	-4.096E-04	-4.044E-04
0.97782	1.003E-03	487.943	1.660E 01	1.660E 01	1.859E 01	1.859E 01	-1.682E-04	-1.670E-04
0.97214	5.246E-04	485.110	2.255E 01	2.255E 01	2.454E 01	2.455E 01	-8.767E-05	-8.729E-05
0.96647	3.147E-04	482.281	2.850E 01	2.850E 01	3.049E 01	3.050E 01	-5.250E-05	-5.235E-05
0.95516	1.523E-04	476.634	4.038E 01	4.038E 01	4.238E 01	4.238E 01	-2.536E-05	-2.532E-05
0.94387	9.419E-05	471.002	5.225E 01	5.225E 01	5.425E 01	5.425E 01	-1.567E-05	-1.565E-05
0.92139	4.357E-05	459.783	7.594E 01	7.594E 01	7.794E 01	7.795E 01	-7.244E-06	-7.240E-06
0.89904	2.446E-05	448.631	9.957E 01	9.957E 01	1.016E 02	1.016E 02	-4.064E-06	-4.063E-06
0.85478	1.047E-05	426.547	1.466E 02	1.466E 02	1.486E 02	1.486E 02	-1.740E-06	-1.739E-06
0.81120	5.610E-06	404.796	1.933E 02	1.933E 02	1.953E 02	1.953E 02	-9.320E-07	-9.319E-07
0.72650	2.330E-06	362.533	2.855E 02	2.855E 02	2.875E 02	2.875E 02	-3.871E-07	-3.871E-07
0.64620	1.234E-06	322.459	3.754E 02	3.754E 02	3.774E 02	3.775E 02	-2.051E-07	-2.051E-07
0.57213	7.687E-07	285.500	4.623E 02	4.623E 02	4.643E 02	4.643E 02	-1.277E-07	-1.277E-07
0.50705	5.153E-07	253.023	5.447E 02	5.447E 02	5.467E 02	5.467E 02	-8.559E-08	-8.559E-08
0.45482	3.479E-07	226.962	6.206E 02	6.206E 02	6.226E 02	6.227E 02	-5.779E-08	-5.779E-08
0.42027	2.454E-07	209.720	6.878E 02	6.878E 02	6.898E 02	6.898E 02	-4.077E-08	-4.077E-08
0.40791	1.731E-07	203.553	7.439E 02	7.439E 02	7.459E 02	7.459E 02	-2.876E-08	-2.876E-08
0.41971	1.236E-07	209.441	7.879E 02	7.879E 02	7.899E 02	7.899E 02	-2.053E-08	-2.053E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.060 θ_D= 7.749E-04 ρ_a= 1.263

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.632E-17
0.10000	6.486E-12	4.740E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-2.189E-17
0.20000	9.729E-12	9.729E-12	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-3.131E-17
0.30000	2.528E-11	2.761E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-4.921E-17
0.40000	6.311E-11	6.161E-11	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-8.331E-17
0.50000	1.277E-10	1.225E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-1.668E-16
0.60000	2.834E-10	2.854E-10	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-3.899E-16
0.70000	8.279E-10	8.239E-10	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-1.140E-15
0.80000	3.443E-09	3.430E-09	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-5.161E-15
0.85000	9.154E-09	9.181E-09	-4.335E-16	-4.337E-16	-4.001E-06	-4.002E-06	-1.495E-14
0.90000	3.522E-08	3.555E-08	-1.860E-15	-1.861E-15	-1.103E-05	-1.103E-05	-6.710E-14
0.92500	8.822E-08	8.817E-08	-4.298E-15	-4.304E-15	-2.192E-05	-2.193E-05	-2.045E-13
0.95000	3.412E-07	3.414E-07	-1.705E-14	-1.710E-14	-5.509E-05	-5.518E-05	-9.178E-13
0.96250	9.171E-07	9.193E-07	-4.940E-14	-4.968E-14	-1.093E-04	-1.096E-04	-2.615E-12
0.97500	4.338E-06	4.370E-06	-2.852E-13	-2.889E-13	-3.485E-04	-3.511E-04	-9.815E-12
0.98124	1.356E-05	1.375E-05	-1.114E-12	-1.140E-12	-9.144E-04	-9.273E-04	-2.371E-11
0.98749	8.893E-05	9.179E-05	-1.187E-11	-1.248E-11	-4.753E-03	-4.918E-03	-6.485E-11
0.99373	7.415E-03	8.543E-03	-1.246E-08	-1.598E-08	-9.283E-01	-1.124E 00	-3.825E-10
0.98919	-2.897E-03	-2.914E-03	-2.168E-11	-2.040E-11	-1.021E 01	-1.026E 01	-8.310E-11
0.98350	-1.812E-03	-1.819E-03	-1.542E-12	-1.504E-12	-1.022E 01	-1.026E 01	-2.843E-11
0.97782	-1.296E-03	-1.301E-03	-3.651E-13	-3.601E-13	-1.022E 01	-1.026E 01	-1.119E-11
0.97214	-1.006E-03	-1.010E-03	-1.306E-13	-1.295E-13	-1.022E 01	-1.026E 01	-5.317E-12
0.96647	-8.222E-04	-8.251E-04	-5.755E-14	-5.721E-14	-1.022E 01	-1.026E 01	-2.865E-12
0.95516	-6.014E-04	-6.035E-04	-1.830E-14	-1.823E-14	-1.022E 01	-1.026E 01	-1.008E-12
0.94387	-4.740E-04	-4.756E-04	-8.638E-15	-8.619E-15	-1.022E 01	-1.026E 01	-4.161E-13
0.92139	-3.329E-04	-3.340E-04	-2.939E-15	-2.936E-15	-1.022E 01	-1.026E 01	-1.159E-13
0.89904	-2.565E-04	-2.574E-04	-1.292E-15	-1.291E-15	-1.022E 01	-1.026E 01	-4.494E-14
0.85478	-1.758E-04	-1.764E-04	-3.415E-16	-3.414E-16	-1.022E 01	-1.026E 01	-1.135E-14
0.81120	-1.337E-04	-1.342E-04	-1.358E-16	-1.358E-16	-1.022E 01	-1.026E 01	-4.195E-15
0.72650	-9.045E-05	-9.077E-05	-3.617E-17	-3.617E-17	-1.022E 01	-1.026E 01	-9.886E-16
0.64620	-6.833E-05	-6.857E-05	-1.418E-17	-1.418E-17	-1.022E 01	-1.026E 01	-3.509E-16
0.57213	-5.490E-05	-5.510E-05	-7.035E-18	-7.035E-18	-1.022E 01	-1.026E 01	-1.528E-16
0.50705	-4.589E-05	-4.605E-05	-3.850E-18	-3.850E-18	-1.022E 01	-1.026E 01	-7.804E-17
0.45482	-3.941E-05	-3.955E-05	-2.121E-18	-2.121E-18	-1.022E 01	-1.026E 01	-4.658E-17
0.42027	-3.454E-05	-3.466E-05	-1.217E-18	-1.217E-18	-1.022E 01	-1.026E 01	-2.999E-17
0.40791	-3.074E-05	-3.085E-05	-6.986E-19	-6.986E-19	-1.022E 01	-1.026E 01	-2.117E-17
0.41971	-2.769E-05	-2.779E-05	-4.004E-19	-4.004E-19	-1.022E 01	-1.026E 01	-1.588E-17

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.070 θ_0= 9.033E-04 ρ_a= 1.264

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0700	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.0700	0.10000	193.643	3.064E-08	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0700	0.20000	172.127	3.960E-08	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0700	0.30000	150.611	5.920E-08	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0700	0.40000	129.095	8.421E-08	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0700	0.50000	107.580	1.326E-07	1.000E 00	-8.044E-07	-8.045E-07	8.044E-07
0.60000	0.0700	0.60000	86.064	2.126E-07	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0700	0.70000	64.548	3.920E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0700	0.80000	43.033	2.128E-06	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0700	0.85000	32.275	5.503E-06	1.000E 00	-1.231E-05	-1.231E-05	1.230E-05
0.90000	0.0700	0.90000	21.518	2.049E-05	1.000E 00	-3.123E-05	-3.125E-05	3.123E-05
0.92500	0.0700	0.92500	16.139	4.953E-05	1.000E 00	-5.756E-05	-5.760E-05	5.754E-05
0.95000	0.0700	0.95000	10.761	1.844E-04	1.000E 00	-1.459E-04	-1.462E-04	1.459E-04
0.96250	0.0700	0.96250	8.073	4.798E-04	1.000E 00	-2.873E-04	-2.881E-04	2.870E-04
0.97500	0.0700	0.97500	5.386	2.123E-03	1.000E 00	-8.690E-04	-8.745E-04	8.670E-04
0.98124	0.0700	0.98125	4.044	6.409E-03	1.000E 00	-2.014E-03	-2.036E-03	2.006E-03
0.98749	0.0702	0.98750	2.704	3.995E-02	1.002E 00	-8.377E-03	-8.590E-03	8.344E-03
0.99373	0.0737	0.99375	1.377	4.691E 00	1.037E 00	-3.002E-01	-3.366E-01	4.129E-01
0.98948	0.2465	1.00000	2.443	1.517E 02	3.600E 00	-1.223E-02	-1.186E-02	1.257E-02
0.98400	0.4199	1.00625	3.782	1.517E 02	6.116E 00	-2.515E-03	-2.483E-03	2.537E-03
0.97852	0.5952	1.01250	5.124	1.517E 02	8.599E 00	-1.025E-03	-1.018E-03	1.030E-03
0.97305	0.7725	1.01875	6.467	1.517E 02	1.105E 01	-5.317E-04	-5.294E-04	5.332E-04
0.96758	0.9518	1.02500	7.811	1.517E 02	1.347E 01	-3.185E-04	-3.175E-04	3.191E-04
0.95669	1.3166	1.03750	10.499	1.517E 02	1.823E 01	-1.532E-04	-1.530E-04	1.534E-04
0.94583	1.6897	1.05000	13.188	1.517E 02	2.287E 01	-9.468E-05	-9.458E-05	9.476E-05
0.92424	2.4622	1.07500	18.566	1.517E 02	3.184E 01	-4.371E-05	-4.369E-05	4.372E-05
0.90283	3.2716	1.10000	23.944	1.517E 02	4.039E 01	-2.451E-05	-2.451E-05	2.452E-05
0.86059	5.0102	1.15000	34.702	1.517E 02	5.639E 01	-1.049E-05	-1.049E-05	1.049E-05
0.81922	6.9264	1.20000	45.459	1.517E 02	7.105E 01	-5.617E-06	-5.616E-06	5.617E-06
0.73968	11.3888	1.30000	66.975	1.517E 02	9.699E 01	-2.332E-06	-2.332E-06	2.332E-06
0.66568	16.8832	1.40000	88.491	1.517E 02	1.192E 02	-1.235E-06	-1.235E-06	1.235E-06
0.59929	23.6704	1.50000	110.006	1.517E 02	1.385E 02	-7.690E-07	-7.690E-07	7.690E-07
0.54328	31.9965	1.60000	131.522	1.517E 02	1.553E 02	-5.155E-07	-5.155E-07	5.155E-07
0.50116	41.9681	1.70000	153.038	1.517E 02	1.702E 02	-3.480E-07	-3.480E-07	3.480E-07
0.47663	53.3516	1.80000	174.554	1.517E 02	1.835E 02	-2.455E-07	-2.455E-07	2.455E-07
0.47242	65.4378	1.90000	196.070	1.517E 02	1.953E 02	-1.732E-07	-1.732E-07	1.732E-07
0.48907	77.2119	2.00000	217.586	1.517E 02	2.059E 02	-1.237E-07	-1.237E-07	1.237E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.070 θ_0= 9.033E-04 ρ_a= 1.264

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.307E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.516E-04	6.516E-04	6.517E-04	-2.044E-06	-2.045E-06
0.90000	3.125E-05	449.110	-1.143E-03	-1.143E-03	1.142E-03	1.143E-03	-5.189E-06	-5.191E-06
0.92500	5.762E-05	461.585	-1.680E-03	-1.680E-03	1.680E-03	1.681E-03	-9.561E-06	-9.568E-06
0.95000	1.463E-04	474.060	-2.851E-03	-2.853E-03	2.850E-03	2.854E-03	-2.424E-05	-2.428E-05
0.96250	2.886E-04	480.297	-4.114E-03	-4.119E-03	4.112E-03	4.121E-03	-4.773E-05	-4.787E-05
0.97500	8.780E-04	486.534	-7.280E-03	-7.299E-03	7.273E-03	7.311E-03	-1.444E-04	-1.453E-04
0.98124	2.052E-03	489.652	-1.151E-02	-1.157E-02	1.150E-02	1.161E-02	-3.345E-04	-3.383E-04
0.98749	8.773E-03	492.769	-2.462E-02	-2.492E-02	2.460E-02	2.521E-02	-1.392E-03	-1.427E-03
0.99373	5.279E-01	495.883	-1.912E-01	-2.053E-01	2.324E-01	2.676E-01	-4.987E-02	-5.591E-02
0.98948	1.183E-02	493.763	4.562E 00	4.561E 00	6.464E 00	6.468E 00	-2.032E-03	-1.970E-03
0.98400	2.473E-03	491.025	1.040E 01	1.040E 01	1.234E 01	1.234E 01	-4.178E-04	-4.125E-04
0.97852	1.015E-03	488.291	1.625E 01	1.625E 01	1.820E 01	1.820E 01	-1.703E-04	-1.691E-04
0.97305	5.285E-04	485.561	2.209E 01	2.209E 01	2.405E 01	2.405E 01	-8.833E-05	-8.794E-05
0.96758	3.172E-04	482.836	2.794E 01	2.794E 01	2.989E 01	2.990E 01	-5.290E-05	-5.275E-05
0.95669	1.529E-04	477.399	3.961E 01	3.961E 01	4.157E 01	4.157E 01	-2.545E-05	-2.541E-05
0.94583	9.454E-05	471.981	5.126E 01	5.126E 01	5.323E 01	5.323E 01	-1.573E-05	-1.571E-05
0.92424	4.368E-05	461.208	7.451E 01	7.451E 01	7.647E 01	7.648E 01	-7.261E-06	-7.257E-06
0.90283	2.450E-05	450.523	9.767E 01	9.767E 01	9.963E 01	9.964E 01	-4.072E-06	-4.071E-06
0.86059	1.048E-05	429.443	1.437E 02	1.437E 02	1.457E 02	1.457E 02	-1.742E-06	-1.742E-06
0.81922	5.616E-06	408.799	1.893E 02	1.893E 02	1.913E 02	1.913E 02	-9.330E-07	-9.329E-07
0.73968	2.332E-06	369.109	2.789E 02	2.789E 02	2.809E 02	2.809E 02	-3.874E-07	-3.873E-07
0.66568	1.235E-06	332.184	3.657E 02	3.657E 02	3.677E 02	3.677E 02	-2.052E-07	-2.052E-07
0.59929	7.690E-07	299.051	4.487E 02	4.487E 02	4.507E 02	4.507E 02	-1.277E-07	-1.277E-07
0.54328	5.155E-07	271.104	5.266E 02	5.266E 02	5.286E 02	5.286E 02	-8.563E-08	-8.562E-08
0.50116	3.480E-07	250.086	5.975E 02	5.975E 02	5.995E 02	5.995E 02	-5.781E-08	-5.781E-08
0.47663	2.455E-07	237.843	6.597E 02	6.597E 02	6.616E 02	6.616E 02	-4.078E-08	-4.078E-08
0.47242	1.732E-07	235.744	7.117E 02	7.117E 02	7.136E 02	7.136E 02	-2.877E-08	-2.877E-08
0.48907	1.237E-07	244.053	7.533E 02	7.533E 02	7.552E 02	7.552E 02	-2.054E-08	-2.054E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.070 θ_D= 9.033E-04 ρ_a= 1.264

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.221E-17
0.10000	9.062E-12	3.240E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-2.979E-17
0.20000	1.203E-11	1.392E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-4.261E-17
0.30000	3.515E-11	3.515E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-6.698E-17
0.40000	6.799E-11	6.989E-11	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-1.134E-16
0.50000	1.397E-10	1.462E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-2.270E-16
0.60000	3.215E-10	3.429E-10	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-5.307E-16
0.70000	9.601E-10	9.514E-10	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-1.551E-15
0.80000	3.998E-09	3.967E-09	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-7.025E-15
0.85000	1.068E-08	1.069E-08	-4.335E-16	-4.337E-16	-4.001E-06	-4.002E-06	-2.035E-14
0.90000	4.108E-08	4.149E-08	-1.860E-15	-1.861E-15	-1.103E-05	-1.103E-05	-9.132E-14
0.92500	1.030E-07	1.029E-07	-4.298E-15	-4.304E-15	-2.192E-05	-2.193E-05	-2.783E-13
0.95000	3.982E-07	3.985E-07	-1.704E-14	-1.710E-14	-5.508E-05	-5.517E-05	-1.249E-12
0.96250	1.070E-06	1.073E-06	-4.936E-14	-4.964E-14	-1.093E-04	-1.096E-04	-3.558E-12
0.97500	5.060E-06	5.099E-06	-2.848E-13	-2.885E-13	-3.482E-04	-3.508E-04	-1.335E-11
0.98124	1.582E-05	1.605E-05	-1.112E-12	-1.137E-12	-9.130E-04	-9.258E-04	-3.221E-11
0.98749	1.034E-04	1.067E-04	-1.177E-11	-1.238E-11	-4.728E-03	-4.892E-03	-8.799E-11
0.99373	8.320E-03	9.548E-03	-1.142E-08	-1.450E-08	-8.698E-01	-1.048E 00	-4.895E-10
0.98948	-2.936E-03	-2.965E-03	-2.255E-11	-2.121E-11	-9.778E 00	-9.807E 00	-1.154E-10
0.98400	-1.851E-03	-1.864E-03	-1.594E-12	-1.553E-12	-9.784E 00	-9.813E 00	-3.909E-11
0.97852	-1.323E-03	-1.332E-03	-3.725E-13	-3.673E-13	-9.785E 00	-9.814E 00	-1.538E-11
0.97305	-1.027E-03	-1.034E-03	-1.322E-13	-1.311E-13	-9.785E 00	-9.814E 00	-7.316E-12
0.96758	-8.390E-04	-8.445E-04	-5.826E-14	-5.791E-14	-9.785E 00	-9.814E 00	-3.930E-12
0.95669	-6.134E-04	-6.174E-04	-1.840E-14	-1.834E-14	-9.785E 00	-9.814E 00	-1.383E-12
0.94583	-4.832E-04	-4.864E-04	-8.687E-15	-8.669E-15	-9.786E 00	-9.814E 00	-5.696E-13
0.92424	-3.393E-04	-3.415E-04	-2.949E-15	-2.945E-15	-9.786E 00	-9.814E 00	-1.584E-13
0.90283	-2.614E-04	-2.631E-04	-1.296E-15	-1.295E-15	-9.786E 00	-9.814E 00	-6.138E-14
0.86059	-1.791E-04	-1.803E-04	-3.422E-16	-3.421E-16	-9.786E 00	-9.814E 00	-1.548E-14
0.81922	-1.362E-04	-1.371E-04	-1.360E-16	-1.360E-16	-9.786E 00	-9.814E 00	-5.720E-15
0.73968	-9.212E-05	-9.272E-05	-3.621E-17	-3.621E-17	-9.786E 00	-9.814E 00	-1.347E-15
0.66568	-6.959E-05	-7.004E-05	-1.419E-17	-1.419E-17	-9.786E 00	-9.814E 00	-4.781E-16
0.59929	-5.591E-05	-5.628E-05	-7.039E-18	-7.039E-18	-9.786E 00	-9.814E 00	-2.081E-16
0.54328	-4.673E-05	-4.703E-05	-3.852E-18	-3.852E-18	-9.786E 00	-9.814E 00	-1.063E-16
0.50116	-4.014E-05	-4.040E-05	-2.123E-18	-2.123E-18	-9.786E 00	-9.814E 00	-6.343E-17
0.47663	-3.517E-05	-3.540E-05	-1.218E-18	-1.218E-18	-9.786E 00	-9.814E 00	-4.084E-17
0.47242	-3.130E-05	-3.151E-05	-6.990E-19	-6.990E-19	-9.786E 00	-9.814E 00	-2.883E-17
0.48907	-2.820E-05	-2.838E-05	-4.007E-19	-4.007E-19	-9.786E 00	-9.814E 00	-2.162E-17

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.080 θ_D= 1.032E-03 ρ_a= 1.266

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0800	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.0800	0.10000	193.643	4.054E-08	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.0800	0.20000	172.127	5.336E-08	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.0800	0.30000	150.611	6.795E-08	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.0800	0.40000	129.095	1.017E-07	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.0800	0.50000	107.580	1.567E-07	1.000E 00	-8.044E-07	-8.045E-07	8.044E-07
0.60000	0.0800	0.60000	86.064	2.518E-07	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.0800	0.70000	64.548	6.753E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.0800	0.80000	43.033	2.425E-06	1.000E 00	-6.346E-06	-6.347E-06	6.346E-06
0.85000	0.0800	0.85000	32.275	6.257E-06	1.000E 00	-1.231E-05	-1.231E-05	1.230E-05
0.90000	0.0800	0.90000	21.518	2.325E-05	1.000E 00	-3.123E-05	-3.125E-05	3.123E-05
0.92500	0.0800	0.92500	16.140	5.626E-05	1.000E 00	-5.756E-05	-5.760E-05	5.754E-05
0.95000	0.0800	0.95000	10.762	2.095E-04	1.000E 00	-1.459E-04	-1.462E-04	1.458E-04
0.96250	0.0800	0.96250	8.074	5.452E-04	1.000E 00	-2.872E-04	-2.880E-04	2.869E-04
0.97500	0.0800	0.97500	5.388	2.414E-03	1.000E 00	-8.681E-04	-8.736E-04	8.662E-04
0.98124	0.0801	0.98125	4.046	7.289E-03	1.000E 00	-2.010E-03	-2.033E-03	2.003E-03
0.98749	0.0802	0.98750	2.708	4.532E-02	1.002E 00	-8.335E-03	-8.545E-03	8.302E-03
0.99373	0.0841	0.99375	1.385	5.001E 00	1.033E 00	-2.869E-01	-3.204E-01	3.873E-01
0.98981	0.2773	1.00000	2.424	1.475E 02	3.579E 00	-1.273E-02	-1.234E-02	1.310E-02
0.98456	0.4731	1.00625	3.761	1.476E 02	6.107E 00	-2.571E-03	-2.538E-03	2.594E-03
0.97931	0.6710	1.01250	5.102	1.476E 02	8.602E 00	-1.039E-03	-1.032E-03	1.044E-03
0.97407	0.8710	1.01875	6.445	1.476E 02	1.107E 01	-5.362E-04	-5.339E-04	5.377E-04
0.96885	1.0732	1.02500	7.788	1.476E 02	1.350E 01	-3.212E-04	-3.202E-04	3.218E-04
0.95844	1.4842	1.03750	10.476	1.476E 02	1.828E 01	-1.538E-04	-1.536E-04	1.540E-04
0.94807	1.9042	1.05000	13.164	1.476E 02	2.295E 01	-9.507E-05	-9.497E-05	9.513E-05
0.92750	2.7723	1.07500	18.542	1.476E 02	3.195E 01	-4.383E-05	-4.380E-05	4.384E-05
0.90715	3.6795	1.10000	23.921	1.476E 02	4.055E 01	-2.456E-05	-2.456E-05	2.457E-05
0.86719	5.6206	1.15000	34.678	1.476E 02	5.663E 01	-1.050E-05	-1.050E-05	1.050E-05
0.82832	7.7464	1.20000	45.435	1.476E 02	7.136E 01	-5.623E-06	-5.623E-06	5.624E-06
0.75451	12.6380	1.30000	66.951	1.476E 02	9.743E 01	-2.334E-06	-2.334E-06	2.334E-06
0.68736	18.5359	1.40000	88.467	1.476E 02	1.198E 02	-1.236E-06	-1.236E-06	1.236E-06
0.62899	25.6162	1.50000	109.982	1.476E 02	1.391E 02	-7.693E-07	-7.693E-07	7.693E-07
0.58207	33.9857	1.60000	131.498	1.476E 02	1.561E 02	-5.157E-07	-5.157E-07	5.157E-07
0.54953	43.8762	1.70000	153.014	1.476E 02	1.710E 02	-3.482E-07	-3.482E-07	3.482E-07
0.53400	54.0392	1.80000	174.530	1.476E 02	1.843E 02	-2.456E-07	-2.456E-07	2.456E-07
0.53697	64.7500	1.90000	196.046	1.476E 02	1.962E 02	-1.733E-07	-1.733E-07	1.733E-07
0.55813	74.9925	2.00000	217.562	1.476E 02	2.069E 02	-1.237E-07	-1.237E-07	1.237E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.080 θ_D= 1.032E-03 ρ_0= 1.266

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.306E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.516E-04	6.516E-04	6.517E-04	-2.044E-06	-2.044E-06
0.90000	3.125E-05	449.110	-1.143E-03	-1.143E-03	1.142E-03	1.143E-03	-5.188E-06	-5.190E-06
0.92500	5.762E-05	461.585	-1.680E-03	-1.680E-03	1.680E-03	1.681E-03	-9.561E-06	-9.568E-06
0.95000	1.463E-04	474.060	-2.851E-03	-2.853E-03	2.850E-03	2.854E-03	-2.424E-05	-2.428E-05
0.96250	2.885E-04	480.297	-4.113E-03	-4.118E-03	4.112E-03	4.121E-03	-4.771E-05	-4.784E-05
0.97500	8.772E-04	486.534	-7.278E-03	-7.296E-03	7.270E-03	7.308E-03	-1.442E-04	-1.451E-04
0.98124	2.049E-03	489.652	-1.151E-02	-1.156E-02	1.149E-02	1.160E-02	-3.340E-04	-3.377E-04
0.98749	8.727E-03	492.770	-2.455E-02	-2.485E-02	2.456E-02	2.516E-02	-1.385E-03	-1.420E-03
0.99373	4.902E-01	495.883	-1.865E-01	-2.000E-01	2.257E-01	2.587E-01	-4.765E-02	-5.322E-02
0.98981	1.231E-02	493.928	4.391E 00	4.390E 00	6.272E 00	6.276E 00	-2.115E-03	-2.050E-03
0.98456	2.528E-03	491.306	1.011E 01	1.011E 01	1.203E 01	1.204E 01	-4.270E-04	-4.215E-04
0.97931	1.029E-03	488.687	1.585E 01	1.584E 01	1.777E 01	1.778E 01	-1.726E-04	-1.714E-04
0.97407	5.330E-04	486.074	2.157E 01	2.157E 01	2.351E 01	2.351E 01	-8.908E-05	-8.869E-05
0.96885	3.199E-04	483.467	2.730E 01	2.730E 01	2.924E 01	2.924E 01	-5.336E-05	-5.320E-05
0.95844	1.535E-04	478.270	3.873E 01	3.873E 01	4.067E 01	4.067E 01	-2.556E-05	-2.551E-05
0.94807	9.493E-05	473.099	5.014E 01	5.014E 01	5.208E 01	5.208E 01	-1.579E-05	-1.578E-05
0.92750	4.379E-05	462.834	7.288E 01	7.288E 01	7.482E 01	7.482E 01	-7.280E-06	-7.276E-06
0.90715	2.455E-05	452.681	9.551E 01	9.551E 01	9.745E 01	9.745E 01	-4.081E-06	-4.079E-06
0.86719	1.050E-05	432.738	1.404E 02	1.404E 02	1.423E 02	1.423E 02	-1.745E-06	-1.745E-06
0.82832	5.623E-06	413.339	1.848E 02	1.848E 02	1.867E 02	1.867E 02	-9.341E-07	-9.340E-07
0.75451	2.334E-06	376.508	2.715E 02	2.715E 02	2.734E 02	2.734E 02	-3.877E-07	-3.876E-07
0.68736	1.236E-06	342.998	3.549E 02	3.549E 02	3.568E 02	3.568E 02	-2.053E-07	-2.053E-07
0.62899	7.693E-07	313.875	4.339E 02	4.339E 02	4.359E 02	4.359E 02	-1.278E-07	-1.278E-07
0.58207	5.157E-07	290.461	5.072E 02	5.072E 02	5.092E 02	5.092E 02	-8.566E-08	-8.566E-08
0.54953	3.482E-07	274.222	5.734E 02	5.734E 02	5.753E 02	5.753E 02	-5.783E-08	-5.783E-08
0.53400	2.456E-07	266.474	6.310E 02	6.310E 02	6.330E 02	6.330E 02	-4.080E-08	-4.080E-08
0.53697	1.733E-07	267.953	6.794E 02	6.794E 02	6.814E 02	6.814E 02	-2.878E-08	-2.878E-08
0.55813	1.237E-07	278.513	7.188E 02	7.188E 02	7.207E 02	7.207E 02	-2.055E-08	-2.055E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.080 θ_D= 1.032E-03 ρ_0= 1.266

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.901E-17
0.10000	8.283E-12	8.283E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-3.891E-17
0.20000	2.101E-11	1.909E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-5.566E-17
0.30000	4.242E-11	3.986E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-8.749E-17
0.40000	8.524E-11	8.140E-11	-4.123E-18	-4.124E-18	-9.569E-08	-9.569E-08	-1.481E-16
0.50000	1.808E-10	1.747E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-2.965E-16
0.60000	3.867E-10	4.001E-10	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-6.932E-16
0.70000	1.124E-09	1.107E-09	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-2.026E-15
0.80000	4.598E-09	4.598E-09	-1.629E-16	-1.629E-16	-1.980E-06	-1.980E-06	-9.176E-15
0.85000	1.227E-08	1.231E-08	-4.335E-16	-4.336E-16	-4.001E-06	-4.001E-06	-2.658E-14
0.90000	4.699E-08	4.749E-08	-1.860E-15	-1.861E-15	-1.103E-05	-1.103E-05	-1.193E-13
0.92500	1.178E-07	1.178E-07	-4.297E-15	-4.304E-15	-2.191E-05	-2.193E-05	-3.635E-13
0.95000	4.553E-07	4.558E-07	-1.704E-14	-1.709E-14	-5.507E-05	-5.516E-05	-1.631E-12
0.96250	1.223E-06	1.227E-06	-4.932E-14	-4.960E-14	-1.096E-04	-1.096E-04	-4.645E-12
0.97500	5.781E-06	5.825E-06	-2.844E-13	-2.880E-13	-3.479E-04	-3.505E-04	-1.741E-11
0.98124	1.810E-05	1.836E-05	-1.109E-12	-1.134E-12	-9.114E-04	-9.241E-04	-4.198E-11
0.98749	1.179E-04	1.217E-04	-1.167E-11	-1.227E-11	-4.702E-03	-4.864E-03	-1.145E-10
0.99373	9.175E-03	1.049E-02	-1.040E-08	-1.309E-08	-8.115E-01	-9.721E-01	-6.015E-10
0.98981	-3.037E-03	-3.082E-03	-2.431E-11	-2.284E-11	-9.503E 00	-9.526E 00	-1.519E-10
0.98456	-1.927E-03	-1.948E-03	-1.652E-12	-1.610E-12	-9.510E 00	-9.533E 00	-5.164E-11
0.97931	-1.377E-03	-1.392E-03	-3.809E-13	-3.756E-13	-9.511E 00	-9.534E 00	-2.033E-11
0.97407	-1.069E-03	-1.080E-03	-1.340E-13	-1.328E-13	-9.511E 00	-9.534E 00	-9.672E-12
0.96885	-8.722E-04	-8.814E-04	-5.906E-14	-5.870E-14	-9.511E 00	-9.534E 00	-5.177E-12
0.95844	-6.373E-04	-6.440E-04	-1.852E-14	-1.846E-14	-9.511E 00	-9.534E 00	-1.823E-12
0.94807	-5.019E-04	-5.071E-04	-8.743E-15	-8.725E-15	-9.511E 00	-9.534E 00	-7.488E-13
0.92750	-3.522E-04	-3.559E-04	-2.959E-15	-2.956E-15	-9.511E 00	-9.534E 00	-2.079E-13
0.90715	-2.713E-04	-2.741E-04	-1.300E-15	-1.299E-15	-9.511E 00	-9.534E 00	-8.047E-14
0.86719	-1.858E-04	-1.878E-04	-3.430E-16	-3.429E-16	-9.511E 00	-9.534E 00	-2.027E-14
0.82832	-1.413E-04	-1.428E-04	-1.362E-16	-1.362E-16	-9.511E 00	-9.534E 00	-7.485E-15
0.75451	-9.555E-05	-9.655E-05	-3.625E-17	-3.625E-17	-9.511E 00	-9.534E 00	-1.762E-15
0.68736	-7.217E-05	-7.293E-05	-1.420E-17	-1.420E-17	-9.511E 00	-9.534E 00	-6.251E-16
0.62899	-5.799E-05	-5.859E-05	-7.044E-18	-7.044E-18	-9.511E 00	-9.534E 00	-2.720E-16
0.58207	-4.846E-05	-4.897E-05	-3.855E-18	-3.855E-18	-9.511E 00	-9.534E 00	-1.389E-16
0.54953	-4.162E-05	-4.206E-05	-2.124E-18	-2.124E-18	-9.511E 00	-9.534E 00	-8.289E-17
0.53400	-3.648E-05	-3.686E-05	-1.219E-18	-1.219E-18	-9.511E 00	-9.534E 00	-5.337E-17
0.53697	-3.246E-05	-3.280E-05	-6.994E-19	-6.994E-19	-9.511E 00	-9.534E 00	-3.767E-17
0.55813	-2.924E-05	-2.955E-05	-4.009E-19	-4.009E-19	-9.511E 00	-9.534E 00	-2.825E-17

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.100 θ_D= 1.286E-03 ρ_a= 1.271

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.1000	0.10000	193.643	6.618E-08	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.1000	0.20000	172.127	7.962E-08	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.1000	0.30000	150.611	1.034E-07	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.1000	0.40000	129.096	1.459E-07	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.1000	0.50000	107.580	2.076E-07	1.000E 00	-8.044E-07	-8.045E-07	8.044E-07
0.60000	0.1000	0.60000	86.064	3.385E-07	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.1000	0.70000	64.548	8.771E-07	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.1000	0.80000	43.033	3.085E-06	1.000E 00	-6.346E-06	-6.346E-06	6.346E-06
0.85000	0.1000	0.85000	32.276	7.944E-06	1.000E 00	-1.230E-05	-1.231E-05	1.230E-05
0.90000	0.1000	0.90000	21.519	2.944E-05	1.000E 00	-3.123E-05	-3.124E-05	3.122E-05
0.92500	0.1000	0.92500	16.141	7.122E-05	1.000E 00	-5.755E-05	-5.759E-05	5.753E-05
0.95000	0.1000	0.95000	10.765	2.647E-04	1.000E 00	-1.459E-04	-1.461E-04	1.458E-04
0.96250	0.1000	0.96250	8.078	6.874E-04	1.000E 00	-2.869E-04	-2.877E-04	2.865E-04
0.97500	0.1000	0.97500	5.393	3.032E-03	1.000E 00	-8.661E-04	-8.715E-04	8.641E-04
0.98124	0.1001	0.98125	4.053	9.127E-03	1.000E 00	-2.002E-03	-2.025E-03	1.995E-03
0.98749	0.1002	0.98750	2.717	5.608E-02	1.001E 00	-8.232E-03	-8.438E-03	8.200E-03
0.99373	0.1047	0.99375	1.405	5.331E 00	1.023E 00	-2.579E-01	-2.857E-01	3.349E-01
0.99057	0.3339	1.00000	2.381	1.392E 02	3.604E 00	-1.406E-02	-1.362E-02	1.449E-02
0.98586	0.5716	1.00625	3.714	1.393E 02	6.218E 00	-2.703E-03	-2.668E-03	2.728E-03
0.98117	0.8116	1.01250	5.053	1.394E 02	8.793E 00	-1.072E-03	-1.065E-03	1.077E-03
0.97649	1.0538	1.01875	6.394	1.394E 02	1.133E 01	-5.467E-04	-5.442E-04	5.482E-04
0.97182	1.2984	1.02500	7.737	1.394E 02	1.385E 01	-3.275E-04	-3.266E-04	3.282E-04
0.96255	1.7948	1.03750	10.424	1.394E 02	1.878E 01	-1.553E-04	-1.550E-04	1.554E-04
0.95334	2.3007	1.05000	13.112	1.394E 02	2.359E 01	-9.597E-05	-9.587E-05	9.603E-05
0.93517	3.3424	1.07500	18.489	1.394E 02	3.289E 01	-4.409E-05	-4.407E-05	4.411E-05
0.91732	4.4249	1.10000	23.867	1.394E 02	4.176E 01	-2.468E-05	-2.467E-05	2.469E-05
0.88265	6.7193	1.15000	34.624	1.394E 02	5.834E 01	-1.054E-05	-1.054E-05	1.054E-05
0.84951	9.1970	1.20000	45.382	1.394E 02	7.354E 01	-5.639E-06	-5.638E-06	5.639E-06
0.78859	14.7503	1.30000	66.897	1.394E 02	1.004E 02	-2.338E-06	-2.338E-06	2.338E-06
0.73626	21.1613	1.40000	88.412	1.394E 02	1.235E 02	-1.238E-06	-1.238E-06	1.238E-06
0.69447	28.4455	1.50000	109.928	1.394E 02	1.435E 02	-7.701E-07	-7.701E-07	7.701E-07
0.66520	36.5129	1.60000	131.444	1.394E 02	1.609E 02	-5.162E-07	-5.162E-07	5.162E-07
0.65015	45.1342	1.70000	152.960	1.394E 02	1.764E 02	-3.485E-07	-3.485E-07	3.485E-07
0.65031	53.9546	1.80000	174.476	1.394E 02	1.901E 02	-2.458E-07	-2.458E-07	2.458E-07
0.66566	62.5678	1.90000	195.991	1.394E 02	2.023E 02	-1.734E-07	-1.734E-07	1.734E-07
0.69520	70.6210	2.00000	217.507	1.394E 02	2.134E 02	-1.238E-07	-1.238E-07	1.238E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.100 θ_D= 1.286E-03 ρ_a= 1.271

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.393E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.306E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.516E-04	6.515E-04	6.516E-04	-2.044E-06	-2.044E-06
0.90000	3.125E-05	449.110	-1.143E-03	-1.143E-03	1.142E-03	1.143E-03	-5.188E-06	-5.190E-06
0.92500	5.761E-05	461.585	-1.680E-03	-1.680E-03	1.680E-03	1.681E-03	-9.559E-06	-9.566E-06
0.95000	1.462E-04	474.060	-2.850E-03	-2.852E-03	2.849E-03	2.853E-03	-2.423E-05	-2.427E-05
0.96250	2.882E-04	480.297	-4.112E-03	-4.117E-03	4.110E-03	4.119E-03	-4.765E-05	-4.779E-05
0.97500	8.750E-04	486.534	-7.271E-03	-7.290E-03	7.264E-03	7.302E-03	-1.439E-04	-1.448E-04
0.98124	2.040E-03	489.652	-1.148E-02	-1.154E-02	1.147E-02	1.158E-02	-3.326E-04	-3.364E-04
0.98749	8.615E-03	492.769	-2.439E-02	-2.469E-02	2.444E-02	2.503E-02	-1.367E-03	-1.402E-03
0.99373	4.154E-01	495.883	-1.754E-01	-1.874E-01	2.116E-01	2.402E-01	-4.283E-02	-4.746E-02
0.99057	1.359E-02	494.308	3.999E 00	3.998E 00	5.855E 00	5.858E 00	-2.336E-03	-2.262E-03
0.98586	2.657E-03	491.958	9.448E 00	9.448E 00	1.134E 01	1.135E 01	-4.490E-04	-4.431E-04
0.98117	1.062E-03	489.614	1.491E 01	1.491E 01	1.681E 01	1.681E 01	-1.781E-04	-1.769E-04
0.97649	5.433E-04	487.278	2.036E 01	2.036E 01	2.227E 01	2.227E 01	-9.081E-05	-9.041E-05
0.97182	3.262E-04	484.950	2.580E 01	2.580E 01	2.772E 01	2.772E 01	-5.441E-05	-5.424E-05
0.96255	1.549E-04	480.322	3.667E 01	3.667E 01	3.858E 01	3.859E 01	-2.579E-05	-2.575E-05
0.95334	9.583E-05	475.730	4.750E 01	4.750E 01	4.942E 01	4.942E 01	-1.594E-05	-1.593E-05
0.93517	4.406E-05	466.661	6.904E 01	6.904E 01	7.096E 01	7.096E 01	-7.324E-06	-7.320E-06
0.91732	2.467E-05	457.752	9.042E 01	9.042E 01	9.235E 01	9.235E 01	-4.100E-06	-4.099E-06
0.88265	1.054E-05	440.463	1.327E 02	1.327E 02	1.346E 02	1.346E 02	-1.751E-06	-1.751E-06
0.84951	5.638E-06	423.917	1.742E 02	1.742E 02	1.761E 02	1.761E 02	-9.367E-07	-9.366E-07
0.78859	2.338E-06	393.517	2.545E 02	2.545E 02	2.564E 02	2.564E 02	-3.883E-07	-3.883E-07
0.73626	1.238E-06	367.403	3.305E 02	3.305E 02	3.324E 02	3.324E 02	-2.056E-07	-2.056E-07
0.69447	7.701E-07	346.548	4.012E 02	4.012E 02	4.032E 02	4.032E 02	-1.279E-07	-1.279E-07
0.66520	5.162E-07	331.942	4.657E 02	4.657E 02	4.677E 02	4.677E 02	-8.575E-08	-8.575E-08
0.65015	3.485E-07	324.432	5.232E 02	5.232E 02	5.251E 02	5.251E 02	-5.789E-08	-5.788E-08
0.65031	2.458E-07	324.510	5.730E 02	5.730E 02	5.749E 02	5.749E 02	-4.083E-08	-4.083E-08
0.66566	1.734E-07	332.171	6.152E 02	6.152E 02	6.171E 02	6.171E 02	-2.881E-08	-2.880E-08
0.69520	1.238E-07	346.913	6.504E 02	6.504E 02	6.523E 02	6.523E 02	-2.057E-08	-2.057E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.100 θ_D=1.286E-03 ρ_a=1.271

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-4.532E-17
0.10000	5.852E-12	5.247E-12	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-6.080E-17
0.20000	2.007E-11	2.190E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-8.696E-17
0.30000	5.224E-11	5.062E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-1.367E-16
0.40000	1.092E-10	1.092E-10	-4.123E-18	-4.123E-18	-9.569E-08	-9.569E-08	-2.314E-16
0.50000	2.125E-10	2.066E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-4.632E-16
0.60000	4.822E-10	4.887E-10	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-1.083E-15
0.70000	1.385E-09	1.386E-09	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-3.166E-15
0.80000	5.698E-09	5.708E-09	-1.628E-16	-1.629E-16	-1.980E-06	-1.980E-06	-1.434E-14
0.85000	1.525E-08	1.526E-08	-4.335E-16	-4.336E-16	-4.001E-06	-4.001E-06	-4.154E-14
0.90000	5.881E-08	5.895E-08	-1.859E-15	-1.861E-15	-1.103E-05	-1.103E-05	-1.863E-13
0.92500	1.462E-07	1.462E-07	-4.297E-15	-4.303E-15	-2.191E-05	-2.193E-05	-5.677E-13
0.95000	5.646E-07	5.653E-07	-1.703E-14	-1.708E-14	-5.505E-05	-5.514E-05	-2.546E-12
0.96250	1.516E-06	1.520E-06	-4.923E-14	-4.951E-14	-1.092E-04	-1.095E-04	-7.250E-12
0.97500	7.154E-06	7.210E-06	-2.834E-13	-2.870E-13	-3.472E-04	-3.497E-04	-2.713E-11
0.98124	2.241E-05	2.273E-05	-1.102E-12	-1.127E-12	-9.075E-04	-9.201E-04	-6.525E-11
0.98749	1.449E-04	1.495E-04	-1.143E-11	-1.201E-11	-4.638E-03	-4.796E-03	-1.774E-10
0.99373	1.015E-02	1.150E-02	-8.368E-09	-1.033E-08	-6.905E-01	-8.175E-01	-8.288E-10
0.99057	-2.846E-03	-2.866E-03	-2.934E-11	-2.752E-11	-9.074E 00	-9.092E 00	-2.407E-10
0.98586	-1.841E-03	-1.845E-03	-1.796E-12	-1.749E-12	-9.082E 00	-9.099E 00	-8.286E-11
0.98117	-1.315E-03	-1.318E-03	-4.008E-13	-3.951E-13	-9.082E 00	-9.100E 00	-3.264E-11
0.97649	-1.019E-03	-1.022E-03	-1.382E-13	-1.370E-13	-9.083E 00	-9.100E 00	-1.554E-11
0.97182	-8.314E-04	-8.332E-04	-6.093E-14	-6.056E-14	-9.083E 00	-9.100E 00	-8.254E-12
0.96255	-6.068E-04	-6.081E-04	-1.879E-14	-1.873E-14	-9.083E 00	-9.101E 00	-2.908E-12
0.95334	-4.775E-04	-4.785E-04	-8.873E-15	-8.854E-15	-9.083E 00	-9.101E 00	-1.187E-12
0.93517	-3.348E-04	-3.355E-04	-2.984E-15	-2.981E-15	-9.083E 00	-9.101E 00	-3.286E-13
0.91732	-2.577E-04	-2.583E-04	-1.310E-15	-1.309E-15	-9.083E 00	-9.101E 00	-1.268E-13
0.88265	-1.765E-04	-1.769E-04	-3.448E-16	-3.447E-16	-9.083E 00	-9.101E 00	-3.186E-14
0.84951	-1.342E-04	-1.346E-04	-1.368E-16	-1.368E-16	-9.083E 00	-9.101E 00	-1.175E-14
0.78859	-9.069E-05	-9.089E-05	-3.635E-17	-3.634E-17	-9.083E 00	-9.101E 00	-2.762E-15
0.73626	-6.849E-05	-6.864E-05	-1.423E-17	-1.423E-17	-9.083E 00	-9.101E 00	-9.790E-16
0.69447	-5.502E-05	-5.514E-05	-7.055E-18	-7.054E-18	-9.083E 00	-9.101E 00	-4.258E-16
0.66520	-4.598E-05	-4.608E-05	-3.861E-18	-3.861E-18	-9.083E 00	-9.101E 00	-2.174E-16
0.65015	-3.949E-05	-3.958E-05	-2.127E-18	-2.127E-18	-9.083E 00	-9.101E 00	-1.297E-16
0.65031	-3.461E-05	-3.468E-05	-1.221E-18	-1.221E-18	-9.083E 00	-9.101E 00	-8.347E-17
0.66566	-3.080E-05	-3.087E-05	-7.004E-19	-7.004E-19	-9.083E 00	-9.101E 00	-5.890E-17
0.69520	-2.775E-05	-2.781E-05	-4.015E-19	-4.015E-19	-9.083E 00	-9.101E 00	-4.417E-17

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.120 θ_D= 1.537E-03 ρ_a= 1.277

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.1200	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.1200	0.10000	193.643	1.064E-07	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.1200	0.20000	172.127	1.246E-07	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.1200	0.30000	150.611	1.547E-07	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.1200	0.40000	129.096	2.009E-07	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.1200	0.50000	107.580	2.835E-07	1.000E 00	-8.044E-07	-8.045E-07	8.044E-07
0.60000	0.1200	0.60000	86.064	4.302E-07	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.1200	0.70000	64.549	1.077E-06	1.000E 00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.1200	0.80000	43.034	3.729E-06	1.000E 00	-6.346E-06	-6.346E-06	6.345E-06
0.85000	0.1200	0.85000	32.277	9.552E-06	1.000E 00	-1.230E-05	-1.231E-05	1.230E-05
0.90000	0.1200	0.90000	21.520	3.528E-05	1.000E-00	-3.122E-05	-3.124E-05	3.122E-05
0.92500	0.1200	0.92500	16.143	8.527E-05	1.000E-00	-5.753E-05	-5.757E-05	5.752E-05
0.95000	0.1200	0.95000	10.767	3.168E-04	1.000E-00	-1.458E-04	-1.460E-04	1.457E-04
0.96250	0.1200	0.96250	8.081	8.221E-04	1.000E-00	-2.865E-04	-2.873E-04	2.861E-04
0.97500	0.1200	0.97500	5.398	3.623E-03	1.000E-00	-8.636E-04	-8.690E-04	8.616E-04
0.98124	0.1201	0.98125	4.060	1.089E-02	1.000E 00	-1.993E-03	-2.015E-03	1.986E-03
0.98749	0.1203	0.98750	2.729	6.617E-02	1.001E 00	-8.109E-03	-8.309E-03	8.078E-03
0.99373	0.1251	0.99375	1.428	5.362E 00	1.014E 00	-2.280E-01	-2.507E-01	2.851E-01
0.99148	0.3828	1.00000	2.326	1.307E 02	3.502E 00	-1.594E-02	-1.542E-02	1.647E-02
0.98743	0.6579	1.00625	3.653	1.309E 02	6.141E 00	-2.883E-03	-2.844E-03	2.911E-03
0.98340	0.9353	1.01250	4.989	1.309E 02	8.740E 00	-1.117E-03	-1.109E-03	1.122E-03
0.97939	1.2151	1.01875	6.329	1.309E 02	1.130E 01	-5.605E-04	-5.580E-04	5.621E-04
0.97540	1.4971	1.02500	7.671	1.309E 02	1.384E 01	-3.360E-04	-3.349E-04	3.366E-04
0.96750	2.0682	1.03750	10.356	1.309E 02	1.882E 01	-1.572E-04	-1.569E-04	1.573E-04
0.95969	2.6487	1.05000	13.043	1.309E 02	2.367E 01	-9.715E-05	-9.705E-05	9.722E-05
0.94439	3.8381	1.07500	18.420	1.309E 02	3.305E 01	-4.444E-05	-4.442E-05	4.445E-05
0.92950	5.0662	1.10000	23.797	1.309E 02	4.200E 01	-2.484E-05	-2.483E-05	2.484E-05
0.90106	7.6413	1.15000	34.554	1.309E 02	5.873E 01	-1.059E-05	-1.059E-05	1.059E-05
0.87457	10.3782	1.20000	45.311	1.309E 02	7.407E 01	-5.659E-06	-5.658E-06	5.659E-06
0.82811	16.3428	1.30000	66.826	1.309E 02	1.012E 02	-2.343E-06	-2.343E-06	2.343E-06
0.79162	22.9351	1.40000	88.342	1.309E 02	1.245E 02	-1.240E-06	-1.240E-06	1.240E-06
0.76652	30.0596	1.50000	109.857	1.309E 02	1.466E 02	-7.711E-07	-7.711E-07	7.711E-07
0.75396	37.5419	1.60000	131.373	1.309E 02	1.623E 02	-5.169E-07	-5.169E-07	5.169E-07
0.75456	45.1437	1.70000	152.889	1.309E 02	1.778E 02	-3.489E-07	-3.489E-07	3.489E-07
0.76828	52.6030	1.80000	174.404	1.309E 02	1.917E 02	-2.461E-07	-2.461E-07	2.461E-07
0.79445	59.6857	1.90000	195.920	1.309E 02	2.040E 02	-1.736E-07	-1.736E-07	1.736E-07
0.83189	66.2243	2.00000	217.436	1.309E 02	2.152E 02	-1.239E-07	-1.239E-07	1.239E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.120 θ_D= 1.537E-03 ρ_a= 1.277

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.392E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.212E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.347E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.306E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.516E-04	-6.516E-04	6.515E-04	6.516E-04	-2.044E-06	-2.044E-06
0.90000	3.124E-05	449.110	-1.142E-03	-1.143E-03	1.142E-03	1.143E-03	-5.187E-06	-5.189E-06
0.92500	5.760E-05	461.585	-1.680E-03	-1.680E-03	1.679E-03	1.680E-03	-9.557E-06	-9.564E-06
0.95000	1.462E-04	474.060	-2.850E-03	-2.851E-03	2.849E-03	2.852E-03	-2.422E-05	-2.426E-05
0.96250	2.878E-04	480.297	-4.110E-03	-4.115E-03	4.109E-03	4.118E-03	-4.759E-05	-4.772E-05
0.97500	8.725E-04	486.534	-7.263E-03	-7.281E-03	7.256E-03	7.294E-03	-1.434E-04	-1.444E-04
0.98124	2.031E-03	489.652	-1.146E-02	-1.151E-02	1.144E-02	1.155E-02	-3.311E-04	-3.348E-04
0.98749	8.482E-03	492.769	-2.421E-02	-2.449E-02	2.430E-02	2.488E-02	-1.347E-03	-1.380E-03
0.99373	3.470E-01	495.883	-1.641E-01	-1.746E-01	1.966E-01	2.211E-01	-3.788E-02	-4.164E-02
0.99148	1.541E-02	494.758	3.537E 00	3.536E 00	5.380E 00	5.382E 00	-2.648E-03	-2.561E-03
0.98743	2.833E-03	492.739	8.653E 00	8.653E 00	1.054E 01	1.054E 01	-4.790E-04	-4.725E-04
0.98340	1.106E-03	490.727	1.378E 01	1.378E 01	1.568E 01	1.568E 01	-1.855E-04	-1.841E-04
0.97939	5.570E-04	488.727	1.890E 01	1.889E 01	2.080E 01	2.080E 01	-9.311E-05	-9.269E-05
0.97540	3.346E-04	486.737	2.400E 01	2.400E 01	2.591E 01	2.591E 01	-5.581E-05	-5.564E-05
0.96750	1.568E-04	482.794	3.418E 01	3.418E 01	3.609E 01	3.609E 01	-2.611E-05	-2.607E-05
0.95969	9.701E-05	478.899	4.431E 01	4.431E 01	4.622E 01	4.622E 01	-1.614E-05	-1.612E-05
0.94439	4.441E-05	471.260	6.443E 01	6.443E 01	6.634E 01	6.634E 01	-7.382E-06	-7.378E-06
0.92950	2.482E-05	463.830	8.433E 01	8.433E 01	8.624E 01	8.625E 01	-4.126E-06	-4.124E-06
0.90106	1.059E-05	449.641	1.235E 02	1.235E 02	1.254E 02	1.254E 02	-1.759E-06	-1.759E-06
0.87457	5.658E-06	436.418	1.616E 02	1.616E 02	1.636E 02	1.636E 02	-9.400E-07	-9.399E-07
0.82811	2.343E-06	413.235	2.347E 02	2.347E 02	2.366E 02	2.366E 02	-3.892E-07	-3.892E-07
0.79162	1.240E-06	395.027	3.028E 02	3.028E 02	3.048E 02	3.048E 02	-2.059E-07	-2.059E-07
0.76652	7.711E-07	382.504	3.653E 02	3.653E 02	3.672E 02	3.672E 02	-1.281E-07	-1.281E-07
0.75396	5.169E-07	376.235	4.214E 02	4.214E 02	4.233E 02	4.233E 02	-8.586E-08	-8.586E-08
0.75456	3.489E-07	376.532	4.710E 02	4.710E 02	4.729E 02	4.730E 02	-5.795E-08	-5.795E-08
0.76828	2.461E-07	383.380	5.141E 02	5.141E 02	5.160E 02	5.160E 02	-4.088E-08	-4.088E-08
0.79445	1.736E-07	396.439	5.509E 02	5.509E 02	5.528E 02	5.528E 02	-2.884E-08	-2.884E-08
0.83189	1.239E-07	415.125	5.821E 02	5.821E 02	5.841E 02	5.841E 02	-2.059E-08	-2.059E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.120 θ_D= 1.537E-03 ρ_a= 1.277

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-6.526E-17
0.10000	1.025E-11	1.151E-11	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-8.755E-17
0.20000	2.735E-11	2.642E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-1.252E-16
0.30000	5.826E-11	5.848E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-1.968E-16
0.40000	1.250E-10	1.253E-10	-4.123E-18	-4.123E-18	-9.569E-08	-9.569E-08	-3.332E-16
0.50000	2.547E-10	2.514E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-6.670E-16
0.60000	5.812E-10	5.791E-10	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-1.560E-15
0.70000	1.654E-09	1.660E-09	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-4.559E-15
0.80000	6.809E-09	6.811E-09	-1.628E-16	-1.629E-16	-1.980E-06	-1.980E-06	-2.064E-14
0.85000	1.828E-08	1.823E-08	-4.334E-16	-4.336E-16	-4.000E-06	-4.001E-06	-5.980E-14
0.90000	7.057E-08	7.050E-08	-1.859E-15	-1.860E-15	-1.103E-05	-1.103E-05	-2.682E-13
0.92500	1.748E-07	1.748E-07	-4.295E-15	-4.301E-15	-2.191E-05	-2.192E-05	-8.171E-13
0.95000	6.752E-07	6.761E-07	-1.702E-14	-1.707E-14	-5.503E-05	-5.512E-05	-3.662E-12
0.96250	1.812E-06	1.818E-06	-4.912E-14	-4.940E-14	-1.091E-04	-1.094E-04	-1.043E-11
0.97500	8.537E-06	8.606E-06	-2.821E-13	-2.857E-13	-3.463E-04	-3.489E-04	-3.894E-11
0.98124	2.670E-05	2.709E-05	-1.093E-12	-1.118E-12	-9.028E-04	-9.154E-04	-9.336E-11
0.98749	1.711E-04	1.765E-04	-1.114E-11	-1.170E-11	-4.562E-03	-4.716E-03	-2.529E-10
0.99373	1.071E-02	1.202E-02	-6.524E-09	-7.916E-09	-5.755E-01	-6.734E-01	-1.059E-09
0.99148	-2.163E-03	-2.189E-03	-3.724E-11	-3.484E-11	-8.721E 00	-8.737E 00	-3.541E-10
0.98743	-1.168E-03	-1.172E-03	-1.998E-12	-1.945E-12	-8.731E 00	-8.746E 00	-1.237E-10
0.98340	-8.424E-04	-8.447E-04	-4.281E-13	-4.219E-13	-8.731E 00	-8.747E 00	-4.873E-11
0.97939	-6.544E-04	-6.562E-04	-1.438E-13	-1.425E-13	-8.732E 00	-8.747E 00	-2.322E-11
0.97540	-5.336E-04	-5.350E-04	-6.345E-14	-6.306E-14	-8.732E 00	-8.747E 00	-1.220E-11
0.96750	-3.891E-04	-3.901E-04	-1.915E-14	-1.908E-14	-8.732E 00	-8.747E 00	-4.302E-12
0.95969	-3.059E-04	-3.067E-04	-9.044E-15	-9.024E-15	-8.732E 00	-8.747E 00	-1.743E-12
0.94439	-2.143E-04	-2.148E-04	-3.016E-15	-3.013E-15	-8.732E 00	-8.747E 00	-4.801E-13
0.92950	-1.649E-04	-1.653E-04	-1.323E-15	-1.322E-15	-8.732E 00	-8.747E 00	-1.847E-13
0.90106	-1.128E-04	-1.131E-04	-3.472E-16	-3.471E-16	-8.732E 00	-8.747E 00	-4.623E-14
0.87457	-8.572E-05	-8.594E-05	-1.375E-16	-1.375E-16	-8.732E 00	-8.747E 00	-1.701E-14
0.82811	-5.792E-05	-5.806E-05	-3.647E-17	-3.647E-17	-8.732E 00	-8.747E 00	-3.993E-15
0.79162	-4.373E-05	-4.384E-05	-1.427E-17	-1.427E-17	-8.732E 00	-8.747E 00	-1.414E-15
0.76652	-3.513E-05	-3.522E-05	-7.069E-18	-7.068E-18	-8.732E 00	-8.747E 00	-6.148E-16
0.75396	-2.935E-05	-2.943E-05	-3.869E-18	-3.869E-18	-8.732E 00	-8.747E 00	-3.136E-16
0.75456	-2.521E-05	-2.527E-05	-2.131E-18	-2.131E-18	-8.732E 00	-8.747E 00	-1.870E-16
0.76828	-2.209E-05	-2.215E-05	-1.223E-18	-1.223E-18	-8.732E 00	-8.747E 00	-1.203E-16
0.79445	-1.966E-05	-1.971E-05	-7.017E-19	-7.017E-19	-8.732E 00	-8.747E 00	-8.490E-17
0.83189	-1.771E-05	-1.775E-05	-4.022E-19	-4.022E-19	-8.732E 00	-8.747E 00	-6.365E-17

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.150 θ_D= 2.871E-03 ρ_0= 1.288

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.1500	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.1500	0.10000	193.643	1.922E-07	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.1500	0.20000	172.127	2.168E-07	1.000E 00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.1500	0.30000	150.612	2.468E-07	1.000E 00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.1500	0.40000	129.096	3.085E-07	1.000E 00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.1500	0.50000	107.580	4.052E-07	1.000E 00	-8.044E-07	-8.045E-07	8.044E-07
0.60000	0.1500	0.60000	86.065	5.870E-07	1.000E 00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.1500	0.70000	64.549	1.394E-06	1.000E-00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.1500	0.80000	43.035	4.629E-06	1.000E-00	-6.345E-06	-6.346E-06	6.345E-06
0.85000	0.1500	0.85000	32.278	1.177E-05	1.000E-00	-1.230E-05	-1.231E-05	1.230E-05
0.90000	0.1500	0.90000	21.523	4.341E-05	1.000E-00	-3.122E-05	-3.123E-05	3.121E-05
0.92500	0.1500	0.92500	16.146	1.049E-04	9.999E-01	-5.751E-05	-5.755E-05	5.750E-05
0.95000	0.1500	0.95000	10.772	3.900E-04	9.999E-01	-1.457E-04	-1.459E-04	1.456E-04
0.96250	0.1500	0.96250	8.088	1.011E-03	9.998E-01	-2.857E-04	-2.865E-04	2.854E-04
0.97500	0.1500	0.97500	5.409	4.457E-03	9.996E-01	-8.590E-04	-8.644E-04	8.571E-04
0.98124	0.1501	0.98125	4.074	1.337E-02	9.993E-01	-1.976E-03	-1.998E-03	1.969E-03
0.98749	0.1503	0.98750	2.749	7.996E-02	9.994E-01	-7.891E-03	-8.081E-03	7.860E-03
0.99373	0.1554	0.99375	1.469	5.153E 00	1.004E 00	-1.879E-01	-2.043E-01	2.238E-01
0.99312	0.4414	1.00000	2.218	1.169E 02	3.184E 00	-2.045E-02	-1.972E-02	2.125E-02
0.99032	0.7640	1.00625	3.834	1.171E 02	5.806E 00	-3.270E-03	-3.223E-03	3.304E-03
0.98755	1.0884	1.01250	4.866	1.171E 02	8.385E 00	-1.208E-03	-1.198E-03	1.214E-03
0.98480	1.4145	1.01875	6.203	1.172E 02	1.093E 01	-5.881E-04	-5.853E-04	5.898E-04
0.98209	1.7425	1.02500	7.543	1.172E 02	1.344E 01	-3.527E-04	-3.516E-04	3.534E-04
0.97676	2.4040	1.03750	10.227	1.172E 02	1.838E 01	-1.609E-04	-1.606E-04	1.610E-04
0.97156	3.0726	1.05000	12.913	1.172E 02	2.319E 01	-9.945E-05	-9.934E-05	9.951E-05
0.96157	4.4310	1.07500	18.288	1.172E 02	3.249E 01	-4.511E-05	-4.509E-05	4.512E-05
0.95213	5.8172	1.10000	23.665	1.172E 02	4.136E 01	-2.513E-05	-2.512E-05	2.513E-05
0.93497	8.6694	1.15000	34.421	1.172E 02	5.795E 01	-1.068E-05	-1.068E-05	1.068E-05
0.92022	11.6206	1.20000	45.178	1.172E 02	7.315E 01	-5.697E-06	-5.696E-06	5.697E-06
0.89835	17.7728	1.30000	66.693	1.172E 02	1.001E 02	-2.353E-06	-2.353E-06	2.353E-06
0.88729	24.1542	1.40000	88.208	1.172E 02	1.231E 02	-1.244E-06	-1.244E-06	1.244E-06
0.88742	30.6145	1.50000	109.723	1.172E 02	1.431E 02	-7.730E-07	-7.730E-07	7.730E-07
0.89875	36.9921	1.60000	131.239	1.172E 02	1.606E 02	-5.182E-07	-5.182E-07	5.182E-07
0.92087	43.1371	1.70000	152.755	1.172E 02	1.760E 02	-3.496E-07	-3.496E-07	3.496E-07
0.95302	48.9310	1.80000	174.271	1.172E 02	1.897E 02	-2.466E-07	-2.466E-07	2.466E-07
0.99422	54.2961	1.90000	195.786	1.172E 02	2.020E 02	-1.740E-07	-1.740E-07	1.740E-07
1.04342	59.1952	2.00000	217.302	1.172E 02	2.130E 02	-1.242E-07	-1.242E-07	1.242E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.150 θ_D= 2.871E-03 ρ_0= 1.288

z	$_x\mu'$-1.0	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.392E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.958E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.346E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.306E-04	-1.054E-06	-1.054E-06
0.85000	1.231E-05	424.160	-6.515E-04	-6.516E-04	6.515E-04	6.516E-04	-2.044E-06	-2.044E-06
0.90000	3.124E-05	449.110	-1.142E-03	-1.143E-03	1.142E-03	1.143E-03	-5.185E-06	-5.188E-06
0.92500	5.758E-05	461.585	-1.679E-03	-1.680E-03	1.679E-03	1.680E-03	-9.554E-06	-9.560E-06
0.95000	1.460E-04	474.060	-2.848E-03	-2.850E-03	2.848E-03	2.851E-03	-2.420E-05	-2.423E-05
0.96250	2.870E-04	480.297	-4.107E-03	-4.112E-03	4.106E-03	4.115E-03	-4.746E-05	-4.760E-05
0.97500	8.678E-04	486.534	-7.248E-03	-7.267E-03	7.241E-03	7.279E-03	-1.427E-04	-1.436E-04
0.98124	2.013E-03	489.652	-1.141E-02	-1.147E-02	1.140E-02	1.151E-02	-3.282E-04	-3.319E-04
0.98749	8.245E-03	492.770	-2.387E-02	-2.415E-02	2.404E-02	2.460E-02	-1.311E-03	-1.342E-03
0.99373	2.657E-01	495.883	-1.468E-01	-1.553E-01	1.742E-01	1.932E-01	-3.121E-02	-3.394E-02
0.99312	1.976E-02	495.578	2.681E 00	2.680E 00	4.574E 00	4.577E 00	-3.396E-03	-3.276E-03
0.99032	3.210E-03	494.182	7.171E 00	7.170E 00	9.115E 00	9.117E 00	-5.431E-04	-5.353E-04
0.98755	1.195E-03	492.797	1.167E 01	1.167E 01	1.363E 01	1.363E 01	-2.006E-04	-1.991E-04
0.98480	5.843E-04	491.428	1.615E 01	1.615E 01	1.812E 01	1.812E 01	-9.769E-05	-9.723E-05
0.98209	3.511E-04	490.074	2.062E 01	2.062E 01	2.259E 01	2.259E 01	-5.859E-05	-5.840E-05
0.97676	1.605E-04	487.415	2.952E 01	2.952E 01	3.149E 01	3.149E 01	-2.672E-05	-2.667E-05
0.97156	9.929E-05	484.822	3.835E 01	3.835E 01	4.032E 01	4.032E 01	-1.652E-05	-1.650E-05
0.96157	4.508E-05	479.836	5.581E 01	5.581E 01	5.778E 01	5.778E 01	-7.493E-06	-7.489E-06
0.95213	2.512E-05	475.125	7.300E 01	7.300E 01	7.497E 01	7.497E 01	-4.174E-06	-4.173E-06
0.93497	1.068E-05	466.563	1.065E 02	1.065E 02	1.085E 02	1.085E 02	-1.775E-06	-1.774E-06
0.92022	5.696E-06	459.199	1.388E 02	1.388E 02	1.408E 02	1.408E 02	-9.463E-07	-9.462E-07
0.89835	2.353E-06	448.289	1.996E 02	1.996E 02	2.016E 02	2.016E 02	-3.909E-07	-3.909E-07
0.88729	1.244E-06	442.767	2.551E 02	2.551E 02	2.570E 02	2.570E 02	-2.066E-07	-2.066E-07
0.88742	7.730E-07	442.834	3.049E 02	3.049E 02	3.069E 02	3.069E 02	-1.284E-07	-1.284E-07
0.89875	5.182E-07	448.489	3.491E 02	3.491E 02	3.511E 02	3.511E 02	-8.608E-08	-8.608E-08
0.92087	3.496E-07	459.524	3.880E 02	3.880E 02	3.900E 02	3.900E 02	-5.808E-08	-5.808E-08
0.95302	2.466E-07	475.566	4.219E 02	4.219E 02	4.238E 02	4.238E 02	-4.097E-08	-4.097E-08
0.99422	1.740E-07	496.129	4.512E 02	4.512E 02	4.532E 02	4.532E 02	-2.890E-08	-2.890E-08
1.04342	1.242E-07	520.677	4.766E 02	4.766E 02	4.785E 02	4.785E 02	-2.063E-08	-2.063E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.150 θ_0= 2.871E-03 ρ_a= 1.288

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.020E-16
0.10000	1.290E-11	1.090E-11	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-1.368E-16
0.20000	3.404E-11	3.503E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-1.957E-16
0.30000	7.647E-11	7.324E-11	-2.260E-18	-2.260E-18	-4.937E-08	-4.937E-08	-3.076E-16
0.40000	1.626E-10	1.590E-10	-4.123E-18	-4.123E-18	-9.569E-08	-9.569E-08	-5.207E-16
0.50000	3.199E-10	3.192E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-1.042E-15
0.60000	7.265E-10	7.281E-10	-1.551E-17	-1.551E-17	-3.424E-07	-3.424E-07	-2.437E-15
0.70000	2.063E-09	2.071E-09	-4.069E-17	-4.069E-17	-7.241E-07	-7.241E-07	-7.122E-15
0.80000	8.534E-09	8.523E-09	-1.628E-16	-1.629E-16	-1.980E-06	-1.980E-06	-3.225E-14
0.85000	2.285E-08	2.279E-08	-4.334E-16	-4.335E-16	-4.000E-06	-4.001E-06	-9.343E-14
0.90000	8.840E-08	8.816E-08	-1.858E-15	-1.860E-15	-1.102E-05	-1.103E-05	-4.190E-13
0.92500	2.185E-07	2.186E-07	-4.293E-15	-4.299E-15	-2.190E-05	-2.192E-05	-1.276E-12
0.95000	8.433E-07	8.447E-07	-1.699E-14	-1.705E-14	-5.498E-05	-5.508E-05	-5.711E-12
0.96250	2.261E-06	2.268E-06	-4.892E-14	-4.920E-14	-1.089E-04	-1.092E-04	-1.625E-11
0.97500	1.062E-06	1.070E-05	-2.798E-13	-2.833E-13	-3.447E-04	-3.472E-04	-6.047E-11
0.98124	3.305E-05	3.353E-05	-1.078E-12	-1.102E-12	-8.944E-04	-9.067E-04	-1.442E-10
0.98749	2.075E-04	2.140E-04	-1.064E-11	-1.116E-11	-4.428E-03	-4.574E-03	-3.880E-10
0.99373	1.070E-02	1.189E-02	-4.420E-09	-5.238E-09	-4.234E-01	-4.870E-01	-1.410E-09
0.99312	3.699E-04	3.219E-04	-5.969E-11	-5.552E-11	-8.717E 00	-8.732E 00	-5.839E-10
0.99032	2.252E-05	1.936E-05	-2.461E-12	-2.390E-12	-8.730E 00	-8.744E 00	-2.081E-10
0.98755	-2.350E-05	-2.498E-05	-4.862E-13	-4.788E-13	-8.731E 00	-8.745E 00	-8.185E-11
0.98480	-2.743E-05	-2.847E-05	-1.553E-13	-1.538E-13	-8.731E 00	-8.745E 00	-3.901E-11
0.98209	-2.505E-05	-2.587E-05	-6.857E-14	-6.814E-14	-8.731E 00	-8.746E 00	-2.009E-11
0.97676	-1.989E-05	-2.047E-05	-1.985E-14	-1.978E-14	-8.731E 00	-8.746E 00	-7.082E-12
0.97156	-1.602E-05	-1.647E-05	-9.379E-15	-9.358E-15	-8.731E 00	-8.746E 00	-2.825E-12
0.96157	-1.145E-05	-1.177E-05	-3.079E-15	-3.075E-15	-8.731E 00	-8.746E 00	-7.715E-13
0.95213	-8.872E-06	-9.116E-06	-1.349E-15	-1.348E-15	-8.731E 00	-8.746E 00	-2.950E-13
0.93497	-6.096E-06	-6.263E-06	-3.517E-16	-3.516E-16	-8.731E 00	-8.746E 00	-7.327E-14
0.92022	-4.639E-06	-4.765E-06	-1.389E-16	-1.388E-16	-8.731E 00	-8.746E 00	-2.688E-14
0.89835	-3.136E-06	-3.221E-06	-3.671E-17	-3.670E-17	-8.731E 00	-8.746E 00	-6.287E-15
0.88729	-2.367E-06	-2.432E-06	-1.434E-17	-1.434E-17	-8.731E 00	-8.746E 00	-2.222E-15
0.88742	-1.901E-06	-1.953E-06	-7.095E-18	-7.095E-18	-8.731E 00	-8.746E 00	-9.652E-16
0.89875	-1.589E-06	-1.632E-06	-3.883E-18	-3.883E-18	-8.731E 00	-8.746E 00	-4.918E-16
0.92087	-1.364E-06	-1.401E-06	-2.138E-18	-2.138E-18	-8.731E 00	-8.746E 00	-2.932E-16
0.95302	-1.195E-06	-1.228E-06	-1.227E-18	-1.227E-18	-8.731E 00	-8.746E 00	-1.885E-16
0.99422	-1.064E-06	-1.093E-06	-7.041E-19	-7.041E-19	-8.731E 00	-8.746E 00	-1.329E-16
1.04342	-9.582E-07	-9.843E-07	-4.036E-19	-4.036E-19	-8.731E 00	-8.746E 00	-9.962E-17

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.200 θ_0= 3.581E-03 ρ_a= 1.325

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	0.2000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.2000	0.10000	193.643	4.377E-07	1.000E 00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.2000	0.20000	172.127	4.690E-07	1.000E-00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.2000	0.30000	150.612	5.119E-07	1.000E-00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.2000	0.40000	129.096	5.953E-07	1.000E-00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.2000	0.50000	107.581	7.387E-07	1.000E-00	-8.044E-07	-8.044E-07	8.044E-07
0.60000	0.2000	0.60000	86.066	9.705E-07	1.000E-00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.2000	0.70000	64.551	2.061E-06	1.000E-00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.2000	0.80000	43.037	6.463E-06	1.000E-00	-6.345E-06	-6.345E-06	6.344E-06
0.85000	0.2000	0.85000	32.281	1.617E-05	1.000E-00	-1.230E-05	-1.230E-05	1.230E-05
0.90000	0.2000	0.90000	21.528	5.894E-05	9.999E-01	-3.120E-05	-3.121E-05	3.119E-05
0.92500	0.2000	0.92500	16.153	1.419E-04	9.998E-01	-5.747E-05	-5.751E-05	5.745E-05
0.95000	0.2000	0.95000	10.783	5.258E-04	9.996E-01	-1.454E-04	-1.456E-04	1.453E-04
0.96250	0.2000	0.96250	8.103	1.356E-03	9.994E-01	-2.841E-04	-2.849E-04	2.838E-04
0.97500	0.2001	0.97500	5.431	5.921E-03	9.987E-01	-8.492E-04	-8.544E-04	8.473E-04
0.98124	0.2001	0.98125	4.104	1.759E-02	9.979E-01	-1.939E-03	-1.960E-03	1.933E-03
0.98749	0.2004	0.98750	2.793	1.005E-01	9.969E-01	-7.440E-03	-7.611E-03	7.412E-03
0.99373	0.2054	0.99375	1.553	4.228E 00	9.950E-01	-1.286E-01	-1.376E-01	1.433E-01
0.99548	0.4868	1.00000	2.067	9.611E 01	2.559E 00	-2.899E-02	-2.785E-02	3.045E-02
0.99482	0.8443	1.00625	3.353	9.662E 01	5.109E 00	-3.962E-03	-3.900E-03	4.010E-03
0.99419	1.2023	1.01250	4.672	9.665E 01	7.612E 00	-1.366E-03	-1.354E-03	1.373E-03
0.99360	1.5609	1.01875	6.003	9.666E 01	1.008E 01	-6.348E-04	-6.316E-04	6.368E-04
0.99304	1.9199	1.02500	7.339	9.666E 01	1.251E 01	-3.813E-04	-3.800E-04	3.821E-04
0.99204	2.6392	1.03750	10.018	9.666E 01	1.727E 01	-1.670E-04	-1.667E-04	1.672E-04
0.99120	3.3597	1.05000	12.701	9.666E 01	2.192E 01	-1.033E-04	-1.032E-04	1.034E-04
0.98999	4.8040	1.07500	18.073	9.666E 01	3.090E 01	-4.623E-05	-4.620E-05	4.624E-05
0.98941	6.2509	1.10000	23.449	9.666E 01	3.947E 01	-2.562E-05	-2.561E-05	2.562E-05
0.99014	9.1453	1.15000	34.203	9.666E 01	5.548E 01	-1.084E-05	-1.084E-05	1.084E-05
0.99339	12.0281	1.20000	44.959	9.666E 01	7.016E 01	-5.760E-06	-5.759E-06	5.760E-06
1.00733	17.7021	1.30000	66.472	9.666E 01	9.613E 01	-2.370E-06	-2.370E-06	2.370E-06
1.03083	23.1694	1.40000	87.987	9.666E 01	1.184E 02	-1.251E-06	-1.251E-06	1.251E-06
1.06326	28.3483	1.50000	109.502	9.666E 01	1.377E 02	-7.762E-07	-7.762E-07	7.762E-07
1.10382	33.1839	1.60000	131.018	9.666E 01	1.546E 02	-5.203E-07	-5.203E-07	5.203E-07
1.15165	37.6476	1.70000	152.533	9.666E 01	1.695E 02	-3.509E-07	-3.509E-07	3.509E-07
1.20590	41.7327	1.80000	174.049	9.666E 01	1.827E 02	-2.475E-07	-2.475E-07	2.475E-07
1.26574	45.4491	1.90000	195.565	9.666E 01	1.945E 02	-1.746E-07	-1.746E-07	1.746E-07
1.33041	48.8173	2.00000	217.081	9.666E 01	2.052E 02	-1.246E-07	-1.246E-07	1.246E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.200 θ_0= 3.581E-03 ρ_a= 1.325

z	$_x\mu'-1$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.092E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.957E-08	-8.958E-08
0.50000	8.045E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.812E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.346E-06	399.209	-4.306E-04	-4.306E-04	4.306E-04	4.306E-04	-1.054E-06	-1.054E-06
0.85000	1.230E-05	424.160	-6.515E-04	-6.515E-04	6.514E-04	6.515E-04	-2.043E-06	-2.044E-06
0.90000	3.122E-05	449.110	-1.142E-03	-1.142E-03	1.142E-03	1.142E-03	-5.182E-06	-5.184E-06
0.92500	5.753E-05	461.585	-1.679E-03	-1.679E-03	1.679E-03	1.680E-03	-9.546E-06	-9.553E-06
0.95000	1.457E-04	474.060	-2.846E-03	-2.848E-03	2.845E-03	2.849E-03	-2.415E-05	-2.419E-05
0.96250	2.854E-04	480.297	-4.101E-03	-4.105E-03	4.099E-03	4.108E-03	-4.720E-05	-4.733E-05
0.97500	8.578E-04	486.534	-7.216E-03	-7.234E-03	7.210E-03	7.247E-03	-1.411E-04	-1.419E-04
0.98124	1.975E-03	489.652	-1.131E-02	-1.136E-02	1.130E-02	1.141E-02	-3.221E-04	-3.256E-04
0.98749	7.757E-03	492.769	-2.318E-02	-2.344E-02	2.349E-02	2.402E-02	-1.236E-03	-1.264E-03
0.99373	1.644E-01	495.884	-1.187E-01	-1.243E-01	1.411E-01	1.534E-01	-2.136E-02	-2.286E-02
0.99548	2.810E-02	496.756	1.546E 00	1.545E 00	3.220E 00	3.223E 00	-4.816E-03	-4.626E-03
0.99482	3.885E-03	496.429	4.959E 00	4.958E 00	6.700E 00	6.702E 00	-6.582E-04	-6.478E-04
0.99419	1.351E-03	496.118	8.386E 00	8.386E 00	1.014E 01	1.014E 01	-2.269E-04	-2.250E-04
0.99360	6.304E-04	495.816	1.180E 01	1.180E 01	1.356E 01	1.356E 01	-1.054E-04	-1.049E-04
0.99304	3.795E-04	495.538	1.519E 01	1.519E 01	1.696E 01	1.696E 01	-6.334E-05	-6.312E-05
0.99204	1.666E-04	495.040	2.193E 01	2.193E 01	2.370E 01	2.370E 01	-2.774E-05	-2.769E-05
0.99120	1.031E-04	494.620	2.858E 01	2.858E 01	3.036E 01	3.036E 01	-1.716E-05	-1.714E-05
0.98999	4.619E-05	494.015	4.166E 01	4.166E 01	4.344E 01	4.344E 01	-7.679E-06	-7.675E-06
0.98941	2.561E-05	493.725	5.443E 01	5.443E 01	5.620E 01	5.620E 01	-4.256E-06	-4.254E-06
0.99014	1.084E-05	494.090	7.901E 01	7.901E 01	8.079E 01	8.079E 01	-1.800E-06	-1.800E-06
0.99339	5.759E-06	495.713	1.023E 02	1.023E 02	1.041E 02	1.041E 02	-9.568E-07	-9.567E-07
1.00733	2.370E-06	502.671	1.453E 02	1.453E 02	1.471E 02	1.471E 02	-3.937E-07	-3.937E-07
1.03083	1.251E-06	514.397	1.835E 02	1.835E 02	1.852E 02	1.852E 02	-2.078E-07	-2.078E-07
1.06326	7.762E-07	530.577	2.172E 02	2.172E 02	2.190E 02	2.190E 02	-1.289E-07	-1.289E-07
1.10382	5.203E-07	550.817	2.468E 02	2.468E 02	2.486E 02	2.486E 02	-8.643E-08	-8.643E-08
1.15165	3.509E-07	574.688	2.729E 02	2.729E 02	2.746E 02	2.746E 02	-5.829E-08	-5.829E-08
1.20590	2.475E-07	601.760	2.957E 02	2.957E 02	2.975E 02	2.975E 02	-4.112E-08	-4.112E-08
1.26574	1.746E-07	631.619	3.157E 02	3.157E 02	3.175E 02	3.175E 02	-2.901E-08	-2.900E-08
1.33041	1.246E-07	663.894	3.334E 02	3.334E 02	3.351E 02	3.351E 02	-2.070E-08	-2.070E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.200 θ_0= 3.581E-03 ρ_a= 1.325

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.813E-16
0.10000	1.640E-11	1.675E-11	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-2.432E-16
0.20000	4.715E-11	4.582E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-3.478E-16
0.30000	1.024E-10	9.836E-11	-2.260E-18	-2.260E-18	-4.936E-08	-4.937E-08	-5.468E-16
0.40000	2.161E-10	2.163E-10	-4.123E-18	-4.123E-18	-9.569E-08	-9.569E-08	-9.257E-16
0.50000	4.289E-10	4.270E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-1.853E-15
0.60000	9.715E-10	9.721E-10	-1.550E-17	-1.551E-17	-3.424E-07	-3.424E-07	-4.332E-15
0.70000	2.772E-09	2.762E-09	-4.069E-17	-4.069E-17	-7.240E-07	-7.241E-07	-1.266E-14
0.80000	1.140E-08	1.139E-08	-1.628E-16	-1.628E-16	-1.980E-06	-1.980E-06	-5.732E-14
0.85000	3.046E-08	3.045E-08	-4.332E-16	-4.334E-16	-3.999E-06	-4.000E-06	-1.660E-13
0.90000	1.178E-07	1.177E-07	-1.857E-15	-1.858E-15	-1.102E-05	-1.102E-05	-7.442E-13
0.92500	2.915E-07	2.917E-07	-4.288E-15	-4.294E-15	-2.189E-05	-2.190E-05	-2.264E-12
0.95000	1.124E-06	1.126E-06	-1.694E-14	-1.699E-14	-5.489E-05	-5.498E-05	-1.011E-11
0.96250	3.004E-06	3.015E-06	-4.849E-14	-4.876E-14	-1.085E-04	-1.088E-04	-2.874E-11
0.97500	1.399E-05	1.411E-05	-2.748E-13	-2.783E-13	-3.412E-04	-3.437E-04	-1.061E-10
0.98124	4.296E-05	4.357E-05	-1.046E-12	-1.069E-12	-8.764E-04	-8.882E-04	-2.500E-10
0.98749	2.546E-04	2.621E-04	-9.632E-12	-1.008E-11	-4.154E-03	-4.285E-03	-6.641E-10
0.99373	9.579E-03	1.050E-02	-2.074E-09	-2.378E-09	-2.374E-01	-2.660E-01	-2.041E-09
0.99548	6.474E-03	6.406E-03	-1.158E-10	-1.068E-10	-6.512E 00	-6.523E 00	-1.155E-09
0.99482	2.471E-03	2.469E-03	-3.382E-12	-3.276E-12	-6.535E 00	-6.544E 00	-4.202E-10
0.99419	1.579E-03	1.579E-03	-5.937E-13	-5.840E-13	-6.536E 00	-6.545E 00	-1.643E-10
0.99360	1.171E-03	1.171E-03	-1.755E-13	-1.738E-13	-6.536E 00	-6.545E 00	-7.826E-11
0.99304	9.336E-04	9.336E-04	-7.768E-14	-7.715E-14	-6.536E 00	-6.546E 00	-3.896E-11
0.99204	6.652E-04	6.653E-04	-2.105E-14	-2.097E-14	-6.537E 00	-6.546E 00	-1.373E-11
0.99120	5.172E-04	5.173E-04	-9.950E-15	-9.928E-15	-6.537E 00	-6.546E 00	-5.341E-12
0.98999	3.581E-04	3.581E-04	-3.184E-15	-3.180E-15	-6.537E 00	-6.546E 00	-1.437E-12
0.98941	2.739E-04	2.739E-04	-1.391E-15	-1.390E-15	-6.537E 00	-6.546E 00	-5.435E-13
0.99014	1.863E-04	1.863E-04	-3.593E-16	-3.592E-16	-6.537E 00	-6.546E 00	-1.334E-13
0.99339	1.412E-04	1.412E-04	-1.411E-16	-1.411E-16	-6.537E 00	-6.546E 00	-4.866E-14
1.00733	9.510E-05	9.511E-05	-3.710E-17	-3.709E-17	-6.537E 00	-6.546E 00	-1.132E-14
1.03083	7.170E-05	7.171E-05	-1.445E-17	-1.445E-17	-6.537E 00	-6.546E 00	-3.988E-15
1.06326	5.755E-05	5.755E-05	-7.139E-18	-7.139E-18	-6.537E 00	-6.546E 00	-1.730E-15
1.10382	4.806E-05	4.806E-05	-3.907E-18	-3.907E-18	-6.537E 00	-6.546E 00	-8.796E-16
1.15165	4.125E-05	4.126E-05	-2.150E-18	-2.150E-18	-6.537E 00	-6.546E 00	-5.238E-16
1.20590	3.614E-05	3.614E-05	-1.234E-18	-1.234E-18	-6.537E 00	-6.546E 00	-3.365E-16
1.26574	3.215E-05	3.216E-05	-7.082E-19	-7.082E-19	-6.537E 00	-6.546E 00	-2.371E-16
1.33041	2.896E-05	2.896E-05	-4.059E-19	-4.059E-19	-6.537E 00	-6.546E 00	-1.776E-16

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.250 θ_D= 4.082E-03 ρ_a= 1.377

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	0.2500	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.2500	0.10000	193.643	3.773E-08	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.2500	0.20000	172.128	7.921E-08	1.000E-00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.2500	0.30000	150.612	1.351E-07	1.000E-00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.2500	0.40000	129.097	2.401E-07	1.000E-00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.2500	0.50000	107.582	4.135E-07	1.000E-00	-8.044E-07	-8.044E-07	8.044E-07
0.60000	0.2500	0.60000	86.067	7.337E-07	1.000E-00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.2500	0.70000	64.552	2.108E-06	1.000E-00	-2.523E-06	-2.523E-06	2.523E-06
0.80000	0.2500	0.80000	43.040	7.684E-06	1.000E-00	-6.344E-06	-6.344E-06	6.343E-06
0.85000	0.2500	0.85000	32.286	1.997E-05	9.999E-01	-1.230E-05	-1.230E-05	1.230E-05
0.90000	0.2500	0.90000	21.535	7.414E-05	9.998E-01	-3.117E-05	-3.119E-05	3.117E-05
0.92500	0.2500	0.92500	16.162	1.792E-04	9.997E-01	-5.741E-05	-5.745E-05	5.739E-05
0.95000	0.2500	0.95000	10.797	6.637E-04	9.993E-01	-1.450E-04	-1.452E-04	1.449E-04
0.96250	0.2500	0.96250	8.122	1.702E-03	9.988E-01	-2.821E-04	-2.829E-04	2.818E-04
0.97500	0.2501	0.97500	5.459	7.352E-03	9.976E-01	-8.367E-04	-8.418E-04	8.349E-04
0.98124	0.2502	0.98125	4.141	2.159E-02	9.963E-01	-1.894E-03	-1.913E-03	1.887E-03
0.98749	0.2505	0.98750	2.849	1.160E-01	9.947E-01	-6.908E-03	-7.057E-03	6.882E-03
0.99373	0.2650	0.99375	1.652	3.040E 00	9.931E-01	-8.280E-02	-8.751E-02	8.805E-02
0.99749	0.4885	1.00000	1.910	7.555E 01	1.862E 00	-4.170E-02	-3.992E-02	4.445E-02
0.99901	0.8362	1.00625	3.146	7.659E 01	4.179E 00	-4.933E-03	-4.846E-03	5.001E-03
1.00053	1.1835	1.01250	4.447	7.665E 01	6.498E 00	-1.576E-03	-1.562E-03	1.585E-03
1.00209	1.5297	1.01875	5.768	7.666E 01	8.785E 00	-7.170E-04	-7.131E-04	7.194E-04
1.00369	1.8749	1.02500	7.098	7.666E 01	1.104E 01	-4.179E-04	-4.164E-04	4.189E-04
1.00699	2.5620	1.03750	9.770	7.666E 01	1.546E 01	-1.785E-04	-1.781E-04	1.787E-04
1.01043	3.2446	1.05000	12.450	7.667E 01	1.976E 01	-1.080E-04	-1.079E-04	1.081E-04
1.01774	4.5953	1.07500	17.818	7.667E 01	2.808E 01	-4.759E-05	-4.756E-05	4.760E-05
1.02561	5.9261	1.10000	23.191	7.667E 01	3.601E 01	-2.621E-05	-2.620E-05	2.622E-05
1.04297	8.5239	1.15000	33.943	7.667E 01	5.085E 01	-1.103E-05	-1.102E-05	1.103E-05
1.06240	11.0317	1.20000	44.698	7.667E 01	6.444E 01	-5.836E-06	-5.836E-06	5.836E-06
1.10703	15.7610	1.30000	66.211	7.667E 01	8.850E 01	-2.391E-06	-2.390E-06	2.391E-06
1.15859	20.0969	1.40000	87.725	7.667E 01	1.091E 02	-1.259E-06	-1.259E-06	1.259E-06
1.21620	24.0429	1.50000	109.240	7.667E 01	1.270E 02	-7.800E-07	-7.800E-07	7.800E-07
1.27905	27.6167	1.60000	130.755	7.667E 01	1.426E 02	-5.229E-07	-5.229E-07	5.229E-07
1.34639	30.8446	1.70000	152.270	7.667E 01	1.564E 02	-3.524E-07	-3.524E-07	3.524E-07
1.41760	33.7568	1.80000	173.786	7.667E 01	1.687E 02	-2.486E-07	-2.486E-07	2.486E-07
1.49212	36.3843	1.90000	195.301	7.667E 01	1.797E 02	-1.754E-07	-1.754E-07	1.754E-07
1.56947	38.7574	2.00000	216.817	7.667E 01	1.895E 02	-1.251E-07	-1.251E-07	1.251E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.250 θ_D= 4.082E-03 ρ_a= 1.377

z	$_x\mu'$-10	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.392E-07	199.605	-5.580E-05	-5.580E-05	5.580E-05	5.580E-05	-8.957E-08	-8.958E-08
0.50000	8.044E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.191E-07	-4.191E-07
0.80000	6.345E-06	399.209	-4.306E-04	-4.306E-04	4.305E-04	4.306E-04	-1.054E-06	-1.054E-06
0.85000	1.230E-05	424.160	-6.514E-04	-6.514E-04	6.514E-04	6.515E-04	-2.043E-06	-2.043E-06
0.90000	3.119E-05	449.110	-1.142E-03	-1.142E-03	1.142E-03	1.142E-03	-5.179E-06	-5.181E-06
0.92500	5.747E-05	461.585	-1.678E-03	-1.678E-03	1.678E-03	1.679E-03	-9.536E-06	-9.543E-06
0.95000	1.456E-04	474.060	-2.843E-03	-2.845E-03	2.842E-03	2.846E-03	-2.409E-05	-2.413E-05
0.96250	2.834E-04	480.297	-4.092E-03	-4.097E-03	4.090E-03	4.099E-03	-4.686E-05	-4.699E-05
0.97500	8.451E-04	486.534	-7.175E-03	-7.193E-03	7.170E-03	7.206E-03	-1.390E-04	-1.398E-04
0.98124	1.927E-03	489.652	-1.118E-02	-1.123E-02	1.118E-02	1.128E-02	-3.145E-04	-3.179E-04
0.98749	7.184E-03	492.769	-2.237E-02	-2.261E-02	2.282E-02	2.329E-02	-1.147E-03	-1.172E-03
0.99373	9.838E-02	495.884	-9.586E-02	-9.965E-02	1.152E-01	1.231E-01	-1.375E-02	-1.454E-02
0.99749	4.072E-02	497.760	6.236E-01	6.216E-01	2.035E 00	2.039E 00	-6.928E-03	-6.631E-03
0.99901	4.828E-03	498.517	2.938E 00	2.937E 00	4.445E 00	6.446E 00	-8.196E-04	-8.051E-04
1.00053	1.557E-03	499.278	5.287E 00	5.286E 00	6.811E 00	6.812E 00	-2.618E-04	-2.594E-04
1.00209	7.117E-04	500.057	7.624E 00	7.624E 00	9.155E 00	9.156E 00	-1.191E-04	-1.185E-04
1.00369	4.159E-04	500.853	9.945E 00	9.945E 00	1.148E 01	1.148E 01	-6.943E-05	-6.918E-05
1.00699	1.780E-04	502.499	1.453E 01	1.453E 01	1.607E 01	1.607E 01	-2.965E-05	-2.959E-05
1.01043	1.079E-04	504.217	1.905E 01	1.905E 01	2.059E 01	2.059E 01	-1.795E-05	-1.793E-05
1.01774	4.755E-05	507.866	2.788E 01	2.788E 01	2.942E 01	2.942E 01	-7.905E-06	-7.901E-06
1.02561	2.620E-05	511.792	3.643E 01	3.643E 01	3.797E 01	3.797E 01	-4.354E-06	-4.353E-06
1.04297	1.102E-05	520.465	5.272E 01	5.271E 01	5.426E 01	5.426E 01	-1.831E-06	-1.831E-06
1.06240	5.835E-06	530.151	6.797E 01	6.797E 01	6.951E 01	6.951E 01	-9.695E-07	-9.694E-07
1.10703	2.390E-06	552.420	9.560E 01	9.560E 01	9.715E 01	9.715E 01	-3.971E-07	-3.971E-07
1.15859	1.259E-06	578.149	1.198E 02	1.198E 02	1.213E 02	1.213E 02	-2.091E-07	-2.091E-07
1.21620	7.800E-07	606.898	1.409E 02	1.409E 02	1.425E 02	1.425E 02	-1.296E-07	-1.296E-07
1.27905	5.229E-07	638.259	1.595E 02	1.595E 02	1.610E 02	1.610E 02	-8.686E-08	-8.685E-08
1.34639	3.524E-07	671.866	1.758E 02	1.758E 02	1.773E 02	1.773E 02	-5.854E-08	-5.854E-08
1.41760	2.486E-07	707.399	1.901E 02	1.901E 02	1.917E 02	1.917E 02	-4.129E-08	-4.129E-08
1.49212	1.754E-07	744.583	2.028E 02	2.028E 02	2.044E 02	2.044E 02	-2.913E-08	-2.913E-08
1.56947	1.251E-07	783.182	2.141E 02	2.141E 02	2.157E 02	2.157E 02	-2.079E-08	-2.079E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0=0.250 θ_D=4.082E-03 ρ_a=1.377

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.833E-16
0.10000	2.093E-11	2.093E-11	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-3.800E-16
0.20000	5.992E-11	5.982E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-5.435E-16
0.30000	1.277E-10	1.262E-10	-2.260E-18	-2.260E-18	-4.936E-08	-4.937E-08	-8.544E-16
0.40000	2.710E-10	2.702E-10	-4.123E-18	-4.123E-18	-9.569E-08	-9.569E-08	-1.446E-15
0.50000	5.363E-10	5.363E-10	-7.534E-18	-7.534E-18	-1.803E-07	-1.803E-07	-2.895E-15
0.60000	1.215E-09	1.215E-09	-1.550E-17	-1.551E-17	-3.424E-07	-3.424E-07	-6.769E-15
0.70000	3.465E-09	3.463E-09	-4.068E-17	-4.069E-17	-7.240E-07	-7.240E-07	-1.978E-14
0.80000	1.427E-08	1.425E-08	-1.628E-16	-1.628E-16	-1.979E-06	-1.980E-06	-8.955E-14
0.85000	3.809E-08	3.809E-08	-4.331E-16	-4.332E-16	-3.998E-06	-3.999E-06	-2.593E-13
0.90000	1.472E-07	1.471E-07	-1.855E-15	-1.856E-15	-1.101E-05	-1.102E-05	-1.162E-12
0.92500	3.642E-07	3.644E-07	-4.282E-15	-4.288E-15	-2.187E-05	-2.188E-05	-3.529E-12
0.95000	1.401E-06	1.404E-06	-1.688E-14	-1.693E-14	-5.476E-05	-5.485E-05	-1.571E-11
0.96250	3.729E-06	3.742E-06	-4.793E-14	-4.820E-14	-1.080E-04	-1.083E-04	-4.460E-11
0.97500	1.721E-05	1.735E-05	-2.686E-13	-2.719E-13	-3.369E-04	-3.393E-04	-1.631E-10
0.98124	5.211E-05	5.283E-05	-1.006E-12	-1.027E-12	-8.540E-04	-8.653E-04	-3.786E-10
0.98749	2.884E-04	2.965E-04	-8.495E-12	-8.867E-12	-3.839E-03	-3.954E-03	-9.913E-10
0.99373	8.148E-03	8.838E-03	-8.654E-10	-9.668E-10	-1.337E-01	-1.466E-01	-2.846E-09
0.99749	1.493E-02	1.485E-02	-2.309E-10	-2.115E-10	-4.409E 00	-4.418E 00	-2.110E-09
0.99901	5.419E-03	5.417E-03	-4.860E-12	-4.692E-12	-4.452E 00	-4.458E 00	-7.758E-10
1.00053	3.357E-03	3.358E-03	-7.493E-13	-7.359E-13	-4.454E 00	-4.460E 00	-2.996E-10
1.00209	2.447E-03	2.448E-03	-2.120E-13	-2.097E-13	-4.454E 00	-4.460E 00	-1.376E-10
1.00369	1.930E-03	1.930E-03	-8.996E-14	-8.932E-14	-4.455E 00	-4.460E 00	-6.785E-11
1.00699	1.358E-03	1.359E-03	-2.336E-14	-2.327E-14	-4.455E 00	-4.460E 00	-2.332E-11
1.01048	1.049E-03	1.049E-03	-1.067E-14	-1.065E-14	-4.455E 00	-4.460E 00	-8.995E-12
1.01774	7.204E-04	7.207E-04	-3.313E-15	-3.309E-15	-4.455E 00	-4.460E 00	-2.375E-12
1.02561	5.488E-04	5.490E-04	-1.444E-15	-1.443E-15	-4.455E 00	-4.460E 00	-8.869E-13
1.04297	3.717E-04	3.719E-04	-3.685E-16	-3.684E-16	-4.455E 00	-4.460E 00	-2.145E-13
1.06240	2.811E-04	[illegible]2E-04	-1.439E-16	-1.439E-16	-4.455E 00	-4.460E 00	-7.770E-14
1.10703	1.889E-04	[illegible]89E-04	-3.757E-17	-3.756E-17	-4.455E 00	-4.460E 00	-1.796E-14
1.15859	1.423E-04	1.423E-04	-1.459E-17	-1.459E-17	-4.455E 00	-4.460E 00	-6.303E-15
1.21620	1.141E-04	1.142E-04	-7.192E-18	-7.192E-18	-4.455E 00	-4.460E 00	-2.729E-15
1.27905	9.526E-05	9.529E-05	-3.936E-18	-3.936E-18	-4.455E 00	-4.460E 00	-1.384E-15
1.34639	8.174E-05	8.177E-05	-2.165E-18	-2.165E-18	-4.455E 00	-4.460E 00	-8.235E-16
1.41760	7.159E-05	7.162E-05	-1.242E-18	-1.242E-18	-4.455E 00	-4.460E 00	-5.283E-16
1.49212	6.368E-05	6.370E-05	-7.130E-19	-7.130E-19	-4.455E 00	-4.460E 00	-3.718E-16
1.56947	5.734E-05	5.736E-05	-4.087E-19	-4.087E-19	-4.455E 00	-4.460E 00	-2.783E-16

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.300 θ_D= 4.610E-03 ρ_a= 1.444

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.3000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.3000	0.10000	193.643	4.377E-08	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.3000	0.20000	172.128	9.171E-08	1.000E-00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.3000	0.30000	150.613	1.684E-07	1.000E-00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.3000	0.40000	129.097	2.901E-07	1.000E-00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.3000	0.50000	107.582	4.969E-07	1.000E-00	-8.044E-07	-8.044E-07	8.044E-07
0.60000	0.3000	0.60000	86.068	8.805E-07	1.000E-00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.3000	0.70000	64.555	2.535E-06	1.000E-00	-2.523E-06	-2.523E-06	2.522E-06
0.80000	0.3000	0.80000	43.044	9.271E-06	9.999E-01	-6.342E-06	-6.343E-06	6.342E-06
0.85000	0.3000	0.85000	32.291	2.404E-05	9.999E-01	-1.229E-05	-1.229E-05	1.229E-05
0.90000	0.3000	0.90000	21.543	8.917E-05	9.998E-01	-3.115E-05	-3.116E-05	3.114E-05
0.92500	0.3000	0.92500	16.174	2.152E-04	9.996E-01	-5.733E-05	-5.737E-05	5.732E-05
0.95000	0.3000	0.95000	10.814	7.952E-04	9.992E-01	-1.446E-04	-1.448E-04	1.445E-04
0.96250	0.3000	0.96250	8.144	2.026E-03	9.986E-01	-2.796E-04	-2.804E-04	2.793E-04
0.97500	0.3001	0.97500	5.494	8.665E-03	9.973E-01	-8.219E-04	-8.268E-04	8.201E-04
0.98124	0.3002	0.98125	4.187	2.515E-02	9.960E-01	-1.840E-03	-1.858E-03	1.834E-03
0.98749	0.3006	0.98750	2.916	1.266E-01	9.947E-01	-6.321E-03	-6.449E-03	6.299E-03
0.99373	0.3048	0.99375	1.766	2.270E 00	9.941E-01	-5.572E-02	-5.827E-02	5.779E-02
0.99892	0.4657	1.00000	1.763	5.481E 01	1.228E 00	-5.865E-02	-5.611E-02	6.363E-02
1.00240	0.7626	1.00625	2.913	5.695E 01	3.179E 00	-6.470E-03	-6.343E-03	6.577E-03
1.00586	1.0696	1.01250	4.185	5.705E 01	5.218E 00	-1.861E-03	-1.842E-03	1.874E-03
1.00934	1.3547	1.01875	5.492	5.707E 01	7.246E 00	-8.277E-04	-8.228E-04	8.308E-04
1.01285	1.6479	1.02500	6.813	5.707E 01	9.248E 00	-4.659E-04	-4.641E-04	4.670E-04
1.01994	2.2281	1.03750	9.476	5.707E 01	1.318E 01	-1.935E-04	-1.932E-04	1.938E-04
1.02713	2.8003	1.05000	12.151	5.707E 01	1.702E 01	-1.140E-04	-1.138E-04	1.141E-04
1.04182	3.9207	1.07500	17.614	5.707E 01	2.443E 01	-4.927E-05	-4.924E-05	4.928E-05
1.05690	5.0095	1.10000	22.884	5.707E 01	3.150E 01	-2.694E-05	-2.693E-05	2.694E-05
1.08815	7.0948	1.15000	33.633	5.707E 01	4.472E 01	-1.125E-05	-1.125E-05	1.125E-05
1.12077	9.0613	1.20000	44.386	5.707E 01	5.683E 01	-5.928E-06	-5.928E-06	5.929E-06
1.18962	12.6604	1.30000	65.898	5.707E 01	7.827E 01	-2.415E-06	-2.415E-06	2.415E-06
1.26264	15.8546	1.40000	87.411	5.707E 01	9.665E 01	-1.269E-06	-1.269E-06	1.269E-06
1.33916	18.6919	1.50000	108.926	5.707E 01	1.126E 02	-7.846E-07	-7.846E-07	7.846E-07
1.41860	21.2170	1.60000	130.440	5.707E 01	1.265E 02	-5.259E-07	-5.259E-07	5.259E-07
1.50050	23.4704	1.70000	151.956	5.707E 01	1.388E 02	-3.542E-07	-3.542E-07	3.542E-07
1.58448	25.4879	1.80000	173.471	5.707E 01	1.497E 02	-2.499E-07	-2.499E-07	2.499E-07
1.67023	27.3002	1.90000	194.986	5.707E 01	1.595E 02	-1.763E-07	-1.763E-07	1.763E-07
1.75748	28.9341	2.00000	216.502	5.707E 01	1.683E 02	-1.258E-07	-1.258E-07	1.258E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.300 θ_D= 4.610E-03 ρ_a= 1.444

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.392E-07	199.605	-5.579E-05	-5.580E-05	5.579E-05	5.580E-05	-8.957E-08	-8.957E-08
0.50000	8.044E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.212E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.523E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.190E-07	-4.190E-07
0.80000	6.343E-06	399.209	-4.305E-04	-4.305E-04	4.305E-04	4.305E-04	-1.054E-06	-1.054E-06
0.85000	1.230E-05	424.160	-6.513E-04	-6.513E-04	6.513E-04	6.514E-04	-2.042E-06	-2.042E-06
0.90000	3.117E-05	449.110	-1.141E-03	-1.142E-03	1.141E-03	1.142E-03	-5.174E-06	-5.176E-06
0.92500	5.740E-05	461.585	-1.677E-03	-1.677E-03	1.677E-03	1.678E-03	-9.524E-06	-9.531E-06
0.95000	1.449E-04	474.060	-2.839E-03	-2.841E-03	2.838E-03	2.842E-03	-2.402E-05	-2.405E-05
0.96250	2.809E-04	480.297	-4.082E-03	-4.086E-03	4.080E-03	4.089E-03	-4.645E-05	-4.658E-05
0.97500	8.300E-04	486.534	-7.126E-03	-7.144E-03	7.122E-03	7.158E-03	-1.365E-04	-1.373E-04
0.98124	1.871E-03	489.652	-1.103E-02	-1.108E-02	1.104E-02	1.114E-02	-3.056E-04	-3.087E-04
0.98749	6.556E-03	492.769	-2.152E-02	-2.173E-02	2.206E-02	2.250E-02	-1.050E-03	-1.071E-03
0.99373	6.321E-02	495.884	-7.910E-02	-8.171E-02	9.699E-02	1.024E-01	-9.256E-03	-9.680E-03
0.99892	5.823E-02	498.472	1.970E-02	1.683E-02	1.146E 00	1.152E 00	-9.742E-03	-9.320E-03
1.00240	6.322E-03	500.210	1.331E 00	1.331E 00	2.598E 00	2.599E 00	-1.075E-03	-1.054E-03
1.00586	1.837E-03	501.935	2.714E 00	2.714E 00	4.003E 00	4.003E 00	-3.091E-04	-3.061E-04
1.00934	8.211E-04	503.672	4.092E 00	4.092E 00	5.389E 00	5.389E 00	-1.375E-04	-1.367E-04
1.01285	4.634E-04	505.422	5.459E 00	5.459E 00	6.759E 00	6.760E 00	-7.739E-05	-7.709E-05
1.01994	1.930E-04	508.961	8.156E 00	8.155E 00	9.460E 00	9.461E 00	-3.215E-05	-3.209E-05
1.02713	1.138E-04	512.581	1.080E 01	1.080E 01	1.211E 01	1.211E 01	-1.893E-05	-1.891E-05
1.04182	4.922E-05	519.882	1.595E 01	1.595E 01	1.725E 01	1.725E 01	-8.184E-06	-8.179E-06
1.05690	2.693E-05	527.406	2.090E 01	2.090E 01	2.221E 01	2.221E 01	-4.475E-06	-4.473E-06
1.08815	1.125E-05	543.002	3.025E 01	3.025E 01	3.156E 01	3.156E 01	-1.869E-06	-1.869E-06
1.12077	5.928E-06	559.276	3.893E 01	3.893E 01	4.024E 01	4.024E 01	-9.848E-07	-9.847E-07
1.18962	2.415E-06	593.634	5.447E 01	5.447E 01	5.578E 01	5.578E 01	-4.012E-07	-4.011E-07
1.26264	1.269E-06	630.074	6.793E 01	6.793E 01	6.924E 01	6.924E 01	-2.108E-07	-2.108E-07
1.33916	7.846E-07	668.256	7.965E 01	7.965E 01	8.096E 01	8.096E 01	-1.303E-07	-1.303E-07
1.41860	5.259E-07	707.898	8.991E 01	8.991E 01	9.122E 01	9.122E 01	-8.737E-08	-8.736E-08
1.50050	3.542E-07	748.767	9.894E 01	9.894E 01	1.003E 02	1.003E 02	-5.884E-08	-5.884E-08
1.58448	2.499E-07	790.674	1.069E 02	1.069E 02	1.082E 02	1.082E 02	-4.150E-08	-4.150E-08
1.67023	1.763E-07	833.463	1.140E 02	1.140E 02	1.154E 02	1.154E 02	-2.928E-08	-2.928E-08
1.75748	1.258E-07	877.003	1.204E 02	1.204E 02	1.217E 02	1.217E 02	-2.089E-08	-2.089E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 0.300 θ_D= 4.610E-03 ρ_a= 1.444

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-4.079E-16
0.10000	2.560E-11	2.560E-11	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-5.472E-16
0.20000	7.314E-11	7.198E-11	-1.297E-18	-1.297E-18	-2.343E-08	-2.343E-08	-7.826E-16
0.30000	1.533E-10	1.533E-10	-2.260E-18	-2.260E-18	-4.936E-08	-4.937E-08	-1.230E-15
0.40000	3.249E-10	3.244E-10	-4.123E-18	-4.123E-18	-9.569E-08	-9.569E-08	-2.083E-15
0.50000	6.453E-10	6.457E-10	-7.533E-18	-7.534E-18	-1.803E-07	-1.803E-07	-4.169E-15
0.60000	1.463E-09	1.459E-09	-1.550E-17	-1.550E-17	-3.424E-07	-3.424E-07	-9.746E-15
0.70000	4.156E-09	4.160E-09	-4.068E-17	-4.068E-17	-7.240E-07	-7.240E-07	-2.848E-14
0.80000	1.712E-08	1.711E-08	-1.627E-16	-1.628E-16	-1.979E-06	-1.979E-06	-1.289E-13
0.85000	4.571E-08	4.570E-08	-4.328E-16	-4.330E-16	-3.997E-06	-3.998E-06	-3.731E-13
0.90000	1.764E-07	1.765E-07	-1.853E-15	-1.854E-15	-1.100E-05	-1.101E-05	-1.670E-12
0.92500	4.365E-07	4.368E-07	-4.275E-15	-4.281E-15	-2.184E-05	-2.186E-05	-5.067E-12
0.95000	1.676E-06	1.679E-06	-1.680E-14	-1.685E-14	-5.461E-05	-5.470E-05	-2.248E-11
0.96250	4.433E-06	4.450E-06	-4.727E-14	-4.753E-14	-1.074E-04	-1.077E-04	-6.370E-11
0.97500	2.032E-05	2.048E-05	-2.613E-13	-2.644E-13	-3.316E-04	-3.340E-04	-2.302E-10
0.98124	6.062E-05	6.144E-05	-9.602E-13	-9.799E-13	-8.281E-04	-8.387E-04	-5.254E-10
0.98749	3.145E-04	3.228E-04	-7.312E-12	-7.610E-12	-3.522E-03	-3.620E-03	-1.356E-09
0.99373	6.709E-03	7.198E-03	-3.984E-10	-4.358E-10	-8.431E-02	-9.092E-02	-3.692E-09
0.99892	2.814E-02	2.805E-02	-4.411E-10	-4.037E-10	-2.693E 00	-2.703E 00	-3.709E-09
1.00240	9.274E-03	9.273E-03	-7.652E-12	-7.355E-12	-2.782E 00	-2.785E 00	-1.359E-09
1.00586	5.467E-03	5.469E-03	-9.820E-13	-9.625E-13	-2.784E 00	-2.788E 00	-5.266E-10
1.00934	3.885E-03	3.887E-03	-2.649E-13	-2.618E-13	-2.785E 00	-2.788E 00	-2.306E-10
1.01285	3.017E-03	3.018E-03	-1.070E-13	-1.062E-13	-2.785E 00	-2.788E 00	-1.121E-10
1.01994	2.087E-03	2.088E-03	-2.653E-14	-2.643E-14	-2.785E 00	-2.788E 00	-3.721E-11
1.02713	1.596E-03	1.597E-03	-1.160E-14	-1.157E-14	-2.785E 00	-2.788E 00	-1.421E-11
1.04182	1.086E-03	1.086E-03	-3.476E-15	-3.470E-15	-2.785E 00	-2.788E 00	-3.664E-12
1.05690	8.226E-04	8.231E-04	-1.509E-15	-1.508E-15	-2.785E 00	-2.788E 00	-1.346E-12
1.08815	5.542E-04	5.545E-04	-3.798E-16	-3.797E-16	-2.785E 00	-2.788E 00	-3.197E-13
1.12077	4.178E-04	4.181E-04	-1.473E-16	-1.473E-16	-2.785E 00	-2.788E 00	-1.149E-13
1.18962	2.800E-04	2.802E-04	-3.814E-17	-3.813E-17	-2.785E 00	-2.788E 00	-2.633E-14
1.26264	2.106E-04	2.107E-04	-1.476E-17	-1.476E-17	-2.785E 00	-2.788E 00	-9.201E-15
1.33916	1.687E-04	1.688E-04	-7.256E-18	-7.255E-18	-2.785E 00	-2.788E 00	-3.974E-15
1.41860	1.408E-04	1.408E-04	-3.971E-18	-3.971E-18	-2.785E 00	-2.788E 00	-2.010E-15
1.50050	1.208E-04	1.208E-04	-2.183E-18	-2.183E-18	-2.785E 00	-2.788E 00	-1.195E-15
1.58448	1.057E-04	1.058E-04	-1.253E-18	-1.253E-18	-2.785E 00	-2.788E 00	-7.651E-16
1.67023	9.402E-05	9.407E-05	-7.188E-19	-7.188E-19	-2.785E 00	-2.788E 00	-5.379E-16
1.75748	8.465E-05	8.469E-05	-4.120E-19	-4.120E-19	-2.785E 00	-2.788E 00	-4.024E-16

PROPAGATION FREQUENCY= 4.980OE 07 ϕ_0= 0.400 θ_D= 3.927E-03 ρ_a= 1.646

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.4000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.4000	0.10000	193.644	6.295E-08	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.4000	0.20000	172.128	1.226E-07	1.000E-00	-2.554E-07	-2.554E-07	2.554E-07
0.30000	0.4000	0.30000	150.613	2.151E-07	1.000E-00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.4000	0.40000	129.099	3.702E-07	1.000E-00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.4000	0.50000	107.585	6.270E-07	1.000E-00	-8.044E-07	-8.044E-07	8.044E-07
0.60000	0.4000	0.60000	86.071	1.094E-06	1.000E-00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.4000	0.70000	64.560	3.175E-06	1.000E-00	-2.522E-06	-2.522E-06	2.522E-06
0.80000	0.4000	0.80000	43.053	1.178E-05	9.999E-01	-6.340E-06	-6.340E-06	6.339E-06
0.85000	0.4000	0.85000	32.304	3.058E-05	9.998E-01	-1.228E-05	-1.228E-05	1.228E-05
0.90000	0.4000	0.90000	21.563	1.137E-04	9.996E-01	-3.107E-05	-3.109E-05	3.107E-05
0.92500	0.4000	0.92500	16.202	2.745E-04	9.993E-01	-5.715E-05	-5.719E-05	5.713E-05
0.95000	0.4000	0.95000	10.858	1.013E-03	9.986E-01	-1.435E-04	-1.437E-04	1.436E-04
0.96250	0.4000	0.96250	8.203	2.550E-03	9.977E-01	-2.742E-04	-2.749E-04	2.739E-04
0.97500	0.4001	0.97500	5.581	1.072E-02	9.957E-01	-7.858E-04	-7.903E-04	7.842E-04
0.98124	0.4002	0.98125	4.301	3.041E-02	9.944E-01	-1.712E-03	-1.728E-03	1.707E-03
0.98749	0.4007	0.98750	3.079	1.350E-01	9.949E-01	-5.205E-03	-5.294E-03	5.188E-03
0.99374	0.4039	0.99375	2.025	1.544E 00	9.999E-01	-3.081E-02	-3.173E-02	3.134E-02
0.99988	0.4562	1.00000	1.713	2.082E 01	5.560E-01	-6.579E-02	-6.438E-02	7.115E-02
1.00557	0.6017	1.00625	2.564	2.568E 01	1.564E 00	-1.036E-02	-1.013E-02	1.059E-02
1.01121	0.7550	1.01250	3.734	2.596E 01	2.880E 00	-2.644E-03	-2.613E-03	2.667E-03
1.01685	0.9073	1.01875	4.994	2.600E 01	4.250E 00	-1.113E-03	-1.105E-03	1.118E-03
1.02249	1.0581	1.02500	6.289	2.601E 01	5.630E 00	-5.690E-04	-5.665E-04	5.706E-04
1.03380	1.3547	1.03750	8.924	2.601E 01	8.369E 00	-2.254E-04	-2.249E-04	2.257E-04
1.04513	1.6449	1.05000	11.584	2.601E 01	1.106E 01	-1.262E-04	-1.260E-04	1.263E-04
1.06789	2.2069	1.07500	16.931	2.601E 01	1.626E 01	-5.264E-05	-5.260E-05	5.266E-05
1.09074	2.7454	1.10000	22.294	2.601E 01	2.123E 01	-2.861E-05	-2.860E-05	2.861E-05
1.13671	3.7572	1.15000	33.036	2.601E 01	3.054E 01	-1.171E-05	-1.170E-05	1.171E-05
1.18300	4.6901	1.20000	43.785	2.601E 01	3.907E 01	-6.111E-06	-6.110E-06	6.111E-06
1.27644	6.3518	1.30000	65.293	2.601E 01	5.417E 01	-2.463E-06	-2.463E-06	2.463E-06
1.37080	7.7858	1.40000	86.804	2.601E 01	6.712E 01	-1.288E-06	-1.288E-06	1.288E-06
1.46591	9.0344	1.50000	108.317	2.601E 01	7.834E 01	-7.935E-07	-7.935E-07	7.935E-07
1.56163	10.1304	1.60000	129.832	2.601E 01	8.815E 01	-5.319E-07	-5.319E-07	5.319E-07
1.65785	11.0995	1.70000	151.346	2.601E 01	9.681E 01	-3.577E-07	-3.577E-07	3.577E-07
1.75450	11.9621	1.80000	172.861	2.601E 01	1.045E 02	-2.523E-07	-2.523E-07	2.523E-07
1.85150	12.7344	1.90000	194.376	2.601E 01	1.114E 02	-1.780E-07	-1.780E-07	1.780E-07
1.94881	13.4298	2.00000	216.892	2.601E 01	1.176E 02	-1.270E-07	-1.270E-07	1.270E-07

PROPAGATION FREQUENCY= 4.980OE 07 ϕ_0= 0.400 θ_D=3.927E-03 ρ_a=1.646

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.392E-07	199.605	-5.579E-05	-5.579E-05	5.579E-05	5.579E-05	-8.957E-08	-8.957E-08
0.50000	8.044E-07	249.506	-8.888E-05	-8.888E-05	8.888E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.180E-07	-2.180E-07
0.70000	2.522E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.190E-07	-4.190E-07
0.80000	6.341E-06	399.209	-4.304E-04	-4.305E-04	4.304E-04	4.305E-04	-1.053E-06	-1.053E-06
0.85000	1.229E-05	424.160	-6.511E-04	-6.511E-04	6.510E-04	6.511E-04	-2.040E-06	-2.041E-06
0.90000	3.109E-05	449.110	-1.140E-03	-1.141E-03	1.140E-03	1.141E-03	-5.162E-06	-5.164E-06
0.92500	5.721E-05	461.585	-1.675E-03	-1.675E-03	1.674E-03	1.675E-03	-9.494E-06	-9.500E-06
0.95000	1.438E-04	474.060	-2.829E-03	-2.831E-03	2.829E-03	2.832E-03	-2.383E-05	-2.387E-05
0.96250	2.754E-04	480.297	-4.056E-03	-4.060E-03	4.054E-03	4.063E-03	-4.555E-05	-4.567E-05
0.97500	7.932E-04	486.534	-7.006E-03	-7.023E-03	7.004E-03	7.037E-03	-1.305E-04	-1.313E-04
0.98124	1.739E-03	489.653	-1.067E-02	-1.071E-02	1.069E-02	1.078E-02	-2.844E-04	-2.871E-04
0.98749	5.368E-03	492.770	-1.971E-02	-1.988E-02	2.035E-02	2.069E-02	-8.646E-04	-8.796E-04
0.99374	3.325E-02	495.886	-5.508E-02	-5.631E-02	6.809E-02	7.060E-02	-5.118E-03	-5.271E-03
0.99988	6.812E-02	498.949	-2.001E-01	-2.033E-01	3.387E-01	3.453E-01	-1.093E-02	-1.069E-02
1.00557	1.012E-02	501.793	-2.486E-02	-2.538E-02	7.200E-01	7.210E-01	-1.721E-03	-1.683E-03
1.01121	2.604E-03	504.604	2.652E-01	2.650E-01	1.045E 00	1.046E 00	-4.392E-04	-4.340E-04
1.01685	1.103E-03	507.418	5.656E-01	5.654E-01	1.356E 00	1.356E 00	-1.849E-04	-1.836E-04
1.02249	5.656E-04	510.234	8.655E-01	8.653E-01	1.661E 00	1.661E 00	-9.452E-05	-9.410E-05
1.03380	2.247E-04	515.877	1.458E 00	1.457E 00	2.257E 00	2.257E 00	-3.744E-05	-3.735E-05
1.04513	1.259E-04	521.534	2.037E 00	2.037E 00	2.839E 00	2.839E 00	-2.096E-05	-2.093E-05
1.06789	5.259E-05	532.887	3.158E 00	3.158E 00	3.962E 00	3.962E 00	-8.744E-06	-8.738E-06
1.09074	2.859E-05	544.289	4.231E 00	4.231E 00	5.036E 00	5.036E 00	-4.752E-06	-4.750E-06
1.13671	1.170E-05	567.230	6.241E 00	6.241E 00	7.047E 00	7.047E 00	-1.944E-06	-1.944E-06
1.18300	6.110E-06	590.333	8.088E 00	8.088E 00	8.894E 00	8.895E 00	-1.015E-06	-1.015E-06
1.27644	2.463E-06	636.957	1.136E 01	1.136E 01	1.217E 01	1.217E 01	-4.091E-07	-4.091E-07
1.37080	1.288E-06	684.045	1.418E 01	1.418E 01	1.498E 01	1.499E 01	-2.140E-07	-2.140E-07
1.46591	7.935E-07	731.505	1.662E 01	1.662E 01	1.743E 01	1.743E 01	-1.318E-07	-1.318E-07
1.56163	5.319E-07	779.271	1.875E 01	1.875E 01	1.956E 01	1.956E 01	-8.836E-08	-8.836E-08
1.65785	3.577E-07	827.288	2.064E 01	2.064E 01	2.145E 01	2.145E 01	-5.942E-08	-5.942E-08
1.75450	2.523E-07	875.516	2.231E 01	2.231E 01	2.312E 01	2.312E 01	-4.192E-08	-4.192E-08
1.85150	1.780E-07	923.922	2.381E 01	2.381E 01	2.461E 01	2.461E 01	-2.957E-08	-2.957E-08
1.94881	1.270E-07	972.480	2.515E 01	2.515E 01	2.596E 01	2.596E 01	-2.109E-08	-2.109E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.400 θ_D= 3.927E-03 ρ_a= 1.646

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-7.252E-16
0.10000	3.473E-11	3.472E-11	-7.442E-19	-7.442E-19	-8.540E-09	-8.540E-09	-9.728E-16
0.20000	9.696E-11	9.696E-11	-1.297E-18	-1.297E-18	-2.342E-08	-2.343E-08	-1.391E-15
0.30000	2.056E-10	2.048E-10	-2.260E-18	-2.260E-18	-4.936E-08	-4.936E-08	-2.187E-15
0.40000	4.346E-10	4.335E-10	-4.123E-18	-4.123E-18	-9.569E-08	-9.569E-08	-3.702E-15
0.50000	8.604E-10	8.593E-10	-7.533E-18	-7.533E-18	-1.803E-07	-1.803E-07	-7.410E-15
0.60000	1.950E-09	1.949E-09	-1.550E-17	-1.550E-17	-3.423E-07	-3.424E-07	-1.732E-14
0.70000	5.543E-09	5.542E-09	-4.067E-17	-4.067E-17	-7.239E-07	-7.239E-07	-5.062E-14
0.80000	2.279E-08	2.279E-08	-1.626E-16	-1.626E-16	-1.978E-06	-1.979E-06	-2.290E-13
0.85000	6.086E-08	6.086E-08	-4.323E-16	-4.324E-16	-3.994E-06	-3.995E-06	-6.623E-13
0.90000	2.346E-07	2.346E-07	-1.847E-15	-1.848E-15	-1.098E-05	-1.099E-05	-2.960E-12
0.92500	5.795E-07	5.800E-07	-4.256E-15	-4.262E-15	-2.178E-05	-2.180E-05	-8.943E-12
0.95000	2.213E-06	2.218E-06	-1.659E-14	-1.665E-14	-5.423E-05	-5.432E-05	-3.933E-11
0.96250	5.735E-06	5.757E-06	-4.581E-14	-4.606E-14	-1.059E-04	-1.062E-04	-1.107E-10
0.97500	2.528E-05	2.547E-05	-2.437E-13	-2.465E-13	-3.190E-04	-3.212E-04	-3.895E-10
0.98124	7.359E-05	7.452E-05	-8.545E-13	-8.707E-13	-7.669E-04	-7.760E-04	-8.541E-10
0.98749	3.345E-04	3.423E-04	-5.280E-12	-5.463E-12	-2.882E-03	-2.950E-03	-2.108E-09
0.99374	4.461E-03	4.711E-03	-1.295E-10	-1.374E-10	-3.378E-02	-3.555E-02	-4.791E-09
0.99988	5.746E-02	6.751E-02	-5.491E-10	-5.258E-10	-5.651E-01	-5.744E-01	-7.107E-09
1.00557	1.919E-02	1.919E-02	-1.700E-11	-1.625E-11	-7.269E-01	-7.279E-01	-3.298E-09
1.01121	1.019E-02	1.019E-02	-1.731E-12	-1.690E-12	-7.329E-01	-7.336E-01	-1.311E-09
1.01685	6.824E-03	6.827E-03	-4.258E-13	-4.199E-13	-7.337E-01	-7.344E-01	-5.399E-10
1.02249	5.109E-03	5.112E-03	-1.473E-13	-1.460E-13	-7.340E-01	-7.346E-01	-2.639E-10
1.03380	3.390E-03	3.392E-03	-3.370E-14	-3.355E-14	-7.341E-01	-7.348E-01	-8.147E-11
1.04513	2.534E-03	2.535E-03	-1.359E-14	-1.356E-14	-7.341E-01	-7.348E-01	-3.040E-11
1.06789	1.682E-03	1.683E-03	-3.804E-15	-3.799E-15	-7.342E-01	-7.348E-01	-7.467E-12
1.09074	1.259E-03	1.259E-03	-1.649E-15	-1.648E-15	-7.342E-01	-7.349E-01	-2.636E-12
1.13671	8.371E-04	8.375E-04	-4.026E-16	-4.025E-16	-7.342E-01	-7.349E-01	-6.085E-13
1.18300	6.270E-04	6.273E-04	-1.540E-16	-1.540E-16	-7.342E-01	-7.349E-01	-2.150E-13
1.27644	4.174E-04	4.177E-04	-3.926E-17	-3.926E-17	-7.342E-01	-7.349E-01	-4.852E-14
1.37080	3.129E-04	3.130E-04	-1.509E-17	-1.509E-17	-7.342E-01	-7.349E-01	-1.680E-14
1.46591	2.502E-04	2.503E-04	-7.380E-18	-7.380E-18	-7.342E-01	-7.349E-01	-7.225E-15
1.56163	2.084E-04	2.085E-04	-4.039E-18	-4.039E-18	-7.342E-01	-7.349E-01	-3.635E-15
1.65785	1.786E-04	1.787E-04	-2.217E-18	-2.217E-18	-7.342E-01	-7.349E-01	-2.154E-15
1.75450	1.563E-04	1.563E-04	-1.272E-18	-1.272E-18	-7.342E-01	-7.349E-01	-1.376E-15
1.85150	1.389E-04	1.390E-04	-7.302E-19	-7.302E-19	-7.342E-01	-7.349E-01	-9.647E-16
1.94881	1.250E-04	1.251E-04	-4.186E-19	-4.186E-19	-7.342E-01	-7.349E-01	-7.206E-16

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.500 θ_D= 2.996E-03 ρ_a= 1.950

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	0.5000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.5000	0.10000	193.644	7.337E-08	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.5000	0.20000	172.129	1.551E-07	1.000E-00	-2.553E-07	-2.554E-07	2.553E-07
0.30000	0.5000	0.30000	150.615	2.685E-07	1.000E-00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.5000	0.40000	129.101	4.636E-07	1.000E-00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.5000	0.50000	107.588	8.004E-07	1.000E-00	-8.043E-07	-8.043E-07	8.043E-07
0.60000	0.5000	0.60000	86.076	1.401E-06	1.000E-00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.5000	0.70000	64.567	4.122E-06	9.999E-01	-2.522E-06	-2.522E-06	2.521E-06
0.80000	0.5000	0.80000	43.065	1.502E-05	9.999E-01	-6.336E-06	-6.336E-06	6.335E-06
0.85000	0.5000	0.85000	32.320	3.882E-05	9.998E-01	-1.227E-05	-1.227E-05	1.227E-05
0.90000	0.5000	0.90000	21.590	1.438E-04	9.995E-01	-3.098E-05	-3.099E-05	3.097E-05
0.92500	0.5000	0.92500	16.238	3.467E-04	9.991E-01	-5.692E-05	-5.696E-05	5.690E-05
0.95000	0.5000	0.95000	10.913	1.269E-03	9.981E-01	-1.420E-04	-1.423E-04	1.420E-04
0.96250	0.5001	0.96250	8.277	3.133E-03	9.969E-01	-2.687E-04	-2.694E-04	2.684E-04
0.97500	0.5001	0.97500	5.691	1.261E-02	9.949E-01	-7.424E-04	-7.464E-04	7.409E-04
0.98124	0.5003	0.98125	4.444	3.452E-02	9.942E-01	-1.565E-03	-1.578E-03	1.561E-03
0.98749	0.5007	0.98750	3.276	1.354E-01	9.970E-01	-4.231E-03	-4.291E-03	4.219E-03
0.99374	0.5031	0.99375	2.316	9.130E-01	1.004E 00	-1.591E-02	-1.623E-02	1.602E-02
0.99997	0.5225	1.00000	1.962	6.177E 00	5.839E-01	-3.625E-02	-3.607E-02	3.770E-02
1.00614	0.5757	1.00625	2.539	1.002E 01	6.125E-01	-1.069E-02	-1.049E-02	1.090E-02
1.01229	0.6383	1.01250	3.579	1.042E 01	1.308E 00	-3.115E-03	-3.078E-03	3.144E-03
1.01844	0.7013	1.01875	4.775	1.048E 01	2.109E 00	-1.279E-03	-1.270E-03	1.285E-03
1.02459	0.7637	1.02500	6.034	1.050E 01	2.938E 00	-6.272E-04	-6.242E-04	6.291E-04
1.03689	0.8864	1.03750	8.630	1.050E 01	4.609E 00	-2.443E-04	-2.438E-04	2.447E-04
1.04920	1.0064	1.05000	11.271	1.051E 01	6.263E 00	-1.334E-04	-1.333E-04	1.336E-04
1.07382	1.2380	1.07500	16.598	1.051E 01	9.478E 00	-5.467E-05	-5.463E-05	5.469E-05
1.09847	1.4592	1.10000	21.951	1.051E 01	1.256E 01	-2.974E-05	-2.973E-05	2.975E-05
1.14781	1.8732	1.15000	32.683	1.051E 01	1.833E 01	-1.198E-05	-1.198E-05	1.198E-05
1.19720	2.2530	1.20000	43.427	1.051E 01	2.362E 01	-6.222E-06	-6.221E-06	6.222E-06
1.29612	2.9258	1.30000	64.930	1.051E 01	3.298E 01	-2.492E-06	-2.492E-06	2.492E-06
1.39520	3.5030	1.40000	86.439	1.051E 01	4.101E 01	-1.300E-06	-1.300E-06	1.300E-06
1.49440	4.0037	1.50000	107.950	1.051E 01	4.797E 01	-7.989E-07	-7.989E-07	7.989E-07
1.59370	4.4420	1.60000	129.464	1.051E 01	5.406E 01	-5.356E-07	-5.356E-07	5.356E-07
1.69309	4.8289	1.70000	150.978	1.051E 01	5.944E 01	-3.599E-07	-3.598E-07	3.599E-07
1.79254	5.1729	1.80000	172.492	1.051E 01	6.421E 01	-2.539E-07	-2.539E-07	2.539E-07
1.89205	5.4807	1.90000	194.007	1.051E 01	6.849E 01	-1.791E-07	-1.791E-07	1.791E-07
1.99161	5.7577	2.00000	215.522	1.051E 01	7.233E 01	-1.277E-07	-1.277E-07	1.277E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.500 θ_D= 2.996E-03 ρ_a= 1.950

z	$_x\mu'-1$ 0	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.554E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.392E-07	199.605	-5.579E-05	-5.579E-05	5.579E-05	5.579E-05	-8.957E-08	-8.957E-08
0.50000	8.043E-07	249.506	-8.888E-05	-8.888E-05	8.887E-05	8.888E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.179E-07	-2.180E-07
0.70000	2.522E-06	349.308	-2.309E-04	-2.309E-04	2.309E-04	2.309E-04	-4.189E-07	-4.189E-07
0.80000	6.337E-06	399.209	-4.303E-04	-4.303E-04	4.303E-04	4.304E-04	-1.052E-06	-1.053E-06
0.85000	1.227E-05	424.160	-6.508E-04	-6.508E-04	6.507E-04	6.508E-04	-2.038E-06	-2.038E-06
0.90000	3.100E-05	449.110	-1.139E-03	-1.139E-03	1.139E-03	1.139E-03	-5.146E-06	-5.148E-06
0.92500	5.698E-05	461.585	-1.671E-03	-1.672E-03	1.671E-03	1.672E-03	-9.455E-06	-9.461E-06
0.95000	1.424E-04	474.060	-2.817E-03	-2.819E-03	2.816E-03	2.820E-03	-2.360E-05	-2.363E-05
0.96250	2.698E-04	480.297	-4.020E-03	-4.024E-03	4.019E-03	4.027E-03	-4.463E-05	-4.475E-05
0.97500	7.489E-04	486.534	-6.857E-03	-6.873E-03	6.857E-03	6.889E-03	-1.233E-04	-1.240E-04
0.98124	1.588E-03	489.652	-1.024E-02	-1.028E-02	1.027E-02	1.035E-02	-2.600E-04	-2.622E-04
0.98749	4.340E-03	492.770	-1.788E-02	-1.801E-02	1.853E-02	1.879E-02	-7.028E-04	-7.128E-04
0.99374	1.666E-02	495.887	-3.846E-02	-3.907E-02	5.057E-02	5.181E-02	-2.644E-03	-2.696E-03
0.99997	3.734E-02	498.996	-1.208E-01	-1.223E-01	1.546E-01	1.577E-01	-6.021E-03	-5.992E-03
1.00614	1.050E-02	502.076	-1.549E-01	-1.554E-01	2.687E-01	2.697E-01	-1.775E-03	-1.742E-03
1.01229	3.069E-03	505.144	-1.232E-01	-1.234E-01	3.386E-01	3.389E-01	-5.174E-04	-5.112E-04
1.01844	1.267E-03	508.212	-7.834E-02	-7.845E-02	3.958E-01	3.960E-01	-2.125E-04	-2.109E-04
1.02459	6.232E-04	511.281	-3.081E-02	-3.090E-02	4.489E-01	4.491E-01	-1.042E-04	-1.037E-04
1.03689	2.435E-04	517.419	6.536E-02	6.528E-02	5.501E-01	5.502E-01	-4.059E-05	-4.049E-05
1.04920	1.332E-04	523.561	1.604E-01	1.603E-01	6.473E-01	6.475E-01	-2.217E-05	-2.213E-05
1.07382	5.462E-05	535.851	3.448E-01	3.447E-01	8.338E-01	8.340E-01	-9.081E-06	-9.075E-06
1.09847	2.973E-05	548.149	5.212E-01	5.211E-01	1.011E 00	1.011E 00	-4.941E-06	-4.939E-06
1.14781	1.198E-05	572.769	8.515E-01	8.514E-01	1.343E 00	1.343E 00	-1.990E-06	-1.990E-06
1.19720	6.221E-06	597.416	1.155E 00	1.154E 00	1.646E 00	1.646E 00	-1.034E-06	-1.033E-06
1.29612	2.492E-06	646.781	1.691E 00	1.691E 00	2.183E 00	2.183E 00	-4.140E-07	-4.140E-07
1.39520	1.300E-06	696.222	2.151E 00	2.151E 00	2.643E 00	2.643E 00	-2.160E-07	-2.160E-07
1.49440	7.989E-07	745.724	2.550E 00	2.550E 00	3.042E 00	3.042E 00	-1.327E-07	-1.327E-07
1.59370	5.356E-07	795.276	2.899E 00	2.899E 00	3.391E 00	3.391E 00	-8.897E-08	-8.897E-08
1.69309	3.598E-07	844.869	3.207E 00	3.207E 00	3.699E 00	3.699E 00	-5.978E-08	-5.978E-08
1.79254	2.539E-07	894.497	3.480E 00	3.480E 00	3.973E 00	3.973E 00	-4.217E-08	-4.217E-08
1.89205	1.791E-07	944.153	3.725E 00	3.725E 00	4.218E 00	4.218E 00	-2.975E-08	-2.975E-08
1.99161	1.277E-07	993.834	3.946E 00	3.945E 00	4.438E 00	4.438E 00	-2.121E-08	-2.121E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.500 θ_D= 2.996E-03 ρ_a= 1.950

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.133E-15
0.10000	4.328E-11	4.304E-11	-7.441E-19	-7.442E-19	-8.540E-09	-8.540E-09	-1.520E-15
0.20000	1.207E-10	1.207E-10	-1.297E-18	-1.297E-18	-2.342E-08	-2.342E-08	-2.174E-15
0.30000	2.560E-10	2.560E-10	-2.260E-18	-2.260E-18	-4.936E-08	-4.936E-08	-3.417E-15
0.40000	5.423E-10	5.419E-10	-4.123E-18	-4.123E-18	-9.568E-08	-9.569E-08	-5.785E-15
0.50000	1.075E-09	1.075E-09	-7.532E-18	-7.533E-18	-1.803E-07	-1.803E-07	-1.158E-14
0.60000	2.437E-09	2.435E-09	-1.550E-17	-1.550E-17	-3.423E-07	-3.423E-07	-2.706E-14
0.70000	6.927E-09	6.925E-09	-4.065E-17	-4.066E-17	-7.237E-07	-7.238E-07	-7.905E-14
0.80000	2.846E-08	2.846E-08	-1.625E-16	-1.625E-16	-1.977E-06	-1.978E-06	-3.574E-13
0.85000	7.597E-08	7.597E-08	-4.316E-16	-4.317E-16	-3.991E-06	-3.992E-06	-1.033E-12
0.90000	2.924E-07	2.925E-07	-1.839E-15	-1.840E-15	-1.096E-05	-1.096E-05	-4.604E-12
0.92500	7.203E-07	7.209E-07	-4.232E-15	-4.238E-15	-2.170E-05	-2.172E-05	-1.384E-11
0.95000	2.734E-06	2.740E-06	-1.636E-14	-1.639E-14	-5.375E-05	-5.384E-05	-6.020E-11
0.96250	6.954E-06	6.979E-06	-4.437E-14	-4.460E-14	-1.039E-04	-1.042E-04	-1.672E-10
0.97500	2.922E-05	2.944E-05	-2.232E-13	-2.256E-13	-3.039E-04	-3.058E-04	-5.732E-10
0.98124	8.238E-05	8.334E-05	-7.385E-13	-7.512E-13	-6.980E-04	-7.056E-04	-1.201E-09
0.98749	3.269E-04	3.337E-04	-3.750E-12	-3.857E-12	-2.295E-03	-2.341E-03	-2.784E-09
0.99374	2.989E-03	3.120E-03	-3.701E-11	-3.850E-11	-1.449E-02	-1.500E-02	-6.175E-09
0.99997	3.857E-02	3.873E-02	-1.766E-10	-1.749E-10	-1.311E-01	-1.336E-01	-7.966E-09
1.00614	3.901E-02	3.903E-02	-1.790E-11	-1.725E-11	-2.105E-01	-2.109E-01	-5.288E-09
1.01229	1.809E-02	1.810E-02	-2.270E-12	-2.216E-12	-2.174E-01	-2.176E-01	-2.247E-09
1.01844	1.112E-02	1.113E-02	-5.337E-13	-5.259E-13	-2.184E-01	-2.186E-01	-9.616E-10
1.02459	7.924E-03	7.928E-03	-1.722E-13	-1.705E-13	-2.187E-01	-2.189E-01	-4.798E-10
1.03689	4.984E-03	4.986E-03	-3.826E-14	-3.808E-14	-2.189E-01	-2.190E-01	-1.435E-10
1.04920	3.622E-03	3.624E-03	-1.483E-14	-1.479E-14	-2.189E-01	-2.191E-01	-5.294E-11
1.07382	2.337E-03	2.338E-03	-4.007E-15	-4.001E-15	-2.189E-01	-2.191E-01	-1.266E-11
1.09847	1.724E-03	1.725E-03	-1.740E-15	-1.738E-15	-2.190E-01	-2.191E-01	-4.347E-12
1.14781	1.130E-03	1.130E-03	-4.167E-16	-4.166E-16	-2.190E-01	-2.191E-01	-9.907E-13
1.19720	8.400E-04	8.405E-04	-1.582E-16	-1.581E-16	-2.190E-01	-2.191E-01	-3.466E-13
1.29612	5.552E-04	5.555E-04	-3.995E-17	-3.995E-17	-2.190E-01	-2.191E-01	-7.747E-14
1.39520	4.146E-04	4.148E-04	-1.530E-17	-1.529E-17	-2.190E-01	-2.191E-01	-2.667E-14
1.49440	3.308E-04	3.310E-04	-7.456E-18	-7.456E-18	-2.190E-01	-2.191E-01	-1.144E-14
1.59370	2.752E-04	2.753E-04	-4.081E-18	-4.081E-18	-2.190E-01	-2.191E-01	-5.737E-15
1.69309	2.356E-04	2.357E-04	-2.239E-18	-2.239E-18	-2.190E-01	-2.191E-01	-3.395E-15
1.79254	2.060E-04	2.061E-04	-1.285E-18	-1.285E-18	-2.190E-01	-2.191E-01	-2.164E-15
1.89205	1.829E-04	1.830E-04	-7.372E-19	-7.372E-19	-2.190E-01	-2.191E-01	-1.516E-15
1.99161	1.646E-04	1.646E-04	-4.226E-19	-4.226E-19	-2.190E-01	-2.191E-01	-1.131E-15

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.600 θ_D= 1.823E-03 ρ_a= 2.292

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.6000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.6000	0.10000	193.644	1.026E-07	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.6000	0.20000	172.130	1.851E-07	1.000E-00	-2.553E-07	-2.553E-07	2.553E-07
0.30000	0.6000	0.30000	150.616	3.202E-07	1.000E-00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.6000	0.40000	129.103	5.836E-07	1.000E-00	-5.392E-07	-5.392E-07	5.392E-07
0.50000	0.6000	0.50000	107.591	9.738E-07	1.000E-00	-8.043E-07	-8.043E-07	8.043E-07
0.60000	0.6000	0.60000	86.081	1.721E-06	1.000E-00	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.6000	0.70000	64.575	5.016E-06	9.999E-01	-2.521E-06	-2.521E-06	2.521E-06
0.80000	0.6000	0.80000	43.079	1.830E-05	9.998E-01	-6.331E-06	-6.332E-06	6.331E-06
0.85000	0.6000	0.85000	32.341	4.714E-05	9.996E-01	-1.225E-05	-1.225E-05	1.225E-05
0.90000	0.6000	0.90000	21.622	1.744E-04	9.992E-01	-3.087E-05	-3.088E-05	3.086E-05
0.92500	0.6000	0.92500	16.282	4.195E-04	9.986E-01	-5.663E-05	-5.667E-05	5.662E-05
0.95000	0.6000	0.95000	10.980	1.520E-03	9.971E-01	-1.403E-04	-1.406E-04	1.403E-04
0.96250	0.6001	0.96250	8.366	3.725E-03	9.957E-01	-2.621E-04	-2.628E-04	2.618E-04
0.97500	0.6002	0.97500	5.822	1.422E-02	9.938E-01	-6.935E-04	-6.970E-04	6.922E-04
0.98124	0.6003	0.98125	4.612	3.737E-02	9.943E-01	-1.407E-03	-1.418E-03	1.404E-03
0.98749	0.6007	0.98750	3.503	1.263E-01	1.000E 00	-3.336E-03	-3.375E-03	3.328E-03
0.99374	0.6026	0.99375	2.628	5.878E-01	1.008E 00	-9.338E-03	-9.466E-03	9.363E-03
0.99998	0.6117	1.00000	2.297	2.789E 00	7.603E-01	-1.678E-02	-1.675E-02	1.708E-02
1.00621	0.6361	1.00625	2.743	4.637E 00	3.963E-01	-8.101E-03	-7.993E-03	8.222E-03
1.01243	0.6659	1.01250	3.672	4.992E 00	4.896E-01	-2.820E-03	-2.790E-03	2.843E-03
1.01866	0.6963	1.01875	4.804	5.057E 00	9.033E-01	-1.255E-03	-1.246E-03	1.261E-03
1.02488	0.7266	1.02500	6.025	5.076E 00	1.378E 00	-6.295E-04	-6.266E-04	6.313E-04
1.03734	0.7862	1.03750	8.578	5.085E 00	2.364E 00	-2.479E-04	-2.473E-04	2.483E-04
1.04979	0.8445	1.05000	11.195	5.087E 00	3.352E 00	-1.353E-04	-1.351E-04	1.354E-04
1.07470	0.9570	1.07500	16.499	5.088E 00	5.284E 00	-5.529E-05	-5.525E-05	5.531E-05
1.09962	1.0644	1.10000	21.840	5.088E 00	7.140E 00	-3.012E-05	-3.011E-05	3.013E-05
1.14946	1.2654	1.15000	32.559	5.088E 00	1.062E 01	-1.208E-05	-1.208E-05	1.208E-05
1.19932	1.4496	1.20000	43.298	5.088E 00	1.381E 01	-6.262E-06	-6.262E-06	6.263E-06
1.29907	1.7756	1.30000	64.794	5.088E 00	1.947E 01	-2.503E-06	-2.503E-06	2.503E-06
1.39885	2.0551	1.40000	86.300	5.088E 00	2.432E 01	-1.305E-06	-1.305E-06	1.305E-06
1.49866	2.2973	1.50000	107.810	5.088E 00	2.852E 01	-8.010E-07	-8.010E-07	8.010E-07
1.59850	2.5093	1.60000	129.322	5.088E 00	3.220E 01	-5.370E-07	-5.370E-07	5.370E-07
1.69835	2.6964	1.70000	150.835	5.088E 00	3.544E 01	-3.607E-07	-3.607E-07	3.607E-07
1.79823	2.8627	1.80000	172.349	5.088E 00	3.833E 01	-2.544E-07	-2.544E-07	2.544E-07
1.89811	3.0115	1.90000	193.863	5.088E 00	4.091E 01	-1.795E-07	-1.795E-07	1.795E-07
1.99801	3.1455	2.00000	215.378	5.088E 00	4.323E 01	-1.280E-07	-1.280E-07	1.280E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.600 θ_D= 1.823E-03 ρ_a= 2.292

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.553E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.392E-07	199.605	-5.579E-05	-5.579E-05	5.579E-05	5.579E-05	-8.956E-08	-8.956E-08
0.50000	8.043E-07	249.506	-8.887E-05	-8.887E-05	8.887E-05	8.887E-05	-1.336E-07	-1.336E-07
0.60000	1.312E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.179E-07	-2.179E-07
0.70000	2.521E-06	349.308	-2.308E-04	-2.308E-04	2.308E-04	2.308E-04	-4.187E-07	-4.188E-07
0.80000	6.332E-06	399.209	-4.302E-04	-4.302E-04	4.302E-04	4.302E-04	-1.052E-06	-1.052E-06
0.85000	1.226E-05	424.160	-6.504E-04	-6.504E-04	6.504E-04	6.505E-04	-2.035E-06	-2.036E-06
0.90000	3.089E-05	449.110	-1.138E-03	-1.138E-03	1.138E-03	1.138E-03	-5.127E-06	-5.129E-06
0.92500	5.669E-05	461.585	-1.668E-03	-1.668E-03	1.667E-03	1.668E-03	-9.407E-06	-9.414E-06
0.95000	1.407E-04	474.060	-2.802E-03	-2.804E-03	2.801E-03	2.805E-03	-2.331E-05	-2.335E-05
0.96250	2.632E-04	480.297	-3.985E-03	-3.989E-03	3.984E-03	3.992E-03	-4.354E-05	-4.365E-05
0.97500	6.993E-04	486.534	-6.701E-03	-6.716E-03	6.703E-03	6.732E-03	-1.152E-04	-1.158E-04
0.98124	1.426E-03	489.652	-9.786E-03	-9.821E-03	9.826E-03	9.895E-03	-2.338E-04	-2.356E-04
0.98749	3.406E-03	492.770	-1.618E-02	-1.628E-02	1.675E-02	1.695E-02	-5.54[illegible]E-04	-5.606E-04
0.99374	9.621E-03	495.887	-2.875E-02	-2.910E-02	4.071E-02	4.140E-02	-1.551E-03	-1.572E-03
0.99998	1.703E-02	499.001	-6.758E-02	-6.823E-02	8.853E-02	8.984E-02	-2.787E-03	-2.783E-03
1.00621	8.004E-03	502.110	-9.664E-02	-9.695E-02	1.387E-01	1.394E-01	-1.346E-03	-1.328E-03
1.01243	2.783E-03	505.216	-9.966E-02	-9.977E-02	1.672E-01	1.674E-01	-4.684E-04	-4.635E-04
1.01866	1.244E-03	508.322	-9.296E-02	-9.302E-02	1.856E-01	1.857E-01	-2.085E-04	-2.071E-04
1.02488	6.255E-04	511.429	-8.353E-02	-8.358E-02	2.006E-01	2.007E-01	-1.046E-04	-1.041E-04
1.03734	2.471E-04	517.643	-6.239E-02	-6.243E-02	2.268E-01	2.269E-01	-4.118E-05	-4.108E-05
1.04979	1.350E-04	523.858	-4.065E-02	-4.069E-02	2.508E-01	2.508E-01	-2.247E-05	-2.244E-05
1.07470	5.524E-05	536.289	2.103E-03	2.065E-03	2.957E-01	2.958E-01	-9.184E-06	-9.178E-06
1.09962	3.011E-05	548.723	4.330E-02	4.327E-02	3.379E-01	3.380E-01	-5.004E-06	-5.002E-06
1.14946	1.208E-05	573.596	1.207E-01	1.206E-01	4.163E-01	4.163E-01	-2.006E-06	-2.006E-06
1.19932	6.262E-06	598.475	1.918E-01	1.917E-01	4.878E-01	4.879E-01	-1.040E-06	-1.040E-06
1.29907	2.503E-06	648.250	3.177E-01	3.176E-01	6.141E-01	6.142E-01	-4.158E-07	-4.158E-07
1.39885	1.305E-06	698.043	4.256E-01	4.256E-01	7.222E-01	7.223E-01	-2.167E-07	-2.167E-07
1.49866	8.010E-07	747.850	5.192E-01	5.192E-01	8.159E-01	8.160E-01	-1.331E-07	-1.331E-07
1.59850	5.370E-07	797.670	6.011E-01	6.011E-01	8.979E-01	8.980E-01	-8.920E-08	-8.920E-08
1.69835	3.607E-07	847.499	6.734E-01	6.734E-01	9.702E-01	9.703E-01	-5.991E-08	-5.991E-08
1.79823	2.544E-07	897.336	7.376E-01	7.376E-01	1.034E 00	1.035E 00	-4.227E-08	-4.227E-08
1.89811	1.795E-07	947.179	7.868E-01	7.868E-01	1.084E 00	1.084E 00	-2.982E-08	-2.982E-08
1.99801	1.280E-07	997.029	8.360E-01	8.360E-01	1.133E 00	1.133E 00	-2.126E-08	-2.126E-08

PROPAGATION FREQUENCY= 4.980OE 07 ϕ_o=0.600 θ_D=1.823E-03 ρ_a=2.292

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.632E-15
0.10000	5.207E-11	5.184E-11	-7.441E-19	-7.441E-19	-8.540E-09	-8.540E-09	-2.189E-15
0.20000	1.460E-10	1.450E-10	-1.297E-18	-1.297E-18	-2.342E-08	-2.342E-08	-3.130E-15
0.30000	3.071E-10	3.076E-10	-2.260E-18	-2.260E-18	-4.936E-08	-4.936E-08	-4.920E-15
0.40000	6.611E-10	6.505E-10	-4.123E-18	-4.123E-18	-9.568E-08	-9.568E-08	-8.329E-15
0.50000	1.290E-09	1.289E-09	-7.532E-18	-7.532E-18	-1.803E-07	-1.803E-07	-1.667E-14
0.60000	2.924E-09	2.922E-09	-1.550E-17	-1.550E-17	-3.423E-07	-3.423E-07	-3.896E-14
0.70000	8.310E-09	8.309E-09	-4.064E-17	-4.064E-17	-7.236E-07	-7.236E-07	-1.138E-13
0.80000	3.413E-08	3.413E-08	-1.623E-16	-1.623E-16	-1.976E-06	-1.976E-06	-5.140E-13
0.85000	9.103E-08	9.108E-08	-4.307E-16	-4.309E-16	-3.986E-06	-3.987E-06	-1.484E-12
0.90000	3.496E-07	3.497E-07	-1.830E-15	-1.831E-15	-1.093E-05	-1.093E-05	-6.595E-12
0.92500	8.585E-07	8.592E-07	-4.203E-15	-4.209E-15	-2.161E-05	-2.162E-05	-1.971E-11
0.95000	3.233E-06	3.240E-06	-1.604E-14	-1.609E-14	-5.318E-05	-5.326E-05	-8.455E-11
0.96250	8.054E-06	8.083E-06	-4.268E-14	-4.290E-14	-1.020E-04	-1.023E-04	-2.313E-10
0.97500	3.222E-05	3.245E-05	-2.009E-13	-2.029E-13	-2.883E-04	-2.900E-04	-7.703E-10
0.98124	8.628E-05	8.721E-05	-6.216E-13	-6.312E-13	-6.280E-04	-6.342E-04	-1.538E-09
0.98749	3.045E-04	3.101E-04	-2.532E-12	-2.592E-12	-1.807E-03	-1.837E-03	-3.399E-09
0.99374	2.115E-03	2.190E-03	-1.418E-11	-1.457E-11	-8.148E-03	-8.352E-03	-6.953E-09
0.99998	1.948E-02	1.962E-02	-4.096E-11	-4.084E-11	-3.550E-02	-3.606E-02	-8.966E-09
1.00621	4.335E-02	4.339E-02	-1.119E-11	-1.089E-11	-5.888E-02	-5.906E-02	-6.241E-09
1.01243	3.523E-02	3.525E-02	-1.925E-12	-1.885E-12	-6.378E-02	-6.384E-02	-3.055E-09
1.01866	1.898E-02	1.899E-02	-5.176E-13	-5.104E-13	-6.473E-02	-6.477E-02	-1.360E-09
1.02488	1.236E-02	1.237E-02	-1.731E-13	-1.715E-13	-6.501E-02	-6.505E-02	-6.949E-10
1.03734	7.114E-03	7.117E-03	-3.915E-14	-3.896E-14	-6.518E-02	-6.522E-02	-2.113E-10
1.04979	4.955E-03	4.958E-03	-1.515E-14	-1.511E-14	-6.522E-02	-6.526E-02	-7.831E-11
1.07470	3.070E-03	3.071E-03	-4.069E-15	-4.064E-15	-6.525E-02	-6.529E-02	-1.868E-11
1.09962	2.220E-03	2.221E-03	-1.770E-15	-1.769E-15	-6.526E-02	-6.530E-02	-6.373E-12
1.14946	1.428E-03	1.429E-03	-4.218E-16	-4.216E-16	-6.527E-02	-6.531E-02	-1.447E-12
1.19932	1.052E-03	1.052E-03	-1.597E-16	-1.597E-16	-6.527E-02	-6.531E-02	-5.048E-13
1.29907	6.889E-04	6.893E-04	-4.022E-17	-4.021E-17	-6.527E-02	-6.531E-02	-1.125E-13
1.39885	5.122E-04	5.124E-04	-1.537E-17	-1.537E-17	-6.527E-02	-6.531E-02	-3.865E-14
1.49866	4.076E-04	4.078E-04	-7.486E-18	-7.486E-18	-6.527E-02	-6.531E-02	-1.656E-14
1.59850	3.384E-04	3.386E-04	-4.097E-18	-4.097E-18	-6.527E-02	-6.531E-02	-8.294E-15
1.69835	2.894E-04	2.895E-04	-2.247E-18	-2.247E-18	-6.527E-02	-6.531E-02	-4.905E-15
1.79823	2.527E-04	2.528E-04	-1.289E-18	-1.289E-18	-6.527E-02	-6.531E-02	-3.124E-15
1.89811	2.243E-04	2.244E-04	-7.400E-19	-7.399E-19	-6.527E-02	-6.531E-02	-2.187E-15
1.99801	2.016E-04	2.017E-04	-4.242E-19	-4.242E-19	-6.527E-02	-6.531E-02	-1.632E-15

PROPAGATION FREQUENCY= 4.980OE 07 ϕ_o= 0.700 θ_D= 1.211E-03 ρ_a= 2.653

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.7000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.7000	0.10000	193.645	9.422E-08	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.7000	0.20000	172.131	1.951E-07	1.000E-00	-2.553E-07	-2.553E-07	2.553E-07
0.30000	0.7000	0.30000	150.618	3.502E-07	1.000E-00	-3.620E-07	-3.620E-07	3.620E-07
0.40000	0.7000	0.40000	129.106	6.270E-07	1.000E-00	-5.391E-07	-5.391E-07	5.391E-07
0.50000	0.7000	0.50000	107.596	1.081E-06	1.000E-00	-8.042E-07	-8.042E-07	8.042E-07
0.60000	0.7000	0.60000	86.088	1.908E-06	9.999E-01	-1.312E-06	-1.312E-06	1.312E-06
0.70000	0.7000	0.70000	64.585	5.590E-06	9.999E-01	-2.520E-06	-2.520E-06	2.520E-06
0.80000	0.7000	0.80000	43.096	2.038E-05	9.998E-01	-6.326E-06	-6.326E-06	6.325E-06
0.85000	0.7000	0.85000	32.365	5.293E-05	9.996E-01	-1.223E-05	-1.223E-05	1.223E-05
0.90000	0.7000	0.90000	21.660	1.954E-04	9.991E-01	-3.073E-05	-3.074E-05	3.073E-05
0.92500	0.7000	0.92500	16.334	4.691E-04	9.985E-01	-5.630E-05	-5.634E-05	5.628E-05
0.95000	0.7000	0.95000	11.059	1.692E-03	9.970E-01	-1.384E-04	-1.386E-04	1.383E-04
0.96250	0.7001	0.96250	8.471	4.087E-03	9.958E-01	-2.547E-04	-2.553E-04	2.544E-04
0.97500	0.7002	0.97500	5.973	1.491E-02	9.950E-01	-6.412E-04	-6.442E-04	6.401E-04
0.98125	0.7003	0.98125	4.803	3.757E-02	9.968E-01	-1.247E-03	-1.256E-03	1.245E-03
0.98749	0.7007	0.98750	3.752	1.067E-01	1.003E 00	-2.567E-03	-2.591E-03	2.561E-03
0.99374	0.7022	0.99375	2.953	4.071E-01	1.007E 00	-6.042E-03	-6.100E-03	6.049E-03
1.00623	0.7176	1.00625	3.017	2.052E 00	6.866E-01	-5.627E-03	-5.574E-03	5.686E-03
1.01247	0.7311	1.01250	3.851	2.314E 00	4.525E-01	-2.333E-03	-2.313E-03	2.349E-03
1.01871	0.7453	1.01875	4.919	2.373E 00	2.585E-01	-1.167E-03	-1.160E-03	1.172E-03
1.02496	0.7596	1.02500	6.097	2.393E 00	2.055E-01	-6.122E-04	-6.095E-04	6.139E-04
1.03745	0.7878	1.03750	8.602	2.403E 00	5.627E-01	-2.462E-04	-2.457E-04	2.466E-04
1.04994	0.8153	1.05000	11.193	2.405E 00	1.005E 00	-1.353E-04	-1.351E-04	1.354E-04
1.07492	0.8686	1.07500	16.470	2.407E 00	1.887E 00	-5.547E-05	-5.544E-05	5.549E-05
1.09990	0.9195	1.10000	21.797	2.407E 00	2.740E 00	-3.027E-05	-3.026E-05	3.028E-05
1.14986	1.0146	1.15000	32.502	2.407E 00	4.341E 00	-1.212E-05	-1.212E-05	1.213E-05
1.19983	1.1018	1.20000	43.233	2.407E 00	5.812E 00	-6.283E-06	-6.282E-06	6.283E-06
1.29977	1.2560	1.30000	64.723	2.407E 00	8.417E 00	-2.509E-06	-2.509E-06	2.509E-06
1.39972	1.3882	1.40000	86.225	2.407E 00	1.065E 01	-1.307E-06	-1.307E-06	1.307E-06
1.49968	1.5028	1.50000	107.733	2.407E 00	1.259E 01	-8.022E-07	-8.022E-07	8.022E-07
1.59965	1.6031	1.60000	129.244	2.407E 00	1.428E 01	-5.378E-07	-5.378E-07	5.378E-07
1.69961	1.6916	1.70000	150.756	2.407E 00	1.578E 01	-3.611E-07	-3.611E-07	3.611E-07
1.79958	1.7702	1.80000	172.269	2.407E 00	1.711E 01	-2.548E-07	-2.548E-07	2.548E-07
1.89956	1.8406	1.90000	193.782	2.407E 00	1.830E 01	-1.797E-07	-1.797E-07	1.797E-07
1.99954	1.9040	2.00000	215.296	2.407E 00	1.937E 01	-1.281E-07	-1.281E-07	1.281E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.700 θ_D= 1.211E-03 ρ_0= 2.653

z	$_x\mu'-1.0$	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.553E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.620E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.013E-08	-6.013E-08
0.40000	5.391E-07	199.605	-5.579E-05	-5.579E-05	5.579E-05	5.579E-05	-8.956E-08	-8.956E-08
0.50000	8.042E-07	249.506	-8.887E-05	-8.887E-05	8.887E-05	8.887E-05	-1.336E-07	-1.336E-07
0.60000	1.212E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.179E-07	-2.179E-07
0.70000	2.520E-06	349.308	-2.308E-04	-2.308E-04	2.308E-04	2.308E-04	-4.186E-07	-4.186E-07
0.80000	6.327E-06	399.209	-4.300E-04	-4.301E-04	4.300E-04	4.301E-04	-1.051E-06	-1.051E-06
0.85000	1.224E-05	424.160	-6.499E-04	-6.500E-04	6.499E-04	6.500E-04	-2.032E-06	-2.032E-06
0.90000	3.075E-05	449.110	-1.136E-03	-1.136E-03	1.136E-03	1.136E-03	-5.105E-06	-5.107E-06
0.92500	5.636E-05	461.585	-1.663E-03	-1.663E-03	1.663E-03	1.664E-03	-9.352E-06	-9.358E-06
0.95000	1.387E-04	474.060	-2.784E-03	-2.786E-03	2.784E-03	2.787E-03	-2.299E-05	-2.302E-05
0.96250	2.557E-04	480.297	-3.940E-03	-3.944E-03	3.939E-03	3.947E-03	-4.230E-05	-4.241E-05
0.97500	6.461E-04	486.534	-6.523E-03	-6.537E-03	6.527E-03	6.553E-03	-1.065E-04	-1.070E-04
0.98125	1.262E-03	489.653	-9.306E-03	-9.335E-03	9.348E-03	9.407E-03	-2.072E-04	-2.086E-04
0.98749	2.610E-03	492.771	-1.473E-02	-1.480E-02	1.513E-02	1.528E-02	-4.264E-04	-4.304E-04
0.99374	6.167E-03	495.888	-2.478E-02	-2.499E-02	3.101E-02	3.143E-02	-1.004E-03	-1.013E-03
1.00623	5.579E-03	502.120	-6.650E-02	-6.671E-02	8.769E-02	8.810E-02	-9.348E-04	-9.260E-04
1.01247	2.308E-03	505.235	-7.481E-02	-7.490E-02	1.035E-01	1.037E-01	-3.876E-04	-3.842E-04
1.01871	1.157E-03	508.351	-7.670E-02	-7.675E-02	1.122E-01	1.123E-01	-1.938E-04	-1.926E-04
1.02496	6.085E-04	511.466	-7.624E-02	-7.627E-02	1.179E-01	1.180E-01	-1.017E-04	-1.012E-04
1.03745	2.454E-04	517.698	-7.298E-02	-7.300E-02	1.261E-01	1.262E-01	-4.090E-05	-4.081E-05
1.04994	1.350E-04	523.931	-6.875E-02	-6.877E-02	1.326E-01	1.326E-01	-2.248E-05	-2.244E-05
1.07492	5.542E-05	536.396	-5.977E-02	-5.979E-02	1.438E-01	1.438E-01	-9.215E-06	-9.209E-06
1.09990	3.025E-05	548.862	-5.081E-02	-5.083E-02	1.538E-01	1.538E-01	-5.028E-06	-5.027E-06
1.14986	1.212E-05	573.795	-3.373E-02	-3.375E-02	1.718E-01	1.719E-01	-2.014E-06	-2.014E-06
1.19983	6.282E-06	598.729	-1.790E-02	-1.792E-02	1.881E-01	1.881E-01	-1.044E-06	-1.044E-06
1.29977	2.509E-06	648.602	1.020E-02	1.017E-02	2.166E-01	2.166E-01	-4.168E-07	-4.167E-07
1.39972	1.307E-06	698.479	3.433E-02	3.431E-02	2.409E-01	2.409E-01	-2.171E-07	-2.171E-07
1.49968	8.022E-07	748.359	5.527E-02	5.525E-02	2.619E-01	2.620E-01	-1.333E-07	-1.333E-07
1.59965	5.378E-07	798.242	7.305E-02	7.303E-02	2.798E-01	2.798E-01	-8.933E-08	-8.933E-08
1.69961	3.611E-07	848.127	8.404E-02	8.402E-02	2.908E-01	2.908E-01	-5.999E-08	-5.999E-08
1.79958	2.548E-07	898.014	9.503E-02	9.501E-02	3.018E-01	3.019E-01	-4.232E-08	-4.232E-08
1.89956	1.797E-07	947.902	1.060E-01	1.060E-01	3.128E-01	3.129E-01	-2.986E-08	-2.986E-08
1.99954	1.281E-07	997.791	1.170E-01	1.170E-01	3.239E-01	3.239E-01	-2.128E-08	-2.128E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.700 θ_D= 1.211E-03 ρ_0= 2.653

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.221E-15
0.10000	6.069E-11	6.058E-11	-7.441E-19	-7.441E-19	-8.539E-09	-8.540E-09	-2.979E-15
0.20000	1.692E-10	1.690E-10	-1.297E-18	-1.297E-18	-2.342E-08	-2.342E-08	-4.261E-15
0.30000	3.583E-10	3.577E-10	-2.259E-18	-2.259E-18	-4.936E-08	-4.936E-08	-6.697E-15
0.40000	7.601E-10	7.592E-10	-4.122E-18	-4.122E-18	-9.568E-08	-9.568E-08	-1.134E-14
0.50000	1.505E-09	1.504E-09	-7.531E-18	-7.531E-18	-1.803E-07	-1.803E-07	-2.268E-14
0.60000	3.409E-09	3.409E-09	-1.549E-17	-1.549E-17	-3.422E-07	-3.422E-07	-5.301E-14
0.70000	9.692E-09	9.691E-09	-4.062E-17	-4.062E-17	-7.234E-07	-7.234E-07	-1.548E-13
0.80000	3.978E-08	3.978E-08	-1.621E-16	-1.621E-16	-1.975E-06	-1.975E-06	-6.985E-13
0.85000	1.060E-07	1.060E-07	-4.297E-16	-4.299E-16	-3.981E-06	-3.982E-06	-2.014E-12
0.90000	4.063E-07	4.065E-07	-1.819E-15	-1.820E-15	-1.089E-05	-1.090E-05	-8.920E-12
0.92500	9.948E-07	9.956E-07	-4.169E-15	-4.175E-15	-2.149E-05	-2.151E-05	-2.648E-11
0.95000	3.714E-06	3.722E-06	-1.569E-14	-1.573E-14	-5.251E-05	-5.259E-05	-1.118E-10
0.96250	9.069E-06	9.100E-06	-4.080E-14	-4.100E-14	-9.953E-05	-9.981E-05	-3.008E-10
0.97500	3.465E-05	3.488E-06	-1.779E-13	-1.795E-13	-2.712E-04	-2.727E-04	-9.721E-10
0.98125	8.817E-05	8.904E-05	-5.111E-13	-5.181E-13	-5.588E-04	-5.637E-04	-1.851E-09
0.98749	2.791E-04	2.835E-04	-1.642E-12	-1.673E-12	-1.442E-03	-1.461E-03	-3.972E-09
0.99374	1.408E-03	1.444E-03	-6.783E-12	-6.914E-12	-4.960E-03	-5.051E-03	-7.182E-09
1.00623	1.519E-02	1.521E-02	-6.036E-12	-5.922E-12	-2.497E-02	-2.506E-02	-6.838E-09
1.01247	2.381E-02	2.382E-02	-1.407E-12	-1.382E-12	-2.809E-02	-2.812E-02	-3.769E-09
1.01871	4.167E-02	4.169E-02	-4.597E-13	-4.540E-13	-2.888E-02	-2.890E-02	-1.727E-09
1.02496	5.218E-02	5.221E-02	-1.656E-13	-1.642E-13	-2.914E-02	-2.916E-02	-9.048E-10
1.03745	1.884E-02	1.884E-02	-3.873E-14	-3.855E-14	-2.930E-02	-2.932E-02	-2.847E-10
1.04994	1.042E-02	1.043E-02	-1.516E-14	-1.511E-14	-2.935E-02	-2.936E-02	-1.067E-10
1.07492	5.420E-03	5.422E-03	-4.088E-15	-4.082E-15	-2.938E-02	-2.939E-02	-2.561E-11
1.09990	3.649E-03	3.650E-03	-1.782E-15	-1.781E-15	-2.939E-02	-2.940E-02	-8.735E-12
1.14986	2.203E-03	2.204E-03	-4.242E-16	-4.240E-16	-2.939E-02	-2.941E-02	-1.984E-12
1.19983	1.577E-03	1.577E-03	-1.605E-16	-1.604E-16	-2.940E-02	-2.941E-02	-6.910E-13
1.29977	1.005E-03	1.005E-03	-4.035E-17	-4.035E-17	-2.940E-02	-2.941E-02	-1.537E-13
1.39972	7.374E-04	7.377E-04	-1.542E-17	-1.541E-17	-2.940E-02	-2.941E-02	-5.278E-14
1.49968	5.823E-04	5.826E-04	-7.502E-18	-7.502E-18	-2.940E-02	-2.941E-02	-2.261E-14
1.59965	4.811E-04	4.813E-04	-4.106E-18	-4.106E-18	-2.940E-02	-2.941E-02	-1.131E-14
1.69961	4.099E-04	4.101E-04	-2.251E-18	-2.251E-18	-2.940E-02	-2.941E-02	-6.689E-15
1.79958	3.571E-04	3.572E-04	-1.292E-18	-1.292E-18	-2.940E-02	-2.941E-02	-4.259E-15
1.89956	3.163E-04	3.164E-04	-7.415E-19	-7.415E-19	-2.940E-02	-2.941E-02	-2.980E-15
1.99954	2.839E-04	2.840E-04	-4.251E-19	-4.251E-19	-2.940E-02	-2.941E-02	-2.223E-15

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.800 θ_0= 8.436E-04 ρ_a= 3.021

z	ϕ	z_f	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	0.8000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	0.8000	0.10000	193.645	1.201E-07	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	0.8000	0.20000	172.132	2.485E-07	1.000E-00	-2.553E-07	-2.553E-07	2.553E-07
0.30000	0.8000	0.30000	150.620	4.302E-07	1.000E-00	-3.619E-07	-3.619E-07	3.619E-07
0.40000	0.8000	0.40000	129.109	7.671E-07	1.000E-00	-5.391E-07	-5.391E-07	5.391E-07
0.50000	0.8000	0.50000	107.600	1.294E-06	1.000E-00	-8.041E-07	-8.042E-07	8.041E-07
0.60000	0.8000	0.60000	86.095	2.308E-06	1.000E-00	-1.311E-06	-1.311E-06	1.311E-06
0.70000	0.8000	0.70000	64.597	6.697E-06	9.999E-01	-2.519E-06	-2.519E-06	2.519E-06
0.80000	0.8000	0.80000	43.116	2.415E-05	9.998E-01	-6.319E-06	-6.320E-06	6.319E-06
0.85000	0.8000	0.85000	32.393	6.249E-05	9.997E-01	-1.221E-05	-1.221E-05	1.221E-05
0.90000	0.8000	0.90000	21.704	2.289E-04	9.993E-01	-3.058E-05	-3.059E-05	3.057E-05
0.92500	0.8000	0.92500	16.394	5.467E-04	9.988E-01	-5.592E-05	-5.596E-05	5.590E-05
0.95000	0.8000	0.95000	11.150	1.948E-03	9.977E-01	-1.362E-04	-1.364E-04	1.361E-04
0.96250	0.8001	0.96250	8.591	4.611E-03	9.968E-01	-2.464E-04	-2.470E-04	2.462E-04
0.97500	0.8002	0.97500	6.144	1.605E-02	9.968E-01	-5.988E-04	-6.014E-04	5.979E-04
0.98124	0.8004	0.98125	5.015	3.775E-02	9.987E-01	-1.091E-03	-1.098E-03	1.089E-03
0.98749	0.8008	0.98750	4.021	9.538E-02	1.004E 00	-2.046E-03	-2.062E-03	2.043E-03
0.99374	0.8019	0.99375	3.290	3.114E-01	1.004E 00	-4.184E-03	-4.213E-03	4.187E-03
1.00623	0.8111	1.00625	3.337	1.166E 00	8.897E-01	-4.011E-03	-3.984E-03	4.041E-03
1.01248	0.8190	1.01250	4.097	1.361E 00	7.878E-01	-1.965E-03	-1.951E-03	1.976E-03
1.01872	0.8274	1.01875	5.105	1.414E 00	6.900E-01	-1.037E-03	-1.031E-03	1.041E-03
1.02497	0.8359	1.02500	6.242	1.434E 00	5.977E-01	-5.792E-04	-5.768E-04	5.807E-04
1.03747	0.8528	1.03750	8.696	1.445E 00	4.199E-01	-2.399E-04	-2.394E-04	2.403E-04
1.04996	0.8694	1.05000	11.258	1.448E 00	2.490E-01	-1.337E-04	-1.335E-04	1.338E-04
1.07495	0.9015	1.07500	16.504	1.449E 00	1.340E-01	-5.526E-05	-5.522E-05	5.528E-05
1.09995	0.9321	1.10000	21.815	1.449E 00	4.443E-01	-3.021E-05	-3.019E-05	3.021E-05
1.14993	0.9894	1.15000	32.505	1.449E 00	1.058E 00	-1.212E-05	-1.212E-05	1.212E-05
1.19992	1.0419	1.20000	43.228	1.449E 00	1.624E 00	-6.284E-06	-6.284E-06	6.285E-06
1.29990	1.1348	1.30000	64.709	1.449E 00	2.628E 00	-2.510E-06	-2.510E-06	2.510E-06
1.39988	1.2144	1.40000	86.207	1.449E 00	3.489E 00	-1.308E-06	-1.308E-06	1.308E-06
1.49987	1.2834	1.50000	107.713	1.449E 00	4.236E 00	-8.025E-07	-8.025E-07	8.025E-07
1.59985	1.3438	1.60000	129.222	1.449E 00	4.889E 00	-5.380E-07	-5.380E-07	5.380E-07
1.69984	1.3971	1.70000	150.733	1.449E 00	5.465E 00	-3.613E-07	-3.613E-07	3.613E-07
1.79983	1.4444	1.80000	172.245	1.449E 00	5.978E 00	-2.549E-07	-2.549E-07	2.549E-07
1.89982	1.4868	1.90000	193.758	1.449E 00	6.436E 00	-1.798E-07	-1.798E-07	1.798E-07
1.99981	1.5249	2.00000	215.271	1.449E 00	6.849E 00	-1.282E-07	-1.282E-07	1.282E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 0.800 θ_0=8.436E-04 ρ_a=3.021

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.553E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.242E-08	-4.242E-08
0.30000	3.619E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.012E-08	-6.012E-08
0.40000	5.391E-07	199.605	-5.579E-05	-5.579E-05	5.579E-05	5.579E-05	-8.955E-08	-8.955E-08
0.50000	8.042E-07	249.506	-8.886E-05	-8.886E-05	8.886E-05	8.887E-05	-1.336E-07	-1.336E-07
0.60000	1.311E-06	299.407	-1.399E-04	-1.399E-04	1.399E-04	1.399E-04	-2.178E-07	-2.179E-07
0.70000	2.519E-06	349.308	-2.308E-04	-2.308E-04	2.308E-04	2.308E-04	-4.185E-07	-4.185E-07
0.80000	6.320E-06	399.209	-4.299E-04	-4.299E-04	4.299E-04	4.299E-04	-1.050E-06	-1.050E-06
0.85000	1.221E-05	424.160	-6.494E-04	-6.495E-04	6.494E-04	6.495E-04	-2.028E-06	-2.029E-06
0.90000	3.060E-05	449.110	-1.134E-03	-1.134E-03	1.134E-03	1.134E-03	-5.080E-06	-5.082E-06
0.92500	5.598E-05	461.585	-1.658E-03	-1.658E-03	1.658E-03	1.659E-03	-9.289E-06	-9.295E-06
0.95000	1.365E-04	474.060	-2.765E-03	-2.766E-03	2.764E-03	2.767E-03	-2.262E-05	-2.265E-05
0.96250	2.474E-04	480.297	-3.892E-03	-3.896E-03	3.891E-03	3.899E-03	-4.094E-05	-4.104E-05
0.97500	6.031E-04	486.534	-6.337E-03	-6.349E-03	6.342E-03	6.366E-03	-9.947E-05	-9.990E-05
0.98124	1.102E-03	489.653	-8.830E-03	-8.855E-03	8.874E-03	8.924E-03	-1.813E-04	-1.824E-04
0.98749	2.074E-03	492.770	-1.347E-02	-1.353E-02	1.380E-02	1.391E-02	-3.399E-04	-3.425E-04
0.99374	4.246E-03	495.888	-2.123E-02	-2.136E-02	2.486E-02	2.513E-02	-6.950E-04	-6.999E-04
1.00623	3.987E-03	502.121	-4.548E-02	-4.561E-02	6.360E-02	6.387E-02	-6.663E-04	-6.618E-04
1.01248	1.948E-03	505.238	-5.234E-02	-5.240E-02	7.467E-02	7.481E-02	-3.265E-04	-3.241E-04
1.01872	1.029E-03	508.355	-5.613E-02	-5.517E-02	8.104E-02	8.111E-02	-1.722E-04	-1.712E-04
1.02497	5.760E-04	511.473	-5.604E-02	-5.607E-02	8.495E-02	8.500E-02	-9.621E-05	-9.582E-05
1.03747	2.392E-04	517.708	-5.587E-02	-5.589E-02	8.985E-02	8.989E-02	-3.986E-05	-3.977E-05
1.04996	1.335E-04	523.943	-5.479E-02	-5.481E-02	9.314E-02	9.317E-02	-2.221E-05	-2.218E-05
1.07495	5.520E-05	536.414	-5.195E-02	-5.196E-02	9.815E-02	9.818E-02	-9.179E-06	-9.173E-06
1.09995	3.019E-05	548.886	-4.889E-02	-4.891E-02	1.022E-01	1.023E-01	-5.018E-06	-5.016E-06
1.14993	1.212E-05	573.830	-4.286E-02	-4.287E-02	1.092E-01	1.093E-01	-2.014E-06	-2.013E-06
1.19992	6.284E-06	598.775	-3.719E-02	-3.720E-02	1.153E-01	1.154E-01	-1.044E-06	-1.044E-06
1.29990	2.510E-06	648.666	-2.705E-02	-2.706E-02	1.259E-01	1.259E-01	-4.169E-07	-4.169E-07
1.39988	1.308E-06	698.558	-2.055E-02	-2.056E-02	1.326E-01	1.326E-01	-2.172E-07	-2.172E-07
1.49987	8.025E-07	748.462	-1.661E-02	-1.662E-02	1.366E-01	1.366E-01	-1.333E-07	-1.333E-07
1.59985	5.380E-07	798.346	-1.265E-02	-1.266E-02	1.406E-01	1.407E-01	-8.937E-08	-8.937E-08
1.69984	3.613E-07	848.241	-8.679E-03	-8.693E-03	1.446E-01	1.447E-01	-6.001E-08	-6.001E-08
1.79983	2.549E-07	898.137	-4.702E-03	-4.716E-03	1.487E-01	1.487E-01	-4.234E-08	-4.234E-08
1.89982	1.798E-07	948.034	-7.208E-04	-7.348E-04	1.527E-01	1.527E-01	-2.987E-08	-2.987E-08
1.99981	1.282E-07	997.931	3.264E-03	3.250E-03	1.567E-01	1.567E-01	-2.129E-08	-2.129E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0=0.800 θ_D=8.436E-04 ρ_a=3.021

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.900E-15
0.10000	6.929E-11	6.899E-11	-7.441E-19	-7.441E-19	-8.539E-09	-8.539E-09	-3.891E-15
0.20000	1.930E-10	1.926E-10	-1.297E-18	-1.297E-18	-2.342E-08	-2.342E-08	-5.565E-15
0.30000	4.093E-10	4.091E-10	-2.259E-18	-2.259E-18	-4.936E-08	-4.936E-08	-8.746E-15
0.40000	8.672E-10	8.664E-10	-4.122E-18	-4.122E-18	-9.567E-08	-9.567E-08	-1.480E-14
0.50000	1.719E-09	1.718E-09	-7.530E-18	-7.530E-18	-1.803E-07	-1.803E-07	-2.962E-14
0.60000	3.896E-09	3.896E-09	-1.549E-17	-1.549E-17	-3.422E-07	-3.422E-07	-6.922E-14
0.70000	1.107E-08	1.107E-08	-4.060E-17	-4.060E-17	-7.232E-07	-7.232E-07	-2.020E-13
0.80000	4.543E-08	4.543E-08	-1.619E-16	-1.619E-16	-1.973E-06	-1.973E-06	-9.107E-13
0.85000	1.210E-07	1.210E-07	-4.286E-16	-4.287E-16	-3.975E-06	-3.976E-06	-2.621E-12
0.90000	4.628E-07	4.630E-07	-1.807E-15	-1.808E-15	-1.085E-05	-1.085E-05	-1.157E-11
0.92500	1.129E-06	1.130E-06	-4.131E-15	-4.136E-15	-2.137E-05	-2.138E-05	-3.406E-11
0.95000	4.183E-06	4.192E-06	-1.530E-14	-1.534E-14	-5.175E-05	-5.183E-05	-1.413E-10
0.96250	1.004E-05	1.007E-05	-3.875E-14	-3.893E-14	-9.693E-05	-9.718E-05	-3.733E-10
0.97500	3.665E-05	3.688E-05	-1.596E-13	-1.610E-13	-2.540E-04	-2.553E-04	-1.[illegible]-09
0.98124	8.781E-05	8.860E-05	-4.114E-13	-4.164E-13	-4.948E-04	-4.987E-04	-2.13[illegible]
0.98749	2.482E-04	2.516E-04	-1.142E-12	-1.160E-12	-1.175E-03	-1.188E-03	-4.290E-09
0.99374	9.315E-04	9.489E-04	-3.686E-12	-3.738E-12	-3.235E-03	-3.280E-03	-7.050E-09
1.00623	6.149E-03	6.164E-03	-3.446E-12	-3.399E-12	-1.265E-02	-1.270E-02	-6.803E-09
1.01248	7.496E-03	7.501E-03	-1.072E-12	-1.057E-12	-1.455E-02	-1.457E-02	-4.025E-09
1.01872	8.661E-03	8.664E-03	-3.792E-13	-3.750E-13	-1.518E-02	-1.519E-02	-2.030E-09
1.02497	9.993E-03	9.997E-03	-1.516E-13	-1.503E-13	-1.541E-02	-1.541E-02	-1.085E-09
1.03747	1.409E-02	1.410E-02	-3.719E-14	-3.702E-14	-1.556E-02	-1.556E-02	-3.574E-10
1.04996	2.350E-02	2.351E-02	-1.488E-14	-1.484E-14	-1.560E-02	-1.561E-02	-1.361E-10
1.07495	4.266E-02	4.267E-02	-4.066E-15	-4.060E-15	-1.563E-02	-1.564E-02	-3.317E-11
1.09995	1.257E-02	1.258E-02	-1.777E-15	-1.775E-15	-1.564E-02	-1.565E-02	-1.137E-11
1.14993	5.050E-03	5.052E-03	-4.240E-16	-4.239E-16	-1.565E-02	-1.565E-02	-2.590E-12
1.19992	3.152E-03	3.153E-03	-1.605E-16	-1.605E-16	-1.565E-02	-1.565E-02	-9.030E-13
1.29990	1.798E-03	1.799E-03	-4.038E-17	-4.038E-17	-1.565E-02	-1.566E-02	-2.010E-13
1.39988	1.258E-03	1.258E-03	-1.543E-17	-1.542E-17	-1.565E-02	-1.566E-02	-6.899E-14
1.49987	9.671E-04	9.674E-04	-7.506E-18	-7.506E-18	-1.565E-02	-1.566E-02	-2.955E-14
1.59985	7.855E-04	7.858E-04	-4.109E-18	-4.109E-18	-1.565E-02	-1.566E-02	-1.479E-14
1.69984	6.613E-04	6.615E-04	-2.253E-18	-2.253E-18	-1.565E-02	-1.566E-02	-8.741E-15
1.79983	5.710E-04	5.712E-04	-1.293E-18	-1.293E-18	-1.565E-02	-1.566E-02	-5.565E-15
1.89982	5.024E-04	5.026E-04	-7.420E-19	-7.420E-19	-1.565E-02	-1.566E-02	-3.894E-15
1.99981	4.486E-04	4.487E-04	-4.254E-19	-4.254E-19	-1.565E-02	-1.566E-02	-2.905E-15

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 1.000 θ_D= 4.655E-04 ρ_a= 3.765

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	1.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	1.0000	0.10000	193.647	1.292E-07	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	1.0000	0.20000	172.135	2.868E-07	1.000E-00	-2.553E-07	-2.553E-07	2.553E-07
0.30000	1.0000	0.30000	150.625	5.536E-07	1.000E-00	-3.619E-07	-3.619E-07	3.619E-07
0.40000	1.0000	0.40000	129.117	9.405E-07	1.000E-00	-5.390E-07	-5.390E-07	5.390E-07
0.50000	1.0000	0.50000	107.612	1.601E-06	1.000E-00	-8.040E-07	-8.040E-07	8.040E-07
0.60000	1.0000	0.60000	86.113	2.841E-06	9.999E-01	-1.311E-06	-1.311E-06	1.311E-06
0.70000	1.0000	0.70000	64.624	8.244E-06	9.999E-01	-2.517E-06	-2.517E-06	2.517E-06
0.80000	1.0000	0.80000	43.163	3.026E-05	9.997E-01	-6.305E-06	-6.305E-06	6.304E-06
0.85000	1.0000	0.85000	32.459	7.796E-05	9.994E-01	-1.216E-05	-1.216E-05	1.216E-05
0.90000	1.0000	0.90000	21.809	2.832E-04	9.987E-01	-3.022E-05	-3.023E-05	3.021E-05
0.92500	1.0000	0.92500	16.536	6.719E-04	9.979E-01	-5.502E-05	-5.506E-05	5.500E-05
0.95000	1.0001	0.95000	11.364	2.339E-03	9.965E-01	-1.310E-04	-1.312E-04	1.310E-04
0.96250	1.0001	0.96250	8.870	5.287E-03	9.959E-01	-2.282E-04	-2.287E-04	2.280E-04
0.97500	1.0002	0.97500	6.534	1.695E-02	9.978E-01	-5.162E-04	-5.181E-04	5.156E-04
0.98125	1.0004	0.98125	5.489	3.445E-02	1.002E 00	-8.245E-04	-8.282E-04	8.233E-04
0.98749	1.0007	0.98750	4.603	7.966E-02	1.007E 00	-1.417E-03	-1.425E-03	1.416E-03
0.99374	1.0015	0.99375	3.983	1.675E-01	1.005E 00	-2.102E-03	-2.110E-03	2.102E-03
1.00624	1.0058	1.00625	4.019	5.248E-01	9.682E-01	-2.061E-03	-2.053E-03	2.069E-03
1.01248	1.0093	1.01250	4.665	6.079E-01	9.338E-01	-1.370E-03	-1.363E-03	1.375E-03
1.01873	1.0131	1.01875	5.567	6.499E-01	8.955E-01	-7.955E-04	-7.921E-04	7.978E-04
1.02498	1.0170	1.02500	6.621	6.659E-01	8.603E-01	-5.012E-04	-4.995E-04	5.023E-04
1.03748	1.0249	1.03750	8.966	6.771E-01	7.972E-01	-2.227E-04	-2.223E-04	2.230E-04
1.04998	1.0327	1.05000	11.464	6.800E-01	7.378E-01	-1.289E-04	-1.287E-04	1.290E-04
1.07498	1.0478	1.07500	16.639	6.816E-01	6.228E-01	-5.441E-05	-5.438E-05	5.443E-05
1.09997	1.0622	1.10000	21.913	6.820E-01	5.119E-01	-2.987E-05	-2.986E-05	2.988E-05
1.14997	1.0891	1.15000	32.564	6.822E-01	3.037E-01	-1.208E-05	-1.207E-05	1.208E-05
1.19997	1.1139	1.20000	43.268	6.823E-01	1.145E-01	-6.272E-06	-6.271E-06	6.272E-06
1.29996	1.1576	1.30000	64.730	6.823E-01	2.333E-01	-2.508E-06	-2.508E-06	2.508E-06
1.39996	1.1951	1.40000	86.218	6.823E-01	5.243E-01	-1.307E-06	-1.307E-06	1.307E-06
1.49996	1.2275	1.50000	107.718	6.823E-01	7.774E-01	-8.024E-07	-8.024E-07	8.024E-07
1.59995	1.2560	1.60000	129.223	6.823E-01	9.990E-01	-5.380E-07	-5.380E-07	5.380E-07
1.69995	1.2810	1.70000	150.731	6.823E-01	1.195E 00	-3.613E-07	-3.613E-07	3.613E-07
1.79995	1.3033	1.80000	172.241	6.823E-01	1.369E 00	-2.549E-07	-2.549E-07	2.549E-07
1.89995	1.3233	1.90000	193.752	6.823E-01	1.524E 00	-1.798E-07	-1.798E-07	1.798E-07
1.99994	1.3412	2.00000	215.265	6.823E-01	1.664E 00	-1.282E-07	-1.282E-07	1.282E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 1.000 θ_0= 4.655E-04 ρ_0= 3.765

z	$_x\mu'$-1.0	T_0	$_oT_t$-T_0	$_xT_t$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.553E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.241E-08	-4.241E-08
0.30000	3.619E-07	149.703	-3.362E-05	-3.362E-05	3.362E-05	3.362E-05	-6.012E-08	-6.012E-08
0.40000	5.390E-07	199.605	-5.578E-05	-5.579E-05	5.578E-05	5.579E-05	-8.954E-08	-8.954E-08
0.50000	8.040E-07	249.506	-8.885E-05	-8.885E-05	8.885E-05	8.886E-05	-1.335E-07	-1.336E-07
0.60000	1.311E-06	299.407	-1.398E-04	-1.398E-04	1.398E-04	1.398E-04	-2.177E-07	-2.178E-07
0.70000	2.517E-06	349.308	-2.307E-04	-2.307E-04	2.307E-04	2.307E-04	-4.181E-07	-4.181E-07
0.80000	6.306E-06	399.209	-4.294E-04	-4.295E-04	4.294E-04	4.295E-04	-1.047E-06	-1.047E-06
0.85000	1.216E-05	424.160	-6.482E-04	-6.483E-04	6.482E-04	6.483E-04	-2.019E-06	-2.020E-06
0.90000	3.024E-05	449.110	-1.129E-03	-1.129E-03	1.129E-03	1.129E-03	-5.019E-06	-5.021E-06
0.92500	5.508E-05	461.585	-1.646E-03	-1.646E-03	1.645E-03	1.646E-03	-9.139E-06	-9.145E-06
0.95000	1.313E-04	474.060	-2.718E-03	-2.720E-03	2.718E-03	2.721E-03	-2.177E-05	-2.180E-05
0.96250	2.290E-04	480.297	-3.781E-03	-3.784E-03	3.780E-03	3.787E-03	-3.791E-05	-3.799E-05
0.97500	5.193E-04	486.534	-5.939E-03	-5.949E-03	5.946E-03	5.965E-03	-8.575E-05	-8.606E-05
0.98125	8.308E-04	489.653	-7.948E-03	-7.966E-03	7.986E-03	8.022E-03	-1.370E-04	-1.376E-04
0.98749	1.430E-03	492.771	-1.127E-02	-1.131E-02	1.150E-02	1.157E-02	-2.355E-04	-2.367E-04
0.99374	2.119E-03	495.889	-1.638E-02	-1.644E-02	1.742E-02	1.754E-02	-3.491E-04	-3.505E-04
1.00624	2.053E-03	502.124	-2.635E-02	-2.642E-02	3.690E-02	3.703E-02	-3.423E-04	-3.413E-04
1.01248	1.362E-03	505.242	-2.988E-02	-2.992E-02	4.414E-02	4.422E-02	-2.275E-04	-2.265E-04
1.01873	7.910E-04	508.360	-3.211E-02	-3.213E-02	4.851E-02	4.856E-02	-1.321E-04	-1.316E-04
1.02498	4.989E-04	511.478	-3.361E-02	-3.362E-02	5.094E-02	5.097E-02	-8.325E-05	-8.297E-05
1.03748	2.221E-04	517.714	-3.530E-02	-3.531E-02	5.344E-02	5.346E-02	-3.699E-05	-3.692E-05
1.04998	1.287E-04	523.951	-3.616E-02	-3.617E-02	5.467E-02	5.469E-02	-2.141E-05	-2.138E-05
1.07498	5.436E-05	536.425	-3.695E-02	-3.696E-02	5.599E-02	5.601E-02	-9.039E-06	-9.033E-06
1.09997	2.986E-05	548.900	-3.723E-02	-3.724E-02	5.673E-02	5.675E-02	-4.962E-06	-4.960E-06
1.14997	1.207E-05	573.849	-3.726E-02	-3.726E-02	5.766E-02	5.767E-02	-2.006E-06	-2.006E-06
1.19997	6.271E-06	598.798	-3.703E-02	-3.704E-02	5.832E-02	5.833E-02	-1.042E-06	-1.042E-06
1.29996	2.508E-06	648.697	-3.634E-02	-3.635E-02	5.940E-02	5.942E-02	-4.167E-07	-4.167E-07
1.39996	1.307E-06	698.596	-3.555E-02	-3.555E-02	6.038E-02	6.039E-02	-2.172E-07	-2.172E-07
1.49996	8.024E-07	748.495	-3.471E-02	-3.472E-02	6.131E-02	6.133E-02	-1.333E-07	-1.333E-07
1.59995	5.380E-07	798.395	-3.386E-02	-3.387E-02	6.223E-02	6.224E-02	-8.937E-08	-8.936E-08
1.69995	3.613E-07	848.295	-3.300E-02	-3.301E-02	6.314E-02	6.315E-02	-6.002E-08	-6.002E-08
1.79995	2.549E-07	898.195	-3.213E-02	-3.214E-02	6.404E-02	6.405E-02	-4.234E-08	-4.234E-08
1.89995	1.798E-07	948.095	-3.126E-02	-3.126E-02	6.493E-02	6.495E-02	-2.987E-08	-2.987E-08
1.99994	1.282E-07	997.995	-3.038E-02	-3.039E-02	6.582E-02	6.584E-02	-2.129E-08	-2.129E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 1.000 θ_0= 4.655E-04 ρ_0= 3.765

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-4.532E-15
0.10000	8.630E-11	8.647E-11	-7.441E-19	-7.441E-19	-8.539E-09	-8.539E-09	-6.079E-15
0.20000	2.412E-10	2.408E-10	-1.297E-18	-1.297E-18	-2.342E-08	-2.342E-08	-8.694E-15
0.30000	5.115E-10	5.114E-10	-2.259E-18	-2.259E-18	-4.936E-08	-4.936E-08	-1.366E-14
0.40000	1.084E-09	1.084E-09	-4.121E-18	-4.121E-18	-9.566E-08	-9.566E-08	-2.313E-14
0.50000	2.149E-09	2.149E-09	-7.527E-18	-7.527E-18	-1.802E-07	-1.802E-07	-4.626E-14
0.60000	4.867E-09	4.867E-09	-1.548E-17	-1.548E-17	-3.421E-07	-3.421E-07	-1.081E-13
0.70000	1.383E-08	1.382E-08	-4.054E-17	-4.055E-17	-7.226E-07	-7.227E-07	-3.151E-13
0.80000	5.665E-08	5.665E-08	-1.613E-16	-1.613E-16	-1.969E-06	-1.970E-06	-1.417E-12
0.85000	1.505E-07	1.505E-07	-4.258E-16	-4.259E-16	-3.960E-06	-3.961E-06	-4.063E-12
0.90000	5.714E-07	5.717E-07	-1.777E-15	-1.779E-15	-1.075E-05	-1.075E-05	-1.777E-11
0.92500	1.386E-06	1.387E-06	-4.040E-15	-4.045E-15	-2.106E-05	-2.108E-05	-5.135E-11
0.95000	4.976E-06	4.986E-06	-1.441E-14	-1.445E-14	-5.002E-05	-5.009E-05	-2.047E-10
0.96250	1.132E-05	1.135E-05	-3.434E-14	-3.448E-14	-9.111E-05	-9.133E-05	-5.197E-10
0.97500	3.802E-05	3.822E-05	-1.259E-13	-1.268E-13	-2.194E-04	-2.204E-04	-1.438E-09
0.98125	8.063E-05	8.123E-05	-2.627E-13	-2.651E-13	-3.901E-04	-3.925E-04	-2.564E-09
0.98749	1.951E-04	1.971E-04	-6.292E-13	-6.357E-13	-7.836E-04	-7.899E-04	-4.299E-09
0.99374	5.598E-04	5.671E-04	-1.192E-12	-1.202E-12	-1.631E-03	-1.645E-03	-6.921E-09
1.00624	2.328E-03	2.338E-03	-1.157E-12	-1.149E-12	-4.315E-03	-4.330E-03	-6.716E-09
1.01248	2.730E-03	2.732E-03	-5.963E-13	-5.906E-13	-5.129E-03	-5.136E-03	-4.127E-09
1.01873	2.938E-03	2.939E-03	-2.490E-13	-2.468E-13	-5.500E-03	-5.504E-03	-2.455E-09
1.02498	3.080E-03	3.082E-03	-1.202E-13	-1.194E-13	-5.662E-03	-5.665E-03	-1.374E-09
1.03748	3.312E-03	3.313E-03	-3.308E-14	-3.294E-14	-5.784E-03	-5.787E-03	-5.006E-10
1.04998	3.543E-03	3.544E-03	-1.405E-14	-1.402E-14	-5.824E-03	-5.826E-03	-1.979E-10
1.07498	4.105E-03	4.106E-03	-3.981E-15	-3.976E-15	-5.852E-03	-5.855E-03	-5.011E-11
1.09997	4.881E-03	4.882E-03	-1.750E-15	-1.749E-15	-5.863E-03	-5.865E-03	-1.749E-11
1.14997	7.871E-03	7.873E-03	-4.216E-16	-4.214E-16	-5.869E-03	-5.871E-03	-4.018E-12
1.19997	2.001E-02	2.002E-02	-1.601E-16	-1.600E-16	-5.871E-03	-5.873E-03	-1.406E-12
1.29996	9.063E-03	9.066E-03	-4.034E-17	-4.034E-17	-5.873E-03	-5.875E-03	-3.136E-13
1.39996	3.745E-03	3.746E-03	-1.542E-17	-1.542E-17	-5.873E-03	-5.875E-03	-1.077E-13
1.49996	2.358E-03	2.358E-03	-7.505E-18	-7.505E-18	-5.873E-03	-5.875E-03	-4.616E-14
1.59995	1.720E-03	1.720E-03	-4.109E-18	-4.109E-18	-5.873E-03	-5.875E-03	-2.310E-14
1.69995	1.354E-03	1.354E-03	-2.253E-18	-2.253E-18	-5.873E-03	-5.875E-03	-1.366E-14
1.79995	1.116E-03	1.116E-03	-1.293E-18	-1.293E-18	-5.873E-03	-5.875E-03	-8.696E-15
1.89995	9.493E-04	9.495E-04	-7.421E-19	-7.421E-19	-5.873E-03	-5.875E-03	-6.085E-15
1.99994	8.259E-04	8.261E-04	-4.255E-19	-4.255E-19	-5.873E-03	-5.875E-03	-4.539E-15

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 1.200 θ_D= 2.872E-04 ρ_a= 4.513

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.2000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	1.2000	0.10000	193.648	1.784E-07	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	1.2000	0.20000	172.139	3.602E-07	1.000E-00	-2.553E-07	-2.553E-07	2.553E-07
0.30000	1.2000	0.30000	150.631	5.936E-07	1.000E-00	-3.619E-07	-3.619E-07	3.619E-07
0.40000	1.2000	0.40000	129.127	1.074E-06	1.000E-00	-5.389E-07	-5.389E-07	5.389E-07
0.50000	1.2000	0.50000	107.627	1.828E-06	9.999E-01	-8.037E-07	-8.038E-07	8.037E-07
0.60000	1.2000	0.60000	86.134	3.175E-06	9.999E-01	-1.310E-06	-1.310E-06	1.310E-06
0.70000	1.2000	0.70000	64.658	9.418E-06	9.998E-01	-2.514E-06	-2.514E-06	2.514E-06
0.80000	1.2000	0.80000	43.220	3.442E-05	9.995E-01	-6.286E-06	-6.287E-06	6.286E-06
0.85000	1.2000	0.85000	32.540	8.901E-05	9.991E-01	-1.209E-05	-1.209E-05	1.209E-05
0.90000	1.2000	0.90000	21.937	3.206E-04	9.982E-01	-2.978E-05	-2.979E-05	2.978E-05
0.92500	1.2000	0.92500	16.709	7.590E-04	9.971E-01	-5.395E-05	-5.398E-05	5.394E-05
0.95000	1.2001	0.95000	11.620	2.569E-03	9.955E-01	-1.252E-04	-1.253E-04	1.251E-04
0.96250	1.2001	0.96250	9.201	5.551E-03	9.955E-01	-2.084E-04	-2.088E-04	2.082E-04
0.97500	1.2002	0.97500	6.982	1.653E-02	9.995E-01	-4.354E-04	-4.367E-04	4.350E-04
0.98125	1.2004	0.98125	6.018	2.934E-02	1.004E 00	-6.284E-04	-6.306E-04	6.277E-04
0.98750	1.2006	0.98750	5.226	5.841E-02	1.009E 00	-9.558E-04	-9.592E-04	9.550E-04
0.99374	1.2012	0.99375	4.694	1.160E-01	1.005E 00	-1.340E-03	-1.343E-03	1.340E-03
0.99999	1.2021	1.00000	4.514	1.935E-01	9.944E-01	-1.503E-03	-1.503E-03	1.505E-03
1.00624	1.2036	1.00625	4.728	2.698E-01	9.915E-01	-1.314E-03	-1.311E-03	1.317E-03
1.01249	1.2054	1.01250	5.288	3.250E-01	9.808E-01	-9.220E-04	-9.190E-04	9.244E-04
1.01874	1.2074	1.01875	6.099	3.525E-01	9.629E-01	-6.114E-04	-6.094E-04	6.128E-04
1.02499	1.2096	1.02500	7.075	3.645E-01	9.455E-01	-4.215E-04	-4.203E-04	4.222E-04
1.03749	1.2139	1.03750	9.307	3.747E-01	9.174E-01	-2.028E-04	-2.024E-04	2.030E-04
1.04999	1.2183	1.05000	11.732	3.775E-01	8.937E-01	-1.228E-04	-1.227E-04	1.229E-04
1.07499	1.2266	1.07500	16.826	3.792E-01	8.496E-01	-5.327E-05	-5.324E-05	5.329E-05
1.09998	1.2347	1.10000	22.055	3.797E-01	8.069E-01	-2.939E-05	-2.938E-05	2.940E-05
1.14998	1.2497	1.15000	32.660	3.799E-01	7.259E-01	-1.200E-05	-1.200E-05	1.200E-05
1.19998	1.2634	1.20000	43.341	3.799E-01	6.509E-01	-6.249E-06	-6.248E-06	6.249E-06
1.29998	1.2878	1.30000	64.779	3.800E-01	5.178E-01	-2.504E-06	-2.504E-06	2.504E-06
1.39998	1.3086	1.40000	86.255	3.800E-01	4.034E-01	-1.306E-06	-1.306E-06	1.306E-06
1.49998	1.3267	1.50000	107.748	3.800E-01	3.043E-01	-8.020E-07	-8.019E-07	8.020E-07
1.59998	1.3426	1.60000	129.248	3.800E-01	2.175E-01	-5.377E-07	-5.377E-07	5.377E-07
1.69998	1.3565	1.70000	150.753	3.800E-01	1.411E-01	-3.612E-07	-3.612E-07	3.612E-07
1.79998	1.3689	1.80000	172.260	3.800E-01	7.333E-02	-2.548E-07	-2.548E-07	2.548E-07
1.89997	1.3801	1.90000	193.769	3.800E-01	1.579E-02	-1.798E-07	-1.798E-07	1.798E-07
1.99997	1.3901	2.00000	215.280	3.800E-01	4.460E-02	-1.282E-07	-1.282E-07	1.282E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 1.200 θ_D= 2.872E-04 ρ_a= 4.513

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.553E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.241E-08	-4.241E-08
0.30000	3.619E-07	149.703	-3.361E-05	-3.361E-05	3.361E-05	3.361E-05	-6.011E-08	-6.011E-08
0.40000	5.389E-07	199.605	-5.578E-05	-5.578E-05	5.578E-05	5.578E-05	-8.952E-08	-8.953E-08
0.50000	8.038E-07	249.506	-8.884E-05	-8.884E-05	8.884E-05	8.884E-05	-1.335E-07	-1.335E-07
0.60000	1.310E-06	299.407	-1.398E-04	-1.398E-04	1.398E-04	1.398E-04	-2.176E-07	-2.176E-07
0.70000	2.514E-06	349.308	-2.306E-04	-2.306E-04	2.306E-04	2.306E-04	-4.176E-07	-4.176E-07
0.80000	6.287E-06	399.209	-4.289E-04	-4.289E-04	4.289E-04	4.289E-04	-1.044E-06	-1.044E-06
0.85000	1.210E-05	424.160	-6.468E-04	-6.468E-04	6.467E-04	6.468E-04	-2.009E-06	-2.009E-06
0.90000	2.980E-05	449.110	-1.123E-03	-1.123E-03	1.123E-03	1.123E-03	-4.947E-06	-4.949E-06
0.92500	5.401E-05	461.585	-1.631E-03	-1.631E-03	1.631E-03	1.632E-03	-8.962E-06	-8.968E-06
0.95000	1.254E-04	474.060	-2.664E-03	-2.666E-03	2.664E-03	2.667E-03	-2.079E-05	-2.082E-05
0.96250	2.090E-04	480.298	-3.658E-03	-3.661E-03	3.658E-03	3.664E-03	-3.461E-05	-3.468E-05
0.97500	4.376E-04	486.535	-5.539E-03	-5.546E-03	5.546E-03	5.561E-03	-7.233E-05	-7.255E-05
0.98125	6.321E-04	489.653	-7.175E-03	-7.188E-03	7.202E-03	7.228E-03	-1.044E-04	-1.048E-04
0.98750	9.618E-04	492.772	-9.569E-03	-9.591E-03	9.690E-03	9.733E-03	-1.588E-04	-1.593E-04
0.99374	1.847E-03	495.890	-1.298E-02	-1.302E-02	1.348E-02	1.355E-02	-2.226E-04	-2.231E-04
0.99999	1.505E-03	499.008	-1.705E-02	-1.709E-02	1.846E-02	1.854E-02	-2.497E-04	-2.497E-04
1.00624	1.311E-03	502.126	-2.084E-02	-2.088E-02	2.363E-02	2.370E-02	-2.183E-04	-2.178E-04
1.01249	9.184E-04	505.244	-2.371E-02	-2.373E-02	2.779E-02	2.783E-02	-1.532E-04	-1.527E-04
1.01874	6.088E-04	508.363	-2.570E-02	-2.571E-02	3.053E-02	3.056E-02	-1.016E-04	-1.012E-04
1.02499	4.199E-04	511.481	-2.711E-02	-2.713E-02	3.231E-02	3.233E-02	-7.002E-05	-6.982E-05
1.03749	2.023E-04	517.718	-2.876E-02	-2.877E-02	3.432E-02	3.433E-02	-3.368E-05	-3.362E-05
1.04999	1.226E-04	523.955	-2.966E-02	-2.966E-02	3.537E-02	3.538E-02	-2.041E-05	-2.038E-05
1.07499	5.323E-05	536.430	-3.058E-02	-3.058E-02	3.648E-02	3.649E-02	-8.849E-06	-8.844E-06
1.09998	2.938E-05	548.905	-3.100E-02	-3.101E-02	3.705E-02	3.706E-02	-4.883E-06	-4.881E-06
1.14998	1.200E-05	573.855	-3.133E-02	-3.134E-02	3.767E-02	3.768E-02	-1.993E-06	-1.993E-06
1.19998	6.248E-06	598.805	-3.141E-02	-3.142E-02	3.802E-02	3.803E-02	-1.038E-06	-1.038E-06
1.29998	2.504E-06	648.705	-3.133E-02	-3.134E-02	3.849E-02	3.850E-02	-4.160E-07	-4.160E-07
1.39998	1.306E-06	698.606	-3.115E-02	-3.115E-02	3.886E-02	3.887E-02	-2.170E-07	-2.170E-07
1.49998	8.019E-07	748.507	-3.093E-02	-3.093E-02	3.918E-02	3.919E-02	-1.332E-07	-1.332E-07
1.59998	5.377E-07	798.407	-3.068E-02	-3.069E-02	3.949E-02	3.950E-02	-8.932E-08	-8.932E-08
1.69998	3.612E-07	848.308	-3.043E-02	-3.044E-02	3.979E-02	3.980E-02	-6.000E-08	-5.999E-08
1.79998	2.548E-07	898.209	-3.017E-02	-3.018E-02	4.008E-02	4.008E-02	-4.233E-08	-4.233E-08
1.89997	1.798E-07	948.110	-2.991E-02	-2.991E-02	4.036E-02	4.037E-02	-2.986E-08	-2.986E-08
1.99997	1.282E-07	998.010	-2.964E-02	-2.965E-02	4.064E-02	4.065E-02	-2.129E-08	-2.129E-08

PROPAG-TION FREQUENCY= 4.9800E 07 ϕ_0= 1.200 θ_D= 2.872E-04 ρ_a= 4.513

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-6.526E-15
0.10000	1.038E-10	1.035E-10	-7.441E-19	-7.441E-19	-8.539E-09	-8.539E-09	-8.753E-15
0.20000	2.896E-10	2.894E-10	-1.296E-18	-1.296E-18	-2.342E-08	-2.342E-08	-1.252E-14
0.30000	6.138E-10	6.138E-10	-2.259E-18	-2.259E-18	-4.935E-08	-4.935E-08	-1.967E-14
0.40000	1.301E-09	1.300E-09	-4.120E-18	-4.120E-18	-9.564E-08	-9.565E-08	-3.329E-14
0.50000	2.578E-09	2.577E-09	-7.524E-18	-7.524E-18	-1.802E-07	-1.802E-07	-6.658E-14
0.60000	5.838E-09	5.838E-09	-1.547E-17	-1.547E-17	-3.419E-07	-3.419E-07	-1.555E-13
0.70000	1.657E-08	1.657E-08	-4.048E-17	-4.048E-17	-7.220E-07	-7.220E-07	-4.528E-13
0.80000	6.778E-08	6.778E-08	-1.606E-16	-1.606E-16	-1.965E-06	-1.965E-06	-2.030E-12
0.85000	1.796E-07	1.796E-07	-4.224E-16	-4.226E-16	-3.943E-06	-3.944E-06	-5.795E-12
0.90000	6.744E-07	6.747E-07	-1.742E-15	-1.744E-15	-1.063E-05	-1.063E-05	-2.507E-11
0.92500	1.626E-06	1.628E-06	-3.933E-15	-3.938E-15	-2.070E-05	-2.072E-05	-7.085E-11
0.95000	5.635E-06	5.646E-06	-1.34[illegible]-14	-1.345E-14	-4.803E-05	-4.810E-05	-2.699E-10
0.96250	1.207E-05	1.210E-05	-2.977E-14	-2.988E-14	-8.493E-05	-8.512E-05	-6.581E-10
0.97500	3.695E-05	3.713E-05	-9.592E-14	-9.649E-14	-1.874E-04	-1.881E-04	-1.650E-09
0.98125	7.167E-05	7.212E-05	-1.724E-13	-1.736E-13	-3.101E-04	-3.116E-04	-2.789E-09
0.98750	1.546E-04	1.558E-04	-3.318E-13	-3.342E-13	-5.384E-04	-5.416E-04	-4.281E-09
0.99374	3.655E-04	3.690E-04	-5.746E-13	-5.774E-13	-9.629E-04	-9.687E-04	-5.830E-09
0.99999	7.863E-04	7.921E-04	-6.928E-13	-6.928E-13	-1.574E-03	-1.581E-03	-6.579E-09
1.00624	1.187E-03	1.191E-03	-5.570E-13	-5.545E-13	-2.175E-03	-2.181E-03	-5.703E-09
1.01249	1.390E-03	1.391E-03	-3.134E-13	-3.113E-13	-2.582E-03	-2.585E-03	-4.149E-09
1.01874	1.486E-03	1.487E-03	-1.652E-13	-1.642E-13	-2.799E-03	-2.801E-03	-2.656E-09
1.02499	1.537E-03	1.538E-03	-9.116E-14	-9.067E-14	-2.916E-03	-2.917E-03	-1.580E-09
1.03749	1.590E-03	1.590E-03	-2.854E-14	-2.844E-14	-3.013E-03	-3.014E-03	-6.331E-10
1.04999	1.619E-03	1.619E-03	-1.304E-14	-1.301E-14	-3.049E-03	-3.050E-03	-2.602E-10
1.07499	1.668E-03	1.668E-03	-3.867E-15	-3.862E-15	-3.076E-03	-3.076E-03	-6.894E-11
1.09998	1.717E-03	1.718E-03	-1.712E-15	-1.710E-15	-3.085E-03	-3.086E-03	-2.463E-11
1.14998	1.826E-03	1.827E-03	-4.177E-16	-4.175E-16	-3.092E-03	-3.093E-03	-5.721E-12
1.19998	1.952E-03	1.952E-03	-1.592E-16	-1.592E-16	-3.094E-03	-3.095E-03	-2.011E-12
1.29998	2.265E-03	2.266E-03	-4.025E-17	-4.024E-17	-3.095E-03	-3.096E-03	-4.502E-13
1.39998	2.700E-03	2.700E-03	-1.540E-17	-1.540E-17	-3.096E-03	-3.096E-03	-1.549E-13
1.49998	3.341E-03	3.341E-03	-7.499E-18	-7.499E-18	-3.096E-03	-3.097E-03	-6.640E-14
1.59998	4.381E-03	4.382E-03	-4.106E-18	-4.106E-18	-3.096E-03	-3.097E-03	-3.324E-14
1.69998	6.358E-03	6.360E-03	-2.252E-18	-2.252E-18	-3.096E-03	-3.097E-03	-1.966E-14
1.79998	1.155E-02	1.155E-02	-1.292E-18	-1.292E-18	-3.096E-03	-3.097E-03	-1.252E-14
1.89997	5.082E-02	5.083E-02	-7.418E-19	-7.417E-19	-3.096E-03	-3.097E-03	-8.759E-15
1.99997	1.709E-02	1.710E-02	-4.253E-19	-4.253E-19	-3.096E-03	-3.097E-03	-6.534E-15

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 1.500 θ_D= 1.814E-04 ρ_a= 5.637

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu$-10
0.	1.5000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	1.5000	0.10000	193.651	2.368E-07	1.000E-00	-1.801E-07	-1.801E-07	1.801E-07
0.20000	1.5000	0.20000	172.146	4.636E-07	1.000E-00	-2.553E-07	-2.553E-07	2.553E-07
0.30000	1.5000	0.30000	150.643	7.604E-07	9.999E-01	-3.618E-07	-3.618E-07	3.618E-07
0.40000	1.5000	0.40000	129.145	1.441E-06	9.999E-01	-5.388E-07	-5.388E-07	5.387E-07
0.50000	1.5000	0.50000	107.653	2.468E-06	9.999E-01	-8.034E-07	-8.034E-07	8.033E-07
0.60000	1.5000	0.60000	86.174	4.242E-06	9.998E-01	-1.309E-06	-1.309E-06	1.309E-06
0.70000	1.5000	0.70000	64.720	1.243E-05	9.996E-01	-2.509E-06	-2.509E-06	2.509E-06
0.80000	1.5000	0.80000	43.326	4.472E-05	9.990E-01	-6.253E-06	-6.254E-06	6.253E-06
0.85000	1.5000	0.85000	32.689	1.144E-04	9.982E-01	-1.197E-05	-1.198E-05	1.197E-05
0.90000	1.5000	0.90000	22.170	4.049E-04	9.966E-01	-2.900E-05	-2.901E-05	2.900E-05
0.92500	1.5000	0.92500	17.022	9.430E-04	9.951E-01	-5.206E-05	-5.210E-05	5.205E-05
0.95000	1.5001	0.95000	12.078	3.025E-03	9.963E-01	-1.153E-04	-1.155E-04	1.153E-04
0.96250	1.5001	0.96250	9.780	5.924E-03	9.965E-01	-1.777E-04	-1.780E-04	1.776E-04
0.97500	1.5003	0.97500	7.739	1.498E-02	1.004E 00	-3.265E-04	-3.272E-04	3.263E-04
0.98125	1.5004	0.98125	6.887	2.545E-02	1.010E 00	-4.516E-04	-4.527E-04	4.513E-04
0.98750	1.5006	0.98750	6.212	4.116E-02	1.012E 00	-5.840E-04	-5.852E-04	5.837E-04
0.99374	1.5009	0.99375	5.777	6.692E-02	1.005E 00	-7.111E-04	-7.120E-04	7.111E-04
0.99999	1.5014	1.00000	5.638	1.011E-01	9.971E-01	-7.649E-04	-7.649E-04	7.655E-04
1.00624	1.5022	1.00625	5.816	1.348E-01	1.000E 00	-6.980E-04	-6.972E-04	6.989E-04
1.01249	1.5031	1.01250	6.283	1.585E-01	1.001E 00	-5.696E-04	-5.685E-04	5.705E-04
1.01874	1.5041	1.01875	6.983	1.735E-01	9.923E-01	-4.364E-04	-4.355E-04	4.371E-04
1.02499	1.5051	1.02500	7.852	1.834E-01	9.812E-01	-3.134E-04	-3.127E-04	3.138E-04
1.03749	1.5073	1.03750	9.915	1.920E-01	9.629E-01	-1.715E-04	-1.712E-04	1.716E-04
1.04999	1.5096	1.05000	12.224	1.946E-01	9.504E-01	-1.125E-04	-1.124E-04	1.126E-04
1.07499	1.5139	1.07500	17.177	1.966E-01	9.313E-01	-5.119E-05	-5.116E-05	5.120E-05
1.09999	1.5180	1.10000	22.328	1.972E-01	9.138E-01	-2.849E-05	-2.848E-05	2.850E-05
1.14999	1.5258	1.15000	32.851	1.975E-01	8.803E-01	-1.185E-05	-1.185E-05	1.185E-05
1.19999	1.5330	1.20000	43.488	1.976E-01	8.486E-01	-6.203E-06	-6.202E-06	6.203E-06
1.29999	1.5457	1.30000	64.883	1.976E-01	7.919E-01	-2.496E-06	-2.496E-06	2.496E-06
1.39998	1.5565	1.40000	86.338	1.976E-01	7.429E-01	-1.304E-06	-1.303E-06	1.304E-06
1.49998	1.5659	1.50000	107.817	1.976E-01	7.003E-01	-8.009E-07	-8.009E-07	8.009E-07
1.59998	1.5742	1.60000	129.308	1.976E-01	6.630E-01	-5.371E-07	-5.371E-07	5.371E-07
1.69998	1.5814	1.70000	150.807	1.976E-01	6.301E-01	-3.608E-07	-3.608E-07	3.609E-07
1.79998	1.5879	1.80000	172.309	1.976E-01	6.008E-01	-2.546E-07	-2.546E-07	2.546E-07
1.89998	1.5937	1.90000	193.815	1.976E-01	5.746E-01	-1.796E-07	-1.796E-07	1.796E-07
1.99998	1.5988	2.00000	215.323	1.976E-01	5.510E-01	-1.281E-07	-1.281E-07	1.281E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 1.500 θ_D= 1.814E-04 ρ_a= 5.637

z	$_x\mu$-1.0	T_0	$_oT_1$-T_0	$_xT_1$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.613E-06	-7.613E-06	7.613E-06	7.613E-06	-2.992E-08	-2.992E-08
0.20000	2.553E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.241E-08	-4.241E-08
0.30000	3.618E-07	149.703	-3.361E-05	-3.361E-05	3.361E-05	3.361E-05	-6.010E-08	-6.010E-08
0.40000	5.388E-07	199.605	-5.577E-05	-5.577E-05	5.577E-05	5.577E-05	-8.949E-08	-8.950E-08
0.50000	8.034E-07	249.506	-8.882E-05	-8.882E-05	8.882E-05	8.882E-05	-1.334E-07	-1.335E-07
0.60000	1.309E-06	299.407	-1.397E-04	-1.397E-04	1.397E-04	1.397E-04	-2.174E-07	-2.174E-07
0.70000	2.509E-06	349.308	-2.304E-04	-2.304E-04	2.304E-04	2.304E-04	-4.168E-07	-4.168E-07
0.80000	6.254E-06	399.209	-4.280E-04	-4.280E-04	4.279E-04	4.280E-04	-1.039E-06	-1.039E-06
0.85000	1.198E-05	424.160	-6.441E-04	-6.441E-04	6.440E-04	6.441E-04	-1.989E-06	-1.989E-06
0.90000	2.902E-05	449.110	-1.112E-03	-1.112E-03	1.112E-03	1.113E-03	-4.818E-06	-4.820E-06
0.92500	5.211E-05	461.585	-1.605E-03	-1.605E-03	1.604E-03	1.605E-03	-8.649E-06	-8.654E-06
0.95000	1.155E-04	474.060	-2.572E-03	-2.574E-03	2.572E-03	2.575E-03	-1.916E-05	-1.918E-05
0.96250	1.781E-04	480.297	-3.466E-03	-3.469E-03	3.466E-03	3.471E-03	-2.951E-05	-2.956E-05
0.97500	3.277E-04	486.535	-4.969E-03	-4.975E-03	4.975E-03	4.986E-03	-5.424E-05	-5.436E-05
0.98125	4.534E-04	489.653	-6.170E-03	-6.178E-03	6.191E-03	6.208E-03	-7.502E-05	-7.519E-05
0.98750	5.862E-04	492.772	-7.767E-03	-7.779E-03	7.827E-03	7.851E-03	-9.701E-05	-9.722E-05
0.99374	7.130E-04	495.890	-9.734E-03	-9.749E-03	9.899E-03	9.929E-03	-1.181E-04	-1.183E-04
0.99999	7.656E-04	499.008	-1.196E-02	-1.197E-02	1.234E-02	1.238E-02	-1.271E-04	-1.271E-04
1.00624	6.972E-04	502.127	-1.411E-02	-1.413E-02	1.481E-02	1.484E-02	-1.159E-04	-1.158E-04
1.01249	5.683E-04	505.245	-1.595E-02	-1.596E-02	1.692E-02	1.695E-02	-9.462E-05	-9.444E-05
1.01874	4.352E-04	508.363	-1.742E-02	-1.743E-02	1.859E-02	1.861E-02	-7.250E-05	-7.234E-05
1.02499	3.125E-04	511.482	-1.851E-02	-1.852E-02	1.983E-02	1.984E-02	-5.205E-05	-5.195E-05
1.03749	1.711E-04	517.719	-1.990E-02	-1.990E-02	2.136E-02	2.137E-02	-2.849E-05	-2.844E-05
1.04999	1.123E-04	523.956	-2.075E-02	-2.075E-02	2.227E-02	2.227E-02	-1.869E-05	-1.867E-05
1.07499	5.114E-05	536.431	-2.166E-02	-2.166E-02	2.325E-02	2.325E-02	-8.503E-06	-8.498E-06
1.09999	2.848E-05	548.906	-2.212E-02	-2.212E-02	2.375E-02	2.376E-02	-4.733E-06	-4.732E-06
1.14999	1.185E-05	573.856	-2.254E-02	-2.254E-02	2.425E-02	2.426E-02	-1.968E-06	-1.968E-06
1.19999	6.202E-06	598.807	-2.272E-02	-2.272E-02	2.451E-02	2.451E-02	-1.030E-06	-1.030E-06
1.29999	2.496E-06	648.708	-2.284E-02	-2.284E-02	2.478E-02	2.478E-02	-4.146E-07	-4.146E-07
1.39998	1.303E-06	698.609	-2.286E-02	-2.286E-02	2.494E-02	2.495E-02	-2.165E-07	-2.165E-07
1.49998	9.009E-07	748.510	-2.283E-02	-2.283E-02	2.507E-02	2.507E-02	-1.330E-07	-1.330E-07
1.59998	5.371E-07	798.411	-2.279E-02	-2.279E-02	2.517E-02	2.518E-02	-8.922E-08	-8.922E-08
1.69998	3.608E-07	848.312	-2.274E-02	-2.274E-02	2.527E-02	2.527E-02	-5.994E-08	-5.994E-08
1.79998	2.546E-07	898.213	-2.268E-02	-2.268E-02	2.536E-02	2.536E-02	-4.229E-08	-4.229E-08
1.89998	1.796E-07	948.114	-2.262E-02	-2.262E-02	2.544E-02	2.545E-02	-2.984E-08	-2.984E-08
1.99998	1.281E-07	998.015	-2.255E-02	-2.255E-02	2.553E-02	2.553E-02	-2.128E-08	-2.128E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 1.500 θ_D= 1.814E-04 ρ_a= 5.637

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.020E-14
0.10000	1.296E-10	1.298E-10	-7.440E-19	-7.440E-19	-8.539E-09	-8.539E-09	-1.368E-14
0.20000	3.619E-10	3.616E-10	-1.296E-18	-1.296E-18	-2.342E-08	-2.342E-08	-1.956E-14
0.30000	7.670E-10	7.670E-10	-2.258E-18	-2.258E-18	-4.934E-08	-4.934E-08	-3.073E-14
0.40000	1.625E-09	1.625E-09	-4.118E-18	-4.118E-18	-9.562E-08	-9.562E-08	-5.199E-14
0.50000	3.220E-09	3.219E-09	-7.519E-18	-7.519E-18	-1.801E-07	-1.801E-07	-1.039E-13
0.60000	7.290E-09	7.289E-09	-1.544E-17	-1.544E-17	-3.417E-07	-3.417E-07	-2.425E-13
0.70000	2.067E-08	2.067E-08	-4.036E-17	-4.036E-17	-7.208E-07	-7.209E-07	-7.048E-13
0.80000	8.420E-08	8.421E-08	-1.593E-16	-1.594E-16	-1.956E-06	-1.957E-06	-3.142E-12
0.85000	2.211E-07	2.211E-07	-4.163E-16	-4.165E-16	-3.911E-06	-3.912E-06	-8.896E-12
0.90000	8.136E-07	8.140E-07	-1.680E-15	-1.681E-15	-1.042E-05	-1.042E-05	-3.774E-11
0.92500	1.933E-06	1.935E-06	-3.746E-15	-3.750E-15	-2.007E-05	-2.008E-05	-1.026E-10
0.95000	6.296E-06	6.304E-06	-1.181E-14	-1.184E-14	-4.479E-05	-4.484E-05	-3.630E-10
0.96250	1.259E-05	1.262E-05	-2.318E-14	-2.325E-14	-7.598E-05	-7.612E-05	-8.359E-10
0.97500	3.333E-05	3.347E-05	-6.056E-14	-6.082E-14	-1.471E-04	-1.476E-04	-1.854E-09
0.98125	5.897E-05	5.927E-05	-1.017E-13	-1.022E-13	-2.219E-04	-2.227E-04	-2.700E-09
0.98750	1.132E-04	1.139E-04	-1.534E-13	-1.540E-13	-3.408E-04	-3.421E-04	-3.877E-09
0.99374	2.254E-04	2.270E-04	-2.090E-13	-2.095E-13	-5.099E-04	-5.118E-04	-4.927E-09
0.99999	4.143E-04	4.166E-04	-2.341E-13	-2.341E-13	-7.211E-04	-7.234E-04	-5.308E-09
1.00624	5.934E-04	5.950E-04	-2.032E-13	-2.027E-13	-9.295E-04	-9.315E-04	-4.832E-09
1.01249	6.948E-04	6.956E-04	-1.475E-13	-1.469E-13	-1.093E-03	-1.094E-03	-3.723E-09
1.01874	7.479E-04	7.483E-04	-9.637E-14	-9.597E-14	-1.206E-03	-1.207E-03	-2.579E-09
1.02499	7.763E-04	7.765E-04	-5.675E-14	-5.653E-14	-1.277E-03	-1.277E-03	-1.775E-09
1.03749	8.015E-04	8.017E-04	-2.194E-14	-2.187E-14	-1.344E-03	-1.345E-03	-7.998E-10
1.04999	8.086E-04	8.088E-04	-1.137E-14	-1.134E-14	-1.375E-03	-1.375E-03	-3.470E-10
1.07499	8.103E-04	8.105E-04	-3.661E-15	-3.657E-15	-1.398E-03	-1.399E-03	-9.902E-11
1.09999	8.082E-04	8.083E-04	-1.640E-15	-1.639E-15	-1.408E-03	-1.408E-03	-3.686E-11
1.14999	8.031E-04	8.033E-04	-4.100E-16	-4.098E-16	-1.414E-03	-1.415E-03	-8.740E-12
1.19999	7.985E-04	7.986E-04	-1.575E-16	-1.574E-16	-1.416E-03	-1.416E-03	-3.102E-12
1.29999	7.899E-04	7.901E-04	-4.004E-17	-4.004E-17	-1.417E-03	-1.418E-03	-6.990E-13
1.39998	7.819E-04	7.821E-04	-1.535E-17	-1.535E-17	-1.418E-03	-1.418E-03	-2.411E-13
1.49998	7.742E-04	7.743E-04	-7.484E-18	-7.484E-18	-1.418E-03	-1.418E-03	-1.035E-13
1.59998	7.666E-04	7.668E-04	-4.099E-18	-4.099E-18	-1.418E-03	-1.418E-03	-5.185E-14
1.69998	7.592E-04	7.594E-04	-2.248E-18	-2.248E-18	-1.418E-03	-1.418E-03	-3.067E-14
1.79998	7.520E-04	7.521E-04	-1.291E-18	-1.291E-18	-1.418E-03	-1.418E-03	-1.954E-14
1.89998	7.449E-04	7.450E-04	-7.409E-19	-7.409E-19	-1.418E-03	-1.418E-03	-1.368E-14
1.99998	7.379E-04	7.381E-04	-4.248E-19	-4.248E-19	-1.418E-03	-1.418E-03	-1.020E-14

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 2.000 θ_D= 9.078E-05 ρ_a= 7.512

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	2.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	2.0000	0.10000	193.658	2.651E-07	9.999E-01	-1.801E-07	-1.801E-07	1.801E-07
0.20000	2.0000	0.20000	172.160	6.003E-07	9.999E-01	-2.552E-07	-2.552E-07	2.552E-07
0.30000	2.0000	0.30000	150.667	1.014E-06	9.998E-01	-3.617E-07	-3.617E-07	3.617E-07
0.40000	2.0000	0.40000	129.183	1.894E-06	9.998E-01	-5.384E-07	-5.384E-07	5.384E-07
0.50000	2.0000	0.50000	107.710	3.042E-06	9.997E-01	-8.025E-07	-8.025E-07	8.025E-07
0.60000	2.0000	0.60000	86.260	5.576E-06	9.994E-01	-1.306E-06	-1.306E-06	1.306E-06
0.70000	2.0000	0.70000	64.853	1.611E-05	9.990E-01	-2.498E-06	-2.498E-06	2.498E-06
0.80000	2.0000	0.80000	43.653	5.784E-05	9.978E-01	-6.182E-06	-6.182E-06	6.182E-06
0.85000	2.0000	0.85000	33.008	1.447E-04	9.963E-01	-1.172E-05	-1.173E-05	1.172E-05
0.90000	2.0000	0.90000	22.665	4.967E-04	9.939E-01	-2.746E-05	-2.747E-05	2.746E-05
0.92500	2.0000	0.92500	17.680	1.131E-03	9.929E-01	-4.831E-05	-4.834E-05	4.830E-05
0.95000	2.0001	0.95000	13.013	3.287E-03	9.961E-01	-9.759E-05	-9.768E-05	9.756E-05
0.96250	2.0002	0.96250	10.927	5.982E-03	1.003E 00	-1.417E-04	-1.419E-04	1.416E-04
0.97500	2.0003	0.97500	9.162	1.201E-02	1.012E 00	-2.107E-04	-2.109E-04	2.106E-04
0.98125	2.0004	0.98125	8.464	1.729E-02	1.015E 00	-2.553E-04	-2.556E-04	2.552E-04
0.98750	2.0005	0.98750	7.935	2.574E-02	1.013E 00	-3.032E-04	-3.035E-04	3.031E-04
0.99375	2.0007	0.99375	7.609	3.661E-02	1.004E 00	-3.433E-04	-3.435E-04	3.433E-04
1.00000	2.0009	1.00000	7.514	4.888E-02	9.988E-01	-3.561E-04	-3.561E-04	3.562E-04
1.00624	2.0013	1.00625	7.657	6.101E-02	1.004E 00	-3.373E-04	-3.371E-04	3.374E-04
1.01249	2.0017	1.01250	8.027	7.164E-02	1.011E 00	-2.930E-04	-2.928E-04	2.932E-04
1.01874	2.0021	1.01875	8.593	7.896E-02	1.011E 00	-2.467E-04	-2.464E-04	2.469E-04
1.02499	2.0026	1.02500	9.321	8.392E-02	1.006E 00	-2.019E-04	-2.017E-04	2.021E-04
1.03749	2.0036	1.03750	11.127	8.940E-02	9.928E-01	-1.369E-04	-1.368E-04	1.370E-04
1.04999	2.0047	1.05000	13.236	9.196E-02	9.829E-01	-9.385E-05	-9.377E-05	9.390E-05
1.07499	2.0067	1.07500	17.927	9.399E-02	9.725E-01	-4.700E-05	-4.698E-05	4.701E-05
1.09999	2.0087	1.10000	22.922	9.461E-02	9.668E-01	-2.685E-05	-2.684E-05	2.685E-05
1.14999	2.0125	1.15000	33.274	9.495E-02	9.573E-01	-1.152E-05	-1.152E-05	1.152E-05
1.19999	2.0159	1.20000	43.821	9.505E-02	9.481E-01	-6.099E-06	-6.099E-06	6.100E-06
1.29999	2.0220	1.30000	65.123	9.510E-02	9.305E-01	-2.476E-06	-2.476E-06	2.477E-06
1.39999	2.0272	1.40000	86.531	9.511E-02	9.149E-01	-1.297E-06	-1.297E-06	1.297E-06
1.49999	2.0317	1.50000	107.982	9.512E-02	9.012E-01	-7.985E-07	-7.985E-07	7.985E-07
1.59999	2.0357	1.60000	129.455	9.512E-02	8.891E-01	-5.357E-07	-5.357E-07	5.357E-07
1.69999	2.0392	1.70000	150.940	9.513E-02	8.784E-01	-3.601E-07	-3.601E-07	3.601E-07
1.79999	2.0423	1.80000	172.432	9.513E-02	8.688E-01	-2.541E-07	-2.541E-07	2.541E-07
1.89999	2.0451	1.90000	193.930	9.513E-02	8.603E-01	-1.793E-07	-1.793E-07	1.793E-07
1.99999	2.0476	2.00000	215.431	9.513E-02	8.526E-01	-1.279E-07	-1.279E-07	1.279E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 2.000 θ_D= 9.078E-05 ρ_a= 7.512

z	$_x\mu'$-1.0	T_0	$_0T_1-T_0$	$_xT_1-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.612E-06	-7.612E-06	7.612E-06	7.612E-06	-2.992E-08	-2.992E-08
0.20000	2.552E-07	99.802	-1.837E-05	-1.837E-05	1.837E-05	1.837E-05	-4.240E-08	-4.240E-08
0.30000	3.617E-07	149.703	-3.360E-05	-3.360E-05	3.360E-05	3.360E-05	-6.008E-08	-6.008E-08
0.40000	5.384E-07	199.605	-5.575E-05	-5.575E-05	5.575E-05	5.575E-05	-8.943E-08	-8.943E-08
0.50000	8.025E-07	249.506	-8.877E-05	-8.877E-05	8.877E-05	8.877E-05	-1.333E-07	-1.333E-07
0.60000	1.306E-06	299.407	-1.396E-04	-1.396E-04	1.396E-04	1.396E-04	-2.169E-07	-2.170E-07
0.70000	2.498E-06	349.308	-2.299E-04	-2.299E-04	2.299E-04	2.299E-04	-4.150E-07	-4.150E-07
0.80000	6.183E-06	399.209	-4.259E-04	-4.259E-04	4.259E-04	4.259E-04	-1.027E-06	-1.027E-06
0.85000	1.173E-05	424.160	-6.383E-04	-6.384E-04	6.383E-04	6.384E-04	-1.948E-06	-1.948E-06
0.90000	2.747E-05	449.110	-1.090E-03	-1.091E-03	1.090E-03	1.091E-03	-4.561E-06	-4.563E-06
0.92500	4.836E-05	461.585	-1.551E-03	-1.552E-03	1.551E-03	1.552E-03	-8.026E-06	-8.030E-06
0.95000	9.774E-05	474.060	-2.400E-03	-2.401E-03	2.400E-03	2.402E-03	-1.621E-05	-1.623E-05
0.96250	1.420E-04	480.298	-3.140E-03	-3.142E-03	3.140E-03	3.144E-03	-2.354E-05	-2.357E-05
0.97500	2.111E-04	486.535	-4.208E-03	-4.211E-03	4.212E-03	4.219E-03	-3.499E-05	-3.504E-05
0.98125	2.559E-04	489.654	-4.932E-03	-4.936E-03	4.941E-03	4.949E-03	-4.241E-05	-4.246E-05
0.98750	3.037E-04	492.772	-5.790E-03	-5.795E-03	5.813E-03	5.823E-03	-5.036E-05	-5.041E-05
0.99375	3.437E-04	495.891	-6.792E-03	-6.798E-03	6.840E-03	6.852E-03	-5.703E-05	-5.706E-05
1.00000	3.563E-04	499.009	-7.871E-03	-7.877E-03	7.960E-03	7.972E-03	-5.915E-05	-5.916E-05
1.00624	3.371E-04	502.128	-8.934E-03	-8.940E-03	9.075E-03	9.087E-03	-5.602E-05	-5.599E-05
1.01249	2.927E-04	505.246	-9.894E-03	-9.900E-03	1.009E-02	1.010E-02	-4.867E-05	-4.863E-05
1.01874	2.463E-04	508.365	-1.071E-02	-1.072E-02	1.095E-02	1.096E-02	-4.098E-05	-4.093E-05
1.02499	2.016E-04	511.483	-1.139E-02	-1.140E-02	1.167E-02	1.168E-02	-3.354E-05	-3.350E-05
1.03749	1.367E-04	517.721	-1.240E-02	-1.241E-02	1.272E-02	1.272E-02	-2.274E-05	-2.272E-05
1.04999	9.374E-05	523.958	-1.311E-02	-1.311E-02	1.344E-02	1.345E-02	-1.559E-05	-1.558E-05
1.07499	4.697E-05	536.433	-1.391E-02	-1.391E-02	1.428E-02	1.428E-02	-7.807E-06	-7.804E-06
1.09999	2.683E-05	548.908	-1.435E-02	-1.436E-02	1.473E-02	1.473E-02	-4.460E-06	-4.458E-06
1.14999	1.152E-05	573.859	-1.479E-02	-1.479E-02	1.518E-02	1.519E-02	-1.914E-06	-1.914E-06
1.19999	6.099E-06	598.809	-1.499E-02	-1.499E-02	1.540E-02	1.540E-02	-1.013E-06	-1.013E-06
1.29999	2.476E-06	648.710	-1.516E-02	-1.516E-02	1.561E-02	1.561E-02	-4.114E-07	-4.114E-07
1.39999	1.297E-06	698.611	-1.524E-02	-1.524E-02	1.572E-02	1.572E-02	-2.155E-07	-2.155E-07
1.49999	7.984E-07	748.512	-1.527E-02	-1.527E-02	1.579E-02	1.579E-02	-1.326E-07	-1.326E-07
1.59999	5.357E-07	798.413	-1.528E-02	-1.529E-02	1.584E-02	1.584E-02	-8.898E-08	-8.898E-08
1.69999	3.601E-07	848.314	-1.529E-02	-1.529E-02	1.588E-02	1.588E-02	-5.981E-08	-5.981E-08
1.79999	2.541E-07	898.216	-1.529E-02	-1.529E-02	1.591E-02	1.591E-02	-4.221E-08	-4.221E-08
1.89999	1.793E-07	948.117	-1.528E-02	-1.528E-02	1.594E-02	1.594E-02	-2.978E-08	-2.978E-08
1.99999	1.279E-07	998.018	-1.527E-02	-1.527E-02	1.596E-02	1.596E-02	-2.124E-08	-2.124E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o=2.000 θ_D=9.078E-05 ρ_a=7.512

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.812E-14
0.10000	1.728E-10	1.729E-10	-7.439E-19	-7.439E-19	-8.538E-09	-8.538E-09	-2.431E-14
0.20000	4.825E-10	4.824E-10	-1.296E-18	-1.296E-18	-2.341E-08	-2.341E-08	-3.475E-14
0.30000	1.022E-09	1.022E-09	-2.257E-18	-2.257E-18	-4.932E-08	-4.932E-08	-5.459E-14
0.40000	2.165E-09	2.165E-09	-4.113E-18	-4.113E-18	-9.556E-08	-9.556E-08	-9.231E-14
0.50000	4.288E-09	4.287E-09	-7.506E-18	-7.507E-18	-1.799E-07	-1.800E-07	-1.843E-13
0.60000	9.695E-09	9.694E-09	-1.540E-17	-1.540E-17	-3.411E-07	-3.411E-07	-4.293E-13
0.70000	2.742E-08	2.742E-08	-4.010E-17	-4.010E-17	-7.183E-07	-7.184E-07	-1.243E-12
0.80000	1.106E-07	1.106E-07	-1.567E-16	-1.567E-16	-1.938E-06	-1.938E-06	-5.475E-12
0.85000	2.866E-07	2.867E-07	-4.036E-16	-4.037E-16	-3.843E-06	-3.844E-06	-1.523E-11
0.90000	1.013E-06	1.013E-06	-1.557E-15	-1.558E-15	-9.985E-06	-9.989E-06	-6.206E-11
0.92500	2.319E-06	2.321E-06	-3.381E-15	-3.385E-15	-1.880E-05	-1.881E-05	-1.566E-10
0.95000	6.704E-06	6.713E-06	-9.104E-15	-9.120E-15	-3.907E-05	-3.911E-05	-4.876E-10
0.96250	1.229E-05	1.231E-05	-1.628E-14	-1.632E-14	-6.224E-05	-6.234E-05	-9.579E-10
0.97500	2.724E-05	2.732E-05	-3.029E-14	-3.037E-14	-1.036E-04	-1.037E-04	-1.855E-09
0.98125	4.314E-05	4.329E-05	-4.097E-14	-4.107E-14	-1.368E-04	-1.370E-04	-2.462E-09
0.98750	7.126E-05	7.157E-05	-5.380E-14	-5.391E-14	-1.805E-04	-1.808E-04	-3.057E-09
0.99375	1.180E-04	1.185E-04	-6.563E-14	-6.571E-14	-2.368E-04	-2.373E-04	-3.473E-09
1.00000	1.805E-04	1.812E-04	-6.959E-14	-6.960E-14	-3.008E-04	-3.013E-04	-3.613E-09
1.00624	2.397E-04	2.402E-04	-6.381E-14	-6.374E-14	-3.639E-04	-3.644E-04	-3.406E-09
1.01249	2.809E-04	2.812E-04	-5.097E-14	-5.088E-14	-4.179E-04	-4.183E-04	-2.955E-09
1.01874	3.055E-04	3.057E-04	-3.884E-14	-3.875E-14	-4.595E-04	-4.598E-04	-2.331E-09
1.02499	3.202E-04	3.203E-04	-2.835E-14	-2.828E-14	-4.908E-04	-4.911E-04	-1.749E-09
1.03749	3.347E-04	3.348E-04	-1.543E-14	-1.540E-14	-5.297E-04	-5.298E-04	-8.912E-10
1.04999	3.396E-04	3.397E-04	-8.569E-15	-8.554E-15	-5.516E-04	-5.517E-04	-4.586E-10
1.07499	3.395E-04	3.395E-04	-3.257E-15	-3.254E-15	-5.709E-04	-5.710E-04	-1.483E-10
1.09999	3.350E-04	3.350E-04	-1.501E-15	-1.500E-15	-5.793E-04	-5.794E-04	-5.941E-11
1.14999	3.243E-04	3.244E-04	-3.934E-16	-3.933E-16	-5.853E-04	-5.854E-04	-1.479E-11
1.19999	3.140E-04	3.141E-04	-1.536E-16	-1.536E-16	-5.871E-04	-5.872E-04	-5.356E-12
1.29999	2.954E-04	2.954E-04	-3.958E-17	-3.958E-17	-5.883E-04	-5.884E-04	-1.225E-12
1.39999	2.790E-04	2.790E-04	-1.524E-17	-1.524E-17	-5.887E-04	-5.888E-04	-4.249E-13
1.49999	2.644E-04	2.644E-04	-7.450E-18	-7.450E-18	-5.889E-04	-5.890E-04	-1.828E-13
1.59999	2.512E-04	2.513E-04	-4.082E-18	-4.082E-18	-5.889E-04	-5.890E-04	-9.178E-14
1.69999	2.393E-04	2.394E-04	-2.241E-18	-2.241E-18	-5.890E-04	-5.891E-04	-5.435E-14
1.79999	2.285E-04	2.286E-04	-1.287E-18	-1.287E-18	-5.890E-04	-5.891E-04	-3.465E-14
1.89999	2.186E-04	2.187E-04	-7.387E-19	-7.387E-19	-5.890E-04	-5.891E-04	-2.427E-14
1.99999	2.096E-04	2.096E-04	-4.236E-19	-4.236E-19	-5.890E-04	-5.891E-04	-1.811E-14

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 2.500 θ_D= 7.804E-05 ρ_a= 9.387

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	2.5000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	2.5000	0.10000	193.666	4.169E-07	9.999E-01	-1.801E-07	-1.801E-07	1.801E-07
0.20000	2.5000	0.20000	172.178	7.070E-07	9.998E-01	-2.551E-07	-2.551E-07	2.551E-07
0.30000	2.5000	0.30000	150.699	1.241E-06	9.997E-01	-3.615E-07	-3.615E-07	3.615E-07
0.40000	2.5000	0.40000	129.232	2.241E-06	9.996E-01	-5.379E-07	-5.379E-07	5.379E-07
0.50000	2.5000	0.50000	107.784	3.815E-06	9.994E-01	-8.014E-07	-8.014E-07	8.014E-07
0.60000	2.5000	0.60000	86.370	6.670E-06	9.990E-01	-1.302E-06	-1.302E-06	1.302E-06
0.70000	2.5000	0.70000	65.024	1.926E-05	9.983E-01	-2.484E-06	-2.484E-06	2.484E-06
0.80000	2.5000	0.80000	43.843	6.820E-05	9.963E-01	-6.092E-06	-6.093E-06	6.092E-06
0.85000	2.5000	0.85000	33.414	1.704E-04	9.943E-01	-1.141E-05	-1.142E-05	1.141E-05
0.90000	2.5000	0.90000	23.286	5.720E-04	9.920E-01	-2.598E-05	-2.599E-05	2.598E-05
0.92500	2.5001	0.92500	18.491	1.252E-03	9.928E-01	-4.406E-05	-4.408E-05	4.405E-05
0.95000	2.5001	0.95000	14.123	3.235E-03	1.001E 00	-8.002E-05	-8.007E-05	7.999E-05
0.96250	2.5002	0.96250	12.245	5.575E-03	1.009E 00	-1.120E-04	-1.121E-04	1.119E-04
0.97500	2.5003	0.97500	10.718	9.312E-03	1.017E 00	-1.471E-04	-1.473E-04	1.471E-04
0.98125	2.5003	0.98125	10.138	1.181E-02	1.017E 00	-1.632E-04	-1.634E-04	1.632E-04
0.98750	2.5004	0.98750	9.710	1.576E-02	1.011E 00	-1.812E-04	-1.813E-04	1.812E-04
0.99375	2.5005	0.99375	9.456	2.041E-02	1.003E 00	-1.944E-04	-1.945E-04	1.944E-04
1.00000	2.5007	1.00000	9.390	2.544E-02	9.993E-01	-1.980E-04	-1.980E-04	1.980E-04
1.00625	2.5008	1.00625	9.515	3.042E-02	1.004E 00	-1.913E-04	-1.913E-04	1.914E-04
1.01250	2.5010	1.01250	9.825	3.500E-02	1.012E 00	-1.757E-04	-1.756E-04	1.758E-04
1.01875	2.5012	1.01875	10.302	3.807E-02	1.017E 00	-1.586E-04	-1.585E-04	1.587E-04
1.02500	2.5015	1.02500	10.925	4.052E-02	1.016E 00	-1.419E-04	-1.418E-04	1.420E-04
1.03749	2.5020	1.03750	12.516	4.403E-02	1.007E 00	-1.067E-04	-1.067E-04	1.068E-04
1.04999	2.5025	1.05000	14.437	4.622E-02	9.964E-01	-7.570E-05	-7.565E-05	7.573E-05
1.07499	2.5035	1.07500	18.851	4.798E-02	9.849E-01	-4.231E-05	-4.230E-05	4.232E-05
1.09999	2.5045	1.10000	23.668	4.863E-02	9.805E-01	-2.512E-05	-2.512E-05	2.513E-05
1.14999	2.5065	1.15000	33.814	4.902E-02	9.768E-01	-1.112E-05	-1.112E-05	1.112E-05
1.19999	2.5082	1.20000	44.250	4.912E-02	9.738E-01	-5.969E-06	-5.969E-06	5.970E-06
1.29999	2.5114	1.30000	65.436	4.918E-02	9.673E-01	-2.451E-06	-2.451E-06	2.452E-06
1.39999	2.5141	1.40000	86.784	4.920E-02	9.609E-01	-1.289E-06	-1.289E-06	1.289E-06
1.49999	2.5164	1.50000	108.199	4.920E-02	9.551E-01	-7.953E-07	-7.952E-07	7.953E-07
1.59999	2.5185	1.60000	129.647	4.920E-02	9.499E-01	-5.337E-07	-5.337E-07	5.338E-07
1.69999	2.5203	1.70000	151.114	4.921E-02	9.452E-01	-3.591E-07	-3.591E-07	3.591E-07
1.79999	2.5219	1.80000	172.594	4.921E-02	9.411E-01	-2.534E-07	-2.534E-07	2.534E-07
1.89999	2.5233	1.90000	194.081	4.921E-02	9.373E-01	-1.789E-07	-1.789E-07	1.789E-07
1.99999	2.5246	2.00000	215.575	4.921E-02	9.339E-01	-1.276E-07	-1.276E-07	1.276E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 2.500 θ_D= 7.804E-05 ρ_a= 9.387

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.801E-07	49.901	-7.612E-06	-7.612E-06	7.612E-06	7.612E-06	-2.991E-08	-2.991E-08
0.20000	2.551E-07	99.802	-1.836E-05	-1.836E-05	1.836E-05	1.836E-05	-4.238E-08	-4.238E-08
0.30000	3.615E-07	149.703	-3.359E-05	-3.359E-05	3.359E-05	3.359E-05	-6.005E-08	-6.005E-08
0.40000	5.379E-07	199.605	-5.572E-05	-5.573E-05	5.572E-05	5.573E-05	-8.935E-08	-8.935E-08
0.50000	8.014E-07	249.506	-8.871E-05	-8.871E-05	8.871E-05	8.871E-05	-1.331E-07	-1.331E-07
0.60000	1.202E-06	299.407	-1.394E-04	-1.394E-04	1.394E-04	1.394E-04	-2.164E-07	-2.164E-07
0.70000	2.485E-06	349.308	-2.294E-04	-2.294E-04	2.294E-04	2.294E-04	-4.127E-07	-4.127E-07
0.80000	6.093E-06	399.209	-4.233E-04	-4.233E-04	4.233E-04	4.233E-04	-1.012E-06	-1.012E-06
0.85000	1.142E-05	424.160	-6.312E-04	-6.313E-04	6.312E-04	6.313E-04	-1.896E-06	-1.896E-06
0.90000	2.600E-05	449.110	-1.064E-03	-1.064E-03	1.064E-03	1.064E-03	-4.316E-06	-4.318E-06
0.92500	4.409E-05	461.585	-1.489E-03	-1.490E-03	1.489E-03	1.490E-03	-7.319E-06	-7.322E-06
0.95000	8.011E-05	474.060	-2.222E-03	-2.223E-03	2.222E-03	2.223E-03	-1.329E-05	-1.330E-05
0.96250	1.121E-04	480.298	-2.817E-03	-2.818E-03	2.818E-03	2.820E-03	-1.860E-05	-1.862E-05
0.97500	1.473E-04	486.535	-3.624E-03	-3.626E-03	3.627E-03	3.631E-03	-2.444E-05	-2.446E-05
0.98125	1.635E-04	489.654	-4.108E-03	-4.110E-03	4.112E-03	4.117E-03	-2.712E-05	-2.714E-05
0.98750	1.814E-04	492.773	-4.642E-03	-4.645E-03	4.651E-03	4.656E-03	-3.011E-05	-3.012E-05
0.99375	1.946E-04	495.891	-5.227E-03	-5.230E-03	5.242E-03	5.248E-03	-3.229E-05	-3.230E-05
1.00000	1.980E-04	499.010	-5.837E-03	-5.840E-03	5.861E-03	5.867E-03	-3.289E-05	-3.289E-05
1.00625	1.913E-04	502.129	-6.441E-03	-6.444E-03	6.476E-03	6.482E-03	-3.178E-05	-3.177E-05
1.01250	1.756E-04	505.247	-7.010E-03	-7.013E-03	7.056E-03	7.062E-03	-2.919E-05	-2.917E-05
1.01875	1.585E-04	508.366	-7.525E-03	-7.527E-03	7.580E-03	7.585E-03	-2.635E-05	-2.633E-05
1.02500	1.418E-04	511.485	-7.990E-03	-7.992E-03	8.054E-03	8.058E-03	-2.357E-05	-2.356E-05
1.03749	1.066E-04	517.722	-8.759E-03	-8.760E-03	8.836E-03	8.839E-03	-1.773E-05	-1.772E-05
1.04999	7.564E-05	523.960	-9.320E-03	-9.321E-03	9.406E-03	9.408E-03	-1.258E-05	-1.257E-05
1.07499	4.229E-05	536.435	-1.002E-02	-1.002E-02	1.011E-02	1.011E-02	-7.029E-06	-7.026E-06
1.09999	2.511E-05	548.910	-1.042E-02	-1.042E-02	1.052E-02	1.052E-02	-4.173E-06	-4.172E-06
1.14999	1.112E-05	573.860	-1.084E-02	-1.084E-02	1.094E-02	1.094E-02	-1.847E-06	-1.847E-06
1.19999	5.968E-06	598.811	-1.104E-02	-1.104E-02	1.115E-02	1.115E-02	-9.916E-07	-9.915E-07
1.29999	2.451E-06	648.712	-1.122E-02	-1.122E-02	1.134E-02	1.134E-02	-4.072E-07	-4.072E-07
1.39999	1.289E-06	698.613	-1.131E-02	-1.131E-02	1.144E-02	1.144E-02	-2.141E-07	-2.141E-07
1.49999	7.952E-07	748.514	-1.135E-02	-1.135E-02	1.149E-02	1.149E-02	-1.321E-07	-1.321E-07
1.59999	5.237E-07	798.415	-1.138E-02	-1.138E-02	1.153E-02	1.153E-02	-8.866E-08	-8.866E-08
1.69999	3.590E-07	848.316	-1.140E-02	-1.140E-02	1.156E-02	1.156E-02	-5.964E-08	-5.964E-08
1.79999	2.534E-07	898.217	-1.141E-02	-1.141E-02	1.158E-02	1.158E-02	-4.210E-08	-4.210E-08
1.89999	1.789E-07	948.118	-1.142E-02	-1.142E-02	1.159E-02	1.159E-02	-2.971E-08	-2.971E-08
1.99999	1.276E-07	998.020	-1.142E-02	-1.142E-02	1.160E-02	1.160E-02	-2.119E-08	-2.119E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 2.500 θ_D= 7.804E-05 ρ_a= 9.387

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.831E-14
0.10000	2.160E-10	2.160E-10	-7.437E-19	-7.437E-19	-8.537E-09	-8.537E-09	-3.796E-14
0.20000	6.029E-10	6.028E-10	-1.295E-18	-1.295E-18	-2.341E-08	-2.341E-08	-5.427E-14
0.30000	1.277E-09	1.277E-09	-2.255E-18	-2.255E-18	-4.930E-08	-4.930E-08	-8.521E-14
0.40000	2.703E-09	2.703E-09	-4.108E-18	-4.108E-18	-9.548E-08	-9.548E-08	-1.440E-13
0.50000	5.350E-09	5.350E-09	-7.491E-18	-7.491E-18	-1.797E-07	-1.797E-07	-2.871E-13
0.60000	1.208E-08	1.208E-08	-1.533E-17	-1.533E-17	-3.404E-07	-3.404E-07	-6.674E-13
0.70000	3.407E-08	3.407E-08	-3.977E-17	-3.977E-17	-7.151E-07	-7.152E-07	-1.922E-12
0.80000	1.352E-07	1.352E-07	-1.533E-16	-1.534E-16	-1.915E-06	-1.916E-06	-8.340E-12
0.85000	3.449E-07	3.449E-07	-3.879E-16	-3.880E-16	-3.760E-06	-3.761E-06	-2.272E-11
0.90000	1.168E-06	1.169E-06	-1.423E-15	-1.424E-15	-9.475E-06	-9.478E-06	-8.712E-11
0.92500	2.554E-06	2.556E-06	-2.980E-15	-2.983E-15	-1.736E-05	-1.737E-05	-2.049E-10
0.95000	6.613E-06	6.621E-06	-6.680E-15	-6.690E-15	-3.370E-05	-3.373E-05	-5.685E-10
0.96250	1.142E-05	1.144E-05	-1.128E-14	-1.130E-14	-5.024E-05	-5.029E-05	-9.566E-10
0.97500	2.224E-05	2.230E-05	-1.727E-14	-1.729E-14	-7.679E-05	-7.689E-05	-1.619E-09
0.98125	3.265E-05	3.274E-05	-2.030E-14	-2.033E-14	-9.437E-05	-9.450E-05	-2.038E-09
0.98750	4.869E-05	4.884E-05	-2.392E-14	-2.395E-14	-1.150E-04	-1.151E-04	-2.378E-09
0.99375	7.249E-05	7.271E-05	-2.670E-14	-2.672E-14	-1.388E-04	-1.390E-04	-2.600E-09
1.00000	1.020E-04	1.022E-04	-2.749E-14	-2.749E-14	-1.643E-04	-1.645E-04	-2.663E-09
1.00625	1.299E-04	1.301E-04	-2.604E-14	-2.603E-14	-1.895E-04	-1.897E-04	-2.546E-09
1.01250	1.505E-04	1.507E-04	-2.278E-14	-2.276E-14	-2.124E-04	-2.126E-04	-2.288E-09
1.01875	1.639E-04	1.640E-04	-1.942E-14	-1.939E-14	-2.320E-04	-2.321E-04	-1.907E-09
1.02500	1.729E-04	1.729E-04	-1.632E-14	-1.630E-14	-2.487E-04	-2.489E-04	-1.498E-09
1.03749	1.825E-04	1.826E-04	-1.047E-14	-1.046E-14	-2.736E-04	-2.737E-04	-8.810E-10
1.04999	1.869E-04	1.869E-04	-6.129E-15	-6.121E-15	-2.889E-04	-2.889E-04	-5.274E-10
1.07499	1.885E-04	1.885E-04	-2.820E-15	-2.818E-15	-3.043E-04	-3.043E-04	-1.904E-10
1.09999	1.864E-04	1.864E-04	-1.348E-15	-1.347E-15	-3.117E-04	-3.118E-04	-8.184E-11
1.14999	1.797E-04	1.798E-04	-3.732E-16	-3.731E-16	-3.171E-04	-3.172E-04	-2.174E-11
1.19999	1.730E-04	1.730E-04	-1.488E-16	-1.488E-16	-3.189E-04	-3.190E-04	-8.065E-12
1.29999	1.609E-04	1.609E-04	-3.899E-17	-3.899E-17	-3.201E-04	-3.201E-04	-1.878E-12
1.39999	1.504E-04	1.504E-04	-1.510E-17	-1.510E-17	-3.205E-04	-3.205E-04	-6.563E-13
1.49999	1.412E-04	1.412E-04	-7.405E-18	-7.405E-18	-3.206E-04	-3.207E-04	-2.833E-13
1.59999	1.331E-04	1.331E-04	-4.060E-18	-4.060E-18	-3.207E-04	-3.207E-04	-1.426E-13
1.69999	1.259E-04	1.259E-04	-2.231E-18	-2.231E-18	-3.207E-04	-3.208E-04	-8.455E-14
1.79999	1.195E-04	1.195E-04	-1.281E-18	-1.281E-18	-3.208E-04	-3.208E-04	-5.397E-14
1.89999	1.136E-04	1.136E-04	-7.358E-19	-7.358E-19	-3.208E-04	-3.208E-04	-3.782E-14
1.99999	1.083E-04	1.083E-04	-4.221E-19	-4.221E-19	-3.208E-04	-3.208E-04	-2.824E-14

PROPAGATION FREQUENCY= 4.980OE 07 ϕ_0= 3.000 θ_D= 5.989E-05 ρ_0= 11.262

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	3.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	3.0000	0.10000	193.676	4.402E-07	9.998E-01	-1.800E-07	-1.800E-07	1.800E-07
0.20000	3.0000	0.20000	172.201	7.404E-07	9.998E-01	-2.551E-07	-2.551E-07	2.551E-07
0.30000	3.0000	0.30000	150.738	1.467E-06	9.997E-01	-3.613E-07	-3.613E-07	3.612E-07
0.40000	3.0000	0.40000	129.292	2.721E-06	9.995E-01	-5.373E-07	-5.373E-07	5.373E-07
0.50000	3.0000	0.50000	107.874	4.642E-06	9.993E-01	-8.001E-07	-8.001E-07	8.001E-07
0.60000	3.0000	0.60000	86.505	8.111E-06	9.989E-01	-1.298E-06	-1.298E-06	1.298E-06
0.70000	3.0000	0.70000	65.232	2.300E-05	9.980E-01	-2.468E-06	-2.468E-06	2.468E-06
0.80000	3.0000	0.80000	44.196	8.015E-05	9.959E-01	-5.985E-06	-5.986E-06	5.985E-06
0.85000	3.0000	0.85000	33.904	1.955E-04	9.940E-01	-1.105E-05	-1.105E-05	1.105E-05
0.90000	3.0000	0.90000	24.024	6.329E-04	9.928E-01	-2.433E-05	-2.434E-05	2.433E-05
0.92500	3.0001	0.92500	19.437	1.319E-03	9.953E-01	-3.957E-05	-3.959E-05	3.956E-05
0.95000	3.0001	0.95000	15.372	2.939E-03	1.004E 00	-6.400E-05	-6.404E-05	6.399E-05
0.96250	3.0002	0.96250	13.684	4.910E-03	1.011E 00	-8.656E-05	-8.662E-05	8.654E-05
0.97500	3.0002	0.97500	12.356	7.815E-03	1.014E 00	-1.098E-04	-1.098E-04	1.098E-04
0.98125	3.0003	0.98125	11.866	9.649E-03	1.012E 00	-1.198E-04	-1.199E-04	1.198E-04
0.98750	3.0004	0.98750	11.514	1.171E-02	1.007E 00	-1.276E-04	-1.277E-04	1.276E-04
0.99375	3.0004	0.99375	11.311	1.394E-02	1.002E 00	-1.324E-04	-1.324E-04	1.324E-04
1.00000	3.0005	1.00000	11.266	1.625E-02	9.996E-01	-1.334E-04	-1.334E-04	1.335E-04
1.00625	3.0006	1.00625	11.382	1.854E-02	1.003E 00	-1.307E-04	-1.307E-04	1.308E-04
1.01250	3.0007	1.01250	11.652	2.071E-02	1.009E 00	-1.246E-04	-1.245E-04	1.246E-04
1.01875	3.0009	1.01875	12.067	2.268E-02	1.014E 00	-1.157E-04	-1.156E-04	1.157E-04
1.02500	3.0010	1.02500	12.612	2.440E-02	1.016E 00	-1.049E-04	-1.049E-04	1.049E-04
1.03750	3.0013	1.03750	14.030	2.708E-02	1.012E 00	-8.141E-05	-8.137E-05	8.143E-05
1.05000	3.0016	1.05000	15.783	2.884E-02	1.004E 00	-6.035E-05	-6.032E-05	6.036E-05
1.07500	3.0023	1.07500	19.924	3.026E-02	9.933E-01	-3.745E-05	-3.744E-05	3.746E-05
1.10000	3.0029	1.10000	24.551	3.089E-02	9.888E-01	-2.322E-05	-2.322E-05	2.323E-05
1.14999	3.0042	1.15000	34.465	3.130E-02	9.865E-01	-1.065E-05	-1.065E-05	1.065E-05
1.19999	3.0053	1.20000	44.771	3.142E-02	9.858E-01	-5.815E-06	-5.814E-06	5.815E-06
1.29999	3.0073	1.30000	65.818	3.148E-02	9.840E-01	-2.421E-06	-2.421E-06	2.421E-06
1.39999	3.0090	1.40000	87.094	3.150E-02	9.817E-01	-1.279E-06	-1.279E-06	1.279E-06
1.49999	3.0105	1.50000	108.465	3.151E-02	9.794E-01	-7.913E-07	-7.913E-07	7.913E-07
1.59999	3.0118	1.60000	129.884	3.151E-02	9.773E-01	-5.314E-07	-5.314E-07	5.314E-07
1.69999	3.0130	1.70000	151.331	3.151E-02	9.754E-01	-3.578E-07	-3.578E-07	3.578E-07
1.79999	3.0140	1.80000	172.794	3.151E-02	9.736E-01	-2.526E-07	-2.526E-07	2.526E-07
1.89999	3.0150	1.90000	194.270	3.151E-02	9.720E-01	-1.783E-07	-1.783E-07	1.783E-07
1.99999	3.0158	2.00000	215.753	3.152E-02	9.705E-01	-1.272E-07	-1.272E-07	1.272E-07

PROPAGATION FREQUENCY= 4.980OE 07 ϕ_0= 3.000 θ_D= 5.989E-05 ρ_0= 11.262

z	$_x\mu'$-10	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.800E-07	49.901	-7.611E-06	-7.611E-06	7.611E-06	7.611E-06	-2.991E-08	-2.991E-08
0.20000	2.551E-07	99.802	-1.836E-05	-1.836E-05	1.836E-05	1.836E-05	-4.237E-08	-4.237E-08
0.30000	3.613E-07	149.703	-3.358E-05	-3.358E-05	3.358E-05	3.358E-05	-6.001E-08	-6.001E-08
0.40000	5.373E-07	199.605	-5.569E-05	-5.569E-05	5.569E-05	5.569E-05	-8.925E-08	-8.925E-08
0.50000	8.001E-07	249.506	-8.863E-05	-8.863E-05	8.863E-05	8.863E-05	-1.329E-07	-1.329E-07
0.60000	1.298E-06	299.407	-1.392E-04	-1.392E-04	1.392E-04	1.392E-04	-2.156E-07	-2.156E-07
0.70000	2.468E-06	349.308	-2.287E-04	-2.287E-04	2.287E-04	2.287E-04	-4.099E-07	-4.099E-07
0.80000	5.986E-06	399.209	-4.202E-04	-4.202E-04	4.201E-04	4.202E-04	-9.942E-07	-9.943E-07
0.85000	1.105E-05	424.160	-6.227E-04	-6.227E-04	6.227E-04	6.227E-04	-1.836E-06	-1.836E-06
0.90000	2.434E-05	449.110	-1.034E-03	-1.034E-03	1.033E-03	1.034E-03	-4.042E-06	-4.043E-06
0.92500	3.960E-05	461.585	-1.421E-03	-1.421E-03	1.421E-03	1.422E-03	-6.573E-06	-6.576E-06
0.95000	6.406E-05	474.060	-2.054E-03	-2.055E-03	2.054E-03	2.055E-03	-1.063E-05	-1.064E-05
0.96250	8.665E-05	480.298	-2.522E-03	-2.523E-03	2.522E-03	2.524E-03	-1.438E-05	-1.439E-05
0.97500	1.099E-04	486.535	-3.134E-03	-3.136E-03	3.136E-03	3.139E-03	-1.824E-05	-1.825E-05
0.98125	1.199E-04	489.654	-3.492E-03	-3.494E-03	3.495E-03	3.498E-03	-1.991E-05	-1.992E-05
0.98750	1.277E-04	492.773	-3.878E-03	-3.880E-03	3.883E-03	3.886E-03	-2.120E-05	-2.121E-05
0.99375	1.324E-04	495.892	-4.283E-03	-4.285E-03	4.290E-03	4.294E-03	-2.199E-05	-2.199E-05
1.00000	1.335E-04	499.010	-4.698E-03	-4.699E-03	4.707E-03	4.711E-03	-2.217E-05	-2.217E-05
1.00625	1.307E-04	502.129	-5.109E-03	-5.111E-03	5.122E-03	5.125E-03	-2.172E-05	-2.171E-05
1.01250	1.246E-04	505.248	-5.506E-03	-5.508E-03	5.522E-03	5.526E-03	-2.069E-05	-2.069E-05
1.01875	1.156E-04	508.366	-5.880E-03	-5.881E-03	5.899E-03	5.902E-03	-1.921E-05	-1.921E-05
1.02500	1.048E-04	511.485	-6.222E-03	-6.224E-03	6.245E-03	6.248E-03	-1.743E-05	-1.742E-05
1.03750	8.135E-05	517.723	-6.801E-03	-6.802E-03	6.830E-03	6.832E-03	-1.352E-05	-1.352E-05
1.05000	6.031E-05	523.960	-7.237E-03	-7.238E-03	7.270E-03	7.272E-03	-1.002E-05	-1.002E-05
1.07500	3.743E-05	536.435	-7.835E-03	-7.836E-03	7.873E-03	7.875E-03	-6.221E-06	-6.219E-06
1.10000	2.322E-05	548.910	-8.202E-03	-8.202E-03	8.242E-03	8.243E-03	-3.858E-06	-3.857E-06
1.14999	1.065E-05	573.861	-8.594E-03	-8.594E-03	8.637E-03	8.638E-03	-1.769E-06	-1.769E-06
1.19999	5.814E-06	598.811	-8.788E-03	-8.789E-03	8.834E-03	8.835E-03	-9.659E-07	-9.658E-07
1.29999	2.421E-06	648.712	-8.973E-03	-8.973E-03	9.022E-03	9.023E-03	-4.022E-07	-4.022E-07
1.39999	1.279E-06	698.614	-9.059E-03	-9.059E-03	9.112E-03	9.113E-03	-2.125E-07	-2.125E-07
1.49999	7.913E-07	748.515	-9.107E-03	-9.107E-03	9.164E-03	9.165E-03	-1.315E-07	-1.314E-07
1.59999	5.314E-07	798.416	-9.138E-03	-9.138E-03	9.199E-03	9.199E-03	-8.827E-08	-8.827E-08
1.69999	3.578E-07	848.317	-9.158E-03	-9.158E-03	9.222E-03	9.223E-03	-5.944E-08	-5.943E-08
1.79999	2.526E-07	898.218	-9.171E-03	-9.171E-03	9.239E-03	9.240E-03	-4.196E-08	-4.196E-08
1.89999	1.783E-07	948.119	-9.180E-03	-9.180E-03	9.252E-03	9.253E-03	-2.962E-08	-2.962E-08
1.99999	1.272E-07	998.020	-9.185E-03	-9.186E-03	9.261E-03	9.262E-03	-2.113E-08	-2.113E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 3.000 θ_D= 5.989E-05 ρ_a= 11.262

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-4.075E-14
0.10000	2.590E-10	2.591E-10	-7.435E-19	-7.435E-19	-8.536E-09	-8.536E-09	-5.464E-14
0.20000	7.232E-10	7.230E-10	-1.294E-18	-1.294E-18	-2.340E-08	-2.340E-08	-7.809E-14
0.30000	1.531E-09	1.531E-09	-2.252E-18	-2.252E-18	-4.927E-08	-4.927E-08	-1.226E-13
0.40000	3.240E-09	3.239E-09	-4.101E-18	-4.101E-18	-9.539E-08	-9.539E-08	-2.070E-13
0.50000	6.408E-09	6.408E-09	-7.472E-18	-7.472E-18	-1.795E-07	-1.795E-07	-4.120E-13
0.60000	1.444E-08	1.444E-08	-1.526E-17	-1.526E-17	-3.395E-07	-3.395E-07	-9.550E-13
0.70000	4.062E-08	4.062E-08	-3.937E-17	-3.938E-17	-7.112E-07	-7.113E-07	-2.732E-12
0.80000	1.585E-07	1.585E-07	-1.494E-16	-1.494E-16	-1.888E-06	-1.888E-06	-1.165E-11
0.85000	3.975E-07	3.975E-07	-3.698E-16	-3.699E-16	-3.661E-06	-3.662E-06	-3.095E-11
0.90000	1.294E-06	1.294E-06	-1.280E-15	-1.281E-15	-8.909E-06	-8.913E-06	-1.111E-10
0.92500	2.699E-06	2.701E-06	-2.572E-15	-2.574E-15	-1.583E-05	-1.584E-05	-2.435E-10
0.95000	6.364E-06	6.371E-06	-4.717E-15	-4.722E-15	-2.934E-05	-2.936E-05	-6.154E-10
0.96250	1.042E-05	1.044E-05	-7.552E-15	-7.561E-15	-4.067E-05	-4.070E-05	-9.145E-10
0.97500	1.804E-05	1.807E-05	-1.094E-14	-1.095E-14	-5.793E-05	-5.798E-05	-1.331E-09
0.98125	2.463E-05	2.458E-05	-1.254E-14	-1.255E-14	-6.892E-05	-6.898E-05	-1.554E-09
0.98750	3.344E-05	3.351E-05	-1.384E-14	-1.385E-14	-8.128E-05	-8.135E-05	-1.749E-09
0.99375	4.477E-05	4.486E-05	-1.464E-14	-1.465E-14	-9.464E-05	-9.472E-05	-1.876E-09
1.00000	5.770E-05	5.780E-05	-1.483E-14	-1.483E-14	-1.085E-04	-1.086E-04	-1.906E-09
1.00625	7.002E-05	7.011E-05	-1.436E-14	-1.436E-14	-1.222E-04	-1.222E-04	-1.831E-09
1.01250	7.997E-05	8.004E-05	-1.332E-14	-1.331E-14	-1.351E-04	-1.352E-04	-1.669E-09
1.01875	8.746E-05	8.752E-05	-1.187E-14	-1.186E-14	-1.469E-04	-1.470E-04	-1.457E-09
1.02500	9.281E-05	9.285E-05	-1.019E-14	-1.018E-14	-1.573E-04	-1.573E-04	-1.232E-09
1.03750	9.916E-05	9.918E-05	-6.864E-15	-6.857E-15	-1.732E-04	-1.732E-04	-8.380E-10
1.05000	1.026E-04	1.026E-04	-4.499E-15	-4.495E-15	-1.834E-04	-1.835E-04	-5.579E-10
1.07500	1.047E-04	1.048E-04	-2.386E-15	-2.384E-15	-1.961E-04	-1.961E-04	-2.221E-10
1.10000	1.041E-04	1.042E-04	-1.187E-15	-1.186E-15	-2.025E-04	-2.025E-04	-1.023E-10
1.14999	1.007E-04	1.007E-04	-3.502E-16	-3.501E-16	-2.074E-04	-2.074E-04	-2.914E-11
1.19999	9.680E-05	9.681E-05	-1.431E-16	-1.431E-16	-2.090E-04	-2.091E-04	-1.111E-11
1.29999	8.964E-05	8.964E-05	-3.828E-17	-3.828E-17	-2.102E-04	-2.102E-04	-2.643E-12
1.39999	8.345E-05	8.346E-05	-1.493E-17	-1.493E-17	-2.105E-04	-2.106E-04	-9.321E-13
1.49999	7.808E-05	7.809E-05	-7.350E-18	-7.349E-18	-2.107E-04	-2.107E-04	-4.038E-13
1.59999	7.336E-05	7.337E-05	-4.033E-18	-4.033E-18	-2.108E-04	-2.108E-04	-2.040E-13
1.69999	6.919E-05	6.919E-05	-2.218E-18	-2.218E-18	-2.108E-04	-2.109E-04	-1.211E-13
1.79999	6.546E-05	6.547E-05	-1.275E-18	-1.275E-18	-2.109E-04	-2.109E-04	-7.740E-14
1.89999	6.212E-05	6.213E-05	-7.322E-19	-7.322E-19	-2.109E-04	-2.109E-04	-5.430E-14
1.99999	5.911E-05	5.911E-05	-4.201E-19	-4.201E-19	-2.109E-04	-2.109E-04	-4.057E-14

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 4.000 θ_D= 4.174E-05 ρ_a=15.010

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	4.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	4.0000	0.10000	193.701	4.802E-07	9.997E-01	-1.800E-07	-1.800E-07	1.800E-07
0.20000	4.0000	0.20000	172.258	1.094E-06	9.996E-01	-2.548E-07	-2.548E-07	2.548E-07
0.30000	4.0000	0.30000	150.836	2.041E-06	9.995E-01	-3.607E-07	-3.607E-07	3.607E-07
0.40000	4.0000	0.40000	129.444	3.655E-06	9.992E-01	-5.358E-07	-5.358E-07	5.358E-07
0.50000	4.0000	0.50000	108.102	6.190E-06	9.988E-01	-7.967E-07	-7.967E-07	7.967E-07
0.60000	4.0000	0.60000	86.846	1.083E-05	9.981E-01	-1.287E-06	-1.287E-06	1.287E-06
0.70000	4.0000	0.70000	65.759	2.903E-05	9.967E-01	-2.426E-06	-2.426E-06	2.426E-06
0.80000	4.0000	0.80000	45.080	1.044E-04	9.942E-01	-5.724E-06	-5.725E-06	5.724E-06
0.85000	4.0000	0.85000	35.119	2.408E-04	9.928E-01	-1.020E-05	-1.020E-05	1.020E-05
0.90000	4.0000	0.90000	25.806	7.206E-04	9.952E-01	-2.077E-05	-2.077E-05	2.076E-05
0.92500	4.0001	0.92500	21.657	1.350E-03	1.001E 00	-3.074E-05	-3.075E-05	3.074E-05
0.95000	4.0001	0.95000	18.166	2.642E-03	1.010E 00	-4.572E-05	-4.574E-05	4.571E-05
0.96250	4.0002	0.96250	16.799	3.606E-03	1.013E 00	-5.341E-05	-5.343E-05	5.340E-05
0.97500	4.0002	0.97500	15.775	4.843E-03	1.011E 00	-6.039E-05	-6.040E-05	6.038E-05
0.98125	4.0002	0.98125	15.415	6.690E-03	1.008E 00	-6.356E-05	-6.357E-05	6.355E-05
0.98750	4.0003	0.98750	15.165	6.601E-03	1.004E 00	-6.642E-05	-6.644E-05	6.642E-05
0.99375	4.0003	0.99375	15.032	7.723E-03	1.000E 00	-6.802E-05	-6.803E-05	6.803E-05
1.00000	4.0004	1.00000	15.019	8.865E-03	9.998E-01	-6.819E-05	-6.819E-05	6.819E-05
1.00625	4.0004	1.00625	15.126	9.984E-03	1.002E 00	-6.690E-05	-6.689E-05	6.690E-05
1.01250	4.0005	1.01250	15.351	1.106E-02	1.006E 00	-6.427E-05	-6.426E-05	6.427E-05
1.01875	4.0006	1.01875	15.688	1.193E-02	1.011E 00	-6.116E-05	-6.115E-05	6.116E-05
1.02500	4.0006	1.02500	16.130	1.269E-02	1.015E 00	-5.765E-05	-5.763E-05	5.766E-05
1.03750	4.0008	1.03750	17.297	1.379E-02	1.016E 00	-5.049E-05	-5.047E-05	5.050E-05
1.05000	4.0009	1.05000	18.779	1.465E-02	1.013E 00	-4.266E-05	-4.265E-05	4.267E-05
1.07500	4.0013	1.07500	22.427	1.578E-02	1.003E 00	-2.817E-05	-2.817E-05	2.818E-05
1.10000	4.0016	1.10000	26.668	1.631E-02	9.964E-01	-1.924E-05	-1.923E-05	1.924E-05
1.15000	4.0023	1.15000	36.072	1.672E-02	9.916E-01	-9.580E-06	-9.579E-06	9.581E-06
1.20000	4.0029	1.20000	46.073	1.684E-02	9.912E-01	-5.446E-06	-5.445E-06	5.446E-06
1.30000	4.0039	1.30000	66.784	1.691E-02	9.917E-01	-2.346E-06	-2.346E-06	2.346E-06
1.40000	4.0049	1.40000	87.882	1.694E-02	9.919E-01	-1.254E-06	-1.254E-06	1.254E-06
1.50000	4.0057	1.50000	109.144	1.695E-02	9.917E-01	-7.814E-07	-7.814E-07	7.814E-07
1.60000	4.0064	1.60000	130.489	1.695E-02	9.913E-01	-5.255E-07	-5.255E-07	5.255E-07
1.70000	4.0070	1.70000	151.882	1.696E-02	9.909E-01	-3.546E-07	-3.546E-07	3.546E-07
1.80000	4.0076	1.80000	173.306	1.696E-02	9.904E-01	-2.505E-07	-2.505E-07	2.505E-07
1.90000	4.0081	1.90000	194.750	1.696E-02	9.900E-01	-1.769E-07	-1.769E-07	1.769E-07
2.00000	4.0085	2.00000	216.208	1.696E-02	9.896E-01	-1.263E-07	-1.263E-07	1.263E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 4.000 θ_D= 4.174E-05 ρ_a= 15.010

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.800E-07	49.901	-7.609E-06	-7.689E-06	7.609E-06	7.609E-06	-2.989E-08	-2.990E-08
0.20000	2.548E-07	99.802	-1.835E-05	-1.835E-05	1.835E-05	1.835E-05	-4.233E-08	-4.233E-08
0.30000	3.607E-07	149.703	-3.356E-05	-3.356E-05	3.355E-05	3.356E-05	-5.991E-08	-5.991E-08
0.40000	5.358E-07	199.605	-5.561E-05	-5.562E-05	5.561E-05	5.562E-05	-8.900E-08	-8.900E-08
0.50000	7.967E-07	249.506	-8.843E-05	-8.843E-05	8.843E-05	8.843E-05	-1.323E-07	-1.323E-07
0.60000	1.287E-06	299.407	-1.387E-04	-1.387E-04	1.387E-04	1.387E-04	-2.138E-07	-2.138E-07
0.70000	2.426E-06	349.308	-2.269E-04	-2.269E-04	2.269E-04	2.269E-04	-4.029E-07	-4.030E-07
0.80000	5.725E-06	399.209	-4.125E-04	-4.125E-04	4.125E-04	4.125E-04	-9.509E-07	-9.510E-07
0.85000	1.020E-05	424.160	-6.025E-04	-6.025E-04	6.025E-04	6.025E-04	-1.695E-06	-1.695E-06
0.90000	2.077E-05	449.110	-9.659E-04	-9.660E-04	9.658E-04	9.661E-04	-3.450E-06	-3.450E-06
0.92500	3.076E-05	461.585	-1.281E-03	-1.281E-03	1.281E-03	1.281E-03	-5.107E-06	-5.109E-06
0.95000	4.575E-05	474.060	-1.756E-03	-1.756E-03	1.756E-03	1.756E-03	-7.595E-06	-7.598E-06
0.96250	5.344E-05	480.298	-2.065E-03	-2.065E-03	2.065E-03	2.066E-03	-8.872E-06	-8.875E-06
0.97500	6.041E-05	486.536	-2.420E-03	-2.420E-03	2.420E-03	2.421E-03	-1.003E-05	-1.003E-05
0.98125	6.358E-05	489.654	-2.613E-03	-2.614E-03	2.614E-03	2.615E-03	-1.056E-05	-1.056E-05
0.98750	6.646E-05	492.773	-2.816E-03	-2.816E-03	2.817E-03	2.818E-03	-1.103E-05	-1.104E-05
0.99375	6.804E-05	495.892	-3.025E-03	-3.026E-03	3.027E-03	3.029E-03	-1.130E-05	-1.130E-05
1.00000	6.819E-05	499.011	-3.238E-03	-3.238E-03	3.240E-03	3.242E-03	-1.133E-05	-1.133E-05
1.00625	6.690E-05	502.129	-3.448E-03	-3.449E-03	3.452E-03	3.453E-03	-1.111E-05	-1.111E-05
1.01250	6.426E-05	505.248	-3.653E-03	-3.653E-03	3.657E-03	3.659E-03	-1.068E-05	-1.067E-05
1.01875	6.114E-05	508.367	-3.848E-03	-3.849E-03	3.853E-03	3.855E-03	-1.016E-05	-1.016E-05
1.02500	5.763E-05	511.486	-4.033E-03	-4.033E-03	4.039E-03	4.040E-03	-9.576E-06	-9.574E-06
1.03750	5.047E-05	517.723	-4.370E-03	-4.371E-03	4.377E-03	4.379E-03	-8.387E-06	-8.384E-06
1.05000	4.264E-05	523.961	-4.660E-03	-4.661E-03	4.669E-03	4.670E-03	-7.086E-06	-7.084E-06
1.07500	2.817E-05	536.436	-5.098E-03	-5.098E-03	5.108E-03	5.109E-03	-4.680E-06	-4.679E-06
1.10000	1.923E-05	548.911	-5.390E-03	-5.390E-03	5.401E-03	5.402E-03	-3.195E-06	-3.195E-06
1.15000	9.579E-06	573.862	-5.726E-03	-5.726E-03	5.738E-03	5.739E-03	-1.591E-06	-1.591E-06
1.20000	5.446E-06	598.812	-5.905E-03	-5.905E-03	5.918E-03	5.918E-03	-9.046E-07	-9.045E-07
1.30000	2.346E-06	648.713	-6.082E-03	-6.082E-03	6.096E-03	6.097E-03	-3.898E-07	-3.898E-07
1.40000	1.254E-06	698.614	-6.167E-03	-6.167E-03	6.182E-03	6.183E-03	-2.083E-07	-2.083E-07
1.50000	7.814E-07	748.515	-6.215E-03	-6.216E-03	6.232E-03	6.232E-03	-1.298E-07	-1.298E-07
1.60000	5.254E-07	798.417	-6.247E-03	-6.247E-03	6.265E-03	6.265E-03	-8.729E-08	-8.729E-08
1.70000	3.546E-07	848.318	-6.268E-03	-6.268E-03	6.287E-03	6.287E-03	-5.891E-08	-5.891E-08
1.80000	2.506E-07	898.219	-6.283E-03	-6.283E-03	6.302E-03	6.303E-03	-4.162E-08	-4.162E-08
1.90000	1.769E-07	948.120	-6.293E-03	-6.293E-03	6.313E-03	6.314E-03	-2.939E-08	-2.939E-08
2.00000	1.263E-07	998.021	-6.300E-03	-6.300E-03	6.322E-03	6.322E-03	-2.099E-08	-2.099E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 4.000 θ_D= 4.174E-05 ρ_a=15.010

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-7.240E-14
0.10000	3.452E-10	3.450E-10	-7.430E-19	-7.431E-19	-8.533E-09	-8.533E-09	-9.704E-14
0.20000	9.630E-10	9.627E-10	-1.292E-18	-1.292E-18	-2.338E-08	-2.338E-08	-1.386E-13
0.30000	2.038E-09	2.038E-09	-2.247E-18	-2.247E-18	-4.920E-08	-4.920E-08	-2.172E-13
0.40000	4.305E-09	4.304E-09	-4.083E-18	-4.083E-18	-9.516E-08	-9.516E-08	-3.661E-13
0.50000	8.500E-09	8.500E-09	-7.425E-18	-7.425E-18	-1.788E-07	-1.788E-07	-7.258E-13
0.60000	1.908E-08	1.908E-08	-1.507E-17	-1.507E-17	-3.372E-07	-3.372E-07	-1.671E-12
0.70000	5.289E-08	5.289E-08	-3.839E-17	-3.839E-17	-7.015E-07	-7.015E-07	-4.705E-12
0.80000	1.987E-07	1.988E-07	-1.399E-16	-1.399E-16	-1.823E-06	-1.823E-06	-1.921E-11
0.85000	4.755E-07	4.756E-07	-3.285E-16	-3.286E-16	-3.433E-06	-3.434E-06	-4.823E-11
0.90000	1.407E-06	1.408E-06	-9.902E-16	-9.907E-16	-7.730E-06	-7.733E-06	-1.505E-10
0.92500	2.697E-06	2.698E-06	-1.820E-15	-1.821E-15	-1.283E-05	-1.284E-05	-2.910E-10
0.95000	5.515E-06	5.520E-06	-3.135E-15	-3.137E-15	-2.198E-05	-2.199E-05	-5.619E-10
0.96250	8.306E-06	8.314E-06	-3.880E-15	-3.882E-15	-2.854E-05	-2.855E-05	-7.693E-10
0.97500	1.255E-05	1.256E-05	-4.499E-15	-4.502E-15	-3.643E-05	-3.645E-05	-9.923E-10
0.98125	1.548E-05	1.550E-05	-4.674E-15	-4.676E-15	-4.072E-05	-4.074E-05	-1.083E-09
0.98750	1.898E-05	1.900E-05	-4.998E-15	-5.000E-15	-4.521E-05	-4.523E-05	-1.143E-09
0.99376	2.306E-05	2.308E-05	-5.187E-15	-5.188E-15	-4.999E-05	-5.001E-05	-1.177E-09
1.00000	2.737E-05	2.740E-05	-5.207E-15	-5.207E-15	-5.486E-05	-5.489E-05	-1.180E-09
1.00625	3.151E-05	3.154E-05	-5.054E-15	-5.054E-15	-5.967E-05	-5.970E-05	-1.153E-09
1.01250	3.511E-05	3.513E-05	-4.748E-15	-4.747E-15	-6.427E-05	-6.429E-05	-1.099E-09
1.01875	3.803E-05	3.805E-05	-4.543E-15	-4.542E-15	-6.860E-05	-6.862E-05	-1.014E-09
1.03500	4.040E-05	4.042E-05	-4.308E-15	-4.306E-15	-7.275E-05	-7.277E-05	-9.102E-10
1.03750	4.376E-05	4.377E-05	-3.592E-15	-3.590E-15	-8.015E-05	-8.017E-05	-6.835E-10
1.05000	4.593E-05	4.594E-05	-2.851E-15	-2.850E-15	-8.617E-05	-8.618E-05	-4.940E-10
1.07500	4.788E-05	4.789E-05	-1.615E-15	-1.614E-15	-9.438E-05	-9.440E-05	-2.578E-10
1.10000	4.829E-05	4.830E-05	-8.749E-16	-8.746E-16	-9.892E-05	-9.893E-05	-1.336E-10
1.15000	4.725E-05	4.726E-05	-2.994E-16	-2.993E-16	-1.027E-04	-1.027E-04	-4.379E-11
1.20000	4.556E-05	4.557E-05	-1.299E-16	-1.299E-16	-1.042E-04	-1.042E-04	-1.774E-11
1.30000	4.217E-05	4.217E-05	-3.655E-17	-3.654E-17	-1.052E-04	-1.052E-04	-4.440E-12
1.40000	3.919E-05	3.919E-05	-1.451E-17	-1.451E-17	-1.056E-04	-1.056E-04	-1.600E-12
1.50000	3.659E-05	3.660E-05	-7.211E-18	-7.211E-18	-1.057E-04	-1.057E-04	-6.998E-13
1.60000	3.433E-05	3.433E-05	-3.966E-18	-3.966E-18	-1.058E-04	-1.058E-04	-3.564E-13
1.70000	3.232E-05	3.233E-05	-2.187E-18	-2.187E-18	-1.059E-04	-1.059E-04	-2.124E-13
1.80000	3.054E-05	3.054E-05	-1.258E-18	-1.258E-18	-1.059E-04	-1.059E-04	-1.362E-13
1.90000	2.895E-05	2.895E-05	-7.232E-19	-7.232E-19	-1.059E-04	-1.059E-04	-9.579E-14
2.00000	2.751E-05	2.751E-05	-4.152E-19	-4.152E-19	-1.059E-04	-1.059E-04	-7.167E-14

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 5.000 θ_0= 0. ρ_0= 18.753

z	ϕ	z_f	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	5.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	5.0000	0.10000	193.734	7.937E-07	9.996E-01	-1.799E-07	-1.799E-07	1.799E-07
0.20000	5.0000	0.20000	172.332	1.521E-06	9.995E-01	-2.545E-07	-2.545E-07	2.545E-07
0.30000	5.0000	0.30000	150.962	2.508E-06	9.992E-01	-3.599E-07	-3.599E-07	3.599E-07
0.40000	5.0000	0.40000	129.640	4.376E-06	9.989E-01	-5.338E-07	-5.338E-07	5.338E-07
0.50000	5.0000	0.50000	108.395	7.577E-06	9.984E-01	-7.923E-07	-7.924E-07	7.923E-07
0.60000	5.0000	0.60000	87.283	1.387E-05	9.974E-01	-1.273E-06	-1.273E-06	1.273E-06
0.70000	5.0000	0.70000	66.431	3.554E-05	9.958E-01	-2.373E-06	-2.373E-06	2.373E-06
0.80000	5.0000	0.80000	46.191	1.236E-04	9.934E-01	-5.413E-06	-5.413E-06	5.413E-06
0.85000	5.0000	0.85000	36.621	2.768E-04	9.933E-01	-9.239E-06	-9.240E-06	9.238E-06
0.90000	5.0000	0.90000	27.929	7.599E-04	9.986E-01	-1.719E-05	-1.719E-05	1.719E-05
0.92500	5.0001	0.92500	24.214	1.285E-03	1.005E 00	-2.393E-05	-2.393E-05	2.392E-05
0.95000	5.0001	0.95000	21.224	2.212E-03	1.011E 00	-3.230E-05	-3.230E-05	3.229E-05
0.96250	5.0001	0.96250	20.106	2.899E-03	1.011E 00	-3.668E-05	-3.668E-05	3.667E-05
0.97500	5.0002	0.97500	19.300	3.713E-03	1.007E 00	-4.020E-05	-4.020E-05	4.020E-05
0.98125	5.0002	0.98125	19.027	4.160E-03	1.004E 00	-4.146E-05	-4.147E-05	4.146E-05
0.98750	5.0002	0.98750	18.846	4.625E-03	1.002E 00	-4.232E-05	-4.233E-05	4.232E-05
0.99375	5.0003	0.99375	18.761	5.103E-03	9.999E-01	-4.274E-05	-4.274E-05	4.274E-05
1.00000	5.0003	1.00000	18.771	5.588E-03	9.998E-01	-4.269E-05	-4.269E-05	4.269E-05
1.00625	5.0003	1.00628	18.878	6.068E-03	1.002E 00	-4.217E-05	-4.217E-05	4.218E-05
1.01250	5.0004	1.01250	19.079	6.536E-03	1.005E 00	-4.122E-05	-4.122E-05	4.122E-05
1.01875	5.0004	1.01875	19.372	6.983E-03	1.008E 00	-3.987E-05	-3.987E-05	3.988E-05
1.02500	5.0004	1.02500	19.751	7.403E-03	1.012E 00	-3.819E-05	-3.819E-05	3.819E-05
1.03750	5.0005	1.03750	20.753	8.148E-03	1.016E 00	-3.408E-05	-3.407E-05	3.408E-05
1.05000	5.0006	1.05000	22.040	8.756E-03	1.016E 00	-2.944E-05	-2.944E-05	2.945E-05
1.07500	5.0008	1.07500	25.283	9.349E-03	1.009E 00	-2.176E-05	-2.175E-05	2.176E-05
1.10000	5.0010	1.10000	29.165	9.834E-03	1.002E 00	-1.540E-05	-1.540E-05	1.540E-05
1.15000	5.0014	1.15000	38.039	1.021E-02	9.949E-01	-8.415E-06	-8.414E-06	8.415E-06
1.20000	5.0018	1.20000	47.695	1.043E-02	9.932E-01	-5.019E-06	-5.018E-06	5.019E-06
1.30000	5.0025	1.30000	68.006	1.050E-02	9.937E-01	-2.255E-06	-2.255E-06	2.255E-06
1.40000	5.0030	1.40000	88.886	1.053E-02	9.945E-01	-1.223E-06	-1.223E-06	1.223E-06
1.50000	5.0035	1.50000	110.011	1.053E-02	9.949E-01	-7.689E-07	-7.689E-07	7.689E-07
1.60000	5.0040	1.60000	131.263	1.054E-02	9.951E-01	-5.179E-07	-5.179E-07	5.180E-07
1.70000	5.0044	1.70000	152.589	1.054E-02	9.952E-01	-3.506E-07	-3.506E-07	3.506E-07
1.80000	5.0047	1.80000	173.962	1.054E-02	9.952E-01	-2.479E-07	-2.479E-07	2.479E-07
1.90000	5.0050	1.90000	195.367	1.054E-02	9.951E-01	-1.752E-07	-1.752E-07	1.752E-07
2.00000	5.0053	2.00000	216.793	1.055E-02	9.951E-01	-1.252E-07	-1.252E-07	1.252E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 5.000 θ_0= 0. ρ_0= 18.753

z	$_x\mu'$-10	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.799E-07	49.901	-7.607E-06	-7.607E-06	7.607E-06	7.607E-06	-2.988E-08	-2.988E-08
0.20000	2.545E-07	99.802	-1.834E-05	-1.834E-05	1.834E-05	1.834E-05	-4.228E-08	-4.228E-08
0.30000	3.599E-07	149.703	-3.352E-05	-3.352E-05	3.352E-05	3.352E-05	-5.979E-08	-5.979E-08
0.40000	5.338E-07	199.605	-5.551E-05	-5.551E-05	5.551E-05	5.551E-05	-8.867E-08	-8.867E-08
0.50000	7.924E-07	249.506	-8.818E-05	-8.818E-05	8.818E-05	8.818E-05	-1.316E-07	-1.316E-07
0.60000	1.273E-06	299.407	-1.380E-04	-1.380E-04	1.380E-04	1.380E-04	-2.115E-07	-2.115E-07
0.70000	2.374E-06	349.308	-2.248E-04	-2.248E-04	2.247E-04	2.248E-04	-3.943E-07	-3.943E-07
0.80000	5.414E-06	399.209	-4.033E-04	-4.033E-04	4.033E-04	4.033E-04	-8.992E-07	-8.993E-07
0.85000	9.241E-06	424.160	-5.793E-04	-5.793E-04	5.793E-04	5.793E-04	-1.535E-06	-1.535E-06
0.90000	1.720E-05	449.110	-8.944E-04	-8.945E-04	8.944E-04	8.946E-04	-2.856E-06	-2.856E-06
0.92500	2.393E-05	461.585	-1.150E-03	-1.150E-03	1.150E-03	1.150E-03	-3.974E-06	-3.975E-06
0.95000	3.231E-05	474.061	-1.497E-03	-1.497E-03	1.497E-03	1.498E-03	-5.365E-06	-5.366E-06
0.96250	3.669E-05	480.298	-1.712E-03	-1.713E-03	1.713E-03	1.713E-03	-6.093E-06	-6.094E-06
0.97500	4.021E-05	486.536	-1.953E-03	-1.953E-03	1.953E-03	1.954E-03	-6.677E-06	-6.678E-06
0.98125	4.147E-05	489.654	-2.080E-03	-2.080E-03	2.081E-03	2.081E-03	-6.888E-06	-6.889E-06
0.98750	4.233E-05	492.773	-2.211E-03	-2.211E-03	2.211E-03	2.212E-03	-7.031E-06	-7.031E-06
0.99375	4.274E-05	495.892	-2.343E-03	-2.344E-03	2.344E-03	2.346E-03	-7.100E-06	-7.100E-06
1.00000	4.269E-05	499.011	-2.477E-03	-2.477E-03	2.478E-03	2.478E-03	-7.091E-06	-7.091E-06
1.00625	4.218E-05	502.130	-2.609E-03	-2.609E-03	2.610E-03	2.611E-03	-7.006E-06	-7.006E-06
1.01250	4.122E-05	505.248	-2.739E-03	-2.739E-03	2.741E-03	2.741E-03	-6.848E-06	-6.847E-06
1.01875	3.987E-05	508.367	-2.865E-03	-2.866E-03	2.867E-03	2.868E-03	-6.624E-06	-6.623E-06
1.02500	3.818E-05	511.486	-2.987E-03	-2.988E-03	2.989E-03	2.990E-03	-6.344E-06	-6.343E-06
1.03750	3.407E-05	517.724	-3.213E-03	-3.213E-03	3.215E-03	3.216E-03	-5.661E-06	-5.660E-06
1.05000	2.944E-05	523.961	-3.411E-03	-3.411E-03	3.414E-03	3.414E-03	-4.891E-06	-4.890E-06
1.07500	2.175E-05	536.436	-3.728E-03	-3.728E-03	3.731E-03	3.732E-03	-3.614E-06	-3.614E-06
1.10000	1.540E-05	548.911	-3.958E-03	-3.958E-03	3.962E-03	3.962E-03	-2.559E-06	-2.558E-06
1.15000	8.414E-06	573.862	-4.245E-03	-4.245E-03	4.250E-03	4.250E-03	-1.398E-06	-1.398E-06
1.20000	5.018E-06	598.812	-4.404E-03	-4.404E-03	4.409E-03	4.409E-03	-8.337E-07	-8.336E-07
1.30000	2.255E-06	648.714	-4.572E-03	-4.572E-03	4.577E-03	4.578E-03	-3.746E-07	-3.746E-07
1.40000	1.223E-06	698.615	-4.654E-03	-4.654E-03	4.660E-03	4.661E-03	-2.032E-07	-2.032E-07
1.50000	7.689E-07	748.516	-4.702E-03	-4.702E-03	4.709E-03	4.709E-03	-1.277E-07	-1.277E-07
1.60000	5.179E-07	798.417	-4.734E-03	-4.734E-03	4.740E-03	4.741E-03	-8.604E-08	-8.604E-08
1.70000	3.506E-07	848.318	-4.755E-03	-4.755E-03	4.762E-03	4.762E-03	-5.823E-08	-5.823E-08
1.80000	2.479E-07	898.219	-4.769E-03	-4.769E-03	4.777E-03	4.777E-03	-4.118E-08	-4.117E-08
1.90000	1.752E-07	948.120	-4.780E-03	-4.780E-03	4.788E-03	4.788E-03	-2.910E-08	-2.910E-08
2.00000	1.252E-07	998.022	-4.787E-03	-4.787E-03	4.795E-03	4.796E-03	-2.080E-08	-2.080E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 5.000 θ_D= 0. ρ_a= 18.753

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.130E-13
0.10000	4.310E-10	4.309E-10	-7.424E-19	-7.424E-19	-8.529E-09	-8.529E-09	-1.514E-13
0.20000	1.202E-09	1.201E-09	-1.290E-18	-1.290E-18	-2.336E-08	-2.336E-08	-2.160E-13
0.30000	2.541E-09	2.540E-09	-2.239E-18	-2.239E-18	-4.911E-08	-4.911E-08	-3.381E-13
0.40000	5.358E-09	5.358E-09	-4.061E-18	-4.061E-18	-9.486E-08	-9.486E-08	-5.684E-13
0.50000	1.056E-08	1.056E-08	-7.364E-18	-7.364E-18	-1.779E-07	-1.779E-07	-1.121E-12
0.60000	2.357E-08	2.357E-08	-1.483E-17	-1.483E-17	-3.343E-07	-3.344E-07	-2.559E-12
0.70000	6.430E-08	6.430E-08	-3.717E-17	-3.717E-17	-6.893E-07	-6.894E-07	-7.063E-12
0.80000	2.307E-07	2.307E-07	-1.288E-16	-1.288E-16	-1.745E-06	-1.745E-06	-2.740E-11
0.85000	5.241E-07	5.242E-07	-2.837E-16	-2.838E-16	-3.181E-06	-3.181E-06	-6.466E-11
0.90000	1.416E-06	1.416E-06	-7.293E-16	-7.296E-16	-6.599E-06	-6.600E-06	-1.766E-10
0.92500	2.513E-06	2.514E-06	-1.245E-15	-1.246E-15	-1.023E-05	-1.024E-05	-2.989E-10
0.95000	4.633E-06	4.635E-06	-1.947E-15	-1.948E-15	-1.615E-05	-1.615E-05	-4.883E-10
0.96250	6.498E-06	6.503E-06	-2.318E-15	-2.319E-15	-2.014E-05	-2.015E-05	-5.950E-10
0.97500	9.024E-06	9.031E-06	-2.628E-15	-2.629E-15	-2.478E-05	-2.479E-05	-6.940E-10
0.98125	1.058E-05	1.059E-05	-2.742E-15	-2.743E-15	-2.729E-05	-2.730E-05	-7.329E-10
0.98750	1.231E-05	1.231E-05	-2.821E-15	-2.821E-15	-2.989E-05	-2.990E-05	-7.603E-10
0.99375	1.416E-05	1.417E-05	-2.859E-15	-2.859E-15	-3.255E-05	-3.256E-05	-7.738E-10
1.00000	1.605E-05	1.606E-05	-2.854E-15	-2.854E-15	-3.523E-05	-3.524E-05	-7.721E-10
1.00625	1.788E-05	1.789E-05	-2.807E-15	-2.807E-15	-3.787E-05	-3.789E-05	-7.555E-10
1.01250	1.954E-05	1.955E-05	-2.721E-15	-2.720E-15	-4.046E-05	-4.047E-05	-7.254E-10
1.01875	2.099E-05	2.100E-05	-2.599E-15	-2.599E-15	-4.295E-05	-4.296E-05	-6.845E-10
1.02500	2.226E-05	2.226E-05	-2.450E-15	-2.450E-15	-4.531E-05	-4.532E-05	-6.361E-10
1.03750	2.425E-05	2.425E-05	-2.096E-15	-2.095E-15	-4.957E-05	-4.958E-05	-5.297E-10
1.05000	2.560E-05	2.560E-05	-1.715E-15	-1.715E-15	-5.314E-05	-5.315E-05	-4.275E-10
1.07500	2.706E-05	2.706E-05	-1.068E-15	-1.068E-15	-5.828E-05	-5.829E-05	-2.538E-10
1.10000	2.760E-05	2.761E-05	-6.106E-16	-6.104E-16	-6.136E-05	-6.137E-05	-1.522E-10
1.15000	2.737E-05	2.738E-05	-2.471E-16	-2.471E-16	-6.434E-05	-6.434E-05	-5.660E-11
1.20000	2.654E-05	2.654E-05	-1.152E-16	-1.151E-16	-6.557E-05	-6.558E-05	-2.442E-11
1.30000	2.464E-05	2.464E-05	-3.446E-17	-3.446E-17	-6.654E-05	-6.654E-05	-6.468E-12
1.40000	2.290E-05	2.290E-05	-1.399E-17	-1.399E-17	-6.687E-05	-6.687E-05	-2.392E-12
1.50000	2.138E-05	2.138E-05	-7.038E-18	-7.038E-18	-6.702E-05	-6.702E-05	-1.059E-12
1.60000	2.004E-05	2.005E-05	-3.881E-18	-3.880E-18	-6.710E-05	-6.710E-05	-5.447E-13
1.70000	1.887E-05	1.887E-05	-2.147E-18	-2.147E-18	-6.714E-05	-6.714E-05	-3.261E-13
1.80000	1.782E-05	1.782E-05	-1.237E-18	-1.237E-18	-6.716E-05	-6.717E-05	-2.101E-13
1.90000	1.689E-05	1.689E-05	-7.118E-19	-7.118E-19	-6.718E-05	-6.718E-05	-1.482E-13
2.00000	1.604E-05	1.604E-05	-4.090E-19	-4.090E-19	-6.719E-05	-6.719E-05	-1.111E-13

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 6.000 θ_D= 0. ρ_a=22.491

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	6.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	6.0000	0.10000	193.774	9.338E-07	9.994E-01	-1.798E-07	-1.798E-07	1.798E-07
0.20000	6.0000	0.20000	172.422	1.614E-06	9.992E-01	-2.541E-07	-2.541E-07	2.541E-07
0.30000	6.0000	0.30000	151.116	3.015E-06	9.988E-01	-3.590E-07	-3.590E-07	3.590E-07
0.40000	6.0000	0.40000	129.879	5.176E-06	9.983E-01	-5.314E-07	-5.315E-07	5.314E-07
0.50000	6.0000	0.50000	108.752	9.658E-06	9.975E-01	-7.871E-07	-7.871E-07	7.871E-07
0.60000	6.0000	0.60000	87.814	1.473E-05	9.962E-01	-1.256E-06	-1.256E-06	1.256E-06
0.70000	6.0000	0.70000	67.242	3.991E-05	9.942E-01	-2.312E-06	-2.312E-06	2.312E-06
0.80000	6.0000	0.80000	47.613	1.358E-04	9.924E-01	-5.064E-06	-5.065E-06	5.064E-06
0.85000	6.0000	0.85000	38.376	2.873E-04	9.943E-01	-8.229E-06	-8.230E-06	8.228E-06
0.90000	6.0000	0.90000	30.322	6.971E-04	1.003E 00	-1.400E-05	-1.400E-05	1.400E-05
0.92500	6.0001	0.92500	27.011	1.126E-03	1.009E 00	-1.865E-05	-1.866E-05	1.865E-05
0.95000	6.0001	0.95000	24.446	1.767E-03	1.012E 00	-2.344E-05	-2.344E-05	2.344E-05
0.96250	6.0001	0.96250	23.522	2.169E-03	1.010E 00	-2.545E-05	-2.545E-05	2.544E-05
0.97500	6.0002	0.97500	22.880	2.615E-03	1.005E 00	-2.694E-05	-2.695E-05	2.694E-05
0.98125	6.0002	0.98125	22.671	2.852E-03	1.003E 00	-2.745E-05	-2.745E-05	2.745E-05
0.98750	6.0002	0.98750	22.542	3.113E-03	1.001E 00	-2.781E-05	-2.781E-05	2.781E-05
0.99375	6.0002	0.99375	22.492	3.430E-03	9.996E-01	-2.797E-05	-2.797E-05	2.797E-05
1.00000	6.0002	1.00000	22.522	3.720E-03	9.998E-01	-2.787E-05	-2.787E-05	2.787E-05
1.00625	6.0003	1.00625	22.632	4.003E-03	1.001E 00	-2.754E-05	-2.754E-05	2.755E-05
1.01250	6.0003	1.01250	22.821	4.227E-03	1.004E 00	-2.708E-05	-2.708E-05	2.709E-05
1.01875	6.0003	1.01875	23.088	4.472E-03	1.007E 00	-2.645E-05	-2.645E-05	2.645E-05
1.02500	6.0003	1.02500	23.428	4.691E-03	1.011E 00	-2.566E-05	-2.566E-05	2.566E-05
1.03750	6.0004	1.03750	24.318	5.098E-03	1.016E 00	-2.371E-05	-2.371E-05	2.371E-05
1.05000	6.0004	1.05000	25.463	5.454E-03	1.018E 00	-2.141E-05	-2.141E-05	2.141E-05
1.07500	6.0006	1.07500	28.386	6.002E-03	1.015E 00	-1.651E-05	-1.651E-05	1.651E-05
1.10000	6.0007	1.10000	31.953	6.330E-03	1.008E 00	-1.257E-05	-1.257E-05	1.257E-05
1.15000	6.0010	1.15000	40.312	6.654E-03	9.983E-01	-7.278E-06	-7.278E-06	7.279E-06
1.20000	6.0012	1.20000	49.604	6.794E-03	9.945E-01	-4.559E-06	-4.558E-06	4.559E-06
1.30000	6.0016	1.30000	69.470	6.873E-03	9.936E-01	-2.150E-06	-2.150E-06	2.150E-06
1.40000	6.0020	1.40000	90.097	6.902E-03	9.944E-01	-1.187E-06	-1.187E-06	1.187E-06
1.50000	6.0023	1.50000	111.061	6.910E-03	9.952E-01	-7.540E-07	-7.540E-07	7.540E-07
1.60000	6.0026	1.60000	132.203	6.917E-03	9.957E-01	-5.090E-07	-5.090E-07	5.090E-07
1.70000	6.0029	1.70000	153.449	6.924E-03	9.960E-01	-3.457E-07	-3.457E-07	3.457E-07
1.80000	6.0031	1.80000	174.761	6.931E-03	9.963E-01	-2.447E-07	-2.447E-07	2.447E-07
1.90000	6.0033	1.90000	196.118	6.931E-03	9.964E-01	-1.730E-07	-1.730E-07	1.730E-07
2.00000	6.0035	2.00000	217.506	6.931E-03	9.965E-01	-1.238E-07	-1.238E-07	1.238E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 6.000 θ_D= 0. ρ_o=22.491

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.798E-07	49.901	-7.605E-06	-7.605E-06	7.605E-06	7.605E-06	-2.986E-08	-2.986E-08
0.20000	2.541E-07	99.802	-1.832E-05	-1.833E-05	1.832E-05	1.833E-05	-4.222E-08	-4.222E-08
0.30000	3.590E-07	149.703	-3.347E-05	-3.348E-05	3.347E-05	3.348E-05	-5.964E-08	-5.964E-08
0.40000	5.315E-07	199.605	-5.539E-05	-5.539E-05	5.539E-05	5.539E-05	-8.828E-08	-8.828E-08
0.50000	7.871E-07	249.506	-8.788E-05	-8.788E-05	8.788E-05	8.788E-05	-1.308E-07	-1.308E-07
0.60000	1.256E-06	299.407	-1.372E-04	-1.372E-04	1.372E-04	1.372E-04	-2.087E-07	-2.087E-07
0.70000	2.312E-06	349.308	-2.222E-04	-2.222E-04	2.222E-04	2.222E-04	-3.840E-07	-3.840E-07
0.80000	5.065E-06	399.209	-3.927E-04	-3.927E-04	3.927E-04	3.927E-04	-8.413E-07	-8.413E-07
0.85000	8.230E-06	424.160	-5.541E-04	-5.541E-04	5.541E-04	5.541E-04	-1.367E-06	-1.367E-06
0.90000	1.400E-05	449.110	-8.273E-04	-8.274E-04	8.273E-04	8.274E-04	-2.325E-06	-2.326E-06
0.92500	1.866E-05	461.585	-1.030E-03	-1.030E-03	1.030E-03	1.030E-03	-3.099E-06	-3.099E-06
0.95000	2.344E-05	474.061	-1.293E-03	-1.293E-03	1.293E-03	1.293E-03	-3.893E-06	-3.894E-06
0.96250	2.545E-05	480.298	-1.446E-03	-1.446E-03	1.446E-03	1.446E-03	-4.227E-06	-4.227E-06
0.97500	2.695E-05	486.536	-1.609E-03	-1.609E-03	1.609E-03	1.610E-03	-4.476E-06	-4.476E-06
0.98125	2.746E-05	489.655	-1.696E-03	-1.696E-03	1.696E-03	1.695E-03	-4.559E-06	-4.560E-06
0.98750	2.781E-05	492.773	-1.780E-03	-1.780E-03	1.781E-03	1.781E-03	-4.619E-06	-4.619E-06
0.99375	2.797E-05	495.892	-1.867E-03	-1.867E-03	1.868E-03	1.868E-03	-4.645E-06	-4.646E-06
1.00000	2.787E-05	499.011	-1.954E-03	-1.955E-03	1.955E-03	1.955E-03	-4.630E-06	-4.630E-06
1.00625	2.754E-05	502.130	-2.041E-03	-2.041E-03	2.041E-03	2.042E-03	-4.576E-06	-4.576E-06
1.01250	2.708E-05	505.249	-2.126E-03	-2.126E-03	2.127E-03	2.127E-03	-4.499E-06	-4.499E-06
1.01875	2.645E-05	508.367	-2.209E-03	-2.210E-03	2.210E-03	2.211E-03	-4.394E-06	-4.394E-06
1.02500	2.566E-05	511.486	-2.291E-03	-2.291E-03	2.292E-03	2.292E-03	-4.263E-06	-4.263E-06
1.03750	2.371E-05	517.724	-2.445E-03	-2.445E-03	2.446E-03	2.446E-03	-3.938E-06	-3.938E-06
1.05000	2.141E-05	523.961	-2.586E-03	-2.586E-03	2.587E-03	2.587E-03	-3.557E-06	-3.557E-06
1.07500	1.651E-05	536.437	-2.822E-03	-2.822E-03	2.823E-03	2.824E-03	-2.742E-06	-2.742E-06
1.10000	1.257E-05	548.912	-3.001E-03	-3.001E-03	3.003E-03	3.003E-03	-2.088E-06	-2.088E-06
1.15000	7.278E-06	573.862	-3.244E-03	-3.244E-03	3.246E-03	3.246E-03	-1.209E-06	-1.209E-06
1.20000	4.558E-06	598.813	-3.389E-03	-3.390E-03	3.392E-03	3.392E-03	-7.572E-07	-7.572E-07
1.30000	2.150E-06	648.714	-3.546E-03	-3.546E-03	3.548E-03	3.548E-03	-3.572E-07	-3.572E-07
1.40000	1.187E-06	698.615	-3.625E-03	-3.625E-03	3.628E-03	3.628E-03	-1.971E-07	-1.971E-07
1.50000	7.540E-07	748.516	-3.672E-03	-3.672E-03	3.675E-03	3.675E-03	-1.253E-07	-1.253E-07
1.60000	5.090E-07	798.417	-3.703E-03	-3.703E-03	3.706E-03	3.706E-03	-8.455E-08	-8.455E-08
1.70000	3.457E-07	848.319	-3.724E-03	-3.724E-03	3.727E-03	3.727E-03	-5.743E-08	-5.743E-08
1.80000	2.447E-07	898.220	-3.738E-03	-3.738E-03	3.742E-03	3.742E-03	-4.065E-08	-4.064E-08
1.90000	1.730E-07	948.121	-3.748E-03	-3.749E-03	3.752E-03	3.752E-03	-2.875E-08	-2.875E-08
2.00000	1.238E-07	998.022	-3.756E-03	-3.756E-03	3.759E-03	3.760E-03	-2.057E-08	-2.057E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 6.000 θ_D= 0. ρ_o=22.491

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.626E-13
0.10000	5.166E-10	5.164E-10	-7.417E-19	-7.417E-19	-8.524E-09	-8.525E-09	-2.177E-13
0.20000	1.439E-09	1.439E-09	-1.287E-18	-1.287E-18	-2.333E-08	-2.333E-08	-3.102E-13
0.30000	3.038E-09	3.038E-09	-2.231E-18	-2.231E-18	-4.900E-08	-4.900E-08	-4.845E-13
0.40000	6.394E-09	6.394E-09	-4.034E-18	-4.034E-18	-9.449E-08	-9.449E-08	-8.122E-13
0.50000	1.256E-08	1.256E-08	-7.291E-18	-7.291E-18	-1.768E-07	-1.768E-07	-1.591E-12
0.60000	2.777E-08	2.777E-08	-1.454E-17	-1.455E-17	-3.309E-07	-3.309E-07	-3.597E-12
0.70000	7.433E-08	7.434E-08	-3.575E-17	-3.575E-17	-6.753E-07	-6.753E-07	-9.698E-12
0.80000	2.531E-07	2.532E-07	-1.167E-16	-1.167E-16	-1.658E-06	-1.658E-06	-3.557E-11
0.85000	5.468E-07	5.469E-07	-2.391E-16	-2.391E-16	-2.919E-06	-2.920E-06	-7.885E-11
0.90000	1.355E-06	1.356E-06	-5.246E-16	-5.247E-16	-5.670E-06	-5.672E-06	-1.905E-10
0.92500	2.263E-06	2.264E-06	-8.325E-16	-8.328E-16	-8.167E-06	-8.169E-06	-2.862E-10
0.95000	3.881E-06	3.882E-06	-1.205E-15	-1.205E-15	-1.197E-05	-1.198E-05	-4.145E-10
0.96250	5.183E-06	5.186E-06	-1.376E-15	-1.376E-15	-1.439E-05	-1.439E-05	-4.811E-10
0.97500	6.769E-06	6.773E-06	-1.510E-15	-1.510E-15	-1.710E-05	-1.710E-05	-5.365E-10
0.98125	7.731E-06	7.735E-06	-1.556E-15	-1.556E-15	-1.853E-05	-1.854E-05	-5.564E-10
0.98750	8.762E-06	8.767E-06	-1.586E-15	-1.586E-15	-2.000E-05	-2.001E-05	-5.685E-10
0.99375	9.833E-06	9.838E-06	-1.598E-15	-1.599E-15	-2.149E-05	-2.150E-05	-5.729E-10
1.00000	1.091E-05	1.091E-05	-1.591E-15	-1.591E-15	-2.298E-05	-2.299E-05	-5.702E-10
1.00625	1.194E-05	1.195E-05	-1.564E-15	-1.564E-15	-2.446E-05	-2.446E-05	-5.603E-10
1.01250	1.291E-05	1.291E-05	-1.522E-15	-1.522E-15	-2.590E-05	-2.591E-05	-5.421E-10
1.01875	1.378E-05	1.378E-05	-1.465E-15	-1.465E-15	-2.730E-05	-2.731E-05	-5.178E-10
1.02500	1.465E-05	1.456E-05	-1.395E-15	-1.395E-15	-2.864E-05	-2.864E-05	-4.889E-10
1.03750	1.580E-05	1.580E-05	-1.227E-15	-1.227E-15	-3.110E-05	-3.110E-05	-4.231E-10
1.05000	1.668E-05	1.668E-05	-1.041E-15	-1.040E-15	-3.322E-05	-3.322E-05	-3.555E-10
1.07500	1.777E-05	1.777E-05	-6.831E-16	-6.830E-16	-3.642E-05	-3.643E-05	-2.403E-10
1.10000	1.827E-05	1.827E-05	-4.475E-16	-4.474E-16	-3.848E-05	-3.848E-05	-1.551E-10
1.15000	1.833E-05	1.833E-05	-1.994E-16	-1.994E-16	-4.079E-05	-4.079E-05	-6.644E-11
1.20000	1.789E-05	1.789E-05	-9.991E-17	-9.990E-17	-4.187E-05	-4.188E-05	-3.056E-11
1.30000	1.668E-05	1.668E-05	-3.212E-17	-3.211E-17	-4.274E-05	-4.274E-05	-8.587E-12
1.40000	1.552E-05	1.552E-05	-1.338E-17	-1.338E-17	-4.305E-05	-4.305E-05	-3.270E-12
1.50000	1.449E-05	1.449E-05	-6.834E-18	-6.834E-18	-4.319E-05	-4.319E-05	-1.467E-12
1.60000	1.359E-05	1.359E-05	-3.780E-18	-3.780E-18	-4.327E-05	-4.327E-05	-7.639E-13
1.70000	1.279E-05	1.279E-05	-2.100E-18	-2.100E-18	-4.331E-05	-4.331E-05	-4.599E-13
1.80000	1.208E-05	1.208E-05	-1.212E-18	-1.212E-18	-4.333E-05	-4.334E-05	-2.978E-13
1.90000	1.144E-05	1.144E-05	-6.981E-19	-6.981E-19	-4.335E-05	-4.335E-05	-2.109E-13
2.00000	1.087E-05	1.087E-05	-4.015E-19	-4.015E-19	-4.336E-05	-4.336E-05	-1.584E-13

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 7.000 θ_D= 0. ρ_0= 26.222

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	7.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	7.0000	0.10000	193.821	1.127E-06	9.993E-01	-1.796E-07	-1.796E-07	1.796E-07
0.20000	7.0000	0.20000	172.528	1.948E-06	9.991E-01	-2.537E-07	-2.537E-07	2.537E-07
0.30000	7.0000	0.30000	151.297	3.575E-06	9.987E-01	-3.580E-07	-3.580E-07	3.580E-07
0.40000	7.0000	0.40000	130.160	5.443E-06	9.982E-01	-5.287E-07	-5.287E-07	5.287E-07
0.50000	7.0000	0.50000	109.171	9.231E-06	9.973E-01	-7.810E-07	-7.810E-07	7.810E-07
0.60000	7.0000	0.60000	88.437	1.857E-05	9.961E-01	-1.237E-06	-1.237E-06	1.237E-06
0.70000	7.0000	0.70000	68.187	4.312E-05	9.944E-01	-2.242E-06	-2.242E-06	2.242E-06
0.80000	7.0000	0.80000	49.029	1.424E-04	9.942E-01	-4.692E-06	-4.693E-06	4.692E-06
0.85000	7.0000	0.85000	40.351	2.886E-04	9.974E-01	-7.263E-06	-7.264E-06	7.263E-06
0.90000	7.0001	0.90000	32.925	6.510E-04	1.005E 00	-1.179E-05	-1.179E-05	1.179E-05
0.92500	7.0001	0.92500	29.980	9.494E-04	1.008E 00	-1.432E-05	-1.433E-05	1.432E-05
0.95000	7.0001	0.95000	27.774	1.413E-03	1.008E 00	-1.743E-05	-1.743E-05	1.743E-05
0.96250	7.0001	0.96250	27.007	1.678E-03	1.005E 00	-1.866E-05	-1.866E-05	1.866E-05
0.97500	7.0001	0.97500	26.492	2.005E-03	1.002E 00	-1.954E-05	-1.954E-05	1.954E-05
0.98125	7.0002	0.98125	26.334	2.175E-03	1.001E 00	-1.981E-05	-1.981E-05	1.981E-05
0.98750	7.0002	0.98750	26.244	2.345E-03	9.999E-01	-1.997E-05	-1.997E-05	1.997E-05
0.99375	7.0002	0.99375	26.223	2.515E-03	9.995E-01	-2.001E-05	-2.001E-05	2.001E-05
1.00000	7.0002	1.00000	26.271	2.686E-03	9.998E-01	-1.993E-05	-1.993E-05	1.993E-05
1.00625	7.0002	1.00626	26.387	2.858E-03	1.001E 00	-1.972E-05	-1.972E-05	1.972E-05
1.01250	7.0002	1.01250	26.571	3.024E-03	1.002E 00	-1.940E-05	-1.940E-05	1.940E-05
1.01875	7.0002	1.01875	26.821	3.185E-03	1.004E 00	-1.897E-05	-1.897E-05	1.897E-05
1.02500	7.0003	1.02500	27.136	3.340E-03	1.007E 00	-1.845E-05	-1.845E-05	1.845E-05
1.03750	7.0003	1.03750	27.949	3.633E-03	1.011E 00	-1.716E-05	-1.716E-05	1.716E-05
1.05000	7.0003	1.05000	28.990	3.889E-03	1.013E 00	-1.564E-05	-1.564E-05	1.564E-05
1.07500	7.0004	1.07500	31.660	4.254E-03	1.014E 00	-1.282E-05	-1.282E-05	1.282E-05
1.10000	7.0005	1.10000	34.960	4.496E-03	1.010E 00	-1.031E-05	-1.031E-05	1.031E-05
1.15000	7.0007	1.15000	42.841	4.769E-03	1.002E 00	-6.408E-06	-6.407E-06	6.408E-06
1.20000	7.0009	1.20000	51.769	4.890E-03	9.975E-01	-4.146E-06	-4.146E-06	4.146E-06
1.30000	7.0012	1.30000	71.161	4.981E-03	9.951E-01	-2.035E-06	-2.035E-06	2.035E-06
1.40000	7.0015	1.40000	91.507	5.010E-03	9.954E-01	-1.145E-06	-1.145E-06	1.145E-06
1.50000	7.0017	1.50000	112.290	5.015E-03	9.960E-01	-7.370E-07	-7.370E-07	7.370E-07
1.60000	7.0019	1.60000	133.305	5.022E-03	9.965E-01	-4.987E-07	-4.986E-07	4.987E-07
1.70000	7.0021	1.70000	154.459	5.025E-03	9.968E-01	-3.401E-07	-3.401E-07	3.401E-07
1.80000	7.0023	1.80000	175.700	5.030E-03	9.971E-01	-2.410E-07	-2.410E-07	2.410E-07
1.90000	7.0024	1.90000	197.002	5.030E-03	9.973E-01	-1.706E-07	-1.706E-07	1.706E-07
2.00000	7.0025	2.00000	218.345	5.030E-03	9.975E-01	-1.222E-07	-1.222E-07	1.222E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 7.000 θ_D= 0. ρ_0= 26.222

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.796E-07	49.901	-7.602E-06	-7.602E-06	7.602E-06	7.602E-06	-2.984E-08	-2.984E-08
0.20000	2.537E-07	99.802	-1.831E-05	-1.831E-05	1.831E-05	1.831E-05	-4.214E-08	-4.214E-08
0.30000	3.580E-07	149.703	-3.342E-05	-3.342E-05	3.342E-05	3.342E-05	-5.947E-08	-5.947E-08
0.40000	5.287E-07	199.605	-5.524E-05	-5.524E-05	5.524E-05	5.525E-05	-8.782E-08	-8.782E-08
0.50000	7.810E-07	249.506	-8.752E-05	-8.752E-05	8.752E-05	8.752E-05	-1.297E-07	-1.297E-07
0.60000	1.237E-06	299.407	-1.363E-04	-1.363E-04	1.363E-04	1.363E-04	-2.055E-07	-2.055E-07
0.70000	2.242E-06	349.308	-2.192E-04	-2.192E-04	2.192E-04	2.192E-04	-3.724E-07	-3.724E-07
0.80000	4.693E-06	399.209	-3.813E-04	-3.814E-04	3.813E-04	3.814E-04	-7.794E-07	-7.795E-07
0.85000	7.264E-06	424.160	-5.287E-04	-5.287E-04	5.287E-04	5.288E-04	-1.207E-06	-1.207E-06
0.90000	1.179E-05	449.110	-7.634E-04	-7.635E-04	7.634E-04	7.635E-04	-1.958E-06	-1.959E-06
0.92500	1.433E-05	461.585	-9.263E-04	-9.264E-04	9.263E-04	9.265E-04	-2.379E-06	-2.380E-06
0.95000	1.743E-05	474.061	-1.125E-03	-1.125E-03	1.125E-03	1.125E-03	-2.896E-06	-2.896E-06
0.96250	1.866E-05	480.298	-1.237E-03	-1.238E-03	1.237E-03	1.238E-03	-3.100E-06	-3.100E-06
0.97500	1.954E-05	486.536	-1.357E-03	-1.357E-03	1.357E-03	1.357E-03	-3.245E-06	-3.246E-06
0.98125	1.982E-05	489.655	-1.418E-03	-1.418E-03	1.418E-03	1.419E-03	-3.291E-06	-3.291E-06
0.98750	1.997E-05	492.774	-1.480E-03	-1.480E-03	1.480E-03	1.481E-03	-3.318E-06	-3.318E-06
0.99375	2.001E-05	495.892	-1.543E-03	-1.543E-03	1.543E-03	1.543E-03	-3.324E-06	-3.324E-06
1.00000	1.993E-05	499.011	-1.605E-03	-1.605E-03	1.605E-03	1.605E-03	-3.310E-06	-3.310E-06
1.00625	1.972E-05	502.130	-1.667E-03	-1.667E-03	1.667E-03	1.667E-03	-3.276E-06	-3.276E-06
1.01250	1.940E-05	505.249	-1.728E-03	-1.728E-03	1.728E-03	1.728E-03	-3.223E-06	-3.223E-06
1.01875	1.897E-05	508.368	-1.788E-03	-1.788E-03	1.788E-03	1.788E-03	-3.152E-06	-3.152E-06
1.02500	1.845E-05	511.486	-1.846E-03	-1.846E-03	1.846E-03	1.847E-03	-3.065E-06	-3.065E-06
1.03750	1.716E-05	517.724	-1.957E-03	-1.957E-03	1.958E-03	1.958E-03	-2.851E-06	-2.851E-06
1.05000	1.564E-05	523.962	-2.059E-03	-2.060E-03	2.060E-03	2.060E-03	-2.599E-06	-2.599E-06
1.07500	1.282E-05	536.437	-2.236E-03	-2.236E-03	2.237E-03	2.237E-03	-2.129E-06	-2.129E-06
1.10000	1.031E-05	548.912	-2.380E-03	-2.380E-03	2.381E-03	2.381E-03	-1.713E-06	-1.712E-06
1.15000	6.407E-06	573.863	-2.583E-03	-2.583E-03	2.584E-03	2.584E-03	-1.064E-06	-1.064E-06
1.20000	4.146E-06	598.813	-2.713E-03	-2.713E-03	2.714E-03	2.714E-03	-6.887E-07	-6.886E-07
1.30000	2.035E-06	648.714	-2.858E-03	-2.858E-03	2.859E-03	2.859E-03	-3.381E-07	-3.381E-07
1.40000	1.146E-06	698.615	-2.934E-03	-2.934E-03	2.935E-03	2.935E-03	-1.903E-07	-1.903E-07
1.50000	7.370E-07	748.516	-2.979E-03	-2.979E-03	2.981E-03	2.981E-03	-1.224E-07	-1.224E-07
1.60000	4.986E-07	798.418	-3.009E-03	-3.010E-03	3.011E-03	3.011E-03	-8.283E-08	-8.283E-08
1.70000	3.401E-07	848.319	-3.030E-03	-3.030E-03	3.032E-03	3.032E-03	-5.649E-08	-5.649E-08
1.80000	2.410E-07	898.220	-3.044E-03	-3.044E-03	3.046E-03	3.046E-03	-4.003E-08	-4.003E-08
1.90000	1.706E-07	948.121	-3.054E-03	-3.055E-03	3.056E-03	3.056E-03	-2.834E-08	-2.834E-08
2.00000	1.222E-07	998.022	-3.062E-03	-3.062E-03	3.064E-03	3.064E-03	-2.030E-08	-2.030E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 7.000 θ_D= 0. ρ_0= 26.222

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.210E-13
0.10000	6.018E-10	6.017E-10	-7.408E-19	-7.408E-19	-8.519E-09	-8.519E-09	-2.957E-13
0.20000	1.675E-09	1.675E-09	-1.283E-18	-1.283E-18	-2.329E-08	-2.329E-08	-4.209E-13
0.30000	3.532E-09	3.532E-09	-2.220E-18	-2.220E-18	-4.887E-08	-4.887E-08	-6.559E-13
0.40000	7.416E-09	7.416E-09	-4.002E-18	-4.002E-18	-9.407E-08	-9.407E-08	-1.096E-12
0.50000	1.483E-08	1.483E-08	-7.205E-18	-7.206E-18	-1.756E-07	-1.756E-07	-2.130E-12
0.60000	3.176E-08	3.176E-08	-1.422E-17	-1.422E-17	-3.269E-07	-3.269E-07	-4.760E-12
0.70000	8.350E-08	8.350E-08	-3.416E-17	-3.416E-17	-6.589E-07	-6.589E-07	-1.250E-11
0.80000	2.709E-07	2.710E-07	-1.043E-16	-1.043E-16	-1.568E-06	-1.568E-06	-4.322E-11
0.85000	5.[illegible]5E-07	5.586E-07	-1.988E-16	-1.988E-16	-2.669E-06	-2.670E-06	-8.986E-11
0.90000	1.[illegible]E-06	1.280E-06	-4.069E-16	-4.070E-16	-4.864E-06	-4.865E-06	-1.876E-10
0.92500	2.0[illegible]E-06	2.014E-06	-5.428E-16	-5.430E-16	-6.637E-06	-6.638E-06	-2.710E-10
0.95000	3.209E-06	3.210E-06	-7.459E-16	-7.461E-16	-9.049E-06	-9.051E-06	-3.523E-10
0.96250	4.022E-06	4.024E-06	-8.330E-16	-8.332E-16	-1.052E-05	-1.053E-05	-3.893E-10
0.97500	4.967E-06	4.969E-06	-8.971E-16	-8.973E-16	-1.215E-05	-1.215E-05	-4.174E-10
0.98125	5.482E-06	5.484E-06	-9.178E-16	-9.179E-16	-1.300E-05	-1.300E-05	-4.266E-10
0.98750	6.017E-06	6.019E-06	-9.298E-16	-9.299E-16	-1.386E-05	-1.386E-05	-4.320E-10
0.99375	6.565E-06	6.567E-06	-9.326E-16	-9.327E-16	-1.473E-05	-1.473E-05	-4.333E-10
1.00000	7.110E-06	7.112E-06	-9.262E-16	-9.263E-16	-1.560E-05	-1.560E-05	-4.304E-10
1.00625	7.637E-06	7.639E-06	-9.109E-16	-9.109E-16	-1.646E-05	-1.646E-05	-4.235E-10
1.01250	8.135E-06	8.137E-06	-8.871E-16	-8.870E-16	-1.730E-05	-1.730E-05	-4.129E-10
1.01875	8.595E-06	8.597E-06	-8.557E-16	-8.556E-16	-1.812E-05	-1.812E-05	-3.992E-10
1.02500	9.016E-06	9.018E-06	-8.178E-16	-8.177E-16	-1.890E-05	-1.890E-05	-3.828E-10
1.03750	9.746E-06	9.748E-06	-7.274E-16	-7.273E-16	-2.035E-05	-2.035E-05	-3.447E-10
1.05000	1.033E-05	1.033E-05	-6.261E-16	-6.260E-16	-2.161E-05	-2.162E-05	-3.037E-10
1.07500	1.111E-05	1.111E-05	-4.604E-16	-4.603E-16	-2.361E-05	-2.362E-05	-2.185E-10
1.10000	1.152E-05	1.152E-05	-3.337E-16	-3.337E-16	-2.509E-05	-2.510E-05	-1.499E-10
1.15000	1.170E-05	1.170E-05	-1.652E-16	-1.652E-16	-2.687E-05	-2.687E-05	-7.120E-11
1.20000	1.150E-05	1.150E-05	-8.647E-17	-8.646E-17	-2.778E-05	-2.778E-05	-3.535E-11
1.30000	1.080E-05	1.080E-05	-2.961E-17	-2.961E-17	-2.855E-05	-2.855E-05	-1.067E-11
1.40000	1.008E-05	1.008E-05	-1.271E-17	-1.271E-17	-2.884E-05	-2.884E-05	-4.195E-12
1.50000	9.416E-06	9.416E-06	-6.603E-18	-6.603E-18	-2.897E-05	-2.898E-05	-1.910E-12
1.60000	8.831E-06	8.831E-06	-3.665E-18	-3.665E-18	-2.905E-05	-2.905E-05	-1.008E-12
1.70000	8.313E-06	8.313E-06	-2.046E-18	-2.046E-18	-2.909E-05	-2.909E-05	-6.110E-13
1.80000	7.852E-06	7.852E-06	-1.183E-18	-1.183E-18	-2.911E-05	-2.912E-05	-3.981E-13
1.90000	7.438E-06	7.439E-06	-6.824E-19	-6.824E-19	-2.913E-05	-2.913E-05	-2.831E-13
2.00000	7.066E-06	7.067E-06	-3.929E-19	-3.929E-19	-2.914E-05	-2.914E-05	-2.132E-13

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 8.000 θ_D= 0. ρ_0=29.945

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	8.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	8.0000	0.10000	193.876	1.087E-06	9.994E-01	-1.795E-07	-1.795E-07	1.795E-07
0.20000	8.0000	0.20000	172.650	2.028E-06	9.992E-01	-2.532E-07	-2.532E-07	2.532E-07
0.30000	8.0000	0.30000	151.506	3.735E-06	9.989E-01	-3.568E-07	-3.568E-07	3.568E-07
0.40000	8.0000	0.40000	130.484	6.777E-06	9.985E-01	-5.255E-07	-5.255E-07	5.255E-07
0.50000	8.0000	0.50000	109.653	1.057E-05	9.979E-01	-7.740E-07	-7.740E-07	7.740E-07
0.60000	8.0000	0.60000	89.149	2.092E-05	9.969E-01	-1.215E-06	-1.215E-06	1.215E-06
0.70000	8.0000	0.70000	69.261	4.674E-05	9.958E-01	-2.165E-06	-2.165E-06	2.165E-06
0.80000	8.0000	0.80000	50.721	1.611E-04	9.963E-01	-4.334E-06	-4.334E-06	4.334E-06
0.85000	8.0000	0.85000	42.515	2.984E-04	9.992E-01	-6.514E-06	-6.514E-06	6.513E-06
0.90000	8.0000	0.90000	35.692	5.968E-04	1.004E 00	-9.823E-06	-9.824E-06	9.823E-06
0.92500	8.0001	0.92500	33.074	8.299E-04	1.005E 00	-1.167E-05	-1.168E-05	1.167E-05
0.95000	8.0001	0.95000	31.173	1.109E-03	1.004E 00	-1.323E-05	-1.324E-05	1.323E-05
0.96250	8.0001	0.96250	30.636	1.264E-03	1.002E 00	-1.380E-05	-1.380E-05	1.380E-05
0.97500	8.0001	0.97500	30.124	1.447E-03	1.001E 00	-1.418E-05	-1.418E-05	1.418E-05
0.98125	8.0001	0.98125	30.008	1.540E-03	1.000E-00	-1.429E-05	-1.429E-05	1.429E-05
0.98750	8.0001	0.98750	29.951	1.641E-03	9.996E-01	-1.436E-05	-1.436E-05	1.436E-05
0.99375	8.0002	0.99375	29.954	1.769E-03	9.996E-01	-1.436E-05	-1.436E-05	1.436E-05
1.00000	8.0002	1.00000	30.018	1.870E-03	9.999E-01	-1.428E-05	-1.428E-05	1.428E-05
1.00625	8.0002	1.00625	30.142	1.959E-03	1.000E 00	-1.417E-05	-1.417E-05	1.417E-05
1.01250	8.0002	1.01250	30.325	2.052E-03	1.001E 00	-1.400E-05	-1.400E-05	1.400E-05
1.01875	8.0002	1.01875	30.566	2.140E-03	1.003E 00	-1.378E-05	-1.378E-05	1.378E-05
1.02500	8.0002	1.02500	30.863	2.227E-03	1.004E 00	-1.351E-05	-1.351E-05	1.351E-05
1.03750	8.0002	1.03750	31.623	2.389E-03	1.006E 00	-1.285E-05	-1.285E-05	1.285E-05
1.05000	8.0003	1.05000	32.587	2.537E-03	1.008E 00	-1.206E-05	-1.206E-05	1.206E-05
1.07500	8.0003	1.07500	35.058	2.788E-03	1.010E 00	-1.024E-05	-1.024E-05	1.024E-05
1.10000	8.0004	1.10000	38.134	2.980E-03	1.008E 00	-8.362E-06	-8.362E-06	8.362E-06
1.15000	8.0005	1.15000	45.584	3.195E-03	1.003E 00	-5.581E-06	-5.581E-06	5.581E-06
1.20000	8.0006	1.20000	54.158	3.309E-03	9.994E-01	-3.747E-06	-3.746E-06	3.747E-06
1.30000	8.0008	1.30000	73.061	3.388E-03	9.969E-01	-1.914E-06	-1.914E-06	1.914E-06
1.40000	8.0010	1.40000	93.106	3.417E-03	9.968E-01	-1.101E-06	-1.100E-06	1.101E-06
1.50000	8.0012	1.50000	113.689	3.427E-03	9.971E-01	-7.181E-07	-7.181E-07	7.181E-07
1.60000	8.0013	1.60000	134.565	3.430E-03	9.975E-01	-4.871E-07	-4.871E-07	4.871E-07
1.70000	8.0014	1.70000	155.615	3.437E-03	9.978E-01	-3.338E-07	-3.338E-07	3.338E-07
1.80000	8.0015	1.80000	176.777	3.441E-03	9.980E-01	-2.368E-07	-2.368E-07	2.368E-07
1.90000	8.0017	1.90000	198.016	3.444E-03	9.981E-01	-1.678E-07	-1.678E-07	1.678E-07
2.00000	8.0017	2.00000	219.308	3.444E-03	9.983E-01	-1.204E-07	-1.204E-07	1.204E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 8.000 θ_D= 0. ρ_a= 29.945

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.795E-07	49.901	-7.599E-06	-7.599E-06	7.599E-06	7.599E-06	-2.981E-08	-2.981E-08
0.20000	2.532E-07	99.802	-1.829E-05	-1.829E-05	1.829E-05	1.829E-05	-4.206E-08	-4.206E-08
0.30000	3.568E-07	149.703	-3.336E-05	-3.336E-05	3.336E-05	3.336E-05	-5.927E-08	-5.927E-08
0.40000	5.255E-07	199.605	-5.508E-05	-5.508E-05	5.508E-05	5.508E-05	-8.729E-08	-8.729E-08
0.50000	7.740E-07	249.506	-8.712E-05	-8.712E-05	8.711E-05	8.712E-05	-1.286E-07	-1.286E-07
0.60000	1.215E-06	299.407	-1.352E-04	-1.352E-04	1.352E-04	1.352E-04	-2.018E-07	-2.018E-07
0.70000	2.165E-06	349.308	-2.159E-04	-2.159E-04	2.159E-04	2.159E-04	-3.596E-07	-3.596E-07
0.80000	4.334E-06	399.209	-3.693E-04	-3.693E-04	3.693E-04	3.694E-04	-7.199E-07	-7.200E-07
0.85000	6.515E-06	424.160	-5.030E-04	-5.031E-04	5.030E-04	5.031E-04	-1.082E-06	-1.082E-06
0.90000	9.824E-06	449.110	-7.035E-04	-7.035E-04	7.035E-04	7.036E-04	-1.632E-06	-1.632E-06
0.92500	1.168E-05	461.586	-8.377E-04	-8.378E-04	8.377E-04	8.378E-04	-1.939E-06	-1.939E-06
0.95000	1.324E-05	474.061	-9.935E-04	-9.936E-04	9.936E-04	9.937E-04	-2.198E-06	-2.199E-06
0.96250	1.380E-05	480.298	-1.078E-03	-1.078E-03	1.078E-03	1.078E-03	-2.293E-06	-2.293E-06
0.97500	1.418E-05	486.536	-1.165E-03	-1.165E-03	1.165E-03	1.166E-03	-2.356E-06	-2.356E-06
0.98125	1.429E-05	489.655	-1.210E-03	-1.210E-03	1.210E-03	1.210E-03	-2.374E-06	-2.374E-06
0.98750	1.436E-05	492.774	-1.254E-03	-1.254E-03	1.254E-03	1.255E-03	-2.386E-06	-2.386E-06
0.99375	1.436E-05	495.892	-1.299E-03	-1.299E-03	1.299E-03	1.299E-03	-2.385E-06	-2.385E-06
1.00000	1.428E-05	499.011	-1.344E-03	-1.344E-03	1.344E-03	1.344E-03	-2.372E-06	-2.372E-06
1.00625	1.417E-05	502.130	-1.388E-03	-1.388E-03	1.388E-03	1.389E-03	-2.353E-06	-2.353E-06
1.01250	1.400E-05	505.249	-1.432E-03	-1.432E-03	1.432E-03	1.432E-03	-2.325E-06	-2.325E-06
1.01875	1.378E-05	508.368	-1.475E-03	-1.476E-03	1.476E-03	1.476E-03	-2.288E-06	-2.288E-06
1.02500	1.351E-05	511.487	-1.518E-03	-1.518E-03	1.518E-03	1.518E-03	-2.244E-06	-2.244E-06
1.03750	1.285E-05	517.724	-1.600E-03	-1.600E-03	1.600E-03	1.601E-03	-2.134E-06	-2.134E-06
1.05000	1.206E-05	523.962	-1.678E-03	-1.678E-03	1.678E-03	1.678E-03	-2.003E-06	-2.003E-06
1.07500	1.024E-05	536.437	-1.817E-03	-1.817E-03	1.818E-03	1.818E-03	-1.701E-06	-1.701E-06
1.10000	8.361E-06	548.912	-1.933E-03	-1.933E-03	1.934E-03	1.934E-03	-1.389E-06	-1.389E-06
1.15000	5.581E-06	573.863	-2.104E-03	-2.104E-03	2.104E-03	2.104E-03	-9.271E-07	-9.271E-07
1.20000	3.746E-06	598.813	-2.218E-03	-2.218E-03	2.219E-03	2.219E-03	-6.224E-07	-6.223E-07
1.30000	1.913E-06	648.714	-2.352E-03	-2.352E-03	2.352E-03	2.352E-03	-3.179E-07	-3.179E-07
1.40000	1.100E-06	698.616	-2.424E-03	-2.424E-03	2.425E-03	2.425E-03	-1.828E-07	-1.828E-07
1.50000	7.181E-07	748.517	-2.468E-03	-2.468E-03	2.469E-03	2.469E-03	-1.193E-07	-1.193E-07
1.60000	4.871E-07	798.418	-2.498E-03	-2.498E-03	2.498E-03	2.498E-03	-8.092E-08	-8.092E-08
1.70000	3.338E-07	848.319	-2.518E-03	-2.518E-03	2.519E-03	2.519E-03	-5.545E-08	-5.545E-08
1.80000	2.368E-07	898.220	-2.532E-03	-2.532E-03	2.533E-03	2.533E-03	-3.934E-08	-3.934E-08
1.90000	1.678E-07	948.121	-2.542E-03	-2.542E-03	2.543E-03	2.543E-03	-2.787E-08	-2.787E-08
2.00000	1.204E-07	998.022	-2.549E-03	-2.549E-03	2.550E-03	2.550E-03	-2.000E-08	-2.000E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 8.000 θ_D= 0. ρ_a= 29.945

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.882E-13
0.10000	6.868E-10	6.868E-10	-7.397E-19	-7.397E-19	-8.513E-09	-8.513E-09	-3.853E-13
0.20000	1.909E-09	1.909E-09	-1.279E-18	-1.279E-18	-2.325E-08	-2.325E-08	-5.476E-13
0.30000	4.022E-09	4.022E-09	-2.208E-18	-2.208E-18	-4.871E-08	-4.872E-08	-8.511E-13
0.40000	8.427E-09	8.426E-09	-3.966E-18	-3.966E-18	-9.358E-08	-9.358E-08	-1.416E-12
0.50000	1.646E-08	1.646E-08	-7.109E-18	-7.109E-18	-1.742E-07	-1.742E-07	-2.730E-12
0.60000	3.560E-08	3.560E-08	-1.385E-17	-1.385E-17	-3.224E-07	-3.224E-07	-6.023E-12
0.70000	9.204E-08	9.204E-08	-3.244E-17	-3.244E-17	-6.413E-07	-6.414E-07	-1.537E-11
0.80000	2.842E-07	2.843E-07	-9.256E-17	-9.257E-17	-1.475E-06	-1.475E-06	-4.979E-11
0.85000	5.596E-07	5.597E-07	-1.693E-16	-1.693E-16	-2.429E-06	-2.429E-06	-9.553E-11
0.90000	1.182E-06	1.182E-06	-3.107E-16	-3.107E-16	-4.164E-06	-4.164E-06	-1.810E-10
0.92500	1.755E-06	1.755E-06	-4.010E-16	-4.011E-16	-5.494E-06	-5.495E-06	-2.405E-10
0.95000	2.584E-06	2.584E-06	-4.828E-16	-4.828E-16	-7.153E-06	-7.154E-06	-3.027E-10
0.96250	3.110E-06	3.111E-06	-5.138E-16	-5.138E-16	-8.086E-06	-8.087E-06	-3.286E-10
0.97500	3.699E-06	3.700E-06	-5.348E-16	-5.348E-16	-9.068E-06	-9.069E-06	-3.469E-10
0.98125	4.009E-06	4.010E-06	-5.409E-16	-5.409E-16	-9.571E-06	-9.572E-06	-3.523E-10
0.98750	4.325E-06	4.325E-06	-5.451E-16	-5.452E-16	-1.008E-05	-1.008E-05	-3.546E-10
0.99375	4.641E-06	4.642E-06	-5.449E-16	-5.449E-16	-1.059E-05	-1.059E-05	-3.545E-10
1.00000	4.954E-06	4.955E-06	-5.404E-16	-5.404E-16	-1.110E-05	-1.110E-05	-3.519E-10
1.00625	5.258E-06	5.259E-06	-5.339E-16	-5.339E-16	-1.160E-05	-1.160E-05	-3.461E-10
1.01250	5.551E-06	5.552E-06	-5.244E-16	-5.244E-16	-1.209E-05	-1.210E-05	-3.378E-10
1.01875	5.828E-06	5.829E-06	-5.123E-16	-5.122E-16	-1.258E-05	-1.258E-05	-3.273E-10
1.02500	6.088E-06	6.089E-06	-4.976E-16	-4.976E-16	-1.305E-05	-1.305E-05	-3.150E-10
1.03750	6.549E-06	6.550E-06	-4.621E-16	-4.621E-16	-1.395E-05	-1.395E-05	-2.862E-10
1.05000	6.928E-06	6.928E-06	-4.206E-16	-4.206E-16	-1.478E-05	-1.478E-05	-2.547E-10
1.07500	7.464E-06	7.464E-06	-3.305E-16	-3.305E-16	-1.618E-05	-1.618E-05	-1.934E-10
1.10000	7.772E-06	7.773E-06	-2.448E-16	-2.448E-16	-1.725E-05	-1.725E-05	-1.430E-10
1.15000	7.973E-06	7.973E-06	-1.347E-16	-1.347E-16	-1.862E-05	-1.862E-05	-7.346E-11
1.20000	7.891E-06	7.892E-06	-7.403E-17	-7.403E-17	-1.938E-05	-1.938E-05	-3.891E-11
1.30000	7.460E-06	7.461E-06	-2.702E-17	-2.702E-17	-2.005E-05	-2.005E-05	-1.264E-11
1.40000	6.978E-06	6.979E-06	-1.199E-17	-1.199E-17	-2.032E-05	-2.032E-05	-5.132E-12
1.50000	6.529E-06	6.529E-06	-6.349E-18	-6.349E-18	-2.045E-05	-2.045E-05	-2.373E-12
1.60000	6.128E-06	6.128E-06	-3.538E-18	-3.538E-18	-2.052E-05	-2.052E-05	-1.272E-12
1.70000	5.771E-06	5.771E-06	-1.986E-18	-1.986E-18	-2.056E-05	-2.056E-05	-7.764E-13
1.80000	5.452E-06	5.452E-06	-1.150E-18	-1.150E-18	-2.059E-05	-2.059E-05	-5.093E-13
1.90000	5.166E-06	5.166E-06	-6.647E-19	-6.647E-19	-2.060E-05	-2.060E-05	-3.639E-13
2.00000	4.908E-06	4.908E-06	-3.832E-19	-3.832E-19	-2.061E-05	-2.061E-05	-2.749E-13

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 10.000 θ_D= 0. ρ_0= 37.362

z	ϕ	z_r	ρ	θ	β	$_0\mu'-1.0$	$_x\mu'-1.0$	$_0\mu'-1.0$
0.	10.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	10.0000	0.10000	194.066	1.027E-06	9.989E-01	-1.791E-07	-1.791E-07	1.791E-07
0.20000	10.0000	0.20000	172.942	2.588E-06	9.986E-01	-2.520E-07	-2.520E-07	2.520E-07
0.30000	10.0000	0.30000	152.006	4.216E-06	9.981E-01	-3.539E-07	-3.539E-07	3.539E-07
0.40000	10.0000	0.40000	131.256	9.445E-06	9.974E-01	-5.180E-07	-5.180E-07	5.180E-07
0.50000	10.0000	0.50000	110.800	1.473E-05	9.964E-01	-7.577E-07	-7.577E-07	7.577E-07
0.60000	10.0000	0.60000	90.834	2.796E-05	9.952E-01	-1.165E-06	-1.165E-06	1.165E-06
0.70000	10.0000	0.70000	71.771	6.319E-05	9.946E-01	-1.995E-06	-1.996E-06	1.995E-06
0.80000	10.0000	0.80000	54.562	1.789E-04	9.977E-01	-3.683E-06	-3.683E-06	3.683E-06
0.85000	10.0000	0.85000	47.299	2.992E-04	1.002E 00	-5.119E-06	-5.120E-06	5.119E-06
0.90000	10.0001	0.90000	41.580	5.033E-04	1.005E 00	-6.828E-06	-6.828E-06	6.828E-06
0.92500	10.0001	0.92500	39.616	6.403E-04	1.005E 00	-7.633E-06	-7.633E-06	7.633E-06
0.95000	10.0001	0.95000	38.105	8.350E-04	1.002E 00	-8.377E-06	-8.378E-06	8.377E-06
0.96250	10.0001	0.96250	37.669	9.426E-04	1.001E 00	-8.622E-06	-8.622E-06	8.622E-06
0.97500	10.0001	0.97500	37.422	1.053E-03	9.997E-01	-8.764E-06	-8.764E-06	8.764E-06
0.98125	10.0001	0.98125	37.370	1.111E-03	9.993E-01	-8.794E-06	-8.794E-06	8.794E-06
0.98750	10.0001	0.98750	37.367	1.167E-03	9.992E-01	-8.796E-06	-8.796E-06	8.796E-06
0.99375	10.0001	0.99375	37.412	1.223E-03	9.994E-01	-8.769E-06	-8.770E-06	8.770E-06
1.00000	10.0001	1.00000	37.506	1.281E-03	9.998E-01	-8.716E-06	-8.716E-06	8.716E-06
1.00625	10.0001	1.00625	37.646	1.340E-03	1.000E 00	-8.635E-06	-8.635E-06	8.635E-06
1.01250	10.0001	1.01250	37.83[illegible]	1.393E-03	1.001E 00	-8.528E-06	-8.528E-06	8.529E-06
1.01875	10.0002	1.01875	38.070	1.448E-03	1.002E 00	-8.397E-06	-8.397E-06	8.397E-06
1.02500	10.0002	1.02500	38.350	1.499E-03	1.004E 00	-8.243E-06	-8.243E-06	8.243E-06
1.03750	10.0002	1.03750	39.045	1.603E-03	1.006E 00	-7.874E-06	-7.874E-06	7.874E-06
1.05000	10.0002	1.05000	39.909	1.692E-03	1.008E 00	-7.438E-06	-7.438E-06	7.438E-06
1.07500	10.0003	1.07500	42.102	1.823E-03	1.011E 00	-6.651E-06	-6.651E-06	6.651E-06
1.10000	10.0003	1.10000	44.836	1.928E-03	1.012E 00	-5.796E-06	-5.795E-06	5.796E-06
1.15000	10.0003	1.15000	51.568	2.080E-03	1.008E 00	-4.181E-06	-4.181E-06	4.181E-06
1.20000	10.0004	1.20000	59.496	2.160E-03	1.003E 00	-2.988E-06	-2.988E-06	2.988E-06
1.30000	10.0006	1.30000	77.428	2.239E-03	9.982E-01	-1.660E-06	-1.660E-06	1.661E-06
1.40000	10.0007	1.40000	96.832	2.271E-03	9.967E-01	-1.003E-06	-1.003E-06	1.003E-06
1.50000	10.0008	1.50000	116.977	2.285E-03	9.966E-01	-6.755E-07	-6.755E-07	6.755E-07
1.60000	10.0009	1.60000	137.537	2.290E-03	9.968E-01	-4.609E-07	-4.609E-07	4.609E-07
1.70000	10.0010	1.70000	158.352	2.298E-03	9.972E-01	-3.193E-07	-3.193E-07	3.193E-07
1.80000	10.0010	1.80000	179.332	2.302E-03	9.974E-01	-2.272E-07	-2.272E-07	2.272E-07
1.90000	10.0011	1.90000	200.426	2.305E-03	9.977E-01	-1.614E-07	-1.614E-07	1.614E-07
2.00000	10.0012	2.00000	221.601	2.307E-03	9.979E-01	-1.162E-07	-1.162E-07	1.162E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 10.000 θ_D= 0. ρ_0= 37.362

z	$_x\mu'-1.0$	T_0	$_0T_t-T_0$	$_xT_t-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.791E-07	49.901	-7.590E-06	-7.591E-06	7.590E-06	7.591E-06	-2.975E-08	-2.975E-08
0.20000	2.520E-07	99.802	-1.824E-05	-1.824E-05	1.824E-05	1.825E-05	-4.186E-08	-4.186E-08
0.30000	3.539E-07	149.703	-3.322E-05	-3.322E-05	3.322E-05	3.322E-05	-5.879E-08	-5.879E-08
0.40000	5.180E-07	199.605	-5.468E-05	-5.468E-05	5.468E-05	5.468E-05	-8.605E-08	-8.605E-08
0.50000	7.577E-07	249.506	-8.615E-05	-8.615E-05	8.615E-05	8.615E-05	-1.259E-07	-1.259E-07
0.60000	1.165E-06	299.407	-1.327E-04	-1.327E-04	1.327E-04	1.327E-04	-1.935E-07	-1.935E-07
0.70000	1.996E-06	349.308	-2.086E-04	-2.086E-04	2.086E-04	2.086E-04	-3.315E-07	-3.315E-07
0.80000	3.683E-06	399.209	-3.446E-04	-3.446E-04	3.446E-04	3.446E-04	-6.118E-07	-6.118E-07
0.85000	5.120E-06	424.160	-4.532E-04	-4.532E-04	4.532E-04	4.532E-04	-8.504E-07	-8.504E-07
0.90000	6.828E-06	449.110	-6.023E-04	-6.024E-04	6.023E-04	6.024E-04	-1.134E-06	-1.134E-06
0.92500	7.634E-06	461.586	-6.925E-04	-6.925E-04	6.925E-04	6.925E-04	-1.268E-06	-1.268E-06
0.95000	8.378E-06	474.061	-7.926E-04	-7.927E-04	7.927E-04	7.927E-04	-1.392E-06	-1.392E-06
0.96250	8.622E-06	480.298	-8.457E-04	-8.457E-04	8.457E-04	8.458E-04	-1.432E-06	-1.432E-06
0.97500	8.764E-06	486.536	-9.000E-04	-9.000E-04	9.000E-04	9.001E-04	-1.456E-06	-1.456E-06
0.98125	8.794E-06	489.655	-9.273E-04	-9.274E-04	9.274E-04	9.[illegible]75E-04	-1.461E-06	-1.461E-06
0.98750	8.796E-06	492.774	-9.548E-04	-9.548E-04	9.548E-04	9.549E-04	-1.461E-06	-1.461E-06
0.99375	8.770E-06	495.892	-9.822E-04	-9.822E-04	9.822E-04	9.823E-04	-1.457E-06	-1.457E-06
1.00000	8.716E-06	499.011	-1.009E-03	-1.009E-03	1.009E-03	1.010E-03	-1.448E-06	-1.448E-06
1.00625	8.635E-06	502.130	-1.037E-03	-1.037E-03	1.037E-03	1.037E-03	-1.434E-06	-1.434E-06
1.01250	8.529E-06	505.249	-1.063E-03	-1.063E-03	1.063E-03	1.063E-03	-1.417E-06	-1.417E-06
1.01875	8.397E-06	508.368	-1.090E-03	-1.090E-03	1.090E-03	1.090E-03	-1.395E-06	-1.395E-06
1.02500	8.243E-06	511.487	-1.116E-03	-1.116E-03	1.116E-03	1.116E-03	-1.369E-06	-1.369E-06
1.03750	7.874E-06	517.724	-1.166E-03	-1.166E-03	1.166E-03	1.166E-03	-1.308E-06	-1.308E-06
1.05000	7.438E-06	523.962	-1.214E-03	-1.214E-03	1.214E-03	1.214E-03	-1.236E-06	-1.236E-06
1.07500	6.651E-06	536.437	-1.302E-03	-1.302E-03	1.302E-03	1.302E-03	-1.105E-06	-1.105E-06
1.10000	5.795E-06	548.912	-1.379E-03	-1.379E-03	1.379E-03	1.379E-03	-9.627E-07	-9.627E-07
1.15000	4.181E-06	573.863	-1.503E-03	-1.503E-03	1.503E-03	1.503E-03	-6.946E-07	-6.945E-07
1.20000	2.988E-06	598.813	-1.592E-03	-1.592E-03	1.592E-03	1.592E-03	-4.964E-07	-4.963E-07
1.30000	1.660E-06	648.715	-1.705E-03	-1.705E-03	1.705E-03	1.705E-03	-2.758E-07	-2.758E-07
1.40000	1.003E-06	698.616	-1.769E-03	-1.769E-03	1.770E-03	1.770E-03	-1.665E-07	-1.665E-07
1.50000	6.755E-07	748.517	-1.810E-03	-1.810E-03	1.811E-03	1.811E-03	-1.122E-07	-1.122E-07
1.60000	4.609E-07	798.418	-1.838E-03	-1.838E-03	1.839E-03	1.839E-03	-7.657E-08	-7.657E-08
1.70000	3.193E-07	848.319	-1.857E-03	-1.857E-03	1.858E-03	1.858E-03	-5.304E-08	-5.304E-08
1.80000	2.272E-07	898.220	-1.871E-03	-1.871E-03	1.871E-03	1.871E-03	-3.774E-08	-3.774E-08
1.90000	1.614E-07	948.121	-1.881E-03	-1.881E-03	1.881E-03	1.881E-03	-2.681E-08	-2.681E-08
2.00000	1.162E-07	998.023	-1.887E-03	-1.887E-03	1.888E-03	1.888E-03	-1.930E-08	-1.930E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-4.487E-13
0.10000	8.552E-10	8.551E-10	-7.372E-19	-7.372E-19	-8.497E-09	-8.498E-09	-5.987E-13
0.20000	2.371E-09	2.371E-09	-1.270E-18	-1.270E-18	-2.315E-08	-2.315E-08	-8.479E-13
0.30000	4.975E-09	4.975E-09	-2.180E-18	-2.180E-18	-4.836E-08	-4.836E-08	-1.310E-12
0.40000	1.036E-08	1.036E-08	-3.881E-18	-3.881E-18	-9.242E-08	-9.242E-08	-2.159E-12
0.50000	2.005E-08	2.005E-08	-6.884E-18	-6.884E-18	-1.709E-07	-1.709E-07	-4.079E-12
0.60000	4.196E-08	4.196E-08	-1.302E-17	-1.302E-17	-3.122E-07	-3.122E-07	-8.741E-12
0.70000	1.030E-07	1.030E-07	-2.875E-17	-2.875E-17	-6.027E-07	-6.027E-07	-2.097E-11
0.80000	2.880E-07	2.880E-07	-7.211E-17	-7.212E-17	-1.294E-06	-1.294E-06	-5.887E-11
0.85000	5.216E-07	5.216E-07	-1.186E-16	-1.186E-16	-1.993E-06	-1.993E-06	-9.980E-11
0.90000	9.827E-07	9.828E-07	-1.814E-16	-1.815E-16	-3.111E-06	-3.111E-06	-1.622E-10
0.92500	1.349E-06	1.349E-06	-2.139E-16	-2.140E-16	-3.849E-06	-3.849E-06	-1.969E-10
0.95000	1.837E-06	1.837E-06	-2.455E-16	-2.455E-16	-4.711E-06	-4.712E-06	-2.231E-10
0.96250	2.121E-06	2.121E-06	-2.562E-16	-2.562E-16	-5.181E-06	-5.181E-06	-2.323E-10
0.97500	2.424E-06	2.424E-06	-2.624E-16	-2.624E-16	-5.667E-06	-5.667E-06	-2.378E-10
0.98125	2.579E-06	2.579E-06	-2.638E-16	-2.638E-16	-5.913E-06	-5.913E-06	-2.390E-10
0.98750	2.734E-06	2.735E-06	-2.638E-16	-2.639E-16	-6.159E-06	-6.160E-06	-2.390E-10
0.99375	2.889E-06	2.889E-06	-2.627E-16	-2.627E-16	-6.406E-06	-6.406E-06	-2.380E-10
1.00000	3.041E-06	3.042E-06	-2.603E-16	-2.603E-16	-6.650E-06	-6.651E-06	-2.360E-10
1.00625	3.189E-06	3.190E-06	-2.568E-16	-2.568E-16	-6.892E-06	-6.893E-06	-2.329E-10
1.01250	3.332E-06	3.333E-06	-2.521E-16	-2.521E-16	-7.130E-06	-7.131E-06	-2.288E-10
1.01875	3.469E-06	3.469E-06	-2.464E-16	-2.464E-16	-7.363E-06	-7.364E-06	-2.239E-10
1.02500	3.599E-06	3.599E-06	-2.397E-16	-2.397E-16	-7.590E-06	-7.591E-06	-2.183E-10
1.03750	3.835E-06	3.835E-06	-2.240E-16	-2.240E-16	-8.024E-06	-8.025E-06	-2.052E-10
1.05000	4.037E-06	4.038E-06	-2.059E-16	-2.059E-16	-8.427E-06	-8.427E-06	-1.905E-10
1.07500	4.344E-06	4.344E-06	-1.746E-16	-1.745E-16	-9.139E-06	-9.139E-06	-1.546E-10
1.10000	4.539E-06	4.539E-06	-1.424E-16	-1.424E-16	-9.731E-06	-9.731E-06	-1.216E-10
1.15000	4.711E-06	4.711E-06	-8.761E-17	-8.760E-17	-1.058E-05	-1.058E-05	-7.283E-11
1.20000	4.715E-06	4.715E-06	-5.233E-17	-5.233E-17	-1.109E-05	-1.109E-05	-4.321E-11
1.30000	4.517E-06	4.518E-06	-2.190E-17	-2.190E-17	-1.162E-05	-1.162E-05	-1.601E-11
1.40000	4.251E-06	4.251E-06	-1.046E-17	-1.046E-17	-1.185E-05	-1.185E-05	-6.931E-12
1.50000	3.987E-06	3.987E-06	-5.790E-18	-5.790E-18	-1.196E-05	-1.196E-05	-3.310E-12
1.60000	3.747E-06	3.748E-06	-3.255E-18	-3.255E-18	-1.203E-05	-1.203E-05	-1.836E-12
1.70000	3.532E-06	3.532E-06	-1.851E-18	-1.851E-18	-1.207E-05	-1.207E-05	-1.138E-12
1.80000	3.338E-06	3.338E-06	-1.077E-18	-1.077E-18	-1.209E-05	-1.209E-05	-7.582E-13
1.90000	3.163E-06	3.164E-06	-6.246E-19	-6.246E-19	-1.210E-05	-1.210E-05	-5.477E-13
2.00000	3.006E-06	3.006E-06	-3.611E-19	-3.611E-19	-1.211E-05	-1.211E-05	-4.166E-13

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.10000	12.0000	0.10000	194.165	1.267E-06	9.985E-01	-1.786E-07	-1.786E-07	1.786E-07
0.20000	12.0000	0.20000	173.299	2.881E-06	9.980E-01	-2.506E-07	-2.506E-07	2.506E-07
0.30000	12.0000	0.30000	152.613	6.243E-06	9.973E-01	-3.504E-07	-3.504E-07	3.504E-07
0.40000	12.0000	0.40000	132.193	8.965E-06	9.963E-01	-5.091E-07	-5.091E-07	5.091E-07
0.50000	12.0000	0.50000	112.183	1.836E-05	9.951E-01	-7.385E-07	-7.385E-07	7.385E-07
0.60000	12.0000	0.60000	92.849	3.180E-05	9.939E-01	-1.108E-06	-1.108E-06	1.108E-06
0.70000	12.0000	0.70000	74.717	7.044E-05	9.941E-01	-1.813E-06	-1.813E-06	1.813E-06
0.80000	12.0000	0.80000	58.910	1.750E-04	9.992E-01	-3.063E-06	-3.063E-06	3.063E-06
0.85000	12.0000	0.85000	52.549	2.706E-04	1.003E 00	-4.011E-06	-4.011E-06	4.011E-06
0.90000	12.0000	0.90000	47.790	4.183E-04	1.005E 00	-4.994E-06	-4.995E-06	4.994E-06
0.92500	12.0001	0.92500	46.173	5.148E-04	1.004E 00	-5.418E-06	-5.418E-06	5.418E-06
0.95000	12.0001	0.95000	45.142	6.215E-04	1.001E 00	-5.707E-06	-5.707E-06	5.707E-06
0.96250	12.0001	0.96250	44.861	6.788E-04	9.997E-01	-5.788E-06	-5.788E-06	5.788E-06
0.97500	12.0001	0.97500	44.740	7.368E-04	9.989E-01	-5.824E-06	-5.824E-06	5.824E-06
0.98125	12.0001	0.98125	44.739	7.667E-04	9.988E-01	-5.824E-06	-5.824E-06	5.824E-06
0.98750	12.0001	0.98750	44.780	7.940E-04	9.989E-01	-5.812E-06	-5.812E-06	5.812E-06
0.99375	12.0001	0.99375	44.860	8.265E-04	9.992E-01	-5.788E-06	-5.788E-06	5.788E-06
1.00000	12.0001	1.00000	44.981	8.538E-04	9.997E-01	-5.753E-06	-5.753E-06	5.753E-06
1.00625	12.0001	1.00625	45.141	8.845E-04	1.000E 00	-5.707E-06	-5.707E-06	5.707E-06
1.01250	12.0001	1.01250	45.341	9.127E-04	1.001E 00	-5.650E-06	-5.650E-06	5.650E-06
1.01875	12.0001	1.01875	45.580	9.409E-04	1.002E 00	-5.582E-06	-5.582E-06	5.582E-06
1.02500	12.0001	1.02500	45.856	9.682E-04	1.003E 00	-5.505E-06	-5.505E-06	5.505E-06
1.03750	12.0001	1.03750	46.522	1.019E-03	1.006E 00	-5.324E-06	-5.324E-06	5.324E-06
1.05000	12.0001	1.05000	47.331	1.066E-03	1.008E 00	-5.111E-06	-5.111E-06	5.111E-06
1.07500	12.0002	1.07500	49.350	1.155E-03	1.012E 00	-4.617E-06	-4.617E-06	4.617E-06
1.10000	12.0002	1.10000	51.851	1.217E-03	1.013E 00	-4.131E-06	-4.131E-06	4.131E-06
1.15000	12.0002	1.15000	58.038	1.318E-03	1.012E 00	-3.178E-06	-3.178E-06	3.178E-06
1.20000	12.0003	1.20000	65.420	1.378E-03	1.007E 00	-2.453E-06	-2.453E-06	2.453E-06
1.30000	12.0004	1.30000	82.442	1.443E-03	1.000E 00	-1.437E-06	-1.437E-06	1.437E-06
1.40000	12.0005	1.40000	101.191	1.472E-03	9.973E-01	-9.059E-07	-9.059E-07	9.059E-07
1.50000	12.0005	1.50000	120.865	1.489E-03	9.964E-01	-6.284E-07	-6.284E-07	6.284E-07
1.60000	12.0006	1.60000	141.078	1.499E-03	9.964E-01	-4.316E-07	-4.316E-07	4.316E-07
1.70000	12.0006	1.70000	161.628	1.501E-03	9.966E-01	-3.028E-07	-3.028E-07	3.028E-07
1.80000	12.0007	1.80000	182.400	1.508E-03	9.969E-01	-2.162E-07	-2.162E-07	2.162E-07
1.90000	12.0007	1.90000	203.328	1.509E-03	9.972E-01	-1.543E-07	-1.543E-07	1.543E-07
2.00000	12.0008	2.00000	224.366	1.509E-03	9.975E-01	-1.113E-07	-1.113E-07	1.113E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.786E-07	49.901	-7.581E-06	-7.581E-06	7.581E-06	7.581E-06	-2.967E-08	-2.967E-08
0.20000	2.506E-07	99.802	-1.819E-05	-1.819E-05	1.819E-05	1.819E-05	-4.162E-08	-4.162E-08
0.30000	3.504E-07	149.703	-3.305E-05	-3.305E-05	3.305E-05	3.305E-05	-5.821E-08	-5.821E-08
0.40000	5.091E-07	199.605	-5.421E-05	-5.421E-05	5.421E-05	5.421E-05	-8.456E-08	-8.457E-08
0.50000	7.385E-07	249.506	-8.501E-05	-8.501E-05	8.500E-05	8.501E-05	-1.227E-07	-1.227E-07
0.60000	1.108E-06	299.407	-1.299E-04	-1.299E-04	1.299E-04	1.299E-04	-1.840E-07	-1.840E-07
0.70000	1.813E-06	349.308	-2.005E-04	-2.005E-04	2.005E-04	2.006E-04	-3.012E-07	-3.012E-07
0.80000	3.063E-06	399.209	-3.199E-04	-3.199E-04	3.199E-04	3.199E-04	-5.088E-07	-5.088E-07
0.85000	4.011E-06	424.160	-4.080E-04	-4.081E-04	4.080E-04	4.081E-04	-6.663E-07	-6.663E-07
0.90000	4.995E-06	449.110	-5.202E-04	-5.202E-04	5.202E-04	5.202E-04	-8.296E-07	-8.297E-07
0.92500	5.418E-06	461.586	-5.853E-04	-5.853E-04	5.853E-04	5.853E-04	-9.000E-07	-9.001E-07
0.95000	5.707E-06	474.061	-6.548E-04	-6.548E-04	6.548E-04	6.549E-04	-9.479E-07	-9.480E-07
0.96250	5.788E-06	480.298	-6.907E-04	-6.907E-04	6.907E-04	6.907E-04	-9.615E-07	-9.615E-07
0.97500	5.824E-06	486.536	-7.269E-04	-7.269E-04	7.269E-04	7.270E-04	-9.674E-07	-9.674E-07
0.98125	5.824E-06	489.655	-7.451E-04	-7.451E-04	7.451E-04	7.451E-04	-9.674E-07	-9.674E-07
0.98750	5.812E-06	492.774	-7.632E-04	-7.633E-04	7.632E-04	7.633E-04	-9.654E-07	-9.654E-07
0.99375	5.788E-06	495.893	-7.813E-04	-7.813E-04	7.813E-04	7.814E-04	-9.615E-07	-9.615E-07
1.00000	5.753E-06	499.011	-7.993E-04	-7.993E-04	7.993E-04	7.994E-04	-9.557E-07	-9.557E-07
1.00625	5.707E-06	502.130	-8.172E-04	-8.172E-04	8.172E-04	8.173E-04	-9.480E-07	-9.480E-07
1.01250	5.650E-06	505.249	-8.349E-04	-8.349E-04	8.349E-04	8.350E-04	-9.385E-07	-9.385E-07
1.01875	5.582E-06	508.368	-8.524E-04	-8.525E-04	8.524E-04	8.525E-04	-9.273E-07	-9.273E-07
1.02500	5.505E-06	511.487	-8.697E-04	-8.697E-04	8.697E-04	8.698E-04	-9.145E-07	-9.145E-07
1.03750	5.324E-06	517.724	-9.035E-04	-9.035E-04	9.035E-04	9.036E-04	-8.844E-07	-8.844E-07
1.05000	5.111E-06	523.962	-9.361E-04	-9.361E-04	9.361E-04	9.362E-04	-8.491E-07	-8.491E-07
1.07500	4.617E-06	536.437	-9.968E-04	-9.968E-04	9.969E-04	9.969E-04	-7.670E-07	-7.670E-07
1.10000	4.131E-06	548.912	-1.051E-03	-1.051E-03	1.051E-03	1.051E-03	-6.863E-07	-6.863E-07
1.15000	3.178E-06	573.863	-1.142E-03	-1.142E-03	1.143E-03	1.143E-03	-5.280E-07	-5.280E-07
1.20000	2.453E-06	598.814	-1.212E-03	-1.212E-03	1.212E-03	1.212E-03	-4.074E-07	-4.074E-07
1.30000	1.437E-06	648.715	-1.307E-03	-1.307E-03	1.307E-03	1.307E-03	-2.387E-07	-2.387E-07
1.40000	9.059E-07	698.616	-1.364E-03	-1.364E-03	1.364E-03	1.364E-03	-1.505E-07	-1.505E-07
1.50000	6.284E-07	748.517	-1.402E-03	-1.402E-03	1.402E-03	1.402E-03	-1.044E-07	-1.044E-07
1.60000	4.316E-07	798.418	-1.428E-03	-1.428E-03	1.428E-03	1.428E-03	-7.169E-08	-7.169E-08
1.70000	3.028E-07	848.319	-1.446E-03	-1.446E-03	1.446E-03	1.446E-03	-5.029E-08	-5.029E-08
1.80000	2.162E-07	898.220	-1.459E-03	-1.459E-03	1.459E-03	1.459E-03	-3.591E-08	-3.591E-08
1.90000	1.543E-07	948.121	-1.468E-03	-1.468E-03	1.468E-03	1.468E-03	-2.563E-08	-2.563E-08
2.00000	1.113E-07	998.023	-1.474E-03	-1.474E-03	1.474E-03	1.475E-03	-1.849E-08	-1.849E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0=12.000 θ_D= 0. ρ_a=44.734

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-6.432E-13
0.10000	1.022E-09	1.022E-09	-7.342E-19	-7.342E-19	-8.479E-09	-8.479E-09	-8.562E-13
0.20000	2.823E-09	2.823E-09	-1.258E-18	-1.258E-18	-2.304E-08	-2.304E-08	-1.208E-12
0.30000	5.899E-09	5.899E-09	-2.146E-18	-2.146E-18	-4.792E-08	-4.792E-08	-1.851E-12
0.40000	1.217E-08	1.217E-08	-3.781E-18	-3.781E-18	-9.104E-08	-9.104E-08	-3.018E-12
0.50000	2.335E-08	2.335E-08	-6.623E-18	-6.623E-18	-1.670E-07	-1.670E-07	-5.569E-12
0.60000	4.681E-08	4.681E-08	-1.210E-17	-1.210E-17	-3.006E-07	-3.006E-07	-1.155E-11
0.70000	1.092E-07	1.092E-07	-2.495E-17	-2.495E-17	-5.616E-07	-5.616E-07	-2.599E-11
0.80000	2.802E-07	2.803E-07	-5.436E-17	-5.436E-17	-1.129E-06	-1.129E-06	-6.406E-11
0.85000	4.719E-07	4.719E-07	-8.219E-17	-8.220E-17	-1.636E-06	-1.636E-06	-9.711E-11
0.90000	8.090E-07	8.091E-07	-1.143E-16	-1.143E-16	-2.368E-06	-2.369E-06	-1.379E-10
0.92500	1.054E-06	1.054E-06	-1.289E-16	-1.290E-16	-2.824E-06	-2.824E-06	-1.563E-10
0.95000	1.354E-06	1.354E-06	-1.392E-16	-1.392E-16	-3.327E-06	-3.328E-06	-1.699E-10
0.96250	1.522E-06	1.522E-06	-1.422E-16	-1.422E-16	-3.591E-06	-3.591E-06	-1.739E-10
0.97500	1.697E-06	1.697E-06	-1.435E-16	-1.435E-16	-3.858E-06	-3.858E-06	-1.757E-10
0.98125	1.786E-06	1.786E-06	-1.435E-16	-1.435E-16	-3.992E-06	-3.992E-06	-1.757E-10
0.98750	1.874E-06	1.874E-06	-1.430E-16	-1.430E-16	-4.126E-06	-4.126E-06	-1.751E-10
0.99375	1.961E-06	1.961E-06	-1.422E-16	-1.422E-16	-4.260E-06	-4.260E-06	-1.739E-10
1.00000	2.047E-06	2.047E-06	-1.409E-16	-1.409E-16	-4.392E-06	-4.392E-06	-1.722E-10
1.00625	2.130E-06	2.130E-06	-1.392E-16	-1.392E-16	-4.523E-06	-4.523E-06	-1.699E-10
1.01250	2.211E-06	2.211E-06	-1.372E-16	-1.372E-16	-4.652E-06	-4.652E-06	-1.672E-10
1.01875	2.288E-06	2.288E-06	-1.348E-16	-1.348E-16	-4.779E-06	-4.780E-06	-1.639E-10
1.02500	2.362E-06	2.362E-06	-1.320E-16	-1.320E-16	-4.904E-06	-4.904E-06	-1.603E-10
1.03750	2.497E-06	2.497E-06	-1.256E-16	-1.256E-16	-5.145E-06	-5.145E-06	-1.521E-10
1.05000	2.614E-06	2.614E-06	-1.183E-16	-1.183E-16	-5.373E-06	-5.374E-06	-1.428E-10
1.07500	2.799E-06	2.799E-06	-1.018E-16	-1.018E-16	-5.785E-06	-5.786E-06	-1.231E-10
1.10000	2.929E-06	2.929E-06	-8.601E-17	-8.601E-17	-6.136E-06	-6.136E-06	-1.022E-10
1.15000	3.059E-06	3.059E-06	-5.753E-17	-5.753E-17	-6.670E-06	-6.670E-06	-6.758E-11
1.20000	3.084E-06	3.084E-06	-3.902E-17	-3.902E-17	-7.023E-06	-7.024E-06	-4.270E-11
1.30000	2.990E-06	2.990E-06	-1.770E-17	-1.770E-17	-7.426E-06	-7.426E-06	-1.820E-11
1.40000	2.831E-06	2.831E-06	-9.011E-18	-9.011E-18	-7.617E-06	-7.617E-06	-8.442E-12
1.50000	2.665E-06	2.665E-06	-5.193E-18	-5.193E-18	-7.720E-06	-7.721E-06	-4.192E-12
1.60000	2.509E-06	2.509E-06	-2.948E-18	-2.948E-18	-7.780E-06	-7.780E-06	-2.414E-12
1.70000	2.367E-06	2.368E-06	-1.701E-18	-1.700E-18	-7.813E-06	-7.814E-06	-1.522E-12
1.80000	2.239E-06	2.239E-06	-9.947E-19	-9.947E-19	-7.833E-06	-7.833E-06	-1.032E-12
1.90000	2.123E-06	2.123E-06	-5.794E-19	-5.794E-19	-7.845E-06	-7.845E-06	-7.534E-13
2.00000	2.018E-06	2.018E-06	-3.362E-19	-3.362E-19	-7.851E-06	-7.852E-06	-5.787E-13

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 15.000 θ_0= 0. ρ_0= 55.687

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	15.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	15.0000	0.10000	194.456	2.615E-06	9.968E-01	-1.778E-07	-1.778E-07	1.778E-07
0.20000	15.0000	0.20000	173.950	3.148E-06	9.959E-01	-2.479E-07	-2.479E-07	2.479E-07
0.30000	15.0000	0.30000	153.721	5.603E-06	9.947E-01	-3.442E-07	-3.442E-07	3.442E-07
0.40000	15.0000	0.40000	133.894	1.110E-05	9.932E-01	-4.932E-07	-4.932E-07	4.932E-07
0.50000	15.0000	0.50000	114.677	1.953E-05	9.918E-01	-7.050E-07	-7.050E-07	7.050E-07
0.60000	15.0000	0.60000	96.436	3.543E-05	9.914E-01	-1.013E-06	-1.013E-06	1.013E-06
0.70000	15.0000	0.70000	79.842	7.086E-05	9.942E-01	-1.535E-06	-1.535E-06	1.535E-06
0.80000	15.0000	0.80000	66.148	1.545E-04	1.002E 00	-2.395E-06	-2.395E-06	2.395E-06
0.85000	15.0000	0.85000	61.018	2.002E-04	1.005E 00	-2.830E-06	-2.830E-06	2.830E-06
0.90000	15.0000	0.90000	57.466	2.476E-04	1.004E 00	-3.256E-06	-3.257E-06	3.256E-06
0.92500	15.0000	0.92500	56.379	3.014E-04	1.001E 00	-3.410E-06	-3.410E-06	3.410E-06
0.95000	15.0001	0.95000	55.793	3.569E-04	9.987E-01	-3.496E-06	-3.496E-06	3.496E-06
0.96250	15.0001	0.96250	55.692	3.851E-04	9.979E-01	-3.511E-06	-3.511E-06	3.511E-06
0.97500	15.0001	0.97500	55.722	4.098E-04	9.977E-01	-3.506E-06	-3.506E-06	3.506E-06
0.98125	15.0001	0.98125	55.785	4.243E-04	9.978E-01	-3.497E-06	-3.497E-06	3.497E-06
0.98750	15.0001	0.98750	55.881	4.397E-04	9.982E-01	-3.483E-06	-3.483E-06	3.483E-06
0.99375	15.0001	0.99375	56.008	4.534E-04	9.987E-01	-3.464E-06	-3.464E-06	3.464E-06
1.00000	15.0001	1.00000	56.168	4.696E-04	9.994E-01	-3.441E-06	-3.441E-06	3.441E-06
1.00625	15.0001	1.00625	56.359	4.849E-04	1.000E 00	-3.413E-06	-3.413E-06	3.413E-06
1.01250	15.0001	1.01250	56.582	4.978E-04	1.001E 00	-3.381E-06	-3.381E-06	3.381E-06
1.01875	15.0001	1.01875	56.836	5.106E-04	1.002E 00	-3.345E-06	-3.345E-06	3.345E-06
1.02500	15.0001	1.02500	57.120	5.259E-04	1.004E 00	-3.305E-06	-3.305E-06	3.305E-06
1.03750	15.0001	1.03750	57.778	5.507E-04	1.006E 00	-3.214E-06	-3.214E-06	3.214E-06
1.05000	15.0001	1.05000	58.552	5.737E-04	1.009E 00	-3.110E-06	-3.110E-06	3.110E-06
1.07500	15.0001	1.07500	60.431	6.147E-04	1.014E 00	-2.884E-06	-2.884E-06	2.884E-06
1.10000	15.0001	1.10000	62.716	6.446E-04	1.017E 00	-2.678E-06	-2.678E-06	2.678E-06
1.15000	15.0001	1.15000	68.335	6.950E-04	1.018E 00	-2.231E-06	-2.231E-06	2.231E-06
1.20000	15.0002	1.20000	75.084	7.360E-04	1.015E 00	-1.792E-06	-1.792E-06	1.792E-06
1.30000	15.0002	1.30000	90.927	7.838E-04	1.006E 00	-1.162E-06	-1.162E-06	1.162E-06
1.40000	15.0003	1.40000	108.737	8.077E-04	1.000E 00	-7.873E-07	-7.873E-07	7.873E-07
1.50000	15.0003	1.50000	127.694	8.213E-04	9.976E-01	-5.535E-07	-5.535E-07	5.535E-07
1.60000	15.0003	1.60000	147.355	8.282E-04	9.964E-01	-3.840E-07	-3.840E-07	3.840E-07
1.70000	15.0004	1.70000	167.473	8.350E-04	9.960E-01	-2.754E-07	-2.754E-07	2.754E-07
1.80000	15.0004	1.80000	187.901	8.350E-04	9.959E-01	-1.977E-07	-1.977E-07	1.977E-07
1.90000	15.0004	1.90000	208.547	8.350E-04	9.961E-01	-1.423E-07	-1.423E-07	1.423E-07
2.00000	15.0004	2.00000	229.354	8.350E-04	9.963E-01	-1.030E-07	-1.030E-07	1.030E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 15.000 θ_0= 0. ρ_0= 55.687

z	$_x\mu'$-1.0	T_0	$_0T_t$-T_0	$_xT_t$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.778E-07	49.901	-7.563E-06	-7.563E-06	7.563E-06	7.563E-06	-2.953E-08	-2.953E-08
0.20000	2.479E-07	99.802	-1.809E-05	-1.809E-05	1.809E-05	1.809E-05	-4.118E-08	-4.118E-08
0.30000	3.442E-07	149.703	-3.274E-05	-3.274E-05	3.274E-05	3.274E-05	-5.717E-08	-5.718E-08
0.40000	4.932E-07	199.605	-5.336E-05	-5.336E-05	5.336E-05	5.336E-05	-8.193E-08	-8.193E-08
0.50000	7.050E-07	249.506	-8.297E-05	-8.297E-05	8.297E-05	8.297E-05	-1.171E-07	-1.171E-07
0.60000	1.013E-06	299.407	-1.250E-04	-1.250E-04	1.250E-04	1.250E-04	-1.682E-07	-1.682E-07
0.70000	1.535E-06	349.308	-1.880E-04	-1.880E-04	1.880E-04	1.880E-04	-2.550E-07	-2.550E-07
0.80000	2.395E-06	399.209	-2.854E-04	-2.854E-04	2.854E-04	2.854E-04	-3.979E-07	-3.979E-07
0.85000	2.830E-06	424.160	-3.507E-04	-3.507E-04	3.507E-04	3.507E-04	-4.700E-07	-4.701E-07
0.90000	3.257E-06	449.110	-4.267E-04	-4.267E-04	4.267E-04	4.267E-04	-5.409E-07	-5.410E-07
0.92500	3.410E-06	461.586	-4.683E-04	-4.683E-04	4.683E-04	4.683E-04	-5.664E-07	-5.664E-07
0.95000	3.496E-06	474.061	-5.115E-04	-5.115E-04	5.115E-04	5.115E-04	-5.807E-07	-5.807E-07
0.96250	3.511E-06	480.299	-5.333E-04	-5.333E-04	5.333E-04	5.334E-04	-5.832E-07	-5.832E-07
0.97500	3.506E-06	486.536	-5.552E-04	-5.552E-04	5.552E-04	5.553E-04	-5.824E-07	-5.824E-07
0.98125	3.497E-06	489.655	-5.662E-04	-5.662E-04	5.662E-04	5.662E-04	-5.809E-07	-5.809E-07
0.98750	3.483E-06	492.774	-5.770E-04	-5.770E-04	5.770E-04	5.771E-04	-5.785E-07	-5.785E-07
0.99375	3.464E-06	495.893	-5.879E-04	-5.879E-04	5.879E-04	5.879E-04	-5.754E-07	-5.754E-07
1.00000	3.441E-06	499.012	-5.986E-04	-5.987E-04	5.986E-04	5.987E-04	-5.715E-07	-5.715E-07
1.00625	3.413E-06	502.130	-6.093E-04	-6.093E-04	6.093E-04	6.094E-04	-5.669E-07	-5.669E-07
1.01250	3.381E-06	505.249	-6.199E-04	-6.199E-04	6.199E-04	6.200E-04	-5.616E-07	-5.616E-07
1.01875	3.345E-06	508.368	-6.304E-04	-6.304E-04	6.304E-04	6.304E-04	-5.556E-07	-5.556E-07
1.02500	3.305E-06	511.487	-6.408E-04	-6.408E-04	6.408E-04	6.408E-04	-5.489E-07	-5.489E-07
1.03750	3.214E-06	517.724	-6.611E-04	-6.611E-04	6.611E-04	6.611E-04	-5.338E-07	-5.338E-07
1.05000	3.110E-06	523.962	-6.808E-04	-6.809E-04	6.808E-04	6.809E-04	-5.166E-07	-5.166E-07
1.07500	2.884E-06	536.437	-7.182E-04	-7.182E-04	7.182E-04	7.183E-04	-4.791E-07	-4.791E-07
1.10000	2.678E-06	548.913	-7.529E-04	-7.529E-04	7.529E-04	7.530E-04	-4.448E-07	-4.448E-07
1.15000	2.231E-06	573.863	-8.142E-04	-8.142E-04	8.142E-04	8.142E-04	-3.706E-07	-3.706E-07
1.20000	1.792E-06	598.814	-8.643E-04	-8.643E-04	8.643E-04	8.644E-04	-2.977E-07	-2.977E-07
1.30000	1.162E-06	648.715	-9.364E-04	-9.364E-04	9.364E-04	9.364E-04	-1.930E-07	-1.930E-07
1.40000	7.873E-07	698.616	-9.839E-04	-9.839E-04	9.839E-04	9.839E-04	-1.308E-07	-1.308E-07
1.50000	5.535E-07	748.517	-1.017E-03	-1.017E-03	1.017E-03	1.017E-03	-9.194E-08	-9.194E-08
1.60000	3.840E-07	798.418	-1.040E-03	-1.040E-03	1.040E-03	1.040E-03	-6.379E-08	-6.379E-08
1.70000	2.754E-07	848.319	-1.056E-03	-1.056E-03	1.056E-03	1.056E-03	-4.574E-08	-4.574E-08
1.80000	1.977E-07	898.221	-1.068E-03	-1.068E-03	1.068E-03	1.068E-03	-3.284E-08	-3.284E-08
1.90000	1.423E-07	948.122	-1.077E-03	-1.077E-03	1.077E-03	1.077E-03	-2.364E-08	-2.364E-08
2.00000	1.030E-07	998.023	-1.083E-03	-1.083E-03	1.083E-03	1.083E-03	-1.711E-08	-1.711E-08

PROPAGATION FREQUENCY= 4.980OE 07 ϕ_o= 20.000 θ_D= 0. ρ_a= 73.589

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.760E-07	49.901	-7.524E-06	-7.524E-06	7.524E-06	7.524E-06	-2.923E-08	-2.923E-08
0.20000	2.624E-07	99.802	-1.788E-05	-1.788E-05	1.788E-05	1.788E-05	-4.026E-08	-4.026E-08
0.30000	3.313E-07	149.703	-3.209E-05	-3.209E-05	3.209E-05	3.209E-05	-5.503E-08	-5.504E-08
0.40000	4.615E-07	199.605	-5.162E-05	-5.162E-05	5.162E-05	5.162E-05	-7.666E-08	-7.666E-08
0.50000	6.403E-07	249.506	-7.892E-05	-7.892E-05	7.892E-05	7.892E-05	-1.064E-07	-1.064E-07
0.60000	8.644E-07	299.407	-1.163E-04	-1.163E-04	1.163E-04	1.163E-04	-1.436E-07	-1.436E-07
0.70000	1.194E-06	349.308	-1.670E-04	-1.670E-04	1.670E-04	1.670E-04	-1.983E-07	-1.983E-07
0.80000	1.553E-06	399.209	-2.356E-04	-2.356E-04	2.356E-04	2.357E-04	-2.580E-07	-2.580E-07
0.85000	1.735E-06	424.160	-2.768E-04	-2.768E-04	2.768E-04	2.768E-04	-2.882E-07	-2.882E-07
0.90000	1.851E-06	449.110	-3.217E-04	-3.217E-04	3.217E-04	3.217E-04	-3.075E-07	-3.075E-07
0.92500	1.877E-06	461.586	-3.449E-04	-3.449E-04	3.449E-04	3.449E-04	-3.118E-07	-3.118E-07
0.95000	1.879E-06	474.061	-3.684E-04	-3.684E-04	3.684E-04	3.684E-04	-3.121E-07	-3.121E-07
0.96250	1.871E-06	480.299	-3.801E-04	-3.801E-04	3.801E-04	3.801E-04	-3.108E-07	-3.108E-07
0.97500	1.857E-06	486.536	-3.917E-04	-3.917E-04	3.917E-04	3.917E-04	-3.085E-07	-3.085E-07
0.98125	1.848E-06	489.655	-3.975E-04	-3.975E-04	3.975E-04	3.975E-04	-3.070E-07	-3.070E-07
0.98750	1.838E-06	492.774	-4.032E-04	-4.033E-04	4.032E-04	4.033E-04	-3.053E-07	-3.053E-07
0.99375	1.826E-06	495.893	-4.090E-04	-4.090E-04	4.090E-04	4.090E-04	-3.033E-07	-3.033E-07
1.00000	1.813E-06	499.012	-4.146E-04	-4.146E-04	4.146E-04	4.146E-04	-3.012E-07	-3.012E-07
1.00625	1.799E-06	502.130	-4.203E-04	-4.203E-04	4.203E-04	4.203E-04	-2.988E-07	-2.988E-07
1.01250	1.783E-06	505.249	-4.259E-04	-4.259E-04	4.259E-04	4.259E-04	-2.962E-07	-2.962E-07
1.01875	1.766E-06	508.368	-4.314E-04	-4.314E-04	4.314E-04	4.314E-04	-2.934E-07	-2.934E-07
1.02500	1.748E-06	511.487	-4.369E-04	-4.369E-04	4.369E-04	4.369E-04	-2.904E-07	-2.904E-07
1.03750	1.709E-06	517.724	-4.477E-04	-4.477E-04	4.477E-04	4.477E-04	-2.839E-07	-2.839E-07
1.05000	1.666E-06	523.962	-4.582E-04	-4.582E-04	4.582E-04	4.582E-04	-2.768E-07	-2.768E-07
1.07500	1.571E-06	536.437	-4.784E-04	-4.784E-04	4.784E-04	4.784E-04	-2.609E-07	-2.609E-07
1.10000	1.480E-06	548.913	-4.974E-04	-4.974E-04	4.974E-04	4.974E-04	-2.458E-07	-2.458E-07
1.15000	1.302E-06	573.863	-5.321E-04	-5.321E-04	5.321E-04	5.321E-04	-2.163E-07	-2.163E-07
1.20000	1.118E-06	598.814	-5.623E-04	-5.623E-04	5.623E-04	5.623E-04	-1.857E-07	-1.857E-07
1.30000	8.148E-07	648.715	-6.098E-04	-6.098E-04	6.098E-04	6.098E-04	-1.354E-07	-1.354E-07
1.40000	5.996E-07	698.616	-6.449E-04	-6.449E-04	6.449E-04	6.449E-04	-9.961E-08	-9.961E-08
1.50000	4.303E-07	748.517	-6.704E-04	-6.704E-04	6.704E-04	6.704E-04	-7.147E-08	-7.147E-08
1.60000	3.109E-07	798.418	-6.886E-04	-6.886E-04	6.886E-04	6.887E-04	-5.164E-08	-5.164E-08
1.70000	2.270E-07	848.320	-7.020E-04	-7.020E-04	7.020E-04	7.020E-04	-3.771E-08	-3.771E-08
1.80000	1.646E-07	898.221	-7.117E-04	-7.117E-04	7.117E-04	7.117E-04	-2.735E-08	-2.735E-08
1.90000	1.203E-07	948.122	-7.187E-04	-7.187E-04	7.187E-04	7.187E-04	-1.999E-08	-1.999E-08

PROPAGATION FREQUENCY= 4.980OE 07 ϕ_o= 20.000 θ_D= 0. ρ_a= 73.589

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.741E-12
0.10000	1.623E-09	1.623E-09	-7.171E-19	-7.171E-19	-8.374E-09	-8.374E-09	-2.286E-12
0.20000	4.463E-09	4.463E-09	-1.194E-18	-1.194E-18	-2.238E-08	-2.238E-08	-3.149E-12
0.30000	9.099E-09	9.099E-09	-1.963E-18	-1.963E-18	-4.554E-08	-4.554E-08	-4.632E-12
0.40000	1.763E-08	1.763E-08	-3.261E-18	-3.261E-18	-8.370E-08	-8.370E-08	-7.122E-12
0.50000	3.233E-08	3.233E-08	-5.342E-18	-5.342E-18	-1.469E-07	-1.469E-07	-1.169E-11
0.60000	5.689E-08	5.689E-08	-8.395E-18	-8.395E-18	-2.484E-07	-2.484E-07	-2.062E-11
0.70000	1.072E-07	1.072E-07	-1.350E-17	-1.350E-17	-4.086E-07	-4.086E-07	-3.531E-11
0.80000	2.108E-07	2.109E-07	-1.983E-17	-1.984E-17	-6.574E-07	-6.574E-07	-5.666E-11
0.85000	2.972E-07	2.972E-07	-2.337E-17	-2.337E-17	-8.195E-07	-8.196E-07	-6.599E-11
0.90000	4.152E-07	4.152E-07	-2.573E-17	-2.573E-17	-1.004E-06	-1.004E-06	-7.255E-11
0.92500	4.850E-07	4.850E-07	-2.626E-17	-2.626E-17	-1.101E-06	-1.101E-06	-7.408E-11
0.95000	5.599E-07	5.599E-07	-2.630E-17	-2.630E-17	-1.200E-06	-1.200E-06	-7.421E-11
0.96250	5.981E-07	5.981E-07	-2.614E-17	-2.614E-17	-1.249E-06	-1.249E-06	-7.374E-11
0.97500	6.360E-07	6.361E-07	-2.585E-17	-2.585E-17	-1.298E-06	-1.298E-06	-7.293E-11
0.98125	6.547E-07	6.547E-07	-2.567E-17	-2.567E-17	-1.322E-06	-1.322E-06	-7.240E-11
0.98750	6.731E-07	6.731E-07	-2.545E-17	-2.545E-17	-1.346E-06	-1.346E-06	-7.179E-11
0.99375	6.910E-07	6.911E-07	-2.521E-17	-2.521E-17	-1.369E-06	-1.369E-06	-7.111E-11
1.00000	7.086E-07	7.086E-07	-2.494E-17	-2.494E-17	-1.393E-06	-1.393E-06	-7.036E-11
1.00625	7.256E-07	7.256E-07	-2.465E-17	-2.465E-17	-1.416E-06	-1.416E-06	-6.954E-11
1.01250	7.421E-07	7.421E-07	-2.434E-17	-2.434E-17	-1.439E-06	-1.439E-06	-6.866E-11
1.01875	7.579E-07	7.580E-07	-2.400E-17	-2.400E-17	-1.461E-06	-1.461E-06	-6.773E-11
1.02500	7.731E-07	7.732E-07	-2.364E-17	-2.364E-17	-1.484E-06	-1.484E-06	-6.674E-11
1.03750	8.015E-07	8.015E-07	-2.286E-17	-2.286E-17	-1.527E-06	-1.527E-06	-6.463E-11
1.05000	8.270E-07	8.270E-07	-2.202E-17	-2.202E-17	-1.569E-06	-1.569E-06	-6.237E-11
1.07500	8.699E-07	8.700E-07	-2.017E-17	-2.017E-17	-1.648E-06	-1.648E-06	-5.756E-11
1.10000	9.032E-07	9.032E-07	-1.848E-17	-1.848E-17	-1.720E-06	-1.720E-06	-5.210E-11
1.15000	9.460E-07	9.451E-07	-1.532E-17	-1.532E-17	-1.847E-06	-1.847E-06	-4.105E-11
1.20000	9.629E-07	9.629E-07	-1.227E-17	-1.227E-17	-1.950E-06	-1.950E-06	-3.177E-11
1.30000	9.588E-07	9.588E-07	-7.681E-18	-7.681E-18	-2.095E-06	-2.095E-06	-1.828E-11
1.40000	9.278E-07	9.278E-07	-4.839E-18	-4.839E-18	-2.187E-06	-2.187E-06	-1.050E-11
1.50000	8.878E-07	8.878E-07	-2.934E-18	-2.934E-18	-2.244E-06	-2.244E-06	-6.505E-12
1.60000	8.456E-07	8.456E-07	-1.774E-18	-1.774E-18	-2.279E-06	-2.279E-06	-4.261E-12
1.70000	8.037E-07	8.037E-07	-1.075E-18	-1.075E-18	-2.300E-06	-2.300E-06	-2.939E-12
1.80000	7.639E-07	7.639E-07	-6.448E-19	-6.448E-19	-2.312E-06	-2.312E-06	-2.161E-12
1.90000	7.267E-07	7.267E-07	-3.829E-19	-3.829E-19	-2.320E-06	-2.320E-06	-1.659E-12

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 15.000 θ_D= 0. ρ_0= 55.687

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-9.967E-13
0.10000	1.259E-09	1.259E-09	-7.287E-19	-7.287E-19	-8.446E-09	-8.446E-09	-1.321E-12
0.20000	3.471E-09	3.471E-09	-1.237E-18	-1.237E-18	-2.282E-08	-2.282E-08	-1.849E-12
0.30000	7.193E-09	7.193E-09	-2.085E-18	-2.086E-18	-4.714E-08	-4.715E-08	-2.797E-12
0.40000	1.455E-08	1.455E-08	-3.605E-18	-3.605E-18	-8.859E-08	-8.859E-08	-4.470E-12
0.50000	2.748E-08	2.748E-08	-6.176E-18	-6.176E-18	-1.602E-07	-1.602E-07	-7.923E-12
0.60000	5.197E-08	5.197E-08	-1.061E-17	-1.061E-17	-2.815E-07	-2.815E-07	-1.560E-11
0.70000	1.115E-07	1.115E-07	-1.950E-17	-1.950E-17	-5.014E-07	-5.014E-07	-3.195E-11
0.80000	2.558E-07	2.558E-07	-3.768E-17	-3.768E-17	-9.203E-07	-9.203E-07	-6.333E-11
0.85000	3.972E-07	3.972E-07	-4.822E-17	-4.822E-17	-1.242E-06	-1.242E-06	-8.703E-11
0.90000	6.191E-07	6.191E-07	-5.971E-17	-5.971E-17	-1.645E-06	-1.645E-06	-1.084E-10
0.92500	7.682E-07	7.683E-07	-6.408E-17	-6.408E-17	-1.877E-06	-1.877E-06	-1.161E-10
0.95000	9.394E-07	9.395E-07	-6.657E-17	-6.657E-17	-2.122E-06	-2.122E-06	-1.206E-10
0.96250	1.030E-06	1.030E-06	-6.700E-17	-6.701E-17	-2.247E-06	-2.247E-06	-1.214E-10
0.97500	1.122E-06	1.122E-06	-6.688E-17	-6.688E-17	-2.372E-06	-2.373E-06	-1.211E-10
0.98125	1.168E-06	1.168E-06	-6.660E-17	-6.660E-17	-2.435E-06	-2.435E-06	-1.207E-10
0.98750	1.213E-06	1.213E-06	-6.619E-17	-6.619E-17	-2.497E-06	-2.497E-06	-1.199E-10
0.99375	1.258E-06	1.258E-06	-6.564E-17	-6.564E-17	-2.559E-06	-2.559E-06	-1.189E-10
1.00000	1.302E-06	1.302E-06	-6.497E-17	-6.497E-17	-2.620E-06	-2.620E-06	-1.177E-10
1.00625	1.344E-06	1.344E-06	-6.416E-17	-6.416E-17	-2.680E-06	-2.680E-06	-1.163E-10
1.01250	1.385E-06	1.385E-06	-6.324E-17	-6.324E-17	-2.740E-06	-2.740E-06	-1.146E-10
1.01875	1.425E-06	1.425E-06	-6.221E-17	-6.221E-17	-2.798E-06	-2.798E-06	-1.128E-10
1.02500	1.463E-06	1.463E-06	-6.107E-17	-6.107E-17	-2.856E-06	-2.856E-06	-1.108E-10
1.03750	1.533E-06	1.533E-06	-5.851E-17	-5.851E-17	-2.968E-06	-2.968E-06	-1.064E-10
1.05000	1.596E-06	1.596E-06	-5.564E-17	-5.564E-17	-3.075E-06	-3.075E-06	-1.015E-10
1.07500	1.699E-06	1.699E-06	-4.960E-17	-4.960E-17	-3.271E-06	-3.271E-06	-9.054E-11
1.10000	1.774E-06	1.774E-06	-4.444E-17	-4.444E-17	-3.447E-06	-3.447E-06	-7.806E-11
1.15000	1.858E-06	1.858E-06	-3.392E-17	-3.392E-17	-3.740E-06	-3.740E-06	-5.599E-11
1.20000	1.885E-06	1.885E-06	-2.452E-17	-2.452E-17	-3.957E-06	-3.957E-06	-3.962E-11
1.30000	1.852E-06	1.852E-06	-1.298E-17	-1.298E-17	-4.226E-06	-4.226E-06	-1.937E-11
1.40000	1.769E-06	1.770E-06	-7.294E-18	-7.294E-18	-4.371E-06	-4.371E-06	-9.777E-12
1.50000	1.676E-06	1.676E-06	-4.289E-18	-4.289E-18	-4.456E-06	-4.456E-06	-5.303E-12
1.60000	1.584E-06	1.584E-06	-2.472E-18	-2.472E-18	-4.505E-06	-4.505E-06	-3.237E-12
1.70000	1.498E-06	1.498E-06	-1.462E-18	-1.462E-18	-4.534E-06	-4.534E-06	-2.095E-12
1.80000	1.419E-06	1.419E-06	-8.631E-19	-8.631E-19	-4.551E-06	-4.551E-06	-1.463E-12
1.90000	1.346E-06	1.346E-06	-5.062E-19	-5.062E-19	-4.561E-06	-4.561E-06	-1.088E-12
2.00000	1.280E-06	1.280E-06	-2.955E-19	-2.955E-19	-4.567E-06	-4.567E-06	-8.493E-13

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 20.000 θ_D= 0. ρ_0= 73.589

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	20.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	20.0000	0.10000	195.079	2.214E-06	9.933E-01	-1.760E-07	-1.760E-07	1.760E-07
0.20000	20.0000	0.20000	175.341	4.909E-06	9.917E-01	-2.424E-07	-2.424E-07	2.424E-07
0.30000	20.0000	0.30000	156.073	7.577E-06	9.899E-01	-3.313E-07	-3.313E-07	3.313E-07
0.40000	20.0000	0.40000	137.474	1.387E-05	9.885E-01	-4.615E-07	-4.615E-07	4.615E-07
0.50000	20.0000	0.50000	119.855	2.263E-05	9.881E-01	-6.403E-07	-6.403E-07	6.403E-07
0.60000	20.0000	0.60000	103.717	3.778E-05	9.904E-01	-8.643E-07	-8.644E-07	8.643E-07
0.70000	20.0000	0.70000	89.861	6.617E-05	9.964E-01	-1.194E-06	-1.194E-06	1.194E-06
0.80000	20.0000	0.80000	79.490	1.067E-04	1.002E 00	-1.553E-06	-1.553E-06	1.553E-06
0.85000	20.0000	0.85000	76.077	1.366E-04	1.002E 00	-1.735E-06	-1.735E-06	1.735E-06
0.90000	20.0000	0.90000	74.083	1.725E-04	9.981E-01	-1.851E-06	-1.851E-06	1.851E-06
0.92500	20.0000	0.92500	73.657	1.938E-04	9.961E-01	-1.877E-06	-1.877E-06	1.877E-06
0.95000	20.0000	0.95000	73.622	2.194E-04	9.951E-01	-1.879E-06	-1.879E-06	1.879E-06
0.96250	20.0000	0.96250	73.752	2.271E-04	9.952E-01	-1.871E-06	-1.871E-06	1.871E-06
0.97500	20.0000	0.97500	73.980	2.391E-04	9.959E-01	-1.857E-06	-1.857E-06	1.857E-06
0.98125	20.0000	0.98125	74.130	2.450E-04	9.964E-01	-1.848E-06	-1.848E-06	1.848E-06
0.98750	20.0000	0.98750	74.304	2.510E-04	9.970E-01	-1.838E-06	-1.838E-06	1.838E-06
0.99375	20.0001	0.99375	74.502	2.578E-04	9.978E-01	-1.826E-06	-1.826E-06	1.826E-06
1.00000	20.0001	1.00000	74.724	2.647E-04	9.987E-01	-1.813E-06	-1.813E-06	1.813E-06
1.00625	20.0001	1.00625	74.969	2.689E-04	9.997E-01	-1.799E-06	-1.799E-06	1.799E-06
1.01250	20.0001	1.01250	75.238	2.749E-04	1.001E 00	-1.783E-06	-1.783E-06	1.783E-06
1.01875	20.0001	1.01875	75.529	2.826E-04	1.002E 00	-1.766E-06	-1.766E-06	1.766E-06
1.02500	20.0001	1.02500	75.843	2.877E-04	1.003E 00	-1.748E-06	-1.748E-06	1.748E-06
1.03750	20.0001	1.03750	76.539	2.971E-04	1.006E 00	-1.709E-06	-1.709E-06	1.709E-06
1.05000	20.0001	1.05000	77.321	3.065E-04	1.009E 00	-1.666E-06	-1.666E-06	1.666E-06
1.07500	20.0001	1.07500	79.138	3.236E-04	1.014E 00	-1.571E-06	-1.571E-06	1.571E-06
1.10000	20.0001	1.10000	81.271	3.347E-04	1.018E 00	-1.480E-06	-1.480E-06	1.480E-06
1.15000	20.0001	1.15000	86.388	3.509E-04	1.023E 00	-1.302E-06	-1.302E-06	1.302E-06
1.20000	20.0001	1.20000	92.478	3.637E-04	1.023E 00	-1.118E-06	-1.118E-06	1.118E-06
1.30000	20.0001	1.30000	106.889	3.825E-04	1.017E 00	-8.149E-07	-8.148E-07	8.149E-07
1.40000	20.0001	1.40000	123.386	3.979E-04	1.009E 00	-5.996E-07	-5.996E-07	5.996E-07
1.50000	20.0002	1.50000	141.241	4.132E-04	1.004E 00	-4.303E-07	-4.303E-07	4.303E-07
1.60000	20.0002	1.60000	159.999	4.201E-04	1.000E 00	-3.109E-07	-3.109E-07	3.109E-07
1.70000	20.0002	1.70000	179.377	4.286E-04	9.981E-01	-2.270E-07	-2.270E-07	2.270E-07
1.80000	20.0002	1.80000	199.195	4.337E-04	9.969E-01	-1.646E-07	-1.646E-07	1.646E-07
1.90000	20.0002	1.90000	219.333	4.337E-04	9.963E-01	-1.203E-07	-1.203E-07	1.203E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 25.000 θ_0= 0. ρ_0= 90.930

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	25.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	25.0000	0.10000	195.870	2.865E-06	9.886E-01	-1.737E-07	-1.737E-07	1.737E-07
0.20000	25.0000	0.20000	177.095	4.536E-06	9.865E-01	-2.356E-07	-2.356E-07	2.356E-07
0.30000	25.0000	0.30000	159.016	9.071E-06	9.847E-01	-3.159E-07	-3.159E-07	3.159E-07
0.40000	25.0000	0.40000	141.900	2.070E-05	9.841E-01	-4.250E-07	-4.250E-07	4.250E-07
0.50000	25.0000	0.50000	126.138	3.372E-05	9.857E-01	-5.697E-07	-5.697E-07	5.697E-07
0.60000	25.0000	0.60000	112.302	4.738E-05	9.902E-01	-7.368E-07	-7.368E-07	7.368E-07
0.70000	25.0000	0.70000	101.186	6.617E-05	9.962E-01	-9.060E-07	-9.060E-07	9.060E-07
0.80000	25.0000	0.80000	93.763	9.477E-05	9.980E-01	-1.083E-06	-1.083E-06	1.083E-06
0.85000	25.0000	0.85000	91.734	1.118E-04	9.955E-01	-1.139E-06	-1.139E-06	1.139E-06
0.90000	25.0000	0.90000	90.940	1.332E-04	9.923E-01	-1.162E-06	-1.162E-06	1.162E-06
0.92500	25.0000	0.92500	91.019	1.434E-04	9.915E-01	-1.159E-06	-1.159E-06	1.159E-06
0.95000	25.0000	0.95000	91.415	1.528E-04	9.920E-01	-1.148E-06	-1.148E-06	1.148E-06
0.96250	25.0000	0.96250	91.730	1.571E-04	9.929E-01	-1.139E-06	-1.139E-06	1.139E-06
0.97500	25.0000	0.97500	92.124	1.639E-04	9.941E-01	-1.128E-06	-1.128E-06	1.128E-06
0.98125	25.0000	0.98125	92.349	1.682E-04	9.949E-01	-1.122E-06	-1.122E-06	1.122E-06
0.98750	25.0000	0.98750	92.593	1.725E-04	9.958E-01	-1.115E-06	-1.115E-06	1.115E-06
0.99375	25.0000	0.99375	92.856	1.733E-04	9.967E-01	-1.107E-06	-1.107E-06	1.107E-06
1.00000	25.0000	1.00000	93.138	1.776E-04	9.978E-01	-1.100E-06	-1.100E-06	1.100E-06
1.00625	25.0000	1.00625	93.438	1.810E-04	9.989E-01	-1.091E-06	-1.091E-06	1.091E-06
1.01250	25.0000	1.01250	93.757	1.853E-04	1.000E 00	-1.083E-06	-1.083E-06	1.083E-06
1.01875	25.0000	1.01875	94.094	1.870E-04	1.001E 00	-1.074E-06	-1.074E-06	1.074E-06
1.02500	25.0000	1.02500	94.448	1.912E-04	1.003E 00	-1.064E-06	-1.064E-06	1.064E-06
1.03750	25.0000	1.03750	95.211	1.947E-04	1.005E 00	-1.044E-06	-1.044E-06	1.044E-06
1.05000	25.0000	1.05000	96.042	1.981E-04	1.008E 00	-1.023E-06	-1.023E-06	1.023E-06
1.07500	25.0000	1.07500	97.907	2.058E-04	1.014E 00	-9.760E-07	-9.760E-07	9.760E-07
1.10000	25.0001	1.10000	100.025	2.143E-04	1.018E 00	-9.257E-07	-9.257E-07	9.258E-07
1.15000	25.0001	1.15000	104.964	2.194E-04	1.025E 00	-8.445E-07	-8.445E-07	8.445E-07
1.20000	25.0001	1.20000	110.731	2.263E-04	1.028E 00	-7.587E-07	-7.587E-07	7.587E-07
1.30000	25.0001	1.30000	124.272	2.399E-04	1.025E 00	-5.898E-07	-5.898E-07	5.898E-07
1.40000	25.0001	1.40000	139.827	2.467E-04	1.019E 00	-4.417E-07	-4.417E-07	4.417E-07
1.50000	25.0001	1.50000	156.797	2.561E-04	1.012E 00	-3.274E-07	-3.274E-07	3.274E-07
1.60000	25.0001	1.60000	174.772	2.613E-04	1.007E 00	-2.446E-07	-2.446E-07	2.446E-07
1.70000	25.0001	1.70000	193.470	2.664E-04	1.003E 00	-1.806E-07	-1.806E-07	1.806E-07
1.80000	25.0001	1.80000	212.702	2.698E-04	1.001E 00	-1.334E-07	-1.334E-07	1.334E-07
1.90000	25.0001	1.90000	232.335	2.715E-04	9.991E-01	-9.834E-08	-9.834E-08	9.834E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 25.000 θ_0= 0. ρ_0= 90.930

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.737E-07	49.901	-7.477E-06	-7.477E-06	7.477E-06	7.477E-06	-2.886E-08	-2.886E-08
0.20000	2.356E-07	99.802	-1.762E-05	-1.762E-05	1.762E-05	1.762E-05	-3.913E-08	-3.914E-08
0.30000	3.159E-07	149.703	-3.130E-05	-3.130E-05	3.130E-05	3.130E-05	-5.247E-08	-5.247E-08
0.40000	4.250E-07	199.605	-4.956E-05	-4.956E-05	4.956E-05	4.956E-05	-7.060E-08	-7.060E-08
0.50000	5.697E-07	249.506	-7.428E-05	-7.429E-05	7.428E-05	7.429E-05	-9.464E-08	-9.464E-08
0.60000	7.369E-07	299.407	-1.068E-04	-1.068E-04	1.068E-04	1.068E-04	-1.224E-07	-1.224E-07
0.70000	9.060E-07	349.308	-1.479E-04	-1.479E-04	1.479E-04	1.479E-04	-1.505E-07	-1.505E-07
0.80000	1.083E-06	399.209	-1.976E-04	-1.976E-04	1.976E-04	1.976E-04	-1.798E-07	-1.798E-07
0.85000	1.139E-06	424.160	-2.254E-04	-2.254E-04	2.254E-04	2.254E-04	-1.892E-07	-1.892E-07
0.90000	1.162E-06	449.110	-2.542E-04	-2.542E-04	2.542E-04	2.542E-04	-1.930E-07	-1.930E-07
0.92500	1.159E-06	461.586	-2.687E-04	-2.687E-04	2.687E-04	2.687E-04	-1.926E-07	-1.926E-07
0.95000	1.148E-06	474.061	-2.831E-04	-2.831E-04	2.831E-04	2.831E-04	-1.907E-07	-1.907E-07
0.96250	1.139E-06	480.299	-2.902E-04	-2.902E-04	2.902E-04	2.902E-04	-1.892E-07	-1.892E-07
0.97500	1.128E-06	486.536	-2.973E-04	-2.973E-04	2.973E-04	2.973E-04	-1.874E-07	-1.874E-07
0.98125	1.122E-06	489.655	-3.008E-04	-3.008E-04	3.008E-04	3.008E-04	-1.863E-07	-1.863E-07
0.98750	1.115E-06	492.774	-3.043E-04	-3.043E-04	3.043E-04	3.043E-04	-1.852E-07	-1.852E-07
0.99375	1.107E-06	495.893	-3.077E-04	-3.077E-04	3.077E-04	3.077E-04	-1.840E-07	-1.840E-07
1.00000	1.100E-06	499.012	-3.112E-04	-3.112E-04	3.112E-04	3.112E-04	-1.827E-07	-1.827E-07
1.00625	1.091E-06	502.130	-3.146E-04	-3.146E-04	3.146E-04	3.146E-04	-1.813E-07	-1.813E-07
1.01250	1.083E-06	505.249	-3.180E-04	-3.180E-04	3.180E-04	3.180E-04	-1.799E-07	-1.799E-07
1.01875	1.074E-06	508.368	-3.213E-04	-3.214E-04	3.213E-04	3.214E-04	-1.783E-07	-1.783E-07
1.02500	1.064E-06	511.487	-3.247E-04	-3.247E-04	3.247E-04	3.247E-04	-1.768E-07	-1.768E-07
1.03750	1.044E-06	517.724	-3.313E-04	-3.313E-04	3.313E-04	3.313E-04	-1.734E-07	-1.734E-07
1.05000	1.023E-06	523.962	-3.377E-04	-3.377E-04	3.377E-04	3.377E-04	-1.699E-07	-1.699E-07
1.07500	9.760E-07	536.437	-3.502E-04	-3.502E-04	3.502E-04	3.502E-04	-1.621E-07	-1.621E-07
1.10000	9.258E-07	548.913	-3.620E-04	-3.620E-04	3.620E-04	3.620E-04	-1.538E-07	-1.538E-07
1.15000	8.445E-07	573.863	-3.841E-04	-3.841E-04	3.841E-04	3.841E-04	-1.403E-07	-1.403E-07
1.20000	7.587E-07	598.814	-4.041E-04	-4.041E-04	4.041E-04	4.041E-04	-1.260E-07	-1.260E-07
1.30000	5.898E-07	648.715	-4.377E-04	-4.377E-04	4.377E-04	4.377E-04	-9.798E-08	-9.798E-08
1.40000	4.417E-07	698.616	-4.634E-04	-4.634E-04	4.634E-04	4.634E-04	-7.338E-08	-7.338E-08
1.50000	3.274E-07	748.517	-4.823E-04	-4.823E-04	4.823E-04	4.824E-04	-5.439E-08	-5.439E-08
1.60000	2.446E-07	798.418	-4.965E-04	-4.965E-04	4.965E-04	4.965E-04	-4.064E-08	-4.064E-08
1.70000	1.806E-07	848.320	-5.071E-04	-5.071E-04	5.071E-04	5.071E-04	-3.001E-08	-3.001E-08
1.80000	1.334E-07	898.221	-5.148E-04	-5.148E-04	5.148E-04	5.149E-04	-2.216E-08	-2.216E-08
1.90000	9.834E-08	948.122	-5.206E-04	-5.206E-04	5.206E-04	5.206E-04	-1.634E-08	-1.634E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 25.000 θ_0= 0. ρ_a= 90.930

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-2.658E-12
0.10000	1.971E-09	1.971E-09	-7.026E-19	-7.026E-19	-8.284E-09	-8.285E-09	-3.451E-12
0.20000	5.339E-09	5.339E-09	-1.141E-18	-1.141E-18	-2.183E-08	-2.183E-08	-4.660E-12
0.30000	1.065E-08	1.065E-08	-1.819E-18	-1.819E-18	-4.361E-08	-4.361E-08	-6.633E-12
0.40000	1.969E-08	1.969E-08	-2.881E-18	-2.881E-18	-7.804E-08	-7.804E-08	-9.763E-12
0.50000	3.475E-08	3.475E-08	-4.480E-18	-4.480E-18	-1.325E-07	-1.325E-07	-1.476E-11
0.60000	5.784E-08	5.784E-08	-6.600E-18	-6.601E-18	-2.147E-07	-2.147E-07	-2.292E-11
0.70000	9.909E-08	9.910E-08	-9.012E-18	-9.012E-18	-3.315E-07	-3.315E-07	-3.485E-11
0.80000	1.736E-07	1.736E-07	-1.170E-17	-1.170E-17	-4.869E-07	-4.869E-07	-4.608E-11
0.85000	2.287E-07	2.287E-07	-1.260E-17	-1.260E-17	-5.781E-07	-5.781E-07	-4.994E-11
0.90000	2.963E-07	2.963E-07	-1.297E-17	-1.297E-17	-6.741E-07	-6.741E-07	-5.159E-11
0.92500	3.339E-07	3.339E-07	-1.294E-17	-1.294E-17	-7.226E-07	-7.226E-07	-5.142E-11
0.95000	3.722E-07	3.722E-07	-1.275E-17	-1.275E-17	-7.707E-07	-7.707E-07	-5.060E-11
0.96250	3.911E-07	3.911E-07	-1.260E-17	-1.261E-17	-7.944E-07	-7.944E-07	-4.996E-11
0.97500	4.096E-07	4.096E-07	-1.243E-17	-1.243E-17	-8.178E-07	-8.178E-07	-4.918E-11
0.98125	4.186E-07	4.186E-07	-1.232E-17	-1.232E-17	-8.294E-07	-8.294E-07	-4.874E-11
0.98750	4.274E-07	4.274E-07	-1.221E-17	-1.221E-17	-8.408E-07	-8.408E-07	-4.827E-11
0.99375	4.360E-07	4.360E-07	-1.210E-17	-1.210E-17	-8.522E-07	-8.522E-07	-4.777E-11
1.00000	4.444E-07	4.444E-07	-1.197E-17	-1.197E-17	-8.634E-07	-8.635E-07	-4.724E-11
1.00625	4.525E-07	4.525E-07	-1.184E-17	-1.184E-17	-8.746E-07	-8.746E-07	-4.668E-11
1.01250	4.604E-07	4.604E-07	-1.170E-17	-1.171E-17	-8.856E-07	-8.856E-07	-4.611E-11
1.01875	4.680E-07	4.680E-07	-1.156E-17	-1.156E-17	-8.965E-07	-8.965E-07	-4.551E-11
1.02500	4.753E-07	4.753E-07	-1.141E-17	-1.141E-17	-9.072E-07	-9.072E-07	-4.489E-11
1.03750	4.891E-07	4.891E-07	-1.110E-17	-1.110E-17	-9.283E-07	-9.283E-07	-4.360E-11
1.05000	5.016E-07	5.016E-07	-1.077E-17	-1.077E-17	-9.487E-07	-9.487E-07	-4.225E-11
1.07500	5.230E-07	5.230E-07	-1.006E-17	-1.006E-17	-9.877E-07	-9.877E-07	-3.945E-11
1.10000	5.398E-07	5.398E-07	-9.310E-18	-9.310E-18	-1.024E-06	-1.024E-06	-3.658E-11
1.15000	5.624E-07	5.624E-07	-8.107E-18	-8.107E-18	-1.089E-06	-1.089E-06	-3.003E-11
1.20000	5.733E-07	5.733E-07	-6.898E-18	-6.898E-18	-1.145E-06	-1.145E-06	-2.425E-11
1.30000	5.744E-07	5.744E-07	-4.720E-18	-4.720E-18	-1.231E-06	-1.231E-06	-1.561E-11
1.40000	5.605E-07	5.605E-07	-3.053E-18	-3.053E-18	-1.289E-06	-1.289E-06	-1.028E-11
1.50000	5.407E-07	5.407E-07	-1.926E-18	-1.926E-18	-1.325E-06	-1.325E-06	-6.973E-12
1.60000	5.183E-07	5.183E-07	-1.211E-18	-1.211E-18	-1.349E-06	-1.349E-06	-4.867E-12
1.70000	4.951E-07	4.951E-07	-7.475E-19	-7.475E-19	-1.363E-06	-1.363E-06	-3.582E-12
1.80000	4.724E-07	4.724E-07	-4.546E-19	-4.546E-19	-1.372E-06	-1.372E-06	-2.748E-12
1.90000	4.508E-07	4.508E-07	-2.735E-19	-2.735E-19	-1.377E-06	-1.377E-06	-2.195E-12

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 30.000 θ_0= 0. ρ_a= 107.580

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	30.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	30.0000	0.10000	196.820	1.921E-06	9.849E-01	-1.711E-07	-1.711E-07	1.711E-07
0.20000	30.0000	0.20000	179.189	5.763E-06	9.830E-01	-2.277E-07	-2.277E-07	2.277E-07
0.30000	30.0000	0.30000	162.496	1.185E-05	9.819E-01	-2.985E-07	-2.985E-07	2.985E-07
0.40000	30.0000	0.40000	147.062	2.284E-05	9.826E-01	-3.861E-07	-3.861E-07	3.861E-07
0.50000	30.0000	0.50000	133.325	3.244E-05	9.854E-01	-4.985E-07	-4.985E-07	4.985E-07
0.60000	30.0000	0.60000	121.859	4.397E-05	9.899E-01	-6.169E-07	-6.169E-07	6.169E-07
0.70000	30.0000	0.70000	113.355	5.934E-05	9.932E-01	-7.226E-07	-7.226E-07	7.225E-07
0.80000	30.0000	0.80000	108.513	7.641E-05	9.916E-01	-7.906E-07	-7.906E-07	7.906E-07
0.85000	30.0000	0.85000	107.635	8.538E-05	9.894E-01	-8.036E-07	-8.036E-07	8.036E-07
0.90000	30.0000	0.90000	107.828	9.477E-05	9.884E-01	-8.008E-07	-8.008E-07	8.008E-07
0.92500	30.0000	0.92500	108.325	9.904E-05	9.890E-01	-7.934E-07	-7.934E-07	7.934E-07
0.95000	30.0000	0.95000	109.086	1.059E-04	9.906E-01	-7.822E-07	-7.822E-07	7.822E-07
0.96250	30.0000	0.96250	109.564	1.101E-04	9.918E-01	-7.753E-07	-7.753E-07	7.753E-07
0.97500	30.0000	0.97500	110.105	1.110E-04	9.933E-01	-7.676E-07	-7.676E-07	7.676E-07
0.98125	30.0000	0.98125	110.399	1.161E-04	9.942E-01	-7.634E-07	-7.634E-07	7.634E-07
0.98750	30.0000	0.98750	110.709	1.178E-04	9.951E-01	-7.590E-07	-7.590E-07	7.590E-07
0.99375	30.0000	0.99375	111.034	1.187E-04	9.960E-01	-7.544E-07	-7.544E-07	7.544E-07
1.00000	30.0000	1.00000	111.375	1.195E-04	9.970E-01	-7.497E-07	-7.497E-07	7.497E-07
1.00625	30.0000	1.00625	111.730	1.229E-04	9.980E-01	-7.447E-07	-7.447E-07	7.447E-07
1.01250	30.0000	1.01250	112.101	1.255E-04	9.991E-01	-7.396E-07	-7.396E-07	7.396E-07
1.01875	30.0000	1.01875	112.486	1.264E-04	1.000E 00	-7.343E-07	-7.343E-07	7.343E-07
1.02500	30.0000	1.02500	112.886	1.281E-04	1.001E 00	-7.289E-07	-7.289E-07	7.289E-07
1.03750	30.0000	1.03750	113.730	1.306E-04	1.004E 00	-7.175E-07	-7.175E-07	7.175E-07
1.05000	30.0000	1.05000	114.631	1.315E-04	1.006E 00	-7.056E-07	-7.056E-07	7.056E-07
1.07500	30.0000	1.07500	116.598	1.366E-04	1.011E 00	-6.803E-07	-6.803E-07	6.803E-07
1.10000	30.0000	1.10000	118.776	1.392E-04	1.015E 00	-6.533E-07	-6.533E-07	6.533E-07
1.15000	30.0000	1.15000	123.720	1.460E-04	1.022E 00	-5.959E-07	-5.959E-07	5.959E-07
1.20000	30.0000	1.20000	129.371	1.511E-04	1.026E 00	-5.365E-07	-5.365E-07	5.365E-07
1.30000	30.0001	1.30000	142.450	1.597E-04	1.028E 00	-4.207E-07	-4.207E-07	4.207E-07
1.40000	30.0001	1.40000	157.394	1.656E-04	1.024E 00	-3.243E-07	-3.243E-07	3.243E-07
1.50000	30.0001	1.50000	173.723	1.699E-04	1.018E 00	-2.488E-07	-2.488E-07	2.488E-07
1.60000	30.0001	1.60000	191.082	1.776E-04	1.013E 00	-1.878E-07	-1.878E-07	1.878E-07
1.70000	30.0001	1.70000	209.215	1.810E-04	1.009E 00	-1.408E-07	-1.408E-07	1.408E-07
1.80000	30.0001	1.80000	227.938	1.861E-04	1.006E 00	-1.053E-07	-1.053E-07	1.053E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 30.000 θ_D= 0. ρ_a=107.580

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.711E-07	49.901	-7.422E-06	-7.422E-06	7.422E-06	7.422E-06	-2.842E-08	-2.842E-08
0.20000	2.277E-07	99.802	-1.732E-05	-1.732E-05	1.732E-05	1.732E-05	-3.783E-08	-3.783E-08
0.30000	2.986E-07	149.703	-3.039E-05	-3.039E-05	3.039E-05	3.039E-05	-4.959E-08	-4.959E-08
0.40000	3.861E-07	199.605	-4.737E-05	-4.737E-05	4.737E-05	4.737E-05	-6.414E-08	-6.414E-08
0.50000	4.985E-07	249.606	-6.939E-05	-6.939E-05	6.939E-05	6.939E-05	-8.280E-08	-8.280E-08
0.60000	6.169E-07	299.407	-9.722E-05	-9.722E-05	9.722E-05	9.722E-05	-1.025E-07	-1.025E-07
0.70000	7.226E-07	349.308	-1.307E-04	-1.307E-04	1.307E-04	1.307E-04	-1.200E-07	-1.200E-07
0.80000	7.906E-07	399.209	-1.687E-04	-1.687E-04	1.687E-04	1.687E-04	-1.313E-07	-1.313E-07
0.85000	8.036E-07	424.160	-1.886E-04	-1.886E-04	1.886E-04	1.886E-04	-1.335E-07	-1.335E-07
0.90000	8.008E-07	449.110	-2.087E-04	-2.087E-04	2.087E-04	2.087E-04	-1.330E-07	-1.330E-07
0.92500	7.934E-07	461.586	-2.186E-04	-2.186E-04	2.186E-04	2.186E-04	-1.318E-07	-1.318E-07
0.95000	7.822E-07	474.061	-2.285E-04	-2.285E-04	2.285E-04	2.285E-04	-1.299E-07	-1.299E-07
0.96250	7.753E-07	480.299	-2.333E-04	-2.333E-04	2.333E-04	2.333E-04	-1.288E-07	-1.288E-07
0.97500	7.676E-07	486.536	-2.381E-04	-2.381E-04	2.381E-04	2.381E-04	-1.275E-07	-1.275E-07
0.98125	7.634E-07	489.655	-2.405E-04	-2.405E-04	2.405E-04	2.405E-04	-1.268E-07	-1.268E-07
0.98750	7.590E-07	492.774	-2.429E-04	-2.429E-04	2.429E-04	2.429E-04	-1.261E-07	-1.261E-07
0.99375	7.544E-07	495.893	-2.452E-04	-2.452E-04	2.452E-04	2.453E-04	-1.253E-07	-1.253E-07
1.00000	7.497E-07	499.012	-2.476E-04	-2.476E-04	2.476E-04	2.476E-04	-1.245E-07	-1.245E-07
1.00625	7.447E-07	502.130	-2.499E-04	-2.499E-04	2.499E-04	2.499E-04	-1.237E-07	-1.237E-07
1.01250	7.396E-07	505.249	-2.522E-04	-2.522E-04	2.522E-04	2.522E-04	-1.229E-07	-1.229E-07
1.01875	7.343E-07	508.368	-2.545E-04	-2.545E-04	2.545E-04	2.545E-04	-1.220E-07	-1.220E-07
1.02500	7.289E-07	511.487	-2.568E-04	-2.568E-04	2.568E-04	2.568E-04	-1.211E-07	-1.211E-07
1.03750	7.175E-07	517.724	-2.613E-04	-2.613E-04	2.613E-04	2.613E-04	-1.192E-07	-1.192E-07
1.05000	7.056E-07	523.962	-2.658E-04	-2.658E-04	2.658E-04	2.658E-04	-1.172E-07	-1.172E-07
1.07500	6.803E-07	536.437	-2.744E-04	-2.744E-04	2.744E-04	2.744E-04	-1.130E-07	-1.130E-07
1.10000	6.533E-07	548.913	-2.827E-04	-2.827E-04	2.827E-04	2.827E-04	-1.085E-07	-1.085E-07
1.15000	5.959E-07	573.863	-2.983E-04	-2.983E-04	2.983E-04	2.983E-04	-9.899E-08	-9.899E-08
1.20000	5.365E-07	598.814	-3.125E-04	-3.125E-04	3.125E-04	3.125E-04	-8.912E-08	-8.912E-08
1.30000	4.207E-07	648.715	-3.363E-04	-3.363E-04	3.363E-04	3.363E-04	-6.988E-08	-6.988E-08
1.40000	3.243E-07	698.616	-3.547E-04	-3.547E-04	3.547E-04	3.547E-04	-5.387E-08	-5.387E-08
1.50000	2.488E-07	748.517	-3.690E-04	-3.690E-04	3.690E-04	3.690E-04	-4.133E-08	-4.133E-08
1.60000	1.878E-07	798.418	-3.798E-04	-3.798E-04	3.798E-04	3.798E-04	-3.119E-08	-3.119E-08
1.70000	1.408E-07	848.320	-3.879E-04	-3.880E-04	3.880E-04	3.880E-04	-2.339E-08	-2.339E-08
1.80000	1.053E-07	898.221	-3.941E-04	-3.941E-04	3.941E-04	3.941E-04	-1.749E-08	-1.749E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 30.000 θ_D= 0. ρ_a=107.580

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-3.720E-12
0.10000	2.292E-09	2.292E-09	-6.856E-19	-6.856E-19	-8.178E-09	-8.178E-09	-4.766E-12
0.20000	6.096E-09	6.096E-09	-1.081E-18	-1.081E-18	-2.119E-08	-2.119E-08	-6.289E-12
0.30000	1.188E-08	1.188E-08	-1.663E-18	-1.663E-18	-4.145E-08	-4.145E-08	-8.627E-12
0.40000	2.107E-08	2.107E-08	-2.493E-18	-2.493E-18	-7.214E-08	-7.214E-08	-1.214E-11
0.50000	3.571E-08	3.571E-08	-3.663E-18	-3.663E-18	-1.178E-07	-1.178E-07	-1.694E-11
0.60000	5.678E-08	5.678E-08	-5.050E-18	-5.050E-18	-1.828E-07	-1.828E-07	-2.348E-11
0.70000	9.019E-08	9.019E-08	-6.409E-18	-6.409E-18	-2.688E-07	-2.688E-07	-3.095E-11
0.80000	1.428E-07	1.428E-07	-7.340E-18	-7.340E-18	-3.725E-07	-3.725E-07	-3.676E-11
0.85000	1.771E-07	1.771E-07	-7.522E-18	-7.523E-18	-4.282E-07	-4.282E-07	-3.797E-11
0.90000	2.152E-07	2.152E-07	-7.482E-18	-7.482E-18	-4.844E-07	-4.844E-07	-3.770E-11
0.92500	2.349E-07	2.349E-07	-7.378E-18	-7.378E-18	-5.122E-07	-5.122E-07	-3.702E-11
0.95000	2.543E-07	2.543E-07	-7.223E-18	-7.223E-18	-5.396E-07	-5.396E-07	-3.600E-11
0.96250	2.636E-07	2.636E-07	-7.127E-18	-7.127E-18	-5.530E-07	-5.530E-07	-3.539E-11
0.97500	2.727E-07	2.727E-07	-7.020E-18	-7.020E-18	-5.662E-07	-5.662E-07	-3.470E-11
0.98125	2.771E-07	2.771E-07	-6.962E-18	-6.962E-18	-5.727E-07	-5.727E-07	-3.434E-11
0.98750	2.813E-07	2.813E-07	-6.902E-18	-6.902E-18	-5.792E-07	-5.792E-07	-3.396E-11
0.99375	2.855E-07	2.855E-07	-6.839E-18	-6.839E-18	-5.856E-07	-5.857E-07	-3.357E-11
1.00000	2.896E-07	2.896E-07	-6.774E-18	-6.774E-18	-5.920E-07	-5.920E-07	-3.317E-11
1.00625	2.935E-07	2.936E-07	-6.707E-18	-6.707E-18	-5.983E-07	-5.983E-07	-3.276E-11
1.01250	2.973E-07	2.973E-07	-6.638E-18	-6.638E-18	-6.045E-07	-6.046E-07	-3.234E-11
1.01875	3.010E-07	3.010E-07	-6.567E-18	-6.567E-18	-6.107E-07	-6.107E-07	-3.191E-11
1.02500	3.045E-07	3.046E-07	-6.493E-18	-6.493E-18	-6.168E-07	-6.168E-07	-3.147E-11
1.03750	3.112E-07	3.112E-07	-6.342E-18	-6.342E-18	-6.288E-07	-6.288E-07	-3.057E-11
1.05000	3.174E-07	3.174E-07	-6.184E-18	-6.184E-18	-6.405E-07	-6.406E-07	-2.965E-11
1.07500	3.280E-07	3.280E-07	-5.852E-18	-5.852E-18	-6.631E-07	-6.631E-07	-2.777E-11
1.10000	3.367E-07	3.367E-07	-5.506E-18	-5.506E-18	-6.843E-07	-6.843E-07	-2.588E-11
1.15000	3.491E-07	3.491E-07	-4.794E-18	-4.794E-18	-7.228E-07	-7.228E-07	-2.221E-11
1.20000	3.560E-07	3.560E-07	-4.092E-18	-4.092E-18	-7.560E-07	-7.560E-07	-1.887E-11
1.30000	3.579E-07	3.580E-07	-2.837E-18	-2.837E-18	-8.075E-07	-8.076E-07	-1.351E-11
1.40000	3.516E-07	3.516E-07	-1.897E-18	-1.897E-18	-8.425E-07	-8.425E-07	-9.632E-12
1.50000	3.414E-07	3.414E-07	-1.244E-18	-1.244E-18	-8.657E-07	-8.657E-07	-6.943E-12
1.60000	3.289E-07	3.290E-07	-7.950E-19	-7.950E-19	-8.807E-07	-8.807E-07	-5.197E-12
1.70000	3.156E-07	3.156E-07	-4.976E-19	-4.976E-19	-8.902E-07	-8.902E-07	-4.023E-12
1.80000	3.023E-07	3.023E-07	-3.065E-19	-3.065E-19	-8.961E-07	-8.961E-07	-3.218E-12

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_D= 35.000 θ_D= 0. ρ_a=123.410

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	35.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	35.0000	0.10000	197.919	2.188E-06	9.864E-01	-1.681E-07	-1.681E-07	1.681E-07
0.20000	35.0000	0.20000	181.595	5.976E-06	9.852E-01	-2.190E-07	-2.190E-07	2.190E-07
0.30000	35.0000	0.30000	166.454	1.302E-05	9.850E-01	-2.800E-07	-2.800E-07	2.800E-07
0.40000	35.0000	0.40000	152.850	1.665E-05	9.860E-01	-3.491E-07	-3.491E-07	3.491E-07
0.50000	35.0000	0.50000	141.228	1.665E-05	9.883E-01	-4.304E-07	-4.304E-07	4.304E-07
0.60000	35.0000	0.60000	132.111	1.665E-05	9.906E-01	-5.098E-07	-5.098E-07	5.098E-07
0.70000	35.0000	0.70000	126.045	1.665E-05	9.910E-01	-5.707E-07	-5.707E-07	5.707E-07
0.80000	35.0000	0.80000	123.479	3.330E-05	9.892E-01	-5.986E-07	-5.986E-07	5.986E-07
0.85000	35.0000	0.85000	123.588	3.842E-05	9.887E-01	-5.974E-07	-5.974E-07	5.974E-07
0.90000	35.0000	0.90000	124.630	4.867E-05	9.897E-01	-5.859E-07	-5.859E-07	5.859E-07
0.92500	35.0000	0.92500	125.494	4.867E-05	9.909E-01	-5.766E-07	-5.766E-07	5.766E-07
0.95000	35.0000	0.95000	126.581	5.293E-05	9.926E-01	-5.651E-07	-5.651E-07	5.651E-07
0.96250	35.0000	0.96250	127.206	5.891E-05	9.936E-01	-5.585E-07	-5.685E-07	5.585E-07
0.97500	35.0000	0.97500	127.885	6.062E-05	9.948E-01	-5.515E-07	-5.515E-07	5.515E-07
0.98125	35.0000	0.98125	128.244	6.233E-05	9.954E-01	-5.479E-07	-5.479E-07	5.479E-07
0.98750	35.0000	0.98750	128.616	6.233E-05	9.960E-01	-5.441E-07	-5.441E-07	5.441E-07
0.99375	35.0000	0.99375	129.001	6.233E-05	9.966E-01	-5.402E-07	-5.402E-07	5.402E-07
1.00000	35.0000	1.00000	129.399	6.574E-05	9.973E-01	-5.362E-07	-5.362E-07	5.362E-07
1.00625	35.0000	1.00625	129.810	6.745E-05	9.980E-01	-5.321E-07	-5.321E-07	5.321E-07
1.01250	35.0000	1.01250	130.233	6.745E-05	9.987E-01	-5.280E-07	-5.280E-07	5.280E-07
1.01875	35.0000	1.01875	130.669	7.172E-05	9.994E-01	-5.237E-07	-5.237E-07	5.237E-07
1.02500	35.0000	1.02500	131.117	7.342E-05	1.000E 00	-5.194E-07	-5.194E-07	5.194E-07
1.03750	35.0000	1.03750	132.050	7.599E-05	1.002E 00	-5.104E-07	-5.104E-07	5.104E-07
1.05000	35.0000	1.05000	133.030	7.684E-05	1.003E 00	-5.012E-07	-5.012E-07	5.012E-07
1.07500	35.0000	1.07500	135.131	8.025E-05	1.006E 00	-4.820E-07	-4.820E-07	4.820E-07
1.10000	35.0000	1.10000	137.410	8.367E-05	1.009E 00	-4.620E-07	-4.620E-07	4.620E-07
1.15000	35.0000	1.15000	142.469	8.623E-05	1.013E 00	-4.205E-07	-4.205E-07	4.205E-07
1.20000	35.0000	1.20000	148.137	9.135E-05	1.017E 00	-3.785E-07	-3.785E-07	3.785E-07
1.30000	35.0000	1.30000	161.040	9.477E-05	1.020E 00	-3.057E-07	-3.057E-07	3.057E-07
1.40000	35.0000	1.40000	175.638	9.733E-05	1.019E 00	-2.412E-07	-2.412E-07	2.412E-07
1.50000	35.0000	1.50000	191.545	9.904E-05	1.016E 00	-1.864E-07	-1.864E-07	1.864E-07
1.60000	35.0001	1.60000	208.462	1.067E-04	1.013E 00	-1.425E-07	-1.425E-07	1.425E-07
1.70000	35.0001	1.70000	226.161	1.084E-04	1.010E 00	-1.082E-07	-1.082E-07	1.082E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_D= 35.000 θ_D= 0. ρ_a=123.410

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.681E-07	49.901	-7.357E-06	-7.357E-06	7.357E-06	7.357E-06	-2.792E-08	-2.792E-08
0.20000	2.190E-07	99.802	-1.697E-05	-1.697E-05	1.697E-05	1.697E-05	-3.638E-08	-3.638E-08
0.30000	2.800E-07	149.703	-2.938E-05	-2.938E-05	2.938E-05	2.938E-05	-4.651E-08	-4.651E-08
0.40000	3.491E-07	199.605	-4.505E-05	-4.505E-05	4.505E-05	4.505E-05	-5.799E-08	-5.799E-08
0.50000	4.304E-07	249.506	-6.445E-05	-6.445E-05	6.445E-05	6.445E-05	-7.149E-08	-7.149E-08
0.60000	5.098E-07	299.407	-8.795E-05	-8.795E-05	8.795E-05	8.795E-05	-8.469E-08	-8.469E-08
0.70000	5.707E-07	349.308	-1.150E-04	-1.150E-04	1.150E-04	1.150E-04	-9.480E-08	-9.480E-08
0.80000	5.986E-07	399.209	-1.444E-04	-1.444E-04	1.444E-04	1.444E-04	-9.944E-08	-9.944E-08
0.85000	5.974E-07	424.160	-1.593E-04	-1.593E-04	1.593E-04	1.593E-04	-9.923E-08	-9.923E-08
0.90000	5.859E-07	449.110	-1.741E-04	-1.741E-04	1.741E-04	1.741E-04	-9.733E-08	-9.733E-08
0.92500	5.766E-07	461.586	-1.813E-04	-1.813E-04	1.813E-04	1.813E-04	-9.578E-08	-9.578E-08
0.95000	5.651E-07	474.061	-1.885E-04	-1.885E-04	1.885E-04	1.885E-04	-9.386E-08	-9.386E-08
0.96250	5.585E-07	480.299	-1.920E-04	-1.920E-04	1.920E-04	1.920E-04	-9.278E-08	-9.278E-08
0.97500	5.515E-07	486.536	-1.954E-04	-1.954E-04	1.954E-04	1.954E-04	-9.162E-08	-9.162E-08
0.98125	5.479E-07	489.655	-1.971E-04	-1.971E-04	1.971E-04	1.971E-04	-9.101E-08	-9.101E-08
0.98750	5.441E-07	492.774	-1.988E-04	-1.988E-04	1.988E-04	1.988E-04	-9.038E-08	-9.038E-08
0.99375	5.402E-07	495.893	-2.005E-04	-2.005E-04	2.005E-04	2.005E-04	-8.973E-08	-8.973E-08
1.00000	5.362E-07	499.012	-2.022E-04	-2.022E-04	2.022E-04	2.022E-04	-8.907E-08	-8.907E-08
1.00625	5.321E-07	502.130	-2.039E-04	-2.039E-04	2.039E-04	2.039E-04	-8.839E-08	-8.839E-08
1.01250	5.280E-07	505.249	-2.055E-04	-2.055E-04	2.055E-04	2.055E-04	-8.770E-08	-8.770E-08
1.01875	5.237E-07	508.368	-2.072E-04	-2.072E-04	2.072E-04	2.072E-04	-8.699E-08	-8.699E-08
1.02500	5.194E-07	511.487	-2.088E-04	-2.088E-04	2.088E-04	2.088E-04	-8.627E-08	-8.627E-08
1.03750	5.104E-07	517.725	-2.120E-04	-2.120E-04	2.120E-04	2.120E-04	-8.479E-08	-8.479E-08
1.05000	5.012E-07	523.962	-2.152E-04	-2.152E-04	2.152E-04	2.152E-04	-8.326E-08	-8.326E-08
1.07500	4.820E-07	536.437	-2.213E-04	-2.213E-04	2.213E-04	2.213E-04	-8.007E-08	-8.007E-08
1.10000	4.620E-07	548.913	-2.272E-04	-2.272E-04	2.272E-04	2.272E-04	-7.675E-08	-7.675E-08
1.15000	4.205E-07	573.863	-2.382E-04	-2.382E-04	2.382E-04	2.382E-04	-6.986E-08	-6.986E-08
1.20000	3.785E-07	598.814	-2.482E-04	-2.482E-04	2.482E-04	2.482E-04	-6.287E-08	-6.287E-08
1.30000	3.057E-07	648.715	-2.652E-04	-2.652E-04	2.652E-04	2.652E-04	-5.078E-08	-5.078E-08
1.40000	2.412E-07	698.616	-2.788E-04	-2.788E-04	2.788E-04	2.788E-04	-4.007E-08	-4.007E-08
1.50000	1.864E-07	748.517	-2.894E-04	-2.894E-04	2.894E-04	2.894E-04	-3.096E-08	-3.096E-08
1.60000	1.425E-07	798.419	-2.976E-04	-2.976E-04	2.976E-04	2.976E-04	-2.367E-08	-2.367E-08
1.70000	1.082E-07	848.320	-3.038E-04	-3.038E-04	3.038E-04	3.038E-04	-1.798E-08	-1.798E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 35.000 θ_D= 0. ρ_0=123.410

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-4.896E-12
0.10000	2.590E-09	2.590E-09	-6.664E-19	-6.664E-19	-8.057E-09	-8.057E-09	-6.175E-12
0.20000	6.768E-09	6.768E-09	-1.016E-18	-1.016E-18	-2.048E-08	-2.048E-08	-7.944E-12
0.30000	1.291E-08	1.291E-08	-1.501E-18	-1.501E-18	-3.913E-08	-3.913E-08	-1.048E-11
0.40000	2.202E-08	2.202E-08	-2.133E-18	-2.133E-18	-6.614E-08	-6.614E-08	-1.402E-11
0.50000	3.586E-08	3.586E-08	-2.935E-18	-2.935E-18	-1.038E-07	-1.038E-07	-1.828E-11
0.60000	5.474E-08	5.475E-08	-3.789E-18	-3.789E-18	-1.542E-07	-1.542E-07	-2.303E-11
0.70000	8.047E-08	8.048E-08	-4.491E-18	-4.491E-18	-2.165E-07	-2.165E-07	-2.728E-11
0.80000	1.140E-07	1.140E-07	-4.826E-18	-4.826E-18	-2.867E-07	-2.867E-07	-2.943E-11
0.85000	1.331E-07	1.331E-07	-4.811E-18	-4.811E-18	-3.229E-07	-3.229E-07	-2.934E-11
0.90000	1.525E-07	1.525E-07	-4.673E-18	-4.673E-18	-3.584E-07	-3.584E-07	-2.844E-11
0.92500	1.619E-07	1.619E-07	-4.561E-18	-4.561E-18	-3.757E-07	-3.757E-07	-2.773E-11
0.95000	1.709E-07	1.709E-07	-4.424E-18	-4.424E-18	-3.925E-07	-3.925E-07	-2.687E-11
0.96250	1.751E-07	1.751E-07	-4.348E-18	-4.348E-18	-4.007E-07	-4.007E-07	-2.639E-11
0.97500	1.792E-07	1.792E-07	-4.266E-18	-4.266E-18	-4.087E-07	-4.087E-07	-2.589E-11
0.98125	1.812E-07	1.812E-07	-4.223E-18	-4.223E-18	-4.127E-07	-4.127E-07	-2.563E-11
0.98750	1.831E-07	1.831E-07	-4.179E-18	-4.179E-18	-4.166E-07	-4.166E-07	-2.536E-11
0.99375	1.850E-07	1.850E-07	-4.134E-18	-4.134E-18	-4.205E-07	-4.205E-07	-2.509E-11
1.00000	1.868E-07	1.868E-07	-4.089E-18	-4.089E-18	-4.244E-07	-4.244E-07	-2.481E-11
1.00625	1.886E-07	1.886E-07	-4.042E-18	-4.042E-18	-4.282E-07	-4.282E-07	-2.453E-11
1.01250	1.903E-07	1.903E-07	-3.994E-18	-3.994E-18	-4.319E-07	-4.319E-07	-2.425E-11
1.01875	1.919E-07	1.919E-07	-3.946E-18	-3.946E-18	-4.356E-07	-4.356E-07	-2.396E-11
1.02500	1.935E-07	1.936E-07	-3.896E-18	-3.896E-18	-4.393E-07	-4.393E-07	-2.367E-11
1.03750	1.966E-07	1.966E-07	-3.796E-18	-3.796E-18	-4.465E-07	-4.465E-07	-2.308E-11
1.05000	1.994E-07	1.994E-07	-3.693E-18	-3.693E-18	-4.535E-07	-4.535E-07	-2.249E-11
1.07500	2.044E-07	2.044E-07	-3.482E-18	-3.482E-18	-4.669E-07	-4.669E-07	-2.128E-11
1.10000	2.085E-07	2.085E-07	-3.267E-18	-3.267E-18	-4.795E-07	-4.795E-07	-2.009E-11
1.15000	2.147E-07	2.147E-07	-2.835E-18	-2.835E-18	-5.024E-07	-5.024E-07	-1.776E-11
1.20000	2.186E-07	2.186E-07	-2.419E-18	-2.419E-18	-5.220E-07	-5.220E-07	-1.562E-11
1.30000	2.206E-07	2.206E-07	-1.727E-18	-1.727E-18	-5.528E-07	-5.528E-07	-1.172E-11
1.40000	2.182E-07	2.182E-07	-1.184E-18	-1.184E-18	-5.744E-07	-5.744E-07	-8.825E-12
1.50000	2.130E-07	2.130E-07	-7.856E-19	-7.856E-19	-5.890E-07	-5.890E-07	-6.790E-12
1.60000	2.061E-07	2.061E-07	-5.074E-19	-5.074E-19	-5.985E-07	-5.985E-07	-5.346E-12
1.70000	1.985E-07	1.985E-07	-3.209E-19	-3.209E-19	-6.046E-07	-6.046E-07	-4.317E-12

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 45.000 θ_D= 0. ρ_0=152.140

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	45.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	45.0000	0.10000	200.523	3.522E-06	9.780E-01	-1.612E-07	-1.612E-07	1.612E-07
0.20000	45.0000	0.20000	187.220	6.830E-06	9.776E-01	-1.999E-07	-1.999E-07	1.999E-07
0.30000	45.0000	0.30000	175.554	1.067E-05	9.785E-01	-2.416E-07	-2.416E-07	2.416E-07
0.40000	45.0000	0.40000	165.870	1.665E-05	9.801E-01	-2.826E-07	-2.826E-07	2.826E-07
0.50000	45.0000	0.50000	158.532	1.836E-05	9.815E-01	-3.184E-07	-3.184E-07	3.184E-07
0.60000	45.0000	0.60000	153.876	2.049E-05	9.817E-01	-3.433E-07	-3.433E-07	3.433E-07
0.70000	46.0000	0.70000	152.148	2.988E-05	9.808E-01	-3.531E-07	-3.531E-07	3.531E-07
0.80000	45.0000	0.80000	153.448	4.482E-05	9.811E-01	-3.457E-07	-3.457E-07	3.457E-07
0.85000	46.0000	0.85000	155.216	5.123E-05	9.828E-01	-3.359E-07	-3.359E-07	3.359E-07
0.90000	45.0000	0.90000	157.700	5.806E-05	9.859E-01	-3.227E-07	-3.227E-07	3.227E-07
0.92500	45.0000	0.92500	159.200	5.806E-05	9.879E-01	-3.149E-07	-3.149E-07	3.149E-07
0.95000	45.0000	0.95000	160.866	6.062E-05	9.903E-01	-3.065E-07	-3.065E-07	3.065E-07
0.96250	45.0000	0.96250	161.760	6.318E-05	9.915E-01	-3.021E-07	-3.021E-07	3.021E-07
0.97500	46.0000	0.97500	162.693	6.574E-05	9.929E-01	-2.976E-07	-2.976E-07	2.976E-07
0.98125	46.0000	0.98125	163.174	6.574E-05	9.935E-01	-2.953E-07	-2.953E-07	2.953E-07
0.98750	45.0000	0.98750	163.666	6.916E-05	9.942E-01	-2.929E-07	-2.929E-07	2.929E-07
0.99375	46.0000	0.99375	164.166	6.916E-05	9.949E-01	-2.906E-07	-2.906E-07	2.906E-07
1.00000	46.0000	1.00000	164.676	7.086E-05	9.956E-01	-2.882E-07	-2.882E-07	2.882E-07
1.00625	46.0000	1.00625	165.195	7.086E-05	9.963E-01	-2.857E-07	-2.857E-07	2.857E-07
1.01250	45.0000	1.01250	165.723	7.086E-05	9.970E-01	-2.833E-07	-2.833E-07	2.833E-07
1.01875	46.0000	1.01875	166.261	7.086E-05	9.977E-01	-2.808E-07	-2.808E-07	2.808E-07
1.02500	45.0000	1.02500	166.808	7.342E-05	9.984E-01	-2.784E-07	-2.784E-07	2.784E-07
1.03750	46.0000	1.03750	167.929	7.342E-05	9.999E-01	-2.734E-07	-2.734E-07	2.734E-07
1.05000	45.0000	1.05000	169.085	7.684E-05	1.001E 00	-2.683E-07	-2.683E-07	2.683E-07
1.07500	45.0000	1.07500	171.500	7.684E-05	1.004E 00	-2.580E-07	-2.580E-07	2.580E-07
1.10000	45.0000	1.10000	174.048	7.684E-05	1.007E 00	-2.475E-07	-2.475E-07	2.475E-07
1.15000	45.0000	1.15000	179.520	7.684E-05	1.012E 00	-2.265E-07	-2.265E-07	2.265E-07
1.20000	45.0000	1.20000	185.455	7.684E-05	1.015E 00	-2.057E-07	-2.057E-07	2.057E-07
1.30000	45.0000	1.30000	198.644	7.684E-05	1.020E 00	-1.664E-07	-1.664E-07	1.664E-07
1.40000	45.0000	1.40000	213.008	8.111E-05	1.022E 00	-1.328E-07	-1.328E-07	1.328E-07
1.50000	45.0000	1.50000	228.684	8.282E-05	1.021E 00	-1.042E-07	-1.042E-07	1.042E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_x\mu'$-1.0	T_0	$_oT_t$-T_0	$_xT_t$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.612E-07	49.901	-7.205E-06	-7.205E-06	7.205E-06	7.205E-06	-2.677E-08	-2.677E-08
0.20000	1.999E-07	99.802	-1.620E-05	-1.620E-05	1.620E-05	1.620E-05	-3.321E-08	-3.321E-08
0.30000	2.416E-07	149.703	-2.721E-05	-2.721E-05	2.721E-05	2.721E-05	-4.013E-08	-4.013E-08
0.40000	2.826E-07	199.605	-4.030E-05	-4.030E-05	4.030E-05	4.030E-05	-4.695E-08	-4.695E-08
0.50000	3.184E-07	249.506	-5.532E-05	-5.532E-05	5.532E-05	5.532E-05	-5.288E-08	-5.288E-08
0.60000	3.433E-07	299.407	-7.189E-05	-7.189E-05	7.189E-05	7.189E-05	-5.703E-08	-5.703E-08
0.70000	3.531E-07	349.308	-8.933E-05	-8.933E-05	8.933E-05	8.933E-05	-5.865E-08	-5.865E-08
0.80000	3.487E-07	399.209	-1.068E-04	-1.068E-04	1.068E-04	1.068E-04	-5.743E-08	-5.743E-08
0.85000	3.359E-07	424.160	-1.154E-04	-1.154E-04	1.154E-04	1.154E-04	-5.581E-08	-5.581E-08
0.90000	3.227E-07	449.110	-1.236E-04	-1.236E-04	1.236E-04	1.236E-04	-5.360E-08	-5.360E-08
0.92500	3.149E-07	461.586	-1.276E-04	-1.276E-04	1.276E-04	1.276E-04	-5.231E-08	-5.231E-08
0.95000	3.065E-07	474.061	-1.314E-04	-1.314E-04	1.314E-04	1.314E-04	-5.092E-08	-5.092E-08
0.96250	3.021E-07	480.299	-1.333E-04	-1.333E-04	1.333E-04	1.333E-04	-5.019E-08	-5.019E-08
0.97500	2.976E-07	486.536	-1.352E-04	-1.352E-04	1.352E-04	1.352E-04	-4.943E-08	-4.943E-08
0.98125	2.953E-07	489.655	-1.361E-04	-1.361E-04	1.361E-04	1.361E-04	-4.905E-08	-4.905E-08
0.98750	2.929E-07	492.774	-1.370E-04	-1.370E-04	1.370E-04	1.370E-04	-4.866E-08	-4.866E-08
0.99375	2.906E-07	495.893	-1.380E-04	-1.380E-04	1.380E-04	1.380E-04	-4.827E-08	-4.827E-08
1.00000	2.882E-07	499.012	-1.389E-04	-1.389E-04	1.389E-04	1.389E-04	-4.787E-08	-4.787E-08
1.00625	2.857E-07	502.130	-1.397E-04	-1.397E-04	1.397E-04	1.397E-04	-4.747E-08	-4.747E-08
1.01250	2.833E-07	505.249	-1.406E-04	-1.406E-04	1.406E-04	1.406E-04	-4.706E-08	-4.706E-08
1.01875	2.808E-07	508.368	-1.415E-04	-1.415E-04	1.415E-04	1.415E-04	-4.665E-08	-4.665E-08
1.02500	2.784E-07	511.487	-1.424E-04	-1.424E-04	1.424E-04	1.424E-04	-4.624E-08	-4.624E-08
1.03750	2.734E-07	517.724	-1.441E-04	-1.441E-04	1.441E-04	1.441E-04	-4.541E-08	-4.541E-08
1.05000	2.683E-07	523.962	-1.458E-04	-1.458E-04	1.458E-04	1.458E-04	-4.456E-08	-4.456E-08
1.07500	2.580E-07	536.437	-1.491E-04	-1.491E-04	1.491E-04	1.491E-04	-4.285E-08	-4.285E-08
1.10000	2.476E-07	548.913	-1.522E-04	-1.522E-04	1.522E-04	1.522E-04	-4.112E-08	-4.112E-08
1.15000	2.266E-07	573.863	-1.581E-04	-1.581E-04	1.581E-04	1.581E-04	-3.763E-08	-3.763E-08
1.20000	2.057E-07	598.814	-1.635E-04	-1.635E-04	1.635E-04	1.635E-04	-3.417E-08	-3.417E-08
1.30000	1.664E-07	648.715	-1.728E-04	-1.728E-04	1.728E-04	1.728E-04	-2.764E-08	-2.764E-08
1.40000	1.328E-07	698.616	-1.802E-04	-1.802E-04	1.802E-04	1.802E-04	-2.205E-08	-2.205E-08
1.50000	1.042E-07	748.517	-1.861E-04	-1.861E-04	1.861E-04	1.861E-04	-1.732E-08	-1.732E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-7.442E-12
0.10000	3.066E-09	3.066E-09	-6.231E-19	-6.231E-19	-7.779E-09	-7.779E-09	-9.050E-12
0.20000	7.603E-09	7.603E-09	-8.784E-19	-8.784E-19	-1.894E-08	-1.894E-08	-1.102E-11
0.30000	1.381E-08	1.381E-08	-1.187E-18	-1.187E-18	-3.433E-08	-3.433E-08	-1.341E-11
0.40000	2.202E-08	2.202E-08	-1.524E-18	-1.524E-18	-5.460E-08	-5.460E-08	-1.612E-11
0.50000	3.306E-08	3.306E-08	-1.842E-18	-1.842E-18	-7.984E-08	-7.984E-08	-1.877E-11
0.60000	4.706E-08	4.706E-08	-2.077E-18	-2.077E-18	-1.093E-07	-1.093E-07	-2.082E-11
0.70000	6.342E-08	6.342E-08	-2.172E-18	-2.172E-18	-1.413E-07	-1.413E-07	-2.167E-11
0.80000	8.112E-08	8.112E-08	-2.100E-18	-2.100E-18	-1.734E-07	-1.734E-07	-2.103E-11
0.85000	8.987E-08	8.987E-08	-2.007E-18	-2.007E-18	-1.888E-07	-1.888E-07	-2.021E-11
0.90000	9.803E-08	9.803E-08	-1.882E-18	-1.882E-18	-2.034E-07	-2.034E-07	-1.913E-11
0.92500	1.018E-07	1.018E-07	-1.810E-18	-1.810E-18	-2.103E-07	-2.103E-07	-1.852E-11
0.95000	1.052E-07	1.052E-07	-1.734E-18	-1.734E-18	-2.169E-07	-2.169E-07	-1.787E-11
0.96250	1.069E-07	1.069E-07	-1.695E-18	-1.695E-18	-2.201E-07	-2.201E-07	-1.754E-11
0.97500	1.084E-07	1.084E-07	-1.654E-18	-1.654E-18	-2.233E-07	-2.233E-07	-1.720E-11
0.98125	1.092E-07	1.092E-07	-1.634E-18	-1.634E-18	-2.248E-07	-2.248E-07	-1.703E-11
0.98750	1.099E-07	1.099E-07	-1.613E-18	-1.613E-18	-2.263E-07	-2.263E-07	-1.686E-11
0.99375	1.106E-07	1.106E-07	-1.593E-18	-1.593E-18	-2.278E-07	-2.278E-07	-1.669E-11
1.00000	1.113E-07	1.113E-07	-1.572E-18	-1.572E-18	-2.293E-07	-2.293E-07	-1.652E-11
1.00625	1.119E-07	1.119E-07	-1.551E-18	-1.551E-18	-2.308E-07	-2.308E-07	-1.635E-11
1.01250	1.126E-07	1.126E-07	-1.530E-18	-1.530E-18	-2.322E-07	-2.322E-07	-1.618E-11
1.01875	1.132E-07	1.132E-07	-1.509E-18	-1.509E-18	-2.336E-07	-2.336E-07	-1.600E-11
1.02500	1.138E-07	1.138E-07	-1.488E-18	-1.488E-18	-2.350E-07	-2.350E-07	-1.583E-11
1.03750	1.149E-07	1.149E-07	-1.445E-18	-1.445E-18	-2.378E-07	-2.378E-07	-1.549E-11
1.05000	1.160E-07	1.160E-07	-1.403E-18	-1.403E-18	-2.404E-07	-2.404E-07	-1.514E-11
1.07500	1.179E-07	1.179E-07	-1.318E-18	-1.318E-18	-2.455E-07	-2.455E-07	-1.447E-11
1.10000	1.194E-07	1.194E-07	-1.234E-18	-1.234E-18	-2.503E-07	-2.503E-07	-1.380E-11
1.15000	1.218E-07	1.218E-07	-1.072E-18	-1.072E-18	-2.589E-07	-2.589E-07	-1.253E-11
1.20000	1.232E-07	1.232E-07	-9.193E-19	-9.193E-19	-2.663E-07	-2.663E-07	-1.135E-11
1.30000	1.240E-07	1.240E-07	-6.557E-19	-6.557E-19	-2.780E-07	-2.780E-07	-9.320E-12
1.40000	1.226E-07	1.226E-07	-4.510E-19	-4.510E-19	-2.862E-07	-2.863E-07	-7.660E-12
1.50000	1.198E-07	1.198E-07	-3.014E-19	-3.014E-19	-2.918E-07	-2.918E-07	-6.389E-12

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0=55.000 θ_0= 0. ρ_0=176.248

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	55.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	55.0000	0.10000	203.682	9.605E-07	9.740E-01	-1.537E-07	-1.537E-07	1.537E-07
0.20000	55.0000	0.20000	193.711	4.162E-06	9.741E-01	-1.799E-07	-1.799E-07	1.799E-07
0.30000	55.0000	0.30000	185.817	6.830E-06	9.747E-01	-2.045E-07	-2.045E-07	2.045E-07
0.40000	55.0000	0.40000	180.161	8.965E-06	9.752E-01	-2.242E-07	-2.242E-07	2.242E-07
0.50000	55.0000	0.50000	176.957	1.281E-05	9.752E-01	-2.361E-07	-2.361E-07	2.361E-07
0.60000	55.0000	0.60000	176.340	1.708E-05	9.748E-01	-2.385E-07	-2.385E-07	2.385E-07
0.70000	55.0000	0.70000	178.335	2.860E-05	9.753E-01	-2.309E-07	-2.309E-07	2.309E-07
0.80000	55.0000	0.80000	182.857	3.244E-05	9.786E-01	-2.146E-07	-2.146E-07	2.146E-07
0.85000	55.0000	0.85000	186.012	3.629E-05	9.816E-01	-2.039E-07	-2.039E-07	2.039E-07
0.90000	55.0000	0.90000	189.726	3.757E-05	9.856E-01	-1.920E-07	-1.920E-07	1.920E-07
0.92500	55.0000	0.92500	191.782	3.757E-05	9.878E-01	-1.857E-07	-1.857E-07	1.857E-07
0.95000	55.0000	0.95000	193.966	4.013E-05	9.901E-01	-1.792E-07	-1.792E-07	1.792E-07
0.96250	55.0000	0.96250	195.104	4.098E-05	9.913E-01	-1.759E-07	-1.759E-07	1.759E-07
0.97500	55.0000	0.97500	196.273	4.269E-05	9.926E-01	-1.726E-07	-1.726E-07	1.726E-07
0.98125	55.0000	0.98125	196.868	4.269E-05	9.932E-01	-1.710E-07	-1.710E-07	1.710E-07
0.98750	55.0000	0.98750	197.471	4.269E-05	9.938E-01	-1.693E-07	-1.693E-07	1.693E-07
0.99375	55.0000	0.99375	198.081	4.610E-05	9.944E-01	-1.676E-07	-1.676E-07	1.676E-07
1.00000	55.0000	1.00000	198.699	4.610E-05	9.950E-01	-1.660E-07	-1.660E-07	1.660E-07
1.00625	55.0000	1.00625	199.323	4.867E-05	9.957E-01	-1.643E-07	-1.643E-07	1.643E-07
1.01250	55.0000	1.01250	199.955	4.867E-05	9.963E-01	-1.626E-07	-1.626E-07	1.626E-07
1.01875	55.0000	1.01875	200.593	4.867E-05	9.969E-01	-1.610E-07	-1.610E-07	1.610E-07
1.02500	55.0000	1.02500	201.239	4.952E-05	9.975E-01	-1.594E-07	-1.594E-07	1.594E-07
1.03750	55.0000	1.03750	202.551	4.952E-05	9.987E-01	-1.562E-07	-1.562E-07	1.562E-07
1.05000	55.0000	1.05000	203.890	4.952E-05	9.999E-01	-1.530E-07	-1.530E-07	1.530E-07
1.07500	55.0000	1.07500	206.646	4.952E-05	1.002E 00	-1.466E-07	-1.466E-07	1.466E-07
1.10000	55.0000	1.10000	209.506	4.952E-05	1.005E 00	-1.402E-07	-1.402E-07	1.402E-07
1.15000	55.0000	1.15000	215.611	4.952E-05	1.009E 00	-1.277E-07	-1.277E-07	1.277E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0=55.000 θ_0= 0. ρ_0=176.248

z	$_x\mu'$-10	T_0	$_0T_f-T_0$	$_xT_f-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.537E-07	49.901	-7.034E-06	-7.034E-06	7.034E-06	7.034E-06	-2.553E-08	-2.553E-08
0.20000	1.799E-07	99.802	-1.535E-05	-1.535E-05	1.535E-05	1.535E-05	-2.989E-08	-2.989E-08
0.30000	2.045E-07	149.703	-2.496E-05	-2.496E-05	2.496E-05	2.496E-05	-3.397E-08	-3.397E-08
0.40000	2.242E-07	199.605	-3.568E-05	-3.568E-05	3.568E-05	3.568E-05	-3.724E-08	-3.724E-08
0.50000	2.361E-07	249.506	-4.721E-05	-4.721E-05	4.721E-05	4.721E-05	-3.922E-08	-3.922E-08
0.60000	2.385E-07	299.407	-5.909E-05	-5.909E-05	5.909E-05	5.909E-05	-3.962E-08	-3.962E-08
0.70000	2.309E-07	349.308	-7.084E-05	-7.084E-05	7.084E-05	7.084E-05	-3.836E-08	-3.836E-08
0.80000	2.146E-07	399.209	-8.199E-05	-8.199E-05	8.199E-05	8.199E-05	-3.564E-08	-3.564E-08
0.85000	2.039E-07	424.160	-8.721E-05	-8.721E-05	8.721E-05	8.721E-05	-3.387E-08	-3.387E-08
0.90000	1.920E-07	449.110	-9.215E-05	-9.215E-05	9.215E-05	9.215E-05	-3.189E-08	-3.189E-08
0.92500	1.857E-07	461.586	-9.451E-05	-9.451E-05	9.451E-05	9.451E-05	-3.084E-08	-3.084E-08
0.95000	1.792E-07	474.061	-9.678E-05	-9.678E-05	9.678E-05	9.678E-05	-2.977E-08	-2.977E-08
0.96250	1.759E-07	480.299	-9.789E-05	-9.789E-05	9.789E-05	9.789E-05	-2.922E-08	-2.922E-08
0.97500	1.726E-07	486.536	-9.898E-05	-9.898E-05	9.898E-05	9.898E-05	-2.867E-08	-2.867E-08
0.98125	1.710E-07	489.655	-9.951E-05	-9.951E-05	9.951E-05	9.951E-05	-2.840E-08	-2.840E-08
0.98750	1.693E-07	492.774	-1.000E-04	-1.000E-04	1.000E-04	1.000E-04	-2.812E-08	-2.812E-08
0.99375	1.676E-07	495.893	-1.006E-04	-1.006E-04	1.006E-04	1.006E-04	-2.784E-08	-2.784E-08
1.00000	1.660E-07	499.012	-1.011E-04	-1.011E-04	1.011E-04	1.011E-04	-2.757E-08	-2.757E-08
1.00625	1.643E-07	502.130	-1.016E-04	-1.016E-04	1.016E-04	1.016E-04	-2.729E-08	-2.729E-08
1.01250	1.626E-07	505.249	-1.021E-04	-1.021E-04	1.021E-04	1.021E-04	-2.701E-08	-2.701E-08
1.01875	1.610E-07	508.368	-1.026E-04	-1.026E-04	1.026E-04	1.026E-04	-2.674E-08	-2.674E-08
1.02500	1.594E-07	511.487	-1.031E-04	-1.031E-04	1.031E-04	1.031E-04	-2.648E-08	-2.648E-08
1.03750	1.562E-07	517.724	-1.041E-04	-1.041E-04	1.041E-04	1.041E-04	-2.594E-08	-2.594E-08
1.05000	1.530E-07	523.962	-1.051E-04	-1.051E-04	1.051E-04	1.051E-04	-2.541E-08	-2.541E-08
1.07500	1.466E-07	536.437	-1.069E-04	-1.069E-04	1.069E-04	1.069E-04	-2.434E-08	-2.434E-08
1.10000	1.402E-07	548.913	-1.087E-04	-1.087E-04	1.087E-04	1.087E-04	-2.329E-08	-2.329E-08
1.15000	1.277E-07	573.863	-1.121E-04	-1.121E-04	1.121E-04	1.121E-04	-2.121E-08	-2.121E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 55.000 θ_D= 0. ρ_a=176.248

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-9.990E-12
0.10000	3.403E-09	3.404E-09	-5.756E-19	-5.756E-19	-7.467E-09	-7.467E-09	-1.163E-11
0.20000	7.983E-09	7.983E-09	-7.429E-19	-7.429E-19	-1.732E-08	-1.732E-08	-1.339E-11
0.30000	1.378E-08	1.378E-08	-9.107E-19	-9.108E-19	-2.970E-08	-2.970E-08	-1.512E-11
0.40000	2.078E-08	2.078E-08	-1.054E-18	-1.054E-18	-4.444E-08	-4.444E-08	-1.661E-11
0.50000	2.909E-08	2.909E-08	-1.145E-18	-1.145E-18	-6.097E-08	-6.097E-08	-1.756E-11
0.60000	3.865E-08	3.865E-08	-1.163E-18	-1.163E-18	-7.833E-08	-7.833E-08	-1.776E-11
0.70000	4.848E-08	4.848E-08	-1.105E-18	-1.105E-18	-9.539E-08	-9.539E-08	-1.715E-11
0.80000	5.794E-08	5.794E-08	-9.831E-19	-9.831E-19	-1.111E-07	-1.111E-07	-1.588E-11
0.85000	6.210E-08	6.210E-08	-9.062E-19	-9.062E-19	-1.181E-07	-1.181E-07	-1.509E-11
0.90000	6.577E-08	6.577E-08	-8.233E-19	-8.233E-19	-1.246E-07	-1.246E-07	-1.423E-11
0.92500	6.739E-08	6.740E-08	-7.808E-19	-7.808E-19	-1.276E-07	-1.276E-07	-1.379E-11
0.95000	6.887E-08	6.887E-08	-7.380E-19	-7.380E-19	-1.304E-07	-1.305E-07	-1.335E-11
0.96250	6.955E-08	6.956E-08	-7.166E-19	-7.166E-19	-1.318E-07	-1.318E-07	-1.313E-11
0.97500	7.020E-08	7.020E-08	-6.953E-19	-6.953E-19	-1.331E-07	-1.331E-07	-1.291E-11
0.98125	7.051E-08	7.051E-08	-6.847E-19	-6.847E-19	-1.338E-07	-1.338E-07	-1.280E-11
0.98750	7.081E-08	7.081E-08	-6.741E-19	-6.742E-19	-1.344E-07	-1.344E-07	-1.269E-11
0.99375	7.110E-08	7.110E-08	-6.636E-19	-6.636E-19	-1.350E-07	-1.350E-07	-1.259E-11
1.00000	7.138E-08	7.138E-08	-6.531E-19	-6.531E-19	-1.357E-07	-1.357E-07	-1.248E-11
1.00625	7.165E-08	7.165E-08	-6.427E-19	-6.427E-19	-1.363E-07	-1.363E-07	-1.237E-11
1.01250	7.192E-08	7.192E-08	-6.323E-19	-6.323E-19	-1.369E-07	-1.369E-07	-1.226E-11
1.01875	7.217E-08	7.217E-08	-6.219E-19	-6.219E-19	-1.374E-07	-1.374E-07	-1.215E-11
1.02500	7.241E-08	7.241E-08	-6.116E-19	-6.116E-19	-1.380E-07	-1.380E-07	-1.204E-11
1.03750	7.288E-08	7.288E-08	-5.912E-19	-5.912E-19	-1.391E-07	-1.391E-07	-1.182E-11
1.05000	7.330E-08	7.330E-08	-5.711E-19	-5.711E-19	-1.402E-07	-1.402E-07	-1.160E-11
1.07500	7.406E-08	7.406E-08	-5.318E-19	-5.318E-19	-1.423E-07	-1.423E-07	-1.117E-11
1.10000	7.468E-08	7.468E-08	-4.938E-19	-4.938E-19	-1.442E-07	-1.442E-07	-1.075E-11
1.15000	7.554E-08	7.555E-08	-4.228E-19	-4.228E-19	-1.476E-07	-1.476E-07	-9.962E-12

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 65.000 θ_D= 0. ρ_a=195.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	65.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	65.0000	0.10000	206.986	9.071E-07	9.790E-01	-1.458E-07	-1.458E-07	1.458E-07
0.20000	65.0000	0.20000	200.797	3.308E-06	9.789E-01	-1.605E-07	-1.605E-07	1.605E-07
0.30000	65.0000	0.30000	196.777	6.190E-06	9.789E-01	-1.712E-07	-1.712E-07	1.712E-07
0.40000	65.0000	0.40000	195.061	9.605E-06	9.786E-01	-1.760E-07	-1.760E-07	1.760E-07
0.50000	65.0000	0.50000	195.710	1.281E-05	9.784E-01	-1.742E-07	-1.742E-07	1.742E-07
0.60000	65.0000	0.60000	198.700	1.750E-05	9.788E-01	-1.660E-07	-1.660E-07	1.660E-07
0.70000	65.0000	0.70000	203.929	2.049E-05	9.808E-01	-1.529E-07	-1.529E-07	1.529E-07
0.80000	65.0000	0.80000	211.230	2.305E-05	9.847E-01	-1.365E-07	-1.365E-07	1.365E-07
0.85000	65.0000	0.85000	215.594	2.561E-05	9.873E-01	-1.275E-07	-1.275E-07	1.275E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 65.000 θ_D= 0. ρ_a=195.000

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.458E-07	49.901	-6.849E-06	-6.849E-06	6.849E-06	6.849E-06	-2.422E-08	-2.422E-08
0.20000	1.605E-07	99.802	-1.450E-05	-1.450E-05	1.450E-05	1.451E-05	-2.666E-08	-2.666E-08
0.30000	1.712E-07	149.703	-2.280E-05	-2.280E-05	2.280E-05	2.280E-05	-2.844E-08	-2.844E-08
0.40000	1.760E-07	199.605	-3.149E-05	-3.149E-05	3.149E-05	3.149E-05	-2.924E-08	-2.924E-08
0.50000	1.742E-07	249.506	-4.026E-05	-4.026E-05	4.026E-05	4.026E-05	-2.894E-08	-2.894E-08
0.60000	1.660E-07	299.407	-4.877E-05	-4.877E-05	4.877E-05	4.877E-05	-2.757E-08	-2.757E-08
0.70000	1.529E-07	349.308	-5.674E-05	-5.674E-05	5.674E-05	5.674E-05	-2.539E-08	-2.539E-08
0.80000	1.365E-07	399.209	-6.397E-05	-6.397E-05	6.397E-05	6.397E-05	-2.267E-08	-2.267E-08
0.85000	1.275E-07	424.160	-6.727E-05	-6.727E-05	6.727E-05	6.727E-05	-2.119E-08	-2.119E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_o= 65.000 θ_D= 0. ρ_a=195.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.223E-11
0.10000	3.602E-09	3.602E-09	-5.271E-19	-5.271E-19	-7.136E-09	-7.136E-09	-1.359E-11
0.20000	7.996E-09	7.996E-09	-6.187E-19	-6.187E-19	-1.573E-08	-1.573E-08	-1.482E-11
0.30000	1.310E-08	1.310E-08	-6.863E-19	-6.863E-19	-2.553E-08	-2.553E-08	-1.568E-11
0.40000	1.868E-08	1.868E-08	-7.174E-19	-7.174E-19	-3.608E-08	-3.608E-08	-1.608E-11
0.50000	2.451E-08	2.451E-08	-7.055E-19	-7.055E-19	-4.678E-08	-4.678E-08	-1.593E-11
0.60000	3.033E-08	3.033E-08	-6.531E-19	-6.531E-19	-5.698E-08	-5.698E-08	-1.527E-11
0.70000	3.544E-08	3.544E-08	-5.705E-19	-5.705E-19	-6.617E-08	-6.617E-08	-1.418E-11
0.80000	3.980E-08	3.980E-08	-4.723E-19	-4.723E-19	-7.398E-08	-7.398E-08	-1.287E-11
0.85000	4.156E-08	4.156E-08	-4.218E-19	-4.218E-19	-7.732E-08	-7.732E-08	-1.218E-11

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	75.0000	0.	215.159	0.	1.000E 00	-1.284E-07	-1.284E-07	1.284E-07
0.10000	75.0000	0.10000	210.618	3.468E-06	9.993E-01	-1.378E-07	-1.378E-07	1.378E-07
0.20000	75.0000	0.20000	208.213	5.976E-06	9.996E-01	-1.430E-07	-1.430E-07	1.430E-07
0.30000	75.0000	0.30000	208.016	7.471E-06	9.999E-01	-1.435E-07	-1.435E-07	1.435E-07
0.40000	75.0000	0.40000	210.036	9.818E-06	1.000E 00	-1.390E-07	-1.390E-07	1.390E-07
0.50000	75.0000	0.50000	214.208	1.323E-05	1.001E 00	-1.303E-07	-1.303E-07	1.303E-07
0.60000	75.0000	0.60000	220.411	1.494E-05	1.001E 00	-1.183E-07	-1.183E-07	1.183E-07

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	$_x\mu'$-1.0	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.284E-07	0.	0.	0.	0.	0.	-2.133E-08	-2.133E-08
0.10000	1.378E-07	49.901	-6.657E-06	-6.657E-06	6.657E-06	6.657E-06	-2.289E-08	-2.289E-08
0.20000	1.430E-07	99.802	-1.368E-05	-1.368E-05	1.368E-05	1.368E-05	-2.376E-08	-2.376E-08
0.30000	1.435E-07	149.703	-2.085E-05	-2.085E-05	2.085E-05	2.085E-05	-2.383E-08	-2.383E-08
0.40000	1.390E-07	199.605	-2.792E-05	-2.792E-05	2.792E-05	2.792E-05	-2.310E-08	-2.310E-08
0.50000	1.303E-07	249.506	-3.466E-05	-3.466E-05	3.466E-05	3.466E-05	-2.165E-08	-2.165E-08
0.60000	1.183E-07	299.407	-4.087E-05	-4.087E-05	4.087E-05	4.087E-05	-1.966E-08	-1.966E-08

PROPAGATION FREQUENCY= 4.9800E 07 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.266E-19	-4.266E-19	0.	0.	-1.390E-11
0.10000	3.674E-09	3.675E-09	-4.798E-19	-4.798E-19	-6.803E-09	-6.803E-09	-1.472E-11
0.20000	7.679E-09	7.679E-09	-5.106E-19	-5.106E-19	-1.424E-08	-1.424E-08	-1.519E-11
0.30000	1.175E-08	1.175E-08	-5.132E-19	-5.132E-19	-2.194E-08	-2.194E-08	-1.524E-11
0.40000	1.581E-08	1.581E-08	-4.871E-19	-4.871E-19	-2.946E-08	-2.946E-08	-1.484E-11
0.50000	1.966E-08	1.966E-08	-4.372E-19	-4.372E-19	-3.639E-08	-3.639E-08	-1.407E-11
0.60000	2.207E-08	2.207E-08	-3.724E-19	-3.724E-19	-4.246E-08	-4.246E-08	-1.306E-11

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.012 θ_D= 2.089E-05 ρ_a= 1.046

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0120	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0120	0.10000	193.643	1.589E-09	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0120	0.20000	172.127	2.189E-09	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0120	0.30000	150.611	3.127E-09	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0120	0.40000	129.095	5.419E-09	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0120	0.50000	107.579	8.025E-09	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0120	0.60000	86.064	9.588E-09	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0120	0.70000	64.548	3.543E-08	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0120	0.80000	43.032	1.201E-07	1.000E 00	-5.712E-07	-5.712E-07	5.712E-07
0.85000	0.0120	0.85000	32.274	3.143E-07	1.000E 00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0120	0.90000	21.516	1.115E-06	1.000E 00	-2.812E-06	-2.812E-06	2.812E-06
0.92500	0.0120	0.92500	16.137	2.720E-06	1.000E 00	-5.183E-06	-5.184E-06	5.182E-06
0.95000	0.0120	0.95000	10.758	9.518E-06	1.000E 00	-1.315E-05	-1.315E-05	1.315E-05
0.96250	0.0120	0.96250	8.069	2.337E-05	1.000E 00	-2.592E-05	-2.594E-05	2.591E-05
0.97500	0.0120	0.97500	5.380	8.687E-05	1.000E 00	-7.860E-05	-7.875E-05	7.853E-05
0.98124	0.0120	0.98125	4.036	2.271E-04	1.000E 00	-1.827E-04	-1.833E-04	1.824E-04
0.98749	0.0120	0.98750	2.692	1.053E-03	1.001E 00	-7.702E-04	-7.761E-04	7.679E-04
0.99373	0.0121	0.99375	1.349	5.085E-02	1.007E 00	-2.728E-02	-2.812E-02	2.763E-02
0.99035	0.0391	1.00000	2.081	1.747E 02	3.225E 00	-2.461E-03	-2.430E-03	2.483E-03
0.98414	0.0726	1.00625	3.424	1.747E 02	5.914E 00	-3.283E-04	-3.268E-04	3.292E-04
0.97792	0.1065	1.01250	4.768	1.747E 02	8.569E 00	-1.152E-04	-1.150E-04	1.154E-04
0.97169	0.1409	1.01875	6.113	1.747E 02	1.119E 01	-5.468E-05	-5.460E-05	5.473E-05
0.96547	0.1757	1.02500	7.457	1.747E 02	1.379E 01	-3.276E-05	-3.273E-05	3.278E-05
0.95303	0.2467	1.03750	10.146	1.747E 02	1.888E 01	-1.468E-05	-1.467E-05	1.468E-05
0.94059	0.3196	1.05000	12.836	1.747E 02	2.385E 01	-9.071E-06	-9.068E-06	9.073E-06
0.91571	0.4713	1.07500	18.214	1.747E 02	3.345E 01	-4.093E-06	-4.093E-06	4.094E-06
0.89084	0.6315	1.10000	23.593	1.747E 02	4.261E 01	-2.276E-06	-2.276E-06	2.276E-06
0.84112	0.9804	1.15000	34.351	1.747E 02	5.974E 01	-9.659E-07	-9.658E-07	9.659E-07
0.79143	1.3730	1.20000	45.109	1.747E 02	7.544E 01	-5.145E-07	-5.145E-07	5.145E-07
0.69220	2.3273	1.30000	66.625	1.747E 02	1.032E 02	-2.123E-07	-2.123E-07	2.123E-07
0.59321	3.6004	1.40000	88.141	1.747E 02	1.270E 02	-1.121E-07	-1.121E-07	1.121E-07
0.49464	5.3822	1.50000	109.657	1.747E 02	1.477E 02	-6.966E-08	-6.966E-08	6.966E-08
0.39679	8.0466	1.60000	131.172	1.747E 02	1.657E 02	-4.669E-08	-4.669E-08	4.669E-08
0.30035	12.4373	1.70000	152.688	1.747E 02	1.816E 02	-3.150E-08	-3.150E-08	3.150E-08
0.20731	20.8630	1.80000	174.204	1.747E 02	1.958E 02	-2.222E-08	-2.222E-08	2.222E-08
0.12549	41.3935	1.90000	195.720	1.747E 02	2.085E 02	-1.568E-08	-1.568E-08	1.568E-08
0.09228	86.6175	2.00000	217.236	1.747E 02	2.199E 02	-1.119E-08	-1.119E-08	1.119E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 0.012 θ_D= 2.089E-05 ρ_a= 1.046

z	$_x\mu'-1.0$	T_o	$_oT_l-T_o$	$_xT_l-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.541E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.865E-05	-5.865E-05	5.865E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.029E-04	-1.557E-06	-1.557E-06
0.92500	5.184E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.870E-06	-2.870E-06
0.95000	1.316E-05	474.060	-2.567E-04	-2.567E-04	2.567E-04	2.568E-04	-7.284E-06	-7.284E-06
0.96250	2.596E-05	480.297	-3.706E-04	-3.707E-04	3.705E-04	3.707E-04	-1.435E-05	-1.437E-05
0.97500	7.883E-05	486.534	-6.565E-04	-6.570E-04	6.563E-04	6.573E-04	-4.352E-05	-4.360E-05
0.98124	1.837E-04	489.652	-1.039E-03	-1.040E-03	1.038E-03	1.041E-03	-1.012E-04	-1.015E-04
0.98749	7.796E-04	492.769	-2.240E-03	-2.248E-03	2.236E-03	2.253E-03	-4.265E-04	-4.297E-04
0.99373	2.937E-02	495.884	-1.876E-02	-1.914E-02	1.888E-02	1.964E-02	-1.510E-02	-1.557E-02
0.99035	2.421E-03	494.198	4.606E 00	4.606E 00	4.110E 03	4.299E 03	-1.363E-03	-1.346E-03
0.98414	3.261E-04	491.095	1.082E 01	1.082E 01	4.116E 03	4.306E 03	-1.818E-04	-1.809E-04
0.97792	1.148E-04	487.991	1.705E 01	1.705E 01	4.122E 03	4.312E 03	-6.381E-05	-6.366E-05
0.97169	5.456E-05	484.887	2.327E 01	2.327E 01	4.128E 03	4.318E 03	-3.028E-05	-3.023E-05
0.96547	3.271E-05	481.782	2.949E 01	2.949E 01	4.135E 03	4.324E 03	-1.814E-05	-1.812E-05
0.95303	1.467E-05	475.573	4.194E 01	4.194E 01	4.147E 03	4.337E 03	-8.127E-06	-8.123E-06
0.94059	9.067E-06	469.365	5.438E 01	5.438E 01	4.159E 03	4.349E 03	-5.023E-06	-5.021E-06
0.91571	4.092E-06	456.951	7.927E 01	7.927E 01	4.184E 03	4.374E 03	-2.267E-06	-2.266E-06
0.89084	2.276E-06	444.539	1.042E 02	1.042E 02	4.209E 03	4.399E 03	-1.260E-06	-1.260E-06
0.84112	9.658E-07	419.728	1.539E 02	1.539E 02	4.259E 03	4.449E 03	-5.348E-07	-5.348E-07
0.79143	5.145E-07	394.934	2.037E 02	2.037E 02	4.309E 03	4.498E 03	-2.849E-07	-2.849E-07
0.69220	2.123E-07	345.413	3.031E 02	3.031E 02	4.408E 03	4.598E 03	-1.175E-07	-1.175E-07
0.59321	1.121E-07	296.021	4.024E 02	4.024E 02	4.507E 03	4.697E 03	-6.209E-08	-6.209E-08
0.49464	6.966E-08	246.833	5.015E 02	5.015E 02	4.607E 03	4.796E 03	-3.857E-08	-3.857E-08
0.39679	4.669E-08	198.002	6.002E 02	6.002E 02	4.705E 03	4.895E 03	-2.586E-08	-2.586E-08
0.30035	3.150E-08	149.878	6.982E 02	6.982E 02	4.803E 03	4.993E 03	-1.744E-08	-1.744E-08
0.20731	2.222E-08	103.451	7.946E 02	7.946E 02	4.900E 03	5.089E 03	-1.230E-08	-1.230E-08
0.12549	1.568E-08	62.620	8.853E 02	8.853E 02	4.990E 03	5.180E 03	-8.680E-09	-8.680E-09
0.09228	1.119E-08	46.049	9.518E 02	9.518E 02	5.057E 03	5.247E 03	-6.196E-09	-6.196E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 0.012 θ_D= 2.089E-05 ρ_a= 1.046

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.958E-19
0.10000	-5.643E-12	-1.767E-12	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-2.627E-19
0.20000	-7.752E-12	-2.109E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-3.757E-19
0.30000	-1.125E-11	-1.505E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-5.905E-19
0.40000	-3.523E-11	-1.334E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-9.997E-19
0.50000	-2.864E-11	-3.429E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-2.001E-18
0.60000	5.178E-12	-4.286E-11	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-4.679E-18
0.70000	-2.134E-11	1.329E-12	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-1.368E-17
0.80000	6.213E-11	1.147E-13	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-6.194E-17
0.85000	2.703E-10	2.836E-10	-3.902E-17	-3.903E-17	-3.601E-07	-3.601E-07	-1.795E-16
0.90000	1.395E-09	1.395E-09	-1.675E-16	-1.675E-16	-9.929E-07	-9.930E-07	-8.052E-16
0.92500	3.518E-09	3.665E-09	-3.871E-16	-3.873E-16	-1.973E-06	-1.974E-06	-2.455E-15
0.95000	1.461E-08	1.451E-08	-1.537E-15	-1.538E-15	-4.962E-06	-4.965E-06	-1.102E-14
0.96250	4.053E-08	3.984E-08	-4.461E-15	-4.469E-15	-9.854E-06	-9.863E-06	-3.139E-14
0.97500	1.917E-07	1.933E-07	-2.586E-14	-2.595E-14	-3.149E-05	-3.156E-05	-1.178E-13
0.98124	5.813E-07	5.829E-07	-1.015E-13	-1.022E-13	-8.269E-05	-8.303E-05	-2.844E-13
0.98749	4.238E-06	4.272E-06	-1.100E-12	-1.117E-12	-4.364E-04	-4.410E-04	-7.663E-13
0.99373	3.647E-04	3.780E-04	-1.012E-09	-1.076E-09	-8.354E-02	-8.792E-02	-1.483E-12
0.99035	-2.854E-03	-2.902E-03	-9.300E-12	-9.067E-12	-1.831E 06	-1.914E 06	-1.142E-12
0.98414	-1.565E-03	-1.592E-03	-2.648E-13	-2.623E-13	-1.831E 06	-1.914E 06	-4.265E-13
0.97792	-1.075E-03	-1.093E-03	-4.807E-14	-4.784E-14	-1.831E 06	-1.914E 06	-1.663E-13
0.97169	-8.182E-04	-8.320E-04	-1.471E-14	-1.467E-14	-1.831E 06	-1.914E 06	-7.892E-14
0.96547	-6.604E-04	-6.715E-04	-6.487E-15	-6.475E-15	-1.831E 06	-1.914E 06	-3.995E-14
0.95303	-4.705E-04	-4.845E-04	-1.825E-15	-1.823E-15	-1.831E 06	-1.914E 06	-1.405E-14
0.94059	-3.727E-04	-3.790E-04	-8.618E-16	-8.612E-16	-1.831E 06	-1.914E 06	-5.545E-15
0.91571	-2.596E-04	-2.640E-04	-2.802E-16	-2.801E-16	-1.831E 06	-1.914E 06	-1.505E-15
0.89084	-1.992E-04	-2.025E-04	-1.226E-16	-1.226E-16	-1.831E 06	-1.914E 06	-5.730E-16
0.84112	-1.359E-04	-1.382E-04	-3.187E-17	-3.187E-17	-1.831E 06	-1.914E 06	-1.417E-16
0.79143	-1.032E-04	-1.049E-04	-1.256E-17	-1.256E-17	-1.831E 06	-1.914E 06	-5.190E-17
0.69220	-6.957E-05	-7.074E-05	-3.314E-18	-3.314E-18	-1.831E 06	-1.914E 06	-1.212E-17
0.59321	-5.249E-05	-5.337E-05	-1.294E-18	-1.294E-18	-1.831E 06	-1.914E 06	-4.279E-18
0.49464	-4.215E-05	-4.285E-05	-6.398E-19	-6.397E-19	-1.831E 06	-1.914E 06	-1.858E-18
0.39679	-3.521E-05	-3.580E-05	-3.501E-19	-3.501E-19	-1.831E 06	-1.914E 06	-9.460E-19
0.30035	-3.023E-05	-3.074E-05	-1.928E-19	-1.928E-19	-1.831E 06	-1.914E 06	-5.637E-19
0.20731	-2.649E-05	-2.693E-05	-1.106E-19	-1.106E-19	-1.831E 06	-1.914E 06	-3.624E-19
0.12549	-2.357E-05	-2.396E-05	-6.348E-20	-6.348E-20	-1.831E 06	-1.914E 06	-2.554E-19
0.09228	-2.123E-05	-2.158E-05	-3.639E-20	-3.639E-20	-1.831E 06	-1.914E 06	-1.914E-19

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.015 θ_0= 2.611E-05 ρ_a= 1.046

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0150	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0150	0.10000	193.643	1.654E-09	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0150	0.20000	172.127	2.553E-09	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0150	0.30000	150.611	4.065E-09	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0150	0.40000	129.095	6.670E-09	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0150	0.50000	107.579	9.380E-09	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0150	0.60000	86.064	1.146E-08	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0150	0.70000	64.548	4.419E-08	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0150	0.80000	43.032	1.501E-07	1.000E 00	-5.712E-07	-5.712E-07	5.712E-07
0.85000	0.0150	0.85000	32.274	3.910E-07	1.000E 00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0150	0.90000	21.516	1.386E-06	1.000E 00	-2.812E-06	-2.812E-06	2.812E-06
0.92500	0.0150	0.92500	16.137	3.380E-06	1.000E 00	-5.183E-06	-5.184E-06	5.182E-06
0.95000	0.0150	0.95000	10.759	1.186E-05	1.000E 00	-1.315E-05	-1.315E-05	1.315E-05
0.96250	0.0150	0.96250	8.069	2.912E-05	1.000E 00	-2.592E-05	-2.594E-05	2.591E-05
0.97500	0.0150	0.97500	5.380	1.083E-04	1.000E 00	-7.860E-05	-7.874E-05	7.853E-05
0.98124	0.0150	0.98125	4.036	2.832E-04	1.000E 00	-1.827E-04	-1.833E-04	1.824E-04
0.98749	0.0150	0.98750	2.692	1.313E-03	1.001E 00	-7.700E-04	-7.759E-04	7.677E-04
0.99373	0.0151	0.99375	1.350	6.342E-02	1.006E 00	-2.722E-02	-2.807E-02	2.758E-02
0.99037	0.0488	1.00000	2.080	1.734E 02	3.226E 00	-2.465E-03	-2.434E-03	2.487E-03
0.98417	0.0906	1.00625	3.423	1.734E 02	5.919E 00	-3.286E-04	-3.270E-04	3.294E-04
0.97796	0.1330	1.01250	4.767	1.734E 02	8.578E 00	-1.153E-04	-1.150E-04	1.155E-04
0.97176	0.1760	1.01875	6.112	1.734E 02	1.121E 01	-5.470E-05	-5.462E-05	5.474E-05
0.96555	0.2195	1.02500	7.456	1.734E 02	1.380E 01	-3.277E-05	-3.274E-05	3.279E-05
0.95314	0.3081	1.03750	10.145	1.734E 02	1.890E 01	-1.468E-05	-1.467E-05	1.468E-05
0.94073	0.3992	1.05000	12.835	1.734E 02	2.388E 01	-9.073E-06	-9.070E-06	9.074E-06
0.91592	0.5886	1.07500	18.214	1.734E 02	3.349E 01	-4.094E-06	-4.093E-06	4.094E-06
0.89112	0.7886	1.10000	23.592	1.734E 02	4.266E 01	-2.276E-06	-2.276E-06	2.276E-06
0.84156	1.2240	1.15000	34.350	1.734E 02	5.980E 01	-9.659E-07	-9.659E-07	9.659E-07
0.79205	1.7138	1.20000	45.108	1.734E 02	7.552E 01	-5.145E-07	-5.145E-07	5.145E-07
0.69324	2.9031	1.30000	66.624	1.734E 02	1.033E 02	-2.123E-07	-2.123E-07	2.123E-07
0.59482	4.4868	1.40000	88.140	1.734E 02	1.272E 02	-1.121E-07	-1.121E-07	1.121E-07
0.49705	6.6958	1.50000	109.656	1.734E 02	1.478E 02	-6.966E-08	-6.966E-08	6.966E-08
0.40037	9.9788	1.60000	131.172	1.734E 02	1.659E 02	-4.669E-08	-4.669E-08	4.669E-08
0.30583	15.3193	1.70000	152.688	1.734E 02	1.819E 02	-3.150E-08	-3.150E-08	3.150E-08
0.21627	25.2409	1.80000	174.203	1.734E 02	1.960E 02	-2.222E-08	-2.222E-08	2.222E-08
0.14146	47.1115	1.90000	195.719	1.734E 02	2.087E 02	-1.568E-08	-1.568E-08	1.568E-08
0.11511	88.4692	2.00000	217.235	1.734E 02	2.201E 02	-1.119E-08	-1.119E-08	1.119E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.015 θ_0=2.611E-05 ρ_a=1.046

z	$_x\mu'$-1.0	T_o	$_oT_1$-T_o	$_xT_1$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-3.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.541E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.865E-05	-5.865E-05	5.865E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.029E-04	-1.557E-06	-1.557E-06
0.92500	5.184E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.870E-06	-2.870E-06
0.95000	1.316E-05	474.060	-2.567E-04	-2.567E-04	2.567E-04	2.568E-04	-7.280E-06	-7.284E-06
0.96250	2.595E-05	480.297	-3.706E-04	-3.707E-04	3.705E-04	3.707E-04	-1.435E-05	-1.437E-05
0.97500	7.883E-05	486.534	-6.565E-04	-6.570E-04	6.563E-04	6.573E-04	-4.352E-05	-4.360E-05
0.98124	1.837E-04	489.652	-1.039E-03	-1.040E-03	1.038E-03	1.041E-03	-1.012E-04	-1.015E-04
0.98749	7.794E-04	492.769	-2.239E-03	-2.248E-03	2.236E-03	2.252E-03	-4.264E-04	-4.296E-04
0.99373	2.931E-02	495.884	-1.872E-02	-1.909E-02	1.889E-02	1.965E-02	-1.507E-02	-1.554E-02
0.99037	2.425E-03	494.206	4.597E 00	4.597E 00	3.530E 03	3.864E 03	-1.365E-03	-1.348E-03
0.98417	3.264E-04	491.111	1.081E 01	1.081E 01	3.537E 03	3.871E 03	-1.819E-04	-1.811E-04
0.97796	1.149E-04	488.014	1.702E 01	1.702E 01	3.543E 03	3.877E 03	-6.385E-05	-6.369E-05
0.97176	5.458E-05	484.918	2.324E 01	2.324E 01	3.549E 03	3.883E 03	-3.029E-05	-3.024E-05
0.96555	3.272E-05	481.821	2.945E 01	2.945E 01	3.555E 03	3.889E 03	-1.814E-05	-1.813E-05
0.95314	1.467E-05	475.628	4.188E 01	4.188E 01	3.568E 03	3.902E 03	-8.128E-06	-8.124E-06
0.94073	9.068E-06	469.436	5.431E 01	5.431E 01	3.580E 03	3.914E 03	-5.024E-06	-5.022E-06
0.91592	4.093E-06	457.055	7.917E 01	7.917E 01	3.605E 03	3.939E 03	-2.267E-06	-2.266E-06
0.89112	2.276E-06	444.680	1.040E 02	1.040E 02	3.630E 03	3.964E 03	-1.260E-06	-1.260E-06
0.84156	9.658E-07	419.946	1.537E 02	1.537E 02	3.680E 03	4.014E 03	-5.348E-07	-5.348E-07
0.79205	5.145E-07	395.240	2.034E 02	2.034E 02	3.729E 03	4.063E 03	-2.849E-07	-2.849E-07
0.69324	2.123E-07	345.933	3.026E 02	3.026E 02	3.828E 03	4.162E 03	-1.175E-07	-1.175E-07
0.59482	1.121E-07	296.824	4.016E 02	4.016E 02	3.927E 03	4.261E 03	-6.210E-08	-6.210E-08
0.49705	6.966E-08	248.032	5.003E 02	5.003E 02	4.026E 03	4.360E 03	-3.857E-08	-3.857E-08
0.40037	4.669E-08	199.788	5.984E 02	5.984E 02	4.124E 03	4.458E 03	-2.586E-08	-2.586E-08
0.30583	3.150E-08	152.613	6.955E 02	6.955E 02	4.221E 03	4.555E 03	-1.744E-08	-1.744E-08
0.21627	2.222E-08	107.920	7.901E 02	7.901E 02	4.316E 03	4.650E 03	-1.230E-08	-1.230E-08
0.14146	1.568E-08	70.590	8.773E 02	8.773E 02	4.403E 03	4.737E 03	-8.680E-09	-8.680E-09
0.11511	1.119E-08	57.440	9.404E 02	9.404E 02	4.466E 03	4.800E 03	-6.196E-09	-6.196E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.015 θ_D= 2.611E-05 ρ_a= 1.046

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-3.059E-19
0.10000	-4.812E-12	-1.556E-12	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-4.104E-19
0.20000	-6.512E-12	-1.700E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-5.870E-19
0.30000	-9.066E-12	-1.283E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-9.227E-19
0.40000	-2.945E-11	-1.049E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-1.562E-18
0.50000	-2.245E-11	-2.743E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-3.127E-18
0.60000	1.085E-11	-3.103E-11	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-7.311E-18
0.70000	-1.533E-12	1.915E-11	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-2.137E-17
0.80000	1.302E-10	7.814E-11	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-9.678E-17
0.85000	4.382E-10	4.499E-10	-3.902E-17	-3.903E-17	-3.601E-07	-3.601E-07	-2.804E-16
0.90000	2.009E-09	2.009E-09	-1.675E-16	-1.675E-16	-9.929E-07	-9.930E-07	-1.258E-15
0.92500	5.035E-09	5.165E-09	-3.871E-16	-3.873E-16	-1.973E-06	-1.974E-06	-3.835E-15
0.95000	2.034E-08	2.026E-08	-1.537E-15	-1.538E-15	-4.962E-06	-4.965E-06	-1.722E-14
0.96250	5.580E-08	5.521E-08	-4.461E-15	-4.468E-15	-9.854E-06	-9.863E-06	-4.905E-14
0.97500	2.642E-07	2.657E-07	-2.585E-14	-2.595E-14	-3.149E-05	-3.156E-05	-1.841E-13
0.98124	7.980E-07	8.005E-07	-1.015E-13	-1.022E-13	-8.268E-05	-8.303E-05	-4.443E-13
0.98749	5.717E-06	5.765E-06	-1.100E-12	-1.116E-12	-4.363E-04	-4.408E-04	-1.197E-12
0.99373	4.724E-04	4.894E-04	-1.008E-09	-1.071E-09	-8.327E-02	-8.764E-02	-2.317E-12
0.99037	-2.959E-03	-3.003E-03	-9.332E-12	-9.098E-12	-1.575E 06	-1.720E 06	-1.786E-12
0.98417	-1.626E-03	-1.649E-03	-2.651E-13	-2.627E-13	-1.575E 06	-1.720E 06	-6.667E-13
0.97796	-1.116E-03	-1.132E-03	-4.811E-14	-4.788E-14	-1.575E 06	-1.720E 06	-2.600E-13
0.97176	-8.497E-04	-8.620E-04	-1.472E-14	-1.468E-14	-1.575E 06	-1.720E 06	-1.234E-13
0.96555	-6.858E-04	-6.957E-04	-6.491E-15	-6.478E-15	-1.575E 06	-1.720E 06	-6.244E-14
0.95314	-4.948E-04	-5.020E-04	-1.825E-15	-1.823E-15	-1.575E 06	-1.720E 06	-2.196E-14
0.94073	-3.871E-04	-3.926E-04	-8.620E-16	-8.614E-16	-1.575E 06	-1.720E 06	-8.666E-15
0.91592	-2.696E-04	-2.735E-04	-2.802E-16	-2.801E-16	-1.575E 06	-1.720E 06	-2.352E-15
0.89112	-2.068E-04	-2.098E-04	-1.226E-16	-1.226E-16	-1.575E 06	-1.720E 06	-8.955E-16
0.84156	-1.411E-04	-1.431E-04	-3.187E-17	-3.187E-17	-1.575E 06	-1.720E 06	-2.215E-16
0.79205	-1.071E-04	-1.086E-04	-1.256E-17	-1.256E-17	-1.575E 06	-1.720E 06	-8.110E-17
0.69324	-7.225E-05	-7.328E-05	-3.314E-18	-3.314E-18	-1.575E 06	-1.720E 06	-1.894E-17
0.59482	-5.451E-05	-5.529E-05	-1.294E-18	-1.294E-18	-1.575E 06	-1.720E 06	-6.686E-18
0.49705	-4.377E-05	-4.440E-05	-6.398E-19	-6.398E-19	-1.575E 06	-1.720E 06	-2.903E-18
0.40037	-3.656E-05	-3.709E-05	-3.501E-19	-3.501E-19	-1.575E 06	-1.720E 06	-1.478E-18
0.30583	-3.139E-05	-3.184E-05	-1.928E-19	-1.928E-19	-1.575E 06	-1.720E 06	-8.809E-19
0.21627	-2.750E-05	-2.790E-05	-1.106E-19	-1.106E-19	-1.575E 06	-1.720E 06	-5.662E-19
0.14146	-2.447E-05	-2.482E-05	-6.348E-20	-6.348E-20	-1.575E 06	-1.720E 06	-3.991E-19
0.11511	-2.204E-05	-2.236E-05	-3.639E-20	-3.639E-20	-1.575E 06	-1.720E 06	-2.991E-19

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.020 θ_D= 3.487E-05 ρ_a= 1.046

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0200	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0200	0.10000	193.643	3.075E-09	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0200	0.20000	172.127	4.429E-09	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0200	0.30000	150.611	5.941E-09	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0200	0.40000	129.095	1.021E-08	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0200	0.50000	107.579	1.522E-08	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0200	0.60000	86.064	2.084E-08	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0200	0.70000	64.548	6.879E-08	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0200	0.80000	43.032	2.335E-07	1.000E 00	-5.712E-07	-5.712E-07	5.712E-07
0.85000	0.0200	0.85000	32.274	5.986E-07	1.000E 00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0200	0.90000	21.516	2.116E-06	1.000E 00	-2.812E-06	-2.812E-06	2.812E-06
0.92500	0.0200	0.92500	16.137	5.136E-06	1.000E 00	-5.183E-06	-5.184E-06	5.182E-06
0.95000	0.0200	0.95000	10.759	1.793E-05	1.000E 00	-1.315E-05	-1.315E-05	1.314E-05
0.96250	0.0200	0.96250	8.070	4.384E-05	1.000E 00	-2.592E-05	-2.594E-05	2.591E-05
0.97499	0.0200	0.97500	5.381	1.612E-04	1.000E 00	-7.858E-05	-7.873E-05	7.851E-05
0.98124	0.0200	0.98125	4.036	4.174E-04	1.000E 00	-1.826E-04	-1.832E-04	1.824E-04
0.98749	0.0200	0.98750	2.693	1.884E-03	1.001E 00	-7.692E-04	-7.750E-04	7.669E-04
0.99373	0.0201	0.99375	1.351	8.500E-02	1.006E 00	-2.702E-02	-2.785E-02	2.737E-02
0.99041	0.0649	1.00000	2.077	1.712E 02	3.224E 00	-2.484E-03	-2.452E-03	2.506E-03
0.98424	0.1206	1.00625	3.420	1.712E 02	5.922E 00	-3.298E-04	-3.282E-04	3.307E-04
0.97807	0.1771	1.01250	4.764	1.712E 02	8.587E 00	-1.156E-04	-1.153E-04	1.157E-04
0.97190	0.2342	1.01875	6.108	1.712E 02	1.122E 01	-5.478E-05	-5.470E-05	5.482E-05
0.96573	0.2921	1.02500	7.452	1.712E 02	1.382E 01	-3.282E-05	-3.278E-05	3.283E-05
0.95339	0.4102	1.03750	10.142	1.712E 02	1.893E 01	-1.469E-05	-1.468E-05	1.469E-05
0.94105	0.5313	1.05000	12.831	1.712E 02	2.392E 01	-9.079E-06	-9.076E-06	9.080E-06
0.91638	0.7834	1.07500	18.210	1.712E 02	3.355E 01	-4.096E-06	-4.095E-06	4.096E-06
0.89174	1.0495	1.10000	23.589	1.712E 02	4.274E 01	-2.277E-06	-2.277E-06	2.277E-06
0.84251	1.6282	1.15000	34.346	1.712E 02	5.992E 01	-9.662E-07	-9.661E-07	9.662E-07
0.79338	2.2787	1.20000	45.104	1.712E 02	7.567E 01	-5.146E-07	-5.146E-07	5.146E-07
0.69549	3.8549	1.30000	66.620	1.712E 02	1.035E 02	-2.123E-07	-2.123E-07	2.123E-07
0.59830	5.9453	1.40000	88.136	1.712E 02	1.274E 02	-1.122E-07	-1.122E-07	1.122E-07
0.50221	8.8407	1.50000	109.652	1.712E 02	1.481E 02	-6.967E-08	-6.966E-08	6.967E-08
0.40801	13.0885	1.60000	131.168	1.712E 02	1.662E 02	-4.670E-08	-4.670E-08	4.670E-08
0.31737	19.8196	1.70000	152.684	1.712E 02	1.822E 02	-3.150E-08	-3.150E-08	3.150E-08
0.23448	31.5879	1.80000	174.199	1.712E 02	1.964E 02	-2.222E-08	-2.222E-08	2.222E-08
0.17098	53.8333	1.90000	195.715	1.712E 02	2.091E 02	-1.568E-08	-1.568E-08	1.568E-08
0.15326	89.2285	2.00000	217.231	1.712E 02	2.206E 02	-1.119E-08	-1.119E-08	1.119E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 0.020 θ_D=3.487E-05 ρ_a=1.046

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.541E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.865E-05	-5.865E-05	5.864E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.029E-04	-1.557E-06	-1.557E-06
0.92500	5.184E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.870E-06	-2.870E-06
0.95000	1.316E-05	474.060	-2.567E-04	-2.567E-04	2.567E-04	2.568E-04	-7.280E-06	-7.284E-06
0.96250	2.595E-05	480.297	-3.705E-04	-3.707E-04	3.705E-04	3.707E-04	-1.435E-05	-1.436E-05
0.97499	7.881E-05	486.534	-6.565E-04	-6.570E-04	6.562E-04	6.572E-04	-4.351E-05	-4.359E-05
0.98124	1.836E-04	489.652	-1.039E-03	-1.040E-03	1.038E-03	1.041E-03	-1.011E-04	-1.015E-04
0.98749	7.786E-04	492.769	-2.238E-03	-2.247E-03	2.235E-03	2.251E-03	-4.259E-04	-4.291E-04
0.99373	2.908E-02	495.882	-1.857E-02	-1.894E-02	1.886E-02	1.961E-02	-1.496E-02	-1.542E-02
0.99041	2.443E-03	494.228	4.574E 00	4.574E 00	2.705E 03	2.807E 03	-1.375E-03	-1.358E-03
0.98424	3.276E-04	491.149	1.077E 01	1.077E 01	2.711E 03	2.813E 03	-1.826E-04	-1.818E-04
0.97807	1.152E-04	488.069	1.697E 01	1.697E 01	2.717E 03	2.820E 03	-6.399E-05	-6.384E-05
0.97190	5.466E-05	484.989	2.317E 01	2.317E 01	2.723E 03	2.826E 03	-3.033E-05	-3.029E-05
0.96573	3.277E-05	481.909	2.936E 01	2.936E 01	2.730E 03	2.832E 03	-1.817E-05	-1.815E-05
0.95339	1.468E-05	475.751	4.176E 01	4.176E 01	2.742E 03	2.844E 03	-8.134E-06	-8.130E-06
0.94105	9.074E-06	469.594	5.416E 01	5.416E 01	2.754E 03	2.857E 03	-5.027E-06	-5.025E-06
0.91638	4.095E-06	457.287	7.894E 01	7.894E 01	2.779E 03	2.881E 03	-2.268E-06	-2.267E-06
0.89174	2.277E-06	444.989	1.037E 02	1.037E 02	2.804E 03	2.906E 03	-1.261E-06	-1.261E-06
0.84251	9.661E-07	420.424	1.532E 02	1.532E 02	2.853E 03	2.956E 03	-5.350E-07	-5.350E-07
0.79338	5.146E-07	395.907	2.027E 02	2.027E 02	2.903E 03	3.005E 03	-2.849E-07	-2.849E-07
0.69549	2.123E-07	347.059	3.014E 02	3.014E 02	3.002E 03	3.104E 03	-1.176E-07	-1.176E-07
0.59830	1.122E-07	298.559	3.998E 02	3.998E 02	3.100E 03	3.202E 03	-6.210E-08	-6.210E-08
0.50221	6.966E-08	250.610	4.977E 02	4.977E 02	3.198E 03	3.300E 03	-3.857E-08	-3.857E-08
0.40801	4.670E-08	203.602	5.946E 02	5.946E 02	3.295E 03	3.397E 03	-2.586E-08	-2.586E-08
0.31737	3.150E-08	158.374	6.897E 02	6.897E 02	3.390E 03	3.492E 03	-1.744E-08	-1.744E-08
0.23448	2.222E-08	117.008	7.810E 02	7.810E 02	3.481E 03	3.584E 03	-1.231E-08	-1.231E-08
0.17098	1.568E-08	85.322	8.626E 02	8.626E 02	3.563E 03	3.665E 03	-8.680E-09	-8.680E-09
0.15326	1.119E-08	76.479	9.213E 02	9.213E 02	3.621E 03	3.724E 03	-6.196E-09	-6.196E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o=0.020 θ_D=3.487E-05 ρ_a=1.046

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-5.439E-19
0.10000	-3.427E-12	-1.204E-12	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-7.296E-19
0.20000	-4.444E-12	-1.018E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-1.044E-18
0.30000	-5.428E-12	-9.138E-12	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-1.640E-18
0.40000	-1.981E-11	-5.734E-12	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-2.777E-18
0.50000	-1.213E-11	-1.599E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-5.559E-18
0.60000	2.031E-11	-1.131E-11	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-1.300E-17
0.70000	3.149E-11	4.886E-11	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-3.799E-17
0.80000	2.437E-10	2.082E-10	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-1.720E-16
0.85000	7.181E-10	7.272E-10	-3.902E-17	-3.903E-17	-3.601E-07	-3.601E-07	-4.985E-16
0.90000	3.033E-09	3.033E-09	-1.675E-16	-1.675E-16	-9.929E-07	-9.930E-07	-2.237E-15
0.92500	7.565E-09	7.665E-09	-3.871E-16	-3.873E-16	-1.973E-06	-1.974E-06	-6.818E-15
0.95000	2.990E-08	2.984E-08	-1.537E-15	-1.538E-15	-4.962E-06	-4.964E-06	-3.060E-14
0.96250	8.125E-08	8.083E-08	-4.460E-15	-4.468E-15	-9.854E-06	-9.863E-06	-8.719E-14
0.97499	3.851E-07	3.865E-07	-2.585E-14	-2.594E-14	-3.149E-05	-3.156E-05	-3.272E-13
0.98124	1.159E-06	1.163E-06	-1.014E-13	-1.021E-13	-8.265E-05	-8.300E-05	-7.895E-13
0.98749	8.181E-06	8.254E-06	-1.098E-12	-1.114E-12	-4.358E-04	-4.403E-04	-2.127E-12
0.99373	6.517E-04	6.750E-04	-9.933E-10	-1.056E-09	-8.225E-02	-8.654E-02	-4.118E-12
0.99041	-3.139E-03	-3.174E-03	-9.463E-12	-9.225E-12	-1.203E 06	-1.247E 06	-3.182E-12
0.98424	-1.727E-03	-1.746E-03	-2.668E-13	-2.643E-13	-1.203E 06	-1.247E 06	-1.188E-12
0.97807	-1.186E-03	-1.199E-03	-4.829E-14	-4.806E-14	-1.203E 06	-1.247E 06	-4.632E-13
0.97190	-9.024E-04	-9.121E-04	-1.476E-14	-1.471E-14	-1.203E 06	-1.247E 06	-2.198E-13
0.96573	-7.283E-04	-7.361E-04	-6.506E-15	-6.493E-15	-1.203E 06	-1.247E 06	-1.112E-13
0.95339	-5.254E-04	-5.311E-04	-1.827E-15	-1.825E-15	-1.203E 06	-1.247E 06	-3.910E-14
0.94105	-4.109E-04	-4.154E-04	-8.629E-16	-8.623E-16	-1.203E 06	-1.247E 06	-1.542E-14
0.91638	-2.862E-04	-2.893E-04	-2.804E-16	-2.803E-16	-1.203E 06	-1.247E 06	-4.184E-15
0.89174	-2.195E-04	-2.219E-04	-1.227E-16	-1.227E-16	-1.203E 06	-1.247E 06	-1.593E-15
0.84251	-1.498E-04	-1.514E-04	-3.188E-17	-3.188E-17	-1.203E 06	-1.247E 06	-3.940E-16
0.79338	-1.137E-04	-1.149E-04	-1.257E-17	-1.256E-17	-1.203E 06	-1.247E 06	-1.442E-16
0.69549	-7.669E-05	-7.751E-05	-3.315E-18	-3.315E-18	-1.203E 06	-1.247E 06	-3.367E-17
0.59830	-5.786E-05	-5.848E-05	-1.294E-18	-1.294E-18	-1.203E 06	-1.247E 06	-1.189E-17
0.50221	-4.646E-05	-4.696E-05	-6.398E-19	-6.398E-19	-1.203E 06	-1.247E 06	-5.161E-18
0.40801	-3.881E-05	-3.923E-05	-3.502E-19	-3.502E-19	-1.203E 06	-1.247E 06	-2.628E-18
0.31737	-3.332E-05	-3.368E-05	-1.928E-19	-1.928E-19	-1.203E 06	-1.247E 06	-1.566E-18
0.23448	-2.919E-05	-2.951E-05	-1.106E-19	-1.106E-19	-1.203E 06	-1.247E 06	-1.007E-18
0.17098	-2.598E-05	-2.626E-05	-6.349E-20	-6.349E-20	-1.203E 06	-1.247E 06	-7.096E-19
0.15326	-2.340E-05	-2.365E-05	-3.639E-20	-3.639E-20	-1.203E 06	-1.247E 06	-5.318E-19

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.025 θ_D= 4.365E-05 ρ_a= 1.046

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0250	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0250	0.10000	193.643	4.012E-09	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0250	0.20000	172.127	5.055E-09	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0250	0.30000	150.611	7.400E-09	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0250	0.40000	129.095	1.271E-08	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0250	0.50000	107.579	1.876E-08	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0250	0.60000	86.064	2.043E-08	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0250	0.70000	64.548	7.671E-08	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0250	0.80000	43.032	2.551E-07	1.000E 00	-5.712E-07	-5.712E-07	5.712E-07
0.85000	0.0250	0.85000	32.274	6.653E-07	1.000E 00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0250	0.90000	21.516	2.355E-06	1.000E 00	-2.812E-06	-2.812E-06	2.812E-06
0.92500	0.0250	0.92500	16.137	5.736E-06	1.000E 00	-5.182E-06	-5.184E-06	5.182E-06
0.95000	0.0250	0.95000	10.759	2.010E-05	1.000E 00	-1.315E-05	-1.315E-05	1.314E-05
0.96250	0.0250	0.96250	8.070	4.927E-05	1.000E 00	-2.592E-05	-2.594E-05	2.591E-05
0.97500	0.0250	0.97500	5.381	1.828E-04	1.000E 00	-7.857E-05	-7.872E-05	7.851E-05
0.98124	0.0250	0.98125	4.037	4.774E-04	1.000E 00	-1.826E-04	-1.832E-04	1.823E-04
0.98749	0.0250	0.98750	2.693	2.205E-03	1.000E 00	-7.689E-04	-7.747E-04	7.666E-04
0.99373	0.0251	0.99375	1.352	1.048E-01	1.005E 00	-2.695E-02	-2.778E-02	2.729E-02
0.99046	0.0810	1.00000	2.075	1.690E 02	3.226E 00	-2.494E-03	-2.462E-03	2.516E-03
0.98433	0.1505	1.00625	3.418	1.690E 02	5.929E 00	-3.305E-04	-3.289E-04	3.314E-04
0.97820	0.2209	1.01250	4.762	1.690E 02	8.600E 00	-1.157E-04	-1.154E-04	1.159E-04
0.97207	0.2922	1.01875	6.106	1.690E 02	1.124E 01	-5.482E-05	-5.474E-05	5.486E-05
0.96594	0.3644	1.02500	7.450	1.690E 02	1.385E 01	-3.284E-05	-3.281E-05	3.286E-05
0.95369	0.5116	1.03750	10.139	1.690E 02	1.896E 01	-1.470E-05	-1.469E-05	1.470E-05
0.94144	0.6626	1.05000	12.829	1.690E 02	2.396E 01	-9.082E-06	-9.079E-06	9.084E-06
0.91697	0.9768	1.07500	18.207	1.690E 02	3.361E 01	-4.097E-06	-4.096E-06	4.097E-06
0.89252	1.3082	1.10000	23.586	1.690E 02	4.282E 01	-2.277E-06	-2.277E-06	2.277E-06
0.84373	2.0285	1.15000	34.344	1.690E 02	6.003E 01	-9.663E-07	-9.663E-07	9.663E-07
0.79508	2.8372	1.20000	45.102	1.690E 02	7.581E 01	-5.147E-07	-5.146E-07	5.147E-07
0.69836	4.7914	1.30000	66.618	1.690E 02	1.037E 02	-2.123E-07	-2.123E-07	2.123E-07
0.60272	7.3697	1.40000	88.134	1.690E 02	1.277E 02	-1.122E-07	-1.122E-07	1.122E-07
0.50875	10.9100	1.50000	109.650	1.690E 02	1.484E 02	-6.967E-08	-6.967E-08	6.967E-08
0.41760	16.0233	1.60000	131.165	1.690E 02	1.665E 02	-4.670E-08	-4.670E-08	4.670E-08
0.33159	23.8828	1.70000	152.681	1.690E 02	1.826E 02	-3.150E-08	-3.150E-08	3.150E-08
0.25594	36.7747	1.80000	174.197	1.690E 02	1.968E 02	-2.222E-08	-2.222E-08	2.222E-08
0.20265	58.1864	1.90000	195.713	1.690E 02	2.095E 02	-1.568E-08	-1.568E-08	1.568E-08
0.19138	87.4108	2.00000	217.229	1.690E 02	2.210E 02	-1.119E-08	-1.119E-08	1.119E-08

PROPAGATION FREQUENCY= 1.660CE 08 ϕ_0= 0.025 θ_D= 4.365E-05 ρ_a= 1.046

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.541E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.865E-05	-5.865E-05	5.864E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.557E-06	-1.557E-06
0.92500	5.184E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.870E-06	-2.870E-06
0.95000	1.316E-05	474.060	-2.567E-04	-2.567E-04	2.567E-04	2.568E-04	-7.280E-06	-7.284E-06
0.96250	2.595E-05	480.297	-3.705E-04	-3.707E-04	3.705E-04	3.707E-04	-1.435E-05	-1.436E-05
0.97500	7.880E-05	486.534	-6.564E-04	-6.570E-04	6.562E-04	6.572E-04	-4.351E-05	-4.359E-05
0.98124	1.836E-04	489.652	-1.038E-03	-1.040E-03	1.038E-03	1.041E-03	-1.011E-04	-1.015E-04
0.98749	7.783E-04	492.769	-2.238E-03	-2.246E-03	2.235E-03	2.251E-03	-4.258E-04	-4.290E-04
0.99373	2.90CE-02	495.884	-1.847E-02	-1.884E-02	1.890E-02	1.965E-02	-1.492E-02	-1.538E-02
0.99046	2.453E-03	494.251	4.551E 00	4.551E 00	7.953E 02	9.979E 02	-1.381E-03	-1.363E-03
0.98433	3.283E-04	491.192	1.073E 01	1.073E 01	8.015E 02	1.004E 03	-1.830E-04	-1.821E-04
0.97820	1.153E-04	488.133	1.690E 01	1.690E 01	8.077E 02	1.010E 03	-6.408E-05	-6.392E-05
0.97207	5.470E-05	485.074	2.308E 01	2.308E 01	8.139E 02	1.016E 03	-3.035E-05	-3.031E-05
0.96594	3.279E-05	482.016	2.926E 01	2.926E 01	8.201E 02	1.023E 03	-1.819E-05	-1.817E-05
0.95369	1.468E-05	475.901	4.161E 01	4.161E 01	8.324E 02	1.035E 03	-8.137E-06	-8.133E-06
0.94144	9.078E-06	469.790	5.396E 01	5.396E 01	8.448E 02	1.047E 03	-5.029E-06	-5.027E-06
0.91697	4.096E-06	457.577	7.865E 01	7.865E 01	8.695E 02	1.072E 03	-2.268E-06	-2.268E-06
0.89252	2.277E-06	445.378	1.033E 02	1.033E 02	8.941E 02	1.097E 03	-1.261E-06	-1.261E-06
0.84373	9.662E-07	421.029	1.526E 02	1.526E 02	9.434E 02	1.146E 03	-5.351E-07	-5.350E-07
0.79508	5.146E-07	396.754	2.018E 02	2.018E 02	9.927E 02	1.195E 03	-2.850E-07	-2.850E-07
0.69836	2.123E-07	348.492	3.000E 02	3.000E 02	1.091E 03	1.293E 03	-1.176E-07	-1.176E-07
0.60272	1.122E-07	300.764	3.976E 02	3.976E 02	1.188E 03	1.391E 03	-6.211E-08	-6.210E-08
0.50875	6.967E-08	253.874	4.944E 02	4.944E 02	1.285E 03	1.488E 03	-3.858E-08	-3.858E-08
0.41760	4.670E-08	208.387	5.898E 02	5.898E 02	1.381E 03	1.583E 03	-2.586E-08	-2.586E-08
0.33159	3.150E-08	165.465	6.826E 02	6.826E 02	1.473E 03	1.676E 03	-1.744E-08	-1.744E-08
0.25594	2.222E-08	127.719	7.703E 02	7.703E 02	1.561E 03	1.764E 03	-1.231E-08	-1.231E-08
0.20265	1.568E-08	101.125	8.468E 02	8.468E 02	1.638E 03	1.840E 03	-8.681E-09	-8.681E-09
0.19138	1.119E-08	95.500	9.023E 02	9.023E 02	1.693E 03	1.896E 03	-6.197E-09	-6.197E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0=0.025 θ_D=4.365E-05 ρ_a=1.046

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-8.498E-19
0.10000	-2.041E-12	-8.526E-13	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-1.140E-18
0.20000	-2.377E-12	-3.358E-13	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-1.631E-18
0.30000	-1.791E-12	-5.443E-12	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-2.563E-18
0.40000	-1.018E-11	-9.809E-13	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-4.339E-18
0.50000	-1.817E-12	-4.545E-12	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-8.685E-18
0.60000	2.977E-11	8.411E-12	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-2.031E-17
0.70000	6.450E-11	7.856E-11	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-5.936E-17
0.80000	3.572E-10	3.382E-10	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-2.688E-16
0.85000	9.980E-10	1.004E-09	-3.902E-17	-3.903E-17	-3.601E-07	-3.601E-07	-7.789E-16
0.90000	4.057E-09	4.057E-09	-1.675E-16	-1.675E-16	-9.929E-07	-9.930E-07	-3.495E-15
0.92500	1.009E-08	1.016E-08	-3.871E-16	-3.872E-16	-1.973E-06	-1.974E-06	-1.065E-14
0.95000	3.946E-08	3.941E-08	-1.537E-15	-1.538E-15	-4.962E-06	-4.964E-06	-4.782E-14
0.96250	1.067E-07	1.064E-07	-4.460E-15	-4.467E-15	-9.853E-06	-9.862E-06	-1.362E-13
0.97500	5.059E-07	5.073E-07	-2.584E-14	-2.594E-14	-3.148E-05	-3.156E-05	-5.111E-13
0.98124	1.520E-06	1.526E-06	-1.014E-13	-1.021E-13	-8.264E-05	-8.299E-05	-1.233E-12
0.98749	1.065E-05	1.074E-05	-1.097E-12	-1.114E-12	-4.356E-04	-4.401E-04	-3.322E-12
0.99373	8.317E-04	8.613E-04	-9.880E-10	-1.050E-09	-8.188E-02	-8.615E-02	-6.433E-12
0.99046	-3.315E-03	-3.342E-03	-9.536E-12	-9.296E-12	-3.519E 05	-4.422E 05	-4.977E-12
0.98433	-1.827E-03	-1.841E-03	-2.677E-13	-2.652E-13	-3.519E 05	-4.422E 05	-1.859E-12
0.97820	-1.254E-03	-1.264E-03	-4.839E-14	-4.816E-14	-3.519E 05	-4.422E 05	-7.247E-13
0.97207	-9.546E-04	-9.619E-04	-1.477E-14	-1.473E-14	-3.519E 05	-4.422E 05	-3.439E-13
0.96594	-7.704E-04	-7.763E-04	-6.514E-15	-6.501E-15	-3.519E 05	-4.422E 05	-1.739E-13
0.95369	-5.558E-04	-5.600E-04	-1.828E-15	-1.826E-15	-3.519E 05	-4.422E 05	-6.115E-14
0.94144	-4.347E-04	-4.380E-04	-8.634E-16	-8.629E-16	-3.519E 05	-4.422E 05	-2.412E-14
0.91697	-3.027E-04	-3.050E-04	-2.805E-16	-2.804E-16	-3.519E 05	-4.422E 05	-6.541E-15
0.89252	-2.322E-04	-2.340E-04	-1.227E-16	-1.227E-16	-3.519E 05	-4.422E 05	-2.490E-15
0.84373	-1.584E-04	-1.596E-04	-3.189E-17	-3.189E-17	-3.519E 05	-4.422E 05	-6.157E-16
0.79508	-1.202E-04	-1.211E-04	-1.257E-17	-1.257E-17	-3.519E 05	-4.422E 05	-2.254E-16
0.69836	-8.111E-05	-8.173E-05	-3.315E-18	-3.315E-18	-3.519E 05	-4.422E 05	-5.262E-17
0.60272	-6.120E-05	-6.166E-05	-1.294E-18	-1.294E-18	-3.519E 05	-4.422E 05	-1.858E-17
0.50875	-4.913E-05	-4.951E-05	-6.399E-19	-6.399E-19	-3.519E 05	-4.422E 05	-8.065E-18
0.41760	-4.104E-05	-4.136E-05	-3.502E-19	-3.502E-19	-3.519E 05	-4.422E 05	-4.106E-18
0.33159	-3.524E-05	-3.551E-05	-1.928E-19	-1.928E-19	-3.519E 05	-4.422E 05	-2.447E-18
0.25594	-3.088E-05	-3.111E-05	-1.106E-19	-1.106E-19	-3.519E 05	-4.422E 05	-1.573E-18
0.20265	-2.747E-05	-2.768E-05	-6.349E-20	-6.349E-20	-3.519E 05	-4.422E 05	-1.109E-18
0.19138	-2.475E-05	-2.493E-05	-3.639E-20	-3.639E-20	-3.519E 05	-4.422E 05	-8.309E-19

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.030 θ_D= 5.228E-05 ρ_a= 1.046

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0300	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0300	0.10000	193.643	5.029E-09	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0300	0.20000	172.127	6.566E-09	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0300	0.30000	150.611	9.901E-09	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0300	0.40000	129.095	1.438E-08	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0300	0.50000	107.579	2.084E-08	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0300	0.60000	86.064	2.293E-08	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0300	0.70000	64.548	8.504E-08	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0300	0.80000	43.032	2.851E-07	1.000E 00	-5.712E-07	-5.712E-07	5.712E-07
0.85000	0.0300	0.85000	32.274	7.487E-07	1.000E 00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0300	0.90000	21.516	2.645E-06	1.000E 00	-2.812E-06	-2.812E-06	2.812E-06
0.92500	0.0300	0.92500	16.138	6.460E-06	1.000E 00	-5.182E-06	-5.184E-06	5.182E-06
0.95000	0.0300	0.95000	10.759	2.268E-05	1.000E 00	-1.315E-05	-1.315E-05	1.314E-05
0.96250	0.0300	0.96250	8.070	5.576E-05	1.000E 00	-2.592E-05	-2.594E-05	2.591E-05
0.97500	0.0300	0.97500	5.381	2.081E-04	1.000E 00	-7.856E-05	-7.871E-05	7.849E-05
0.98124	0.0300	0.98125	4.037	5.461E-04	1.000E 00	-1.826E-04	-1.832E-04	1.823E-04
0.98749	0.0300	0.98750	2.694	2.554E-03	1.000E 00	-7.683E-04	-7.742E-04	7.660E-04
0.99373	0.0301	0.99375	1.353	1.243E-01	1.004E 00	-2.680E-02	-2.763E-02	2.714E-02
0.99052	0.0969	1.00000	2.072	1.668E 02	3.226E 00	-2.510E-03	-2.478E-03	2.533E-03
0.98444	0.1801	1.00625	3.415	1.668E 02	5.934E 00	-3.316E-04	-3.300E-04	3.325E-04
0.97836	0.2644	1.01250	4.758	1.668E 02	8.611E 00	-1.160E-04	-1.157E-04	1.161E-04
0.97228	0.3497	1.01875	6.103	1.668E 02	1.125E 01	-5.489E-05	-5.481E-05	5.493E-05
0.96621	0.4361	1.02500	7.447	1.668E 02	1.387E 01	-3.288E-05	-3.285E-05	3.290E-05
0.95406	0.6122	1.03750	10.136	1.668E 02	1.900E 01	-1.470E-05	-1.470E-05	1.471E-05
0.94192	0.7929	1.05000	12.825	1.668E 02	2.400E 01	-9.088E-06	-9.085E-06	9.090E-06
0.91768	1.1686	1.07500	18.204	1.668E 02	3.367E 01	-4.098E-06	-4.098E-06	4.099E-06
0.89348	1.5646	1.10000	23.583	1.668E 02	4.289E 01	-2.278E-06	-2.278E-06	2.278E-06
0.84521	[illegible]247	1.15000	34.341	1.668E 02	6.014E 01	-9.665E-07	-9.665E-07	9.666E-07
0.79715	[illegible]887	1.20000	45.098	1.668E 02	7.595E 01	-5.147E-07	-5.147E-07	5.148E-07
0.70186	5.7109	1.30000	66.614	1.668E 02	1.039E 02	-2.123E-07	-2.123E-07	2.123E-07
0.60808	8.7559	1.40000	88.130	1.668E 02	1.279E 02	-1.122E-07	-1.122E-07	1.122E-07
0.51664	12.8942	1.50000	109.646	1.668E 02	1.487E 02	-6.967E-08	-6.967E-08	6.967E-08
0.42903	18.7648	1.60000	131.162	1.668E 02	1.669E 02	-4.670E-08	-4.670E-08	4.670E-08
0.34816	27.4945	1.70000	152.678	1.668E 02	1.829E 02	-3.151E-08	-3.151E-08	3.151E-08
0.27995	40.9447	1.80000	174.194	1.668E 02	1.972E 02	-2.222E-08	-2.222E-08	2.222E-08
0.23563	61.0460	1.90000	195.709	1.668E 02	2.099E 02	-1.568E-08	-1.568E-08	1.568E-08
0.22951	85.8303	2.00000	217.225	1.668E 02	2.214E 02	-1.119E-08	-1.119E-08	1.119E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.030 θ_D=5.228E-05 ρ_a=1.046

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.541E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.865E-05	-5.865E-05	5.864E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.557E-06	-1.557E-06
0.92500	5.184E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.870E-06	-2.870E-06
0.95000	1.316E-05	474.060	-2.567E-04	-2.567E-04	2.567E-04	2.568E-04	-7.280E-06	-7.283E-06
0.96250	2.595E-05	480.297	-3.705E-04	-3.707E-04	3.705E-04	3.707E-04	-1.435E-05	-1.436E-05
0.97500	7.879E-05	486.534	-6.564E-04	-6.569E-04	6.562E-04	6.572E-04	-4.350E-05	-4.358E-05
0.98124	1.835E-04	489.652	-1.038E-03	-1.040E-03	1.038E-03	1.041E-03	-1.011E-04	-1.014E-04
0.98749	7.777E-04	492.770	-2.237E-03	-2.245E-03	2.234E-03	2.250E-03	-4.254E-04	-4.287E-04
0.99373	2.884E-02	495.884	-1.832E-02	-1.869E-02	1.893E-02	1.967E-02	-1.484E-02	-1.530E-02
0.99052	2.469E-03	494.280	4.521E 00	4.521E 00	5.094E 00	5.095E 00	-1.390E-03	-1.372E-03
0.98444	3.294E-04	491.247	1.067E 01	1.067E 01	1.125E 01	1.125E 01	-1.836E-04	-1.827E-04
0.97836	1.150E-04	488.213	1.682E 01	1.682E 01	1.740E 01	1.740E 01	-6.421E-05	-6.406E-05
0.97228	5.477E-05	485.180	2.297E 01	2.297E 01	2.355E 01	2.355E 01	-3.039E-05	-3.035E-05
0.96621	3.284E-05	482.148	2.912E 01	2.912E 01	2.970E 01	2.971E 01	-1.821E-05	-1.819E-05
0.95406	1.469E-05	476.088	4.142E 01	4.142E 01	4.200E 01	4.200E 01	-8.142E-06	-8.138E-06
0.94192	9.084E-06	470.031	5.372E 01	5.372E 01	5.430E 01	5.430E 01	-5.032E-06	-5.031E-06
0.91768	4.097E-06	457.933	7.829E 01	7.829E 01	7.887E 01	7.887E 01	-2.269E-06	-2.269E-06
0.89348	2.278E-06	445.855	1.028E 02	1.028E 02	1.034E 02	1.034E 02	-1.261E-06	-1.261E-06
0.84521	9.665E-07	421.769	1.519E 02	1.519E 02	1.525E 02	1.525E 02	-5.352E-07	-5.352E-07
0.79715	5.147E-07	397.789	2.008E 02	2.008E 02	2.014E 02	2.014E 02	-2.850E-07	-2.850E-07
0.70186	2.123E-07	350.236	2.983E 02	2.983E 02	2.988E 02	2.988E 02	-1.176E-07	-1.176E-07
0.60808	1.122E-07	303.438	3.950E 02	3.950E 02	3.955E 02	3.955E 02	-6.211E-08	-6.211E-08
0.51664	6.967E-08	257.807	4.905E 02	4.905E 02	4.911E 02	4.911E 02	-3.858E-08	-3.858E-08
0.42903	4.670E-08	214.090	5.841E 02	5.841E 02	5.847E 02	5.847E 02	-2.586E-08	-2.586E-08
0.34816	3.151E-08	173.737	6.744E 02	6.744E 02	6.749E 02	6.749E 02	-1.745E-08	-1.745E-08
0.27995	2.222E-08	139.697	7.583E 02	7.583E 02	7.589E 02	7.589E 02	-1.231E-08	-1.231E-08
0.23563	1.568E-08	117.583	8.303E 02	8.303E 02	8.309E 02	8.309E 02	-8.681E-09	-8.681E-09
0.22951	1.119E-08	114.529	8.833E 02	8.833E 02	8.839E 02	8.839E 02	-6.197E-09	-6.197E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.030 θ_D=5.228E-05 ρ_a=1.046

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.224E-18
0.10000	-0.	-1.685E-12	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-1.642E-18
0.20000	-9.595E-14	-1.781E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-2.348E-18
0.30000	1.958E-12	-2.374E-12	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-3.691E-18
0.40000	2.746E-12	7.704E-12	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-6.248E-18
0.50000	9.401E-12	9.401E-12	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-1.251E-17
0.60000	4.096E-11	2.787E-11	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-2.924E-17
0.70000	1.047E-10	1.157E-10	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-8.548E-17
0.80000	4.981E-10	4.848E-10	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-3.871E-16
0.85000	1.293E-09	1.318E-09	-3.902E-17	-3.903E-17	-3.601E-07	-3.601E-07	-1.122E-15
0.90000	5.130E-09	5.154E-09	-1.675E-16	-1.675E-16	-9.928E-07	-9.930E-07	-5.033E-15
0.92500	1.277E-08	1.279E-08	-3.871E-16	-3.872E-16	-1.973E-06	-1.974E-06	-1.534E-14
0.95000	4.930E-08	4.935E-08	-1.537E-15	-1.538E-15	-4.962E-06	-4.964E-06	-6.885E-14
0.96250	1.329E-07	1.328E-07	-4.459E-15	-4.467E-15	-9.853E-06	-9.862E-06	-1.961E-13
0.97500	6.302E-07	6.312E-07	-2.584E-14	-2.594E-14	-3.148E-05	-3.155E-05	-7.359E-13
0.98124	1.891E-06	1.899E-06	-1.014E-13	-1.021E-13	-8.262E-05	-8.297E-05	-1.776E-12
0.98749	1.318E-05	1.330E-05	-1.095E-12	-1.112E-12	-4.352E-04	-4.397E-04	-4.781E-12
0.99373	1.019E-03	1.055E-03	-9.776E-10	-1.039E-09	-8.117E-02	-8.539E-02	-9.262E-12
0.99052	-3.488E-03	-3.493E-03	-9.654E-12	-9.410E-12	-9.685E 01	-9.737E 01	-7.180E-12
0.98444	-1.924E-03	-1.926E-03	-2.692E-13	-2.667E-13	-9.686E 01	-9.737E 01	-2.683E-12
0.97836	-1.321E-03	-1.322E-03	-4.856E-14	-4.832E-14	-9.686E 01	-9.737E 01	-1.046E-12
0.97228	-1.005E-03	-1.006E-03	-1.480E-14	-1.476E-14	-9.686E 01	-9.737E 01	-4.962E-13
0.96621	-8.110E-04	-8.118E-04	-6.527E-15	-6.515E-15	-9.686E 01	-9.737E 01	-2.507E-13
0.95406	-5.850E-04	-5.856E-04	-1.830E-15	-1.828E-15	-9.686E 01	-9.737E 01	-8.818E-14
0.94192	-4.575E-04	-4.580E-04	-8.643E-16	-8.637E-16	-9.686E 01	-9.737E 01	-3.476E-14
0.91768	-3.186E-04	-3.189E-04	-2.806E-16	-2.805E-16	-9.686E 01	-9.737E 01	-9.427E-15
0.89348	-2.444E-04	-2.446E-04	-1.228E-16	-1.228E-16	-9.686E 01	-9.737E 01	-3.588E-15
0.84521	-1.667E-04	-1.669E-04	-3.190E-17	-3.190E-17	-9.686E 01	-9.737E 01	-8.869E-16
0.79715	-1.265E-04	-1.266E-04	-1.257E-17	-1.257E-17	-9.686E 01	-9.737E 01	-3.247E-16
0.70186	-8.535E-05	-8.544E-05	-3.316E-18	-3.316E-18	-9.686E 01	-9.737E 01	-7.578E-17
0.60808	-6.440E-05	-6.446E-05	-1.294E-18	-1.294E-18	-9.686E 01	-9.737E 01	-2.676E-17
0.51664	-5.170E-05	-5.176E-05	-6.399E-19	-6.399E-19	-9.686E 01	-9.737E 01	-1.162E-17
0.42903	-4.319E-05	-4.324E-05	-3.502E-19	-3.502E-19	-9.686E 01	-9.737E 01	-5.914E-18
0.34816	-3.708E-05	-3.712E-05	-1.928E-19	-1.928E-19	-9.686E 01	-9.737E 01	-3.524E-18
0.27995	-3.249E-05	-3.252E-05	-1.106E-19	-1.106E-19	-9.686E 01	-9.737E 01	-2.265E-18
0.23563	-2.891E-05	-2.894E-05	-6.350E-20	-6.350E-20	-9.686E 01	-9.737E 01	-1.597E-18
0.22951	-2.604E-05	-2.607E-05	-3.640E-20	-3.640E-20	-9.686E 01	-9.737E 01	-1.197E-18

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.040 θ_D= 6.978E-05 ρ_a= 1.046

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0400	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0400	0.10000	193.643	7.921E-09	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0400	0.20000	172.127	1.105E-08	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0400	0.30000	150.611	1.355E-08	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0400	0.40000	129.095	1.980E-08	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0400	0.50000	107.580	2.960E-08	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0400	0.60000	86.064	3.669E-08	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0400	0.70000	64.548	1.234E-07	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0400	0.80000	43.032	4.135E-07	1.000E 00	-5.712E-07	-5.712E-07	5.712E-07
0.85000	0.0400	0.85000	32.274	1.074E-06	1.000E 00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0400	0.90000	21.517	3.812E-06	1.000E 00	-2.812E-06	-2.812E-06	2.812E-06
0.92500	0.0400	0.92500	16.138	9.291E-06	1.000E 00	-5.182E-06	-5.183E-06	5.182E-06
0.95000	0.0400	0.95000	10.759	3.253E-05	1.000E 00	-1.315E-05	-1.315E-05	1.314E-05
0.96250	0.0400	0.96250	8.070	7.973E-05	1.000E 00	-2.591E-05	-2.593E-05	2.590E-05
0.97500	0.0400	0.97500	5.382	2.956E-04	1.000E 00	-7.852E-05	-7.867E-05	7.845E-05
0.98124	0.0400	0.98125	4.038	7.709E-04	1.000E 00	-1.824E-04	-1.830E-04	1.821E-04
0.98749	0.0400	0.98750	2.696	3.543E-03	1.000E 00	-7.663E-04	-7.721E-04	7.640E-04
0.99373	0.0402	0.99375	1.357	1.637E-01	1.004E 00	-2.630E-02	-2.710E-02	2.663E-02
0.99067	0.1281	1.00000	2.063	1.624E 02	3.222E 00	-2.562E-03	-2.529E-03	2.585E-03
0.98472	0.2385	1.00625	3.405	1.624E 02	5.945E 00	-3.351E-04	-3.335E-04	3.360E-04
0.97878	0.3501	1.01250	4.748	1.624E 02	8.636E 00	-1.167E-04	-1.164E-04	1.169E-04
0.97283	0.4632	1.01875	6.092	1.624E 02	1.129E 01	-5.511E-05	-5.503E-05	5.516E-05
0.96689	0.5776	1.02500	7.436	1.624E 02	1.392E 01	-3.302E-05	-3.299E-05	3.304E-05
0.95502	0.8108	1.03750	10.125	1.624E 02	1.907E 01	-1.473E-05	-1.473E-05	1.474E-05
0.94316	1.0499	1.05000	12.814	1.624E 02	2.411E 01	-9.106E-06	-9.103E-06	9.108E-06
0.91950	1.5464	1.07500	18.193	1.624E 02	3.382E 01	-4.103E-06	-4.103E-06	4.104E-06
0.89591	2.0692	1.10000	23.572	1.624E 02	4.310E 01	-2.280E-06	-2.280E-06	2.280E-06
0.84898	3.2017	1.15000	34.329	1.624E 02	6.043E 01	-9.672E-07	-9.672E-07	9.673E-07
0.80242	4.4662	1.20000	45.087	1.624E 02	7.633E 01	-5.150E-07	-5.150E-07	5.150E-07
0.71069	7.4883	1.30000	66.603	1.624E 02	1.044E 02	-2.124E-07	-2.124E-07	2.124E-07
0.62152	11.3913	1.40000	88.119	1.624E 02	1.285E 02	-1.122E-07	-1.122E-07	1.122E-07
0.53619	16.5676	1.50000	109.635	1.624E 02	1.494E 02	-6.969E-08	-6.969E-08	6.969E-08
0.45684	23.6179	1.60000	131.150	1.624E 02	1.677E 02	-4.671E-08	-4.671E-08	4.671E-08
0.38719	33.4044	1.70000	152.666	1.624E 02	1.838E 02	-3.151E-08	-3.151E-08	3.151E-08
0.33335	46.8751	1.80000	174.182	1.624E 02	1.982E 02	-2.223E-08	-2.223E-08	2.223E-08
0.30386	64.1424	1.90000	195.698	1.624E 02	2.110E 02	-1.568E-08	-1.568E-08	1.568E-08
0.30584	83.0191	2.00000	217.214	1.624E 02	2.225E 02	-1.119E-08	-1.119E-08	1.119E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.040 θ_D= 6.978E-05 ρ_a= 1.046

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-$_o$	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.541E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.865E-05	-5.865E-05	5.864E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.557E-06	-1.557E-06
0.92500	5.184E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.869E-06	-2.870E-06
0.95000	1.316E-05	474.060	-2.567E-04	-2.567E-04	2.567E-04	2.568E-04	-7.279E-06	-7.283E-06
0.96250	2.594E-05	480.297	-3.706E-04	-3.706E-04	3.704E-04	3.707E-04	-1.435E-05	-1.436E-05
0.97500	7.875E-05	486.534	-6.563E-04	-6.568E-04	6.560E-04	6.571E-04	-4.348E-05	-4.356E-05
0.98124	1.834E-04	489.652	-1.038E-03	-1.039E-03	1.037E-03	1.040E-03	-1.010E-04	-1.013E-04
0.98749	7.756E-04	492.769	-2.234E-03	-2.242E-03	2.231E-03	2.248E-03	-4.243E-04	-4.275E-04
0.99373	2.827E-02	495.883	-1.789E-02	-1.825E-02	1.892E-02	1.965E-02	-1.456E-02	-1.501E-02
0.99067	2.520E-03	494.358	4.441E 00	4.441E 00	4.999E 00	5.000E 00	-1.419E-03	-1.401E-03
0.98472	3.328E-04	491.389	1.053E 01	1.053E 01	1.109E 01	1.109E 01	-1.855E-04	-1.847E-04
0.97878	1.163E-04	488.421	1.661E 01	1.661E 01	1.718E 01	1.718E 01	-6.463E-05	-6.448E-05
0.97283	5.499E-05	485.455	2.270E 01	2.270E 01	2.326E 01	2.326E 01	-3.052E-05	-3.047E-05
0.96689	3.297E-05	482.490	2.878E 01	2.878E 01	2.935E 01	2.935E 01	-1.828E-05	-1.827E-05
0.95502	1.472E-05	476.566	4.094E 01	4.094E 01	4.151E 01	4.151E 01	-8.158E-06	-8.154E-06
0.94316	9.101E-06	470.650	5.310E 01	5.310E 01	5.366E 01	5.366E 01	-5.042E-06	-5.040E-06
0.91950	4.102E-06	458.843	7.738E 01	7.738E 01	7.794E 01	7.794E 01	-2.272E-06	-2.272E-06
0.89591	2.280E-06	447.072	1.016E 02	1.016E 02	1.022E 02	1.022E 02	-1.263E-06	-1.263E-06
0.84898	9.672E-07	423.651	1.500E 02	1.500E 02	1.506E 02	1.506E 02	-5.356E-07	-5.356E-07
0.80242	5.150E-07	400.415	1.982E 02	1.982E 02	1.987E 02	1.987E 02	-2.852E-07	-2.852E-07
0.71069	2.124E-07	354.643	2.939E 02	2.939E 02	2.944E 02	2.944E 02	-1.176E-07	-1.176E-07
0.62152	1.122E-07	310.146	3.883E 02	3.883E 02	3.888E 02	3.888E 02	-6.213E-08	-6.213E-08
0.53619	6.969E-08	267.564	4.807E 02	4.807E 02	4.813E 02	4.813E 02	-3.859E-08	-3.859E-08
0.45684	4.671E-08	227.969	5.702E 02	5.702E 02	5.708E 02	5.708E 02	-2.587E-08	-2.587E-08
0.38719	3.151E-08	193.210	6.549E 02	6.549E 02	6.555E 02	6.555E 02	-1.745E-08	-1.745E-08
0.33335	2.223E-08	166.344	7.317E 02	7.317E 02	7.322E 02	7.322E 02	-1.231E-08	-1.231E-08
0.30386	1.568E-08	151.628	7.963E 02	7.963E 02	7.968E 02	7.968E 02	-8.683E-09	-8.683E-09
0.30584	1.119E-08	152.616	8.452E 02	8.452E 02	8.458E 02	8.458E 02	-6.198E-09	-6.198E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.040 θ_D= 6.978E-05 ρ_a= 1.046

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-2.175E-18
0.10000	-8.734E-13	-1.982E-13	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-2.918E-18
0.20000	-7.536E-13	-7.838E-14	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-4.174E-18
0.30000	1.168E-12	1.592E-12	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-6.562E-18
0.40000	1.025E-11	9.937E-12	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-1.111E-17
0.50000	2.054E-11	1.787E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-2.223E-17
0.60000	5.416E-11	4.886E-11	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-5.199E-17
0.70000	1.488E-10	1.457E-10	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-1.520E-16
0.80000	6.585E-10	6.492E-10	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-6.882E-16
0.85000	1.757E-09	1.752E-09	-3.902E-17	-3.903E-17	-3.601E-07	-3.601E-07	-1.994E-15
0.90000	6.991E-09	6.967E-09	-1.674E-16	-1.675E-16	-9.928E-07	-9.930E-07	-8.946E-15
0.92500	1.730E-08	1.735E-08	-3.871E-16	-3.872E-16	-1.973E-06	-1.974E-06	-2.727E-14
0.95000	6.708E-08	6.706E-08	-1.536E-15	-1.538E-15	-4.961E-06	-4.964E-06	-1.224E-13
0.96250	1.805E-07	1.806E-07	-4.458E-15	-4.465E-15	-9.851E-06	-9.860E-06	-3.486E-13
0.97500	8.566E-07	8.583E-07	-2.582E-14	-2.591E-14	-3.147E-05	-3.154E-05	-1.308E-12
0.98124	2.569E-06	2.580E-06	-1.012E-13	-1.019E-13	-8.255E-05	-8.289E-05	-3.153E-12
0.98749	1.779E-05	1.795E-05	-1.091E-12	-1.107E-12	-4.340E-04	-4.384E-04	-8.485E-12
0.99373	1.351E-03	1.399E-03	-9.418E-10	-1.000E-09	-7.868E-02	-8.274E-02	-1.646E-11
0.99067	-3.844E-03	-3.854E-03	-1.004E-11	-9.782E-12	-8.900E 01	-8.916E 01	-1.284E-11
0.98472	-2.126E-03	-2.131E-03	-2.739E-13	-2.713E-13	-8.900E 01	-8.916E 01	-4.804E-12
0.97878	-1.459E-03	-1.462E-03	-4.908E-14	-4.884E-14	-8.900E 01	-8.916E 01	-1.871E-12
0.97283	-1.109E-03	-1.112E-03	-1.490E-14	-1.486E-14	-8.900E 01	-8.916E 01	-8.878E-13
0.96689	-8.950E-04	-8.969E-04	-6.570E-15	-6.557E-15	-8.900E 01	-8.916E 01	-4.478E-13
0.95502	-6.454E-04	-6.468E-04	-1.836E-15	-1.834E-15	-8.900E 01	-8.916E 01	-1.575E-13
0.94316	-5.046E-04	-5.057E-04	-8.669E-16	-8.664E-16	-8.900E 01	-8.916E 01	-6.199E-14
0.91950	-3.513E-04	-3.521E-04	-2.811E-16	-2.810E-16	-8.900E 01	-8.916E 01	-1.680E-14
0.89591	-2.695E-04	-2.701E-04	-1.230E-16	-1.230E-16	-8.900E 01	-8.916E 01	-6.390E-15
0.84898	-1.838E-04	-1.842E-04	-3.194E-17	-3.193E-17	-8.900E 01	-8.916E 01	-1.579E-15
0.80242	-1.395E-04	-1.398E-04	-1.258E-17	-1.258E-17	-8.900E 01	-8.916E 01	-5.777E-16
0.71069	-9.409E-05	-9.429E-05	-3.318E-18	-3.318E-18	-8.900E 01	-8.916E 01	-1.348E-16
0.62152	-7.099E-05	-7.114E-05	-1.295E-18	-1.295E-18	-8.900E 01	-8.916E 01	-4.759E-17
0.53619	-5.699E-05	-5.712E-05	-6.401E-19	-6.401E-19	-8.900E 01	-8.916E 01	-2.066E-17
0.45684	-4.761E-05	-4.771E-05	-3.504E-19	-3.503E-19	-8.900E 01	-8.916E 01	-1.052E-17
0.38719	-4.088E-05	-4.097E-05	-1.929E-19	-1.929E-19	-8.900E 01	-8.916E 01	-6.267E-18
0.33335	-3.581E-05	-3.589E-05	-1.107E-19	-1.107E-19	-8.900E 01	-8.916E 01	-4.028E-18
0.30386	-3.187E-05	-3.194E-05	-6.352E-20	-6.351E-20	-8.900E 01	-8.916E 01	-2.839E-18
0.30584	-2.870E-05	-2.877E-05	-3.641E-20	-3.641E-20	-8.900E 01	-8.916E 01	-2.127E-18

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.050 θ_D= 8.774E-05 ρ_a= 1.047

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0500	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0500	0.10000	193.643	1.360E-08	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0500	0.20000	172.127	1.595E-08	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0500	0.30000	150.611	2.022E-08	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0500	0.40000	129.095	2.918E-08	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0500	0.50000	107.580	4.002E-08	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0500	0.60000	86.064	4.336E-08	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0500	0.70000	64.548	1.534E-07	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0500	0.80000	43.032	5.003E-07	1.000E 00	-5.712E-07	-5.712E-07	5.712E-07
0.85000	0.0500	0.85000	32.274	1.297E-06	1.000E 00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0500	0.90000	21.517	4.609E-06	1.000E 00	-2.812E-06	-2.812E-06	2.812E-06
0.92500	0.0500	0.92500	16.138	1.123E-05	1.000E 00	-5.182E-06	-5.183E-06	5.182E-06
0.95000	0.0500	0.95000	10.760	3.931E-05	1.000E 00	-1.314E-05	-1.315E-05	1.314E-05
0.96250	0.0500	0.96250	8.071	9.657E-05	1.000E 00	-2.590E-05	-2.592E-05	2.589E-05
0.97500	0.0500	0.97500	5.383	3.587E-04	1.000E 00	-7.848E-05	-7.863E-05	7.841E-05
0.98124	0.0500	0.98125	4.040	9.375E-04	1.000E 00	-1.822E-04	-1.829E-04	1.820E-04
0.98749	0.0500	0.98750	2.698	4.332E-03	1.000E 00	-7.640E-04	-7.698E-04	7.617E-04
0.99373	0.0502	0.99375	1.362	1.996E-01	1.003E 00	-2.575E-02	-2.653E-02	2.606E-02
0.99087	0.1586	1.00000	2.052	1.580E 02	3.218E 00	-2.627E-03	-2.593E-03	2.651E-03
0.98509	0.2954	1.00625	3.392	1.580E 02	5.958E 00	-3.395E-04	-3.379E-04	3.404E-04
0.97931	0.4339	1.01250	4.735	1.580E 02	8.665E 00	-1.177E-04	-1.174E-04	1.178E-04
0.97353	0.5741	1.01875	6.079	1.580E 02	1.134E 01	-5.539E-05	-5.531E-05	5.544E-05
0.96777	0.7159	1.02500	7.423	1.580E 02	1.398E 01	-3.319E-05	-3.316E-05	3.321E-05
0.95625	1.0047	1.03750	10.111	1.580E 02	1.917E 01	-1.477E-05	-1.476E-05	1.477E-05
0.94475	1.3006	1.05000	12.800	1.580E 02	2.423E 01	-9.129E-06	-9.125E-06	9.130E-06
0.92184	1.9144	1.07500	18.179	1.580E 02	3.401E 01	-4.110E-06	-4.109E-06	4.110E-06
0.89903	2.5594	1.10000	23.558	1.580E 02	4.334E 01	-2.283E-06	-2.283E-06	2.283E-06
0.85380	3.9525	1.15000	34.315	1.580E 02	6.078E 01	-9.682E-07	-9.681E-07	9.682E-07
0.80912	5.5003	1.20000	45.073	1.580E 02	7.677E 01	-5.154E-07	-5.154E-07	5.154E-07
0.72187	9.1638	1.30000	66.589	1.580E 02	1.051E 02	-2.125E-07	-2.125E-07	2.125E-07
0.63837	13.8091	1.40000	88.104	1.580E 02	1.293E 02	-1.122E-07	-1.122E-07	1.122E-07
0.56030	19.7984	1.50000	109.620	1.580E 02	1.503E 02	-6.971E-08	-6.971E-08	6.971E-08
0.49026	27.6070	1.60000	131.136	1.580E 02	1.687E 02	-4.673E-08	-4.673E-08	4.673E-08
0.43217	37.7524	1.70000	152.652	1.580E 02	1.849E 02	-3.152E-08	-3.152E-08	3.152E-08
0.39139	50.4991	1.80000	174.168	1.580E 02	1.994E 02	-2.223E-08	-2.223E-08	2.223E-08
0.37364	65.2847	1.90000	195.684	1.580E 02	2.123E 02	-1.568E-08	-1.568E-08	1.568E-08
0.38213	80.4373	2.00000	217.200	1.580E 02	2.239E 02	-1.120E-08	-1.120E-08	1.120E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 0.050 θ_D= 8.774E-05 ρ_a= 1.047

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.624E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.541E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.865E-05	-5.865E-05	5.864E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.557E-06	-1.557E-06
0.92500	5.184E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.869E-06	-2.870E-06
0.95000	1.315E-05	474.060	-2.567E-04	-2.567E-04	2.566E-04	2.567E-04	-7.279E-06	-7.282E-06
0.96250	2.594E-05	480.297	-3.705E-04	-3.706E-04	3.704E-04	3.707E-04	-1.434E-05	-1.435E-05
0.97500	7.871E-05	486.534	-6.561E-04	-6.566E-04	6.559E-04	6.569E-04	-4.345E-05	-4.354E-05
0.98124	1.832E-04	489.652	-1.038E-03	-1.039E-03	1.037E-03	1.040E-03	-1.009E-04	-1.013E-04
0.98749	7.733E-04	492.770	-2.231E-03	-2.239E-03	2.228E-03	2.245E-03	-4.230E-04	-4.262E-04
0.99373	2.765E-02	495.884	-1.741E-02	-1.776E-02	1.893E-02	1.964E-02	-1.426E-02	-1.469E-02
0.99087	2.583E-03	494.455	4.342E 00	4.341E 00	4.896E 00	4.896E 00	-1.454E-03	-1.436E-03
0.98509	3.372E-04	491.570	1.034E 01	1.034E 01	1.090E 01	1.090E 01	-1.880E-04	-1.871E-04
0.97931	1.173E-04	488.686	1.634E 01	1.634E 01	1.691E 01	1.691E 01	-6.517E-05	-6.501E-05
0.97353	5.527E-05	485.805	2.234E 01	2.234E 01	2.291E 01	2.291E 01	-3.067E-05	-3.063E-05
0.96777	3.314E-05	482.926	2.834E 01	2.834E 01	2.890E 01	2.890E 01	-1.838E-05	-1.836E-05
0.95625	1.476E-05	477.177	4.033E 01	4.033E 01	4.089E 01	4.089E 01	-8.178E-06	-8.174E-06
0.94475	9.124E-06	471.441	5.230E 01	5.230E 01	5.286E 01	5.286E 01	-5.055E-06	-5.053E-06
0.92184	4.109E-06	460.007	7.621E 01	7.621E 01	7.677E 01	7.677E 01	-2.276E-06	-2.275E-06
0.89903	2.283E-06	448.628	1.001E 02	1.001E 02	1.006E 02	1.006E 02	-1.264E-06	-1.264E-06
0.85380	9.681E-07	426.055	1.476E 02	1.476E 02	1.482E 02	1.482E 02	-5.361E-07	-5.361E-07
0.80912	5.154E-07	403.762	1.948E 02	1.948E 02	1.954E 02	1.954E 02	-2.854E-07	-2.854E-07
0.72187	2.125E-07	360.222	2.883E 02	2.883E 02	2.888E 02	2.888E 02	-1.177E-07	-1.177E-07
0.63837	1.122E-07	318.554	3.798E 02	3.798E 02	3.804E 02	3.804E 02	-6.215E-08	-6.215E-08
0.56030	6.971E-08	279.596	4.687E 02	4.687E 02	4.693E 02	4.693E 02	-3.860E-08	-3.860E-08
0.49026	4.673E-08	244.644	5.536E 02	5.536E 02	5.541E 02	5.541E 02	-2.587E-08	-2.587E-08
0.43217	3.152E-08	215.658	6.324E 02	6.324E 02	6.330E 02	6.330E 02	-1.745E-08	-1.745E-08
0.39139	2.223E-08	195.309	7.027E 02	7.027E 02	7.033E 02	7.033E 02	-1.231E-08	-1.231E-08
0.37364	1.568E-08	186.450	7.615E 02	7.615E 02	7.620E 02	7.620E 02	-8.685E-09	-8.685E-09
0.38213	1.120E-08	190.687	8.071E 02	8.071E 02	8.077E 02	8.077E 02	-6.199E-09	-6.199E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o=0.050 θ_D=8.774E-05 ρ_a=1.047

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-3.399E-18
0.10000	1.161E-12	9.802E-13	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-4.560E-18
0.20000	2.915E-12	3.664E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-6.522E-18
0.30000	5.469E-12	6.983E-12	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-1.025E-17
0.40000	1.398E-11	1.548E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-1.736E-17
0.50000	3.096E-11	2.976E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-3.474E-17
0.60000	7.121E-11	7.073E-11	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-8.124E-17
0.70000	2.045E-10	2.080E-10	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-2.374E-16
0.80000	8.610E-10	8.407E-10	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-1.075E-15
0.85000	2.265E-09	2.288E-09	-3.902E-17	-3.903E-17	-3.601E-07	-3.601E-07	-3.116E-15
0.90000	8.853E-09	8.845E-09	-1.674E-16	-1.675E-16	-9.928E-07	-9.929E-07	-1.398E-14
0.92500	2.197E-08	2.197E-08	-3.870E-16	-3.872E-16	-1.973E-06	-1.974E-06	-4.260E-14
0.95000	8.495E-08	8.495E-08	-1.536E-15	-1.538E-15	-4.961E-06	-4.963E-06	-1.912E-13
0.96250	2.284E-07	2.287E-07	-4.456E-15	-4.463E-15	-9.850E-06	-9.859E-06	-5.446E-13
0.97500	1.083E-06	1.085E-06	-2.579E-14	-2.589E-14	-3.145E-05	-3.152E-05	-2.042E-12
0.98124	3.224E-06	3.238E-06	-1.011E-13	-1.018E-13	-8.247E-05	-8.281E-05	-4.920E-12
0.98749	2.221E-05	2.242E-05	-1.085E-12	-1.102E-12	-4.325E-04	-4.370E-04	-1.323E-11
0.99373	1.661E-03	1.720E-03	-9.031E-10	-9.584E-10	-7.599E-02	-7.986E-02	-2.570E-11
0.99087	-4.096E-03	-4.103E-03	-1.052E-11	-1.025E-11	-8.547E 01	-8.559E 01	-2.021E-11
0.98509	-2.268E-03	-2.271E-03	-2.799E-13	-2.772E-13	-8.548E 01	-8.559E 01	-7.572E-12
0.97931	-1.555E-03	-1.557E-03	-4.973E-14	-4.949E-14	-8.548E 01	-8.559E 01	-2.948E-12
0.97353	-1.182E-03	-1.184E-03	-1.502E-14	-1.498E-14	-8.548E 01	-8.559E 01	-1.398E-12
0.96777	-9.535E-04	-9.547E-04	-6.624E-15	-6.611E-15	-8.548E 01	-8.559E 01	-7.037E-13
0.95625	-6.873E-04	-6.881E-04	-1.843E-15	-1.841E-15	-8.548E 01	-8.559E 01	-2.474E-13
0.94475	-5.372E-04	-5.379E-04	-8.703E-16	-8.697E-16	-8.548E 01	-8.559E 01	-9.726E-14
0.92184	-3.740E-04	-3.744E-04	-2.817E-16	-2.816E-16	-8.548E 01	-8.559E 01	-2.633E-14
0.89903	-2.868E-04	-2.871E-04	-1.232E-16	-1.232E-16	-8.548E 01	-8.559E 01	-1.001E-14
0.85380	-1.956E-04	-1.958E-04	-3.198E-17	-3.198E-17	-8.548E 01	-8.559E 01	-2.471E-15
0.80912	-1.484E-04	-1.486E-04	-1.259E-17	-1.259E-17	-8.548E 01	-8.559E 01	-9.037E-16
0.72187	-1.061E-04	-1.062E-04	-3.320E-18	-3.320E-18	-8.548E 01	-8.559E 01	-2.108E-16
0.63837	-7.552E-05	-7.561E-05	-1.295E-18	-1.295E-18	-8.548E 01	-8.559E 01	-7.440E-17
0.56030	-6.063E-05	-6.071E-05	-6.404E-19	-6.404E-19	-8.548E 01	-8.559E 01	-3.229E-17
0.49026	-5.065E-05	-5.071E-05	-3.505E-19	-3.505E-19	-8.548E 01	-8.559E 01	-1.644E-17
0.43217	-4.348E-05	-4.354E-05	-1.929E-19	-1.929E-19	-8.548E 01	-8.559E 01	-9.795E-18
0.39139	-3.810E-05	-3.815E-05	-1.107E-19	-1.107E-19	-8.548E 01	-8.559E 01	-6.295E-18
0.37364	-3.390E-05	-3.394E-05	-6.354E-20	-6.354E-20	-8.548E 01	-8.559E 01	-4.437E-18
0.38213	-3.053E-05	-3.057E-05	-3.642E-20	-3.642E-20	-8.548E 01	-8.559E 01	-3.325E-18

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.060 θ_D= 1.059E-04 ρ_a= 1.047

z	ϕ	z_r	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	0.0600	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0600	0.10000	193.643	1.704E-08	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0600	0.20000	172.127	2.001E-08	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0600	0.30000	150.611	2.751E-08	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0600	0.40000	129.095	3.502E-08	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0600	0.50000	107.580	4.669E-08	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0600	0.60000	86.064	5.253E-08	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0600	0.70000	64.548	1.734E-07	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0600	0.80000	43.032	5.636E-07	1.000E-00	-5.712E-07	-5.712E-07	5.712E-07
0.85000	0.0600	0.85000	32.275	1.481E-06	1.000E-00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0600	0.90000	21.517	5.263E-06	1.000E-00	-2.812E-06	-2.812E-06	2.811E-06
0.92500	0.0600	0.92500	16.139	1.284E-05	1.000E-00	-5.182E-06	-5.183E-06	5.181E-06
0.95000	0.0600	0.95000	10.761	4.497E-05	1.000E-00	-1.314E-05	-1.315E-05	1.314E-05
0.96250	0.0600	0.96250	8.072	1.105E-04	1.000E-00	-2.589E-05	-2.592E-05	2.588E-05
0.97500	0.0600	0.97500	5.384	4.122E-04	9.999E-01	-7.842E-05	-7.857E-05	7.835E-05
0.98124	0.0600	0.98125	4.042	1.081E-03	9.999E-01	-1.820E-04	-1.826E-04	1.818E-04
0.98749	0.0600	0.98750	2.701	5.038E-03	9.998E-01	-7.612E-04	-7.670E-04	7.590E-04
0.99373	0.0603	0.99375	1.367	2.322E-01	1.002E 00	-2.510E-02	-2.585E-02	2.538E-02
0.99110	0.1880	1.00000	2.039	1.535E 02	3.214E 00	-2.705E-03	-2.670E-03	2.730E-03
0.98552	0.3507	1.00625	3.378	1.535E 02	5.979E 00	-3.447E-04	-3.431E-04	3.457E-04
0.97995	0.5153	1.01250	4.720	1.535E 02	8.709E 00	-1.188E-04	-1.185E-04	1.190F-04
0.97438	0.6817	1.01875	6.063	1.535E 02	1.141E 01	-5.572E-05	-5.564E-05	5.577E-05
0.96883	0.8501	1.02500	7.407	1.535E 02	1.407E 01	-3.339E-05	-3.336E-05	3.341E-05
0.95773	1.1927	1.03750	10.095	1.535E 02	1.930E 01	-1.481E-05	-1.480E-05	1.482E-05
0.94668	1.5434	1.05000	12.784	1.535E 02	2.441E 01	-9.155E-06	-9.152E-06	9.157E-06
0.92467	2.2698	1.07500	18.162	1.535E 02	3.426E 01	-4.118E-06	-4.117E-06	4.118E-06
0.90282	3.0316	1.10000	23.541	1.535E 02	4.367E 01	-2.287E-06	-2.286E-06	2.287E-06
0.85963	4.6705	1.15000	34.298	1.535E 02	6.126E 01	-9.692E-07	-9.692E-07	9.692E-07
0.81723	6.4811	1.20000	45.056	1.535E 02	7.738E 01	-5.158E-07	-5.158E-07	5.158E-07
0.73528	10.7180	1.30000	66.572	1.535E 02	1.059E 02	-2.126E-07	-2.126E-07	2.126E-07
0.65834	15.9801	1.40000	88.088	1.535E 02	1.304E 02	-1.123E-07	-1.123E-07	1.123E-07
0.58837	22.5613	1.50000	109.603	1.535E 02	1.515E 02	-6.973E-08	-6.973E-08	6.973E-08
0.52816	30.7746	1.60000	131.119	1.535E 02	1.701E 02	-4.674E-08	-4.674E-08	4.674E-08
0.48138	40.8306	1.70000	152.635	1.535E 02	1.864E 02	-3.153E-08	-3.153E-08	3.153E-08
0.45222	52.5976	1.80000	174.151	1.535E 02	2.010E 02	-2.224E-08	-2.224E-08	2.224E-08
0.44416	65.3668	1.90000	195.667	1.535E 02	2.140E 02	-1.569E-08	-1.569E-08	1.569E-08
0.45831	77.9635	2.00000	217.183	1.535E 02	2.257E 02	-1.120E-08	-1.120E-08	1.120E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.060 θ_D= 1.059E-04 ρ_a= 1.047

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.541E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.864E-05	-5.865E-05	5.864E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.557E-06	-1.557E-06
0.92500	5.183E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.869E-06	-2.870E-06
0.95000	1.315E-05	474.060	-2.567E-04	-2.567E-04	2.566E-04	2.567E-04	-7.278E-06	-7.281E-06
0.96250	2.593E-05	480.297	-3.704E-04	-3.706E-04	3.704E-04	3.706E-04	-1.434E-05	-1.435E-05
0.97500	7.865E-05	486.534	-6.560E-04	-6.565E-04	6.557E-04	6.567E-04	-4.342E-05	-4.351E-05
0.98124	1.830E-04	489.652	-1.037E-03	-1.039E-03	1.036E-03	1.039E-03	-1.008E-04	-1.011E-04
0.98749	7.705E-04	492.770	-2.227E-03	-2.236E-03	2.225E-03	2.241E-03	-4.215E-04	-4.247E-04
0.99373	2.692E-02	495.884	-1.688E-02	-1.722E-02	1.893E-02	1.962E-02	-1.390E-02	-1.431E-02
0.99110	2.660E-03	494.572	4.222E 00	4.222E 00	4.774E 00	4.774E 00	-1.498E-03	-1.478E-03
0.98552	3.424E-04	491.788	1.012E 01	1.012E 01	1.068E 01	1.068E 01	-1.909E-04	-1.900E-04
0.97995	1.184E-04	489.007	1.602E 01	1.602E 01	1.658E 01	1.658E 01	-6.580E-05	-6.564E-05
0.97438	5.560E-05	486.229	2.192E 01	2.192E 01	2.248E 01	2.248E 01	-3.085E-05	-3.081E-05
0.96883	3.334E-05	483.455	2.781E 01	2.781E 01	2.837E 01	2.837E 01	-1.849E-05	-1.847E-05
0.95773	1.480E-05	477.920	3.958E 01	3.958E 01	4.014E 01	4.014E 01	-8.202E-06	-8.197E-06
0.94668	9.151E-06	472.402	5.134E 01	5.134E 01	5.190E 01	5.190E 01	-5.069E-06	-5.068E-06
0.92467	4.117E-06	461.421	7.480E 01	7.480E 01	7.536E 01	7.536E 01	-2.280E-06	-2.280E-06
0.90282	2.286E-06	450.517	9.817E 01	9.817E 01	9.873E 01	9.873E 01	-1.266E-06	-1.266E-06
0.85963	9.691E-07	428.967	1.447E 02	1.447E 02	1.452E 02	1.452E 02	-5.367E-07	-5.366E-07
0.81723	5.158E-07	407.805	1.908E 02	1.908E 02	1.913E 02	1.913E 02	-2.856E-07	-2.856E-07
0.73528	2.126E-07	366.912	2.816E 02	2.816E 02	2.821E 02	2.821E 02	-1.177E-07	-1.177E-07
0.65834	1.123E-07	328.517	3.699E 02	3.699E 02	3.704E 02	3.704E 02	-6.218E-08	-6.218E-08
0.58837	6.973E-08	293.604	4.547E 02	4.547E 02	4.553E 02	4.553E 02	-3.861E-08	-3.861E-08
0.52816	4.674E-08	263.558	5.346E 02	5.346E 02	5.352E 02	5.352E 02	-2.588E-08	-2.588E-08
0.48138	3.153E-08	240.214	6.079E 02	6.079E 02	6.084E 02	6.084E 02	-1.746E-08	-1.746E-08
0.45222	2.224E-08	225.662	6.723E 02	6.723E 02	6.729E 02	6.729E 02	-1.231E-08	-1.231E-08
0.44416	1.569E-08	221.639	7.263E 02	7.263E 02	7.268E 02	7.268E 02	-8.687E-09	-8.687E-09
0.45831	1.120E-08	228.702	7.691E 02	7.691E 02	7.697E 02	7.697E 02	-6.201E-09	-6.201E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0=0.060 θ_D=1.059E-04 ρ_a=1.047

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-4.895E-18
0.10000	1.559E-12	2.082E-13	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-6.567E-18
0.20000	3.170E-12	4.209E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-9.392E-18
0.30000	8.315E-12	8.315E-12	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-1.476E-17
0.40000	1.860E-11	1.725E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-2.499E-17
0.50000	3.625E-11	3.792E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-5.003E-17
0.60000	8.398E-11	8.758E-11	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-1.170E-16
0.70000	2.494E-10	2.447E-10	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-3.419E-16
0.80000	1.028E-09	1.021E-09	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-1.548E-15
0.85000	2.729E-09	2.759E-09	-3.902E-17	-3.903E-17	-3.601E-07	-3.601E-07	-4.486E-15
0.90000	1.066E-08	1.068E-08	-1.674E-16	-1.675E-16	-9.928E-07	-9.929E-07	-2.013E-14
0.92500	2.647E-08	2.647E-08	-3.870E-16	-3.872E-16	-1.973E-06	-1.973E-06	-6.134E-14
0.95000	1.024E-07	1.024E-07	-1.536E-15	-1.537E-15	-4.960E-06	-4.963E-06	-2.752E-13
0.96250	2.753E-07	2.754E-07	-4.453E-15	-4.461E-15	-9.847E-06	-9.857E-06	-7.839E-13
0.97500	1.304E-06	1.307E-06	-2.577E-14	-2.586E-14	-3.143E-05	-3.150E-05	-2.938E-12
0.98124	3.543E-06	3.559E-06	-1.009E-13	-1.016E-13	-8.237E-05	-8.271E-05	-7.075E-12
0.98749	2.632E-05	2.658E-05	-1.078E-12	-1.095E-12	-4.308E-04	-4.352E-04	-1.901E-11
0.99373	1.943E-03	2.010E-03	-8.585E-10	-9.104E-10	-7.292E-02	-7.660E-02	-3.698E-11
0.99110	-4.172E-03	-4.179E-03	-1.113E-11	-1.084E-11	-8.228E 01	-8.237E 01	-2.936E-11
0.98552	-2.317E-03	-2.320E-03	-2.870E-13	-2.843E-13	-8.228E 01	-8.237E 01	-1.102E-11
0.97995	-1.587E-03	-1.589E-03	-5.052E-14	-5.027E-14	-8.228E 01	-8.237E 01	-4.286E-12
0.97438	-1.206E-03	-1.207E-03	-1.516E-14	-1.512E-14	-8.228E 01	-8.237E 01	-2.033E-12
0.96883	-9.722E-04	-9.733E-04	-6.689E-15	-6.675E-15	-8.228E 01	-8.237E 01	-1.020E-12
0.95773	-7.004E-04	-7.012E-04	-1.851E-15	-1.849E-15	-8.228E 01	-8.237E 01	-3.587E-13
0.94668	-5.474E-04	-5.480E-04	-8.743E-16	-8.737E-16	-8.228E 01	-8.237E 01	-1.407E-13
0.92467	-3.809E-04	-3.813E-04	-2.825E-16	-2.824E-16	-8.228E 01	-8.237E 01	-3.805E-14
0.90282	-2.920E-04	-2.924E-04	-1.235E-16	-1.235E-16	-8.228E 01	-8.237E 01	-1.445E-14
0.85963	-1.991E-04	-1.994E-04	-3.203E-17	-3.203E-17	-8.228E 01	-8.237E 01	-3.564E-15
0.81723	-1.511E-04	-1.512E-04	-1.261E-17	-1.261E-17	-8.228E 01	-8.237E 01	-1.303E-15
0.73528	-1.019E-04	-1.020E-04	-3.323E-18	-3.323E-18	-8.228E 01	-8.237E 01	-3.039E-16
0.65834	-7.687E-05	-7.696E-05	-1.296E-18	-1.296E-18	-8.228E 01	-8.237E 01	-1.072E-16
0.58837	-6.172E-05	-6.178E-05	-6.407E-19	-6.407E-19	-8.228E 01	-8.237E 01	-4.653E-17
0.52816	-5.155E-05	-5.161E-05	-3.507E-19	-3.507E-19	-8.228E 01	-8.237E 01	-2.368E-17
0.48138	-4.426E-05	-4.431E-05	-1.930E-19	-1.930E-19	-8.228E 01	-8.237E 01	-1.411E-17
0.45222	-3.878E-05	-3.882E-05	-1.108E-19	-1.108E-19	-8.228E 01	-8.237E 01	-9.068E-18
0.44416	-3.450E-05	-3.454E-05	-6.357E-20	-6.357E-20	-8.228E 01	-8.237E 01	-6.391E-18
0.45831	-3.108E-05	-3.111E-05	-3.644E-20	-3.644E-20	-8.228E 01	-8.237E 01	-4.789E-18

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.070 θ_D= 1.242E-04 ρ_a= 1.048

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0700	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0700	0.10000	193.643	2.751E-08	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0700	0.20000	172.127	3.064E-08	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0700	0.30000	150.611	4.044E-08	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0700	0.40000	129.095	4.919E-08	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0700	0.50000	107.580	6.670E-08	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0700	0.60000	86.064	7.087E-08	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0700	0.70000	64.548	2.301E-07	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0700	0.80000	43.033	7.270E-07	1.000E 00	-5.712E-07	-5.712E-07	5.712E-07
0.85000	0.0700	0.85000	32.275	1.871E-06	1.000E-00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0700	0.90000	21.518	6.623E-06	1.000E-00	-2.811E-06	-2.812E-06	2.811E-06
0.92500	0.0700	0.92500	16.139	1.608E-05	1.000E-00	-5.181E-06	-5.183E-06	5.181E-06
0.95000	0.0700	0.95000	10.761	5.632E-05	1.000E-00	-1.314E-05	-1.315E-05	1.314E-05
0.96250	0.0700	0.96250	8.073	1.379E-04	1.000E-00	-2.588E-05	-2.590E-05	2.587E-05
0.97500	0.0700	0.97500	5.386	5.112E-04	9.999E-01	-7.835E-05	-7.850E-05	7.828E-05
0.98124	0.0700	0.98125	4.044	1.332E-03	9.999E-01	-1.818E-04	-1.824E-04	1.815E-04
0.98749	0.0700	0.98750	2.704	6.097E-03	9.998E-01	-7.577E-04	-7.634E-04	7.554E-04
0.99373	0.0703	0.99375	1.374	2.639E-01	1.002E 00	-2.428E-02	-2.500E-02	2.454E-02
0.99138	0.2162	1.00000	2.023	1.490E 02	3.208E 00	-2.805E-03	-2.768E-03	2.832E-03
0.98604	0.4038	1.00625	3.360	1.490E 02	6.000E 00	-3.513E-04	-3.496E-04	3.522E-04
0.98071	0.5936	1.01250	4.701	1.490E 02	8.756E 00	-1.202E-04	-1.199E-04	1.204E-04
0.97539	0.7854	1.01875	6.044	1.490E 02	1.148E 01	-5.613E-05	-5.604E-05	5.617E-05
0.97008	0.9794	1.02500	7.388	1.490E 02	1.417E 01	-3.364E-05	-3.360E-05	3.366E-05
0.95949	1.3737	1.03750	10.076	1.490E 02	1.945E 01	-1.486E-05	-1.486E-05	1.487E-05
0.94894	1.7769	1.05000	12.764	1.490E 02	2.460E 01	-9.188E-06	-9.185E-06	9.190E-06
0.92800	2.6106	1.07500	18.142	1.490E 02	3.455E 01	-4.127E-06	-4.126E-06	4.127E-06
0.90727	3.4826	1.10000	23.521	1.490E 02	4.404E 01	-2.291E-06	-2.290E-06	2.291E-06
0.86647	5.3507	1.15000	34.278	1.490E 02	6.180E 01	-9.705E-07	-9.705E-07	9.705E-07
0.82669	7.4011	1.20000	45.036	1.490E 02	7.807E 01	-5.164E-07	-5.164E-07	5.164E-07
0.75079	12.1379	1.30000	66.551	1.490E 02	1.069E 02	-2.128E-07	-2.128E-07	2.128E-07
0.68115	17.8900	1.40000	88.067	1.490E 02	1.315E 02	-1.123E-07	-1.123E-07	1.123E-07
0.61987	24.8625	1.50000	109.583	1.490E 02	1.529E 02	-6.975E-08	-6.975E-08	6.975E-08
0.56966	33.2084	1.60000	131.099	1.490E 02	1.716E 02	-4.676E-08	-4.676E-08	4.676E-08
0.53366	42.9147	1.70000	152.615	1.490E 02	1.882E 02	-3.154E-08	-3.154E-08	3.154E-08
0.51485	53.6661	1.80000	174.130	1.490E 02	2.028E 02	-2.225E-08	-2.225E-08	2.225E-08
0.51512	64.8094	1.90000	195.646	1.490E 02	2.160E 02	-1.569E-08	-1.569E-08	1.569E-08
0.53443	75.5393	2.00000	217.162	1.490E 02	2.278E 02	-1.120E-08	-1.120E-08	1.120E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0 = 0.070 θ_D = 1.242E-04 ρ_a = 1.048

z	$_x\mu$-10	T_0	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.540E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.864E-05	-5.865E-05	5.864E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.557E-06	-1.557E-06
0.92500	5.183E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.869E-06	-2.870E-06
0.95000	1.315E-05	474.060	-2.566E-04	-2.567E-04	2.566E-04	2.567E-04	-7.277E-06	-7.280E-06
0.96250	2.592E-05	480.297	-3.704E-04	-3.705E-04	3.703E-04	3.706E-04	-1.433E-05	-1.434E-05
0.97500	7.858E-05	486.534	-6.557E-04	-6.562E-04	6.555E-04	6.565E-04	-4.338E-05	-4.347E-05
0.98124	1.827E-04	489.652	-1.036E-03	-1.038E-03	1.036E-03	1.039E-03	-1.006E-04	-1.010E-04
0.98749	7.668E-04	492.769	-2.222E-03	-2.231E-03	2.220E-03	2.237E-03	-4.195E-04	-4.227E-04
0.99373	2.600E-02	495.884	-1.623E-02	-1.656E-02	1.887E-02	1.954E-02	-1.345E-02	-1.384E-02
0.99138	2.757E-03	494.710	4.082E 00	4.082E 00	4.632E 00	4.632E 00	-1.553E-03	-1.533E-03
0.98604	3.488E-04	492.046	9.862E 00	9.862E 00	1.042E 01	1.042E 01	-1.945E-04	-1.936E-04
0.98071	1.198E-04	489.385	1.564E 01	1.564E 01	1.620E 01	1.620E 01	-6.658E-05	-6.642E-05
0.97539	5.601E-05	486.729	2.142E 01	2.142E 01	2.197E 01	2.197E 01	-3.108E-05	-3.103E-05
0.97008	3.359E-05	484.079	2.718E 01	2.718E 01	2.774E 01	2.774E 01	-1.863E-05	-1.861E-05
0.95949	1.485E-05	478.795	3.871E 01	3.871E 01	3.926E 01	3.926E 01	-8.231E-06	-8.226E-06
0.94894	9.183E-06	473.534	5.020E 01	5.020E 01	5.076E 01	5.076E 01	-5.087E-06	-5.086E-06
0.92800	4.126E-06	463.084	7.313E 01	7.313E 01	7.369E 01	7.369E 01	-2.285E-06	-2.285E-06
0.90727	2.290E-06	452.737	9.595E 01	9.595E 01	9.651E 01	9.651E 01	-1.268E-06	-1.268E-06
0.86647	9.705E-07	432.379	1.413E 02	1.413E 02	1.418E 02	1.418E 02	-5.374E-07	-5.374E-07
0.82669	5.164E-07	412.526	1.861E 02	1.861E 02	1.866E 02	1.866E 02	-2.859E-07	-2.859E-07
0.75079	2.128E-07	374.653	2.738E 02	2.738E 02	2.744E 02	2.744E 02	-1.178E-07	-1.178E-07
0.68115	1.123E-07	339.901	3.585E 02	3.585E 02	3.590E 02	3.591E 02	-6.221E-08	-6.221E-08
0.61987	6.975E-08	309.323	4.390E 02	4.390E 02	4.395E 02	4.395E 02	-3.862E-08	-3.862E-08
0.56966	4.676E-08	284.268	5.139E 02	5.139E 02	5.145E 02	5.145E 02	-2.589E-08	-2.589E-08
0.53366	3.154E-08	266.302	5.818E 02	5.818E 02	5.824E 02	5.824E 02	-1.746E-08	-1.746E-08
0.51485	2.225E-08	256.915	6.411E 02	6.411E 02	6.416E 02	6.416E 02	-1.232E-08	-1.232E-08
0.51512	1.569E-08	257.049	6.908E 02	6.908E 02	6.914E 02	6.914E 02	-8.690E-09	-8.690E-09
0.53443	1.126E-08	266.689	7.311E 02	7.311E 02	7.317E 02	7.317E 02	-6.203E-09	-6.203E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0 = 0.070 θ_D = 1.242E-04 ρ_a = 1.048

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-6.662E-18
0.10000	6.179E-13	1.436E-12	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-8.938E-18
0.20000	2.758E-12	3.970E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-1.278E-17
0.30000	9.161E-12	9.161E-12	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-2.010E-17
0.40000	1.954E-11	1.870E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-3.402E-17
0.50000	4.714E-11	4.326E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-6.809E-17
0.60000	9.859E-11	9.944E-11	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-1.592E-16
0.70000	2.879E-10	2.898E-10	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-4.654E-16
0.80000	1.193E-09	1.187E-09	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-2.107E-15
0.85000	3.174E-09	3.211E-09	-3.902E-17	-3.902E-17	-3.601E-07	-3.601E-07	-6.106E-15
0.90000	1.244E-08	1.243E-08	-1.674E-16	-1.675E-16	-9.927E-07	-9.929E-07	-2.739E-14
0.92500	3.088E-08	3.088E-08	-3.870E-16	-3.871E-16	-1.973E-06	-1.973E-06	-8.348E-14
0.95000	1.195E-07	1.195E-07	-1.536E-15	-1.537E-15	-4.960E-06	-4.962E-06	-3.745E-13
0.96250	3.212E-07	3.215E-07	-4.450E-15	-4.458E-15	-9.845E-06	-9.854E-06	-1.067E-12
0.97500	1.521E-06	1.525E-06	-2.573E-14	-2.583E-14	-3.141E-05	-3.148E-05	-3.994E-12
0.98124	3.909E-06	3.928E-06	-1.006E-13	-1.013E-13	-8.224E-05	-8.259E-05	-9.610E-12
0.98749	3.039E-05	3.069E-05	-1.070E-12	-1.086E-12	-4.286E-04	-4.330E-04	-2.579E-11
0.99373	2.196E-03	2.271E-03	-8.041E-10	-8.519E-10	-6.908E-02	-7.251E-02	-5.031E-11
0.99138	-4.179E-03	-4.187E-03	-1.192E-11	-1.160E-11	-7.896E 01	-7.904E 01	-4.041E-11
0.98604	-2.329E-03	-2.331E-03	-2.961E-13	-2.933E-13	-7.896E 01	-7.904E 01	-1.519E-11
0.98071	-1.593E-03	-1.595E-03	-5.150E-14	-5.125E-14	-7.896E 01	-7.904E 01	-5.904E-12
0.97539	-1.210E-03	-1.211E-03	-1.534E-14	-1.530E-14	-7.896E 01	-7.904E 01	-2.799E-12
0.97008	-9.747E-04	-9.757E-04	-6.768E-15	-6.754E-15	-7.896E 01	-7.904E 01	-1.400E-12
0.95949	-7.018E-04	-7.025E-04	-1.861E-15	-1.859E-15	-7.896E 01	-7.904E 01	-4.923E-13
0.94894	-5.482E-04	-5.488E-04	-8.791E-16	-8.785E-16	-7.896E 01	-7.904E 01	-1.926E-13
0.92800	-3.813E-04	-3.817E-04	-2.833E-16	-2.833E-16	-7.896E 01	-7.904E 01	-5.201E-14
0.90727	-2.923E-04	-2.926E-04	-1.239E-16	-1.239E-16	-7.896E 01	-7.904E 01	-1.974E-14
0.86647	-1.993E-04	-1.995E-04	-3.210E-17	-3.209E-17	-7.896E 01	-7.904E 01	-4.862E-15
0.82669	-1.512E-04	-1.513E-04	-1.263E-17	-1.263E-17	-7.896E 01	-7.904E 01	-1.777E-15
0.75079	-1.020E-04	-1.021E-04	-3.326E-18	-3.326E-18	-7.896E 01	-7.904E 01	-4.141E-16
0.68115	-7.691E-05	-7.699E-05	-1.297E-18	-1.297E-18	-7.896E 01	-7.904E 01	-1.461E-16
0.61987	-6.174E-05	-6.181E-05	-6.411E-19	-6.411E-19	-7.896E 01	-7.904E 01	-6.338E-17
0.56966	-5.157E-05	-5.163E-05	-3.509E-19	-3.509E-19	-7.896E 01	-7.904E 01	-3.225E-17
0.53366	-4.428E-05	-4.433E-05	-1.931E-19	-1.931E-19	-7.896E 01	-7.904E 01	-1.922E-17
0.51485	-3.879E-05	-3.883E-05	-1.108E-19	-1.108E-19	-7.896E 01	-7.904E 01	-1.235E-17
0.51512	-3.452E-05	-3.455E-05	-6.360E-20	-6.360E-20	-7.896E 01	-7.904E 01	-8.701E-18
0.53443	-3.109E-05	-3.112E-05	-3.646E-20	-3.646E-20	-7.896E 01	-7.904E 01	-6.519E-18

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.080 θ_0= 1.429E-04 ρ_a= 1.049

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0800	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.0800	0.10000	193.643	3.575E-08	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.0800	0.20000	172.127	4.106E-08	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.0800	0.30000	150.611	4.669E-08	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.0800	0.40000	129.095	6.128E-08	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.0800	0.50000	107.580	7.837E-08	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.0800	0.60000	86.064	8.671E-08	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.0800	0.70000	64.548	2.585E-07	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.0800	0.80000	43.033	8.271E-07	1.000E 00	-5.712E-07	-5.712E-07	5.711E-07
0.85000	0.0800	0.85000	32.275	2.101E-06	1.000E-00	-1.108E-06	-1.108E-06	1.108E-06
0.90000	0.0800	0.90000	21.518	7.410E-06	1.000E-00	-2.811E-06	-2.812E-06	2.811E-06
0.92500	0.0800	0.92500	16.140	1.802E-05	1.000E-00	-5.181E-06	-5.182E-06	5.181E-06
0.95000	0.0800	0.95000	10.762	6.307E-05	1.000E-00	-1.314E-05	-1.315E-05	1.314E-05
0.96250	0.0800	0.96250	8.074	1.546E-04	1.000E-00	-2.587E-05	-2.589E-05	2.586E-05
0.97500	0.0800	0.97500	5.388	5.735E-04	1.000E-00	-7.827E-05	-7.842E-05	7.821E-05
0.98124	0.0800	0.98125	4.046	1.496E-03	9.999E-01	-1.815E-04	-1.821E-04	1.812E-04
0.98749	0.0800	0.98750	2.708	6.855E-03	9.999E-01	-7.538E-04	-7.595E-04	7.516E-04
0.99373	0.0804	0.99375	1.382	2.903E-01	1.002E 00	-2.344E-02	-2.411E-02	2.367E-02
0.99169	0.2430	1.00000	2.035	1.444E 02	3.201E 00	-2.922E-03	-2.883E-03	2.950E-03
0.98663	0.4546	1.00625	3.340	1.445E 02	6.022E 00	-3.589E-04	-3.571E-04	3.599E-04
0.98157	0.6685	1.01250	4.680	1.445E 02	8.805E 00	-1.219E-04	-1.216E-04	1.220E-04
0.97653	0.8846	1.01875	6.022	1.445E 02	1.155E 01	-5.660E-05	-5.651E-05	5.664E-05
0.97151	1.1030	1.02500	7.365	1.445E 02	1.427E 01	-3.392E-05	-3.389E-05	3.394E-05
0.96150	1.5466	1.03750	10.053	1.445E 02	1.960E 01	-1.492E-05	-1.492E-05	1.493E-05
0.95154	1.9996	1.05000	12.741	1.445E 02	2.481E 01	-9.225E-06	-9.222E-06	9.227E-06
0.93182	2.9343	1.07500	18.119	1.445E 02	3.486E 01	-4.138E-06	-4.137E-06	4.138E-06
0.91236	3.9093	1.10000	23.497	1.445E 02	4.445E 01	-2.295E-06	-2.295E-06	2.295E-06
0.87428	5.9878	1.15000	34.255	1.445E 02	6.239E 01	-9.720E-07	-9.720E-07	9.720E-07
0.83745	8.2525	1.20000	45.012	1.445E 02	7.883E 01	-5.170E-07	-5.170E-07	5.170E-07
0.76827	13.4123	1.30000	66.528	1.445E 02	1.079E 02	-2.129E-07	-2.129E-07	2.129E-07
0.70651	19.5318	1.40000	88.044	1.445E 02	1.328E 02	-1.124E-07	-1.124E-07	1.124E-07
0.65428	26.7226	1.50000	109.559	1.445E 02	1.544E 02	-6.978E-08	-6.978E-08	6.979E-08
0.61400	35.0040	1.60000	131.075	1.445E 02	1.734E 02	-4.678E-08	-4.678E-08	4.678E-08
0.58815	44.2242	1.70000	152.591	1.445E 02	1.900E 02	-3.155E-08	-3.155E-08	3.155E-08
0.57865	54.0431	1.80000	174.107	1.445E 02	2.049E 02	-2.226E-08	-2.226E-08	2.226E-08
0.58631	63.8330	1.90000	195.623	1.445E 02	2.181E 02	-1.570E-08	-1.570E-08	1.570E-08
0.61047	73.1364	2.00000	217.139	1.445E 02	2.301E 02	-1.121E-08	-1.121E-08	1.121E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.080 θ_0= 1.429E-04 ρ_a= 1.049

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.540E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.163E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.864E-05	-5.865E-05	5.864E-05	5.865E-05	-6.133E-07	-6.133E-07
0.90000	2.812E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.557E-06	-1.557E-06
0.92500	5.183E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.869E-06	-2.869E-06
0.95000	1.315E-05	474.060	-2.566E-04	-2.567E-04	2.566E-04	2.567E-04	-7.275E-06	-7.279E-06
0.96250	2.590E-05	480.297	-3.703E-04	-3.705E-04	3.703E-04	3.705E-04	-1.432E-05	-1.434E-05
0.97500	7.850E-05	486.534	-6.555E-04	-6.560E-04	6.553E-04	6.563E-04	-4.334E-05	-4.342E-05
0.98124	1.824E-04	489.652	-1.036E-03	-1.037E-03	1.035E-03	1.038E-03	-1.005E-04	-1.008E-04
0.98749	7.629E-04	492.770	-2.217E-03	-2.225E-03	2.216E-03	2.232E-03	-4.174E-04	-4.205E-04
0.99373	2.505E-02	495.884	-1.559E-02	-1.590E-02	1.877E-02	1.942E-02	-1.298E-02	-1.335E-02
0.99169	2.872E-03	494.866	3.924E 00	3.924E 00	4.472E 00	4.472E 00	-1.618E-03	-1.596E-03
0.98663	3.564E-04	492.339	9.567E 00	9.567E 00	1.012E 01	1.012E 01	-1.987E-04	-1.977E-04
0.98157	1.214E-04	489.817	1.521E 01	1.521E 01	1.576E 01	1.576E 01	-6.748E-05	-6.732E-05
0.97653	5.647E-05	487.302	2.084E 01	2.084E 01	2.140E 01	2.140E 01	-3.134E-05	-3.129E-05
0.97151	3.387E-05	484.794	2.647E 01	2.647E 01	2.702E 01	2.702E 01	-1.878E-05	-1.876E-05
0.96150	1.491E-05	479.798	3.770E 01	3.770E 01	3.826E 01	3.826E 01	-8.264E-06	-8.260E-06
0.95154	9.221E-06	474.831	4.891E 01	4.891E 01	4.946E 01	4.946E 01	-5.108E-06	-5.107E-06
0.93182	4.137E-06	464.990	7.122E 01	7.122E 01	7.178E 01	7.178E 01	-2.291E-06	-2.291E-06
0.91236	2.295E-06	455.277	9.341E 01	9.341E 01	9.397E 01	9.397E 01	-1.271E-06	-1.271E-06
0.87428	9.719E-07	436.273	1.374E 02	1.374E 02	1.379E 02	1.379E 02	-5.382E-07	-5.382E-07
0.83745	5.170E-07	417.896	1.807E 02	1.807E 02	1.812E 02	1.812E 02	-2.863E-07	-2.863E-07
0.76827	2.129E-07	383.375	2.651E 02	2.651E 02	2.657E 02	2.657E 02	-1.179E-07	-1.179E-07
0.70651	1.124E-07	352.557	3.458E 02	3.458E 02	3.464E 02	3.464E 02	-6.225E-08	-6.225E-08
0.65428	6.978E-08	326.491	4.218E 02	4.218E 02	4.224E 02	4.224E 02	-3.864E-08	-3.864E-08
0.61400	4.678E-08	306.393	4.918E 02	4.918E 02	4.924E 02	4.924E 02	-2.590E-08	-2.590E-08
0.58815	3.155E-08	293.492	5.546E 02	5.546E 02	5.552E 02	5.552E 02	-1.747E-08	-1.747E-08
0.57865	2.226E-08	288.753	6.092E 02	6.092E 02	6.098E 02	6.098E 02	-1.232E-08	-1.232E-08
0.58631	1.570E-08	292.574	6.553E 02	6.553E 02	6.559E 02	6.559E 02	-8.693E-09	-8.693E-09
0.61047	1.121E-08	304.632	6.932E 02	6.932E 02	6.937E 02	6.937E 02	-6.205E-09	-6.205E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.080 θ_D= 1.429E-04 ρ_0= 1.049

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-8.702E-18
0.10000	2.336E-12	3.031E-12	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-1.167E-17
0.20000	4.713E-12	4.818E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-1.670E-17
0.30000	1.237E-11	1.145E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-2.625E-17
0.40000	2.502E-11	2.352E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-4.443E-17
0.50000	5.303E-11	5.303E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-8.894E-17
0.60000	1.165E-10	1.125E-10	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-2.080E-16
0.70000	3.379E-10	3.347E-10	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-6.078E-16
0.80000	1.383E-09	1.378E-09	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-2.753E-15
0.85000	3.633E-09	3.689E-09	-3.902E-17	-3.902E-17	-3.601E-07	-3.601E-07	-7.975E-15
0.90000	1.425E-08	1.425E-08	-1.674E-16	-1.674E-16	-9.927E-07	-9.928E-07	-3.578E-14
0.92500	3.537E-08	3.535E-08	-3.869E-16	-3.871E-16	-1.973E-06	-1.973E-06	-1.090E-13
0.95000	1.366E-07	1.367E-07	-1.535E-15	-1.537E-15	-4.959E-06	-4.961E-06	-4.890E-13
0.96250	3.672E-07	3.676E-07	-4.447E-15	-4.454E-15	-9.842E-06	-9.851E-06	-1.392E-12
0.97500	1.738E-06	1.742E-06	-2.569E-14	-2.579E-14	-3.138E-05	-3.145E-05	-5.211E-12
0.98124	4.110E-06	4.131E-06	-1.004E-13	-1.011E-13	-8.210E-05	-8.245E-05	-1.252E-11
0.98749	3.434E-05	3.468E-05	-1.061E-12	-1.077E-12	-4.262E-04	-4.305E-04	-3.357E-11
0.99373	2.440E-03	2.523E-03	-7.495E-10	-7.932E-10	-6.518E-02	-6.836E-02	-6.570E-11
0.99169	-4.126E-03	-4.134E-03	-1.288E-11	-1.253E-11	-7.544E 01	-7.551E 01	-5.349E-11
0.98663	-2.309E-03	-2.311E-03	-3.068E-13	-3.038E-13	-7.545E 01	-7.551E 01	-2.015E-11
0.98157	-1.578E-03	-1.580E-03	-5.264E-14	-5.238E-14	-7.545E 01	-7.551E 01	-7.818E-12
0.97653	-1.197E-03	-1.198E-03	-1.555E-14	-1.550E-14	-7.545E 01	-7.551E 01	-3.705E-12
0.97151	-9.640E-04	-9.650E-04	-6.860E-15	-6.846E-15	-7.545E 01	-7.551E 01	-1.847E-12
0.96150	-6.936E-04	-6.943E-04	-1.873E-15	-1.871E-15	-7.545E 01	-7.551E 01	-6.490E-13
0.95154	-5.416E-04	-5.422E-04	-8.847E-16	-8.841E-16	-7.545E 01	-7.551E 01	-2.533E-13
0.93182	-3.766E-04	-3.769E-04	-2.844E-16	-2.843E-16	-7.545E 01	-7.551E 01	-6.828E-14
0.91236	-2.886E-04	-2.889E-04	-1.243E-16	-1.243E-16	-7.545E 01	-7.551E 01	-2.588E-14
0.87428	-1.967E-04	-1.969E-04	-3.217E-17	-3.217E-17	-7.545E 01	-7.551E 01	-6.366E-15
0.83745	-1.492E-04	-1.493E-04	-1.265E-17	-1.265E-17	-7.545E 01	-7.551E 01	-2.325E-15
0.76827	-1.006E-04	-1.007E-04	-3.330E-18	-3.330E-18	-7.545E 01	-7.551E 01	-5.416E-16
0.70651	-7.588E-05	-7.596E-05	-1.298E-18	-1.298E-18	-7.545E 01	-7.551E 01	-1.910E-16
0.65428	-6.092E-05	-6.098E-05	-6.415E-19	-6.415E-19	-7.545E 01	-7.551E 01	-8.286E-17
0.61400	-5.088E-05	-5.093E-05	-3.511E-19	-3.511E-19	-7.545E 01	-7.551E 01	-4.215E-17
0.58815	-4.368E-05	-4.373E-05	-1.933E-19	-1.933E-19	-7.545E 01	-7.551E 01	-2.511E-17
0.57865	-3.827E-05	-3.831E-05	-1.109E-19	-1.109E-19	-7.545E 01	-7.551E 01	-1.613E-17
0.58631	-3.405E-05	-3.409E-05	-6.364E-20	-6.364E-20	-7.545E 01	-7.551E 01	-1.137E-17
0.61047	-3.067E-05	-3.070E-05	-3.648E-20	-3.648E-20	-7.545E 01	-7.551E 01	-8.518E-18

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.100 θ_D= 1.821E-04 ρ_0= 1.050

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.1000	0.10000	193.643	6.378E-08	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.1000	0.20000	172.127	6.941E-08	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.1000	0.30000	150.611	7.671E-08	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.1000	0.40000	129.096	9.588E-08	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.1000	0.50000	107.580	1.151E-07	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.1000	0.60000	86.064	1.334E-07	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.1000	0.70000	64.548	3.569E-07	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.1000	0.80000	43.033	1.087E-06	1.000E-00	-5.711E-07	-5.712E-07	5.711E-07
0.85000	0.1000	0.85000	32.276	2.761E-06	1.000E-00	-1.107E-06	-1.108E-06	1.107E-06
0.90000	0.1000	0.90000	21.519	9.658E-06	1.000E-00	-2.811E-06	-2.811E-06	2.811E-06
0.92500	0.1000	0.92500	16.141	2.347E-05	1.000E-00	-5.180E-06	-5.181E-06	5.180E-06
0.95000	0.1000	0.95000	10.765	8.178E-05	1.000E-00	-1.313E-05	-1.314E-05	1.313E-05
0.96250	0.1000	0.96250	8.078	2.001E-04	9.999E-01	-2.584E-05	-2.586E-05	2.583E-05
0.97500	0.1000	0.97500	5.393	7.392E-04	9.999E-01	-7.809E-05	-7.823E-05	7.802E-05
0.98124	0.1000	0.98125	4.053	1.919E-03	9.998E-01	-1.808E-04	-1.814E-04	1.805E-04
0.98749	0.1000	0.98750	2.717	8.661E-03	9.996E-01	-7.445E-04	-7.500E-04	7.423E-04
0.99373	0.1004	0.99375	1.400	3.331E-01	1.001E 00	-2.149E-02	-2.209E-02	2.168E-02
0.99242	0.2917	1.00000	1.963	1.352E 02	3.190E 00	-3.217E-03	-3.172E-03	3.250E-03
0.98801	0.5477	1.00625	3.292	1.352E 02	6.098E 00	-3.774E-04	-3.755E-04	3.784E-04
0.98362	0.8061	1.01250	4.630	1.352E 02	8.965E 00	-1.258E-04	-1.255E-04	1.260E-04
0.97925	1.0668	1.01875	5.971	1.352E 02	1.180E 01	-5.794E-05	-5.785E-05	5.799E-05
0.97489	1.3298	1.02500	7.314	1.352E 02	1.459E 01	-3.460E-05	-3.456E-05	3.462E-05
0.96625	1.8630	1.03750	10.000	1.352E 02	2.008E 01	-1.507E-05	-1.506E-05	1.507E-05
0.95770	2.4057	1.05000	12.688	1.352E 02	2.544E 01	-9.314E-06	-9.310E-06	9.315E-06
0.94085	3.5206	1.07500	18.065	1.352E 02	3.578E 01	-4.163E-06	-4.163E-06	4.164E-06
0.92437	4.6757	1.10000	23.443	1.352E 02	4.566E 01	-2.306E-06	-2.306E-06	2.307E-06
0.89260	7.1113	1.15000	34.200	1.352E 02	6.411E 01	-9.755E-07	-9.755E-07	9.755E-07
0.86257	9.7216	1.20000	44.958	1.352E 02	8.103E 01	-5.184E-07	-5.184E-07	5.184E-07
0.80844	15.4934	1.30000	66.473	1.352E 02	1.110E 02	-2.133E-07	-2.133E-07	2.133E-07
0.76363	22.0160	1.40000	87.989	1.352E 02	1.366E 02	-1.126E-07	-1.126E-07	1.126E-07
0.72986	29.2445	1.50000	109.504	1.352E 02	1.589E 02	-6.986E-08	-6.986E-08	6.986E-08
0.70870	37.0366	1.60000	131.020	1.352E 02	1.783E 02	-4.683E-08	-4.683E-08	4.683E-08
0.70129	45.1483	1.70000	152.536	1.352E 02	1.955E 02	-3.158E-08	-3.158E-08	3.158E-08
0.70807	53.2672	1.80000	174.052	1.352E 02	2.107E 02	-2.228E-08	-2.228E-08	2.228E-08
0.72865	61.0794	1.90000	195.568	1.352E 02	2.244E 02	-1.571E-08	-1.571E-08	1.571E-08
0.76189	68.3366	2.00000	217.084	1.352E 02	2.367E 02	-1.122E-08	-1.122E-08	1.122E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.100 θ_D=1.821E-04 ρ_a=1.050

z	$_x\mu'-1$	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.246E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.540E-08	-6.541E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.712E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.162E-07	-3.163E-07
0.85000	1.108E-06	424.160	-5.864E-05	-5.864E-05	5.864E-05	5.864E-05	-6.132E-07	-6.133E-07
0.90000	2.811E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.556E-06	-1.557E-06
0.92500	5.182E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.868E-06	-2.869E-06
0.95000	1.314E-05	474.060	-2.566E-04	-2.566E-04	2.565E-04	2.566E-04	-7.272E-06	-7.276E-06
0.96250	2.587E-05	480.297	-3.702E-04	-3.703E-04	3.702E-04	3.704E-04	-1.431E-05	-1.432E-05
0.97500	7.831E-05	486.534	-6.549E-04	-6.554E-04	6.547E-04	6.557E-04	-4.324E-05	-4.332E-05
0.98124	1.817E-04	489.652	-1.034E-03	-1.035E-03	1.033E-03	1.036E-03	-1.001E-04	-1.004E-04
0.98749	7.533E-04	492.769	-2.204E-03	-2.212E-03	2.204E-03	2.220E-03	-4.122E-04	-4.153E-04
0.99373	2.289E-02	495.884	-1.424E-02	-1.453E-02	1.843E-02	1.901E-02	-1.190E-02	-1.223E-02
0.99242	3.160E-03	495.227	3.559E 00	3.559E 00	4.102E 00	4.102E 00	-1.781E-03	-1.757E-03
0.98801	3.747E-04	493.027	8.874E 00	8.874E 00	9.424E 00	9.424E 00	-2.089E-04	-2.079E-04
0.98362	1.253E-04	490.836	1.418E 01	1.418E 01	1.473E 01	1.473E 01	-6.965E-05	-6.947E-05
0.97925	5.781E-05	488.655	1.948E 01	1.948E 01	2.004E 01	2.004E 01	-3.208E-05	-3.203E-05
0.97489	3.455E-05	486.483	2.477E 01	2.477E 01	2.533E 01	2.533E 01	-1.916E-05	-1.914E-05
0.96625	1.505E-05	482.172	3.532E 01	3.532E 01	3.588E 01	3.588E 01	-8.342E-06	-8.338E-06
0.95770	9.309E-06	477.902	4.583E 01	4.583E 01	4.638E 01	4.638E 01	-5.157E-06	-5.155E-06
0.94085	4.162E-06	469.495	6.671E 01	6.671E 01	6.726E 01	6.726E 01	-2.305E-06	-2.305E-06
0.92437	2.306E-06	461.273	8.741E 01	8.741E 01	8.796E 01	8.796E 01	-1.277E-06	-1.277E-06
0.89260	9.754E-07	445.420	1.282E 02	1.282E 02	1.288E 02	1.288E 02	-5.402E-07	-5.401E-07
0.86257	5.184E-07	430.431	1.682E 02	1.682E 02	1.687E 02	1.687E 02	-2.870E-07	-2.870E-07
0.80844	2.133E-07	403.422	2.451E 02	2.451E 02	2.456E 02	2.456E 02	-1.181E-07	-1.181E-07
0.76363	1.126E-07	381.062	3.173E 02	3.173E 02	3.179E 02	3.179E 02	-6.233E-08	-6.233E-08
0.72986	6.986E-08	364.208	3.841E 02	3.841E 02	3.846E 02	3.846E 02	-3.868E-08	-3.868E-08
0.70870	4.683E-08	353.648	4.445E 02	4.445E 02	4.451E 02	4.451E 02	-2.593E-08	-2.593E-08
0.70129	3.158E-08	349.953	4.981E 02	4.981E 02	4.987E 02	4.987E 02	-1.749E-08	-1.749E-08
0.70807	2.228E-08	353.337	5.447E 02	5.447E 02	5.452E 02	5.452E 02	-1.233E-08	-1.233E-08
0.72865	1.571E-08	363.603	5.843E 02	5.843E 02	5.848E 02	5.848E 02	-8.701E-09	-8.701E-09
0.76189	1.122E-08	380.194	6.176E 02	6.176E 02	6.182E 02	6.182E 02	-6.211E-09	-6.211E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0=0.100 θ_D=1.821E-04 ρ_a=1.050

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.360E-17
0.10000	2.216E-12	1.960E-12	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-1.824E-17
0.20000	5.640E-12	6.916E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-2.609E-17
0.30000	1.448E-11	1.413E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-4.101E-17
0.40000	3.110E-11	3.212E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-6.943E-17
0.50000	6.322E-11	6.363E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-1.390E-16
0.60000	1.463E-10	1.436E-10	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-3.249E-16
0.70000	4.134E-10	4.157E-10	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-9.497E-16
0.80000	1.708E-09	1.710E-09	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-4.301E-15
0.85000	4.557E-09	4.573E-09	-3.902E-17	-3.902E-17	-3.601E-07	-3.601E-07	-1.246E-14
0.90000	1.768E-08	1.767E-08	-1.674E-16	-1.674E-16	-9.926E-07	-9.927E-07	-5.589E-14
0.92500	4.384E-08	4.385E-08	-3.869E-16	-3.870E-16	-1.973E-06	-1.973E-06	-1.703E-13
0.95000	1.694E-07	1.695E-07	-1.534E-15	-1.536E-15	-4.957E-06	-4.960E-06	-7.634E-13
0.96250	4.552E-07	4.556E-07	-4.439E-15	-4.446E-15	-9.834E-06	-9.843E-06	-2.173E-12
0.97500	2.158E-06	2.163E-06	-2.559E-14	-2.569E-14	-3.131E-05	-3.138E-05	-8.120E-12
0.98124	5.332E-06	5.359E-06	-9.975E-14	-1.004E-13	-8.177E-05	-8.211E-05	-1.947E-11
0.98749	4.243E-05	4.284E-05	-1.039E-12	-1.054E-12	-4.204E-04	-4.246E-04	-5.203E-11
0.99373	2.747E-03	2.836E-03	-6.316E-10	-6.670E-10	-5.681E-02	-5.946E-02	-1.027E-10
0.99242	-3.759E-03	-3.769E-03	-1.545E-11	-1.502E-11	-6.762E 01	-6.767E 01	-8.637E-11
0.98801	-2.140E-03	-2.142E-03	-3.334E-13	-3.300E-13	-6.763E 01	-6.768E 01	-3.263E-11
0.98362	-1.459E-03	-1.460E-03	-5.541E-14	-5.513E-14	-6.763E 01	-6.768E 01	-1.262E-11
0.97925	-1.104E-03	-1.105E-03	-1.613E-14	-1.608E-14	-6.763E 01	-6.768E 01	-5.952E-12
0.97489	-8.879E-04	-8.887E-04	-7.080E-15	-7.065E-15	-6.763E 01	-6.768E 01	-2.951E-12
0.96625	-6.379E-04	-6.384E-04	-1.901E-15	-1.898E-15	-6.763E 01	-6.768E 01	-1.037E-12
0.95770	-4.976E-04	-4.980E-04	-8.980E-16	-8.973E-16	-6.763E 01	-6.768E 01	-4.020E-13
0.94085	-3.456E-04	-3.459E-04	-2.868E-16	-2.867E-16	-6.763E 01	-6.768E 01	-1.079E-13
0.92437	-2.647E-04	-2.650E-04	-1.253E-16	-1.253E-16	-6.763E 01	-6.768E 01	-4.080E-14
0.89260	-1.803E-04	-1.805E-04	-3.234E-17	-3.234E-17	-6.763E 01	-6.768E 01	-1.001E-14
0.86257	-1.367E-04	-1.369E-04	-1.270E-17	-1.270E-17	-6.763E 01	-6.768E 01	-3.650E-15
0.80844	-9.217E-05	-9.225E-05	-3.339E-18	-3.338E-18	-6.763E 01	-6.768E 01	-8.489E-16
0.76363	-6.951E-05	-6.957E-05	-1.301E-18	-1.301E-18	-6.763E 01	-6.768E 01	-2.991E-16
0.72986	-5.580E-05	-5.585E-05	-6.425E-19	-6.425E-19	-6.763E 01	-6.768E 01	-1.297E-16
0.70870	-4.660E-05	-4.664E-05	-3.516E-19	-3.516E-19	-6.763E 01	-6.768E 01	-6.596E-17
0.70129	-4.001E-05	-4.004E-05	-1.935E-19	-1.935E-19	-6.763E 01	-6.768E 01	-3.929E-17
0.70807	-3.505E-05	-3.508E-05	-1.111E-19	-1.111E-19	-6.763E 01	-6.768E 01	-2.523E-17
0.72865	-3.118E-05	-3.121E-05	-6.373E-20	-6.373E-20	-6.763E 01	-6.768E 01	-1.778E-17
0.76189	-2.809E-05	-2.811E-05	-3.653E-20	-3.653E-20	-6.763E 01	-6.768E 01	-1.332E-17

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.120 θ_D= 2.225E-04 ρ_a= 1.053

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1200	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.1200	0.10000	193.643	9.995E-08	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.1200	0.20000	172.127	1.096E-07	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.1200	0.30000	150.611	1.226E-07	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.1200	0.40000	129.096	1.417E-07	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.1200	0.50000	107.580	1.651E-07	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.1200	0.60000	86.064	1.851E-07	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.1200	0.70000	64.549	4.569E-07	1.000E 00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.1200	0.80000	43.034	1.327E-06	1.000E-00	-5.711E-07	-5.711E-07	5.711E-07
0.85000	0.1200	0.85000	32.277	3.328E-06	1.000E-00	-1.107E-06	-1.107E-06	1.107E-06
0.90000	0.1200	0.90000	21.520	1.153E-05	1.000E-00	-2.811E-06	-2.811E-06	2.810E-06
0.92500	0.1200	0.92500	16.143	2.797E-05	1.000E-00	-5.179E-06	-5.180E-06	5.179E-06
0.95000	0.1200	0.95000	10.767	9.754E-05	9.999E-01	-1.313E-05	-1.313E-05	1.312E-05
0.96250	0.1200	0.96250	8.081	2.384E-04	9.999E-01	-2.580E-05	-2.583E-05	2.579E-05
0.97500	0.1200	0.97500	5.398	8.799E-04	9.997E-01	-7.786E-05	-7.801E-05	7.779E-05
0.98124	0.1200	0.98125	4.060	2.284E-03	9.996E-01	-1.799E-04	-1.805E-04	1.796E-04
0.98749	0.1201	0.98750	2.729	1.022E-02	9.992E-01	-7.334E-04	-7.388E-04	7.313E-04
0.99373	0.1205	0.99375	1.422	3.604E-01	9.990E-01	-1.939E-02	-1.990E-02	1.953E-02
0.99328	0.3324	1.00000	1.907	1.256E 02	3.236E 00	-3.651E-03	-3.598E-03	3.691E-03
0.98968	0.6268	1.00625	3.227	1.256E 02	6.311E 00	-4.040E-04	-4.019E-04	4.052E-04
0.98609	0.9235	1.01250	4.562	1.257E 02	9.339E 00	-1.313E-04	-1.310E-04	1.315E-04
0.98254	1.2225	1.01875	5.901	1.257E 02	1.233E 01	-6.009E-05	-5.999E-05	6.014E-05
0.97901	1.5237	1.02500	7.242	1.257E 02	1.528E 01	-3.555E-05	-3.552E-05	3.557E-05
0.97203	2.1326	1.03750	9.928	1.257E 02	2.108E 01	-1.537E-05	-1.536E-05	1.538E-05
0.96516	2.7504	1.05000	12.615	1.257E 02	2.673E 01	-9.437E-06	-9.434E-06	9.439E-06
0.95177	4.0123	1.07500	17.991	1.257E 02	3.765E 01	-4.199E-06	-4.198E-06	4.199E-06
0.93885	5.3095	1.10000	23.369	1.257E 02	4.807E 01	-2.322E-06	-2.322E-06	2.322E-06
0.91451	8.0106	1.15000	34.125	1.257E 02	6.756E 01	-9.804E-07	-9.803E-07	9.804E-07
0.89232	10.8526	1.20000	44.882	1.257E 02	8.542E 01	-5.204E-07	-5.204E-07	5.204E-07
0.85501	16.9413	1.30000	66.397	1.257E 02	1.170E 02	-2.138E-07	-2.138E-07	2.138E-07
0.82815	23.5038	1.40000	87.913	1.257E 02	1.441E 02	-1.128E-07	-1.128E-07	1.128E-07
0.81279	30.4087	1.50000	109.428	1.257E 02	1.676E 02	-6.996E-08	-6.995E-08	6.996E-08
0.80959	37.4727	1.60000	130.944	1.257E 02	1.881E 02	-4.689E-08	-4.689E-08	4.689E-08
0.81868	44.4857	1.70000	152.460	1.257E 02	2.062E 02	-3.162E-08	-3.162E-08	3.162E-08
0.83966	51.2463	1.80000	173.976	1.257E 02	2.223E 02	-2.230E-08	-2.230E-08	2.230E-08
0.87168	57.5941	1.90000	195.491	1.257E 02	2.368E 02	-1.573E-08	-1.573E-08	1.573E-08
0.91358	63.4265	2.00000	217.007	1.257E 02	2.497E 02	-1.123E-08	-1.123E-08	1.123E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.120 θ_D=2.225E-04 ρ_a=1.053

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.540E-08	-6.540E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.711E-07	399.209	-3.876E-05	-3.876E-05	3.876E-05	3.876E-05	-3.162E-07	-3.162E-07
0.85000	1.108E-06	424.160	-5.864E-05	-5.864E-05	5.864E-05	5.864E-05	-6.132E-07	-6.132E-07
0.90000	2.811E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.556E-06	-1.556E-06
0.92500	5.181E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.868E-06	-2.868E-06
0.95000	1.314E-05	474.060	-2.565E-04	-2.566E-04	2.565E-04	2.566E-04	-7.269E-06	-7.272E-06
0.96250	2.584E-05	480.297	-3.701E-04	-3.702E-04	3.700E-04	3.703E-04	-1.429E-05	-1.430E-05
0.97500	7.809E-05	486.534	-6.541E-04	-6.547E-04	6.539E-04	6.550E-04	-4.311E-05	-4.319E-05
0.98124	1.808E-04	489.652	-1.033E-03	-1.034E-03	1.032E-03	1.035E-03	-9.962E-05	-9.995E-05
0.98749	7.420E-04	492.769	-2.190E-03	-2.198E-03	2.191E-03	2.206E-03	-4.061E-04	-4.091E-04
0.99373	2.057E-02	495.884	-1.298E-02	-1.324E-02	1.787E-02	1.840E-02	-1.074E-02	-1.102E-02
0.99328	3.585E-03	495.658	3.124E 00	3.124E 00	3.663E 00	3.664E 00	-2.021E-03	-1.992E-03
0.98968	4.010E-04	493.860	8.037E 00	8.037E 00	8.584E 00	8.584E 00	-2.237E-04	-2.225E-04
0.98609	1.308E-04	492.073	1.294E 01	1.294E 01	1.349E 01	1.349E 01	-7.272E-05	-7.253E-05
0.98254	5.995E-05	490.298	1.784E 01	1.784E 01	1.839E 01	1.839E 01	-3.327E-05	-3.322E-05
0.97901	3.550E-05	488.536	2.272E 01	2.272E 01	2.327E 01	2.327E 01	-1.969E-05	-1.967E-05
0.97203	1.536E-05	485.053	3.244E 01	3.244E 01	3.299E 01	3.299E 01	-8.511E-06	-8.506E-06
0.96516	9.432E-06	481.626	4.210E 01	4.210E 01	4.265E 01	4.265E 01	-5.225E-06	-5.224E-06
0.95177	4.198E-06	474.943	6.126E 01	6.126E 01	6.181E 01	6.181E 01	-2.325E-06	-2.324E-06
0.93885	2.322E-06	468.496	8.018E 01	8.018E 01	8.073E 01	8.073E 01	-1.286E-06	-1.286E-06
0.91451	9.803E-07	456.353	1.173E 02	1.173E 02	1.178E 02	1.178E 02	-5.428E-07	-5.428E-07
0.89232	5.204E-07	445.278	1.533E 02	1.533E 02	1.539E 02	1.539E 02	-2.881E-07	-2.881E-07
0.85501	2.138E-07	426.658	2.218E 02	2.218E 02	2.224E 02	2.224E 02	-1.184E-07	-1.184E-07
0.82815	1.128E-07	413.257	2.851E 02	2.851E 02	2.857E 02	2.857E 02	-6.245E-08	-6.245E-08
0.81279	6.995E-08	405.593	3.427E 02	3.427E 02	3.432E 02	3.432E 02	-3.874E-08	-3.874E-08
0.80959	4.689E-08	403.993	3.942E 02	3.942E 02	3.947E 02	3.947E 02	-2.597E-08	-2.597E-08
0.81868	3.162E-08	408.529	4.396E 02	4.396E 02	4.401E 02	4.401E 02	-1.751E-08	-1.751E-08
0.83966	2.230E-08	419.000	4.790E 02	4.790E 02	4.795E 02	4.795E 02	-1.235E-08	-1.235E-08
0.87168	1.573E-08	434.979	5.129E 02	5.129E 02	5.135E 02	5.135E 02	-8.712E-09	-8.712E-09
0.91358	1.123E-08	455.886	5.419E 02	5.419E 02	5.425E 02	5.425E 02	-6.218E-09	-6.218E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o = 0.120 θ_D = 2.225E-04 ρ_u = 1.053

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.958E-17
0.10000	2.402E-12	2.174E-12	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-2.627E-17
0.20000	7.624E-12	8.185E-12	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-3.757E-17
0.30000	1.727E-11	1.727E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-5.905E-17
0.40000	3.842E-11	3.796E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-9.997E-17
0.50000	7.699E-11	7.699E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-2.001E-16
0.60000	1.742E-10	1.737E-10	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-4.679E-16
0.70000	4.970E-10	4.960E-10	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-1.368E-15
0.80000	2.043E-09	2.049E-09	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-6.193E-15
0.85000	5.482E-09	5.474E-09	-3.901E-17	-3.902E-17	-3.601E-07	-3.601E-07	-1.794E-14
0.90000	2.116E-08	2.115E-08	-1.673E-16	-1.674E-16	-9.925E-07	-9.926E-07	-8.047E-14
0.92500	5.244E-08	5.245E-08	-3.867E-16	-3.869E-16	-1.972E-06	-1.973E-06	-2.451E-13
0.95000	2.026E-07	2.027E-07	-1.533E-15	-1.534E-15	-4.955E-06	-4.957E-06	-1.098E-12
0.96250	5.441E-07	5.446E-07	-4.429E-15	-4.436E-15	-9.826E-06	-9.835E-06	-3.125E-12
0.97500	2.572E-06	2.578E-06	-2.548E-14	-2.558E-14	-3.123E-05	-3.130E-05	-1.165E-11
0.98124	6.937E-06	6.970E-06	-9.899E-14	-9.965E-14	-8.157E-05	-8.190E-05	-2.786E-11
0.98749	5.066E-05	5.114E-05	-1.013E-12	-1.027E-12	-4.137E-04	-4.179E-04	-7.419E-11
0.99373	2.938E-03	3.029E-03	-5.153E-10	-5.427E-10	-4.848E-02	-5.063E-02	-1.483E-10
0.99328	-5.210E-03	-5.221E-03	-1.964E-11	-1.907E-11	-5.907E 01	-5.910E 01	-1.304E-10
0.98968	-2.904E-03	-2.906E-03	-3.731E-13	-3.693E-13	-5.907E 01	-5.911E 01	-4.945E-11
0.98609	-1.967E-03	-1.968E-03	-5.944E-14	-5.913E-14	-5.907E 01	-5.911E 01	-1.903E-11
0.98254	-1.484E-03	-1.485E-03	-1.707E-14	-1.701E-14	-5.907E 01	-5.911E 01	-8.872E-12
0.97901	-1.191E-03	-1.192E-03	-7.394E-15	-7.379E-15	-5.907E 01	-5.911E 01	-4.387E-12
0.97203	-8.536E-04	-8.541E-04	-1.961E-15	-1.959E-15	-5.907E 01	-5.911E 01	-1.529E-12
0.96516	-6.651E-04	-6.655E-04	-9.166E-16	-9.159E-16	-5.907E 01	-5.911E 01	-5.916E-13
0.95177	-4.613E-04	-4.616E-04	-2.901E-16	-2.900E-16	-5.907E 01	-5.911E 01	-1.580E-13
0.93885	-3.531E-04	-3.533E-04	-1.266E-16	-1.266E-16	-5.907E 01	-5.911E 01	-5.949E-14
0.91451	-2.403E-04	-2.405E-04	-3.258E-17	-3.258E-17	-5.907E 01	-5.911E 01	-1.453E-14
0.89232	-1.822E-04	-1.823E-04	-1.277E-17	-1.277E-17	-5.907E 01	-5.911E 01	-5.289E-15
0.85501	-1.228E-04	-1.228E-04	-3.351E-18	-3.351E-18	-5.907E 01	-5.911E 01	-1.228E-15
0.82815	-9.256E-05	-9.262E-05	-1.304E-18	-1.304E-18	-5.907E 01	-5.911E 01	-4.321E-16
0.81279	-7.429E-05	-7.434E-05	-6.439E-19	-6.438E-19	-5.907E 01	-5.911E 01	-1.873E-16
0.80959	-6.204E-05	-6.208E-05	-3.524E-19	-3.524E-19	-5.907E 01	-5.911E 01	-9.518E-17
0.81868	-5.326E-05	-5.329E-05	-1.939E-19	-1.939E-19	-5.907E 01	-5.911E 01	-5.667E-17
0.83966	-4.666E-05	-4.669E-05	-1.113E-19	-1.113E-19	-5.907E 01	-5.911E 01	-3.639E-17
0.87168	-4.151E-05	-4.154E-05	-6.385E-20	-6.385E-20	-5.907E 01	-5.911E 01	-2.563E-17
0.91358	-3.739E-05	-3.741E-05	-3.660E-20	-3.660E-20	-5.907E 01	-5.911E 01	-1.920E-17

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o = 0.150 θ_D = 2.889E-04 ρ_a = 1.057

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1500	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.1500	0.10000	193.643	1.876E-07	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.1500	0.20000	172.127	1.959E-07	1.000E 00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.1500	0.30000	150.612	2.093E-07	1.000E 00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.1500	0.40000	129.096	2.293E-07	1.000E 00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.1500	0.50000	107.580	2.668E-07	1.000E 00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.1500	0.60000	86.065	2.835E-07	1.000E 00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.1500	0.70000	64.549	6.070E-07	1.000E-00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.1500	0.80000	43.035	1.634E-06	1.000E-00	-5.711E-07	-5.711E-07	5.711E-07
0.85000	0.1500	0.85000	32.278	4.002E-06	1.000E-00	-1.107E-06	-1.107E-06	1.107E-06
0.90000	0.1500	0.90000	21.523	1.379E-05	1.000E-00	-2.810E-06	-2.810E-06	2.810E-06
0.92500	0.1500	0.92500	16.146	3.327E-05	9.999E-01	-5.177E-06	-5.178E-06	5.177E-06
0.95000	0.1500	0.95000	10.772	1.162E-04	9.998E-01	-1.312E-05	-1.312E-05	1.311E-05
0.96250	0.1500	0.96250	8.088	2.841E-04	9.997E-01	-2.574E-05	-2.576E-05	2.573E-05
0.97500	0.1500	0.97500	5.409	1.050E-03	9.993E-01	-7.745E-05	-7.759E-05	7.738E-05
0.98124	0.1500	0.98125	4.074	2.725E-03	9.989E-01	-1.784E-04	-1.789E-04	1.781E-04
0.98749	0.1501	0.98750	2.749	1.213E-02	9.979E-01	-7.137E-04	-7.188E-04	7.116E-04
0.99373	0.1505	0.99375	1.461	3.778E-01	9.962E-01	-1.635E-02	-1.674E-02	1.642E-02
0.99472	0.3770	1.00000	1.812	1.106E 02	3.127E 00	-4.539E-03	-4.468E-03	4.596E-03
0.99256	0.7148	1.00625	3.117	1.107E 02	6.540E 00	-4.538E-04	-4.513E-04	4.553E-04
0.99042	1.0542	1.01250	4.446	1.107E 02	9.845E 00	-1.413E-04	-1.409E-04	1.416E-04
0.98832	1.3950	1.01875	5.782	1.107E 02	1.309E 01	-6.391E-05	-6.380E-05	6.396E-05
0.98626	1.7373	1.02500	7.122	1.107E 02	1.630E 01	-3.722E-05	-3.718E-05	3.724E-05
0.98223	2.4262	1.03750	9.805	1.107E 02	2.258E 01	-1.590E-05	-1.589E-05	1.590E-05
0.97835	3.1207	1.05000	12.491	1.107E 02	2.892E 01	-9.648E-06	-9.645E-06	9.650E-06
0.97103	4.5258	1.07500	17.866	1.107E 02	4.083E 01	-4.259E-06	-4.258E-06	4.259E-06
0.96429	5.9514	1.10000	23.243	1.107E 02	5.220E 01	-2.348E-06	-2.348E-06	2.348E-06
0.95265	8.8586	1.15000	33.999	1.107E 02	7.345E 01	-9.886E-07	-9.885E-07	9.886E-07
0.94352	11.8298	1.20000	44.755	1.107E 02	9.293E 01	-5.237E-07	-5.237E-07	5.237E-07
0.93307	17.9056	1.30000	66.270	1.107E 02	1.274E 02	-2.147E-07	-2.147E-07	2.147E-07
0.93327	24.0485	1.40000	87.786	1.107E 02	1.569E 02	-1.131E-07	-1.131E-07	1.131E-07
0.94412	30.1191	1.50000	109.301	1.107E 02	1.825E 02	-7.012E-08	-7.012E-08	7.012E-08
0.96527	35.9878	1.60000	130.817	1.107E 02	2.049E 02	-4.700E-08	-4.700E-08	4.700E-08
0.99605	41.5495	1.70000	152.332	1.107E 02	2.247E 02	-3.168E-08	-3.168E-08	3.168E-08
1.03561	46.7324	1.80000	173.848	1.107E 02	2.423E 02	-2.235E-08	-2.235E-08	2.235E-08
1.08299	51.4982	1.90000	195.364	1.107E 02	2.580E 02	-1.577E-08	-1.577E-08	1.577E-08
1.13721	55.8373	2.00000	216.880	1.107E 02	2.721E 02	-1.125E-08	-1.125E-08	1.125E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 0.150 θ_D= 2.889E-04 ρ_a= 1.057

z	$_x\mu'-1$	T_o	$_oT_1-T_o$	$_xT_1-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.540E-08	-6.540E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.711E-07	399.209	-3.875E-05	-3.876E-05	3.875E-05	3.876E-05	-3.162E-07	-3.162E-07
0.85000	1.107E-06	424.160	-5.864E-05	-5.864E-05	5.864E-05	5.864E-05	-6.131E-07	-6.132E-07
0.90000	2.810E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.556E-06	-1.556E-06
0.92500	5.179E-06	461.585	-1.512E-04	-1.512E-04	1.512E-04	1.512E-04	-2.867E-06	-2.867E-06
0.95000	1.313E-05	474.060	-2.564E-04	-2.565E-04	2.564E-04	2.565E-04	-7.262E-06	-7.266E-06
0.96250	2.577E-05	480.297	-3.698E-04	-3.699E-04	3.697E-04	3.700E-04	-1.425E-05	-1.426E-05
0.97500	7.767E-05	486.534	-6.528E-04	-6.533E-04	6.526E-04	6.536E-04	-4.288E-05	-4.296E-05
0.98124	1.793E-04	489.652	-1.029E-03	-1.030E-03	1.028E-03	1.031E-03	-9.876E-05	-9.908E-05
0.98749	7.219E-04	492.770	-2.163E-03	-2.170E-03	2.165E-03	2.180E-03	-3.952E-04	-3.980E-04
0.99373	1.723E-02	495.884	-1.127E-02	-1.149E-02	1.664E-02	1.708E-02	-9.051E-03	-9.269E-03
0.99472	4.453E-03	496.378	2.400E 00	2.400E 00	2.931E 00	2.932E 00	-2.513E-03	-2.474E-03
0.99256	4.502E-04	495.297	6.595E 00	6.595E 00	7.136E 00	7.136E 00	-2.513E-04	-2.499E-04
0.99042	1.408E-04	494.232	1.078E 01	1.078E 01	1.132E 01	1.132E 01	-7.826E-05	-7.805E-05
0.98832	6.375E-05	493.184	1.494E 01	1.494E 01	1.549E 01	1.549E 01	-3.539E-05	-3.533E-05
0.98626	3.716E-05	492.153	1.909E 01	1.909E 01	1.964E 01	1.964E 01	-2.061E-05	-2.059E-05
0.98223	1.588E-05	490.145	2.734E 01	2.734E 01	2.788E 01	2.788E 01	-8.803E-06	-8.798E-06
0.97835	9.643E-06	488.209	3.551E 01	3.551E 01	3.606E 01	3.606E 01	-5.342E-06	-5.340E-06
0.97103	4.258E-06	484.553	5.164E 01	5.164E 01	5.219E 01	5.219E 01	-2.358E-06	-2.358E-06
0.96429	2.348E-06	481.193	6.748E 01	6.748E 01	6.802E 01	6.802E 01	-1.300E-06	-1.300E-06
0.95265	9.885E-07	475.385	9.824E 01	9.824E 01	9.878E 01	9.878E 01	-5.474E-07	-5.474E-07
0.94352	5.237E-07	470.829	1.277E 02	1.277E 02	1.283E 02	1.283E 02	-2.900E-07	-2.900E-07
0.93307	2.147E-07	465.611	1.829E 02	1.829E 02	1.834E 02	1.834E 02	-1.189E-07	-1.189E-07
0.93327	1.131E-07	465.712	2.327E 02	2.327E 02	2.332E 02	2.332E 02	-6.265E-08	-6.265E-08
0.94412	7.012E-08	471.128	2.771E 02	2.771E 02	2.777E 02	2.777E 02	-3.883E-08	-3.883E-08
0.96527	4.700E-08	481.680	3.165E 02	3.165E 02	3.170E 02	3.170E 02	-2.603E-08	-2.603E-08
0.99605	3.168E-08	497.042	3.510E 02	3.510E 02	3.516E 02	3.516E 02	-1.754E-08	-1.754E-08
1.03561	2.235E-08	516.784	3.812E 02	3.812E 02	3.817E 02	3.817E 02	-1.238E-08	-1.238E-08
1.08299	1.577E-08	540.426	4.075E 02	4.075E 02	4.080E 02	4.080E 02	-8.730E-09	-8.730E-09
1.13721	1.125E-08	567.482	4.303E 02	4.303E 02	4.308E 02	4.308E 02	-6.230E-09	-6.230E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 0.150 θ_D= 2.889E-04 ρ_a= 1.057

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-3.059E-17
0.10000	3.507E-12	4.090E-12	-6.698E-20	-6.698E-20	-7.686E-10	-7.686E-10	-4.104E-17
0.20000	1.050E-11	1.050E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-5.870E-17
0.30000	2.242E-11	2.287E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-9.227E-17
0.40000	4.848E-11	4.789E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-1.562E-16
0.50000	9.601E-11	9.414E-11	-6.781E-19	-6.781E-19	-1.623E-08	-1.623E-08	-3.127E-16
0.60000	2.198E-10	2.189E-10	-1.396E-18	-1.396E-18	-3.082E-08	-3.082E-08	-7.311E-16
0.70000	6.206E-10	6.206E-10	-3.662E-18	-3.662E-18	-6.517E-08	-6.517E-08	-2.137E-15
0.80000	2.553E-09	2.565E-09	-1.466E-17	-1.466E-17	-1.782E-07	-1.782E-07	-9.675E-15
0.85000	6.862E-09	6.840E-09	-3.901E-17	-3.901E-17	-3.600E-07	-3.600E-07	-2.803E-14
0.90000	2.645E-08	2.644E-08	-1.673E-16	-1.673E-16	-9.923E-07	-9.924E-07	-1.257E-13
0.92500	6.556E-08	6.556E-08	-3.866E-16	-3.867E-16	-1.972E-06	-1.972E-06	-3.826E-13
0.95000	2.531E-07	2.532E-07	-1.531E-15	-1.532E-15	-4.951E-06	-4.953E-06	-1.713E-12
0.96250	6.777E-07	6.784E-07	-4.410E-15	-4.418E-15	-9.810E-06	-9.818E-06	-4.872E-12
0.97500	3.193E-06	3.201E-06	-2.527E-14	-2.537E-14	-3.109E-05	-3.116E-05	-1.810E-11
0.98124	9.335E-06	9.378E-06	-9.760E-14	-9.825E-14	-8.080E-05	-8.113E-05	-4.302E-11
0.98749	6.211E-05	6.268E-05	-9.669E-13	-9.808E-13	-4.015E-04	-4.055E-04	-1.139E-10
0.99373	2.991E-03	3.078E-03	-3.675E-10	-3.855E-10	-3.676E-02	-3.826E-02	-2.311E-10
0.99472	-2.585E-03	-2.618E-03	-2.967E-11	-2.875E-11	-4.586E 01	-4.588E 01	-2.240E-10
0.99256	-1.948E-03	-1.949E-03	-4.523E-13	-4.473E-13	-4.586E 01	-4.589E 01	-8.476E-11
0.99042	-1.314E-03	-1.315E-03	-6.697E-14	-6.660E-14	-4.586E 01	-4.589E 01	-3.224E-11
0.98832	-9.865E-04	-9.871E-04	-1.878E-14	-1.871E-14	-4.586E 01	-4.589E 01	-1.472E-11
0.98626	-7.891E-04	-7.896E-04	-7.957E-15	-7.940E-15	-4.586E 01	-4.589E 01	-7.240E-12
0.98223	-5.634E-04	-5.637E-04	-2.068E-15	-2.066E-15	-4.586E 01	-4.589E 01	-2.488E-12
0.97835	-4.349E-04	-4.352E-04	-9.487E-16	-9.481E-16	-4.586E 01	-4.589E 01	-9.591E-13
0.97103	-3.010E-04	-3.012E-04	-2.958E-16	-2.957E-16	-4.586E 01	-4.589E 01	-2.538E-13
0.96429	-2.301E-04	-2.302E-04	-1.290E-16	-1.289E-16	-4.586E 01	-4.589E 01	-9.494E-14
0.95265	-1.564E-04	-1.565E-04	-3.298E-17	-3.298E-17	-4.586E 01	-4.589E 01	-2.302E-14
0.94352	-1.185E-04	-1.186E-04	-1.290E-17	-1.290E-17	-4.586E 01	-4.589E 01	-8.351E-15
0.93307	-7.978E-05	-7.983E-05	-3.371E-18	-3.371E-18	-4.586E 01	-4.589E 01	-1.933E-15
0.93327	-6.014E-05	-6.017E-05	-1.310E-18	-1.310E-18	-4.586E 01	-4.589E 01	-6.789E-16
0.94412	-4.825E-05	-4.829E-05	-6.462E-19	-6.461E-19	-4.586E 01	-4.589E 01	-2.940E-16
0.96527	-4.029E-05	-4.032E-05	-3.536E-19	-3.536E-19	-4.586E 01	-4.589E 01	-1.492E-16
0.99605	-3.459E-05	-3.461E-05	-1.945E-19	-1.945E-19	-4.586E 01	-4.589E 01	-8.881E-17
1.03561	-3.030E-05	-3.032E-05	-1.116E-19	-1.116E-19	-4.586E 01	-4.589E 01	-5.699E-17
1.08299	-2.695E-05	-2.697E-05	-6.407E-20	-6.407E-20	-4.586E 01	-4.589E 01	-4.012E-17
1.13721	-2.427E-05	-2.429E-05	-3.672E-20	-3.672E-20	-4.586E 01	-4.589E 01	-3.004E-17

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.200 θ_D= 4.271E-04 ρ_a= 1.070

z	ϕ	z_f	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.2000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.2000	0.10000	193.643	4.329E-07	1.000E 00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.2000	0.20000	172.127	4.444E-07	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.2000	0.30000	150.612	4.594E-07	1.000E-00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.2000	0.40000	129.096	4.969E-07	1.000E-00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.2000	0.50000	107.581	5.419E-07	1.000E-00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.2000	0.60000	86.066	5.703E-07	1.000E-00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.2000	0.70000	64.551	1.021E-06	1.000E-00	-2.271E-07	-2.271E-07	2.271E-07
0.80000	0.2000	0.80000	43.037	2.481E-06	1.000E-00	-5.710E-07	-5.710E-07	5.710E-07
0.85000	0.2000	0.85000	32.281	5.776E-06	1.000E-00	-1.107E-06	-1.107E-06	1.107E-06
0.90000	0.2000	0.90000	21.528	1.937E-05	9.999E-01	-2.808E-06	-2.808E-06	2.808E-06
0.92500	0.2000	0.92500	16.153	4.666E-05	9.998E-01	-5.173E-06	-5.174E-06	5.173E-06
0.95000	0.2000	0.95000	10.783	1.616E-04	9.996E-01	-1.309E-05	-1.310E-05	1.309E-05
0.96250	0.2000	0.96250	8.103	3.936E-04	9.993E-01	-2.559E-05	-2.562E-05	2.558E-05
0.97500	0.2000	0.97500	5.431	1.440E-03	9.985E-01	-7.656E-05	-7.670E-05	7.649E-05
0.98124	0.2000	0.98125	4.104	3.695E-03	9.975E-01	-1.750E-04	-1.756E-04	1.748E-04
0.98749	0.2001	0.98750	2.793	1.575E-02	9.955E-01	-6.729E-04	-6.775E-04	6.711E-04
0.99373	0.2006	0.99375	1.543	3.591E-01	9.950E-01	-1.156E-02	-1.179E-02	1.158E-02
0.99751	0.3909	1.00000	1.561	8.088E 01	2.291E 00	-1.094E-02	-1.072E-02	1.117E-02
0.99851	0.7443	1.00625	2.811	8.122E 01	5.697E 00	-6.611E-04	-6.567E-04	6.637E-04
0.99954	1.0976	1.01250	4.122	8.123E 01	9.091E 00	-1.736E-04	-1.730E-04	1.739E-04
1.00060	1.4502	1.01875	5.449	8.123E 01	1.241E 01	-7.598E-05	-7.584E-05	7.606E-05
1.00171	1.8022	1.02500	6.783	8.124E 01	1.568E 01	-4.235E-05	-4.230E-05	4.238E-05
1.00403	2.5038	1.03750	9.460	8.124E 01	2.209E 01	-1.748E-05	-1.747E-05	1.749E-05
1.00651	3.2021	1.05000	12.143	8.124E 01	2.693E 01	-1.027E-05	-1.026E-05	1.027E-05
1.01190	4.5880	1.07500	17.515	8.124E 01	3.841E 01	-4.432E-06	-4.431E-06	4.433E-06
1.01788	5.9584	1.10000	22.890	8.124E 01	4.936E 01	-2.423E-06	-2.423E-06	2.423E-06
1.03155	8.6478	1.15000	33.644	8.124E 01	6.983E 01	-1.012E-06	-1.012E-06	1.012E-06
1.04744	11.2612	1.20000	44.399	8.124E 01	8.859E 01	-5.332E-07	-5.332E-07	5.332E-07
1.08544	16.2332	1.30000	65.913	8.124E 01	1.218E 02	-2.172E-07	-2.172E-07	2.172E-07
1.13103	20.8369	1.40000	87.428	8.124E 01	1.502E 02	-1.142E-07	-1.142E-07	1.142E-07
1.18333	25.0590	1.50000	108.943	8.124E 01	1.749E 02	-7.059E-08	-7.059E-08	7.059E-08
1.24150	28.9048	1.60000	130.459	8.124E 01	1.965E 02	-4.732E-08	-4.732E-08	4.732E-08
1.30475	32.3923	1.70000	151.974	8.124E 01	2.155E 02	-3.187E-08	-3.187E-08	3.187E-08
1.37237	35.5469	1.80000	173.490	8.124E 01	2.324E 02	-2.248E-08	-2.248E-08	2.248E-08
1.44377	38.3974	1.90000	195.006	8.124E 01	2.476E 02	-1.586E-08	-1.586E-08	1.586E-08
1.51839	40.9736	2.00000	216.521	8.124E 01	2.612E 02	-1.131E-08	-1.131E-08	1.131E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.200 θ_D= 4.271E-04 ρ_a= 1.070

z	$_x\mu'$-1.0	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.540E-08	-6.540E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.711E-07	399.209	-3.875E-05	-3.875E-05	3.875E-05	3.875E-05	-3.162E-07	-3.162E-07
0.85000	1.107E-06	424.160	-5.863E-05	-5.863E-05	5.863E-05	5.864E-05	-6.130E-07	-6.130E-07
0.90000	2.809E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.555E-06	-1.555E-06
0.92500	5.175E-06	461.585	-1.511E-04	-1.511E-04	1.511E-04	1.511E-04	-2.864E-06	-2.865E-06
0.95000	1.310E-05	474.060	-2.562E-04	-2.562E-04	2.562E-04	2.563E-04	-7.248E-06	-7.252E-06
0.96250	2.563E-05	480.297	-3.692E-04	-3.693E-04	3.691E-04	3.694E-04	-1.417E-05	-1.418E-05
0.97500	7.678E-05	486.534	-6.499E-04	-6.504E-04	6.498E-04	6.508E-04	-4.239E-05	-4.247E-05
0.98124	1.759E-04	489.652	-1.019E-03	-1.021E-03	1.019E-03	1.022E-03	-9.692E-05	-9.724E-05
0.98749	6.803E-04	492.769	-2.105E-03	-2.112E-03	2.111E-03	2.125E-03	-3.726E-04	-3.751E-04
0.99373	1.205E-02	495.884	-9.113E-03	-9.263E-03	1.396E-02	1.426E-02	-6.399E-03	-6.529E-03
0.99751	1.074E-02	497.767	9.912E-01	9.910E-01	1.546E 00	1.546E 00	-6.056E-03	-5.938E-03
0.99851	6.549E-04	498.266	3.602E 00	3.602E 00	4.175E 00	4.175E 00	-3.660E-04	-3.636E-04
0.99954	1.728E-04	498.780	6.206E 00	6.206E 00	6.781E 00	6.781E 00	-9.612E-05	-9.581E-05
1.00060	7.578E-05	499.313	8.791E 00	8.791E 00	9.367E 00	9.367E 00	-4.207E-05	-4.199E-05
1.00171	4.228E-05	499.865	1.136E 01	1.136E 01	1.193E 01	1.193E 01	-2.345E-05	-2.342E-05
1.00403	1.747E-05	501.024	1.644E 01	1.644E 01	1.701E 01	1.701E 01	-9.679E-06	-9.673E-06
1.00651	1.026E-05	502.259	2.144E 01	2.144E 01	2.202E 01	2.202E 01	-5.686E-06	-5.683E-06
1.01190	4.431E-06	504.951	3.122E 01	3.122E 01	3.180E 01	3.180E 01	-2.454E-06	-2.454E-06
1.01788	2.423E-06	507.934	4.071E 01	4.071E 01	4.129E 01	4.129E 01	-1.342E-06	-1.341E-06
1.03155	1.012E-06	514.758	5.884E 01	5.884E 01	5.942E 01	5.942E 01	-5.604E-07	-5.603E-07
1.04744	5.332E-07	522.684	7.587E 01	7.587E 01	7.644E 01	7.644E 01	-2.952E-07	-2.952E-07
1.08544	2.172E-07	541.646	1.068E 02	1.068E 02	1.074E 02	1.074E 02	-1.203E-07	-1.203E-07
1.13103	1.142E-07	564.396	1.340E 02	1.340E 02	1.345E 02	1.345E 02	-6.321E-08	-6.321E-08
1.18333	7.059E-08	590.496	1.578E 02	1.578E 02	1.583E 02	1.583E 02	-3.909E-08	-3.909E-08
1.24150	4.732E-08	619.522	1.786E 02	1.786E 02	1.792E 02	1.792E 02	-2.620E-08	-2.620E-08
1.30475	3.187E-08	651.084	1.970E 02	1.970E 02	1.975E 02	1.975E 02	-1.765E-08	-1.765E-08
1.37237	2.248E-08	684.831	2.131E 02	2.131E 02	2.137E 02	2.137E 02	-1.245E-08	-1.245E-08
1.44377	1.586E-08	720.456	2.274E 02	2.274E 02	2.280E 02	2.280E 02	-8.781E-09	-8.781E-09
1.51839	1.131E-08	757.694	2.401E 02	2.401E 02	2.406E 02	2.406E 02	-6.265E-09	-6.265E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0=0.200 θ_D=4.271E-04 ρ_a=1.070

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-5.439E-17
0.10000	5.042E-12	4.794E-12	-6.697E-20	-6.698E-20	-7.686E-10	-7.686E-10	-7.296E-17
0.20000	1.432E-11	1.411E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-1.044E-16
0.30000	3.038E-11	3.052E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-1.640E-16
0.40000	6.455E-11	6.455E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-2.977E-16
0.50000	1.280E-10	1.282E-10	-6.780E-19	-6.781E-19	-1.623E-08	-1.623E-08	-5.558E-16
0.60000	2.912E-10	2.912E-10	-1.395E-18	-1.395E-18	-3.081E-08	-3.082E-08	-1.300E-15
0.70000	8.361E-10	8.292E-10	-3.662E-18	-3.662E-18	-6.516E-08	-6.516E-08	-3.798E-15
0.80000	3.419E-09	3.418E-09	-1.465E-17	-1.465E-17	-1.782E-07	-1.782E-07	-1.720E-14
0.85000	9.151E-09	9.138E-09	-3.900E-17	-3.900E-17	-3.600E-07	-3.600E-07	-4.981E-14
0.90000	3.530E-08	3.530E-08	-1.672E-16	-1.672E-16	-9.918E-07	-9.920E-07	-2.232E-13
0.92500	8.747E-08	8.749E-08	-3.861E-16	-3.863E-16	-1.970E-06	-1.971E-06	-6.790E-13
0.95000	3.373E-07	3.374E-07	-1.526E-15	-1.528E-15	-4.942E-06	-4.945E-06	-3.032E-12
0.96250	9.108E-07	9.118E-07	-4.371E-15	-4.378E-15	-9.775E-06	-9.783E-06	-8.615E-12
0.97500	4.216E-06	4.226E-06	-2.482E-14	-2.492E-14	-3.078E-05	-3.084E-05	-3.176E-11
0.98124	1.282E-05	1.288E-05	-9.468E-14	-9.529E-14	-7.917E-05	-7.949E-05	-7.462E-11
0.98749	7.678E-05	7.745E-05	-8.753E-13	-8.873E-13	-3.766E-04	-3.801E-04	-1.952E-10
0.99373	2.741E-03	2.813E-03	-1.851E-10	-1.927E-10	-2.141E-02	-2.215E-02	-4.122E-10
0.99751	1.076E-02	1.063E-02	-1.661E-10	-1.597E-10	-3.024E 01	-3.026E 01	-4.138E-10
0.99851	2.349E-03	2.348E-03	-8.511E-13	-8.398E-13	-3.026E 01	-3.028E 01	-1.924E-10
0.99954	1.405E-03	1.405E-03	-9.351E-14	-9.292E-14	-3.026E 01	-3.028E 01	-7.353E-11
1.00060	1.015E-03	1.015E-03	-2.455E-14	-2.446E-14	-3.026E 01	-3.028E 01	-3.144E-11
1.00171	7.961E-04	7.960E-04	-9.780E-15	-9.757E-15	-3.026E 01	-3.028E 01	-1.515E-11
1.00403	5.573E-04	5.572E-04	-2.400E-15	-2.398E-15	-3.026E 01	-3.028E 01	-4.987E-12
1.00651	4.513E-04	4.513E-04	-1.045E-15	-1.045E-15	-3.026E 01	-3.028E 01	-1.898E-12
1.01190	3.090E-04	3.090E-04	-3.125E-16	-3.123E-16	-3.026E 01	-3.028E 01	-4.883E-13
1.01788	2.349E-04	2.349E-04	-1.357E-16	-1.357E-16	-3.026E 01	-3.028E 01	-1.793E-13
1.03155	1.588E-04	1.588E-04	-3.415E-17	-3.414E-17	-3.026E 01	-3.028E 01	-4.258E-14
1.04744	1.200E-04	1.200E-04	-1.324E-17	-1.324E-17	-3.026E 01	-3.028E 01	-1.530E-14
1.08544	8.055E-05	8.055E-05	-3.430E-18	-3.430E-18	-3.026E 01	-3.028E 01	-3.508E-15
1.13103	6.063E-05	6.063E-05	-1.328E-18	-1.328E-18	-3.026E 01	-3.028E 01	-1.226E-15
1.18333	4.861E-05	4.861E-05	-6.527E-19	-6.527E-19	-3.026E 01	-3.028E 01	-5.296E-16
1.24150	4.057E-05	4.057E-05	-3.572E-19	-3.572E-19	-3.026E 01	-3.028E 01	-2.679E-16
1.30475	3.481E-05	3.481E-05	-1.964E-19	-1.964E-19	-3.026E 01	-3.028E 01	-1.592E-16
1.37237	3.048E-05	3.048E-05	-1.127E-19	-1.127E-19	-3.026E 01	-3.028E 01	-1.020E-16
1.44377	2.711E-05	2.711E-05	-6.466E-20	-6.466E-20	-3.026E 01	-3.028E 01	-7.169E-17
1.51839	2.441E-05	2.441E-05	-3.707E-20	-3.707E-20	-3.026E 01	-3.028E 01	-5.364E-17

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.250 θ_D= 1.144E-03 ρ_a= 1.114

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.2500	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.2500	0.10000	193.643	2.876E-08	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.2500	0.20000	172.128	4.419E-08	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.2500	0.30000	150.612	7.004E-08	1.000E-00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.2500	0.40000	129.097	1.151E-07	1.000E-00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.2500	0.50000	107.582	1.768E-07	1.000E-00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.2500	0.60000	86.067	2.301E-07	1.000E-00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.2500	0.70000	64.552	7.871E-07	1.000E-00	-2.270E-07	-2.270E-07	2.270E-07
0.80000	0.2500	0.80000	43.040	2.708E-06	1.000E-00	-5.709E-07	-5.710E-07	5.709E-07
0.85000	0.2500	0.85000	32.286	7.017E-06	9.999E-01	-1.107E-06	-1.107E-06	1.107E-06
0.90000	0.2500	0.90000	21.535	2.484E-05	9.998E-01	-2.806E-06	-2.806E-06	2.806E-06
0.92500	0.2500	0.92500	16.162	6.040E-05	9.997E-01	-5.168E-06	-5.169E-06	5.167E-06
0.95000	0.2500	0.95000	10.797	2.099E-04	9.993E-01	-1.306E-05	-1.306E-05	1.305E-05
0.96250	0.2500	0.96250	8.122	5.091E-04	9.987E-01	-2.541E-05	-2.543E-05	2.540E-05
0.97500	0.2500	0.97500	5.459	1.843E-03	9.974E-01	-7.544E-05	-7.558E-05	7.538E-05
0.98124	0.2500	0.98125	4.141	4.667E-03	9.959E-01	-1.709E-04	-1.714E-04	1.707E-04
0.98749	0.2501	0.98750	2.849	1.889E-02	9.936E-01	-6.247E-04	-6.288E-04	6.231E-04
0.99373	0.2506	0.99375	1.643	3.001E-01	9.969E-01	-7.599E-03	-7.727E-03	7.594E-03
0.99936	0.3508	1.00000	1.324	4.864E 01	1.387E 00	-3.158E-02	-3.091E-02	3.295E-02
1.00340	0.6230	1.00625	2.455	5.020E 01	4.022E 00	-1.065E-03	-1.057E-03	1.071E-03
1.00744	0.8946	1.01250	3.732	5.023E 01	6.873E 00	-2.371E-04	-2.362E-04	2.376E-04
1.01150	1.1640	1.01875	5.045	5.023E 01	9.717E 00	-9.671E-05	-9.651E-05	9.682E-05
1.01559	1.4314	1.02500	6.371	5.023E 01	1.253E 01	-4.955E-05	-4.949E-05	4.959E-05
1.02382	1.9597	1.03750	9.039	5.023E 01	1.806E 01	-1.963E-05	-1.962E-05	1.964E-05
1.03214	2.4795	1.05000	11.718	5.023E 01	2.254E 01	-1.108E-05	-1.108E-05	1.108E-05
1.04904	3.4943	1.07500	17.085	5.023E 01	3.257E 01	-4.654E-06	-4.654E-06	4.655E-06
1.06625	4.4766	1.10000	22.457	5.023E 01	4.216E 01	-2.527E-06	-2.527E-06	2.527E-06
1.10156	6.3479	1.15000	33.209	5.023E 01	6.007E 01	-1.041E-06	-1.041E-06	1.041E-06
1.13798	8.1011	1.20000	43.963	5.023E 01	7.649E 01	-5.450E-07	-5.450E-07	5.450E-07
1.21372	11.2847	1.30000	65.476	5.023E 01	1.055E 02	-2.203E-07	-2.203E-07	2.203E-07
1.29277	14.0868	1.40000	86.990	5.023E 01	1.304E 02	-1.154E-07	-1.154E-07	1.154E-07
1.37454	16.5608	1.50000	108.505	5.023E 01	1.520E 02	-7.117E-08	-7.117E-08	7.117E-08
1.45859	18.7534	1.60000	130.020	5.023E 01	1.709E 02	-4.770E-08	-4.770E-08	4.770E-08
1.54454	20.7046	1.70000	151.536	5.023E 01	1.876E 02	-3.209E-08	-3.209E-08	3.209E-08
1.63210	22.4483	1.80000	173.051	5.023E 01	2.024E 02	-2.264E-08	-2.264E-08	2.264E-08
1.72101	24.0131	1.90000	194.567	5.023E 01	2.156E 02	-1.597E-08	-1.597E-08	1.597E-08
1.81107	25.4233	2.00000	216.083	5.023E 01	2.276E 02	-1.139E-08	-1.139E-08	1.139E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 0.250 θ_D=1.144E-03 ρ_a=1.114

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.540E-08	-6.540E-08
0.70000	2.271E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.710E-07	399.209	-3.875E-05	-3.875E-05	3.875E-05	3.875E-05	-3.161E-07	-3.161E-07
0.85000	1.107E-06	424.160	-5.863E-05	-5.863E-05	5.863E-05	5.863E-05	-6.128E-07	-6.129E-07
0.90000	2.807E-06	449.110	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.554E-06	-1.554E-06
0.92500	5.169E-06	461.585	-1.510E-04	-1.510E-04	1.510E-04	1.510E-04	-2.861E-06	-2.862E-06
0.95000	1.307E-05	474.060	-2.559E-04	-2.560E-04	2.559E-04	2.560E-04	-7.230E-06	-7.234E-06
0.96250	2.544E-05	480.297	-3.684E-04	-3.685E-04	3.684E-04	3.686E-04	-1.407E-05	-1.408E-05
0.97500	7.565E-05	486.534	-6.463E-04	-6.468E-04	6.462E-04	6.472E-04	-4.177E-05	-4.185E-05
0.98124	1.717E-04	489.652	-1.008E-03	-1.009E-03	1.008E-03	1.011E-03	-9.463E-05	-9.493E-05
0.98749	6.312E-04	492.769	-2.035E-03	-2.041E-03	2.046E-03	2.058E-03	-3.459E-04	-3.482E-04
0.99373	7.853E-03	495.884	-7.790E-03	-7.892E-03	1.117E-02	1.137E-02	-4.208E-03	-4.279E-03
0.99936	3.157E-02	498.694	1.094E-01	1.089E-01	5.480E-01	5.489E-01	-1.749E-02	-1.711E-02
1.00340	1.053E-03	500.708	1.190E 00	1.190E 00	1.676E 00	1.676E 00	-5.900E-04	-5.850E-04
1.00744	2.358E-04	502.724	2.292E 00	2.292E 00	2.781E 00	2.781E 00	-1.313E-04	-1.308E-04
1.01150	9.641E-05	504.751	3.383E 00	3.383E 00	3.873E 00	3.873E 00	-5.355E-05	-5.344E-05
1.01559	4.946E-05	506.790	4.463E 00	4.463E 00	4.954E 00	4.954E 00	-2.744E-05	-2.740E-05
1.02382	1.961E-05	510.899	6.591E 00	6.591E 00	7.082E 00	7.082E 00	-1.087E-05	-1.086E-05
1.03214	1.107E-05	515.052	8.676E 00	8.676E 00	9.167E 00	9.167E 00	-6.135E-06	-6.133E-06
1.04904	4.653E-06	523.481	1.272E 01	1.272E 01	1.321E 01	1.321E 01	-2.577E-06	-2.577E-06
1.06625	2.526E-06	532.069	1.661E 01	1.661E 01	1.710E 01	1.710E 01	-1.399E-06	-1.399E-06
1.10156	1.041E-06	549.693	2.394E 01	2.394E 01	2.443E 01	2.443E 01	-5.767E-07	-5.766E-07
1.13798	5.450E-07	567.866	3.071E 01	3.071E 01	3.120E 01	3.120E 01	-3.018E-07	-3.018E-07
1.21372	2.203E-07	605.662	4.282E 01	4.282E 01	4.331E 01	4.331E 01	-1.220E-07	-1.220E-07
1.29277	1.154E-07	645.106	5.328E 01	5.328E 01	5.377E 01	5.377E 01	-6.391E-08	-6.391E-08
1.37454	7.117E-08	685.913	6.237E 01	6.237E 01	6.286E 01	6.286E 01	-3.941E-08	-3.941E-08
1.45859	4.770E-08	727.855	7.033E 01	7.033E 01	7.082E 01	7.082E 01	-2.641E-08	-2.641E-08
1.54454	3.209E-08	770.745	7.734E 01	7.734E 01	7.783E 01	7.783E 01	-1.777E-08	-1.777E-08
1.63210	2.264E-08	814.435	8.355E 01	8.355E 01	8.404E 01	8.404E 01	-1.254E-08	-1.254E-08
1.72101	1.597E-08	858.802	8.909E 01	8.909E 01	8.958E 01	8.958E 01	-8.843E-09	-8.843E-09
1.81107	1.139E-08	903.746	9.404E 01	9.404E 01	9.453E 01	9.453E 01	-6.308E-09	-6.308E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 0.250 θ_D=1.144E-03 ρ_a=1.114

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-8.498E-17
0.10000	6.575E-12	6.412E-12	-6.697E-20	-6.698E-20	-7.686E-10	-7.686E-10	-1.140E-16
0.20000	1.803E-11	1.785E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-1.631E-16
0.30000	3.819E-11	3.798E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-2.563E-16
0.40000	8.133E-11	8.166E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-4.339E-16
0.50000	1.608E-10	1.615E-10	-6.780E-19	-6.780E-19	-1.623E-08	-1.623E-08	-8.685E-16
0.60000	3.650E-10	3.646E-10	-1.395E-18	-1.395E-18	-3.081E-08	-3.081E-08	-2.031E-15
0.70000	1.039E-09	1.039E-09	-3.661E-18	-3.662E-18	-6.516E-08	-6.516E-08	-5.934E-15
0.80000	4.276E-09	4.277E-09	-1.465E-17	-1.465E-17	-1.781E-07	-1.782E-07	-2.686E-14
0.85000	1.144E-08	1.143E-08	-3.898E-17	-3.898E-17	-3.599E-07	-3.599E-07	-7.778E-14
0.90000	4.413E-08	4.413E-08	-1.670E-16	-1.670E-16	-9.913E-07	-9.914E-07	-3.484E-13
0.92500	1.093E-07	1.093E-07	-3.856E-16	-3.857E-16	-1.968E-06	-1.969E-06	-1.058E-12
0.95000	4.206E-07	4.208E-07	-1.520E-15	-1.522E-15	-4.931E-06	-4.934E-06	-4.713E-12
0.96250	1.125E-06	1.126E-06	-4.321E-15	-4.328E-15	-9.730E-06	-9.739E-06	-1.337E-11
0.97500	5.174E-06	5.186E-06	-2.426E-14	-2.435E-14	-3.038E-05	-3.045E-05	-4.880E-11
0.98124	1.570E-05	1.577E-05	-9.107E-14	-9.164E-14	-7.715E-05	-7.745E-05	-1.130E-10
0.98749	8.707E-05	8.779E-05	-7.719E-13	-7.819E-13	-3.480E-04	-3.511E-04	-2.919E-10
0.99373	2.368E-03	2.424E-03	-8.076E-11	-8.352E-11	-1.227E-02	-1.261E-02	-6.655E-10
0.99936	3.034E-02	3.028E-02	-1.353E-09	-1.296E-09	-1.042E 01	-1.043E 01	-6.477E-10
1.00340	7.627E-03	7.627E-03	-1.910E-12	-1.878E-12	-1.057E 01	-1.057E 01	-4.214E-10
1.00744	4.363E-03	4.363E-03	-1.546E-13	-1.534E-13	-1.057E 01	-1.057E 01	-1.526E-10
1.01150	3.057E-03	3.057E-03	-3.615E-14	-3.600E-14	-1.057E 01	-1.057E 01	-6.130E-11
1.01559	2.353E-03	2.353E-03	-1.257E-14	-1.254E-14	-1.057E 01	-1.057E 01	-2.948E-11
1.02382	1.611E-03	1.612E-03	-2.880E-15	-2.876E-15	-1.057E 01	-1.057E 01	-9.118E-12
1.03214	1.276E-03	1.276E-03	-1.177E-15	-1.176E-15	-1.057E 01	-1.057E 01	-3.404E-12
1.04904	8.620E-04	8.621E-04	-3.341E-16	-3.340E-16	-1.057E 01	-1.057E 01	-8.435E-13
1.06625	6.509E-04	6.510E-04	-1.447E-16	-1.446E-16	-1.057E 01	-1.057E 01	-3.012E-13
1.10156	4.369E-04	4.370E-04	-3.563E-17	-3.562E-17	-1.057E 01	-1.057E 01	-6.989E-14
1.13798	3.288E-04	3.288E-04	-1.368E-17	-1.368E-17	-1.057E 01	-1.057E 01	-2.481E-14
1.21372	2.200E-04	2.200E-04	-3.503E-18	-3.502E-18	-1.057E 01	-1.057E 01	-5.624E-15
1.29277	1.653E-04	1.653E-04	-1.349E-18	-1.349E-18	-1.057E 01	-1.057E 01	-1.952E-15
1.37454	1.323E-04	1.324E-04	-6.607E-19	-6.607E-19	-1.057E 01	-1.057E 01	-8.408E-16
1.45859	1.104E-04	1.104E-04	-3.616E-19	-3.616E-19	-1.057E 01	-1.057E 01	-4.237E-16
1.54454	9.464E-05	9.465E-05	-1.986E-19	-1.986E-19	-1.057E 01	-1.057E 01	-2.513E-16
1.63210	8.284E-05	8.285E-05	-1.140E-19	-1.140E-19	-1.057E 01	-1.057E 01	-1.606E-16
1.72101	7.366E-05	7.367E-05	-6.540E-20	-6.540E-20	-1.057E 01	-1.057E 01	-1.127E-16
1.81107	6.631E-05	6.632E-05	-3.749E-20	-3.749E-20	-1.057E 01	-1.057E 01	-8.425E-17

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.300 θ_D= 1.421E-03 ρ_a= 1.208

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.3000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.3000	0.10000	193.643	3.502E-08	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.3000	0.20000	172.128	5.586E-08	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.3000	0.30000	150.613	9.338E-08	1.000E-00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.3000	0.40000	129.097	1.434E-07	1.000E-00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.3000	0.50000	107.582	2.101E-07	1.000E-00	-7.240E-08	-7.240E-08	7.240E-08
0.60000	0.3000	0.60000	86.068	2.535E-07	1.000E-00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.3000	0.70000	64.555	9.672E-07	1.000E-00	-2.270E-07	-2.270E-07	2.270E-07
0.80000	0.3000	0.80000	43.044	3.268E-06	9.999E-01	-5.708E-07	-5.709E-07	5.708E-07
0.85000	0.3000	0.85000	32.291	8.471E-06	9.999E-01	-1.106E-06	-1.106E-06	1.106E-06
0.90000	0.3000	0.90000	21.543	3.004E-05	9.998E-01	-2.803E-06	-2.804E-06	2.803E-06
0.92500	0.3000	0.92500	16.174	7.289E-05	9.996E-01	-5.161E-06	-5.162E-06	5.161E-06
0.95000	0.3000	0.95000	10.814	2.528E-04	9.991E-01	-1.302E-05	-1.302E-05	1.301E-05
0.96250	0.3000	0.96250	8.144	6.093E-04	9.985E-01	-2.519E-05	-2.521E-05	2.518E-05
0.97500	0.3000	0.97500	5.494	2.186E-03	9.971E-01	-7.410E-05	-7.423E-05	7.404E-05
0.98124	0.3000	0.98125	4.187	5.473E-03	9.956E-01	-1.660E-04	-1.665E-04	1.658E-04
0.98749	0.3001	0.98750	2.915	2.110E-02	9.938E-01	-5.717E-04	-5.752E-04	5.703E-04
0.99373	0.3006	0.99375	1.756	2.388E-01	1.000E 00	-5.074E-03	-5.144E-03	5.065E-03
0.99991	0.3319	1.00000	1.246	1.800E 01	7.691E-01	-5.051E-02	-4.998E-02	5.347E-02
1.00569	0.4658	1.00625	2.139	2.313E 01	2.532E 00	-2.153E-03	-2.131E-03	2.168E-03
1.01144	0.6042	1.01250	3.357	2.320E 01	4.676E 00	-3.525E-04	-3.509E-04	3.534E-04
1.01720	0.7411	1.01875	4.645	2.321E 01	6.892E 00	-1.246E-04	-1.243E-04	1.248E-04
1.02296	0.8766	1.02500	5.958	2.321E 01	9.112E 00	-5.834E-05	-5.825E-05	5.838E-05
1.03451	1.1430	1.03750	8.614	2.321E 01	1.351E 01	-2.207E-05	-2.205E-05	2.208E-05
1.04608	1.4035	1.05000	11.285	2.321E 01	1.736E 01	-1.197E-05	-1.197E-05	1.197E-05
1.06928	1.9077	1.07500	16.646	2.321E 01	2.549E 01	-4.892E-06	-4.891E-06	4.893E-06
1.09257	2.3904	1.10000	22.016	2.321E 01	3.326E 01	-2.657E-06	-2.657E-06	2.657E-06
1.13935	3.2965	1.15000	32.764	2.321E 01	4.779E 01	-1.072E-06	-1.072E-06	1.072E-06
1.18639	4.1310	1.20000	43.517	2.321E 01	6.111E 01	-5.574E-07	-5.574E-07	5.574E-07
1.28116	5.6153	1.30000	65.028	2.321E 01	8.468E 01	-2.236E-07	-2.236E-07	2.236E-07
1.37666	6.8944	1.40000	86.542	2.321E 01	1.049E 02	-1.167E-07	-1.167E-07	1.167E-07
1.47276	8.0071	1.50000	108.056	2.321E 01	1.224E 02	-7.176E-08	-7.176E-08	7.176E-08
1.56935	8.9831	1.60000	129.571	2.321E 01	1.377E 02	-4.811E-08	-4.810E-08	4.811E-08
1.66634	9.8458	1.70000	151.086	2.321E 01	1.512E 02	-3.233E-08	-3.233E-08	3.233E-08
1.76367	10.6134	1.80000	172.601	2.321E 01	1.633E 02	-2.281E-08	-2.281E-08	2.281E-08
1.86128	11.3006	1.90000	194.117	2.321E 01	1.740E 02	-1.609E-08	-1.609E-08	1.609E-08
1.95913	11.9192	2.00000	215.633	2.321E 01	1.837E 02	-1.147E-08	-1.147E-08	1.147E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.300 θ_D=1.421E-03 ρ_a=1.208

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.022E-06	-5.022E-06	5.022E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.240E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.540E-08	-6.540E-08
0.70000	2.270E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.709E-07	399.209	-3.875E-05	-3.875E-05	3.875E-05	3.875E-05	-3.161E-07	-3.161E-07
0.85000	1.107E-06	424.160	-5.862E-05	-5.862E-05	5.862E-05	5.862E-05	-6.126E-07	-6.127E-07
0.90000	2.804E-06	449.110	-1.027E-04	-1.027E-04	1.027E-04	1.027E-04	-1.552E-06	-1.553E-06
0.92500	5.163E-06	461.585	-1.509E-04	-1.510E-04	1.509E-04	1.510E-04	-2.858E-06	-2.858E-06
0.95000	1.303E-05	474.060	-2.556E-04	-2.556E-04	2.555E-04	2.556E-04	-7.208E-06	-7.212E-06
0.96250	2.522E-05	480.297	-3.674E-04	-3.675E-04	3.674E-04	3.676E-04	-1.395E-05	-1.396E-05
0.97500	7.430E-05	486.534	-6.418E-04	-6.423E-04	6.418E-04	6.427E-04	-4.103E-05	-4.110E-05
0.98124	1.668E-04	489.652	-9.946E-04	-9.959E-04	9.951E-04	9.978E-04	-9.194E-05	-9.222E-05
0.98749	5.772E-04	492.769	-1.960E-03	-1.966E-03	1.975E-03	1.986E-03	-3.166E-04	-3.185E-04
0.99373	5.206E-03	495.884	-6.861E-03	-6.932E-03	8.996E-03	9.138E-03	-2.809E-03	-2.848E-03
0.99991	5.235E-02	498.968	-7.129E-02	-7.198E-02	1.637E-01	1.651E-01	-2.797E-02	-2.768E-02
1.00569	2.125E-03	501.851	1.189E-01	1.189E-01	4.463E-01	4.465E-01	-1.192E-03	-1.180E-03
1.01144	3.502E-04	504.721	3.651E-01	3.650E-01	6.980E-01	6.980E-01	-1.952E-04	-1.943E-04
1.01720	1.242E-04	507.595	6.098E-01	6.098E-01	9.440E-01	9.440E-01	-6.900E-05	-6.883E-05
1.02296	5.821E-05	510.471	8.517E-01	8.516E-01	1.186E 00	1.186E 00	-3.230E-05	-3.225E-05
1.03451	2.205E-05	516.233	1.327E 00	1.327E 00	1.662E 00	1.662E 00	-1.222E-05	-1.221E-05
1.04608	1.196E-05	522.007	1.791E 00	1.791E 00	2.126E 00	2.127E 00	-6.629E-06	-6.626E-06
1.06928	4.891E-06	533.585	2.688E 00	2.688E 00	3.024E 00	3.024E 00	-2.709E-06	-2.708E-06
1.09257	2.657E-06	545.203	3.545E 00	3.545E 00	3.881E 00	3.881E 00	-1.471E-06	-1.471E-06
1.13935	1.072E-06	568.548	5.151E 00	5.150E 00	5.486E 00	5.486E 00	-5.938E-07	-5.938E-07
1.18639	5.574E-07	592.025	6.625E 00	6.625E 00	6.961E 00	6.961E 00	-3.086E-07	-3.086E-07
1.28116	2.236E-07	639.312	9.238E 00	9.238E 00	9.574E 00	9.574E 00	-1.238E-07	-1.238E-07
1.37666	1.167E-07	686.970	1.148E 01	1.148E 01	1.182E 01	1.182E 01	-6.463E-08	-6.463E-08
1.47276	7.176E-08	734.925	1.343E 01	1.343E 01	1.376E 01	1.376E 01	-3.974E-08	-3.974E-08
1.56935	4.810E-08	783.124	1.513E 01	1.513E 01	1.547E 01	1.547E 01	-2.664E-08	-2.664E-08
1.66634	3.233E-08	831.523	1.663E 01	1.663E 01	1.697E 01	1.697E 01	-1.790E-08	-1.790E-08
1.76367	2.281E-08	880.091	1.797E 01	1.797E 01	1.830E 01	1.830E 01	-1.263E-08	-1.263E-08
1.86128	1.609E-08	928.799	1.916E 01	1.916E 01	1.949E 01	1.949E 01	-8.908E-09	-8.908E-09
1.95913	1.147E-08	977.628	2.023E 01	2.023E 01	2.057E 01	2.057E 01	-6.352E-09	-6.352E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.300 θ_D= 1.421E-03 ρ_a= 1.208

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.224E-16
0.10000	7.774E-12	7.616E-12	-6.697E-20	-6.697E-20	-7.686E-10	-7.686E-10	-1.642E-16
0.20000	2.180E-11	2.153E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-2.348E-16
0.30000	4.612E-11	4.576E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-3.691E-16
0.40000	9.776E-11	9.750E-11	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-6.248E-16
0.50000	1.945E-10	1.943E-10	-6.780E-19	-6.780E-19	-1.623E-08	-1.623E-08	-1.251E-15
0.60000	4.385E-10	4.391E-10	-1.395E-18	-1.395E-18	-3.081E-08	-3.081E-08	-2.924E-15
0.70000	1.247E-09	1.247E-09	-3.661E-18	-3.661E-18	-6.516E-08	-6.516E-08	-8.544E-15
0.80000	5.133E-09	5.132E-09	-1.465E-17	-1.465E-17	-1.781E-07	-1.781E-07	-3.867E-14
0.85000	1.371E-08	1.371E-08	-3.896E-17	-3.896E-17	-3.598E-07	-3.598E-07	-1.119E-13
0.90000	5.293E-08	5.293E-08	-1.668E-16	-1.668E-16	-9.906E-07	-9.907E-07	-5.011E-13
0.92500	1.310E-07	1.310E-07	-3.849E-16	-3.851E-16	-1.966E-06	-1.967E-06	-1.520E-12
0.95000	5.031E-07	5.034E-07	-1.513E-15	-1.514E-15	-4.918E-06	-4.920E-06	-6.743E-12
0.96250	1.330E-06	1.332E-06	-4.261E-15	-4.268E-15	-9.673E-06	-9.682E-06	-1.910E-11
0.97500	6.085E-06	6.099E-06	-2.360E-14	-2.368E-14	-2.991E-05	-2.997E-05	-6.889E-11
0.98124	1.824E-05	1.832E-05	-8.690E-14	-8.743E-14	-7.480E-05	-7.508E-05	-1.568E-10
0.98749	9.489E-05	9.563E-05	-6.643E-13	-6.724E-13	-3.192E-04	-3.218E-04	-3.999E-10
0.99373	1.977E-03	2.018E-03	-3.659E-11	-3.761E-11	-7.707E-03	-7.885E-03	-9.541E-10
0.99991	6.601E-02	6.598E-02	-3.619E-09	-3.544E-09	-2.236E 00	-2.250E 00	-8.931E-10
1.00569	1.699E-02	1.699E-02	-7.214E-12	-7.069E-12	-2.732E 00	-2.733E 00	-6.897E-10
1.01144	9.057E-03	9.058E-03	-2.978E-13	-2.951E-13	-2.733E 00	-2.734E 00	-2.798E-10
1.01720	6.095E-03	6.096E-03	-5.458E-14	-5.431E-14	-2.733E 00	-2.734E 00	-1.125E-10
1.02296	4.578E-03	4.579E-03	-1.630E-14	-1.625E-14	-2.733E 00	-2.734E 00	-5.391E-11
1.03451	3.050E-03	3.050E-03	-3.462E-15	-3.457E-15	-2.733E 00	-2.734E 00	-1.560E-11
1.04608	2.344E-03	2.344E-03	-1.328E-15	-1.327E-15	-2.733E 00	-2.734E 00	-5.685E-12
1.06928	1.559E-03	1.559E-03	-3.577E-16	-3.576E-16	-2.733E 00	-2.734E 00	-1.351E-12
1.09257	1.168E-03	1.168E-03	-1.550E-16	-1.549E-16	-2.733E 00	-2.734E 00	-4.647E-13
1.13935	7.774E-04	7.775E-04	-3.721E-17	-3.720E-17	-2.733E 00	-2.734E 00	-1.060E-13
1.18639	5.826E-04	5.827E-04	-1.414E-17	-1.414E-17	-2.733E 00	-2.734E 00	-3.714E-14
1.28116	3.881E-04	3.881E-04	-3.579E-18	-3.579E-18	-2.733E 00	-2.734E 00	-8.317E-15
1.37666	2.909E-04	2.910E-04	-1.371E-18	-1.371E-18	-2.733E 00	-2.734E 00	-2.868E-15
1.47276	2.327E-04	2.327E-04	-6.691E-19	-6.691E-19	-2.733E 00	-2.734E 00	-1.231E-15
1.56935	1.939E-04	1.939E-04	-3.662E-19	-3.662E-19	-2.733E 00	-2.734E 00	-6.178E-16
1.66634	1.662E-04	1.662E-04	-2.009E-19	-2.009E-19	-2.733E 00	-2.734E 00	-3.657E-16
1.76367	1.454E-04	1.454E-04	-1.153E-19	-1.153E-19	-2.733E 00	-2.734E 00	-2.332E-16
1.86128	1.292E-04	1.292E-04	-6.616E-20	-6.616E-20	-2.733E 00	-2.734E 00	-1.634E-16
1.95913	1.163E-04	1.163E-04	-3.793E-20	-3.793E-20	-2.733E 00	-2.734E 00	-1.220E-16

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.400 θ_D= 7.192E-04 ρ_a= 1.522

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.4000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.4000	0.10000	193.644	4.711E-08	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.4000	0.20000	172.128	7.504E-08	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.4000	0.30000	150.613	1.151E-07	1.000E-00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.4000	0.40000	129.099	1.768E-07	1.000E-00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.4000	0.50000	107.585	2.535E-07	1.000E-00	-7.239E-08	-7.239E-08	7.239E-08
0.60000	0.4000	0.60000	86.071	2.868E-07	1.000E-00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.4000	0.70000	64.560	1.107E-06	1.000E-00	-2.270E-07	-2.270E-07	2.270E-07
0.80000	0.4000	0.80000	43.053	3.749E-06	9.999E-01	-5.706E-07	-5.706E-07	5.706E-07
0.85000	0.4000	0.85000	32.304	9.952E-06	9.998E-01	-1.105E-06	-1.106E-06	1.105E-06
0.90000	0.4000	0.90000	21.563	3.522E-05	9.996E-01	-2.797E-06	-2.797E-06	2.797E-06
0.92500	0.4000	0.92500	16.202	8.575E-05	9.993E-01	-5.145E-06	-5.146E-06	5.144E-06
0.95000	0.4000	0.95000	10.858	2.967E-04	9.985E-01	-1.292E-05	-1.292E-05	1.291E-05
0.96250	0.4000	0.96250	8.203	7.102E-04	9.976E-01	-2.470E-05	-2.472E-05	2.469E-05
0.97500	0.4000	0.97500	5.581	2.519E-03	9.956E-01	-7.084E-05	-7.096E-05	7.079E-05
0.98124	0.4001	0.98125	4.301	6.187E-03	9.941E-01	-1.545E-04	-1.549E-04	1.543E-04
0.98749	0.4001	0.98750	3.078	2.193E-02	9.943E-01	-4.706E-04	-4.730E-04	4.696E-04
0.99374	0.4006	0.99375	2.016	1.761E-01	1.007E 00	-2.820E-03	-2.846E-03	2.815E-03
0.99997	0.4063	1.00000	1.526	2.509E 00	5.886E-01	-1.259E-02	-1.258E-02	1.276E-02
1.00620	0.4304	1.00625	2.100	4.491E 00	8.374E-01	-2.353E-03	-2.333E-03	2.369E-03
1.01243	0.4584	1.01250	3.186	4.608E 00	1.838E 00	-4.220E-04	-4.200E-04	4.232E-04
1.01865	0.4864	1.01875	4.417	4.621E 00	2.942E 00	-1.440E-04	-1.436E-04	1.442E-04
1.02488	0.5140	1.02500	5.699	4.625E 00	4.076E 00	-6.671E-05	-6.661E-05	6.677E-05
1.03734	0.5683	1.03750	8.324	4.626E 00	6.349E 00	-2.391E-05	-2.389E-05	2.392E-05
1.04981	0.6213	1.05000	10.980	4.627E 00	8.780E 00	-1.264E-05	-1.264E-05	1.265E-05
1.07473	0.7237	1.07500	16.325	4.627E 00	1.322E 01	-5.074E-06	-5.073E-06	5.075E-06
1.09966	0.8214	1.10000	21.686	4.627E 00	1.747E 01	-2.758E-06	-2.758E-06	2.759E-06
1.14954	1.0042	1.15000	32.427	4.627E 00	2.543E 01	-1.097E-06	-1.097E-06	1.097E-06
1.19942	1.1717	1.20000	43.176	4.627E 00	3.273E 01	-5.671E-07	-5.670E-07	5.671E-07
1.29921	1.4682	1.30000	64.683	4.627E 00	4.565E 01	-2.261E-07	-2.261E-07	2.261E-07
1.39903	1.7224	1.40000	86.195	4.627E 00	5.673E 01	-1.177E-07	-1.177E-07	1.177E-07
1.49887	1.9428	1.50000	107.708	4.627E 00	6.633E 01	-7.223E-08	-7.223E-08	7.223E-08
1.59874	2.1356	1.60000	129.222	4.627E 00	7.473E 01	-4.842E-08	-4.842E-08	4.842E-08
1.69862	2.3057	1.70000	150.737	4.627E 00	8.214E 01	-3.251E-08	-3.251E-08	3.251E-08
1.79851	2.4570	1.80000	172.252	4.627E 00	8.873E 01	-2.294E-08	-2.294E-08	2.294E-08
1.89842	2.5923	1.90000	193.767	4.627E 00	9.463E 01	-1.618E-08	-1.618E-08	1.618E-08
1.99833	2.7141	2.00000	215.282	4.627E 00	9.993E 01	-1.153E-08	-1.153E-08	1.153E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o=0.400 θ_D=7.192E-04 ρ_a=1.522

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.021E-06	-5.021E-06	5.021E-06	5.022E-06	-2.687E-08	-2.687E-08
0.50000	7.239E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.009E-08	-4.009E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.539E-08	-6.539E-08
0.70000	2.270E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.706E-07	399.209	-3.874E-05	-3.874E-05	3.874E-05	3.874E-05	-3.159E-07	-3.159E-07
0.85000	1.106E-06	424.160	-5.860E-05	-5.860E-05	5.860E-05	5.860E-05	-6.121E-07	-6.121E-07
0.90000	2.797E-06	449.110	-1.026E-04	-1.026E-04	1.026E-04	1.027E-04	-1.549E-06	-1.549E-06
0.92500	5.146E-06	461.585	-1.507E-04	-1.507E-04	1.507E-04	1.507E-04	-2.849E-06	-2.849E-06
0.95000	1.293E-05	474.060	-2.547E-04	-2.547E-04	2.547E-04	2.548E-04	-7.153E-06	-7.156E-06
0.96250	2.473E-05	480.297	-3.651E-04	-3.652E-04	3.651E-04	3.653E-04	-1.368E-05	-1.369E-05
0.97500	7.103E-05	486.534	-6.311E-04	-6.315E-04	6.311E-04	6.320E-04	-3.923E-05	-3.929E-05
0.98124	1.552E-04	489.652	-9.621E-04	-9.634E-04	9.630E-04	9.654E-04	-8.555E-05	-8.579E-05
0.98749	4.744E-04	492.770	-1.800E-03	-1.804E-03	1.816E-03	1.825E-03	-2.606E-04	-2.619E-04
0.99374	2.867E-03	495.886	-4.994E-03	-5.028E-03	6.155E-03	6.222E-03	-1.561E-03	-1.576E-03
0.99997	1.273E-02	498.999	-1.718E-02	-1.735E-02	4.241E-02	4.274E-02	-6.971E-03	-6.965E-03
1.00620	2.329E-03	502.106	-2.635E-02	-2.638E-02	7.632E-02	7.639E-02	-1.303E-03	-1.292E-03
1.01243	4.192E-04	505.213	-1.762E-02	-1.763E-02	9.144E-02	9.146E-02	-2.337E-04	-2.326E-04
1.01865	1.434E-04	508.321	-7.547E-03	-7.555E-03	1.03CE-01	1.031E-01	-7.972E-05	-7.951E-05
1.02488	6.656E-05	511.429	2.417E-03	2.409E-03	1.136E-01	1.136E-01	-3.694E-05	-3.688E-05
1.03734	2.388E-05	517.647	2.186E-02	2.185E-02	1.336E-01	1.336E-01	-1.324E-05	-1.323E-05
1.04981	1.264E-05	523.866	4.071E-02	4.070E-02	1.526E-01	1.527E-01	-7.001E-06	-6.998E-06
1.07473	5.073E-06	536.305	7.694E-02	7.693E-02	1.891E-01	1.891E-01	-2.810E-06	-2.809E-06
1.09966	2.758E-06	548.745	1.114E-01	1.114E-01	2.236E-01	2.237E-01	-1.527E-06	-1.527E-06
1.14954	1.096E-06	573.632	1.758E-01	1.758E-01	2.881E-01	2.881E-01	-6.072E-07	-6.072E-07
1.19942	5.670E-07	598.523	2.348E-01	2.348E-01	3.471E-01	3.471E-01	-3.140E-07	-3.140E-07
1.29921	2.264E-07	648.320	3.391E-01	3.390E-01	4.514E-01	4.515E-01	-1.252E-07	-1.252E-07
1.39903	1.177E-07	698.132	4.284E-01	4.284E-01	5.408E-01	5.408E-01	-6.519E-08	-6.519E-08
1.49887	7.223E-08	747.955	5.059E-01	5.059E-01	6.183E-01	6.183E-01	-3.999E-08	-3.999E-08
1.59874	4.842E-08	797.789	5.737E-01	5.737E-01	6.861E-01	6.861E-01	-2.681E-08	-2.681E-08
1.69862	3.251E-08	847.630	6.334E-01	6.334E-01	7.459E-01	7.459E-01	-1.800E-08	-1.800E-08
1.79851	2.294E-08	897.478	6.761E-01	6.761E-01	7.885E-01	7.885E-01	-1.270E-08	-1.270E-08
1.89842	1.618E-08	947.332	7.167E-01	7.167E-01	8.292E-01	8.292E-01	-8.959E-09	-8.959E-09
1.99833	1.153E-08	997.190	7.574E-01	7.574E-01	8.698E-01	8.699E-01	-6.387E-09	-6.387E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o=0.400 θ_D=7.192E-04 ρ_a=1.522

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-2.175E-16
0.10000	1.035E-11	1.035E-11	-6.697E-20	-6.697E-20	-7.686E-10	-7.686E-10	-2.918E-16
0.20000	2.922E-11	2.895E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-4.174E-16
0.30000	6.153E-11	6.146E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-6.561E-16
0.40000	1.302E-10	1.299E-10	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-1.111E-15
0.50000	2.584E-10	2.583E-10	-6.780E-19	-6.780E-19	-1.623E-08	-1.623E-08	-2.223E-15
0.60000	5.848E-10	5.847E-10	-1.395E-18	-1.395E-18	-3.081E-08	-3.081E-08	-5.197E-15
0.70000	1.662E-09	1.663E-09	-3.660E-18	-3.660E-18	-6.515E-08	-6.515E-08	-1.518E-14
0.80000	6.837E-09	6.836E-09	-1.464E-17	-1.464E-17	-1.781E-07	-1.781E-07	-6.869E-14
0.85000	1.826E-08	1.826E-08	-3.891E-17	-3.891E-17	-3.595E-07	-3.595E-07	-1.987E-13
0.90000	7.038E-08	7.038E-08	-1.662E-16	-1.663E-16	-9.888E-07	-9.889E-07	-8.878E-13
0.92500	1.739E-07	1.739E-07	-3.832E-16	-3.834E-16	-1.961E-06	-1.961E-06	-2.682E-12
0.95000	6.643E-07	6.647E-07	-1.495E-15	-1.496E-15	-4.884E-06	-4.886E-06	-1.179E-11
0.96250	1.718E-06	1.720E-06	-4.130E-15	-4.136E-15	-9.542E-06	-9.550E-06	-3.318E-11
0.97500	7.581E-06	7.599E-06	-2.201E-14	-2.209E-14	-2.877E-05	-2.883E-05	-1.166E-10
0.98124	2.214E-05	2.222E-05	-7.731E-14	-7.774E-14	-6.923E-05	-6.948E-05	-2.551E-10
0.98749	1.009E-04	1.016E-04	-4.794E-13	-4.843E-13	-2.610E-04	-2.628E-04	-6.240E-10
0.99374	1.335E-03	1.357E-03	-1.202E-11	-1.224E-11	-3.106E-03	-3.154E-03	-1.326E-09
0.99997	7.104E-02	7.113E-02	-2.193E-10	-2.189E-10	-9.649E-02	-9.736E-02	-1.645E-09
1.00620	5.046E-02	5.046E-02	-8.541E-12	-8.396E-12	-1.727E-01	-1.728E-01	-1.255E-09
1.01243	2.279E-02	2.279E-02	-4.011E-13	-3.973E-13	-1.748E-01	-1.748E-01	-5.685E-10
1.01865	1.414E-02	1.414E-02	-6.901E-14	-6.865E-14	-1.749E-01	-1.750E-01	-2.342E-10
1.02488	1.014E-02	1.014E-02	-2.007E-14	-2.001E-14	-1.750E-01	-1.750E-01	-1.094E-10
1.03734	6.430E-03	6.431E-03	-3.925E-15	-3.919E-15	-1.750E-01	-1.750E-01	-3.144E-11
1.04981	4.594E-03	4.595E-03	-1.446E-15	-1.445E-15	-1.750E-01	-1.750E-01	-1.128E-11
1.07473	2.980E-03	2.980E-03	-3.761E-16	-3.760E-16	-1.750E-01	-1.750E-01	-2.602E-12
1.09966	2.203E-03	2.204E-03	-1.631E-16	-1.631E-16	-1.750E-01	-1.750E-01	-8.711E-13
1.14954	1.448E-03	1.448E-03	-3.845E-17	-3.845E-17	-1.750E-01	-1.750E-01	-1.960E-13
1.19942	1.078E-03	1.078E-03	-1.450E-17	-1.450E-17	-1.750E-01	-1.750E-01	-6.804E-14
1.29921	7.135E-04	7.137E-04	-3.639E-18	-3.639E-18	-1.750E-01	-1.750E-01	-1.510E-14
1.39903	5.332E-04	5.333E-04	-1.389E-18	-1.389E-18	-1.750E-01	-1.750E-01	-5.177E-15
1.49887	4.256E-04	4.257E-04	-6.756E-19	-6.756E-19	-1.750E-01	-1.750E-01	-2.217E-15
1.59874	3.542E-04	3.542E-04	-3.698E-19	-3.698E-19	-1.750E-01	-1.750E-01	-1.109E-15
1.69862	3.033E-04	3.033E-04	-2.027E-19	-2.027E-19	-1.750E-01	-1.750E-01	-6.555E-16
1.79851	2.651E-04	2.652E-04	-1.163E-19	-1.163E-19	-1.750E-01	-1.750E-01	-4.174E-16
1.89842	2.355E-04	2.356E-04	-6.676E-20	-6.676E-20	-1.750E-01	-1.750E-01	-2.920E-16
1.99833	2.119E-04	2.119E-04	-3.827E-20	-3.827E-20	-1.750E-01	-1.750E-01	-2.178E-16

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.500 θ_D= 3.403E-04 ρ_a= 1.885

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.5000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.5000	0.10000	193.644	5.378E-08	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.5000	0.20000	172.129	9.338E-08	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.5000	0.30000	150.615	1.384E-07	1.000E-00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.5000	0.40000	129.101	2.134E-07	1.000E-00	-4.853E-08	-4.853E-08	4.853E-08
0.50000	0.5000	0.50000	107.588	3.402E-07	1.000E-00	-7.239E-08	-7.239E-08	7.239E-08
0.60000	0.5000	0.60000	86.076	3.802E-07	1.000E-00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.5000	0.70000	64.567	1.507E-06	9.999E-01	-2.269E-07	-2.269E-07	2.269E-07
0.80000	0.5000	0.80000	43.065	4.989E-06	9.999E-01	-5.702E-07	-5.703E-07	5.702E-07
0.85000	0.5000	0.85000	32.320	1.307E-05	9.998E-01	-1.104E-06	-1.104E-06	1.104E-06
0.90000	0.5000	0.90000	21.590	4.621E-05	9.995E-01	-2.788E-06	-2.789E-06	2.788E-06
0.92500	0.5000	0.92500	16.238	1.117E-04	9.991E-01	-5.124E-06	-5.125E-06	5.123E-06
0.95000	0.5000	0.95000	10.913	3.839E-04	9.980E-01	-1.279E-05	-1.280E-05	1.279E-05
0.96250	0.5000	0.96250	8.277	9.082E-04	9.968E-01	-2.420E-05	-2.422E-05	2.419E-05
0.97500	0.5000	0.97500	5.690	3.106E-03	9.947E-01	-6.692E-05	-6.703E-05	6.687E-05
0.98124	0.5001	0.98125	4.444	7.348E-03	9.939E-01	-1.412E-04	-1.416E-04	1.410E-04
0.98749	0.5002	0.98750	3.275	2.340E-02	9.966E-01	-3.824E-04	-3.840E-04	3.817E-04
0.99374	0.5005	0.99375	2.308	1.212E-01	1.010E 00	-1.457E-03	-1.466E-03	1.455E-03
1.00622	0.5090	1.00625	2.338	1.241E 00	3.892E-01	-1.368E-03	-1.360E-03	1.374E-03
1.01246	0.5170	1.01250	3.318	1.328E 00	3.393E-01	-3.671E-04	-3.656E-04	3.680E-04
1.01871	0.5251	1.01875	4.491	1.343E 00	7.231E-01	-1.374E-04	-1.371E-04	1.376E-04
1.02496	0.5331	1.02500	5.739	1.348E 00	1.179E 00	-6.535E-05	-6.524E-05	6.540E-05
1.03745	0.5490	1.03750	8.327	1.350E 00	2.125E 00	-2.388E-05	-2.387E-05	2.389E-05
1.04995	0.5645	1.05000	10.964	1.350E 00	3.534E 00	-1.268E-05	-1.267E-05	1.268E-05
1.07494	0.5944	1.07500	16.289	1.351E 00	5.587E 00	-5.095E-06	-5.094E-06	5.095E-06
1.09993	0.6229	1.10000	21.641	1.351E 00	7.556E 00	-2.773E-06	-2.772E-06	2.773E-06
1.14992	0.6763	1.15000	32.372	1.351E 00	1.125E 01	-1.101E-06	-1.100E-06	1.101E-06
1.19991	0.7252	1.20000	43.116	1.351E 00	1.464E 01	-5.688E-07	-5.688E-07	5.688E-07
1.29989	0.8118	1.30000	64.619	1.351E 00	2.063E 01	-2.266E-07	-2.266E-07	2.266E-07
1.39988	0.8860	1.40000	86.128	1.351E 00	2.578E 01	-1.179E-07	-1.179E-07	1.179E-07
1.49987	0.9503	1.50000	107.639	1.351E 00	3.023E 01	-7.232E-08	-7.232E-08	7.232E-08
1.59985	1.0066	1.60000	129.153	1.351E 00	3.413E 01	-4.848E-08	-4.848E-08	4.848E-08
1.69984	1.0563	1.70000	150.666	1.351E 00	3.758E 01	-3.255E-08	-3.255E-08	3.255E-08
1.79983	1.1004	1.80000	172.181	1.351E 00	4.063E 01	-2.296E-08	-2.296E-08	2.296E-08
1.89983	1.1399	1.90000	193.696	1.351E 00	4.337E 01	-1.620E-08	-1.620E-08	1.620E-08
1.99982	1.1755	2.00000	215.211	1.351E 00	4.584E 01	-1.155E-08	-1.155E-08	1.155E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.500 θ_D= 3.403E-04 ρ_a= 1.885

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.021E-06	-5.021E-06	5.021E-06	5.021E-06	-2.687E-08	-2.687E-08
0.50000	7.239E-08	249.506	-7.999E-06	-7.999E-06	7.999E-06	7.999E-06	-4.008E-08	-4.008E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.539E-08	-6.539E-08
0.70000	2.269E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.257E-07	-1.257E-07
0.80000	5.703E-07	399.209	-3.873E-05	-3.873E-05	3.873E-05	3.873E-05	-3.157E-07	-3.158E-07
0.85000	1.104E-06	424.160	-5.857E-05	-5.857E-05	5.857E-05	5.857E-05	-6.114E-07	-6.115E-07
0.90000	2.789E-06	449.110	-1.025E-04	-1.025E-04	1.025E-04	1.025E-04	-1.544E-06	-1.544E-06
0.92500	5.125E-06	461.585	-1.504E-04	-1.504E-04	1.504E-04	1.505E-04	-2.837E-06	-2.838E-06
0.95000	1.280E-05	474.060	-2.536E-04	-2.536E-04	2.536E-04	2.536E-04	-7.082E-06	-7.085E-06
0.96250	2.423E-05	480.297	-3.622E-04	-3.624E-04	3.622E-04	3.625E-04	-1.340E-05	-1.341E-05
0.97500	6.709E-05	486.534	-6.179E-04	-6.184E-04	6.181E-04	6.189E-04	-3.705E-05	-3.711E-05
0.98124	1.418E-04	489.652	-9.240E-04	-9.251E-04	9.255E-04	9.277E-04	-7.818E-05	-7.838E-05
0.98749	3.850E-04	492.770	-1.633E-03	-1.637E-03	1.652E-03	1.659E-03	-2.117E-04	-2.126E-04
0.99374	1.472E-03	495.887	-3.752E-03	-3.769E-03	4.301E-03	4.334E-03	-8.067E-04	-8.116E-04
1.00622	1.358E-03	502.115	-6.385E-03	-6.403E-03	3.669E-02	3.673E-02	-7.574E-04	-7.530E-04
1.01246	3.650E-04	505.231	-5.566E-03	-5.572E-03	4.207E-02	4.208E-02	-2.033E-04	-2.025E-04
1.01871	1.369E-04	508.348	-4.240E-03	-4.244E-03	4.478E-02	4.478E-02	-7.608E-05	-7.589E-05
1.02496	6.520E-05	511.465	-3.021E-03	-3.024E-03	4.659E-02	4.660E-02	-3.618E-05	-3.613E-05
1.03745	2.386E-05	517.700	-9.071E-04	-9.097E-04	4.921E-02	4.922E-02	-1.322E-05	-1.321E-05
1.04995	1.267E-05	523.936	9.540E-04	9.514E-04	5.129E-02	5.129E-02	-7.021E-06	-7.018E-06
1.07494	5.093E-06	536.408	4.323E-03	4.321E-03	5.486E-02	5.487E-02	-2.821E-06	-2.821E-06
1.09993	2.772E-06	548.880	7.411E-03	7.409E-03	5.804E-02	5.805E-02	-1.535E-06	-1.535E-06
1.14992	1.100E-06	573.825	1.304E-02	1.304E-02	6.376E-02	6.377E-02	-6.094E-07	-6.094E-07
1.19991	5.687E-07	598.770	1.625E-02	1.625E-02	6.701E-02	6.701E-02	-3.149E-07	-3.149E-07
1.29989	2.266E-07	648.663	1.970E-02	1.970E-02	7.049E-02	7.050E-02	-1.255E-07	-1.254E-07
1.39988	1.179E-07	698.556	2.316E-02	2.315E-02	7.397E-02	7.397E-02	-6.530E-08	-6.530E-08
1.49987	7.232E-08	748.451	2.662E-02	2.662E-02	7.744E-02	7.745E-02	-4.005E-08	-4.004E-08
1.59985	4.848E-08	798.346	3.008E-02	3.008E-02	8.091E-02	8.092E-02	-2.684E-08	-2.684E-08
1.69984	3.255E-08	848.242	3.355E-02	3.355E-02	8.438E-02	8.439E-02	-1.802E-08	-1.802E-08
1.79983	2.296E-08	898.139	3.701E-02	3.701E-02	8.785E-02	8.785E-02	-1.271E-08	-1.271E-08
1.89983	1.620E-08	948.036	4.048E-02	4.048E-02	9.132E-02	9.132E-02	-8.969E-09	-8.969E-09
1.99982	1.155E-08	997.933	4.395E-02	4.394E-02	9.478E-02	9.479E-02	-6.394E-09	-6.394E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0=0.500 θ_D=3.403E-04 ρ_a=1.885

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-3.399E-16
0.10000	1.287E-11	1.289E-11	-6.697E-20	-6.697E-20	-7.686E-10	-7.686E-10	-4.560E-16
0.20000	3.632E-11	3.628E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-6.522E-16
0.30000	7.680E-11	7.670E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-1.025E-15
0.40000	1.627E-10	1.626E-10	-3.711E-19	-3.711E-19	-8.612E-09	-8.612E-09	-1.735E-15
0.50000	3.225E-10	3.224E-10	-6.779E-19	-6.779E-19	-1.623E-08	-1.623E-08	-3.473E-15
0.60000	7.310E-10	7.308E-10	-1.395E-18	-1.395E-18	-3.081E-08	-3.081E-08	-8.119E-15
0.70000	2.077E-09	2.077E-09	-3.659E-18	-3.659E-18	-6.514E-08	-6.514E-08	-2.372E-14
0.80000	8.539E-09	8.538E-09	-1.462E-17	-1.462E-17	-1.780E-07	-1.780E-07	-1.072E-13
0.85000	2.279E-08	2.279E-08	-3.885E-17	-3.885E-17	-3.592E-07	-3.592E-07	-2.098E-13
0.90000	8.772E-08	8.773E-08	-1.655E-16	-1.656E-16	-9.865E-07	-9.866E-07	-1.381E-12
0.92500	2.161E-07	2.162E-07	-3.811E-16	-3.812E-16	-1.954E-06	-1.954E-06	-4.153E-12
0.95000	8.209E-07	8.214E-07	-1.472E-15	-1.473E-15	-4.840E-06	-4.843E-06	-1.805E-11
0.96250	2.085E-06	2.087E-06	-4.000E-15	-4.006E-15	-9.380E-06	-9.388E-06	-5.013E-11
0.97500	8.778E-06	8.798E-06	-2.015E-14	-2.022E-14	-2.741E-05	-2.747E-05	-1.716E-10
0.98124	2.479E-05	2.487E-05	-6.679E-14	-6.713E-14	-6.303E-05	-6.324E-05	-3.587E-10
0.98749	9.856E-05	9.917E-05	-3.402E-13	-3.431E-13	-2.077E-04	-2.090E-04	-8.263E-10
0.99374	8.992E-04	9.108E-04	-3.439E-12	-3.481E-12	-1.323E-03	-1.337E-03	-1.777E-09
1.00622	7.082E-02	7.084E-02	-3.054E-12	-3.019E-12	-2.497E-02	-2.499E-02	-1.759E-09
1.01246	8.115E-02	8.116E-02	-3.185E-13	-3.159E-13	-2.599E-02	-2.600E-02	-8.000E-10
1.01871	3.785E-02	3.786E-02	-6.395E-14	-6.364E-14	-2.613E-02	-2.613E-02	-3.471E-10
1.02496	2.307E-02	2.307E-02	-1.943E-14	-1.937E-14	-2.616E-02	-2.617E-02	-1.673E-10
1.03745	1.265E-02	1.265E-02	-3.919E-15	-3.913E-15	-2.618E-02	-2.618E-02	-4.905E-11
1.04995	7.513E-03	7.515E-03	-1.453E-15	-1.451E-15	-2.618E-02	-2.619E-02	-1.773E-11
1.07494	4.642E-03	4.643E-03	-3.782E-16	-3.780E-16	-2.618E-02	-2.619E-02	-4.103E-12
1.09993	3.354E-03	3.355E-03	-1.643E-16	-1.642E-16	-2.619E-02	-2.619E-02	-1.371E-12
1.14992	2.155E-03	2.156E-03	-3.866E-17	-3.865E-17	-2.619E-02	-2.619E-02	-3.083E-13
1.19991	1.587E-03	1.588E-03	-1.457E-17	-1.457E-17	-2.619E-02	-2.619E-02	-1.069E-13
1.29989	1.039E-03	1.040E-03	-3.650E-18	-3.650E-18	-2.619E-02	-2.619E-02	-2.368E-14
1.39988	7.726E-04	7.727E-04	-1.392E-18	-1.392E-18	-2.619E-02	-2.619E-02	-8.114E-15
1.49987	6.148E-04	6.149E-04	-6.769E-19	-6.769E-19	-2.619E-02	-2.619E-02	-3.473E-15
1.59985	5.105E-04	5.106E-04	-3.705E-19	-3.705E-19	-2.619E-02	-2.619E-02	-1.736E-15
1.69984	4.364E-04	4.365E-04	-2.031E-19	-2.031E-19	-2.619E-02	-2.619E-02	-1.026E-15
1.79983	3.812E-04	3.812E-04	-1.166E-19	-1.166E-19	-2.619E-02	-2.619E-02	-6.530E-16
1.89983	3.383E-04	3.384E-04	-6.688E-20	-6.688E-20	-2.619E-02	-2.619E-02	-4.568E-16
1.99982	3.041E-04	3.042E-04	-3.834E-20	-3.834E-20	-2.619E-02	-2.619E-02	-3.406E-16

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.600 θ_D= 1.871E-04 ρ_a= 2.257

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.6000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.6000	0.10000	193.644	8.338E-08	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.6000	0.20000	172.130	1.167E-07	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.6000	0.30000	150.616	1.668E-07	1.000E-00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.6000	0.40000	129.103	2.801E-07	1.000E-00	-4.853E-08	-4.853E-08	4.852E-08
0.50000	0.6000	0.50000	107.591	4.202E-07	1.000E-00	-7.239E-08	-7.239E-08	7.238E-08
0.60000	0.6000	0.60000	86.081	5.069E-07	1.000E-00	-1.181E-07	-1.181E-07	1.181E-07
0.70000	0.6000	0.70000	64.575	1.828E-06	9.999E-01	-2.269E-07	-2.269E-07	2.269E-07
0.80000	0.6000	0.80000	43.079	6.403E-06	9.998E-01	-5.698E-07	-5.698E-07	5.698E-07
0.85000	0.6000	0.85000	32.341	1.641E-05	9.996E-01	-1.103E-06	-1.103E-06	1.103E-06
0.90000	0.6000	0.90000	21.622	5.784E-05	9.992E-01	-2.778E-06	-2.779E-06	2.778E-06
0.92500	0.6000	0.92500	16.282	1.392E-04	9.986E-01	-5.098E-06	-5.099E-06	5.097E-06
0.95000	0.6000	0.95000	10.980	4.717E-04	9.971E-01	-1.264E-05	-1.264E-05	1.263E-05
0.96250	0.6000	0.96250	8.366	1.106E-03	9.956E-01	-2.361E-05	-2.363E-05	2.360E-05
0.97500	0.6000	0.97500	5.822	3.641E-03	9.937E-01	-6.251E-05	-6.261E-05	6.247E-05
0.98124	0.6001	0.98125	4.612	8.270E-03	9.941E-01	-1.269E-04	-1.272E-04	1.268E-04
0.98749	0.6002	0.98750	3.501	2.342E-02	1.000E 00	-3.014E-04	-3.025E-04	3.010E-04
0.99374	0.6005	0.99375	2.621	8.717E-02	1.014E 00	-8.485E-04	-8.521E-04	8.475E-04
1.00623	0.6048	1.00625	2.643	6.018E-01	7.140E-01	-8.273E-04	-8.240E-04	8.297E-04
1.01247	0.6087	1.01250	3.534	6.630E-01	5.253E-01	-2.922E-04	-2.912E-04	2.928E-04
1.01872	0.6128	1.01875	4.649	6.774E-01	3.477E-01	-1.243E-04	-1.240E-04	1.244E-04
1.02497	0.6168	1.02500	5.861	6.818E-01	1.850E-01	-6.133E-05	-6.124E-05	6.138E-05
1.03746	0.6248	1.03750	8.408	6.843E-01	2.476E-01	-2.336E-05	-2.334E-05	2.337E-05
1.04996	0.6327	1.05000	11.022	6.849E-01	1.266E 00	-1.255E-05	-1.254E-05	1.255E-05
1.07496	0.6479	1.07500	16.324	6.853E-01	2.270E 00	-5.075E-06	-5.073E-06	5.075E-06
1.09996	0.6624	1.10000	21.665	6.854E-01	3.240E 00	-2.765E-06	-2.765E-06	2.765E-06
1.14996	0.6895	1.15000	32.383	6.854E-01	5.063E 00	-1.100E-06	-1.100E-06	1.100E-06
1.19995	0.7143	1.20000	43.122	6.854E-01	6.738E 00	-5.686E-07	-5.686E-07	5.686E-07
1.29995	0.7582	1.30000	64.618	6.854E-01	9.704E 00	-2.266E-07	-2.266E-07	2.266E-07
1.39994	0.7959	1.40000	86.124	6.854E-01	1.225E 01	-1.179E-07	-1.179E-07	1.179E-07
1.49994	0.8285	1.50000	107.634	6.854E-01	1.445E 01	-7.233E-08	-7.233E-08	7.233E-08
1.59994	0.8571	1.60000	129.146	6.854E-01	1.638E 01	-4.849E-08	-4.849E-08	4.849E-08
1.69993	0.8823	1.70000	150.659	6.854E-01	1.809E 01	-3.255E-08	-3.255E-08	3.255E-08
1.79993	0.9047	1.80000	172.173	6.854E-01	1.960E 01	-2.297E-08	-2.297E-08	2.297E-08
1.89993	0.9247	1.90000	193.687	6.854E-01	2.095E 01	-1.620E-08	-1.620E-08	1.620E-08
1.99993	0.9428	2.00000	215.202	6.854E-01	2.217E 01	-1.155E-08	-1.155E-08	1.155E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o=0.600 θ_D=1.871E-04 ρ_a=2.257

z	$_x\mu'-1_0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.273E-08	-1.273E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.853E-08	199.605	-5.021E-06	-5.021E-06	5.021E-06	5.021E-06	-2.687E-08	-2.687E-08
0.50000	7.239E-08	249.506	-7.999E-06	-7.999E-06	7.998E-06	7.999E-06	-4.008E-08	-4.008E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.538E-08	-6.538E-08
0.70000	2.269E-07	349.308	-2.078E-05	-2.078E-05	2.078E-05	2.078E-05	-1.256E-07	-1.256E-07
0.80000	5.698E-07	399.209	-3.872E-05	-3.872E-05	3.872E-05	3.872E-05	-3.155E-07	-3.155E-07
0.85000	1.103E-06	424.160	-5.854E-05	-5.854E-05	5.854E-05	5.854E-05	-6.106E-07	-6.107E-07
0.90000	2.779E-06	449.110	-1.024E-04	-1.024E-04	1.024E-04	1.024E-04	-1.538E-06	-1.539E-06
0.92500	5.100E-06	461.585	-1.501E-04	-1.501E-04	1.501E-04	1.501E-04	-2.823E-06	-2.823E-06
0.95000	1.265E-05	474.060	-2.522E-04	-2.523E-04	2.522E-04	2.523E-04	-6.997E-06	-7.001E-06
0.96250	2.364E-05	480.297	-3.588E-04	-3.589E-04	3.588E-04	3.590E-04	-1.307E-05	-1.308E-05
0.97500	6.266E-05	486.534	-6.036E-04	-6.040E-04	6.039E-04	6.047E-04	-3.461E-05	-3.467E-05
0.98124	1.274E-04	489.652	-8.828E-04	-8.837E-04	8.849E-04	8.867E-04	-7.029E-05	-7.045E-05
0.98749	3.031E-04	492.770	-1.476E-03	-1.478E-03	1.495E-03	1.500E-03	-1.669E-04	-1.675E-04
0.99374	8.546E-04	495.887	-2.997E-03	-3.006E-03	3.280E-03	3.299E-03	-4.698E-04	-4.718E-04
1.00623	8.230E-04	502.118	-4.210E-03	-4.220E-03	1.807E-02	1.809E-02	-4.581E-04	-4.563E-04
1.01247	2.908E-04	505.235	-4.285E-03	-4.289E-03	2.121E-02	2.122E-02	-1.618E-04	-1.612E-04
1.01872	1.239E-04	508.352	-4.448E-03	-4.450E-03	2.222E-02	2.223E-02	-6.880E-05	-6.865E-05
1.02497	6.120E-05	511.470	-4.549E-03	-4.550E-03	2.267E-02	2.267E-02	-3.396E-05	-3.391E-05
1.03746	2.333E-05	517.707	-4.613E-03	-4.615E-03	2.309E-02	2.309E-02	-1.293E-05	-1 92E-05
1.04996	1.254E-05	523.944	-4.591E-03	-4.592E-03	2.332E-02	2.332E-02	-6.948E-06	-6. 45E-06
1.07496	5.073E-06	536.418	-4.460E-03	-4.461E-03	2.366E-02	2.366E-02	-2.810E-06	-2.809E-06
1.09996	2.765E-06	548.892	-4.282E-03	-4.283E-03	2.393E-02	2.393E-02	-1.531E-06	-1.531E-06
1.14996	1.100E-06	573.841	-3.878E-03	-3.879E-03	2.44 -02	2.442E-02	-6.089E-07	-6.089E-07
1.19995	5.686E-07	598.790	-3.451E-03	-3.452E-03	2.48 E-02	2.489E-02	-3.149E-07	-3.148E-07
1.29995	2.266E-07	648.689	-2.576E-03	-2.577E-03	2.580E-02	2.580E-02	-1.255E-07	-1.255E-07
1.39994	1.179E-07	698.588	-1.692E-03	-1.693E-03	2.670E-02	2.670E-02	-6.531E-08	-6.531E-08
1.49994	7.233E-08	748.488	-8.034E-04	-8.045E-04	2.760E-02	2.760E-02	-4.005E-08	-4.005E-08
1.59994	4.849E-08	798.387	8.651E-05	8.540E-05	2.849E-02	2.849E-02	-2.685E-08	-2.685E-08
1.69993	3.255E-08	848.287	9.773E-04	9.762E-04	2.939E-02	2.939E-02	-1.803E-08	-1.803E-08
1.79993	2.297E-08	898.187	1.869E-03	1.867E-03	3.028E-02	3.028E-02	-1.272E-08	-1.272E-08
1.89993	1.620E-08	948.087	2.760E-03	2.759E-03	3.117E-02	3.118E-02	-8.971E-09	-8.971E-09
1.99993	1.155E-08	997.987	3.653E-03	3.651E-03	3.207E-02	3.207E-02	-6.395E-09	-6.395E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o=0.600 θ_D=1.871E-04 ρ_a=2.257

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-4.395E-16
0.10000	1.556E-11	1.555E-11	-6.697E-20	-6.697E-20	-7.686E-10	-7.686E-10	-6.566E-16
0.20000	4.346E-11	4.346E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-9.391E-16
0.30000	9.228E-11	9.210E-11	-2.034E-19	-2.034E-19	-4.443E-09	-4.443E-09	-1.476E-15
0.40000	1.953E-10	1.953E-10	-3.710E-19	-3.710E-19	-8.611E-09	-8.611E-09	-2.499E-15
0.50000	3.869E-10	3.871E-10	-6.779E-19	-6.779E-19	-1.623E-08	-1.623E-08	-5.000E-15
0.60000	8.771E-10	8.770E-10	-1.395E-18	-1.395E-18	-3.081E-08	-3.081E-08	-1.169E-14
0.70000	2.493E-09	2.493E-09	-3.657E-18	-3.658E-18	-6.512E-08	-6.512E-08	-3.413E-14
0.80000	1.024E-08	1.024E-08	-1.461E-17	-1.461E-17	-1.779E-07	-1.779E-07	-1.542E-13
0.85000	2.731E-08	2.731E-08	-3.877E-17	-3.877E-17	-3.588E-07	-3.588E-07	-4.451E-13
0.90000	1.049E-07	1.049E-07	-1.647E-16	-1.648E-16	-9.837E-07	-9.838E-07	-1.978E-12
0.92500	2.576E-07	2.577E-07	-3.785E-16	-3.786E-16	-1.945E-06	-1.945E-06	-5.913E-12
0.95000	9.706E-07	9.712E-07	-1.445E-15	-1.446E-15	-4.788E-06	-4.791E-06	-2.536E-11
0.96250	2.415E-06	2.417E-06	-3.847E-15	-3.853E-15	-9.189E 06	-9.196E-06	-6.936E-11
0.97500	9.686E-06	9.706E-06	-1.813E-14	-1.819E-14	-2.599E-05	-2.604E-05	-2.307E-10
0.98124	2.596E-05	2.604E-05	-5.620E-14	-5.645E-14	-5.669E-05	-5.685E-05	-4.597E-10
0.98749	9.178E-05	9.227E-05	-2.296E-13	-2.312E-13	-1.635E-04	-1.643E-04	-1.011E-09
0.99374	6.368E-04	6.435E-04	-1.297E-12	-1.308E-12	-7.410E-04	-7.465E-04	-2.046E-09
1.00623	2.232E-02	2.233E-02	-1.244E-12	-1.234E-12	-5.988E-03	-5.995E-03	-2.[illegible]04E-09
1.01247	3.060E-02	3.061E-02	-2.183E-13	-2.169E-13	-6.539E-03	-6.541E-03	-[illegible]10
1.01872	4.604E-02	4.605E-02	-5.432E-14	-5.408E-14	-6.642E-03	-6.643E-03	-[illegible]E-10
1.02497	8.605E-02	8.606E-02	-1.762E-14	-1.757E-14	-6.671E-03	-6.673E-03	-2.262E-10
1.03746	6.352E-02	6.353E-02	-3.785E-15	-3.779E-15	-6.688E-03	-6.689E-03	-6.817E-11
1.04996	1.228E-02	1.228E-02	-1.429E-15	-1.428E-15	-6.692E-03	-6.693E-03	-2.499E-11
1.07496	6.687E-03	6.688E-03	-3.761E-16	-3.760E-16	-6.695E-03	-6.696E-03	-5.856E-12
1.09996	4.578E-03	4.579E-03	-1.637E-16	-1.636E-16	-6.696E-03	-6.697E-03	-1.967E-12
1.14996	2.802E-03	2.803E-03	-3.861E-17	-3.861E-17	-6.697E-03	-6.698E-03	-4.434E-13
1.19995	2.018E-03	2.018E-03	-1.456E-17	-1.456E-17	-6.697E-03	-6.698E-03	-1.538E-13
1.29995	1.293E-03	1.294E-03	-3.650E-18	-3.650E-18	-6.697E-03	-6.698E-03	-3.410E-14
1.39994	9.516E-04	9.517E-04	-1.393E-18	-1.392E-18	-6.697E-03	-6.698E-03	-1.169E-14
1.49994	7.526E-04	7.527E-04	-6.770E-19	-6.770E-19	-6.697E-03	-6.698E-03	-5.001E-15
1.59994	6.225E-04	6.226E-04	-3.706E-19	-3.706E-19	-6.697E-03	-6.698E-03	-2.500E-15
1.69993	5.307E-04	5.308E-04	-2.031E-19	-2.031E-19	-6.697E-03	-6.698E-03	-1.478E-15
1.79993	4.625E-04	4.626E-04	-1.166E-19	-1.166E-19	-6.697E-03	-6.698E-03	-9.404E-16
1.89993	4.098E-04	4.099E-04	-6.690E-20	-6.690E-20	-6.697E-03	-6.698E-03	-6.578E-16
1.99993	3.679E-04	3.680E-04	-3.835E-20	-3.835E-20	-6.697E-03	-6.698E-03	-4.906E-16

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.700 θ_D= 1.144E-04 ρ_a= 2.631

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.7000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.7000	0.10000	193.645	7.504E-08	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.7000	0.20000	172.131	1.034E-07	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.7000	0.30000	150.618	1.801E-07	1.000E-00	-3.258E-08	-3.258E-08	3.258E-08
0.40000	0.7000	0.40000	129.106	2.868E-07	1.000E-00	-4.852E-08	-4.852E-08	4.852E-08
0.50000	0.7000	0.50000	107.596	4.069E-07	1.000E-00	-7.238E-08	-7.238E-08	7.238E-08
0.60000	0.7000	0.60000	86.088	4.936E-07	9.999E-01	-1.180E-07	-1.181E-07	1.180E-07
0.70000	0.7000	0.70000	64.585	1.868E-06	9.999E-01	-2.268E-07	-2.268E-07	2.268E-07
0.80000	0.7000	0.80000	43.096	6.510E-06	9.998E-01	-5.693E-07	-5.694E-07	5.693E-07
0.85000	0.7000	0.85000	32.365	1.708E-05	9.996E-01	-1.101E-06	-1.101E-06	1.101E-06
0.90000	0.7000	0.90000	21.660	6.040E-05	9.991E-01	-2.766E-06	-2.767E-06	2.766E-06
0.92500	0.7000	0.92500	16.334	1.450E-04	9.984E-01	-5.068E-06	-5.069E-06	5.067E-06
0.95000	0.7000	0.95000	11.059	4.903E-04	9.970E-01	-1.246E-05	-1.247E-05	1.246E-05
0.96250	0.7000	0.96250	8.471	1.133E-03	9.957E-01	-2.294E-05	-2.295E-05	2.293E-05
0.97500	0.7000	0.97500	5.973	3.614E-03	9.948E-01	-5.779E-05	-5.787E-05	5.775E-05
0.98125	0.7001	0.98125	4.803	7.937E-03	9.966E-01	-1.125E-04	-1.127E-04	1.124E-04
0.98749	0.7002	0.98750	3.751	2.002E-02	1.003E 00	-2.319E-04	-2.325E-04	2.316E-04
0.99374	0.7004	0.99375	2.948	6.283E-02	1.011E 00	-5.484E-04	-5.500E-04	5.479E-04
1.00623	0.7025	1.00625	2.967	2.799E-01	9.621E-01	-5.361E-04	-5.346E-04	5.371E-04
1.01248	0.7044	1.01250	3.781	3.213E-01	9.095E-01	-2.253E-04	-2.247E-04	2.256E-04
1.01873	0.7064	1.01875	4.838	3.329E-01	8.615E-01	-1.103E-04	-1.100E-04	1.104E-04
1.02498	0.7084	1.02500	6.011	3.370E-01	8.194E-01	-5.684E-05	-5.676E-05	5.688E-05
1.03747	0.7124	1.03750	8.511	3.395E-01	7.404E-01	-2.270E-05	-2.269E-05	2.271E-05
1.04997	0.7163	1.05000	11.100	3.401E-01	6.633E-01	-1.237E-05	-1.237E-05	1.238E-05
1.07497	0.7238	1.07500	16.375	3.405E-01	5.126E-01	-5.045E-06	-5.044E-06	5.046E-06
1.09997	0.7310	1.10000	21.702	3.406E-01	3.677E-01	-2.754E-06	-2.753E-06	2.754E-06
1.14997	0.7445	1.15000	32.407	3.406E-01	9.915E-02	-1.098E-06	-1.098E-06	1.098E-06
1.19997	0.7568	1.20000	43.138	3.406E-01	1.613E-01	-5.682E-07	-5.681E-07	5.682E-07
1.29997	0.7786	1.30000	64.627	3.406E-01	6.027E-01	-2.265E-07	-2.265E-07	2.265E-07
1.39997	0.7973	1.40000	86.130	3.406E-01	9.832E-01	-1.179E-07	-1.179E-07	1.179E-07
1.49997	0.8136	1.50000	107.637	3.406E-0.	1.313E 00	-7.232E-08	-7.232E-08	7.232E-08
1.59997	0.8278	1.60000	129.148	3.406E-0.	1.602E 00	-4.848E-08	-4.848E-08	4.848E-08
1.69997	0.8403	1.70000	150.660	3.406E-01	1.857E 00	-3.255E-08	-3.255E-08	3.255E-08
1.79996	0.8514	1.80000	172.173	3.406E-01	2.084E 00	-2.297E-08	-2.297E-08	2.297E-08
1.89996	0.8614	1.90000	193.687	3.406E-01	2.286E 00	-1.620E-08	-1.620E-08	1.620E-08
1.99996	0.8703	2.00000	215.201	3.406E-01	2.469E 00	-1.155E-08	-1.155E-08	1.155E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 0.700 θ_D= 1.144E-04 ρ_a= 2.631

z	$_x\mu'$-1.0	T_0	$_0T_1$-T_0	$_xT_1$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.272E-08	-1.272E-08
0.30000	3.258E-08	149.703	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.852E-08	199.605	-5.021E-06	-5.021E-06	5.021E-06	5.021E-06	-2.687E-08	-2.687E-08
0.50000	7.238E-08	249.506	-7.998E-06	-7.998E-06	7.998E-06	7.998E-06	-4.008E-08	-4.008E-08
0.60000	1.181E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.537E-08	-6.537E-08
0.70000	2.268E-07	349.308	-2.077E-05	-2.077E-05	2.077E-05	2.077E-05	-1.256E-07	-1.256E-07
0.80000	5.694E-07	399.209	-3.870E-05	-3.870E-05	3.870E-05	3.871E-05	-3.152E-07	-3.153E-07
0.85000	1.101E-06	424.160	-5.850E-05	-5.850E-05	5.850E-05	5.850E-05	-6.096E-07	-6.097E-07
0.90000	2.767E-06	449.110	-1.022E-04	-1.022E-04	1.022E-04	1.022E-04	-1.532E-06	-1.532E-06
0.92500	5.070E-06	461.585	-1.497E-04	-1.497E-04	1.497E-04	1.497E-04	-2.806E-06	-2.807E-06
0.95000	1.247E-05	474.060	-2.507E-04	-2.507E-04	2.506E-04	2.507E-04	-6.899E-06	-6.902E-06
0.96250	2.296E-05	480.297	-3.548E-04	-3.549E-04	3.548E-04	3.550E-04	-1.270E-05	-1.271E-05
0.97500	5.792E-05	486.534	-5.876E-04	-5.880E-04	5.879E-04	5.886E-04	-3.200E-05	-3.204E-05
0.98125	1.129E-04	489.653	-8.395E-04	-8.403E-04	8.415E-04	8.431E-04	-6.230E-05	-6.242E-05
0.98749	2.329E-04	492.771	-1.339E-03	-1.341E-03	1.354E-03	1.358E-03	-1.284E-04	-1.287E-04
0.99374	5.511E-04	495.888	-2.446E-03	-2.452E-03	2.593E-03	2.604E-03	-3.036E-04	-3.045E-04
1.00623	5.341E-04	502.122	-5.561E-03	-5.567E-03	8.557E-03	8.569E-03	-2.968E-04	-2.960E-04
1.01248	2.244E-04	505.239	-6.219E-03	-6.222E-03	1.020E-02	1.020E-02	-1.247E-04	-1.244E-04
1.01873	1.099E-04	508.357	-6.557E-03	-6.558E-03	1.085E-02	1.085E-02	-6.105E-05	-6.093E-05
1.02498	5.672E-05	511.475	-6.737E-03	-6.738E-03	1.117E-02	1.117E-02	-3.147E-05	-3.143E-05
1.03747	2.268E-05	517.712	-6.907E-03	-6.908E-03	1.146E-02	1.146E-02	-1.257E-05	-1.256E-05
1.04997	1.237E-05	523.949	-6.975E-03	-6.975E-03	1.159E-02	1.160E-02	-6.852E-06	-6.849E-06
1.07497	5.044E-06	536.424	-7.015E-03	-7.016E-03	1.175E-02	1.176E-02	-2.794E-06	-2.793E-06
1.09997	2.753E-06	548.899	-7.006E-03	-7.007E-03	1.186E-02	1.186E-02	-1.525E-06	-1.525E-06
1.14997	1.098E-06	573.849	-6.939E-03	-6.939E-03	1.201E-02	1.201E-02	-6.080E-07	-6.080E-07
1.19997	5.681E-07	598.799	-6.848E-03	-6.848E-03	1.214E-02	1.214E-02	-3.146E-07	-3.146E-07
1.29997	2.265E-07	648.700	-6.645E-03	-6.646E-03	1.238E-02	1.238E-02	-1.254E-07	-1.254E-07
1.39997	1.179E-07	698.600	-6.433E-03	-6.433E-03	1.261E-02	1.261E-02	-6.530E-08	-6.530E-08
1.49997	7.232E-08	748.501	-6.217E-03	-6.218E-03	1.284E-02	1.284E-02	-4.005E-08	-4.005E-08
1.59997	4.848E-08	798.402	-5.999E-03	-6.000E-03	1.306E-02	1.306E-02	-2.685E-08	-2.685E-08
1.69997	3.255E-08	848.303	-5.781E-03	-5.782E-03	1.328E-02	1.328E-02	-1.803E-08	-1.803E-08
1.79996	2.297E-08	898.203	-5.562E-03	-5.562E-03	1.350E-02	1.350E-02	-1.272E-08	-1.272E-08
1.89996	1.620E-08	948.104	-5.342E-03	-5.343E-03	1.372E-02	1.373E-02	-8.971E-09	-8.971E-09
1.99996	1.155E-08	998.005	-5.122E-03	-5.123E-03	1.395E-02	1.395E-02	-6.395E-09	-6.395E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o=0.700 θ_D=1.144E-04 ρ_a=2.631

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-6.662E-16
0.10000	1.817E-11	1.803E-11	-6.697E-20	-6.697E-20	-7.686E-10	-7.686E-10	-8.937E-16
0.20000	5.057E-11	5.062E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-1.278E-15
0.30000	1.076E-10	1.074E-10	-2.033E-19	-2.033E-19	-4.442E-09	-4.442E-09	-2.009E-15
0.40000	2.277E-10	2.276E-10	-3.710E-19	-3.710E-19	-8.611E-09	-8.611E-09	-3.401E-15
0.50000	4.514E-10	4.512E-10	-6.778E-19	-6.778E-19	-1.623E-08	-1.623E-08	-6.805E-15
0.60000	1.023E-09	1.023E-09	-1.394E-18	-1.394E-18	-3.080E-08	-3.080E-08	-1.590E-14
0.70000	2.907E-09	2.907E-09	-3.656E-18	-3.656E-18	-6.510E-08	-6.511E-08	-4.643E-14
0.80000	1.194E-08	1.194E-08	-1.459E-17	-1.459E-17	-1.777E-07	-1.777E-07	-2.096E-13
0.85000	3.181E-08	3.181E-08	-3.868E-17	-3.868E-17	-3.583E-07	-3.583E-07	-6.041E-13
0.90000	1.219E-07	1.219E-07	-1.637E-16	-1.638E-16	-9.804E-07	-9.805E-07	-2.676E-12
0.92500	2.985E-07	2.986E-07	-3.754E-16	-3.756E-16	-1.935E-06	-1.935E-06	-7.942E-12
0.95000	1.115E-06	1.116E-06	-1.413E-15	-1.414E-15	-4.728E-06	-4.730E-06	-3.353E-11
0.96250	2.725E-06	2.728E-06	-3.677E-15	-3.683E-15	-8.966E-06	-8.973E-06	-9.017E-11
0.97500	1.043E-05	1.045E-05	-1.605E-14	-1.610E-14	-2.445E-05	-2.449E-05	-2.911E-10
0.98125	2.653E-05	2.661E-05	-4.619E-14	-4.638E-14	-5.043E-05	-5.056E-05	-5.536E-10
0.98749	8.409E-05	8.449E-05	-1.488E-13	-1.496E-13	-1.303E-04	-1.308E-04	-1.184E-09
0.99374	4.249E-04	4.282E-04	-6.193E-13	-6.229E-13	-4.499E-04	-4.524E-04	-2.128E-09
1.00623	7.910E-03	7.913E-03	-5.965E-13	-5.932E-13	-2.337E-03	-2.340E-03	-2.100E-09
1.01248	8.565E-03	8.567E-03	-1.420E-13	-1.412E-13	-2.645E-03	-2.646E-03	-1.165E-09
1.01873	9.035E-03	9.036E-03	-4.473E-14	-4.456E-14	-2.723E-03	-2.723E-03	-5.420E-10
1.02498	9.456E-03	9.458E-03	-1.565E-14	-1.561E-14	-2.748E-03	-2.748E-03	-2.857E-10
1.03747	1.035E-02	1.035E-02	-3.620E-15	-3.614E-15	-2.763E-03	-2.763E-03	-8.871E-11
1.04997	1.141E-02	1.142E-02	-1.398E-15	-1.397E-15	-2.767E-03	-2.768E-03	-3.307E-11
1.07497	1.443E-02	1.443E-02	-3.732E-16	-3.730E-16	-2.770E-03	-2.770E-03	-7.868E-12
1.09997	1.966E-02	1.966E-02	-1.627E-16	-1.627E-16	-2.771E-03	-2.771E-03	-2.661E-12
1.14997	6.972E-02	6.973E-02	-3.853E-17	-3.852E-17	-2.772E-03	-2.772E-03	-6.018E-13
1.19997	4.108E-02	4.109E-02	-1.454E-17	-1.454E-17	-2.772E-03	-2.772E-03	-2.091E-13
1.29997	1.015E-02	1.015E-02	-3.648E-18	-3.648E-18	-2.772E-03	-2.772E-03	-4.639E-14
1.39997	5.775E-03	5.776E-03	-1.392E-18	-1.392E-18	-2.772E-03	-2.772E-03	-1.590E-14
1.49997	4.036E-03	4.036E-03	-6.770E-19	-6.770E-19	-2.772E-03	-2.772E-03	-6.806E-15
1.59997	3.101E-03	3.102E-03	-3.706E-19	-3.706E-19	-2.772E-03	-2.772E-03	-3.403E-15
1.69997	2.518E-03	2.519E-03	-2.031E-19	-2.031E-19	-2.772E-03	-2.772E-03	-2.011E-15
1.79996	2.120E-03	2.120E-03	-1.166E-19	-1.166E-19	-2.772E-03	-2.772E-03	-1.280E-15
1.89996	1.830E-03	1.830E-03	-6.690E-20	-6.690E-20	-2.772E-03	-2.772E-03	-8.954E-16
1.99996	1.610E-03	1.610E-03	-3.835E-20	-3.835E-20	-2.772E-03	-2.772E-03	-6.677E-16

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 0.800 θ_D= 9.478E-05 ρ_a= 3.006

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.8000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	0.8000	0.10000	193.645	1.017E-07	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	0.8000	0.20000	172.132	1.651E-07	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	0.8000	0.30000	150.620	2.435E-07	1.000E-00	-3.257E-08	-3.257E-08	3.257E-08
0.40000	0.8000	0.40000	129.109	3.602E-07	1.000E-00	-4.852E-08	-4.852E-08	4.852E-08
0.50000	0.8000	0.50000	107.600	5.269E-07	1.000E-00	-7.237E-08	-7.237E-08	7.237E-08
0.60000	0.8000	0.60000	86.095	6.804E-07	1.000E-00	-1.180E-07	-1.180E-07	1.180E-07
0.70000	0.8000	0.70000	64.597	2.401E-06	9.999E-01	-2.267E-07	-2.267E-07	2.267E-07
0.80000	0.8000	0.80000	43.116	8.218E-06	9.998E-01	-5.688E-07	-5.688E-07	5.688E-07
0.85000	0.8000	0.85000	32.393	2.150E-05	9.997E-01	-1.099E-06	-1.099E-06	1.099E-06
0.90000	0.8000	0.90000	21.704	7.556E-05	9.993E-01	-2.752E-06	-2.753E-06	2.752E-06
0.92500	0.8000	0.92500	16.394	1.775E-04	9.988E-01	-5.034E-06	-5.035E-06	5.033E-06
0.95000	0.8000	0.95000	11.150	6.026E-04	9.977E-01	-1.226E-05	-1.227E-05	1.226E-05
0.96250	0.8000	0.96250	8.591	1.363E-03	9.968E-01	-2.220E-05	-2.221E-05	2.219E-05
0.97500	0.8001	0.97500	6.144	4.173E-03	9.967E-01	-5.396E-05	-5.403E-05	5.393E-05
0.98124	0.8001	0.98125	5.014	8.670E-03	9.986E-01	-9.842E-05	-9.859E-05	9.834E-05
0.98749	0.8002	0.98750	4.020	1.986E-02	1.004E 00	-1.847E-04	-1.851E-04	1.845E-04
0.99374	0.8004	0.99375	3.285	5.346E-02	1.007E 00	-3.788E-04	-3.796E-04	3.785E-04
0.99999	0.8009	1.00000	3.008	1.184E-01	9.966E-01	-5.079E-04	-5.079E-04	5.081E-04
1.00623	0.8019	1.00625	3.305	1.825E-01	9.941E-01	-3.717E-04	-3.710E-04	3.722E-04
1.01248	0.8031	1.01250	4.052	2.149E-01	9.782E-01	-1.813E-04	-1.809E-04	1.816E-04
1.01873	0.8044	1.01875	5.053	2.257E-01	9.613E-01	-9.619E-05	-9.603E-05	9.628E-05
1.02498	0.8058	1.02500	6.186	2.301E-01	9.478E-01	-5.317E-05	-5.310E-05	5.320E-05
1.03748	0.8085	1.03750	8.636	2.329E-01	9.254E-01	-2.194E-05	-2.192E-05	2.194E-05
1.04997	0.8112	1.05000	11.196	2.336E-01	9.042E-01	-1.216E-05	-1.216E-05	1.217E-05
1.07497	0.8164	1.07500	16.441	2.340E-01	8.626E-01	-5.007E-06	-5.006E-06	5.008E-06
1.09997	0.8213	1.10000	21.752	2.341E-01	8.223E-01	-2.738E-06	-2.738E-06	2.738E-06
1.14997	0.8306	1.15000	32.441	2.342E-01	7.462E-01	-1.096E-06	-1.096E-06	1.096E-06
1.19997	0.8391	1.20000	43.164	2.342E-01	6.762E-01	-5.674E-07	-5.674E-07	5.674E-07
1.29997	0.8541	1.30000	64.645	2.342E-01	5.520E-01	-2.264E-07	-2.264E-07	2.264E-07
1.39997	0.8669	1.40000	86.143	2.342E-01	4.456E-01	-1.179E-07	-1.179E-07	1.179E-07
1.49997	0.8781	1.50000	107.649	2.342E-01	3.533E-01	-7.231E-08	-7.231E-08	7.231E-08
1.59997	0.8879	1.60000	129.158	2.342E-01	2.725E-01	-4.848E-08	-4.848E-08	4.848E-08
1.69997	0.8965	1.70000	150.669	2.342E-01	2.012E-01	-3.255E-08	-3.255E-08	3.255E-08
1.79997	0.9041	1.80000	172.181	2.342E-01	1.379E-01	-2.296E-08	-2.296E-08	2.296E-08
1.89997	0.9110	1.90000	193.694	2.342E-01	8.129E-02	-1.620E-08	-1.620E-08	1.620E-08
1.99997	0.9171	2.00000	215.207	2.342E-01	3.069E-02	-1.155E-08	-1.155E-08	1.155E-08

PROPAGATION FREQUENCY= 1.660DE 08 ϕ_o= 0.800 θ_D= 9.478E-05 ρ_a= 3.006

z	$_x\mu'-1$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.977E-09	-8.977E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.272E-08	-1.272E-08
0.30000	3.257E-08	149.703	-3.026E-06	-3.026E-06	3.025E-06	3.026E-06	-1.804E-08	-1.804E-08
0.40000	4.854E-08	199.605	-5.021E-06	-5.021E-06	5.021E-06	5.021E-06	-2.687E-08	-2.687E-08
0.50000	7.237E-08	249.506	-7.998E-06	-7.998E-06	7.998E-06	7.998E-06	-4.007E-08	-4.007E-08
0.60000	1.180E-07	299.407	-1.259E-05	-1.259E-05	1.259E-05	1.259E-05	-6.535E-08	-6.535E-08
0.70000	2.267E-07	349.308	-2.077E-05	-2.077E-05	2.077E-05	2.077E-05	-1.255E-07	-1.255E-07
0.80000	5.688E-07	399.209	-3.869E-05	-3.869E-05	3.869E-05	3.869E-05	-3.149E-07	-3.149E-07
0.85000	1.099E-06	424.160	-5.845E-05	-5.845E-05	5.845E-05	5.845E-05	-6.085E-07	-6.086E-07
0.90000	2.753E-06	449.110	-1.020E-04	-1.021E-04	1.020E-04	1.021E-04	-1.524E-06	-1.524E-06
0.92500	5.035E-06	461.585	-1.492E-04	-1.492E-04	1.492E-04	1.492E-04	-2.787E-06	-2.788E-06
0.95000	1.227E-05	474.060	-2.489E-04	-2.489E-04	2.489E-04	2.489E-04	-6.788E-06	-6.791E-06
0.96250	2.222E-05	480.297	-3.504E-04	-3.505E-04	3.504E-04	3.506E-04	-1.229E-05	-1.230E-05
0.97500	5.407E-05	486.534	-5.708E-04	-5.711E-04	5.713E-04	5.719E-04	-2.988E-05	-2.992E-05
0.98124	9.869E-05	489.653	-7.964E-04	-7.971E-04	7.989E-04	8.002E-04	-5.450E-05	-5.459E-05
0.98749	1.853E-04	492.770	-1.222E-03	-1.224E-03	1.236E-03	1.239E-03	-1.023E-04	-1.025E-04
0.99374	3.801E-04	495.888	-2.027E-03	-2.030E-03	2.133E-03	2.140E-03	-2.097E-04	-2.102E-04
0.99999	5.082E-04	499.005	-3.256E-03	-3.262E-03	3.787E-03	3.798E-03	-2.812E-04	-2.812E-04
1.00623	3.707E-04	502.122	-4.314E-03	-4.318E-03	5.588E-03	5.595E-03	-2.058E-04	-2.054E-04
1.01248	1.808E-04	505.239	-4.894E-03	-4.896E-03	6.672E-03	6.675E-03	-1.004E-04	-1.002E-04
1.01873	9.596E-05	508.357	-5.219E-03	-5.220E-03	7.193E-03	7.195E-03	-5.326E-05	-5.317E-05
1.02498	5.307E-05	511.476	-5.396E-03	-5.397E-03	7.460E-03	7.461E-03	-2.944E-05	-2.940E-05
1.03748	2.191E-05	517.713	-5.574E-03	-5.574E-03	7.714E-03	7.715E-03	-1.215E-05	-1.214E-05
1.04997	1.216E-05	523.950	-5.654E-03	-5.655E-03	7.834E-03	7.835E-03	-6.735E-06	-6.732E-06
1.07497	5.006E-06	536.425	-5.723E-03	-5.724E-03	7.963E-03	7.963E-03	-2.773E-06	-2.772E-06
1.09997	2.737E-06	548.900	-5.743E-03	-5.744E-03	8.037E-03	8.037E-03	-1.516E-06	-1.516E-06
1.14997	1.095E-06	573.850	-5.734E-03	-5.734E-03	8.133E-03	8.133E-03	-6.066E-07	-6.066E-07
1.19997	5.674E-07	598.800	-5.701E-03	-5.702E-03	8.205E-03	8.205E-03	-3.142E-07	-3.142E-07
1.29997	2.264E-07	648.701	-5.615E-03	-5.615E-03	8.327E-03	8.328E-03	-1.253E-07	-1.253E-07
1.39997	1.179E-07	698.602	-5.519E-03	-5.519E-03	8.439E-03	8.440E-03	-6.528E-08	-6.527E-08
1.49997	7.231E-08	748.503	-5.419E-03	-5.419E-03	8.548E-03	8.549E-03	-4.004E-08	-4.004E-08
1.59997	4.848E-08	798.404	-5.318E-03	-5.318E-03	8.655E-03	8.656E-03	-2.684E-08	-2.684E-08
1.69997	3.255E-08	848.305	-5.215E-03	-5.216E-03	8.762E-03	8.763E-03	-1.802E-08	-1.802E-08
1.79997	2.296E-08	898.206	-5.113E-03	-5.113E-03	8.867E-03	8.868E-03	-1.271E-08	-1.271E-08
1.89997	1.620E-08	948.107	-5.009E-03	-5.010E-03	8.973E-03	8.973E-03	-8.970E-09	-8.970E-09
1.99997	1.155E-08	998.008	-4.906E-03	-4.906E-03	9.078E-03	9.078E-03	-6.394E-09	-6.394E-09

PROPAGATION FREQUENCY= 1.660DE 08 ϕ_o= 0.800 θ_D= 9.478E-05 ρ_a= 3.006

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-8.701E-16
0.10000	2.061E-11	2.058E-11	-6.697E-20	-6.697E-20	-7.686E-10	-7.686E-10	-1.167E-15
0.20000	5.790E-11	5.781E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-1.669E-15
0.30000	1.228E-10	1.227E-10	-2.033E-19	-2.033E-19	-4.442E-09	-4.442E-09	-2.624E-15
0.40000	2.602E-10	2.601E-10	-3.710E-19	-3.710E-19	-8.610E-09	-8.610E-09	-4.441E-15
0.50000	5.156E-10	5.155E-10	-6.777E-19	-6.777E-19	-1.623E-08	-1.623E-08	-8.886E-15
0.60000	1.169E-09	1.169E-09	-1.394E-18	-1.394E-18	-3.080E-08	-3.080E-08	-2.077E-14
0.70000	3.321E-09	3.321E-09	-3.654E-18	-3.654E-18	-6.509E-08	-6.509E-08	-6.060E-14
0.80000	1.363E-08	1.363E-08	-1.457E-17	-1.457E-17	-1.776E-07	-1.776E-07	-2.732E-13
0.85000	3.630E-08	3.630E-08	-3.857E-17	-3.858E-17	-3.578E-07	-3.578E-07	-7.863E-13
0.90000	1.388E-07	1.389E-07	-1.626E-16	-1.627E-16	-9.766E-07	-9.767E-07	-3.470E-12
0.92500	3.389E-07	3.390E-07	-3.719E-16	-3.721E-16	-1.923E-06	-1.924E-06	-1.022E-11
0.95000	1.256E-06	1.257E-06	-1.378E-15	-1.379E-15	-4.660E-06	-4.662E-06	-4.239E-11
0.96250	3.019E-06	3.022E-06	-3.492E-15	-3.497E-15	-8.731E-06	-8.737E-06	-1.119E-10
0.97500	1.104E-05	1.106E-05	-1.440E-14	-1.444E-14	-2.290E-05	-2.293E-05	-3.440E-10
0.98124	2.643E-05	2.650E-05	-3.717E-14	-3.730E-14	-4.464E-05	-4.475E-05	-6.382E-10
0.98749	7.477E-05	7.507E-05	-1.033E-13	-1.038E-13	-1.061E-04	-1.065E-04	-1.282E-09
0.99374	2.808E-04	2.824E-04	-3.350E-13	-3.365E-13	-2.930E-04	-2.942E-04	-2.099E-09
0.99999	1.104E-03	1.109E-03	-5.443E-13	-5.444E-13	-7.303E-04	-7.325E-04	-2.662E-09
1.00623	1.896E-03	1.898E-03	-3.250E-13	-3.237E-13	-1.161E-03	-1.163E-03	-2.068E-09
1.01248	2.114E-03	2.114E-03	-1.004E-13	-9.993E-14	-1.341E-03	-1.342E-03	-1.247E-09
1.01873	2.185E-03	2.186E-03	-3.584E-14	-3.571E-14	-1.401E-03	-1.401E-03	-6.248E-10
1.02498	2.218E-03	2.218E-03	-1.407E-14	-1.403E-14	-1.422E-03	-1.422E-03	-3.357E-10
1.03748	2.253E-03	2.253E-03	-3.429E-15	-3.424E-15	-1.435E-03	-1.436E-03	-1.099E-10
1.04997	2.280E-03	2.280E-03	-1.361E-15	-1.360E-15	-1.439E-03	-1.440E-03	-4.172E-11
1.07497	2.335E-03	2.335E-03	-3.693E-16	-3.692E-16	-1.442E-03	-1.442E-03	-1.011E-11
1.09997	2.394E-03	2.394E-03	-1.615E-16	-1.614E-16	-1.443E-03	-1.443E-03	-3.447E-12
1.14997	2.524E-03	2.524E-03	-3.840E-17	-3.839E-17	-1.444E-03	-1.444E-03	-7.828E-13
1.19997	2.669E-03	2.669E-03	-1.452E-17	-1.452E-17	-1.444E-03	-1.444E-03	-2.724E-13
1.29997	3.018E-03	3.018E-03	-3.645E-18	-3.645E-18	-1.444E-03	-1.444E-03	-6.052E-14
1.39997	3.472E-03	3.472E-03	-1.392E-18	-1.391E-18	-1.444E-03	-1.444E-03	-2.076E-14
1.49997	4.087E-03	4.088E-03	-6.768E-19	-6.768E-19	-1.444E-03	-1.444E-03	-8.886E-15
1.59997	4.967E-03	4.968E-03	-3.705E-19	-3.705E-19	-1.444E-03	-1.444E-03	-4.443E-15
1.69997	6.331E-03	6.332E-03	-2.031E-19	-2.031E-19	-1.444E-03	-1.444E-03	-2.626E-15
1.79997	8.724E-03	8.725E-03	-1.166E-19	-1.166E-19	-1.444E-03	-1.444E-03	-1.672E-15
1.89997	1.402E-02	1.402E-02	-6.689E-20	-6.689E-20	-1.444E-03	-1.444E-03	-1.169E-15
1.99997	3.529E-02	3.529E-02	-3.835E-20	-3.835E-20	-1.444E-03	-1.444E-03	-8.720E-16

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 1.000 θ_D= 4.508E-05 ρ_a= 3.756

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	1.0000	0.10000	193.647	1.042E-07	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	1.0000	0.20000	172.135	1.601E-07	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	1.0000	0.30000	150.625	2.768E-07	1.000E-00	-3.257E-08	-3.257E-08	3.257E-08
0.40000	1.0000	0.40000	129.117	4.469E-07	1.000E-00	-4.851E-08	-4.851E-08	4.851E-08
0.50000	1.0000	0.50000	107.612	6.670E-07	1.000E-00	-7.236E-08	-7.236E-08	7.236E-08
0.60000	1.0000	0.60000	86.113	8.138E-07	9.999E-01	-1.180E-07	-1.180E-07	1.180E-07
0.70000	1.0000	0.70000	64.624	3.068E-06	9.999E-01	-2.265E-07	-2.265E-07	2.265E-07
0.80000	1.0000	0.80000	43.163	1.062E-05	9.997E-01	-5.674E-07	-5.674E-07	5.674E-07
0.85000	1.0000	0.85000	32.459	2.716E-05	9.994E-01	-1.094E-06	-1.094E-06	1.094E-06
0.90000	1.0000	0.90000	21.809	9.402E-05	9.987E-01	-2.720E-06	-2.720E-06	2.720E-06
0.92500	1.0000	0.92500	16.536	2.196E-04	9.979E-01	-4.953E-06	-4.954E-06	4.952E-06
0.95000	1.0000	0.95000	11.364	7.240E-04	9.964E-01	-1.180E-05	-1.180E-05	1.180E-05
0.96250	1.0000	0.96250	8.870	1.586E-03	9.958E-01	-2.055E-05	-2.056E-05	2.054E-05
0.97500	1.0001	0.97500	6.534	4.487E-03	9.977E-01	-4.651E-05	-4.656E-05	4.649E-05
0.98124	1.0001	0.98125	5.489	8.435E-03	1.002E 00	-7.432E-05	-7.442E-05	7.428E-05
0.98749	1.0002	0.98750	4.601	1.728E-02	1.007E 00	-1.278E-04	-1.280E-04	1.278E-04
0.99374	1.0003	0.99375	3.979	3.432E-02	1.007E 00	-1.898E-04	-1.900E-04	1.897E-04
0.99999	1.0006	1.00000	3.758	6.485E-02	9.986E-01	-2.305E-04	-2.305E-04	2.305E-04
1.00624	1.0011	1.00625	4.003	9.516E-02	1.003E 00	-1.870E-04	-1.868E-04	1.871E-04
1.01248	1.0018	1.01250	4.642	1.116E-01	9.989E-01	-1.248E-04	-1.246E-04	1.249E-04
1.01873	1.0025	1.01875	5.539	1.201E-01	9.890E-01	-7.249E-05	-7.239E-05	7.254E-05
1.02498	1.0032	1.02500	6.591	1.239E-01	9.811E-01	-4.556E-05	-4.552E-05	4.559E-05
1.03748	1.0047	1.03750	8.933	1.267E-01	9.712E-01	-2.021E-05	-2.020E-05	2.022E-05
1.04998	1.0061	1.05000	11.429	1.275E-01	9.640E-01	-1.167E-05	-1.166E-05	1.167E-05
1.07498	1.0090	1.07500	16.604	1.280E-01	9.506E-01	-4.916E-06	-4.915E-06	4.916E-06
1.09998	1.0117	1.10000	21.877	1.281E-01	9.373E-01	-2.699E-06	-2.699E-06	2.699E-06
1.14998	1.0167	1.15000	32.528	1.282E-01	9.116E-01	-1.089E-06	-1.089E-06	1.089E-06
1.19998	1.0214	1.20000	43.232	1.282E-01	8.876E-01	-5.655E-07	-5.655E-07	5.655E-07
1.29998	1.0296	1.30000	64.693	1.282E-01	8.448E-01	-2.260E-07	-2.260E-07	2.260E-07
1.39998	1.0367	1.40000	86.182	1.282E-01	8.081E-01	-1.178E-07	-1.178E-07	1.178E-07
1.49998	1.0428	1.50000	107.682	1.283E-01	7.762E-01	-7.226E-08	-7.226E-08	7.226E-08
1.59998	1.0481	1.60000	129.186	1.283E-01	7.483E-01	-4.845E-08	-4.845E-08	4.845E-08
1.69998	1.0528	1.70000	150.695	1.283E-01	7.236E-01	-3.254E-08	-3.254E-08	3.254E-08
1.79998	1.0570	1.80000	172.205	1.283E-01	7.017E-01	-2.295E-08	-2.295E-08	2.295E-08
1.89998	1.0608	1.90000	193.716	1.283E-01	6.821E-01	-1.619E-08	-1.619E-08	1.619E-08
1.99998	1.0641	2.00000	215.228	1.283E-01	6.644E-01	-1.154E-08	-1.154E-08	1.154E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 1.000 θ_D= 4.508E-05 ρ_a= 3.756

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.852E-07	-6.852E-07	6.852E-07	6.852E-07	-8.976E-09	-8.976E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.272E-08	-1.272E-08
0.30000	3.257E-08	149.703	-3.025E-06	-3.025E-06	3.025E-06	3.025E-06	-1.804E-08	-1.804E-08
0.40000	4.851E-08	199.605	-5.021E-06	-5.021E-06	5.021E-06	5.021E-06	-2.686E-08	-2.686E-08
0.50000	7.236E-08	249.506	-7.997E-06	-7.997E-06	7.997E-06	7.997E-06	-4.007E-08	-4.007E-08
0.60000	1.180E-07	299.407	-1.258E-05	-1.258E-05	1.258E-05	1.258E-05	-6.533E-08	-6.533E-08
0.70000	2.265E-07	349.308	-2.076E-05	-2.076E-05	2.076E-05	2.076E-05	-1.254E-07	-1.254E-07
0.80000	5.675E-07	399.209	-3.865E-05	-3.865E-05	3.865E-05	3.865E-05	-3.142E-07	-3.142E-07
0.85000	1.094E-06	424.160	-5.834E-05	-5.834E-05	5.834E-05	5.834E-05	-6.059E-07	-6.059E-07
0.90000	2.720E-06	449.110	-1.016E-04	-1.016E-04	1.016E-04	1.016E-04	-1.506E-06	-1.506E-06
0.92500	4.954E-06	461.585	-1.481E-04	-1.481E-04	1.481E-04	1.481E-04	-2.742E-06	-2.743E-06
0.95000	1.181E-05	474.060	-2.447E-04	-2.447E-04	2.447E-04	2.448E-04	-6.533E-06	-6.536E-06
0.96250	2.057E-05	480.297	-3.404E-04	-3.405E-04	3.404E-04	3.406E-04	-1.138E-05	-1.139E-05
0.97500	4.659E-05	486.534	-5.349E-04	-5.352E-04	5.355E-04	5.360E-04	-2.575E-05	-2.578E-05
0.98124	7.448E-05	489.653	-7.165E-04	-7.170E-04	7.189E-04	7.199E-04	-4.115E-05	-4.121E-05
0.98749	1.282E-04	492.771	-1.021E-03	-1.022E-03	1.032E-03	1.034E-03	-7.079E-05	-7.090E-05
0.99374	1.901E-04	495.889	-1.502E-03	-1.503E-03	1.545E-03	1.549E-03	-1.051E-04	-1.052E-04
0.99999	2.306E-04	499.006	-2.114E-03	-2.117E-03	2.274E-03	2.278E-03	-1.276E-04	-1.276E-04
1.00624	1.867E-04	502.124	-2.685E-03	-2.687E-03	3.031E-03	3.035E-03	-1.035E-04	-1.034E-04
1.01248	1.245E-04	505.242	-3.107E-03	-3.108E-03	3.586E-03	3.588E-03	-6.911E-05	-6.901E-05
1.01873	7.235E-05	508.360	-3.368E-03	-3.369E-03	3.926E-03	3.928E-03	-4.014E-05	-4.008E-05
1.02498	4.550E-05	511.478	-3.527E-03	-3.527E-03	4.125E-03	4.126E-03	-2.523E-05	-2.520E-05
1.03748	2.019E-05	517.715	-3.700E-03	-3.700E-03	4.333E-03	4.334E-03	-1.119E-05	-1.118E-05
1.04998	1.166E-05	523.953	-3.786E-03	-3.787E-03	4.436E-03	4.436E-03	-6.460E-06	-6.457E-06
1.07498	4.914E-06	536.427	-3.872E-03	-3.872E-03	4.542E-03	4.542E-03	-2.722E-06	-2.721E-06
1.09998	2.699E-06	548.902	-3.909E-03	-3.910E-03	4.596E-03	4.597E-03	-1.495E-06	-1.494E-06
1.14998	1.089E-06	573.853	-3.936E-03	-3.936E-03	4.655E-03	4.656E-03	-6.032E-07	-6.031E-07
1.19998	5.654E-07	598.803	-3.940E-03	-3.940E-03	4.690E-03	4.691E-03	-3.131E-07	-3.131E-07
1.29998	2.260E-07	648.704	-3.927E-03	-3.927E-03	4.740E-03	4.740E-03	-1.251E-07	-1.251E-07
1.39998	1.178E-07	698.605	-3.904E-03	-3.904E-03	4.779E-03	4.779E-03	-6.521E-08	-6.521E-08
1.49998	7.226E-08	748.506	-3.877E-03	-3.877E-03	4.815E-03	4.815E-03	-4.001E-08	-4.001E-08
1.59998	4.845E-08	798.407	-3.849E-03	-3.849E-03	4.849E-03	4.850E-03	-2.683E-08	-2.683E-08
1.69998	3.254E-08	848.309	-3.819E-03	-3.819E-03	4.882E-03	4.883E-03	-1.802E-08	-1.802E-08
1.79998	2.295E-08	898.210	-3.789E-03	-3.790E-03	4.915E-03	4.915E-03	-1.271E-08	-1.271E-08
1.89998	1.619E-08	948.111	-3.759E-03	-3.759E-03	4.947E-03	4.948E-03	-8.966E-09	-8.966E-09
1.99998	1.154E-08	998.012	-3.729E-03	-3.729E-03	4.979E-03	4.980E-03	-6.392E-09	-6.392E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 1.000 θ_D= 4.508E-05 ρ_o= 3.756

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.360E-15
0.10000	2.588E-11	2.588E-11	-6.697E-20	-6.697E-20	-7.685E-10	-7.685E-10	-1.824E-15
0.20000	7.238E-11	7.232E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-2.608E-15
0.30000	1.535E-10	1.534E-10	-2.033E-19	-2.033E-19	-4.442E-09	-4.442E-09	-4.099E-15
0.40000	3.251E-10	3.250E-10	-3.709E-19	-3.709E-19	-8.609E-09	-8.609E-09	-6.938E-15
0.50000	6.444E-10	6.446E-10	-6.775E-19	-6.775E-19	-1.622E-08	-1.622E-08	-1.388E-14
0.60000	1.460E-09	1.460E-09	-1.393E-18	-1.393E-18	-3.079E-08	-3.079E-08	-3.242E-14
0.70000	4.147E-09	4.148E-09	-3.649E-18	-3.649E-18	-6.504E-08	-6.504E-08	-9.453E-14
0.80000	1.699E-08	1.700E-08	-1.452E-17	-1.452E-17	-1.773E-07	-1.773E-07	-4.251E-13
0.85000	4.516E-08	4.516E-08	-3.832E-17	-3.833E-17	-3.565E-07	-3.565E-07	-1.219E-12
0.90000	1.715E-07	1.715E-07	-1.600E-16	-1.600E-16	-9.676E-07	-9.678E-07	-5.330E-12
0.92500	4.159E-07	4.160E-07	-3.638E-16	-3.639E-16	-1.896E-06	-1.897E-06	-1.540E-11
0.95000	1.494E-06	1.495E-06	-1.298E-15	-1.299E-15	-4.504E-06	-4.506E-06	-6.139E-11
0.96250	3.398E-06	3.401E-06	-3.094E-15	-3.098E-15	-8.206E-06	-8.212E-06	-1.558E-10
0.97500	1.142E-05	1.144E-05	-1.138E-14	-1.138E-14	-1.977E-05	-1.980E-05	-4.310E-10
0.98124	2.424E-05	2.430E-05	-2.371E-14	-2.377E-14	-3.518E-05	-3.524E-05	-7.678E-10
0.98749	5.869E-05	5.887E-05	-5.685E-14	-5.702E-14	-7.072E-05	-7.089E-05	-1.286E-09
0.99374	1.686E-04	1.692E-04	-1.078E-13	-1.081E-13	-1.473E-04	-1.477E-04	-2.071E-09
0.99999	4.460E-04	4.473E-04	-1.474E-13	-1.474E-13	-2.705E-04	-2.711E-04	-2.408E-09
1.00624	7.111E-04	7.118E-04	-1.055E-13	-1.052E-13	-3.919E-04	-3.923E-04	-2.032E-09
1.01248	8.156E-04	8.159E-04	-5.470E-14	-5.454E-14	-4.663E-04	-4.665E-04	-1.252E-09
1.01873	8.523E-04	8.524E-04	-2.282E-14	-2.276E-14	-5.003E-04	-5.005E-04	-7.463E-10
1.02498	8.664E-04	8.665E-04	-1.099E-14	-1.097E-14	-5.152E-04	-5.153E-04	-4.183E-10
1.03748	8.726E-04	8.726E-04	-3.015E-15	-3.011E-15	-5.264E-04	-5.265E-04	-1.521E-10
1.04998	8.704E-04	8.705E-04	-1.276E-15	-1.275E-15	-5.300E-04	-5.301E-04	-6.006E-11
1.07498	8.633E-04	8.634E-04	-3.601E-16	-3.600E-16	-5.326E-04	-5.326E-04	-1.516E-11
1.09998	8.559E-04	8.560E-04	-1.583E-16	-1.583E-16	-5.335E-04	-5.336E-04	-5.278E-12
1.14998	8.419E-04	8.420E-04	-3.807E-17	-3.807E-17	-5.341E-04	-5.342E-04	-1.211E-12
1.19998	8.287E-04	8.287E-04	-1.444E-17	-1.444E-17	-5.343E-04	-5.343E-04	-4.231E-13
1.29998	8.036E-04	8.037E-04	-3.637E-18	-3.637E-18	-5.344E-04	-5.345E-04	-9.428E-14
1.39998	7.802E-04	7.803E-04	-1.390E-18	-1.390E-18	-5.344E-04	-5.345E-04	-3.237E-14
1.49998	7.581E-04	7.582E-04	-6.761E-19	-6.761E-19	-5.344E-04	-5.345E-04	-1.387E-14
1.59998	7.373E-04	7.373E-04	-3.702E-19	-3.702E-19	-5.345E-04	-5.345E-04	-6.937E-15
1.69998	7.175E-04	7.176E-04	-2.029E-19	-2.029E-19	-5.345E-04	-5.345E-04	-4.101E-15
1.79998	6.988E-04	6.989E-04	-1.165E-19	-1.165E-19	-5.345E-04	-5.345E-04	-2.611E-15
1.89998	6.811E-04	6.811E-04	-6.685E-20	-6.685E-20	-5.345E-04	-5.345E-04	-1.826E-15
1.99998	6.642E-04	6.643E-04	-3.833E-20	-3.833E-20	-5.345E-04	-5.345E-04	-1.362E-15

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.507

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.2000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	1.2000	0.10000	193.648	1.167E-07	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	1.2000	0.20000	172.139	2.034E-07	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	1.2000	0.30000	150.631	2.868E-07	1.000E-00	-3.257E-08	-3.257E-08	3.257E-08
0.40000	1.2000	0.40000	129.127	4.602E-07	1.000E-00	-4.850E-08	-4.850E-08	4.850E-08
0.50000	1.2000	0.50000	107.627	6.804E-07	9.999E-01	-7.234E-08	-7.234E-08	7.234E-08
0.60000	1.2000	0.60000	86.134	7.737E-07	9.999E-01	-1.179E-07	-1.179E-07	1.179E-07
0.70000	1.2000	0.70000	64.658	3.148E-06	9.998E-01	-2.263E-07	-2.263E-07	2.263E-07
0.80000	1.2000	0.80000	43.220	1.083E-05	9.995E-01	-5.658E-07	-5.658E-07	5.658E-07
0.85000	1.2000	0.85000	32.540	2.833E-05	9.991E-01	-1.088E-06	-1.088E-06	1.088E-06
0.90000	1.2000	0.90000	21.937	9.733E-05	9.982E-01	-2.681E-06	-2.681E-06	2.681E-06
0.92500	1.2000	0.92500	16.709	2.284E-04	9.971E-01	-4.856E-06	-4.857E-06	4.856E-06
0.95000	1.2000	0.95000	11.620	7.340E-04	9.955E-01	-1.127E-05	-1.127E-05	1.127E-05
0.96250	1.2000	0.96250	9.201	1.551E-03	9.955E-01	-1.876E-05	-1.878E-05	1.876E-05
0.97500	1.2001	0.97500	6.981	4.102E-03	9.994E-01	-3.923E-05	-3.926E-05	3.921E-05
0.98125	1.2001	0.98125	6.017	7.017E-03	1.004E 00	-5.663E-05	-5.669E-05	5.660E-05
0.98749	1.2002	0.98750	5.225	1.279E-02	1.009E 00	-8.617E-05	-8.627E-05	8.614E-05
0.99374	1.2003	0.99375	4.690	2.320E-02	1.006E 00	-1.209E-04	-1.210E-04	1.208E-04
0.99999	1.2005	1.00000	4.508	3.723E-02	9.993E-01	-1.357E-04	-1.357E-04	1.357E-04
1.00624	1.2007	1.00625	4.718	5.112E-02	1.005E 00	-1.189E-04	-1.188E-04	1.189E-04
1.01249	1.2011	1.01250	5.274	6.119E-02	1.006E 00	-8.359E-05	-8.351E-05	8.364E-05
1.01874	1.2015	1.01875	6.082	6.673E-02	9.997E-01	-5.531E-05	-5.525E-05	5.534E-05
1.02499	1.2019	1.02500	7.056	6.951E-02	9.931E-01	-3.817E-05	-3.813E-05	3.818E-05
1.03749	1.2027	1.03750	9.285	7.194E-02	9.856E-01	-1.834E-05	-1.833E-05	1.835E-05
1.04999	1.2035	1.05000	11.710	7.273E-02	9.823E-01	-1.110E-05	-1.109E-05	1.110E-05
1.07499	1.2051	1.07500	16.802	7.322E-02	9.776E-01	-4.806E-06	-4.805E-06	4.807E-06
1.09999	1.2067	1.10000	22.031	7.336E-02	9.728E-01	-2.652E-06	-2.652E-06	2.652E-06
1.14999	1.2096	1.15000	32.636	7.343E-02	9.629E-01	-1.082E-06	-1.081E-06	1.082E-06
1.19998	1.2123	1.20000	43.317	7.345E-02	9.533E-01	-5.631E-07	-5.630E-07	5.631E-07
1.29998	1.2170	1.30000	64.754	7.346E-02	9.360E-01	-2.256E-07	-2.256E-07	2.256E-07
1.39998	1.2210	1.40000	86.231	7.346E-02	9.209E-01	-1.176E-07	-1.176E-07	1.176E-07
1.49998	1.2245	1.50000	107.723	7.346E-02	9.078E-01	-7.221E-08	-7.221E-08	7.221E-08
1.59998	1.2276	1.60000	129.224	7.347E-02	8.964E-01	-4.842E-08	-4.842E-08	4.842E-08
1.69998	1.2303	1.70000	150.728	7.347E-02	8.862E-01	-3.252E-08	-3.252E-08	3.252E-08
1.79998	1.2327	1.80000	172.236	7.347E-02	8.772E-01	-2.294E-08	-2.294E-08	2.294E-08
1.89998	1.2348	1.90000	193.745	7.347E-02	8.692E-01	-1.619E-08	-1.619E-08	1.619E-08
1.99998	1.2367	2.00000	215.256	7.347E-02	8.619E-01	-1.154E-08	-1.154E-08	1.154E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.507

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.851E-07	-6.851E-07	6.851E-07	6.851E-07	-8.976E-09	-8.976E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.272E-08	-1.272E-08
0.30000	3.257E-08	149.703	-3.025E-06	-3.025E-06	3.025E-06	3.025E-06	-1.803E-08	-1.803E-08
0.40000	4.850E-08	199.605	-5.020E-06	-5.020E-06	5.020E-06	5.020E-06	-2.686E-08	-2.686E-08
0.50000	7.234E-08	249.506	-7.996E-06	-7.996E-06	7.996E-06	7.996E-06	-4.005E-08	-4.005E-08
0.60000	1.179E-07	299.407	-1.258E-05	-1.258E-05	1.258E-05	1.258E-05	-6.529E-08	-6.529E-08
0.70000	2.263E-07	349.308	-2.075E-05	-2.075E-05	2.075E-05	2.075E-05	-1.253E-07	-1.253E-07
0.80000	5.658E-07	399.209	-3.860E-05	-3.860E-05	3.860E-05	3.860E-05	-3.133E-07	-3.133E-07
0.85000	1.088E-06	424.160	-5.821E-05	-5.821E-05	5.821E-05	5.821E-05	-6.026E-07	-6.027E-07
0.90000	2.681E-06	449.110	-1.011E-04	-1.011E-04	1.011E-04	1.011E-04	-1.484E-06	-1.484E-06
0.92500	4.858E-06	461.585	-1.468E-04	-1.468E-04	1.468E-04	1.468E-04	-2.689E-06	-2.690E-06
0.95000	1.128E-05	474.060	-2.398E-04	-2.399E-04	2.398E-04	2.399E-04	-6.240E-06	-6.243E-06
0.96250	1.878E-05	480.298	-3.293E-04	-3.294E-04	3.294E-04	3.295E-04	-1.039E-05	-1.040E-05
0.97500	3.928E-05	486.535	-4.988E-04	-4.990E-04	4.994E-04	4.998E-04	-2.172E-05	-2.174E-05
0.98125	5.672E-05	489.653	-6.466E-04	-6.470E-04	6.483E-04	6.490E-04	-3.136E-05	-3.139E-05
0.98749	8.632E-05	492.772	-8.646E-04	-8.652E-04	8.705E-04	8.717E-04	-4.772E-05	-4.777E-05
0.99374	1.210E-04	495.890	-1.183E-03	-1.183E-03	1.203E-03	1.204E-03	-6.693E-05	-6.698E-05
0.99999	1.357E-04	499.008	-1.574E-03	-1.575E-03	1.627E-03	1.629E-03	-7.515E-05	-7.516E-05
1.00624	1.187E-04	502.126	-1.955E-03	-1.956E-03	2.055E-03	2.057E-03	-6.581E-05	-6.577E-05
1.01249	8.348E-05	505.244	-2.251E-03	-2.251E-03	2.395E-03	2.396E-03	-4.629E-05	-4.624E-05
1.01874	5.523E-05	508.362	-2.451E-03	-2.451E-03	2.623E-03	2.624E-03	-3.062E-05	-3.059E-05
1.02499	3.812E-05	511.481	-2.587E-03	-2.588E-03	2.776E-03	2.776E-03	-2.113E-05	-2.112E-05
1.03749	1.833E-05	517.718	-2.745E-03	-2.745E-03	2.949E-03	2.949E-03	-1.016E-05	-1.015E-05
1.04999	1.109E-05	523.955	-2.829E-03	-2.829E-03	3.040E-03	3.041E-03	-6.144E-06	-6.142E-06
1.07499	4.805E-06	536.430	-2.917E-03	-2.917E-03	3.136E-03	3.136E-03	-2.661E-06	-2.661E-06
1.09999	2.652E-06	548.906	-2.959E-03	-2.959E-03	3.184E-03	3.184E-03	-1.469E-06	-1.468E-06
1.14999	1.081E-06	573.856	-2.996E-03	-2.996E-03	3.232E-03	3.232E-03	-5.989E-07	-5.988E-07
1.19998	5.630E-07	598.806	-3.010E-03	-3.011E-03	3.257E-03	3.257E-03	-3.118E-07	-3.118E-07
1.29998	2.256E-07	648.707	-3.018E-03	-3.018E-03	3.285E-03	3.285E-03	-1.249E-07	-1.249E-07
1.39998	1.176E-07	698.609	-3.016E-03	-3.016E-03	3.303E-03	3.303E-03	-6.513E-08	-6.513E-08
1.49998	7.221E-08	748.510	-3.010E-03	-3.010E-03	3.318E-03	3.318E-03	-3.998E-08	-3.998E-08
1.59998	4.842E-08	798.411	-3.003E-03	-3.003E-03	3.331E-03	3.331E-03	-2.681E-08	-2.681E-08
1.69998	3.252E-08	848.312	-2.995E-03	-2.995E-03	3.343E-03	3.344E-03	-1.801E-08	-1.801E-08
1.79998	2.294E-08	898.213	-2.986E-03	-2.986E-03	3.355E-03	3.355E-03	-1.270E-08	-1.270E-08
1.89998	1.619E-08	948.114	-2.976E-03	-2.976E-03	3.366E-03	3.366E-03	-8.962E-09	-8.962E-09
1.99998	1.154E-08	998.015	-2.967E-03	-2.967E-03	3.377E-03	3.377E-03	-6.389E-09	-6.389E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.507

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.958E-15
0.10000	3.108E-11	3.105E-11	-6.697E-20	-6.697E-20	-7.685E-10	-7.685E-10	-2.626E-15
0.20000	8.691E-11	8.686E-11	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-3.755E-15
0.30000	1.842E-10	1.841E-10	-2.033E-19	-2.033E-19	-4.442E-09	-4.442E-09	-5.902E-15
0.40000	3.901E-10	3.900E-10	-3.708E-19	-3.708E-19	-8.608E-09	-8.608E-09	-9.987E-15
0.50000	7.731E-10	7.733E-10	-6.772E-19	-6.772E-19	-1.622E-08	-1.622E-08	-1.997E-14
0.60000	1.751E-09	1.751E-09	-1.392E-18	-1.392E-18	-3.077E-08	-3.077E-08	-4.664E-14
0.70000	4.972E-09	4.971E-09	-3.643E-18	-3.643E-18	-6.498E-08	-6.498E-08	-1.358E-13
0.80000	2.033E-08	2.033E-08	-1.445E-17	-1.446E-17	-1.768E-07	-1.768E-07	-6.090E-13
0.85000	5.387E-08	5.387E-08	-3.802E-17	-3.803E-17	-3.549E-07	-3.549E-07	-1.738E-12
0.90000	2.024E-07	2.024E-07	-1.568E-16	-1.569E-16	-9.569E-07	-9.570E-07	-7.519E-12
0.92500	4.880E-07	4.881E-07	-3.541E-16	-3.542E-16	-1.864E-06	-1.864E-06	-2.125E-11
0.95000	1.691E-06	1.692E-06	-1.209E-15	-1.209E-15	-4.324E-06	-4.326E-06	-8.095E-11
0.96250	3.623E-06	3.627E-06	-2.683E-15	-2.686E-15	-7.649E-06	-7.655E-06	-1.973E-10
0.97500	1.110E-05	1.112E-05	-8.650E-15	-8.665E-15	-1.688E-05	-1.690E-05	-4.945E-10
0.98125	2.154E-05	2.158E-05	-1.555E-14	-1.558E-14	-2.795E-05	-2.800E-05	-8.355E-10
0.98749	4.648E-05	4.660E-05	-2.996E-14	-3.002E-14	-4.856E-05	-4.864E-05	-1.282E-09
0.99374	1.100E-04	1.103E-04	-5.191E-14	-5.198E-14	-8.689E-05	-8.705E-05	-1.746E-09
0.99999	2.372E-04	2.377E-04	-6.267E-14	-6.267E-14	-1.421E-04	-1.423E-04	-1.974E-09
1.00624	3.586E-04	3.589E-04	-5.052E-14	-5.045E-14	-1.966E-04	-1.968E-04	-1.716E-09
1.01249	4.170E-04	4.171E-04	-2.853E-14	-2.847E-14	-2.335E-04	-2.336E-04	-1.250E-09
1.01874	4.413E-04	4.414E-04	-1.498E-14	-1.495E-14	-2.532E-04	-2.533E-04	-8.036E-10
1.02499	4.517E-04	4.518E-04	-8.281E-15	-8.268E-15	-2.639E-04	-2.639E-04	-4.777E-10
1.03749	4.568E-04	4.569E-04	-2.589E-15	-2.586E-15	-2.727E-04	-2.727E-04	-1.913E-10
1.04999	4.548E-04	4.549E-04	-1.180E-15	-1.179E-15	-2.759E-04	-2.760E-04	-7.863E-11
1.07499	4.475E-04	4.476E-04	-3.491E-16	-3.490E-16	-2.783E-04	-2.784E-04	-2.080E-11
1.09999	4.398E-04	4.398E-04	-1.546E-16	-1.545E-16	-2.792E-04	-2.793E-04	-7.415E-12
1.14999	4.252E-04	4.252E-04	-3.767E-17	-3.767E-17	-2.798E-04	-2.799E-04	-1.721E-12
1.19998	4.116E-04	4.116E-04	-1.435E-17	-1.435E-17	-2.800E-04	-2.800E-04	-6.047E-13
1.29998	3.870E-04	3.870E-04	-3.626E-18	-3.626E-18	-2.801E-04	-2.801E-04	-1.353E-13
1.39998	3.652E-04	3.652E-04	-1.387E-18	-1.387E-18	-2.802E-04	-2.802E-04	-4.652E-14
1.49998	3.458E-04	3.458E-04	-6.754E-19	-6.753E-19	-2.802E-04	-2.802E-04	-1.994E-14
1.59998	3.283E-04	3.283E-04	-3.698E-19	-3.698E-19	-2.802E-04	-2.802E-04	-9.979E-15
1.69998	3.125E-04	3.126E-04	-2.028E-19	-2.028E-19	-2.802E-04	-2.802E-04	-5.900E-15
1.79998	2.982E-04	2.982E-04	-1.164E-19	-1.164E-19	-2.802E-04	-2.802E-04	-3.757E-15
1.89998	2.851E-04	2.851E-04	-6.680E-20	-6.680E-20	-2.802E-04	-2.802E-04	-2.629E-15
1.99998	2.731E-04	2.732E-04	-3.830E-20	-3.830E-20	-2.802E-04	-2.802E-04	-1.961E-15

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 1.500 θ_D= 0. ρ_0= 5.633

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.5000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	1.5000	0.10000	193.651	1.734E-07	1.000E-00	-1.621E-08	-1.621E-08	1.621E-08
0.20000	1.5000	0.20000	172.146	2.435E-07	1.000E-00	-2.298E-08	-2.298E-08	2.298E-08
0.30000	1.5000	0.30000	150.643	3.935E-07	9.999E-01	-3.256E-08	-3.256E-08	3.256E-08
0.40000	1.5000	0.40000	129.145	6.804E-07	9.999E-01	-4.849E-08	-4.849E-08	4.849E-08
0.50000	1.5000	0.50000	107.653	1.054E-06	9.999E-01	-7.230E-08	-7.230E-08	7.230E-08
0.60000	1.5000	0.60000	86.174	1.227E-06	9.998E-01	-1.178E-07	-1.178E-07	1.178E-07
0.70000	1.5000	0.70000	64.720	4.616E-06	9.996E-01	-2.258E-07	-2.258E-07	2.258E-07
0.80000	1.5000	0.80000	43.326	1.563E-05	9.990E-01	-5.628E-07	-5.628E-07	5.628E-07
0.85000	1.5000	0.85000	32.689	4.002E-05	9.982E-01	-1.078E-06	-1.078E-06	1.078E-06
0.90000	1.5000	0.90000	22.170	1.344E-04	9.965E-01	-2.611E-06	-2.611E-06	2.610E-06
0.92500	1.5000	0.92500	17.022	3.074E-04	9.951E-01	-4.687E-06	-4.687E-06	4.686E-06
0.95000	1.5000	0.95000	12.078	9.349E-04	9.942E-01	-1.038E-05	-1.039E-05	1.038E-05
0.96250	1.5000	0.96250	9.780	1.847E-03	9.965E-01	-1.600E-05	-1.601E-05	1.600E-05
0.97500	1.5001	0.97500	7.738	4.280E-03	1.004E 00	-2.941E-05	-2.943E-05	2.940E-05
0.98125	1.5001	0.98125	6.886	6.801E-03	1.010E 00	-4.068E-05	-4.071E-05	4.067E-05
0.98749	1.5002	0.98750	6.211	1.067E-02	1.012E 00	-5.261E-05	-5.265E-05	5.260E-05
0.99374	1.5003	0.99375	5.775	1.649E-02	1.006E 00	-6.408E-05	-6.411E-05	6.408E-05
0.99999	1.5004	1.00000	5.634	2.384E-02	9.996E-01	-6.896E-05	-6.896E-05	6.896E-05
1.00624	1.5005	1.00625	5.810	3.110E-02	1.006E 00	-6.297E-05	-6.295E-05	6.298E-05
1.01249	1.5008	1.01250	6.275	3.663E-02	1.012E 00	-5.137E-05	-5.134E-05	5.139E-05
1.01874	1.5010	1.01875	6.973	4.033E-02	1.008E 00	-3.939E-05	-3.936E-05	3.940E-05
1.02499	1.5012	1.02500	7.841	4.273E-02	1.002E 00	-2.830E-05	-2.828E-05	2.830E-05
1.03749	1.5017	1.03750	9.902	4.503E-02	9.924E-01	-1.548E-05	-1.547E-05	1.548E-05
1.04999	1.5023	1.05000	12.210	4.589E-02	9.882E-01	-1.014E-05	-1.014E-05	1.015E-05
1.07499	1.5033	1.07500	17.163	4.650E-02	9.856E-01	-4.613E-06	-4.612E-06	4.613E-06
1.09999	1.5043	1.10000	22.314	4.668E-02	9.841E-01	-2.568E-06	-2.568E-06	2.569E-06
1.14999	1.5061	1.15000	32.836	4.678E-02	9.804E-01	-1.067E-06	-1.067E-06	1.067E-06
1.19999	1.5078	1.20000	43.474	4.681E-02	9.763E-01	-5.586E-07	-5.586E-07	5.586E-07
1.29999	1.5108	1.30000	64.868	4.683E-02	9.683E-01	-2.247E-07	-2.247E-07	2.247E-07
1.39999	1.5134	1.40000	86.323	4.684E-02	9.611E-01	-1.174E-07	-1.174E-07	1.174E-07
1.49999	1.5156	1.50000	107.802	4.684E-02	9.548E-01	-7.210E-08	-7.210E-08	7.210E-08
1.59999	1.5176	1.60000	129.293	4.684E-02	9.493E-01	-4.835E-08	-4.835E-08	4.835E-08
1.69999	1.5193	1.70000	150.792	4.684E-02	9.444E-01	-3.248E-08	-3.246E-08	3.248E-08
1.79999	1.5208	1.80000	172.294	4.685E-02	9.400E-01	-2.292E-08	-2.292E-08	2.292E-08
1.89999	1.5222	1.90000	193.800	4.685E-02	9.361E-01	-1.617E-08	-1.617E-08	1.617E-08
1.99999	1.5234	2.00000	215.308	4.685E-02	9.326E-01	-1.153E-08	-1.153E-08	1.153E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 1.500 θ_D=0. ρ_0= 5.633

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.851E-07	-6.851E-07	6.851E-07	6.851E-07	-8.976E-09	-8.976E-09
0.20000	2.298E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.272E-08	-1.272E-08
0.30000	3.256E-08	149.703	-3.025E-06	-3.025E-06	3.025E-06	3.025E-06	-1.803E-08	-1.803E-08
0.40000	4.849E-08	199.605	-5.019E-06	-5.019E-06	5.019E-06	5.019E-06	-2.685E-08	-2.685E-08
0.50000	7.230E-08	249.506	-7.994E-06	-7.994E-06	7.994E-06	7.994E-06	-4.003E-08	-4.003E-08
0.60000	1.178E-07	299.407	-1.258E-05	-1.258E-05	1.258E-05	1.258E-05	-6.522E-08	-6.523E-08
0.70000	2.258E-07	349.308	-2.073E-05	-2.073E-05	2.073E-05	2.073E-05	-1.250E-07	-1.250E-07
0.80000	5.628E-07	399.209	-3.852E-05	-3.852E-05	3.852E-05	3.852E-05	-3.116E-07	-3.116E-07
0.85000	1.078E-06	424.160	-5.797E-05	-5.797E-05	5.797E-05	5.797E-05	-5.967E-07	-5.968E-07
0.90000	2.611E-06	449.110	-1.001E-04	-1.001E-04	1.001E-04	1.001E-04	-1.446E-06	-1.446E-06
0.92500	4.688E-06	461.585	-1.444E-04	-1.444E-04	1.444E-04	1.444E-04	-2.595E-06	-2.596E-06
0.95000	1.039E-05	474.060	-2.316E-04	-2.316E-04	2.316E-04	2.316E-04	-5.750E-06	-5.752E-06
0.96250	1.601E-05	480.297	-3.120E-04	-3.121E-04	3.121E-04	3.122E-04	-8.859E-06	-8.864E-06
0.97500	2.944E-05	486.535	-4.474E-04	-4.476E-04	4.480E-04	4.483E-04	-1.628E-05	-1.629E-05
0.98125	4.073E-05	489.653	-5.558E-04	-5.560E-04	5.574E-04	5.579E-04	-2.253E-05	-2.254E-05
0.98749	5.267E-05	492.771	-7.002E-04	-7.005E-04	7.043E-04	7.049E-04	-2.913E-05	-2.915E-05
0.99374	6.413E-05	495.890	-8.792E-04	-8.796E-04	8.892E-04	8.901E-04	-3.548E-05	-3.550E-05
0.99999	6.897E-05	499.008	-1.084E-03	-1.084E-03	1.105E-03	1.106E-03	-3.818E-05	-3.819E-05
1.00624	6.294E-05	502.126	-1.284E-03	-1.285E-03	1.321E-03	1.322E-03	-3.487E-05	-3.485E-05
1.01249	5.133E-05	505.245	-1.455E-03	-1.455E-03	1.507E-03	1.507E-03	-2.845E-05	-2.843E-05
1.01874	3.935E-05	508.363	-1.591E-03	-1.591E-03	1.654E-03	1.654E-03	-2.181E-05	-2.179E-05
1.02499	2.827E-05	511.482	-1.692E-03	-1.692E-03	1.763E-03	1.763E-03	-1.567E-05	-1.566E-05
1.03749	1.547E-05	517.719	-1.819E-03	-1.819E-03	1.899E-03	1.899E-03	-8.570E-06	-8.566E-06
1.04999	1.014E-05	523.956	-1.896E-03	-1.896E-03	1.980E-03	1.980E-03	-5.617E-06	-5.616E-06
1.07499	4.612E-06	536.431	-1.979E-03	-1.979E-03	2.068E-03	2.068E-03	-2.554E-06	-2.554E-06
1.09999	2.568E-06	548.906	-2.021E-03	-2.021E-03	2.112E-03	2.113E-03	-1.422E-06	-1.422E-06
1.14999	1.067E-06	573.857	-2.061E-03	-2.061E-03	2.156E-03	2.157E-03	-5.910E-07	-5.910E-07
1.19999	5.586E-07	598.807	-2.078E-03	-2.078E-03	2.178E-03	2.178E-03	-3.093E-07	-3.093E-07
1.29999	2.247E-07	648.708	-2.091E-03	-2.091E-03	2.200E-03	2.200E-03	-1.244E-07	-1.244E-07
1.39999	1.174E-07	698.609	-2.095E-03	-2.095E-03	2.212E-03	2.212E-03	-6.498E-08	-6.498E-08
1.49999	7.210E-08	748.510	-2.096E-03	-2.096E-03	2.221E-03	2.221E-03	-3.992E-08	-3.992E-08
1.59999	4.835E-08	798.411	-2.095E-03	-2.095E-03	2.228E-03	2.228E-03	-2.677E-08	-2.677E-08
1.69999	3.248E-08	848.313	-2.092E-03	-2.092E-03	2.234E-03	2.234E-03	-1.799E-08	-1.799E-08
1.79999	2.292E-08	898.214	-2.089E-03	-2.090E-03	2.240E-03	2.240E-03	-1.269E-08	-1.269E-08
1.89999	1.617E-08	948.115	-2.086E-03	-2.086E-03	2.245E-03	2.245E-03	-8.954E-09	-8.954E-09
1.99999	1.153E-08	998.016	-2.083E-03	-2.083E-03	2.250E-03	2.250E-03	-6.384E-09	-6.384E-09

PROPAGATION FREQUENCY= 1.660JE 08 ϕ_0= 1.500 θ_D= 0. ρ_c= 5.633

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-3.059E-15
0.10000	3.888E-11	3.890E-11	-6.696E-20	-6.696E-20	-7.685E-10	-7.685E-10	-4.103E-15
0.20000	1.085E-10	1.086E-10	-1.167E-19	-1.167E-19	-2.108E-09	-2.108E-09	-5.867E-15
0.30000	2.301E-10	2.301E-10	-2.032E-19	-2.032E-19	-4.441E-09	-4.441E-09	-9.218E-15
0.40000	4.874E-10	4.874E-10	-3.706E-19	-3.706E-19	-8.606E-09	-8.606E-09	-1.560E-14
0.50000	9.660E-10	9.66JE-10	-6.767E-19	-6.767E-19	-1.621E-08	-1.621E-08	-3.117E-14
0.60000	2.187E-09	2.187E-09	-1.390E-18	-1.390E-18	-3.075E-08	-3.075E-08	-7.274E-14
0.70000	6.200E-09	6.200E-09	-3.632E-18	-3.632E-18	-6.488E-08	-6.488E-08	-2.114E-13
0.80000	2.526E-08	2.526E-08	-1.434E-17	-1.434E-17	-1.761E-07	-1.761E-07	-9.427E-13
0.85000	6.633E-08	6.633E-08	-3.747E-17	-3.748E-17	-3.520E-07	-3.520E-07	-2.669E-12
0.90000	2.441E-07	2.442E-07	-1.512E-16	-1.513E-16	-9.376E-07	-9.377E-07	-1.132E-11
0.92500	5.801E-07	5.803E-07	-3.372E-16	-3.374E-16	-1.806E-06	-1.807E-06	-3.078E-11
0.95000	1.889E-06	1.890E-06	-1.064E-15	-1.064E-15	-4.032E-06	-4.034E-06	-1.089E-10
0.96250	3.779E-06	3.782E-06	-2.088E-15	-2.090E-15	-6.842E-06	-6.846E-06	-2.507E-10
0.97500	1.001E-05	1.002E-05	-5.458E-15	-5.465E-15	-1.325E-05	-1.327E-05	-5.559E-10
0.98125	1.772E-05	1.775E-05	-9.168E-15	-9.181E-15	-2.000E-05	-2.002E-05	-8.092E-10
0.98749	3.402E-05	3.409E-05	-1.383E-14	-1.385E-14	-3.071E-05	-3.075E-05	-1.162E-09
0.99374	6.778E-05	6.792E-05	-1.885E-14	-1.886E-14	-4.596E-05	-4.601E-05	-1.477E-09
0.99999	1.247E-04	1.249E-04	-2.112E-14	-2.112E-14	-6.502E-05	-6.508E-05	-1.592E-09
1.00624	1.788E-04	1.790E-04	-1.834E-14	-1.833E-14	-8.383E-05	-8.388E-05	-1.451E-09
1.01249	2.090E-04	2.091E-04	-1.332E-14	-1.330E-14	-9.857E-05	-9.861E-05	-1.120E-09
1.01874	2.241E-04	2.241E-04	-8.708E-15	-8.697E-15	-1.088E-04	-1.088E-04	-7.762E-10
1.02499	2.316E-04	2.316E-04	-5.133E-15	-5.127E-15	-1.152E-04	-1.152E-04	-5.344E-10
1.03749	2.369E-04	2.370E-04	-1.983E-15	-1.981E-15	-1.213E-04	-1.213E-04	-2.408E-10
1.04999	2.369E-04	2.369E-04	-1.026E-15	-1.025E-15	-1.240E-04	-1.240E-04	-1.045E-10
1.07499	2.333E-04	2.333E-04	-3.301E-16	-3.299E-16	-1.262E-04	-1.262E-04	-2.980E-11
1.09999	2.287E-04	2.287E-04	-1.479E-16	-1.479E-16	-1.270E-04	-1.270E-04	-1.108E-11
1.14999	2.197E-04	2.197E-04	-3.695E-17	-3.694E-17	-1.276E-04	-1.276E-04	-2.627E-12
1.19999	2.115E-04	2.115E-04	-1.419E-17	-1.419E-17	-1.278E-04	-1.278E-04	-9.318E-13
1.29999	1.969E-04	1.969E-04	-3.606E-18	-3.606E-18	-1.279E-04	-1.279E-04	-2.099E-13
1.39999	1.842E-04	1.842E-04	-1.382E-18	-1.382E-18	-1.279E-04	-1.279E-04	-7.238E-14
1.49999	1.730E-04	1.730E-04	-6.739E-19	-6.739E-19	-1.279E-04	-1.279E-04	-3.106E-14
1.59999	1.632E-04	1.632E-04	-3.691E-19	-3.691E-19	-1.279E-04	-1.279E-04	-1.556E-14
1.69999	1.544E-04	1.544E-04	-2.024E-19	-2.024E-19	-1.279E-04	-1.280E-04	-9.205E-15
1.79999	1.465E-04	1.465E-04	-1.162E-19	-1.162E-19	-1.279E-04	-1.280E-04	-5.863E-15
1.89999	1.393E-04	1.393E-04	-6.670E-20	-6.670E-20	-1.279E-04	-1.280E-04	-4.104E-15
1.99999	1.329E-04	1.329E-04	-3.825E-20	-3.825E-20	-1.279E-04	-1.280E-04	-3.061E-15

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 2.000 θ_D= 0. ρ_a= 7.509

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	2.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	2.0000	0.10000	193.658	1.951E-07	9.999E-01	-1.621E-08	-1.621E-08	1.621E-08
0.20000	2.0000	0.20000	172.160	3.468E-07	9.999E-01	-2.297E-08	-2.297E-08	2.297E-08
0.30000	2.0000	0.30000	150.667	4.936E-07	9.998E-01	-3.255E-08	-3.255E-08	3.255E-08
0.40000	2.0000	0.40000	129.183	8.671E-07	9.998E-01	-4.845E-08	-4.845E-08	4.845E-08
0.50000	2.0000	0.50000	107.710	1.174E-06	9.997E-01	-7.222E-08	-7.223E-08	7.222E-08
0.60000	2.0000	0.60000	86.260	1.494E-06	9.994E-01	-1.175E-07	-1.175E-07	1.175E-07
0.70000	2.0000	0.70000	64.853	5.710E-06	9.990E-01	-2.248E-07	-2.248E-07	2.248E-07
0.80000	2.0000	0.80000	43.553	1.964E-05	9.978E-01	-5.564E-07	-5.564E-07	5.564E-07
0.85000	2.0000	0.85000	33.008	4.781E-05	9.963E-01	-1.055E-06	-1.055E-06	1.055E-06
0.90000	2.0000	0.90000	22.665	1.611E-04	9.939E-01	-2.472E-06	-2.472E-06	2.471E-06
0.92500	2.0000	0.92500	17.680	3.558E-04	9.929E-01	-4.349E-06	-4.350E-06	4.349E-06
0.95000	2.0000	0.95000	13.012	9.972E-04	9.961E-01	-8.786E-06	-8.788E-06	8.785E-06
0.96250	2.0000	0.96250	10.927	1.822E-03	1.002E 00	-1.276E-05	-1.276E-05	1.276E-05
0.97500	2.0001	0.97500	9.162	3.504E-03	1.012E 00	-1.897E-05	-1.898E-05	1.897E-05
0.98125	2.0001	0.98125	8.463	4.906E-03	1.015E 00	-2.299E-05	-2.300E-05	2.299E-05
0.98750	2.0001	0.98750	7.934	6.894E-03	1.013E 00	-2.730E-05	-2.731E-05	2.730E-05
0.99375	2.0002	0.99375	7.607	9.386E-03	1.005E 00	-3.092E-05	-3.092E-05	3.092E-05
1.00000	2.0003	1.00000	7.511	1.221E-02	9.998E-01	-3.208E-05	-3.208E-05	3.208E-05
1.00624	2.0003	1.00625	7.654	1.501E-02	1.006E 00	-3.038E-05	-3.038E-05	3.039E-05
1.01249	2.0004	1.01250	8.022	1.749E-02	1.014E 00	-2.640E-05	-2.640E-05	2.641E-05
1.01874	2.0006	1.01875	8.588	1.928E-02	1.016E 00	-2.222E-05	-.222E-05	2.223E-05
1.02499	2.0007	1.02500	9.315	2.059E-02	1.013E 00	-1.819E-05	-1.819E-05	1.820E-05
1.03749	2.0009	1.03750	11.120	2.214E-02	1.002E 00	-1.233E-05	-1.233E-05	1.233E-05
1.04999	2.0012	1.05000	13.228	2.289E-02	9.952E-01	-8.456E-06	-8.453E-06	8.457E-06
1.07499	2.0017	1.07500	17.919	2.351E-02	9.900E-01	-4.233E-06	-4.233E-06	4.234E-06
1.09999	2.0022	1.10000	22.913	2.370E-02	9.893E-01	-2.418E-06	-2.418E-06	2.418E-06
1.14999	2.0031	1.15000	33.265	2.381E-02	9.893E-01	-1.038E-06	-1.038E-06	1.038E-06
1.19999	2.0040	1.20000	43.812	2.384E-02	9.888E-01	-5.492E-07	-5.492E-07	5.492E-07
1.29999	2.0055	1.30000	65.114	2.386E-02	9.867E-01	-2.229E-07	-2.229E-07	2.229E-07
1.39999	2.0068	1.40000	86.522	2.387E-02	9.844E-01	-1.168E-07	-1.168E-07	1.168E-07
1.49999	2.0080	1.50000	107.973	2.387E-02	9.822E-01	-7.187E-08	-7.187E-08	7.187E-08
1.59999	2.0090	1.60000	129.445	2.388E-02	9.802E-01	-4.822E-08	-4.822E-08	4.822E-08
1.69999	2.0098	1.70000	150.930	2.388E-02	9.784E-01	-3.241E-08	-3.241E-08	3.241E-08
1.79999	2.0106	1.80000	172.423	2.388E-02	9.767E-01	-2.287E-08	-2.287E-08	2.287E-08
1.89999	2.0113	1.90000	193.921	2.388E-02	9.753E-01	-1.614E-08	-1.614E-08	1.614E-08
1.99999	2.0120	2.00000	215.422	2.388E-02	9.739E-01	-1.151E-08	-1.151E-08	1.151E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 2.000 θ_D= 0. ρ_a= 7.509

z	$_x\mu-1$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.851E-07	-6.851E-07	6.851E-07	6.851E-07	-8.975E-09	-8.975E-09
0.20000	2.297E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.272E-08	-1.272E-08
0.30000	3.255E-08	149.703	-3.024E-06	-3.024E-06	3.024E-06	3.024E-06	-1.802E-08	-1.802E-08
0.40000	4.845E-08	199.605	-5.018E-06	-5.018E-06	5.018E-06	5.018E-06	-2.683E-08	-2.683E-08
0.50000	7.223E-08	249.506	-7.989E-06	-7.989E-06	7.989E-06	7.989E-06	-3.999E-08	-3.999E-08
0.60000	1.175E-07	299.407	-1.256E-05	-1.256E-05	1.256E-05	1.256E-05	-6.508E-08	-6.509E-08
0.70000	2.246E-07	349.308	-2.069E-05	-2.069E-05	2.069E-05	2.069E-05	-1.245E-07	-1.245E-07
0.80000	5.564E-07	399.209	-3.833E-05	-3.833E-05	3.833E-05	3.833E-05	-3.081E-07	-3.081E-07
0.85000	1.055E-06	424.160	-5.745E-05	-5.745E-05	5.745E-05	5.745E-05	-5.843E-07	-5.843E-07
0.90000	2.472E-06	449.110	-9.814E-05	-9.814E-05	9.814E-05	9.814E-05	-1.369E-06	-1.369E-06
0.92500	4.350E-06	461.585	-1.396E-04	-1.396E-04	1.396E-04	1.396E-04	-2.408E-06	-2.409E-06
0.95000	8.790E-06	474.060	-2.161E-04	-2.161E-04	2.161E-04	2.161E-04	-4.865E-06	-4.866E-06
0.96250	1.277E-05	480.298	-2.826E-04	-2.827E-04	2.827E-04	2.828E-04	-7.065E-06	-7.067E-06
0.97500	1.898E-05	486.535	-3.789E-04	-3.789E-04	3.793E-04	3.794E-04	-1.050E-05	-1.051E-05
0.98125	2.300E-05	489.654	-4.440E-04	-4.441E-04	4.449E-04	4.451E-04	-1.273E-05	-1.273E-05
0.98750	2.732E-05	492.772	-5.215E-04	-5.216E-04	5.232E-04	5.235E-04	-1.512E-05	-1.512E-05
0.99375	3.093E-05	495.891	-6.121E-04	-6.123E-04	6.154E-04	6.157E-04	-1.712E-05	-1.712E-05
1.00000	3.208E-05	499.009	-7.099E-04	-7.101E-04	7.155E-04	7.159E-04	-1.776E-05	-1.776E-05
1.00624	3.038E-05	502.128	-8.066E-04	-8.067E-04	8.151E-04	8.154E-04	-1.682E-05	-1.682E-05
1.01249	2.639E-05	505.246	-8.940E-04	-8.941E-04	9.057E-04	9.060E-04	-1.462E-05	-1.462E-05
1.01874	2.221E-05	508.365	-9.682E-04	-9.683E-04	9.826E-04	9.828E-04	-1.231E-05	-1.230E-05
1.02499	1.818E-05	511.483	-1.030E-03	-1.030E-03	1.047E-03	1.047E-03	-1.007E-05	-1.007E-05
1.03749	1.233E-05	517.721	-1.122E-03	-1.122E-03	1.141E-03	1.141E-03	-6.828E-06	-6.826E-06
1.04999	8.452E-06	523.958	-1.185E-03	-1.185E-03	1.206E-03	1.206E-03	-4.682E-06	-4.681E-06
1.07499	4.232E-06	536.433	-1.258E-03	-1.258E-03	1.281E-03	1.281E-03	-2.344E-06	-2.344E-06
1.09999	2.417E-06	548.908	-1.298E-03	-1.298E-03	1.322E-03	1.322E-03	-1.339E-06	-1.339E-06
1.14999	1.038E-06	573.859	-1.337E-03	-1.337E-03	1.362E-03	1.362E-03	-5.745E-07	-5.745E-07
1.19999	5.492E-07	598.809	-1.356E-03	-1.356E-03	1.382E-03	1.382E-03	-3.041E-07	-3.041E-07
1.29999	2.229E-07	648.710	-1.372E-03	-1.372E-03	1.400E-03	1.400E-03	-1.234E-07	-1.234E-07
1.39999	1.168E-07	698.611	-1.379E-03	-1.379E-03	1.409E-03	1.409E-03	-6.466E-08	-6.466E-08
1.49999	7.187E-08	748.513	-1.382E-03	-1.382E-03	1.415E-03	1.415E-03	-3.980E-08	-3.980E-08
1.59999	4.822E-08	798.414	-1.384E-03	-1.384E-03	1.419E-03	1.419E-03	-2.670E-08	-2.670E-08
1.69999	3.241E-08	848.315	-1.385E-03	-1.385E-03	1.422E-03	1.422E-03	-1.795E-08	-1.795E-08
1.79999	2.287E-08	898.216	-1.385E-03	-1.385E-03	1.425E-03	1.425E-03	-1.266E-08	-1.266E-08
1.89999	1.614E-08	948.117	-1.385E-03	-1.385E-03	1.427E-03	1.427E-03	-8.937E-09	-8.937E-09
1.99999	1.151E-08	998.018	-1.385E-03	-1.385E-03	1.428E-03	1.428E-03	-6.373E-09	-6.373E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 2.000 θ_D= 0. ρ_a= 7.509

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-5.437E-15
0.10000	5.183E-11	5.184E-11	-6.695E-20	-6.695E-20	-7.684E-10	-7.684E-10	-7.292E-15
0.20000	1.447E-10	1.447E-10	-1.166E-19	-1.166E-19	-2.107E-09	-2.107E-09	-1.042E-14
0.30000	3.067E-10	3.067E-10	-2.031E-19	-2.031E-19	-4.439E-09	-4.439E-09	-1.638E-14
0.40000	6.495E-10	6.494E-10	-3.702E-19	-3.702E-19	-8.600E-09	-8.600E-09	-2.769E-14
0.50000	1.286E-09	1.286E-09	-6.756E-19	-6.756E-19	-1.620E-08	-1.620E-08	-5.529E-14
0.60000	2.908E-09	2.908E-09	-1.386E-18	-1.386E-18	-3.070E-08	-3.070E-08	-1.288E-13
0.70000	8.225E-09	8.225E-09	-3.609E-18	-3.609E-18	-6.465E-08	-6.465E-08	-3.728E-13
0.80000	3.318E-08	3.318E-08	-1.410E-17	-1.410E-17	-1.744E-07	-1.745E-07	-1.643E-12
0.85000	8.600E-08	8.600E-08	-3.633E-17	-3.633E-17	-3.459E-07	-3.459E-07	-4.570E-12
0.90000	3.039E-07	3.040E-07	-1.401E-16	-1.402E-16	-8.987E-07	-8.989E-07	-1.862E-11
0.92500	6.958E-07	6.960E-07	-3.044E-16	-3.045E-16	-1.692E-06	-1.693E-06	-4.697E-11
0.95000	2.012E-06	2.013E-06	-8.198E-16	-8.203E-16	-3.518E-06	-3.519E-06	-1.463E-10
0.96250	3.689E-06	3.691E-06	-1.466E-15	-1.467E-15	-5.605E-06	-5.607E-06	-2.873E-10
0.97500	8.180E-06	8.187E-06	-2.729E-15	-2.731E-15	-9.326E-06	-9.331E-06	-5.562E-10
0.98125	1.296E-05	1.297E-05	-3.691E-15	-3.693E-15	-1.232E-05	-1.232E-05	-7.385E-10
0.98750	2.141E-05	2.143E-05	-4.848E-15	-4.851E-15	-1.626E-05	-1.627E-05	-9.166E-10
0.99375	3.545E-05	3.550E-05	-5.914E-15	-5.916E-15	-2.133E-05	-2.134E-05	-1.042E-09
1.00000	5.428E-05	5.434E-05	-6.271E-15	-6.272E-15	-2.710E-05	-2.711E-05	-1.084E-09
1.00624	7.209E-05	7.214E-05	-5.751E-15	-5.749E-15	-3.278E-05	-3.280E-05	-1.022E-09
1.01249	8.441E-05	8.444E-05	-4.595E-15	-4.593E-15	-3.765E-05	-3.766E-05	-8.872E-10
1.01874	9.172E-05	9.174E-05	-3.500E-15	-3.497E-15	-4.140E-05	-4.141E-05	-7.004E-10
1.02499	9.602E-05	9.603E-05	-2.556E-15	-2.554E-15	-4.423E-05	-4.423E-05	-5.255E-10
1.03749	1.001E-04	1.001E-04	-1.391E-15	-1.390E-15	-4.773E-05	-4.774E-05	-2.679E-10
1.04999	1.013E-04	1.013E-04	-7.723E-16	-7.720E-16	-4.971E-05	-4.971E-05	-1.378E-10
1.07499	1.007E-04	1.007E-04	-2.934E-16	-2.933E-16	-5.147E-05	-5.148E-05	-4.457E-11
1.09999	9.887E-05	9.887E-05	-1.352E-16	-1.352E-16	-5.223E-05	-5.224E-05	-1.785E-11
1.14999	9.478E-05	9.478E-05	-3.543E-17	-3.543E-17	-5.277E-05	-5.277E-05	-4.443E-12
1.19999	9.093E-05	9.094E-05	-1.383E-17	-1.383E-17	-5.294E-05	-5.294E-05	-1.608E-12
1.29999	8.414E-05	8.414E-05	-3.564E-18	-3.564E-18	-5.304E-05	-5.305E-05	-3.676E-13
1.39999	7.832E-05	7.832E-05	-1.372E-18	-1.372E-18	-5.308E-05	-5.308E-05	-1.275E-13
1.49999	7.326E-05	7.327E-05	-6.706E-19	-6.706E-19	-5.309E-05	-5.309E-05	-5.486E-14
1.59999	6.883E-05	6.883E-05	-3.675E-19	-3.675E-19	-5.310E-05	-5.310E-05	-2.754E-14
1.69999	6.490E-05	6.490E-05	-2.017E-19	-2.017E-19	-5.310E-05	-5.311E-05	-1.631E-14
1.79999	6.139E-05	6.140E-05	-1.158E-19	-1.158E-19	-5.311E-05	-5.311E-05	-1.040E-14
1.89999	5.825E-05	5.825E-05	-6.650E-20	-6.650E-20	-5.311E-05	-5.311E-05	-7.281E-15
1.99999	5.541E-05	5.542E-05	-3.814E-20	-3.814E-20	-5.311E-05	-5.311E-05	-5.434E-15

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.395

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	2.5000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	2.5000	0.10000	193.666	2.868E-07	9.999E-01	-1.621E-08	-1.621E-08	1.621E-08
0.20000	2.5000	0.20000	172.178	4.069E-07	9.998E-01	-2.296E-08	-2.296E-08	2.296E-08
0.30000	2.5000	0.30000	150.699	6.136E-07	9.997E-01	-3.253E-08	-3.253E-08	3.253E-08
0.40000	2.5000	0.40000	129.232	1.054E-06	9.996E-01	-4.841E-08	-4.841E-08	4.841E-08
0.50000	2.5000	0.50000	107.784	1.547E-06	9.994E-01	-7.213E-08	-7.213E-08	7.213E-08
0.60000	2.5000	0.60000	86.370	1.868E-06	9.990E-01	-1.172E-07	-1.172E-07	1.172E-07
0.70000	2.5000	0.70000	65.024	6.723E-06	9.983E-01	-2.236E-07	-2.236E-07	2.236E-07
0.80000	2.5000	0.80000	43.843	2.113E-05	9.963E-01	-5.483E-07	-5.483E-07	5.483E-07
0.85000	2.5000	0.85000	33.414	5.336E-05	9.943E-01	-1.027E-06	-1.027E-06	1.027E-06
0.90000	2.5000	0.90000	23.286	1.759E-04	9.920E-01	-2.339E-06	-2.339E-06	2.339E-06
0.92500	2.5000	0.92500	18.491	3.767E-04	9.928E-01	-3.966E-06	-3.967E-06	3.966E-06
0.95000	2.5000	0.95000	14.123	9.622E-04	1.001E 00	-7.203E-06	-7.205E-06	7.202E-06
0.96250	2.5000	0.96250	12.244	1.600E-03	1.009E 00	-1.008E-05	-1.008E-05	1.008E-05
0.97500	2.5001	0.97500	10.717	2.682E-03	1.017E 00	-1.325E-05	-1.325E-05	1.325E-05
0.98125	2.5001	0.98125	10.137	3.442E-03	1.017E 00	-1.470E-05	-1.470E-05	1.470E-05
0.98750	2.5001	0.98750	9.709	4.446E-03	1.011E 00	-1.632E-05	-1.632E-05	1.632E-05
0.99375	2.5001	0.99375	9.455	5.613E-03	1.003E 00	-1.750E-05	-1.750E-05	1.750E-05
1.00000	2.5002	1.00000	9.388	6.873E-03	9.998E-01	-1.783E-05	-1.783E-05	1.783E-05
1.00625	2.5002	1.00625	9.513	8.126E-03	1.005E 00	-1.723E-05	-1.722E-05	1.723E-05
1.01250	2.5003	1.01250	9.822	9.269E-03	1.014E 00	-1.582E-05	-1.582E-05	1.582E-05
1.01875	2.5003	1.01875	10.299	1.016E-02	1.019E 00	-1.428E-05	-1.428E-05	1.428E-05
1.02500	2.5004	1.02500	10.921	1.088E-02	1.019E 00	-1.278E-05	-1.277E-05	1.278E-05
1.03749	2.5005	1.03750	12.512	1.188E-02	1.011E 00	-9.612E-06	-9.609E-06	9.613E-06
1.04999	2.5007	1.05000	14.432	1.247E-02	1.002E 00	-6.817E-06	-6.816E-06	6.818E-06
1.07499	2.5010	1.07500	18.846	1.298E-02	9.928E-01	-3.810E-06	-3.809E-06	3.810E-06
1.09999	2.5012	1.10000	23.662	1.318E-02	9.905E-01	-2.262E-06	-2.262E-06	2.262E-06
1.14999	2.5018	1.15000	33.808	1.330E-02	9.909E-01	-1.001E-06	-1.001E-06	1.001E-06
1.19999	2.5022	1.20000	44.244	1.334E-02	9.917E-01	-5.374E-07	-5.374E-07	5.374E-07
1.29999	2.5031	1.30000	65.430	1.336E-02	9.919E-01	-2.207E-07	-2.207E-07	2.207E-07
1.39999	2.5038	1.40000	86.778	1.338E-02	9.913E-01	-1.160E-07	-1.160E-07	1.160E-07
1.49999	2.5045	1.50000	108.193	1.338E-02	9.906E-01	-7.158E-08	-7.158E-08	7.158E-08
1.59999	2.5050	1.60000	129.641	1.338E-02	9.898E-01	-4.804E-08	-4.804E-08	4.804E-08
1.69999	2.5055	1.70000	151.108	1.338E-02	9.890E-01	-3.232E-08	-3.232E-08	3.232E-08
1.79999	2.5060	1.80000	172.588	1.339E-02	9.883E-01	-2.281E-08	-2.281E-08	2.281E-08
1.89999	2.5064	1.90000	194.076	1.339E-02	9.876E-01	-1.610E-08	-1.610E-08	1.610E-08
1.99999	2.5067	2.00000	215.569	1.339E-02	9.870E-01	-1.148E-08	-1.148E-08	1.148E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 2.500 θ_D=0. ρ_a=9.385

z	$_x\mu'$-1.0	T_o	$_oT_1$-T_o	$_xT_1$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.621E-08	49.901	-6.850E-07	-6.850E-07	6.850E-07	6.850E-07	-8.974E-09	-8.974E-09
0.20000	2.296E-08	99.802	-1.653E-06	-1.653E-06	1.653E-06	1.653E-06	-1.272E-08	-1.272E-08
0.30000	3.253E-08	149.703	-3.023E-06	-3.023E-06	3.023E-06	3.023E-06	-1.801E-08	-1.801E-08
0.40000	4.841E-08	199.605	-5.015E-06	-5.015E-06	5.015E-06	5.015E-06	-2.680E-08	-2.681E-08
0.50000	7.213E-08	249.506	-7.984E-06	-7.984E-06	7.984E-06	7.984E-06	-3.994E-08	-3.994E-08
0.60000	1.172E-07	299.407	-1.255E-05	-1.255E-05	1.255E-05	1.255E-05	-6.491E-08	-6.491E-08
0.70000	2.236E-07	349.308	-2.064E-05	-2.064E-05	2.064E-05	2.064E-05	-1.238E-07	-1.238E-07
0.80000	5.483E-07	399.209	-3.810E-05	-3.810E-05	3.810E-05	3.810E-05	-3.036E-07	-3.036E-07
0.85000	1.027E-06	424.160	-5.681E-05	-5.681E-05	5.681E-05	5.681E-05	-5.689E-07	-5.689E-07
0.90000	2.339E-06	449.110	-9.576E-05	-9.576E-05	9.576E-05	9.576E-05	-1.295E-06	-1.295E-06
0.92500	3.967E-06	461.585	-1.340E-04	-1.340E-04	1.340E-04	1.341E-04	-2.196E-06	-2.196E-06
0.95000	7.206E-06	474.060	-2.000E-04	-2.000E-04	2.000E-04	2.000E-04	-3.989E-06	-3.989E-06
0.96250	1.008E-05	480.298	-2.536E-04	-2.536E-04	2.537E-04	2.537E-04	-5.582E-06	-5.583E-06
0.97500	1.325E-05	486.535	-3.263E-04	-3.263E-04	3.265E-04	3.266E-04	-7.335E-06	-7.337E-06
0.98125	1.470E-05	489.654	-3.698E-04	-3.699E-04	3.702E-04	3.703E-04	-8.138E-06	-8.140E-06
0.98750	1.632E-05	492.773	-4.179E-04	-4.180E-04	4.186E-04	4.188E-04	-9.035E-06	-9.037E-06
0.99375	1.750E-05	495.891	-4.707E-04	-4.707E-04	4.718E-04	4.720E-04	-9.691E-06	-9.692E-06
1.00000	1.783E-05	499.010	-5.257E-04	-5.258E-04	5.275E-04	5.276E-04	-9.871E-06	-9.871E-06
1.00625	1.722E-05	502.129	-5.802E-04	-5.803E-04	5.827E-04	5.829E-04	-9.538E-06	-9.537E-06
1.01250	1.582E-05	505.247	-6.315E-04	-6.316E-04	6.348E-04	6.350E-04	-8.760E-06	-8.759E-06
1.01875	1.428E-05	508.366	-6.779E-04	-6.780E-04	6.819E-04	6.820E-04	-7.907E-06	-7.906E-06
1.02500	1.277E-05	511.485	-7.199E-04	-7.199E-04	7.245E-04	7.246E-04	-7.074E-06	-7.072E-06
1.03749	9.609E-06	517.722	-7.892E-04	-7.892E-04	7.947E-04	7.948E-04	-5.322E-06	-5.321E-06
1.04999	6.815E-06	523.959	-8.398E-04	-8.398E-04	8.460E-04	8.461E-04	-3.775E-06	-3.774E-06
1.07499	3.809E-06	536.435	-9.025E-04	-9.025E-04	9.094E-04	9.094E-04	-2.110E-06	-2.109E-06
1.09999	2.262E-06	548.910	-9.390E-04	-9.391E-04	9.463E-04	9.463E-04	-1.252E-06	-1.252E-06
1.14999	1.001E-06	573.860	-9.765E-04	-9.765E-04	9.843E-04	9.843E-04	-5.543E-07	-5.543E-07
1.19999	5.373E-07	598.811	-9.946E-04	-9.946E-04	1.003E-03	1.003E-03	-2.976E-07	-2.975E-07
1.29999	2.207E-07	648.712	-1.011E-03	-1.011E-03	1.020E-03	1.020E-03	-1.222E-07	-1.222E-07
1.39999	1.160E-07	698.613	-1.019E-03	-1.019E-03	1.029E-03	1.029E-03	-6.425E-08	-6.425E-08
1.49999	7.158E-08	748.514	-1.023E-03	-1.023E-03	1.033E-03	1.033E-03	-3.964E-08	-3.964E-08
1.59999	4.804E-08	798.415	-1.026E-03	-1.026E-03	1.037E-03	1.037E-03	-2.660E-08	-2.660E-08
1.69999	3.232E-08	848.316	-1.027E-03	-1.027E-03	1.039E-03	1.039E-03	-1.789E-08	-1.789E-08
1.79999	2.281E-08	898.217	-1.028E-03	-1.028E-03	1.041E-03	1.041E-03	-1.263E-08	-1.263E-08
1.89999	1.610E-08	948.118	-1.029E-03	-1.029E-03	1.042E-03	1.042E-03	-8.914E-09	-8.914E-09
1.99999	1.148E-08	998.020	-1.029E-03	-1.029E-03	1.043E-03	1.043E-03	-6.358E-09	-6.358E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-8.493E-15
0.10000	6.479E-11	6.478E-11	-6.694E-20	-6.694E-20	-7.683E-10	-7.683E-10	-1.139E-14
0.20000	1.809E-10	1.808E-10	-1.166E-19	-1.166E-19	-2.107E-09	-2.107E-09	-1.628E-14
0.30000	3.831E-10	3.831E-10	-2.029E-19	-2.029E-19	-4.437E-09	-4.437E-09	-2.556E-14
0.40000	8.109E-10	8.108E-10	-3.697E-19	-3.697E-19	-8.593E-09	-8.593E-09	-4.320E-14
0.50000	1.605E-09	1.605E-09	-6.742E-19	-6.742E-19	-1.618E-08	-1.618E-08	-8.614E-14
0.60000	3.623E-09	3.623E-09	-1.380E-18	-1.380E-18	-3.063E-08	-3.063E-08	-2.002E-13
0.70000	1.022E-08	1.022E-08	-3.579E-18	-3.580E-18	-6.436E-08	-6.436E-08	-5.765E-13
0.80000	4.056E-08	4.056E-08	-1.380E-17	-1.380E-17	-1.724E-07	-1.724E-07	-2.502E-12
0.85000	1.035E-07	1.035E-07	-3.492E-17	-3.492E-17	-3.384E-07	-3.384E-07	-6.814E-12
0.90000	3.505E-07	3.505E-07	-1.281E-16	-1.282E-16	-8.528E-07	-8.529E-07	-2.613E-11
0.92500	7.663E-07	7.665E-07	-2.683E-16	-2.684E-16	-1.563E-06	-1.563E-06	-6.147E-11
0.95000	1.985E-06	1.985E-06	-6.015E-16	-6.018E-16	-3.033E-06	-3.034E-06	-1.705E-10
0.96250	3.428E-06	3.429E-06	-1.016E-15	-1.016E-15	-4.523E-06	-4.525E-06	-2.869E-10
0.97500	6.678E-06	6.683E-06	-1.555E-15	-1.556E-15	-6.914E-06	-6.917E-06	-4.856E-10
0.98125	9.803E-06	9.811E-06	-1.828E-15	-1.829E-15	-8.498E-06	-8.501E-06	-6.113E-10
0.98750	1.462E-05	1.463E-05	-2.154E-15	-2.155E-15	-1.035E-05	-1.036E-05	-7.133E-10
0.99375	2.177E-05	2.179E-05	-2.405E-15	-2.405E-15	-1.250E-05	-1.250E-05	-1.799E-10
1.00000	3.063E-05	3.065E-05	-2.475E-15	-2.475E-15	-1.479E-05	-1.480E-05	-7.990E-10
1.00625	3.902E-05	3.904E-05	-2.345E-15	-2.345E-15	-1.706E-05	-1.707E-05	-7.639E-10
1.01250	4.520E-05	4.522E-05	-2.052E-15	-2.051E-15	-1.913E-05	-1.913E-05	-6.866E-10
1.01875	4.922E-05	4.923E-05	-1.748E-15	-1.747E-15	-2.089E-05	-2.089E-05	-5.724E-10
1.02500	5.187E-05	5.187E-05	-1.470E-15	-1.469E-15	-2.240E-05	-2.240E-05	-4.500E-10
1.03749	5.471E-05	5.471E-05	-9.431E-16	-9.427E-16	-2.464E-05	-2.464E-05	-2.645E-10
1.04999	5.595E-05	5.595E-05	-5.521E-16	-5.518E-16	-2.601E-05	-2.601E-05	-1.584E-10
1.07499	5.631E-05	5.631E-05	-2.539E-16	-2.539E-16	-2.740E-05	-2.740E-05	-5.716E-11
1.09999	5.555E-05	5.555E-05	-1.214E-16	-1.214E-16	-2.807E-05	-2.807E-05	-2.457E-11
1.14999	5.335E-05	5.335E-05	-3.360E-17	-3.360E-17	-2.856E-05	-2.856E-05	-6.527E-12
1.19999	5.115E-05	5.115E-05	-1.340E-17	-1.339E-17	-2.872E-05	-2.872E-05	-2.421E-12
1.29999	4.723E-05	4.723E-05	-3.510E-18	-3.510E-18	-2.882E-05	-2.882E-05	-5.636E-13
1.39999	4.389E-05	4.389E-05	-1.360E-18	-1.360E-18	-2.886E-05	-2.886E-05	-1.970E-13
1.49999	4.100E-05	4.100E-05	-6.665E-19	-6.665E-19	-2.887E-05	-2.887E-05	-8.500E-14
1.59999	3.847E-05	3.847E-05	-3.655E-19	-3.655E-19	-2.888E-05	-2.888E-05	-4.279E-14
1.69999	3.623E-05	3.624E-05	-2.008E-19	-2.008E-19	-2.888E-05	-2.888E-05	-2.537E-14
1.79999	3.425E-05	3.425E-05	-1.153E-19	-1.153E-19	-2.888E-05	-2.889E-05	-1.619E-14
1.89999	3.247E-05	3.247E-05	-6.623E-20	-6.623E-20	-2.889E-05	-2.889E-05	-1.135E-14
1.99999	3.086E-05	3.086E-05	-3.799E-20	-3.799E-20	-2.889E-05	-2.889E-05	-8.473E-15

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 3.000 θ_D= 0. ρ_a=11.261

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	3.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	3.0000	0.10000	193.676	3.435E-07	9.998E-01	-1.620E-08	-1.620E-08	1.620E-08
0.20000	3.0000	0.20000	172.201	3.669E-07	9.998E-01	-2.295E-08	-2.295E-08	2.295E-08
0.30000	3.0000	0.30000	150.738	6.937E-07	9.997E-01	-3.251E-08	-3.251E-08	3.251E-08
0.40000	3.0000	0.40000	129.292	1.254E-06	9.995E-01	-4.836E-08	-4.836E-08	4.836E-08
0.50000	3.0000	0.50000	107.874	1.788E-06	9.993E-01	-7.201E-08	-7.201E-08	7.201E-08
0.60000	3.0000	0.60000	86.505	2.134E-06	9.989E-01	-1.168E-07	-1.168E-07	1.168E-07
0.70000	3.0000	0.70000	65.232	7.897E-06	9.980E-01	-2.221E-07	-2.221E-07	2.221E-07
0.80000	3.0000	0.80000	44.196	2.743E-05	9.959E-01	-5.387E-07	-5.387E-07	5.387E-07
0.85000	3.0000	0.85000	33.904	6.126E-05	9.940E-01	-9.947E-07	-9.948E-07	9.947E-07
0.90000	3.0000	0.90000	24.024	1.976E-04	9.928E-01	-2.190E-06	-2.190E-06	2.190E-06
0.92500	3.0000	0.92500	19.437	4.051E-04	9.953E-01	-3.562E-06	-3.562E-06	3.562E-06
0.95000	3.0000	0.95000	15.372	9.229E-04	1.004E 00	-5.761E-06	-5.762E-06	5.761E-06
0.96250	3.0000	0.96250	13.684	1.447E-03	1.011E 00	-7.793E-06	-7.794E-06	7.792E-06
0.97500	3.0001	0.97500	12.356	2.248E-03	1.014E 00	-9.882E-06	-9.884E-06	9.882E-06
0.98125	3.0001	0.98125	11.866	2.768E-03	1.012E 00	-1.079E-05	-1.079E-05	1.079E-05
0.98750	3.0001	0.98750	11.513	3.361E-03	1.007E 00	-1.149E-05	-1.149E-05	1.149E-05
0.99375	3.0001	0.99375	11.310	4.012E-03	1.002E 00	-1.192E-05	-1.192E-05	1.192E-05
1.00000	3.0002	1.00000	11.265	4.691E-03	9.999E-01	-1.201E-05	-1.201E-05	1.201E-05
1.00625	3.0002	1.00625	11.380	5.365E-03	1.003E 00	-1.177E-05	-1.177E-05	1.177E-05
1.01250	3.0002	1.01250	11.650	5.996E-03	1.010E 00	-1.121E-05	-1.121E-05	1.121E-05
1.01875	3.0003	1.01875	12.065	6.559E-03	1.015E 00	-1.041E-05	-1.041E-05	1.041E-05
1.02500	3.0003	1.02500	12.610	7.043E-03	1.017E 00	-9.444E-06	-9.443E-06	9.445E-06
1.03750	3.0004	1.03750	14.027	7.776E-03	1.014E 00	-7.329E-06	-7.328E-06	7.330E-06
1.05000	3.0005	1.05000	15.779	8.251E-03	1.007E 00	-5.433E-06	-5.432E-06	5.433E-06
1.07500	3.0007	1.07500	19.921	8.698E-03	9.967E-01	-3.372E-06	-3.371E-06	3.372E-06
1.09999	3.0008	1.10000	24.547	8.895E-03	9.931E-01	-2.091E-06	-2.091E-06	2.091E-06
1.14999	3.0012	1.15000	34.461	9.023E-03	9.926E-01	-9.589E-07	-9.588E-07	9.589E-07
1.19999	3.0015	1.20000	44.767	9.067E-03	9.935E-01	-5.234E-07	-5.234E-07	5.234E-07
1.29999	3.0021	1.30000	65.814	9.088E-03	9.945E-01	-2.179E-07	-2.179E-07	2.179E-07
1.39999	3.0026	1.40000	87.090	9.101E-03	9.947E-01	-1.151E-07	-1.151E-07	1.151E-07
1.49999	3.0030	1.50000	108.461	9.106E-03	9.946E-01	-7.122E-08	-7.122E-08	7.122E-08
1.59999	3.0034	1.60000	129.880	9.108E-03	9.944E-01	-4.783E-08	-4.783E-08	4.783E-08
1.69999	3.0038	1.70000	151.326	9.113E-03	9.941E-01	-3.220E-08	-3.220E-08	3.220E-08
1.79999	3.0041	1.80000	172.790	9.115E-03	9.938E-01	-2.274E-08	-2.274E-08	2.274E-08
1.89999	3.0043	1.90000	194.265	9.115E-03	9.935E-01	-1.605E-08	-1.605E-08	1.605E-08
1.99999	3.0046	2.00000	215.748	9.117E-03	9.932E-01	-1.145E-08	-1.145E-08	1.145E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 3.000 θ_D= 0. ρ_g=11.261

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.620E-08	49.901	-6.850E-07	-6.850E-07	6.850E-07	6.850E-07	-8.972E-09	-8.972E-09
0.20000	2.295E-08	99.802	-1.652E-06	-1.652E-06	1.652E-06	1.652E-06	-1.271E-08	-1.271E-08
0.30000	3.254E-08	149.703	-3.022E-06	-3.022E-06	3.022E-06	3.022E-06	-1.800E-08	-1.800E-08
0.40000	4.836E-08	199.605	-5.012E-06	-5.012E-06	5.012E-06	5.012E-06	-2.678E-08	-2.678E-08
0.50000	7.201E-08	249.506	-7.977E-06	-7.977E-06	7.977E-06	7.977E-06	-3.987E-08	-3.987E-08
0.60000	1.168E-07	299.407	-1.253E-05	-1.253E-05	1.253E-05	1.253E-05	-6.469E-08	-6.469E-08
0.70000	2.221E-07	349.308	-2.058E-05	-2.058E-05	2.058E-05	2.058E-05	-1.230E-07	-1.230E-07
0.80000	5.387E-07	399.209	-3.781E-05	-3.782E-05	3.781E-05	3.782E-05	-2.983E-07	-2.983E-07
0.85000	9.948E-07	424.160	-5.604E-05	-5.604E-05	5.604E-05	5.604E-05	-5.508E-07	-5.508E-07
0.90000	2.19CE-06	449.110	-9.302E-05	-9.302E-05	9.302E-05	9.303E-05	-1.213E-06	-1.213E-06
0.92500	3.563E-06	461.585	-1.279E-04	-1.279E-04	1.279E-04	1.279E-04	-1.972E-06	-1.972E-06
0.95000	5.763E-06	474.060	-1.849E-04	-1.849E-04	1.849E-04	1.849E-04	-3.190E-06	-3.191E-06
0.96250	7.795E-06	480.298	-2.270E-04	-2.270E-04	2.271E-04	2.271E-04	-4.315E-06	-4.316E-06
0.97500	9.885E-06	486.535	-2.822E-04	-2.822E-04	2.823E-04	2.824E-04	-5.472E-06	-5.473E-06
0.98125	1.079E-05	489.654	-3.144E-04	-3.144E-04	3.146E-04	3.147E-04	-5.973E-06	-5.974E-06
0.98750	1.169E-05	492.773	-3.491E-04	-3.492E-04	3.495E-04	3.496E-04	-6.363E-06	-6.363E-06
0.99375	1.192E-05	495.891	-3.856E-04	-3.856E-04	3.862E-04	3.863E-04	-6.598E-06	-6.598E-06
1.00000	1.201E-05	499.010	-4.229E-04	-4.229E-04	4.237E-04	4.238E-04	-6.651E-06	-6.651E-06
1.00625	1.177E-05	502.129	-4.599E-04	-4.600E-04	4.610E-04	4.611E-04	-6.516E-06	-6.516E-06
1.01250	1.121E-05	505.248	-4.957E-04	-4.957E-04	4.971E-04	4.971E-04	-6.209E-06	-6.208E-06
1.01875	1.041E-05	508.366	-5.293E-04	-5.294E-04	5.310E-04	5.311E-04	-5.765E-06	-5.764E-06
1.02500	9.442E-06	511.485	-5.602E-04	-5.602E-04	5.621E-04	5.622E-04	-5.229E-06	-5.229E-06
1.03750	7.327E-06	517.722	-6.123E-04	-6.123E-04	6.147E-04	6.147E-04	-4.058E-06	-4.058E-06
1.05000	5.431E-06	523.960	-6.516E-04	-6.516E-04	6.543E-04	6.543E-04	-3.008E-06	-3.008E-06
1.07500	3.37.E-06	536.435	-7.055E-04	-7.055E-04	7.086E-04	7.086E-04	-1.867E-06	-1.867E-06
1.09999	2.091E-06	548.910	-7.385E-04	-7.385E-04	7.418E-04	7.418E-04	-1.158E-06	-1.158E-06
1.14999	9.588E-07	573.861	-7.737E-04	-7.737E-04	7.773E-04	7.773E-04	-5.309E-07	-5.309E-07
1.19999	5.234E-07	598.811	-7.913E-04	-7.913E-04	7.950E-04	7.950E-04	-2.898E-07	-2.898E-07
1.29999	2.179E-07	648.712	-8.079E-04	-8.079E-04	8.120E-04	8.120E-04	-1.207E-07	-1.207E-07
1.39999	1.151E-07	698.613	-8.156E-04	-8.157E-04	8.201E-04	8.201E-04	-6.375E-08	-6.375E-08
1.49999	7.122E-08	748.515	-8.200E-04	-8.200E-04	8.247E-04	8.247E-04	-3.944E-08	-3.944E-08
1.59999	4.783E-08	798.416	-8.228E-04	-8.228E-04	8.278E-04	8.278E-04	-2.648E-08	-2.648E-08
1.69999	3.220E-08	848.317	-8.246E-04	-8.246E-04	8.299E-04	8.300E-04	-1.783E-08	-1.783E-08
1.79999	2.274E-08	898.218	-8.258E-04	-8.258E-04	8.315E-04	8.315E-04	-1.259E-08	-1.259E-08
1.89999	1.605E-08	948.119	-8.266E-04	-8.266E-04	8.326E-04	8.326E-04	-8.887E-09	-8.887E-09
1.99999	1.145E-08	998.020	-8.271E-04	-8.271E-04	8.334E-04	8.334E-04	-6.341E-09	-6.341E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 3.000 θ_D= 0. ρ_g=11.261

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.223E-14
0.10000	7.771E-11	7.768E-11	-6.692E-20	-6.692E-20	-7.682E-10	-7.682E-10	-1.639E-14
0.20000	2.169E-10	2.169E-10	-1.165E-19	-1.165E-19	-2.106E-09	-2.106E-09	-2.343E-14
0.30000	4.594E-10	4.594E-10	-2.027E-19	-2.027E-19	-4.435E-09	-4.435E-09	-3.677E-14
0.40000	9.718E-10	9.718E-10	-3.691E-19	-3.691E-19	-8.585E-09	-8.585E-09	-6.209E-14
0.50000	1.922E-09	1.922E-09	-6.725E-19	-6.725E-19	-1.615E-08	-1.615E-08	-1.236E-13
0.60000	4.333E-09	4.333E-09	-1.373E-18	-1.373E-18	-3.055E-08	-3.055E-08	-2.865E-13
0.70000	1.219E-08	1.219E-08	-3.544E-18	-3.544E-18	-6.401E-08	-6.401E-08	-8.197E-13
0.80000	4.755E-08	4.755E-08	-1.344E-17	-1.344E-17	-1.699E-07	-1.699E-07	-3.494E-12
0.85000	1.192E-07	1.193E-07	-3.329E-17	-3.329E-17	-3.295E-07	-3.295E-07	-9.285E-12
0.90000	3.882E-07	3.883E-07	-1.152E-16	-1.152E-16	-8.019E-07	-8.020E-07	-3.332E-11
0.92500	8.099E-07	8.100E-07	-2.315E-16	-2.316E-16	-1.425E-06	-1.425E-06	-7.306E-11
0.95000	1.910E-06	1.910E-06	-4.247E-16	-4.248E-16	-2.641E-06	-2.642E-06	-1.846E-10
0.96250	3.128E-06	3.129E-06	-6.800E-16	-6.802E-16	-3.661E-06	-3.662E-06	-2.743E-10
0.97500	5.416E-06	5.419E-06	-9.848E-16	-9.851E-16	-5.215E-06	-5.217E-06	-3.991E-10
0.98125	7.364E-06	7.368E-06	-1.129E-15	-1.129E-15	-6.205E-06	-6.206E-06	-4.661E-10
0.98750	1.004E-05	1.005E-05	-1.246E-15	-1.246E-15	-7.318E-06	-7.320E-06	-5.245E-10
0.99375	1.344E-05	1.345E-05	-1.318E-15	-1.318E-15	-8.520E-06	-8.523E-06	-5.628E-10
1.00000	1.732E-05	1.733E-05	-1.335E-15	-1.335E-15	-9.765E-06	-9.768E-06	-5.719E-10
1.00625	2.102E-05	2.103E-05	-1.293E-15	-1.293E-15	-1.100E-05	-1.100E-05	-5.493E-10
1.01250	2.401E-05	2.401E-05	-1.199E-15	-1.199E-15	-1.217E-05	-1.217E-05	-5.008E-10
1.01875	2.625E-05	2.626E-05	-1.068E-15	-1.068E-15	-1.323E-05	-1.323E-05	-4.373E-10
1.02500	2.785E-05	2.786E-05	-9.176E-16	-9.174E-16	-1.416E-05	-1.416E-05	-3.698E-10
1.03750	2.974E-05	2.975E-05	-6.180E-16	-6.178E-16	-1.559E-05	-1.559E-05	-2.515E-10
1.05000	3.076E-05	3.076E-05	-4.049E-16	-4.048E-16	-1.651E-05	-1.651E-05	-1.675E-10
1.07500	3.137E-05	3.137E-05	-2.148E-16	-2.147E-16	-1.765E-05	-1.765E-05	-6.666E-11
1.09999	3.116E-05	3.117E-05	-1.069E-16	-1.069E-16	-1.823E-05	-1.823E-05	-3.071E-11
1.14999	3.008E-05	3.008E-05	-3.153E-17	-3.153E-17	-1.867E-05	-1.867E-05	-8.746E-12
1.19999	2.887E-05	2.887E-05	-1.289E-17	-1.288E-17	-1.882E-05	-1.882E-05	-3.334E-12
1.29999	2.665E-05	2.666E-05	-3.446E-18	-3.446E-18	-1.892E-05	-1.892E-05	-7.932E-13
1.39999	2.475E-05	2.475E-05	-1.344E-18	-1.344E-18	-1.895E-05	-1.896E-05	-2.797E-13
1.49999	2.311E-05	2.311E-05	-6.615E-19	-6.615E-19	-1.897E-05	-1.897E-05	-1.212E-13
1.59999	2.167E-05	2.167E-05	-3.630E-19	-3.630E-19	-1.898E-05	-1.898E-05	-6.120E-14
1.69999	2.040E-05	2.040E-05	-1.997E-19	-1.997E-19	-1.898E-05	-1.898E-05	-3.633E-14
1.79999	1.928E-05	1.928E-05	-1.147E-19	-1.147E-19	-1.898E-05	-1.898E-05	-2.322E-14
1.89999	1.827E-05	1.827E-05	-6.591E-20	-6.591E-20	-1.898E-05	-1.898E-05	-1.629E-14
1.99999	1.736E-05	1.736E-05	-3.781E-20	-3.781E-20	-1.899E-05	-1.899E-05	-1.217E-14

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 4.000 θ_0= 0. ρ_a=15.009

z	ϕ	z_r	ρ	θ	β	$_0\mu-1.0$	$_x\mu-1.0$	$_0\mu'-1.0$
0.	4.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	4.0000	0.10000	193.701	3.268E-07	9.997E-01	-1.620E-08	-1.620E-08	1.620E-08
0.20000	4.0000	0.20000	172.258	6.670E-07	9.996E-01	-2.293E-08	-2.293E-08	2.293E-08
0.30000	4.0000	0.30000	150.836	1.027E-06	9.995E-01	-3.246E-08	-3.246E-08	3.246E-08
0.40000	4.0000	0.40000	129.444	1.681E-06	9.992E-01	-4.822E-08	-4.822E-08	4.822E-08
0.50000	4.0000	0.50000	108.102	2.401E-06	9.988E-01	-7.170E-08	-7.170E-08	7.170E-08
0.60000	4.0000	0.60000	86.846	3.042E-06	9.981E-01	-1.158E-07	-1.158E-07	1.158E-07
0.70000	4.0000	0.70000	65.759	9.498E-06	9.967E-01	-2.183E-07	-2.183E-07	2.183E-07
0.80000	4.0000	0.80000	45.080	3.458E-05	9.942E-01	-5.152E-07	-5.152E-07	5.152E-07
0.85000	4.0000	0.85000	35.119	7.620E-05	9.928E-01	-9.181E-07	-9.182E-07	9.181E-07
0.90000	4.0000	0.90000	25.806	2.356E-04	9.951E-01	-1.869E-06	-1.869E-06	1.869E-06
0.92500	4.0000	0.92500	21.657	4.525E-04	1.001E 00	-2.767E-06	-2.768E-06	2.767E-06
0.95000	4.0000	0.95000	18.166	8.431E-04	1.010E 00	-4.115E-06	-4.116E-06	4.115E-06
0.96250	4.0000	0.96250	16.798	1.148E-03	1.013E 00	-4.808E-06	-4.808E-06	4.807E-06
0.97500	4.0001	0.97500	15.775	1.538E-03	1.011E 00	-5.435E-06	-5.436E-06	5.435E-06
0.98125	4.0001	0.98125	15.414	1.775E-03	1.008E 00	-5.721E-06	-5.721E-06	5.721E-06
0.98750	4.0001	0.98750	15.165	2.035E-03	1.004E 00	-5.979E-06	-5.979E-06	5.979E-06
0.99375	4.0001	0.99375	15.032	2.336E-03	1.001E 00	-6.123E-06	-6.123E-06	6.123E-06
1.00000	4.0001	1.00000	15.018	2.639E-03	9.999E-01	-6.138E-06	-6.138E-06	6.138E-06
1.00625	4.0001	1.00625	15.125	2.940E-03	1.002E 00	-6.022E-06	-6.022E-06	6.022E-06
1.01250	4.0002	1.01250	15.349	3.226E-03	1.007E 00	-5.785E-06	-5.785E-06	5.785E-06
1.01875	4.0002	1.01875	15.686	3.483E-03	1.011E 00	-5.505E-06	-5.504E-06	5.505E-06
1.02500	4.0002	1.02500	16.128	3.709E-03	1.015E 00	-5.189E-06	-5.188E-06	5.189E-06
1.03750	4.0002	1.03750	17.295	4.076E-03	1.017E 00	-4.544E-06	-4.544E-06	4.544E-06
1.05000	4.0003	1.05000	18.777	4.346E-03	1.014E 00	-3.840E-06	-3.839E-06	3.840E-06
1.07500	4.0004	1.07500	22.425	4.680E-03	1.004E 00	-2.536E-06	-2.536E-06	2.536E-06
1.10000	4.0005	1.10000	26.666	4.851E-03	9.978E-01	-1.731E-06	-1.731E-06	1.732E-06
1.15000	4.0007	1.15000	36.069	4.991E-03	9.936E-01	-8.624E-07	-8.623E-07	8.624E-07
1.20000	4.0009	1.20000	46.070	5.036E-03	9.937E-01	-4.902E-07	-4.902E-07	4.902E-07
1.30000	4.0012	1.30000	66.781	5.059E-03	9.952E-01	-2.112E-07	-2.112E-07	2.112E-07
1.40000	4.0015	1.40000	87.879	5.075E-03	9.962E-01	-1.129E-07	-1.129E-07	1.129E-07
1.50000	4.0017	1.50000	109.141	5.077E-03	9.967E-01	-7.033E-08	-7.033E-08	7.033E-08
1.60000	4.0019	1.60000	130.486	5.082E-03	9.969E-01	-4.729E-08	-4.729E-08	4.729E-08
1.70000	4.0021	1.70000	151.879	5.087E-03	9.970E-01	-3.192E-08	-3.192E-08	3.192E-08
1.80000	4.0023	1.80000	173.303	5.090E-03	9.971E-01	-2.255E-08	-2.255E-08	2.255E-08
1.90000	4.0024	1.90000	194.747	5.090E-03	9.971E-01	-1.592E-08	-1.592E-08	1.592E-08
2.00000	4.0026	2.00000	216.205	5.090E-03	9.971E-01	-1.137E-08	-1.137E-08	1.137E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 4.000 θ_0= 0. ρ_a=15.009

z	$_x\mu'-1.0$	T_0	$_0T_1-T_0$	$_xT_1-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.620E-08	49.901	-6.848E-07	-6.848E-07	6.848E-07	6.848E-07	-8.968E-09	-8.969E-09
0.20000	2.293E-08	99.802	-1.652E-06	-1.652E-06	1.652E-06	1.652E-06	-1.270E-08	-1.270E-08
0.30000	3.246E-08	149.703	-3.020E-06	-3.020E-06	3.020E-06	3.020E-06	-1.797E-08	-1.797E-08
0.40000	4.822E-08	199.605	-5.005E-06	-5.005E-06	5.005E-06	5.005E-06	-2.670E-08	-2.670E-08
0.50000	7.170E-08	249.506	-7.959E-06	-7.959E-06	7.959E-06	7.959E-06	-3.970E-08	-3.970E-08
0.60000	1.158E-07	299.407	-1.248E-05	-1.248E-05	1.248E-05	1.248E-05	-6.414E-08	-6.414E-08
0.70000	2.183E-07	349.308	-2.042E-05	-2.042E-05	2.042E-05	2.042E-05	-1.209E-07	-1.209E-07
0.80000	5.152E-07	399.209	-3.713E-05	-3.713E-05	3.713E-05	3.713E-05	-2.853E-07	-2.853E-07
0.85000	9.182E-07	424.160	-5.422E-05	-5.423E-05	5.422E-05	5.423E-05	-5.084E-07	-5.084E-07
0.90000	1.869E-06	449.110	-8.693E-05	-8.693E-05	8.693E-05	8.694E-05	-1.035E-06	-1.035E-06
0.92500	2.768E-06	461.585	-1.153E-04	-1.153E-04	1.153E-04	1.153E-04	-1.532E-06	-1.532E-06
0.95000	4.116E-06	474.060	-1.580E-04	-1.580E-04	1.580E-04	1.581E-04	-2.279E-06	-2.279E-06
0.96250	4.808E-06	480.298	-1.859E-04	-1.859E-04	1.859E-04	1.859E-04	-2.662E-06	-2.662E-06
0.97500	5.436E-06	486.536	-2.178E-04	-2.178E-04	2.179E-04	2.179E-04	-3.010E-06	-3.010E-06
0.98125	5.722E-06	489.654	-2.352E-04	-2.352E-04	2.353E-04	2.353E-04	-3.168E-06	-3.168E-06
0.98750	5.980E-06	492.773	-2.534E-04	-2.534E-04	2.536E-04	2.536E-04	-3.311E-06	-3.311E-06
0.99375	6.123E-06	495.892	-2.723E-04	-2.723E-04	2.725E-04	2.725E-04	-3.390E-06	-3.391E-06
1.00000	6.138E-06	499.011	-2.914E-04	-2.914E-04	2.917E-04	2.917E-04	-3.399E-06	-3.399E-06
1.00625	6.022E-06	502.129	-3.104E-04	-3.104E-04	3.107E-04	3.107E-04	-3.334E-06	-3.334E-06
1.01250	5.785E-06	505.248	-3.288E-04	-3.288E-04	3.292E-04	3.292E-04	-3.203E-06	-3.203E-06
1.01875	5.504E-06	508.367	-3.464E-04	-3.464E-04	3.468E-04	3.469E-04	-3.048E-06	-3.048E-06
1.02500	5.188E-06	511.486	-3.630E-04	-3.630E-04	3.635E-04	3.636E-04	-2.873E-06	-2.873E-06
1.03750	4.544E-06	517.723	-3.934E-04	-3.934E-04	3.940E-04	3.940E-04	-2.516E-06	-2.516E-06
1.05000	3.839E-06	523.961	-4.195E-04	-4.195E-04	4.202E-04	4.202E-04	-2.126E-06	-2.126E-06
1.07500	2.536E-06	536.436	-4.589E-04	-4.589E-04	4.598E-04	4.598E-04	-1.404E-06	-1.404E-06
1.10000	1.731E-06	548.911	-4.852E-04	-4.852E-04	4.862E-04	4.862E-04	-9.588E-07	-9.587E-07
1.15000	8.623E-07	573.861	-5.154E-04	-5.154E-04	5.165E-04	5.165E-04	-4.775E-07	-4.775E-07
1.20000	4.902E-07	598.812	-5.315E-04	-5.315E-04	5.326E-04	5.327E-04	-2.714E-07	-2.714E-07
1.30000	2.112E-07	648.713	-5.474E-04	-5.474E-04	5.487E-04	5.487E-04	-1.169E-07	-1.169E-07
1.40000	1.129E-07	698.614	-5.551E-04	-5.551E-04	5.565E-04	5.565E-04	-6.250E-08	-6.250E-08
1.50000	7.033E-08	748.515	-5.595E-04	-5.595E-04	5.609E-04	5.609E-04	-3.894E-08	-3.894E-08
1.60000	4.729E-08	798.416	-5.623E-04	-5.623E-04	5.639E-04	5.639E-04	-2.619E-08	-2.619E-08
1.70000	3.192E-08	848.318	-5.642E-04	-5.642E-04	5.659E-04	5.659E-04	-1.767E-08	-1.767E-08
1.80000	2.255E-08	898.219	-5.655E-04	-5.655E-04	5.673E-04	5.673E-04	-1.249E-08	-1.249E-08
1.90000	1.592E-08	948.120	-5.664E-04	-5.664E-04	5.683E-04	5.683E-04	-8.818E-09	-8.818E-09
2.00000	1.137E-08	998.021	-5.670E-04	-5.670E-04	5.690E-04	5.690E-04	-6.296E-09	-6.296E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 4.000 θ_D= 0. ρ_a=15.009

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-2.172E-14
0.10000	1.035E-10	1.035E-10	-6.687E-20	-6.687E-20	-7.680E-10	-7.680E-10	-2.911E-14
0.20000	2.888E-10	2.889E-10	-1.163E-19	-1.163E-19	-2.104E-09	-2.104E-09	-4.157E-14
0.30000	6.113E-10	6.113E-10	-2.022E-19	-2.022E-19	-4.428E-09	-4.428E-09	-6.516E-14
0.40000	1.291E-09	1.291E-09	-3.675E-19	-3.675E-19	-8.564E-09	-8.564E-09	-1.098E-13
0.50000	2.550E-09	2.550E-09	-6.682E-19	-6.682E-19	-1.609E-08	-1.609E-08	-2.177E-13
0.60000	5.723E-09	5.723E-09	-1.356E-18	-1.356E-18	-3.035E-08	-3.035E-08	-5.013E-13
0.70000	1.587E-08	1.587E-08	-3.455E-18	-3.455E-18	-6.314E-08	-6.314E-08	-1.411E-12
0.80000	5.962E-08	5.963E-08	-1.259E-17	-1.259E-17	-1.640E-07	-1.640E-07	-5.763E-12
0.85000	1.426E-07	1.427E-07	-2.957E-17	-2.957E-17	-3.090E-07	-3.090E-07	-1.447E-11
0.90000	4.223E-07	4.223E-07	-8.914E-17	-8.915E-17	-6.958E-07	-6.959E-07	-4.516E-11
0.92500	8.092E-07	8.094E-07	-1.638E-16	-1.639E-16	-1.155E-06	-1.155E-06	-8.729E-11
0.95000	1.655E-06	1.655E-06	-2.822E-16	-2.823E-16	-1.978E-06	-1.979E-06	-1.685E-10
0.96250	2.493E-06	2.493E-06	-3.492E-16	-3.493E-16	-2.569E-06	-2.569E-06	-2.308E-10
0.97500	3.766E-06	3.767E-06	-4.050E-16	-4.051E-16	-3.279E-06	-3.279E-06	-2.977E-10
0.98125	4.646E-06	4.648E-06	-4.207E-16	-4.208E-16	-3.665E-06	-3.666E-06	-3.249E-10
0.98750	5.697E-06	5.699E-06	-4.500E-16	-4.500E-16	-4.070E-06	-4.070E-06	-3.429E-10
0.99375	6.919E-06	6.922E-06	-4.670E-16	-4.670E-16	-4.500E-06	-4.500E-06	-3.530E-10
1.00000	8.215E-06	8.218E-06	-4.687E-16	-4.687E-16	-4.939E-06	-4.939E-06	-3.541E-10
1.00625	9.457E-06	9.459E-06	-4.550E-16	-4.550E-16	-5.372E-06	-5.372E-06	-3.459E-10
1.01250	1.054E-05	1.054E-05	-4.274E-16	-4.274E-16	-5.785E-06	-5.786E-06	-3.297E-10
1.01875	1.141E-05	1.142E-05	-4.089E-16	-4.088E-16	-6.175E-06	-6.176E-06	-3.042E-10
1.02500	1.212E-05	1.212E-05	-3.877E-16	-3.877E-16	-6.548E-06	-6.549E-06	-2.731E-10
1.03750	1.313E-05	1.313E-05	-3.233E-16	-3.233E-16	-7.215E-06	-7.215E-06	-2.051E-10
1.05000	1.378E-05	1.378E-05	-2.567E-16	-2.566E-16	-7.756E-06	-7.757E-06	-1.482E-10
1.07500	1.436E-05	1.436E-05	-1.454E-16	-1.454E-16	-8.496E-06	-8.496E-06	-7.735E-11
1.10000	1.448E-05	1.448E-05	-7.876E-17	-7.875E-17	-8.904E-06	-8.904E-06	-4.008E-11
1.15000	1.416E-05	1.416E-05	-2.695E-17	-2.695E-17	-9.245E-06	-9.245E-06	-1.314E-11
1.20000	1.365E-05	1.365E-05	-1.169E-17	-1.169E-17	-9.378E-06	-9.378E-06	-5.325E-12
1.30000	1.262E-05	1.262E-05	-3.289E-18	-3.289E-18	-9.472E-06	-9.472E-06	-1.332E-12
1.40000	1.172E-05	1.172E-05	-1.306E-18	-1.306E-18	-9.504E-06	-9.504E-06	-4.800E-13
1.50000	1.093E-05	1.093E-05	-6.491E-19	-6.491E-19	-9.517E-06	-9.518E-06	-2.100E-13
1.60000	1.025E-05	1.025E-05	-3.569E-19	-3.569E-19	-9.525E-06	-9.525E-06	-1.069E-13
1.70000	9.647E-06	9.647E-06	-1.968E-19	-1.968E-19	-9.529E-06	-9.529E-06	-6.372E-14
1.80000	9.111E-06	9.111E-06	-1.132E-19	-1.132E-19	-9.531E-06	-9.531E-06	-4.087E-14
1.90000	8.632E-06	8.632E-06	-6.509E-20	-6.509E-20	-9.532E-06	-9.532E-06	-2.874E-14
2.00000	8.200E-06	8.201E-06	-3.737E-20	-3.737E-20	-9.533E-06	-9.533E-06	-2.150E-14

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 5.000 θ_D= 0. ρ_a=18.752

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	5.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	5.0000	0.10000	193.734	5.469E-07	9.996E-01	-1.619E-08	-1.619E-08	1.619E-08
0.20000	5.0000	0.20000	172.332	8.138E-07	9.995E-01	-2.291E-08	-2.291E-08	2.291E-08
0.30000	5.0000	0.30000	150.962	1.174E-06	9.992E-01	-3.239E-08	-3.239E-08	3.239E-08
0.40000	5.0000	0.40000	129.640	2.054E-06	9.989E-01	-4.804E-08	-4.804E-08	4.804E-08
0.50000	5.0000	0.50000	108.395	3.202E-06	9.984E-01	-7.131E-08	-7.131E-08	7.131E-08
0.60000	5.0000	0.60000	87.283	4.482E-06	9.974E-01	-1.146E-07	-1.146E-07	1.146E-07
0.70000	5.0000	0.70000	66.431	1.259E-05	9.958E-01	-2.136E-07	-2.136E-07	2.136E-07
0.80000	5.0000	0.80000	46.191	4.269E-05	9.934E-01	-4.872E-07	-4.872E-07	4.872E-07
0.85000	5.0000	0.85000	36.621	9.306E-05	9.933E-01	-8.315E-07	-8.316E-07	8.315E-07
0.90000	5.0000	0.90000	27.929	2.634E-04	9.986E-01	-1.547E-06	-1.547E-06	1.547E-06
0.92500	5.0000	0.92500	24.214	4.235E-04	1.005E 00	-2.153E-06	-2.154E-06	2.153E-06
0.95000	5.0000	0.95000	21.224	7.031E-04	1.011E 00	-2.907E-06	-2.907E-06	2.907E-06
0.96250	5.0000	0.96250	20.105	9.016E-04	1.011E 00	-3.301E-06	-3.301E-06	3.301E-06
0.97500	5.0001	0.97500	19.299	1.141E-03	1.007E 00	-3.618E-06	-3.618E-06	3.618E-06
0.98125	5.0001	0.98125	19.026	1.275E-03	1.004E 00	-3.732E-06	-3.732E-06	3.732E-06
0.98750	5.0001	0.98750	18.846	1.415E-03	1.002E 00	-3.809E-06	-3.810E-06	3.809E-06
0.99375	5.0001	0.99375	18.760	1.561E-03	9.999E-01	-3.847E-06	-3.847E-06	3.847E-06
1.00000	5.0001	1.00000	18.771	1.711E-03	9.999E-01	-3.842E-06	-3.842E-06	3.842E-06
1.00625	5.0001	1.00625	18.877	1.859E-03	1.002E 00	-3.796E-06	-3.796E-06	3.796E-06
1.01250	5.0001	1.01250	19.078	2.005E-03	1.005E 00	-3.710E-06	-3.710E-06	3.710E-06
1.01875	5.0001	1.01875	19.370	2.140E-03	1.008E 00	-3.589E-06	-3.589E-06	3.589E-06
1.02500	5.0001	1.02500	19.750	2.268E-03	1.012E 00	-3.437E-06	-3.437E-06	3.437E-06
1.03750	5.0002	1.03750	20.752	2.484E-03	1.016E 00	-3.067E-06	-3.067E-06	3.067E-06
1.05000	5.0002	1.05000	22.038	2.659E-03	1.016E 00	-2.650E-06	-2.650E-06	2.650E-06
1.07500	5.0002	1.07500	25.282	2.802E-03	1.010E 00	-1.958E-06	-1.958E-06	1.958E-06
1.10000	5.0003	1.10000	29.163	2.959E-03	1.003E 00	-1.386E-06	-1.386E-06	1.386E-06
1.15000	5.0004	1.15000	38.037	3.082E-03	9.957E-01	-7.574E-07	-7.574E-07	7.574E-07
1.20000	5.0006	1.20000	47.692	3.208E-03	9.942E-01	-4.517E-07	-4.517E-07	4.517E-07
1.30000	5.0008	1.30000	68.003	3.226E-03	9.951E-01	-2.030E-07	-2.030E-07	2.030E-07
1.40000	5.0009	1.40000	88.883	3.236E-03	9.962E-01	-1.101E-07	-1.101E-07	1.101E-07
1.50000	5.0011	1.50000	110.009	3.243E-03	9.969E-01	-6.920E-08	-6.920E-08	6.920E-08
1.60000	5.0012	1.60000	131.261	3.246E-03	9.974E-01	-4.662E-08	-4.662E-08	4.662E-08
1.70000	5.0013	1.70000	152.587	3.251E-03	9.976E-01	-3.155E-08	-3.155E-08	3.155E-08
1.80000	5.0015	1.80000	173.960	3.251E-03	9.978E-01	-2.231E-08	-2.231E-08	2.231E-08
1.90000	5.0015	1.90000	195.364	3.253E-03	9.980E-01	-1.577E-08	-1.577E-08	1.577E-08
2.00000	5.0016	2.00000	216.791	3.253E-03	9.980E-01	-1.127E-08	-1.127E-08	1.127E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 5.000 θ_D= 0. ρ_a=18.752

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.619E-08	49.901	-6.847E-07	-6.847E-07	6.847E-07	6.847E-07	-8.964E-09	-8.964E-09
0.20000	2.291E-08	99.802	-1.650E-06	-1.650E-06	1.650E-06	1.650E-06	-1.268E-08	-1.268E-08
0.30000	3.239E-08	149.703	-3.017E-06	-3.017E-06	3.017E-06	3.017E-06	-1.794E-08	-1.794E-08
0.40000	4.804E-08	199.605	-4.996E-06	-4.996E-06	4.996E-06	4.996E-06	-2.660E-08	-2.660E-08
0.50000	7.131E-08	249.506	-7.937E-06	-7.937E-06	7.936E-06	7.937E-06	-3.949E-08	-3.949E-08
0.60000	1.146E-07	299.407	-1.242E-05	-1.242E-05	1.242E-05	1.242E-05	-6.344E-08	-6.344E-08
0.70000	2.136E-07	349.308	-2.023E-05	-2.023E-05	2.023E-05	2.023E-05	-1.183E-07	-1.183E-07
0.80000	4.872E-07	399.209	-3.630E-05	-3.630E-05	3.630E-05	3.630E-05	-2.698E-07	-2.698E-07
0.85000	8.316E-07	424.160	-5.213E-05	-5.214E-05	5.213E-05	5.214E-05	-4.604E-07	-4.604E-07
0.90000	1.547E-06	449.110	-8.050E-05	-8.050E-05	8.050E-05	8.051E-05	-8.568E-07	-8.568E-07
0.92500	2.154E-06	461.585	-1.035E-04	-1.035E-04	1.035E-04	1.035E-04	-1.192E-06	-1.192E-06
0.95000	2.907E-06	474.060	-1.348E-04	-1.348E-04	1.348E-04	1.348E-04	-1.610E-06	-1.610E-06
0.96250	3.302E-06	480.298	-1.541E-04	-1.541E-04	1.542E-04	1.542E-04	-1.828E-06	-1.828E-06
0.97500	3.618E-06	486.536	-1.758E-04	-1.758E-04	1.758E-04	1.758E-04	-2.003E-06	-2.003E-06
0.98125	3.732E-06	489.654	-1.872E-04	-1.872E-04	1.873E-04	1.873E-04	-2.066E-06	-2.067E-06
0.98750	3.810E-06	492.773	-1.990E-04	-1.990E-04	1.991E-04	1.991E-04	-2.109E-06	-2.109E-06
0.99375	3.847E-06	495.892	-2.109E-04	-2.109E-04	2.110E-04	2.110E-04	-2.130E-06	-2.130E-06
1.00000	3.842E-06	499.011	-2.229E-04	-2.229E-04	2.230E-04	2.230E-04	-2.127E-06	-2.128E-06
1.00625	3.796E-06	502.130	-2.348E-04	-2.348E-04	2.350E-04	2.350E-04	-2.102E-06	-2.102E-06
1.01250	3.710E-06	505.248	-2.465E-04	-2.465E-04	2.467E-04	2.467E-04	-2.054E-06	-2.054E-06
1.01875	3.589E-06	508.367	-2.579E-04	-2.579E-04	2.581E-04	2.581E-04	-1.987E-06	-1.987E-06
1.02500	3.437E-06	511.486	-2.689E-04	-2.689E-04	2.691E-04	2.691E-04	-1.903E-06	-1.903E-06
1.03750	3.067E-06	517.723	-2.892E-04	-2.892E-04	2.894E-04	2.894E-04	-1.698E-06	-1.698E-06
1.05000	2.650E-06	523.961	-3.070E-04	-3.070E-04	3.073E-04	3.073E-04	-1.467E-06	-1.467E-06
1.07500	1.956E-06	536.436	-3.355E-04	-3.355E-04	3.358E-04	3.359E-04	-1.084E-06	-1.084E-06
1.10000	1.386E-06	548.911	-3.562E-04	-3.562E-04	3.566E-04	3.566E-04	-7.677E-07	-7.676E-07
1.15000	7.574E-07	573.862	-3.821E-04	-3.821E-04	3.825E-04	3.825E-04	-4.194E-07	-4.194E-07
1.20000	4.517E-07	598.812	-3.964E-04	-3.964E-04	3.969E-04	3.969E-04	-2.501E-07	-2.501E-07
1.30000	2.030E-07	648.713	-4.115E-04	-4.115E-04	4.120E-04	4.120E-04	-1.124E-07	-1.124E-07
1.40000	1.101E-07	698.615	-4.189E-04	-4.189E-04	4.195E-04	4.195E-04	-6.095E-08	-6.095E-08
1.50000	6.920E-08	748.516	-4.232E-04	-4.232E-04	4.238E-04	4.238E-04	-3.832E-08	-3.832E-08
1.60000	4.662E-08	798.417	-4.260E-04	-4.260E-04	4.267E-04	4.267E-04	-2.581E-08	-2.581E-08
1.70000	3.155E-08	848.318	-4.279E-04	-4.279E-04	4.286E-04	4.286E-04	-1.747E-08	-1.747E-08
1.80000	2.231E-08	898.219	-4.293E-04	-4.293E-04	4.300E-04	4.300E-04	-1.235E-08	-1.235E-08
1.90000	1.577E-08	948.120	-4.302E-04	-4.302E-04	4.309E-04	4.309E-04	-8.730E-09	-8.730E-09
2.00000	1.127E-08	998.021	-4.308E-04	-4.308E-04	4.316E-04	4.316E-04	-6.239E-09	-6.239E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 5.000 θ_D= 0. ρ_a=18.752

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-3.391E-14
0.10000	1.293E-10	1.293E-10	-6.682E-20	-6.682E-20	-7.676E-10	-7.676E-10	-4.542E-14
0.20000	3.605E-10	3.605E-10	-1.161E-19	-1.161E-19	-2.102E-09	-2.102E-09	-6.481E-14
0.30000	7.621E-10	7.621E-10	-2.016E-19	-2.016E-19	-4.420E-09	-4.420E-09	-1.014E-13
0.40000	1.607E-09	1.607E-09	-3.655E-19	-3.655E-19	-8.537E-09	-8.537E-09	-1.705E-13
0.50000	3.167E-09	3.167E-09	-6.628E-19	-6.628E-19	-1.601E-08	-1.601E-08	-3.362E-13
0.60000	7.071E-09	7.071E-09	-1.335E-18	-1.335E-18	-3.009E-08	-3.009E-08	-7.678E-13
0.70000	1.929E-08	1.929E-08	-3.345E-18	-3.345E-18	-6.204E-08	-6.204E-08	-2.119E-12
0.80000	6.921E-08	6.921E-08	-1.159E-17	-1.159E-17	-1.570E-07	-1.570E-07	-8.221E-12
0.85000	1.573E-07	1.573E-07	-2.554E-17	-2.554E-17	-2.863E-07	-2.863E-07	-1.940E-11
0.90000	4.247E-07	4.248E-07	-6.565E-17	-6.565E-17	-5.939E-07	-5.940E-07	-5.298E-11
0.92500	7.540E-07	7.541E-07	-1.121E-16	-1.121E-16	-9.211E-07	-9.212E-07	-8.965E-11
0.95000	1.390E-06	1.390E-06	-1.753E-16	-1.753E-16	-1.453E-06	-1.453E-06	-1.465E-10
0.96250	1.950E-06	1.950E-06	-2.086E-16	-2.087E-16	-1.813E-06	-1.813E-06	-1.785E-10
0.97500	2.708E-06	2.708E-06	-2.366E-16	-2.366E-16	-2.230E-06	-2.230E-06	-2.082E-10
0.98125	3.176E-06	3.177E-06	-2.468E-16	-2.469E-16	-2.456E-06	-2.457E-06	-2.199E-10
0.98750	3.693E-06	3.693E-06	-2.539E-16	-2.539E-16	-2.691E-06	-2.691E-06	-2.281E-10
0.99375	4.249E-06	4.250E-06	-2.573E-16	-2.573E-16	-2.930E-06	-2.930E-06	-2.321E-10
1.00000	4.817E-06	4.818E-06	-2.569E-16	-2.569E-16	-3.171E-06	-3.171E-06	-2.316E-10
1.00625	5.364E-06	5.365E-06	-2.527E-16	-2.527E-16	-3.409E-06	-3.409E-06	-2.267E-10
1.01250	5.863E-06	5.863E-06	-2.449E-16	-2.449E-16	-3.642E-06	-3.642E-06	-2.176E-10
1.01875	6.298E-06	6.299E-06	-2.340E-16	-2.340E-16	-3.866E-06	-3.866E-06	-2.054E-10
1.02500	6.677E-06	6.678E-06	-2.205E-16	-2.205E-16	-4.079E-06	-4.079E-06	-1.908E-10
1.03750	7.274E-06	7.275E-06	-1.887E-16	-1.886E-16	-4.462E-06	-4.462E-06	-1.589E-10
1.05000	7.679E-06	7.679E-06	-1.544E-16	-1.544E-16	-4.783E-06	-4.783E-06	-1.283E-10
1.07500	8.118E-06	8.118E-06	-9.613E-17	-9.612E-17	-5.246E-06	-5.246E-06	-7.616E-11
1.10000	8.279E-06	8.279E-06	-5.496E-17	-5.495E-17	-5.523E-06	-5.523E-06	-4.566E-11
1.15000	8.209E-06	8.209E-06	-2.224E-17	-2.224E-17	-5.791E-06	-5.791E-06	-1.698E-11
1.20000	7.957E-06	7.957E-06	-1.037E-17	-1.037E-17	-5.902E-06	-5.902E-06	-7.328E-12
1.30000	7.384E-06	7.384E-06	-3.102E-18	-3.102E-18	-5.989E-06	-5.989E-06	-1.941E-12
1.40000	6.861E-06	6.861E-06	-1.259E-18	-1.259E-18	-6.019E-06	-6.019E-06	-7.178E-13
1.50000	6.403E-06	6.403E-06	-6.335E-19	-6.335E-19	-6.032E-06	-6.032E-06	-3.176E-13
1.60000	6.002E-06	6.002E-06	-3.493E-19	-3.493E-19	-6.039E-06	-6.039E-06	-1.634E-13
1.70000	5.648E-06	5.649E-06	-1.933E-19	-1.933E-19	-6.043E-06	-6.043E-06	-9.785E-14
1.80000	5.334E-06	5.334E-06	-1.113E-19	-1.113E-19	-6.045E-06	-6.046E-06	-6.303E-14
1.90000	5.053E-06	5.053E-06	-6.407E-20	-6.406E-20	-6.047E-06	-6.047E-06	-4.446E-14
2.00000	4.800E-06	4.800E-06	-3.681E-20	-3.681E-20	-6.047E-06	-6.048E-06	-3.333E-14

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 6.000 θ_D= 0. ρ_a=22.490

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	6.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	6.0000	0.10000	193.774	6.737E-07	9.994E-01	-1.618E-08	-1.618E-08	1.618E-08
0.20000	6.0000	0.20000	172.422	1.041E-06	9.992E-01	-2.287E-08	-2.287E-08	2.287E-08
0.30000	6.0000	0.30000	151.116	1.628E-06	9.988E-01	-3.231E-08	-3.231E-08	3.231E-08
0.40000	6.0000	0.40000	129.879	2.401E-06	9.983E-01	-4.783E-08	-4.783E-08	4.783E-08
0.50000	6.0000	0.50000	108.752	2.401E-06	9.975E-01	-7.084E-08	-7.084E-08	7.084E-08
0.60000	6.0000	0.60000	87.814	4.162E-06	9.962E-01	-1.131E-07	-1.131E-07	1.131E-07
0.70000	6.0000	0.70000	67.242	1.259E-05	9.942E-01	-2.081E-07	-2.081E-07	2.081E-07
0.80000	6.0000	0.80000	47.513	4.504E-05	9.924E-01	-4.558E-07	-4.558E-07	4.558E-07
0.85000	6.0000	0.85000	38.376	9.818E-05	9.943E-01	-7.406E-07	-7.406E-07	7.406E-07
0.90000	6.0000	0.90000	30.322	2.476E-04	1.003E 00	-1.260E-06	-1.260E-06	1.260E-06
0.92500	6.0000	0.92500	27.011	3.740E-04	1.009E 00	-1.679E-06	-1.679E-06	1.679E-06
0.95000	6.0000	0.95000	24.446	5.661E-04	1.012E 00	-2.110E-06	-2.110E-06	2.109E-06
0.96250	6.0000	0.96250	23.522	6.898E-04	1.010E 00	-2.290E-06	-2.290E-06	2.290E-06
0.97500	6.0001	0.97500	22.879	8.307E-04	1.005E 00	-2.425E-06	-2.425E-06	2.425E-06
0.98125	6.0001	0.98125	22.671	9.059E-04	1.003E 00	-2.470E-06	-2.470E-06	2.470E-06
0.98750	6.0001	0.98750	22.541	9.870E-04	1.001E 00	-2.503E-06	-2.503E-06	2.503E-06
0.99375	6.0001	0.99375	22.491	1.072E-03	9.996E-01	-2.517E-06	-2.517E-06	2.517E-06
1.00000	6.0001	1.00000	22.521	1.154E-03	9.999E-01	-2.508E-06	-2.508E-06	2.508E-06
1.00625	6.0001	1.00625	22.632	1.237E-03	1.001E 00	-2.479E-06	-2.479E-06	2.479E-06
1.01250	6.0001	1.01250	22.821	1.314E-03	1.004E 00	-2.438E-06	-2.438E-06	2.438E-06
1.01875	6.0001	1.01875	23.087	1.388E-03	1.007E 00	-2.381E-06	-2.381E-06	2.381E-06
1.02500	6.0001	1.02500	23.427	1.458E-03	1.011E 00	-2.310E-06	-2.310E-06	2.310E-06
1.03750	6.0001	1.03750	24.317	1.585E-03	1.016E 00	-2.134E-06	-2.134E-06	2.134E-06
1.05000	6.0001	1.05000	25.462	1.692E-03	1.018E 00	-1.927E-06	-1.927E-06	1.927E-06
1.07500	6.0002	1.07500	28.384	1.854E-03	1.015E 00	-1.486E-06	-1.486E-06	1.486E-06
1.10000	6.0002	1.10000	31.951	1.959E-03	1.008E 00	-1.132E-06	-1.131E-06	1.132E-06
1.15000	6.0003	1.15000	40.310	2.063E-03	9.987E-01	-6.551E-07	-6.551E-07	6.551E-07
1.20000	6.0004	1.20000	49.602	2.114E-03	9.951E-01	-4.103E-07	-4.103E-07	4.103E-07
1.30000	6.0005	1.30000	69.468	2.152E-03	9.944E-01	-1.935E-07	-1.935E-07	1.935E-07
1.40000	6.0006	1.40000	90.095	2.162E-03	9.954E-01	-1.068E-07	-1.068E-07	1.068E-07
1.50000	6.0007	1.50000	111.059	2.170E-03	9.963E-01	-6.787E-08	-6.787E-08	6.787E-08
1.60000	6.0008	1.60000	132.201	2.175E-03	9.969E-01	-4.581E-08	-4.581E-08	4.581E-08
1.70000	6.0009	1.70000	153.447	2.177E-03	9.974E-01	-3.111E-08	-3.111E-08	3.111E-08
1.80000	6.0010	1.80000	174.759	2.179E-03	9.977E-01	-2.202E-08	-2.202E-08	2.202E-08
1.90000	6.0010	1.90000	196.116	2.184E-03	9.979E-01	-1.557E-08	-1.557E-08	1.557E-08
2.00000	6.0011	2.00000	217.504	2.184E-03	9.981E-01	-1.114E-08	-1.114E-08	1.114E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0 6.000 θ_D= 0. ρ_a=22.490

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.618E-08	49.901	-6.844E-07	-6.844E-07	6.844E-07	6.844E-07	-8.958E-09	-8.958E-09
0.20000	2.287E-08	99.802	-1.649E-06	-1.649E-06	1.649E-06	1.649E-06	-1.267E-08	-1.267E-08
0.30000	3.231E-08	149.703	-3.013E-06	-3.013E-06	3.013E-06	3.013E-06	-1.789E-08	-1.789E-08
0.40000	4.783E-08	199.605	-4.985E-06	-4.985E-06	4.985E-06	4.985E-06	-2.648E-08	-2.648E-08
0.50000	7.084E-08	249.506	-7.909E-06	-7.909E-06	7.909E-06	7.909E-06	-3.923E-08	-3.923E-08
0.60000	1.131E-07	299.407	-1.235E-05	-1.235E-05	1.235E-05	1.235E-05	-6.260E-08	-6.260E-08
0.70000	2.081E-07	349.308	-2.000E-05	-2.000E-05	2.000E-05	2.000E-05	-1.152E-07	-1.152E-07
0.80000	4.558E-07	399.209	-3.534E-05	-3.534E-05	3.534E-05	3.534E-05	-2.524E-07	-2.524E-07
0.85000	7.406E-07	424.160	-4.987E-05	-4.987E-05	4.987E-05	4.987E-05	-4.101E-07	-4.101E-07
0.90000	1.260E-06	449.110	-7.446E-05	-7.446E-05	7.446E-05	7.446E-05	-6.976E-07	-6.976E-07
0.92500	1.679E-06	461.585	-9.269E-05	-9.269E-05	9.270E-05	9.270E-05	-9.297E-07	-9.298E-07
0.95000	2.110E-06	474.061	-1.164E-04	-1.164E-04	1.164E-04	1.164E-04	-1.168E-06	-1.168E-06
0.96250	2.290E-06	480.298	-1.301E-04	-1.301E-04	1.301E-04	1.301E-04	-1.268E-06	-1.268E-06
0.97500	2.425E-06	486.536	-1.448E-04	-1.448E-04	1.449E-04	1.449E-04	-1.343E-06	-1.343E-06
0.98125	2.470E-06	489.655	-1.525E-04	-1.525E-04	1.525E-04	1.525E-04	-1.368E-06	-1.368E-06
0.98750	2.503E-06	492.773	-1.602E-04	-1.602E-04	1.603E-04	1.603E-04	-1.386E-06	-1.386E-06
0.99375	2.517E-06	495.892	-1.681E-04	-1.681E-04	1.681E-04	1.681E-04	-1.394E-06	-1.394E-06
1.00000	2.508E-06	499.011	-1.759E-04	-1.759E-04	1.759E-04	1.760E-04	-1.389E-06	-1.389E-06
1.00625	2.479E-06	502.130	-1.837E-04	-1.837E-04	1.837E-04	1.837E-04	-1.373E-06	-1.373E-06
1.01250	2.438E-06	505.249	-1.913E-04	-1.913E-04	1.914E-04	1.914E-04	-1.350E-06	-1.350E-06
1.01875	2.381E-06	508.367	-1.989E-04	-1.989E-04	1.989E-04	1.989E-04	-1.318E-06	-1.318E-06
1.02500	2.310E-06	511.486	-2.062E-04	-2.062E-04	2.063E-04	2.063E-04	-1.279E-06	-1.279E-06
1.03750	2.134E-06	517.724	-2.200E-04	-2.200E-04	2.201E-04	2.202E-04	-1.182E-06	-1.181E-06
1.05000	1.927E-06	523.961	-2.327E-04	-2.327E-04	2.328E-04	2.328E-04	-1.067E-06	-1.067E-06
1.07500	1.486E-06	536.437	-2.540E-04	-2.540E-04	2.541E-04	2.541E-04	-8.228E-07	-8.228E-07
1.10000	1.131E-06	548.912	-2.701E-04	-2.701E-04	2.703E-04	2.703E-04	-6.265E-07	-6.265E-07
1.15000	6.551E-07	573.862	-2.919E-04	-2.919E-04	2.921E-04	2.921E-04	-3.627E-07	-3.627E-07
1.20000	4.103E-07	598.813	-3.051E-04	-3.051E-04	3.053E-04	3.053E-04	-2.272E-07	-2.272E-07
1.30000	1.935E-07	648.714	-3.191E-04	-3.191E-04	3.194E-04	3.194E-04	-1.072E-07	-1.072E-07
1.40000	1.068E-07	698.615	-3.263E-04	-3.263E-04	3.265E-04	3.265E-04	-5.913E-08	-5.913E-08
1.50000	6.787E-08	748.516	-3.305E-04	-3.305E-04	3.307E-04	3.307E-04	-3.758E-08	-3.758E-08
1.60000	4.581E-08	798.417	-3.333E-04	-3.333E-04	3.335E-04	3.336E-04	-2.537E-08	-2.537E-08
1.70000	3.111E-08	848.318	-3.351E-04	-3.351E-04	3.354E-04	3.355E-04	-1.723E-08	-1.723E-08
1.80000	2.202E-08	898.220	-3.364E-04	-3.364E-04	3.368E-04	3.368E-04	-1.219E-08	-1.219E-08
1.90000	1.557E-08	948.121	-3.374E-04	-3.374E-04	3.377E-04	3.377E-04	-8.624E-09	-8.624E-09
2.00000	1.114E-08	998.022	-3.380E-04	-3.380E-04	3.384E-04	3.384E-04	-6.170E-09	-6.170E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 6.000 θ_D= 0. ρ_a=22.490

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-4.877E-14
0.10000	1.550E-10	1.550E-10	-6.675E-20	-6.675E-20	-7.672E-10	-7.672E-10	-6.530E-14
0.20000	4.316E-10	4.316E-10	-1.158E-19	-1.158E-19	-2.099E-09	-2.099E-09	-9.307E-14
0.30000	9.115E-10	9.115E-10	-2.008E-19	-2.008E-19	-4.410E-09	-4.410E-09	-1.454E-13
0.40000	1.918E-09	1.918E-09	-3.631E-19	-3.631E-19	-8.504E-09	-8.504E-09	-2.437E-13
0.50000	3.769E-09	3.769E-09	-6.562E-19	-6.562E-19	-1.592E-08	-1.592E-08	-4.774E-13
0.60000	8.330E-09	8.330E-09	-1.309E-18	-1.309E-18	-2.978E-08	-2.978E-08	-1.079E-12
0.70000	2.230E-08	2.230E-08	-3.217E-18	-3.217E-18	-6.077E-08	-6.078E-08	-2.909E-12
0.80000	7.595E-08	7.595E-08	-1.050E-17	-1.050E-17	-1.492E-07	-1.492E-07	-1.067E-11
0.85000	1.640E-07	1.640E-07	-2.152E-17	-2.152E-17	-2.627E-07	-2.627E-07	-2.366E-11
0.90000	4.067E-07	4.067E-07	-4.721E-17	-4.721E-17	-5.104E-07	-5.104E-07	-5.716E-11
0.92500	6.790E-07	6.790E-07	-7.493E-17	-7.494E-17	-7.351E-07	-7.352E-07	-8.585E-11
0.95000	1.164E-06	1.165E-06	-1.084E-16	-1.084E-16	-1.078E-06	-1.078E-06	-1.243E-10
0.96250	1.555E-06	1.555E-06	-1.239E-16	-1.239E-16	-1.295E-06	-1.295E-06	-1.443E-10
0.97500	2.031E-06	2.031E-06	-1.359E-16	-1.359E-16	-1.539E-06	-1.539E-06	-1.610E-10
0.98125	2.320E-06	2.320E-06	-1.400E-16	-1.400E-16	-1.668E-06	-1.668E-06	-1.669E-10
0.98750	2.629E-06	2.629E-06	-1.428E-16	-1.428E-16	-1.800E-06	-1.800E-06	-1.705E-10
0.99375	2.950E-06	2.951E-06	-1.439E-16	-1.439E-16	-1.934E-06	-1.934E-06	-1.719E-10
1.00000	3.272E-06	3.273E-06	-1.432E-16	-1.432E-16	-2.069E-06	-2.069E-06	-1.711E-10
1.00625	3.583E-06	3.583E-06	-1.408E-16	-1.408E-16	-2.202E-06	-2.202E-06	-1.681E-10
1.01250	3.872E-06	3.872E-06	-1.370E-16	-1.370E-16	-2.332E-06	-2.332E-06	-1.626E-10
1.01875	4.134E-06	4.135E-06	-1.319E-16	-1.319E-16	-2.457E-06	-2.458E-06	-1.554E-10
1.02500	4.366E-06	4.366E-06	-1.256E-16	-1.256E-16	-2.578E-06	-2.578E-06	-1.467E-10
1.03750	4.740E-06	4.740E-06	-1.105E-16	-1.105E-16	-2.799E-06	-2.799E-06	-1.269E-10
1.05000	5.004E-06	5.005E-06	-9.367E-17	-9.366E-17	-2.990E-06	-2.990E-06	-1.067E-10
1.07500	5.331E-06	5.331E-06	-6.149E-17	-6.148E-17	-3.278E-06	-3.279E-06	-7.209E-11
1.10000	5.479E-06	5.479E-06	-4.028E-17	-4.027E-17	-3.463E-06	-3.463E-06	-4.653E-11
1.15000	5.498E-06	5.498E-06	-1.795E-17	-1.795E-17	-3.671E-06	-3.671E-06	-1.993E-11
1.20000	5.364E-06	5.364E-06	-8.993E-18	-8.992E-18	-3.769E-06	-3.769E-06	-9.169E-12
1.30000	5.002E-06	5.002E-06	-2.891E-18	-2.891E-18	-3.846E-06	-3.847E-06	-2.576E-12
1.40000	4.653E-06	4.653E-06	-1.204E-18	-1.204E-18	-3.875E-06	-3.875E-06	-9.812E-13
1.50000	4.344E-06	4.344E-06	-6.151E-19	-6.151E-19	-3.887E-06	-3.887E-06	-4.401E-13
1.60000	4.072E-06	4.072E-06	-3.402E-19	-3.402E-19	-3.894E-06	-3.894E-06	-2.292E-13
1.70000	3.832E-06	3.832E-06	-1.890E-19	-1.890E-19	-3.898E-06	-3.898E-06	-1.380E-13
1.80000	3.619E-06	3.619E-06	-1.090E-19	-1.090E-19	-3.900E-06	-3.900E-06	-8.935E-14
1.90000	3.428E-06	3.428E-06	-6.283E-20	-6.283E-20	-3.902E-06	-3.902E-06	-6.327E-14
2.00000	3.256E-06	3.256E-06	-3.614E-20	-3.614E-20	-3.902E-06	-3.902E-06	-4.753E-14

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 7.000 θ_D= 0. ρ_a=26.221

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	7.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	7.0000	0.10000	193.821	8.204E-07	9.993E-01	-1.617E-08	-1.617E-08	1.617E-08
0.20000	7.0000	0.20000	172.528	1.054E-06	9.991E-01	-2.283E-08	-2.283E-08	2.283E-08
0.30000	7.0000	0.30000	151.297	1.814E-06	9.987E-01	-3.222E-08	-3.222E-08	3.222E-08
0.40000	7.0000	0.40000	130.160	2.508E-06	9.982E-01	-4.758E-08	-4.758E-08	4.758E-08
0.50000	7.0000	0.50000	109.171	4.696E-06	9.973E-01	-7.029E-08	-7.029E-08	7.029E-08
0.60000	7.0000	0.60000	88.437	6.297E-06	9.961E-01	-1.113E-07	-1.113E-07	1.113E-07
0.70000	7.0000	0.70000	68.187	1.259E-05	9.944E-01	-2.018E-07	-2.018E-07	2.018E-07
0.80000	7.0000	0.80000	49.029	4.781E-05	9.942E-01	-4.223E-07	-4.223E-07	4.223E-07
0.85000	7.0000	0.85000	40.351	9.946E-05	9.974E-01	-6.537E-07	-6.537E-07	6.537E-07
0.90000	7.0000	0.90000	32.925	2.220E-04	1.005E 00	-1.061E-06	-1.061E-06	1.061E-06
0.92500	7.0000	0.92500	29.980	3.180E-04	1.008E 00	-1.289E-06	-1.289E-06	1.289E-06
0.95000	7.0000	0.95000	27.773	4.260E-04	1.008E 00	-1.569E-06	-1.569E-06	1.569E-06
0.96250	7.0000	0.96250	27.007	4.781E-04	1.005E 00	-1.680E-06	-1.680E-06	1.680E-06
0.97500	7.0000	0.97500	26.492	5.780E-04	1.002E 00	-1.758E-06	-1.758E-06	1.758E-06
0.98125	7.0001	0.98125	26.334	6.301E-04	1.001E 00	-1.783E-06	-1.783E-06	1.783E-06
0.98750	7.0001	0.98750	26.244	6.788E-04	9.999E-01	-1.798E-06	-1.798E-06	1.798E-06
0.99375	7.0001	0.99375	26.223	7.283E-04	9.995E-01	-1.801E-06	-1.801E-06	1.801E-06
1.00000	7.0001	1.00000	26.270	7.786E-04	9.999E-01	-1.793E-06	-1.793E-06	1.793E-06
1.00625	7.0001	1.00625	26.387	8.299E-04	1.001E 00	-1.775E-06	-1.775E-06	1.775E-06
1.01250	7.0001	1.01250	26.571	8.794E-04	1.003E 00	-1.746E-06	-1.746E-06	1.746E-06
1.01875	7.0001	1.01875	26.821	9.263E-04	1.005E 00	-1.708E-06	-1.708E-06	1.708E-06
1.02500	7.0001	1.02500	27.135	9.724E-04	1.007E 00	-1.661E-06	-1.661E-06	1.661E-06
1.03750	7.0001	1.03750	27.949	1.053E-03	1.011E 00	-1.545E-06	-1.545E-06	1.545E-06
1.05000	7.0001	1.05000	28.989	1.128E-03	1.013E 00	-1.408E-06	-1.408E-06	1.408E-06
1.07500	7.0001	1.07500	31.659	1.238E-03	1.014E 00	-1.154E-06	-1.153E-06	1.154E-06
1.10000	7.0002	1.10000	34.958	1.315E-03	1.010E 00	-9.279E-07	-9.279E-07	9.279E-07
1.15000	7.0002	1.15000	42.840	1.407E-03	1.002E 00	-5.767E-07	-5.767E-07	5.767E-07
1.20000	7.0003	1.20000	51.768	1.451E-03	9.978E-01	-3.731E-07	-3.731E-07	3.731E-07
1.30000	7.0004	1.30000	71.159	1.484E-03	9.955E-01	-1.832E-07	-1.832E-07	1.832E-07
1.40000	7.0004	1.40000	91.505	1.498E-03	9.959E-01	-1.031E-07	-1.031E-07	1.031E-07
1.50000	7.0005	1.50000	112.288	1.498E-03	9.965E-01	-6.633E-08	-6.633E-08	6.633E-08
1.60000	7.0006	1.60000	133.304	1.503E-03	9.971E-01	-4.488E-08	-4.488E-08	4.488E-08
1.70000	7.0006	1.70000	154.457	1.504E-03	9.975E-01	-3.061E-08	-3.061E-08	3.061E-08
1.80000	7.0007	1.80000	175.699	1.511E-03	9.979E-01	-2.169E-08	-2.169E-08	2.169E-08
1.90000	7.0007	1.90000	197.000	1.513E-03	9.981E-01	-1.535E-08	-1.535E-08	1.535E-08
2.00000	7.0008	2.00000	218.343	1.515E-03	9.983E-01	-1.100E-08	-1.100E-08	1.100E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 7.000 θ_D= 0. ρ_a= 26.221

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.617E-08	49.901	-6.842E-07	-6.842E-07	6.842E-07	6.842E-07	-8.951E-09	-8.951E-09
0.20000	2.283E-08	99.802	-1.648E-06	-1.648E-06	1.648E-06	1.648E-06	-1.264E-08	-1.264E-08
0.30000	3.224E-08	149.703	-3.008E-06	-3.008E-06	3.008E-06	3.008E-06	-1.784E-08	-1.784E-08
0.40000	4.758E-08	199.605	-4.972E-06	-4.972E-06	4.972E-06	4.972E-06	-2.635E-08	-2.635E-08
0.50000	7.029E-08	249.506	-7.877E-06	-7.877E-06	7.877E-06	7.877E-06	-3.892E-08	-3.892E-08
0.60000	1.113E-07	299.407	-1.226E-05	-1.226E-05	1.226E-05	1.226E-05	-6.164E-08	-6.164E-08
0.70000	2.018E-07	349.308	-1.973E-05	-1.973E-05	1.973E-05	1.973E-05	-1.117E-07	-1.117E-07
0.80000	4.223E-07	399.209	-3.432E-05	-3.432E-05	3.432E-05	3.432E-05	-2.338E-07	-2.338E-07
0.85000	6.538E-07	424.160	-4.758E-05	-4.759E-05	4.758E-05	4.759E-05	-3.620E-07	-3.620E-07
0.90000	1.061E-06	449.110	-6.871E-05	-6.871E-05	6.871E-05	6.871E-05	-5.876E-07	-5.876E-07
0.92500	1.284E-06	461.585	-8.337E-05	-8.337E-05	8.337E-05	8.338E-05	-7.139E-07	-7.139E-07
0.95000	1.569E-06	474.061	-1.012E-04	-1.012E-04	1.013E-04	1.013E-04	-8.687E-07	-8.687E-07
0.96250	1.680E-06	480.298	-1.114E-04	-1.114E-04	1.114E-04	1.114E-04	-9.301E-07	-9.301E-07
0.97500	1.758E-06	486.536	-1.221E-04	-1.221E-04	1.221E-04	1.221E-04	-9.736E-07	-9.737E-07
0.98125	1.783E-06	489.655	-1.276E-04	-1.276E-04	1.277E-04	1.277E-04	-9.874E-07	-9.874E-07
0.98750	1.798E-06	492.774	-1.332E-04	-1.332E-04	1.332E-04	1.332E-04	-9.954E-07	-9.954E-07
0.99375	1.801E-06	495.892	-1.388E-04	-1.388E-04	1.389E-04	1.389E-04	-9.972E-07	-9.973E-07
1.00000	1.799E-06	499.011	-1.444E-04	-1.444E-04	1.445E-04	1.445E-04	-9.930E-07	-9.930E-07
1.00625	1.775E-06	502.130	-1.500E-04	-1.500E-04	1.500E-04	1.500E-04	-9.828E-07	-9.828E-07
1.01250	1.746E-06	505.249	-1.555E-04	-1.555E-04	1.555E-04	1.555E-04	-9.669E-07	-9.669E-07
1.01875	1.708E-06	508.368	-1.609E-04	-1.609E-04	1.609E-04	1.609E-04	-9.456E-07	-9.456E-07
1.02500	1.66AE-06	511.486	-1.661E-04	-1.661E-04	1.662E-04	1.662E-04	-9.195E-07	-9.195E-07
1.03750	1.545E-06	517.724	-1.761E-04	-1.762E-04	1.762E-04	1.762E-04	-8.553E-07	-8.553E-07
1.05000	1.408E-06	523.962	-1.854E-04	-1.854E-04	1.854E-04	1.854E-04	-7.796E-07	-7.796E-07
1.07500	1.153E-06	536.437	-2.012E-04	-2.012E-04	2.013E-04	2.013E-04	-6.387E-07	-6.387E-07
1.10000	9.279E-07	548.912	-2.142E-04	-2.142E-04	2.143E-04	2.143E-04	-5.138E-07	-5.138E-07
1.15000	5.767E-07	573.863	-2.325E-04	-2.325E-04	2.326E-04	2.326E-04	-3.193E-07	-3.193E-07
1.20000	3.731E-07	598.813	-2.441E-04	-2.441E-04	2.442E-04	2.442E-04	-2.066E-07	-2.066E-07
1.30000	1.834E-07	648.714	-2.572E-04	-2.572E-04	2.573E-04	2.573E-04	-1.014E-07	-1.014E-07
1.40000	1.031E-07	698.615	-2.640E-04	-2.640E-04	2.642E-04	2.642E-04	-5.708E-08	-5.708E-08
1.50000	6.633E-08	748.516	-2.681E-04	-2.681E-04	2.683E-04	2.683E-04	-3.673E-08	-3.673E-08
1.60000	4.488E-08	798.418	-2.709E-04	-2.709E-04	2.710E-04	2.710E-04	-2.485E-08	-2.485E-08
1.70000	3.064E-08	848.319	-2.727E-04	-2.727E-04	2.729E-04	2.729E-04	-1.695E-08	-1.695E-08
1.80000	2.169E-08	898.220	-2.740E-04	-2.740E-04	2.742E-04	2.742E-04	-1.201E-08	-1.201E-08
1.90000	1.535E-08	948.121	-2.749E-04	-2.749E-04	2.751E-04	2.751E-04	-8.501E-09	-8.501E-09
2.00000	1.100E-08	998.022	-2.756E-04	-2.756E-04	2.757E-04	2.757E-04	-6.090E-09	-6.090E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 7.000 θ_D= 0. ρ_a=26.221

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-6.629E-14
0.10000	1.805E-10	1.805E-10	-6.667E-20	-6.667E-20	-7.667E-10	-7.667E-10	-8.870E-14
0.20000	5.024E-10	5.024E-10	-1.155E-19	-1.155E-19	-2.096E-09	-2.096E-09	-1.263E-13
0.30000	1.060E-09	1.060E-09	-1.998E-19	-1.998E-19	-4.398E-09	-4.398E-09	-1.968E-13
0.40000	2.225E-09	2.225E-09	-3.602E-19	-3.602E-19	-8.466E-09	-8.466E-09	-3.287E-13
0.50000	4.358E-09	4.358E-09	-6.485E-19	-6.485E-19	-1.580E-08	-1.580E-08	-6.390E-13
0.60000	9.529E-09	9.529E-09	-1.280E-18	-1.280E-18	-2.942E-08	-2.942E-08	-1.428E-12
0.70000	2.505E-08	2.505E-08	-3.074E-18	-3.074E-18	-5.930E-08	-5.930E-08	-3.750E-12
0.80000	8.128E-08	8.129E-08	-9.384E-18	-9.385E-18	-1.411E-07	-1.411E-07	-1.297E-11
0.85000	1.676E-07	1.676E-07	-1.789E-17	-1.789E-17	-2.402E-07	-2.403E-07	-2.696E-11
0.90000	3.839E-07	3.839E-07	-3.662E-17	-3.663E-17	-4.378E-07	-4.378E-07	-5.628E-11
0.92500	6.041E-07	6.041E-07	-4.886E-17	-4.886E-17	-5.973E-07	-5.974E-07	-8.129E-11
0.95000	9.629E-07	9.630E-07	-6.714E-17	-6.714E-17	-8.145E-07	-8.145E-07	-1.057E-10
0.96250	1.207E-06	1.207E-06	-7.498E-17	-7.498E-17	-9.472E-07	-9.473E-07	-1.168E-10
0.97500	1.490E-06	1.491E-06	-8.075E-17	-8.075E-17	-1.093E-06	-1.093E-06	-1.252E-10
0.98125	1.645E-06	1.645E-06	-8.261E-17	-8.261E-17	-1.170E-06	-1.170E-06	-1.280E-10
0.98750	1.805E-06	1.806E-06	-8.369E-17	-8.369E-17	-1.248E-06	-1.248E-06	-1.296E-10
0.99375	1.970E-06	1.970E-06	-8.394E-17	-8.394E-17	-1.326E-06	-1.326E-06	-1.300E-10
1.00000	2.133E-06	2.133E-06	-8.337E-17	-8.337E-17	-1.404E-06	-1.404E-06	-1.291E-10
1.00625	2.291E-06	2.292E-06	-8.198E-17	-8.198E-17	-1.482E-06	-1.482E-06	-1.271E-10
1.01250	2.441E-06	2.441E-06	-7.984E-17	-7.984E-17	-1.557E-06	-1.557E-06	-1.239E-10
1.01875	2.579E-06	2.579E-06	-7.701E-17	-7.701E-17	-1.631E-06	-1.631E-06	-1.197E-10
1.02500	2.705E-06	2.705E-06	-7.360E-17	-7.360E-17	-1.701E-06	-1.701E-06	-1.148E-10
1.03750	2.924E-06	2.924E-06	-6.547E-17	-6.547E-17	-1.831E-06	-1.831E-06	-1.034E-10
1.05000	3.099E-06	3.099E-06	-5.635E-17	-5.635E-17	-1.945E-06	-1.945E-06	-9.110E-11
1.07500	3.334E-06	3.334E-06	-4.144E-17	-4.144E-17	-2.125E-06	-2.126E-06	-6.555E-11
1.10000	3.455E-06	3.455E-06	-3.004E-17	-3.003E-17	-2.259E-06	-2.259E-06	-4.496E-11
1.15000	3.509E-06	3.509E-06	-1.487E-17	-1.487E-17	-2.418E-06	-2.418E-06	-2.136E-11
1.20000	3.450E-06	3.450E-06	-7.783E-18	-7.783E-18	-2.500E-06	-2.500E-06	-1.061E-11
1.30000	3.240E-06	3.240E-06	-2.665E-18	-2.665E-18	-2.569E-06	-2.569E-06	-3.202E-12
1.40000	3.022E-06	3.022E-06	-1.144E-18	-1.144E-18	-2.596E-06	-2.596E-06	-1.259E-12
1.50000	2.823E-06	2.823E-06	-5.943E-19	-5.943E-19	-2.608E-06	-2.608E-06	-5.729E-13
1.60000	2.648E-06	2.648E-06	-3.298E-19	-3.298E-19	-2.615E-06	-2.615E-06	-3.025E-13
1.70000	2.492E-06	2.492E-06	-1.842E-19	-1.842E-19	-2.618E-06	-2.618E-06	-1.833E-13
1.80000	2.354E-06	2.354E-06	-1.064E-19	-1.064E-19	-2.620E-06	-2.620E-06	-1.194E-13
1.90000	2.230E-06	2.230E-06	-6.142E-20	-6.142E-20	-2.622E-06	-2.622E-06	-8.492E-14
2.00000	2.118E-06	2.118E-06	-3.536E-20	-3.536E-20	-2.622E-06	-2.622E-06	-6.396E-14

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 8.000 θ_D= 0. ρ_a= 29.944

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	8.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	8.0000	0.10000	193.876	6.804E-07	9.994E-01	-1.615E-08	-1.615E-08	1.615E-08
0.20000	8.0000	0.20000	172.650	1.387E-06	9.992E-01	-2.279E-08	-2.279E-08	2.279E-08
0.30000	8.0000	0.30000	151.506	1.628E-06	9.989E-01	-3.211E-08	-3.211E-08	3.211E-08
0.40000	8.0000	0.40000	130.484	2.615E-06	9.985E-01	-4.730E-08	-4.730E-08	4.730E-08
0.50000	8.0000	0.50000	109.653	5.016E-06	9.979E-01	-6.966E-08	-6.966E-08	6.966E-08
0.60000	8.0000	0.60000	89.149	6.830E-06	9.969E-01	-1.093E-07	-1.093E-07	1.093E-07
0.70000	8.0000	0.70000	69.261	1.366E-05	9.958E-01	-1.948E-07	-1.948E-07	1.948E-07
0.80000	8.0000	0.80000	50.721	6.275E-05	9.963E-01	-3.901E-07	-3.901E-07	3.901E-07
0.85000	8.0000	0.85000	42.515	1.071E-04	9.992E-01	-5.862E-07	-5.863E-07	5.862E-07
0.90000	8.0000	0.90000	35.692	2.019E-04	1.004E 00	-8.841E-07	-8.841E-07	8.841E-07
0.92500	8.0000	0.92500	33.074	2.698E-04	1.005E 00	-1.051E-06	-1.051E-06	1.051E-06
0.95000	8.0000	0.95000	31.173	3.415E-04	1.004E 00	-1.191E-06	-1.191E-06	1.191E-06
0.96250	8.0000	0.96250	30.535	3.825E-04	1.002E 00	-1.242E-06	-1.242E-06	1.242E-06
0.97500	8.0000	0.97500	30.124	4.440E-04	1.001E 00	-1.276E-06	-1.276E-06	1.276E-06
0.98125	8.0000	0.98125	30.007	4.747E-04	1.000E 00	-1.286E-06	-1.286E-06	1.286E-06
0.98750	8.0000	0.98750	29.950	5.054E-04	9.996E-01	-1.293E-06	-1.293E-06	1.293E-06
0.99375	8.0000	0.99375	29.954	5.362E-04	9.996E-01	-1.292E-06	-1.292E-06	1.292E-06
1.00000	8.0001	1.00000	30.018	5.686E-04	9.999E-01	-1.285E-06	-1.285E-06	1.285E-06
1.00625	8.0001	1.00625	30.141	6.002E-04	1.001E 00	-1.275E-06	-1.275E-06	1.275E-06
1.01250	8.0001	1.01250	30.324	6.284E-04	1.001E 00	-1.260E-06	-1.260E-06	1.260E-06
1.01875	8.0001	1.01875	30.565	6.557E-04	1.003E 00	-1.240E-06	-1.240E-06	1.240E-06
1.02500	8.0001	1.02500	30.863	6.839E-04	1.004E 00	-1.216E-06	-1.216E-06	1.216E-06
1.03750	8.0001	1.03750	31.622	7.360E-04	1.006E 00	-1.156E-06	-1.156E-06	1.156E-06
1.05000	8.0001	1.05000	32.586	7.838E-04	1.008E 00	-1.085E-06	-1.085E-06	1.085E-06
1.07500	8.0001	1.07500	35.058	8.589E-04	1.010E 00	-9.219E-07	-9.218E-07	9.219E-07
1.10000	8.0001	1.10000	38.133	9.187E-04	1.008E 00	-7.526E-07	-7.526E-07	7.526E-07
1.15000	8.0002	1.15000	45.583	9.818E-04	1.003E 00	-5.023E-07	-5.023E-07	5.023E-07
1.20000	8.0002	1.20000	54.157	1.025E-03	9.996E-01	-3.372E-07	-3.372E-07	3.372E-07
1.30000	8.0003	1.30000	73.060	1.062E-03	9.971E-01	-1.722E-07	-1.722E-07	1.722E-07
1.40000	8.0003	1.40000	93.104	1.069E-03	9.971E-01	-9.905E-08	-9.905E-08	9.905E-08
1.50000	8.0004	1.50000	113.688	1.072E-03	9.974E-01	-6.463E-08	-6.463E-08	6.463E-08
1.60000	8.0004	1.60000	134.563	1.079E-03	9.978E-01	-4.384E-08	-4.384E-08	4.384E-08
1.70000	8.0005	1.70000	155.614	1.083E-03	9.982E-01	-3.004E-08	-3.004E-08	3.004E-08
1.80000	8.0005	1.80000	176.776	1.083E-03	9.984E-01	-2.131E-08	-2.131E-08	2.131E-08
1.90000	8.0005	1.90000	198.014	1.084E-03	9.986E-01	-1.510E-08	-1.510E-08	1.510E-08
2.00000	8.0005	2.00000	219.307	1.084E-03	9.988E-01	-1.084E-08	-1.084E-08	1.084E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 8.000 θ_D= 0. ρ_a= 29.944

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.615E-08	49.901	-6.839E-07	-6.839E-07	6.839E-07	6.839E-07	-8.943E-09	-8.943E-09
0.20000	2.279E-08	99.802	-1.646E-06	-1.646E-06	1.646E-06	1.646E-06	-1.262E-08	-1.262E-08
0.30000	3.211E-08	149.703	-3.003E-06	-3.003E-06	3.003E-06	3.003E-06	-1.778E-08	-1.778E-08
0.40000	4.730E-08	199.605	-4.957E-06	-4.957E-06	4.957E-06	4.957E-06	-2.619E-08	-2.619E-08
0.50000	6.966E-08	249.506	-7.840E-06	-7.840E-06	7.840E-06	7.840E-06	-3.857E-08	-3.857E-08
0.60000	1.093E-07	299.407	-1.217E-05	-1.217E-05	1.217E-05	1.217E-05	-6.055E-08	-6.055E-08
0.70000	1.948E-07	349.308	-1.943E-05	-1.944E-05	1.943E-05	1.944E-05	-1.079E-07	-1.079E-07
0.80000	3.901E-07	399.209	-3.324E-05	-3.324E-05	3.324E-05	3.324E-05	-2.160E-07	-2.160E-07
0.85000	5.863E-07	424.160	-4.527E-05	-4.527E-05	4.527E-05	4.528E-05	-3.246E-07	-3.246E-07
0.90000	8.841E-07	449.110	-6.332E-05	-6.332E-05	6.332E-05	6.332E-05	-4.895E-07	-4.896E-07
0.92500	1.051E-06	461.585	-7.539E-05	-7.540E-05	7.540E-05	7.540E-05	-5.818E-07	-5.818E-07
0.95000	1.191E-06	474.061	-8.942E-05	-8.942E-05	8.942E-05	8.943E-05	-6.595E-07	-6.595E-07
0.96250	1.242E-06	480.298	-9.702E-05	-9.702E-05	9.702E-05	9.703E-05	-6.879E-07	-6.879E-07
0.97500	1.276E-06	486.536	-1.049E-04	-1.049E-04	1.049E-04	1.049E-04	-7.068E-07	-7.068E-07
0.98125	1.286E-06	489.655	-1.089E-04	-1.089E-04	1.089E-04	1.089E-04	-7.122E-07	-7.122E-07
0.98750	1.293E-06	492.774	-1.129E-04	-1.129E-04	1.129E-04	1.129E-04	-7.157E-07	-7.157E-07
0.99375	1.292E-06	495.892	-1.169E-04	-1.169E-04	1.169E-04	1.169E-04	-7.155E-07	-7.155E-07
1.00000	1.285E-06	499.011	-1.210E-04	-1.210E-04	1.210E-04	1.210E-04	-7.118E-07	-7.118E-07
1.00625	1.275E-06	502.130	-1.249E-04	-1.249E-04	1.250E-04	1.250E-04	-7.060E-07	-7.060E-07
1.01250	1.260E-06	505.249	-1.289E-04	-1.289E-04	1.289E-04	1.289E-04	-6.975E-07	-6.975E-07
1.01875	1.240E-06	508.368	-1.328E-04	-1.328E-04	1.328E-04	1.328E-04	-6.865E-07	-6.865E-07
1.02500	1.216E-06	511.486	-1.366E-04	-1.366E-04	1.366E-04	1.366E-04	-6.732E-07	-6.732E-07
1.03750	1.156E-06	517.724	-1.440E-04	-1.440E-04	1.440E-04	1.441E-04	-6.403E-07	-6.403E-07
1.05000	1.085E-06	523.962	-1.510E-04	-1.510E-04	1.510E-04	1.511E-04	-6.008E-07	-6.008E-07
1.07500	9.216E-07	536.437	-1.636E-04	-1.636E-04	1.636E-04	1.636E-04	-5.104E-07	-5.104E-07
1.10000	7.526E-07	548.912	-1.740E-04	-1.740E-04	1.740E-04	1.740E-04	-4.167E-07	-4.167E-07
1.15000	5.023E-07	573.863	-1.894E-04	-1.894E-04	1.894E-04	1.894E-04	-2.781E-07	-2.781E-07
1.20000	3.372E-07	598.813	-1.996E-04	-1.996E-04	1.997E-04	1.997E-04	-1.867E-07	-1.867E-07
1.30000	1.722E-07	648.714	-2.117E-04	-2.117E-04	2.117E-04	2.117E-04	-9.536E-08	-9.536E-08
1.40000	9.905E-08	698.615	-2.182E-04	-2.182E-04	2.182E-04	2.182E-04	-5.484E-08	-5.484E-08
1.50000	6.463E-08	748.517	-2.221E-04	-2.221E-04	2.222E-04	2.222E-04	-3.579E-08	-3.579E-08
1.60000	4.384E-08	798.418	-2.248E-04	-2.248E-04	2.249E-04	2.249E-04	-2.428E-08	-2.428E-08
1.70000	3.004E-08	848.319	-2.266E-04	-2.266E-04	2.267E-04	2.267E-04	-1.663E-08	-1.663E-08
1.80000	2.131E-08	898.220	-2.279E-04	-2.279E-04	2.280E-04	2.280E-04	-1.180E-08	-1.180E-08
1.90000	1.510E-08	948.121	-2.288E-04	-2.288E-04	2.289E-04	2.289E-04	-8.363E-09	-8.363E-09
2.00000	1.084E-08	998.022	-2.294E-04	-2.294E-04	2.295E-04	2.295E-04	-6.000E-09	-6.000E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 8.000 θ_D= 0. ρ_a=29.944

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-8.646E-14
0.10000	2.061E-10	2.060E-10	-6.657E-20	-6.657E-20	-7.661E-10	-7.661E-10	-1.156E-13
0.20000	5.728E-10	5.728E-10	-1.151E-19	-1.151E-19	-2.093E-09	-2.093E-09	-1.643E-13
0.30000	1.207E-09	1.207E-09	-1.987E-19	-1.987E-19	-4.384E-09	-4.384E-09	-2.553E-13
0.40000	2.528E-09	2.528E-09	-3.570E-19	-3.570E-19	-8.422E-09	-8.422E-09	-4.248E-13
0.50000	4.938E-09	4.938E-09	-6.398E-19	-6.398E-19	-1.568E-08	-1.568E-08	-8.190E-13
0.60000	1.068E-08	1.068E-08	-1.247E-18	-1.247E-18	-2.902E-08	-2.902E-08	-1.807E-12
0.70000	2.761E-08	2.761E-08	-2.919E-18	-2.920E-18	-5.772E-08	-5.772E-08	-4.611E-12
0.80000	8.528E-08	8.528E-08	-8.331E-18	-8.331E-18	-1.327E-07	-1.327E-07	-1.494E-11
0.85000	1.679E-07	1.679E-07	-1.523E-17	-1.523E-17	-2.186E-07	-2.186E-07	-2.866E-11
0.90000	3.546E-07	3.547E-07	-2.796E-17	-2.796E-17	-3.748E-07	-3.748E-07	-5.429E-11
0.92500	5.264E-07	5.264E-07	-3.610E-17	-3.610E-17	-4.945E-07	-4.945E-07	-7.215E-11
0.95000	7.752E-07	7.753E-07	-4.345E-17	-4.345E-17	-6.438E-07	-6.438E-07	-9.080E-11
0.96250	9.332E-07	9.332E-07	-4.624E-17	-4.624E-17	-7.278E-07	-7.278E-07	-9.857E-11
0.97500	1.110E-06	1.110E-06	-4.813E-17	-4.813E-17	-8.162E-07	-8.162E-07	-1.041E-10
0.98125	1.203E-06	1.203E-06	-4.868E-17	-4.868E-17	-8.614E-07	-8.615E-07	-1.057E-10
0.98750	1.297E-06	1.298E-06	-4.907E-17	-4.907E-17	-9.071E-07	-9.072E-07	-1.064E-10
0.99375	1.392E-06	1.392E-06	-4.904E-17	-4.904E-17	-9.531E-07	-9.531E-07	-1.063E-10
1.00000	1.486E-06	1.486E-06	-4.863E-17	-4.863E-17	-9.987E-07	-9.988E-07	-1.056E-10
1.00625	1.578E-06	1.578E-06	-4.805E-17	-4.805E-17	-1.044E-06	-1.044E-06	-1.038E-10
1.01250	1.665E-06	1.665E-06	-4.720E-17	-4.720E-17	-1.089E-06	-1.089E-06	-1.014E-10
1.01875	1.749E-06	1.749E-06	-4.610E-17	-4.610E-17	-1.132E-06	-1.132E-06	-9.820E-11
1.02500	1.827E-06	1.827E-06	-4.478E-17	-4.478E-17	-1.175E-06	-1.175E-06	-9.449E-11
1.03750	1.965E-06	1.965E-06	-4.159E-17	-4.159E-17	-1.256E-06	-1.256E-06	-8.587E-11
1.05000	2.078E-06	2.078E-06	-3.786E-17	-3.786E-17	-1.330E-06	-1.330E-06	-7.642E-11
1.07500	2.239E-06	2.239E-06	-2.975E-17	-2.974E-17	-1.456E-06	-1.456E-06	-5.802E-11
1.10000	2.332E-06	2.332E-06	-2.204E-17	-2.204E-17	-1.553E-06	-1.553E-06	-4.291E-11
1.15000	2.392E-06	2.392E-06	-1.213E-17	-1.213E-17	-1.676E-06	-1.676E-06	-2.204E-11
1.20000	2.367E-06	2.367E-06	-6.663E-18	-6.663E-18	-1.744E-06	-1.744E-06	-1.167E-11
1.30000	2.238E-06	2.238E-06	-2.432E-18	-2.432E-18	-1.805E-06	-1.805E-06	-3.792E-12
1.40000	2.093E-06	2.093E-06	-1.079E-18	-1.079E-18	-1.829E-06	-1.829E-06	-1.540E-12
1.50000	1.958E-06	1.958E-06	-5.714E-19	-5.714E-19	-1.841E-06	-1.841E-06	-7.119E-13
1.60000	1.838E-06	1.838E-06	-3.184E-19	-3.184E-19	-1.847E-06	-1.847E-06	-3.817E-13
1.70000	1.731E-06	1.731E-06	-1.787E-19	-1.787E-19	-1.851E-06	-1.851E-06	-2.329E-13
1.80000	1.635E-06	1.635E-06	-1.035E-19	-1.035E-19	-1.853E-06	-1.853E-06	-1.528E-13
1.90000	1.549E-06	1.549E-06	-5.983E-20	-5.983E-20	-1.854E-06	-1.854E-06	-1.092E-13
2.00000	1.472E-06	1.472E-06	-3.449E-20	-3.449E-20	-1.855E-06	-1.855E-06	-8.246E-14

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0=10.000 θ_D= 0. ρ_a=37.362

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	10.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	10.0000	0.10000	194.006	1.041E-06	9.989E-01	-1.612E-08	-1.612E-08	1.612E-08
0.20000	10.0000	0.20000	172.942	1.441E-06	9.986E-01	-2.268E-08	-2.268E-08	2.268E-08
0.30000	10.0000	0.30000	152.006	3.362E-06	9.981E-01	-3.185E-08	-3.185E-08	3.185E-08
0.40000	10.0000	0.40000	131.256	4.002E-06	9.974E-01	-4.662E-08	-4.662E-08	4.662E-08
0.50000	10.0000	0.50000	110.800	6.617E-06	9.964E-01	-6.819E-08	-6.819E-08	6.819E-08
0.60000	10.0000	0.60000	90.834	1.163E-05	9.952E-01	-1.048E-07	-1.048E-07	1.048E-07
0.70000	10.0000	0.70000	71.771	2.540E-05	9.946E-01	-1.796E-07	-1.796E-07	1.796E-07
0.80000	10.0000	0.80000	54.562	7.684E-05	9.977E-01	-3.315E-07	-3.315E-07	3.315E-07
0.85000	10.0000	0.85000	47.299	1.187E-04	1.002E 00	-4.607E-07	-4.607E-07	4.607E-07
0.90000	10.0000	0.90000	41.580	1.870E-04	1.005E 00	-6.145E-07	-6.145E-07	6.145E-07
0.92500	10.0000	0.92500	39.516	2.305E-04	1.005E 00	-6.870E-07	-6.870E-07	6.870E-07
0.95000	10.0000	0.95000	38.105	2.860E-04	1.002E 00	-7.540E-07	-7.540E-07	7.540E-07
0.96250	10.0000	0.96250	37.669	3.185E-04	1.001E 00	-7.760E-07	-7.760E-07	7.760E-07
0.97500	10.0000	0.97500	37.422	3.535E-04	9.997E-01	-7.887E-07	-7.888E-07	7.887E-07
0.98125	10.0000	0.98125	37.370	3.722E-04	9.993E-01	-7.914E-07	-7.914E-07	7.914E-07
0.98750	10.0000	0.98750	37.367	3.893E-04	9.992E-01	-7.916E-07	-7.916E-07	7.916E-07
0.99375	10.0000	0.99375	37.412	4.081E-04	9.994E-01	-7.893E-07	-7.893E-07	7.893E-07
1.00000	10.0000	1.00000	37.505	4.260E-04	9.998E-01	-7.844E-07	-7.844E-07	7.844E-07
1.00625	10.0000	1.00625	37.646	4.431E-04	1.000E 00	-7.772E-07	-7.772E-07	7.772E-07
1.01250	10.0000	1.01250	37.834	4.610E-04	1.001E 00	-7.676E-07	-7.676E-07	7.676E-07
1.01875	10.0001	1.01875	38.069	4.773E-04	1.002E 00	-7.558E-07	-7.558E-07	7.558E-07
1.02500	10.0001	1.02500	38.350	4.952E-04	1.004E 00	-7.419E-07	-7.419E-07	7.419E-07
1.03750	10.0001	1.03750	39.044	5.276E-04	1.006E 00	-7.087E-07	-7.087E-07	7.087E-07
1.05000	10.0001	1.05000	39.908	5.558E-04	1.008E 00	-6.694E-07	-6.694E-07	6.694E-07
1.07500	10.0001	1.07500	42.101	5.976E-04	1.011E 00	-5.986E-07	-5.986E-07	5.986E-07
1.10000	10.0001	1.10000	44.835	6.284E-04	1.012E 00	-5.216E-07	-5.216E-07	5.216E-07
1.15000	10.0001	1.15000	51.568	6.745E-04	1.008E 00	-3.763E-07	-3.763E-07	3.763E-07
1.20000	10.0001	1.20000	59.495	7.052E-04	1.003E 00	-2.689E-07	-2.689E-07	2.689E-07
1.30000	10.0002	1.30000	77.427	7.377E-04	9.983E-01	-1.494E-07	-1.494E-07	1.494E-07
1.40000	10.0002	1.40000	96.831	7.513E-04	9.969E-01	-9.023E-08	-9.023E-08	9.023E-08
1.50000	10.0003	1.50000	116.976	7.564E-04	9.968E-01	-6.080E-08	-6.080E-08	6.080E-08
1.60000	10.0003	1.60000	137.536	7.582E-04	9.970E-01	-4.148E-08	-4.148E-08	4.148E-08
1.70000	10.0003	1.70000	158.351	7.599E-04	9.974E-01	-2.874E-08	-2.874E-08	2.874E-08
1.80000	10.0003	1.80000	179.331	7.650E-04	9.977E-01	-2.045E-08	-2.045E-08	2.045E-08
1.90000	10.0004	1.90000	200.425	7.684E-04	9.979E-01	-1.453E-08	-1.453E-08	1.453E-08
2.00000	10.0004	2.00000	221.600	7.701E-04	9.982E-01	-1.046E-08	-1.046E-08	1.046E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.612E-08	49.901	-6.831E-07	-6.831E-07	6.831E-07	6.831E-07	-8.924E-09	-8.924E-09
0.20000	2.268E-08	99.802	-1.642E-06	-1.642E-06	1.642E-06	1.642E-06	-1.256E-08	-1.256E-08
0.30000	3.185E-08	149.703	-2.990E-06	-2.990E-06	2.990E-06	2.990E-06	-1.764E-08	-1.764E-08
0.40000	4.462E-08	199.605	-4.921E-06	-4.921E-06	4.921E-06	4.921E-06	-2.581E-08	-2.581E-08
0.50000	6.819E-08	249.506	-7.754E-06	-7.754E-06	7.754E-06	7.754E-06	-3.776E-08	-3.776E-08
0.60000	1.048E-07	299.407	-1.194E-05	-1.194E-05	1.194E-05	1.194E-05	-5.805E-08	-5.805E-08
0.70000	1.796E-07	349.308	-1.877E-05	-1.877E-05	1.877E-05	1.877E-05	-9.944E-08	-9.944E-08
0.80000	3.315E-07	399.209	-3.101E-05	-3.101E-05	3.101E-05	3.101E-05	-1.835E-07	-1.835E-07
0.85000	4.608E-07	424.160	-4.078E-05	-4.079E-05	4.078E-05	4.079E-05	-2.551E-07	-2.551E-07
0.90000	6.145E-07	449.110	-5.421E-05	-5.421E-05	5.421E-05	5.421E-05	-3.403E-07	-3.403E-07
0.92500	6.870E-07	461.585	-6.232E-05	-6.232E-05	6.232E-05	6.232E-05	-3.804E-07	-3.804E-07
0.95000	7.540E-07	474.061	-7.134E-05	-7.134E-05	7.134E-05	7.134E-05	-4.175E-07	-4.175E-07
0.96250	7.760E-07	480.298	-7.611E-05	-7.611E-05	7.612E-05	7.612E-05	-4.297E-07	-4.297E-07
0.97500	7.888E-07	486.536	-8.100E-05	-8.100E-05	8.100E-05	8.100E-05	-4.367E-07	-4.367E-07
0.98125	7.915E-07	489.655	-8.346E-05	-8.346E-05	8.347E-05	8.347E-05	-4.382E-07	-4.382E-07
0.98750	7.916E-07	492.774	-8.593E-05	-8.593E-05	8.594E-05	8.594E-05	-4.383E-07	-4.383E-07
0.99375	7.893E-07	495.892	-8.840E-05	-8.840E-05	8.840E-05	8.841E-05	-4.370E-07	-4.370E-07
1.00000	7.844E-07	499.011	-9.085E-05	-9.085E-05	9.086E-05	9.086E-05	-4.344E-07	-4.344E-07
1.00625	7.772E-07	502.130	-9.329E-05	-9.329E-05	9.329E-05	9.330E-05	-4.303E-07	-4.303E-07
1.01250	7.676E-07	505.249	-9.570E-05	-9.570E-05	9.570E-05	9.571E-05	-4.250E-07	-4.250E-07
1.01875	7.558E-07	508.368	-9.807E-05	-9.807E-05	9.808E-05	9.808E-05	-4.185E-07	-4.185E-07
1.02500	7.419E-07	511.486	-1.004E-04	-1.004E-04	1.004E-04	1.004E-04	-4.108E-07	-4.108E-07
1.03750	7.087E-07	517.724	-1.049E-04	-1.049E-04	1.049E-04	1.049E-04	-3.924E-07	-3.924E-07
1.05000	6.694E-07	523.962	-1.092E-04	-1.092E-04	1.092E-04	1.092E-04	-3.707E-07	-3.707E-07
1.07500	5.986E-07	536.437	-1.171E-04	-1.172E-04	1.172E-04	1.172E-04	-3.315E-07	-3.314E-07
1.10000	5.216E-07	548.912	-1.241E-04	-1.241E-04	1.242E-04	1.242E-04	-2.888E-07	-2.888E-07
1.15000	3.763E-07	573.863	-1.353E-04	-1.353E-04	1.353E-04	1.353E-04	-2.084E-07	-2.084E-07
1.20000	2.689E-07	598.813	-1.433E-04	-1.433E-04	1.433E-04	1.433E-04	-1.489E-07	-1.489E-07
1.30000	1.494E-07	648.714	-1.534E-04	-1.534E-04	1.535E-04	1.535E-04	-8.275E-08	-8.275E-08
1.40000	9.023E-08	698.616	-1.592E-04	-1.592E-04	1.593E-04	1.593E-04	-4.996E-08	-4.996E-08
1.50000	6.086E-08	748.517	-1.629E-04	-1.629E-04	1.630E-04	1.630E-04	-3.366E-08	-3.366E-08
1.60000	4.148E-08	798.418	-1.654E-04	-1.654E-04	1.655E-04	1.655E-04	-2.297E-08	-2.297E-08
1.70000	2.874E-08	848.319	-1.672E-04	-1.672E-04	1.672E-04	1.672E-04	-1.591E-08	-1.591E-08
1.80000	2.045E-08	898.220	-1.684E-04	-1.684E-04	1.684E-04	1.684E-04	-1.132E-08	-1.132E-08
1.90000	1.453E-08	948.121	-1.692E-04	-1.692E-04	1.693E-04	1.693E-04	-8.044E-09	-8.044E-09
2.00000	1.046E-08	998.022	-1.699E-04	-1.699E-04	1.699E-04	1.699E-04	-5.790E-09	-5.790E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.346E-13
0.10000	2.565E-10	2.565E-10	-6.635E-20	-6.635E-20	-7.648E-10	-7.648E-10	-1.796E-13
0.20000	7.112E-10	7.112E-10	-1.143E-19	-1.143E-19	-2.084E-09	-2.084E-09	-2.544E-13
0.30000	1.493E-09	1.493E-09	-1.962E-19	-1.962E-19	-4.352E-09	-4.352E-09	-3.929E-13
0.40000	3.107E-09	3.107E-09	-3.493E-19	-3.493E-19	-8.318E-09	-8.318E-09	-6.476E-13
0.50000	6.016E-09	6.016E-09	-6.196E-19	-6.196E-19	-1.538E-08	-1.538E-08	-1.224E-12
0.60000	1.259E-08	1.259E-08	-1.172E-18	-1.172E-18	-2.810E-08	-2.810E-08	-2.622E-12
0.70000	3.089E-08	3.089E-08	-2.588E-18	-2.588E-18	-5.425E-08	-5.425E-08	-6.291E-12
0.80000	8.640E-08	8.640E-08	-6.490E-18	-6.490E-18	-1.165E-07	-1.165E-07	-1.766E-11
0.85000	1.565E-07	1.565E-07	-1.067E-17	-1.067E-17	-1.793E-07	-1.793E-07	-2.994E-11
0.90000	2.948E-07	2.948E-07	-1.633E-17	-1.633E-17	-2.800E-07	-2.800E-07	-4.865E-11
0.92500	4.048E-07	4.048E-07	-1.925E-17	-1.926E-17	-3.464E-07	-3.464E-07	-5.906E-11
0.95000	5.510E-07	5.511E-07	-2.210E-17	-2.210E-17	-4.241E-07	-4.241E-07	-6.694E-11
0.96250	6.364E-07	6.364E-07	-2.306E-17	-2.306E-17	-4.663E-07	-4.663E-07	-6.970E-11
0.97500	7.272E-07	7.272E-07	-2.362E-17	-2.362E-17	-5.100E-07	-5.100E-07	-7.134E-11
0.98125	7.737E-07	7.737E-07	-2.374E-17	-2.374E-17	-5.322E-07	-5.322E-07	-7.169E-11
0.98750	8.203E-07	8.203E-07	-2.375E-17	-2.375E-17	-5.544E-07	-5.544E-07	-7.171E-11
0.99375	8.667E-07	8.668E-07	-2.364E-17	-2.364E-17	-5.765E-07	-5.765E-07	-7.141E-11
1.00000	9.124E-07	9.125E-07	-2.343E-17	-2.343E-17	-5.985E-07	-5.986E-07	-7.079E-11
1.00625	9.569E-07	9.569E-07	-2.311E-17	-2.311E-17	-6.203E-07	-6.203E-07	-6.986E-11
1.01250	9.997E-07	9.998E-07	-2.269E-17	-2.269E-17	-6.417E-07	-6.417E-07	-6.865E-11
1.01875	1.041E-06	1.041E-06	-2.217E-17	-2.217E-17	-6.627E-07	-6.627E-07	-6.718E-11
1.02500	1.080E-06	1.080E-06	-2.157E-17	-2.157E-17	-6.832E-07	-6.832E-07	-6.548E-11
1.03750	1.150E-06	1.150E-06	-2.016E-17	-2.016E-17	-7.222E-07	-7.222E-07	-6.156E-11
1.05000	1.211E-06	1.211E-06	-1.853E-17	-1.853E-17	-7.584E-07	-7.585E-07	-5.715E-11
1.07500	1.303E-06	1.303E-06	-1.571E-17	-1.571E-17	-8.225E-07	-8.225E-07	-4.637E-11
1.10000	1.362E-06	1.362E-06	-1.282E-17	-1.282E-17	-8.758E-07	-8.758E-07	-3.648E-11
1.15000	1.413E-06	1.413E-06	-7.885E-18	-7.885E-18	-9.520E-07	-9.520E-07	-2.185E-11
1.20000	1.414E-06	1.414E-06	-4.710E-18	-4.710E-18	-9.983E-07	-9.983E-07	-1.296E-11
1.30000	1.355E-06	1.355E-06	-1.971E-18	-1.971E-18	-1.046E-06	-1.046E-06	-4.802E-12
1.40000	1.275E-06	1.275E-06	-9.415E-19	-9.415E-19	-1.066E-06	-1.066E-06	-2.079E-12
1.50000	1.196E-06	1.196E-06	-5.212E-19	-5.211E-19	-1.077E-06	-1.077E-06	-9.929E-13
1.60000	1.124E-06	1.124E-06	-2.930E-19	-2.930E-19	-1.083E-06	-1.083E-06	-5.508E-13
1.70000	1.059E-06	1.059E-06	-1.666E-19	-1.666E-19	-1.086E-06	-1.086E-06	-3.414E-13
1.80000	1.001E-06	1.001E-06	-9.691E-20	-9.691E-20	-1.088E-06	-1.088E-06	-2.275E-13
1.90000	9.489E-07	9.489E-07	-5.622E-20	-5.622E-20	-1.089E-06	-1.089E-06	-1.643E-13
2.00000	9.016E-07	9.016E-07	-3.250E-20	-3.250E-20	-1.090E-06	-1.090E-06	-1.250E-13

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	12.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	12.0000	0.10000	194.165	2.188E-06	9.985E-01	-1.608E-08	-1.608E-08	1.608E-08
0.20000	12.0000	0.20000	173.299	2.455E-06	9.980E-01	-2.255E-08	-2.255E-08	2.255E-08
0.30000	12.0000	0.30000	152.613	2.455E-06	9.973E-01	-3.154E-08	-3.154E-08	3.154E-08
0.40000	12.0000	0.40000	132.193	5.763E-06	9.963E-01	-4.582E-08	-4.582E-08	4.582E-08
0.50000	12.0000	0.50000	112.183	8.965E-06	9.951E-01	-6.646E-08	-6.646E-08	6.646E-08
0.60000	12.0000	0.60000	92.649	1.387E-05	9.939E-01	-9.968E-08	-9.968E-08	9.968E-08
0.70000	12.0000	0.70000	74.717	3.095E-05	9.941E-01	-1.632E-07	-1.632E-07	1.632E-07
0.80000	12.0000	0.80000	58.910	8.239E-05	9.992E-01	-2.757E-07	-2.757E-07	2.757E-07
0.85000	12.0000	0.85000	52.549	1.157E-04	1.003E 00	-3.610E-07	-3.610E-07	3.610E-07
0.90000	12.0000	0.90000	47.790	1.648E-04	1.005E 00	-4.495E-07	-4.495E-07	4.495E-07
0.92500	12.0000	0.92500	46.173	1.947E-04	1.004E 00	-4.876E-07	-4.876E-07	4.876E-07
0.95000	12.0000	0.95000	45.142	2.297E-04	1.001E 00	-5.136E-07	-5.136E-07	5.136E-07
0.96250	12.0000	0.96250	44.861	2.493E-04	9.997E-01	-5.209E-07	-5.209E-07	5.209E-07
0.97500	12.0000	0.97500	44.739	2.698E-04	9.989E-01	-5.241E-07	-5.241E-07	5.241E-07
0.98125	12.0000	0.98125	44.739	2.783E-04	9.988E-01	-5.241E-07	-5.241E-07	5.241E-07
0.98750	12.0000	0.98750	44.779	2.911E-04	9.989E-01	-5.231E-07	-5.231E-07	5.231E-07
0.99375	12.0000	0.99375	44.860	3.005E-04	9.992E-01	-5.210E-07	-5.210E-07	5.210E-07
1.00000	12.0000	1.00000	44.981	3.108E-04	9.997E-01	-5.178E-07	-5.178E-07	5.178E-07
1.00625	12.0000	1.00625	45.141	3.236E-04	1.000E 00	-5.136E-07	-5.136E-07	5.136E-07
1.01250	12.0000	1.01250	45.341	3.330E-04	1.001E 00	-5.085E-07	-5.085E-07	5.085E-07
1.01875	12.0000	1.01875	45.579	3.415E-04	1.002E 00	-5.024E-07	-5.024E-07	5.024E-07
1.02500	12.0000	1.02500	45.856	3.518E-04	1.003E 00	-4.955E-07	-4.955E-07	4.955E-07
1.03750	12.0000	1.03750	46.521	3.697E-04	1.006E 00	-4.792E-07	-4.792E-07	4.792E-07
1.05000	12.0001	1.05000	47.330	3.876E-04	1.008E 00	-4.600E-07	-4.600E-07	4.600E-07
1.07500	12.0001	1.07500	49.350	4.141E-04	1.012E 00	-4.155E-07	-4.155E-07	4.155E-07
1.10000	12.0001	1.10000	51.851	4.354E-04	1.013E 00	-3.718E-07	-3.718E-07	3.718E-07
1.15000	12.0001	1.15000	58.037	4.696E-04	1.012E 00	-2.861E-07	-2.861E-07	2.861E-07
1.20000	12.0001	1.20000	65.419	4.935E-04	1.007E 00	-2.207E-07	-2.207E-07	2.207E-07
1.30000	12.0001	1.30000	82.442	5.140E-04	1.000E 00	-1.293E-07	-1.293E-07	1.293E-07
1.40000	12.0002	1.40000	101.190	5.310E-04	9.974E-01	-8.153E-08	-8.153E-08	8.153E-08
1.50000	12.0002	1.50000	120.865	5.379E-04	9.965E-01	-5.656E-08	-5.656E-08	5.656E-08
1.60000	12.0002	1.60000	141.077	5.430E-04	9.965E-01	-3.884E-08	-3.884E-08	3.884E-08
1.70000	12.0002	1.70000	161.627	5.447E-04	9.967E-01	-2.725E-08	-2.725E-08	2.725E-08
1.80000	12.0003	1.80000	182.400	5.498E-04	9.970E-01	-1.946E-08	-1.946E-08	1.946E-08
1.90000	12.0003	1.90000	203.327	5.515E-04	9.973E-01	-1.389E-08	-1.389E-08	1.389E-08
2.00000	12.0003	2.00000	224.366	5.550E-04	9.976E-01	-1.002E-08	-1.002E-08	1.002E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.608E-08	49.901	-6.823E-07	-6.823E-07	6.823E-07	6.823E-07	-8.901E-09	-8.901E-09
0.20000	2.255E-08	99.802	-1.637E-06	-1.637E-06	1.637E-06	1.637E-06	-1.249E-08	-1.249E-08
0.30000	3.154E-08	149.703	-2.975E-06	-2.975E-06	2.975E-06	2.975E-06	-1.746E-08	-1.746E-08
0.40000	4.582E-08	199.605	-4.879E-06	-4.879E-06	4.879E-06	4.879E-06	-2.537E-08	-2.537E-08
0.50000	6.646E-08	249.506	-7.650E-06	-7.651E-06	7.650E-06	7.651E-06	-3.680E-08	-3.680E-08
0.60000	9.968E-08	299.407	-1.169E-05	-1.169E-05	1.169E-05	1.169E-05	-5.520E-08	-5.520E-08
0.70000	1.632E-07	349.308	-1.804E-05	-1.805E-05	1.804E-05	1.805E-05	-9.037E-08	-9.037E-08
0.80000	2.757E-07	399.209	-2.879E-05	-2.879E-05	2.879E-05	2.879E-05	-1.526E-07	-1.527E-07
0.85000	3.610E-07	424.160	-3.672E-05	-3.672E-05	3.672E-05	3.672E-05	-1.999E-07	-1.999E-07
0.90000	4.495E-07	449.110	-4.682E-05	-4.682E-05	4.682E-05	4.682E-05	-2.489E-07	-2.489E-07
0.92500	4.876E-07	461.586	-5.267E-05	-5.267E-05	5.267E-05	5.268E-05	-2.700E-07	-2.700E-07
0.95000	5.136E-07	474.061	-5.893E-05	-5.893E-05	5.894E-05	5.894E-05	-2.844E-07	-2.844E-07
0.96250	5.209E-07	480.298	-6.216E-05	-6.216E-05	6.216E-05	6.217E-05	-2.885E-07	-2.885E-07
0.97500	5.241E-07	486.536	-6.542E-05	-6.542E-05	6.543E-05	6.543E-05	-2.902E-07	-2.902E-07
0.98125	5.241E-07	489.655	-6.706E-05	-6.706E-05	6.706E-05	6.706E-05	-2.902E-07	-2.902E-07
0.98750	5.231E-07	492.774	-6.869E-05	-6.869E-05	6.869E-05	6.870E-05	-2.896E-07	-2.896E-07
0.99375	5.210E-07	495.892	-7.032E-05	-7.032E-05	7.032E-05	7.032E-05	-2.885E-07	-2.885E-07
1.00000	5.178E-07	499.011	-7.194E-05	-7.194E-05	7.194E-05	7.194E-05	-2.867E-07	-2.867E-07
1.00625	5.136E-07	502.130	-7.355E-05	-7.355E-05	7.355E-05	7.355E-05	-2.844E-07	-2.844E-07
1.01250	5.085E-07	505.249	-7.514E-05	-7.514E-05	7.515E-05	7.515E-05	-2.816E-07	-2.816E-07
1.01875	5.024E-07	508.368	-7.672E-05	-7.672E-05	7.672E-05	7.672E-05	-2.782E-07	-2.782E-07
1.02500	4.955E-07	511.487	-7.827E-05	-7.828E-05	7.828E-05	7.828E-05	-2.744E-07	-2.744E-07
1.03750	4.792E-07	517.724	-8.132E-05	-8.132E-05	8.132E-05	8.132E-05	-2.653E-07	-2.653E-07
1.05000	4.600E-07	523.962	-8.425E-05	-8.425E-05	8.425E-05	8.425E-05	-2.547E-07	-2.547E-07
1.07500	4.155E-07	536.437	-8.971E-05	-8.971E-05	8.972E-05	8.972E-05	-2.301E-07	-2.301E-07
1.10000	3.718E-07	548.912	-9.462E-05	-9.462E-05	9.463E-05	9.463E-05	-2.059E-07	-2.059E-07
1.15000	2.861E-07	573.863	-1.028E-04	-1.028E-04	1.028E-04	1.028E-04	-1.584E-07	-1.584E-07
1.20000	2.207E-07	598.813	-1.091E-04	-1.091E-04	1.091E-04	1.091E-04	-1.222E-07	-1.222E-07
1.30000	1.293E-07	648.715	-1.176E-04	-1.176E-04	1.176E-04	1.176E-04	-7.161E-08	-7.161E-08
1.40000	8.153E-08	698.616	-1.227E-04	-1.227E-04	1.227E-04	1.227E-04	-4.515E-08	-4.515E-08
1.50000	5.656E-08	748.517	-1.261E-04	-1.261E-04	1.262E-04	1.262E-04	-3.132E-08	-3.132E-08
1.60000	3.884E-08	798.418	-1.285E-04	-1.285E-04	1.285E-04	1.285E-04	-2.151E-08	-2.151E-08
1.70000	2.725E-08	848.319	-1.301E-04	-1.301E-04	1.301E-04	1.301E-04	-1.509E-08	-1.509E-08
1.80000	1.946E-08	898.220	-1.313E-04	-1.313E-04	1.313E-04	1.313E-04	-1.077E-08	-1.077E-08
1.90000	1.389E-08	948.121	-1.321E-04	-1.321E-04	1.321E-04	1.321E-04	-7.690E-09	-7.690E-09
2.00000	1.002E-08	998.023	-1.327E-04	-1.327E-04	1.327E-04	1.327E-04	-5.546E-09	-5.546E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.930E-13
0.10000	3.066E-10	3.065E-10	-6.608E-20	-6.608E-20	-7.631E-10	-7.631E-10	-2.569E-13
0.20000	8.468E-10	8.468E-10	-1.132E-19	-1.132E-19	-2.073E-09	-2.073E-09	-3.623E-13
0.30000	1.770E-09	1.770E-09	-1.931E-19	-1.931E-19	-4.313E-09	-4.313E-09	-5.554E-13
0.40000	3.647E-09	3.647E-09	-3.403E-19	-3.403E-19	-8.194E-09	-8.194E-09	-9.053E-13
0.50000	7.005E-09	7.005E-09	-5.960E-19	-5.960E-19	-1.503E-08	-1.503E-08	-1.671E-12
0.60000	1.404E-08	1.404E-08	-1.089E-18	-1.089E-18	-2.706E-08	-2.706E-08	-3.466E-12
0.70000	3.277E-08	3.277E-08	-2.246E-18	-2.246E-18	-5.054E-08	-5.054E-08	-7.796E-12
0.80000	8.407E-08	8.408E-08	-4.892E-18	-4.893E-18	-1.016E-07	-1.016E-07	-1.922E-11
0.85000	1.416E-07	1.416E-07	-7.398E-18	-7.398E-18	-1.472E-07	-1.473E-07	-2.913E-11
0.90000	2.427E-07	2.427E-07	-1.029E-17	-1.029E-17	-2.132E-07	-2.132E-07	-4.136E-11
0.92500	3.162E-07	3.162E-07	-1.161E-17	-1.161E-17	-2.542E-07	-2.542E-07	-4.688E-11
0.95000	4.062E-07	4.062E-07	-1.253E-17	-1.253E-17	-2.995E-07	-2.995E-07	-5.096E-11
0.96250	4.566E-07	4.566E-07	-1.279E-17	-1.280E-17	-3.232E-07	-3.232E-07	-5.217E-11
0.97500	5.091E-07	5.091E-07	-1.291E-17	-1.291E-17	-3.472E-07	-3.472E-07	-5.270E-11
0.98125	5.357E-07	5.357E-07	-1.291E-17	-1.291E-17	-3.593E-07	-3.593E-07	-5.271E-11
0.98750	5.622E-07	5.622E-07	-1.287E-17	-1.287E-17	-3.714E-07	-3.714E-07	-5.253E-11
0.99375	5.883E-07	5.884E-07	-1.280E-17	-1.280E-17	-3.834E-07	-3.834E-07	-5.218E-11
1.00000	6.140E-07	6.141E-07	-1.268E-17	-1.268E-17	-3.953E-07	-3.953E-07	-5.166E-11
1.00625	6.390E-07	6.391E-07	-1.253E-17	-1.253E-17	-4.071E-07	-4.071E-07	-5.098E-11
1.01250	6.632E-07	6.632E-07	-1.235E-17	-1.235E-17	-4.187E-07	-4.187E-07	-5.015E-11
1.01875	6.864E-07	6.864E-07	-1.213E-17	-1.213E-17	-4.301E-07	-4.301E-07	-4.918E-11
1.02500	7.085E-07	7.085E-07	-1.188E-17	-1.188E-17	-4.414E-07	-4.414E-07	-4.809E-11
1.03750	7.490E-07	7.490E-07	-1.131E-17	-1.131E-17	-4.631E-07	-4.631E-07	-4.562E-11
1.05000	7.843E-07	7.843E-07	-1.065E-17	-1.065E-17	-4.836E-07	-4.836E-07	-4.285E-11
1.07500	8.398E-07	8.398E-07	-9.163E-18	-9.163E-18	-5.207E-07	-5.207E-07	-3.692E-11
1.10000	8.787E-07	8.787E-07	-7.741E-18	-7.741E-18	-5.522E-07	-5.523E-07	-3.067E-11
1.15000	9.176E-07	9.176E-07	-5.178E-18	-5.178E-18	-6.003E-07	-6.003E-07	-2.027E-11
1.20000	9.252E-07	9.252E-07	-3.512E-18	-3.512E-18	-6.321E-07	-6.321E-07	-1.281E-11
1.30000	8.971E-07	8.971E-07	-1.593E-18	-1.593E-18	-6.684E-07	-6.684E-07	-5.460E-12
1.40000	8.494E-07	8.494E-07	-8.110E-19	-8.110E-19	-6.855E-07	-6.855E-07	-2.533E-12
1.50000	7.994E-07	7.994E-07	-4.674E-19	-4.674E-19	-6.948E-07	-6.949E-07	-1.258E-12
1.60000	7.528E-07	7.528E-07	-2.653E-19	-2.653E-19	-7.002E-07	-7.002E-07	-7.241E-13
1.70000	7.102E-07	7.102E-07	-1.530E-19	-1.530E-19	-7.032E-07	-7.032E-07	-4.565E-13
1.80000	6.716E-07	6.716E-07	-8.953E-20	-8.953E-20	-7.050E-07	-7.050E-07	-3.095E-13
1.90000	6.368E-07	6.368E-07	-5.215E-20	-5.215E-20	-7.060E-07	-7.060E-07	-2.260E-13
2.00000	6.052E-07	6.052E-07	-3.026E-20	-3.026E-20	-7.066E-07	-7.066E-07	-1.736E-13

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 15.000 θ_D= 0. ρ_a= 55.687

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	15.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	15.0000	0.10000	194.456	1.481E-06	9.968E-01	-1.600E-08	-1.600E-08	1.600E-08
0.20000	15.0000	0.20000	173.950	2.241E-06	9.959E-01	-2.231E-08	-2.231E-08	2.231E-08
0.30000	15.0000	0.30000	153.721	3.789E-06	9.947E-01	-3.098E-08	-3.098E-08	3.098E-08
0.40000	15.0000	0.40000	133.894	6.403E-06	9.932E-01	-4.439E-08	-4.439E-08	4.439E-08
0.50000	15.0000	0.50000	114.677	9.285E-06	9.918E-01	-6.345E-08	-6.345E-08	6.345E-08
0.60000	15.0000	0.60000	96.436	1.644E-05	9.914E-01	-9.113E-08	-9.113E-08	9.113E-08
0.70000	15.0000	0.70000	79.842	3.116E-05	9.942E-01	-1.382E-07	-1.382E-07	1.382E-07
0.80000	15.0000	0.80000	66.148	6.318E-05	1.002E 00	-2.156E-07	-2.156E-07	2.156E-07
0.85000	15.0000	0.85000	61.018	6.318E-05	1.005E 00	-2.547E-07	-2.547E-07	2.547E-07
0.90000	15.0000	0.90000	57.465	6.318E-05	1.004E 00	-2.931E-07	-2.931E-07	2.931E-07
0.92500	15.0000	0.92500	56.379	8.367E-05	1.001E 00	-3.069E-07	-3.069E-07	3.069E-07
0.95000	15.0000	0.95000	55.793	1.016E-04	9.987E-01	-3.146E-07	-3.146E-07	3.146E-07
0.96250	15.0000	0.96250	55.692	1.110E-04	9.979E-01	-3.160E-07	-3.160E-07	3.160E-07
0.97500	15.0000	0.97500	55.722	1.178E-04	9.977E-01	-3.156E-07	-3.156E-07	3.156E-07
0.98125	15.0000	0.98125	55.785	1.221E-04	9.978E-01	-3.147E-07	-3.147E-07	3.147E-07
0.98750	15.0000	0.98750	55.880	1.289E-04	9.982E-01	-3.134E-07	-3.134E-07	3.134E-07
0.99375	15.0000	0.99375	56.008	1.349E-04	9.987E-01	-3.118E-07	-3.118E-07	3.118E-07
1.00000	15.0000	1.00000	56.168	1.392E-04	9.994E-01	-3.097E-07	-3.097E-07	3.097E-07
1.00625	15.0000	1.00625	56.359	1.460E-04	1.000E 00	-3.072E-07	-3.072E-07	3.072E-07
1.01250	15.0000	1.01250	56.582	1.494E-04	1.001E 00	-3.043E-07	-3.043E-07	3.043E-07
1.01875	15.0000	1.01875	56.835	1.562E-04	1.002E 00	-3.010E-07	-3.010E-07	3.010E-07
1.02500	15.0000	1.02500	57.119	1.579E-04	1.004E 00	-2.974E-07	-2.974E-07	2.974E-07
1.03750	15.0000	1.03750	57.777	1.665E-04	1.006E 00	-2.892E-07	-2.892E-07	2.892E-07
1.05000	15.0000	1.05000	58.552	1.750E-04	1.009E 00	-2.799E-07	-2.799E-07	2.799E-07
1.07500	15.0000	1.07500	60.430	1.870E-04	1.014E 00	-2.596E-07	-2.596E-07	2.596E-07
1.10000	15.0000	1.10000	62.716	1.981E-04	1.017E 00	-2.410E-07	-2.410E-07	2.410E-07
1.15000	15.0000	1.15000	68.335	2.143E-04	1.018E 00	-2.008E-07	-2.008E-07	2.008E-07
1.20000	15.0001	1.20000	75.083	2.271E-04	1.015E 00	-1.613E-07	-1.613E-07	1.613E-07
1.30000	15.0001	1.30000	90.927	2.476E-04	1.006E 00	-1.046E-07	-1.046E-07	1.046E-07
1.40000	15.0001	1.40000	108.737	2.613E-04	1.000E 00	-7.086E-08	-7.086E-08	7.086E-08
1.50000	15.0001	1.50000	127.693	2.681E-04	9.976E-01	-4.981E-08	-4.981E-08	4.981E-08
1.60000	15.0001	1.60000	147.354	2.749E-04	9.964E-01	-3.456E-08	-3.456E-08	3.456E-08
1.70000	15.0001	1.70000	167.472	2.749E-04	9.960E-01	-2.478E-08	-2.478E-08	2.478E-08
1.80000	15.0001	1.80000	187.900	2.800E-04	9.960E-01	-1.779E-08	-1.779E-08	1.779E-08
1.90000	15.0001	1.90000	208.547	2.800E-04	9.961E-01	-1.281E-08	-1.281E-08	1.281E-08
2.00000	15.0001	2.00000	229.354	2.817E-04	9.964E-01	-9.270E-09	-9.270E-09	9.270E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o= 15.000 θ_D= 0. ρ_a=55.687

z	$_x\mu$-1 0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.600E-08	49.901	-6.806E-07	-6.806E-07	6.806E-07	6.806E-07	-8.859E-09	-8.859E-09
0.20000	2.231E-08	99.802	-1.628E-06	-1.628E-06	1.628E-06	1.628E-06	-1.235E-08	-1.235E-08
0.30000	3.098E-08	149.703	-2.947E-06	-2.947E-06	2.947E-06	2.947E-06	-1.715E-08	-1.715E-08
0.40000	4.439E-08	199.605	-4.802E-06	-4.802E-06	4.802E-06	4.802E-06	-2.458E-08	-2.458E-08
0.50000	6.345E-08	249.506	-7.468E-06	-7.468E-06	7.468E-06	7.468E-06	-3.513E-08	-3.513E-08
0.60000	9.113E-08	299.407	-1.125E-05	-1.125E-05	1.125E-05	1.125E-05	-5.046E-08	-5.046E-08
0.70000	1.382E-07	349.308	-1.692E-05	-1.692E-05	1.692E-05	1.692E-05	-7.651E-08	-7.651E-08
0.80000	2.156E-07	399.209	-2.569E-05	-2.569E-05	2.569E-05	2.569E-05	-1.194E-07	-1.194E-07
0.85000	2.547E-07	424.160	-3.156E-05	-3.156E-05	3.156E-05	3.156E-05	-1.410E-07	-1.410E-07
0.90000	2.931E-07	449.110	-3.840E-05	-3.840E-05	3.840E-05	3.840E-05	-1.623E-07	-1.623E-07
0.92500	3.069E-07	461.586	-4.215E-05	-4.215E-05	4.215E-05	4.215E-05	-1.699E-07	-1.699E-07
0.95000	3.146E-07	474.061	-4.603E-05	-4.603E-05	4.603E-05	4.603E-05	-1.742E-07	-1.742E-07
0.96250	3.160E-07	480.299	-4.800E-05	-4.800E-05	4.800E-05	4.800E-05	-1.750E-07	-1.750E-07
0.97500	3.156E-07	486.536	-4.997E-05	-4.997E-05	4.997E-05	4.997E-05	-1.747E-07	-1.747E-07
0.98125	3.147E-07	489.655	-5.095E-05	-5.095E-05	5.096E-05	5.096E-05	-1.743E-07	-1.743E-07
0.98750	3.134E-07	492.774	-5.193E-05	-5.193E-05	5.193E-05	5.193E-05	-1.736E-07	-1.736E-07
0.99375	3.118E-07	495.893	-5.291E-05	-5.291E-05	5.291E-05	5.291E-05	-1.726E-07	-1.726E-07
1.00000	3.097E-07	499.011	-5.388E-05	-5.388E-05	5.388E-05	5.388E-05	-1.715E-07	-1.715E-07
1.00625	3.072E-07	502.130	-5.484E-05	-5.484E-05	5.484E-05	5.484E-05	-1.701E-07	-1.701E-07
1.01250	3.043E-07	505.249	-5.579E-05	-5.579E-05	5.579E-05	5.579E-05	-1.685E-07	-1.685E-07
1.01875	3.010E-07	508.368	-5.674E-05	-5.674E-05	5.674E-05	5.674E-05	-1.667E-07	-1.667E-07
1.02500	2.974E-07	511.487	-5.767E-05	-5.767E-05	5.767E-05	5.767E-05	-1.647E-07	-1.647E-07
1.03750	2.892E-07	517.724	-5.950E-05	-5.950E-05	5.950E-05	5.950E-05	-1.602E-07	-1.602E-07
1.05000	2.799E-07	523.962	-6.128E-05	-6.128E-05	6.128E-05	6.128E-05	-1.550E-07	-1.550E-07
1.07500	2.596E-07	536.437	-6.464E-05	-6.464E-05	6.464E-05	6.464E-05	-1.437E-07	-1.437E-07
1.10000	2.410E-07	548.913	-6.776E-05	-6.776E-05	6.777E-05	6.777E-05	-1.334E-07	-1.334E-07
1.15000	2.008E-07	573.863	-7.328E-05	-7.328E-05	7.328E-05	7.328E-05	-1.112E-07	-1.112E-07
1.20000	1.613E-07	598.814	-7.779E-05	-7.779E-05	7.779E-05	7.779E-05	-8.930E-08	-8.930E-08
1.30000	1.046E-07	648.715	-8.428E-05	-8.428E-05	8.428E-05	8.428E-05	-5.791E-08	-5.791E-08
1.40000	7.086E-08	698.616	-8.855E-05	-8.855E-05	8.855E-05	8.855E-05	-3.924E-08	-3.924E-08
1.50000	4.981E-08	748.517	-9.153E-05	-9.153E-05	9.154E-05	9.154E-05	-2.758E-08	-2.758E-08
1.60000	3.456E-08	798.418	-9.361E-05	-9.362E-05	9.362E-05	9.362E-05	-1.914E-08	-1.914E-08
1.70000	2.478E-08	848.319	-9.508E-05	-9.508E-05	9.508E-05	9.508E-05	-1.372E-08	-1.372E-08
1.80000	1.779E-08	898.221	-9.613E-05	-9.613E-05	9.614E-05	9.614E-05	-9.853E-09	-9.853E-09
1.90000	1.281E-08	948.122	-9.689E-05	-9.689E-05	9.689E-05	9.689E-05	-7.091E-09	-7.091E-09
2.00000	9.270E-09	998.023	-9.743E-05	-9.743E-05	9.744E-05	9.744E-05	-5.133E-09	-5.133E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_o=15.000 θ_D= 0. ρ_a=55.687

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-2.990E-13
0.10000	3.778E-10	3.778E-10	-6.558E-20	-6.558E-20	-7.601E-10	-7.601E-10	-3.964E-13
0.20000	1.041E-09	1.041E-09	-1.113E-19	-1.113E-19	-2.054E-09	-2.054E-09	-5.548E-13
0.30000	2.158E-09	2.158E-09	-1.877E-19	-1.877E-19	-4.243E-09	-4.243E-09	-8.391E-13
0.40000	4.377E-09	4.377E-09	-3.244E-19	-3.244E-19	-7.973E-09	-7.973E-09	-1.341E-12
0.50000	8.246E-09	8.246E-09	-5.558E-19	-5.558E-19	-1.441E-08	-1.441E-08	-2.377E-12
0.60000	1.559E-08	1.559E-08	-9.552E-19	-9.552E-19	-2.533E-08	-2.533E-08	-4.680E-12
0.70000	3.345E-08	3.345E-08	-1.755E-18	-1.755E-18	-4.512E-08	-4.512E-08	-9.585E-12
0.80000	7.675E-08	7.675E-08	-3.391E-18	-3.391E-18	-8.283E-08	-8.283E-08	-1.900E-11
0.85000	1.192E-07	1.192E-07	-4.340E-18	-4.340E-18	-1.118E-07	-1.118E-07	-2.611E-11
0.90000	1.857E-07	1.857E-07	-5.374E-18	-5.374E-18	-1.481E-07	-1.481E-07	-3.252E-11
0.92500	2.305E-07	2.305E-07	-5.767E-18	-5.767E-18	-1.690E-07	-1.690E-07	-3.483E-11
0.95000	2.818E-07	2.819E-07	-5.991E-18	-5.991E-18	-1.910E-07	-1.910E-07	-3.617E-11
0.96250	3.091E-07	3.091E-07	-6.031E-18	-6.031E-18	-2.023E-07	-2.023E-07	-3.641E-11
0.97500	3.367E-07	3.367E-07	-6.019E-18	-6.019E-18	-2.135E-07	-2.135E-07	-3.634E-11
0.98125	3.504E-07	3.504E-07	-5.994E-18	-5.994E-18	-2.191E-07	-2.191E-07	-3.620E-11
0.98750	3.640E-07	3.640E-07	-5.957E-18	-5.957E-18	-2.247E-07	-2.247E-07	-3.597E-11
0.99375	3.774E-07	3.774E-07	-5.908E-18	-5.908E-18	-2.303E-07	-2.303E-07	-3.568E-11
1.00000	3.905E-07	3.905E-07	-5.847E-18	-5.847E-18	-2.358E-07	-2.358E-07	-3.531E-11
1.00625	4.032E-07	4.033E-07	-5.775E-18	-5.775E-18	-2.412E-07	-2.412E-07	-3.488E-11
1.01250	4.156E-07	4.156E-07	-5.692E-18	-5.692E-18	-2.466E-07	-2.466E-07	-3.439E-11
1.01875	4.274E-07	4.275E-07	-5.599E-18	-5.599E-18	-2.519E-07	-2.519E-07	-3.384E-11
1.02500	4.388E-07	4.388E-07	-5.496E-18	-5.496E-18	-2.570E-07	-2.570E-07	-3.324E-11
1.03750	4.599E-07	4.600E-07	-5.266E-18	-5.266E-18	-2.671E-07	-2.671E-07	-3.191E-11
1.05000	4.788E-07	4.788E-07	-5.008E-18	-5.008E-18	-2.767E-07	-2.767E-07	-3.045E-11
1.07500	5.098E-07	5.098E-07	-4.464E-18	-4.464E-18	-2.944E-07	-2.944E-07	-2.716E-11
1.10000	5.323E-07	5.323E-07	-4.000E-18	-4.000E-18	-3.102E-07	-3.103E-07	-2.342E-11
1.15000	5.574E-07	5.574E-07	-3.053E-18	-3.053E-18	-3.366E-07	-3.366E-07	-1.680E-11
1.20000	5.655E-07	5.655E-07	-2.207E-18	-2.207E-18	-3.562E-07	-3.562E-07	-1.189E-11
1.30000	5.555E-07	5.555E-07	-1.168E-18	-1.168E-18	-3.803E-07	-3.803E-07	-5.812E-12
1.40000	5.308E-07	5.308E-07	-6.564E-19	-6.564E-19	-3.934E-07	-3.934E-07	-2.933E-12
1.50000	5.027E-07	5.027E-07	-3.860E-19	-3.860E-19	-4.010E-07	-4.010E-07	-1.591E-12
1.60000	4.752E-07	4.752E-07	-2.225E-19	-2.225E-19	-4.055E-07	-4.055E-07	-9.711E-13
1.70000	4.494E-07	4.494E-07	-1.316E-19	-1.316E-19	-4.081E-07	-4.081E-07	-6.284E-13
1.80000	4.256E-07	4.256E-07	-7.768E-20	-7.768E-20	-4.096E-07	-4.096E-07	-4.388E-13
1.90000	4.039E-07	4.039E-07	-4.556E-20	-4.556E-20	-4.105E-07	-4.105E-07	-3.263E-13
2.00000	3.841E-07	3.841E-07	-2.659E-20	-2.659E-20	-4.110E-07	-4.110E-07	-2.548E-13

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 20.000 θ_0= 0. ρ_a= 73.589

z	ϕ	z_r	ρ	θ	β	$_o\mu'$-1	$_x\mu'$-1	$_o\mu'$-1
0.	20.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	20.0000	0.10000	195.079	2.268E-06	9.933E-01	-1.594E-08	-1.584E-08	1.584E-08
0.20000	20.0000	0.20000	175.341	2.615E-06	9.917E-01	-2.181E-08	-2.182E-08	2.181E-08
0.30000	20.0000	0.30000	156.173	4.696E-06	9.899E-01	-2.982E-08	-2.982E-08	2.982E-08
0.40000	20.0000	0.40000	137.474	7.044E-06	9.885E-01	-4.153E-08	-4.153E-08	4.153E-08
0.50000	20.0000	0.50000	119.855	1.110E-05	9.881E-01	-5.763E-08	-5.763E-08	5.763E-08
0.60000	20.0000	0.60000	103.717	1.729E-05	9.904E-01	-7.779E-08	-7.779E-08	7.779E-08
0.70000	20.0000	0.70000	89.861	2.817E-05	9.964E-01	-1.074E-07	-1.074E-07	1.074E-07
0.80000	20.0000	0.80000	79.490	3.842E-05	1.002E 00	-1.398E-07	-1.398E-07	1.398E-07
0.85000	20.0000	0.85000	76.077	4.183E-05	1.002E 00	-1.561E-07	-1.561E-07	1.561E-07
0.90000	20.0000	0.90000	74.083	4.952E-05	9.981E-01	-1.666E-07	-1.666E-07	1.666E-07
0.92500	20.0000	0.92500	73.657	5.635E-05	9.961E-01	-1.689E-07	-1.689E-07	1.689E-07
0.95000	20.0000	0.95000	73.622	6.574E-05	9.951E-01	-1.691E-07	-1.691E-07	1.691E-07
0.96250	20.0000	0.96250	73.752	6.745E-05	9.952E-01	-1.684E-07	-1.684E-07	1.684E-07
0.97500	20.0000	0.97500	73.980	7.257E-05	9.959E-01	-1.672E-07	-1.672E-07	1.672E-07
0.98125	20.0000	0.98125	74.130	7.342E-05	9.964E-01	-1.663E-07	-1.663E-07	1.663E-07
0.98750	20.0000	0.98750	74.304	7.769E-05	9.970E-01	-1.654E-07	-1.654E-07	1.654E-07
0.99375	20.0000	0.99375	74.502	7.940E-05	9.978E-01	-1.643E-07	-1.643E-07	1.643E-07
1.00000	20.0000	1.00000	74.724	8.111E-05	9.987E-01	-1.632E-07	-1.632E-07	1.632E-07
1.00625	20.0000	1.00625	74.969	8.623E-05	9.997E-01	-1.619E-07	-1.619E-07	1.619E-07
1.01250	20.0000	1.01250	75.238	8.708E-05	1.001E 00	-1.605E-07	-1.605E-07	1.605E-07
1.01875	20.0000	1.01875	75.529	9.135E-05	1.002E 00	-1.590E-07	-1.590E-07	1.590E-07
1.02500	20.0000	1.02500	75.843	9.392E-05	1.003E 00	-1.573E-07	-1.573E-07	1.573E-07
1.03750	20.0000	1.03750	76.539	9.477E-05	1.006E 00	-1.538E-07	-1.538E-07	1.538E-07
1.05000	20.0000	1.05000	77.321	9.904E-05	1.009E 00	-1.500E-07	-1.500E-07	1.500E-07
1.07500	20.0000	1.07500	79.138	1.050E-04	1.014E 00	-1.414E-07	-1.414E-07	1.414E-07
1.10000	20.0000	1.10000	81.271	1.050E-04	1.018E 00	-1.332E-07	-1.332E-07	1.332E-07
1.15000	20.0000	1.15000	86.388	1.050E-04	1.023E 00	-1.172E-07	-1.172E-07	1.172E-07
1.20000	20.0000	1.20000	92.478	1.050E-04	1.023E 00	-1.006E-07	-1.006E-07	1.006E-07
1.30000	20.0000	1.30000	106.889	1.110E-04	1.017E 00	-7.334E-08	-7.334E-08	7.334E-08
1.40000	20.0000	1.40000	123.386	1.195E-04	1.009E 00	-5.397E-08	-5.397E-08	5.397E-08
1.50000	20.0000	1.50000	141.240	1.247E-04	1.004E 00	-3.872E-08	-3.872E-08	3.872E-08
1.60000	20.0001	1.60000	159.998	1.349E-04	1.000E 00	-2.798E-08	-2.798E-08	2.798E-08
1.70000	20.0001	1.70000	179.377	1.417E-04	9.982E-01	-2.043E-08	-2.043E-08	2.043E-08
1.80000	20.0001	1.80000	199.194	1.417E-04	9.970E-01	-1.482E-08	-1.482E-08	1.482E-08
1.90000	20.0001	1.90000	219.332	1.451E-04	9.963E-01	-1.083E-08	-1.083E-08	1.083E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 20.000 θ_0= 0. ρ_a= 73.589

z	$_x\mu'$-1	T_o	$_oT_f$-T_o	$_zT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.584E-08	49.901	-6.772E-07	-6.772E-07	6.772E-07	6.772E-07	-8.770E-09	-8.770E-09
0.20000	2.182E-08	99.802	-1.609E-06	-1.609E-06	1.609E-06	1.609E-06	-1.208E-08	-1.208E-08
0.30000	2.982E-08	149.703	-2.888E-06	-2.888E-06	2.888E-06	2.888E-06	-1.651E-08	-1.651E-08
0.40000	4.153E-08	199.605	-4.646E-06	-4.646E-06	4.646E-06	4.646E-06	-2.300E-08	-2.300E-08
0.50000	5.763E-08	249.506	-7.103E-06	-7.103E-06	7.103E-06	7.103E-06	-3.191E-08	-3.191E-08
0.60000	7.779E-08	299.407	-1.047E-05	-1.047E-05	1.047E-05	1.047E-05	-4.307E-08	-4.307E-08
0.70000	1.074E-07	349.308	-1.503E-05	-1.503E-05	1.503E-05	1.503E-05	-5.948E-08	-5.948E-08
0.80000	1.398E-07	399.209	-2.121E-05	-2.121E-05	2.121E-05	2.121E-05	-7.739E-08	-7.739E-08
0.85000	1.561E-07	424.160	-2.491E-05	-2.491E-05	2.491E-05	2.491E-05	-8.646E-08	-8.646E-08
0.90000	1.666E-07	449.110	-2.895E-05	-2.895E-05	2.895E-05	2.895E-05	-9.225E-08	-9.225E-08
0.92500	1.689E-07	461.586	-3.104E-05	-3.104E-05	3.104E-05	3.104E-05	-9.353E-08	-9.353E-08
0.95000	1.691E-07	474.061	-3.316E-05	-3.316E-05	3.316E-05	3.316E-05	-9.364E-08	-9.364E-08
0.96250	1.684E-07	480.299	-3.421E-05	-3.421E-05	3.421E-05	3.421E-05	-9.324E-08	-9.324E-08
0.97500	1.672E-07	486.536	-3.525E-05	-3.526E-05	3.525E-05	3.526E-05	-9.256E-08	-9.256E-08
0.98125	1.663E-07	489.655	-3.577E-05	-3.578E-05	3.578E-05	3.578E-05	-9.211E-08	-9.211E-08
0.98750	1.654E-07	492.774	-3.629E-05	-3.629E-05	3.629E-05	3.629E-05	-9.159E-08	-9.159E-08
0.99375	1.643E-07	495.893	-3.681E-05	-3.681E-05	3.681E-05	3.681E-05	-9.100E-08	-9.100E-08
1.00000	1.632E-07	499.012	-3.732E-05	-3.732E-05	3.732E-05	3.732E-05	-9.035E-08	-9.035E-08
1.00625	1.619E-07	502.130	-3.782E-05	-3.782E-05	3.782E-05	3.782E-05	-8.963E-08	-8.963E-08
1.01250	1.605E-07	505.249	-3.833E-05	-3.833E-05	3.833E-05	3.833E-05	-8.885E-08	-8.885E-08
1.01875	1.590E-07	508.368	-3.882E-05	-3.883E-05	3.883E-05	3.883E-05	-8.801E-08	-8.801E-08
1.02500	1.573E-07	511.487	-3.932E-05	-3.932E-05	3.932E-05	3.932E-05	-8.712E-08	-8.712E-08
1.03750	1.538E-07	517.724	-4.029E-05	-4.029E-05	4.029E-05	4.029E-05	-8.517E-08	-8.518E-08
1.05000	1.500E-07	523.962	-4.124E-05	-4.124E-05	4.124E-05	4.124E-05	-8.304E-08	-8.304E-08
1.07500	1.414E-07	536.437	-4.305E-05	-4.305E-05	4.306E-05	4.306E-05	-7.828E-08	-7.828E-08
1.10000	1.332E-07	548.913	-4.477E-05	-4.477E-05	4.477E-05	4.477E-05	-7.374E-08	-7.374E-08
1.15000	1.172E-07	573.863	-4.789E-05	-4.789E-05	4.789E-05	4.789E-05	-6.488E-08	-6.488E-08
1.20000	1.006E-07	598.814	-5.061E-05	-5.061E-05	5.061E-05	5.061E-05	-5.571E-08	-5.571E-08
1.30000	7.334E-08	648.715	-5.488E-05	-5.488E-05	5.488E-05	5.489E-05	-4.061E-08	-4.061E-08
1.40000	5.397E-08	698.616	-5.804E-05	-5.804E-05	5.804E-05	5.804E-05	-2.988E-08	-2.988E-08
1.50000	3.872E-08	748.517	-6.034E-05	-6.034E-05	6.034E-05	6.034E-05	-2.144E-08	-2.144E-08
1.60000	2.798E-08	798.418	-6.198E-05	-6.198E-05	6.198E-05	6.198E-05	-1.549E-08	-1.549E-08
1.70000	2.043E-08	848.320	-6.318E-05	-6.318E-05	6.318E-05	6.318E-05	-1.131E-08	-1.131E-08
1.80000	1.482E-08	898.221	-6.405E-05	-6.405E-05	6.405E-05	6.405E-05	-8.204E-09	-8.204E-09
1.90000	1.083E-08	948.122	-6.469E-05	-6.469E-05	6.469E-05	6.469E-05	-5.997E-09	-5.997E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 20.000 θ_D= 0. ρ_a= 73.589

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-5.222E-13
0.10000	4.870E-10	4.870E-10	-6.454E-20	-6.454E-20	-7.537E-10	-7.537E-10	-6.859E-13
0.20000	1.339E-09	1.339E-09	-1.074E-19	-1.074E-19	-2.014E-09	-2.014E-09	-9.447E-13
0.30000	2.730E-09	2.730E-09	-1.766E-19	-1.766E-19	-4.098E-09	-4.098E-09	-1.390E-12
0.40000	5.296E-09	5.296E-09	-2.935E-19	-2.935E-19	-7.533E-09	-7.533E-09	-2.137E-12
0.50000	9.700E-09	9.700E-09	-4.808E-19	-4.808E-19	-1.322E-08	-1.322E-08	-3.507E-12
0.60000	1.707E-08	1.707E-08	-7.556E-19	-7.556E-19	-2.236E-08	-2.236E-08	-6.187E-12
0.70000	3.215E-08	3.215E-08	-1.215E-18	-1.215E-18	-3.677E-08	-3.677E-08	-1.059E-11
0.80000	6.325E-08	6.325E-08	-1.785E-18	-1.785E-18	-5.917E-08	-5.917E-08	-1.700E-11
0.85000	8.915E-08	8.915E-08	-2.104E-18	-2.104E-18	-7.376E-08	-7.376E-08	-1.980E-11
0.90000	1.246E-07	1.246E-07	-2.315E-18	-2.315E-18	-9.036E-08	-9.037E-08	-2.176E-11
0.92500	1.455E-07	1.455E-07	-2.363E-18	-2.363E-18	-9.913E-08	-9.913E-08	-2.222E-11
0.95000	1.680E-07	1.680E-07	-2.367E-18	-2.367E-18	-1.080E-07	-1.080E-07	-2.226E-11
0.96250	1.794E-07	1.794E-07	-2.352E-18	-2.352E-18	-1.124E-07	-1.124E-07	-2.212E-11
0.97500	1.908E-07	1.908E-07	-2.327E-18	-2.327E-18	-1.168E-07	-1.168E-07	-2.188E-11
0.98125	1.964E-07	1.964E-07	-2.310E-18	-2.310E-18	-1.189E-07	-1.189E-07	-2.172E-11
0.98750	2.019E-07	2.019E-07	-2.291E-18	-2.291E-18	-1.211E-07	-1.211E-07	-2.154E-11
0.99375	2.073E-07	2.073E-07	-2.269E-18	-2.269E-18	-1.232E-07	-1.232E-07	-2.133E-11
1.00000	2.126E-07	2.126E-07	-2.245E-18	-2.245E-18	-1.253E-07	-1.253E-07	-2.111E-11
1.00625	2.177E-07	2.177E-07	-2.219E-18	-2.219E-18	-1.274E-07	-1.274E-07	-2.086E-11
1.01250	2.226E-07	2.226E-07	-2.190E-18	-2.190E-18	-1.295E-07	-1.295E-07	-2.060E-11
1.01875	2.274E-07	2.274E-07	-2.160E-18	-2.160E-18	-1.315E-07	-1.315E-07	-2.032E-11
1.02500	2.319E-07	2.319E-07	-2.127E-18	-2.127E-18	-1.335E-07	-1.335E-07	-2.002E-11
1.03750	2.405E-07	2.405E-07	-2.057E-18	-2.057E-18	-1.374E-07	-1.374E-07	-1.939E-11
1.05000	2.481E-07	2.481E-07	-1.981E-18	-1.981E-18	-1.412E-07	-1.412E-07	-1.871E-11
1.07500	2.610E-07	2.610E-07	-1.816E-18	-1.816E-18	-1.483E-07	-1.483E-07	-1.727E-11
1.10000	2.710E-07	2.710E-07	-1.663E-18	-1.663E-18	-1.548E-07	-1.548E-07	-1.563E-11
1.15000	2.835E-07	2.835E-07	-1.379E-18	-1.379E-18	-1.662E-07	-1.662E-07	-1.232E-11
1.20000	2.889E-07	2.889E-07	-1.104E-18	-1.104E-18	-1.755E-07	-1.755E-07	-9.531E-12
1.30000	2.876E-07	2.876E-07	-6.913E-19	-6.913E-19	-1.886E-07	-1.886E-07	-5.484E-12
1.40000	2.783E-07	2.783E-07	-4.355E-19	-4.355E-19	-1.969E-07	-1.969E-07	-3.150E-12
1.50000	2.663E-07	2.663E-07	-2.641E-19	-2.641E-19	-2.020E-07	-2.020E-07	-1.952E-12
1.60000	2.537E-07	2.537E-07	-1.596E-19	-1.596E-19	-2.051E-07	-2.051E-07	-1.278E-12
1.70000	2.411E-07	2.411E-07	-9.679E-20	-9.679E-20	-2.070E-07	-2.070E-07	-8.816E-13
1.80000	2.292E-07	2.292E-07	-5.803E-20	-5.803E-20	-2.081E-07	-2.081E-07	-6.485E-13
1.90000	2.180E-07	2.180E-07	-3.447E-20	-3.447E-20	-2.088E-07	-2.088E-07	-4.978E-13

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 25.000 θ_D= 0. ρ_a= 90.930

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	25.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	25.0000	0.10000	195.870	1.574E-06	9.886E-01	-1.564E-08	-1.564E-08	1.564E-08
0.20000	25.0000	0.20000	177.095	3.042E-06	9.865E-01	-2.120E-08	-2.120E-08	2.120E-08
0.30000	25.0000	0.30000	159.016	4.482E-06	9.847E-01	-2.843E-08	-2.843E-08	2.843E-08
0.40000	25.0000	0.40000	141.900	1.174E-05	9.841E-01	-3.825E-08	-3.825E-08	3.825E-08
0.50000	25.0000	0.50000	126.137	1.942E-05	9.857E-01	-5.128E-08	-5.128E-08	5.128E-08
0.60000	25.0000	0.60000	112.302	2.391E-05	9.902E-01	-6.632E-08	-6.632E-08	6.632E-08
0.70000	25.0000	0.70000	101.186	2.946E-05	9.962E-01	-8.154E-08	-8.154E-08	8.154E-08
0.80000	25.0000	0.80000	93.763	3.586E-05	9.980E-01	-9.743E-08	-9.743E-08	9.743E-08
0.85000	25.0000	0.85000	91.734	3.927E-05	9.955E-01	-1.025E-07	-1.025E-07	1.025E-07
0.90000	25.0000	0.90000	90.940	4.525E-05	9.923E-01	-1.046E-07	-1.046E-07	1.046E-07
0.92500	25.0000	0.92500	91.019	4.952E-05	9.915E-01	-1.044E-07	-1.044E-07	1.044E-07
0.95000	25.0000	0.95000	91.415	5.037E-05	9.920E-01	-1.033E-07	-1.033E-07	1.033E-07
0.96250	25.0000	0.96250	91.730	5.293E-05	9.929E-01	-1.025E-07	-1.025E-07	1.025E-07
0.97500	25.0000	0.97500	92.123	5.720E-05	9.941E-01	-1.015E-07	-1.015E-07	1.015E-07
0.98125	25.0000	0.98125	92.349	5.720E-05	9.949E-01	-1.009E-07	-1.009E-07	1.009E-07
0.98750	25.0000	0.98750	92.593	6.147E-05	9.958E-01	-1.003E-07	-1.003E-07	1.003E-07
0.99375	25.0000	0.99375	92.856	6.147E-05	9.967E-01	-9.967E-08	-9.967E-08	9.967E-08
1.00000	25.0000	1.00000	93.138	6.403E-05	9.978E-01	-9.897E-08	-9.897E-08	9.897E-08
1.00625	25.0000	1.00625	93.438	6.659E-05	9.989E-01	-9.822E-08	-9.822E-08	9.822E-08
1.01250	25.0000	1.01250	93.757	6.659E-05	1.000E 00	-9.744E-08	-9.745E-08	9.744E-08
1.01875	25.0000	1.01875	94.093	6.745E-05	1.001E 00	-9.663E-08	-9.663E-08	9.663E-08
1.02500	25.0000	1.02500	94.448	7.001E-05	1.003E 00	-9.577E-08	-9.577E-08	9.577E-08
1.03750	25.0000	1.03750	95.211	7.086E-05	1.005E 00	-9.397E-08	-9.397E-08	9.397E-08
1.05000	25.0000	1.05000	96.042	7.086E-05	1.008E 00	-9.203E-08	-9.203E-08	9.203E-08
1.07500	25.0000	1.07500	97.906	7.342E-05	1.014E 00	-8.784E-08	-8.784E-08	8.784E-08
1.10000	25.0000	1.10000	100.025	7.428E-05	1.018E 00	-8.332E-08	-8.332E-08	8.332E-08
1.15000	25.0000	1.15000	104.964	7.513E-05	1.025E 00	-7.601E-08	-7.601E-08	7.601E-08
1.20000	25.0000	1.20000	110.731	7.599E-05	1.028E 00	-6.828E-08	-6.828E-08	6.828E-08
1.30000	25.0000	1.30000	124.272	7.855E-05	1.025E 00	-5.309E-08	-5.309E-08	5.309E-08
1.40000	25.0000	1.40000	139.827	8.025E-05	1.019E 00	-3.975E-08	-3.975E-08	3.975E-08
1.50000	25.0000	1.50000	156.797	8.538E-05	1.012E 00	-2.947E-08	-2.947E-08	2.947E-08
1.60000	25.0000	1.60000	174.771	9.050E-05	1.007E 00	-2.202E-08	-2.202E-08	2.202E-08
1.70000	25.0000	1.70000	193.470	9.392E-05	1.003E 00	-1.626E-08	-1.626E-08	1.626E-08
1.80000	25.0000	1.80000	212.702	9.904E-05	1.001E 00	-1.201E-08	-1.201E-08	1.201E-08
1.90000	25.0001	1.90000	232.335	9.904E-05	9.991E-01	-8.851E-09	-8.851E-09	8.851E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 25.000 θ_D= 0. ρ_a= 90.930

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.564E-08	49.901	-6.729E-07	-6.729E-07	6.729E-07	6.729E-07	-8.659E-09	-8.659E-09
0.20000	2.120E-08	99.802	-1.586E-06	-1.586E-06	1.586E-06	1.586E-06	-1.174E-08	-1.174E-08
0.30000	2.843E-08	149.703	-2.817E-06	-2.817E-06	2.817E-06	2.817E-06	-1.574E-08	-1.574E-08
0.40000	3.825E-08	199.605	-4.460E-06	-4.460E-06	4.460E-06	4.460E-06	-2.118E-08	-2.118E-08
0.50000	5.128E-08	249.506	-6.686E-06	-6.686E-06	6.686E-06	6.686E-06	-2.839E-08	-2.839E-08
0.60000	6.832E-08	299.407	-9.614E-06	-9.614E-06	9.614E-06	9.614E-06	-3.672E-08	-3.672E-08
0.70000	8.154E-08	349.308	-1.331E-05	-1.331E-05	1.331E-05	1.331E-05	-4.515E-08	-4.515E-08
0.80000	9.743E-08	399.209	-1.779E-05	-1.779E-05	1.779E-05	1.779E-05	-5.395E-08	-5.395E-08
0.85000	1.025E-07	424.160	-2.029E-05	-2.029E-05	2.029E-05	2.029E-05	-5.676E-08	-5.676E-08
0.90000	1.046E-07	449.110	-2.288E-05	-2.288E-05	2.288E-05	2.288E-05	-5.789E-08	-5.790E-08
0.92500	1.044E-07	461.586	-2.418E-05	-2.418E-05	2.418E-05	2.418E-05	-5.778E-08	-5.778E-08
0.95000	1.033E-07	474.061	-2.548E-05	-2.548E-05	2.548E-05	2.548E-05	-5.721E-08	-5.721E-08
0.96250	1.025E-07	480.299	-2.612E-05	-2.612E-05	2.612E-05	2.612E-05	-5.676E-08	-5.676E-08
0.97500	1.015E-07	486.536	-2.676E-05	-2.676E-05	2.676E-05	2.676E-05	-5.621E-08	-5.621E-08
0.98125	1.009E-07	489.655	-2.707E-05	-2.707E-05	2.707E-05	2.707E-05	-5.589E-08	-5.589E-08
0.98750	1.003E-07	492.774	-2.738E-05	-2.738E-05	2.738E-05	2.738E-05	-5.555E-08	-5.555E-08
0.99375	9.967E-08	495.893	-2.770E-05	-2.770E-05	2.770E-05	2.770E-05	-5.519E-08	-5.519E-08
1.00000	9.897E-08	499.011	-2.801E-05	-2.801E-05	2.801E-05	2.801E-05	-5.480E-08	-5.480E-08
1.00625	9.822E-08	502.130	-2.831E-05	-2.831E-05	2.831E-05	2.831E-05	-5.439E-08	-5.439E-08
1.01250	9.745E-08	505.249	-2.862E-05	-2.862E-05	2.862E-05	2.862E-05	-5.396E-08	-5.396E-08
1.01875	9.663E-08	508.368	-2.892E-05	-2.892E-05	2.892E-05	2.892E-05	-5.350E-08	-5.350E-08
1.02500	9.577E-08	511.487	-2.922E-05	-2.922E-05	2.922E-05	2.922E-05	-5.303E-08	-5.303E-08
1.03750	9.397E-08	517.724	-2.981E-05	-2.981E-05	2.981E-05	2.981E-05	-5.203E-08	-5.203E-08
1.05000	9.203E-08	523.962	-3.039E-05	-3.039E-05	3.039E-05	3.039E-05	-5.096E-08	-5.096E-08
1.07500	8.784E-08	536.437	-3.152E-05	-3.152E-05	3.152E-05	3.152E-05	-4.864E-08	-4.864E-08
1.10000	8.334E-08	548.913	-3.258E-05	-3.258E-05	3.258E-05	3.258E-05	-4.613E-08	-4.613E-08
1.15000	7.401E-08	573.863	-3.457E-05	-3.457E-05	3.457E-05	3.457E-05	-4.209E-08	-4.209E-08
1.20000	6.828E-08	598.814	-3.637E-05	-3.637E-05	3.637E-05	3.637E-05	-3.781E-08	-3.781E-08
1.30000	5.309E-08	648.715	-3.940E-05	-3.940E-05	3.940E-05	3.940E-05	-2.939E-08	-2.939E-08
1.40000	3.975E-08	698.616	-4.170E-05	-4.170E-05	4.170E-05	4.170E-05	-2.201E-08	-2.201E-08
1.50000	2.947E-08	748.517	-4.341E-05	-4.341E-05	4.341E-05	4.341E-05	-1.632E-08	-1.632E-08
1.60000	2.204E-08	798.418	-4.469E-05	-4.469E-05	4.469E-05	4.469E-05	-1.219E-08	-1.219E-08
1.70000	1.626E-08	848.320	-4.564E-05	-4.564E-05	4.564E-05	4.564E-05	-9.002E-09	-9.002E-09
1.80000	1.201E-08	898.221	-4.634E-05	-4.634E-05	4.634E-05	4.634E-05	-6.648E-09	-6.648E-09
1.90000	8.854E-09	948.122	-4.685E-05	-4.685E-05	4.685E-05	4.685E-05	-4.901E-09	-4.901E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0=25.000 θ_D= 0. ρ_a=90.930

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-7.973E-13
0.10000	5.913E-10	5.913E-10	-6.323E-20	-6.323E-20	-7.456E-10	-7.456E-10	-1.035E-12
0.20000	1.602E-09	1.602E-09	-1.027E-19	-1.027E-19	-1.964E-09	-1.964E-09	-1.398E-12
0.30000	3.195E-09	3.195E-09	-1.637E-19	-1.637E-19	-3.925E-09	-3.925E-09	-1.990E-12
0.40000	5.910E-09	5.910E-09	-2.593E-19	-2.593E-19	-7.023E-09	-7.023E-09	-2.929E-12
0.50000	1.043E-08	1.043E-08	-4.032E-19	-4.032E-19	-1.192E-08	-1.192E-08	-4.429E-12
0.60000	1.735E-08	1.735E-08	-5.940E-19	-5.941E-19	-1.933E-08	-1.933E-08	-6.877E-12
0.70000	2.973E-08	2.973E-08	-8.111E-19	-8.111E-19	-2.983E-08	-2.983E-08	-1.045E-11
0.80000	5.209E-08	5.209E-08	-1.053E-18	-1.053E-18	-4.382E-08	-4.382E-08	-1.382E-11
0.85000	6.860E-08	6.860E-08	-1.134E-18	-1.134E-18	-5.203E-08	-5.203E-08	-1.498E-11
0.90000	8.890E-08	8.890E-08	-1.168E-18	-1.168E-18	-6.067E-08	-6.067E-08	-1.548E-11
0.92500	1.002E-07	1.002E-07	-1.164E-18	-1.164E-18	-6.503E-08	-6.503E-08	-1.543E-11
0.95000	1.117E-07	1.117E-07	-1.148E-18	-1.148E-18	-6.936E-08	-6.936E-08	-1.516E-11
0.96250	1.173E-07	1.173E-07	-1.134E-18	-1.134E-18	-7.149E-08	-7.150E-08	-1.499E-11
0.97500	1.229E-07	1.229E-07	-1.118E-18	-1.118E-18	-7.360E-08	-7.360E-08	-1.475E-11
0.98125	1.256E-07	1.256E-07	-1.109E-18	-1.109E-18	-7.464E-08	-7.464E-08	-1.462E-11
0.98750	1.282E-07	1.282E-07	-1.099E-18	-1.099E-18	-7.568E-08	-7.568E-08	-1.448E-11
0.99375	1.308E-07	1.308E-07	-1.089E-18	-1.089E-18	-7.670E-08	-7.670E-08	-1.433E-11
1.00000	1.333E-07	1.333E-07	-1.078E-18	-1.078E-18	-7.771E-08	-7.771E-08	-1.417E-11
1.00625	1.358E-07	1.358E-07	-1.066E-18	-1.066E-18	-7.871E-08	-7.871E-08	-1.400E-11
1.01250	1.381E-07	1.381E-07	-1.053E-18	-1.053E-18	-7.970E-08	-7.970E-08	-1.383E-11
1.01875	1.404E-07	1.404E-07	-1.041E-18	-1.041E-18	-8.068E-08	-8.068E-08	-1.365E-11
1.02500	1.426E-07	1.426E-07	-1.027E-18	-1.027E-18	-8.165E-08	-8.165E-08	-1.347E-11
1.03750	1.467E-07	1.467E-07	-9.989E-19	-9.989E-19	-8.354E-08	-8.354E-08	-1.308E-11
1.05000	1.505E-07	1.505E-07	-9.690E-19	-9.690E-19	-8.538E-08	-8.539E-08	-1.268E-11
1.07500	1.569E-07	1.569E-07	-9.052E-19	-9.052E-19	-8.889E-08	-8.889E-08	-1.183E-11
1.10000	1.619E-07	1.619E-07	-8.379E-19	-8.379E-19	-9.215E-08	-9.215E-08	-1.097E-11
1.15000	1.687E-07	1.687E-07	-7.296E-19	-7.296E-19	-9.802E-08	-9.802E-08	-9.008E-12
1.20000	1.720E-07	1.720E-07	-6.208E-19	-6.208E-19	-1.031E-07	-1.031E-07	-7.276E-12
1.30000	1.723E-07	1.723E-07	-4.248E-19	-4.248E-19	-1.108E-07	-1.108E-07	-4.684E-12
1.40000	1.681E-07	1.681E-07	-2.748E-19	-2.748E-19	-1.160E-07	-1.160E-07	-3.083E-12
1.50000	1.622E-07	1.622E-07	-1.734E-19	-1.734E-19	-1.193E-07	-1.193E-07	-2.092E-12
1.60000	1.555E-07	1.555E-07	-1.090E-19	-1.090E-19	-1.214E-07	1.214E-07	-1.460E-12
1.70000	1.485E-07	1.485E-07	-6.728E-20	-6.727E-20	-1.227E-07	-1.227E-07	-1.075E-12
1.80000	1.417E-07	1.417E-07	-4.092E-20	-4.092E-20	-1.235E-07	-1.235E-07	-8.243E-13
1.90000	1.352E-07	1.352E-07	-2.462E-20	-2.462E-20	-1.239E-07	-1.239E-07	-6.585E-13

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 30.000 θ_D= 0. ρ_a= 107.579

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	30.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	30.0000	0.10000	196.820	1.121E-06	9.849E-01	-1.540E-08	-1.540E-08	1.540E-08
0.20000	30.0000	0.20000	179.189	3.468E-06	9.830E-01	-2.050E-08	-2.050E-08	2.050E-08
0.30000	30.0000	0.30000	162.496	5.336E-06	9.819E-01	-2.687E-08	-2.687E-08	2.687E-08
0.40000	30.0000	0.40000	147.062	1.195E-05	9.826E-01	-3.475E-08	-3.475E-08	3.475E-08
0.50000	30.0000	0.50000	133.325	1.430E-05	9.854E-01	-4.486E-08	-4.486E-08	4.486E-08
0.60000	30.0000	0.60000	121.859	1.622E-05	9.899E-01	-5.552E-08	-5.552E-08	5.552E-08
0.70000	30.0000	0.70000	113.355	1.921E-05	9.932E-01	-6.503E-08	-6.503E-08	6.503E-08
0.80000	30.0000	0.80000	108.513	2.177E-05	9.916E-01	-7.116E-08	-7.116E-08	7.115E-08
0.85000	30.0000	0.85000	107.635	2.220E-05	9.894E-01	-7.233E-08	-7.233E-08	7.233E-08
0.90000	30.0000	0.90000	107.828	2.476E-05	9.884E-01	-7.207E-08	-7.207E-08	7.207E-08
0.92500	30.0000	0.92500	108.325	2.476E-05	9.890E-01	-7.140E-08	-7.140E-08	7.140E-08
0.95000	30.0000	0.95000	109.086	2.561E-05	9.906E-01	-7.040E-08	-7.040E-08	7.040E-08
0.96250	30.0000	0.96250	109.564	2.817E-05	9.918E-01	-6.978E-08	-6.978E-08	6.978E-08
0.97500	30.0000	0.97500	110.105	3.074E-05	9.933E-01	-6.908E-08	-6.908E-08	6.908E-08
0.98125	30.0000	0.98125	110.399	3.074E-05	9.942E-01	-6.870E-08	-6.870E-08	6.870E-08
0.98750	30.0000	0.98750	110.709	3.244E-05	9.951E-01	-6.831E-08	-6.831E-08	6.831E-08
0.99375	30.0000	0.99375	111.034	3.330E-05	9.960E-01	-6.790E-08	-6.790E-08	6.790E-08
1.00000	30.0000	1.00000	111.374	3.586E-05	9.970E-01	-6.747E-08	-6.747E-08	6.747E-08
1.00625	30.0000	1.00625	111.730	3.586E-05	9.980E-01	-6.702E-08	-6.702E-08	6.702E-08
1.01250	30.0000	1.01250	112.101	3.757E-05	9.991E-01	-6.656E-08	-6.656E-08	6.656E-08
1.01875	30.0000	1.01875	112.486	4.013E-05	1.000E 00	-6.609E-08	-6.609E-08	6.609E-08
1.02500	30.0000	1.02500	112.886	4.013E-05	1.001E 00	-6.560E-08	-6.560E-08	6.560E-08
1.03750	30.0000	1.03750	113.730	4.013E-05	1.004E 00	-6.458E-08	-6.458E-08	6.458E-08
1.05000	30.0000	1.05000	114.631	4.269E-05	1.006E 00	-6.351E-08	-6.351E-08	6.351E-08
1.07500	30.0000	1.07500	116.598	4.269E-05	1.011E 00	-6.123E-08	-6.123E-08	6.123E-08
1.10000	30.0000	1.10000	118.776	4.269E-05	1.015E 00	-5.880E-08	-5.880E-08	5.880E-08
1.15000	30.0000	1.15000	123.719	4.269E-05	1.022E 00	-5.363E-08	-5.363E-08	5.363E-08
1.20000	30.0000	1.20000	129.371	4.354E-05	1.026E 00	-4.828E-08	-4.828E-08	4.828E-08
1.30000	30.0000	1.30000	142.450	4.440E-05	1.028E 00	-3.786E-08	-3.786E-08	3.786E-08
1.40000	30.0000	1.40000	157.394	4.610E-05	1.024E 00	-2.919E-08	-2.919E-08	2.919E-08
1.50000	30.0000	1.50000	173.723	4.696E-05	1.018E 00	-2.240E-08	-2.239E-08	2.240E-08
1.60000	30.0000	1.60000	191.082	5.293E-05	1.013E 00	-1.690E-08	-1.690E-08	1.690E-08
1.70000	30.0000	1.70000	209.215	5.464E-05	1.009E 00	-1.267E-08	-1.267E-08	1.267E-08
1.80000	30.0000	1.80000	227.937	5.806E-05	1.006E 00	-9.476E-09	-9.476E-09	9.476E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 30.000 θ_D= 0. ρ_a= 107.579

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.540E-08	49.901	-6.680E-07	-6.680E-07	6.680E-07	6.680E-07	-8.526E-09	-8.526E-09
0.20000	2.050E-08	99.802	-1.558E-06	-1.558E-06	1.558E-06	1.558E-06	-1.135E-08	-1.135E-08
0.30000	2.687E-08	149.703	-2.735E-06	-2.735E-06	2.735E-06	2.735E-06	-1.488E-08	-1.488E-08
0.40000	3.475E-08	199.605	-4.263E-06	-4.263E-06	4.263E-06	4.263E-06	-1.924E-08	-1.924E-08
0.50000	4.486E-08	249.506	-6.245E-06	-6.245E-06	6.245E-06	6.245E-06	-2.484E-08	-2.484E-08
0.60000	5.552E-08	299.407	-8.750E-06	-8.750E-06	8.750E-06	8.750E-06	-3.074E-08	-3.074E-08
0.70000	6.503E-08	349.308	-1.177E-05	-1.177E-05	1.177E-05	1.177E-05	-3.601E-08	-3.601E-08
0.80000	7.116E-08	399.209	-1.518E-05	-1.518E-05	1.518E-05	1.518E-05	-3.940E-08	-3.940E-08
0.85000	7.233E-08	424.160	-1.698E-05	-1.698E-05	1.698E-05	1.698E-05	-4.005E-08	-4.005E-08
0.90000	7.207E-08	449.110	-1.878E-05	-1.878E-05	1.878E-05	1.878E-05	-3.991E-08	-3.991E-08
0.92500	7.140E-08	461.586	-1.968E-05	-1.968E-05	1.968E-05	1.968E-05	-3.954E-08	-3.954E-08
0.95000	7.040E-08	474.061	-2.056E-05	-2.056E-05	2.056E-05	2.056E-05	-3.898E-08	-3.898E-08
0.96250	6.978E-08	480.299	-2.100E-05	-2.100E-05	2.100E-05	2.100E-05	-3.864E-08	-3.864E-08
0.97500	6.908E-08	486.536	-2.143E-05	-2.143E-05	2.143E-05	2.143E-05	-3.825E-08	-3.825E-08
0.98125	6.870E-08	489.655	-2.165E-05	-2.165E-05	2.165E-05	2.165E-05	-3.804E-08	-3.804E-08
0.98750	6.831E-08	492.774	-2.186E-05	-2.186E-05	2.186E-05	2.186E-05	-3.782E-08	-3.782E-08
0.99375	6.790E-08	495.893	-2.207E-05	-2.207E-05	2.207E-05	2.207E-05	-3.760E-08	-3.760E-08
1.00000	6.747E-08	499.012	-2.228E-05	-2.228E-05	2.228E-05	2.228E-05	-3.736E-08	-3.736E-08
1.00625	6.702E-08	502.130	-2.249E-05	-2.249E-05	2.249E-05	2.249E-05	-3.711E-08	-3.711E-08
1.01250	6.656E-08	505.249	-2.270E-05	-2.270E-05	2.270E-05	2.270E-05	-3.686E-08	-3.686E-08
1.01875	6.609E-08	508.368	-2.291E-05	-2.291E-05	2.291E-05	2.291E-05	-3.659E-08	-3.659E-08
1.02500	6.560E-08	511.487	-2.311E-05	-2.311E-05	2.311E-05	2.311E-05	-3.632E-08	-3.632E-08
1.03750	6.458E-08	517.724	-2.352E-05	-2.352E-05	2.352E-05	2.352E-05	-3.576E-08	-3.576E-08
1.05000	6.351E-08	523.962	-2.392E-05	-2.392E-05	2.392E-05	2.392E-05	-3.516E-08	-3.516E-08
1.07500	6.123E-08	536.437	-2.470E-05	-2.470E-05	2.470E-05	2.470E-05	-3.390E-08	-3.390E-08
1.10000	5.880E-08	548.913	-2.545E-05	-2.545E-05	2.545E-05	2.545E-05	-3.256E-08	-3.256E-08
1.15000	5.363E-08	573.863	-2.685E-05	-2.685E-05	2.685E-05	2.685E-05	-2.970E-08	-2.970E-08
1.20000	4.828E-08	598.814	-2.812E-05	-2.812E-05	2.812E-05	2.812E-05	-2.674E-08	-2.674E-08
1.30000	3.786E-08	648.715	-3.027E-05	-3.027E-05	3.027E-05	3.027E-05	-2.097E-08	-2.097E-08
1.40000	2.919E-08	698.616	-3.193E-05	-3.193E-05	3.193E-05	3.193E-05	-1.616E-08	-1.616E-08
1.50000	2.239E-08	748.517	-3.321E-05	-3.321E-05	3.321E-05	3.321E-05	-1.240E-08	-1.240E-08
1.60000	1.690E-08	798.418	-3.418E-05	-3.418E-05	3.418E-05	3.418E-05	-9.358E-09	-9.358E-09
1.70000	1.267E-08	848.320	-3.492E-05	-3.492E-05	3.492E-05	3.492E-05	-7.018E-09	-7.018E-09
1.80000	9.476E-09	898.221	-3.546E-05	-3.546E-05	3.547E-05	3.547E-05	-5.247E-09	-5.247E-09

PROPAGATION FREQUENCY= 1.660CE 08 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.116E-12
0.10000	6.876E-10	6.876E-10	-6.170E-20	-6.170E-20	-7.360E-10	-7.360E-10	-1.430E-12
0.20000	1.829E-09	1.829E-09	-9.726E-20	-9.726E-20	-1.907E-09	-1.907E-09	-1.887E-12
0.30000	3.565E-09	3.565E-09	-1.497E-19	-1.497E-19	-3.730E-09	-3.730E-09	-2.588E-12
0.40000	6.320E-09	6.320E-09	-2.243E-19	-2.243E-19	-6.493E-09	-6.493E-09	-3.642E-12
0.50000	1.071E-08	1.071E-08	-3.296E-19	-3.296E-19	-1.060E-08	-1.060E-08	-5.082E-12
0.60000	1.703E-08	1.703E-08	-4.545E-19	-4.545E-19	-1.646E-08	-1.646E-08	-7.044E-12
0.70000	2.706E-08	2.706E-08	-5.768E-19	-5.768E-19	-2.419E-08	-2.419E-08	-9.284E-12
0.80000	4.283E-08	4.283E-08	-6.606E-19	-6.606E-19	-3.352E-08	-3.352E-08	-1.103E-11
0.85000	5.314E-08	5.314E-08	-6.770E-19	-6.770E-19	-3.854E-08	-3.854E-08	-1.139E-11
0.90000	6.457E-08	6.457E-08	-6.734E-19	-6.734E-19	-4.360E-08	-4.360E-08	-1.131E-11
0.92500	7.048E-08	7.048E-08	-6.641E-19	-6.641E-19	-4.610E-08	-4.610E-08	-1.111E-11
0.95000	7.629E-08	7.629E-08	-6.501E-19	-6.501E-19	-4.856E-08	-4.856E-08	-1.080E-11
0.96250	7.909E-08	7.909E-08	-6.414E-19	-6.414E-19	-4.977E-08	-4.977E-08	-1.062E-11
0.97500	8.180E-08	8.180E-08	-6.318E-19	-6.318E-19	-5.096E-08	-5.096E-08	-1.041E-11
0.98125	8.312E-08	8.312E-08	-6.266E-19	-6.266E-19	-5.155E-08	-5.155E-08	-1.030E-11
0.98750	8.440E-08	8.440E-08	-6.212E-19	-6.212E-19	-5.213E-08	-5.213E-08	-1.019E-11
0.99375	8.565E-08	8.565E-08	-6.155E-19	-6.155E-19	-5.271E-08	-5.271E-08	-1.007E-11
1.00000	8.687E-08	8.687E-08	-6.097E-19	-6.097E-19	-5.328E-08	-5.328E-08	-9.951E-12
1.00625	8.805E-08	8.805E-08	-6.036E-19	-6.036E-19	-5.385E-08	-5.385E-08	-9.828E-12
1.01250	8.919E-08	8.919E-08	-5.974E-19	-5.974E-19	-5.441E-08	-5.441E-08	-9.701E-12
1.01875	9.029E-08	9.029E-08	-5.910E-19	-5.910E-19	-5.497E-08	-5.497E-08	-9.572E-12
1.02500	9.136E-08	9.136E-08	-5.844E-19	-5.844E-19	-5.551E-08	-5.552E-08	-9.440E-12
1.03750	9.337E-08	9.337E-08	-5.708E-19	-5.708E-19	-5.659E-08	-5.660E-08	-9.170E-12
1.05000	9.521E-08	9.521E-08	-5.565E-19	-5.565E-19	-5.765E-08	-5.765E-08	-8.894E-12
1.07500	9.839E-08	9.839E-08	-5.267E-19	-5.267E-19	-5.968E-08	-5.968E-08	-8.331E-12
1.10000	1.010E-07	1.010E-07	-4.955E-19	-4.955E-19	-6.159E-08	-6.159E-08	-7.764E-12
1.15000	1.047E-07	1.047E-07	-4.314E-19	-4.314E-19	-6.505E-08	-6.505E-08	-6.664E-12
1.20000	1.068E-07	1.068E-07	-3.683E-19	-3.683E-19	-6.804E-08	-6.804E-08	-5.662E-12
1.30000	1.074E-07	1.074E-07	-2.553E-19	-2.553E-19	-7.268E-08	-7.268E-08	-4.052E-12
1.40000	1.055E-07	1.055E-07	-1.707E-19	-1.707E-19	-7.582E-08	-7.582E-08	-2.890E-12
1.50000	1.024E-07	1.024E-07	-1.120E-19	-1.120E-19	-7.791E-08	-7.791E-08	-2.083E-12
1.60000	9.868E-08	9.869E-08	-7.155E-20	-7.155E-20	-7.926E-08	-7.926E-08	-1.559E-12
1.70000	9.469E-08	9.469E-08	-4.478E-20	-4.478E-20	-8.012E-08	-8.012E-08	-1.207E-12
1.80000	9.068E-08	9.068E-08	-2.758E-20	-2.758E-20	-8.065E-08	-8.065E-08	-9.653E-13

PROPAGATION FREQUENCY= 1.660CE 08 ϕ_0= 35.000 θ_D= 0. ρ_a=123.410

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	35.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	35.0000	0.10000	197.919	0.	9.864E-01	-1.513E-08	-1.513E-08	1.513E-08
0.20000	35.0000	0.20000	181.595	0.	9.852E-01	-1.971E-08	-1.971E-08	1.971E-08
0.30000	35.0000	0.30000	166.454	0.	9.850E-01	-2.520E-08	-2.520E-08	2.520E-08
0.40000	35.0000	0.40000	152.850	0.	9.860E-01	-3.142E-08	-3.142E-08	3.142E-08
0.50000	35.0000	0.50000	141.228	0.	9.883E-01	-3.873E-08	-3.873E-08	3.873E-08
0.60000	35.0000	0.60000	132.111	0.	9.906E-01	-4.589E-08	-4.589E-08	4.589E-08
0.70000	35.0000	0.70000	126.045	0.	9.910E-01	-5.136E-08	-5.136E-08	5.136E-08
0.80000	35.0000	0.80000	123.479	5.550E-06	9.892E-01	-5.387E-08	-5.387E-08	5.387E-08
0.85000	35.0000	0.85000	123.588	6.830E-06	9.887E-01	-5.376E-08	-5.376E-08	5.376E-08
0.90000	35.0000	0.90000	124.630	6.830E-06	9.897E-01	-5.273E-08	-5.273E-08	5.273E-08
0.92500	35.0000	0.92500	125.494	6.830E-06	9.909E-01	-5.189E-08	-5.189E-08	5.189E-08
0.95000	35.0000	0.95000	126.581	8.538E-06	9.926E-01	-5.085E-08	-5.086E-08	5.085E-08
0.96250	35.0000	0.96250	127.206	9.392E-06	9.936E-01	-5.027E-08	-5.027E-08	5.027E-08
0.97500	35.0000	0.97500	127.885	9.392E-06	9.948E-01	-4.964E-08	-4.964E-08	4.964E-08
0.98125	35.0000	0.98125	128.244	1.110E-05	9.954E-01	-4.931E-08	-4.931E-08	4.931E-08
0.98750	35.0000	0.98750	128.616	1.366E-05	9.960E-01	-4.897E-08	-4.897E-08	4.897E-08
0.99375	35.0000	0.99375	129.001	1.366E-05	9.966E-01	-4.862E-08	-4.862E-08	4.862E-08
1.00000	35.0000	1.00000	129.399	1.366E-05	9.973E-01	-4.826E-08	-4.826E-08	4.826E-08
1.00625	35.0000	1.00625	129.810	1.622E-05	9.980E-01	-4.789E-08	-4.789E-08	4.789E-08
1.01250	35.0000	1.01250	130.233	1.878E-05	9.987E-01	-4.752E-08	-4.752E-08	4.752E-08
1.01875	35.0000	1.01875	130.669	1.878E-05	9.994E-01	-4.713E-08	-4.713E-08	4.713E-08
1.02500	35.0000	1.02500	131.117	1.964E-05	1.000E 00	-4.674E-08	-4.674E-08	4.674E-08
1.03750	35.0000	1.03750	132.050	1.964E-05	1.002E 00	-4.594E-08	-4.594E-08	4.594E-08
1.05000	35.0000	1.05000	133.030	1.964E-05	1.003E 00	-4.511E-08	-4.511E-08	4.511E-08
1.07500	35.0000	1.07500	135.131	1.964E-05	1.006E 00	-4.338E-08	-4.338E-08	4.338E-08
1.10000	35.0000	1.10000	137.410	1.964E-05	1.009E 00	-4.158E-08	-4.158E-08	4.158E-08
1.15000	35.0000	1.15000	142.469	1.964E-05	1.013E 00	-3.785E-08	-3.785E-08	3.785E-08
1.20000	35.0000	1.20000	148.137	1.964E-05	1.017E 00	-3.406E-08	-3.406E-08	3.406E-08
1.30000	35.0000	1.30000	161.040	1.964E-05	1.020E 00	-2.751E-08	-2.751E-08	2.751E-08
1.40000	35.0000	1.40000	175.638	1.964E-05	1.019E 00	-2.171E-08	-2.171E-08	2.171E-08
1.50000	35.0000	1.50000	191.545	2.391E-05	1.016E 00	-1.677E-08	-1.677E-08	1.677E-08
1.60000	35.0000	1.60000	208.462	2.476E-05	1.013E 00	-1.282E-08	-1.282E-08	1.282E-08
1.70000	35.0000	1.70000	226.161	2.817E-05	1.010E 00	-9.741E-09	-9.741E-09	9.741E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 35.000 θ_0= 0. ρ_0=123.410

z	$_x\mu'-1$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.513E-08	49.901	-6.621E-07	-6.621E-07	6.621E-07	6.621E-07	-8.375E-09	-8.375E-09
0.20000	1.971E-08	99.802	-1.527E-06	-1.527E-06	1.527E-06	1.527E-06	-1.091E-08	-1.091E-08
0.30000	2.520E-08	149.703	-2.644E-06	-2.644E-06	2.644E-06	2.644E-06	-1.395E-08	-1.395E-08
0.40000	3.142E-08	199.605	-4.054E-06	-4.054E-06	4.054E-06	4.055E-06	-1.740E-08	-1.740E-08
0.50000	3.873E-08	249.506	-5.800E-06	-5.800E-06	5.800E-06	5.800E-06	-2.145E-08	-2.145E-08
0.60000	4.589E-08	299.407	-7.916E-06	-7.916E-06	7.916E-06	7.916E-06	-2.541E-08	-2.541E-08
0.70000	5.136E-08	349.308	-1.035E-05	-1.035E-05	1.035E-05	1.035E-05	-2.844E-08	-2.844E-08
0.80000	5.387E-08	399.209	-1.299E-05	-1.299E-05	1.299E-05	1.299E-05	-2.983E-08	-2.983E-08
0.85000	5.376E-08	424.160	-1.434E-05	-1.434E-05	1.434E-05	1.434E-05	-2.977E-08	-2.977E-08
0.90000	5.273E-08	449.110	-1.567E-05	-1.567E-05	1.567E-05	1.567E-05	-2.920E-08	-2.920E-08
0.92500	5.189E-08	461.586	-1.632E-05	-1.632E-05	1.632E-05	1.632E-05	-2.873E-08	-2.873E-08
0.95000	5.086E-08	474.061	-1.696E-05	-1.696E-05	1.696E-05	1.696E-05	-2.816E-08	-2.816E-08
0.96250	5.027E-08	480.299	-1.728E-05	-1.728E-05	1.728E-05	1.728E-05	-2.783E-08	-2.783E-08
0.97500	4.964E-08	486.536	-1.759E-05	-1.759E-05	1.759E-05	1.759E-05	-2.748E-08	-2.748E-08
0.98125	4.931E-08	489.655	-1.774E-05	-1.774E-05	1.774E-05	1.774E-05	-2.730E-08	-2.730E-08
0.98750	4.897E-08	492.774	-1.790E-05	-1.790E-05	1.790E-05	1.790E-05	-2.711E-08	-2.711E-08
0.99375	4.862E-08	495.893	-1.805E-05	-1.805E-05	1.805E-05	1.805E-05	-2.692E-08	-2.692E-08
1.00000	4.826E-08	499.012	-1.820E-05	-1.820E-05	1.820E-05	1.820E-05	-2.672E-08	-2.672E-08
1.00625	4.789E-08	502.130	-1.835E-05	-1.835E-05	1.835E-05	1.835E-05	-2.652E-08	-2.652E-08
1.01250	4.752E-08	505.249	-1.850E-05	-1.850E-05	1.850E-05	1.850E-05	-2.631E-08	-2.631E-08
1.01875	4.713E-08	508.368	-1.865E-05	-1.865E-05	1.865E-05	1.865E-05	-2.610E-08	-2.610E-08
1.02500	4.674E-08	511.487	-1.879E-05	-1.879E-05	1.879E-05	1.879E-05	-2.588E-08	-2.588E-08
1.03750	4.594E-08	517.724	-1.908E-05	-1.908E-05	1.908E-05	1.908E-05	-2.544E-08	-2.544E-08
1.05000	4.511E-08	523.962	-1.936E-05	-1.937E-05	1.936E-05	1.937E-05	-2.498E-08	-2.498E-08
1.07500	4.338E-08	536.437	-1.992E-05	-1.992E-05	1.992E-05	1.992E-05	-2.402E-08	-2.402E-08
1.10000	4.158E-08	548.913	-2.045E-05	-2.045E-05	2.045E-05	2.045E-05	-2.302E-08	-2.302E-08
1.15000	3.785E-08	573.863	-2.144E-05	-2.144E-05	2.144E-05	2.144E-05	-2.096E-08	-2.096E-08
1.20000	3.406E-08	598.814	-2.234E-05	-2.234E-05	2.234E-05	2.234E-05	-1.886E-08	-1.886E-08
1.30000	2.751E-08	648.715	-2.387E-05	-2.387E-05	2.387E-05	2.387E-05	-1.523E-08	-1.523E-08
1.40000	2.171E-08	698.616	-2.509E-05	-2.509E-05	2.509E-05	2.509E-05	-1.202E-08	-1.202E-08
1.50000	1.677E-08	748.517	-2.605E-05	-2.605E-05	2.605E-05	2.605E-05	-9.288E-09	-9.288E-09
1.60000	1.282E-08	798.418	-2.678E-05	-2.678E-05	2.678E-05	2.678E-05	-7.100E-09	-7.100E-09
1.70000	9.741E-09	848.320	-2.734E-05	-2.734E-05	2.734E-05	2.734E-05	-5.394E-09	-5.394E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 35.000 θ_0= 0. ρ_0=123.410

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-1.469E-12
0.10000	7.771E-10	7.771E-10	-5.998E-20	-5.998E-20	-7.251E-10	-7.251E-10	-1.853E-12
0.20000	2.030E-09	2.030E-09	-9.141E-20	-9.141E-20	-1.844E-09	-1.844E-09	-2.383E-12
0.30000	3.874E-09	3.874E-09	-1.351E-19	-1.351E-19	-3.522E-09	-3.522E-09	-3.144E-12
0.40000	6.602E-09	6.602E-09	-1.920E-19	-1.920E-19	-5.952E-09	-5.952E-09	-4.205E-12
0.50000	1.076E-08	1.076E-08	-2.642E-19	-2.642E-19	-9.346E-09	-9.346E-09	-5.483E-12
0.60000	1.642E-08	1.642E-08	-3.410E-19	-3.410E-19	-1.388E-08	-1.388E-08	-6.908E-12
0.70000	2.414E-08	2.414E-08	-4.042E-19	-4.042E-19	-1.948E-08	-1.948E-08	-8.184E-12
0.80000	3.421E-08	3.421E-08	-4.343E-19	-4.344E-19	-2.581E-08	-2.581E-08	-8.829E-12
0.85000	3.993E-08	3.993E-08	-4.330E-19	-4.330E-19	-2.906E-08	-2.906E-08	-8.801E-12
0.90000	4.576E-08	4.576E-08	-4.206E-19	-4.206E-19	-3.226E-08	-3.226E-08	-8.533E-12
0.92500	4.858E-08	4.858E-08	-4.105E-19	-4.105E-19	-3.381E-08	-3.381E-08	-8.319E-12
0.95000	5.126E-08	5.126E-08	-3.982E-19	-3.982E-19	-3.532E-08	-3.532E-08	-8.061E-12
0.96250	5.254E-08	5.254E-08	-3.913E-19	-3.913E-19	-3.606E-08	-3.606E-08	-7.918E-12
0.97500	5.376E-08	5.376E-08	-3.839E-19	-3.839E-19	-3.679E-08	-3.679E-08	-7.767E-12
0.98125	5.435E-08	5.435E-08	-3.801E-19	-3.801E-19	-3.714E-08	-3.714E-08	-7.688E-12
0.98750	5.493E-08	5.493E-08	-3.761E-19	-3.761E-19	-3.750E-08	-3.750E-08	-7.608E-12
0.99375	5.549E-08	5.549E-08	-3.721E-19	-3.721E-19	-3.785E-08	-3.785E-08	-7.527E-12
1.00000	5.604E-08	5.604E-08	-3.680E-19	-3.680E-19	-3.819E-08	-3.819E-08	-7.444E-12
1.00625	5.657E-08	5.657E-08	-3.638E-19	-3.638E-19	-3.854E-08	-3.854E-08	-7.360E-12
1.01250	5.708E-08	5.708E-08	-3.595E-19	-3.595E-19	-3.887E-08	-3.887E-08	-7.275E-12
1.01875	5.758E-08	5.758E-08	-3.551E-19	-3.551E-19	-3.921E-08	-3.921E-08	-7.188E-12
1.02500	5.806E-08	5.806E-08	-3.507E-19	-3.507E-19	-3.954E-08	-3.954E-08	-7.101E-12
1.03750	5.898E-08	5.898E-08	-3.416E-19	-3.416E-19	-4.019E-08	-4.019E-08	-6.925E-12
1.05000	5.983E-08	5.983E-08	-3.324E-19	-3.324E-19	-4.082E-08	-4.082E-08	-6.746E-12
1.07500	6.132E-08	6.132E-08	-3.134E-19	-3.134E-19	-4.202E-08	-4.202E-08	-6.385E-12
1.10000	6.256E-08	6.256E-08	-2.940E-19	-2.940E-19	-4.316E-08	-4.316E-08	-6.026E-12
1.15000	6.442E-08	6.442E-08	-2.552E-19	-2.552E-19	-4.521E-08	-4.521E-08	-5.329E-12
1.20000	6.557E-08	6.557E-08	-2.177E-19	-2.177E-19	-4.698E-08	-4.698E-08	-4.686E-12
1.30000	6.619E-08	6.619E-08	-1.554E-19	-1.554E-19	-4.975E-08	-4.975E-08	-3.516E-12
1.40000	6.546E-08	6.546E-08	-1.066E-19	-1.066E-19	-5.170E-08	-5.170E-08	-2.647E-12
1.50000	6.389E-08	6.389E-08	-7.070E-20	-7.070E-20	-5.301E-08	-5.301E-08	-2.037E-12
1.60000	6.183E-08	6.183E-08	-4.566E-20	-4.566E-20	-5.387E-08	-5.387E-08	-1.604E-12
1.70000	5.955E-08	5.955E-08	-2.888E-20	-2.888E-20	-5.442E-08	-5.442E-08	-1.295E-12

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	45.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	45.0000	0.10000	200.523	0.	9.780E-01	-1.451E-08	-1.451E-08	1.451E-08
0.20000	45.0000	0.20000	187.220	0.	9.776E-01	-1.799E-08	-1.799E-08	1.799E-08
0.30000	45.0000	0.30000	175.554	0.	9.785E-01	-2.174E-08	-2.174E-08	2.174E-08
0.40000	45.0000	0.40000	165.870	0.	9.801E-01	-2.544E-08	-2.544E-08	2.544E-08
0.50000	45.0000	0.50000	158.532	0.	9.815E-01	-2.865E-08	-2.865E-08	2.865E-08
0.60000	45.0000	0.60000	153.876	0.	9.817E-01	-3.090E-08	-3.090E-08	3.090E-08
0.70000	45.0000	0.70000	152.148	2.988E-06	9.808E-01	-3.178E-08	-3.178E-08	3.178E-08
0.80000	45.0000	0.80000	153.448	1.067E-05	9.811E-01	-3.111E-08	-3.111E-08	3.111E-08
0.85000	45.0000	0.85000	155.216	1.494E-05	9.828E-01	-3.024E-08	-3.024E-08	3.024E-08
0.90000	45.0000	0.90000	157.700	2.134E-05	9.859E-01	-2.904E-08	-2.904E-08	2.904E-08
0.92500	45.0000	0.92500	159.200	2.134E-05	9.879E-01	-2.834E-08	-2.834E-08	2.834E-08
0.95000	45.0000	0.95000	160.866	2.220E-05	9.903E-01	-2.759E-08	-2.759E-08	2.759E-08
0.96250	45.0000	0.96250	161.760	2.220E-05	9.915E-01	-2.719E-08	-2.719E-08	2.719E-08
0.97500	45.0000	0.97500	162.693	2.476E-05	9.929E-01	-2.678E-08	-2.678E-08	2.678E-08
0.98125	45.0000	0.98125	163.174	2.732E-05	9.935E-01	-2.657E-08	-2.657E-08	2.657E-08
0.98750	45.0000	0.98750	163.665	2.817E-05	9.942E-01	-2.636E-08	-2.636E-08	2.636E-08
0.99375	45.0000	0.99375	164.166	2.817E-05	9.949E-01	-2.615E-08	-2.615E-08	2.615E-08
1.00000	45.0000	1.00000	164.676	2.903E-05	9.956E-01	-2.593E-08	-2.593E-08	2.593E-08
1.00625	45.0000	1.00625	165.195	2.903E-05	9.963E-01	-2.572E-08	-2.572E-08	2.572E-08
1.01250	45.0000	1.01250	165.723	3.074E-05	9.970E-01	-2.550E-08	-2.550E-08	2.550E-08
1.01875	45.0000	1.01875	166.261	3.074E-05	9.977E-01	-2.528E-08	-2.528E-08	2.528E-08
1.02500	45.0000	1.02500	166.808	3.244E-05	9.984E-01	-2.505E-08	-2.505E-08	2.505E-08
1.03750	45.0000	1.03750	167.929	3.330E-05	9.999E-01	-2.460E-08	-2.460E-08	2.460E-08
1.05000	45.0000	1.05000	169.085	3.330E-05	1.001E 00	-2.414E-08	-2.414E-08	2.414E-08
1.07500	45.0000	1.07500	171.500	3.330E-05	1.004E 00	-2.322E-08	-2.322E-08	2.322E-08
1.10000	45.0000	1.10000	174.048	3.330E-05	1.007E 00	-2.228E-08	-2.228E-08	2.228E-08
1.15000	45.0000	1.15000	179.520	3.330E-05	1.012E 00	-2.039E-08	-2.039E-08	2.039E-08
1.20000	45.0000	1.20000	185.454	3.330E-05	1.015E 00	-1.851E-08	-1.851E-08	1.851E-08
1.30000	45.0000	1.30000	198.544	3.330E-05	1.020E 00	-1.497E-08	-1.497E-08	1.497E-08
1.40000	45.0000	1.40000	213.007	3.330E-05	1.022E 00	-1.195E-08	-1.195E-08	1.195E-08
1.50000	45.0000	1.50000	228.583	3.671E-05	1.021E 00	-9.382E-09	-9.382E-09	9.382E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.451E-08	49.901	-6.485E-07	-6.485E-07	6.485E-07	6.485E-07	-8.032E-09	-8.032E-09
0.20000	1.799E-08	99.802	-1.458E-06	-1.458E-06	1.458E-06	1.458E-06	-9.963E-09	-9.963E-09
0.30000	2.174E-08	149.703	-2.448E-06	-2.448E-06	2.448E-06	2.448E-06	-1.204E-08	-1.204E-08
0.40000	2.544E-08	199.605	-3.627E-06	-3.627E-06	3.627E-06	3.627E-06	-1.408E-08	-1.408E-08
0.50000	2.865E-08	249.506	-4.979E-06	-4.979E-06	4.979E-06	4.979E-06	-1.587E-08	-1.587E-08
0.60000	3.090E-08	299.407	-6.470E-06	-6.470E-06	6.470E-06	6.470E-06	-1.711E-08	-1.711E-08
0.70000	3.178E-08	349.308	-8.040E-06	-8.040E-06	8.040E-06	8.040E-06	-1.760E-08	-1.760E-08
0.80000	3.111E-08	399.209	-9.616E-06	-9.616E-06	9.616E-06	9.616E-06	-1.723E-08	-1.723E-08
0.85000	3.024E-08	424.160	-1.038E-05	-1.038E-05	1.038E-05	1.038E-05	-1.674E-08	-1.674E-08
0.90000	2.904E-08	449.110	-1.112E-05	-1.112E-05	1.112E-05	1.112E-05	-1.608E-08	-1.608E-08
0.92500	2.834E-08	461.586	-1.148E-05	-1.148E-05	1.148E-05	1.148E-05	-1.569E-08	-1.569E-08
0.95000	2.759E-08	474.061	-1.183E-05	-1.183E-05	1.183E-05	1.183E-05	-1.528E-08	-1.528E-08
0.96250	2.719E-08	480.299	-1.200E-05	-1.200E-05	1.200E-05	1.200E-05	-1.506E-08	-1.506E-08
0.97500	2.678E-08	486.536	-1.217E-05	-1.217E-05	1.217E-05	1.217E-05	-1.483E-08	-1.483E-08
0.98125	2.657E-08	489.655	-1.225E-05	-1.225E-05	1.225E-05	1.225E-05	-1.471E-08	-1.471E-08
0.98750	2.636E-08	492.774	-1.233E-05	-1.233E-05	1.233E-05	1.233E-05	-1.460E-08	-1.460E-08
0.99375	2.615E-08	495.893	-1.242E-05	-1.242E-05	1.242E-05	1.242E-05	-1.448E-08	-1.448E-08
1.00000	2.593E-08	499.011	-1.250E-05	-1.250E-05	1.250E-05	1.250E-05	-1.436E-08	-1.436E-08
1.00625	2.572E-08	502.130	-1.258E-05	-1.258E-05	1.258E-05	1.258E-05	-1.424E-08	-1.424E-08
1.01250	2.550E-08	505.249	-1.266E-05	-1.266E-05	1.266E-05	1.266E-05	-1.412E-08	-1.412E-08
1.01875	2.528E-08	508.368	-1.274E-05	-1.274E-05	1.274E-05	1.274E-05	-1.400E-08	-1.400E-08
1.02500	2.505E-08	511.487	-1.281E-05	-1.281E-05	1.281E-05	1.281E-05	-1.387E-08	-1.387E-08
1.03750	2.460E-08	517.724	-1.297E-05	-1.297E-05	1.297E-05	1.297E-05	-1.362E-08	-1.362E-08
1.05000	2.414E-08	523.962	-1.312E-05	-1.312E-05	1.312E-05	1.312E-05	-1.337E-08	-1.337E-08
1.07500	2.322E-08	536.437	-1.342E-05	-1.342E-05	1.342E-05	1.342E-05	-1.286E-08	-1.286E-08
1.10000	2.228E-08	548.913	-1.370E-05	-1.370E-05	1.370E-05	1.370E-05	-1.234E-08	-1.234E-08
1.15000	2.039E-08	573.863	-1.423E-05	-1.423E-05	1.423E-05	1.423E-05	-1.129E-08	-1.129E-08
1.20000	1.851E-08	598.814	-1.472E-05	-1.472E-05	1.472E-05	1.472E-05	-1.025E-08	-1.025E-08
1.30000	1.497E-08	648.715	-1.555E-05	-1.555E-05	1.555E-05	1.555E-05	-8.291E-09	-8.291E-09
1.40000	1.195E-08	698.616	-1.622E-05	-1.622E-05	1.622E-05	1.622E-05	-6.616E-09	-6.616E-09
1.50000	9.382E-09	748.517	-1.675E-05	-1.675E-05	1.675E-05	1.675E-05	-5.195E-09	-5.195E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-2.233E-12
0.10000	9.199E-10	9.199E-10	-5.608E-20	-5.608E-20	-7.001E-10	-7.001E-10	-2.715E-12
0.20000	2.281E-09	2.281E-09	-7.905E-20	-7.905E-20	-1.704E-09	-1.704E-09	-3.305E-12
0.30000	4.142E-09	4.142E-09	-1.068E-19	-1.068E-19	-3.090E-09	-3.090E-09	-4.024E-12
0.40000	6.600E-09	6.600E-09	-1.372E-19	-1.372E-19	-4.914E-09	-4.914E-09	-4.835E-12
0.50000	9.919E-09	9.919E-09	-1.658E-19	-1.658E-19	-7.185E-09	-7.185E-09	-5.632E-12
0.60000	1.412E-08	1.412E-08	-1.869E-19	-1.869E-19	-9.837E-09	-9.837E-09	-6.246E-12
0.70000	1.902E-08	1.902E-08	-1.955E-19	-1.955E-19	-1.272E-08	-1.272E-08	-6.500E-12
0.80000	2.434E-08	2.434E-08	-1.890E-19	-1.890E-19	-1.561E-08	-1.561E-08	-6.309E-12
0.85000	2.696E-08	2.696E-08	-1.806E-19	-1.806E-19	-1.699E-08	-1.699E-08	-6.062E-12
0.90000	2.941E-08	2.941E-08	-1.694E-19	-1.694E-19	-1.830E-08	-1.830E-08	-5.738E-12
0.92500	3.053E-08	3.053E-08	-1.629E-19	-1.629E-19	-1.893E-08	-1.893E-08	-5.555E-12
0.95000	3.157E-08	3.157E-08	-1.561E-19	-1.561E-19	-1.952E-08	-1.952E-08	-5.361E-12
0.96250	3.206E-08	3.206E-08	-1.525E-19	-1.525E-19	-1.981E-08	-1.981E-08	-5.262E-12
0.97500	3.252E-08	3.252E-08	-1.489E-19	-1.489E-19	-2.009E-08	-2.009E-08	-5.161E-12
0.98125	3.275E-08	3.275E-08	-1.471E-19	-1.471E-19	-2.023E-08	-2.023E-08	-5.110E-12
0.98750	3.296E-08	3.296E-08	-1.452E-19	-1.452E-19	-2.037E-08	-2.037E-08	-5.059E-12
0.99375	3.317E-08	3.317E-08	-1.433E-19	-1.433E-19	-2.050E-08	-2.050E-08	-5.008E-12
1.00000	3.338E-08	3.338E-08	-1.415E-19	-1.415E-19	-2.064E-08	-2.064E-08	-4.956E-12
1.00625	3.358E-08	3.358E-08	-1.396E-19	-1.396E-19	-2.077E-08	-2.077E-08	-4.905E-12
1.01250	3.377E-08	3.377E-08	-1.377E-19	-1.377E-19	-2.090E-08	-2.090E-08	-4.853E-12
1.01875	3.396E-08	3.396E-08	-1.358E-19	-1.358E-19	-2.103E-08	-2.103E-08	-4.801E-12
1.02500	3.414E-08	3.414E-08	-1.339E-19	-1.339E-19	-2.115E-08	-2.115E-08	-4.750E-12
1.03750	3.448E-08	3.448E-08	-1.301E-19	-1.301E-19	-2.140E-08	-2.140E-08	-4.646E-12
1.05000	3.480E-08	3.480E-08	-1.262E-19	-1.262E-19	-2.164E-08	-2.164E-08	-4.543E-12
1.07500	3.536E-08	3.536E-08	-1.186E-19	-1.186E-19	-2.210E-08	-2.210E-08	-4.340E-12
1.10000	3.583E-08	3.583E-08	-1.111E-19	-1.111E-19	-2.253E-08	-2.253E-08	-4.140E-12
1.15000	3.653E-08	3.653E-08	-9.644E-20	-9.644E-20	-2.330E-08	-2.330E-08	-3.758E-12
1.20000	3.697E-08	3.697E-08	-8.274E-20	-8.274E-20	-2.397E-08	-2.397E-08	-3.404E-12
1.30000	3.719E-08	3.719E-08	-5.902E-20	-5.902E-20	-2.502E-08	-2.502E-08	-2.796E-12
1.40000	3.677E-08	3.677E-08	-4.059E-20	-4.059E-20	-2.576E-08	-2.576E-08	-2.298E-12
1.50000	3.593E-08	3.593E-08	-2.713E-20	-2.713E-20	-2.626E-08	-2.626E-08	-1.917E-12

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 55.000 θ_D= 0. ρ_a=176.248

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	55.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	55.0000	0.10000	203.582	0.	9.740E-01	-1.383E-08	-1.383E-08	1.383E-08
0.20000	55.0000	0.20000	193.711	0.	9.741E-01	-1.619E-08	-1.619E-08	1.619E-08
0.30000	55.0000	0.30000	185.817	0.	9.747E-01	-1.841E-08	-1.841E-08	1.841E-08
0.40000	55.0000	0.40000	180.161	0.	9.752E-01	-2.017E-08	-2.017E-08	2.017E-08
0.50000	55.0000	0.50000	176.957	4.269E-07	9.752E-01	-2.125E-08	-2.125E-08	2.125E-08
0.60000	55.0000	0.60000	176.340	2.988E-06	9.748E-01	-2.146E-08	-2.146E-08	2.146E-08
0.70000	55.0000	0.70000	178.335	6.403E-06	9.753E-01	-2.078E-08	-2.078E-08	2.078E-08
0.80000	55.0000	0.80000	182.857	7.684E-06	9.786E-01	-1.931E-08	-1.931E-08	1.931E-08
0.85000	55.0000	0.85000	186.012	7.684E-06	9.816E-01	-1.835E-08	-1.835E-08	1.835E-08
0.90000	55.0000	0.90000	189.726	7.684E-06	9.856E-01	-1.728E-08	-1.728E-08	1.728E-08
0.92500	55.0000	0.92500	191.782	7.684E-06	9.878E-01	-1.671E-08	-1.671E-08	1.671E-08
0.95000	55.0000	0.95000	193.966	9.392E-06	9.901E-01	-1.613E-08	-1.613E-08	1.613E-08
0.96250	55.0000	0.96250	195.104	1.025E-05	9.913E-01	-1.583E-08	-1.583E-08	1.583E-08
0.97500	55.0000	0.97500	196.273	1.195E-05	9.926E-01	-1.554E-08	-1.554E-08	1.554E-08
0.98125	55.0000	0.98125	196.868	1.281E-05	9.932E-01	-1.539E-08	-1.539E-08	1.539E-08
0.98750	55.0000	0.98750	197.471	1.537E-05	9.938E-01	-1.524E-08	-1.524E-08	1.524E-08
0.99375	55.0000	0.99375	198.081	1.537E-05	9.944E-01	-1.509E-08	-1.509E-08	1.509E-08
1.00000	55.0000	1.00000	198.699	1.622E-05	9.950E-01	-1.494E-08	-1.494E-08	1.494E-08
1.00625	55.0000	1.00625	199.323	1.793E-05	9.957E-01	-1.479E-08	-1.479E-08	1.479E-08
1.01250	55.0000	1.01250	199.955	1.878E-05	9.963E-01	-1.463E-08	-1.463E-08	1.463E-08
1.01875	55.0000	1.01875	200.593	2.049E-05	9.969E-01	-1.449E-08	-1.449E-08	1.449E-08
1.02500	55.0000	1.02500	201.239	2.049E-05	9.975E-01	-1.435E-08	-1.435E-08	1.435E-08
1.03750	55.0000	1.03750	202.551	2.220E-05	9.987E-01	-1.406E-08	-1.406E-08	1.406E-08
1.05000	55.0000	1.05000	203.890	2.305E-05	9.999E-01	-1.377E-08	-1.377E-08	1.377E-08
1.07500	55.0000	1.07500	206.646	2.305E-05	1.002E 00	-1.319E-08	-1.319E-08	1.319E-08
1.10000	55.0000	1.10000	209.505	2.305E-05	1.005E 00	-1.262E-08	-1.262E-08	1.262E-08
1.15000	55.0000	1.15000	215.511	2.305E-05	1.009E 00	-1.149E-08	-1.149E-08	1.149E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 55.000 θ_D= 0. ρ_0=176.248

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.383E-08	49.901	-6.331E-07	-6.331E-07	6.331E-07	6.331E-07	-7.659E-09	-7.659E-09
0.20000	1.619E-08	99.802	-1.382E-06	-1.382E-06	1.382E-06	1.382E-06	-8.967E-09	-8.967E-09
0.30000	1.841E-08	149.703	-2.247E-06	-2.247E-06	2.247E-06	2.247E-06	-1.019E-08	-1.019E-08
0.40000	2.017E-08	199.605	-3.212E-06	-3.212E-06	3.212E-06	3.212E-06	-1.117E-08	-1.117E-08
0.50000	2.125E-08	249.506	-4.248E-06	-4.248E-06	4.248E-06	4.248E-06	-1.177E-08	-1.177E-08
0.60000	2.146E-08	299.407	-5.318E-06	-5.318E-06	5.318E-06	5.318E-06	-1.189E-08	-1.189E-08
0.70000	2.078E-08	349.308	-6.376E-06	-6.376E-06	6.376E-06	6.376E-06	-1.151E-08	-1.151E-08
0.80000	1.931E-08	399.209	-7.379E-06	-7.379E-06	7.379E-06	7.379E-06	-1.069E-08	-1.069E-08
0.85000	1.835E-08	424.160	-7.849E-06	-7.849E-06	7.849E-06	7.849E-06	-1.016E-08	-1.016E-08
0.90000	1.728E-08	449.110	-8.294E-06	-8.294E-06	8.294E-06	8.294E-06	-9.566E-09	-9.566E-09
0.92500	1.671E-08	461.586	-8.506E-06	-8.506E-06	8.506E-06	8.506E-06	-9.252E-09	-9.252E-09
0.95000	1.613E-08	474.061	-8.710E-06	-8.710E-06	8.710E-06	8.710E-06	-8.930E-09	-8.930E-09
0.96250	1.585E-08	480.299	-8.810E-06	-8.810E-06	8.810E-06	8.810E-06	-8.767E-09	-8.767E-09
0.97500	1.554E-08	486.536	-8.908E-06	-8.908E-06	8.908E-06	8.908E-06	-8.602E-09	-8.602E-09
0.98125	1.539E-08	489.655	-8.956E-06	-8.956E-06	8.956E-06	8.956E-06	-8.519E-09	-8.519E-09
0.98750	1.524E-08	492.774	-9.004E-06	-9.004E-06	9.004E-06	9.004E-06	-8.437E-09	-8.437E-09
0.99375	1.509E-08	495.893	-9.051E-06	-9.051E-06	9.051E-06	9.051E-06	-8.353E-09	-8.353E-09
1.00000	1.494E-08	499.011	-9.098E-06	-9.098E-06	9.098E-06	9.098E-06	-8.270E-09	-8.270E-09
1.00625	1.479E-08	502.130	-9.144E-06	-9.144E-06	9.144E-06	9.144E-06	-8.187E-09	-8.187E-09
1.01250	1.463E-08	505.249	-9.190E-06	-9.190E-06	9.190E-06	9.190E-06	-8.103E-09	-8.103E-09
1.01875	1.449E-08	508.368	-9.236E-06	-9.236E-06	9.236E-06	9.236E-06	-8.023E-09	-8.023E-09
1.02500	1.435E-08	511.487	-9.281E-06	-9.281E-06	9.281E-06	9.281E-06	-7.943E-09	-7.943E-09
1.03750	1.406E-08	517.724	-9.369E-06	-9.369E-06	9.369E-06	9.369E-06	-7.783E-09	-7.783E-09
1.05000	1.377E-08	523.962	-9.456E-06	-9.456E-06	9.456E-06	9.456E-06	-7.623E-09	-7.623E-09
1.07500	1.319E-08	536.437	-9.624E-06	-9.624E-06	9.624E-06	9.624E-06	-7.303E-09	-7.303E-09
1.10000	1.262E-08	548.913	-9.785E-06	-9.785E-06	9.785E-06	9.785E-06	-6.986E-09	-6.986E-09
1.15000	1.149E-08	573.863	-1.009E-05	-1.009E-05	1.009E-05	1.009E-05	-6.364E-09	-6.364E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 55.000 θ_D= 0. ρ_0=176.248

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-2.997E-12
0.10000	1.021E-09	1.021E-09	-5.181E-20	-5.181E-20	-6.720E-10	-6.720E-10	-3.490E-12
0.20000	2.395E-09	2.395E-09	-6.686E-20	-6.686E-20	-1.558E-09	-1.558E-09	-4.017E-12
0.30000	4.135E-09	4.135E-09	-8.197E-20	-8.197E-20	-2.673E-09	-2.673E-09	-4.537E-12
0.40000	6.234E-09	6.234E-09	-9.485E-20	-9.485E-20	-4.000E-09	-4.000E-09	-4.983E-12
0.50000	8.727E-09	8.727E-09	-1.030E-19	-1.030E-19	-5.487E-09	-5.487E-09	-5.269E-12
0.60000	1.159E-08	1.159E-08	-1.047E-19	-1.047E-19	-7.050E-09	-7.050E-09	-5.328E-12
0.70000	1.454E-08	1.454E-08	-9.943E-20	-9.943E-20	-8.585E-09	-8.585E-09	-5.145E-12
0.80000	1.738E-08	1.738E-08	-8.848E-20	-8.848E-20	-9.996E-09	-9.996E-09	-4.765E-12
0.85000	1.863E-08	1.863E-08	-8.156E-20	-8.156E-20	-1.063E-08	-1.063E-08	-4.526E-12
0.90000	1.973E-08	1.973E-08	-7.410E-20	-7.410E-20	-1.121E-08	-1.121E-08	-4.270E-12
0.92500	2.022E-08	2.022E-08	-7.027E-20	-7.027E-20	-1.148E-08	-1.148E-08	-4.138E-12
0.95000	2.066E-08	2.066E-08	-6.642E-20	-6.642E-20	-1.174E-08	-1.174E-08	-4.006E-12
0.96250	2.087E-08	2.087E-08	-6.450E-20	-6.450E-20	-1.186E-08	-1.186E-08	-3.940E-12
0.97500	2.106E-08	2.106E-08	-6.258E-20	-6.258E-20	-1.198E-08	-1.198E-08	-3.874E-12
0.98125	2.115E-08	2.115E-08	-6.163E-20	-6.163E-20	-1.204E-08	-1.204E-08	-3.841E-12
0.98750	2.124E-08	2.124E-08	-6.067E-20	-6.067E-20	-1.210E-08	-1.210E-08	-3.808E-12
0.99375	2.133E-08	2.133E-08	-5.973E-20	-5.973E-20	-1.215E-08	-1.215E-08	-3.776E-12
1.00000	2.141E-08	2.141E-08	-5.878E-20	-5.878E-20	-1.221E-08	-1.221E-08	-3.743E-12
1.00625	2.150E-08	2.150E-08	-5.784E-20	-5.784E-20	-1.226E-08	-1.226E-08	-3.711E-12
1.01250	2.157E-08	2.157E-08	-5.691E-20	-5.691E-20	-1.232E-08	-1.232E-08	-3.679E-12
1.01875	2.165E-08	2.165E-08	-5.597E-20	-5.597E-20	-1.237E-08	-1.237E-08	-3.645E-12
1.02500	2.172E-08	2.172E-08	-5.505E-20	-5.505E-20	-1.242E-08	-1.242E-08	-3.611E-12
1.03750	2.186E-08	2.186E-08	-5.321E-20	-5.321E-20	-1.252E-08	-1.252E-08	-3.545E-12
1.05000	2.199E-08	2.199E-08	-5.140E-20	-5.140E-20	-1.262E-08	-1.262E-08	-3.479E-12
1.07500	2.222E-08	2.222E-08	-4.786E-20	-4.786E-20	-1.281E-08	-1.281E-08	-3.350E-12
1.10000	2.240E-08	2.240E-08	-4.445E-20	-4.445E-20	-1.298E-08	-1.298E-08	-3.225E-12
1.15000	2.266E-08	2.266E-08	-3.805E-20	-3.805E-20	-1.329E-08	-1.329E-08	-2.989E-12

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 65.000 θ_D= 0. ρ_0=195.000

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	65.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	65.0000	0.10000	206.986	0.	9.790E-01	-1.312E-08	-1.312E-08	1.312E-08
0.20000	65.0000	0.20000	200.797	2.134E-07	9.789E-01	-1.444E-08	-1.444E-08	1.444E-08
0.30000	65.0000	0.30000	196.777	2.134E-07	9.789E-01	-1.541E-08	-1.541E-08	1.541E-08
0.40000	65.0000	0.40000	195.061	8.538E-07	9.786E-01	-1.584E-08	-1.584E-08	1.584E-08
0.50000	65.0000	0.50000	195.710	1.281E-06	9.784E-01	-1.568E-08	-1.568E-08	1.568E-08
0.60000	65.0000	0.60000	198.700	2.988E-06	9.788E-01	-1.494E-08	-1.494E-08	1.494E-08
0.70000	65.0000	0.70000	203.929	2.988E-06	9.808E-01	-1.376E-08	-1.376E-08	1.376E-08
0.80000	65.0000	0.80000	211.230	2.988E-06	9.847E-01	-1.228E-08	-1.228E-08	1.228E-08
0.85000	65.0000	0.85000	215.594	2.988E-06	9.873E-01	-1.148E-08	-1.148E-08	1.148E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 65.000 θ_D= 0. ρ_0=195.000

z	$_x\mu'$-1.0	T_0	$_0T_f-T_0$	$_xT_f-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.312E-08	49.901	-6.164E-07	-6.164E-07	6.164E-07	6.164E-07	-7.265E-09	-7.265E-09
0.20000	1.444E-08	99.802	-1.305E-06	-1.305E-06	1.305E-06	1.305E-06	-7.998E-09	-7.998E-09
0.30000	1.541E-08	149.703	-2.052E-06	-2.052E-06	2.052E-06	2.052E-06	-8.532E-09	-8.532E-09
0.40000	1.584E-08	199.605	-2.834E-06	-2.834E-06	2.834E-06	2.834E-06	-8.773E-09	-8.773E-09
0.50000	1.568E-08	249.506	-3.623E-06	-3.623E-06	3.623E-06	3.623E-06	-8.681E-09	-8.681E-09
0.60000	1.494E-08	299.407	-4.389E-06	-4.389E-06	4.389E-06	4.389E-06	-8.270E-09	-8.270E-09
0.70000	1.376E-08	349.308	-5.107E-06	-5.107E-06	5.107E-06	5.107E-06	-7.618E-09	-7.618E-09
0.80000	1.228E-08	399.209	-5.757E-06	-5.757E-06	5.757E-06	5.757E-06	-6.802E-09	-6.802E-09
0.85000	1.148E-08	424.160	-6.054E-06	-6.054E-06	6.054E-06	6.054E-06	-6.356E-09	-6.356E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 65.000 θ_D= 0. ρ_0= 195.000

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-3.669E-12
0.10000	1.081E-09	1.081E-09	-4.744E-20	-4.744E-20	-6.423E-10	-6.423E-10	-4.078E-12
0.20000	2.399E-09	2.399E-09	-5.568E-20	-5.568E-20	-1.415E-09	-1.415E-09	-4.445E-12
0.30000	3.929E-09	3.929E-09	-6.177E-20	-6.177E-20	-2.297E-09	-2.297E-09	-4.705E-12
0.40000	5.603E-09	5.603E-09	-6.457E-20	-6.457E-20	-3.247E-09	-3.247E-09	-4.823E-12
0.50000	7.352E-09	7.352E-09	-6.350E-20	-6.350E-20	-4.210E-09	-4.210E-09	-4.779E-12
0.60000	9.098E-09	9.098E-09	-5.878E-20	-5.878E-20	-5.129E-09	-5.129E-09	-4.580E-12
0.70000	1.063E-08	1.063E-08	-5.134E-20	-5.134E-20	-5.955E-09	-5.955E-09	-4.255E-12
0.80000	1.194E-08	1.194E-08	-4.251E-20	-4.251E-20	-6.658E-09	-6.658E-09	-3.860E-12
0.85000	1.247E-08	1.247E-08	-3.797E-20	-3.797E-20	-6.959E-09	-6.959E-09	-3.654E-12

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 75.000 θ_D= 0. ρ_0= 207.828

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	75.0000	0.	215.159	0.	1.000E 00	-1.156E-08	-1.156E-08	1.156E-08
0.10000	75.0000	0.10000	210.618	0.	9.993E-01	-1.240E-08	-1.240E-08	1.240E-08
0.20000	75.0000	0.20000	208.213	0.	9.996E-01	-1.287E-08	-1.287E-08	1.287E-08
0.30000	75.0000	0.30000	208.016	0.	9.999E-01	-1.291E-08	-1.291E-08	1.291E-08
0.40000	75.0000	0.40000	210.036	0.	1.000E 00	-1.251E-08	-1.251E-08	1.251E-08
0.50000	75.0000	0.50000	214.208	2.134E-06	1.001E 00	-1.173E-08	-1.173E-08	1.173E-08
0.60000	75.0000	0.60000	220.411	3.415E-06	1.001E 00	-1.065E-08	-1.065E-08	1.065E-08

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 75.000 θ_D= 0. ρ_0=207.828

z	$_x\mu'$-1.0	T_0	$_0T_f-T_0$	$_xT_f-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	1.156E-08	0.	0.	0.	0.	0.	-6.399E-09	-6.399E-09
0.10000	1.240E-08	49.901	-5.991E-07	-5.991E-07	5.991E-07	5.991E-07	-6.867E-09	-6.867E-09
0.20000	1.287E-08	99.802	-1.231E-06	-1.231E-06	1.231E-06	1.231E-06	-7.128E-09	-7.128E-09
0.30000	1.291E-08	149.703	-1.877E-06	-1.877E-06	1.877E-06	1.877E-06	-7.150E-09	-7.150E-09
0.40000	1.251E-08	199.605	-2.513E-06	-2.513E-06	2.513E-06	2.513E-06	-6.929E-09	-6.929E-09
0.50000	1.173E-08	249.506	-3.119E-06	-3.119E-06	3.119E-06	3.119E-06	-6.494E-09	-6.494E-09
0.60000	1.065E-08	299.407	-3.678E-06	-3.678E-06	3.678E-06	3.678E-06	-5.898E-09	-5.898E-09

PROPAGATION FREQUENCY= 1.6600E 08 ϕ_0= 75.000 θ_D= 0. ρ_0=207.828

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-3.840E-20	-3.840E-20	0.	0.	-4.169E-12
0.10000	1.102E-09	1.102E-09	-4.318E-20	-4.318E-20	-6.122E-10	-6.123E-10	-4.416E-12
0.20000	2.304E-09	2.304E-09	-4.596E-20	-4.596E-20	-1.282E-09	-1.282E-09	-4.558E-12
0.30000	3.526E-09	3.526E-09	-4.619E-20	-4.619E-20	-1.975E-09	-1.975E-09	-4.571E-12
0.40000	4.743E-09	4.743E-09	-4.384E-20	-4.384E-20	-2.651E-09	-2.651E-09	-4.451E-12
0.50000	5.838E-09	5.838E-09	-3.935E-20	-3.935E-20	-3.275E-09	-3.276E-09	-4.221E-12
0.60000	6.620E-09	6.620E-09	-3.352E-20	-3.352E-20	-3.822E-09	-3.822E-09	-3.917E-12

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.012 θ_D= 2.823E-06 ρ_a= 1.016

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0120	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0120	0.10000	193.643	1.381E-09	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0120	0.20000	172.127	2.189E-09	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0120	0.30000	150.611	2.970E-09	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0120	0.40000	129.095	5.107E-09	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0120	0.50000	107.579	6.774E-09	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0120	0.60000	86.064	7.712E-09	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0120	0.70000	64.548	3.032E-08	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0120	0.80000	43.032	1.009E-07	1.000E 00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0120	0.85000	32.274	2.601E-07	1.000E 00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0120	0.90000	21.516	9.146E-07	1.000E 00	-4.325E-07	-4.325E-07	4.324E-07
0.92500	0.0120	0.92500	16.137	2.236E-06	1.000E 00	-7.971E-07	-7.971E-07	7.970E-07
0.95000	0.0120	0.95000	10.758	7.677E-06	1.000E 00	-2.022E-06	-2.023E-06	2.022E-06
0.96250	0.0120	0.96250	8.069	1.846E-05	1.000E 00	-3.987E-06	-3.989E-06	3.987E-06
0.97500	0.0120	0.97500	5.380	6.370E-05	1.000E 00	-1.209E-05	-1.210E-05	1.209E-05
0.98124	0.0120	0.98125	4.036	1.545E-04	1.000E 00	-2.812E-05	-2.816E-05	2.811E-05
0.98749	0.0120	0.98750	2.692	5.654E-04	1.001E 00	-1.187E-04	-1.190E-04	1.185E-04
0.99373	0.0120	0.99375	1.349	1.077E-02	1.004E 00	-4.184E-03	-4.234E-03	4.177E-03
0.99063	0.0370	1.00000	2.021	1.748E 02	3.058E 00	-4.310E-04	-4.288E-04	4.323E-04
0.98441	0.0701	1.00625	3.365	1.748E 02	5.714E 00	-5.367E-05	-5.357E-05	5.372E-05
0.97819	0.1037	1.01250	4.709	1.748E 02	8.340E 00	-1.839E-05	-1.837E-05	1.840E-05
0.97197	0.1376	1.01875	6.053	1.748E 02	1.094E 01	-8.598E-06	-8.593E-06	8.601E-06
0.96574	0.1720	1.02500	7.398	1.748E 02	1.350E 01	-5.152E-06	-5.150E-06	5.153E-06
0.95330	0.2422	1.03750	10.087	1.748E 02	1.853E 01	-2.281E-06	-2.281E-06	2.281E-06
0.94086	0.3142	1.05000	12.776	1.748E 02	2.345E 01	-1.410E-06	-1.410E-06	1.410E-06
0.91598	0.4641	1.07500	18.155	1.748E 02	3.294E 01	-6.337E-07	-6.337E-07	6.338E-07
0.89110	0.6224	1.10000	23.534	1.748E 02	4.199E 01	-3.519E-07	-3.518E-07	3.519E-07
0.84138	0.9671	1.15000	34.292	1.748E 02	5.893E 01	-1.491E-07	-1.491E-07	1.491E-07
0.79168	1.3550	1.20000	45.050	1.748E 02	7.445E 01	-7.936E-08	-7.935E-08	7.936E-08
0.69243	2.2978	1.30000	66.565	1.748E 02	1.019E 02	-3.271E-08	-3.271E-08	3.271E-08
0.59342	3.5056	1.40000	88.081	1.748E 02	1.254E 02	-1.727E-08	-1.727E-08	1.727E-08
0.49482	5.3159	1.50000	109.597	1.748E 02	1.458E 02	-1.072E-08	-1.072E-08	1.072E-08
0.39691	7.9482	1.60000	131.113	1.748E 02	1.637E 02	-7.189E-09	-7.189E-09	7.189E-09
0.30039	12.2869	1.70000	152.629	1.748E 02	1.795E 02	-4.849E-09	-4.849E-09	4.849E-09
0.20719	20.6199	1.80000	174.145	1.748E 02	1.935E 02	-3.421E-09	-3.421E-09	3.421E-09
0.12499	41.0031	1.90000	195.661	1.748E 02	2.060E 02	-2.413E-09	-2.413E-09	2.413E-09
0.09120	86.6903	2.00000	217.177	1.748E 02	2.173E 02	-1.722E-09	-1.722E-09	1.722E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.012 θ_D= 2.823E-06 ρ_a= 1.016

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.961	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.325E-07	449.110	-1.582E-05	-1.582E-05	1.582E-05	1.582E-05	-6.106E-07	-6.106E-07
0.92500	7.972E-07	461.585	-2.326E-05	-2.326E-05	2.326E-05	2.326E-05	-1.125E-06	-1.126E-06
0.95000	2.023E-06	474.060	-3.948E-05	-3.948E-05	3.948E-05	3.948E-05	-2.855E-06	-2.856E-06
0.96250	3.989E-06	480.297	-5.699E-05	-5.700E-05	5.699E-05	5.700E-05	-5.630E-06	-5.632E-06
0.97500	1.211E-05	486.534	-1.010E-04	-1.010E-04	1.010E-04	1.010E-04	-1.708E-05	-1.709E-05
0.98124	2.818E-05	489.652	-1.600E-04	-1.601E-04	1.600E-04	1.602E-04	-3.971E-05	-3.976E-05
0.98749	1.192E-04	492.769	-3.450E-04	-3.455E-04	3.448E-04	3.458E-04	-1.676E-04	-1.681E-04
0.99373	4.277E-03	495.884	-2.893E-03	-2.915E-03	2.891E-03	2.935E-03	-5.908E-03	-5.978E-03
0.99063	4.278E-04	494.335	4.615E 00	4.615E 00	2.596E 01	2.759E 01	-6.086E-04	-6.054E-04
0.98441	5.352E-05	491.232	1.084E 01	1.084E 01	3.218E 01	3.381E 01	-7.578E-05	-7.563E-05
0.97819	1.836E-05	488.128	1.706E 01	1.706E 01	3.840E 01	4.004E 01	-2.597E-05	-2.594E-05
0.97197	8.591E-06	485.023	2.328E 01	2.328E 01	4.463E 01	4.626E 01	-1.214E-05	-1.213E-05
0.96574	5.149E-06	481.918	2.951E 01	2.951E 01	5.085E 01	5.248E 01	-7.274E-06	-7.271E-06
0.95330	2.280E-06	475.708	4.195E 01	4.195E 01	6.330E 01	6.493E 01	-3.221E-06	-3.220E-06
0.94086	1.410E-06	469.499	5.440E 01	5.440E 01	7.574E 01	7.738E 01	-1.991E-06	-1.990E-06
0.91598	6.337E-07	457.084	7.929E 01	7.929E 01	1.006E 02	1.023E 02	-8.948E-07	-8.948E-07
0.89110	3.518E-07	444.671	1.042E 02	1.042E 02	1.255E 02	1.272E 02	-4.968E-07	-4.968E-07
0.84138	1.491E-07	419.856	1.539E 02	1.539E 02	1.753E 02	1.769E 02	-2.106E-07	-2.105E-07
0.79168	7.935E-08	395.059	2.037E 02	2.037E 02	2.250E 02	2.267E 02	-1.120E-07	-1.120E-07
0.69243	3.271E-08	345.529	3.031E 02	3.031E 02	3.245E 02	3.261E 02	-4.618E-08	-4.618E-08
0.59342	1.727E-08	296.125	4.024E 02	4.024E 02	4.238E 02	4.254E 02	-2.439E-08	-2.439E-08
0.49482	1.072E-08	246.920	5.015E 02	5.015E 02	5.229E 02	5.245E 02	-1.514E-08	-1.514E-08
0.39691	7.189E-09	198.064	6.003E 02	6.003E 02	6.216E 02	6.233E 02	-1.015E-08	-1.015E-08
0.30039	4.849E-09	149.898	6.984E 02	6.984E 02	7.197E 02	7.213E 02	-6.847E-09	-6.847E-09
0.20719	3.421E-09	103.391	7.948E 02	7.948E 02	8.161E 02	8.177E 02	-4.830E-09	-4.830E-09
0.12499	2.413E-09	62.372	8.857E 02	8.857E 02	9.070E 02	9.087E 02	-3.407E-09	-3.407E-09
0.09120	1.722E-09	45.510	9.525E 02	9.525E 02	9.739E 02	9.754E 02	-2.432E-09	-2.432E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 0.012 θ_D= 2.823E-06 ρ_o= 1.016

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-7.678E-20
0.10000	-2.925E-12	-2.253E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-1.030E-19
0.20000	-2.471E-12	-2.471E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-1.673E-19
0.30000	-1.332E-12	-3.594E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-2.316E-19
0.40000	-7.849E-12	-1.032E-11	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-3.921E-19
0.50000	5.118E-12	3.316E-12	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-7.848E-19
0.60000	8.580E-12	-1.875E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-1.835E-18
0.70000	-3.063E-12	1.388E-11	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-5.363E-18
0.80000	3.013E-11	-5.045E-12	-2.254E-18	-2.254E-18	-2.741E-08	-2.741E-08	-2.429E-17
0.85000	1.432E-10	1.263E-10	-6.101E-18	-6.002E-18	-5.538E-08	-5.538E-08	-7.038E-17
0.90000	5.850E-10	5.499E-10	-2.575E-17	-2.576E-17	-1.527E-07	-1.527E-07	-3.158E-16
0.92500	1.469E-09	1.437E-09	-5.954E-17	-5.955E-17	-3.035E-07	-3.035E-07	-9.626E-16
0.95000	5.700E-09	5.584E-09	-2.364E-16	-2.365E-16	-7.632E-07	-7.634E-07	-4.321E-15
0.96250	1.567E-08	1.583E-08	-6.864E-16	-6.868E-16	-1.516E-06	-1.516E-06	-1.231E-14
0.97500	7.552E-08	7.553E-08	-3.981E-15	-3.987E-15	-4.846E-06	-4.851E-06	-4.619E-14
0.98124	2.381E-07	2.383E-07	-1.564E-14	-1.568E-14	-1.277E-05	-1.279E-05	-1.115E-13
0.98749	1.673E-06	1.680E-06	-1.698E-13	-1.709E-13	-6.734E-05	-6.761E-05	-2.999E-13
0.99373	1.300E-04	1.318E-04	-1.548E-10	-1.585E-10	-1.283E-02	-1.308E-02	-5.413E-13
0.99063	-2.681E-03	-2.687E-03	-1.829E-12	-1.810E-12	-2.726E 05	-2.933E 05	-4.631E-13
0.98441	-1.419E-03	-1.422E-03	-4.503E-14	-4.485E-14	-2.726E 05	-2.933E 05	-1.744E-13
0.97819	-9.664E-04	-9.686E-04	-7.847E-15	-7.831E-15	-2.726E 05	-2.933E 05	-6.770E-14
0.97197	-7.327E-04	-7.344E-04	-2.344E-15	-2.341E-15	-2.726E 05	-2.933E 05	-3.208E-14
0.96574	-5.900E-04	-5.914E-04	-1.034E-15	-1.033E-15	-2.726E 05	-2.933E 05	-1.607E-14
0.95330	-4.246E-04	-4.255E-04	-2.852E-16	-2.851E-16	-2.726E 05	-2.933E 05	-5.647E-15
0.94086	-3.316E-04	-3.323E-04	-1.347E-16	-1.347E-16	-2.726E 05	-2.933E 05	-2.212E-15
0.91598	-2.306E-04	-2.311E-04	-4.348E-17	-4.348E-17	-2.726E 05	-2.933E 05	-5.978E-16
0.89110	-1.767E-04	-1.771E-04	-1.902E-17	-1.902E-17	-2.726E 05	-2.933E 05	-2.269E-16
0.84138	-1.205E-04	-1.207E-04	-4.929E-18	-4.929E-18	-2.726E 05	-2.933E 05	-5.595E-17
0.79168	-9.138E-05	-9.159E-05	-1.940E-18	-1.940E-18	-2.726E 05	-2.933E 05	-2.045E-17
0.69243	-6.162E-05	-6.176E-05	-5.111E-19	-5.111E-19	-2.726E 05	-2.933E 05	-4.768E-18
0.59342	-4.648E-05	-4.659E-05	-1.994E-19	-1.994E-19	-2.726E 05	-2.933E 05	-1.682E-18
0.49482	-3.732E-05	-3.740E-05	-9.855E-20	-9.855E-20	-2.726E 05	-2.933E 05	-7.301E-19
0.39691	-3.117E-05	-3.124E-05	-5.394E-20	-5.394E-20	-2.726E 05	-2.933E 05	-3.716E-19
0.30039	-2.676E-05	-2.682E-05	-2.969E-20	-2.969E-20	-2.726E 05	-2.933E 05	-2.214E-19
0.20719	-2.345E-05	-2.350E-05	-1.704E-20	-1.704E-20	-2.726E 05	-2.933E 05	-1.423E-19
0.12499	-2.086E-05	-2.091E-05	-9.777E-21	-9.777E-21	-2.726E 05	-2.933E 05	-1.003E-19
0.09120	-1.879E-05	-1.883E-05	-5.604E-21	-5.604E-21	-2.726E 05	-2.933E 05	-7.512E-20

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 0.015 θ_D= 3.575E-06 ρ_o= 1.016

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0150	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0150	0.10000	193.643	1.641E-09	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0150	0.20000	172.127	2.345E-09	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0150	0.30000	150.611	3.804E-09	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0150	0.40000	129.095	6.253E-09	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0150	0.50000	107.579	8.546E-09	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0150	0.60000	86.064	9.797E-09	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0150	0.70000	64.548	3.835E-08	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0150	0.80000	43.032	1.242E-07	1.000E 00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0150	0.85000	32.274	3.277E-07	1.000E 00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0150	0.90000	21.516	1.141E-06	1.000E 00	-4.325E-07	-4.325E-07	4.324E-07
0.92500	0.0150	0.92500	16.137	2.781E-06	1.000E 00	-7.971E-07	-7.971E-07	7.970E-07
0.95000	0.0150	0.95000	10.759	9.562E-06	1.000E 00	-2.022E-06	-2.023E-06	2.022E-06
0.96250	0.0150	0.96250	8.069	2.299E-05	1.000E 00	-3.987E-06	-3.989E-06	3.987E-06
0.97500	0.0150	0.97500	5.380	7.935E-05	1.000E 00	-1.209E-05	-1.210E-05	1.209E-05
0.98124	0.0150	0.98125	4.036	1.925E-04	1.000E 00	-2.812E-05	-2.816E-05	2.810E-05
0.98749	0.0150	0.98750	2.692	7.045E-04	1.001E 00	-1.186E-04	-1.190E-04	1.185E-04
0.99373	0.0150	0.99375	1.350	1.342E-02	1.003E 00	-4.176E-03	-4.226E-03	4.169E-03
0.99064	0.0463	1.00000	2.021	1.735E 02	3.060E 00	-4.311E-04	-4.288E-04	4.324E-04
0.98444	0.0876	1.00625	3.365	1.735E 02	5.722E 00	-5.366E-05	-5.356E-05	5.371E-05
0.97823	0.1295	1.01250	4.709	1.735E 02	8.352E 00	-1.837E-05	-1.837E-05	1.840E-05
0.97202	0.1719	1.01875	6.053	1.735E 02	1.095E 01	-8.597E-06	-8.592E-06	8.600E-06
0.96581	0.2149	1.02500	7.398	1.735E 02	1.352E 01	-5.151E-06	-5.149E-06	5.152E-06
0.95340	0.3025	1.03750	10.087	1.735E 02	1.856E 01	-2.281E-06	-2.280E-06	2.281E-06
0.94099	0.3924	1.05000	12.777	1.735E 02	2.348E 01	-1.410E-06	-1.410E-06	1.410E-06
0.91618	0.5796	1.07500	18.155	1.735E 02	3.298E 01	-6.337E-07	-6.337E-07	6.337E-07
0.89137	0.7772	1.10000	23.534	1.735E 02	4.205E 01	-3.518E-07	-3.518E-07	3.518E-07
0.84180	1.2073	1.15000	34.292	1.735E 02	5.901E 01	-1.491E-07	-1.491E-07	1.491E-07
0.79227	1.6911	1.20000	45.050	1.735E 02	7.455E 01	-7.935E-08	-7.935E-08	7.935E-08
0.69344	2.8660	1.30000	66.566	1.735E 02	1.020E 02	-3.271E-08	-3.271E-08	3.271E-08
0.59499	4.4306	1.40000	88.082	1.735E 02	1.256E 02	-1.727E-08	-1.727E-08	1.727E-08
0.49716	6.6131	1.50000	109.598	1.735E 02	1.460E 02	-1.072E-08	-1.072E-08	1.072E-08
0.40040	9.8573	1.60000	131.113	1.735E 02	1.639E 02	-7.189E-09	-7.189E-09	7.189E-09
0.30574	15.1373	1.70000	152.629	1.735E 02	1.797E 02	-4.849E-09	-4.849E-09	4.849E-09
0.21594	24.9618	1.80000	174.145	1.735E 02	1.937E 02	-3.421E-09	-3.421E-09	3.421E-09
0.14066	46.7324	1.90000	195.661	1.735E 02	2.063E 02	-2.413E-09	-2.413E-09	2.413E-09
0.11375	88.5087	2.00000	217.177	1.735E 02	2.175E 02	-1.722E-09	-1.722E-09	1.722E-09

PROPAGATION FREQUENCY= 4.233GE 08 ϕ_o= 0.015 θ_D=3.575E-06 ρ_a=1.016

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.325E-07	449.110	-1.582E-05	-1.582E-05	1.582E-05	1.582E-05	-6.106E-07	-6.106E-07
0.92500	7.974E-07	461.585	-2.326E-05	-2.326E-05	2.326E-05	2.326E-05	-1.125E-06	-1.126E-06
0.95000	2.023E-06	474.060	-3.948E-05	-3.948E-05	3.948E-05	3.948E-05	-2.855E-06	-2.856E-06
0.96250	3.989E-06	480.297	-5.699E-05	-5.700E-05	5.699E-05	5.700E-05	-5.630E-06	-5.632E-06
0.97500	1.211E-05	486.534	-1.010E-04	-1.010E-04	1.010E-04	1.010E-04	-1.708E-05	-1.709E-05
0.98124	2.818E-05	489.652	-1.600E-04	-1.601E-04	1.600E-04	1.602E-04	-3.971E-05	-3.976E-05
0.98749	1.192E-04	492.769	-3.449E-04	-3.454E-04	3.447E-04	3.457E-04	-1.675E-04	-1.680E-04
0.99373	4.269E-03	495.884	-2.888E-03	-2.910E-03	2.889E-03	2.933E-03	-5.897E-03	-5.967E-03
0.99064	4.279E-04	494.341	4.609E 00	4.609E 00	1.516E 01	1.628E 01	-6.087E-04	-6.056E-04
0.98444	5.351E-05	491.245	1.082E 01	1.082E 01	2.137E 01	2.250E 01	-7.577E-05	-7.562E-05
0.97823	1.836E-05	488.147	1.704E 01	1.704E 01	2.759E 01	2.872E 01	-2.596E-05	-2.594E-05
0.97202	8.590E-06	485.050	2.326E 01	2.326E 01	3.381E 01	3.493E 01	-1.214E-05	-1.213E-05
0.96581	5.148E-06	481.953	2.947E 01	2.947E 01	4.002E 01	4.115E 01	-7.273E-06	-7.270E-06
0.95340	2.280E-06	475.759	4.190E 01	4.190E 01	5.245E 01	5.358E 01	-3.221E-06	-3.220E-06
0.94099	1.409E-06	469.565	5.433E 01	5.433E 01	6.489E 01	6.601E 01	-1.990E-06	-1.990E-06
0.91618	6.336E-07	457.183	7.919E 01	7.919E 01	8.974E 01	9.087E 01	-8.948E-07	-8.947E-07
0.89137	3.518E-07	444.805	1.040E 02	1.040E 02	1.146E 02	1.157E 02	-4.968E-07	-4.969E-07
0.84180	1.491E-07	420.066	1.537E 02	1.537E 02	1.643E 02	1.654E 02	-2.105E-07	-2.105E-07
0.79227	7.935E-08	395.354	2.034E 02	2.034E 02	2.139E 02	2.151E 02	-1.120E-07	-1.120E-07
0.69344	3.271E-08	346.033	3.026E 02	3.026E 02	3.132E 02	3.143E 02	-4.618E-08	-4.619E-08
0.59499	1.727E-08	296.905	4.016E 02	4.016E 02	4.122E 02	4.133E 02	-2.439E-08	-2.439E-08
0.49716	1.072E-08	248.087	5.004E 02	5.004E 02	5.109E 02	5.120E 02	-1.514E-08	-1.514E-08
0.40040	7.189E-09	199.804	5.986E 02	5.986E 02	6.091E 02	6.102E 02	-1.015E-08	-1.015E-08
0.30574	4.849E-09	152.566	6.957E 02	6.957E 02	7.062E 02	7.074E 02	-6.847E-09	-6.847E-09
0.21594	3.421E-09	107.755	7.904E 02	7.904E 02	8.010E 02	8.021E 02	-4.830E-09	-4.830E-09
0.14066	2.413E-09	70.189	8.779E 02	8.779E 02	8.884E 02	8.895E 02	-3.407E-09	-3.407E-09
0.11375	1.722E-09	56.762	9.412E 02	9.412E 02	9.517E 02	9.529E 02	-2.432E-09	-2.432E-09

PROPAGATION FREQUENCY= 4.233GE 08 ϕ_o=0.015 θ_D=3.575E-06 ρ_a=1.016

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.200E-19
0.10000	-2.526E-12	-1.984E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.192E-10	-1.609E-19
0.20000	-2.076E-12	-2.076E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-2.302E-19
0.30000	-9.056E-13	-8.181E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-3.619E-19
0.40000	-6.410E-12	-8.486E-12	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-6.126E-19
0.50000	5.470E-12	3.883E-12	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-1.226E-18
0.60000	9.829E-12	-1.410E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-2.867E-18
0.70000	4.639E-12	1.887E-11	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-8.380E-18
0.80000	5.623E-11	2.485E-11	-2.254E-18	-2.254E-18	-2.741E-08	-2.741E-08	-3.795E-17
0.85000	2.047E-10	1.897E-10	-6.001E-18	-6.002E-18	-5.538E-08	-5.538E-08	-1.100E-16
0.90000	8.211E-10	7.916E-10	-2.575E-17	-2.576E-17	-1.527E-07	-1.527E-07	-4.936E-16
0.92500	2.052E-09	2.025E-09	-5.954E-17	-5.955E-17	-3.035E-07	-3.035E-07	-1.504E-15
0.95000	7.957E-09	7.853E-09	-2.364E-16	-2.365E-16	-7.632E-07	-7.634E-07	-6.751E-15
0.96250	2.169E-08	2.182E-08	-6.864E-16	-6.868E-16	-1.516E-06	-1.516E-06	-1.923E-14
0.97500	1.039E-07	1.040E-07	-3.980E-15	-3.986E-15	-4.846E-06	-4.850E-06	-7.217E-14
0.98124	3.270E-07	3.274E-07	-1.564E-14	-1.568E-14	-1.277E-05	-1.279E-05	-1.742E-13
0.98749	2.259E-06	2.267E-06	-1.698E-13	-1.708E-13	-6.732E-05	-6.759E-05	-4.685E-13
0.99373	1.738E-04	1.762E-04	-1.542E-10	-1.579E-10	-1.279E-02	-1.304E-02	-8.459E-13
0.99064	-2.779E-03	-2.784E-03	-1.829E-12	-1.810E-12	-1.340E 05	-1.483E 05	-7.236E-13
0.98444	-1.474E-03	-1.477E-03	-4.501E-14	-4.484E-14	-1.340E 05	-1.483E 05	-2.724E-13
0.97823	-1.004E-03	-1.006E-03	-7.845E-15	-7.829E-15	-1.340E 05	-1.483E 05	-1.058E-13
0.97202	-7.612E-04	-7.627E-04	-2.344E-15	-2.341E-15	-1.340E 05	-1.483E 05	-5.011E-14
0.96581	-6.129E-04	-6.142E-04	-1.034E-15	-1.033E-15	-1.340E 05	-1.483E 05	-2.510E-14
0.95340	-4.411E-04	-4.420E-04	-2.852E-16	-2.851E-16	-1.340E 05	-1.483E 05	-8.821E-15
0.94099	-3.445E-04	-3.452E-04	-1.347E-16	-1.347E-16	-1.340E 05	-1.483E 05	-3.456E-15
0.91618	-2.395E-04	-2.400E-04	-4.348E-17	-4.348E-17	-1.340E 05	-1.483E 05	-9.339E-16
0.89137	-1.836E-04	-1.840E-04	-1.902E-17	-1.901E-17	-1.340E 05	-1.483E 05	-3.546E-16
0.84180	-1.252E-04	-1.254E-04	-4.929E-18	-4.929E-18	-1.340E 05	-1.483E 05	-8.742E-17
0.79227	-9.494E-05	-9.513E-05	-1.940E-18	-1.940E-18	-1.340E 05	-1.483E 05	-3.196E-17
0.69344	-6.402E-05	-6.415E-05	-5.111E-19	-5.111E-19	-1.340E 05	-1.483E 05	-7.450E-18
0.59499	-4.829E-05	-4.839E-05	-1.994E-19	-1.994E-19	-1.340E 05	-1.483E 05	-2.629E-18
0.49716	-3.877E-05	-3.885E-05	-9.855E-20	-9.855E-20	-1.340E 05	-1.483E 05	-1.141E-18
0.40040	-3.238E-05	-3.245E-05	-5.394E-20	-5.394E-20	-1.340E 05	-1.483E 05	-5.806E-19
0.30574	-2.780E-05	-2.786E-05	-2.969E-20	-2.969E-20	-1.340E 05	-1.483E 05	-3.459E-19
0.21594	-2.436E-05	-2.441E-05	-1.704E-20	-1.704E-20	-1.340E 05	-1.483E 05	-2.223E-19
0.14066	-2.167E-05	-2.172E-05	-9.777E-21	-9.777E-21	-1.340E 05	-1.483E 05	-1.567E-19
0.11375	-1.952E-05	-1.956E-05	-5.604E-21	-5.604E-21	-1.340E 05	-1.483E 05	-1.174E-19

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.020 θ_D= 4.830E-06 ρ_a= 1.016

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0200	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0200	0.10000	193.643	2.658E-09	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0200	0.20000	172.127	4.012E-09	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0200	0.30000	150.611	5.836E-09	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0200	0.40000	129.095	1.001E-08	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0200	0.50000	107.579	1.355E-08	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0200	0.60000	86.064	1.793E-08	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0200	0.70000	64.548	5.878E-08	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0200	0.80000	43.032	2.009E-07	1.000E 00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0200	0.85000	32.274	5.069E-07	1.000E 00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0200	0.90000	21.516	1.781E-06	1.000E 00	-4.324E-07	-4.325E-07	4.324E-07
0.92500	0.0200	0.92500	16.137	4.332E-06	1.000E 00	-7.971E-07	-7.971E-07	7.970E-07
0.95000	0.0200	0.95000	10.759	1.486E-05	1.000E 00	-2.022E-06	-2.023E-06	2.022E-06
0.96250	0.0200	0.96250	8.070	3.565E-05	1.000E 00	-3.987E-06	-3.988E-06	3.986E-06
0.97499	0.0200	0.97500	5.384	1.226E-04	1.000E 00	-1.209E-05	-1.210E-05	1.209E-05
0.98124	0.0200	0.98125	4.036	2.966E-04	1.000E 00	-2.811E-05	-2.815E-05	2.809E-05
0.98749	0.0200	0.98750	2.693	1.073E-03	1.000E 00	-1.185E-04	-1.189E-04	1.184E-04
0.99373	0.0200	0.99375	1.351	1.886E-02	1.002E 00	-4.145E-03	-4.194E-03	4.138E-03
0.99068	0.0616	1.00000	2.018	1.713E 02	3.059E 00	-4.344E-04	-4.321E-04	4.357E-04
0.98451	0.1166	1.00625	3.361	1.713E 02	5.727E 00	-5.387E-05	-5.377E-05	5.393E-05
0.97834	0.1724	1.01250	4.705	1.713E 02	8.363E 00	-1.843E-05	-1.842E-05	1.844E-05
0.97216	0.2289	1.01875	6.049	1.713E 02	1.097E 01	-8.610E-06	-8.605E-06	8.613E-06
0.96599	0.2861	1.02500	7.394	1.713E 02	1.354E 01	-5.159E-06	-5.157E-06	5.160E-06
0.95364	0.4027	1.03750	10.083	1.713E 02	1.859E 01	-2.283E-06	-2.282E-06	2.283E-06
0.94130	0.5225	1.05000	12.772	1.713E 02	2.353E 01	-1.411E-06	-1.411E-06	1.411E-06
0.91663	0.7716	1.07500	18.151	1.713E 02	3.305E 01	-6.340E-07	-6.340E-07	6.340E-07
0.89198	1.0345	1.10000	23.530	1.713E 02	4.214E 01	-3.520E-07	-3.520E-07	3.520E-07
0.84273	1.6063	1.15000	34.288	1.713E 02	5.913E 01	-1.492E-07	-1.492E-07	1.492E-07
0.79358	2.2491	1.20000	45.046	1.713E 02	7.471E 01	-7.937E-08	-7.937E-08	7.937E-08
0.69564	3.8067	1.30000	66.561	1.713E 02	1.023E 02	-3.271E-08	-3.271E-08	3.271E-08
0.59839	5.8726	1.40000	88.077	1.713E 02	1.259E 02	-1.727E-08	-1.727E-08	1.727E-08
0.50221	8.7348	1.50000	109.593	1.713E 02	1.464E 02	-1.073E-08	-1.073E-08	1.073E-08
0.40787	12.9359	1.60000	131.109	1.713E 02	1.643E 02	-7.189E-09	-7.189E-09	7.189E-09
0.31703	19.6000	1.70000	152.625	1.713E 02	1.801E 02	-4.849E-09	-4.849E-09	4.849E-09
0.23378	31.2812	1.80000	174.141	1.713E 02	1.941E 02	-3.421E-09	-3.421E-09	3.421E-09
0.16971	53.5050	1.90000	195.657	1.713E 02	2.067E 02	-2.413E-09	-2.413E-09	2.413E-09
0.15148	89.2156	2.00000	217.173	1.713E 02	2.180E 02	-1.723E-09	-1.723E-09	1.723E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.020 θ_D= 4.830E-06 ρ_a= 1.016

z	$_x\mu'$-1.0	T_0	$_0T_1$-T_0	$_xT_1$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.325E-07	449.110	-1.582E-05	-1.582E-05	1.582E-05	1.582E-05	-6.106E-07	-6.106E-07
0.92500	7.972E-07	461.585	-2.326E-05	-2.326E-05	2.326E-05	2.326E-05	-1.125E-06	-1.126E-06
0.95000	2.023E-06	474.060	-3.948E-05	-3.948E-05	3.948E-05	3.948E-05	-2.855E-06	-2.856E-06
0.96250	3.989E-06	480.297	-5.699E-05	-5.700E-05	5.699E-05	5.700E-05	-5.629E-06	-5.631E-06
0.97499	1.210E-05	486.534	-1.010E-04	-1.010E-04	1.010E-04	1.010E-04	-1.707E-05	-1.709E-05
0.98124	2.817E-05	489.652	-1.600E-04	-1.601E-04	1.600E-04	1.601E-04	-3.969E-05	-3.975E-05
0.98749	1.191E-04	492.769	-3.448E-04	-3.453E-04	3.446E-04	3.456E-04	-1.674E-04	-1.679E-04
0.99373	4.237E-03	495.882	-2.872E-03	-2.894E-03	2.879E-03	2.923E-03	-5.853E-03	-5.922E-03
0.99068	4.311E-04	494.362	4.587E 00	4.587E 00	4.756E 00	4.756E 00	-6.133E-04	-6.101E-04
0.98451	5.372E-05	491.282	1.079E 01	1.079E 01	1.096E 01	1.096E 01	-7.607E-05	-7.593E-05
0.97834	1.841E-05	488.201	1.699E 01	1.699E 01	1.716E 01	1.716E 01	-2.603E-05	-2.600E-05
0.97216	8.603E-06	485.120	2.318E 01	2.318E 01	2.335E 01	2.336E 01	-1.216E-05	-1.215E-05
0.96599	5.156E-06	482.039	2.938E 01	2.938E 01	2.955E 01	2.955E 01	-7.285E-06	-7.282E-06
0.95364	2.282E-06	475.879	4.178E 01	4.178E 01	4.195E 01	4.195E 01	-3.223E-06	-3.222E-06
0.94130	1.411E-06	469.720	5.418E 01	5.418E 01	5.435E 01	5.435E 01	-1.992E-06	-1.992E-06
0.91663	6.340E-07	457.409	7.897E 01	7.897E 01	7.914E 01	7.914E 01	-8.952E-07	-8.952E-07
0.89198	3.520E-07	445.107	1.037E 02	1.037E 02	1.039E 02	1.039E 02	-4.970E-07	-4.970E-07
0.84273	1.492E-07	420.533	1.533E 02	1.533E 02	1.534E 02	1.534E 02	-2.106E-07	-2.106E-07
0.79358	7.937E-08	396.006	2.027E 02	2.027E 02	2.029E 02	2.029E 02	-1.121E-07	-1.121E-07
0.69564	3.271E-08	347.134	3.015E 02	3.015E 02	3.017E 02	3.017E 02	-4.619E-08	-4.619E-08
0.59839	1.727E-08	298.631	4.000E 02	4.000E 02	4.001E 02	4.001E 02	-2.439E-08	-2.439E-08
0.50221	1.073E-08	250.607	4.978E 02	4.978E 02	4.980E 02	4.980E 02	-1.514E-08	-1.514E-08
0.40787	7.189E-09	203.533	5.948E 02	5.948E 02	5.950E 02	5.950E 02	-1.015E-08	-1.015E-08
0.31703	4.849E-09	158.200	6.901E 02	6.901E 02	6.902E 02	6.902E 02	-6.847E-09	-6.847E-09
0.23378	3.421E-09	116.659	7.815E 02	7.815E 02	7.817E 02	7.817E 02	-4.830E-09	-4.830E-09
0.16971	2.413E-09	84.686	8.634E 02	8.634E 02	8.635E 02	8.635E 02	-3.407E-09	-3.407E-09
0.15148	1.723E-09	75.592	9.224E 02	9.224E 02	9.225E 02	9.225E 02	-2.432E-09	-2.432E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.020 θ_D=4.830E-06 ρ_a= 1.016

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-2.233E-19
0.10000	-1.860E-12	-1.536E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-2.861E-19
0.20000	-1.417E-12	-1.417E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-4.092E-19
0.30000	-1.946E-13	-5.825E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-6.433E-19
0.40000	-4.012E-12	-5.429E-12	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-1.089E-18
0.50000	6.056E-12	4.828E-12	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-2.180E-18
0.60000	1.191E-11	-6.359E-12	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-5.097E-18
0.70000	1.748E-11	2.719E-11	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-1.490E-17
0.80000	9.971E-11	7.466E-11	-2.254E-18	-2.254E-18	-2.741E-08	-2.741E-08	-6.747E-17
0.85000	3.071E-10	2.955E-10	-6.001E-18	-6.002E-18	-5.538E-08	-5.538E-08	-1.955E-16
0.90000	1.215E-09	1.195E-09	-2.575E-17	-2.576E-17	-1.527E-07	-1.527E-07	-8.771E-16
0.92500	3.025E-09	3.004E-09	-5.954E-17	-5.955E-17	-3.035E-07	-3.035E-07	-2.674E-15
0.95000	1.172E-08	1.163E-08	-2.364E-16	-2.365E-16	-7.632E-07	-7.632E-07	-1.200E-14
0.96250	3.172E-08	3.182E-08	-6.863E-16	-6.867E-16	-1.516E-06	-1.516E-06	-3.419E-14
0.97499	1.513E-07	1.513E-07	-3.979E-15	-3.985E-15	-4.845E-06	-4.850E-06	-1.283E-13
0.98124	4.753E-07	4.759E-07	-1.563E-14	-1.567E-14	-1.276E-05	-1.278E-05	-3.095E-13
0.98749	3.234E-06	3.246E-06	-1.695E-13	-1.705E-13	-6.724E-05	-6.751E-05	-8.323E-13
0.99373	2.467E-04	2.501E-04	-1.520E-10	-1.556E-10	-1.263E-02	-1.289E-02	-1.504E-12
0.99068	-2.947E-03	-2.951E-03	-1.836E-12	-1.836E-12	-8.107E 02	-8.123E 02	-1.295E-12
0.98451	-1.567E-03	-1.570E-03	-4.531E-14	-4.514E-14	-8.107E 02	-8.123E 02	-4.856E-13
0.97834	-1.067E-03	-1.069E-03	-7.877E-15	-7.962E-15	-8.107E 02	-8.123E 02	-1.885E-13
0.97216	-8.091E-04	-8.104E-04	-2.350E-15	-2.347E-15	-8.107E 02	-8.123E 02	-8.931E-14
0.96599	-6.514E-04	-6.525E-04	-1.036E-15	-1.035E-15	-8.107E 02	-8.123E 02	-4.470E-14
0.95364	-4.687E-04	-4.694E-04	-2.855E-16	-2.854E-16	-8.107E 02	-8.123E 02	-1.571E-14
0.94130	-3.660E-04	-3.666E-04	-1.349E-16	-1.348E-16	-8.107E 02	-8.123E 02	-6.152E-15
0.91663	-2.545E-04	-2.549E-04	-4.351E-17	-4.351E-17	-8.107E 02	-8.123E 02	-1.662E-15
0.89198	-1.951E-04	-1.954E-04	-1.903E-17	-1.903E-17	-8.107E 02	-8.123E 02	-6.308E-16
0.84273	-1.330E-04	-1.332E-04	-4.931E-18	-4.931E-18	-8.107E 02	-8.123E 02	-1.555E-16
0.79358	-1.009E-04	-1.010E-04	-1.941E-18	-1.941E-18	-8.107E 02	-8.123E 02	-5.683E-17
0.69564	-6.801E-05	-6.812E-05	-5.112E-19	-5.112E-19	-8.107E 02	-8.123E 02	-1.325E-17
0.59839	-5.131E-05	-5.139E-05	-1.994E-19	-1.994E-19	-8.107E 02	-8.123E 02	-4.674E-18
0.50221	-4.119E-05	-4.125E-05	-9.856E-20	-9.856E-20	-8.107E 02	-8.123E 02	-2.028E-18
0.40787	-3.440E-05	-3.446E-05	-5.394E-20	-5.394E-20	-8.107E 02	-8.123E 02	-1.032E-18
0.31703	-2.954E-05	-2.958E-05	-2.969E-20	-2.969E-20	-8.107E 02	-8.123E 02	-6.150E-19
0.23378	-2.588E-05	-2.592E-05	-1.704E-20	-1.704E-20	-8.107E 02	-8.123E 02	-3.952E-19
0.16971	-2.302E-05	-2.306E-05	-9.778E-21	-9.778E-21	-8.107E 02	-8.123E 02	-2.785E-19
0.15148	-2.074E-05	-2.077E-05	-5.605E-21	-5.605E-21	-8.107E 02	-8.123E 02	-2.087E-19

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.025 θ_D= 5.958E-06 ρ_a= 1.016

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	0.0250	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0250	0.10000	193.643	3.804E-09	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0250	0.20000	172.127	4.742E-09	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0250	0.30000	150.611	7.087E-09	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0250	0.40000	129.095	1.209E-08	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0250	0.50000	107.579	2.584E-08	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0250	0.60000	86.064	1.709E-08	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0250	0.70000	64.548	6.670E-08	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0250	0.80000	43.032	2.143E-07	1.000E 00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0250	0.85000	32.274	5.553E-07	1.000E 00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0250	0.90000	21.516	1.941E-06	1.000E 00	-4.324E-07	-4.325E-07	4.324E-07
0.92500	0.0250	0.92500	16.137	4.736E-06	1.000E 00	-7.970E-07	-7.971E-07	7.970E-07
0.95000	0.0250	0.95000	10.759	1.626E-05	1.000E 00	-2.022E-06	-2.023E-06	2.022E-06
0.96250	0.0250	0.96250	8.070	3.904E-05	1.000E 00	-3.987E-06	-3.988E-06	3.986E-06
0.97500	0.0250	0.97500	5.381	1.346E-04	1.000E 00	-1.209E-05	-1.210E-05	1.209E-05
0.98124	0.0250	0.98125	4.037	3.264E-04	1.000E 00	-2.811E-05	-2.815E-05	2.809E-05
0.98749	0.0250	0.98750	2.693	1.192E-03	1.000E 00	-1.185E-04	-1.188E-04	1.183E-04
0.99373	0.0250	0.99375	1.352	2.233E-02	1.001E 00	-4.134E-03	-4.183E-03	4.127E-03
0.99073	0.0768	1.00000	2.016	1.692E 02	3.060E 00	-4.364E-04	-4.341E-04	4.378E-04
0.98460	0.1455	1.00625	3.358	1.692E 02	5.734E 00	-5.402E-05	-5.392E-05	5.407E-05
0.97846	0.2151	1.01250	4.702	1.692E 02	8.377E 00	-1.846E-05	-1.845E-05	1.847E-05
0.97233	0.2855	1.01875	6.046	1.692E 02	1.099E 01	-8.620E-06	-8.615E-06	8.622E-06
0.96620	0.3569	1.02500	7.391	1.692E 02	1.357E 01	-5.165E-06	-5.163E-06	5.166E-06
0.95394	0.5024	1.03750	10.080	1.692E 02	1.863E 01	-2.284E-06	-2.283E-06	2.284E-06
0.94169	0.6517	1.05000	12.769	1.692E 02	2.357E 01	-1.412E-06	-1.411E-06	1.412E-06
0.91720	0.9622	1.07500	18.148	1.692E 02	3.312E 01	-6.342E-07	-6.342E-07	6.343E-07
0.89274	1.2898	1.10000	23.527	1.692E 02	4.223E 01	-3.521E-07	-3.521E-07	3.521E-07
0.84392	2.0019	1.15000	34.285	1.692E 02	5.926E 01	-1.492E-07	-1.492E-07	1.492E-07
0.79524	2.8013	1.20000	45.042	1.692E 02	7.487E 01	-7.938E-08	-7.938E-08	7.938E-08
0.69845	4.7333	1.30000	66.558	1.692E 02	1.025E 02	-3.271E-08	-3.271E-08	3.271E-08
0.60271	7.2828	1.40000	88.074	1.692E 02	1.262E 02	-1.727E-08	-1.727E-08	1.727E-08
0.50861	10.7851	1.50000	109.590	1.692E 02	1.467E 02	-1.073E-08	-1.073E-08	1.073E-08
0.41726	15.8473	1.60000	131.106	1.692E 02	1.646E 02	-7.190E-09	-7.190E-09	7.190E-09
0.33096	23.6407	1.70000	152.622	1.692E 02	1.805E 02	-4.850E-09	-4.850E-09	4.850E-09
0.25486	36.4678	1.80000	174.138	1.692E 02	1.946E 02	-3.421E-09	-3.421E-09	3.421E-09
0.20094	57.9153	1.90000	195.654	1.692E 02	2.072E 02	-2.413E-09	-2.413E-09	2.413E-09
0.18921	87.4206	2.00000	217.169	1.692E 02	2.185E 02	-1.723E-09	-1.723E-09	1.723E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.025 θ_D= 5.958E-06 ρ_a= 1.016

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	99.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.016E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.115E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.692E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.323E-07	449.110	-1.582E-05	-1.582E-05	1.582E-05	1.582E-05	-6.106E-07	-6.106E-07
0.92500	7.972E-07	461.585	-2.326E-05	-2.326E-05	2.326E-05	2.326E-05	-1.125E-06	-1.126E-06
0.95000	2.023E-06	474.060	-3.948E-05	-3.948E-05	3.948E-05	3.948E-05	-2.855E-06	-2.856E-06
0.96250	3.989E-06	480.297	-5.699E-05	-5.700E-05	5.699E-05	5.700E-05	-5.629E-06	-5.631E-06
0.97500	1.210E-05	486.534	-1.010E-04	-1.010E-04	1.010E-04	1.010E-04	-1.707E-05	-1.708E-05
0.98124	2.817E-05	489.652	-1.601E-04	-1.601E-04	1.600E-04	1.601E-04	-3.969E-05	-3.974E-05
0.98749	1.190E-04	492.769	-3.447E-04	-3.452E-04	3.445E-04	3.455E-04	-1.673E-04	-1.678E-04
0.99373	4.226E-03	495.884	-2.865E-03	-2.887E-03	2.877E-03	2.921E-03	-5.838E-03	-5.907E-03
0.99073	4.332E-04	494.384	4.565E 00	4.565E 00	4.732E 00	4.732E 00	-6.162E-04	-6.130E-04
0.98460	5.387E-05	491.325	1.074E 01	1.074E 01	1.091E 01	1.091E 01	-7.627E-05	-7.613E-05
0.97846	1.844E-05	488.264	1.692E 01	1.692E 01	1.709E 01	1.709E 01	-2.607E-05	-2.605E-05
0.97233	8.614E-06	485.204	2.310E 01	2.310E 01	2.327E 01	2.327E 01	-1.217E-05	-1.216E-05
0.96620	5.162E-06	482.145	2.928E 01	2.928E 01	2.945E 01	2.945E 01	-7.293E-06	-7.290E-06
0.95394	2.283E-06	476.027	4.163E 01	4.163E 01	4.180E 01	4.180E 01	-3.225E-06	-3.224E-06
0.94169	1.411E-06	469.913	5.399E 01	5.399E 01	5.415E 01	5.415E 01	-1.993E-06	-1.993E-06
0.91720	6.342E-07	457.694	7.868E 01	7.868E 01	7.885E 01	7.885E 01	-8.955E-07	-8.955E-07
0.89274	3.526E-07	445.489	1.034E 02	1.034E 02	1.035E 02	1.035E 02	-4.971E-07	-4.971E-07
0.84392	1.494E-07	421.126	1.527E 02	1.527E 02	1.528E 02	1.528E 02	-2.106E-07	-2.106E-07
0.79524	7.938E-08	396.835	2.019E 02	2.019E 02	2.021E 02	2.021E 02	-1.121E-07	-1.121E-07
0.69845	3.274E-08	348.537	3.001E 02	3.001E 02	3.003E 02	3.003E 02	-4.619E-08	-4.619E-08
0.60271	1.727E-08	300.760	3.978E 02	3.980E 02	3.980E 02	3.980E 02	-2.439E-08	-2.439E-08
0.50961	1.073E-08	253.803	4.947E 02	4.947E 02	4.948E 02	4.948E 02	-1.514E-08	-1.514E-08
0.41726	7.190E-09	208.219	5.901E 02	5.901E 02	5.903E 02	5.903E 02	-1.015E-08	-1.015E-08
0.33096	4.850E-09	165.151	6.831E 02	6.831E 02	6.833E 02	6.833E 02	-6.847E-09	-6.847E-09
0.25486	3.421E-09	127.180	7.710E 02	7.710E 02	7.711E 02	7.711E 02	-4.830E-09	-4.830E-09
0.20094	2.413E-09	100.274	8.478E 02	8.478E 02	8.480E 02	8.480E 02	-3.407E-09	-3.407E-09
0.18921	1.723E-09	94.420	9.035E 02	9.035E 02	9.037E 02	9.037E 02	-2.432E-09	-2.432E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0=0.025 θ_D=5.958E-06 ρ_a=1.016

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-3.333E-19
0.10000	-1.194E-12	-1.087E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-4.471E-19
0.20000	-7.576E-13	-7.576E-13	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-6.394E-19
0.30000	5.163E-13	-3.470E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-1.005E-18
0.40000	-1.614E-12	-2.371E-12	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-1.702E-18
0.50000	6.642E-12	5.772E-12	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-3.406E-18
0.60000	1.399E-11	1.385E-12	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-7.964E-18
0.70000	3.051E-11	3.551E-11	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-2.328E-17
0.80000	1.452E-10	1.245E-10	-2.254E-18	-2.254E-18	-2.741E-08	-2.741E-08	-1.054E-16
0.85000	4.095E-10	4.013E-10	-6.001E-18	-6.002E-18	-5.538E-08	-5.538E-08	-3.055E-16
0.90000	1.608E-09	1.597E-09	-2.575E-17	-2.576E-17	-1.527E-07	-1.527E-07	-1.371E-15
0.92500	3.998E-09	3.983E-09	-5.954E-17	-5.955E-17	-3.035E-07	-3.035E-07	-4.178E-15
0.95000	1.548E-08	1.541E-08	-2.364E-16	-2.365E-16	-7.632E-07	-7.633E-07	-1.875E-14
0.96250	4.175E-08	4.181E-08	-6.962E-16	-6.867E-16	-1.516E-06	-1.516E-06	-5.342E-14
0.97500	1.986E-07	1.987E-07	-3.979E-15	-3.984E-15	-4.845E-06	-4.849E-06	-2.004E-13
0.98124	6.235E-07	6.244E-07	-1.562E-14	-1.567E-14	-1.276E-05	-1.278E-05	-4.835E-13
0.98749	4.210E-06	4.225E-06	-1.694E-13	-1.704E-13	-6.721E-05	-6.748E-05	-1.300E-12
0.99373	3.198E-04	3.242E-04	-1.512E-10	-1.548E-10	-1.258E-02	-1.283E-02	-2.351E-12
0.99073	-3.112E-03	-3.116E-03	-1.873E-12	-1.853E-12	-7.836E 02	-7.847E 02	-2.018E-12
0.98460	-1.660E-03	-1.662E-03	-4.551E-14	-4.534E-14	-7.836E 02	-7.847E 02	-7.622E-13
0.97846	-1.130E-03	-1.132E-03	-7.899E-15	-7.884E-15	-7.836E 02	-7.847E 02	-2.950E-13
0.97233	-8.567E-04	-8.577E-04	-2.354E-15	-2.351E-15	-7.836E 02	-7.847E 02	-1.398E-13
0.96620	-6.897E-04	-6.905E-04	-1.038E-15	-1.037E-15	-7.836E 02	-7.847E 02	-6.994E-14
0.95394	-4.962E-04	-4.968E-04	-2.858E-16	-2.856E-16	-7.836E 02	-7.847E 02	-2.458E-14
0.94169	-3.875E-04	-3.879E-04	-1.350E-16	-1.349E-16	-7.836E 02	-7.847E 02	-9.621E-15
0.91720	-2.694E-04	-2.697E-04	-4.353E-17	-4.353E-17	-7.836E 02	-7.847E 02	-2.598E-15
0.89274	-2.065E-04	-2.067E-04	-1.904E-17	-1.903E-17	-7.836E 02	-7.847E 02	-9.861E-16
0.84392	-1.407E-04	-1.409E-04	-4.933E-18	-4.933E-18	-7.836E 02	-7.847E 02	-2.430E-16
0.79524	-1.068E-04	-1.069E-04	-1.941E-18	-1.941E-18	-7.836E 02	-7.847E 02	-8.882E-17
0.69845	-7.199E-05	-7.207E-05	-5.113E-19	-5.113E-19	-7.836E 02	-7.847E 02	-2.070E-17
0.60271	-5.430E-05	-5.437E-05	-1.994E-19	-1.994E-19	-7.836E 02	-7.847E 02	-7.304E-18
0.50861	-4.359E-05	-4.364E-05	-9.857E-20	-9.857E-20	-7.836E 02	-7.847E 02	-3.170E-18
0.41726	-3.641E-05	-3.645E-05	-5.395E-20	-5.395E-20	-7.836E 02	-7.847E 02	-1.613E-18
0.33096	-3.126E-05	-3.130E-05	-2.970E-20	-2.970E-20	-7.836E 02	-7.847E 02	-9.610E-19
0.25486	-2.739E-05	-2.742E-05	-1.704E-20	-1.704E-20	-7.836E 02	-7.847E 02	-6.175E-19
0.20094	-2.437E-05	-2.440E-05	-9.779E-21	-9.779E-21	-7.836E 02	-7.847E 02	-4.352E-19
0.18921	-2.195E-05	-2.197E-05	-5.605E-21	-5.605E-21	-7.836E 02	-7.847E 02	-3.261E-19

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_0= 0.030 θ_D= 7.149E-06 ρ_a= 1.016

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0300	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0300	0.10000	193.643	5.029E-09	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0300	0.20000	172.127	6.149E-09	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0300	0.30000	150.611	9.067E-09	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0300	0.40000	129.095	1.438E-08	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0300	0.50000	107.579	1.876E-08	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0300	0.60000	86.064	1.959E-08	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0300	0.70000	64.548	7.337E-08	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0300	0.80000	43.032	2.368E-07	1.000E 00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0300	0.85000	32.274	6.136E-07	1.000E 00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0300	0.90000	21.516	2.148E-06	1.000E 00	-4.324E-07	-4.325E-07	4.324E-07
0.92500	0.0300	0.92500	16.138	5.259E-06	1.000E 00	-7.970E-07	-7.971E-07	7.970E-07
0.95000	0.0300	0.95000	10.759	1.808E-05	1.000E 00	-2.022E-06	-2.023E-06	2.022E-06
0.96250	0.0300	0.96250	8.070	4.349E-05	1.000E 00	-3.987E-06	-3.988E-06	3.986E-06
0.97500	0.0300	0.97500	5.381	1.503E-04	1.000E 00	-1.209E-05	-1.210E-05	1.208E-05
0.98124	0.0300	0.98125	4.037	3.649E-04	1.000E 00	-2.810E-05	-2.814E-05	2.808E-05
0.98749	0.0300	0.98750	2.694	1.340E-03	1.000E 00	-1.184E-04	-1.187E-04	1.182E-04
0.99373	0.0300	0.99375	1.353	2.597E-02	1.001E 00	-4.113E-03	-4.161E-03	4.106E-03
0.99078	0.0919	1.00000	2.014	1.670E 02	3.062E 00	-4.380E-04	-4.387E-04	4.394E-04
0.98469	0.1742	1.00625	3.357	1.670E 02	5.743E 00	-5.411E-05	-5.401E-05	5.416E-05
0.97861	0.2575	1.01250	4.731	1.670E 02	8.391E 00	-1.848E-05	-1.847E-05	1.849E-05
0.97253	0.3418	1.01875	6.045	1.670E 02	1.101E 01	-8.625E-06	-8.620E-06	8.628E-06
0.96645	0.4272	1.02500	7.389	1.670E 02	1.359E 01	-5.168E-06	-5.166E-06	5.169E-06
0.95429	0.6013	1.03750	10.078	1.670E 02	1.867E 01	-2.284E-06	-2.284E-06	2.285E-06
0.94215	0.7798	1.05000	12.758	1.670E 02	2.362E 01	-1.412E-06	-1.412E-06	1.412E-06
0.91789	1.1511	1.07500	18.146	1.670E 02	3.318E 01	-6.344E-07	-6.343E-07	6.344E-07
0.89366	1.5426	1.10000	23.525	1.670E 02	4.231E 01	-3.521E-07	-3.521E-07	3.521E-07
0.84536	2.3927	1.15000	34.283	1.670E 02	5.937E 01	-1.492E-07	-1.492E-07	1.492E-07
0.79726	3.3456	1.20000	45.041	1.670E 02	7.502E 01	-7.939E-08	-7.939E-08	7.939E-08
0.70185	5.6415	1.30000	66.557	1.670E 02	1.027E 02	-3.272E-08	-3.272E-08	3.272E-08
0.60793	8.6531	1.40000	88.073	1.670E 02	1.264E 02	-1.728E-08	-1.728E-08	1.728E-08
0.51630	12.7487	1.50000	109.588	1.670E 02	1.470E 02	-1.073E-08	-1.073E-08	1.073E-08
0.42842	18.5653	1.60000	131.104	1.670E 02	1.650E 02	-7.190E-09	-7.190E-09	7.190E-09
0.34717	27.2338	1.70000	152.620	1.670E 02	1.808E 02	-4.850E-09	-4.850E-09	4.850E-09
0.27840	40.6447	1.80000	174.136	1.670E 02	1.949E 02	-3.421E-09	-3.421E-09	3.421E-09
0.23343	60.8232	1.90000	195.652	1.670E 02	2.076E 02	-2.413E-09	-2.413E-09	2.413E-09
0.22687	85.8659	2.00000	217.168	1.670E 02	2.189E 02	-1.723E-09	-1.723E-09	1.723E-09

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_0= 0.030 θ_D= 7.149E-06 ρ_a= 1.016

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.325E-07	449.110	-1.582E-05	-1.582E-05	1.582E-05	1.582E-05	-6.106E-07	-6.106E-07
0.92500	7.971E-07	461.585	-2.326E-05	-2.326E-05	2.326E-05	2.326E-05	-1.125E-06	-1.125E-06
0.95000	2.023E-06	474.060	-3.948E-05	-3.948E-05	3.948E-05	3.948E-05	-2.855E-06	-2.856E-06
0.96250	3.989E-06	480.297	-5.699E-05	-5.700E-05	5.698E-05	5.700E-05	-5.629E-06	-5.631E-06
0.97500	1.210E-05	486.534	-1.010E-04	-1.010E-04	1.010E-04	1.010E-04	-1.707E-05	-1.708E-05
0.98124	2.816E-05	489.652	-1.600E-04	-1.601E-04	1.599E-04	1.601E-04	-3.968E-05	-3.973E-05
0.98749	1.189E-04	492.770	-3.446E-04	-3.451E-04	3.444E-04	3.454E-04	-1.672E-04	-1.677E-04
0.99373	4.203E-03	495.884	-2.852E-03	-2.874E-03	2.872E-03	2.915E-03	-5.807E-03	-5.876E-03
0.99078	4.348E-04	494.409	4.540E 00	4.540E 00	4.706E 00	4.706E 00	-6.185E-04	-6.152E-04
0.98469	5.396E-05	491.373	1.069E 01	1.069E 01	1.086E 01	1.086E 01	-7.640E-05	-7.626E-05
0.97861	1.846E-05	488.338	1.685E 01	1.685E 01	1.702E 01	1.702E 01	-2.610E-05	-2.607E-05
0.97253	8.617E-06	485.303	2.300E 01	2.300E 01	2.317E 01	2.317E 01	-1.218E-05	-1.217E-05
0.96645	5.165E-06	482.269	2.915E 01	2.915E 01	2.932E 01	2.932E 01	-7.297E-06	-7.294E-06
0.95429	2.284E-06	476.204	4.146E 01	4.146E 01	4.162E 01	4.162E 01	-3.226E-06	-3.225E-06
0.94215	1.412E-06	470.143	5.376E 01	5.376E 01	5.392E 01	5.392E 01	-1.994E-06	-1.993E-06
0.91789	6.343E-07	458.036	7.834E 01	7.834E 01	7.851E 01	7.851E 01	-8.957E-07	-8.956E-07
0.89366	3.521E-07	445.949	1.029E 02	1.029E 02	1.031E 02	1.031E 02	-4.972E-07	-4.972E-07
0.84536	1.492E-07	421.843	1.520E 02	1.520E 02	1.521E 02	1.521E 02	-2.107E-07	-2.107E-07
0.79726	7.939E-08	397.840	2.009E 02	2.009E 02	2.011E 02	2.011E 02	-1.121E-07	-1.121E-07
0.70185	3.272E-08	350.234	2.984E 02	2.984E 02	2.986E 02	2.986E 02	-4.619E-08	-4.619E-08
0.60793	1.728E-08	303.365	3.952E 02	3.952E 02	3.954E 02	3.954E 02	-2.439E-08	-2.439E-08
0.51630	1.073E-08	257.638	4.908E 02	4.908E 02	4.910E 02	4.910E 02	-1.515E-08	-1.515E-08
0.42842	7.190E-09	213.787	5.846E 02	5.846E 02	5.847E 02	5.847E 02	-1.015E-08	-1.015E-08
0.34717	4.850E-09	173.241	6.750E 02	6.750E 02	6.752E 02	6.752E 02	-6.848E-09	-6.848E-09
0.27840	3.421E-09	138.925	7.592E 02	7.592E 02	7.594E 02	7.594E 02	-4.830E-09	-4.830E-09
0.23343	2.413E-09	116.483	8.316E 02	8.316E 02	8.317E 02	8.317E 02	-3.408E-09	-3.408E-09
0.22687	1.723E-09	113.211	8.847E 02	8.847E 02	8.849E 02	8.849E 02	-2.432E-09	-2.432E-09

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_0= 0.030 θ_D= 7.149E-06 ρ_a= 1.016

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-4.799E-19
0.10000	-1.059E-12	-5.217E-13	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-6.438E-19
0.20000	-5.676E-13	4.911E-13	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-9.208E-19
0.30000	2.065E-12	6.345E-13	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-1.447E-18
0.40000	8.447E-13	1.903E-12	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-2.450E-18
0.50000	7.072E-12	7.097E-12	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-4.905E-18
0.60000	1.767E-11	1.011E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-1.147E-17
0.70000	4.761E-11	4.224E-11	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-3.352E-17
0.80000	1.917E-10	1.752E-10	-2.254E-18	-2.254E-18	-2.741E-08	-2.741E-08	-1.518E-16
0.85000	5.118E-10	5.118E-10	-6.002E-18	-6.002E-18	-5.538E-08	-5.538E-08	-4.399E-16
0.90000	2.018E-09	2.026E-09	-2.576E-17	-2.576E-17	-1.527E-07	-1.527E-07	-1.974E-15
0.92500	4.996E-09	4.996E-09	-5.954E-17	-5.955E-17	-3.035E-07	-3.035E-07	-6.016E-15
0.95000	1.934E-08	1.934E-08	-2.364E-16	-2.365E-16	-7.632E-07	-7.633E-07	-2.700E-14
0.96250	5.208E-08	5.205E-08	-6.861E-16	-6.866E-16	-1.516E-06	-1.516E-06	-7.692E-14
0.97500	2.472E-07	2.474E-07	-3.978E-15	-3.984E-15	-4.844E-06	-4.849E-06	-2.885E-13
0.98124	7.758E-07	7.771E-07	-1.562E-14	-1.566E-14	-1.276E-05	-1.278E-05	-6.960E-13
0.98749	5.211E-06	5.230E-06	-1.691E-13	-1.701E-13	-6.715E-05	-6.743E-05	-1.871E-12
0.99373	3.948E-04	4.002E-04	-1.496E-10	-1.532E-10	-1.247E-02	-1.272E-02	-3.385E-12
0.99078	-3.341E-03	-3.343E-03	-1.886E-12	-1.866E-12	-7.694E 02	-7.701E 02	-2.909E-12
0.98469	-1.785E-03	-1.786E-03	-4.564E-14	-4.546E-14	-7.694E 02	-7.701E 02	-1.096E-12
0.97861	-1.215E-03	-1.216E-03	-7.912E-15	-7.896E-15	-7.694E 02	-7.701E 02	-4.253E-13
0.97253	-9.215E-04	-9.215E-04	-2.356E-15	-2.353E-15	-7.694E 02	-7.701E 02	-2.015E-13
0.96645	-7.414E-04	-7.419E-04	-1.039E-15	-1.038E-15	-7.694E 02	-7.701E 02	-1.008E-13
0.95429	-5.334E-04	-5.337E-04	-2.859E-16	-2.858E-16	-7.694E 02	-7.701E 02	-3.541E-14
0.94215	-4.165E-04	-4.168E-04	-1.350E-16	-1.350E-16	-7.694E 02	-7.701E 02	-1.386E-14
0.91789	-2.896E-04	-2.898E-04	-4.354E-17	-4.354E-17	-7.694E 02	-7.701E 02	-3.743E-15
0.89366	-2.220E-04	-2.221E-04	-1.904E-17	-1.904E-17	-7.694E 02	-7.701E 02	-1.420E-15
0.84536	-1.513E-04	-1.514E-04	-4.934E-18	-4.933E-18	-7.694E 02	-7.701E 02	-3.500E-16
0.79726	-1.148E-04	-1.148E-04	-1.942E-18	-1.941E-18	-7.694E 02	-7.701E 02	-1.279E-16
0.70185	-7.738E-05	-7.743E-05	-5.114E-19	-5.114E-19	-7.694E 02	-7.701E 02	-2.982E-17
0.60793	-5.837E-05	-5.840E-05	-1.994E-19	-1.994E-19	-7.694E 02	-7.701E 02	-1.052E-17
0.51630	-4.686E-05	-4.689E-05	-9.857E-20	-9.857E-20	-7.694E 02	-7.701E 02	-4.565E-18
0.42842	-3.914E-05	-3.916E-05	-5.395E-20	-5.395E-20	-7.694E 02	-7.701E 02	-2.323E-18
0.34717	-3.360E-05	-3.362E-05	-2.970E-20	-2.970E-20	-7.694E 02	-7.701E 02	-1.384E-18
0.27840	-2.944E-05	-2.946E-05	-1.704E-20	-1.704E-20	-7.694E 02	-7.701E 02	-8.893E-19
0.23343	-2.619E-05	-2.621E-05	-9.779E-21	-9.779E-21	-7.694E 02	-7.701E 02	-6.267E-19
0.22687	-2.359E-05	-2.361E-05	-5.606E-21	-5.606E-21	-7.694E 02	-7.701E 02	-4.696E-19

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_0= 0.040 θ_D= 9.530E-06 ρ_a= 1.016

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0400	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0400	0.10000	193.643	7.921E-09	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0400	0.20000	172.127	1.011E-08	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0400	0.30000	150.611	1.271E-08	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0400	0.40000	129.095	1.959E-08	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0400	0.50000	107.580	2.626E-08	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0400	0.60000	86.064	3.168E-08	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0400	0.70000	64.548	1.084E-07	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0400	0.80000	43.032	3.502E-07	1.000E 00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0400	0.85000	32.274	9.005E-07	1.000E 00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0400	0.90000	21.517	3.148E-06	1.000E 00	-4.324E-07	-4.324E-07	4.324E-07
0.92500	0.0400	0.92500	16.138	7.691E-06	1.000E 00	-7.970E-07	-7.971E-07	7.970E-07
0.95000	0.0400	0.95000	10.759	2.641E-05	1.000E 00	-2.022E-06	-2.022E-06	2.022E-06
0.96250	0.0400	0.96250	8.070	6.341E-05	1.000E 00	-3.986E-06	-3.987E-06	3.985E-06
0.97500	0.0400	0.97500	5.382	2.185E-04	1.000E 00	-1.208E-05	-1.209E-05	1.208E-05
0.98124	0.0400	0.98125	4.038	5.294E-04	1.000E 00	-2.808E-05	-2.812E-05	2.806E-05
0.98749	0.0400	0.98750	2.696	1.928E-03	1.000E 00	-1.181E-04	-1.184E-04	1.179E-04
0.99373	0.0401	0.99375	1.357	3.526E-02	1.001E 00	-4.037E-03	-4.084E-03	4.030E-03
0.99092	0.1217	1.00000	2.035	1.626E 02	3.060E 00	-4.473E-04	-4.449E-04	4.487E-04
0.98497	0.2307	1.00625	3.346	1.626E 02	5.755E 00	-5.472E-05	-5.461E-05	5.477E-05
0.97902	0.3411	1.01250	4.689	1.626E 02	8.418E 00	-1.861E-05	-1.860E-05	1.862E-05
0.97306	0.4529	1.01875	6.033	1.626E 02	1.105E 01	-8.663E-06	-8.658E-06	8.665E-06
0.96712	0.5661	1.02500	7.378	1.626E 02	1.365E 01	-5.191E-06	-5.189E-06	5.192E-06
0.95523	0.7967	1.03750	10.066	1.626E 02	1.875E 01	-2.289E-06	-2.289E-06	2.290E-06
0.94336	1.0331	1.05000	12.756	1.626E 02	2.373E 01	-1.415E-06	-1.415E-06	1.415E-06
0.91967	1.5243	1.07500	18.134	1.626E 02	3.335E 01	-6.352E-07	-6.352E-07	6.353E-07
0.89605	2.0413	1.10000	23.513	1.626E 02	4.252E 01	-3.525E-07	-3.525E-07	3.525E-07
0.84905	3.1615	1.15000	34.271	1.626E 02	5.968E 01	-1.493E-07	-1.493E-07	1.493E-07
0.80241	4.4125	1.20000	45.028	1.626E 02	7.541E 01	-7.944E-08	-7.944E-08	7.944E-08
0.71050	7.4034	1.30000	66.544	1.626E 02	1.032E 02	-3.273E-08	-3.273E-08	3.273E-08
0.62110	11.2686	1.40000	88.060	1.626E 02	1.271E 02	-1.728E-08	-1.728E-08	1.728E-08
0.53547	16.4002	1.50000	109.576	1.626E 02	1.478E 02	-1.073E-08	-1.073E-08	1.073E-08
0.45572	23.4023	1.60000	131.092	1.626E 02	1.659E 02	-7.192E-09	-7.192E-09	7.192E-09
0.38553	33.1504	1.70000	152.608	1.626E 02	1.818E 02	-4.851E-09	-4.851E-09	4.851E-09
0.33103	46.6294	1.80000	174.124	1.626E 02	1.960E 02	-3.422E-09	-3.422E-09	3.422E-09
0.30089	64.0060	1.90000	195.639	1.626E 02	2.087E 02	-2.414E-09	-2.414E-09	2.414E-09
0.30247	83.0837	2.00000	217.155	1.626E 02	2.201E 02	-1.723E-09	-1.723E-09	1.723E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.040 θ_D=9.530E-06 ρ_a=1.016

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.016E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.325E-07	449.110	-1.582E-05	-1.582E-05	1.582E-05	1.582E-05	-6.106E-07	-6.106E-07
0.92500	7.971E-07	461.585	-2.326E-05	-2.326E-05	2.326E-05	2.326E-05	-1.125E-06	-1.125E-06
0.95000	2.023E-06	474.060	-3.948E-05	-3.948E-05	3.947E-05	3.948E-05	-2.855E-06	-2.856E-06
0.96250	3.988E-06	480.297	-5.698E-05	-5.699E-05	5.698E-05	5.700E-05	-5.627E-06	-5.629E-06
0.97500	1.210E-05	486.534	-1.009E-04	-1.010E-04	1.009E-04	1.010E-04	-1.706E-05	-1.707E-05
0.98124	2.814E-05	489.652	-1.599E-04	-1.600E-04	1.599E-04	1.601E-04	-3.965E-05	-3.970E-05
0.98749	1.186E-04	492.769	-3.441E-04	-3.446E-04	3.440E-04	3.450E-04	-1.667E-04	-1.672E-04
0.99373	4.125E-03	495.883	-2.811E-03	-2.831E-03	2.851E-03	2.893E-03	-5.700E-03	-5.767E-03
0.99092	4.439E-04	494.483	4.465E 00	4.465E 00	4.631E 00	4.631E 00	-6.316E-04	-6.282E-04
0.98497	5.456E-05	491.511	1.055E 01	1.055E 01	1.072E 01	1.072E 01	-7.726E-05	-7.711E-05
0.97902	1.859E-05	488.540	1.664E 01	1.664E 01	1.681E 01	1.681E 01	-2.628E-05	-2.626E-05
0.97306	8.655E-06	485.570	2.273E 01	2.273E 01	2.290E 01	2.290E 01	-1.223E-05	-1.222E-05
0.96712	5.188E-06	482.602	2.882E 01	2.882E 01	2.899E 01	2.899E 01	-7.330E-06	-7.327E-06
0.95523	2.289E-06	476.671	4.099E 01	4.099E 01	4.116E 01	4.116E 01	-3.232E-06	-3.232E-06
0.94336	1.415E-06	470.748	5.315E 01	5.315E 01	5.332E 01	5.332E 01	-1.998E-06	-1.998E-06
0.91967	6.352E-07	458.927	7.745E 01	7.745E 01	7.761E 01	7.761E 01	-8.969E-07	-8.969E-07
0.89605	3.525E-07	447.140	1.017E 02	1.017E 02	1.019E 02	1.019E 02	-4.977E-07	-4.977E-07
0.84905	1.493E-07	423.686	1.501E 02	1.501E 02	1.503E 02	1.503E 02	-2.108E-07	-2.108E-07
0.80241	7.944E-08	400.412	1.983E 02	1.983E 02	1.985E 02	1.985E 02	-1.122E-07	-1.122E-07
0.71050	3.273E-08	354.550	2.941E 02	2.941E 02	2.943E 02	2.943E 02	-4.621E-08	-4.621E-08
0.62110	1.728E-08	309.938	3.886E 02	3.886E 02	3.888E 02	3.888E 02	-2.440E-08	-2.440E-08
0.53547	1.073E-08	267.204	4.812E 02	4.812E 02	4.814E 02	4.814E 02	-1.515E-08	-1.515E-08
0.45572	7.192E-09	227.407	5.709E 02	5.709E 02	5.711E 02	5.711E 02	-1.015E-08	-1.015E-08
0.38553	4.851E-09	192.382	6.559E 02	6.559E 02	6.560E 02	6.560E 02	-6.849E-09	-6.849E-09
0.33103	3.422E-09	165.190	7.330E 02	7.330E 02	7.331E 02	7.331E 02	-4.831E-09	-4.831E-09
0.30089	2.414E-09	150.149	7.979E 02	7.979E 02	7.981E 02	7.981E 02	-3.408E-09	-3.408E-09
0.30247	1.723E-09	150.937	8.470E 02	8.470E 02	8.472E 02	8.472E 02	-2.433E-09	-2.433E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0=0.040 θ_D=9.530E-06 ρ_a=1.016

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-8.531E-19
0.10000	-3.291E-13	-3.291E-13	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-1.144E-18
0.20000	4.943E-13	-3.748E-14	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-1.637E-18
0.30000	1.774E-12	1.352E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-2.573E-18
0.40000	4.307E-12	3.244E-12	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-4.356E-18
0.50000	9.040E-12	7.176E-12	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-8.719E-18
0.60000	1.743E-11	1.385E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-2.339E-17
0.70000	6.963E-11	5.919E-11	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-5.959E-17
0.80000	2.525E-10	2.551E-11	-2.254E-18	-2.254E-18	-2.741E-08	-2.741E-08	-2.699E-16
0.85000	6.934E-10	6.894E-10	-6.001E-18	-6.002E-18	-5.538E-08	-5.538E-08	-7.820E-16
0.90000	2.730E-09	2.736E-09	-2.575E-17	-2.576E-17	-1.527E-07	-1.527E-07	-3.508E-15
0.92500	6.792E-09	6.795E-09	-5.953E-17	-5.954E-17	-3.035E-07	-3.035E-07	-1.069E-14
0.95000	2.631E-08	2.631E-08	-2.363E-16	-2.364E-16	-7.631E-07	-7.633E-07	-4.799E-14
0.96250	7.081E-08	7.083E-08	-6.859E-16	-6.863E-16	-1.515E-06	-1.516E-06	-1.367E-13
0.97500	3.361E-07	3.363E-07	-3.975E-15	-3.980E-15	-4.842E-06	-4.847E-06	-5.127E-13
0.98124	1.054E-06	1.056E-06	-1.561E-14	-1.564E-14	-1.275E-05	-1.277E-05	-1.236E-12
0.98749	7.034E-06	7.059E-06	-1.684E-13	-1.694E-13	-6.696E-05	-6.723E-05	-3.321E-12
0.99373	5.265E-04	5.337E-04	-1.442E-10	-1.476E-10	-1.210E-02	-1.234E-02	-6.023E-12
0.99092	-3.508E-03	-3.510E-03	-1.962E-12	-1.941E-12	-7.487E 02	-7.492E 02	-5.206E-12
0.98497	-1.878E-03	-1.879E-03	-4.649E-14	-4.631E-14	-7.487E 02	-7.492E 02	-1.964E-12
0.97902	-1.278E-03	-1.278E-03	-8.303E-15	-7.987E-15	-7.487E 02	-7.492E 02	-7.615E-13
0.97306	-9.680E-04	-9.685E-04	-2.372E-15	-2.370E-15	-7.487E 02	-7.492E 02	-3.607E-13
0.96712	-7.791E-04	-7.794E-04	-1.046E-15	-1.046E-15	-7.487E 02	-7.492E 02	-1.801E-13
0.95523	-5.603E-04	-5.605E-04	-2.868E-16	-2.867E-16	-7.487E 02	-7.492E 02	-6.327E-14
0.94336	-4.374E-04	-4.376E-04	-1.355E-16	-1.355E-16	-7.487E 02	-7.492E 02	-2.473E-14
0.91967	-3.040E-04	-3.042E-04	-4.363E-17	-4.362E-17	-7.487E 02	-7.492E 02	-6.672E-15
0.89605	-2.330E-04	-2.331E-04	-1.907E-17	-1.907E-17	-7.487E 02	-7.492E 02	-2.530E-15
0.84905	-1.588E-04	-1.589E-04	-4.940E-18	-4.939E-18	-7.487E 02	-7.492E 02	-6.231E-16
0.80241	-1.204E-04	-1.205E-04	-1.943E-18	-1.943E-18	-7.487E 02	-7.492E 02	-2.277E-16
0.71050	-8.121E-05	-8.124E-05	-5.117E-19	-5.117E-19	-7.487E 02	-7.492E 02	-5.305E-17
0.62110	-6.125E-05	-6.128E-05	-1.995E-19	-1.995E-19	-7.487E 02	-7.492E 02	-1.871E-17
0.53547	-4.917E-05	-4.919E-05	-9.861E-20	-9.861E-20	-7.487E 02	-7.492E 02	-8.118E-18
0.45572	-4.107E-05	-4.109E-05	-5.397E-20	-5.397E-20	-7.487E 02	-7.492E 02	-4.131E-18
0.38553	-3.526E-05	-3.528E-05	-2.971E-20	-2.971E-20	-7.487E 02	-7.492E 02	-2.461E-18
0.33103	-3.089E-05	-3.091E-05	-1.705E-20	-1.705E-20	-7.487E 02	-7.492E 02	-1.581E-18
0.30089	-2.749E-05	-2.750E-05	-9.783E-21	-9.783E-21	-7.487E 02	-7.492E 02	-1.114E-18
0.30247	-2.476E-05	-2.477E-05	-5.607E-21	-5.607E-21	-7.487E 02	-7.492E 02	-8.349E-19

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.050 θ_D= 1.230E-05 ρ_a= 1.016

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0500	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0500	0.10000	193.643	1.235E-08	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0500	0.20000	172.127	1.511E-08	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0500	0.30000	150.611	1.959E-08	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0500	0.40000	129.095	2.793E-08	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0500	0.50000	107.580	3.627E-08	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0500	0.60000	86.064	3.669E-08	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0500	0.70000	64.548	1.317E-07	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0500	0.80000	43.032	4.169E-07	1.000E 00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0500	0.85000	32.274	1.084E-06	1.000E 00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0500	0.90000	21.517	3.782E-06	1.000E-00	-4.324E-07	-4.324E-07	4.324E-07
0.92500	0.0500	0.92500	16.138	9.225E-06	1.000E-00	-7.970E-07	-7.970E-07	7.969E-07
0.95000	0.0500	0.95000	10.760	3.166E-05	1.000E-00	-2.022E-06	-2.022E-06	2.022E-06
0.96250	0.0500	0.96250	8.071	7.611E-05	1.000E-00	-3.984E-06	-3.986E-06	3.984E-06
0.97500	0.0500	0.97500	5.383	2.624E-04	1.000E-00	-1.208E-05	-1.208E-05	1.207E-05
0.98124	0.0500	0.98125	4.040	6.360E-04	1.000E-00	-2.805E-05	-2.809E-05	2.804E-05
0.98749	0.0500	0.98750	2.698	2.321E-03	9.999E-01	-1.177E-04	-1.181E-04	1.176E-04
0.99373	0.0501	0.99375	1.362	4.267E-02	1.000E 00	-3.953E-03	-3.999E-03	3.946E-03
0.99110	0.1507	1.00000	1.995	1.582E 02	3.061E 00	-4.571E-04	-4.547E-04	4.586E-04
0.98531	0.2860	1.00625	3.335	1.582E 02	5.776E 00	-5.534E-05	-5.524E-05	5.540E-05
0.97952	0.4230	1.01250	4.678	1.582E 02	8.458E 00	-1.875E-05	-1.873E-05	1.876E-05
0.97374	0.5617	1.01875	6.022	1.582E 02	1.111E 01	-8.701E-06	-8.696E-06	8.704E-06
0.96796	0.7020	1.02500	7.366	1.582E 02	1.372E 01	-5.214E-06	-5.212E-06	5.215E-06
0.95642	0.9877	1.03750	10.054	1.582E 02	1.886E 01	-2.294E-06	-2.294E-06	2.294E-06
0.94490	1.2803	1.05000	12.743	1.582E 02	2.388E 01	-1.418E-06	-1.418E-06	1.418E-06
0.92194	1.8876	1.07500	18.122	1.582E 02	3.356E 01	-6.361E-07	-6.361E-07	6.361E-07
0.89909	2.5258	1.10000	23.501	1.582E 02	4.281E 01	-3.529E-07	-3.529E-07	3.529E-07
0.85375	3.9043	1.15000	34.258	1.582E 02	6.009E 01	-1.494E-07	-1.494E-07	1.494E-07
0.80896	5.4364	1.20000	45.016	1.582E 02	7.593E 01	-7.949E-08	-7.949E-08	7.949E-08
0.72144	9.0647	1.30000	66.532	1.582E 02	1.040E 02	-3.274E-08	-3.274E-08	3.274E-08
0.63759	13.6700	1.40000	88.048	1.582E 02	1.280E 02	-1.729E-08	-1.729E-08	1.729E-08
0.55909	19.6169	1.50000	109.563	1.582E 02	1.488E 02	-1.073E-08	-1.073E-08	1.073E-08
0.48850	27.3687	1.60000	131.079	1.582E 02	1.670E 02	-7.193E-09	-7.193E-09	7.193E-09
0.42975	37.5213	1.70000	152.595	1.582E 02	1.831E 02	-4.852E-09	-4.852E-09	4.852E-09
0.38825	50.3098	1.80000	174.111	1.582E 02	1.974E 02	-3.422E-09	-3.422E-09	3.422E-09
0.36985	65.2137	1.90000	195.627	1.582E 02	2.102E 02	-2.414E-09	-2.414E-09	2.414E-09
0.37795	80.5538	2.00000	217.143	1.582E 02	2.217E 02	-1.723E-09	-1.723E-09	1.723E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.050 θ_D= 1.230E-05 ρ_a= 1.016

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.324E-07	449.110	-1.582E-05	-1.582E-05	1.582E-05	1.582E-05	-6.106E-07	-6.106E-07
0.92500	7.971E-07	461.585	-2.326E-05	-2.326E-05	2.326E-05	2.326E-05	-1.125E-06	-1.125E-06
0.95000	2.022E-06	474.060	-3.947E-05	-3.948E-05	3.947E-05	3.948E-05	-2.855E-06	-2.855E-06
0.96250	3.986E-06	480.297	-5.698E-05	-5.699E-05	5.698E-05	5.699E-05	-5.626E-06	-5.628E-06
0.97500	1.209E-05	486.534	-1.009E-04	-1.010E-04	1.009E-04	1.010E-04	-1.705E-05	-1.706E-05
0.98124	2.811E-05	489.652	-1.598E-04	-1.599E-04	1.598E-04	1.600E-04	-3.961E-05	-3.966E-05
0.98749	1.183E-04	492.770	-3.436E-04	-3.441E-04	3.436E-04	3.446E-04	-1.662E-04	-1.667E-04
0.99373	4.038E-03	495.884	-2.763E-03	-2.784E-03	2.826E-03	2.868E-03	-5.582E-03	-5.647E-03
0.99110	4.537E-04	494.572	4.375E 00	4.375E 00	4.540E 00	4.540E 00	-6.455E-04	-6.420E-04
0.98531	5.519E-05	491.682	1.038E 01	1.038E 01	1.055E 01	1.055E 01	-7.814E-05	-7.799E-05
0.97952	1.872E-05	488.793	1.639E 01	1.639E 01	1.656E 01	1.656E 01	-2.647E-05	-2.645E-05
0.97374	8.694E-06	485.906	2.240E 01	2.240E 01	2.256E 01	2.256E 01	-1.229E-05	-1.228E-05
0.96796	5.211E-06	483.022	2.840E 01	2.840E 01	2.857E 01	2.857E 01	-7.363E-06	-7.366E-06
0.95642	2.296E-06	477.263	4.040E 01	4.040E 01	4.056E 01	4.056E 01	-3.239E-06	-3.239E-06
0.94490	1.418E-06	471.515	5.238E 01	5.238E 01	5.255E 01	5.255E 01	-2.002E-06	-2.002E-06
0.92194	6.361E-07	460.059	7.631E 01	7.631E 01	7.648E 01	7.648E 01	-8.982E-07	-8.981E-07
0.89909	3.529E-07	448.656	1.002E 02	1.002E 02	1.004E 02	1.004E 02	-4.983E-07	-4.983E-07
0.85375	1.494E-07	426.031	1.478E 02	1.478E 02	1.479E 02	1.479E 02	-2.110E-07	-2.110E-07
0.80896	7.949E-08	403.680	1.951E 02	1.951E 02	1.952E 02	1.952E 02	-1.122E-07	-1.122E-07
0.72144	3.274E-08	360.005	2.886E 02	2.886E 02	2.888E 02	2.888E 02	-4.623E-08	-4.623E-08
0.63759	1.729E-08	318.166	3.804E 02	3.804E 02	3.806E 02	3.806E 02	-2.441E-08	-2.441E-08
0.55909	1.073E-08	278.990	4.695E 02	4.695E 02	4.696E 02	4.696E 02	-1.515E-08	-1.515E-08
0.48850	7.193E-09	243.766	5.546E 02	5.546E 02	5.548E 02	5.548E 02	-1.016E-08	-1.016E-08
0.42975	4.852E-09	214.449	6.338E 02	6.338E 02	6.340E 02	6.340E 02	-6.850E-09	-6.850E-09
0.38825	3.422E-09	193.741	7.044E 02	7.044E 02	7.046E 02	7.046E 02	-4.832E-09	-4.832E-09
0.36985	2.414E-09	184.560	7.635E 02	7.635E 02	7.637E 02	7.637E 02	-3.409E-09	-3.409E-09
0.37795	1.723E-09	188.600	8.094E 02	8.094E 02	8.095E 02	8.095E 02	-2.433E-09	-2.433E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 0.050 θ_D= 1.230E-05 ρ_a= 1.016

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.333E-18
0.10000	2.548E-13	2.548E-13	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-1.788E-18
0.20000	1.116E-12	9.950E-13	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-2.558E-18
0.30000	2.478E-12	2.796E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-4.021E-18
0.40000	5.691E-12	6.168E-12	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-6.807E-18
0.50000	1.205E-11	1.166E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-1.362E-17
0.60000	2.753E-11	2.796E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-3.186E-17
0.70000	8.177E-11	8.125E-11	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-9.311E-17
0.80000	3.366E-10	3.328E-10	-2.254E-18	-2.254E-18	-2.741E-08	-2.741E-08	-4.217E-16
0.85000	8.899E-10	8.975E-10	-6.001E-18	-6.001E-18	-5.538E-08	-5.538E-08	-1.222E-15
0.90000	3.473E-09	3.475E-09	-2.575E-17	-2.575E-17	-1.527E-07	-1.527E-07	-5.482E-15
0.92500	8.643E-09	8.609E-09	-5.953E-17	-5.954E-17	-3.035E-07	-3.035E-07	-1.671E-14
0.95000	3.352E-08	3.332E-08	-2.363E-16	-2.364E-16	-7.630E-07	-7.632E-07	-7.497E-14
0.96250	8.960E-08	8.964E-08	-6.856E-16	-6.860E-16	-1.515E-06	-1.516E-06	-2.135E-13
0.97500	4.250E-07	4.254E-07	-3.971E-15	-3.977E-15	-4.840E-06	-4.844E-06	-8.005E-13
0.98124	1.323E-06	1.325E-06	-1.557E-14	-1.562E-14	-1.273E-05	-1.275E-05	-1.929E-12
0.98749	8.782E-06	8.815E-06	-1.675E-13	-1.685E-13	-6.673E-05	-6.700E-05	-5.179E-12
0.99373	6.463E-04	6.549E-04	-1.384E-10	-1.416E-10	-1.170E-02	-1.193E-02	-9.420E-12
0.99110	-3.593E-03	-3.595E-03	-2.045E-12	-2.023E-12	-7.257E 02	-7.260E 02	-8.193E-12
0.98531	-1.947E-03	-1.927E-03	-4.737E-14	-4.719E-14	-7.257E 02	-7.260E 02	-3.093E-1
0.97952	-1.310E-03	-1.310E-03	-8.097E-15	-8.081E-15	-7.257E 02	-7.260E 02	-1.199E-1
0.97374	-9.917E-04	-9.921E-04	-2.389E-15	-2.386E-15	-7.257E 02	-7.260E 02	-5.677E-15
0.96796	-7.978E-04	-7.982E-04	-1.054E-15	-1.053E-15	-7.257E 02	-7.260E 02	-2.828E-13
0.95642	-5.735E-04	-5.738E-04	-2.878E-16	-2.877E-16	-7.257E 02	-7.260E 02	-9.936E-14
0.94490	-4.477E-04	-4.479E-04	-1.360E-16	-1.359E-16	-7.257E 02	-7.260E 02	-3.878E-14
0.92194	-3.111E-04	-3.112E-04	-4.371E-17	-4.370E-17	-7.257E 02	-7.260E 02	-1.045E-14
0.89909	-2.384E-04	-2.385E-04	-1.911E-17	-1.911E-17	-7.257E 02	-7.260E 02	-3.962E-15
0.85375	-1.625E-04	-1.625E-04	-4.946E-18	-4.945E-18	-7.257E 02	-7.260E 02	-9.749E-16
0.80896	-1.232E-04	-1.233E-04	-1.945E-18	-1.945E-18	-7.257E 02	-7.260E 02	-3.561E-16
0.72144	-8.306E-05	-8.310E-05	-5.120E-19	-5.120E-19	-7.257E 02	-7.260E 02	-8.295E-17
0.63759	-6.265E-05	-6.268E-05	-1.996E-19	-1.996E-19	-7.257E 02	-7.260E 02	-2.925E-17
0.55909	-5.029E-05	-5.031E-05	-9.864E-20	-9.864E-20	-7.257E 02	-7.260E 02	-1.269E-17
0.48850	-4.201E-05	-4.202E-05	-5.399E-20	-5.399E-20	-7.257E 02	-7.260E 02	-6.457E-18
0.42975	-3.607E-05	-3.608E-05	-2.972E-20	-2.972E-20	-7.257E 02	-7.260E 02	-3.846E-18
0.38825	-3.160E-05	-3.161E-05	-1.705E-20	-1.705E-20	-7.257E 02	-7.260E 02	-2.471E-18
0.36985	-2.811E-05	-2.812E-05	-9.786E-21	-9.786E-21	-7.257E 02	-7.260E 02	-1.741E-18
0.37795	-2.532E-05	-2.533E-05	-5.609E-21	-5.609E-21	-7.257E 02	-7.260E 02	-1.305E-18

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 0.060 θ_D= 1.466E-05 ρ_a= 1.016

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0600	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0600	0.10000	193.643	1.704E-08	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0600	0.20000	172.127	2.022E-08	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0600	0.30000	150.611	2.689E-08	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0600	0.40000	129.095	3.543E-08	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0600	0.50000	107.580	4.252E-08	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0600	0.60000	86.064	4.252E-08	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0600	0.70000	64.548	1.467E-07	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0600	0.80000	43.032	4.702E-07	1.000E-00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0600	0.85000	32.275	1.221E-06	1.000E-00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0600	0.90000	21.517	4.262E-06	1.000E-00	-4.324E-07	-4.324E-07	4.324E-07
0.92500	0.0600	0.92500	16.139	1.042E-05	1.000E-00	-7.969E-07	-7.970E-07	7.969E-07
0.95000	0.0600	0.95000	10.761	3.575E-05	1.000E-00	-2.022E-06	-2.022E-06	2.021E-06
0.96250	0.0600	0.96250	8.072	8.594E-05	1.000E-00	-3.983E-06	-3.984E-06	3.982E-06
0.97500	0.0600	0.97500	5.384	2.968E-04	9.999E-01	-1.207E-05	-1.208E-05	1.206E-05
0.98124	0.0600	0.98125	4.042	7.199E-04	9.999E-01	-2.802E-05	-2.806E-05	2.800E-05
0.98749	0.0600	0.98750	2.701	2.635E-03	9.997E-01	-1.173E-04	-1.176E-04	1.171E-04
0.99373	0.0601	0.99375	1.367	4.906E-02	9.993E-01	-3.855E-03	-3.899E-03	3.848E-03
0.99132	0.1198	1.00000	1.983	1.538E 02	3.062E 00	-4.699E-04	-4.673E-04	4.714E-04
0.98573	0.3398	1.00625	3.322	1.538E 02	5.805E 00	-5.615E-05	-5.604E-05	5.621E-05
0.98014	0.5026	1.01250	4.664	1.538E 02	8.514E 00	-1.892E-05	-1.890E-05	1.893E-05
0.97456	0.6674	1.01875	6.007	1.538E 02	1.119E 01	-8.751E-06	-8.745E-06	8.753E-06
0.96899	0.8340	1.02500	7.351	1.538E 02	1.383E 01	-5.245E-06	-5.242E-06	5.246E-06
0.95786	1.1732	1.03750	10.039	1.538E 02	1.902E 01	-2.301E-06	-2.300E-06	2.301E-06
0.94678	1.5203	1.05000	12.728	1.538E 02	2.409E 01	-1.422E-06	-1.422E-06	1.422E-06
0.92471	2.2394	1.07500	18.106	1.538E 02	3.386E 01	-6.373E-07	-6.372E-07	6.373E-07
0.90279	2.9936	1.10000	23.485	1.538E 02	4.320E 01	-3.534E-07	-3.534E-07	3.534E-07
0.85946	4.6166	1.15000	34.242	1.538E 02	6.065E 01	-1.496E-07	-1.496E-07	1.496E-07
0.81689	6.4103	1.20000	45.000	1.538E 02	7.664E 01	-7.955E-08	-7.955E-08	7.955E-08
0.73458	10.6108	1.30000	66.516	1.538E 02	1.049E 02	-3.276E-08	-3.276E-08	3.276E-08
0.65718	15.8647	1.40000	88.031	1.538E 02	1.292E 02	-1.729E-08	-1.729E-08	1.729E-08
0.58666	22.3808	1.50000	109.547	1.538E 02	1.502E 02	-1.073E-08	-1.073E-08	1.073E-08
0.52580	30.5727	1.60000	131.063	1.538E 02	1.686E 02	-7.196E-09	-7.196E-09	7.196E-09
0.47827	40.6387	1.70000	152.579	1.538E 02	1.848E 02	-4.853E-09	-4.853E-09	4.853E-09
0.44837	52.4661	1.80000	174.095	1.538E 02	1.993E 02	-3.423E-09	-3.423E-09	3.423E-09
0.43968	65.3489	1.90000	195.611	1.538E 02	2.122E 02	-2.415E-09	-2.415E-09	2.415E-09
0.45344	78.0851	2.00000	217.126	1.538E 02	2.238E 02	-1.724E-09	-1.724E-09	1.724E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.000 θ_D=1.466E-05 ρ_a=1.016

z	$_x\mu'$-1.0	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.016E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.324E-07	449.110	-1.582E-05	-1.582E-05	1.582E-05	1.582E-05	-6.105E-07	-6.106E-07
0.92500	7.970E-07	461.585	-2.326E-05	-2.326E-05	2.326E-05	2.326E-05	-1.125E-06	-1.125E-06
0.95000	2.022E-06	474.060	-3.947E-05	-3.947E-05	3.947E-05	3.948E-05	-2.854E-06	-2.855E-06
0.96250	3.985E-06	480.297	-5.697E-05	-5.698E-05	5.697E-05	5.699E-05	-5.624E-06	-5.626E-06
0.97500	1.208E-05	486.534	-1.009E-04	-1.009E-04	1.009E-04	1.009E-04	-1.704E-05	-1.705E-05
0.98124	2.808E-05	489.652	-1.598E-04	-1.598E-04	1.597E-04	1.599E-04	-3.956E-05	-3.962E-05
0.98749	1.178E-04	492.770	-3.430E-04	-3.435E-04	3.431E-04	3.440E-04	-1.656E-04	-1.661E-04
0.99373	3.936E-03	495.884	-2.710E-03	-2.731E-03	2.795E-03	2.836E-03	-5.443E-03	-5.505E-03
0.99132	4.663E-04	494.681	4.265E 00	4.265E 00	4.430E 00	4.430E 00	-6.634E-04	-6.598E-04
0.98573	5.599E-05	491.890	1.017E 01	1.017E 01	1.034E 01	1.034E 01	-7.929E-05	-7.913E-05
0.98014	1.889E-05	489.102	1.638E 01	1.638E 01	1.625E 01	1.625E 01	-2.672E-05	-2.669E-05
0.97456	8.743E-06	486.317	2.199E 01	2.199E 01	2.215E 01	2.215E 01	-1.236E-05	-1.235E-05
0.96899	5.241E-06	483.535	2.789E 01	2.789E 01	2.805E 01	2.805E 01	-7.405E-06	-7.402E-06
0.95786	2.300E-06	477.985	3.967E 01	3.967E 01	3.984E 01	3.984E 01	-3.248E-06	-3.248E-06
0.94678	1.422E-06	472.452	5.144E 01	5.144E 01	5.161E 01	5.161E 01	-2.008E-06	-2.008E-06
0.92471	6.372E-07	461.439	7.493E 01	7.493E 01	7.510E 01	7.510E 01	-8.998E-07	-8.997E-07
0.90279	3.534E-07	450.532	9.834E 01	9.834E 01	9.851E 01	9.851E 01	-4.990E-07	-4.990E-07
0.85946	1.496E-07	428.881	1.449E 02	1.449E 02	1.451E 02	1.451E 02	-2.112E-07	-2.112E-07
0.81689	7.955E-08	407.640	1.911E 02	1.911E 02	1.913E 02	1.913E 02	-1.123E-07	-1.123E-07
0.73458	3.276E-08	366.562	2.821E 02	2.821E 02	2.823E 02	2.823E 02	-4.626E-08	-4.626E-08
0.65718	1.729E-08	327.941	3.706E 02	3.706E 02	3.708E 02	3.708E 02	-2.442E-08	-2.442E-08
0.58666	1.073E-08	292.752	4.557E 02	4.557E 02	4.559E 02	4.559E 02	-1.516E-08	-1.516E-08
0.52580	7.196E-09	262.378	5.360E 02	5.360E 02	5.361E 02	5.361E 02	-1.016E-08	-1.016E-08
0.47827	4.853E-09	238.665	6.096E 02	6.096E 02	6.098E 02	6.098E 02	-6.852E-09	-6.852E-09
0.44837	3.423E-09	223.740	6.744E 02	6.744E 02	6.746E 02	6.746E 02	-4.834E-09	-4.834E-09
0.43968	2.415E-09	219.406	7.287E 02	7.287E 02	7.288E 02	7.288E 02	-3.410E-09	-3.410E-09
0.45344	1.724E-09	226.270	7.717E 02	7.717E 02	7.719E 02	7.719E 02	-2.434E-09	-2.434E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.000 θ_D=1.466E-05 ρ_a= 1.016

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.920E-18
0.10000	4.142E-13	6.295E-13	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-2.575E-18
0.20000	1.590E-12	1.690E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-3.683E-18
0.30000	3.158E-12	3.600E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-5.790E-18
0.40000	7.189E-12	6.957E-12	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-9.801E-18
0.50000	1.500E-11	1.394E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-1.962E-17
0.60000	3.331E-11	3.388E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-4.587E-17
0.70000	9.905E-11	9.761E-11	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-1.341E-16
0.80000	4.042E-10	4.035E-10	-2.254E-18	-2.254E-18	-2.741E-08	-2.741E-08	-6.072E-16
0.85000	1.069E-09	1.084E-09	-6.001E-18	-6.001E-18	-5.538E-08	-5.538E-08	-1.759E-15
0.90000	4.186E-09	4.188E-09	-2.575E-17	-2.575E-17	-1.527E-07	-1.527E-07	-7.893E-15
0.92500	1.039E-08	1.038E-08	-5.953E-17	-5.954E-17	-3.034E-07	-3.035E-07	-2.406E-14
0.95000	4.015E-08	4.015E-08	-2.363E-16	-2.364E-16	-7.630E-07	-7.631E-07	-1.079E-13
0.96250	1.080E-07	1.080E-07	-6.852E-16	-6.856E-16	-1.515E-06	-1.515E-06	-3.074E-13
0.97500	5.118E-07	5.122E-07	-3.967E-15	-3.973E-15	-4.837E-06	-4.841E-06	-1.152E-12
0.98124	1.583E-06	1.585E-06	-1.555E-14	-1.559E-14	-1.272E-05	-1.274E-05	-2.773E-12
0.98749	1.055E-05	1.059E-05	-1.665E-13	-1.675E-13	-6.647E-05	-6.673E-05	-7.439E-12
0.99373	7.554E-04	7.655E-04	-1.316E-10	-1.347E-10	-1.123E-02	-1.145E-02	-1.358E-11
0.99132	-3.576E-03	-3.578E-03	-2.154E-12	-2.130E-12	-6.996E 02	-6.999E 02	-1.191E-11
0.98573	-1.908E-03	-1.909E-03	-4.852E-14	-4.834E-14	-6.996E 02	-6.999E 02	-4.530E-12
0.98014	-1.295E-03	-1.296E-03	-8.219E-15	-8.202E-15	-6.996E 02	-6.999E 02	-1.742E-12
0.97456	-9.799E-04	-9.803E-04	-2.411E-15	-2.408E-15	-6.996E 02	-6.999E 02	-8.250E-13
0.96899	-7.880E-04	-7.884E-04	-1.064E-15	-1.063E-15	-6.996E 02	-6.999E 02	-4.099E-13
0.95786	-5.662E-04	-5.665E-04	-2.890E-16	-2.889E-16	-6.996E 02	-6.999E 02	-1.440E-13
0.94678	-4.418E-04	-4.420E-04	-1.365E-16	-1.365E-16	-6.996E 02	-6.999E 02	-5.609E-14
0.92471	-3.070E-04	-3.071E-04	-4.382E-17	-4.381E-17	-6.996E 02	-6.999E 02	-1.510E-14
0.90279	-2.352E-04	-2.353E-04	-1.915E-17	-1.915E-17	-6.996E 02	-6.999E 02	-5.720E-15
0.85946	-1.602E-04	-1.603E-04	-4.953E-18	-4.953E-18	-6.996E 02	-6.999E 02	-1.406E-15
0.81689	-1.215E-04	-1.216E-04	-1.947E-18	-1.947E-18	-6.996E 02	-6.999E 02	-5.134E-16
0.73458	-8.191E-05	-8.195E-05	-5.124E-19	-5.124E-19	-6.996E 02	-6.999E 02	-1.196E-16
0.65718	-6.178E-05	-6.181E-05	-1.997E-19	-1.997E-19	-6.996E 02	-6.999E 02	-4.215E-17
0.58666	-4.959E-05	-4.962E-05	-9.869E-20	-9.869E-20	-6.996E 02	-6.999E 02	-1.629E-17
0.52580	-4.142E-05	-4.144E-05	-5.401E-20	-5.401E-20	-6.996E 02	-6.999E 02	-9.302E-18
0.47827	-3.556E-05	-3.558E-05	-2.973E-20	-2.973E-20	-6.996E 02	-6.999E 02	-5.541E-18
0.44837	-3.116E-05	-3.117E-05	-1.706E-20	-1.706E-20	-6.996E 02	-6.999E 02	-3.560E-18
0.43968	-2.772E-05	-2.773E-05	-9.790E-21	-9.790E-21	-6.996E 02	-6.999E 02	-2.508E-18
0.45344	-2.497E-05	-2.498E-05	-5.612E-21	-5.612E-21	-6.996E 02	-6.999E 02	-1.879E-18

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.070 θ_D= 1.720E-05 ρ_a= 1.017

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0700	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0700	0.10000	193.643	2.578E-08	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0700	0.20000	172.127	2.918E-08	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0700	0.30000	150.611	3.919E-08	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0700	0.40000	129.095	4.752E-08	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0700	0.50000	107.580	6.170E-08	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0700	0.60000	86.064	6.170E-08	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0700	0.70000	64.548	1.968E-07	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0700	0.80000	43.033	6.103E-07	1.000E-00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0700	0.85000	32.275	1.564E-06	1.000E-00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0700	0.90000	21.518	5.456E-06	1.000E-00	-4.324E-07	-4.324E-07	4.324E-07
0.92500	0.0700	0.92500	16.139	1.326E-05	1.000E-00	-7.969E-07	-7.970E-07	7.969E-07
0.95000	0.0700	0.95000	10.761	4.557E-05	1.000E-00	-2.021E-06	-2.022E-06	2.021E-06
0.96250	0.0700	0.96250	8.073	1.093E-04	1.000E-00	-3.981E-06	-3.983E-06	3.981E-06
0.97500	0.0700	0.97500	5.386	3.766E-04	9.999E-01	-1.206E-05	-1.206E-05	1.205E-05
0.98124	0.0700	0.98125	4.044	9.113E-04	9.999E-01	-2.798E-05	-2.802E-05	2.796E-05
0.98749	0.0700	0.98750	2.704	3.307E-03	9.997E-01	-1.167E-04	-1.171E-04	1.166E-04
0.99373	0.0701	0.99375	1.374	5.762E-02	9.993E-01	-3.731E-03	-3.773E-03	3.724E-03
0.99158	0.2058	1.00000	1.969	1.493E 02	3.061E 00	-4.855E-04	-4.829E-04	4.871E-04
0.98622	0.3916	1.00625	3.305	1.493E 02	5.833E 00	-5.712E-05	-5.701E-05	5.718E-05
0.98087	0.5795	1.01250	4.647	1.493E 02	8.570E 00	-1.913E-05	-1.911E-05	1.914E-05
0.97553	0.7695	1.01875	5.989	1.493E 02	1.127E 01	-8.822E-06	-8.816E-06	8.824E-06
0.97019	0.9615	1.02500	7.333	1.493E 02	1.394E 01	-5.280E-06	-5.278E-06	5.281E-06
0.95957	1.3520	1.03750	10.021	1.493E 02	1.918E 01	-2.308E-06	-2.307E-06	2.308E-06
0.94898	1.7513	1.05000	12.710	1.493E 02	2.430E 01	-1.427E-06	-1.426E-06	1.427E-06
0.92796	2.5770	1.07500	18.088	1.493E 02	3.418E 01	-6.386E-07	-6.386E-07	6.386E-07
0.90713	3.4409	1.10000	23.466	1.493E 02	4.361E 01	-3.540E-07	-3.540E-07	3.540E-07
0.86615	5.2922	1.15000	34.224	1.493E 02	6.124E 01	-1.498E-07	-1.498E-07	1.498E-07
0.82616	7.3250	1.20000	44.981	1.493E 02	7.739E 01	-7.963E-08	-7.963E-08	7.963E-08
0.74978	12.0258	1.30000	66.497	1.493E 02	1.060E 02	-3.278E-08	-3.278E-08	3.278E-08
0.67957	17.7438	1.40000	88.013	1.493E 02	1.305E 02	-1.730E-08	-1.730E-08	1.730E-08
0.61763	24.6907	1.50000	109.528	1.493E 02	1.517E 02	-1.074E-08	-1.074E-08	1.074E-08
0.56666	33.0308	1.60000	131.044	1.493E 02	1.703E 02	-7.198E-09	-7.198E-09	7.198E-09
0.52986	42.7649	1.70000	152.560	1.493E 02	1.867E 02	-4.854E-09	-4.854E-09	4.854E-09
0.51029	53.5867	1.80000	174.076	1.493E 02	2.013E 02	-3.424E-09	-3.424E-09	3.424E-09
0.50994	64.8367	1.90000	195.592	1.493E 02	2.143E 02	-2.416E-09	-2.416E-09	2.416E-09
0.52885	75.6870	2.00000	217.108	1.493E 02	2.261E 02	-1.724E-09	-1.724E-09	1.724E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.070 θ_D= 1.720E-05 ρ_a= 1.017

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.324E-07	449.110	-1.582E-05	-1.582E-05	1.582E-05	1.582E-05	-6.105E-07	-6.105E-07
0.92500	7.970E-07	461.585	-2.326E-05	-2.326E-05	2.325E-05	2.326E-05	-1.125E-06	-1.125E-06
0.95000	2.022E-06	474.060	-3.947E-05	-3.947E-05	3.947E-05	3.947E-05	-2.854E-06	-2.855E-06
0.96250	3.983E-06	480.297	-5.697E-05	-5.697E-05	5.696E-05	5.698E-05	-5.622E-06	-5.623E-06
0.97500	1.207E-05	486.534	-1.009E-04	-1.009E-04	1.009E-04	1.009E-04	-1.702E-05	-1.704E-05
0.98124	2.804E-05	489.652	-1.596E-04	-1.597E-04	1.596E-04	1.598E-04	-3.951E-05	-3.956E-05
0.98749	1.173E-04	492.769	-3.422E-04	-3.427E-04	3.424E-04	3.434E-04	-1.648E-04	-1.653E-04
0.99373	3.808E-03	495.884	-2.641E-03	-2.660E-03	2.760E-03	2.799E-03	-5.268E-03	-5.327E-03
0.99158	4.818E-04	494.809	4.137E 00	4.137E 00	4.301E 00	4.301E 00	-6.856E-04	-6.818E-04
0.98622	5.696E-05	492.135	9.930E 00	9.930E 00	1.009E 01	1.009E 01	-8.066E-05	-8.050E-05
0.98087	1.910E-05	489.464	1.572E 01	1.572E 01	1.588E 01	1.588E 01	-2.701E-05	-2.698E-05
0.97553	8.814E-06	486.799	2.150E 01	2.150E 01	2.167E 01	2.167E 01	-1.246E-05	-1.245E-05
0.97019	5.277E-06	484.138	2.728E 01	2.728E 01	2.745E 01	2.745E 01	-7.455E-06	-7.452E-06
0.95957	2.307E-06	478.834	3.882E 01	3.882E 01	3.899E 01	3.899E 01	-3.259E-06	-3.258E-06
0.94898	1.426E-06	473.553	5.034E 01	5.034E 01	5.051E 01	5.051E 01	-2.014E-06	-2.014E-06
0.92796	6.385E-07	463.061	7.331E 01	7.331E 01	7.348E 01	7.348E 01	-9.017E-07	-9.016E-07
0.90713	3.540E-07	452.670	9.618E 01	9.618E 01	9.634E 01	9.634E 01	-4.998E-07	-4.998E-07
0.86615	1.498E-07	432.218	1.416E 02	1.416E 02	1.417E 02	1.417E 02	-2.115E-07	-2.115E-07
0.82616	7.963E-08	412.261	1.865E 02	1.865E 02	1.867E 02	1.867E 02	-1.124E-07	-1.124E-07
0.74978	3.278E-08	374.151	2.745E 02	2.745E 02	2.747E 02	2.747E 02	-4.628E-08	-4.628E-08
0.67957	1.730E-08	339.115	3.594E 02	3.594E 02	3.596E 02	3.596E 02	-2.443E-08	-2.443E-08
0.61763	1.074E-08	308.203	4.402E 02	4.402E 02	4.404E 02	4.404E 02	-1.516E-08	-1.516E-08
0.56666	7.198E-09	282.771	5.156E 02	5.156E 02	5.157E 02	5.157E 02	-1.016E-08	-1.016E-08
0.52986	4.854E-09	264.405	5.838E 02	5.838E 02	5.840E 02	5.840E 02	-6.854E-09	-6.854E-09
0.51029	3.424E-09	254.639	6.435E 02	6.435E 02	6.437E 02	6.437E 02	-4.835E-09	-4.835E-09
0.50994	2.416E-09	254.465	6.936E 02	6.936E 02	6.938E 02	6.938E 02	-3.411E-09	-3.411E-09
0.52885	1.724E-09	263.901	7.341E 02	7.341E 02	7.342E 02	7.342E 02	-2.435E-09	-2.435E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.070 θ_0= 1.720E-05 ρ_a= 1.017

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-2.613E-18
0.10000	4.395E-13	3.045E-13	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-3.505E-18
0.20000	8.425E-13	1.867E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-5.013E-18
0.30000	3.350E-12	2.991E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-7.880E-18
0.40000	8.385E-12	7.593E-12	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-1.334E-17
0.50000	1.758E-11	1.758E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-2.670E-17
0.60000	3.984E-11	3.845E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-6.244E-17
0.70000	1.114E-10	1.137E-10	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-1.825E-16
0.80000	4.672E-10	4.712E-10	-2.254E-18	-2.254E-18	-2.741E-08	-2.741E-08	-8.265E-16
0.85000	1.246E-09	1.260E-09	-6.001E-18	-6.001E-18	-5.538E-08	-5.538E-08	-2.395E-15
0.90000	4.885E-09	4.882E-09	-2.575E-17	-2.575E-17	-1.527E-07	-1.527E-07	-1.074E-14
0.92500	1.211E-08	1.211E-08	-5.952E-17	-5.953E-17	-3.034E-07	-3.035E-07	-3.274E-14
0.95000	4.685E-08	4.687E-08	-2.362E-16	-2.363E-16	-7.628E-07	-7.630E-07	-1.469E-13
0.96250	1.260E-07	1.261E-07	-6.847E-16	-6.852E-16	-1.514E-06	-1.515E-06	-4.182E-13
0.97500	5.970E-07	5.976E-07	-3.961E-15	-3.967E-15	-4.833E-06	-4.837E-06	-1.566E-12
0.98124	1.842E-06	1.846E-06	-1.551E-14	-1.555E-14	-1.270E-05	-1.272E-05	-3.767E-12
0.98749	1.226E-05	1.230E-05	-1.652E-13	-1.662E-13	-6.612E-05	-6.639E-05	-1.009E-11
0.99373	8.540E-04	8.652E-04	-1.234E-10	-1.262E-10	-1.066E-02	-1.086E-02	-1.851E-11
0.99158	-3.530E-03	-3.532E-03	-2.292E-12	-2.267E-12	-6.694E 02	-6.697E 02	-1.639E-11
0.98622	-1.881E-03	-1.882E-03	-4.992E-14	-4.972E-14	-6.694E 02	-6.697E 02	-6.201E-12
0.98087	-1.275E-03	-1.276E-03	-8.364E-15	-8.347E-15	-6.694E 02	-6.697E 02	-2.398E-12
0.97553	-9.643E-04	-9.648E-04	-2.442E-15	-2.439E-15	-6.694E 02	-6.697E 02	-1.133E-12
0.97019	-7.751E-04	-7.754E-04	-1.075E-15	-1.074E-15	-6.694E 02	-6.697E 02	-5.623E-13
0.95957	-5.566E-04	-5.569E-04	-2.905E-16	-2.904E-16	-6.694E 02	-6.697E 02	-1.975E-13
0.94898	-4.342E-04	-4.344E-04	-1.372E-16	-1.372E-16	-6.694E 02	-6.697E 02	-7.675E-14
0.92796	-3.015E-04	-3.017E-04	-4.394E-17	-4.394E-17	-6.694E 02	-6.697E 02	-2.064E-14
0.90713	-2.310E-04	-2.311E-04	-1.920E-17	-1.920E-17	-6.694E 02	-6.697E 02	-7.810E-15
0.86615	-1.573E-04	-1.574E-04	-4.962E-18	-4.962E-18	-6.694E 02	-6.697E 02	-1.918E-15
0.82616	-1.193E-04	-1.194E-04	-1.950E-18	-1.950E-18	-6.694E 02	-6.697E 02	-6.999E-16
0.74978	-8.042E-05	-8.046E-05	-5.128E-19	-5.128E-19	-6.694E 02	-6.697E 02	-1.629E-16
0.67957	-6.065E-05	-6.068E-05	-1.999E-19	-1.999E-19	-6.694E 02	-6.697E 02	-5.741E-17
0.61763	-4.869E-05	-4.871E-05	-9.874E-20	-9.874E-20	-6.694E 02	-6.697E 02	-2.491E-17
0.56666	-4.066E-05	-4.068E-05	-5.404E-20	-5.404E-20	-6.694E 02	-6.697E 02	-1.267E-17
0.52986	-3.491E-05	-3.493E-05	-2.974E-20	-2.974E-20	-6.694E 02	-6.697E 02	-7.545E-18
0.51029	-3.058E-05	-3.060E-05	-1.707E-20	-1.707E-20	-6.694E 02	-6.697E 02	-4.847E-18
0.50994	-2.721E-05	-2.722E-05	-9.795E-21	-9.795E-21	-6.694E 02	-6.697E 02	-3.415E-18
0.52885	-2.451E-05	-2.452E-05	-5.614E-21	-5.614E-21	-6.694E 02	-6.697E 02	-2.558E-18

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.080 θ_0= 1.990E-05 ρ_a= 1.017

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0800	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.0800	0.10000	193.643	3.575E-08	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.0800	0.20000	172.127	4.002E-08	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.0800	0.30000	150.611	4.461E-08	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.0800	0.40000	129.095	5.711E-08	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.0800	0.50000	107.580	7.337E-08	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.0800	0.60000	86.064	7.504E-08	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.0800	0.70000	64.548	2.218E-07	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.0800	0.80000	43.033	6.870E-07	1.000E 00	-8.784E-08	-8.784E-08	8.784E-08
0.85000	0.0800	0.85000	32.275	1.741E-06	1.000E-00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.0800	0.90000	21.518	6.076E-06	1.000E-00	-4.324E-07	-4.324E-07	4.324E-07
0.92500	0.0800	0.92500	16.140	1.481E-05	1.000E-00	-7.968E-07	-7.969E-07	7.968E-07
0.95000	0.0800	0.95000	10.762	5.079E-05	1.000E-00	-2.021E-06	-2.021E-06	2.021E-06
0.96250	0.0800	0.96250	8.074	1.219E-04	1.000E-00	-3.979E-06	-3.981E-06	3.979E-06
0.97500	0.0800	0.97500	5.388	4.200E-04	9.999E-01	-1.204E-05	-1.205E-05	1.204E-05
0.98124	0.0800	0.98125	4.046	1.016E-03	9.999E-01	-2.793E-05	-2.797E-05	2.792E-05
0.98749	0.0800	0.98750	2.708	3.686E-03	9.998E-01	-1.162E-04	-1.165E-04	1.160E-04
0.99373	0.0801	0.99375	1.382	6.344E-02	9.997E-01	-3.602E-03	-3.642E-03	3.595E-03
0.99187	0.2316	1.00000	1.952	1.448E 02	3.057E 00	-5.046E-04	-5.018E-04	5.063E-04
0.98678	0.4413	1.00625	3.286	1.448E 02	5.858E 00	-5.831E-05	-5.819E-05	5.837E-05
0.98170	0.6532	1.01250	4.626	1.448E 02	8.624E 00	-1.938E-05	-1.936E-05	1.939E-05
0.97664	0.8673	1.01875	5.968	1.448E 02	1.136E 01	-8.919E-06	-8.913E-06	8.921E-06
0.97159	1.0837	1.02500	7.312	1.448E 02	1.405E 01	-5.323E-06	-5.321E-06	5.324E-06
0.96153	1.5233	1.03750	9.999	1.448E 02	1.935E 01	-2.317E-06	-2.317E-06	2.317E-06
0.95152	1.9722	1.05000	12.688	1.448E 02	2.452E 01	-1.432E-06	-1.432E-06	1.432E-06
0.93170	2.8988	1.07500	18.065	1.448E 02	3.451E 01	-6.402E-07	-6.402E-07	6.402E-07
0.91212	3.8654	1.10000	23.444	1.448E 02	4.404E 01	-3.547E-07	-3.547E-07	3.547E-07
0.87381	5.9270	1.15000	34.201	1.448E 02	6.185E 01	-1.500E-07	-1.500E-07	1.500E-07
0.83672	8.1746	1.20000	44.959	1.448E 02	7.818E 01	-7.972E-08	-7.972E-08	7.972E-08
0.76697	13.3013	1.30000	66.474	1.448E 02	1.071E 02	-3.280E-08	-3.280E-08	3.280E-08
0.70454	19.3932	1.40000	87.990	1.448E 02	1.318E 02	-1.731E-08	-1.731E-08	1.731E-08
0.65155	26.5695	1.50000	109.506	1.448E 02	1.533E 02	-1.074E-08	-1.074E-08	1.074E-08
0.61046	34.8590	1.60000	131.021	1.448E 02	1.721E 02	-7.201E-09	-7.201E-09	7.201E-09
0.58378	44.1190	1.70000	152.537	1.448E 02	1.887E 02	-4.856E-09	-4.856E-09	4.856E-09
0.57353	53.9809	1.80000	174.053	1.448E 02	2.034E 02	-3.426E-09	-3.426E-09	3.426E-09
0.58058	63.8977	1.90000	195.569	1.448E 02	2.166E 02	-2.417E-09	-2.417E-09	2.417E-09
0.60433	73.3044	2.00000	217.085	1.448E 02	2.284E 02	-1.725E-09	-1.725E-09	1.725E-09

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_0= 0.080 θ_D= 1.990E-05 ρ_a= 1.017

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.324E-07	449.110	-1.581E-05	-1.582E-05	1.581E-05	1.582E-05	-6.105E-07	-6.105E-07
0.92500	7.969E-07	461.585	-2.325E-05	-2.326E-05	2.325E-05	2.326E-05	-1.125E-06	-1.125E-06
0.95000	2.021E-06	474.060	-3.947E-05	-3.947E-05	3.947E-05	3.947E-05	-2.854E-06	-2.854E-06
0.96250	3.981E-06	480.297	-5.696E-05	-5.697E-05	5.696E-05	5.697E-05	-5.619E-06	-5.621E-06
0.97500	1.206E-05	486.534	-1.008E-04	-1.009E-04	1.008E-04	1.009E-04	-1.701E-05	-1.702E-05
0.98124	2.799E-05	489.652	-1.595E-04	-1.596E-04	1.595E-04	1.597E-04	-3.944E-05	-3.949E-05
0.98749	1.167E-04	492.770	-3.414E-04	-3.419E-04	3.417E-04	3.426E-04	-1.640E-04	-1.645E-04
0.99373	3.675E-03	495.884	-2.571E-03	-2.590E-03	2.718E-03	2.756E-03	-5.086E-03	-5.142E-03
0.99187	5.007E-04	494.955	3.990E 00	3.990E 00	4.153E 00	4.153E 00	-7.125E-04	-7.086E-04
0.98678	5.814E-05	492.416	9.648E 00	9.648E 00	9.812E 00	9.812E 00	-8.233E-05	-8.217E-05
0.98170	1.935E-05	489.882	1.530E 01	1.530E 01	1.546E 01	1.546E 01	-2.736E-05	-2.733E-05
0.97664	8.911E-06	487.355	2.095E 01	2.095E 01	2.111E 01	2.111E 01	-1.259E-05	-1.259E-05
0.97159	5.320E-06	484.834	2.659E 01	2.659E 01	2.675E 01	2.675E 01	-7.516E-06	-7.513E-06
0.96153	2.316E-06	479.813	3.784E 01	3.784E 01	3.801E 01	3.801E 01	-3.272E-06	-3.271E-06
0.95152	1.432E-06	474.821	4.907E 01	4.907E 01	4.924E 01	4.924E 01	-2.022E-06	-2.022E-06
0.93170	6.402E-07	464.927	7.144E 01	7.144E 01	7.161E 01	7.161E 01	-9.040E-07	-9.039E-07
0.91212	3.547E-07	455.160	9.369E 01	9.369E 01	9.385E 01	9.385E 01	-5.008E-07	-5.008E-07
0.87381	1.502E-07	436.039	1.378E 02	1.378E 02	1.379E 02	1.379E 02	-2.118E-07	-2.118E-07
0.83672	7.972E-08	417.535	1.812E 02	1.812E 02	1.814E 02	1.814E 02	-1.126E-07	-1.126E-07
0.76697	3.280E-08	382.728	2.659E 02	2.659E 02	2.661E 02	2.661E 02	-4.632E-08	-4.632E-08
0.70454	1.731E-08	351.576	3.470E 02	3.470E 02	3.471E 02	3.471E 02	-2.444E-08	-2.444E-08
0.65155	1.074E-08	325.133	4.233E 02	4.233E 02	4.235E 02	4.235E 02	-1.517E-08	-1.517E-08
0.61046	7.201E-09	304.626	4.937E 02	4.937E 02	4.939E 02	4.939E 02	-1.017E-08	-1.017E-08
0.58378	4.856E-09	291.313	5.569E 02	5.569E 02	5.571E 02	5.571E 02	-6.857E-09	-6.857E-09
0.57353	3.426E-09	286.199	6.120E 02	6.120E 02	6.121E 02	6.121E 02	-4.837E-09	-4.837E-09
0.58058	2.417E-09	289.718	6.583E 02	6.583E 02	6.585E 02	6.585E 02	-3.412E-09	-3.412E-09
0.60433	1.725E-09	301.568	6.964E 02	6.964E 02	6.966E 02	6.966E 02	-2.435E-09	-2.435E-09

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_0= 0.080 θ_D= 1.990E-05 ρ_a= 1.017

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-3.413E-18
0.10000	5.900E-13	8.451E-13	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-4.578E-18
0.20000	1.703E-12	1.737E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-6.548E-18
0.30000	5.026E-12	4.686E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-1.029E-17
0.40000	9.255E-12	9.765E-12	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-1.742E-17
0.50000	1.979E-11	1.979E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-3.488E-17
0.60000	4.741E-11	4.614E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-8.155E-17
0.70000	1.317E-10	1.342E-10	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-2.384E-16
0.80000	5.393E-10	5.417E-10	-2.254E-18	-2.254E-18	-2.740E-08	-2.741E-08	-1.079E-15
0.85000	1.428E-09	1.448E-09	-6.001E-18	-6.001E-18	-5.538E-08	-5.538E-08	-3.128E-15
0.90000	5.591E-09	5.588E-09	-2.575E-17	-2.575E-17	-1.527E-07	-1.527E-07	-1.403E-14
0.92500	1.386E-08	1.386E-08	-5.951E-17	-5.952E-17	-3.034E-07	-3.034E-07	-4.275E-14
0.95000	5.361E-08	5.361E-08	-2.361E-16	-2.362E-16	-7.627E-07	-7.629E-07	-1.917E-13
0.96250	1.441E-07	1.441E-07	-6.842E-16	-6.846E-16	-1.514E-06	-1.514E-06	-5.460E-13
0.97500	6.819E-07	6.825E-07	-3.955E-15	-3.961E-15	-4.829E-06	-4.833E-06	-2.043E-12
0.98124	2.101E-06	2.105E-06	-1.547E-14	-1.551E-14	-1.268E-05	-1.270E-05	-4.909E-12
0.98749	1.398E-05	1.403E-05	-1.638E-13	-1.647E-13	-6.575E-05	-6.602E-05	-1.314E-11
0.99373	9.475E-04	9.597E-04	-1.151E-10	-1.177E-10	-1.007E-02	-1.026E-02	-2.423E-11
0.99187	-3.465E-03	-3.467E-03	-2.466E-12	-2.438E-12	-6.367E 02	-6.370E 02	-2.170E-11
0.98678	-1.844E-03	-1.845E-03	-5.164E-14	-5.144E-14	-6.367E 02	-6.370E 02	-8.221E-12
0.98170	-1.248E-03	-1.249E-03	-8.542E-15	-8.525E-15	-6.367E 02	-6.370E 02	-3.175E-12
0.97664	-9.429E-04	-9.433E-04	-2.483E-15	-2.480E-15	-6.367E 02	-6.370E 02	-1.496E-12
0.97159	-7.574E-04	-7.578E-04	-1.089E-15	-1.089E-15	-6.367E 02	-6.370E 02	-7.413E-13
0.96153	-5.436E-04	-5.438E-04	-2.923E-16	-2.922E-16	-6.367E 02	-6.370E 02	-2.603E-13
0.95152	-4.238E-04	-4.240E-04	-1.381E-16	-1.380E-16	-6.367E 02	-6.370E 02	-1.009E-13
0.93170	-2.942E-04	-2.944E-04	-4.410E-17	-4.409E-17	-6.367E 02	-6.370E 02	-2.709E-14
0.91212	-2.253E-04	-2.254E-04	-1.926E-17	-1.926E-17	-6.367E 02	-6.370E 02	-1.024E-14
0.87381	-1.535E-04	-1.535E-04	-4.973E-18	-4.973E-18	-6.367E 02	-6.370E 02	-2.511E-15
0.83672	-1.163E-04	-1.164E-04	-1.953E-18	-1.953E-18	-6.367E 02	-6.370E 02	-9.159E-16
0.76697	-7.841E-05	-7.845E-05	-5.134E-19	-5.134E-19	-6.367E 02	-6.370E 02	-2.130E-16
0.70454	-5.914E-05	-5.916E-05	-2.000E-19	-2.000E-19	-6.367E 02	-6.370E 02	-7.506E-17
0.65155	-4.747E-05	-4.749E-05	-9.880E-20	-9.880E-20	-6.367E 02	-6.370E 02	-3.256E-17
0.61046	-3.964E-05	-3.966E-05	-5.407E-20	-5.407E-20	-6.367E 02	-6.370E 02	-1.655E-17
0.58378	-3.403E-05	-3.405E-05	-2.976E-20	-2.976E-20	-6.367E 02	-6.370E 02	-9.860E-18
0.57353	-2.981E-05	-2.983E-05	-1.708E-20	-1.708E-20	-6.367E 02	-6.370E 02	-6.333E-18
0.58058	-2.653E-05	-2.654E-05	-9.800E-21	-9.800E-21	-6.367E 02	-6.370E 02	-4.462E-18
0.60433	-2.389E-05	-2.390E-05	-5.618E-21	-5.618E-21	-6.367E 02	-6.370E 02	-3.342E-18

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.100 θ_D= 2.499E-05 ρ_a= 1.017

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.1000	0.10000	193.643	6.212E-08	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.1000	0.20000	172.127	6.608E-08	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.1000	0.30000	150.611	7.754E-08	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.1000	0.40000	129.096	9.338E-08	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.1000	0.50000	107.580	1.067E-07	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.1000	0.60000	86.064	1.201E-07	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.1000	0.70000	64.548	3.102E-07	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.1000	0.80000	43.033	9.238E-07	1.000E-00	-8.783E-08	-8.784E-08	8.783E-08
0.85000	0.1000	0.85000	32.276	2.315E-06	1.000E-00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.1000	0.90000	21.519	8.004E-06	1.000E-00	-4.323E-07	-4.323E-07	4.323E-07
0.92500	0.1000	0.92500	16.141	1.945E-05	1.000E-00	-7.967E-07	-7.968E-07	7.967E-07
0.95000	0.1000	0.95000	10.763	6.649E-05	1.000E-00	-2.020E-06	-2.020E-06	2.020E-06
0.96250	0.1000	0.96250	8.078	1.594E-04	9.999E-01	-3.975E-06	-3.976E-06	3.974E-06
0.97500	0.1000	0.97500	5.393	5.480E-04	9.998E-01	-1.202E-05	-1.202E-05	1.201E-05
0.98124	0.1000	0.98125	4.053	1.322E-03	9.997E-01	-2.782E-05	-2.786E-05	2.781E-05
0.98749	0.1000	0.98750	2.717	4.753E-03	9.994E-01	-1.147E-04	-1.150E-04	1.146E-04
0.99373	0.1002	0.99375	1.400	7.541E-02	9.987E-01	-3.306E-03	-3.341E-03	3.300E-03
0.99257	0.2784	1.00000	1.909	1.356E 02	3.053E 00	-5.563E-04	-5.531E-04	5.583E-04
0.98813	0.5324	1.00625	3.236	1.356E 02	5.945E 00	-6.145E-05	-6.132E-05	6.152E-05
0.98371	0.7889	1.01250	4.574	1.356E 02	8.800E 00	-2.003E-05	-2.001E-05	2.004E-05
0.97931	1.0477	1.01875	5.914	1.356E 02	1.162E 01	-9.172E-06	-9.167E-06	9.175E-06
0.97493	1.3089	1.02500	7.257	1.356E 02	1.440E 01	-5.436E-06	-5.434E-06	5.437E-06
0.96622	1.8384	1.03750	9.943	1.356E 02	1.987E 01	-2.353E-06	-2.353E-06	2.354E-06
0.95760	2.3775	1.05000	12.631	1.356E 02	2.521E 01	-1.447E-06	-1.447E-06	1.447E-06
0.94062	3.4852	1.07500	18.008	1.356E 02	3.551E 01	-6.444E-07	-6.444E-07	6.444E-07
0.92401	4.6332	1.10000	23.386	1.356E 02	4.534E 01	-3.565E-07	-3.565E-07	3.565E-07
0.89195	7.0550	1.15000	34.143	1.356E 02	6.372E 01	-1.506E-07	-1.506E-07	1.506E-07
0.86160	9.6523	1.20000	44.900	1.356E 02	8.057E 01	-7.995E-08	-7.995E-08	7.995E-08
0.80680	15.4030	1.30000	66.416	1.356E 02	1.104E 02	-3.287E-08	-3.287E-08	3.287E-08
0.76125	21.9148	1.40000	87.931	1.356E 02	1.359E 02	-1.734E-08	-1.734E-08	1.734E-08
0.72668	29.1483	1.50000	109.447	1.356E 02	1.581E 02	-1.075E-08	-1.075E-08	1.075E-08
0.70472	36.9654	1.60000	130.963	1.356E 02	1.775E 02	-7.209E-09	-7.209E-09	7.209E-09
0.69656	45.1228	1.70000	152.478	1.356E 02	1.945E 02	-4.861E-09	-4.861E-09	4.861E-09
0.70269	53.3039	1.80000	173.994	1.356E 02	2.097E 02	-3.429E-09	-3.429E-09	3.429E-09
0.72273	61.1870	1.90000	195.510	1.356E 02	2.233E 02	-2.419E-09	-2.419E-09	2.419E-09
0.75558	68.5150	2.00000	217.026	1.356E 02	2.356E 02	-1.726E-09	-1.726E-09	1.726E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.100 θ_D= 2.499E-05 ρ_a= 1.017

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.784E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.019E-06	-9.019E-06	9.019E-06	9.019E-06	-2.405E-07	-2.405E-07
0.90000	4.323E-07	449.110	-1.581E-05	-1.581E-05	1.581E-05	1.581E-05	-6.104E-07	-6.104E-07
0.92500	7.968E-07	461.585	-2.325E-05	-2.325E-05	2.325E-05	2.325E-05	-1.125E-06	-1.125E-06
0.95000	2.021E-06	474.060	-3.946E-05	-3.946E-05	3.946E-05	3.946E-05	-2.852E-06	-2.853E-06
0.96250	3.977E-06	480.297	-5.694E-05	-5.695E-05	5.694E-05	5.695E-05	-5.612E-06	-5.614E-06
0.97500	1.203E-05	486.534	-1.007E-04	-1.008E-04	1.007E-04	1.008E-04	-1.697E-05	-1.698E-05
0.98124	2.788E-05	489.652	-1.592E-04	-1.593E-04	1.592E-04	1.594E-04	-3.929E-05	-3.934E-05
0.98749	1.152E-04	492.769	-3.393E-04	-3.398E-04	3.399E-04	3.409E-04	-1.620E-04	-1.624E-04
0.99373	3.370E-03	495.883	-2.412E-03	-2.429E-03	2.621E-03	2.656E-03	-4.668E-03	-4.718E-03
0.99257	5.518E-04	495.302	3.642E 00	3.642E 00	3.804E 00	3.804E 00	-7.855E-04	-7.810E-04
0.98813	6.126E-05	493.088	8.974E 00	8.974E 00	9.137E 00	9.137E 00	-8.676E-05	-8.659E-05
0.98371	2.000E-05	490.882	1.430E 01	1.430E 01	1.446E 01	1.446E 01	-2.828E-05	-2.826E-05
0.97931	9.164E-06	488.686	1.961E 01	1.961E 01	1.978E 01	1.978E 01	-1.295E-05	-1.294E-05
0.97493	5.433E-06	486.499	2.492E 01	2.492E 01	2.508E 01	2.508E 01	-7.675E-06	-7.672E-06
0.96622	2.352E-06	482.156	3.550E 01	3.550E 01	3.566E 01	3.566E 01	-3.323E-06	-3.322E-06
0.95760	1.447E-06	477.854	4.604E 01	4.604E 01	4.620E 01	4.620E 01	-2.043E-06	-2.043E-06
0.94062	6.443E-07	469.381	6.699E 01	6.699E 01	6.715E 01	6.715E 01	-9.099E-07	-9.098E-07
0.92401	3.565E-07	461.090	8.775E 01	8.775E 01	8.792E 01	8.792E 01	-5.034E-07	-5.034E-07
0.89195	1.506E-07	445.093	1.287E 02	1.287E 02	1.289E 02	1.289E 02	-2.126E-07	-2.126E-07
0.86160	7.995E-08	429.949	1.688E 02	1.688E 02	1.690E 02	1.690E 02	-1.129E-07	-1.129E-07
0.80680	3.287E-08	402.602	2.460E 02	2.460E 02	2.462E 02	2.462E 02	-4.641E-08	-4.641E-08
0.76125	1.734E-08	379.870	3.187E 02	3.187E 02	3.188E 02	3.188E 02	-2.448E-08	-2.448E-08
0.72668	1.075E-08	362.622	3.858E 02	3.858E 02	3.860E 02	3.860E 02	-1.519E-08	-1.519E-08
0.70472	7.209E-09	351.664	4.467E 02	4.467E 02	4.468E 02	4.468E 02	-1.018E-08	-1.018E-08
0.69656	4.861E-09	347.593	5.007E 02	5.007E 02	5.008E 02	5.008E 02	-6.863E-09	-6.863E-09
0.70269	3.429E-09	350.649	5.475E 02	5.475E 02	5.477E 02	5.477E 02	-4.842E-09	-4.842E-09
0.72273	2.419E-09	360.651	5.874E 02	5.874E 02	5.876E 02	5.876E 02	-3.415E-09	-3.415E-09
0.75558	1.726E-09	377.045	6.209E 02	6.209E 02	6.211E 02	6.211E 02	-2.438E-09	-2.438E-09

PROPAGATION FREQUENCY= 4.233E 08 ϕ_0= 0.100 θ_D= 2.499E-05 ρ_a= 1.017

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-5.332E-18
0.10000	7.820E-13	1.026E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-7.153E-18
0.20000	2.351E-12	2.431E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-1.023E-17
0.30000	5.447E-12	6.096E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-1.608E-17
0.40000	1.195E-11	1.244E-11	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-2.723E-17
0.50000	2.442E-11	2.417E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-5.450E-17
0.60000	5.799E-11	5.820E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-1.274E-16
0.70000	1.635E-10	1.631E-10	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-3.724E-16
0.80000	6.704E-10	6.723E-10	-2.254E-18	-2.254E-18	-2.740E-08	-2.740E-08	-1.687E-15
0.85000	1.788E-09	1.793E-09	-6.000E-18	-6.001E-18	-5.538E-08	-5.538E-08	-4.886E-15
0.90000	6.935E-09	6.933E-09	-2.574E-17	-2.575E-17	-1.527E-07	-1.527E-07	-2.192E-14
0.92500	1.720E-08	1.720E-08	-5.950E-17	-5.951E-17	-3.034E-07	-3.034E-07	-6.678E-14
0.95000	6.646E-08	6.647E-08	-2.360E-16	-2.361E-16	-7.625E-07	-7.626E-07	-2.993E-13
0.96250	1.786E-07	1.786E-07	-6.829E-16	-6.834E-16	-1.513E-06	-1.513E-06	-8.522E-13
0.97500	8.469E-07	8.477E-07	-3.940E-15	-3.946E-15	-4.819E-06	-4.823E-06	-3.184E-12
0.98124	2.615E-06	2.622E-06	-1.537E-14	-1.541E-14	-1.262E-05	-1.264E-05	-7.631E-12
0.98749	1.717E-05	1.723E-05	-1.603E-13	-1.613E-13	-6.486E-05	-6.511E-05	-2.036E-11
0.99373	1.072E-03	1.086E-03	-9.717E-11	-9.925E-11	-8.793E-03	-8.952E-03	-3.808E-11
0.99257	-3.070E-03	-3.072E-03	-2.966E-12	-2.932E-12	-5.617E 02	-5.619E 02	-3.515E-11
0.98813	-1.644E-03	-1.645E-03	-5.632E-14	-5.609E-14	-5.617E 02	-5.619E 02	-1.336E-11
0.98371	-1.109E-03	-1.109E-03	-9.016E-15	-8.998E-15	-5.617E 02	-5.619E 02	-5.139E-12
0.97931	-8.356E-04	-8.360E-04	-2.594E-15	-2.591E-15	-5.617E 02	-5.619E 02	-2.400E-12
0.97493	-6.702E-04	-6.705E-04	-1.126E-15	-1.126E-15	-5.617E 02	-5.619E 02	-1.187E-12
0.96622	-4.801E-04	-4.803E-04	-2.995E-16	-2.993E-16	-5.617E 02	-5.619E 02	-4.142E-13
0.95760	-3.740E-04	-3.742E-04	-1.403E-16	-1.402E-16	-5.617E 02	-5.619E 02	-1.603E-13
0.94062	-2.594E-04	-2.595E-04	-4.449E-17	-4.449E-17	-5.617E 02	-5.619E 02	-4.286E-14
0.92431	-1.985E-04	-1.986E-04	-1.943E-17	-1.942E-17	-5.617E 02	-5.619E 02	-1.615E-14
0.89195	-1.351E-04	-1.352E-04	-5.001E-18	-5.001E-18	-5.617E 02	-5.619E 02	-3.949E-15
0.86160	-1.024E-04	-1.024E-04	-1.962E-18	-1.962E-18	-5.617E 02	-5.619E 02	-1.438E-15
0.80680	-6.899E-05	-6.902E-05	-5.148E-19	-5.148E-19	-5.617E 02	-5.619E 02	-3.340E-16
0.76125	-5.202E-05	-5.204E-05	-2.035E-19	-2.035E-19	-5.617E 02	-5.619E 02	-1.176E-16
0.72068	-4.175E-05	-4.177E-05	-9.896E-20	-9.896E-20	-5.617E 02	-5.619E 02	-5.098E-17
0.70472	-3.486E-05	-3.488E-05	-5.416E-20	-5.416E-20	-5.617E 02	-5.619E 02	-2.591E-17
0.69656	-2.993E-05	-2.995E-05	-2.981E-20	-2.981E-20	-5.617E 02	-5.619E 02	-1.543E-17
0.70269	-2.622E-05	-2.623E-05	-1.710E-20	-1.710E-20	-5.617E 02	-5.619E 02	-9.906E-18
0.72273	-2.333E-05	-2.334E-05	-9.815E-21	-9.815E-21	-5.617E 02	-5.619E 02	-6.978E-18
0.75558	-2.101E-05	-2.102E-05	-5.626E-21	-5.626E-21	-5.617E 02	-5.619E 02	-5.226E-18

PROPAGATION FREQUENCY= 4.233E 08 ϕ_0= 0.120 θ_D= 3.162E-05 ρ_a= 1.018

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1200	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.1200	0.10000	193.643	9.995E-08	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.1200	0.20000	172.127	1.101E-07	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.1200	0.30000	150.611	1.230E-07	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.1200	0.40000	129.096	1.392E-07	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.1200	0.50000	107.580	1.584E-07	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.1200	0.60000	86.064	1.791E-07	1.000E 00	-1.817E-08	-1.817E-08	1.817E-08
0.70000	0.1200	0.70000	64.549	4.302E-07	1.000E 00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.1200	0.80000	43.034	1.127E-06	1.000E 00	-8.783E-08	-8.783E-08	8.783E-08
0.85000	0.1200	0.85000	32.277	2.808E-06	1.000E 00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.1200	0.90000	21.520	9.538E-06	1.000E 00	-4.322E-07	-4.323E-07	4.322E-07
0.92500	0.1200	0.92500	16.143	2.313E-05	1.000E 00	-7.965E-07	-7.966E-07	7.965E-07
0.95000	0.1200	0.95000	10.767	7.927E-05	9.999E-01	-2.019E-06	-2.019E-06	2.019E-06
0.96250	0.1200	0.96250	8.081	1.899E-04	9.999E-01	-3.969E-06	-3.971E-06	3.969E-06
0.97500	0.1200	0.97500	5.398	6.512E-04	9.997E-01	-1.198E-05	-1.199E-05	1.198E-05
0.98124	0.1200	0.98125	4.060	1.567E-03	9.995E-01	-2.769E-05	-2.773E-05	2.768E-05
0.98749	0.1200	0.98750	2.729	5.606E-03	9.990E-01	-1.130E-04	-1.133E-04	1.129E-04
0.99373	0.1202	0.99375	1.422	8.343E-02	9.976E-01	-2.986E-03	-3.016E-03	2.980E-03
0.99337	0.3184	1.00000	1.860	1.261E 02	3.059E 00	-6.222E-04	-6.185E-04	6.245E-04
0.98971	0.6110	1.00625	3.179	1.261E 02	6.042E 00	-6.523E-05	-6.510E-05	6.531E-05
0.98609	0.9060	1.01250	4.514	1.261E 02	8.992E 00	-2.080E-05	-2.078E-05	2.081E-05
0.98248	1.2031	1.01875	5.853	1.261E 02	1.191E 01	-9.468E-06	-9.462E-06	9.471E-06
0.97891	1.5025	1.02500	7.194	1.261E 02	1.479E 01	-5.566E-06	-5.564E-06	5.567E-06
0.97183	2.1079	1.03750	9.880	1.261E 02	2.044E 01	-2.395E-06	-2.394E-06	2.395E-06
0.96487	2.7221	1.05000	12.567	1.261E 02	2.597E 01	-1.464E-06	-1.463E-06	1.464E-06
0.95128	3.9771	1.07500	17.943	1.261E 02	3.662E 01	-6.492E-07	-6.491E-07	6.492E-07
0.93817	5.2679	1.10000	23.321	1.261E 02	4.680E 01	-3.586E-07	-3.586E-07	3.586E-07
0.91342	7.9572	1.15000	34.077	1.261E 02	6.582E 01	-1.512E-07	-1.512E-07	1.512E-07
0.89080	10.7897	1.20000	44.835	1.261E 02	8.325E 01	-8.022E-08	-8.022E-08	8.022E-08
0.85258	16.8679	1.30000	66.350	1.261E 02	1.141E 02	-3.294E-08	-3.294E-08	3.294E-08
0.82477	23.4247	1.40000	87.865	1.261E 02	1.405E 02	-1.737E-08	-1.737E-08	1.737E-08
0.80846	30.3615	1.50000	109.381	1.261E 02	1.634E 02	-1.077E-08	-1.077E-08	1.077E-08
0.80435	37.4652	1.60000	130.897	1.261E 02	1.835E 02	-7.218E-09	-7.218E-09	7.218E-09
0.81261	44.5324	1.70000	152.412	1.261E 02	2.012E 02	-4.866E-09	-4.866E-09	4.866E-09
0.83288	51.3562	1.80000	173.928	1.261E 02	2.169E 02	-3.433E-09	-3.433E-09	3.433E-09
0.86433	57.7700	1.90000	195.444	1.261E 02	2.310E 02	-2.421E-09	-2.421E-09	2.421E-09
0.90577	63.6658	2.00000	216.960	1.261E 02	2.436E 02	-1.728E-09	-1.728E-09	1.728E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.120 θ_D=3.162E-05 ρ_a=1.018

z	$_x\mu'-1_0$	T_o	$_o T_f - T_o$	$_x T_f - T_o$	$_o T_g - T_o$	$_x T_g - T_o$	$_o D_z - D_o$	$_x D_z - D_o$
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	99.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.783E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.018E-06	-9.018E-06	9.018E-06	9.018E-06	-2.405E-07	-2.405E-07
0.90000	4.323E-07	449.110	-1.581E-05	-1.581E-05	1.581E-05	1.581E-05	-6.103E-07	-6.103E-07
0.92500	7.966E-07	461.585	-2.325E-05	-2.325E-05	2.325E-05	2.325E-05	-1.125E-06	-1.125E-06
0.95000	2.020E-06	474.060	-3.945E-05	-3.945E-05	3.945E-05	3.946E-05	-2.851E-06	-2.851E-06
0.96250	3.971E-06	480.297	-5.692E-05	-5.692E-05	5.691E-05	5.693E-05	-5.604E-06	-5.606E-06
0.97500	1.199E-05	486.534	-1.006E-04	-1.006E-04	1.006E-04	1.007E-04	-1.692E-05	-1.693E-05
0.98124	2.775E-05	489.652	-1.589E-04	-1.589E-04	1.589E-04	1.591E-04	-3.910E-05	-3.915E-05
0.98749	1.135E-04	492.769	-3.368E-04	-3.373E-04	3.378E-04	3.387E-04	-1.596E-04	-1.600E-04
0.99373	3.041E-03	495.884	-2.248E-03	-2.264E-03	2.506E-03	2.537E-03	-4.216E-03	-4.259E-03
0.99337	6.170E-04	495.701	3.242E 00	3.242E 00	3.402E 00	3.402E 00	-8.786E-04	-8.733E-04
0.98971	6.503E-05	493.879	8.182E 00	8.182E 00	8.343E 00	8.343E 00	-9.211E-05	-9.192E-05
0.98609	2.077E-05	492.068	1.311E 01	1.311E 01	1.327E 01	1.327E 01	-2.937E-05	-2.934E-05
0.98248	9.459E-06	490.270	1.803E 01	1.803E 01	1.819E 01	1.819E 01	-1.337E-05	-1.336E-05
0.97891	5.563E-06	488.486	2.293E 01	2.293E 01	2.309E 01	2.309E 01	-7.859E-06	-7.856E-06
0.97183	2.394E-06	484.956	3.270E 01	3.270E 01	3.286E 01	3.286E 01	-3.381E-06	-3.380E-06
0.96487	1.465E-06	481.482	4.241E 01	4.241E 01	4.257E 01	4.257E 01	-2.067E-06	-2.066E-06
0.95128	6.491E-07	474.702	6.167E 01	6.167E 01	6.183E 01	6.183E 01	-9.166E-07	-9.165E-07
0.93817	3.586E-07	468.156	8.069E 01	8.069E 01	8.085E 01	8.085E 01	-5.063E-07	-5.063E-07
0.91342	1.512E-07	455.808	1.180E 02	1.180E 02	1.181E 02	1.181E 02	-2.135E-07	-2.135E-07
0.89080	8.022E-08	444.519	1.542E 02	1.542E 02	1.544E 02	1.544E 02	-1.133E-07	-1.133E-07
0.85258	3.294E-08	425.445	2.232E 02	2.232E 02	2.234E 02	2.234E 02	-4.651E-08	-4.651E-08
0.82477	1.737E-08	411.570	2.870E 02	2.870E 02	2.871E 02	2.871E 02	-2.452E-08	-2.452E-08
0.80846	1.077E-08	403.432	3.450E 02	3.450E 02	3.452E 02	3.452E 02	-1.520E-08	-1.520E-08
0.80435	7.218E-09	401.378	3.970E 02	3.970E 02	3.971E 02	3.971E 02	-1.019E-08	-1.019E-08
0.81261	4.866E-09	405.502	4.427E 02	4.427E 02	4.429E 02	4.429E 02	-6.871E-09	-6.871E-09
0.83288	3.433E-09	415.619	4.825E 02	4.825E 02	4.827E 02	4.827E 02	-4.847E-09	-4.847E-09
0.86433	2.421E-09	431.309	5.167E 02	5.167E 02	5.169E 02	5.169E 02	-3.419E-09	-3.419E-09
0.90577	1.726E-09	451.991	5.460E 02	5.460E 02	5.461E 02	5.461E 02	-2.440E-09	-2.440E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0=0.120 θ_D=3.162E-05 ρ_a=1.018

z	$_o D_y$	$_x D_y$	$_o \kappa$	$_x \kappa$	$_o \kappa_f$	$_x \kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-7.678E-18
0.10000	9.681E-13	1.125E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-1.030E-17
0.20000	2.914E-12	3.395E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-1.473E-17
0.30000	6.510E-12	7.346E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-2.316E-17
0.40000	1.478E-11	1.509E-11	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-3.921E-17
0.50000	2.953E-11	2.980E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-7.847E-17
0.60000	6.864E-11	6.864E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-1.835E-16
0.70000	1.939E-10	1.946E-10	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-5.363E-16
0.80000	8.030E-10	8.019E-10	-2.254E-18	-2.254E-18	-2.740E-08	-2.740E-08	-2.429E-15
0.85000	2.145E-09	2.147E-09	-6.000E-18	-6.000E-18	-5.537E-08	-5.537E-08	-7.036E-15
0.90000	8.289E-09	8.298E-09	-2.574E-17	-2.574E-17	-1.526E-07	-1.526E-07	-3.156E-14
0.92500	2.057E-08	2.058E-08	-5.948E-17	-5.949E-17	-3.033E-07	-3.033E-07	-9.611E-14
0.95000	7.948E-08	7.948E-08	-2.358E-16	-2.359E-16	-7.621E-07	-7.623E-07	-4.306E-13
0.96250	2.134E-07	2.135E-07	-6.814E-16	-6.818E-16	-1.511E-06	-1.512E-06	-1.226E-12
0.97500	1.009E-06	1.010E-06	-3.923E-15	-3.929E-15	-4.806E-06	-4.811E-06	-4.569E-12
0.98124	3.134E-06	3.139E-06	-1.525E-14	-1.529E-14	-1.256E-05	-1.258E-05	-1.092E-11
0.98749	2.029E-05	2.036E-05	-1.563E-13	-1.572E-13	-6.380E-05	-6.405E-05	-2.904E-11
0.99373	1.151E-03	1.164E-03	-7.943E-11	-8.105E-11	-7.501E-03	-7.630E-03	-5.528E-11
0.99337	-3.847E-03	-3.849E-03	-3.667E-12	-3.623E-12	-4.775E 02	-4.776E 02	-5.298E-11
0.98971	-1.943E-03	-1.943E-03	-6.217E-14	-6.191E-14	-4.775E 02	-4.776E 02	-2.015E-11
0.98609	-1.301E-03	-1.301E-03	-9.587E-15	-9.567E-15	-4.775E 02	-4.776E 02	-7.710E-12
0.98248	-9.772E-04	-9.775E-04	-2.725E-15	-2.721E-15	-4.775E 02	-4.776E 02	-3.563E-12
0.97891	-7.823E-04	-7.826E-04	-1.170E-15	-1.169E-15	-4.775E 02	-4.776E 02	-1.757E-12
0.97183	-5.592E-04	-5.594E-04	-3.078E-16	-3.077E-16	-4.775E 02	-4.776E 02	-6.091E-13
0.96487	-4.351E-04	-4.353E-04	-1.428E-16	-1.428E-16	-4.775E 02	-4.776E 02	-2.353E-13
0.95128	-3.013E-04	-3.014E-04	-4.494E-17	-4.494E-17	-4.775E 02	-4.776E 02	-6.261E-14
0.93817	-2.305E-04	-2.306E-04	-1.961E-17	-1.961E-17	-4.775E 02	-4.776E 02	-2.352E-14
0.91342	-1.568E-04	-1.568E-04	-5.033E-18	-5.033E-18	-4.775E 02	-4.776E 02	-5.728E-15
0.89080	-1.188E-04	-1.188E-04	-1.972E-18	-1.971E-18	-4.775E 02	-4.776E 02	-2.082E-15
0.85258	-7.999E-05	-8.002E-05	-5.165E-19	-5.165E-19	-4.775E 02	-4.776E 02	-4.828E-16
0.82477	-6.030E-05	-6.032E-05	-2.009E-19	-2.009E-19	-4.775E 02	-4.776E 02	-1.698E-16
0.80846	-4.839E-05	-4.841E-05	-9.915E-20	-9.915E-20	-4.775E 02	-4.776E 02	-7.358E-17
0.80435	-4.041E-05	-4.042E-05	-5.426E-20	-5.426E-20	-4.775E 02	-4.776E 02	-3.738E-17
0.81261	-3.469E-05	-3.470E-05	-2.986E-20	-2.986E-20	-4.775E 02	-4.776E 02	-2.225E-17
0.83288	-3.039E-05	-3.040E-05	-1.713E-20	-1.713E-20	-4.775E 02	-4.776E 02	-1.428E-17
0.86433	-2.703E-05	-2.704E-05	-9.832E-21	-9.832E-21	-4.775E 02	-4.776E 02	-1.006E-17
0.90577	-2.435E-05	-2.436E-05	-5.636E-21	-5.636E-21	-4.775E 02	-4.776E 02	-7.532E-18

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.150 θ_D= 4.193E-05 ρ_a= 1.020

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.1500	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.1500	0.10000	193.643	1.857E-07	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.1500	0.20000	172.127	1.935E-07	1.000E 00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.1500	0.30000	150.612	2.084E-07	1.000E 00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.1500	0.40000	129.096	2.293E-07	1.000E 00	-7.464E-09	-7.464E-09	7.464E-09
0.50000	0.1500	0.50000	107.580	2.535E-07	1.000E 00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.1500	0.60000	86.065	2.635E-07	1.000E 00	-1.816E-08	-1.817E-08	1.816E-08
0.70000	0.1500	0.70000	64.549	3.403E-07	1.000E-00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.1500	0.80000	43.035	1.381E-06	1.000E-00	-8.783E-08	-8.783E-08	8.783E-08
0.85000	0.1500	0.85000	32.278	3.302E-06	1.000E-00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.1500	0.90000	21.523	1.129E-05	1.000E-00	-4.321E-07	-4.321E-07	4.321E-07
0.92500	0.1500	0.92500	16.146	2.729E-05	9.999E-01	-7.962E-07	-7.965E-07	7.962E-07
0.95000	0.1500	0.95000	10.772	9.333E-05	9.998E-01	-2.017E-06	-2.018E-06	2.017E-06
0.96250	0.1500	0.96250	8.088	2.234E-04	9.997E-01	-3.959E-06	-3.960E-06	3.958E-06
0.97500	0.1500	0.97500	5.409	7.656E-04	9.993E-01	-1.192E-05	-1.193E-05	1.191E-05
0.98124	0.1500	0.98125	4.074	1.839E-03	9.988E-01	-2.745E-05	-2.749E-05	2.744E-05
0.98749	0.1500	0.98750	2.749	6.524E-03	9.977E-01	-1.100E-04	-1.103E-04	1.098E-04
0.99373	0.1502	0.99375	1.461	8.924E-02	9.953E-01	-2.520E-03	-2.543E-03	2.514E-03
0.99477	0.3618	1.00000	1.762	1.111E 02	3.079E 00	-7.765E-04	-7.714E-04	7.796E-04
0.99256	0.6984	1.00625	3.064	1.111E 02	6.722E 00	-7.365E-05	-7.349E-05	7.374E-05
0.99039	1.0368	1.01250	4.392	1.111E 02	1.020E 01	-2.247E-05	-2.245E-05	2.248E-05
0.98824	1.3767	1.01875	5.728	1.111E 02	1.360E 01	-1.010E-05	-1.010E-05	1.011E-05
0.98614	1.7181	1.02500	7.067	1.111E 02	1.696E 01	-5.843E-06	-5.840E-06	5.844E-06
0.98203	2.4054	1.03750	9.750	1.111E 02	2.354E 01	-2.482E-06	-2.481E-06	2.482E-06
0.97807	3.0984	1.05000	12.436	1.111E 02	2.996E 01	-1.498E-06	-1.498E-06	1.498E-06
0.97057	4.5009	1.07500	17.811	1.111E 02	4.235E 01	-6.590E-07	-6.590E-07	6.590E-07
0.96366	5.9244	1.10000	23.188	1.111E 02	5.417E 01	-3.629E-07	-3.628E-07	3.629E-07
0.95167	8.8289	1.15000	33.943	1.111E 02	7.627E 01	-1.526E-07	-1.526E-07	1.526E-07
0.94219	11.7996	1.20000	44.700	1.111E 02	9.653E 01	-8.076E-08	-8.076E-08	8.076E-08
0.93101	17.8817	1.30000	66.213	1.111E 02	1.324E 02	-3.308E-08	-3.308E-08	3.309E-08
0.93051	24.0403	1.40000	87.730	1.111E 02	1.631E 02	-1.742E-08	-1.742E-08	1.742E-08
0.94070	30.1353	1.50000	109.245	1.111E 02	1.897E 02	-1.079E-08	-1.079E-08	1.079E-08
0.96124	36.0348	1.60000	130.761	1.111E 02	2.130E 02	-7.236E-09	-7.236E-09	7.236E-09
0.99149	41.6310	1.70000	152.277	1.111E 02	2.336E 02	-4.877E-09	-4.877E-09	4.877E-09
1.03059	46.8496	1.80000	173.793	1.111E 02	2.518E 02	-3.440E-09	-3.440E-09	3.440E-09
1.07759	51.6502	1.90000	195.308	1.111E 02	2.682E 02	-2.427E-09	-2.427E-09	2.427E-09
1.13149	56.0219	2.00000	216.824	1.111E 02	2.829E 02	-1.732E-09	-1.732E-09	1.732E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.150 θ_D= 4.193E-05 ρ_a= 1.020

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.817E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.931E-08	-4.931E-08
0.80000	8.783E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.018E-06	-9.018E-06	9.018E-06	9.018E-06	-2.405E-07	-2.405E-07
0.90000	4.322E-07	449.110	-1.581E-05	-1.581E-05	1.581E-05	1.581E-05	-6.102E-07	-6.102E-07
0.92500	7.963E-07	461.585	-2.325E-05	-2.325E-05	2.325E-05	2.325E-05	-1.124E-06	-1.124E-06
0.95000	2.018E-06	474.060	-3.943E-05	-3.944E-05	3.943E-05	3.944E-05	-2.848E-06	-2.849E-06
0.96250	3.961E-06	480.297	-5.687E-05	-5.688E-05	5.687E-05	5.689E-05	-5.590E-06	-5.592E-06
0.97500	1.193E-05	486.534	-1.004E-04	-1.004E-04	1.004E-04	1.005E-04	-1.683E-05	-1.684E-05
0.98124	2.751E-05	489.652	-1.582E-04	-1.583E-04	1.583E-04	1.585E-04	-3.876E-05	-3.881E-05
0.98749	1.104E-04	492.770	-3.325E-04	-3.330E-04	3.339E-04	3.348E-04	-1.553E-04	-1.557E-04
0.99373	2.562E-03	495.884	-2.004E-03	-2.017E-03	2.300E-03	2.326E-03	-3.558E-03	-3.591E-03
0.99477	7.695E-04	496.400	2.542E 00	2.542E 00	2.699E 00	2.699E 00	-1.096E-03	-1.089E-03
0.99256	7.341E-05	495.299	6.761E 00	6.761E 00	6.919E 00	6.919E 00	-1.040E-04	-1.038E-04
0.99039	2.243E-05	494.214	1.096E 01	1.096E 01	1.112E 01	1.112E 01	-3.173E-05	-3.169E-05
0.98824	1.009E-05	493.145	1.515E 01	1.515E 01	1.531E 01	1.531E 01	-1.427E-05	-1.426E-05
0.98614	5.839E-06	492.094	1.932E 01	1.932E 01	1.948E 01	1.948E 01	-8.250E-06	-8.246E-06
0.98203	2.481E-06	490.045	2.761E 01	2.761E 01	2.777E 01	2.777E 01	-3.504E-06	-3.503E-06
0.97807	1.498E-06	488.066	3.583E 01	3.583E 01	3.598E 01	3.598E 01	-2.116E-06	-2.115E-06
0.97057	6.590E-07	484.325	5.204E 01	5.204E 01	5.220E 01	5.220E 01	-9.305E-07	-9.305E-07
0.96366	3.628E-07	480.879	6.796E 01	6.796E 01	6.812E 01	6.812E 01	-5.123E-07	-5.123E-07
0.95167	1.526E-07	474.896	9.890E 01	9.890E 01	9.906E 01	9.906E 01	-2.154E-07	-2.154E-07
0.94219	8.076E-08	470.162	1.286E 02	1.286E 02	1.287E 02	1.287E 02	-1.140E-07	-1.140E-07
0.93101	3.308E-08	464.586	1.841E 02	1.841E 02	1.842E 02	1.842E 02	-4.671E-08	-4.671E-08
0.93051	1.742E-08	464.336	2.342E 02	2.342E 02	2.344E 02	2.344E 02	-2.460E-08	-2.460E-08
0.94070	1.079E-08	469.421	2.790E 02	2.790E 02	2.792E 02	2.792E 02	-1.524E-08	-1.524E-08
0.96124	7.236E-09	479.672	3.187E 02	3.187E 02	3.188E 02	3.188E 02	-1.022E-08	-1.022E-08
0.99149	4.877E-09	494.766	3.535E 02	3.535E 02	3.536E 02	3.536E 02	-6.886E-09	-6.886E-09
1.03059	3.440E-09	514.279	3.839E 02	3.839E 02	3.840E 02	3.840E 02	-4.857E-09	-4.857E-09
1.07759	2.427E-09	537.728	4.103E 02	4.103E 02	4.105E 02	4.105E 02	-3.427E-09	-3.427E-09
1.13149	1.732E-09	564.625	4.333E 02	4.333E 02	4.335E 02	4.335E 02	-2.445E-09	-2.445E-09

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_0= 0.150 θ_D= 4.193E-05 ρ_a= 1.020

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.200E-17
0.10000	1.496E-12	1.417E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-1.609E-17
0.20000	3.765E-12	4.454E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-2.362E-17
0.30000	8.925E-12	8.780E-12	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-3.619E-17
0.40000	1.894E-11	1.931E-11	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-6.126E-17
0.50000	3.782E-11	3.787E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-1.226E-16
0.60000	8.532E-11	8.504E-11	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-2.867E-16
0.70000	2.434E-10	2.430E-10	-5.632E-19	-5.632E-19	-1.002E-08	-1.002E-08	-8.379E-16
0.80000	1.003E-09	1.003E-09	-2.254E-18	-2.254E-18	-2.740E-08	-2.740E-08	-3.794E-15
0.85000	2.691E-09	2.681E-09	-5.999E-18	-5.999E-18	-5.537E-08	-5.537E-08	-1.099E-14
0.90000	1.037E-08	1.037E-08	-2.573E-17	-2.573E-17	-1.526E-07	-1.526E-07	-4.929E-14
0.92500	2.571E-08	2.571E-08	-5.945E-17	-5.946E-17	-3.032E-07	-3.032E-07	-1.501E-13
0.95000	9.928E-08	9.930E-08	-2.355E-16	-2.356E-16	-7.615E-07	-7.617E-07	-6.716E-13
0.96250	2.658E-07	2.660E-07	-6.786E-16	-6.790E-16	-1.509E-06	-1.510E-06	-1.910E-12
0.97500	1.253E-06	1.254E-06	-3.891E-15	-3.896E-15	-4.784E-06	-4.788E-06	-7.096E-12
0.98124	3.897E-06	3.903E-06	-1.504E-14	-1.508E-14	-1.244E-05	-1.246E-05	-1.686E-11
0.98749	2.462E-05	2.470E-05	-1.493E-13	-1.501E-13	-6.191E-05	-6.215E-05	-4.459E-11
0.99373	1.172E-03	1.185E-03	-5.677E-11	-5.784E-11	-5.692E-03	-5.781E-03	-8.684E-11
0.99477	2.336E-03	2.329E-03	-5.583E-12	-5.507E-12	-3.437E 02	-3.438E 02	-9.174E-11
0.99256	4.669E-04	4.665E-04	-7.599E-14	-7.565E-14	-3.437E 02	-3.438E 02	-3.480E-11
0.99039	2.849E-04	2.847E-04	-1.087E-14	-1.084E-14	-3.437E 02	-3.438E 02	-1.314E-11
0.98824	2.095E-04	2.094E-04	-3.043E-15	-3.010E-15	-3.437E 02	-3.438E 02	-5.940E-12
0.98614	1.664E-04	1.663E-04	-1.264E-15	-1.263E-15	-3.437E 02	-3.438E 02	-2.912E-12
0.98203	1.181E-04	1.180E-04	-3.256E-16	-3.254E-16	-3.437E 02	-3.438E 02	-9.941E-13
0.97807	9.158E-05	9.152E-05	-1.481E-16	-1.481E-16	-3.437E 02	-3.438E 02	-3.824E-13
0.97057	6.324E-05	6.320E-05	-4.588E-17	-4.587E-17	-3.437E 02	-3.438E 02	-1.307E-13
0.96366	4.830E-05	4.827E-05	-1.999E-17	-1.999E-17	-3.437E 02	-3.438E 02	-3.758E-14
0.95167	3.281E-05	3.279E-05	-5.100E-18	-5.100E-18	-3.437E 02	-3.438E 02	-9.083E-15
0.94219	2.484E-05	2.483E-05	-1.991E-18	-1.991E-18	-3.437E 02	-3.438E 02	-3.290E-15
0.93101	1.672E-05	1.671E-05	-5.198E-19	-5.198E-19	-3.437E 02	-3.438E 02	-7.603E-16
0.93051	1.260E-05	1.259E-05	-2.019E-19	-2.019E-19	-3.437E 02	-3.438E 02	-2.669E-16
0.94070	1.011E-05	1.011E-05	-9.952E-20	-9.952E-20	-3.437E 02	-3.438E 02	-1.155E-16
0.96124	8.443E-06	8.437E-06	-5.447E-20	-5.447E-20	-3.437E 02	-3.438E 02	-5.862E-17
0.99149	7.247E-06	7.242E-06	-2.996E-20	-2.996E-20	-3.437E 02	-3.438E 02	-3.487E-17
1.03059	6.348E-06	6.344E-06	-1.719E-20	-1.719E-20	-3.437E 02	-3.438E 02	-2.237E-17
1.07759	5.647E-06	5.643E-06	-9.867E-21	-9.867E-21	-3.437E 02	-3.438E 02	-1.575E-17
1.13149	5.086E-06	5.082E-06	-5.656E-21	-5.656E-21	-3.437E 02	-3.438E 02	-1.179E-17

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_0= 0.200 θ_D= 6.699E-05 ρ_a= 1.025

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.2000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.2000	0.10000	193.643	4.313E-07	1.000E 00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.2000	0.20000	172.127	4.411E-07	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.2000	0.30000	150.612	4.561E-07	1.000E-00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.2000	0.40000	129.096	4.919E-07	1.000E-00	-7.463E-09	-7.464E-09	7.463E-09
0.50000	0.2000	0.50000	107.581	5.319E-07	1.000E-00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.2000	0.60000	86.066	5.469E-07	1.000E-00	-1.816E-08	-1.816E-08	1.816E-08
0.70000	0.2000	0.70000	64.551	9.338E-07	1.000E-00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.2000	0.80000	43.037	2.128E-06	1.000E-00	-8.782E-08	-8.782E-08	8.782E-08
0.85000	0.2000	0.85000	32.281	4.896E-06	1.000E-00	-1.703E-07	-1.703E-07	1.703E-07
0.90000	0.2000	0.90000	21.528	1.614E-05	9.999E-01	-4.319E-07	-4.319E-07	4.319E-07
0.92500	0.2000	0.92500	16.153	3.871E-05	9.998E-01	-7.956E-07	-7.957E-07	7.956E-07
0.95000	0.2000	0.95000	10.783	1.314E-04	9.996E-01	-2.013E-06	-2.014E-06	2.013E-06
0.96250	0.2000	0.96250	8.103	3.134E-04	9.993E-01	-3.937E-06	-3.938E-06	3.936E-06
0.97500	0.2000	0.97500	5.431	1.066E-03	9.984E-01	-1.178E-05	-1.179E-05	1.178E-05
0.98124	0.2000	0.98125	4.104	2.534E-03	9.974E-01	-2.694E-05	-2.698E-05	2.693E-05
0.98749	0.2001	0.98750	2.793	8.750E-03	9.954E-01	-1.037E-04	-1.039E-04	1.035E-04
0.99373	0.2002	0.99375	1.543	9.426E-02	9.947E-01	-1.784E-03	-1.798E-03	1.780E-03
0.99736	0.3797	1.00000	1.533	8.220E 01	2.335E 00	-1.875E-03	-1.861E-03	1.886E-03
0.99824	0.7343	1.00625	2.784	8.231E 01	5.615E 00	-1.057E-04	-1.054E-04	1.058E-04
0.99915	1.0887	1.01250	4.091	8.232E 01	9.055E 00	-2.720E-05	-2.716E-05	2.722E-05
1.00010	1.4426	1.01875	5.418	8.232E 01	1.242E 01	-1.187E-05	-1.186E-05	1.187E-05
1.00109	1.7959	1.02500	6.752	8.232E 01	1.572E 01	-6.589E-06	-6.586E-06	6.591E-06
1.00318	2.5005	1.03750	9.429	8.232E 01	2.218E 01	-2.711E-06	-2.711E-06	2.712E-06
1.00542	3.2020	1.05000	12.111	8.232E 01	2.848E 01	-1.588E-06	-1.588E-06	1.588E-06
1.01035	4.5952	1.07500	17.483	8.232E 01	4.063E 01	-6.841E-07	-6.840E-07	6.841E-07
1.01587	5.9742	1.10000	22.858	8.232E 01	5.223E 01	-3.737E-07	-3.736E-07	3.737E-07
1.02865	8.6838	1.15000	33.612	8.232E 01	7.390E 01	-1.560E-07	-1.560E-07	1.560E-07
1.04367	11.3211	1.20000	44.368	8.232E 01	9.376E 01	-8.213E-08	-8.213E-08	8.213E-08
1.08005	16.3496	1.30000	65.881	8.232E 01	1.289E 02	-3.344E-08	-3.344E-08	3.344E-08
1.12417	21.0171	1.40000	87.396	8.232E 01	1.590E 02	-1.757E-08	-1.757E-08	1.757E-08
1.17517	25.3061	1.50000	108.911	8.232E 01	1.851E 02	-1.086E-08	-1.086E-08	1.086E-08
1.23218	29.2185	1.60000	130.427	8.232E 01	2.080E 02	-7.281E-09	-7.281E-09	7.281E-09
1.29442	32.7700	1.70000	151.943	8.232E 01	2.281E 02	-4.903E-09	-4.903E-09	4.903E-09
1.36117	35.9846	1.80000	173.458	8.232E 01	2.460E 02	-3.459E-09	-3.459E-09	3.459E-09
1.43180	38.8904	1.90000	194.974	8.232E 01	2.621E 02	-2.440E-09	-2.440E-09	2.440E-09
1.50576	41.5170	2.00000	216.490	8.232E 01	2.765E 02	-1.741E-09	-1.741E-09	1.741E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.200 θ_D=6.699E-05 ρ_a=1.025

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.464E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.816E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.930E-08	-4.930E-08
0.80000	8.782E-08	399.209	-5.960E-06	-5.960E-06	5.960E-06	5.960E-06	-1.240E-07	-1.240E-07
0.85000	1.703E-07	424.160	-9.017E-06	-9.017E-06	9.017E-06	9.017E-06	-2.404E-07	-2.404E-07
0.90000	4.319E-07	449.110	-1.581E-05	-1.581E-05	1.581E-05	1.581E-05	-6.098E-07	-6.098E-07
0.92500	7.957E-07	461.585	-2.324E-05	-2.324E-05	2.324E-05	2.324E-05	-1.123E-06	-1.123E-06
0.95000	2.014E-06	474.060	-3.940E-05	-3.940E-05	3.940E-05	3.941E-05	-2.843E-06	-2.843E-06
0.96250	3.939E-06	480.297	-5.678E-05	-5.679E-05	5.678E-05	5.679E-05	-5.559E-06	-5.561E-06
0.97500	1.179E-05	486.534	-9.996E-05	-9.999E-05	9.999E-05	1.000E-04	-1.663E-05	-1.665E-05
0.98124	2.700E-05	489.652	-1.568E-04	-1.569E-04	1.570E-04	1.571E-04	-3.804E-05	-3.809E-05
0.98749	1.041E-04	492.769	-3.232E-04	-3.236E-04	3.259E-04	3.267E-04	-1.464E-04	-1.468E-04
0.99373	1.809E-03	495.884	-1.615E-03	-1.624E-03	1.947E-03	1.965E-03	-2.519E-03	-2.539E-03
0.99736	1.857E-03	497.695	1.245E 00	1.245E 00	1.397E 00	1.397E 00	-2.648E-03	-2.627E-03
0.99824	1.053E-04	498.133	3.925E 00	3.925E 00	4.080E 00	4.080E 00	-1.492E-04	-1.488E-04
0.99915	2.715E-05	498.588	6.588E 00	6.588E 00	6.744E 00	6.744E 00	-3.840E-05	-3.836E-05
1.00010	1.186E-05	499.062	9.233E 00	9.233E 00	9.389E 00	9.389E 00	-1.676E-05	-1.675E-05
1.00109	6.585E-06	499.554	1.186E 01	1.186E 01	1.201E 01	1.201E 01	-9.304E-06	-9.299E-06
1.00318	2.710E-06	500.597	1.705E 01	1.705E 01	1.721E 01	1.721E 01	-3.828E-06	-3.827E-06
1.00542	1.588E-06	501.715	2.217E 01	2.217E 01	2.233E 01	2.233E 01	-2.242E-06	-2.242E-06
1.01035	6.840E-07	504.176	3.219E 01	3.219E 01	3.234E 01	3.234E 01	-9.659E-07	-9.658E-07
1.01587	3.736E-07	506.931	4.191E 01	4.191E 01	4.206E 01	4.206E 01	-5.276E-07	-5.276E-07
1.02865	1.560E-07	513.309	6.048E 01	6.048E 01	6.064E 01	6.064E 01	-2.202E-07	-2.202E-07
1.04367	8.213E-08	520.804	7.794E 01	7.794E 01	7.809E 01	7.809E 01	-1.160E-07	-1.160E-07
1.08005	3.344E-08	538.957	1.097E 02	1.097E 02	1.098E 02	1.098E 02	-4.722E-08	-4.722E-08
1.12417	1.757E-08	560.975	1.376E 02	1.376E 02	1.377E 02	1.377E 02	-2.481E-08	-2.481E-08
1.17517	1.086E-08	586.423	1.620E 02	1.620E 02	1.622E 02	1.622E 02	-1.534E-08	-1.534E-08
1.23218	7.284E-09	614.874	1.835E 02	1.835E 02	1.836E 02	1.836E 02	-1.028E-08	-1.028E-08
1.29442	4.903E-09	645.933	2.023E 02	2.023E 02	2.025E 02	2.025E 02	-6.923E-09	-6.923E-09
1.36117	3.459E-09	679.241	2.189E 02	2.189E 02	2.191E 02	2.191E 02	-4.884E-09	-4.884E-09
1.43180	2.440E-09	714.484	2.336E 02	2.336E 02	2.337E 02	2.337E 02	-3.445E-09	-3.445E-09
1.50576	1.741E-09	751.390	2.466E 02	2.466E 02	2.467E 02	2.467E 02	-2.458E-09	-2.458E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.200 θ_D=6.699E-05 ρ_a=1.025

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-2.133E-17
0.10000	1.966E-12	1.952E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-2.861E-17
0.20000	5.623E-12	5.558E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-4.092E-17
0.30000	1.207E-11	1.189E-11	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-6.433E-17
0.40000	2.542E-11	2.552E-11	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-1.089E-16
0.50000	5.025E-11	5.036E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-2.180E-16
0.60000	1.143E-10	1.145E-10	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-5.097E-16
0.70000	3.255E-10	3.255E-10	-5.631E-19	-5.631E-19	-1.002E-08	-1.002E-08	-1.490E-15
0.80000	1.341E-09	1.340E-09	-2.253E-18	-2.254E-18	-2.740E-08	-2.740E-08	-6.744E-15
0.85000	3.588E-09	3.582E-09	-5.997E-18	-5.997E-18	-5.536E-08	-5.536E-08	-1.953E-14
0.90000	1.385E-08	1.384E-08	-2.571E-17	-2.571E-17	-1.525E-07	-1.525E-07	-8.755E-14
0.92500	3.430E-08	3.431E-08	-5.939E-17	-5.940E-17	-3.030E-07	-3.030E-07	-2.663E-13
0.95000	1.323E-07	1.323E-07	-2.348E-16	-2.349E-16	-7.602E-07	-7.603E-07	-1.189E-12
0.96250	3.573E-07	3.574E-07	-6.725E-16	-6.730E-16	-1.504E-06	-1.504E-06	-3.378E-12
0.97500	1.654E-06	1.656E-06	-3.822E-15	-3.827E-15	-4.736E-06	-4.740E-06	-1.245E-11
0.98124	5.085E-06	5.093E-06	-1.459E-14	-1.462E-14	-1.219E-05	-1.221E-05	-2.925E-11
0.98749	3.021E-05	3.032E-05	-1.351E-13	-1.358E-13	-5.807E-05	-5.828E-05	-7.643E-11
0.99373	1.077E-03	1.087E-03	-2.869E-11	-2.915E-11	-3.326E-03	-3.370E-03	-1.569E-10
0.99736	1.390E-02	1.388E-02	-3.166E-11	-3.116E-11	-1.484E 02	-1.484E 02	-1.564E-10
0.99824	3.896E-03	3.896E-03	-1.396E-13	-1.389E-13	-1.484E 02	-1.484E 02	-7.721E-11
0.99915	2.353E-03	2.353E-03	-1.482E-14	-1.478E-14	-1.484E 02	-1.484E 02	-2.958E-11
1.00010	1.700E-03	1.701E-03	-3.868E-15	-3.862E-15	-1.484E 02	-1.484E 02	-1.256E-11
1.00109	1.334E-03	1.334E-03	-1.532E-15	-1.531E-15	-1.484E 02	-1.484E 02	-6.938E-12
1.00318	9.331E-04	9.332E-04	-3.741E-16	-3.739E-16	-1.484E 02	-1.484E 02	-1.978E-12
1.00542	7.180E-04	7.180E-04	-1.622E-16	-1.621E-16	-1.484E 02	-1.484E 02	-7.519E-13
1.01035	4.915E-04	4.915E-04	-4.828E-17	-4.828E-17	-1.484E 02	-1.484E 02	-1.929E-13
1.01587	3.737E-04	3.737E-04	-2.096E-17	-2.096E-17	-1.484E 02	-1.484E 02	-7.070E-14
1.02865	2.526E-04	2.526E-04	-5.267E-18	-5.267E-18	-1.484E 02	-1.484E 02	-1.676E-14
1.04367	1.908E-04	1.908E-04	-2.041E-18	-2.041E-18	-1.484E 02	-1.484E 02	-6.316E-15
1.08005	1.281E-04	1.281E-04	-5.282E-19	-5.282E-19	-1.484E 02	-1.484E 02	-1.378E-15
1.12417	9.643E-05	9.643E-05	-2.044E-19	-2.044E-19	-1.484E 02	-1.484E 02	-4.814E-16
1.17517	7.731E-05	7.731E-05	-1.005E-19	-1.005E-19	-1.484E 02	-1.484E 02	-2.079E-16
1.23218	6.452E-05	6.452E-05	-5.498E-20	-5.498E-20	-1.484E 02	-1.484E 02	-1.052E-16
1.29442	5.536E-05	5.536E-05	-3.022E-20	-3.022E-20	-1.484E 02	-1.484E 02	-6.248E-17
1.36117	4.847E-05	4.848E-05	-1.734E-20	-1.734E-20	-1.484E 02	-1.484E 02	-4.002E-17
1.43180	4.311E-05	4.312E-05	-9.952E-21	-9.952E-21	-1.484E 02	-1.484E 02	-2.813E-17
1.50576	3.882E-05	3.882E-05	-5.705E-21	-5.705E-21	-1.484E 02	-1.484E 02	-2.104E-17

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_o= 0.250 θ_D= 2.020E-04 ρ_a= 1.041

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.2500	0.	215.459	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.2500	0.10000	193.643	2.835E-08	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.2500	0.20000	172.128	4.336E-08	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.2500	0.30000	150.612	6.170E-08	1.000E-00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.2500	0.40000	129.097	1.051E-07	1.000E-00	-7.463E-09	-7.463E-09	7.463E-09
0.50000	0.2500	0.50000	107.582	1.567E-07	1.000E-00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.2500	0.60000	86.067	1.834E-07	1.000E-00	-1.816E-08	-1.816E-08	1.816E-08
0.70000	0.2500	0.70000	64.552	6.870E-07	1.000E-00	-3.492E-08	-3.492E-08	3.492E-08
0.80000	0.2500	0.80000	43.040	2.281E-06	1.000E-00	-8.780E-08	-8.781E-08	8.780E-08
0.85000	0.2500	0.85000	32.286	5.923E-06	9.999E-01	-1.702E-07	-1.702E-07	1.702E-07
0.90000	0.2500	0.90000	21.535	2.070E-05	9.998E-01	-4.315E-07	-4.316E-07	4.315E-07
0.92500	0.2500	0.92500	16.162	5.043E-05	9.997E-01	-7.948E-07	-7.948E-07	7.948E-07
0.95000	0.2500	0.95000	10.797	1.719E-04	9.993E-01	-2.008E-06	-2.009E-06	2.008E-06
0.96250	0.2500	0.96250	8.122	4.092E-04	9.987E-01	-3.909E-06	-3.910E-06	3.908E-06
0.97500	0.2500	0.97500	5.459	1.383E-03	9.974E-01	-1.161E-05	-1.162E-05	1.160E-05
0.98124	0.2500	0.98125	4.144	3.257E-03	9.959E-01	-2.631E-05	-2.634E-05	2.629E-05
0.98749	0.2501	0.98750	2.849	1.087E-02	9.935E-01	-9.624E-05	-9.649E-05	9.613E-05
0.99373	0.2503	0.99375	1.642	9.012E-02	9.970E-01	-1.174E-03	-1.182E-03	1.172E-03
0.99959	0.3177	1.00000	1.196	4.123E 01	1.321E 00	-1.094E-02	-1.084E-02	1.111E-02
1.00425	0.5548	1.00625	2.279	4.203E 01	3.759E 00	-2.402E-04	-2.393E-04	2.407E-04
1.00891	0.7909	1.01250	3.547	4.205E 01	6.597E 00	-4.430E-05	-4.423E-05	4.434E-05
1.01360	1.0250	1.01875	4.856	4.206E 01	9.459E 00	-1.675E-05	-1.674E-05	1.676E-05
1.01830	1.2570	1.02500	6.180	4.206E 01	1.230E 01	-8.191E-06	-8.187E-06	8.193E-06
1.02776	1.7146	1.03750	8.846	4.206E 01	1.789E 01	-3.182E-06	-3.181E-06	3.182E-06
1.03728	2.1638	1.05000	11.525	4.206E 01	2.336E 01	-1.763E-06	-1.763E-06	1.764E-06
1.05652	3.0379	1.07500	16.892	4.206E 01	3.392E 01	-7.316E-07	-7.315E-07	7.316E-07
1.07599	3.8806	1.10000	22.265	4.206E 01	4.401E 01	-3.972E-07	-3.972E-07	3.972E-07
1.11559	5.4769	1.15000	33.016	4.206E 01	6.286E 01	-1.622E-07	-1.622E-07	1.622E-07
1.15600	6.9627	1.20000	43.771	4.206E 01	8.015E 01	-8.463E-08	-8.463E-08	8.463E-08
1.23891	9.6392	1.30000	65.283	4.206E 01	1.107E 02	-3.410E-08	-3.410E-08	3.410E-08
1.32419	11.9755	1.40000	86.797	4.206E 01	1.369E 02	-1.784E-08	-1.784E-08	1.784E-08
1.41141	14.0261	1.50000	108.312	4.206E 01	1.597E 02	-1.098E-08	-1.098E-08	1.098E-08
1.50022	15.8361	1.60000	129.827	4.206E 01	1.796E 02	-7.363E-09	-7.363E-09	7.363E-09
1.59036	17.4423	1.70000	151.343	4.206E 01	1.971E 02	-4.951E-09	-4.951E-09	4.951E-09
1.68161	18.8753	1.80000	172.858	4.206E 01	2.127E 02	-3.493E-09	-3.493E-09	3.493E-09
1.77381	20.1600	1.90000	194.374	4.206E 01	2.266E 02	-2.464E-09	-2.464E-09	2.464E-09
1.86681	21.3172	2.00000	215.890	4.206E 01	2.392E 02	-1.757E-09	-1.757E-09	1.757E-09

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_o= 0.250 θ_D= 2.020E-04 ρ_a= 1.041

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.463E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.816E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.492E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.930E-08	-4.930E-08
0.80000	8.781E-08	399.209	-5.959E-06	-5.959E-06	5.959E-06	5.959E-06	-1.240E-07	-1.240E-07
0.85000	1.702E-07	424.160	-9.016E-06	-9.016E-06	9.016E-06	9.016E-06	-2.403E-07	-2.403E-07
0.90000	4.316E-07	449.110	-1.580E-05	-1.580E-05	1.580E-05	1.580E-05	-6.093E-07	-6.094E-07
0.92500	7.949E-07	461.585	-2.323E-05	-2.323E-05	2.323E-05	2.323E-05	-1.122E-06	-1.122E-06
0.95000	2.009E-06	474.060	-3.936E-05	-3.936E-05	3.936E-05	3.936E-05	-2.836E-06	-2.836E-06
0.96250	3.911E-06	480.297	-5.666E-05	-5.667E-05	5.666E-05	5.668E-05	-5.519E-06	-5.521E-06
0.97500	1.162E-05	486.534	-9.939E-05	-9.942E-05	9.944E-05	9.950E-05	-1.639E-05	-1.640E-05
0.98124	2.636E-05	489.652	-1.550E-04	-1.550E-04	1.553E-04	1.555E-04	-3.714E-05	-3.719E-05
0.98749	9.662E-05	492.769	-3.120E-04	-3.124E-04	3.163E-04	3.171E-04	-1.359E-04	-1.362E-04
0.99373	1.187E-03	495.884	-1.314E-03	-1.320E-03	1.619E-03	1.631E-03	-1.658E-03	-1.669E-03
0.99959	1.091E-02	498.808	1.340E-01	1.339E-01	2.774E-01	2.775E-01	-1.545E-02	-1.531E-02
1.00425	2.389E-04	501.130	9.238E-01	9.238E-01	1.081E 00	1.081E 00	-3.392E-04	-3.379E-04
1.00891	4.420E-05	503.459	1.713E 00	1.713E 00	1.870E 00	1.870E 00	-6.255E-05	-6.245E-05
1.01360	1.673E-05	505.798	2.493E 00	2.493E 00	2.651E 00	2.651E 00	-2.366E-05	-2.363E-05
1.01830	8.184E-06	508.145	3.264E 00	3.264E 00	3.422E 00	3.422E 00	-1.157E-05	-1.156E-05
1.02776	3.180E-06	512.865	4.782E 00	4.782E 00	4.940E 00	4.940E 00	-4.492E-06	-4.491E-06
1.03728	1.763E-06	517.617	6.268E 00	6.268E 00	6.426E 00	6.426E 00	-2.490E-06	-2.489E-06
1.05652	7.315E-07	527.214	9.146E 00	9.146E 00	9.304E 00	9.304E 00	-1.033E-06	-1.033E-06
1.07599	3.972E-07	536.930	1.191E 01	1.191E 01	1.206E 01	1.206E 01	-5.608E-07	-5.608E-07
1.11559	1.622E-07	556.692	1.709E 01	1.709E 01	1.725E 01	1.725E 01	-2.290E-07	-2.290E-07
1.15600	8.463E-08	576.856	2.188E 01	2.188E 01	2.204E 01	2.204E 01	-1.195E-07	-1.195E-07
1.23891	3.410E-08	618.232	3.041E 01	3.041E 01	3.056E 01	3.056E 01	-4.815E-08	-4.815E-08
1.32419	1.784E-08	660.788	3.775E 01	3.775E 01	3.791E 01	3.791E 01	-2.518E-08	-2.518E-08
1.41141	1.098E-08	704.308	4.413E 01	4.413E 01	4.429E 01	4.429E 01	-1.551E-08	-1.551E-08
1.50022	7.363E-09	748.625	4.972E 01	4.972E 01	4.987E 01	4.987E 01	-1.040E-08	-1.040E-08
1.59036	4.951E-09	793.606	5.464E 01	5.464E 01	5.479E 01	5.479E 01	-6.991E-09	-6.991E-09
1.68161	3.493E-09	839.143	5.900E 01	5.900E 01	5.916E 01	5.916E 01	-4.932E-09	-4.932E-09
1.77381	2.464E-09	885.150	6.289E 01	6.289E 01	6.305E 01	6.305E 01	-3.479E-09	-3.479E-09
1.86681	1.757E-09	931.559	6.639E 01	6.639E 01	6.655E 01	6.655E 01	-2.481E-09	-2.481E-09

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_o= C.250 θ_D= 2.020E-04 ρ_o= 1.041

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-3.333E-17
0.10000	2.513E-12	2.464E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-4.471E-17
0.20000	7.021E-12	7.021E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-6.394E-17
0.30000	1.500E-11	1.486E-11	-3.128E-20	-3.128E-20	-6.833E-10	-6.833E-10	-1.005E-16
0.40000	3.169E-11	3.180E-11	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-1.702E-16
0.50000	6.273E-11	6.315E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-3.406E-16
0.60000	1.426E-10	1.432E-10	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-7.963E-16
0.70000	4.074E-10	4.074E-10	-5.631E-19	-5.631E-19	-1.002E-08	-1.002E-08	-2.327E-15
0.80000	1.677E-09	1.677E-09	-2.253E-18	-2.253E-18	-2.740E-08	-2.740E-08	-1.053E-14
0.85000	4.483E-09	4.481E-09	-5.995E-18	-5.995E-18	-5.535E-08	-5.535E-08	-3.050E-14
0.90000	1.731E-08	1.731E-08	-2.568E-17	-2.568E-17	-1.524E-07	-1.525E-07	-1.366E-13
0.92500	4.286E-08	4.286E-08	-5.930E-17	-5.931E-17	-3.027E-07	-3.028E-07	-4.151E-13
0.95000	1.649E-07	1.650E-07	-2.339E-16	-2.339E-16	-7.585E-07	-7.586E-07	-1.848E-12
0.96250	4.413E-07	4.415E-07	-6.649E-16	-6.653E-16	-1.497E-06	-1.497E-06	-5.243E-12
0.97500	2.030E-06	2.032E-06	-3.735E-15	-3.740E-15	-4.675E-06	-4.679E-06	-1.914E-11
0.98124	6.166E-06	6.176E-06	-1.403E-14	-1.406E-14	-1.188E-05	-1.190E-05	-4.430E-11
0.98749	3.422E-05	3.433E-05	-1.191E-13	-1.197E-13	-5.365E-05	-5.384E-05	-1.143E-10
0.99373	9.312E-04	9.397E-04	-1.254E-11	-1.271E-11	-1.934E-03	-1.955E-03	-2.558E-10
0.99959	3.033E-02	3.031E-02	-1.171E-09	-1.150E-09	-3.494E 01	-3.495E 01	-1.919E-10
1.00425	8.171E-03	8.171E-03	-6.038E-13	-5.993E-13	-3.503E 01	-3.504E 01	-1.753E-10
1.00891	4.571E-03	4.571E-03	-3.279E-14	-3.268E-14	-3.503E 01	-3.504E 01	-6.682E-11
1.01360	3.162E-03	3.162E-03	-6.744E-15	-6.732E-15	-3.503E 01	-3.504E 01	-2.681E-11
1.01830	2.415E-03	2.416E-03	-2.169E-15	-2.167E-15	-3.503E 01	-3.504E 01	-1.290E-11
1.02776	1.640E-03	1.640E-03	-4.810E-16	-4.807E-16	-3.503E 01	-3.504E 01	-3.857E-12
1.03728	1.241E-03	1.241E-03	-1.910E-16	-1.909E-16	-3.503E 01	-3.504E 01	-1.424E-12
1.05652	8.346E-04	8.347E-04	-5.294E-17	-5.293E-17	-3.503E 01	-3.504E 01	-3.464E-13
1.07599	6.287E-04	6.288E-04	-2.292E-17	-2.292E-17	-3.503E 01	-3.504E 01	-1.217E-13
1.11559	4.210E-04	4.210E-04	-5.583E-18	-5.582E-18	-3.503E 01	-3.504E 01	-2.803E-14
1.15600	3.164E-04	3.165E-04	-2.134E-18	-2.134E-18	-3.503E 01	-3.504E 01	-9.893E-15
1.23891	2.114E-04	2.114E-04	-5.437E-19	-5.437E-19	-3.503E 01	-3.504E 01	-2.231E-15
1.32419	1.587E-04	1.587E-04	-2.089E-19	-2.089E-19	-3.503E 01	-3.504E 01	-7.722E-16
1.41141	1.271E-04	1.271E-04	-1.022E-19	-1.022E-19	-3.503E 01	-3.504E 01	-3.321E-16
1.50022	1.059E-04	1.059E-04	-5.591E-20	-5.591E-20	-3.503E 01	-3.504E 01	-1.670E-16
1.59036	9.083E-05	9.084E-05	-3.069E-20	-3.069E-20	-3.503E 01	-3.504E 01	-9.900E-17
1.68161	7.950E-05	7.950E-05	-1.761E-20	-1.761E-20	-3.503E 01	-3.504E 01	-6.322E-17
1.77381	7.068E-05	7.068E-05	-1.011E-20	-1.011E-20	-3.503E 01	-3.504E 01	-4.434E-17
1.86681	6.362E-05	6.362E-05	-5.794E-21	-5.794E-21	-3.503E 01	-3.504E 01	-3.312E-17

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_0= 0.300 θ_D= 3.988E-04 ρ_o= 1.145

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.3000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.3000	0.10000	193.643	3.502E-08	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.3000	0.20000	172.128	5.253E-08	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.3000	0.30000	150.613	8.171E-08	1.000E-00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.3000	0.40000	129.097	1.384E-07	1.000E-00	-7.463E-09	-7.463E-09	7.463E-09
0.50000	0.3000	0.50000	107.582	1.868E-07	1.000E-00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.3000	0.60000	86.068	2.268E-07	1.000E-00	-1.816E-08	-1.816E-08	1.816E-08
0.70000	0.3000	0.70000	64.555	8.538E-07	1.000E-00	-3.491E-08	-3.491E-08	3.491E-08
0.80000	0.3000	0.80000	43.044	2.788E-06	9.999E-01	-8.779E-08	-8.779E-08	8.779E-08
0.85000	0.3000	0.85000	32.291	7.150E-06	9.999E-01	-1.702E-07	-1.702E-07	1.702E-07
0.90000	0.3000	0.90000	21.543	2.513E-05	9.998E-01	-4.312E-07	-4.312E-07	4.311E-07
0.92500	0.3000	0.92500	16.174	6.099E-05	9.996E-01	-7.938E-07	-7.938E-07	7.938E-07
0.95000	0.3000	0.95000	10.814	2.076E-04	9.991E-01	-2.002E-06	-2.003E-06	2.002E-06
0.96250	0.3000	0.96250	8.144	4.917E-04	9.985E-01	-3.875E-06	-3.876E-06	3.874E-06
0.97500	0.3000	0.97500	5.494	1.648E-03	9.970E-01	-1.140E-05	-1.141E-05	1.140E-05
0.98124	0.3000	0.98125	4.187	3.837E-03	9.955E-01	-2.556E-05	-2.559E-05	2.554E-05
0.98749	0.3001	0.98750	2.915	1.237E-02	9.937E-01	-8.807E-05	-8.828E-05	8.797E-05
0.99373	0.3003	0.99375	1.755	8.303E-02	1.001E 00	-7.832E-04	-7.874E-04	7.817E-04
0.99996	0.3065	1.00000	1.151	3.731E 00	7.363E-01	-1.509E-02	-1.508E-02	1.533E-02
1.00616	0.3431	1.00625	1.851	6.556E 00	2.231E 00	-6.344E-04	-6.313E-04	6.364E-04
1.01236	0.3834	1.01250	3.628	6.613E 00	4.279E 00	-7.648E-05	-7.632E-05	7.657E-05
1.01857	0.4234	1.01875	4.305	6.620E 00	6.469E 00	-2.374E-05	-2.372E-05	2.376E-05
1.02478	0.4629	1.02500	5.614	6.622E 00	8.690E 00	-1.072E-05	-1.071E-05	1.073E-05
1.03720	0.5406	1.03750	8.266	6.623E 00	1.311E 01	-3.735E-06	-3.734E-06	3.735E-06
1.04962	0.6164	1.05000	10.936	6.624E 00	1.746E 01	-1.959E-06	-1.959E-06	1.960E-06
1.07447	0.7629	1.07500	16.296	6.624E 00	2.589E 01	-7.829E-07	-7.828E-07	7.829E-07
1.09933	0.9027	1.10000	21.665	6.624E 00	3.394E 01	-4.252E-07	-4.252E-07	4.252E-07
1.14906	1.1642	1.15000	32.413	6.624E 00	4.901E 01	-1.688E-07	-1.688E-07	1.688E-07
1.19882	1.4040	1.20000	43.166	6.624E 00	6.283E 01	-8.725E-08	-8.725E-08	8.725E-08
1.29839	1.8685	1.30000	64.677	6.624E 00	8.729E 01	-3.478E-08	-3.478E-08	3.478E-08
1.39803	2.1925	1.40000	86.190	6.624E 00	1.083E 02	-1.811E-08	-1.811E-08	1.811E-08
1.49771	2.5080	1.50000	107.705	6.624E 00	1.264E 02	-1.111E-08	-1.111E-08	1.111E-08
1.59743	2.7842	1.60000	129.220	6.624E 00	1.423E 02	-7.446E-09	-7.446E-09	7.446E-09
1.69718	3.0279	1.70000	150.735	6.624E 00	1.564E 02	-5.000E-09	-5.000E-09	5.000E-09
1.79697	3.2445	1.80000	172.250	6.624E 00	1.688E 02	-3.527E-09	-3.527E-09	3.527E-09
1.89677	3.4384	1.90000	193.766	6.624E 00	1.800E 02	-2.488E-09	-2.488E-09	2.488E-09
1.99660	3.6128	2.00000	215.281	6.624E 00	1.900E 02	-1.774E-09	-1.774E-09	1.774E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.300 θ_D= 3.988E-04 ρ_a= 1.145

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.463E-09	199.605	-7.723E-07	-7.723E-07	7.723E-07	7.723E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.816E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.565E-08	-2.565E-08
0.70000	3.491E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.930E-08	-4.930E-08
0.80000	8.779E-08	399.209	-5.959E-06	-5.959E-06	5.959E-06	5.959E-06	-1.240E-07	-1.240E-07
0.85000	1.702E-07	424.160	-9.015E-06	-9.015E-06	9.015E-06	9.015E-06	-2.403E-07	-2.403E-07
0.90000	4.312E-07	449.110	-1.580E-05	-1.580E-05	1.580E-05	1.580E-05	-6.088E-07	-6.088E-07
0.92500	7.939E-07	461.585	-2.321E-05	-2.321E-05	2.321E-05	2.321E-05	-1.121E-06	-1.121E-06
0.95000	2.005E-06	474.060	-3.930E-05	-3.931E-05	3.930E-05	3.931E-05	-2.827E-06	-2.828E-06
0.96250	3.877E-06	480.297	-5.651E-05	-5.651E-05	5.651E-05	5.653E-05	-5.471E-06	-5.473E-06
0.97500	1.141E-05	486.534	-9.869E-05	-9.872E-05	9.878E-05	9.883E-05	-1.610E-05	-1.611E-05
0.98124	2.560E-05	489.652	-1.528E-04	-1.529E-04	1.533E-04	1.535E-04	-3.609E-05	-3.613E-05
0.98749	8.839E-05	492.769	-3.001E-04	-3.005E-04	3.057E-04	3.064E-04	-1.243E-04	-1.246E-04
0.99373	7.902E-04	495.884	-1.093E-03	-1.098E-03	1.352E-03	1.361E-03	-1.106E-03	-1.112E-03
0.99996	1.530E-02	498.992	-2.418E-03	-2.496E-03	4.200E-02	4.215E-02	-2.131E-02	-2.129E-02
1.00616	6.301E-04	502.084	7.157E-03	7.151E-03	8.544E-02	8.545E-02	-8.958E-04	-8.914E-04
1.01236	7.624E-05	505.180	2.997E-02	2.997E-02	1.098E-01	1.098E-01	-1.080E-04	-1.078E-04
1.01857	2.371E-05	508.277	5.138E-02	5.138E-02	1.314E-01	1.314E-01	-3.353E-05	-3.349E-05
1.02478	1.071E-05	511.375	7.200E-02	7.199E-02	1.521E-01	1.522E-01	-1.514E-05	-1.513E-05
1.03720	3.733E-06	517.573	1.119E-01	1.119E-01	1.921E-01	1.921E-01	-5.273E-06	-5.272E-06
1.04962	1.959E-06	523.772	1.505E-01	1.505E-01	2.307E-01	2.307E-01	-2.767E-06	-2.766E-06
1.07447	7.828E-07	536.173	2.246E-01	2.246E-01	3.049E-01	3.049E-01	-1.105E-06	-1.105E-06
1.09933	4.254E-07	548.578	2.952E-01	2.952E-01	3.755E-01	3.756E-01	-6.004E-07	-6.004E-07
1.14906	1.688E-07	573.396	4.271E-01	4.271E-01	5.074E-01	5.074E-01	-2.383E-07	-2.383E-07
1.19882	8.725E-08	598.226	5.479E-01	5.479E-01	6.283E-01	6.283E-01	-1.232E-07	-1.232E-07
1.29839	3.478E-08	647.913	7.616E-01	7.616E-01	8.420E-01	8.420E-01	-4.910E-08	-4.910E-08
1.39803	1.811E-08	697.631	9.448E-01	9.448E-01	1.025E 00	1.025E 00	-2.557E-08	-2.557E-08
1.49771	1.111E-08	747.374	1.104E 00	1.104E 00	1.184E 00	1.184E 00	-1.568E-08	-1.568E-08
1.59743	7.446E-09	797.136	1.242E 00	1.242E 00	1.323E 00	1.323E 00	-1.051E-08	-1.051E-08
1.69718	5.006E-09	846.915	1.365E 00	1.365E 00	1.445E 00	1.445E 00	-7.060E-09	-7.060E-09
1.79697	3.527E-09	896.707	1.460E 00	1.460E 00	1.541E 00	1.541E 00	-4.981E-09	-4.980E-09
1.89677	2.488E-09	946.511	1.544E 00	1.544E 00	1.624E 00	1.624E 00	-3.513E-09	-3.513E-09
1.99660	1.774E-09	996.324	1.627E 00	1.627E 00	1.707E 00	1.707E 00	-2.505E-09	-2.505E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.300 θ_D= 3.988E-04 ρ_a= 1.145

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-4.799E-17
0.10000	3.077E-12	3.043E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-6.438E-17
0.20000	8.531E-12	8.447E-12	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-9.208E-17
0.30000	1.800E-11	1.798E-11	-3.128E-20	-3.128E-20	-6.832E-10	-6.832E-10	-1.447E-16
0.40000	3.836E-11	3.809E-11	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-2.450E-16
0.50000	7.595E-11	7.595E-11	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-4.904E-16
0.60000	1.718E-10	1.720E-10	-2.146E-19	-2.146E-19	-4.739E-09	-4.739E-09	-1.147E-15
0.70000	4.890E-10	4.892E-10	-5.630E-19	-5.630E-19	-1.002E-08	-1.002E-08	-3.351E-15
0.80000	2.012E-09	2.012E-09	-2.252E-18	-2.252E-18	-2.739E-08	-2.739E-08	-1.516E-14
0.85000	5.378E-09	5.377E-09	-5.992E-18	-5.992E-18	-5.533E-08	-5.533E-08	-4.390E-14
0.90000	2.076E-08	2.076E-08	-2.565E-17	-2.565E-17	-1.523E-07	-1.523E-07	-1.965E-13
0.92500	5.137E-08	5.138E-08	-5.920E-17	-5.921E-17	-3.024E-07	-3.024E-07	-5.96CE-13
0.95000	1.973E-07	1.974E-07	-2.328E-16	-2.328E-16	-7.564E-07	-7.565E-07	-2.644E-12
0.96250	5.219E-07	5.222E-07	-6.556E-16	-6.561E-16	-1.488E-06	-1.489E-06	-7.488E-12
0.97500	2.388E-06	2.390E-06	-3.633E-15	-3.638E-15	-4.602E-06	-4.606E-06	-2.701E-11
0.98124	7.163E-06	7.174E-06	-1.339E-14	-1.342E-14	-1.152E-05	-1.153E-05	-6.148E-11
0.98749	3.729E-05	3.740E-05	-1.025E-13	-1.030E-13	-4.919E-05	-4.935E-05	-1.566E-10
0.99373	7.784E-04	7.847E-04	-5.668E-12	-5.729E-12	-1.192E-03	-1.203E-03	-3.696E-10
0.99996	5.569E-02	5.568E-02	-2.349E-09	-2.345E-09	-6.674E-01	-6.707E-01	-2.548E-10
1.00616	1.584E-02	1.584E-02	-3.804E-12	-3.767E-12	-1.133E 00	-1.134E 00	-3.340E-10
1.01236	8.148E-03	8.148E-03	-8.088E-14	-8.053E-14	-1.134E 00	-1.134E 00	-1.438E-10
1.01857	5.350E-03	5.350E-03	-1.188E-14	-1.186E-14	-1.134E 00	-1.134E 00	-5.610E-11
1.02478	3.957E-03	3.957E-03	-3.304E-15	-3.299E-15	-1.134E 00	-1.134E 00	-2.527E-11
1.03720	2.589E-03	2.590E-03	-6.187E-16	-6.183E-16	-1.134E 00	-1.134E 00	-7.118E-12
1.04962	1.921E-03	1.921E-03	-2.251E-16	-2.250E-16	-1.134E 00	-1.134E 00	-2.529E-12
1.07447	1.266E-03	1.266E-03	-5.810E-17	-5.809E-17	-1.134E 00	-1.134E 00	-5.783E-13
1.09933	9.435E-04	9.435E-04	-2.517E-17	-2.516E-17	-1.134E 00	-1.134E 00	-1.928E-13
1.14906	6.249E-04	6.250E-04	-5.921E-18	-5.921E-18	-1.134E 00	-1.134E 00	-4.332E-14
1.19882	4.672E-04	4.672E-04	-2.232E-18	-2.232E-18	-1.134E 00	-1.134E 00	-1.502E-14
1.29839	3.104E-04	3.104E-04	-5.597E-19	-5.597E-19	-1.134E 00	-1.134E 00	-3.331E-15
1.39803	2.324E-04	2.324E-04	-2.136E-19	-2.136E-19	-1.134E 00	-1.134E 00	-1.142E-15
1.49771	1.857E-04	1.857E-04	-1.039E-19	-1.039E-19	-1.134E 00	-1.134E 00	-4.891E-16
1.59743	1.547E-04	1.547E-04	-5.687E-20	-5.687E-20	-1.134E 00	-1.134E 00	-2.446E-16
1.69718	1.325E-04	1.325E-04	-3.118E-20	-3.118E-20	-1.134E 00	-1.134E 00	-1.446E-16
1.79697	1.159E-04	1.159E-04	-1.789E-20	-1.789E-20	-1.134E 00	-1.134E 00	-9.207E-17
1.89677	1.030E-04	1.030E-04	-1.027E-20	-1.027E-20	-1.134E 00	-1.134E 00	-6.442E-17
1.99660	9.268E-05	9.268E-05	-5.886E-21	-5.886E-21	-1.134E 00	-1.134E 00	-4.805E-17

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.400 θ_D= 1.220E-04 ρ_0= 1.505

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.4000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.4000	0.10000	193.644	4.419E-08	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.4000	0.20000	172.128	6.837E-08	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.4000	0.30000	150.613	9.505E-08	1.000E-00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.4000	0.40000	129.099	1.701E-07	1.000E-00	-7.463E-09	-7.463E-09	7.463E-09
0.50000	0.4000	0.50000	107.585	2.201E-07	1.000E-00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.4000	0.60000	86.071	2.201E-07	1.000E-00	-1.816E-08	-1.816E-08	1.816E-08
0.70000	0.4000	0.70000	64.560	9.205E-07	1.000E-00	-3.491E-08	-3.491E-08	3.491E-08
0.80000	0.4000	0.80000	43.053	3.082E-06	9.999E-01	-8.775E-08	-8.775E-08	8.775E-08
0.85000	0.4000	0.85000	32.304	8.191E-06	9.998E-01	-1.700E-07	-1.700E-07	1.700E-07
0.90000	0.4000	0.90000	21.563	2.865E-05	9.996E-01	-4.301E-07	-4.302E-07	4.301E-07
0.92500	0.4000	0.92500	16.204	6.996E-05	9.993E-01	-7.912E-07	-7.913E-07	7.912E-07
0.95000	0.4000	0.95000	10.858	2.372E-04	9.985E-01	-1.987E-06	-1.987E-06	1.987E-06
0.96250	0.4000	0.96250	8.203	5.574E-04	9.976E-01	-3.799E-06	-3.800E-06	3.798E-06
0.97500	0.4000	0.97500	5.581	1.838E-03	9.956E-01	-1.090E-05	-1.091E-05	1.090E-05
0.98124	0.4000	0.98125	4.301	4.172E-03	9.941E-01	-2.378E-05	-2.381E-05	2.377E-05
0.98749	0.4001	0.98750	3.078	1.256E-02	9.942E-01	-7.247E-05	-7.261E-05	7.240E-05
0.99374	0.4003	0.99375	2.015	6.478E-02	1.007E 00	-4.351E-04	-4.366E-04	4.345E-04
1.00621	0.4072	1.00625	2.035	1.048E 00	8.117E-01	-4.177E-04	-4.163E-04	4.186E-04
1.01246	0.4138	1.01250	3.103	1.097E 00	1.786E 00	-7.069E-05	-7.055E-05	7.076E-05
1.01870	0.4205	1.01875	4.328	1.105E 00	2.880E 00	-2.340E-05	-2.337E-05	2.341E-05
1.02495	0.4271	1.02500	5.609	1.108E 00	4.008E 00	-1.075E-05	-1.074E-05	1.075E-05
1.03745	0.4402	1.03750	8.231	1.109E 00	6.277E 00	-3.770E-06	-3.769E-06	3.771E-06
1.04994	0.4529	1.05000	10.886	1.109E 00	8.520E 00	-1.977E-06	-1.977E-06	1.977E-06
1.07494	0.4774	1.07500	16.231	1.109E 00	1.288E 01	-7.887E-07	-7.886E-07	7.887E-07
1.09994	0.5009	1.10000	21.592	1.109E 00	1.705E 01	-4.287E-07	-4.287E-07	4.288E-07
1.14993	0.5447	1.15000	32.333	1.109E 00	2.486E 01	-1.697E-07	-1.697E-07	1.697E-07
1.19992	0.5849	1.20000	43.082	1.109E 00	3.202E 01	-8.762E-08	-8.762E-08	8.762E-08
1.29991	0.6561	1.30000	64.589	1.109E 00	4.470E 01	-3.488E-08	-3.488E-08	3.488E-08
1.39990	0.7170	1.40000	86.101	1.109E 00	5.557E 01	-1.815E-08	-1.815E-08	1.815E-08
1.49989	0.7698	1.50000	107.614	1.109E 00	6.500E 01	-1.113E-08	-1.113E-08	1.113E-08
1.59988	0.8161	1.60000	129.128	1.109E 00	7.324E 01	-7.459E-09	-7.459E-09	7.459E-09
1.69987	0.8569	1.70000	150.643	1.109E 00	8.052E 01	-5.008E-09	-5.008E-09	5.008E-09
1.79987	0.8931	1.80000	172.158	1.109E 00	8.698E 01	-3.533E-09	-3.533E-09	3.533E-09
1.89986	0.9256	1.90000	193.673	1.109E 00	9.277E 01	-2.492E-09	-2.492E-09	2.492E-09
1.99986	0.9548	2.00000	215.188	1.109E 00	9.798E 01	-1.776E-09	-1.776E-09	1.776E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.400 θ_D= 1.220E-04 ρ_0= 1.505

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.463E-09	199.605	-7.722E-07	-7.722E-07	7.722E-07	7.722E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.816E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.564E-08	-2.564E-08
0.70000	3.491E-08	349.308	-3.196E-06	-3.196E-06	3.196E-06	3.196E-06	-4.929E-08	-4.929E-08
0.80000	8.775E-08	399.209	-5.958E-06	-5.958E-06	5.958E-06	5.958E-06	-1.239E-07	-1.239E-07
0.85000	1.700E-07	424.160	-9.011E-06	-9.012E-06	9.011E-06	9.012E-06	-2.400E-07	-2.401E-07
0.90000	4.302E-07	449.110	-1.579E-05	-1.579E-05	1.579E-05	1.579E-05	-6.074E-07	-6.074E-07
0.92500	7.913E-07	461.585	-2.318E-05	-2.318E-05	2.318E-05	2.318E-05	-1.117E-06	-1.117E-06
0.95000	1.987E-06	474.060	-3.917E-05	-3.917E-05	3.917E-05	3.918E-05	-2.805E-06	-2.806E-06
0.96250	3.801E-06	480.297	-5.615E-05	-5.616E-05	5.616E-05	5.617E-05	-5.364E-06	-5.366E-06
0.97500	1.091E-05	486.534	-9.703E-05	-9.705E-05	9.714E-05	9.719E-05	-1.539E-05	-1.540E-05
0.98124	2.382E-05	489.652	-1.478E-04	-1.479E-04	1.484E-04	1.486E-04	-3.358E-05	-3.361E-05
0.98749	7.269E-05	492.770	-2.754E-04	-2.757E-04	2.812E-04	2.818E-04	-1.023E-04	-1.025E-04
0.99374	4.376E-04	495.886	-7.806E-04	-7.826E-04	9.382E-04	9.423E-04	-6.143E-04	-6.165E-04
1.00621	4.157E-04	502.112	9.813E-03	9.810E-03	2.660E-02	2.661E-02	-5.898E-04	-5.878E-04
1.01246	7.049E-05	505.228	1.235E-02	1.235E-02	3.026E-02	3.026E-02	-9.981E-05	-9.962E-05
1.01870	2.336E-05	508.345	1.398E-02	1.398E-02	3.215E-02	3.215E-02	-3.303E-05	-3.300E-05
1.02495	1.074E-05	511.463	1.476E-02	1.476E-02	3.303E-02	3.303E-02	-1.518E-05	-1.517E-05
1.03745	3.769E-06	517.698	1.507E-02	1.507E-02	3.342E-02	3.342E-02	-5.324E-06	-5.322E-06
1.04994	1.976E-06	523.935	1.536E-02	1.536E-02	3.374E-02	3.374E-02	-2.791E-06	-2.791E-06
1.07494	7.886E-07	536.408	1.593E-02	1.593E-02	3.435E-02	3.435E-02	-1.114E-06	-1.114E-06
1.09994	4.287E-07	548.881	1.651E-02	1.651E-02	3.494E-02	3.494E-02	-6.054E-07	-6.053E-07
1.14993	1.697E-07	573.827	1.768E-02	1.768E-02	3.612E-02	3.612E-02	-2.396E-07	-2.396E-07
1.19992	8.762E-08	598.774	1.884E-02	1.884E-02	3.729E-02	3.729E-02	-1.237E-07	-1.237E-07
1.29991	3.488E-08	648.670	2.118E-02	2.118E-02	3.964E-02	3.964E-02	-4.924E-08	-4.924E-08
1.39990	1.815E-08	698.566	2.352E-02	2.352E-02	4.198E-02	4.198E-02	-2.553E-08	-2.563E-08
1.49989	1.113E-08	748.462	2.586E-02	2.585E-02	4.431E-02	4.432E-02	-1.571E-08	-1.571E-08
1.59988	7.459E-09	798.359	2.819E-02	2.819E-02	4.665E-02	4.665E-02	-1.053E-08	-1.053E-08
1.69987	5.008E-09	848.257	3.053E-02	3.053E-02	4.899E-02	4.899E-02	-7.071E-09	-7.071E-09
1.79987	3.533E-09	898.155	3.287E-02	3.287E-02	5.133E-02	5.133E-02	-4.988E-09	-4.988E-09
1.89986	2.492E-09	948.054	3.521E-02	3.521E-02	5.367E-02	5.367E-02	-3.519E-09	-3.519E-09
1.99986	1.776E-09	997.952	3.755E-02	3.755E-02	5.601E-02	5.601E-02	-2.508E-09	-2.508E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.400 θ_0= 1.220E-04 ρ_a= 1.505

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-8.531E-17
0.10000	4.029E-12	4.056E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-1.144E-16
0.20000	1.136E-11	1.135E-11	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-1.637E-16
0.30000	2.407E-11	2.409E-11	-3.128E-20	-3.128E-20	-6.832E-10	-6.832E-10	-2.573E-16
0.40000	5.090E-11	5.095E-11	-5.707E-20	-5.707E-20	-1.324E-09	-1.324E-09	-4.356E-16
0.50000	1.012E-10	1.011E-10	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-8.718E-16
0.60000	2.293E-10	2.294E-10	-2.146E-19	-2.146E-19	-4.738E-09	-4.738E-09	-2.038E-15
0.70000	6.521E-10	6.521E-10	-5.629E-19	-5.629E-19	-1.002E-08	-1.002E-08	-5.955E-15
0.80000	2.681E-09	2.681E-09	-2.251E-18	-2.251E-18	-2.738E-08	-2.738E-08	-2.694E-14
0.85000	7.160E-09	7.160E-09	-5.984E-18	-5.984E-18	-5.529E-08	-5.529E-08	-7.792E-14
0.90000	2.760E-08	2.760E-08	-2.557E-17	-2.557E-17	-1.521E-07	-1.521E-07	-3.481E-13
0.92500	6.820E-08	6.821E-08	-5.894E-17	-5.895E-17	-3.015E-07	-3.016E-07	-1.052E-12
0.95000	2.606E-07	2.606E-07	-2.300E-16	-2.300E-16	-7.511E-07	-7.513E-07	-4.625E-12
0.96250	6.741E-07	6.744E-07	-6.354E-16	-6.358E-16	-1.468E-06	-1.468E-06	-1.301E-11
0.97500	2.975E-06	2.978E-06	-3.388E-15	-3.393E-15	-4.427E-06	-4.430E-06	-4.572E-11
0.98124	8.692E-06	8.704E-06	-1.191E-14	-1.193E-14	-1.066E-05	-1.067E-05	-9.999E-11
0.98749	3.963E-05	3.974E-05	-7.393E-14	-7.423E-14	-4.022E-05	-4.033E-05	-2.444E-10
0.99374	5.262E-04	5.296E-04	-1.861E-12	-1.874E-12	-4.801E-04	-4.831E-04	-5.167E-10
1.00621	3.517E-02	3.517E-02	-1.723E-12	-1.711E-12	-3.047E-02	-3.048E-02	-5.098E-10
1.01246	1.589E-02	1.589E-02	-7.100E-14	-7.072E-14	-3.088E-02	-3.088E-02	-2.390E-10
1.01870	9.789E-03	9.789E-03	-1.160E-14	-1.158E-14	-3.091E-02	-3.091E-02	-9.799E-11
1.02495	6.990E-03	6.990E-03	-3.317E-15	-3.312E-15	-3.091E-02	-3.092E-02	-4.505E-11
1.03745	4.409E-03	4.409E-03	-6.280E-16	-6.276E-16	-3.092E-02	-3.092E-02	-1.285E-11
1.04994	3.209E-03	3.209E-03	-2.282E-16	-2.281E-16	-3.092E-02	-3.092E-02	-4.580E-12
1.07494	2.074E-03	2.074E-03	-5.869E-17	-5.868E-17	-3.092E-02	-3.092E-02	-1.045E-12
1.09994	1.531E-03	1.531E-03	-2.545E-17	-2.545E-17	-3.092E-02	-3.092E-02	-3.469E-13
1.14993	1.004E-03	1.004E-03	-5.967E-18	-5.967E-18	-3.092E-02	-3.092E-02	-7.775E-14
1.19992	7.471E-04	7.471E-04	-2.246E-18	-2.246E-18	-3.092E-02	-3.092E-02	-2.691E-14
1.29991	4.940E-04	4.940E-04	-5.621E-19	-5.621E-19	-3.092E-02	-3.092E-02	-5.954E-15
1.39990	3.690E-04	3.690E-04	-2.143E-19	-2.143E-19	-3.092E-02	-3.092E-02	-2.039E-15
1.49989	2.944E-04	2.945E-04	-1.042E-19	-1.042E-19	-3.092E-02	-3.092E-02	-8.724E-16
1.59988	2.450E-04	2.450E-04	-5.702E-20	-5.702E-20	-3.092E-02	-3.092E-02	-4.360E-16
1.69987	2.097E-04	2.097E-04	-3.125E-20	-3.125E-20	-3.092E-02	-3.092E-02	-2.576E-16
1.79987	1.833E-04	1.834E-04	-1.793E-20	-1.793E-20	-3.092E-02	-3.092E-02	-1.640E-16
1.89986	1.629E-04	1.629E-04	-1.029E-20	-1.029E-20	-3.092E-02	-3.092E-02	-1.147E-16
1.99986	1.465E-04	1.465E-04	-5.900E-21	-5.900E-21	-3.092E-02	-3.092E-02	-8.552E-17

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.500 θ_0= 6.314E-05 ρ_a= 1.879

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.5000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.5000	0.10000	193.644	4.752E-08	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.5000	0.20000	172.129	8.171E-08	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.5000	0.30000	150.615	1.251E-07	1.000E-00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.5000	0.40000	129.101	1.968E-07	1.000E-00	-7.463E-09	-7.463E-09	7.463E-09
0.50000	0.5000	0.50000	107.588	2.935E-07	1.000E-00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.5000	0.60000	86.076	3.002E-07	1.000E-00	-1.816E-08	-1.816E-08	1.816E-08
0.70000	0.5000	0.70000	64.567	1.241E-06	9.999E-01	-3.490E-08	-3.490E-08	3.490E-08
0.80000	0.5000	0.80000	43.065	4.135E-06	9.999E-01	-8.770E-08	-8.770E-08	8.770E-08
0.85000	0.5000	0.85000	32.320	1.083E-05	9.998E-01	-1.698E-07	-1.698E-07	1.698E-07
0.90000	0.5000	0.90000	21.590	3.799E-05	9.995E-01	-4.288E-07	-4.289E-07	4.288E-07
0.92500	0.5000	0.92500	16.238	9.221E-05	9.991E-01	-7.880E-07	-7.881E-07	7.880E-07
0.95000	0.5000	0.95000	10.913	3.107E-04	9.980E-01	-1.967E-06	-1.968E-06	1.967E-06
0.96250	0.5000	0.96250	8.277	7.238E-04	9.968E-01	-3.722E-06	-3.723E-06	3.722E-06
0.97500	0.5000	0.97500	5.690	2.317E-03	9.947E-01	-1.030E-05	-1.030E-05	1.029E-05
0.98124	0.5001	0.98125	4.444	5.087E-03	9.939E-01	-2.173E-05	-2.175E-05	2.172E-05
0.98749	0.5001	0.98750	3.275	1.408E-02	9.966E-01	-5.888E-05	-5.897E-05	5.883E-05
0.99374	0.5003	0.99375	2.307	5.430E-02	1.011E 00	-2.246E-04	-2.252E-04	2.244E-04
1.00622	0.5030	1.00625	2.320	3.904E-01	4.689E-01	-2.187E-04	-2.182E-04	2.190E-04
1.01247	0.5056	1.01250	3.293	4.293E-01	3.431E-01	-5.786E-05	-5.777E-05	5.791E-05
1.01871	0.5082	1.01875	4.463	4.381E-01	6.485E-01	-2.148E-05	-2.146E-05	2.149E-05
1.02496	0.5109	1.02500	5.711	4.408E-01	1.067E 00	-1.019E-05	-1.019E-05	1.020E-05
1.03746	0.5160	1.03750	8.298	4.424E-01	1.955E 00	-3.702E-06	-3.700E-06	3.702E-06
1.04996	0.5211	1.05000	10.935	4.428E-01	2.847E 00	-1.960E-06	-1.960E-06	1.960E-06
1.07496	0.5309	1.07500	16.260	4.431E-01	4.590E 00	-7.861E-07	-7.860E-07	7.861E-07
1.09996	0.5403	1.10000	21.612	4.431E-01	6.264E 00	-4.278E-07	-4.278E-07	4.278E-07
1.14996	0.5578	1.15000	32.342	4.432E-01	9.401E 00	-1.696E-07	-1.696E-07	1.696E-07
1.19995	0.5739	1.20000	43.087	4.432E-01	1.228E 01	-8.760E-08	-8.760E-08	8.760E-08
1.29995	0.6023	1.30000	64.589	4.432E-01	1.738E 01	-3.488E-08	-3.488E-08	3.488E-08
1.39995	0.6266	1.40000	86.098	4.432E-01	2.175E 01	-1.815E-08	-1.815E-08	1.815E-08
1.49995	0.6477	1.50000	107.610	4.432E-01	2.554E 01	-1.113E-08	-1.113E-08	1.113E-08
1.59995	0.6662	1.60000	129.123	4.432E-01	2.886E 01	-7.460E-09	-7.460E-09	7.460E-09
1.69995	0.6825	1.70000	150.637	4.432E-01	3.178E 01	-5.008E-09	-5.008E-09	5.008E-09
1.79995	0.6970	1.80000	172.151	4.432E-01	3.438E 01	-3.533E-09	-3.533E-09	3.533E-09
1.89994	0.7099	1.90000	193.666	4.432E-01	3.671E 01	-2.492E-09	-2.492E-09	2.492E-09
1.99994	0.7216	2.00000	215.184	4.432E-01	3.880E 01	-1.777E-09	-1.777E-09	1.777E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.500 θ_D=6.314E-05 ρ_a=1.879

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.463E-09	199.605	-7.722E-07	-7.722E-07	7.722E-07	7.722E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.816E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.564E-08	-2.564E-08
0.70000	3.490E-08	349.308	-3.195E-06	-3.195E-06	3.195E-06	3.195E-06	-4.928E-08	-4.928E-08
0.80000	8.770E-08	399.209	-5.956E-06	-5.956E-06	5.956E-06	5.956E-06	-1.238E-07	-1.238E-07
0.85000	1.698E-07	424.160	-9.007E-06	-9.007E-06	9.007E-06	9.007E-06	-2.398E-07	-2.398E-07
0.90000	4.289E-07	449.110	-1.577E-05	-1.577E-05	1.577E-05	1.577E-05	-6.056E-07	-6.056E-07
0.92500	7.881E-07	461.585	-2.314E-05	-2.314E-05	2.314E-05	2.314E-05	-1.113E-06	-1.113E-06
0.95000	1.968E-06	474.060	-3.900E-05	-3.900E-05	3.900E-05	3.900E-05	-2.778E-06	-2.778E-06
0.96250	3.724E-06	480.297	-5.571E-05	-5.571E-05	5.572E-05	5.574E-05	-5.256E-06	-5.257E-06
0.97500	1.031E-05	486.534	-9.498E-05	-9.500E-05	9.517E-05	9.522E-05	-1.454E-05	-1.455E-05
0.98124	2.176E-05	489.652	-1.418E-04	-1.419E-04	1.428E-04	1.429E-04	-3.068E-05	-3.071E-05
0.98749	5.903E-05	492.770	-2.492E-04	-2.494E-04	2.565E-04	2.570E-04	-8.313E-05	-8.327E-05
0.99374	2.255E-04	495.887	-5.648E-04	-5.658E-04	6.757E-04	6.777E-04	-3.172E-04	-3.179E-04
1.00622	2.180E-04	502.116	-4.368E-04	-4.379E-04	6.264E-03	6.267E-03	-3.088E-04	-3.081E-04
1.01247	5.773E-05	505.232	-1.641E-04	-1.644E-04	7.258E-03	7.259E-03	-8.170E-05	-8.157E-05
1.01871	2.145E-05	508.350	-1.054E-04	-1.056E-04	7.538E-03	7.538E-03	-3.033E-05	-3.030E-05
1.02496	1.018E-05	511.468	-8.237E-05	-8.254E-05	7.654E-03	7.654E-03	-1.439E-05	-1.438E-05
1.03746	3.700E-06	517.705	-4.783E-05	-4.799E-05	7.766E-03	7.767E-03	-5.226E-06	-5.225E-06
1.04996	1.959E-06	523.942	-1.058E-05	-1.073E-05	7.837E-03	7.837E-03	-2.767E-06	-2.767E-06
1.07496	7.860E-07	536.416	7.078E-05	7.063E-05	7.950E-03	7.950E-03	-1.110E-06	-1.110E-06
1.09996	4.278E-07	548.891	1.578E-04	1.577E-04	8.052E-03	8.052E-03	-6.040E-07	-6.040E-07
1.14996	1.696E-07	573.841	3.382E-04	3.381E-04	8.246E-03	8.246E-03	-2.394E-07	-2.394E-07
1.19995	8.760E-08	598.791	5.219E-04	5.217E-04	8.435E-03	8.436E-03	-1.237E-07	-1.237E-07
1.29995	3.488E-08	648.691	8.925E-04	8.924E-04	8.811E-03	8.812E-03	-4.924E-08	-4.924E-08
1.39995	1.815E-08	698.591	1.265E-03	1.264E-03	9.186E-03	9.186E-03	-2.563E-08	-2.563E-08
1.49995	1.113E-08	748.492	1.637E-03	1.637E-03	9.560E-03	9.560E-03	-1.571E-08	-1.571E-08
1.59995	7.460E-09	798.392	2.010E-03	2.010E-03	9.934E-03	9.934E-03	-1.053E-08	-1.053E-08
1.69995	5.008E-09	848.293	2.383E-03	2.383E-03	1.031E-02	1.031E-02	-7.071E-09	-7.071E-09
1.79995	3.533E-09	898.194	2.756E-03	2.756E-03	1.068E-02	1.068E-02	-4.989E-09	-4.989E-09
1.89994	2.492E-09	948.094	3.129E-03	3.129E-03	1.105E-02	1.105E-02	-3.519E-09	-3.519E-09
1.99994	1.777E-09	997.995	3.502E-03	3.502E-03	1.143E-02	1.143E-02	-2.509E-09	-2.509E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.500 θ_D= 6.314E-05 ρ_a= 1.879

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.333E-16
0.10000	5.019E-12	5.050E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-1.788E-16
0.20000	1.421E-11	1.421E-11	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-2.558E-16
0.30000	3.009E-11	3.009E-11	-3.127E-20	-3.127E-20	-6.832E-10	-6.832E-10	-4.020E-16
0.40000	6.377E-11	6.373E-11	-5.706E-20	-5.706E-20	-1.324E-09	-1.324E-09	-6.805E-16
0.50000	1.265E-10	1.265E-10	-1.043E-19	-1.043E-19	-2.496E-09	-2.496E-09	-1.362E-15
0.60000	2.866E-10	2.866E-10	-2.145E-19	-2.145E-19	-4.738E-09	-4.738E-09	-3.184E-15
0.70000	8.147E-10	8.149E-10	-5.627E-19	-5.627E-19	-1.002E-08	-1.002E-08	-9.300E-15
0.80000	3.349E-09	3.348E-09	-2.249E-18	-2.249E-18	-2.737E-08	-2.737E-08	-4.205E-14
0.85000	8.937E-09	8.938E-09	-5.974E-18	-5.975E-18	-5.524E-08	-5.524E-08	-1.215E-13
0.90000	3.440E-08	3.440E-08	-2.546E-17	-2.546E-17	-1.517E-07	-1.517E-07	-5.416E-13
0.92500	8.477E-08	8.478E-08	-5.861E-17	-5.862E-17	-3.005E-07	-3.005E-07	-1.628E-12
0.95000	3.220E-07	3.220E-07	-2.264E-16	-2.265E-16	-7.445E-07	-7.446E-07	-7.079E-12
0.96250	8.178E-07	8.182E-07	-6.154E-16	-6.157E-16	-1.443E-06	-1.443E-06	-1.966E-11
0.97500	3.445E-06	3.448E-06	-3.102E-15	-3.106E-15	-4.218E-06	-4.222E-06	-6.729E-11
0.98124	9.730E-06	9.743E-06	-1.029E-14	-1.031E-14	-9.703E-06	-9.715E-06	-1.406E-10
0.98749	3.872E-05	3.881E-05	-5.244E-14	-5.262E-14	-3.200E-05	-3.207E-05	-3.238E-10
0.99374	3.545E-04	3.563E-04	-5.317E-13	-5.342E-13	-2.041E-04	-2.050E-04	-6.944E-10
1.00622	3.405E-02	3.405E-02	-5.056E-13	-5.033E-13	-3.940E-03	-3.942E-03	-6.915E-10
1.01247	4.670E-02	4.670E-02	-5.099E-14	-5.082E-14	-4.106E-03	-4.107E-03	-3.194E-10
1.01871	2.458E-02	2.458E-02	-1.010E-14	-1.008E-14	-4.129E-03	-4.129E-03	-1.387E-10
1.02496	1.485E-02	1.485E-02	-3.054E-15	-3.050E-15	-4.134E-03	-4.134E-03	-6.659E-11
1.03746	8.008E-03	8.009E-03	-6.101E-16	-6.097E-16	-4.137E-03	-4.137E-03	-1.949E-11
1.04996	5.433E-03	5.434E-03	-2.252E-16	-2.251E-16	-4.137E-03	-4.138E-03	-7.029E-12
1.07496	3.292E-03	3.292E-03	-5.842E-17	-5.841E-17	-4.138E-03	-4.138E-03	-1.621E-12
1.09996	2.357E-03	2.357E-03	-2.538E-17	-2.537E-17	-4.138E-03	-4.138E-03	-5.403E-13
1.14996	1.502E-03	1.502E-03	-5.962E-18	-5.962E-18	-4.138E-03	-4.138E-03	-1.213E-13
1.19995	1.102E-03	1.102E-03	-2.245E-18	-2.245E-18	-4.138E-03	-4.138E-03	-4.202E-14
1.29995	7.189E-04	7.190E-04	-5.621E-19	-5.621E-19	-4.138E-03	-4.138E-03	-9.303E-15
1.39995	5.334E-04	5.334E-04	-2.144E-19	-2.144E-19	-4.138E-03	-4.138E-03	-3.186E-15
1.49995	4.240E-04	4.240E-04	-1.042E-19	-1.042E-19	-4.138E-03	-4.138E-03	-1.363E-15
1.59995	3.518E-04	3.518E-04	-5.703E-20	-5.703E-20	-4.138E-03	-4.138E-03	-6.814E-16
1.69995	3.006E-04	3.006E-04	-3.126E-20	-3.126E-20	-4.138E-03	-4.138E-03	-4.026E-16
1.79995	2.624E-04	2.625E-04	-1.794E-20	-1.794E-20	-4.138E-0.	-4.138E-03	-2.562E-16
1.89994	2.329E-04	2.329E-04	-1.029E-20	-1.029E-20	-4.138E-03	-4.138E-03	-1.792E-16
1.99994	2.093E-04	2.093E-04	-5.901E-21	-5.901E-21	-4.138E-03	-4.138E-03	-1.336E-16

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.600 θ_D= 2.983E-05 ρ_a= 2.254

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.6000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.6000	0.10000	193.644	7.087E-08	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.6000	0.20000	172.130	9.838E-08	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.6000	0.30000	150.616	1.501E-07	1.000E-00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.6000	0.40000	129.103	2.668E-07	1.000E-00	-7.463E-09	-7.463E-09	7.463E-09
0.50000	0.6000	0.50000	107.591	3.535E-07	1.000E-00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.6000	0.60000	86.081	4.135E-07	1.000E-00	-1.816E-08	-1.816E-08	1.816E-08
0.70000	0.6000	0.70000	64.575	1.574E-06	9.999E-01	-3.489E-08	-3.489E-08	3.489E-08
0.80000	0.6000	0.80000	43.079	5.309E-06	9.998E-01	-8.763E-08	-8.763E-08	8.763E-08
0.85000	0.6000	0.85000	32.341	1.366E-05	9.996E-01	-1.696E-07	-1.696E-07	1.696E-07
0.90000	0.6000	0.90000	21.622	4.818E-05	9.992E-01	-4.273E-07	-4.273E-07	4.273E-07
0.92500	0.6000	0.92500	16.282	1.157E-04	9.986E-01	-7.841E-07	-7.841E-07	7.840E-07
0.95000	0.6000	0.95000	10.980	3.870E-04	9.971E-01	-1.944E-06	-1.944E-06	1.944E-06
0.96250	0.6000	0.96250	8.366	8.907E-04	9.956E-01	-3.631E-06	-3.633E-06	3.631E-06
0.97500	0.6000	0.97500	5.822	2.766E-03	9.937E-01	-9.618E-06	-9.623E-06	9.615E-06
0.98124	0.6001	0.98125	4.612	5.856E-03	9.941E-01	-1.954E-05	-1.955E-05	1.953E-05
0.98749	0.6001	0.98750	3.501	1.488E-02	1.000E 00	-4.640E-05	-4.647E-05	4.638E-05
0.99374	0.6003	0.99375	2.620	4.600E-02	1.014E 00	-1.307E-04	-1.309E-04	1.306E-04
0.99998	0.6008	1.00000	2.256	1.395E-01	9.916E-01	-2.524E-04	-2.524E-04	2.525E-04
1.00623	0.6020	1.00625	2.634	2.319E-01	7.089E-01	-1.286E-04	-1.283E-04	1.287E-04
1.01247	0.6035	1.01250	3.522	2.621E-01	4.989E-01	-4.548E-05	-4.542E-05	4.551E-05
1.01872	0.6052	1.01875	4.635	2.709E-01	3.184E-01	-1.927E-05	-1.925E-05	1.928E-05
1.02497	0.6068	1.02500	5.846	2.740E-01	2.289E-01	-9.501E-06	-9.496E-06	9.504E-06
1.03747	0.6100	1.03750	8.392	2.758E-01	4.972E-01	-3.607E-06	-3.606E-06	3.608E-06
1.04997	0.6132	1.05000	11.006	2.763E-01	9.083E-01	-1.935E-06	-1.935E-06	1.935E-06
1.07496	0.6193	1.07500	16.308	2.766E-01	1.747E 00	-7.818E-07	-7.817E-07	7.818E-07
1.09996	0.6252	1.10000	21.649	2.767E-01	2.561E 00	-4.260E-07	-4.260E-07	4.260E-07
1.14996	0.6361	1.15000	32.367	2.767E-01	4.091E 00	-1.693E-07	-1.693E-07	1.693E-07
1.19996	0.6461	1.20000	43.106	2.767E-01	5.497E 00	-8.752E-08	-8.751E-08	8.752E-08
1.29996	0.6639	1.30000	64.602	2.767E-01	7.988E 00	-3.486E-08	-3.486E-08	3.486E-08
1.39996	0.6791	1.40000	86.108	2.767E-01	1.013E 01	-1.815E-08	-1.815E-08	1.815E-08
1.49996	0.6922	1.50000	107.618	2.767E-01	1.198E 01	-1.113E-08	-1.113E-08	1.113E-08
1.59996	0.7038	1.60000	129.130	2.767E-01	1.360E 01	-7.459E-09	-7.459E-09	7.459E-09
1.69996	0.7140	1.70000	150.643	2.767E-01	1.503E 01	-5.008E-09	-5.008E-09	5.008E-09
1.79996	0.7230	1.80000	172.157	2.767E-01	1.630E 01	-3.533E-09	-3.533E-09	3.533E-09
1.89996	0.7311	1.90000	193.671	2.767E-01	1.744E 01	-2.492E-09	-2.492E-09	2.492E-09
1.99996	0.7384	2.00000	215.186	2.767E-01	1.846E 01	-1.776E-09	-1.776E-09	1.776E-09

PROPAGATION FREQUENCY= 4.233GE 08 ϕ_0= 0.600 θ_D= 2.983E-05 ρ_a= 2.254

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.463E-09	199.605	-7.722E-07	-7.722E-07	7.722E-07	7.722E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.816E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.564E-08	-2.564E-08
0.70000	3.489E-08	349.308	-3.195E-06	-3.195E-06	3.195E-06	3.195E-06	-4.927E-08	-4.927E-08
0.80000	8.763E-08	399.209	-5.954E-06	-5.954E-06	5.954E-06	5.954E-06	-1.237E-07	-1.237E-07
0.85000	1.696E-07	424.160	-9.002E-06	-9.002E-06	9.002E-06	9.002E-06	-2.395E-07	-2.395E-07
0.90000	4.273E-07	449.110	-1.575E-05	-1.575E-05	1.575E-05	1.575E-05	-6.033E-07	-6.033E-07
0.92500	7.841E-07	461.585	-2.308E-05	-2.308E-05	2.308E-05	2.308E-05	-1.107E-06	-1.107E-06
0.95000	1.944E-06	474.060	-3.879E-05	-3.879E-05	3.879E-05	3.880E-05	-2.744E-06	-2.745E-06
0.96250	3.633E-06	480.297	-5.517E-05	-5.518E-05	5.520E-05	5.521E-05	-5.128E-06	-5.129E-06
0.97500	9.626E-06	486.534	-9.274E-05	-9.276E-05	9.301E-05	9.306E-05	-1.358E-05	-1.359E-05
0.98124	1.956E-05	489.652	-1.354E-04	-1.354E-04	1.366E-04	1.367E-04	-2.758E-05	-2.761E-05
0.98749	4.650E-05	492.770	-2.245E-04	-2.246E-04	2.327E-04	2.330E-04	-6.552E-05	-6.561E-05
0.99374	1.310E-04	495.887	-4.435E-04	-4.441E-04	5.231E-04	5.243E-04	-1.846E-04	-1.849E-04
0.99998	2.525E-04	499.003	-7.363E-04	-7.374E-04	1.475E-03	1.477E-03	-3.564E-04	-3.564E-04
1.00623	1.283E-04	502.118	-6.932E-04	-6.938E-04	2.749E-03	2.751E-03	-1.815E-04	-1.812E-04
1.01247	4.539E-05	505.235	-6.492E-04	-6.494E-04	3.293E-03	3.294E-03	-6.421E-05	-6.413E-05
1.01872	1.924E-05	508.353	-6.416E-04	-6.418E-04	3.483E-03	3.484E-03	-2.721E-05	-2.718E-05
1.02497	9.493E-06	511.471	-6.432E-04	-6.433E-04	3.567E-03	3.567E-03	-1.342E-05	-1.341E-05
1.03747	3.605E-06	517.708	-6.427E-04	-6.428E-04	3.642E-03	3.642E-03	-5.093E-06	-5.091E-06
1.04997	1.934E-06	523.945	-6.353E-04	-6.354E-04	3.682E-03	3.682E-03	-2.732E-06	-2.732E-06
1.07496	7.817E-07	536.420	-6.116E-04	-6.117E-04	3.737E-03	3.737E-03	-1.104E-06	-1.104E-06
1.09996	4.260E-07	548.895	-5.817E-04	-5.818E-04	3.782E-03	3.782E-03	-6.015E-07	-6.015E-07
1.14996	1.693E-07	573.845	-5.153E-04	-5.154E-04	3.861E-03	3.862E-03	-2.390E-07	-2.390E-07
1.19996	8.751E-08	598.795	-4.455E-04	-4.456E-04	3.937E-03	3.937E-03	-1.236E-07	-1.236E-07
1.29996	3.486E-08	648.696	-3.027E-04	-3.028E-04	4.086E-03	4.086E-03	-4.922E-08	-4.922E-08
1.39996	1.815E-08	698.597	-1.585E-04	-1.586E-04	4.232E-03	4.232E-03	-2.562E-08	-2.562E-08
1.49996	1.113E-08	748.497	-1.370E-05	-1.377E-05	4.379E-03	4.379E-03	-1.571E-08	-1.571E-08
1.59996	7.459E-09	798.398	1.314E-04	1.313E-04	4.525E-03	4.525E-03	-1.053E-08	-1.053E-08
1.69996	5.008E-09	848.299	2.767E-04	2.766E-04	4.670E-03	4.671E-03	-7.071E-09	-7.071E-09
1.79996	3.533E-09	898.200	4.220E-04	4.219E-04	4.816E-03	4.816E-03	-4.988E-09	-4.988E-09
1.89996	2.492E-09	948.101	5.674E-04	5.673E-04	4.962E-03	4.962E-03	-3.519E-09	-3.519E-09
1.99996	1.776E-09	998.002	7.129E-04	7.128E-04	5.108E-03	5.108E-03	-2.508E-09	-2.508E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.600 θ_D= 2.983E-05 ρ_a= 2.254

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.919E-16
0.10000	6.104E-12	6.104E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-2.575E-16
0.20000	1.706E-11	1.705E-11	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-3.683E-16
0.30000	3.612E-11	3.616E-11	-3.127E-20	-3.127E-20	-6.832E-10	-6.832E-10	-5.789E-16
0.40000	7.659E-11	7.655E-11	-5.706E-20	-5.706E-20	-1.324E-09	-1.324E-09	-9.799E-16
0.50000	1.517E-10	1.518E-10	-1.042E-19	-1.042E-19	-2.496E-09	-2.496E-09	-1.961E-15
0.60000	3.440E-10	3.439E-10	-2.145E-19	-2.145E-19	-4.737E-09	-4.738E-09	-4.584E-15
0.70000	9.778E-10	9.777E-10	-5.625E-19	-5.625E-19	-1.001E-08	-1.001E-08	-1.339E-14
0.80000	4.015E-09	4.015E-09	-2.246E-18	-2.247E-18	-2.735E-08	-2.735E-08	-6.047E-14
0.85000	1.071E-08	1.071E-08	-5.963E-18	-5.963E-18	-5.518E-08	-5.518E-08	-1.745E-13
0.90000	4.113E-08	4.114E-08	-2.533E-17	-2.534E-17	-1.513E-07	-1.513E-07	-7.758E-13
0.92500	1.010E-07	1.010E-07	-5.821E-17	-5.822E-17	-2.991E-07	-2.992E-07	-2.319E-12
0.95000	3.807E-07	3.808E-07	-2.222E-16	-2.223E-16	-7.365E-07	-7.366E-07	-9.944E-12
0.96250	9.473E-07	9.477E-07	-5.919E-16	-5.923E-16	-1.413E-06	-1.414E-06	-2.720E-11
0.97500	3.801E-06	3.804E-06	-2.791E-15	-2.794E-15	-3.999E-06	-4.002E-06	-9.045E-11
0.98124	1.019E-05	1.020E-05	-8.654E-15	-8.669E-15	-8.725E-06	-8.735E-06	-1.802E-10
0.98749	3.604E-05	3.612E-05	-3.538E-14	-3.548E-14	-2.518E-05	-2.523E-05	-3.963E-10
0.99374	2.503E-04	2.514E-04	-2.000E-13	-2.007E-13	-1.142E-04	-1.146E-04	-8.011E-10
0.99998	5.011E-03	5.028E-03	-6.632E-13	-6.633E-13	-5.268E-04	-5.279E-04	-1.019E-09
1.00623	1.371E-02	1.371E-02	-1.946E-13	-1.940E-13	-9.315E-04	-9.319E-04	-7.909E-10
1.01247	1.971E-02	1.971E-02	-3.424E-14	-3.415E-14	-1.018E-03	-1.018E-03	-3.911E-10
1.01872	3.077E-02	3.077E-02	-8.464E-15	-8.449E-15	-1.034E-03	-1.034E-03	-1.776E-10
1.02497	4.255E-02	4.256E-02	-2.739E-15	-2.736E-15	-1.038E-03	-1.038E-03	-8.938E-11
1.03747	1.936E-02	1.936E-02	-5.858E-16	-5.854E-16	-1.041E-03	-1.041E-03	-2.691E-11
1.04997	1.047E-02	1.047E-02	-2.207E-16	-2.206E-16	-1.042E-03	-1.042E-03	-9.858E-12
1.07496	5.318E-03	5.318E-03	-5.798E-17	-5.797E-17	-1.042E-03	-1.042E-03	-2.306E-12
1.09996	3.546E-03	3.546E-03	-2.523E-17	-2.523E-17	-1.042E-03	-1.042E-03	-7.733E-13
1.14996	2.123E-03	2.123E-03	-5.947E-18	-5.947E-18	-1.042E-03	-1.042E-03	-1.742E-13
1.19996	1.514E-03	1.514E-03	-2.242E-18	-2.242E-18	-1.042E-03	-1.042E-03	-6.041E-14
1.29996	9.617E-04	9.618E-04	-5.618E-19	-5.618E-19	-1.042E-03	-1.042E-03	-1.338E-14
1.39996	7.046E-04	7.046E-04	-2.143E-19	-2.143E-19	-1.042E-03	-1.042E-03	-4.586E-15
1.49996	5.559E-04	5.559E-04	-1.042E-19	-1.042E-19	-1.042E-03	-1.042E-03	-1.963E-15
1.59996	4.590E-04	4.591E-04	-5.702E-20	-5.702E-20	-1.042E-03	-1.042E-03	-9.810E-16
1.69996	3.909E-04	3.909E-04	-3.125E-20	-3.125E-20	-1.042E-03	-1.042E-03	-5.797E-16
1.79996	3.404E-04	3.404E-04	-1.794E-20	-1.794E-20	-1.042E-03	-1.042E-03	-3.689E-16
1.89996	3.014E-04	3.015E-04	-1.029E-20	-1.029E-20	-1.042E-03	-1.042E-03	-2.580E-16
1.99996	2.705E-04	2.705E-04	-5.901E-21	-5.901E-21	-1.042E-03	-1.042E-03	-1.924E-16

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.700 θ_0= 0. ρ_a= 2.629

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.7000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.7000	0.10000	193.645	6.253E-08	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.7000	0.20000	172.131	9.005E-08	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.7000	0.30000	150.618	1.668E-07	1.000E-00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.7000	0.40000	129.106	2.801E-07	1.000E-00	-7.462E-09	-7.462E-09	7.462E-09
0.50000	0.7000	0.50000	107.596	3.669E-07	1.000E-00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.7000	0.60000	86.088	4.135E-07	9.999E-01	-1.815E-08	-1.815E-08	1.815E-08
0.70000	0.7000	0.70000	64.585	1.574E-06	9.999E-01	-3.488E-08	-3.488E-08	3.488E-08
0.80000	0.7000	0.80000	43.096	5.363E-06	9.998E-01	-8.756E-08	-8.756E-08	8.756E-08
0.85000	0.7000	0.85000	32.365	1.409E-05	9.996E-01	-1.693E-07	-1.693E-07	1.693E-07
0.90000	0.7000	0.90000	21.660	4.931E-05	9.991E-01	-4.254E-07	-4.255E-07	4.254E-07
0.92500	0.7000	0.92500	16.334	1.181E-04	9.984E-01	-7.794E-07	-7.795E-07	7.794E-07
0.95000	0.7000	0.95000	11.059	3.920E-04	9.970E-01	-1.916E-06	-1.917E-06	1.916E-06
0.96250	0.7000	0.96250	8.471	8.877E-04	9.957E-01	-3.528E-06	-3.529E-06	3.528E-06
0.97500	0.7000	0.97500	5.973	2.677E-03	9.948E-01	-8.891E-06	-8.896E-06	8.889E-06
0.98125	0.7001	0.98125	4.803	5.478E-03	9.966E-01	-1.731E-05	-1.733E-05	1.731E-05
0.98749	0.7001	0.98750	3.751	1.284E-02	1.003E 00	-3.569E-05	-3.573E-05	3.567E-05
0.99374	0.7003	0.99375	2.947	3.429E-02	1.012E 00	-8.444E-05	-8.454E-05	8.440E-05
0.99999	0.7006	1.00000	2.631	8.213E-02	9.978E-01	-1.289E-04	-1.289E-04	1.290E-04
1.00623	0.7013	1.00625	2.964	1.294E-01	1.001E 00	-8.282E-05	-8.273E-05	8.287E-05
1.01248	0.7021	1.01250	3.775	1.504E-01	9.823E-01	-3.483E-05	-3.479E-05	3.485E-05
1.01873	0.7031	1.01875	4.831	1.575E-01	9.657E-01	-1.702E-05	-1.701E-05	1.703E-05
1.02498	0.7040	1.02500	6.004	1.602E-01	9.542E-01	-8.762E-06	-8.757E-06	8.764E-06
1.03748	0.7059	1.03750	8.503	1.620E-01	9.361E-01	-3.498E-06	-3.497E-06	3.499E-06
1.04997	0.7078	1.05000	11.092	1.625E-01	9.188E-01	-1.906E-06	-1.905E-06	1.906E-06
1.07497	0.7114	1.07500	16.367	1.628E-01	8.844E-01	-7.766E-07	-7.765E-07	7.766E-07
1.09997	0.7148	1.10000	21.694	1.629E-01	8.507E-01	-4.238E-07	-4.238E-07	4.238E-07
1.14997	0.7213	1.15000	32.398	1.629E-01	7.871E-01	-1.690E-07	-1.689E-07	1.690E-07
1.19997	0.7272	1.20000	43.130	1.629E-01	7.284E-01	-8.741E-08	-8.741E-08	8.741E-08
1.29997	0.7376	1.30000	64.619	1.629E-01	6.243E-01	-3.484E-08	-3.484E-08	3.484E-08
1.39997	0.7466	1.40000	86.121	1.629E-01	5.350E-01	-1.814E-08	-1.814E-08	1.814E-08
1.49997	0.7543	1.50000	107.629	1.629E-01	4.575E-01	-1.112E-08	-1.112E-08	1.112E-08
1.59997	0.7611	1.60000	129.140	1.629E-01	3.898E-01	-7.457E-09	-7.457E-09	7.457E-09
1.69997	0.7671	1.70000	150.652	1.629E-01	3.300E-01	-5.007E-09	-5.007E-09	5.007E-09
1.79997	0.7724	1.80000	172.165	1.629E-01	2.768E-01	-3.532E-09	-3.532E-09	3.532E-09
1.89997	0.7772	1.90000	193.678	1.629E-01	2.292E-01	-2.492E-09	-2.492E-09	2.492E-09
1.99997	0.7815	2.00000	215.193	1.629E-01	1.865E-01	-1.776E-09	-1.776E-09	1.776E-09

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_0= 0.70G θ_D= 0. ρ_a= 2.629

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.074E-09	-7.074E-09
0.40000	7.462E-09	199.605	-7.722E-07	-7.722E-07	7.722E-07	7.722E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.815E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.563E-08	-2.563E-08
0.70000	3.488E-08	349.308	-3.195E-06	-3.195E-06	3.195E-06	3.195E-06	-4.925E-08	-4.925E-08
0.80000	8.756E-08	399.209	-5.952E-06	-5.952E-06	5.952E-06	5.952E-06	-1.236E-07	-1.236E-07
0.85000	1.693E-07	424.160	-8.996E-06	-8.996E-06	8.996E-06	8.996E-06	-2.391E-07	-2.391E-07
0.90000	4.255E-07	449.110	-1.572E-05	-1.572E-05	1.572E-05	1.572E-05	-6.007E-07	-6.007E-07
0.92500	7.795E-07	461.585	-2.302E-05	-2.302E-05	2.302E-05	2.302E-05	-1.101E-06	-1.101E-06
0.95000	1.917E-06	474.060	-3.855E-05	-3.855E-05	3.855E-05	3.856E-05	-2.706E-06	-2.706E-06
0.96250	3.530E-06	480.297	-5.455E-05	-5.456E-05	5.458E-05	5.459E-05	-4.982E-06	-4.983E-06
0.97500	8.899E-06	486.534	-9.028E-05	-9.031E-05	9.054E-05	9.058E-05	-1.255E-05	-1.256E-05
0.98125	1.733E-05	489.653	-1.288E-04	-1.288E-04	1.299E-04	1.300E-04	-2.445E-05	-2.446E-05
0.98749	3.575E-05	492.771	-2.041E-04	-2.043E-04	2.103E-04	2.105E-04	-5.039E-05	-5.045E-05
0.99374	8.459E-05	495.888	-3.657E-04	-3.660E-04	4.100E-04	4.106E-04	-1.192E-04	-1.194E-04
0.99999	1.290E-04	499.005	-6.112E-04	-6.118E-04	8.673E-04	8.685E-04	-1.821E-04	-1.821E-04
1.00623	8.269E-05	502.122	-7.673E-04	-7.676E-04	1.408E-03	1.408E-03	-1.169E-04	-1.168E-04
1.01248	3.478E-05	505.239	-8.297E-04	-8.299E-04	1.700E-03	1.700E-03	-4.918E-05	-4.913E-05
1.01873	1.700E-05	508.357	-8.610E-04	-8.611E-04	1.821E-03	1.822E-03	-2.403E-05	-2.401E-05
1.02498	8.755E-06	511.475	-8.794E-04	-8.796E-04	1.880E-03	1.880E-03	-1.237E-05	-1.236E-05
1.03748	3.497E-06	517.712	-8.975E-04	-8.976E-04	1.932E-03	1.932E-03	-4.940E-06	-4.938E-06
1.04997	1.905E-06	523.949	-9.039E-04	-9.040E-04	1.958E-03	1.958E-03	-2.691E-06	-2.690E-06
1.07497	7.765E-07	536.424	-9.050E-04	-9.050E-04	1.988E-03	1.988E-03	-1.096E-06	-1.096E-06
1.09997	4.238E-07	548.899	-8.991E-04	-8.992E-04	2.008E-03	2.008E-03	-5.984E-07	-5.984E-07
1.14997	1.689E-07	573.850	-8.804E-04	-8.804E-04	2.040E-03	2.040E-03	-2.386E-07	-2.386E-07
1.19997	8.741E-08	598.800	-8.581E-04	-8.581E-04	2.069E-03	2.069E-03	-1.234E-07	-1.234E-07
1.29997	3.484E-08	648.701	-8.103E-04	-8.104E-04	2.122E-03	2.122E-03	-4.920E-08	-4.920E-08
1.39997	1.814E-08	698.602	-7.611E-04	-7.612E-04	2.173E-03	2.174E-03	-2.561E-08	-2.561E-08
1.49997	1.112E-08	748.503	-7.114E-04	-7.114E-04	2.225E-03	2.225E-03	-1.571E-08	-1.571E-08
1.59997	7.457E-09	798.404	-6.614E-04	-6.614E-04	2.276E-03	2.276E-03	-1.053E-08	-1.053E-08
1.69997	5.007E-09	848.305	-6.113E-04	-6.113E-04	2.326E-03	2.326E-03	-7.070E-09	-7.070E-09
1.79997	3.532E-09	898.206	-5.610E-04	-5.611E-04	2.377E-03	2.377E-03	-4.987E-09	-4.987E-09
1.89997	2.492E-09	948.107	-5.107E-04	-5.108E-04	2.428E-03	2.428E-03	-3.518E-09	-3.518E-09
1.99997	1.776E-09	998.009	-4.604E-04	-4.604E-04	2.478E-03	2.478E-03	-2.508E-09	-2.508E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0=0.700 θ_D=0. ρ_a=2.629

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-2.613E-16
0.10000	7.090E-12	7.073E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-3.505E-16
0.20000	1.985E-11	1.988E-11	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-5.013E-16
0.30000	4.217E-11	4.211E-11	-3.127E-20	-3.127E-20	-6.832E-10	-6.832E-10	-7.879E-16
0.40000	8.925E-11	8.934E-11	-5.706E-20	-5.706E-20	-1.324E-09	-1.324E-09	-1.334E-15
0.50000	1.771E-10	1.770E-10	-1.042E-19	-1.042E-19	-2.495E-09	-2.495E-09	-2.669E-15
0.60000	4.012E-10	4.012E-10	-2.144E-19	-2.144E-19	-4.737E-09	-4.737E-09	-6.237E-15
0.70000	1.140E-09	1.140E-09	-5.622E-19	-5.622E-19	-1.001E-08	-1.001E-08	-1.821E-14
0.80000	4.681E-09	4.681E-09	-2.244E-18	-2.244E-18	-2.733E-08	-2.733E-08	-8.218E-14
0.85000	1.247E-08	1.247E-08	-5.949E-18	-5.949E-18	-5.511E-08	-5.511E-08	-2.369E-13
0.90000	4.781E-08	4.781E-08	-2.518E-17	-2.519E-17	-1.508E-07	-1.508E-07	-1.049E-12
0.92500	1.171E-07	1.171E-07	-5.774E-17	-5.775E-17	-2.976E-07	-2.976E-07	-3.114E-12
0.95000	4.373E-07	4.374E-07	-2.174E-16	-2.175E-16	-7.272E-07	-7.273E-07	-1.315E-11
0.96250	1.069E-06	1.070E-06	-5.657E-16	-5.661E-16	-1.379E-06	-1.380E-06	-3.536E-11
0.97500	4.091E-06	4.095E-06	-2.471E-15	-2.474E-15	-3.762E-06	-3.764E-06	-1.142E-10
0.98125	1.041E-05	1.042E-05	-7.112E-15	-7.123E-15	-7.761E-06	-7.769E-06	-2.170E-10
0.98749	3.302E-05	3.308E-05	-2.292E-14	-2.297E-14	-2.006E-05	-2.010E-05	-4.641E-10
0.99374	1.670E-04	1.675E-04	-9.547E-14	-9.569E-14	-6.932E-05	-6.947E-05	-8.335E-10
0.99999	1.118E-03	1.120E-03	-1.955E-13	-1.955E-13	-2.161E-04	-2.165E-04	-1.079E-09
1.00623	3.986E-03	3.987E-03	-9.242E-14	-9.222E-14	-3.607E-04	-3.609E-04	-8.248E-10
1.01248	4.163E-03	4.164E-03	-2.203E-14	-2.198E-14	-4.084E-04	-4.085E-04	-4.582E-10
1.01873	4.231E-03	4.231E-03	-6.919E-15	-6.908E-15	-4.204E-04	-4.204E-04	-2.134E-10
1.02498	4.262E-03	4.262E-03	-2.416E-15	-2.413E-15	-4.243E-04	-4.243E-04	-1.125E-10
1.03748	4.295E-03	4.295E-03	-5.583E-16	-5.580E-16	-4.266E-04	-4.266E-04	-3.490E-11
1.04997	4.324E-03	4.325E-03	-2.155E-16	-2.154E-16	-4.273E-04	-4.273E-04	-1.301E-11
1.07497	4.388E-03	4.389E-03	-5.745E-17	-5.744E-17	-4.277E-04	-4.277E-04	-3.092E-12
1.09997	4.458E-03	4.459E-03	-2.505E-17	-2.505E-17	-4.278E-04	-4.279E-04	-1.045E-12
1.14997	4.609E-03	4.610E-03	-5.929E-18	-5.929E-18	-4.279E-04	-4.279E-04	-2.362E-13
1.19997	4.773E-03	4.774E-03	-2.238E-18	-2.238E-18	-4.279E-04	-4.280E-04	-8.205E-14
1.29997	5.141E-03	5.141E-03	-5.613E-19	-5.613E-19	-4.280E-04	-4.280E-04	-1.820E-14
1.39997	5.571E-03	5.571E-03	-2.142E-19	-2.142E-19	-4.280E-04	-4.280E-04	-6.238E-15
1.49997	6.079E-03	6.080E-03	-1.041E-19	-1.041E-19	-4.280E-04	-4.280E-04	-2.670E-15
1.59997	6.690E-03	6.691E-03	-5.700E-20	-5.700E-20	-4.280E-04	-4.280E-04	-1.335E-15
1.69997	7.437E-03	7.438E-03	-3.125E-20	-3.125E-20	-4.280E-04	-4.280E-04	-7.888E-16
1.79997	8.373E-03	8.373E-03	-1.793E-20	-1.793E-20	-4.280E-04	-4.280E-04	-5.020E-16
1.89997	9.579E-03	9.580E-03	-1.029E-20	-1.029E-20	-4.280E-04	-4.280E-04	-3.512E-16
1.99997	1.119E-02	1.119E-02	-5.900E-21	-5.900E-21	-4.280E-04	-4.280E-04	-2.619E-16

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.800 θ_D= 0. ρ_a= 3.004

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.8000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	0.8000	0.10000	193.645	8.921E-08	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	0.8000	0.20000	172.132	1.517E-07	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	0.8000	0.30000	150.620	2.201E-07	1.000E-00	-5.010E-09	-5.010E-09	5.010E-09
0.40000	0.8000	0.40000	129.109	3.602E-07	1.000E-00	-7.462E-09	-7.462E-09	7.462E-09
0.50000	0.8000	0.50000	107.600	4.669E-07	1.000E-00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	0.8000	0.60000	86.095	5.603E-07	1.000E-00	-1.815E-08	-1.815E-08	1.815E-08
0.70000	0.8000	0.70000	64.597	2.108E-06	9.999E-01	-3.487E-08	-3.487E-08	3.487E-08
0.80000	0.8000	0.80000	43.116	7.017E-06	9.998E-01	-8.747E-08	-8.747E-08	8.747E-08
0.85000	0.8000	0.85000	32.393	1.830E-05	9.997E-01	-1.690E-07	-1.690E-07	1.690E-07
0.90000	0.8000	0.90000	21.704	6.281E-05	9.993E-01	-4.233E-07	-4.233E-07	4.233E-07
0.92500	0.8000	0.92500	16.394	1.496E-04	9.988E-01	-7.742E-07	-7.742E-07	7.741E-07
0.95000	0.8000	0.95000	11.150	4.903E-04	9.977E-01	-1.886E-06	-1.886E-06	1.885E-06
0.96250	0.8000	0.96250	8.591	1.093E-03	9.968E-01	-3.414E-06	-3.415E-06	3.414E-06
0.97500	0.8000	0.97500	6.144	3.184E-03	9.966E-01	-8.302E-06	-8.306E-06	8.300E-06
0.98124	0.8001	0.98125	5.014	6.247E-03	9.986E-01	-1.514E-05	-1.515E-05	1.514E-05
0.98749	0.8001	0.98750	4.020	1.358E-02	1.004E 00	-2.842E-05	-2.845E-05	2.841E-05
0.99374	0.8003	0.99375	3.285	3.200E-02	1.007E 00	-5.831E-05	-5.835E-05	5.829E-05
0.99999	0.8006	1.00000	3.006	6.607E-02	9.989E-01	-7.820E-05	-7.826E-05	7.820E-05
1.00623	0.8011	1.00625	3.302	9.977E-02	1.004E 00	-5.728E-05	-5.724E-05	5.731E-05
1.01248	0.8018	1.01250	4.048	1.177E-01	9.966E-01	-2.793E-05	-2.791E-05	2.795E-05
1.01873	0.8025	1.01875	5.049	1.248E-01	9.879E-01	-1.483E-05	-1.482E-05	1.483E-05
1.02498	0.8032	1.02500	6.181	1.278E-01	9.824E-01	-8.188E-06	-8.184E-06	8.190E-06
1.03748	0.8048	1.03750	8.631	1.299E-01	9.756E-01	-3.377E-06	-3.377E-06	3.378E-06
1.04998	0.8063	1.05000	11.191	1.305E-01	9.698E-01	-1.872E-06	-1.872E-06	1.872E-06
1.07497	0.8092	1.07500	16.436	1.308E-01	9.581E-01	-7.705E-07	-7.704E-07	7.705E-07
1.09997	0.8119	1.10000	21.747	1.309E-01	9.464E-01	-4.213E-07	-4.213E-07	4.213E-07
1.14997	0.8171	1.15000	32.435	1.309E-01	9.239E-01	-1.685E-07	-1.685E-07	1.685E-07
1.19997	0.8218	1.20000	43.159	1.309E-01	9.031E-01	-8.728E-08	-8.728E-08	8.728E-08
1.29997	0.8302	1.30000	64.640	1.310E-01	8.661E-01	-3.482E-08	-3.482E-08	3.482E-08
1.39997	0.8374	1.40000	86.138	1.310E-01	8.343E-01	-1.813E-08	-1.813E-08	1.813E-08
1.49997	0.8437	1.50000	107.643	1.310E-01	8.067E-01	-1.112E-08	-1.112E-08	1.112E-08
1.59997	0.8491	1.60000	129.152	1.310E-01	7.826E-01	-7.456E-09	-7.456E-09	7.456E-09
1.69997	0.8539	1.70000	150.663	1.310E-01	7.613E-01	-5.006E-09	-5.006E-09	5.006E-09
1.79997	0.8582	1.80000	172.175	1.310E-01	7.423E-01	-3.532E-09	-3.532E-09	3.532E-09
1.89997	0.8620	1.90000	193.688	1.310E-01	7.254E-01	-2.491E-09	-2.491E-09	2.491E-09
1.99997	0.8655	2.00000	215.202	1.310E-01	7.101E-01	-1.776E-09	-1.776E-09	1.776E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 0.800 θ_D= 0. ρ_a= 3.004

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.543E-07	-2.543E-07	2.543E-07	2.543E-07	-4.990E-09	-4.990E-09
0.30000	5.010E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.073E-09	-7.073E-09
0.40000	7.462E-09	199.605	-7.722E-07	-7.722E-07	7.722E-07	7.722E-07	-1.054E-08	-1.054E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.572E-08	-1.572E-08
0.60000	1.815E-08	299.407	-1.936E-06	-1.936E-06	1.936E-06	1.936E-06	-2.563E-08	-2.563E-08
0.70000	3.487E-08	349.308	-3.194E-06	-3.194E-06	3.194E-06	3.194E-06	-4.923E-08	-4.923E-08
0.80000	8.747E-08	399.209	-5.950E-06	-5.950E-06	5.950E-06	5.950E-06	-1.235E-07	-1.235E-07
0.85000	1.690E-07	424.160	-8.989E-06	-8.989E-06	8.989E-06	8.989E-06	-2.386E-07	-2.386E-07
0.90000	4.233E-07	449.110	-1.569E-05	-1.569E-05	1.569E-05	1.569E-05	-5.977E-07	-5.977E-07
0.92500	7.742E-07	461.585	-2.295E-05	-2.295E-05	2.295E-05	2.295E-05	-1.093E-06	-1.093E-06
0.95000	1.886E-06	474.060	-3.827E-05	-3.827E-05	3.828E-05	3.828E-05	-2.662E-06	-2.663E-06
0.96250	3.416E-06	480.297	-5.387E-05	-5.388E-05	5.391E-05	5.393E-05	-4.821E-06	-4.822E-06
0.97500	8.309E-06	486.534	-8.765E-05	-8.767E-05	8.802E-05	8.806E-05	-1.172E-05	-1.173E-05
0.98124	1.516E-05	489.653	-1.220E-04	-1.220E-04	1.234E-04	1.235E-04	-2.138E-05	-2.140E-05
0.98749	2.846E-05	492.770	-1.857E-04	-1.858E-04	1.926E-04	1.928E-04	-4.013E-05	-4.017E-05
0.99374	5.838E-05	495.888	-3.008E-04	-3.011E-04	3.394E-04	3.398E-04	-8.233E-05	-8.240E-05
0.99999	7.821E-05	499.005	-4.592E-04	-4.595E-04	6.249E-04	6.256E-04	-1.104E-04	-1.104E-04
1.00623	5.722E-05	502.122	-5.719E-04	-5.721E-04	9.524E-04	9.528E-04	-8.088E-05	-8.082E-05
1.01248	2.790E-05	505.239	-6.239E-04	-6.240E-04	1.157E-03	1.157E-03	-3.944E-05	-3.941E-05
1.01873	1.481E-05	508.357	-6.540E-04	-6.540E-04	1.257E-03	1.257E-03	-2.093E-05	-2.092E-05
1.02498	8.182E-06	511.476	-6.716E-04	-6.717E-04	1.308E-03	1.308E-03	-1.156E-05	-1.156E-05
1.03748	3.376E-06	517.713	-6.904E-04	-6.904E-04	1.355E-03	1.355E-03	-4.769E-06	-4.768E-06
1.04998	1.874E-06	523.950	-6.988E-04	-6.989E-04	1.378E-03	1.378E-03	-2.643E-06	-2.643E-06
1.07497	7.704E-07	536.425	-7.042E-04	-7.042E-04	1.403E-03	1.403E-03	-1.088E-06	-1.088E-06
1.09997	4.213E-07	548.900	-7.028E-04	-7.028E-04	1.419E-03	1.419E-03	-5.948E-07	-5.948E-07
1.14997	1.685E-07	573.850	-6.929E-04	-6.929E-04	1.442E-03	1.442E-03	-2.380E-07	-2.380E-07
1.19997	8.728E-08	598.801	-6.795E-04	-6.796E-04	1.462E-03	1.462E-03	-1.232E-07	-1.232E-07
1.29997	3.482E-08	648.702	-6.497E-04	-6.497E-04	1.497E-03	1.497E-03	-4.916E-08	-4.916E-08
1.39997	1.813E-08	698.603	-6.183E-04	-6.183E-04	1.531E-03	1.531E-03	-2.560E-08	-2.560E-08
1.49997	1.112E-08	748.504	-5.864E-04	-5.864E-04	1.564E-03	1.564E-03	-1.570E-08	-1.570E-08
1.59997	7.456E-09	798.405	-5.542E-04	-5.542E-04	1.597E-03	1.597E-03	-1.053E-08	-1.053E-08
1.69997	5.006E-09	848.306	-5.219E-04	-5.219E-04	1.630E-03	1.630E-03	-7.068E-09	-7.068E-09
1.79997	3.532E-09	898.207	-4.896E-04	-4.896E-04	1.663E-03	1.663E-03	-4.987E-09	-4.987E-09
1.89997	2.491E-09	948.108	-4.571E-04	-4.571E-04	1.696E-03	1.696E-03	-3.518E-09	-3.518E-09
1.99997	1.776E-09	998.009	-4.246E-04	-4.247E-04	1.728E-03	1.728E-03	-2.508E-09	-2.508E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 0.800 θ_D= 0. ρ_a= 3.004

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-3.412E-16
0.10000	8.119E-12	8.119E-12	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-4.578E-16
0.20000	2.268E-11	2.273E-11	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-6.547E-16
0.30000	4.814E-11	4.811E-11	-3.127E-20	-3.127E-20	-6.832E-10	-6.832E-10	-1.029E-15
0.40000	1.019E-10	1.019E-10	-5.705E-20	-5.705E-20	-1.324E-09	-1.324E-09	-1.742E-15
0.50000	2.022E-10	2.022E-10	-1.042E-19	-1.042E-19	-2.495E-09	-2.495E-09	-3.485E-15
0.60000	4.584E-10	4.583E-10	-2.144E-19	-2.144E-19	-4.736E-09	-4.736E-09	-8.143E-15
0.70000	1.302E-09	1.303E-09	-5.619E-19	-5.619E-19	-1.001E-08	-1.001E-08	-2.376E-14
0.80000	5.345E-09	5.345E-09	-2.240E-18	-2.240E-18	-2.731E-08	-2.731E-08	-1.071E-13
0.85000	1.423E-08	1.424E-08	-5.932E-18	-5.933E-18	-5.502E-08	-5.502E-08	-3.084E-13
0.90000	5.445E-08	5.445E-08	-2.501E-17	-2.501E-17	-1.502E-07	-1.502E-07	-1.361E-12
0.92500	1.329E-07	1.329E-07	-5.720E-17	-5.721E-17	-2.958E-07	-2.958E-07	-4.007E-12
0.95000	4.926E-07	4.927E-07	-2.120E-16	-2.120E-16	-7.168E-07	-7.169E-07	-1.662E-11
0.96250	1.184E-06	1.185E-06	-5.373E-16	-5.376E-16	-1.343E-06	-1.343E-06	-4.388E-11
0.97500	4.331E-06	4.334E-06	-2.216E-15	-2.218E-15	-3.523E-06	-3.525E-06	-1.349E-10
0.98124	1.037E-05	1.038E-05	-5.722E-15	-5.730E-15	-6.870E-06	-6.876E-06	-2.502E-10
0.98749	2.935E-05	2.940E-05	-1.591E-14	-1.594E-14	-1.633E-05	-1.636E-05	-5.024E-10
0.99374	1.103E-04	1.105E-04	-5.161E-14	-5.170E-14	-4.512E-05	-4.520E-05	-8.227E-10
0.99999	4.344E-04	4.352E-04	-8.387E-14	-8.387E-14	-1.125E-04	-1.126E-04	-1.044E-09
1.00623	7.461E-04	7.464E-04	-5.014E-14	-5.006E-14	-1.789E-04	-1.790E-04	-8.118E-10
1.01248	8.258E-04	8.258E-04	-1.547E-14	-1.545E-14	-2.067E-04	-2.067E-04	-4.904E-10
1.01873	8.469E-04	8.469E-04	-5.530E-15	-5.523E-15	-2.159E-04	-2.159E-04	-2.455E-10
1.02498	8.523E-04	8.523E-04	-2.168E-15	-2.166E-15	-2.191E-04	-2.191E-04	-1.320E-10
1.03748	8.511E-04	8.511E-04	-5.283E-16	-5.280E-16	-2.212E-04	-2.212E-04	-4.318E-11
1.04998	8.466E-04	8.467E-04	-2.096E-16	-2.095E-16	-2.218E-04	-2.218E-04	-1.639E-11
1.07497	8.374E-04	8.375E-04	-5.584E-17	-5.683E-17	-2.222E-04	-2.223E-04	-3.969E-12
1.09997	8.286E-04	8.287E-04	-2.485E-17	-2.485E-17	-2.224E-04	-2.224E-04	-1.353E-12
1.14997	8.119E-04	8.119E-04	-5.908E-18	-5.908E-18	-2.225E-04	-2.225E-04	-3.072E-13
1.19997	7.960E-04	7.961E-04	-2.233E-18	-2.233E-18	-2.225E-04	-2.225E-04	-1.069E-13
1.29997	7.662E-04	7.662E-04	-5.607E-19	-5.607E-19	-2.225E-04	-2.225E-04	-2.374E-14
1.39997	7.386E-04	7.386E-04	-2.140E-19	-2.140E-19	-2.225E-04	-2.225E-04	-8.142E-15
1.49997	7.129E-04	7.129E-04	-1.041E-19	-1.041E-19	-2.225E-04	-2.225E-04	-3.485E-15
1.59997	6.890E-04	6.890E-04	-5.698E-20	-5.698E-20	-2.225E-04	-2.225E-04	-1.743E-15
1.69997	6.666E-04	6.666E-04	-3.124E-20	-3.124E-20	-2.225E-04	-2.225E-04	-1.030E-15
1.79997	6.456E-04	6.457E-04	-1.793E-20	-1.793E-20	-2.225E-04	-2.225E-04	-6.556E-16
1.89997	6.259E-04	6.259E-04	-1.029E-20	-1.029E-20	-2.225E-04	-2.225E-04	-4.586E-16
1.99997	6.074E-04	6.074E-04	-5.898E-21	-5.898E-21	-2.225E-04	-2.225E-04	-3.420E-16

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 1.000 θ_D= 0. ρ_a= 3.755

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	1.0000	0.10000	193.647	9.088E-08	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	1.0000	0.20000	172.135	1.367E-07	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	1.0000	0.30000	150.625	2.568E-07	1.000E-00	-5.009E-09	-5.009E-09	5.009E-09
0.40000	1.0000	0.40000	129.117	4.202E-07	1.000E-00	-7.461E-09	-7.461E-09	7.461E-09
0.50000	1.0000	0.50000	107.612	5.736E-07	1.000E-00	-1.113E-08	-1.113E-08	1.113E-08
0.60000	1.0000	0.60000	86.113	6.937E-07	9.999E-01	-1.814E-08	-1.814E-08	1.814E-08
0.70000	1.0000	0.70000	64.624	2.615E-06	9.999E-01	-3.484E-08	-3.484E-08	3.484E-08
0.80000	1.0000	0.80000	43.163	8.965E-06	9.997E-01	-8.726E-08	-8.726E-08	8.726E-08
0.85000	1.0000	0.85000	32.459	2.268E-05	9.994E-01	-1.683E-07	-1.683E-07	1.683E-07
0.90000	1.0000	0.90000	21.809	7.823E-05	9.987E-01	-4.183E-07	-4.183E-07	4.183E-07
0.92500	1.0000	0.92500	16.536	1.841E-04	9.979E-01	-7.617E-07	-7.618E-07	7.617E-07
0.95000	1.0000	0.95000	11.364	5.902E-04	9.964E-01	-1.815E-06	-1.815E-06	1.815E-06
0.96250	1.0000	0.96250	8.870	1.281E-03	9.958E-01	-3.161E-06	-3.162E-06	3.161E-06
0.97500	1.0001	0.97500	6.534	3.457E-03	9.977E-01	-7.155E-06	-7.158E-06	7.154E-06
0.98124	1.0001	0.98125	5.488	6.284E-03	1.002E 00	-1.143E-05	-1.144E-05	1.143E-05
0.98749	1.0001	0.98750	4.601	1.211E-02	1.007E 00	-1.967E-05	-1.968E-05	1.966E-05
0.99374	1.0002	0.99375	3.979	2.329E-02	1.007E 00	-2.920E-05	-2.921E-05	2.919E-05
0.99999	1.0004	1.00000	3.757	4.092E-02	9.995E-01	-3.547E-05	-3.547E-05	3.547E-05
1.00624	1.0008	1.00625	4.001	5.840E-02	1.006E 00	-2.877E-05	-2.876E-05	2.877E-05
1.01248	1.0011	1.01250	4.646	6.926E-02	1.005E 00	-1.921E-05	-1.920E-05	1.921E-05
1.01873	1.0016	1.01875	5.537	7.487E-02	9.975E-01	-1.116E-05	-1.115E-05	1.116E-05
1.02498	1.0020	1.02500	6.588	7.757E-02	9.921E-01	-7.012E-06	-7.009E-06	7.013E-06
1.03748	1.0030	1.03750	8.930	7.969E-02	9.871E-01	-3.110E-06	-3.109E-06	3.110E-06
1.04998	1.0039	1.05000	11.426	8.036E-02	9.848E-01	-1.795E-06	-1.795E-06	1.795E-06
1.07498	1.0057	1.07500	16.601	8.077E-02	9.807E-01	-7.562E-07	-7.561E-07	7.562E-07
1.09998	1.0074	1.10000	21.874	8.088E-02	9.763E-01	-4.152E-07	-4.152E-07	4.152E-07
1.14998	1.0106	1.15000	32.525	8.094E-02	9.674E-01	-1.675E-07	-1.675E-07	1.676E-07
1.19998	1.0135	1.20000	43.229	8.096E-02	9.589E-01	-8.698E-08	-8.697E-08	8.698E-08
1.29998	1.0187	1.30000	64.690	8.097E-02	9.435E-01	-3.476E-08	-3.476E-08	3.476E-08
1.39998	1.0231	1.40000	86.179	8.097E-02	9.301E-01	-1.811E-08	-1.811E-08	1.811E-08
1.49998	1.0270	1.50000	107.678	8.097E-02	9.186E-01	-1.111E-08	-1.111E-08	1.111E-08
1.59998	1.0304	1.60000	129.183	8.097E-02	9.084E-01	-7.451E-09	-7.451E-09	7.451E-09
1.69998	1.0334	1.70000	150.691	8.097E-02	8.995E-01	-5.004E-09	-5.004E-09	5.004E-09
1.79998	1.0360	1.80000	172.201	8.097E-02	8.915E-01	-3.530E-09	-3.530E-09	3.530E-09
1.89998	1.0384	1.90000	193.713	8.097E-02	8.844E-01	-2.490E-09	-2.490E-09	2.490E-09
1.99998	1.0405	2.00000	215.225	8.098E-02	8.779E-01	-1.775E-09	-1.775E-09	1.775E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 1.000 θ_D= 0. ρ_0= 3.755

z	$_x\mu'-1$ 0	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.542E-07	-2.542E-07	2.542E-07	2.542E-07	-4.990E-09	-4.990E-09
0.30000	5.009E-09	149.703	-4.653E-07	-4.653E-07	4.653E-07	4.653E-07	-7.073E-09	-7.073E-09
0.40000	7.461E-09	199.605	-7.721E-07	-7.721E-07	7.721E-07	7.721E-07	-1.053E-08	-1.053E-08
0.50000	1.113E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.571E-08	-1.571E-08
0.60000	1.814E-08	299.407	-1.935E-06	-1.935E-06	1.935E-06	1.935E-06	-2.562E-08	-2.562E-08
0.70000	3.484E-08	349.308	-3.193E-06	-3.193E-06	3.193E-06	3.193E-06	-4.919E-08	-4.919E-08
0.80000	8.727E-08	399.209	-5.944E-06	-5.944E-06	5.944E-06	5.944E-06	-1.232E-07	-1.232E-07
0.85000	1.683E-07	424.160	-8.972E-06	-8.972E-06	8.972E-06	8.972E-06	-2.376E-07	-2.376E-07
0.90000	4.183E-07	449.110	-1.563E-05	-1.563E-05	1.563E-05	1.563E-05	-5.906E-07	-5.906E-07
0.92500	7.618E-07	461.585	-2.278E-05	-2.278E-05	2.278E-05	2.278E-05	-1.076E-06	-1.076E-06
0.95000	1.815E-06	474.060	-3.763E-05	-3.763E-05	3.764E-05	3.764E-05	-2.562E-06	-2.563E-06
0.96250	3.164E-06	480.297	-5.233E-05	-5.233E-05	5.238E-05	5.239E-05	-4.463E-06	-4.465E-06
0.97500	7.160E-06	486.534	-8.211E-05	-8.212E-05	8.254E-05	8.257E-05	-1.010E-05	-1.011E-05
0.98124	1.144E-05	489.653	-1.097E-04	-1.097E-04	1.111E-04	1.112E-04	-1.614E-05	-1.615E-05
0.98749	1.969E-05	492.771	-1.552E-04	-1.552E-04	1.606E-04	1.607E-04	-2.777E-05	-2.779E-05
0.99374	2.922E-05	495.889	-2.242E-04	-2.243E-04	2.446E-04	2.448E-04	-4.123E-05	-4.125E-05
0.99999	3.547E-05	499.006	-3.058E-04	-3.059E-04	3.694E-04	3.696E-04	-5.009E-05	-5.009E-05
1.00624	2.875E-05	502.124	-3.746E-04	-3.747E-04	5.050E-04	5.052E-04	-4.962E-05	-4.960E-05
1.01248	1.919E-05	505.242	-4.226E-04	-4.227E-04	6.072E-04	6.073E-04	-2.712E-05	-2.711E-05
1.01873	1.115E-05	508.360	-4.526E-04	-4.527E-04	6.697E-04	6.697E-04	-1.575E-05	-1.574E-05
1.02498	7.008E-06	511.478	-4.714E-04	-4.715E-04	7.058E-04	7.059E-04	-9.900E-06	-9.896E-06
1.03748	3.109E-06	517.715	-4.928E-04	-4.928E-04	7.432E-04	7.432E-04	-4.391E-06	-4.390E-06
1.04998	1.794E-06	523.952	-5.037E-04	-5.037E-04	7.614E-04	7.614E-04	-2.534E-06	-2.534E-06
1.07498	7.561E-07	536.427	-5.140E-04	-5.140E-04	7.805E-04	7.805E-04	-1.068E-06	-1.068E-06
1.09998	4.154E-07	548.902	-5.176E-04	-5.176E-04	7.910E-04	7.910E-04	-5.863E-07	-5.863E-07
1.14998	1.675E-07	573.853	-5.178E-04	-5.178E-04	8.041E-04	8.041E-04	-2.366E-07	-2.366E-07
1.19998	8.697E-08	598.803	-5.145E-04	-5.145E-04	8.134E-04	8.134E-04	-1.228E-07	-1.228E-07
1.29998	3.476E-08	648.704	-5.047E-04	-5.047E-04	8.286E-04	8.286E-04	-4.908E-08	-4.908E-08
1.39998	1.811E-08	698.605	-4.935E-04	-4.935E-04	8.423E-04	8.424E-04	-2.558E-08	-2.558E-08
1.49998	1.111E-08	748.507	-4.818E-04	-4.818E-04	8.555E-04	8.555E-04	-1.569E-08	-1.569E-08
1.59998	7.451E-09	798.408	-4.698E-04	-4.698E-04	8.684E-04	8.684E-04	-1.052E-08	-1.052E-08
1.69998	5.004E-09	848.309	-4.576E-04	-4.576E-04	8.812E-04	8.812E-04	-7.065E-09	-7.065E-09
1.79998	3.530E-09	898.210	-4.453E-04	-4.454E-04	8.939E-04	8.939E-04	-4.984E-09	-4.984E-09
1.89998	2.490E-09	948.111	-4.330E-04	-4.330E-04	9.065E-04	9.065E-04	-3.516E-09	-3.516E-09
1.99998	1.775E-09	998.012	-4.207E-04	-4.207E-04	9.190E-04	9.191E-04	-2.507E-09	-2.507E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 1.000 θ_D= 0. ρ_0= 3.755

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-5.332E-16
0.10000	1.017E-11	1.015E-11	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-7.152E-16
0.20000	2.838E-11	2.843E-11	-1.795E-20	-1.795E-20	-3.242E-10	-3.242E-10	-1.023E-15
0.30000	6.017E-11	6.017E-11	-3.127E-20	-3.127E-20	-6.831E-10	-6.831E-10	-1.608E-15
0.40000	1.275E-10	1.275E-10	-5.704E-20	-5.704E-20	-1.324E-09	-1.324E-09	-2.721E-15
0.50000	2.527E-10	2.528E-10	-1.042E-19	-1.042E-19	-2.495E-09	-2.495E-09	-5.442E-15
0.60000	5.727E-10	5.725E-10	-2.142E-19	-2.142E-19	-4.735E-09	-4.735E-09	-1.271E-14
0.70000	1.627E-09	1.627E-09	-5.612E-19	-5.612E-19	-1.000E-08	-1.000E-08	-3.707E-14
0.80000	6.665E-09	6.665E-09	-2.233E-18	-2.233E-18	-2.726E-08	-2.726E-08	-1.667E-13
0.85000	1.771E-08	1.771E-08	-5.894E-18	-5.894E-18	-5.482E-08	-5.482E-08	-4.780E-13
0.90000	6.724E-08	6.724E-08	-2.461E-17	-2.461E-17	-1.488E-07	-1.488E-07	-2.090E-12
0.92500	1.631E-07	1.631E-07	-5.595E-17	-5.596E-17	-2.916E-07	-2.917E-07	-6.040E-12
0.95000	5.859E-07	5.860E-07	-1.997E-16	-1.997E-16	-6.927E-07	-6.928E-07	-2.407E-11
0.96250	1.333E-06	1.333E-06	-4.760E-16	-4.763E-16	-1.262E-06	-1.263E-06	-6.110E-11
0.97500	4.482E-06	4.485E-06	-1.747E-15	-1.749E-15	-3.042E-06	-3.043E-06	-1.690E-10
0.98124	9.513E-06	9.521E-06	-3.649E-15	-3.653E-15	-5.413E-06	-5.417E-06	-3.011E-10
0.98749	2.304E-05	2.306E-05	-8.751E-15	-8.762E-15	-1.088E-05	-1.089E-05	-5.042E-10
0.99374	6.618E-05	6.628E-05	-1.660E-14	-1.662E-14	-2.268E-05	-2.270E-05	-8.121E-10
0.99999	1.752E-04	1.754E-04	-2.270E-14	-2.270E-14	-4.164E-05	-4.168E-05	-9.440E-10
1.00624	2.794E-04	2.795E-04	-1.623E-14	-1.621E-14	-6.033E-05	-6.035E-05	-7.975E-10
1.01248	3.198E-04	3.199E-04	-8.421E-15	-8.411E-15	-7.177E-05	-7.178E-05	-4.916E-10
1.01873	3.334E-04	3.334E-04	-3.513E-15	-3.510E-15	-7.701E-05	-7.702E-05	-2.930E-10
1.02498	3.380E-04	3.381E-04	-1.692E-15	-1.691E-15	-7.931E-05	-7.931E-05	-1.643E-10
1.03748	3.387E-04	3.387E-04	-4.641E-16	-4.639E-16	-8.102E-05	-8.103E-05	-5.970E-11
1.04998	3.362E-04	3.362E-04	-1.963E-16	-1.962E-16	-8.158E-05	-8.159E-05	-2.358E-11
1.07498	3.302E-04	3.302E-04	-5.540E-17	-5.539E-17	-8.198E-05	-8.198E-05	-5.951E-12
1.09998	3.242E-04	3.242E-04	-2.436E-17	-2.436E-17	-8.212E-05	-8.212E-05	-2.071E-12
1.14998	3.130E-04	3.130E-04	-5.857E-18	-5.856E-18	-8.221E-05	-8.222E-05	-4.749E-13
1.19998	3.027E-04	3.027E-04	-2.222E-18	-2.222E-18	-8.224E-05	-8.224E-05	-1.660E-13
1.29998	2.840E-04	2.840E-04	-5.594E-19	-5.594E-19	-8.226E-05	-8.226E-05	-3.698E-14
1.39998	2.675E-04	2.675E-04	-2.137E-19	-2.137E-19	-8.226E-05	-8.226E-05	-1.270E-14
1.49998	2.528E-04	2.528E-04	-1.040E-19	-1.040E-19	-8.226E-05	-8.227E-05	-5.439E-15
1.59998	2.396E-04	2.396E-04	-5.693E-20	-5.693E-20	-8.226E-05	-8.227E-05	-2.721E-15
1.69998	2.278E-04	2.278E-04	-3.121E-20	-3.121E-20	-8.227E-05	-8.227E-05	-1.608E-15
1.79998	2.170E-04	2.170E-04	-1.791E-20	-1.791E-20	-8.227E-05	-8.227E-05	-1.024E-15
1.89998	2.073E-04	2.073E-04	-1.028E-20	-1.028E-20	-8.227E-05	-8.227E-05	-7.163E-16
1.99998	1.983E-04	1.984E-04	-5.895E-21	-5.895E-21	-8.227E-05	-8.227E-05	-5.342E-16

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.506

z	ϕ	z_r	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	1.2000	0.	215.459	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	1.2000	0.10000	193.648	1.034E-07	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	1.2000	0.20000	172.139	1.934E-07	1.000E-00	-3.534E-09	-3.534E-09	3.534E-09
0.30000	1.2000	0.30000	150.831	2.868E-07	1.000E-00	-5.009E-09	-5.009E-09	5.009E-09
0.40000	1.2000	0.40000	129.127	4.536E-07	1.000E-00	-7.459E-09	-7.459E-09	7.459E-09
0.50000	1.2000	0.50000	107.627	6.136E-07	9.999E-01	-1.112E-08	-1.112E-08	1.112E-08
0.60000	1.2000	0.60000	86.134	6.136E-07	9.999E-01	-1.813E-08	-1.813E-08	1.813E-08
0.70000	1.2000	0.70000	64.658	2.668E-06	9.998E-01	-3.480E-08	-3.480E-08	3.480E-08
0.80000	1.2000	0.80000	43.220	9.071E-06	9.995E-01	-8.701E-08	-8.701E-08	8.701E-08
0.85000	1.2000	0.85000	32.540	2.300E-05	9.991E-01	-1.674E-07	-1.674E-07	1.674E-07
0.90000	1.2000	0.90000	21.937	7.983E-05	9.981E-01	-4.123E-07	-4.123E-07	4.123E-07
0.92500	1.2000	0.92500	16.709	1.848E-04	9.971E-01	-7.469E-07	-7.470E-07	7.469E-07
0.95000	1.2000	0.95000	11.620	5.812E-04	9.955E-01	-1.733E-06	-1.734E-06	1.733E-06
0.96250	1.2000	0.96250	9.201	1.218E-03	9.955E-01	-2.886E-06	-2.887E-06	2.886E-06
0.97500	1.2001	0.97500	6.981	3.066E-03	9.994E-01	-6.034E-06	-6.036E-06	6.033E-06
0.98125	1.2001	0.98125	6.017	5.157E-03	1.004E 00	-8.711E-06	-8.715E-06	8.710E-06
0.98749	1.2001	0.98750	5.224	8.994E-03	1.009E 00	-1.326E-05	-1.326E-05	1.325E-05
0.99374	1.2002	0.99375	4.690	1.546E-02	1.006E 00	-1.859E-05	-1.860E-05	1.859E-05
0.99999	1.2003	1.00000	4.357	2.420E-02	9.997E-01	-2.088E-05	-2.088E-05	2.088E-05
1.00624	1.2005	1.00625	4.717	3.286E-02	1.006E 00	-1.828E-05	-1.828E-05	1.829E-05
1.01249	1.2007	1.01250	5.273	3.913E-02	1.008E 00	-1.286E-05	-1.286E-05	1.286E-05
1.01874	1.2010	1.01875	6.084	4.281E-02	1.003E 00	-8.507E-06	-8.504E-06	8.509E-06
1.02499	1.2012	1.02500	7.054	4.482E-02	9.971E-01	-5.871E-06	-5.870E-06	5.872E-06
1.03749	1.2018	1.03750	9.284	4.658E-02	9.915E-01	-2.822E-06	-2.821E-06	2.822E-06
1.04999	1.2023	1.05000	11.708	4.720E-02	9.899E-01	-1.707E-06	-1.706E-06	1.707E-06
1.07499	1.2033	1.07500	16.800	4.759E-02	9.886E-01	-7.392E-07	-7.392E-07	7.393E-07
1.09999	1.2044	1.10000	22.029	4.770E-02	9.870E-01	-4.080E-07	-4.079E-07	4.080E-07
1.14999	1.2062	1.15000	32.634	4.776E-02	9.833E-01	-1.663E-07	-1.663E-07	1.663E-07
1.19998	1.2080	1.20000	43.315	4.778E-02	9.793E-01	-8.660E-08	-8.660E-08	8.660E-08
1.29998	1.2110	1.30000	64.752	4.779E-02	9.719E-01	-3.469E-08	-3.469E-08	3.469E-08
1.39998	1.2137	1.40000	86.229	4.779E-02	9.654E-01	-1.809E-08	-1.809E-08	1.809E-08
1.49998	1.2159	1.50000	107.721	4.779E-02	9.597E-01	-1.111E-08	-1.111E-08	1.111E-08
1.59998	1.2179	1.60000	129.222	4.779E-02	9.547E-01	-7.446E-09	-7.446E-09	7.446E-09
1.69998	1.2197	1.70000	150.726	4.779E-02	9.503E-01	-5.001E-09	-5.001E-09	5.001E-09
1.79998	1.2212	1.80000	172.234	4.779E-02	9.464E-01	-3.528E-09	-3.528E-09	3.528E-09
1.89998	1.2226	1.90000	193.743	4.779E-02	9.429E-01	-2.489E-09	-2.489E-09	2.489E-09
1.99998	1.2239	2.00000	215.254	4.779E-02	9.397E-01	-1.775E-09	-1.775E-09	1.775E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.506

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.534E-09	99.802	-2.542E-07	-2.542E-07	2.542E-07	2.542E-07	-4.989E-09	-4.990E-09
0.30000	5.009E-09	149.703	-4.652E-07	-4.652E-07	4.652E-07	4.652E-07	-7.072E-09	-7.072E-09
0.40000	7.459E-09	199.605	-7.720E-07	-7.720E-07	7.720E-07	7.720E-07	-1.053E-08	-1.053E-08
0.50000	1.112E-08	249.506	-1.230E-06	-1.230E-06	1.230E-06	1.230E-06	-1.571E-08	-1.571E-08
0.60000	1.813E-08	299.407	-1.935E-06	-1.935E-06	1.935E-06	1.935E-06	-2.560E-08	-2.560E-08
0.70000	3.480E-08	349.308	-3.191E-06	-3.191E-06	3.191E-06	3.191E-06	-4.913E-08	-4.913E-08
0.80000	8.701E-08	399.209	-5.937E-06	-5.937E-06	5.937E-06	5.937E-06	-1.229E-07	-1.229E-07
0.85000	1.674E-07	424.160	-8.952E-06	-8.952E-06	8.952E-06	8.952E-06	-2.363E-07	-2.363E-07
0.90000	4.123E-07	449.110	-1.554E-05	-1.554E-05	1.554E-05	1.554E-05	-5.821E-07	-5.821E-07
0.92500	7.470E-07	461.585	-2.257E-05	-2.258E-05	2.258E-05	2.258E-05	-1.055E-06	-1.055E-06
0.95000	1.734E-06	474.060	-3.688E-05	-3.688E-05	3.689E-05	3.690E-05	-2.448E-06	-2.448E-06
0.96250	2.887E-06	480.298	-5.063E-05	-5.063E-05	5.068E-05	5.069E-05	-4.075E-06	-4.076E-06
0.97500	6.037E-06	486.535	-7.660E-05	-7.661E-05	7.694E-05	7.697E-05	-8.520E-06	-8.523E-06
0.98125	8.717E-06	489.653	-9.911E-05	-9.913E-05	1.001E-04	1.001E-04	-1.230E-05	-1.231E-05
0.98749	1.327E-05	492.772	-1.319E-04	-1.320E-04	1.350E-04	1.350E-04	-1.872E-05	-1.873E-05
0.99374	1.860E-05	495.890	-1.790E-04	-1.790E-04	1.880E-04	1.881E-04	-2.626E-05	-2.626E-05
0.99999	2.088E-05	499.008	-2.351E-04	-2.352E-04	2.573E-04	2.575E-04	-2.948E-05	-2.948E-05
1.00624	1.828E-05	502.126	-2.878E-04	-2.879E-04	3.291E-04	3.292E-04	-2.582E-05	-2.581E-05
1.01249	1.285E-05	505.244	-3.279E-04	-3.279E-04	3.868E-04	3.868E-04	-1.816E-05	-1.815E-05
1.01874	8.502E-06	508.362	-3.548E-04	-3.548E-04	4.257E-04	4.258E-04	-1.201E-05	-1.201E-05
1.02499	5.869E-06	511.481	-3.734E-04	-3.734E-04	4.516E-04	4.516E-04	-8.290E-06	-8.288E-06
1.03749	2.821E-06	517.718	-3.951E-04	-3.952E-04	4.807E-04	4.807E-04	-3.984E-06	-3.984E-06
1.04999	1.706E-06	523.955	-4.070E-04	-4.070E-04	4.959E-04	4.959E-04	-2.410E-06	-2.410E-06
1.07499	7.392E-07	536.430	-4.193E-04	-4.193E-04	5.118E-04	5.118E-04	-1.044E-06	-1.044E-06
1.09999	4.079E-07	548.906	-4.249E-04	-4.249E-04	5.200E-04	5.201E-04	-5.760E-07	-5.760E-07
1.14999	1.663E-07	573.856	-4.292E-04	-4.292E-04	5.289E-04	5.289E-04	-2.349E-07	-2.349E-07
1.19998	8.660E-08	598.806	-4.300E-04	-4.300E-04	5.341E-04	5.341E-04	-1.223E-07	-1.223E-07
1.29998	3.469E-08	648.707	-4.283E-04	-4.284E-04	5.412E-04	5.412E-04	-4.898E-08	-4.898E-08
1.39998	1.809E-08	698.609	-4.252E-04	-4.253E-04	5.468E-04	5.468E-04	-2.554E-08	-2.554E-08
1.49998	1.111E-08	748.510	-4.216E-04	-4.216E-04	5.518E-04	5.518E-04	-1.568E-08	-1.568E-08
1.59998	7.446E-09	798.411	-4.177E-04	-4.177E-04	5.566E-04	5.566E-04	-1.051E-08	-1.051E-08
1.69998	5.001E-09	848.312	-4.137E-04	-4.137E-04	5.613E-04	5.613E-04	-7.061E-09	-7.061E-09
1.79998	3.528E-09	898.213	-4.095E-04	-4.096E-04	5.658E-04	5.658E-04	-4.982E-09	-4.982E-09
1.89998	2.489E-09	948.114	-4.054E-04	-4.054E-04	5.703E-04	5.703E-04	-3.515E-09	-3.515E-09
1.99998	1.775E-09	998.015	-4.011E-04	-4.011E-04	5.747E-04	5.748E-04	-2.506E-09	-2.506E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 1.200 θ_D= 0. ρ_a= 4.506

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-7.677E-16
0.10000	1.217E-11	1.219E-11	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-1.030E-15
0.20000	3.407E-11	3.404E-11	-1.794E-20	-1.794E-20	-3.242E-10	-3.242E-10	-1.473E-15
0.30000	7.217E-11	7.217E-11	-3.126E-20	-3.126E-20	-6.831E-10	-6.831E-10	-2.314E-15
0.40000	1.530E-10	1.530E-10	-5.702E-20	-5.702E-20	-1.324E-09	-1.324E-09	-3.917E-15
0.50000	3.033E-10	3.032E-10	-1.041E-19	-1.041E-19	-2.494E-09	-2.494E-09	-7.833E-15
0.60000	6.868E-10	6.867E-10	-2.141E-19	-2.141E-19	-4.733E-09	-4.733E-09	-1.829E-14
0.70000	1.950E-09	1.949E-09	-5.603E-19	-5.603E-19	-9.993E-09	-9.993E-09	-5.327E-14
0.80000	7.974E-09	7.974E-09	-2.223E-18	-2.223E-18	-2.720E-08	-2.720E-08	-2.388E-13
0.85000	2.112E-08	2.113E-08	-5.848E-18	-5.848E-18	-5.458E-08	-5.458E-08	-6.817E-13
0.90000	7.936E-08	7.936E-08	-2.412E-17	-2.412E-17	-1.472E-07	-1.472E-07	-2.949E-12
0.92500	1.914E-07	1.914E-07	-5.446E-17	-5.447E-17	-2.866E-07	-2.867E-07	-8.335E-12
0.95000	6.634E-07	6.635E-07	-1.859E-16	-1.860E-16	-6.651E-07	-6.652E-07	-3.174E-11
0.96250	1.421E-06	1.422E-06	-4.127E-16	-4.129E-16	-1.177E-06	-1.177E-06	-7.738E-11
0.97500	4.355E-06	4.358E-06	-1.331E-15	-1.332E-15	-2.597E-06	-2.598E-06	-1.939E-10
0.98125	8.452E-06	8.458E-06	-2.393E-15	-2.395E-15	-4.301E-06	-4.303E-06	-3.276E-10
0.98749	1.824E-05	1.826E-05	-4.610E-15	-4.614E-15	-7.471E-06	-7.476E-06	-5.026E-10
0.99374	4.317E-05	4.322E-05	-7.988E-15	-7.992E-15	-1.337E-05	-1.338E-05	-6.847E-10
0.99999	9.309E-05	9.317E-05	-9.642E-15	-9.642E-15	-2.187E-05	-2.188E-05	-7.743E-10
1.00624	1.407E-04	1.408E-04	-7.772E-15	-7.768E-15	-3.025E-05	-3.026E-05	-6.730E-10
1.01249	1.635E-04	1.636E-04	-4.389E-15	-4.386E-15	-3.593E-05	-3.594E-05	-4.905E-10
1.01874	1.729E-04	1.730E-04	-2.305E-15	-2.303E-15	-3.896E-05	-3.897E-05	-3.154E-10
1.02499	1.768E-04	1.769E-04	-1.274E-15	-1.273E-15	-4.060E-05	-4.060E-05	-1.875E-10
1.03749	1.785E-04	1.785E-04	-3.983E-16	-3.982E-16	-4.196E-05	-4.196E-05	-7.508E-11
1.04999	1.774E-04	1.774E-04	-1.815E-16	-1.814E-16	-4.246E-05	-4.246E-05	-3.085E-11
1.07499	1.740E-04	1.740E-04	-5.370E-17	-5.369E-17	-4.283E-05	-4.283E-05	-8.159E-12
1.09999	1.704E-04	1.704E-04	-2.378E-17	-2.378E-17	-4.296E-05	-4.297E-05	-2.909E-12
1.14999	1.637E-04	1.637E-04	-5.794E-18	-5.794E-18	-4.306E-05	-4.306E-05	-6.750E-13
1.19998	1.575E-04	1.575E-04	-2.208E-18	-2.207E-18	-4.308E-05	-4.308E-05	-2.372E-13
1.29998	1.465E-04	1.465E-04	-5.577E-19	-5.577E-19	-4.310E-05	-4.310E-05	-5.305E-14
1.39998	1.370E-04	1.370E-04	-2.133E-19	-2.133E-19	-4.310E-05	-4.311E-05	-1.824E-14
1.49998	1.286E-04	1.286E-04	-1.039E-19	-1.039E-19	-4.311E-05	-4.311E-05	-7.819E-15
1.59998	1.212E-04	1.212E-04	-5.687E-20	-5.687E-20	-4.311E-05	-4.311E-05	-3.913E-15
1.69998	1.146E-04	1.146E-04	-3.119E-20	-3.119E-20	-4.311E-05	-4.311E-05	-2.314E-15
1.79998	1.087E-04	1.087E-04	-1.790E-20	-1.790E-20	-4.311E-05	-4.311E-05	-1.473E-15
1.89998	1.033E-04	1.033E-04	-1.027E-20	-1.027E-20	-4.311E-05	-4.311E-05	-1.031E-15
1.99998	9.849E-05	9.849E-05	-5.890E-21	-5.890E-21	-4.311E-05	-4.311E-05	-7.689E-16

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 1.500 θ_D= 0. ρ_a= 5.632

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.5000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	1.5000	0.10000	193.651	1.701E-07	1.000E-00	-2.493E-09	-2.493E-09	2.493E-09
0.20000	1.5000	0.20000	172.146	2.401E-07	1.000E-00	-3.533E-09	-3.533E-09	3.533E-09
0.30000	1.5000	0.30000	150.643	3.669E-07	9.999E-01	-5.008E-09	-5.008E-09	5.008E-09
0.40000	1.5000	0.40000	129.145	6.403E-07	9.999E-01	-7.457E-09	-7.457E-09	7.457E-09
0.50000	1.5000	0.50000	107.653	9.338E-07	9.999E-01	-1.112E-08	-1.112E-08	1.112E-08
0.60000	1.5000	0.60000	86.174	1.014E-06	9.998E-01	-1.812E-08	-1.812E-08	1.812E-08
0.70000	1.5000	0.70000	64.720	3.949E-06	9.996E-01	-3.473E-08	-3.473E-08	3.473E-08
0.80000	1.5000	0.80000	43.326	1.302E-05	9.990E-01	-8.655E-08	-8.655E-08	8.655E-08
0.85000	1.5000	0.85000	32.689	3.351E-05	9.982E-01	-1.657E-07	-1.657E-07	1.657E-07
0.90000	1.5000	0.90000	22.170	1.133E-04	9.965E-01	-4.015E-07	-4.015E-07	4.015E-07
0.92500	1.5000	0.92500	17.022	2.557E-04	9.951E-01	-7.208E-07	-7.208E-07	7.208E-07
0.95000	1.5000	0.95000	12.078	7.648E-04	9.942E-01	-1.597E-06	-1.597E-06	1.597E-06
0.96250	1.5000	0.96250	9.780	1.516E-03	9.964E-01	-2.461E-06	-2.461E-06	2.461E-06
0.97500	1.5001	0.97500	7.738	3.404E-03	1.004E 00	-4.524E-06	-4.525E-06	4.523E-06
0.98125	1.5001	0.98125	6.886	5.271E-03	1.010E 00	-6.258E-06	-6.259E-06	6.257E-06
0.98749	1.5001	0.98750	6.211	8.170E-03	1.012E 00	-8.093E-06	-8.095E-06	8.092E-06
0.99374	1.5002	0.99375	5.775	1.235E-02	1.006E 00	-9.857E-06	-9.859E-06	9.857E-06
0.99999	1.5003	1.00000	5.634	1.748E-02	9.998E-01	-1.061E-05	-1.061E-05	1.061E-05
1.00624	1.5004	1.00625	5.809	2.254E-02	1.007E 00	-9.685E-06	-9.683E-06	9.685E-06
1.01249	1.5006	1.01250	6.275	2.658E-02	1.013E 00	-7.901E-06	-7.899E-06	7.902E-06
1.01874	1.5007	1.01875	6.972	2.934E-02	1.010E 00	-6.058E-06	-6.056E-06	6.058E-06
1.02499	1.5009	1.02500	7.840	3.112E-02	1.004E 00	-4.352E-06	-4.351E-06	4.353E-06
1.03749	1.5013	1.03750	9.901	3.290E-02	9.949E-01	-2.381E-06	-2.380E-06	2.381E-06
1.04999	1.5017	1.05000	12.209	3.362E-02	9.915E-01	-1.560E-06	-1.560E-06	1.560E-06
1.07499	1.5024	1.07500	17.162	3.411E-02	9.903E-01	-7.095E-07	-7.094E-07	7.095E-07
1.09999	1.5031	1.10000	22.513	3.426E-02	9.901E-01	-3.950E-07	-3.950E-07	3.950E-07
1.14999	1.5045	1.15000	32.835	3.434E-02	9.889E-01	-1.642E-07	-1.642E-07	1.642E-07
1.19999	1.5057	1.20000	43.472	3.437E-02	9.872E-01	-8.591E-08	-8.591E-08	8.592E-08
1.29999	1.5079	1.30000	64.867	3.438E-02	9.833E-01	-3.456E-08	-3.456E-08	3.456E-08
1.39999	1.5098	1.40000	86.322	3.439E-02	9.797E-01	-1.805E-08	-1.805E-08	1.805E-08
1.49999	1.5115	1.50000	107.861	3.439E-02	9.765E-01	-1.109E-08	-1.109E-08	1.109E-08
1.59999	1.5129	1.60000	129.292	3.439E-02	9.737E-01	-7.436E-09	-7.436E-09	7.436E-09
1.69999	1.5142	1.70000	150.791	3.440E-02	9.712E-01	-4.996E-09	-4.996E-09	4.996E-09
1.79999	1.5153	1.80000	172.293	3.440E-02	9.689E-01	-3.525E-09	-3.525E-09	3.525E-09
1.89999	1.5163	1.90000	193.799	3.440E-02	9.669E-01	-2.487E-09	-2.487E-09	2.487E-09
1.99999	1.5172	2.00000	215.307	3.440E-02	9.651E-01	-1.773E-09	-1.773E-09	1.773E-09

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_0= 1.500 θ_D=0. ρ_a=5.632

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.533E-09	99.802	-2.542E-07	-2.542E-07	2.542E-07	2.542E-07	-4.989E-09	-4.989E-09
0.30000	5.008E-09	149.703	-4.652E-07	-4.652E-07	4.652E-07	4.652E-07	-7.071E-09	-7.071E-09
0.40000	7.457E-09	199.605	-7.719E-07	-7.719E-07	7.719E-07	7.719E-07	-1.053E-08	-1.053E-08
0.50000	1.112E-08	249.506	-1.229E-06	-1.229E-06	1.229E-06	1.229E-06	-1.570E-08	-1.570E-08
0.60000	1.812E-08	299.407	-1.934E-06	-1.934E-06	1.934E-06	1.934E-06	-2.558E-08	-2.558E-08
0.70000	3.473E-08	349.308	-3.188E-06	-3.188E-06	3.188E-06	3.188E-06	-4.903E-08	-4.904E-08
0.80000	8.655E-08	399.209	-5.923E-06	-5.923E-06	5.923E-06	5.923E-06	-1.222E-07	-1.222E-07
0.85000	1.657E-07	424.160	-8.915E-06	-8.915E-06	8.915E-06	8.915E-06	-2.340E-07	-2.340E-07
0.90000	4.015E-07	449.110	-1.540E-05	-1.540E-05	1.540E-05	1.540E-05	-5.669E-07	-5.669E-07
0.92500	7.209E-07	461.585	-2.221E-05	-2.221E-05	2.221E-05	2.221E-05	-1.018E-06	-1.018E-06
0.95000	1.597E-06	474.060	-3.560E-05	-3.561E-05	3.562E-05	3.563E-05	-2.255E-06	-2.255E-06
0.96250	2.462E-06	480.297	-4.795E-05	-4.796E-05	4.804E-05	4.804E-05	-3.475E-06	-3.475E-06
0.97500	4.525E-06	486.535	-6.865E-05	-6.866E-05	6.908E-05	6.909E-05	-6.387E-06	-6.389E-06
0.98125	6.260E-06	489.653	-8.510E-05	-8.511E-05	8.613E-05	8.616E-05	-8.836E-06	-8.836E-06
0.98749	8.096E-06	492.771	-1.068E-04	-1.068E-04	1.093E-04	1.093E-04	-1.143E-05	-1.143E-05
0.99374	9.860E-06	495.890	-1.331E-04	-1.332E-04	1.389E-04	1.389E-04	-1.392E-05	-1.392E-05
0.99999	1.061E-05	499.008	-1.625E-04	-1.626E-04	1.741E-04	1.742E-04	-1.498E-05	-1.498E-05
1.00624	9.683E-06	502.126	-1.907E-04	-1.907E-04	2.101E-04	2.102E-04	-1.367E-05	-1.367E-05
1.01249	7.898E-06	505.245	-2.142E-04	-2.142E-04	2.414E-04	2.414E-04	-1.116E-05	-1.115E-05
1.01874	6.055E-06	508.363	-2.329E-04	-2.329E-04	2.662E-04	2.662E-04	-8.553E-06	-8.551E-06
1.02499	4.351E-06	511.482	-2.469E-04	-2.469E-04	2.846E-04	2.846E-04	-6.145E-06	-6.144E-06
1.03749	2.380E-06	517.719	-2.646E-04	-2.646E-04	3.073E-04	3.073E-04	-3.361E-06	-3.361E-06
1.04999	1.560E-06	523.956	-2.755E-04	-2.755E-04	3.206E-04	3.206E-04	-2.203E-06	-2.203E-06
1.07499	7.094E-07	536.431	-2.874E-04	-2.874E-04	3.350E-04	3.350E-04	-1.002E-06	-1.002E-06
1.09999	3.950E-07	548.906	-2.934E-04	-2.934E-04	3.424E-04	3.424E-04	-5.578E-07	-5.577E-07
1.14999	1.642E-07	573.857	-2.985E-04	-2.985E-04	3.501E-04	3.501E-04	-2.318E-07	-2.318E-07
1.19999	8.591E-08	598.807	-3.003E-04	-3.004E-04	3.542E-04	3.542E-04	-1.213E-07	-1.213E-07
1.29999	3.456E-08	648.708	-3.008E-04	-3.008E-04	3.592E-04	3.592E-04	-4.880E-08	-4.880E-08
1.39999	1.805E-08	698.609	-2.998E-04	-2.998E-04	3.627E-04	3.627E-04	-2.548E-08	-2.548E-08
1.49999	1.109E-08	748.510	-2.982E-04	-2.982E-04	3.657E-04	3.657E-04	-1.566E-08	-1.566E-08
1.59999	7.436E-09	798.411	-2.964E-04	-2.964E-04	3.684E-04	3.684E-04	-1.050E-08	-1.050E-08
1.69999	4.996E-09	848.313	-2.945E-04	-2.945E-04	3.709E-04	3.709E-04	-7.054E-09	-7.054E-09
1.79999	3.525E-09	898.214	-2.924E-04	-2.924E-04	3.734E-04	3.734E-04	-4.977E-09	-4.977E-09
1.89999	2.487E-09	948.115	-2.903E-04	-2.903E-04	3.758E-04	3.758E-04	-3.511E-09	-3.511E-09
1.99999	1.773E-09	998.016	-2.882E-04	-2.882E-04	3.781E-04	3.782E-04	-2.504E-09	-2.504E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0=1.500 θ_D=0. ρ_a=5.632

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.199E-15
0.10000	1.525E-11	1.525E-11	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-1.609E-15
0.20000	4.257E-11	4.258E-11	-1.794E-20	-1.794E-20	-3.241E-10	-3.241E-10	-2.301E-15
0.30000	9.024E-11	9.022E-11	-3.125E-20	-3.125E-20	-6.829E-10	-6.829E-10	-3.615E-15
0.40000	1.912E-10	1.912E-10	-5.699E-20	-5.699E-20	-1.323E-09	-1.323E-09	-6.116E-15
0.50000	3.788E-10	3.788E-10	-1.041E-19	-1.041E-19	-2.493E-09	-2.493E-09	-1.223E-14
0.60000	8.576E-10	8.576E-10	-2.138E-19	-2.138E-19	-4.729E-09	-4.729E-09	-2.852E-14
0.70000	2.431E-09	2.431E-09	-5.586E-19	-5.586E-19	-9.977E-09	-9.977E-09	-8.292E-14
0.80000	9.907E-09	9.907E-09	-2.206E-18	-2.206E-18	-2.708E-08	-2.708E-08	-3.697E-13
0.85000	2.601E-08	2.601E-08	-5.763E-18	-5.764E-18	-5.413E-08	-5.413E-08	-1.047E-12
0.90000	9.574E-08	9.574E-08	-2.326E-17	-2.326E-17	-1.442E-07	-1.442E-07	-4.440E-12
0.92500	2.275E-07	2.275E-07	-5.187E-17	-5.188E-17	-2.778E-07	-2.778E-07	-1.207E-11
0.95000	7.411E-07	7.411E-07	-1.636E-16	-1.637E-16	-6.202E-07	-6.203E-07	-4.269E-11
0.96250	1.482E-06	1.483E-06	-3.212E-16	-3.214E-16	-1.052E-06	-1.053E-06	-9.830E-11
0.97500	3.928E-06	3.930E-06	-8.397E-16	-8.402E-16	-2.039E-06	-2.040E-06	-2.180E-10
0.98125	6.956E-06	6.956E-06	-1.411E-15	-1.411E-15	-3.078E-06	-3.078E-06	-3.173E-10
0.98749	1.335E-05	1.336E-05	-2.128E-15	-2.129E-15	-4.725E-06	-4.727E-06	-4.558E-10
0.99374	2.660E-05	2.662E-05	-2.900E-15	-2.901E-15	-7.071E-06	-7.074E-06	-5.792E-10
0.99999	4.895E-05	4.898E-05	-3.248E-15	-3.249E-15	-1.000E-05	-1.001E-05	-6.245E-10
1.00624	7.016E-05	7.019E-05	-2.822E-15	-2.821E-15	-1.290E-05	-1.290E-05	-5.691E-10
1.01249	8.199E-05	8.200E-05	-2.048E-15	-2.047E-15	-1.516E-05	-1.517E-05	-4.394E-10
1.01874	8.787E-05	8.788E-05	-1.339E-15	-1.339E-15	-1.674E-05	-1.674E-05	-3.045E-10
1.02499	9.078E-05	9.078E-05	-7.895E-16	-7.892E-16	-1.772E-05	-1.772E-05	-2.096E-10
1.03749	9.281E-05	9.281E-05	-3.050E-16	-3.048E-16	-1.866E-05	-1.866E-05	-9.447E-11
1.04999	9.274E-05	9.274E-05	-1.578E-16	-1.578E-16	-1.908E-05	-1.908E-05	-4.100E-11
1.07499	9.118E-05	9.119E-05	-5.076E-17	-5.075E-17	-1.941E-05	-1.941E-05	-1.169E-11
1.09999	8.926E-05	8.926E-05	-2.275E-17	-2.275E-17	-1.954E-05	-1.954E-05	-4.347E-12
1.14999	8.554E-05	8.555E-05	-5.682E-18	-5.682E-18	-1.963E-05	-1.963E-05	-1.030E-12
1.19999	8.214E-05	8.214E-05	-2.182E-18	-2.182E-18	-1.965E-05	-1.965E-05	-3.655E-13
1.29999	7.613E-05	7.613E-05	-5.547E-19	-5.546E-19	-1.967E-05	-1.967E-05	-8.232E-14
1.39999	7.095E-05	7.095E-05	-2.126E-19	-2.126E-19	-1.968E-05	-1.968E-05	-2.839E-14
1.49999	6.644E-05	6.644E-05	-1.036E-19	-1.036E-19	-1.968E-05	-1.968E-05	-1.218E-14
1.59999	6.247E-05	6.247E-05	-5.676E-20	-5.676E-20	-1.968E-05	-1.968E-05	-6.102E-15
1.69999	5.896E-05	5.895E-05	-3.113E-20	-3.113E-20	-1.968E-05	-1.968E-05	-3.610E-15
1.79999	5.580E-05	5.580E-05	-1.787E-20	-1.787E-20	-1.968E-05	-1.968E-05	-2.299E-15
1.89999	5.297E-05	5.297E-05	-1.026E-20	-1.026E-20	-1.968E-05	-1.968E-05	-1.609E-15
1.99999	5.042E-05	5.042E-05	-5.882E-21	-5.882E-21	-1.968E-05	-1.968E-05	-1.201E-15

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 2.000 θ_D= 0. ρ_a= 7.509

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	2.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	2.0000	0.10000	193.658	1.651E-07	9.999E-01	-2.493E-09	-2.493E-09	2.493E-09
0.20000	2.0000	0.20000	172.160	3.402E-07	9.999E-01	-3.532E-09	-3.533E-09	3.532E-09
0.30000	2.0000	0.30000	150.667	4.869E-07	9.998E-01	-5.006E-09	-5.006E-09	5.006E-09
0.40000	2.0000	0.40000	129.183	8.138E-07	9.998E-01	-7.452E-09	-7.452E-09	7.452E-09
0.50000	2.0000	0.50000	107.710	1.014E-06	9.997E-01	-1.111E-08	-1.111E-08	1.111E-08
0.60000	2.0000	0.60000	86.260	1.227E-06	9.994E-01	-1.808E-08	-1.808E-08	1.808E-08
0.70000	2.0000	0.70000	64.853	4.963E-06	9.990E-01	-3.458E-08	-3.458E-08	3.458E-08
0.80000	2.0000	0.80000	43.553	1.654E-05	9.978E-01	-8.557E-08	-8.557E-08	8.557E-08
0.85000	2.0000	0.85000	33.008	3.970E-05	9.963E-01	-1.623E-07	-1.623E-07	1.623E-07
0.90000	2.0000	0.90000	22.606	1.343E-04	9.939E-01	-3.801E-07	-3.801E-07	3.801E-07
0.92500	2.0000	0.92500	17.683	2.933E-04	9.929E-01	-6.689E-07	-6.689E-07	6.688E-07
0.95000	2.0000	0.95000	13.012	8.102E-04	9.961E-01	-1.351E-06	-1.351E-06	1.351E-06
0.96250	2.0000	0.96250	10.927	1.483E-03	1.002E 00	-1.962E-06	-1.963E-06	1.962E-06
0.97500	2.0001	0.97500	9.182	2.805E-03	1.012E 00	-2.918E-06	-2.918E-06	2.917E-06
0.98125	2.0001	0.98125	8.463	3.898E-03	1.015E 00	-3.536E-06	-3.537E-06	3.536E-06
0.98750	2.0001	0.98750	7.933	5.344E-03	1.013E 00	-4.199E-06	-4.200E-06	4.199E-06
0.99375	2.0002	0.99375	7.607	7.144E-03	1.005E 00	-4.755E-06	-4.756E-06	4.755E-06
1.00000	2.0002	1.00000	7.511	9.187E-03	9.998E-01	-4.933E-06	-4.933E-06	4.933E-06
1.00624	2.0003	1.00625	7.653	1.122E-02	1.006E 00	-4.673E-06	-4.672E-06	4.673E-06
1.01249	2.0003	1.01250	8.022	1.301E-02	1.014E 00	-4.061E-06	-4.060E-06	4.061E-06
1.01874	2.0004	1.01875	8.588	1.438E-02	1.017E 00	-3.418E-06	-3.417E-06	3.418E-06
1.02499	2.0005	1.02500	9.314	1.538E-02	1.013E 00	-2.798E-06	-2.798E-06	2.798E-06
1.03749	2.0007	1.03750	11.119	1.660E-02	1.003E 00	-1.896E-06	-1.896E-06	1.896E-06
1.04999	2.0009	1.05000	13.228	1.722E-02	9.963E-01	-1.300E-06	-1.300E-06	1.300E-06
1.07499	2.0013	1.07500	17.918	1.771E-02	9.915E-01	-6.511E-07	-6.510E-07	6.511E-07
1.09999	2.0017	1.10000	22.913	1.787E-02	9.912E-01	-3.718E-07	-3.718E-07	3.718E-07
1.14999	2.0024	1.15000	33.264	1.796E-02	9.920E-01	-1.596E-07	-1.596E-07	1.596E-07
1.19999	2.0030	1.20000	43.811	1.799E-02	9.922E-01	-8.446E-08	-8.446E-08	8.446E-08
1.29999	2.0042	1.30000	65.113	1.801E-02	9.915E-01	-3.429E-08	-3.429E-08	3.429E-08
1.39999	2.0052	1.40000	86.521	1.802E-02	9.903E-01	-1.796E-08	-1.796E-08	1.796E-08
1.49999	2.0060	1.50000	107.972	1.802E-02	9.891E-01	-1.105E-08	-1.105E-08	1.105E-08
1.59999	2.0068	1.60000	129.445	1.802E-02	9.879E-01	-7.415E-09	-7.415E-09	7.415E-09
1.69999	2.0074	1.70000	150.929	1.803E-02	9.869E-01	-4.985E-09	-4.985E-09	4.985E-09
1.79999	2.0080	1.80000	172.422	1.803E-02	9.859E-01	-3.518E-09	-3.518E-09	3.518E-09
1.89999	2.0085	1.90000	193.920	1.803E-02	9.851E-01	-2.482E-09	-2.482E-09	2.482E-09
1.99999	2.0090	2.00000	215.421	1.803E-02	9.843E-01	-1.770E-09	-1.770E-09	1.770E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 2.000 θ_D=0. ρ_a=7.509

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.493E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.520E-09	-3.520E-09
0.20000	3.533E-09	99.802	-2.542E-07	-2.542E-07	2.542E-07	2.542E-07	-4.988E-09	-4.988E-09
0.30000	5.006E-09	149.703	-4.651E-07	-4.651E-07	4.651E-07	4.651E-07	-7.068E-09	-7.068E-09
0.40000	7.452E-09	199.605	-7.716E-07	-7.716E-07	7.716E-07	7.716E-07	-1.052E-08	-1.052E-08
0.50000	1.111E-08	249.506	-1.229E-06	-1.229E-06	1.229E-06	1.229E-06	-1.568E-08	-1.568E-08
0.60000	1.808E-08	299.407	-1.932E-06	-1.932E-06	1.932E-06	1.932E-06	-2.552E-08	-2.552E-08
0.70000	3.458E-08	349.308	-3.182E-06	-3.182E-06	3.182E-06	3.182E-06	-4.382E-08	-4.382E-08
0.80000	8.557E-08	399.209	-5.895E-06	-5.895E-06	5.895E-06	5.895E-06	-1.208E-07	-1.208E-07
0.85000	1.623E-07	424.160	-8.836E-06	-8.836E-06	8.836E-06	8.836E-06	-2.291E-07	-2.292E-07
0.90000	3.801E-07	449.110	-1.509E-05	-1.509E-05	1.509E-05	1.509E-05	-5.367E-07	-5.367E-07
0.92500	6.689E-07	461.585	-2.147E-05	-2.147E-05	2.147E-05	2.147E-05	-9.444E-07	-9.445E-07
0.95000	1.352E-06	474.060	-3.322E-05	-3.322E-05	3.324E-05	3.325E-05	-1.908E-06	-1.908E-06
0.96250	1.963E-06	480.298	-4.344E-05	-4.344E-05	4.352E-05	4.352E-05	-2.771E-06	-2.771E-06
0.97500	2.918E-06	486.535	-5.816E-05	-5.816E-05	5.844E-05	5.845E-05	-4.120E-06	-4.120E-06
0.98125	3.537E-06	489.653	-6.808E-05	-6.808E-05	6.864E-05	6.865E-05	-4.993E-06	-4.994E-06
0.98750	4.200E-06	492.772	-7.981E-05	-7.982E-05	8.088E-05	8.089E-05	-5.929E-06	-5.930E-06
0.99375	4.756E-06	495.891	-9.344E-05	-9.345E-05	9.536E-05	9.538E-05	-6.715E-06	-6.715E-06
1.00000	4.933E-06	499.009	-1.080E-04	-1.080E-04	1.112E-04	1.112E-04	-6.966E-06	-6.966E-06
1.00624	4.672E-06	502.128	-1.223E-04	-1.223E-04	1.271E-04	1.271E-04	-6.598E-06	-6.597E-06
1.01249	4.060E-06	505.246	-1.351E-04	-1.352E-04	1.417E-04	1.417E-04	-5.734E-06	-5.733E-06
1.01874	3.417E-06	508.365	-1.460E-04	-1.460E-04	1.540E-04	1.540E-04	-4.826E-06	-4.825E-06
1.02499	2.797E-06	511.483	-1.551E-04	-1.551E-04	1.643E-04	1.643E-04	-3.951E-06	-3.950E-06
1.03749	1.896E-06	517.721	-1.686E-04	-1.686E-04	1.794E-04	1.794E-04	-2.678E-06	-2.677E-06
1.04999	1.300E-06	523.958	-1.780E-04	-1.780E-04	1.898E-04	1.898E-04	-1.836E-06	-1.836E-06
1.07499	6.510E-07	536.433	-1.889E-04	-1.889E-04	2.017E-04	2.017E-04	-9.193E-07	-9.192E-07
1.09999	3.718E-07	548.908	-1.948E-04	-1.948E-04	2.081E-04	2.081E-04	-5.250E-07	-5.250E-07
1.14999	1.596E-07	573.859	-2.005E-04	-2.005E-04	2.146E-04	2.146E-04	-2.253E-07	-2.253E-07
1.19999	8.446E-08	598.809	-2.031E-04	-2.031E-04	2.179E-04	2.179E-04	-1.193E-07	-1.193E-07
1.29999	3.429E-08	648.710	-2.052E-04	-2.052E-04	2.212E-04	2.212E-04	-4.841E-08	-4.841E-08
1.39999	1.796E-08	698.611	-2.058E-04	-2.058E-04	2.230E-04	2.230E-04	-2.536E-08	-2.536E-08
1.49999	1.105E-08	748.513	-2.059E-04	-2.059E-04	2.244E-04	2.244E-04	-1.561E-08	-1.561E-08
1.59999	7.415E-09	798.414	-2.057E-04	-2.057E-04	2.254E-04	2.254E-04	-1.047E-08	-1.047E-08
1.69999	4.984E-09	848.315	-2.054E-04	-2.054E-04	2.264E-04	2.264E-04	-7.038E-09	-7.038E-09
1.79999	3.518E-09	898.216	-2.050E-04	-2.050E-04	2.272E-04	2.272E-04	-4.967E-09	-4.967E-09
1.89999	2.482E-09	948.117	-2.045E-04	-2.045E-04	2.280E-04	2.280E-04	-3.505E-09	-3.505E-09
1.99999	1.770E-09	998.018	-2.040E-04	-2.040E-04	2.287E-04	2.287E-04	-2.499E-09	-2.499E-09

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_0= 2.000 θ_D= 0. ρ_a= 7.539

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-2.132E-15
0.10000	2.033E-11	2.031E-11	-1.030E-20	-1.030E-20	-1.182E-10	-1.182E-10	-2.859E-15
0.20000	5.676E-11	5.676E-11	-1.793E-20	-1.793E-20	-3.241E-10	-3.241E-10	-4.088E-15
0.30000	1.203E-10	1.203E-10	-3.123E-20	-3.123E-20	-6.827E-10	-6.827E-10	-6.422E-15
0.40000	2.547E-10	2.547E-10	-5.693E-20	-5.693E-20	-1.323E-09	-1.323E-09	-1.086E-14
0.50000	5.044E-10	5.044E-10	-1.039E-19	-1.039E-19	-2.491E-09	-2.491E-09	-2.168E-14
0.60000	1.140E-09	1.140E-09	-2.131E-19	-2.131E-19	-4.721E-09	-4.721E-09	-5.051E-14
0.70000	3.226E-09	3.226E-09	-5.550E-19	-5.550E-19	-9.942E-09	-9.943E-09	-1.462E-13
0.80000	1.301E-08	1.301E-08	-2.169E-18	-2.169E-18	-2.683E-08	-2.683E-08	-6.441E-13
0.85000	3.373E-08	3.373E-08	-5.587E-18	-5.587E-18	-5.320E-08	-5.320E-08	-1.792E-12
0.90000	1.192E-07	1.192E-07	-2.155E-17	-2.155E-17	-1.382E-07	-1.382E-07	-7.301E-12
0.92500	2.729E-07	2.729E-07	-4.682E-17	-4.682E-17	-2.603E-07	-2.603E-07	-1.842E-11
0.95000	7.891E-07	7.893E-07	-1.261E-16	-1.261E-16	-5.410E-07	-5.411E-07	-5.736E-11
0.96250	1.447E-06	1.447E-06	-2.256E-16	-2.256E-16	-8.620E-07	-8.622E-07	-1.127E-10
0.97500	3.209E-06	3.210E-06	-4.198E-16	-4.199E-16	-1.434E-06	-1.435E-06	-2.181E-10
0.98125	5.082E-06	5.085E-06	-5.677E-16	-5.679E-16	-1.895E-06	-1.895E-06	-2.896E-10
0.98750	8.398E-06	8.402E-06	-7.457E-16	-7.458E-16	-2.500E-06	-2.501E-06	-3.594E-10
0.99375	1.391E-05	1.392E-05	-9.096E-16	-9.097E-16	-3.281E-06	-3.282E-06	-4.085E-10
1.00000	2.129E-05	2.130E-05	-9.646E-16	-9.646E-16	-4.168E-06	-4.169E-06	-4.250E-10
1.00624	2.828E-05	2.829E-05	-8.845E-16	-8.844E-16	-5.042E-06	-5.043E-06	-4.009E-10
1.01249	3.311E-05	3.311E-05	-7.367E-16	-7.366E-16	-5.791E-06	-5.792E-06	-3.479E-10
1.01874	3.597E-05	3.598E-05	-5.382E-16	-5.380E-16	-6.368E-06	-6.368E-06	-2.747E-10
1.02499	3.765E-05	3.766E-05	-3.930E-16	-3.929E-16	-6.802E-06	-6.803E-06	-2.061E-10
1.03749	3.925E-05	3.925E-05	-2.139E-16	-2.138E-16	-7.342E-06	-7.342E-06	-1.051E-10
1.04999	3.970E-05	3.970E-05	-1.188E-16	-1.188E-16	-7.645E-06	-7.645E-06	-5.407E-11
1.07499	3.945E-05	3.945E-05	-4.512E-17	-4.512E-17	-7.917E-06	-7.917E-06	-1.748E-11
1.09999	3.872E-05	3.872E-05	-2.080E-17	-2.079E-17	-8.034E-06	-8.034E-06	-7.000E-12
1.14999	3.709E-05	3.709E-05	-5.449E-18	-5.449E-18	-8.116E-06	-8.116E-06	-1.742E-12
1.19999	3.555E-05	3.556E-05	-2.127E-18	-2.127E-18	-8.142E-06	-8.142E-06	-6.307E-13
1.29999	3.285E-05	3.286E-05	-5.481E-19	-5.481E-19	-8.158E-06	-8.158E-06	-1.442E-13
1.39999	3.055E-05	3.055E-05	-2.111E-19	-2.111E-19	-8.163E-06	-8.164E-06	-5.001E-14
1.49999	2.855E-05	2.855E-05	-1.031E-19	-1.031E-19	-8.166E-06	-8.166E-06	-2.151E-14
1.59999	2.679E-05	2.679E-05	-5.652E-20	-5.652E-20	-8.167E-06	-8.167E-06	-1.080E-14
1.69999	2.524E-05	2.524E-05	-3.102E-20	-3.102E-20	-8.167E-06	-8.168E-06	-6.395E-15
1.79999	2.386E-05	2.387E-05	-1.781E-20	-1.781E-20	-8.168E-06	-8.168E-06	-4.077E-15
1.89999	2.263E-05	2.263E-05	-1.023E-20	-1.023E-20	-8.168E-06	-8.168E-06	-2.855E-15
1.99999	2.151E-05	2.151E-05	-5.865E-21	-5.865E-21	-8.168E-06	-8.168E-06	-2.131E-15

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	2.5000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	2.5000	0.10000	193.666	2.668E-07	9.999E-01	-2.492E-09	-2.492E-09	2.492E-09
0.20000	2.5000	0.20000	172.178	3.535E-07	9.998E-01	-3.531E-09	-3.531E-09	3.531E-09
0.30000	2.5000	0.30000	150.699	5.603E-07	9.997E-01	-5.003E-09	-5.003E-09	5.003E-09
0.40000	2.5000	0.40000	129.232	9.472E-07	9.996E-01	-7.445E-09	-7.445E-09	7.445E-09
0.50000	2.5000	0.50000	107.784	1.334E-06	9.994E-01	-1.109E-08	-1.109E-08	1.109E-08
0.60000	2.5000	0.60000	86.370	1.441E-06	9.990E-01	-1.803E-08	-1.803E-08	1.803E-08
0.70000	2.5000	0.70000	65.024	5.603E-06	9.983E-01	-3.439E-08	-3.439E-08	3.439E-08
0.80000	2.5000	0.80000	43.843	1.772E-05	9.963E-01	-8.432E-08	-8.432E-08	8.432E-08
0.85000	2.5000	0.85000	33.414	4.504E-05	9.943E-01	-1.580E-07	-1.580E-07	1.580E-07
0.90000	2.5000	0.90000	23.286	1.464E-04	9.920E-01	-3.597E-07	-3.597E-07	3.597E-07
0.92500	2.5000	0.92500	18.491	3.093E-04	9.928E-01	-6.099E-07	-6.100E-07	6.099E-07
0.95000	2.5000	0.95000	14.123	7.838E-04	1.001E 00	-1.108E-06	-1.108E-06	1.108E-06
0.96250	2.5000	0.96250	12.244	1.286E-03	1.009E 00	-1.550E-06	-1.550E-06	1.550E-06
0.97500	2.5001	0.97500	10.717	2.159E-03	1.017E 00	-2.037E-06	-2.038E-06	2.037E-06
0.98125	2.5001	0.98125	10.137	2.784E-03	1.017E 00	-2.260E-06	-2.261E-06	2.260E-06
0.98750	2.5001	0.98750	9.709	3.553E-03	1.011E 00	-2.510E-06	-2.510E-06	2.510E-06
0.99375	2.5001	0.99375	9.455	4.442E-03	1.003E 00	-2.692E-06	-2.692E-06	2.692E-06
1.00000	2.5001	1.00000	9.388	5.402E-03	9.999E-01	-2.742E-06	-2.742E-06	2.742E-06
1.00625	2.5002	1.00625	9.513	6.356E-03	1.005E 00	-2.649E-06	-2.649E-06	2.649E-06
1.01250	2.5002	1.01250	9.822	7.225E-03	1.014E 00	-2.433E-06	-2.433E-06	2.433E-06
1.01875	2.5003	1.01875	10.299	7.949E-03	1.019E 00	-2.196E-06	-2.196E-06	2.196E-06
1.02500	2.5003	1.02500	10.921	8.527E-03	1.019E 00	-1.965E-06	-1.964E-06	1.965E-06
1.03749	2.5004	1.03750	12.512	9.328E-03	1.011E 00	-1.478E-06	-1.478E-06	1.478E-06
1.04999	2.5005	1.05000	14.432	9.796E-03	1.002E 00	-1.048E-06	-1.048E-06	1.048E-06
1.07499	2.5008	1.07500	18.845	1.021E-02	9.934E-01	-5.859E-07	-5.859E-07	5.859E-07
1.09999	2.5010	1.10000	23.662	1.037E-02	9.914E-01	-3.479E-07	-3.479E-07	3.479E-07
1.14999	2.5014	1.15000	33.838	1.047E-02	9.921E-01	-1.540E-07	-1.540E-07	1.540E-07
1.19999	2.5018	1.20000	44.244	1.050E-02	9.932E-01	-8.264E-08	-8.264E-08	8.264E-08
1.29999	2.5024	1.30000	65.429	1.052E-02	9.940E-01	-3.394E-08	-3.394E-08	3.394E-08
1.39999	2.5030	1.40000	86.778	1.053E-02	9.939E-01	-1.784E-08	-1.784E-08	1.784E-08
1.49999	2.5035	1.50000	108.192	1.053E-02	9.935E-01	-1.101E-08	-1.101E-08	1.101E-08
1.59999	2.5040	1.60000	129.640	1.054E-02	9.931E-01	-7.388E-09	-7.388E-09	7.389E-09
1.69999	2.5043	1.70000	151.108	1.054E-02	9.926E-01	-4.970E-09	-4.970E-09	4.970E-09
1.79999	2.5047	1.80000	172.587	1.054E-02	9.922E-01	-3.508E-09	-3.508E-09	3.508E-09
1.89999	2.5050	1.90000	194.075	1.054E-02	9.918E-01	-2.476E-09	-2.476E-09	2.476E-09
1.99999	2.5053	2.00000	215.568	1.055E-02	9.914E-01	-1.766E-09	-1.766E-09	1.766E-09

PROPAGATION FREQUENCY= 4.233DE 08 ϕ_0= 2.500 θ_D=0. ρ_a= 9.385

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.492E-09	49.901	-1.054E-07	-1.054E-07	1.054E-07	1.054E-07	-3.519E-09	-3.519E-09
0.20000	3.531E-09	99.802	-2.542E-07	-2.542E-07	2.542E-07	2.542E-07	-4.986E-09	-4.986E-09
0.30000	5.003E-09	149.703	-4.650E-07	-4.650E-07	4.650E-07	4.650E-07	-7.064E-09	-7.064E-09
0.40000	7.445E-09	199.605	-7.713E-07	-7.713E-07	7.713E-07	7.713E-07	-1.051E-08	-1.051E-08
0.50000	1.109E-08	249.506	-1.228E-06	-1.228E-06	1.228E-06	1.228E-06	-1.566E-08	-1.566E-08
0.60000	1.803E-08	299.407	-1.930E-06	-1.933E-06	1.930E-06	1.930E-06	-2.545E-08	-2.545E-08
0.70000	3.439E-08	349.308	-3.174E-06	-3.174E-06	3.174E-06	3.174E-06	-4.855E-08	-4.855E-08
0.80000	8.433E-08	399.209	-5.859E-06	-5.859E-06	5.859E-06	5.859E-06	-1.191E-07	-1.191E-07
0.85000	1.58CE-07	424.160	-8.737E-06	-8.737E-06	8.737E-06	8.737E-06	-2.231E-07	-2.231E-07
0.90000	3.597E-07	449.110	-1.473E-05	-1.473E-05	1.473E-05	1.473E-05	-5.078E-07	-5.079E-07
0.92500	6.100E-07	461.585	-2.061E-05	-2.061E-05	2.062E-05	2.062E-05	-8.612E-07	-8.613E-07
0.95000	1.108E-06	474.060	-3.075E-05	-3.075E-05	3.077E-05	3.077E-05	-1.564E-06	-1.564E-06
0.96250	1.551E-06	480.298	-3.898E-05	-3.898E-05	3.904E-05	3.904E-05	-2.189E-06	-2.189E-06
0.97500	2.038E-06	486.535	-5.011E-05	-5.011E-05	5.028E-05	5.029E-05	-2.877E-06	-2.877E-06
0.98125	2.261E-06	489.654	-5.676E-05	-5.677E-05	5.705E-05	5.706E-05	-3.192E-06	-3.192E-06
0.98750	2.510E-06	492.773	-6.410E-05	-6.410E-05	6.457E-05	6.458E-05	-3.544E-06	-3.544E-06
0.99375	2.694E-06	495.891	-7.210E-05	-7.211E-05	7.285E-05	7.286E-05	-3.801E-06	-3.801E-06
1.00000	2.742E-06	499.010	-8.043E-05	-8.044E-05	8.154E-05	8.155E-05	-3.871E-06	-3.871E-06
1.00625	2.649E-06	502.128	-8.866E-05	-8.866E-05	9.020E-05	9.021E-05	-3.740E-06	-3.740E-06
1.01250	2.435E-06	505.247	-9.638E-05	-9.638E-05	9.838E-05	9.839E-05	-3.435E-06	-3.435E-06
1.01875	2.196E-06	508.366	-1.033E-04	-1.034E-04	1.058E-04	1.058E-04	-3.101E-06	-3.101E-06
1.02500	1.964E-06	511.484	-1.097E-04	-1.097E-04	1.125E-04	1.125E-04	-2.774E-06	-2.774E-06
1.03749	1.478E-06	517.722	-1.201E-04	-1.201E-04	1.235E-04	1.235E-04	-2.087E-06	-2.087E-06
1.04999	1.046E-06	523.959	-1.277E-04	-1.277E-04	1.315E-04	1.316E-04	-1.480E-06	-1.480E-06
1.07499	5.859E-07	536.434	-1.372E-04	-1.372E-04	1.415E-04	1.415E-04	-8.273E-07	-8.272E-07
1.09999	3.478E-07	548.910	-1.427E-04	-1.427E-04	1.472E-04	1.472E-04	-4.912E-07	-4.912E-07
1.14999	1.540E-07	573.860	-1.484E-04	-1.484E-04	1.532E-04	1.532E-04	-2.174E-07	-2.174E-07
1.19999	8.264E-08	598.811	-1.511E-04	-1.511E-04	1.561E-04	1.561E-04	-1.167E-07	-1.167E-07
1.29999	3.394E-08	648.712	-1.535E-04	-1.535E-04	1.590E-04	1.590E-04	-4.792E-08	-4.792E-08
1.39999	1.784E-08	698.613	-1.545E-04	-1.545E-04	1.604E-04	1.604E-04	-2.520E-08	-2.520E-08
1.49999	1.101E-08	748.514	-1.550E-04	-1.550E-04	1.613E-04	1.613E-04	-1.554E-08	-1.554E-08
1.59999	7.386E-09	798.415	-1.552E-04	-1.552E-04	1.620E-04	1.620E-04	-1.043E-08	-1.043E-08
1.69999	4.970E-09	848.316	-1.553E-04	-1.553E-04	1.625E-04	1.625E-04	-7.018E-09	-7.018E-09
1.79999	3.508E-09	898.217	-1.553E-04	-1.553E-04	1.629E-04	1.629E-04	-4.953E-09	-4.953E-09
1.89999	2.476E-09	948.118	-1.552E-04	-1.552E-04	1.633E-04	1.633E-04	-3.496E-09	-3.496E-09
1.99999	1.766E-09	998.020	-1.551E-04	-1.551E-04	1.636E-04	1.636E-04	-2.493E-09	-2.493E-09

PROPAGATION FREQUENCY= 4.233DE 08 ϕ_0=2.500 θ_D=0. ρ_a=9.385

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	.	-5.905E-21	-5.905E-21	0.	0.	-3.333E-15
0.10000	2.540E-11	2.540E-11	-1.029E-20	-1.029E-20	-1.182E-10	-1.182E-10	-4.466E-15
0.20000	7.093E-11	7.092E-11	-1.793E-20	-1.793E-20	-3.240E-10	-3.240E-10	-6.384E-15
0.30000	1.502E-10	1.502E-10	-3.121E-20	-3.121E-20	-6.824E-10	-6.824E-10	-1.002E-14
0.40000	3.180E-10	3.180E-10	-5.685E-20	-5.685E-20	-1.322E-09	-1.322E-09	-1.694E-14
0.50000	6.294E-10	6.294E-10	-1.037E-19	-1.037E-19	-2.488E-09	-2.488E-09	-3.378E-14
0.60000	1.421E-09	1.421E-09	-2.122E-19	-2.122E-19	-4.711E-09	-4.711E-09	-7.851E-14
0.70000	4.009E-09	4.009E-09	-5.505E-19	-5.505E-19	-9.898E-09	-9.898E-09	-2.261E-13
0.80000	1.591E-08	1.591E-08	-2.122E-18	-2.122E-18	-2.651E-08	-2.651E-08	-9.811E-13
0.85000	4.057E-08	4.058E-08	-5.370E-18	-5.370E-18	-5.204E-08	-5.205E-08	-2.672E-12
0.90000	1.375E-07	1.375E-07	-1.971E-17	-1.971E-17	-1.312E-07	-1.312E-07	-1.025E-11
0.92500	3.005E-07	3.006E-07	-4.126E-17	-4.127E-17	-2.403E-07	-2.403E-07	-2.411E-11
0.95000	7.784E-07	7.785E-07	-9.252E-17	-9.253E-17	-4.665E-07	-4.666E-07	-6.686E-11
0.96250	1.344E-06	1.345E-06	-1.562E-16	-1.562E-16	-6.957E-07	-6.958E-07	-1.125E-10
0.97500	2.620E-06	2.620E-06	-2.392E-16	-2.392E-16	-1.063E-06	-1.064E-06	-1.904E-10
0.98125	3.845E-06	3.847E-06	-2.812E-16	-2.812E-16	-1.307E-06	-1.307E-06	-2.397E-10
0.98750	5.736E-06	5.738E-06	-3.313E-16	-3.314E-16	-1.592E-06	-1.593E-06	-2.797E-10
0.99375	8.541E-06	8.544E-06	-3.698E-16	-3.699E-16	-1.922E-06	-1.922E-06	-3.058E-10
1.00000	1.202E-05	1.202E-05	-3.807E-16	-3.807E-16	-2.275E-06	-2.276E-06	-3.133E-10
1.00625	1.530E-05	1.531E-05	-3.607E-16	-3.607E-16	-2.624E-06	-2.625E-06	-2.996E-10
1.01250	1.773E-05	1.773E-05	-3.156E-16	-3.155E-16	-2.942E-06	-2.942E-06	-2.693E-10
1.01875	1.930E-05	1.931E-05	-2.688E-16	-2.688E-16	-3.213E-06	-3.213E-06	-2.245E-10
1.02500	2.034E-05	2.034E-05	-2.260E-16	-2.259E-16	-3.445E-06	-3.445E-06	-1.765E-10
1.03749	2.145E-05	2.145E-05	-1.450E-16	-1.450E-16	-3.789E-06	-3.789E-06	-1.038E-10
1.04999	2.194E-05	2.194E-05	-8.490E-17	-8.489E-17	-4.001E-06	-4.001E-06	-6.211E-11
1.07499	2.207E-05	2.207E-05	-3.905E-17	-3.905E-17	-4.214E-06	-4.214E-06	-2.242E-11
1.09999	2.177E-05	2.177E-05	-1.867E-17	-1.867E-17	-4.317E-06	-4.317E-06	-9.637E-12
1.14999	2.090E-05	2.090E-05	-5.168E-18	-5.168E-18	-4.392E-06	-4.392E-06	-2.560E-12
1.19999	2.003E-05	2.003E-05	-2.060E-18	-2.060E-18	-4.417E-06	-4.417E-06	-9.493E-13
1.29999	1.849E-05	1.849E-05	-5.398E-19	-5.398E-19	-4.433E-06	-4.433E-06	-2.210E-13
1.39999	1.717E-05	1.717E-05	-2.091E-19	-2.091E-19	-4.438E-06	-4.438E-06	-7.724E-14
1.49999	1.603E-05	1.604E-05	-1.025E-19	-1.025E-19	-4.440E-06	-4.440E-06	-3.333E-14
1.59999	1.504E-05	1.504E-05	-5.621E-20	-5.621E-20	-4.441E-06	-4.441E-06	-1.678E-14
1.69999	1.416E-05	1.416E-05	-3.088E-20	-3.088E-20	-4.442E-06	-4.442E-06	-9.948E-15
1.79999	1.338E-05	1.338E-05	-1.774E-20	-1.774E-20	-4.442E-06	-4.442E-06	-6.350E-15
1.89999	1.268E-05	1.268E-05	-1.019E-20	-1.019E-20	-4.442E-06	-4.443E-06	-4.450E-15
1.99999	1.205E-05	1.205E-05	-5.843E-21	-5.843E-21	-4.443E-06	-4.443E-06	-3.323E-15

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_0= 3.000 θ_0= 0. ρ_0= 11.261

z	ϕ	z_r	ρ	θ	β	$_0\mu'$-1.0	$_x\mu'$-1.0	$_0\mu'$-1.0
0.	3.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	3.0000	0.10000	193.676	2.868E-07	9.998E-01	-2.492E-09	-2.492E-09	2.492E-09
0.20000	3.0000	0.20000	172.201	3.669E-07	9.998E-01	-3.530E-09	-3.530E-09	3.530E-09
0.30000	3.0000	0.30000	150.738	6.403E-07	9.997E-01	-5.000E-09	-5.000E-09	5.000E-09
0.40000	3.0000	0.40000	129.292	1.121E-06	9.995E-01	-7.436E-09	-7.436E-09	7.436E-09
0.50000	3.0000	0.50000	107.874	1.521E-06	9.993E-01	-1.107E-08	-1.107E-08	1.107E-08
0.60000	3.0000	0.60000	86.503	1.601E-06	9.989E-01	-1.797E-08	-1.797E-08	1.797E-08
0.70000	3.0000	0.70000	65.232	6.510E-06	9.980E-01	-3.415E-08	-3.415E-08	3.415E-08
0.80000	3.0000	0.80000	44.196	2.263E-05	9.959E-01	-8.284E-08	-8.284E-08	8.284E-08
0.85000	3.0000	0.85000	33.904	4.995E-05	9.940E-01	-1.530E-07	-1.530E-07	1.530E-07
0.90000	3.0000	0.90000	24.024	1.626E-04	9.928E-01	-3.368E-07	-3.368E-07	3.368E-07
0.92500	3.0000	0.92500	19.437	3.300E-04	9.953E-01	-5.478E-07	-5.478E-07	5.478E-07
0.95000	3.0000	0.95000	15.372	7.577E-04	1.004E 00	-8.861E-07	-8.861E-07	8.860E-07
0.96250	3.0000	0.96250	13.683	1.162E-03	1.011E 00	-1.198E-06	-1.199E-06	1.198E-06
0.97500	3.0001	0.97500	12.355	1.790E-03	1.014E 00	-1.520E-06	-1.520E-06	1.520E-06
0.98125	3.0001	0.98125	11.866	2.202E-03	1.012E 00	-1.659E-06	-1.659E-06	1.659E-06
0.98750	3.0001	0.98750	11.513	2.675E-03	1.007E 00	-1.767E-06	-1.767E-06	1.767E-06
0.99375	3.0001	0.99375	11.310	3.196E-03	1.002E 00	-1.833E-06	-1.833E-06	1.833E-06
1.00000	3.0001	1.00000	11.265	3.740E-03	9.999E-01	-1.847E-06	-1.847E-06	1.847E-06
1.00625	3.0001	1.00625	11.380	4.281E-03	1.003E 00	-1.810E-06	-1.810E-06	1.810E-06
1.01250	3.0002	1.01250	11.650	4.785E-03	1.010E 00	-1.724E-06	-1.724E-06	1.724E-06
1.01875	3.0002	1.01875	12.064	5.236E-03	1.015E 00	-1.601E-06	-1.601E-06	1.601E-06
1.02500	3.0002	1.02500	12.610	5.617E-03	1.017E 00	-1.452E-06	-1.452E-06	1.452E-06
1.03750	3.0003	1.03750	14.027	6.188E-03	1.014E 00	-1.127E-06	-1.127E-06	1.127E-06
1.05000	3.0004	1.05000	15.779	6.559E-03	1.007E 00	-8.355E-07	-8.354E-07	8.355E-07
1.07500	3.0005	1.07500	19.920	6.924E-03	9.970E-01	-5.185E-07	-5.185E-07	5.185E-07
1.09999	3.0007	1.10000	24.546	7.085E-03	9.934E-01	-3.215E-07	-3.215E-07	3.215E-07
1.14999	3.0010	1.15000	34.461	7.192E-03	9.931E-01	-1.475E-07	-1.475E-07	1.475E-07
1.19999	3.0012	1.20000	44.766	7.225E-03	9.941E-01	-8.050E-08	-8.049E-08	8.05CE-08
1.29999	3.0017	1.30000	65.813	7.249E-03	9.954E-01	-3.352E-08	-3.352E-08	3.352E-08
1.39999	3.0021	1.40000	87.090	7.262E-03	9.958E-01	-1.771E-08	-1.771E-08	1.771E-08
1.49999	3.0024	1.50000	108.461	7.264E-03	9.959E-01	-1.095E-08	-1.095E-08	1.095E-08
1.59999	3.0027	1.60000	129.879	7.267E-03	9.958E-01	-7.356E-09	-7.356E-09	7.356E-09
1.69999	3.0030	1.70000	151.326	7.272E-03	9.956E-01	-4.953E-09	-4.953E-09	4.953E-09
1.79999	3.0032	1.80000	172.789	7.276E-03	9.954E-01	-3.497E-09	-3.497E-09	3.497E-09
1.89999	3.0035	1.90000	194.265	7.276E-03	9.953E-01	-2.468E-09	-2.468E-09	2.468E-09
1.99999	3.0036	2.00000	215.748	7.276E-03	9.951E-01	-1.761E-09	-1.761E-09	1.761E-09

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_0= 3.000 θ_0= 0. ρ_0= 11.261

z	$_x\mu'$-1.0	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.492E-09	49.901	-1.053E-07	-1.053E-07	1.053E-07	1.053E-07	-3.519E-09	-3.519E-09
0.20000	3.530E-09	99.802	-2.541E-07	-2.541E-07	2.541E-07	2.541E-07	-4.984E-09	-4.984E-09
0.30000	5.000E-09	149.703	-4.648E-07	-4.648E-07	4.648E-07	4.648E-07	-7.060E-09	-7.060E-09
0.40000	7.436E-09	199.605	-7.709E-07	-7.709E-07	7.709E-07	7.709E-07	-1.050E-08	-1.050E-08
0.50000	1.107E-08	249.506	-1.227E-06	-1.227E-06	1.227E-06	1.227E-06	-1.564E-08	-1.564E-08
0.60000	1.797E-08	299.407	-1.927E-06	-1.927E-06	1.927E-06	1.927E-06	-2.537E-08	-2.537E-08
0.70000	3.415E-08	349.308	-3.165E-06	-3.165E-06	3.165E-06	3.165E-06	-4.823E-08	-4.823E-08
0.80000	8.284E-08	399.209	-5.815E-06	-5.815E-06	5.815E-06	5.815E-06	-1.170E-07	-1.170E-07
0.85000	1.530E-07	424.160	-8.618E-06	-8.619E-06	8.619E-06	8.619E-06	-2.160E-07	-2.160E-07
0.90000	3.368E-07	449.110	-1.431E-05	-1.431E-05	1.431E-05	1.431E-05	-4.756E-07	-4.756E-07
0.92500	5.478E-07	461.585	-1.967E-05	-1.967E-05	1.967E-05	1.967E-05	-7.735E-07	-7.735E-07
0.95000	8.862E-07	474.060	-2.842E-05	-2.843E-05	2.845E-05	2.845E-05	-1.251E-06	-1.251E-06
0.96250	1.199E-06	480.298	-3.489E-05	-3.489E-05	3.494E-05	3.494E-05	-1.692E-06	-1.692E-06
0.97500	1.520E-06	486.535	-4.335E-05	-4.335E-05	4.347E-05	4.347E-05	-2.146E-06	-2.146E-06
0.98125	1.659E-06	489.654	-4.828E-05	-4.828E-05	4.846E-05	4.846E-05	-2.343E-06	-2.343E-06
0.98750	1.767E-06	492.773	-5.359E-05	-5.359E-05	5.386E-05	5.386E-05	-2.495E-06	-2.495E-06
0.99375	1.833E-06	495.891	-5.916E-05	-5.916E-05	5.954E-05	5.955E-05	-2.587E-06	-2.588E-06
1.00000	1.847E-06	499.010	-6.484E-05	-6.484E-05	6.537E-05	6.537E-05	-2.608E-06	-2.608E-06
1.00625	1.810E-06	502.129	-7.047E-05	-7.047E-05	7.117E-05	7.117E-05	-2.555E-06	-2.555E-06
1.01250	1.724E-06	505.248	-7.590E-05	-7.590E-05	7.678E-05	7.679E-05	-2.435E-06	-2.435E-06
1.01875	1.601E-06	508.366	-8.100E-05	-8.101E-05	8.206E-05	8.207E-05	-2.261E-06	-2.261E-06
1.02500	1.452E-06	511.485	-8.569E-05	-8.569E-05	8.691E-05	8.692E-05	-2.051E-06	-2.051E-06
1.03750	1.127E-06	517.722	-9.360E-05	-9.360E-05	9.510E-05	9.511E-05	-1.591E-06	-1.591E-06
1.05000	8.354E-07	523.960	-9.956E-05	-9.956E-05	1.013E-04	1.013E-04	-1.180E-06	-1.180E-06
1.07500	5.185E-07	536.435	-1.078E-04	-1.078E-04	1.097E-04	1.097E-04	-7.321E-07	-7.321E-07
1.09999	3.215E-07	548.910	-1.128E-04	-1.128E-04	1.149E-04	1.149E-04	-4.540E-07	-4.540E-07
1.14999	1.475E-07	573.861	-1.181E-04	-1.181E-04	1.204E-04	1.204E-04	-2.082E-07	-2.082E-07
1.19999	8.049E-08	598.811	-1.208E-04	-1.208E-04	1.232E-04	1.232E-04	-1.137E-07	-1.137E-07
1.29999	3.352E-08	648.712	-1.233E-04	-1.233E-04	1.259E-04	1.259E-04	-4.732E-08	-4.732E-08
1.39999	1.771E-08	698.613	-1.244E-04	-1.244E-04	1.272E-04	1.272E-04	-2.500E-08	-2.500E-08
1.49999	1.095E-08	748.514	-1.250E-04	-1.250E-04	1.280E-04	1.280E-04	-1.547E-08	-1.547E-08
1.59999	7.356E-09	798.416	-1.253E-04	-1.253E-04	1.285E-04	1.285E-04	-1.039E-08	-1.039E-08
1.69999	4.953E-09	848.317	-1.255E-04	-1.255E-04	1.289E-04	1.289E-04	-6.993E-09	-6.993E-09
1.79999	3.497E-09	898.218	-1.256E-04	-1.256E-04	1.292E-04	1.292E-04	-4.937E-09	-4.937E-09
1.89999	2.468E-09	948.119	-1.257E-04	-1.257E-04	1.295E-04	1.295E-04	-3.485E-09	-3.485E-09
1.99999	1.761E-09	998.020	-1.257E-04	-1.257E-04	1.297E-04	1.297E-04	-2.487E-09	-2.487E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 3.000 θ_D= 0. ρ_0= 11.201

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-4.794E-15
0.10000	3.046E-11	3.048E-11	-1.329E-20	-1.329E-20	-1.181E-10	-1.181E-10	-6.429E-15
0.20000	8.507E-11	8.506E-11	-1.791E-20	-1.791E-20	-3.239E-10	-3.239E-10	-9.187E-15
0.30000	1.802E-10	1.802E-10	-3.118E-20	-3.118E-20	-6.820E-10	-6.820E-10	-1.442E-14
0.40000	3.811E-10	3.811E-10	-5.676E-20	-5.676E-20	-1.320E-09	-1.320E-09	-2.435E-14
0.50000	7.539E-10	7.539E-10	-1.034E-19	-1.034E-19	-2.484E-09	-2.484E-09	-4.847E-14
0.60000	1.699E-09	1.699E-09	-2.112E-19	-2.112E-19	-4.698E-09	-4.698E-09	-1.124E-13
0.70000	4.779E-09	4.779E-09	-5.450E-19	-5.450E-19	-9.844E-09	-9.844E-09	-3.214E-13
0.80000	1.865E-08	1.865E-08	-2.067E-18	-2.068E-18	-2.613E-08	-2.613E-08	-1.370E-12
0.85000	4.676E-08	4.677E-08	-5.119E-18	-5.120E-18	-5.067E-08	-5.067E-08	-3.641E-12
0.90000	1.523E-07	1.523E-07	-1.772E-17	-1.772E-17	-1.233E-07	-1.233E-07	-1.307E-11
0.92500	3.176E-07	3.176E-07	-3.561E-17	-3.561E-17	-2.191E-07	-2.191E-07	-2.865E-11
0.95000	7.490E-07	7.491E-07	-6.531E-17	-6.532E-17	-4.062E-07	-4.062E-07	-7.239E-11
0.96250	1.227E-06	1.227E-06	-1.046E-16	-1.046E-16	-5.630E-07	-5.631E-07	-1.076E-10
0.97500	2.124E-06	2.125E-06	-1.515E-16	-1.515E-16	-8.021E-07	-8.022E-07	-1.565E-10
0.98125	2.888E-06	2.889E-06	-1.736E-16	-1.737E-16	-9.543E-07	-9.544E-07	-1.828E-10
0.98750	3.938E-06	3.939E-06	-1.916E-16	-1.916E-16	-1.125E-06	-1.126E-06	-2.057E-10
0.99375	5.272E-06	5.274E-06	-2.027E-16	-2.028E-16	-1.310E-06	-1.311E-06	-2.207E-10
1.00000	6.795E-06	6.796E-06	-2.053E-16	-2.053E-16	-1.502E-06	-1.502E-06	-2.243E-10
1.00625	8.246E-06	8.247E-06	-1.988E-16	-1.988E-16	-1.692E-06	-1.692E-06	-2.154E-10
1.01250	9.416E-06	9.417E-06	-1.844E-16	-1.844E-16	-1.871E-06	-1.871E-06	-1.964E-10
1.01875	1.030E-05	1.030E-05	-1.643E-16	-1.643E-16	-2.035E-06	-2.035E-06	-1.715E-10
1.02500	1.092E-05	1.092E-05	-1.411E-16	-1.411E-16	-2.177E-06	-2.178E-06	-1.450E-10
1.03750	1.166E-05	1.166E-05	-9.504E-17	-9.503E-17	-2.397E-06	-2.398E-06	-9.864E-11
1.05000	1.206E-05	1.206E-05	-6.227E-17	-6.226E-17	-2.540E-06	-2.540E-06	-6.568E-11
1.07500	1.230E-05	1.230E-05	-3.303E-17	-3.302E-17	-2.715E-06	-2.715E-06	-2.614E-11
1.09999	1.222E-05	1.222E-05	-1.644E-17	-1.643E-17	-2.803E-06	-2.803E-06	-1.204E-11
1.14999	1.179E-05	1.179E-05	-4.849E-18	-4.849E-18	-2.871E-06	-2.871E-06	-3.430E-12
1.19999	1.132E-05	1.132E-05	-1.982E-18	-1.982E-18	-2.894E-06	-2.894E-06	-1.308E-12
1.29999	1.045E-05	1.045E-05	-5.300E-19	-5.300E-19	-2.910E-06	-2.910E-06	-3.111E-13
1.39999	9.698E-06	9.698E-06	-2.067E-19	-2.067E-19	-2.915E-06	-2.915E-06	-1.097E-13
1.49999	9.052E-06	9.052E-06	-1.017E-19	-1.017E-19	-2.917E-06	-2.917E-06	-4.752E-14
1.59999	8.488E-06	8.488E-06	-5.583E-20	-5.583E-20	-2.918E-06	-2.918E-06	-2.400E-14
1.69999	7.990E-06	7.990E-06	-3.071E-20	-3.071E-20	-2.919E-06	-2.919E-06	-1.425E-14
1.79999	7.548E-06	7.548E-06	-1.764E-20	-1.764E-20	-2.919E-06	-2.919E-06	-9.107E-15
1.89999	7.152E-06	7.152E-06	-1.014E-20	-1.014E-20	-2.920E-06	-2.920E-06	-6.389E-15
1.99999	6.795E-06	6.795E-06	-5.815E-21	-5.815E-21	-2.920E-06	-2.920E-06	-4.773E-15

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 4.000 θ_D= 0. ρ_0=15.009

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	4.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	4.0000	0.10000	193.701	2.735E-07	9.997E-01	-2.491E-09	-2.491E-09	2.491E-09
0.20000	4.0000	0.20000	172.258	5.603E-07	9.996E-01	-3.527E-09	-3.527E-09	3.527E-09
0.30000	4.0000	0.30000	150.836	9.738E-07	9.995E-01	-4.992E-09	-4.992E-09	4.992E-09
0.40000	4.0000	0.40000	129.444	1.547E-06	9.992E-01	-7.415E-09	-7.415E-09	7.415E-09
0.50000	4.0000	0.50000	108.102	2.188E-06	9.988E-01	-1.103E-08	-1.103E-08	1.103E-08
0.60000	4.0000	0.60000	86.846	2.668E-06	9.981E-01	-1.781E-08	-1.781E-08	1.781E-08
0.70000	4.0000	0.70000	65.759	7.684E-06	9.967E-01	-3.357E-08	-3.357E-08	3.357E-08
0.80000	4.0000	0.80000	45.080	2.946E-05	9.942E-01	-7.923E-08	-7.924E-08	7.923E-08
0.85000	4.0000	0.85000	35.119	6.425E-05	9.928E-01	-1.412E-07	-1.412E-07	1.412E-07
0.90000	4.0000	0.90000	25.806	1.972E-04	9.951E-01	-2.874E-07	-2.875E-07	2.874E-07
0.92500	4.0000	0.92500	21.657	3.808E-04	1.001E 00	-4.256E-07	-4.256E-07	4.256E-07
0.95000	4.0000	0.95000	18.166	6.992E-04	1.010E 00	-6.329E-07	-6.329E-07	6.329E-07
0.96250	4.0000	0.96250	16.798	9.511E-04	1.013E 00	-7.394E-07	-7.394E-07	7.394E-07
0.97500	4.0001	0.97500	15.775	1.272E-03	1.011E 00	-8.359E-07	-8.360E-07	8.359E-07
0.98125	4.0001	0.98125	15.414	1.461E-03	1.008E 00	-8.798E-07	-8.799E-07	8.798E-07
0.98750	4.0001	0.98750	15.164	1.667E-03	1.004E 00	-9.195E-07	-9.196E-07	9.195E-07
0.99375	4.0001	0.99375	15.031	1.901E-03	1.001E 00	-9.417E-07	-9.417E-07	9.417E-07
1.00000	4.0001	1.00000	15.018	2.135E-03	9.999E-01	-9.439E-07	-9.439E-07	9.439E-07
1.00625	4.0001	1.00625	15.125	2.368E-03	1.002E 00	-9.261E-07	-9.261E-07	9.261E-07
1.01250	4.0001	1.01250	15.349	2.592E-03	1.007E 00	-8.896E-07	-8.896E-07	8.897E-07
1.01875	4.0001	1.01875	15.686	2.798E-03	1.011E 00	-8.465E-07	-8.465E-07	8.465E-07
1.02500	4.0002	1.02500	16.128	2.984E-03	1.015E 00	-7.979E-07	-7.979E-07	7.979E-07
1.03750	4.0002	1.03750	17.295	3.292E-03	1.017E 00	-6.988E-07	-6.988E-07	6.988E-07
1.05000	4.0002	1.05000	18.777	3.512E-03	1.014E 00	-5.905E-07	-5.905E-07	5.905E-07
1.07500	4.0003	1.07500	22.425	3.781E-03	1.004E 00	-3.900E-07	-3.900E-07	3.900E-07
1.10000	4.0004	1.10000	26.665	3.924E-03	9.979E-01	-2.663E-07	-2.663E-07	2.663E-07
1.15000	4.0005	1.15000	36.069	4.042E-03	9.938E-01	-1.326E-07	-1.326E-07	1.326E-07
1.20000	4.0007	1.20000	46.069	4.078E-03	9.939E-01	-7.538E-08	-7.538E-08	7.538E-08
1.30000	4.0010	1.30000	66.780	4.103E-03	9.955E-01	-3.248E-08	-3.248E-08	3.248E-08
1.40000	4.0012	1.40000	87.879	4.113E-03	9.965E-01	-1.736E-08	-1.736E-08	1.736E-08
1.50000	4.0014	1.50000	109.141	4.120E-03	9.971E-01	-1.082E-08	-1.082E-08	1.082E-08
1.60000	4.0016	1.60000	130.486	4.122E-03	9.974E-01	-7.273E-09	-7.273E-09	7.273E-09
1.70000	4.0017	1.70000	151.879	4.124E-03	9.975E-01	-4.908E-09	-4.908E-09	4.908E-09
1.80000	4.0018	1.80000	173.302	4.124E-03	9.976E-01	-3.468E-09	-3.468E-09	3.468E-09
1.90000	4.0020	1.90000	194.746	4.124E-03	9.977E-01	-2.449E-09	-2.449E-09	2.449E-09
2.00000	4.0021	2.00000	216.205	4.124E-03	9.977E-01	-1.749E-09	-1.749E-09	1.749E-09

PROPAGATION FREQUENCY= 4.233DE 08 ϕ_0= 4.000 θ_D= 0. ρ_0=15.009

z	$_x\mu'$-1.0	T_0	$_oT_1$-T_0	$_xT_1$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.49.E-09	49.901	-1.053E-07	-1.053E-07	1.053E-07	1.053E-07	-3.517E-09	-3.517E-09
0.20000	3.527E-09	99.802	-2.540E-07	-2.540E-07	2.540E-07	2.540E-07	-4.980E-09	-4.98.E-09
0.30000	4.99.E-09	149.703	-4.644E-07	-4.644E-07	4.644E-07	4.644E-07	-7.049E-09	-7.049E-09
0.40000	7.415E-09	199.605	-7.698E-07	-7.698E-07	7.698E-07	7.698E-07	-1.047E-08	-1.047E-08
0.50000	1.103E-08	249.506	-1.224E-06	-1.224E-06	1.224E-06	1.224E-06	-1.557E-08	-1.557E-08
0.60000	1.781E-08	299.407	-1.920E-06	-1.920E-06	1.920E-06	1.920E-06	-2.515E-08	-2.515E-08
0.70000	3.357E-08	349.308	-3.141E-06	-3.141E-06	3.141E-06	3.141E-06	-4.741E-08	-4.741E-08
0.80000	7.924E-08	399.209	-5.710E-06	-5.710E-06	5.710E-06	5.710E-06	-1.119E-07	-1.119E-07
0.85000	1.412E-07	424.160	-8.339E-06	-8.339E-06	8.339E-06	8.339E-06	-1.994E-07	-1.994E-07
0.90000	2.875E-07	449.110	-1.337E-05	-1.337E-05	1.337E-05	1.337E-05	-4.059E-07	-4.059E-07
0.92500	4.256E-07	461.585	-1.773E-05	-1.773E-05	1.773E-05	1.773E-05	-6.009E-07	-6.009E-07
0.95000	6.330E-07	474.060	-2.429E-05	-2.429E-05	2.431E-05	2.431E-05	-8.937E-07	-8.937E-07
0.96250	7.394E-07	480.298	-2.857E-05	-2.857E-05	2.860E-05	2.860E-05	-1.044E-06	-1.044E-06
0.97500	8.360E-07	486.535	-3.347E-05	-3.347E-05	3.353E-05	3.353E-05	-1.180E-06	-1.180E-06
0.98125	8.799E-07	489.654	-3.614E-05	-3.614E-05	3.622E-05	3.622E-05	-1.242E-06	-1.242E-06
0.98750	9.196E-07	492.773	-3.893E-05	-3.893E-05	3.904E-05	3.904E-05	-1.298E-06	-1.298E-06
0.99375	9.417E-07	495.892	-4.182E-05	-4.183E-05	4.196E-05	4.196E-05	-1.330E-06	-1.330E-06
1.00000	9.439E-07	499.011	-4.475E-05	-4.475E-05	4.492E-05	4.493E-05	-1.333E-06	-1.333E-06
1.00625	9.261E-07	502.129	-4.765E-05	-4.765E-05	4.787E-05	4.787E-05	-1.308E-06	-1.308E-06
1.01250	8.896E-07	505.248	-5.047E-05	-5.047E-05	5.072E-05	5.073E-05	-1.256E-06	-1.256E-06
1.01875	8.465E-07	508.367	-5.315E-05	-5.315E-05	5.346E-05	5.346E-05	-1.195E-06	-1.195E-06
1.02500	7.979E-07	511.486	-5.569E-05	-5.570E-05	5.604E-05	5.604E-05	-1.127E-06	-1.127E-06
1.03750	6.986E-07	517.723	-6.033E-05	-6.033E-05	6.076E-05	6.076E-05	-9.867E-07	-9.867E-07
1.05000	5.905E-07	523.961	-6.432E-05	-6.432E-05	6.481E-05	6.481E-05	-8.338E-07	-8.337E-07
1.07500	3.900E-07	536.436	-7.035E-05	-7.035E-05	7.093E-05	7.093E-05	-5.507E-07	-5.507E-07
1.10000	2.663E-07	548.911	-7.437E-05	-7.437E-05	7.501E-05	7.501E-05	-3.760E-07	-3.760E-07
1.15000	1.326E-07	573.861	-7.899E-05	-7.899E-05	7.970E-05	7.970E-05	-1.873E-07	-1.873E-07
1.20000	7.538E-08	598.812	-8.145E-05	-8.145E-05	8.221E-05	8.221E-05	-1.064E-07	-1.064E-07
1.30000	3.248E-08	648.713	-8.387E-05	-8.387E-05	8.470E-05	8.470E-05	-4.586E-08	-4.586E-08
1.40000	1.730E-08	698.614	-8.502E-05	-8.502E-05	8.592E-05	8.592E-05	-2.451E-08	-2.451E-08
1.50000	1.082E-08	748.515	-8.567E-05	-8.567E-05	8.663E-05	8.663E-05	-1.527E-08	-1.527E-08
1.60000	7.273E-09	798.416	-8.608E-05	-8.608E-05	8.711E-05	8.711E-05	-1.027E-08	-1.027E-08
1.70000	4.908E-09	848.318	-8.635E-05	-8.635E-05	8.745E-05	8.745E-05	-6.930E-09	-6.930E-09
1.80000	3.468E-09	898.219	-8.652E-05	-8.652E-05	8.768E-05	8.769E-05	-4.896E-09	-4.896E-09
1.90000	2.449E-09	948.120	-8.663E-05	-8.663E-05	8.786E-05	8.786E-05	-3.458E-09	-3.458E-09
2.00000	1.749E-09	998.021	-8.671E-05	-8.671E-05	8.800E-05	8.800E-05	-2.469E-09	-2.469E-09

PROPAGATION FREQUENCY= 4.233DE 08 ϕ_0= 4.000 θ_D= 0. ρ_0=15.009

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-8.517E-15
0.10000	4.060E-11	4.060E-11	-1.028E-20	-1.028E-20	-1.181E-10	-1.181E-10	-1.142E-14
0.20000	1.133E-10	1.133E-10	-1.789E-20	-1.789E-20	-3.236E-10	-3.236E-10	-1.630E-14
0.30000	2.397E-10	2.397E-10	-3.110E-20	-3.110E-20	-6.810E-10	-6.810E-10	-2.555E-14
0.40000	5.064E-10	5.064E-10	-5.652E-20	-5.652E-20	-1.317E-09	-1.317E-09	-4.307E-14
0.50000	1.000E-09	1.000E-09	-1.028E-19	-1.028E-19	-2.474E-09	-2.474E-09	-8.538E-14
0.60000	2.244E-09	2.244E-09	-2.086E-19	-2.086E-19	-4.667E-09	-4.667E-09	-1.966E-13
0.70000	6.222E-09	6.222E-09	-5.313E-19	-5.313E-19	-9.709E-09	-9.709E-09	-5.535E-13
0.80000	2.338E-08	2.338E-08	-1.936E-18	-1.936E-18	-2.523E-08	-2.523E-08	-2.260E-12
0.85000	5.594E-08	5.594E-08	-4.547E-18	-4.547E-18	-4.752E-08	-4.752E-08	-5.674E-12
0.90000	1.656E-07	1.656E-07	-1.371E-17	-1.371E-17	-1.070E-07	-1.070E-07	-1.771E-11
0.92500	3.174E-07	3.174E-07	-2.520E-17	-2.520E-17	-1.776E-07	-1.776E-07	-3.423E-11
0.95000	6.491E-07	6.491E-07	-4.341E-17	-4.341E-17	-3.042E-07	-3.043E-07	-6.610E-11
0.96250	9.776E-07	9.776E-07	-5.371E-17	-5.372E-17	-3.951E-07	-3.951E-07	-9.249E-11
0.97500	1.477E-06	1.477E-06	-6.229E-17	-6.229E-17	-5.043E-07	-5.043E-07	-1.167E-10
0.98125	1.822E-06	1.823E-06	-6.471E-17	-6.471E-17	-5.637E-07	-5.637E-07	-1.274E-10
0.98750	2.234E-06	2.235E-06	-6.920E-17	-6.920E-17	-6.259E-07	-6.259E-07	-1.345E-10
0.99375	2.714E-06	2.714E-06	-7.182E-17	-7.182E-17	-6.920E-07	-6.921E-07	-1.384E-10
1.00000	3.222E-06	3.222E-06	-7.208E-17	-7.208E-17	-7.595E-07	-7.596E-07	-1.389E-10
1.00625	3.709E-06	3.709E-06	-6.997E-17	-6.997E-17	-8.261E-07	-8.262E-07	-1.357E-10
1.01250	4.132E-06	4.133E-06	-6.573E-17	-6.573E-17	-8.897E-07	-8.897E-07	-1.293E-10
1.01875	4.476E-06	4.476E-06	-6.288E-17	-6.288E-17	-9.497E-07	-9.497E-07	-1.193E-10
1.02500	4.755E-06	4.755E-06	-5.963E-17	-5.963E-17	-1.007E-06	-1.007E-06	-1.071E-10
1.03750	5.150E-06	5.150E-06	-4.972E-17	-4.972E-17	-1.110E-06	-1.110E-06	-8.044E-11
1.05000	5.403E-06	5.403E-06	-3.947E-17	-3.947E-17	-1.193E-06	-1.193E-06	-5.814E-11
1.07500	5.633E-06	5.633E-06	-2.236E-17	-2.236E-17	-1.307E-06	-1.307E-06	-3.034E-11
1.10000	5.678E-06	5.678E-06	-1.211E-17	-1.211E-17	-1.369E-06	-1.369E-06	-1.572E-11
1.15000	5.553E-06	5.553E-06	-4.145E-18	-4.145E-18	-1.422E-06	-1.422E-06	-5.153E-12
1.20000	5.351E-06	5.351E-06	-1.799E-18	-1.799E-18	-1.442E-06	-1.442E-06	-2.088E-12
1.30000	4.948E-06	4.948E-06	-5.059E-19	-5.059E-19	-1.457E-06	-1.457E-06	-5.225E-13
1.40000	4.594E-06	4.594E-06	-2.008E-19	-2.008E-19	-1.462E-06	-1.462E-06	-1.883E-13
1.50000	4.287E-06	4.287E-06	-9.982E-20	-9.982E-20	-1.464E-06	-1.464E-06	-8.234E-14
1.60000	4.018E-06	4.018E-06	-5.489E-20	-5.489E-20	-1.465E-06	-1.465E-06	-4.193E-14
1.70000	3.781E-06	3.781E-06	-3.027E-20	-3.027E-20	-1.465E-06	-1.465E-06	-2.499E-14
1.80000	3.571E-06	3.571E-06	-1.741E-20	-1.741E-20	-1.466E-06	-1.466E-06	-1.603E-14
1.90000	3.383E-06	3.383E-06	-1.001E-20	-1.001E-20	-1.466E-06	-1.466E-06	-1.127E-14
2.00000	3.214E-06	3.214E-06	-5.747E-21	-5.747E-21	-1.466E-06	-1.466E-06	-8.432E-15

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 5.000 θ_D= 0. ρ_a= 18.752

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	5.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	5.0000	0.10000	193.734	5.403E-07	9.996E-01	-2.490E-09	-2.490E-09	2.490E-09
0.20000	5.0000	0.20000	172.332	8.138E-07	9.995E-01	-3.523E-09	-3.523E-09	3.523E-09
0.30000	5.0000	0.30000	150.962	1.147E-06	9.992E-01	-4.982E-09	-4.982E-09	4.982E-09
0.40000	5.0000	0.40000	129.640	1.841E-06	9.989E-01	-7.388E-09	-7.388E-09	7.388E-09
0.50000	5.0000	0.50000	108.395	2.241E-06	9.984E-01	-1.097E-08	-1.097E-08	1.097E-08
0.60000	5.0000	0.60000	87.283	2.241E-06	9.974E-01	-1.762E-08	-1.762E-08	1.762E-08
0.70000	5.0000	0.70000	66.431	9.498E-06	9.958E-01	-3.285E-08	-3.285E-08	3.285E-08
0.80000	5.0000	0.80000	46.191	3.650E-05	9.934E-01	-7.492E-08	-7.492E-08	7.492E-08
0.85000	5.0000	0.85000	36.621	7.919E-05	9.933E-01	-1.279E-07	-1.279E-07	1.279E-07
0.90000	5.0000	0.90000	27.929	2.245E-04	9.986E-01	-2.380E-07	-2.380E-07	2.380E-07
0.92500	5.0000	0.92500	24.214	3.560E-04	1.005E 00	-3.312E-07	-3.312E-07	3.312E-07
0.95000	5.0000	0.95000	21.224	5.853E-04	1.011E 00	-4.471E-07	-4.471E-07	4.471E-07
0.96250	5.0000	0.96250	20.105	7.462E-04	1.011E 00	-5.077E-07	-5.077E-07	5.077E-07
0.97500	5.0000	0.97500	19.299	9.392E-04	1.007E 00	-5.564E-07	-5.564E-07	5.564E-07
0.98125	5.0001	0.98125	19.026	1.047E-03	1.004E 00	-5.739E-07	-5.740E-07	5.739E-07
0.98750	5.0001	0.98750	18.846	1.161E-03	1.002E 00	-5.859E-07	-5.859E-07	5.859E-07
0.99375	5.0001	0.99375	18.760	1.281E-03	1.000E-00	-5.916E-07	-5.916E-07	5.916E-07
1.00000	5.0001	1.00000	18.770	1.403E-03	9.999E-01	-5.909E-07	-5.909E-07	5.909E-07
1.00625	5.0001	1.00625	18.877	1.526E-03	1.002E 00	-5.838E-07	-5.838E-07	5.838E-07
1.01250	5.0001	1.01250	19.078	1.646E-03	1.005E 00	-5.706E-07	-5.706E-07	5.706E-07
1.01875	5.0001	1.01875	19.370	1.758E-03	1.008E 00	-5.519E-07	-5.519E-07	5.519E-07
1.02500	5.0001	1.02500	19.750	1.863E-03	1.012E 00	-5.286E-07	-5.286E-07	5.286E-07
1.03750	5.0001	1.03750	20.752	2.036E-03	1.016E 00	-4.717E-07	-4.717E-07	4.717E-07
1.05000	5.0002	1.05000	22.038	2.175E-03	1.016E 00	-4.075E-07	-4.075E-07	4.076E-07
1.07500	5.0002	1.07500	25.282	2.285E-03	1.010E 00	-3.012E-07	-3.012E-07	3.012E-07
1.10000	5.0003	1.10000	29.163	2.414E-03	1.003E 00	-2.132E-07	-2.132E-07	2.132E-07
1.15000	5.0004	1.15000	38.037	2.519E-03	9.958E-01	-1.165E-07	-1.165E-07	1.165E-07
1.20000	5.0004	1.20000	47.692	2.563E-03	9.943E-01	-6.947E-08	-6.947E-08	6.947E-08
1.30000	5.0006	1.30000	68.003	2.590E-03	9.952E-01	-3.121E-08	-3.121E-08	3.121E-08
1.40000	5.0008	1.40000	88.883	2.607E-03	9.963E-01	-1.693E-08	-1.693E-08	1.693E-08
1.50000	5.0009	1.50000	110.008	2.611E-03	9.971E-01	-1.064E-08	-1.064E-08	1.064E-08
1.60000	5.0010	1.60000	131.261	2.611E-03	9.975E-01	-7.169E-09	-7.169E-09	7.169E-09
1.70000	5.0011	1.70000	152.587	2.613E-03	9.978E-01	-4.852E-09	-4.852E-09	4.852E-09
1.80000	5.0012	1.80000	173.960	2.613E-03	9.981E-01	-3.431E-09	-3.431E-09	3.431E-09
1.90000	5.0012	1.90000	195.364	2.613E-03	9.982E-01	-2.425E-09	-2.425E-09	2.425E-09
2.00000	5.0013	2.00000	216.790	2.613E-03	9.983E-01	-1.733E-09	-1.733E-09	1.733E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 5.000 θ_D= 0. ρ_a= 18.752

z	$_x\mu'$-1.0	T_0	$_0T_1$-T_0	$_xT_1$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.490E-09	49.901	-1.053E-07	-1.053E-07	1.053E-07	1.053E-07	-3.515E-09	-3.515E-09
0.20000	3.523E-09	99.802	-2.538E-07	-2.538E-07	2.538E-07	2.538E-07	-4.974E-09	-4.974E-09
0.30000	4.982E-09	149.703	-4.639E-07	-4.639E-07	4.639E-07	4.639E-07	-7.034E-09	-7.034E-09
0.40000	7.388E-09	199.605	-7.684E-07	-7.684E-07	7.684E-07	7.684E-07	-1.043E-08	-1.043E-08
0.50000	1.097E-08	249.506	-1.221E-06	-1.221E-06	1.221E-06	1.221E-06	-1.548E-08	-1.548E-08
0.60000	1.762E-08	299.407	-1.910E-06	-1.910E-06	1.910E-06	1.910E-06	-2.488E-08	-2.488E-08
0.70000	3.285E-08	349.308	-3.111E-06	-3.111E-06	3.111E-06	3.111E-06	-4.638E-08	-4.638E-08
0.80000	7.492E-08	399.209	-5.582E-06	-5.582E-06	5.582E-06	5.582E-06	-1.058E-07	-1.058E-07
0.85000	1.279E-07	424.160	-8.018E-06	-8.018E-06	8.018E-06	8.018E-06	-1.806E-07	-1.806E-07
0.90000	2.380E-07	449.110	-1.238E-05	-1.238E-05	1.238E-05	1.238E-05	-3.360E-07	-3.360E-07
0.92500	3.312E-07	461.585	-1.591E-05	-1.591E-05	1.592E-05	1.592E-05	-4.676E-07	-4.676E-07
0.95000	4.471E-07	474.060	-2.072E-05	-2.072E-05	2.073E-05	2.073E-05	-6.313E-07	-6.313E-07
0.96250	5.077E-07	480.298	-2.370E-05	-2.370E-05	2.372E-05	2.372E-05	-7.169E-07	-7.169E-07
0.97500	5.564E-07	486.536	-2.702E-05	-2.702E-05	2.705E-05	2.705E-05	-7.857E-07	-7.857E-07
0.98125	5.740E-07	489.654	-2.878E-05	-2.878E-05	2.882E-05	2.882E-05	-8.104E-07	-8.104E-07
0.98750	5.859E-07	492.773	-3.058E-05	-3.058E-05	3.063E-05	3.063E-05	-8.272E-07	-8.272E-07
0.99375	5.916E-07	495.892	-3.241E-05	-3.241E-05	3.248E-05	3.248E-05	-8.353E-07	-8.353E-07
1.00000	5.909E-07	499.011	-3.425E-05	-3.425E-05	3.433E-05	3.433E-05	-8.343E-07	-8.343E-07
1.00625	5.838E-07	502.130	-3.608E-05	-3.608E-05	3.617E-05	3.617E-05	-8.243E-07	-8.243E-07
1.01250	5.706E-07	505.248	-3.787E-05	-3.787E-05	3.798E-05	3.798E-05	-8.057E-07	-8.057E-07
1.01875	5.519E-07	508.367	-3.962E-05	-3.962E-05	3.974E-05	3.974E-05	-7.793E-07	-7.793E-07
1.02500	5.286E-07	511.486	-4.130E-05	-4.130E-05	4.143E-05	4.143E-05	-7.464E-07	-7.464E-07
1.03750	4.717E-07	517.723	-4.441E-05	-4.441E-05	4.457E-05	4.457E-05	-6.661E-07	-6.660E-07
1.05000	4.075E-07	523.961	-4.714E-05	-4.714E-05	4.733E-05	4.733E-05	-5.754E-07	-5.754E-07
1.07500	3.012E-07	536.436	-5.152E-05	-5.152E-05	5.173E-05	5.173E-05	-4.252E-07	-4.252E-07
1.10000	2.132E-07	548.911	-5.469E-05	-5.469E-05	5.493E-05	5.493E-05	-3.010E-07	-3.010E-07
1.15000	1.165E-07	573.862	-5.865E-05	-5.865E-05	5.893E-05	5.893E-05	-1.645E-07	-1.645E-07
1.20000	6.947E-08	598.812	-6.088E-05	-6.088E-05	6.118E-05	6.118E-05	-9.809E-08	-9.809E-08
1.30000	3.121E-08	648.713	-6.319E-05	-6.319E-05	6.352E-05	6.352E-05	-4.407E-08	-4.407E-08
1.40000	1.693E-08	698.615	-6.432E-05	-6.432E-05	6.468E-05	6.468E-05	-2.390E-08	-2.390E-08
1.50000	1.064E-08	748.516	-6.497E-05	-6.497E-05	6.536E-05	6.536E-05	-1.503E-08	-1.503E-08
1.60000	7.169E-09	798.417	-6.539E-05	-6.539E-05	6.581E-05	6.581E-05	-1.012E-08	-1.012E-08
1.70000	4.852E-09	848.318	-6.567E-05	-6.568E-05	6.612E-05	6.612E-05	-6.851E-09	-6.851E-09
1.80000	3.431E-09	898.219	-6.587E-05	-6.587E-05	6.633E-05	6.633E-05	-4.844E-09	-4.844E-09
1.90000	2.425E-09	948.120	-6.600E-05	-6.600E-05	6.649E-05	6.649E-05	-3.423E-09	-3.423E-09
2.00000	1.733E-09	998.021	-6.609E-05	-6.609E-05	6.661E-05	6.661E-05	-2.447E-09	-2.447E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 5.000 θ_D= 0. ρ_a= 18.752

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.330E-14
0.10000	5.071E-11	5.071E-11	-1.028E-20	-1.028E-20	-1.181E-10	-1.181E-10	-1.781E-14
0.20000	1.414E-10	1.414E-10	-1.785E-20	-1.785E-20	-3.233E-10	-3.233E-10	-2.562E-14
0.30000	2.989E-10	2.989E-10	-3.100E-20	-3.100E-20	-6.797E-10	-6.797E-10	-3.977E-14
0.40000	6.303E-10	6.303E-10	-5.621E-20	-5.621E-20	-1.313E-09	-1.313E-09	-6.687E-14
0.50000	1.242E-09	1.242E-09	-1.019E-19	-1.019E-19	-2.462E-09	-2.462E-09	-1.319E-13
0.60000	2.773E-09	2.773E-09	-2.053E-19	-2.053E-19	-4.628E-09	-4.628E-09	-3.011E-13
0.70000	7.565E-09	7.565E-09	-5.145E-19	-5.145E-19	-9.541E-09	-9.541E-09	-8.309E-13
0.80000	2.714E-08	2.714E-08	-1.782E-18	-1.782E-18	-2.415E-08	-2.415E-08	-3.224E-12
0.85000	6.167E-08	6.167E-08	-3.928E-18	-3.928E-18	-4.402E-08	-4.403E-08	-7.607E-12
0.90000	1.666E-07	1.666E-07	-1.010E-17	-1.010E-17	-9.134E-08	-9.134E-08	-2.078E-11
0.92500	2.957E-07	2.957E-07	-1.724E-17	-1.724E-17	-1.417E-07	-1.417E-07	-3.516E-11
0.95000	5.452E-07	5.452E-07	-2.696E-17	-2.696E-17	-2.235E-07	-2.235E-07	-5.744E-11
0.96250	7.647E-07	7.648E-07	-3.209E-17	-3.209E-17	-2.788E-07	-2.788E-07	-7.000E-11
0.97500	1.062E-06	1.062E-06	-3.638E-17	-3.638E-17	-3.430E-07	-3.430E-07	-8.165E-11
0.98125	1.246E-06	1.246E-06	-3.796E-17	-3.796E-17	-3.778E-07	-3.778E-07	-8.622E-11
0.98750	1.448E-06	1.448E-06	-3.904E-17	-3.905E-17	-4.138E-07	-4.138E-07	-8.944E-11
0.99375	1.667E-06	1.667E-06	-3.957E-17	-3.957E-17	-4.506E-07	-4.506E-07	-9.104E-11
1.00000	1.889E-06	1.889E-06	-3.951E-17	-3.951E-17	-4.876E-07	-4.876E-07	-9.084E-11
1.00625	2.104E-06	2.104E-06	-3.886E-17	-3.886E-17	-5.243E-07	-5.243E-07	-8.888E-11
1.01250	2.299E-06	2.299E-06	-3.766E-17	-3.766E-17	-5.601E-07	-5.601E-07	-8.534E-11
1.01875	2.470E-06	2.470E-06	-3.598E-17	-3.598E-17	-5.946E-07	-5.946E-07	-8.053E-11
1.02500	2.619E-06	2.619E-06	-3.391E-17	-3.391E-17	-6.273E-07	-6.273E-07	-7.484E-11
1.03750	2.853E-06	2.853E-06	-2.901E-17	-2.901E-17	-6.862E-07	-6.862E-07	-6.233E-11
1.05000	3.011E-06	3.011E-06	-2.374E-17	-2.374E-17	-7.356E-07	-7.356E-07	-5.030E-11
1.07500	3.183E-06	3.183E-06	-1.478E-17	-1.478E-17	-8.068E-07	-8.068E-07	-2.987E-11
1.10000	3.247E-06	3.247E-06	-8.452E-18	-8.452E-18	-8.494E-07	-8.494E-07	-1.791E-11
1.15000	3.219E-06	3.219E-06	-3.421E-18	-3.421E-18	-8.906E-07	-8.906E-07	-6.659E-12
1.20000	3.120E-06	3.120E-06	-1.594E-18	-1.594E-18	-9.081E-07	-9.082E-07	-2.874E-12
1.30000	2.895E-06	2.895E-06	-4.770E-19	-4.770E-19	-9.214E-07	-9.214E-07	-7.611E-13
1.40000	2.690E-06	2.690E-06	-1.936E-19	-1.936E-19	-9.260E-07	-9.260E-07	-2.815E-13
1.50000	2.511E-06	2.511E-06	-9.742E-20	-9.742E-20	-9.280E-07	-9.280E-07	-1.246E-13
1.60000	2.353E-06	2.353E-06	-5.371E-20	-5.371E-20	-9.291E-07	-9.291E-07	-6.409E-14
1.70000	2.215E-06	2.215E-06	-2.972E-20	-2.972E-20	-9.297E-07	-9.297E-07	-3.837E-14
1.80000	2.091E-06	2.092E-06	-1.712E-20	-1.712E-20	-9.301E-07	-9.301E-07	-2.472E-14
1.90000	1.981E-06	1.981E-06	-9.852E-21	-9.852E-21	-9.303E-07	-9.303E-07	-1.744E-14
2.00000	1.882E-06	1.882E-06	-5.661E-21	-5.661E-21	-9.304E-07	-9.304E-07	-1.307E-14

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 6.000 θ_D= 0. ρ_a= 22.490

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	6.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	6.0000	0.10000	193.774	6.270E-07	9.994E-01	-2.488E-09	-2.488E-09	2.488E-09
0.20000	6.0000	0.20000	172.422	8.271E-07	9.992E-01	-3.518E-09	-3.518E-09	3.518E-09
0.30000	6.0000	0.30000	151.116	1.441E-06	9.988E-01	-4.969E-09	-4.969E-09	4.969E-09
0.40000	6.0000	0.40000	129.879	2.241E-06	9.983E-01	-7.356E-09	-7.356E-09	7.356E-09
0.50000	6.0000	0.50000	108.752	2.455E-06	9.975E-01	-1.089E-08	-1.089E-08	1.089E-08
0.60000	6.0000	0.60000	87.814	3.202E-06	9.962E-01	-1.739E-08	-1.739E-08	1.739E-08
0.70000	6.0000	0.70000	67.242	9.498E-06	9.942E-01	-3.200E-08	-3.200E-08	3.200E-08
0.80000	6.0000	0.80000	47.513	3.906E-05	9.924E-01	-7.010E-08	-7.010E-08	7.010E-08
0.85000	6.0000	0.85000	38.376	8.410E-05	9.943E-01	-1.139E-07	-1.139E-07	1.139E-07
0.90000	6.0000	0.90000	30.322	2.126E-04	1.003E 00	-1.937E-07	-1.938E-07	1.937E-07
0.92500	6.0000	0.92500	27.011	3.163E-04	1.009E 00	-2.582E-07	-2.582E-07	2.582E-07
0.95000	6.0000	0.95000	24.445	4.756E-04	1.012E 00	-3.244E-07	-3.244E-07	3.244E-07
0.96250	6.0000	0.96250	23.522	5.780E-04	1.010E 00	-3.522E-07	-3.522E-07	3.522E-07
0.97500	6.0000	0.97500	22.879	6.941E-04	1.005E 00	-3.729E-07	-3.729E-07	3.729E-07
0.98125	6.0000	0.98125	22.671	7.573E-04	1.003E 00	-3.799E-07	-3.799E-07	3.799E-07
0.98750	6.0001	0.98750	22.541	8.230E-04	1.001E 00	-3.849E-07	-3.849E-07	3.849E-07
0.99375	6.0001	0.99375	22.491	8.913E-04	9.996E-01	-3.871E-07	-3.871E-07	3.871E-07
1.00000	6.0001	1.00000	22.521	9.596E-04	9.999E-01	-3.858E-07	-3.858E-07	3.858E-07
1.00625	6.0001	1.00625	22.632	1.026E-03	1.001E 00	-3.813E-07	-3.813E-07	3.813E-07
1.01250	6.0001	1.01250	22.821	1.091E-03	1.004E 00	-3.749E-07	-3.749E-07	3.749E-07
1.01875	6.0001	1.01875	23.087	1.155E-03	1.007E 00	-3.661E-07	-3.661E-07	3.661E-07
1.02500	6.0001	1.02500	23.427	1.213E-03	1.011E 00	-3.552E-07	-3.552E-07	3.552E-07
1.03750	6.0001	1.03750	24.317	1.318E-03	1.016E 00	-3.282E-07	-3.281E-07	3.282E-07
1.05000	6.0001	1.05000	25.462	1.406E-03	1.018E 00	-2.964E-07	-2.964E-07	2.964E-07
1.07500	6.0001	1.07500	28.384	1.540E-03	1.015E 00	-2.285E-07	-2.285E-07	2.285E-07
1.10000	6.0002	1.10000	31.951	1.626E-03	1.008E 00	-1.740E-07	-1.740E-07	1.740E-07
1.15000	6.0002	1.15000	40.310	1.713E-03	9.988E-01	-1.007E-07	-1.007E-07	1.007E-07
1.20000	6.0003	1.20000	49.60[illegible]	[illegible]759E-03	9.951E-01	-6.310E-08	-6.310E-08	6.310E-08
1.30000	6.0004	1.30000	69.[illegible]	791E-03	9.944E-01	-2.976E-08	-2.976E-08	2.976E-08
1.40000	6.0005	1.40000	90.[illegible]	1.803E-03	9.955E-01	-1.642E-08	-1.642E-08	1.642E-08
1.50000	6.0006	1.50000	111.059	1.810E-03	9.964E-01	-1.044E-08	-1.044E-08	1.044E-08
1.60000	6.0007	1.60000	132.201	1.812E-03	9.970E-01	-7.045E-09	-7.045E-09	7.045E-09
1.70000	6.0008	1.70000	153.447	1.817E-03	9.975E-01	-4.785E-09	-4.785E-09	4.785E-09
1.80000	6.0008	1.80000	174.759	1.822E-03	9.978E-01	-3.387E-09	-3.387E-09	3.387E-09
1.90000	6.0009	1.90000	196.116	1.825E-03	9.981E-01	-2.395E-09	-2.395E-09	2.395E-09
2.00000	6.0009	2.00000	217.504	1.827E-03	9.982E-01	-1.714E-09	-1.714E-09	1.714E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 6.000 θ_D= 0. ρ_0=22.490

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.488E-09	49.901	-1.053E-07	-1.053E-07	1.053E-07	1.053E-07	-3.513E-09	-3.513E-09
0.20000	3.518E-09	99.802	-2.536E-07	-2.536E-07	2.536E-07	2.536E-07	-4.967E-09	-4.967E-09
0.30000	4.969E-09	149.703	-4.633E-07	-4.633E-07	4.633E-07	4.633E-07	-7.017E-09	-7.017E-09
0.40000	7.356E-09	199.605	-7.666E-07	-7.666E-07	7.666E-07	7.666E-07	-1.039E-08	-1.039E-08
0.50000	1.089E-08	249.506	-1.216E-06	-1.216E-06	1.216E-06	1.216E-06	-1.538E-08	-1.538E-08
0.60000	1.739E-08	299.407	-1.899E-06	-1.899E-06	1.899E-06	1.899E-06	-2.455E-08	-2.455E-08
0.70000	3.206E-08	349.308	-3.075E-06	-3.075E-06	3.075E-06	3.075E-06	-4.518E-08	-4.518E-08
0.80000	7.010E-08	399.209	-5.435E-06	-5.435E-06	5.435E-06	5.435E-06	-9.898E-08	-9.898E-08
0.85000	1.139E-07	424.160	-7.669E-06	-7.669E-06	7.669E-06	7.669E-06	-1.608E-07	-1.608E-07
0.90000	1.938E-07	449.110	-1.145E-05	-1.145E-05	1.145E-05	1.145E-05	-2.736E-07	-2.736E-07
0.92500	2.582E-07	461.585	-1.425E-05	-1.425E-05	1.426E-05	1.426E-05	-3.646E-07	-3.646E-07
0.95000	3.244E-07	474.061	-1.789E-05	-1.789E-05	1.790E-05	1.790E-05	-4.581E-07	-4.581E-07
0.96250	3.522E-07	480.298	-2.000E-05	-2.000E-05	2.002E-05	2.002E-05	-4.973E-07	-4.973E-07
0.97500	3.729E-07	486.536	-2.227E-05	-2.227E-05	2.229E-05	2.229E-05	-5.266E-07	-5.266E-07
0.98125	3.799E-07	489.655	-2.344E-05	-2.344E-05	2.346E-05	2.346E-05	-5.364E-07	-5.364E-07
0.98750	3.849E-07	492.773	-2.463E-05	-2.463E-05	2.466E-05	2.466E-05	-5.435E-07	-5.435E-07
0.99375	3.871E-07	495.892	-2.583E-05	-2.583E-05	2.586E-05	2.586E-05	-5.466E-07	-5.466E-07
1.00000	3.858E-07	499.011	-2.704E-05	-2.704E-05	2.707E-05	2.707E-05	-5.447E-07	-5.447E-07
1.00625	3.813E-07	502.130	-2.823E-05	-2.823E-05	2.827E-05	2.827E-05	-5.383E-07	-5.383E-07
1.01250	3.749E-07	505.249	-2.941E-05	-2.941E-05	2.945E-05	2.945E-05	-5.293E-07	-5.293E-07
1.01875	3.661E-07	508.367	-3.056E-05	-3.056E-05	3.061E-05	3.061E-05	-5.170E-07	-5.170E-07
1.02500	3.552E-07	511.486	-3.168E-05	-3.168E-05	3.174E-05	3.174E-05	-5.015E-07	-5.015E-07
1.03750	3.281E-07	517.724	-3.381E-05	-3.381E-05	3.388E-05	3.388E-05	-4.633E-07	-4.633E-07
1.05000	2.964E-07	523.961	-3.576E-05	-3.576E-05	3.584E-05	3.584E-05	-4.185E-07	-4.185E-07
1.07500	2.285E-07	536.436	-3.902E-05	-3.902E-05	3.912E-05	3.912E-05	-3.227E-07	-3.227E-07
1.10000	1.740E-07	548.912	-4.150E-05	-4.150E-05	4.161E-05	4.161E-05	-2.457E-07	-2.457E-07
1.15000	1.007E-07	573.862	-4.485E-05	-4.485E-05	4.498E-05	4.498E-05	-1.422E-07	-1.422E-07
1.20000	6.310E-08	598.813	-4.686E-05	-4.686E-05	4.700E-05	4.700E-05	-8.909E-08	-8.909E-08
1.30000	2.976E-08	648.714	-4.902E-05	-4.902E-05	4.917E-05	4.917E-05	-4.203E-08	-4.203E-08
1.40000	1.642E-08	698.615	-5.011E-05	-5.011E-05	5.028E-05	5.028E-05	-2.319E-08	-2.319E-08
1.50000	1.044E-08	748.516	-5.075E-05	-5.075E-05	5.094E-05	5.094E-05	-1.474E-08	-1.474E-08
1.60000	7.045E-09	798.417	-5.117E-05	-5.117E-05	5.137E-05	5.137E-05	-9.947E-09	-9.947E-09
1.70000	4.785E-09	848.318	-5.146E-05	-5.146E-05	5.167E-05	5.167E-05	-6.756E-09	-6.756E-09
1.80000	3.387E-09	898.219	-5.165E-05	-5.165E-05	5.188E-05	5.188E-05	-4.782E-09	-4.782E-09
1.90000	2.395E-09	948.121	-5.179E-05	-5.179E-05	5.203E-05	5.203E-05	-3.382E-09	-3.382E-09
2.00000	1.714E-09	998.022	-5.188E-05	-5.188E-05	5.214E-05	5.214E-05	-2.420E-09	-2.420E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 6.000 θ_D= 0. ρ_0=22.490

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.913E-14
0.10000	6.077E-11	6.077E-11	-1.027E-20	-1.027E-20	-1.180E-10	-1.180E-10	-2.561E-14
0.20000	1.693E-10	1.693E-10	-1.781E-20	-1.781E-20	-3.229E-10	-3.229E-10	-3.650E-14
0.30000	3.574E-10	3.574E-10	-3.087E-20	-3.087E-20	-6.782E-10	-6.782E-10	-5.701E-14
0.40000	7.522E-10	7.522E-10	-5.583E-20	-5.583E-20	-1.308E-09	-1.308E-09	-9.556E-14
0.50000	1.478E-09	1.478E-09	-1.009E-19	-1.009E-19	-2.448E-09	-2.448E-09	-1.872E-13
0.60000	3.267E-09	3.267E-09	-2.013E-19	-2.013E-19	-4.580E-09	-4.580E-09	-4.232E-13
0.70000	8.745E-09	8.745E-09	-4.948E-19	-4.948E-19	-9.346E-09	-9.346E-09	-1.141E-12
0.80000	2.978E-08	2.978E-08	-1.615E-18	-1.615E-18	-2.294E-08	-2.294E-08	-4.185E-12
0.85000	6.433E-08	6.433E-08	-3.309E-18	-3.309E-18	-4.041E-08	-4.041E-08	-9.277E-12
0.90000	1.595E-07	1.595E-07	-7.260E-18	-7.261E-18	-7.849E-08	-7.849E-08	-2.241E-11
0.92500	2.663E-07	2.663E-07	-1.152E-17	-1.152E-17	-1.131E-07	-1.131E-07	-3.366E-11
0.95000	4.566E-07	4.567E-07	-1.668E-17	-1.668E-17	-1.657E-07	-1.657E-07	-4.876E-11
0.96250	6.099E-07	6.099E-07	-1.905E-17	-1.905E-17	-1.992E-07	-1.992E-07	-5.660E-11
0.97500	7.965E-07	7.966E-07	-2.090E-17	-2.090E-17	-2.367E-07	-2.367E-07	-6.312E-11
0.98125	9.097E-07	9.098E-07	-2.153E-17	-2.153E-17	-2.565E-07	-2.565E-07	-6.546E-11
0.98750	1.031E-06	1.031E-06	-2.195E-17	-2.195E-17	-2.769E-07	-2.769E-07	-6.688E-11
0.99375	1.157E-06	1.157E-06	-2.213E-17	-2.213E-17	-2.975E-07	-2.975E-07	-6.740E-11
1.00000	1.283E-06	1.283E-06	-2.202E-17	-2.202E-17	-3.181E-07	-3.182E-07	-6.709E-11
1.00625	1.405E-06	1.405E-06	-2.166E-17	-2.166E-17	-3.386E-07	-3.386E-07	-6.592E-11
1.01250	1.519E-06	1.519E-06	-2.107E-17	-2.107E-17	-3.586E-07	-3.586E-07	-6.378E-11
1.01875	1.621E-06	1.621E-06	-2.028E-17	-2.028E-17	-3.779E-07	-3.779E-07	-6.092E-11
1.02500	1.712E-06	1.712E-06	-1.931E-17	-1.931E-17	-3.964E-07	-3.965E-07	-5.752E-11
1.03750	1.859E-06	1.859E-06	-1.699E-17	-1.699E-17	-4.304E-07	-4.305E-07	-4.978E-11
1.05000	1.963E-06	1.963E-06	-1.440E-17	-1.440E-17	-4.598E-07	-4.598E-07	-4.183E-11
1.07500	2.091E-06	2.091E-06	-9.456E-18	-9.456E-18	-5.042E-07	-5.042E-07	-2.827E-11
1.10000	2.149E-06	2.149E-06	-6.194E-18	-6.194E-18	-5.326E-07	-5.326E-07	-1.825E-11
1.15000	2.156E-06	2.156E-06	-2.760E-18	-2.760E-18	-5.646E-07	-5.646E-07	-7.818E-12
1.20000	2.104E-06	2.104E-06	-1.383E-18	-1.383E-18	-5.796E-07	-5.796E-07	-3.596E-12
1.30000	1.961E-06	1.961E-06	-4.445E-19	-4.445E-19	-5.915E-07	-5.916E-07	-1.010E-12
1.40000	1.825E-06	1.825E-06	-1.852E-19	-1.852E-19	-5.959E-07	-5.959E-07	-3.848E-13
1.50000	1.703E-06	1.703E-06	-9.459E-20	-9.459E-20	-5.978E-07	-5.978E-07	-1.726E-13
1.60000	1.597E-06	1.597E-06	-5.232E-20	-5.232E-20	-5.989E-07	-5.989E-07	-8.987E-14
1.70000	1.503E-06	1.503E-06	-2.907E-20	-2.907E-20	-5.995E-07	-5.995E-07	-5.411E-14
1.80000	1.419E-06	1.419E-06	-1.677E-20	-1.677E-20	-5.998E-07	-5.998E-07	-3.504E-14
1.90000	1.344E-06	1.344E-06	-9.663E-21	-9.663E-21	-6.000E-07	-6.000E-07	-2.481E-14
2.00000	1.277E-06	1.277E-06	-5.557E-21	-5.557E-21	-6.001E-07	-6.001E-07	-1.864E-14

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 7.000 θ_D= 0. ρ_0= 26.221

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	7.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	7.0000	0.10000	193.821	7.137E-07	9.993E-01	-2.486E-09	-2.486E-09	2.486E-09
0.20000	7.0000	0.20000	172.528	9.472E-07	9.991E-01	-3.511E-09	-3.511E-09	3.511E-09
0.30000	7.0000	0.30000	151.297	1.281E-06	9.987E-01	-4.955E-09	-4.955E-09	4.955E-09
0.40000	7.0000	0.40000	130.160	1.281E-06	9.982E-01	-7.317E-09	-7.317E-09	7.317E-09
0.50000	7.0000	0.50000	109.171	3.522E-06	9.973E-01	-1.081E-08	-1.081E-08	1.081E-08
0.60000	7.0000	0.60000	88.437	5.229E-06	9.961E-01	-1.712E-08	-1.712E-08	1.712E-08
0.70000	7.0000	0.70000	68.187	1.110E-05	9.944E-01	-3.103E-08	-3.103E-08	3.103E-08
0.80000	7.0000	0.80000	49.029	4.119E-05	9.942E-01	-6.495E-08	-6.495E-08	6.495E-08
0.85000	7.0000	0.85000	40.351	8.495E-05	9.974E-01	-1.005E-07	-1.005E-07	1.005E-07
0.90000	7.0000	0.90000	32.925	1.895E-04	1.005E 00	-1.632E-07	-1.632E-07	1.632E-07
0.92500	7.0000	0.92500	29.980	2.698E-04	1.008E 00	-1.983E-07	-1.983E-07	1.983E-07
0.95000	7.0000	0.95000	27.773	3.500E-04	1.008E 00	-2.413E-07	-2.413E-07	2.413E-07
0.96250	7.0000	0.96250	27.007	3.868E-04	1.005E 00	-2.583E-07	-2.583E-07	2.583E-07
0.97500	7.0000	0.97500	26.492	4.687E-04	1.002E 00	-2.704E-07	-2.704E-07	2.704E-07
0.98125	7.0000	0.98125	26.334	5.114E-04	1.001E 00	-2.742E-07	-2.742E-07	2.742E-07
0.98750	7.0000	0.98750	26.244	5.515E-04	9.999E-01	-2.765E-07	-2.765E-07	2.765E-07
0.99375	7.0000	0.99375	26.223	5.925E-04	9.995E-01	-2.770E-07	-2.770E-07	2.770E-07
1.00000	7.0001	1.00000	26.270	6.352E-04	9.999E-01	-2.758E-07	-2.758E-07	2.758E-07
1.00625	7.0001	1.00625	26.387	6.753E-04	1.001E 00	-2.730E-07	-2.730E-07	2.730E-07
1.01250	7.0001	1.01250	26.571	7.155E-04	1.003E 00	-2.685E-07	-2.685E-07	2.685E-07
1.01875	7.0001	1.01875	26.821	7.530E-04	1.005E 00	-2.626E-07	-2.626E-07	2.626E-07
1.02500	7.0001	1.02500	27.135	7.897E-04	1.007E 00	-2.554E-07	-2.554E-07	2.554E-07
1.03750	7.0001	1.03750	27.948	8.580E-04	1.011E 00	-2.375E-07	-2.375E-07	2.375E-07
1.05000	7.0001	1.05000	28.989	9.170E-04	1.013E 00	-2.165E-07	-2.165E-07	2.165E-07
1.07500	7.0001	1.07500	31.659	1.011E-03	1.014E 00	-1.774E-07	-1.774E-07	1.774E-07
1.10000	7.0001	1.10000	34.958	1.074E-03	1.010E 00	-1.427E-07	-1.427E-07	1.427E-07
1.15000	7.0002	1.15000	42.840	1.149E-03	1.002E 00	-8.869E-08	-8.869E-08	8.869E-08
1.20000	7.0002	1.20000	51.768	1.188E-03	9.979E-01	-5.738E-08	-5.738E-08	5.738E-08
1.30000	7.0003	1.30000	71.159	1.221E-03	9.955E-01	-2.817E-08	-2.817E-08	2.817E-08
1.40000	7.0004	1.40000	91.505	1.233E-03	9.959E-01	-1.585E-08	-1.585E-08	1.585E-08
1.50000	7.0004	1.50000	112.288	1.236E-03	9.966E-01	-1.020E-08	-1.020E-08	1.020E-08
1.60000	7.0005	1.60000	133.304	1.240E-03	9.972E-01	-6.902E-09	-6.902E-09	6.902E-09
1.70000	7.0005	1.70000	154.457	1.241E-03	9.976E-01	-4.707E-09	-4.707E-09	4.707E-09
1.80000	7.0006	1.80000	175.699	1.243E-03	9.979E-01	-3.335E-09	-3.335E-09	3.335E-09
1.90000	7.0006	1.90000	197.000	1.248E-03	9.982E-01	-2.361E-09	-2.361E-09	2.361E-09
2.00000	7.0006	2.00000	218.343	1.250E-03	9.984E-01	-1.691E-09	-1.691E-09	1.691E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 7.000 θ_D= 0. ρ_0=26.221

z	$_x\mu'$-1.0	T_0	$_0T_t$-T_0	$_xT_t$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.486E-09	49.901	-1.052E-07	-1.052E-07	1.052E-07	1.052E-07	-3.510E-09	-3.510E-09
0.20000	3.511E-09	99.802	-2.534E-07	-2.534E-07	2.534E-07	2.534E-07	-4.958E-09	-4.958E-09
0.30000	4.955E-09	149.703	-4.626E-07	-4.626E-07	4.626E-07	4.626E-07	-6.996E-09	-6.996E-09
0.40000	7.317E-09	199.605	-7.646E-07	-7.646E-07	7.646E-07	7.646E-07	-1.033E-08	-1.033E-08
0.50000	1.081E-08	249.506	-1.211E-06	-1.211E-06	1.211E-06	1.211E-06	-1.526E-08	-1.526E-08
0.60000	1.712E-08	299.407	-1.886E-06	-1.886E-06	1.886E-06	1.886E-06	-2.417E-08	-2.417E-08
0.70000	3.103E-08	349.308	-3.034E-06	-3.034E-06	3.034E-06	3.034E-06	-4.381E-08	-4.381E-08
0.80000	6.495E-08	399.209	-5.278E-06	-5.278E-06	5.278E-06	5.278E-06	-9.170E-08	-9.170E-08
0.85000	1.005E-07	424.160	-7.318E-06	-7.318E-06	7.318E-06	7.318E-06	-1.420E-07	-1.420E-07
0.90000	1.632E-07	449.110	-1.057E-05	-1.057E-05	1.057E-05	1.057E-05	-2.304E-07	-2.304E-07
0.92500	1.983E-07	461.585	-1.282E-05	-1.282E-05	1.282E-05	1.282E-05	-2.800E-07	-2.800E-07
0.95000	2.413E-07	474.061	-1.557E-05	-1.557E-05	1.557E-05	1.557E-05	-3.407E-07	-3.407E-07
0.96250	2.583E-07	480.298	-1.713E-05	-1.713E-05	1.713E-05	1.713E-05	-3.647E-07	-3.647E-07
0.97500	2.704E-07	486.536	-1.878E-05	-1.878E-05	1.878E-05	1.878E-05	-3.818E-07	-3.818E-07
0.98125	2.743E-07	489.655	-1.963E-05	-1.963E-05	1.964E-05	1.964E-05	-3.872E-07	-3.872E-07
0.98750	2.765E-07	492.774	-2.048E-05	-2.048E-05	2.050E-05	2.050E-05	-3.903E-07	-3.903E-07
0.99375	2.770E-07	495.892	-2.135E-05	-2.135E-05	2.136E-05	2.136E-05	-3.911E-07	-3.911E-07
1.00000	2.758E-07	499.011	-2.221E-05	-2.221E-05	2.222E-05	2.222E-05	-3.894E-07	-3.894E-07
1.00625	2.730E-07	502.130	-2.306E-05	-2.306E-05	2.308E-05	2.308E-05	-3.854E-07	-3.854E-07
1.01250	2.685E-07	505.249	-2.391E-05	-2.391E-05	2.393E-05	2.393E-05	-3.792E-07	-3.792E-07
1.01875	2.626E-07	508.368	-2.473E-05	-2.473E-05	2.476E-05	2.476E-05	-3.708E-07	-3.708E-07
1.02500	2.554E-07	511.486	-2.554E-05	-2.554E-05	2.557E-05	2.557E-05	-3.606E-07	-3.606E-07
1.03750	2.375E-07	517.724	-2.708E-05	-2.708E-05	2.711E-05	2.711E-05	-3.354E-07	-3.354E-07
1.05000	2.165E-07	523.962	-2.849E-05	-2.849E-05	2.853E-05	2.853E-05	-3.057E-07	-3.057E-07
1.07500	1.774E-07	536.437	-3.093E-05	-3.093E-05	3.097E-05	3.097E-05	-2.505E-07	-2.505E-07
1.10000	1.427E-07	548.912	-3.292E-05	-3.292E-05	3.297E-05	3.297E-05	-2.015E-07	-2.015E-07
1.15000	8.869E-08	573.862	-3.573E-05	-3.573E-05	3.579E-05	3.579E-05	-1.252E-07	-1.252E-07
1.20000	5.738E-08	598.813	-3.752E-05	-3.752E-05	3.759E-05	3.759E-05	-8.102E-08	-8.102E-08
1.30000	2.817E-08	648.714	-3.953E-05	-3.953E-05	3.960E-05	3.960E-05	-3.978E-08	-3.978E-08
1.40000	1.585E-08	698.615	-4.057E-05	-4.058E-05	4.066E-05	4.066E-05	-2.239E-08	-2.239E-08
1.50000	1.020E-08	748.516	-4.120E-05	-4.120E-05	4.129E-05	4.129E-05	-1.440E-08	-1.440E-08
1.60000	6.902E-09	798.418	-4.162E-05	-4.162E-05	4.171E-05	4.171E-05	-9.745E-09	-9.745E-09
1.70000	4.707E-09	848.319	-4.190E-05	-4.190E-05	4.200E-05	4.200E-05	-6.647E-09	-6.647E-09
1.80000	3.335E-09	898.220	-4.210E-05	-4.210E-05	4.220E-05	4.220E-05	-4.710E-09	-4.710E-09
1.90000	2.361E-09	948.121	-4.223E-05	-4.223E-05	4.235E-05	4.235E-05	-3.334E-09	-3.334E-09
2.00000	1.691E-09	998.022	-4.233E-05	-4.233E-05	4.245E-05	4.245E-05	-2.388E-09	-2.388E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 7.000 θ_D= 0. ρ_a= 26.221

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-2.600E-14
0.10000	7.080E-11	7.080E-11	-1.025E-20	-1.025E-20	-1.179E-10	-1.179E-10	-3.478E-14
0.20000	1.970E-10	1.970E-10	-1.776E-20	-1.776E-20	-3.224E-10	-3.224E-10	-4.951E-14
0.30000	4.155E-10	4.155E-10	-3.073E-20	-3.073E-20	-6.763E-10	-6.764E-10	-7.716E-14
0.40000	8.724E-10	8.724E-10	-5.539E-20	-5.540E-20	-1.302E-09	-1.302E-09	-1.289E-13
0.50000	1.709E-09	1.709E-09	-9.973E-20	-9.973E-20	-2.430E-09	-2.430E-09	-2.506E-13
0.60000	3.737E-09	3.737E-09	-1.968E-19	-1.968E-19	-4.525E-09	-4.525E-09	-5.600E-13
0.70000	9.823E-09	9.823E-09	-4.728E-19	-4.728E-19	-9.119E-09	-9.119E-09	-1.471E-12
0.80000	3.188E-08	3.188E-08	-1.443E-18	-1.443E-18	-2.170E-08	-2.170E-08	-5.085E-12
0.85000	6.571E-08	6.571E-08	-2.752E-18	-2.752E-18	-3.695E-08	-3.695E-08	-1.057E-11
0.90000	1.505E-07	1.505E-07	-5.632E-18	-5.632E-18	-6.733E-08	-6.733E-08	-2.207E-11
0.92500	2.369E-07	2.369E-07	-7.514E-18	-7.514E-18	-9.186E-08	-9.187E-08	-3.188E-11
0.95000	3.776E-07	3.776E-07	-1.032E-17	-1.033E-17	-1.253E-07	-1.253E-07	-4.144E-11
0.96250	4.733E-07	4.733E-07	-1.153E-17	-1.153E-17	-1.457E-07	-1.457E-07	-4.579E-11
0.97500	5.845E-07	5.845E-07	-1.242E-17	-1.242E-17	-1.681E-07	-1.681E-07	-4.910E-11
0.98125	6.450E-07	6.451E-07	-1.270E-17	-1.270E-17	-1.799E-07	-1.799E-07	-5.019E-11
0.98750	7.080E-07	7.081E-07	-1.287E-17	-1.287E-17	-1.919E-07	-1.919E-07	-5.082E-11
0.99375	7.725E-07	7.725E-07	-1.291E-17	-1.291E-17	-2.039E-07	-2.039E-07	-5.097E-11
1.00000	8.365E-07	8.366E-07	-1.282E-17	-1.282E-17	-2.160E-07	-2.160E-07	-5.063E-11
1.00625	8.986E-07	8.986E-07	-1.261E-17	-1.261E-17	-2.279E-07	-2.279E-07	-4.983E-11
1.01250	9.571E-07	9.572E-07	-1.228E-17	-1.228E-17	-2.395E-07	-2.395E-07	-4.858E-11
1.01875	1.011E-06	1.011E-06	-1.184E-17	-1.184E-17	-2.508E-07	-2.508E-07	-4.696E-11
1.02500	1.061E-06	1.061E-06	-1.132E-17	-1.132E-17	-2.616E-07	-2.616E-07	-4.503E-11
1.03750	1.147E-06	1.147E-06	-1.007E-17	-1.007E-17	-2.816E-07	-2.817E-07	-4.055E-11
1.05000	1.215E-06	1.215E-06	-8.666E-18	-8.666E-18	-2.992E-07	-2.992E-07	-3.573E-11
1.07500	1.307E-06	1.307E-06	-6.373E-18	-6.373E-18	-3.269E-07	-3.269E-07	-2.571E-11
1.10000	1.355E-06	1.355E-06	-4.619E-18	-4.619E-18	-3.473E-07	-3.473E-07	-1.763E-11
1.15000	1.376E-06	1.376E-06	-2.287E-18	-2.287E-18	-3.719E-07	-3.719E-07	-8.377E-12
1.20000	1.353E-06	1.353E-06	-1.197E-18	-1.197E-18	-3.845E-07	-3.845E-07	-4.159E-12
1.30000	1.270E-06	1.271E-06	-4.098E-19	-4.098E-19	-3.951E-07	-3.951E-07	-1.256E-12
1.40000	1.185E-06	1.185E-06	-1.759E-19	-1.759E-19	-3.992E-07	-3.992E-07	-4.936E-13
1.50000	1.107E-06	1.107E-06	-9.139E-20	-9.139E-20	-4.011E-07	-4.011E-07	-2.247E-13
1.60000	1.038E-06	1.038E-06	-5.073E-20	-5.073E-20	-4.021E-07	-4.021E-07	-1.186E-13
1.70000	9.774E-07	9.774E-07	-2.832E-20	-2.832E-20	-4.027E-07	-4.027E-07	-7.189E-14
1.80000	9.231E-07	9.231E-07	-1.637E-20	-1.637E-20	-4.030E-07	-4.030E-07	-4.683E-14
1.90000	8.745E-07	8.745E-07	-9.445E-21	-9.445E-21	-4.032E-07	-4.032E-07	-3.330E-14
2.00000	8.307E-07	8.307E-07	-5.438E-21	-5.438E-21	-4.033E-07	-4.033E-07	-2.508E-14

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 8.000 θ_D= 0. ρ_a= 29.944

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	8.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	8.0000	0.10000	193.876	6.737E-07	9.994E-01	-2.484E-09	-2.484E-09	2.484E-09
0.20000	8.0000	0.20000	172.650	1.121E-06	9.992E-01	-3.505E-09	-3.505E-09	3.505E-09
0.30000	8.0000	0.30000	151.526	1.628E-06	9.989E-01	-4.938E-09	-4.938E-09	4.938E-09
0.40000	8.0000	0.40000	130.484	2.615E-06	9.985E-01	-7.273E-09	-7.273E-09	7.273E-09
0.50000	8.0000	0.50000	109.653	3.949E-06	9.979E-01	-1.071E-08	-1.071E-08	1.071E-08
0.60000	8.0000	0.60000	89.149	7.044E-06	9.969E-01	-1.682E-08	-1.682E-08	1.682E-08
0.70000	8.0000	0.70000	69.261	1.174E-05	9.958E-01	-2.996E-08	-2.996E-08	2.996E-08
0.80000	8.0000	0.80000	50.721	5.571E-05	9.963E-01	-5.999E-08	-5.999E-08	5.999E-08
0.85000	8.0000	0.85000	42.515	9.263E-05	9.992E-01	-9.016E-08	-9.016E-08	9.016E-08
0.90000	8.0000	0.90000	35.692	1.733E-04	1.004E 00	-1.360E-07	-1.360E-07	1.360E-07
0.92500	8.0000	0.92500	33.574	2.271E-04	1.005E 00	-1.616E-07	-1.616E-07	1.616E-07
0.95000	8.0000	0.95000	31.173	2.835E-04	1.004E 00	-1.832E-07	-1.832E-07	1.832E-07
0.96250	8.0000	0.96250	30.535	3.159E-04	1.002E 00	-1.911E-07	-1.911E-07	1.911E-07
0.97500	8.0000	0.97500	30.124	3.671E-04	1.001E 00	-1.963E-07	-1.963E-07	1.963E-07
0.98125	8.0000	0.98125	30.007	3.936E-04	1.000E 00	-1.978E-07	-1.978E-07	1.978E-07
0.98750	8.0000	0.98750	29.950	4.192E-04	9.996E-01	-1.988E-07	-1.988E-07	1.988E-07
0.99375	8.0000	0.99375	29.954	4.440E-04	9.996E-01	-1.987E-07	-1.987E-07	1.987E-07
1.00000	8.0000	1.00000	30.018	4.696E-04	9.999E-01	-1.977E-07	-1.977E-07	1.977E-07
1.00625	8.0000	1.00625	30.141	4.952E-04	1.001E 00	-1.961E-07	-1.961E-07	1.961E-07
1.01250	8.0000	1.01250	30.324	5.217E-04	1.001E 00	-1.937E-07	-1.937E-07	1.937E-07
1.01875	8.0001	1.01875	30.565	5.447E-04	1.003E 00	-1.907E-07	-1.907E-07	1.907E-07
1.02500	8.0001	1.02500	30.863	5.695E-04	1.004E 00	-1.870E-07	-1.870E-07	1.870E-07
1.03750	8.0001	1.03750	31.622	6.130E-04	1.006E 00	-1.778E-07	-1.778E-07	1.778E-07
1.05000	8.0001	1.05000	32.536	6.506E-04	1.008E 00	-1.669E-07	-1.669E-07	1.669E-07
1.07500	8.0001	1.07500	35.358	7.163E-04	1.010E 00	-1.418E-07	-1.418E-07	1.418E-07
1.10000	8.0001	1.10000	38.133	7.599E-04	1.008E 00	-1.157E-07	-1.157E-07	1.157E-07
1.15000	8.0001	1.15000	45.583	8.111E-04	1.003E 00	-7.725E-08	-7.725E-08	7.725E-08
1.20000	8.0002	1.20000	54.157	8.469E-04	9.996E-01	-5.186E-08	-5.186E-08	5.186E-08
1.30000	8.0002	1.30000	73.360	8.743E-04	9.971E-01	-2.649E-08	-2.649E-08	2.649E-08
1.40000	8.0003	1.40000	93.104	8.845E-04	9.971E-01	-1.523E-08	-1.523E-08	1.523E-08
1.50000	8.0003	1.50000	113.688	8.879E-04	9.975E-01	-9.939E-09	-9.939E-09	9.939E-09
1.60000	8.0003	1.60000	134.563	8.930E-04	9.979E-01	-6.742E-09	-6.742E-09	6.742E-09
1.70000	8.0004	1.70000	155.613	8.948E-04	9.982E-01	-4.620E-09	-4.620E-09	4.620E-09
1.80000	8.0004	1.80000	176.776	8.982E-04	9.985E-01	-3.278E-09	-3.278E-09	3.278E-09
1.90000	8.0004	1.90000	198.014	9.033E-04	9.987E-01	-2.323E-09	-2.323E-09	2.323E-09
2.00000	8.0005	2.00000	219.307	9.033E-04	9.988E-01	-1.666E-09	-1.666E-09	1.666E-09

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_o= 8.000 θ_D= 0. ρ_a=29.944

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.484E-09	49.901	-1.052E-07	-1.052E-07	1.052E-07	1.052E-07	-3.507E-09	-3.507E-09
0.20000	3.505E-09	99.802	-2.531E-07	-2.531E-07	2.531E-07	2.531E-07	-4.948E-09	-4.948E-09
0.30000	4.938E-09	149.703	-4.618E-07	-4.618E-07	4.618E-07	4.618E-07	-6.972E-09	-6.973E-09
0.40000	7.273E-09	199.605	-7.623E-07	-7.623E-07	7.623E-07	7.623E-07	-1.027E-08	-1.027E-08
0.50000	1.071E-08	249.506	-1.206E-06	-1.206E-06	1.206E-06	1.206E-06	-1.513E-08	-1.513E-08
0.60000	1.684E-08	299.407	-1.871E-06	-1.871E-06	1.871E-06	1.871E-06	-2.374E-08	-2.374E-08
0.70000	2.996E-08	349.308	-2.989E-06	-2.989E-06	2.989E-06	2.989E-06	-4.231E-08	-4.231E-08
0.80000	5.999E-08	399.209	-5.112E-06	-5.112E-06	5.112E-06	5.112E-06	-8.470E-08	-8.470E-08
0.85000	9.016E-08	424.160	-6.962E-06	-6.962E-06	6.963E-06	6.963E-06	-1.273E-07	-1.273E-07
0.90000	1.360E-07	449.110	-9.737E-06	-9.737E-06	9.738E-06	9.738E-06	-1.920E-07	-1.920E-07
0.92500	1.616E-07	461.585	-1.159E-05	-1.159E-05	1.160E-05	1.160E-05	-2.282E-07	-2.282E-07
0.95000	1.832E-07	474.061	-1.375E-05	-1.375E-05	1.375E-05	1.375E-05	-2.586E-07	-2.586E-07
0.96250	1.911E-07	480.298	-1.492E-05	-1.492E-05	1.492E-05	1.492E-05	-2.698E-07	-2.698E-07
0.97500	1.963E-07	486.536	-1.613E-05	-1.613E-05	1.613E-05	1.613E-05	-2.772E-07	-2.772E-07
0.98125	1.978E-07	489.655	-1.674E-05	-1.674E-05	1.675E-05	1.675E-05	-2.793E-07	-2.793E-07
0.98750	1.988E-07	492.774	-1.736E-05	-1.736E-05	1.737E-05	1.737E-05	-2.807E-07	-2.807E-07
0.99375	1.987E-07	495.892	-1.798E-05	-1.798E-05	1.799E-05	1.799E-05	-2.806E-07	-2.806E-07
1.00000	1.977E-07	499.011	-1.860E-05	-1.860E-05	1.861E-05	1.861E-05	-2.791E-07	-2.791E-07
1.00625	1.961E-07	502.130	-1.921E-05	-1.921E-05	1.922E-05	1.922E-05	-2.769E-07	-2.769E-07
1.01250	1.937E-07	505.249	-1.982E-05	-1.982E-05	1.983E-05	1.983E-05	-2.735E-07	-2.735E-07
1.01875	1.907E-07	508.368	-2.042E-05	-2.042E-05	2.043E-05	2.043E-05	-2.692E-07	-2.692E-07
1.02500	1.870E-07	511.486	-2.101E-05	-2.101E-05	2.102E-05	2.102E-05	-2.640E-07	-2.640E-07
1.03750	1.778E-07	517.724	-2.214E-05	-2.214E-05	2.216E-05	2.216E-05	-2.511E-07	-2.511E-07
1.05000	1.669E-07	523.962	-2.322E-05	-2.322E-05	2.324E-05	2.324E-05	-2.356E-07	-2.356E-07
1.07500	1.418E-07	536.437	-2.515E-05	-2.515E-05	2.517E-05	2.517E-05	-2.002E-07	-2.002E-07
1.10000	1.157E-07	548.912	-2.675E-05	-2.675E-05	2.677E-05	2.677E-05	-1.634E-07	-1.634E-07
1.15000	7.725E-08	573.863	-2.911E-05	-2.911E-05	2.914E-05	2.914E-05	-1.091E-07	-1.091E-07
1.20000	5.186E-08	598.813	-3.069E-05	-3.069E-05	3.072E-05	3.072E-05	-7.322E-08	-7.322E-08
1.30000	2.649E-08	648.714	-3.254E-05	-3.254E-05	3.257E-05	3.257E-05	-3.740E-08	-3.740E-08
1.40000	1.523E-08	698.615	-3.353E-05	-3.353E-05	3.358E-05	3.358E-05	-2.151E-08	-2.151E-08
1.50000	9.939E-09	748.517	-3.414E-05	-3.414E-05	3.419E-05	3.419E-05	-1.403E-08	-1.403E-08
1.60000	6.742E-09	798.418	-3.455E-05	-3.455E-05	3.460E-05	3.460E-05	-9.520E-09	-9.520E-09
1.70000	4.620E-09	848.319	-3.483E-05	-3.483E-05	3.488E-05	3.488E-05	-6.523E-09	-6.523E-09
1.80000	3.278E-09	898.220	-3.502E-05	-3.502E-05	3.508E-05	3.508E-05	-4.628E-09	-4.628E-09
1.90000	2.323E-09	948.121	-3.516E-05	-3.516E-05	3.522E-05	3.522E-05	-3.279E-09	-3.279E-09
2.00000	1.666E-09	998.022	-3.526E-05	-3.526E-05	3.532E-05	3.532E-05	-2.353E-09	-2.353E-09

PROPAGATION FREQUENCY= 4.233OE 08 ϕ_o= 8.000 θ_D= 0. ρ_a=29.944

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-3.390E-14
0.10000	8.080E-11	8.080E-11	-1.024E-20	-1.024E-20	-1.178E-10	-1.178E-10	-4.533E-14
0.20000	2.246E-10	2.246E-10	-1.771E-20	-1.771E-20	-3.218E-10	-3.218E-10	-6.443E-14
0.30000	4.732E-10	4.732E-10	-3.056E-20	-3.056E-20	-6.743E-10	-6.743E-10	-1.001E-13
0.40000	9.914E-10	9.913E-10	-5.489E-20	-5.490E-20	-1.295E-09	-1.295E-09	-1.666E-13
0.50000	1.936E-09	1.936E-09	-9.839E-20	-9.839E-20	-2.411E-09	-2.411E-09	-3.212E-13
0.60000	4.188E-09	4.188E-09	-1.917E-19	-1.917E-19	-4.463E-09	-4.463E-09	-7.086E-13
0.70000	1.083E-08	1.083E-08	-4.490E-19	-4.490E-19	-8.877E-09	-8.877E-09	-1.808E-12
0.80000	3.344E-08	3.344E-08	-1.281E-18	-1.281E-18	-2.041E-08	-2.041E-08	-5.858E-12
0.85000	6.584E-08	6.584E-08	-2.343E-18	-2.343E-18	-3.361E-08	-3.362E-08	-1.124E-11
0.90000	1.391E-07	1.391E-07	-4.300E-18	-4.300E-18	-5.763E-08	-5.763E-08	-2.129E-11
0.92500	2.064E-07	2.064E-07	-5.551E-18	-5.551E-18	-7.605E-08	-7.605E-08	-2.830E-11
0.95000	3.040E-07	3.040E-07	-6.682E-18	-6.682E-18	-9.901E-08	-9.901E-08	-3.561E-11
0.96250	3.660E-07	3.660E-07	-7.111E-18	-7.111E-18	-1.119E-07	-1.119E-07	-3.865E-11
0.97500	4.352E-07	4.352E-07	-7.402E-18	-7.402E-18	-1.255E-07	-1.255E-07	-4.081E-11
0.98125	4.717E-07	4.717E-07	-7.487E-18	-7.487E-18	-1.325E-07	-1.325E-07	-4.145E-11
0.98750	5.088E-07	5.088E-07	-7.546E-18	-7.546E-18	-1.395E-07	-1.395E-07	-4.172E-11
0.99375	5.460E-07	5.460E-07	-7.542E-18	-7.542E-18	-1.466E-07	-1.466E-07	-4.171E-11
1.00000	5.828E-07	5.828E-07	-7.479E-18	-7.479E-18	-1.536E-07	-1.536E-07	-4.140E-11
1.00625	6.187E-07	6.187E-07	-7.390E-18	-7.390E-18	-1.605E-07	-1.605E-07	-4.072E-11
1.01250	6.531E-07	6.531E-07	-7.259E-18	-7.259E-18	-1.674E-07	-1.674E-07	-3.975E-11
1.01875	6.857E-07	6.857E-07	-7.090E-18	-7.090E-18	-1.741E-07	-1.741E-07	-3.851E-11
1.02500	7.163E-07	7.163E-07	-6.887E-18	-6.887E-18	-1.806E-07	-1.807E-07	-3.706E-11
1.03750	7.706E-07	7.706E-07	-6.396E-18	-6.396E-18	-1.931E-07	-1.931E-07	-3.368E-11
1.05000	8.151E-07	8.151E-07	-5.822E-18	-5.822E-18	-2.045E-07	-2.045E-07	-2.997E-11
1.07500	8.781E-07	8.781E-07	-4.574E-18	-4.574E-18	-2.240E-07	-2.240E-07	-2.275E-11
1.10000	9.144E-07	9.144E-07	-3.389E-18	-3.389E-18	-2.388E-07	-2.388E-07	-1.683E-11
1.15000	9.379E-07	9.379E-07	-1.865E-18	-1.865E-18	-2.577E-07	-2.577E-07	-8.643E-12
1.20000	9.283E-07	9.283E-07	-1.025E-18	-1.025E-18	-2.682E-07	-2.682E-07	-4.578E-12
1.30000	8.776E-07	8.776E-07	-3.740E-19	-3.740E-19	-2.775E-07	-2.775E-07	-1.487E-12
1.40000	8.208E-07	8.208E-07	-1.659E-19	-1.659E-19	-2.813E-07	-2.813E-07	-6.038E-13
1.50000	7.680E-07	7.680E-07	-8.788E-20	-8.788E-20	-2.831E-07	-2.831E-07	-2.792E-13
1.60000	7.207E-07	7.207E-07	-4.897E-20	-4.897E-20	-2.841E-07	-2.841E-07	-1.497E-13
1.70000	6.787E-07	6.787E-07	-2.749E-20	-2.749E-20	-2.846E-07	-2.846E-07	-9.134E-14
1.80000	6.412E-07	6.412E-07	-1.592E-20	-1.592E-20	-2.849E-07	-2.849E-07	-5.991E-14
1.90000	6.075E-07	6.075E-07	-9.201E-21	-9.201E-21	-2.851E-07	-2.851E-07	-4.281E-14
2.00000	5.772E-07	5.772E-07	-5.304E-21	-5.304E-21	-2.852E-07	-2.852E-07	-3.234E-14

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	ϕ	z_t	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	10.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	10.0000	0.10000	194.006	1.041E-06	9.989E-01	-2.479E-09	-2.479E-09	2.479E-09
0.20000	10.0000	0.20000	172.942	1.441E-06	9.986E-01	-3.488E-09	-3.488E-09	3.488E-09
0.30000	10.0000	0.30000	152.006	3.468E-06	9.981E-01	-4.898E-09	-4.898E-09	4.898E-09
0.40000	10.0000	0.40000	131.256	4.055E-06	9.974E-01	-7.170E-09	-7.170E-09	7.170E-09
0.50000	10.0000	0.50000	110.800	6.723E-06	9.964E-01	-1.049E-08	-1.049E-08	1.049E-08
0.60000	10.0000	0.60000	90.834	9.071E-06	9.952E-01	-1.612E-08	-1.612E-08	1.612E-08
0.70000	10.0000	0.70000	71.771	2.263E-05	9.946E-01	-2.762E-08	-2.762E-08	2.762E-08
0.80000	10.0000	0.80000	54.562	6.958E-05	9.977E-01	-5.097E-08	-5.097E-08	5.097E-08
0.85000	10.0000	0.85000	47.299	1.054E-04	1.002E 00	-7.086E-08	-7.086E-08	7.086E-08
0.90000	10.0000	0.90000	41.580	1.639E-04	1.005E 00	-9.450E-08	-9.450E-08	9.450E-08
0.92500	10.0000	0.92500	39.516	2.023E-04	1.005E 00	-1.056E-07	-1.056E-07	1.056E-07
0.95000	10.0000	0.95000	38.105	2.476E-04	1.002E 00	-1.160E-07	-1.160E-07	1.160E-07
0.96250	10.0000	0.96250	37.669	2.732E-04	1.001E 00	-1.193E-07	-1.193E-07	1.193E-07
0.97500	10.0000	0.97500	37.422	3.031E-04	9.997E-01	-1.213E-07	-1.213E-07	1.213E-07
0.98125	10.0000	0.98125	37.370	3.185E-04	9.993E-01	-1.217E-07	-1.217E-07	1.217E-07
0.98750	10.0000	0.98750	37.367	3.338E-04	9.992E-01	-1.217E-07	-1.217E-07	1.217E-07
0.99375	10.0000	0.99375	37.412	3.483E-04	9.994E-01	-1.214E-07	-1.214E-07	1.214E-07
1.00000	10.0000	1.00000	37.505	3.620E-04	9.998E-01	-1.206E-07	-1.206E-07	1.206E-07
1.00625	10.0000	1.00625	37.646	3.791E-04	1.000E 00	-1.195E-07	-1.195E-07	1.195E-07
1.01250	10.0000	1.01250	37.834	3.953E-04	1.001E 00	-1.180E-07	-1.180E-07	1.180E-07
1.01875	10.0000	1.01875	38.069	4.098E-04	1.002E 00	-1.162E-07	-1.162E-07	1.162E-07
1.02500	10.0000	1.02500	38.350	4.226E-04	1.004E 00	-1.141E-07	-1.141E-07	1.141E-07
1.03750	10.0001	1.03750	39.044	4.499E-04	1.006E 00	-1.090E-07	-1.090E-07	1.090E-07
1.05000	10.0001	1.05000	39.938	4.738E-04	1.008E 00	-1.029E-07	-1.029E-07	1.029E-07
1.07500	10.0001	1.07500	42.101	5.088E-04	1.011E 00	-9.206E-08	-9.206E-08	9.206E-08
1.10000	10.0001	1.10000	44.835	5.328E-04	1.012E 00	-8.022E-08	-8.022E-08	8.022E-08
1.15000	10.0001	1.15000	51.567	5.772E-04	1.008E 00	-5.787E-08	-5.787E-08	5.787E-08
1.20000	10.0001	1.20000	59.495	6.045E-04	1.004E 00	-4.136E-08	-4.136E-08	4.136E-08
1.30000	10.0002	1.30000	77.427	6.318E-04	9.983E-01	-2.298E-08	-2.298E-08	2.298E-08
1.40000	10.0002	1.40000	96.831	6.489E-04	9.969E-01	-1.388E-08	-1.388E-08	1.388E-08
1.50000	10.0002	1.50000	116.975	6.540E-04	9.968E-01	-9.350E-09	-9.350E-09	9.350E-09
1.60000	10.0003	1.60000	137.536	6.591E-04	9.970E-01	-6.380E-09	-6.380E-09	6.380E-09
1.70000	10.0003	1.70000	158.351	6.591E-04	9.974E-01	-4.419E-09	-4.419E-09	4.419E-09
1.80000	10.0003	1.80000	179.331	6.608E-04	9.977E-01	-3.145E-09	-3.145E-09	3.145E-09
1.90000	10.0003	1.90000	200.425	6.677E-04	9.980E-01	-2.234E-09	-2.234E-09	2.234E-09
2.00000	10.0003	2.00000	221.603	6.677E-04	9.982E-01	-1.608E-09	-1.608E-09	1.608E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.479E-09	49.901	-1.051E-07	-1.051E-07	1.051E-07	1.051E-07	-3.500E-09	-3.500E-09
0.20000	3.488E-09	99.802	-2.525E-07	-2.525E-07	2.525E-07	2.525E-07	-4.925E-09	-4.925E-09
0.30000	4.898E-09	149.703	-4.598E-07	-4.598E-07	4.598E-07	4.598E-07	-6.916E-09	-6.916E-09
0.40000	7.170E-09	199.605	-7.569E-07	-7.569E-07	7.569E-07	7.569E-07	-1.012E-08	-1.012E-08
0.50000	1.049E-08	249.506	-1.192E-06	-1.192E-06	1.192E-06	1.192E-06	-1.481E-08	-1.481E-08
0.60000	1.612E-08	299.407	-1.837E-06	-1.837E-06	1.837E-06	1.837E-06	-2.276E-08	-2.276E-08
0.70000	2.762E-08	349.308	-2.887E-06	-2.887E-06	2.887E-06	2.887E-06	-3.900E-08	-3.900E-08
0.80000	5.097E-08	399.209	-4.769E-06	-4.769E-06	4.769E-06	4.769E-06	-7.197E-08	-7.197E-08
0.85000	7.086E-08	424.160	-6.272E-06	-6.272E-06	6.272E-06	6.272E-06	-1.000E-07	-1.000E-07
0.90000	9.450E-08	449.110	-8.337E-06	-8.337E-06	8.338E-06	8.338E-06	-1.334E-07	-1.334E-07
0.92500	1.056E-07	461.585	-9.584E-06	-9.584E-06	9.585E-06	9.585E-06	-1.492E-07	-1.492E-07
0.95000	1.160E-07	474.061	-1.097E-05	-1.097E-05	1.097E-05	1.097E-05	-1.637E-07	-1.637E-07
0.96250	1.193E-07	480.298	-1.170E-05	-1.170E-05	1.171E-05	1.171E-05	-1.685E-07	-1.685E-07
0.97500	1.213E-07	486.536	-1.246E-05	-1.246E-05	1.246E-05	1.246E-05	-1.713E-07	-1.713E-07
0.98125	1.217E-07	489.655	-1.283E-05	-1.283E-05	1.284E-05	1.284E-05	-1.719E-07	-1.719E-07
0.98750	1.217E-07	492.774	-1.321E-05	-1.321E-05	1.322E-05	1.322E-05	-1.719E-07	-1.719E-07
0.99375	1.214E-07	495.892	-1.359E-05	-1.359E-05	1.360E-05	1.360E-05	-1.714E-07	-1.714E-07
1.00000	1.206E-07	499.011	-1.397E-05	-1.397E-05	1.397E-05	1.397E-05	-1.703E-07	-1.703E-07
1.00625	1.195E-07	502.130	-1.434E-05	-1.434E-05	1.435E-05	1.435E-05	-1.688E-07	-1.688E-07
1.01250	1.180E-07	505.249	-1.471E-05	-1.471E-05	1.472E-05	1.472E-05	-1.667E-07	-1.667E-07
1.01875	1.162E-07	508.368	-1.508E-05	-1.508E-05	1.509E-05	1.509E-05	-1.641E-07	-1.641E-07
1.02500	1.141E-07	511.486	-1.544E-05	-1.544E-05	1.545E-05	1.545E-05	-1.611E-07	-1.611E-07
1.03750	1.090E-07	517.724	-1.613E-05	-1.613E-05	1.614E-05	1.614E-05	-1.539E-07	-1.539E-07
1.05000	1.029E-07	523.962	-1.680E-05	-1.680E-05	1.680E-05	1.680E-05	-1.454E-07	-1.454E-07
1.07500	9.206E-08	536.437	-1.801E-05	-1.801E-05	1.802E-05	1.802E-05	-1.300E-07	-1.300E-07
1.10000	8.022E-08	548.912	-1.909E-05	-1.909E-05	1.910E-05	1.910E-05	-1.133E-07	-1.133E-07
1.15000	5.787E-08	573.863	-2.079E-05	-2.079E-05	2.081E-05	2.081E-05	-8.171E-08	-8.171E-08
1.20000	4.136E-08	598.813	-2.202E-05	-2.202E-05	2.204E-05	2.204E-05	-5.840E-08	-5.840E-08
1.30000	2.298E-08	648.714	-2.359E-05	-2.359E-05	2.361E-05	2.361E-05	-3.245E-08	-3.245E-08
1.40000	1.388E-08	698.616	-2.448E-05	-2.448E-05	2.450E-05	2.450E-05	-1.959E-08	-1.959E-08
1.50000	9.350E-09	748.517	-2.505E-05	-2.505E-05	2.507E-05	2.507E-05	-1.320E-08	-1.320E-08
1.60000	6.380E-09	798.418	-2.543E-05	-2.543E-05	2.546E-05	2.546E-05	-9.008E-09	-9.008E-09
1.70000	4.419E-09	848.319	-2.570E-05	-2.570E-05	2.573E-05	2.573E-05	-6.240E-09	-6.240E-09
1.80000	3.145E-09	898.220	-2.588E-05	-2.588E-05	2.591E-05	2.591E-05	-4.440E-09	-4.440E-09
1.90000	2.234E-09	948.121	-2.602E-05	-2.602E-05	2.605E-05	2.605E-05	-3.155E-09	-3.155E-09
2.00000	1.608E-09	998.022	-2.611E-05	-2.611E-05	2.614E-05	2.614E-05	-2.271E-09	-2.271E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 10.000 θ_0= 0. ρ_a= 37.362

z	$_0D_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-5.278E-14
0.10000	1.006E-10	1.006E-10	-1.020E-20	-1.020E-20	-1.176E-10	-1.176E-10	-7.043E-14
0.20000	2.789E-10	2.789E-10	-1.758E-20	-1.758E-20	-3.205E-10	-3.205E-10	-9.976E-14
0.30000	5.853E-10	5.853E-10	-3.017E-20	-3.017E-20	-6.693E-10	-6.693E-10	-1.541E-13
0.40000	1.218E-09	1.218E-09	-5.372E-20	-5.372E-20	-1.279E-09	-1.279E-09	-2.540E-13
0.50000	2.359E-09	2.359E-09	-9.528E-20	-9.528E-20	-2.365E-09	-2.365E-09	-4.799E-13
0.60000	4.936E-09	4.936E-09	-1.803E-19	-1.803E-19	-4.321E-09	-4.321E-09	-1.028E-12
0.70000	1.211E-08	1.211E-08	-3.979E-19	-3.979E-19	-8.342E-09	-8.342E-09	-2.467E-12
0.80000	3.388E-08	3.388E-08	-9.981E-19	-9.981E-19	-1.792E-08	-1.792E-08	-6.926E-12
0.85000	6.136E-08	6.136E-08	-1.641E-18	-1.641E-18	-2.758E-08	-2.758E-08	-1.174E-11
0.90000	1.156E-07	1.156E-07	-2.511E-18	-2.511E-18	-4.306E-08	-4.306E-08	-1.908E-11
0.92500	1.587E-07	1.587E-07	-2.961E-18	-2.961E-18	-5.327E-08	-5.327E-08	-2.316E-11
0.95000	2.161E-07	2.161E-07	-3.398E-18	-3.398E-18	-6.521E-08	-6.521E-08	-2.625E-11
0.96250	2.496E-07	2.496E-07	-3.546E-18	-3.546E-18	-7.171E-08	-7.171E-08	-2.733E-11
0.97500	2.852E-07	2.852E-07	-3.632E-18	-3.632E-18	-7.843E-08	-7.844E-08	-2.798E-11
0.98125	3.034E-07	3.034E-07	-3.651E-18	-3.651E-18	-8.184E-08	-8.184E-08	-2.811E-11
0.98750	3.217E-07	3.217E-07	-3.652E-18	-3.652E-18	-8.526E-08	-8.526E-08	-2.812E-11
0.99375	3.399E-07	3.399E-07	-3.636E-18	-3.636E-18	-8.866E-08	-8.866E-08	-2.800E-11
1.00000	3.578E-07	3.578E-07	-3.603E-18	-3.603E-18	-9.205E-08	-9.205E-08	-2.776E-11
1.00625	3.752E-07	3.753E-07	-3.554E-18	-3.554E-18	-9.540E-08	-9.540E-08	-2.740E-11
1.01250	3.921E-07	3.921E-07	-3.489E-18	-3.489E-18	-9.869E-08	-9.869E-08	-2.692E-11
1.01875	4.081E-07	4.081E-07	-3.410E-18	-3.410E-18	-1.019E-07	-1.019E-07	-2.634E-11
1.02500	4.234E-07	4.234E-07	-3.318E-18	-3.318E-18	-1.051E-07	-1.051E-07	-2.568E-11
1.03750	4.512E-07	4.512E-07	-3.101E-18	-3.101E-18	-1.111E-07	-1.111E-07	-2.414E-11
1.05000	4.750E-07	4.750E-07	-2.850E-18	-2.850E-18	-1.166E-07	-1.166E-07	-2.241E-11
1.07500	5.110E-07	5.110E-07	-2.416E-18	-2.416E-18	-1.265E-07	-1.265E-07	-1.818E-11
1.10000	5.340E-07	5.340E-07	-1.971E-18	-1.971E-18	-1.347E-07	-1.347E-07	-1.431E-11
1.15000	5.543E-07	5.543E-07	-1.213E-18	-1.213E-18	-1.464E-07	-1.464E-07	-8.568E-12
1.20000	5.546E-07	5.547E-07	-7.243E-19	-7.243E-19	-1.535E-07	-1.535E-07	-5.084E-12
1.30000	5.314E-07	5.314E-07	-3.032E-19	-3.032E-19	-1.608E-07	-1.608E-07	-1.883E-12
1.40000	5.000E-07	5.000E-07	-1.448E-19	-1.448E-19	-1.640E-07	-1.640E-07	-8.154E-13
1.50000	4.690E-07	4.690E-07	-8.015E-20	-8.015E-20	-1.656E-07	-1.656E-07	-3.894E-13
1.60000	4.408E-07	4.408E-07	-4.505E-20	-4.505E-20	-1.665E-07	-1.665E-07	-2.160E-13
1.70000	4.154E-07	4.154E-07	-2.561E-20	-2.561E-20	-1.670E-07	-1.670E-07	-1.339E-13
1.80000	3.926E-07	3.926E-07	-1.490E-20	-1.490E-20	-1.673E-07	-1.673E-07	-8.920E-14
1.90000	3.721E-07	3.721E-07	-8.646E-21	-8.646E-21	-1.675E-07	-1.675E-07	-6.443E-14
2.00000	3.536E-07	3.536E-07	-4.998E-21	-4.998E-21	-1.676E-07	-1.676E-07	-4.901E-14

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 12.000 θ_0= 0. ρ_a= 44.734

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	12.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	12.0000	0.10000	194.165	9.205E-07	9.985E-01	-2.472E-09	-2.472E-09	2.472E-09
0.20000	12.0000	0.20000	173.299	2.508E-06	9.980E-01	-3.468E-09	-3.468E-09	3.468E-09
0.30000	12.0000	0.30000	152.613	2.508E-06	9.973E-01	-4.850E-09	-4.850E-09	4.850E-09
0.40000	12.0000	0.40000	132.193	4.696E-06	9.963E-01	-7.046E-09	-7.046E-09	7.046E-09
0.50000	12.0000	0.50000	112.183	6.723E-06	9.951E-01	-1.022E-08	-1.022E-08	1.022E-08
0.60000	12.0000	0.60000	92.849	1.323E-05	9.939E-01	-1.533E-08	-1.533E-08	1.533E-08
0.70000	12.0000	0.70000	74.717	2.903E-05	9.941E-01	-2.510E-08	-2.510E-08	2.510E-08
0.80000	12.0000	0.80000	58.910	7.513E-05	9.992E-01	-4.240E-08	-4.240E-08	4.240E-08
0.85000	12.0000	0.85000	52.549	1.042E-04	1.003E 00	-5.551E-08	-5.551E-08	5.551E-08
0.90000	12.0000	0.90000	47.790	1.460E-04	1.005E 00	-6.913E-08	-6.913E-08	6.913E-08
0.92500	12.0000	0.92500	46.173	1.716E-04	1.004E 00	-7.499E-08	-7.499E-08	7.499E-08
0.95000	12.0000	0.95000	45.142	2.015E-04	1.001E 00	-7.899E-08	-7.899E-08	7.899E-08
0.96250	12.0000	0.96250	44.861	2.194E-04	9.997E-01	-8.011E-08	-8.011E-08	8.011E-08
0.97500	12.0000	0.97500	44.739	2.365E-04	9.989E-01	-8.060E-08	-8.060E-08	8.060E-08
0.98125	12.0000	0.98125	44.739	2.450E-04	9.988E-01	-8.061E-08	-8.061E-08	8.060E-08
0.98750	12.0000	0.98750	44.779	2.527E-04	9.989E-01	-8.044E-08	-8.044E-08	8.044E-08
0.99375	12.0000	0.99375	44.860	2.621E-04	9.992E-01	-8.012E-08	-8.012E-08	8.012E-08
1.00000	12.0000	1.00000	44.981	2.741E-04	9.997E-01	-7.963E-08	-7.963E-08	7.963E-08
1.00625	12.0000	1.00625	45.141	2.826E-04	1.000E 00	-7.899E-08	-7.899E-08	7.899E-08
1.01250	12.0000	1.01250	45.341	2.894E-04	1.001E 00	-7.820E-08	-7.820E-08	7.820E-08
1.01875	12.0000	1.01875	45.579	2.997E-04	1.002E 00	-7.727E-08	-7.727E-08	7.727E-08
1.02500	12.0000	1.02500	45.856	3.065E-04	1.003E 00	-7.620E-08	-7.620E-08	7.620E-08
1.03750	12.0000	1.03750	46.521	3.219E-04	1.006E 00	-7.369E-08	-7.369E-08	7.369E-08
1.05000	12.0000	1.05000	47.330	3.372E-04	1.008E 00	-7.075E-08	-7.075E-08	7.075E-08
1.07500	12.0001	1.07500	49.350	3.594E-04	1.012E 00	-6.391E-08	-6.391E-08	6.391E-08
1.10000	12.0001	1.10000	51.851	3.791E-04	1.013E 00	-5.718E-08	-5.718E-08	5.718E-08
1.15000	12.0001	1.15000	58.037	4.081E-04	1.012E 00	-4.399E-08	-4.399E-08	4.399E-08
1.20000	12.0001	1.20000	65.419	4.269E-04	1.007E 00	-3.395E-08	-3.395E-08	3.395E-08
1.30000	12.0001	1.30000	82.442	4.508E-04	1.000E 00	-1.989E-08	-1.989E-08	1.989E-08
1.40000	12.0001	1.40000	101.190	4.662E-04	9.974E-01	-1.254E-08	-1.254E-08	1.254E-08
1.50000	12.0002	1.50000	120.864	4.747E-04	9.965E-01	-8.698E-09	-8.698E-09	8.698E-09
1.60000	12.0002	1.60000	141.077	4.798E-04	9.965E-01	-5.973E-09	-5.973E-09	5.973E-09
1.70000	12.0002	1.70000	161.627	4.867E-04	9.968E-01	-4.191E-09	-4.191E-09	4.191E-09
1.80000	12.0002	1.80000	182.400	4.884E-04	9.971E-01	-2.992E-09	-2.992E-09	2.992E-09
1.90000	12.0002	1.90000	203.327	4.901E-04	9.974E-01	-2.136E-09	-2.136E-09	2.136E-09
2.00000	12.0003	2.00000	224.365	4.935E-04	9.976E-01	-1.540E-09	-1.540E-09	1.540E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.472E-09	49.901	-1.049E-07	-1.049E-07	1.049E-07	1.049E-07	-3.491E-09	-3.491E-09
0.20000	3.468E-09	99.802	-2.518E-07	-2.518E-07	2.518E-07	2.518E-07	-4.897E-09	-4.897E-09
0.30000	4.850E-09	149.703	-4.574E-07	-4.574E-07	4.574E-07	4.574E-07	-6.848E-09	-6.848E-09
0.40000	7.046E-09	199.605	-7.503E-07	-7.503E-07	7.503E-07	7.503E-07	-9.949E-09	-9.949E-09
0.50000	1.022E-08	249.506	-1.177E-06	-1.177E-06	1.177E-06	1.177E-06	-1.443E-08	-1.443E-08
0.60000	1.533E-08	299.407	-1.797E-06	-1.797E-06	1.797E-06	1.797E-06	-2.165E-08	-2.165E-08
0.70000	2.510E-08	349.308	-2.775E-06	-2.775E-06	2.775E-06	2.775E-06	-3.544E-08	-3.544E-08
0.80000	4.240E-08	399.209	-4.428E-06	-4.428E-06	4.428E-06	4.428E-06	-5.986E-08	-5.986E-08
0.85000	5.551E-08	424.160	-5.648E-06	-5.648E-06	5.648E-06	5.648E-06	-7.839E-08	-7.839E-08
0.90000	6.913E-08	449.110	-7.200E-06	-7.200E-06	7.201E-06	7.201E-06	-9.761E-08	-9.761E-08
0.92500	7.499E-08	461.585	-8.100E-06	-8.100E-06	8.101E-06	8.101E-06	-1.059E-07	-1.059E-07
0.95000	7.899E-08	474.061	-9.063E-06	-9.063E-06	9.064E-06	9.064E-06	-1.115E-07	-1.115E-07
0.96250	8.011E-08	480.298	-9.559E-06	-9.559E-06	9.561E-06	9.561E-06	-1.131E-07	-1.131E-07
0.97500	8.060E-08	486.536	-1.006E-05	-1.006E-05	1.006E-05	1.006E-05	-1.138E-07	-1.138E-07
0.98125	8.061E-08	489.655	-1.031E-05	-1.031E-05	1.031E-05	1.031E-05	-1.138E-07	-1.138E-07
0.98750	8.044E-08	492.774	-1.056E-05	-1.056E-05	1.057E-05	1.057E-05	-1.136E-07	-1.136E-07
0.99375	8.012E-08	495.892	-1.081E-05	-1.081E-05	1.082E-05	1.082E-05	-1.131E-07	-1.131E-07
1.00000	7.963E-08	499.011	-1.106E-05	-1.106E-05	1.107E-05	1.107E-05	-1.124E-07	-1.124E-07
1.00625	7.899E-08	502.130	-1.131E-05	-1.131E-05	1.131E-05	1.131E-05	-1.115E-07	-1.115E-07
1.01250	7.820E-08	505.249	-1.155E-05	-1.155E-05	1.156E-05	1.156E-05	-1.104E-07	-1.104E-07
1.01875	7.727E-08	508.368	-1.180E-05	-1.180E-05	1.180E-05	1.180E-05	-1.091E-07	-1.091E-07
1.02500	7.620E-08	511.487	-1.204E-05	-1.204E-05	1.204E-05	1.204E-05	-1.076E-07	-1.076E-07
1.03750	7.369E-08	517.724	-1.250E-05	-1.250E-05	1.251E-05	1.251E-05	-1.040E-07	-1.040E-07
1.05000	7.075E-08	523.962	-1.295E-05	-1.295E-05	1.296E-05	1.296E-05	-9.989E-08	-9.989E-08
1.07500	6.391E-08	536.437	-1.379E-05	-1.379E-05	1.380E-05	1.380E-05	-9.023E-08	-9.023E-08
1.10000	5.718E-08	548.912	-1.455E-05	-1.455E-05	1.455E-05	1.455E-05	-8.074E-08	-8.074E-08
1.15000	4.399E-08	573.863	-1.581E-05	-1.581E-05	1.582E-05	1.582E-05	-6.212E-08	-6.212E-08
1.20000	3.395E-08	598.813	-1.677E-05	-1.677E-05	1.678E-05	1.678E-05	-4.793E-08	-4.793E-08
1.30000	1.989E-08	648.715	-1.808E-05	-1.808E-05	1.809E-05	1.809E-05	-2.808E-08	-2.808E-08
1.40000	1.254E-08	698.616	-1.887E-05	-1.887E-05	1.888E-05	1.888E-05	-1.770E-08	-1.770E-08
1.50000	8.698E-09	748.517	-1.939E-05	-1.939E-05	1.941E-05	1.941E-05	-1.228E-08	-1.228E-08
1.60000	5.975E-09	798.418	-1.976E-05	-1.976E-05	1.977E-05	1.977E-05	-8.434E-09	-8.434E-09
1.70000	4.191E-09	848.319	-2.000E-05	-2.000E-05	2.002E-05	2.002E-05	-5.917E-09	-5.917E-09
1.80000	2.992E-09	898.220	-2.018E-05	-2.018E-05	2.020E-05	2.020E-05	-4.225E-09	-4.225E-09
1.90000	2.136E-09	948.121	-2.031E-05	-2.031E-05	2.032E-05	2.032E-05	-3.016E-09	-3.016E-09
2.00000	1.540E-09	998.023	-2.040E-05	-2.040E-05	2.042E-05	2.042E-05	-2.175E-09	-2.175E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-7.567E-14
0.10000	1.202E-10	1.202E-10	-1.016E-20	-1.016E-20	-1.174E-10	-1.174E-10	-1.007E-13
0.20000	3.321E-10	3.321E-10	-1.741E-20	-1.741E-20	-3.188E-10	-3.188E-10	-1.421E-13
0.30000	6.940E-10	6.939E-10	-2.970E-20	-2.970E-20	-6.633E-10	-6.633E-10	-2.178E-13
0.40000	1.430E-09	1.430E-09	-5.233E-20	-5.233E-20	-1.260E-09	-1.260E-09	-3.550E-13
0.50000	2.747E-09	2.747E-09	-9.166E-20	-9.166E-20	-2.311E-09	-2.311E-09	-6.552E-13
0.60000	5.507E-09	5.507E-09	-1.675E-19	-1.675E-19	-4.161E-09	-4.161E-09	-1.359E-12
0.70000	1.285E-08	1.285E-08	-3.454E-19	-3.454E-19	-7.773E-09	-7.773E-09	-3.057E-12
0.80000	3.297E-08	3.297E-08	-7.524E-19	-7.524E-19	-1.562E-08	-1.562E-08	-7.536E-12
0.85000	5.552E-08	5.552E-08	-1.138E-18	-1.138E-18	-2.265E-08	-2.265E-08	-1.142E-11
0.90000	9.518E-08	9.518E-08	-1.583E-18	-1.583E-18	-3.278E-08	-3.278E-08	-1.622E-11
0.92500	1.240E-07	1.240E-07	-1.785E-18	-1.785E-18	-3.909E-08	-3.909E-08	-1.838E-11
0.95000	1.593E-07	1.593E-07	-1.927E-18	-1.927E-18	-4.605E-08	-4.605E-08	-1.999E-11
0.96250	1.791E-07	1.791E-07	-1.968E-18	-1.968E-18	-4.970E-08	-4.970E-08	-2.046E-11
0.97500	1.997E-07	1.997E-07	-1.986E-18	-1.986E-18	-5.340E-08	-5.340E-08	-2.067E-11
0.98125	2.101E-07	2.101E-07	-1.986E-18	-1.986E-18	-5.526E-08	-5.526E-08	-2.067E-11
0.98750	2.205E-07	2.205E-07	-1.980E-18	-1.980E-18	-5.711E-08	-5.711E-08	-2.060E-11
0.99375	2.307E-07	2.307E-07	-1.968E-18	-1.968E-18	-5.896E-08	-5.896E-08	-2.046E-11
1.00000	2.408E-07	2.408E-07	-1.950E-18	-1.950E-18	-6.079E-08	-6.079E-08	-2.026E-11
1.00625	2.506E-07	2.506E-07	-1.927E-18	-1.927E-18	-6.260E-08	-6.260E-08	-1.999E-11
1.01250	2.601E-07	2.601E-07	-1.899E-18	-1.899E-18	-6.439E-08	-6.439E-08	-1.967E-11
1.01875	2.692E-07	2.692E-07	-1.865E-18	-1.865E-18	-6.615E-08	-6.615E-08	-1.929E-11
1.02500	2.778E-07	2.778E-07	-1.827E-18	-1.827E-18	-6.788E-08	-6.788E-08	-1.886E-11
1.03750	2.937E-07	2.937E-07	-1.739E-18	-1.739E-18	-7.121E-08	-7.121E-08	-1.789E-11
1.05000	3.076E-07	3.076E-07	-1.638E-18	-1.638E-18	-7.437E-08	-7.437E-08	-1.680E-11
1.07500	3.293E-07	3.293E-07	-1.409E-18	-1.409E-18	-8.008E-08	-8.008E-08	-1.448E-11
1.10000	3.446E-07	3.446E-07	-1.190E-18	-1.190E-18	-8.493E-08	-8.493E-08	-1.203E-11
1.15000	3.598E-07	3.598E-07	-7.963E-19	-7.963E-19	-9.232E-08	-9.232E-08	-7.950E-12
1.20000	3.628E-07	3.628E-07	-5.401E-19	-5.401E-19	-9.721E-08	-9.721E-08	-5.024E-12
1.30000	3.518E-07	3.518E-07	-2.450E-19	-2.450E-19	-1.028E-07	-1.028E-07	-2.141E-12
1.40000	3.331E-07	3.331E-07	-1.247E-19	-1.247E-19	-1.054E-07	-1.054E-07	-9.933E-13
1.50000	3.135E-07	3.135E-07	-7.187E-20	-7.187E-20	-1.069E-07	-1.069E-07	-4.931E-13
1.60000	2.952E-07	2.952E-07	-4.080E-20	-4.080E-20	-1.077E-07	-1.077E-07	-2.840E-13
1.70000	2.785E-07	2.785E-07	-2.354E-20	-2.354E-20	-1.081E-07	-1.081E-07	-1.790E-13
1.80000	2.634E-07	2.634E-07	-1.377E-20	-1.377E-20	-1.084E-07	-1.084E-07	-1.214E-13
1.90000	2.497E-07	2.497E-07	-8.020E-21	-8.020E-21	-1.086E-07	-1.086E-07	-8.864E-14
2.00000	2.373E-07	2.373E-07	-4.653E-21	-4.653E-21	-1.087E-07	-1.087E-07	-6.808E-14

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 15.000 θ_D= 0. ρ_a= 55.687

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	15.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	15.0000	0.10000	194.456	1.347E-06	9.968E-01	-2.461E-09	-2.461E-09	2.461E-09
0.20000	15.0000	0.20000	173.950	2.081E-06	9.959E-01	-3.431E-09	-3.431E-09	3.431E-09
0.30000	15.0000	0.30000	153.721	3.682E-06	9.947E-01	-4.764E-09	-4.764E-09	4.764E-09
0.40000	15.0000	0.40000	133.894	4.802E-06	9.932E-01	-6.827E-09	-6.827E-09	6.827E-09
0.50000	15.0000	0.50000	114.677	7.897E-06	9.918E-01	-9.758E-09	-9.758E-09	9.758E-09
0.60000	15.0000	0.60000	96.436	1.473E-05	9.914E-01	-1.401E-08	-1.401E-08	1.401E-08
0.70000	15.0000	0.70000	79.842	2.903E-05	9.942E-01	-2.125E-08	-2.125E-08	2.125E-08
0.80000	15.0000	0.80000	66.148	4.952E-05	1.002E 00	-3.315E-08	-3.315E-08	3.315E-08
0.85000	15.0000	0.85000	61.018	4.952E-05	1.005E 00	-3.916E-08	-3.916E-08	3.916E-08
0.90000	15.0000	0.90000	57.465	4.952E-05	1.004E 00	-4.507E-08	-4.507E-08	4.507E-08
0.92500	15.0000	0.92500	56.379	6.659E-05	1.001E 00	-4.720E-08	-4.720E-08	4.720E-08
0.95000	15.0000	0.95000	55.793	8.111E-05	9.987E-01	-4.838E-08	-4.838E-08	4.838E-08
0.96250	15.0000	0.96250	55.692	8.879E-05	9.979E-01	-4.859E-08	-4.859E-08	4.859E-08
0.97500	15.0000	0.97500	55.722	9.562E-05	9.977E-01	-4.853E-08	-4.853E-08	4.853E-08
0.98125	15.0000	0.98125	55.785	9.904E-05	9.978E-01	-4.840E-08	-4.840E-08	4.840E-08
0.98750	15.0000	0.98750	55.880	1.059E-04	9.982E-01	-4.820E-08	-4.820E-08	4.820E-08
0.99375	15.0000	0.99375	56.008	1.076E-04	9.987E-01	-4.794E-08	-4.794E-08	4.794E-08
1.00000	15.0000	1.00000	56.168	1.118E-04	9.994E-01	-4.762E-08	-4.762E-08	4.762E-08
1.00625	15.0000	1.00625	56.359	1.187E-04	1.000E 00	-4.724E-08	-4.724E-08	4.724E-08
1.01250	15.0000	1.01250	56.582	1.212E-04	1.001E 00	-4.679E-08	-4.679E-08	4.679E-08
1.01875	15.0000	1.01875	56.835	1.272E-04	1.002E 00	-4.629E-08	-4.629E-08	4.629E-08
1.02500	15.0000	1.02500	57.119	1.315E-04	1.004E 00	-4.574E-08	-4.574E-08	4.574E-08
1.03750	15.0000	1.03750	57.777	1.383E-04	1.006E 00	-4.448E-08	-4.448E-08	4.448E-08
1.05000	15.0000	1.05000	58.552	1.426E-04	1.009E 00	-4.304E-08	-4.304E-08	4.304E-08
1.07500	15.0000	1.07500	60.430	1.528E-04	1.014E 00	-3.992E-08	-3.992E-08	3.992E-08
1.10000	15.0000	1.10000	62.716	1.597E-04	1.017E 00	-3.706E-08	-3.706E-08	3.706E-08
1.15000	15.0000	1.15000	68.335	1.750E-04	1.018E 00	-3.088E-08	-3.088E-08	3.088E-08
1.20000	15.0000	1.20000	75.083	1.844E-04	1.015E 00	-2.480E-08	-2.480E-08	2.480E-08
1.30000	15.0001	1.30000	90.927	1.998E-04	1.006E 00	-1.608E-08	-1.608E-08	1.609E-08
1.40000	15.0001	1.40000	108.737	2.100E-04	1.000E 00	-1.090E-08	-1.090E-08	1.090E-08
1.50000	15.0001	1.50000	127.693	2.134E-04	9.976E-01	-7.661E-09	-7.661E-09	7.661E-09
1.60000	15.0001	1.60000	147.354	2.169E-04	9.964E-01	-5.315E-09	-5.315E-09	5.315E-09
1.70000	15.0001	1.70000	167.472	2.220E-04	9.960E-01	-3.812E-09	-3.812E-09	3.812E-09
1.80000	15.0001	1.80000	187.900	2.237E-04	9.960E-01	-2.737E-09	-2.737E-09	2.737E-09
1.90000	15.0001	1.90000	208.547	2.237E-04	9.962E-01	-1.969E-09	-1.969E-09	1.969E-09
2.00000	15.0001	2.00000	229.353	2.237E-04	9.964E-01	-1.426E-09	-1.426E-09	1.426E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 15.000 θ_D= 0. ρ_a= 55.687

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.461E-09	49.901	-1.047E-07	-1.047E-07	1.047E-07	1.047E-07	-3.474E-09	-3.474E-09
0.20000	3.431E-09	99.802	-2.504E-07	-2.504E-07	2.504E-07	2.504E-07	-4.845E-09	-4.845E-09
0.30000	4.764E-09	149.703	-4.531E-07	-4.531E-07	4.531E-07	4.531E-07	-6.726E-09	-6.726E-09
0.40000	6.827E-09	199.605	-7.385E-07	-7.385E-07	7.385E-07	7.385E-07	-9.639E-09	-9.639E-09
0.50000	9.758E-09	249.506	-1.148E-06	-1.148E-06	1.148E-06	1.148E-06	-1.378E-08	-1.378E-08
0.60000	1.401E-08	299.407	-1.731E-06	-1.731E-06	1.731E-06	1.731E-06	-1.979E-08	-1.979E-08
0.70000	2.125E-08	349.308	-2.602E-06	-2.602E-06	2.602E-06	2.602E-06	-3.000E-08	-3.000E-08
0.80000	3.315E-08	399.209	-3.950E-06	-3.950E-06	3.950E-06	3.950E-06	-4.681E-08	-4.681E-08
0.85000	3.917E-08	424.160	-4.854E-06	-4.854E-06	4.854E-06	4.854E-06	-5.530E-08	-5.530E-08
0.90000	4.507E-08	449.110	-5.906E-06	-5.906E-06	5.906E-06	5.906E-06	-6.364E-08	-6.364E-08
0.92500	4.720E-08	461.586	-6.482E-06	-6.482E-06	6.482E-06	6.482E-06	-6.664E-08	-6.664E-08
0.95000	4.838E-08	474.061	-7.079E-06	-7.079E-06	7.079E-06	7.079E-06	-6.832E-08	-6.832E-08
0.96250	4.859E-08	480.299	-7.382E-06	-7.382E-06	7.382E-06	7.382E-06	-6.861E-08	-6.861E-08
0.97500	4.853E-08	486.536	-7.685E-06	-7.685E-06	7.685E-06	7.685E-06	-6.852E-08	-6.852E-08
0.98125	4.840E-08	489.655	-7.836E-06	-7.836E-06	7.836E-06	7.836E-06	-6.834E-08	-6.834E-08
0.98750	4.820E-08	492.774	-7.987E-06	-7.987E-06	7.987E-06	7.987E-06	-6.806E-08	-6.806E-08
0.99375	4.794E-08	495.893	-8.137E-06	-8.137E-06	8.137E-06	8.137E-06	-6.770E-08	-6.770E-08
1.00000	4.762E-08	499.011	-8.286E-06	-8.286E-06	8.286E-06	8.286E-06	-6.724E-08	-6.724E-08
1.00625	4.724E-08	502.130	-8.433E-06	-8.433E-06	8.434E-06	8.434E-06	-6.670E-08	-6.670E-08
1.01250	4.679E-08	505.249	-8.580E-06	-8.580E-06	8.581E-06	8.581E-06	-6.607E-08	-6.607E-08
1.01875	4.629E-08	508.368	-8.725E-06	-8.725E-06	8.726E-06	8.726E-06	-6.536E-08	-6.536E-08
1.02500	4.574E-08	511.487	-8.869E-06	-8.869E-06	8.869E-06	8.869E-06	-6.458E-08	-6.458E-08
1.03750	4.448E-08	517.724	-9.150E-06	-9.150E-06	9.151E-06	9.151E-06	-6.281E-08	-6.281E-08
1.05000	4.304E-08	523.962	-9.423E-06	-9.423E-06	9.424E-06	9.424E-06	-6.078E-08	-6.078E-08
1.07500	3.992E-08	536.437	-9.940E-06	-9.940E-06	9.941E-06	9.941E-06	-5.637E-08	-5.637E-08
1.10000	3.706E-08	548.913	-1.042E-05	-1.042E-05	1.042E-05	1.042E-05	-5.233E-08	-5.233E-08
1.15000	3.088E-08	573.863	-1.127E-05	-1.127E-05	1.127E-05	1.127E-05	-4.360E-08	-4.360E-08
1.20000	2.480E-08	598.814	-1.196E-05	-1.196E-05	1.196E-05	1.196E-05	-3.502E-08	-3.502E-08
1.30000	1.608E-08	648.715	-1.296E-05	-1.296E-05	1.296E-05	1.296E-05	-2.271E-08	-2.271E-08
1.40000	1.090E-08	698.616	-1.362E-05	-1.362E-05	1.362E-05	1.362E-05	-1.539E-08	-1.539E-08
1.50000	7.661E-09	748.517	-1.408E-05	-1.408E-05	1.408E-05	1.408E-05	-1.082E-08	-1.082E-08
1.60000	5.315E-09	798.418	-1.440E-05	-1.440E-05	1.440E-05	1.440E-05	-7.505E-09	-7.505E-09
1.70000	3.812E-09	848.319	-1.462E-05	-1.462E-05	1.462E-05	1.462E-05	-5.382E-09	-5.382E-09
1.80000	2.737E-09	898.221	-1.478E-05	-1.478E-05	1.479E-05	1.479E-05	-3.864E-09	-3.864E-09
1.90000	1.969E-09	948.122	-1.490E-05	-1.490E-05	1.490E-05	1.490E-05	-2.781E-09	-2.781E-09
2.00000	1.426E-09	998.023	-1.498E-05	-1.498E-05	1.499E-05	1.499E-05	-2.013E-09	-2.013E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 15.000 θ_D= 0. ρ_0= 55.687

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.173E-13
0.10000	1.482E-10	1.482E-10	-1.009E-20	-1.009E-20	-1.169E-10	-1.169E-10	-1.554E-13
0.20000	4.083E-10	4.083E-10	-1.712E-20	-1.712E-20	-3.159E-10	-3.159E-10	-2.176E-13
0.30000	8.462E-10	8.462E-10	-2.887E-20	-2.887E-20	-6.525E-10	-6.525E-10	-3.291E-13
0.40000	1.717E-09	1.717E-09	-4.989E-20	-4.989E-20	-1.226E-09	-1.226E-09	-5.259E-13
0.50000	3.234E-09	3.234E-09	-8.548E-20	-8.548E-20	-2.217E-09	-2.217E-09	-9.321E-13
0.60000	6.115E-09	6.115E-09	-1.469E-19	-1.469E-19	-3.896E-09	-3.896E-09	-1.835E-12
0.70000	1.312E-08	1.312E-08	-2.699E-19	-2.699E-19	-6.939E-09	-6.939E-09	-3.759E-12
0.80000	3.010E-08	3.010E-08	-5.215E-19	-5.215E-19	-1.274E-08	-1.274E-08	-7.451E-12
0.85000	4.673E-08	4.673E-08	-6.674E-19	-6.674E-19	-1.719E-08	-1.719E-08	-1.024E-11
0.90000	7.283E-08	7.283E-08	-8.265E-19	-8.265E-19	-2.277E-08	-2.277E-08	-1.275E-11
0.92500	9.038E-08	9.038E-08	-8.869E-19	-8.869E-19	-2.598E-08	-2.598E-08	-1.366E-11
0.95000	1.105E-07	1.105E-07	-9.214E-19	-9.214E-19	-2.937E-08	-2.937E-08	-1.419E-11
0.96250	1.212E-07	1.212E-07	-9.274E-19	-9.274E-19	-3.110E-08	-3.110E-08	-1.428E-11
0.97500	1.320E-07	1.320E-07	-9.257E-19	-9.257E-19	-3.284E-08	-3.284E-08	-1.425E-11
0.98125	1.374E-07	1.374E-07	-9.219E-19	-9.219E-19	-3.370E-08	-3.370E-08	-1.419E-11
0.98750	1.428E-07	1.428E-07	-9.161E-19	-9.161E-19	-3.456E-08	-3.456E-08	-1.411E-11
0.99375	1.480E-07	1.480E-07	-9.086E-19	-9.086E-19	-3.541E-08	-3.541E-08	-1.399E-11
1.00000	1.531E-07	1.531E-07	-8.992E-19	-8.992E-19	-3.626E-08	-3.626E-08	-1.385E-11
1.00625	1.581E-07	1.581E-07	-8.881E-19	-8.881E-19	-3.710E-08	-3.710E-08	-1.368E-11
1.01250	1.630E-07	1.630E-07	-8.753E-19	-8.753E-19	-3.792E-08	-3.792E-08	-1.349E-11
1.01875	1.676E-07	1.676E-07	-8.610E-19	-8.610E-19	-3.873E-08	-3.873E-08	-1.327E-11
1.02500	1.721E-07	1.721E-07	-8.453E-19	-8.453E-19	-3.953E-08	-3.953E-08	-1.304E-11
1.03750	1.804E-07	1.804E-07	-8.099E-19	-8.099E-19	-4.108E-08	-4.108E-08	-1.251E-11
1.05000	1.878E-07	1.878E-07	-7.701E-19	-7.701E-19	-4.256E-08	-4.256E-08	-1.194E-11
1.07500	1.999E-07	1.999E-07	-6.866E-19	-6.866E-19	-4.528E-08	-4.528E-08	-1.065E-11
1.10000	2.087E-07	2.087E-07	-6.151E-19	-6.151E-19	-4.771E-08	-4.771E-08	-9.183E-12
1.15000	2.186E-07	2.186E-07	-4.694E-19	-4.694E-19	-5.176E-08	-5.176E-08	-6.587E-12
1.20000	2.218E-07	2.218E-07	-3.393E-19	-3.393E-19	-5.477E-08	-5.477E-08	-4.662E-12
1.30000	2.179E-07	2.179E-07	-1.797E-19	-1.797E-19	-5.849E-08	-5.849E-08	-2.279E-12
1.40000	2.082E-07	2.082E-07	-1.010E-19	-1.010E-19	-6.050E-08	-6.050E-08	-1.150E-12
1.50000	1.971E-07	1.971E-07	-5.936E-20	-5.936E-20	-6.167E-08	-6.167E-08	-6.239E-13
1.60000	1.864E-07	1.864E-07	-3.422E-20	-3.422E-20	-6.236E-08	-6.236E-08	-3.808E-13
1.70000	1.762E-07	1.762E-07	-2.024E-20	-2.024E-20	-6.276E-08	-6.276E-08	-2.464E-13
1.80000	1.669E-07	1.669E-07	-1.195E-20	-1.195E-20	-6.299E-08	-6.299E-08	-1.721E-13
1.90000	1.584E-07	1.584E-07	-7.007E-21	-7.007E-21	-6.313E-08	-6.313E-08	-1.279E-13
2.00000	1.506E-07	1.506E-07	-4.090E-21	-4.090E-21	-6.321E-08	-6.321E-08	-9.992E-14

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 20.000 θ_D= 0. ρ_a=73.589

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	20.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	20.0000	0.10000	195.079	2.268E-06	9.933E-01	-2.436E-09	-2.436E-09	2.436E-09
0.20000	20.0000	0.20000	175.341	2.615E-06	9.917E-01	-3.355E-09	-3.355E-09	3.355E-09
0.30000	20.0000	0.30000	156.073	3.415E-06	9.899E-01	-4.586E-09	-4.586E-09	4.586E-09
0.40000	20.0000	0.40000	137.474	5.976E-06	9.885E-01	-6.387E-09	-6.387E-09	6.387E-09
0.50000	20.0000	0.50000	119.855	9.605E-06	9.881E-01	-8.862E-09	-8.863E-09	8.862E-09
0.60000	20.0000	0.60000	103.717	1.494E-05	9.904E-01	-1.196E-08	-1.196E-08	1.196E-08
0.70000	20.0000	0.70000	89.861	2.476E-05	9.964E-01	-1.652E-08	-1.652E-08	1.652E-08
0.80000	20.0000	0.80000	79.490	3.330E-05	1.002E 00	-2.149E-08	-2.149E-08	2.149E-08
0.85000	20.0000	0.85000	76.077	3.629E-05	1.002E 00	-2.401E-08	-2.401E-08	2.401E-08
0.90000	20.0000	0.90000	74.083	4.013E-05	9.981E-01	-2.562E-08	-2.562E-08	2.562E-08
0.92500	20.0000	0.92500	73.657	4.525E-05	9.961E-01	-2.598E-08	-2.598E-08	2.598E-08
0.95000	20.0000	0.95000	73.622	5.379E-05	9.951E-01	-2.601E-08	-2.601E-08	2.601E-08
0.96250	20.0000	0.96250	73.752	5.464E-05	9.952E-01	-2.590E-08	-2.590E-08	2.590E-08
0.97500	20.0000	0.97500	73.980	5.976E-05	9.959E-01	-2.571E-08	-2.571E-08	2.571E-08
0.98125	20.0000	0.98125	74.130	6.062E-05	9.964E-01	-2.558E-08	-2.558E-08	2.558E-08
0.98750	20.0000	0.98750	74.304	6.489E-05	9.970E-01	-2.544E-08	-2.544E-08	2.544E-08
0.99375	20.0000	0.99375	74.502	6.659E-05	9.978E-01	-2.527E-08	-2.527E-08	2.527E-08
1.00000	20.0000	1.00000	74.724	6.830E-05	9.987E-01	-2.509E-08	-2.509E-08	2.509E-08
1.00625	20.0000	1.00625	74.969	7.342E-05	9.997E-01	-2.489E-08	-2.489E-08	2.489E-08
1.01250	20.0000	1.01250	75.238	7.428E-05	1.001E 00	-2.468E-08	-2.468E-08	2.468E-08
1.01875	20.0000	1.01875	75.529	7.855E-05	1.002E 00	-2.444E-08	-2.444E-08	2.444E-08
1.02500	20.0000	1.02500	75.843	8.025E-05	1.003E 00	-2.420E-08	-2.420E-08	2.420E-08
1.03750	20.0000	1.03750	76.539	8.111E-05	1.006E 00	-2.366E-08	-2.366E-08	2.366E-08
1.05000	20.0000	1.05000	77.321	8.452E-05	1.009E 00	-2.306E-08	-2.306E-08	2.306E-08
1.07500	20.0000	1.07500	79.138	8.794E-05	1.014E 00	-2.174E-08	-2.174E-08	2.174E-08
1.10000	20.0000	1.10000	81.271	8.794E-05	1.018E 00	-2.048E-08	-2.048E-08	2.048E-08
1.15000	20.0000	1.15000	86.388	8.794E-05	1.023E 00	-1.802E-08	-1.802E-08	1.802E-08
1.20000	20.0000	1.20000	92.478	8.879E-05	1.023E 00	-1.547E-08	-1.547E-08	1.547E-08
1.30000	20.0000	1.30000	106.889	9.050E-05	1.017E 00	-1.128E-08	-1.128E-08	1.128E-08
1.40000	20.0000	1.40000	123.386	9.904E-05	1.009E 00	-8.299E-09	-8.299E-09	8.299E-09
1.50000	20.0000	1.50000	141.240	1.025E-04	1.004E 00	-5.955E-09	-5.955E-09	5.955E-09
1.60000	20.0000	1.60000	159.998	1.093E-04	1.000E 00	-4.303E-09	-4.303E-09	4.303E-09
1.70000	20.0001	1.70000	179.377	1.195E-04	9.982E-01	-3.142E-09	-3.142E-09	3.142E-09
1.80000	20.0001	1.80000	199.194	1.195E-04	9.970E-01	-2.279E-09	-2.279E-09	2.279E-09
1.90000	20.0001	1.90000	219.332	1.229E-04	9.963E-01	-1.666E-09	-1.666E-09	1.666E-09

PROPAGATION FREQUENCY= 4.233CE 08 ϕ_0=20.000 θ_D= 0. ρ_a=73.589

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.436E-09	49.901	-1.041E-07	-1.041E-07	1.041E-07	1.041E-07	-3.439E-09	-3.439E-09
0.20000	3.355E-09	99.802	-2.475E-07	-2.475E-07	2.475E-07	2.475E-07	-4.737E-09	-4.737E-09
0.30000	4.586E-09	149.703	-4.442E-07	-4.442E-07	4.442E-07	4.442E-07	-6.475E-09	-6.475E-09
0.40000	6.387E-09	199.605	-7.145E-07	-7.145E-07	7.145E-07	7.145E-07	-9.018E-09	-9.018E-09
0.50000	8.863E-09	249.506	-1.092E-06	-1.092E-06	1.092E-06	1.092E-06	-1.251E-08	-1.251E-08
0.60000	1.196E-08	299.407	-1.610E-06	-1.610E-06	1.610E-06	1.610E-06	-1.689E-08	-1.689E-08
0.70000	1.652E-08	349.308	-2.312E-06	-2.312E-06	2.312E-06	2.312E-06	-2.333E-08	-2.333E-08
0.80000	2.149E-08	399.209	-3.262E-06	-3.262E-06	3.262E-06	3.262E-06	-3.035E-08	-3.035E-08
0.85000	2.401E-08	424.160	-3.831E-06	-3.831E-06	3.831E-06	3.831E-06	-3.391E-08	-3.391E-08
0.90000	2.562E-08	449.110	-4.452E-06	-4.452E-06	4.452E-06	4.452E-06	-3.618E-08	-3.618E-08
0.92500	2.598E-08	461.586	-4.774E-06	-4.774E-06	4.774E-06	4.774E-06	-3.668E-08	-3.668E-08
0.95000	2.601E-08	474.061	-5.099E-06	-5.099E-06	5.099E-06	5.099E-06	-3.672E-08	-3.672E-08
0.96250	2.590E-08	480.299	-5.261E-06	-5.261E-06	5.261E-06	5.261E-06	-3.657E-08	-3.657E-08
0.97500	2.571E-08	486.536	-5.422E-06	-5.422E-06	5.422E-06	5.422E-06	-3.630E-08	-3.630E-08
0.98125	2.558E-08	489.655	-5.502E-06	-5.502E-06	5.502E-06	5.502E-06	-3.612E-08	-3.612E-08
0.98750	2.544E-08	492.774	-5.581E-06	-5.581E-06	5.581E-06	5.581E-06	-3.592E-08	-3.592E-08
0.99375	2.527E-08	495.893	-5.660E-06	-5.660E-06	5.660E-06	5.660E-06	-3.569E-08	-3.569E-08
1.00000	2.509E-08	499.012	-5.739E-06	-5.739E-06	5.739E-06	5.739E-06	-3.543E-08	-3.543E-08
1.00625	2.489E-08	502.130	-5.817E-06	-5.817E-06	5.817E-06	5.817E-06	-3.515E-08	-3.515E-08
1.01250	2.468E-08	505.249	-5.894E-06	-5.894E-06	5.894E-06	5.894E-06	-3.484E-08	-3.484E-08
1.01875	2.444E-08	508.368	-5.971E-06	-5.971E-06	5.971E-06	5.971E-06	-3.452E-08	-3.452E-08
1.02500	2.420E-08	511.487	-6.047E-06	-6.047E-06	6.047E-06	6.047E-06	-3.417E-08	-3.417E-08
1.03750	2.366E-08	517.724	-6.196E-06	-6.196E-06	6.196E-06	6.196E-06	-3.340E-08	-3.340E-08
1.05000	2.306E-08	523.962	-6.342E-06	-6.342E-06	6.342E-06	6.342E-06	-3.256E-08	-3.256E-08
1.07500	2.174E-08	536.437	-6.621E-06	-6.621E-06	6.621E-06	6.621E-06	-3.070E-08	-3.070E-08
1.10000	2.046E-08	548.913	-6.884E-06	-6.884E-06	6.885E-06	6.885E-06	-2.892E-08	-2.892E-08
1.15000	1.802E-08	573.863	-7.365E-06	-7.365E-06	7.365E-06	7.365E-06	-2.544E-08	-2.544E-08
1.20000	1.547E-08	598.814	-7.783E-06	-7.783E-06	7.783E-06	7.783E-06	-2.185E-08	-2.185E-08
1.30000	1.128E-08	648.715	-8.440E-06	-8.440E-06	8.441E-06	8.441E-06	-1.592E-08	-1.592E-08
1.40000	8.299E-09	698.616	-8.926E-06	-8.926E-06	8.927E-06	8.927E-06	-1.172E-08	-1.172E-08
1.50000	5.955E-09	748.517	-9.279E-06	-9.279E-06	9.280E-06	9.280E-06	-8.409E-09	-8.409E-09
1.60000	4.303E-09	798.418	-9.531E-06	-9.531E-06	9.532E-06	9.532E-06	-6.075E-09	-6.075E-09
1.70000	3.142E-09	848.320	-9.716E-06	-9.716E-06	9.716E-06	9.716E-06	-4.437E-09	-4.437E-09
1.80000	2.279E-09	898.221	-9.850E-06	-9.850E-06	9.851E-06	9.851E-06	-3.217E-09	-3.217E-09
1.90000	1.666E-09	948.122	-9.947E-06	-9.947E-06	9.948E-06	9.948E-06	-2.352E-09	-2.352E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0=20.000 θ_D= 0. ρ_a=73.589

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-2.048E-13
0.10000	1.910E-10	1.910E-10	-9.925E-21	-9.925E-21	-1.159E-10	-1.159E-10	-2.690E-13
0.20000	5.251E-10	5.251E-10	-1.652E-20	-1.652E-20	-3.097E-10	-3.097E-10	-3.705E-13
0.30000	1.070E-09	1.070E-09	-2.716E-20	-2.716E-20	-6.303E-10	-6.303E-10	-5.450E-13
0.40000	2.077E-09	2.077E-09	-4.513E-20	-4.513E-20	-1.158E-09	-1.158E-09	-8.379E-13
0.50000	3.804E-09	3.804E-09	-7.394E-20	-7.394E-20	-2.034E-09	-2.034E-09	-1.375E-12
0.60000	6.693E-09	6.693E-09	-1.162E-19	-1.162E-19	-3.438E-09	-3.438E-09	-2.426E-12
0.70000	1.261E-08	1.261E-08	-1.868E-19	-1.868E-19	-5.655E-09	-5.655E-09	-4.154E-12
0.80000	2.481E-08	2.481E-08	-2.745E-19	-2.745E-19	-9.099E-09	-9.099E-09	-6.665E-12
0.85000	3.496E-08	3.496E-08	-3.235E-19	-3.235E-19	-1.134E-08	-1.134E-08	-7.764E-12
0.90000	4.885E-08	4.885E-08	-3.561E-19	-3.561E-19	-1.390E-08	-1.390E-08	-8.535E-12
0.92500	5.706E-08	5.706E-08	-3.634E-19	-3.634E-19	-1.524E-08	-1.524E-08	-8.715E-12
0.95000	6.587E-08	6.587E-08	-3.640E-19	-3.640E-19	-1.661E-08	-1.661E-08	-8.730E-12
0.96250	7.037E-08	7.037E-08	-3.618E-19	-3.618E-19	-1.729E-08	-1.729E-08	-8.675E-12
0.97500	7.483E-08	7.483E-08	-3.578E-19	-3.578E-19	-1.796E-08	-1.796E-08	-8.580E-12
0.98125	7.703E-08	7.703E-08	-3.553E-19	-3.553E-19	-1.829E-08	-1.829E-08	-8.517E-12
0.98750	7.919E-08	7.919E-08	-3.523E-19	-3.523E-19	-1.862E-08	-1.862E-08	-8.446E-12
0.99375	8.130E-08	8.130E-08	-3.490E-19	-3.490E-19	-1.895E-08	-1.895E-08	-8.366E-12
1.00000	8.336E-08	8.336E-08	-3.453E-19	-3.453E-19	-1.928E-08	-1.928E-08	-8.278E-12
1.00625	8.537E-08	8.537E-08	-3.412E-19	-3.412E-19	-1.960E-08	-1.960E-08	-8.182E-12
1.01250	8.730E-08	8.730E-08	-3.368E-19	-3.368E-19	-1.991E-08	-1.991E-08	-8.078E-12
1.01875	8.917E-08	8.917E-08	-3.321E-19	-3.321E-19	-2.023E-08	-2.023E-08	-7.968E-12
1.02500	9.096E-08	9.096E-08	-3.272E-19	-3.272E-19	-2.053E-08	-2.053E-08	-7.852E-12
1.03750	9.430E-08	9.430E-08	-3.164E-19	-3.164E-19	-2.114E-08	-2.114E-08	-7.604E-12
1.05000	9.730E-08	9.730E-08	-3.047E-19	-3.047E-19	-2.172E-08	-2.172E-08	-7.338E-12
1.07500	1.023E-07	1.023E-07	-2.792E-19	-2.792E-19	-2.281E-08	-2.281E-08	-6.772E-12
1.10000	1.063E-07	1.063E-07	-2.557E-19	-2.557E-19	-2.381E-08	-2.381E-08	-6.129E-12
1.15000	1.112E-07	1.112E-07	-2.121E-19	-2.121E-19	-2.556E-08	-2.556E-08	-4.830E-12
1.20000	1.133E-07	1.133E-07	-1.698E-19	-1.698E-19	-2.698E-08	-2.699E-08	-3.737E-12
1.30000	1.128E-07	1.128E-07	-1.063E-19	-1.063E-19	-2.900E-08	-2.900E-08	-2.151E-12
1.40000	1.092E-07	1.092E-07	-6.697E-20	-6.697E-20	-3.028E-08	-3.028E-08	-1.235E-12
1.50000	1.044E-07	1.044E-07	-4.061E-20	-4.061E-20	-3.107E-08	-3.107E-08	-7.653E-13
1.60000	9.948E-08	9.948E-08	-2.455E-20	-2.455E-20	-3.154E-08	-3.154E-08	-5.013E-13
1.70000	9.455E-08	9.455E-08	-1.489E-20	-1.489E-20	-3.183E-08	-3.183E-08	-3.457E-13
1.80000	8.987E-08	8.987E-08	-8.925E-21	-8.925E-21	-3.200E-08	-3.200E-08	-2.543E-13
1.90000	8.550E-08	8.550E-08	-5.300E-21	-5.300E-21	-3.211E-08	-3.211E-08	-1.952E-13

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 25.000 θ_D= 0. ρ_a= 90.930

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	25.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	25.0000	0.10000	195.870	1.628E-06	9.886E-01	-2.405E-09	-2.405E-09	2.405E-09
0.20000	25.0000	0.20000	177.095	2.721E-06	9.865E-01	-3.261E-09	-3.261E-09	3.261E-09
0.30000	25.0000	0.30000	159.016	4.802E-06	9.847E-01	-4.372E-09	-4.372E-09	4.372E-09
0.40000	25.0000	0.40000	141.900	1.153E-05	9.841E-01	-5.883E-09	-5.883E-09	5.883E-09
0.50000	25.0000	0.50000	126.137	2.006E-05	9.857E-01	-7.886E-09	-7.886E-09	7.886E-09
0.60000	25.0000	0.60000	112.302	2.433E-05	9.902E-01	-1.020E-08	-1.020E-08	1.020E-08
0.70000	25.0000	0.70000	101.186	2.946E-05	9.962E-01	-1.254E-08	-1.254E-08	1.254E-08
0.80000	25.0000	0.80000	93.763	3.415E-05	9.980E-01	-1.498E-08	-1.498E-08	1.498E-08
0.85000	25.0000	0.85000	91.734	3.757E-05	9.955E-01	-1.576E-08	-1.576E-08	1.576E-08
0.90000	25.0000	0.90000	90.940	4.269E-05	9.923E-01	-1.608E-08	-1.608E-08	1.608E-08
0.92500	25.0000	0.92500	91.019	4.610E-05	9.915E-01	-1.605E-08	-1.605E-08	1.605E-08
0.95000	25.0000	0.95000	91.415	4.952E-05	9.920E-01	-1.589E-08	-1.589E-08	1.589E-08
0.96250	25.0000	0.96250	91.730	4.952E-05	9.929E-01	-1.576E-08	-1.576E-08	1.576E-08
0.97500	25.0000	0.97500	92.123	5.379E-05	9.941E-01	-1.561E-08	-1.561E-08	1.561E-08
0.98125	25.0000	0.98125	92.349	5.379E-05	9.949E-01	-1.552E-08	-1.552E-08	1.552E-08
0.98750	25.0000	0.98750	92.593	5.720E-05	9.958E-01	-1.543E-08	-1.543E-08	1.543E-08
0.99375	25.0000	0.99375	92.856	5.720E-05	9.967E-01	-1.533E-08	-1.533E-08	1.533E-08
1.00000	25.0000	1.00000	93.138	5.976E-05	9.978E-01	-1.522E-08	-1.522E-08	1.522E-08
1.00625	25.0000	1.00625	93.438	6.233E-05	9.989E-01	-1.511E-08	-1.511E-08	1.511E-08
1.01250	25.0000	1.01250	93.757	6.233E-05	1.000E 00	-1.499E-08	-1.499E-08	1.499E-08
1.01875	25.0000	1.01875	94.093	6.318E-05	1.001E 00	-1.486E-08	-1.486E-08	1.486E-08
1.02500	25.0000	1.02500	94.448	6.574E-05	1.003E 00	-1.473E-08	-1.473E-08	1.473E-08
1.03750	25.0000	1.03750	95.211	7.001E-05	1.005E 00	-1.445E-08	-1.445E-08	1.445E-08
1.05000	25.0000	1.05000	96.042	7.001E-05	1.008E 00	-1.415E-08	-1.415E-08	1.415E-08
1.07500	25.0000	1.07500	97.906	7.001E-05	1.014E 00	-1.351E-08	-1.351E-08	1.351E-08
1.10000	25.0000	1.10000	100.025	7.172E-05	1.018E 00	-1.281E-08	-1.281E-08	1.281E-08
1.15000	25.0000	1.15000	104.964	7.428E-05	1.025E 00	-1.169E-08	-1.169E-08	1.169E-08
1.20000	25.0000	1.20000	110.731	7.428E-05	1.028E 00	-1.050E-08	-1.050E-08	1.050E-08
1.30000	25.0000	1.30000	124.272	7.684E-05	1.025E 00	-8.164E-09	-8.164E-09	8.164E-09
1.40000	25.0000	1.40000	139.827	7.684E-05	1.019E 00	-6.114E-09	-6.114E-09	6.114E-09
1.50000	25.0000	1.50000	156.797	8.196E-05	1.012E 00	-4.532E-09	-4.532E-09	4.532E-09
1.60000	25.0000	1.60000	174.771	8.708E-05	1.007E 00	-3.386E-09	-3.386E-09	3.386E-09
1.70000	25.0000	1.70000	193.470	8.708E-05	1.003E 00	-2.500E-09	-2.500E-09	2.500E-09
1.80000	25.0000	1.80000	212.702	9.050E-05	1.001E 00	-1.846E-09	-1.846E-09	1.846E-09
1.90000	25.0000	1.90000	232.335	9.221E-05	9.991E-01	-1.361E-09	-1.361E-09	1.361E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 25.000 θ_D= 0. ρ_a= 90.930

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.405E-09	49.901	-1.035E-07	-1.035E-07	1.035E-07	1.035E-07	-3.395E-09	-3.395E-09
0.20000	3.261E-09	99.802	-2.439E-07	-2.439E-07	2.439E-07	2.439E-07	-4.604E-09	-4.604E-09
0.30000	4.372E-09	149.703	-4.332E-07	-4.332E-07	4.332E-07	4.332E-07	-6.173E-09	-6.173E-09
0.40000	5.883E-09	199.605	-6.859E-07	-6.859E-07	6.859E-07	6.859E-07	-8.306E-09	-8.306E-09
0.50000	7.886E-09	249.506	-1.028E-06	-1.028E-06	1.028E-06	1.028E-06	-1.113E-08	-1.113E-08
0.60000	1.020E-08	299.407	-1.478E-06	-1.478E-06	1.478E-06	1.478E-06	-1.440E-08	-1.440E-08
0.70000	1.254E-08	349.308	-2.047E-06	-2.047E-06	2.047E-06	2.047E-06	-1.771E-08	-1.771E-08
0.80000	1.498E-08	399.209	-2.735E-06	-2.735E-06	2.735E-06	2.735E-06	-2.116E-08	-2.116E-08
0.85000	1.576E-08	424.160	-3.120E-06	-3.120E-06	3.120E-06	3.120E-06	-2.226E-08	-2.226E-08
0.90000	1.608E-08	449.110	-3.518E-06	-3.518E-06	3.518E-06	3.518E-06	-2.270E-08	-2.270E-08
0.92500	1.605E-08	461.586	-3.719E-06	-3.719E-06	3.719E-06	3.719E-06	-2.266E-08	-2.266E-08
0.95000	1.589E-08	474.061	-3.918E-06	-3.918E-06	3.918E-06	3.918E-06	-2.244E-08	-2.244E-08
0.96250	1.576E-08	480.299	-4.017E-06	-4.017E-06	4.017E-06	4.017E-06	-2.226E-08	-2.226E-08
0.97500	1.561E-08	486.536	-4.115E-06	-4.115E-06	4.115E-06	4.115E-06	-2.204E-08	-2.204E-08
0.98125	1.552E-08	489.655	-4.163E-06	-4.163E-06	4.163E-06	4.163E-06	-2.192E-08	-2.192E-08
0.98750	1.543E-08	492.774	-4.211E-06	-4.211E-06	4.211E-06	4.211E-06	-2.178E-08	-2.178E-08
0.99375	1.533E-08	495.893	-4.259E-06	-4.259E-06	4.259E-06	4.259E-06	-2.164E-08	-2.164E-08
1.00000	1.522E-08	499.011	-4.307E-06	-4.307E-06	4.307E-06	4.307E-06	-2.149E-08	-2.149E-08
1.00625	1.511E-08	502.130	-4.354E-06	-4.354E-06	4.354E-06	4.354E-06	-2.133E-08	-2.133E-08
1.01250	1.499E-08	505.249	-4.401E-06	-4.401E-06	4.401E-06	4.401E-06	-2.116E-08	-2.116E-08
1.01875	1.486E-08	508.368	-4.448E-06	-4.448E-06	4.448E-06	4.448E-06	-2.098E-08	-2.098E-08
1.02500	1.473E-08	511.487	-4.494E-06	-4.494E-06	4.494E-06	4.494E-06	-2.080E-08	-2.080E-08
1.03750	1.445E-08	517.724	-4.585E-06	-4.585E-06	4.585E-06	4.585E-06	-2.040E-08	-2.040E-08
1.05000	1.415E-08	523.962	-4.674E-06	-4.674E-06	4.674E-06	4.674E-06	-1.998E-08	-1.998E-08
1.07500	1.351E-08	536.437	-4.847E-06	-4.847E-06	4.847E-06	4.847E-06	-1.907E-08	-1.907E-08
1.10000	1.281E-08	548.913	-5.011E-06	-5.011E-06	5.011E-06	5.011E-06	-1.809E-08	-1.809E-08
1.15000	1.169E-08	573.863	-5.317E-06	-5.317E-06	5.317E-06	5.317E-06	-1.650E-08	-1.650E-08
1.20000	1.050E-08	598.814	-5.593E-06	-5.593E-06	5.594E-06	5.594E-06	-1.483E-08	-1.483E-08
1.30000	8.164E-09	648.715	-6.058E-06	-6.058E-06	6.059E-06	6.059E-06	-1.153E-08	-1.153E-08
1.40000	6.114E-09	698.616	-6.413E-06	-6.413E-06	6.413E-06	6.413E-06	-8.632E-09	-8.632E-09
1.50000	4.532E-09	748.517	-6.676E-06	-6.676E-06	6.676E-06	6.676E-06	-6.399E-09	-6.399E-09
1.60000	3.386E-09	798.418	-6.872E-06	-6.872E-06	6.873E-06	6.873E-06	-4.781E-09	-4.781E-09
1.70000	2.500E-09	848.319	-7.018E-06	-7.018E-06	7.019E-06	7.019E-06	-3.530E-09	-3.530E-09
1.80000	1.846E-09	898.221	-7.126E-06	-7.126E-06	7.126E-06	7.126E-06	-2.607E-09	-2.607E-09
1.90000	1.361E-09	948.122	-7.205E-06	-7.205E-06	7.206E-06	7.206E-06	-1.922E-09	-1.922E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 25.000 θ_0= 0. ρ_0= 90.930

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-3.127E-13
0.10000	2.319E-10	2.319E-10	-9.725E-21	-9.725E-21	-1.147E-10	-1.147E-10	-4.060E-13
0.20000	6.281E-10	6.281E-10	-1.579E-20	-1.579E-20	-3.021E-10	-3.021E-10	-5.482E-13
0.30000	1.253E-09	1.253E-09	-2.518E-20	-2.518E-20	-6.036E-10	-6.036E-10	-7.803E-13
0.40000	2.318E-09	2.318E-09	-3.987E-20	-3.987E-20	-1.080E-09	-1.080E-09	-1.149E-12
0.50000	4.089E-09	4.089E-09	-6.200E-20	-6.200E-20	-1.833E-09	-1.833E-09	-1.737E-12
0.60000	6.805E-09	6.805E-09	-9.136E-20	-9.136E-20	-2.972E-09	-2.972E-09	-2.697E-12
0.70000	1.166E-08	1.166E-08	-1.247E-19	-1.247E-19	-4.588E-09	-4.588E-09	-4.160E-12
0.80000	2.043E-08	2.043E-08	-1.620E-19	-1.620E-19	-6.739E-09	-6.739E-09	-5.421E-12
0.85000	2.690E-08	2.690E-08	-1.744E-19	-1.744E-19	-8.001E-09	-8.001E-09	-5.876E-12
0.90000	3.486E-08	3.486E-08	-1.796E-19	-1.796E-19	-9.330E-09	-9.330E-09	-6.069E-12
0.92500	3.928E-08	3.928E-08	-1.791E-19	-1.791E-19	-1.000E-08	-1.000E-08	-6.050E-12
0.95000	4.379E-08	4.379E-08	-1.765E-19	-1.765E-19	-1.067E-08	-1.067E-08	-5.953E-12
0.96250	4.601E-08	4.602E-08	-1.745E-19	-1.745E-19	-1.099E-08	-1.100E-08	-5.878E-12
0.97500	4.819E-08	4.819E-08	-1.720E-19	-1.720E-19	-1.132E-08	-1.132E-08	-5.786E-12
0.98125	4.925E-08	4.925E-08	-1.706E-19	-1.706E-19	-1.148E-08	-1.148E-08	-5.734E-12
0.98750	5.028E-08	5.028E-08	-1.690E-19	-1.690E-19	-1.164E-08	-1.164E-08	-5.678E-12
0.99375	5.130E-08	5.130E-08	-1.674E-19	-1.674E-19	-1.180E-08	-1.180E-08	-5.619E-12
1.00000	5.228E-08	5.228E-08	-1.657E-19	-1.657E-19	-1.195E-08	-1.195E-08	-5.557E-12
1.00625	5.324E-08	5.324E-08	-1.639E-19	-1.639E-19	-1.211E-08	-1.211E-08	-5.492E-12
1.01250	5.417E-08	5.417E-08	-1.620E-19	-1.620E-19	-1.226E-08	-1.226E-08	-5.424E-12
1.01875	5.506E-08	5.506E-08	-1.600E-19	-1.600E-19	-1.241E-08	-1.241E-08	-5.354E-12
1.02500	5.592E-08	5.592E-08	-1.580E-19	-1.580E-19	-1.256E-08	-1.256E-08	-5.281E-12
1.03750	5.754E-08	5.754E-08	-1.536E-19	-1.536E-19	-1.285E-08	-1.285E-08	-5.129E-12
1.05000	5.901E-08	5.901E-08	-1.490E-19	-1.490E-19	-1.313E-08	-1.313E-08	-4.971E-12
1.07500	6.153E-08	6.153E-08	-1.392E-19	-1.392E-19	-1.367E-08	-1.367E-08	-4.641E-12
1.10000	6.351E-08	6.351E-08	-1.289E-19	-1.289E-19	-1.417E-08	-1.417E-08	-4.303E-12
1.15000	6.616E-08	6.616E-08	-1.122E-19	-1.122E-19	-1.507E-08	-1.507E-08	-3.533E-12
1.20000	6.745E-08	6.745E-08	-9.547E-20	-9.547E-20	-1.585E-08	-1.585E-08	-2.853E-12
1.30000	6.757E-08	6.757E-08	-6.533E-20	-6.533E-20	-1.704E-08	-1.704E-08	-1.837E-12
1.40000	6.594E-08	6.594E-08	-4.225E-20	-4.225E-20	-1.784E-08	-1.784E-08	-1.209E-12
1.50000	6.361E-08	6.361E-08	-2.666E-20	-2.666E-20	-1.835E-08	-1.835E-08	-8.203E-13
1.60000	6.097E-08	6.097E-08	-1.676E-20	-1.676E-20	-1.867E-08	-1.867E-08	-5.726E-13
1.70000	5.825E-08	5.825E-08	-1.035E-20	-1.035E-20	-1.886E-08	-1.886E-08	-4.215E-13
1.80000	5.558E-08	5.558E-08	-6.292E-21	-6.292E-21	-1.899E-08	-1.899E-08	-3.232E-13
1.90000	5.303E-08	5.303E-08	-3.786E-21	-3.786E-21	-1.906E-08	-1.906E-08	-2.582E-13

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 30.000 θ_0= 0. ρ_0= 107.579

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	30.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	30.0000	0.10000	196.820	7.204E-07	9.849E-01	-2.368E-09	-2.368E-09	2.368E-09
0.20000	30.0000	0.20000	179.189	2.615E-06	9.830E-01	-3.152E-09	-3.152E-09	3.152E-09
0.30000	30.0000	0.30000	162.496	5.229E-06	9.819E-01	-4.132E-09	-4.132E-09	4.132E-09
0.40000	30.0000	0.40000	147.062	1.110E-05	9.826E-01	-5.344E-09	-5.344E-09	5.344E-09
0.50000	30.0000	0.50000	133.325	1.302E-05	9.854E-01	-6.899E-09	-6.899E-09	6.899E-09
0.60000	30.0000	0.60000	121.859	1.579E-05	9.899E-01	-8.538E-09	-8.538E-09	8.538E-09
0.70000	30.0000	0.70000	113.355	1.708E-05	9.932E-01	-1.000E-08	-1.000E-08	1.000E-08
0.80000	30.0000	0.80000	108.513	1.836E-05	9.916E-01	-1.094E-08	-1.094E-08	1.094E-08
0.85000	30.0000	0.85000	107.635	1.964E-05	9.894E-01	-1.112E-08	-1.112E-08	1.112E-08
0.90000	30.0000	0.90000	107.828	1.964E-05	9.884E-01	-1.108E-08	-1.108E-08	1.108E-08
0.92500	30.0000	0.92500	108.325	2.305E-05	9.890E-01	-1.098E-08	-1.098E-08	1.098E-08
0.95000	30.0000	0.95000	109.086	2.391E-05	9.906E-01	-1.083E-08	-1.083E-08	1.083E-08
0.96250	30.0000	0.96250	109.564	2.561E-05	9.918E-01	-1.073E-08	-1.073E-08	1.073E-08
0.97500	30.0000	0.97500	110.105	2.561E-05	9.933E-01	-1.062E-08	-1.062E-08	1.062E-08
0.98125	30.0000	0.98125	110.399	2.561E-05	9.942E-01	-1.057E-08	-1.057E-08	1.057E-08
0.98750	30.0000	0.98750	110.709	2.732E-05	9.951E-01	-1.051E-08	-1.051E-08	1.051E-08
0.99375	30.0000	0.99375	111.034	3.159E-05	9.960E-01	-1.044E-08	-1.044E-08	1.044E-08
1.00000	30.0000	1.00000	111.374	3.244E-05	9.970E-01	-1.038E-08	-1.038E-08	1.038E-08
1.00625	30.0000	1.00625	111.730	3.415E-05	9.980E-01	-1.031E-08	-1.031E-08	1.031E-08
1.01250	30.0000	1.01250	112.101	3.586E-05	9.991E-01	-1.024E-08	-1.024E-08	1.024E-08
1.01875	30.0000	1.01875	112.486	3.671E-05	1.000E 00	-1.016E-08	-1.016E-08	1.016E-08
1.02500	30.0000	1.02500	112.886	3.842E-05	1.001E 00	-1.009E-08	-1.009E-08	1.009E-08
1.03750	30.0000	1.03750	113.730	3.927E-05	1.004E 00	-9.931E-09	-9.931E-09	9.931E-09
1.05000	30.0000	1.05000	114.631	4.183E-05	1.006E 00	-9.766E-09	-9.766E-09	9.766E-09
1.07500	30.0000	1.07500	116.598	4.183E-05	1.011E 00	-9.416E-09	-9.416E-09	9.416E-09
1.10000	30.0000	1.10000	118.776	4.183E-05	1.015E 00	-9.042E-09	-9.042E-09	9.042E-09
1.15000	30.0000	1.15000	123.719	4.183E-05	1.022E 00	-8.248E-09	-8.248E-09	8.248E-09
1.20000	30.0000	1.20000	129.371	4.183E-05	1.026E 00	-7.425E-09	-7.425E-09	7.425E-09
1.30000	30.0000	1.30000	142.450	4.183E-05	1.028E 00	-5.823E-09	-5.823E-09	5.823E-09
1.40000	30.0000	1.40000	157.394	4.440E-05	1.024E 00	-4.488E-09	-4.488E-09	4.488E-09
1.50000	30.0000	1.50000	173.723	4.440E-05	1.018E 00	-3.444E-09	-3.444E-09	3.444E-09
1.60000	30.0000	1.60000	191.082	4.610E-05	1.013E 00	-2.599E-09	-2.599E-09	2.599E-09
1.70000	30.0000	1.70000	209.215	5.293E-05	1.009E 00	-1.949E-09	-1.949E-09	1.949E-09
1.80000	30.0000	1.80000	227.937	5.293E-05	1.006E 00	-1.457E-09	-1.457E-09	1.457E-09

PROPAGATION FREQUENCY= 4.2333E 08 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.369E-09	49.901	-1.027E-07	-1.027E-07	1.027E-07	1.027E-07	-3.344E-09	-3.344E-09
0.20000	3.152E-09	99.802	-2.397E-07	-2.397E-07	2.397E-07	2.397E-07	-4.450E-09	-4.450E-09
0.30000	4.132E-09	149.703	-4.206E-07	-4.206E-07	4.206E-07	4.206E-07	-5.834E-09	-5.834E-09
0.40000	5.344E-09	199.605	-6.556E-07	-6.556E-07	6.556E-07	6.556E-07	-7.546E-09	-7.546E-09
0.50000	6.899E-09	249.506	-9.604E-07	-9.604E-07	9.604E-07	9.604E-07	-9.742E-09	-9.742E-09
0.60000	8.536E-09	299.407	-1.346E-06	-1.346E-06	1.346E-06	1.346E-06	-1.206E-08	-1.206E-08
0.70000	1.000E-08	349.308	-1.810E-06	-1.810E-06	1.810E-06	1.810E-06	-1.412E-08	-1.412E-08
0.80000	1.094E-08	399.209	-2.335E-06	-2.335E-06	2.335E-06	2.335E-06	-1.545E-08	-1.545E-08
0.85000	1.112E-08	424.160	-2.611E-06	-2.611E-06	2.611E-06	2.611E-06	-1.571E-08	-1.571E-08
0.90000	1.108E-08	449.110	-2.888E-06	-2.888E-06	2.888E-06	2.888E-06	-1.565E-08	-1.565E-08
0.92500	1.098E-08	461.586	-3.026E-06	-3.026E-06	3.026E-06	3.026E-06	-1.550E-08	-1.551E-08
0.95000	1.088E-08	474.061	-3.162E-06	-3.162E-06	3.162E-06	3.162E-06	-1.529E-08	-1.529E-08
0.96250	1.078E-08	480.299	-3.229E-06	-3.229E-06	3.229E-06	3.229E-06	-1.515E-08	-1.515E-08
0.97500	1.066E-08	486.536	-3.296E-06	-3.296E-06	3.296E-06	3.296E-06	-1.500E-08	-1.500E-08
0.98125	1.057E-08	489.655	-3.329E-06	-3.329E-06	3.329E-06	3.329E-06	-1.492E-08	-1.492E-08
0.98750	1.051E-08	492.774	-3.362E-06	-3.362E-06	3.362E-06	3.362E-06	-1.483E-08	-1.483E-08
0.99375	1.044E-08	495.893	-3.394E-06	-3.394E-06	3.394E-06	3.394E-06	-1.474E-08	-1.474E-08
1.00000	1.038E-08	499.012	-3.427E-06	-3.427E-06	3.427E-06	3.427E-06	-1.465E-08	-1.465E-08
1.00625	1.031E-08	502.130	-3.459E-06	-3.459E-06	3.459E-06	3.459E-06	-1.455E-08	-1.455E-08
1.01250	1.024E-08	505.249	-3.491E-06	-3.491E-06	3.491E-06	3.491E-06	-1.445E-08	-1.445E-08
1.01875	1.016E-08	508.368	-3.523E-06	-3.523E-06	3.523E-06	3.523E-06	-1.435E-08	-1.435E-08
1.02500	1.009E-08	511.487	-3.555E-06	-3.555E-06	3.555E-06	3.555E-06	-1.424E-08	-1.424E-08
1.03750	9.93E-09	517.724	-3.617E-06	-3.617E-06	3.617E-06	3.617E-06	-1.402E-08	-1.402E-08
1.05000	9.760E-09	523.962	-3.678E-06	-3.678E-06	3.679E-06	3.679E-06	-1.379E-08	-1.379E-08
1.07500	9.410E-09	536.437	-3.798E-06	-3.798E-06	3.798E-06	3.798E-06	-1.329E-08	-1.329E-08
1.10000	9.044E-09	548.913	-3.913E-06	-3.913E-06	3.913E-06	3.913E-06	-1.277E-08	-1.277E-08
1.15000	8.248E-09	573.863	-4.129E-06	-4.129E-06	4.129E-06	4.129E-06	-1.165E-08	-1.165E-08
1.20000	7.425E-09	598.814	-4.325E-06	-4.325E-06	4.325E-06	4.325E-06	-1.048E-08	-1.048E-08
1.30000	5.823E-09	648.715	-4.655E-06	-4.655E-06	4.655E-06	4.655E-06	-8.222E-09	-8.222E-09
1.40000	4.486E-09	698.616	-4.910E-06	-4.910E-06	4.910E-06	4.910E-06	-6.337E-09	-6.337E-09
1.50000	3.444E-09	748.517	-5.107E-06	-5.107E-06	5.107E-06	5.107E-06	-4.863E-09	-4.863E-09
1.60000	2.599E-09	798.418	-5.257E-06	-5.257E-06	5.257E-06	5.257E-06	-3.670E-09	-3.670E-09
1.70000	1.949E-09	848.320	-5.369E-06	-5.369E-06	5.370E-06	5.370E-06	-2.752E-09	-2.752E-09
1.80000	1.457E-09	898.221	-5.454E-06	-5.454E-06	5.454E-06	5.454E-06	-2.058E-09	-2.058E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-4.377E-13
0.10000	2.697E-10	2.697E-10	-9.489E-21	-9.489E-21	-1.132E-10	-1.132E-10	-5.607E-13
0.20000	7.172E-10	7.172E-10	-1.496E-20	-1.496E-20	-2.933E-10	-2.933E-10	-7.399E-13
0.30000	1.398E-09	1.398E-09	-2.301E-20	-2.301E-20	-5.736E-10	-5.736E-10	-1.015E-12
0.40000	2.479E-09	2.479E-09	-3.450E-20	-3.450E-20	-9.985E-10	-9.985E-10	-1.428E-12
0.50000	4.201E-09	4.201E-09	-5.070E-20	-5.070E-20	-1.631E-09	-1.631E-09	-1.993E-12
0.60000	6.680E-09	6.680E-09	-6.990E-20	-6.990E-20	-2.531E-09	-2.531E-09	-2.762E-12
0.70000	1.061E-08	1.061E-08	-8.870E-20	-8.870E-20	-3.721E-09	-3.721E-09	-3.641E-12
0.80000	1.680E-08	1.680E-08	-1.016E-19	-1.016E-19	-5.155E-09	-5.155E-09	-4.324E-12
0.85000	2.084E-08	2.084E-08	-1.041E-19	-1.041E-19	-5.926E-09	-5.926E-09	-4.467E-12
0.90000	2.532E-08	2.532E-08	-1.036E-19	-1.036E-19	-6.705E-09	-6.705E-09	-4.436E-12
0.92500	2.764E-08	2.764E-08	-1.021E-19	-1.021E-19	-7.093E-09	-7.093E-09	-4.355E-12
0.95000	2.992E-08	2.992E-08	-9.997E-20	-9.997E-20	-7.469E-09	-7.469E-09	-4.236E-12
0.96250	3.102E-08	3.102E-08	-9.864E-20	-9.864E-20	-7.654E-09	-7.654E-09	-4.163E-12
0.97500	3.208E-08	3.208E-08	-9.716E-20	-9.716E-20	-7.837E-09	-7.837E-09	-4.083E-12
0.98125	3.259E-08	3.259E-08	-9.636E-20	-9.636E-20	-7.927E-09	-7.927E-09	-4.040E-12
0.98750	3.310E-08	3.310E-08	-9.553E-20	-9.553E-20	-8.017E-09	-8.017E-09	-3.996E-12
0.99375	3.359E-08	3.359E-08	-9.466E-20	-9.466E-20	-8.106E-09	-8.106E-09	-3.950E-12
1.00000	3.407E-08	3.407E-08	-9.376E-20	-9.376E-20	-8.194E-09	-8.194E-09	-3.903E-12
1.00625	3.453E-08	3.453E-08	-9.283E-20	-9.283E-20	-8.281E-09	-8.281E-09	-3.854E-12
1.01250	3.498E-08	3.498E-08	-9.187E-20	-9.187E-20	-8.368E-09	-8.368E-09	-3.804E-12
1.01875	3.541E-08	3.541E-08	-9.089E-20	-9.089E-20	-8.453E-09	-8.453E-09	-3.754E-12
1.02500	3.583E-08	3.583E-08	-8.987E-20	-8.987E-20	-8.537E-09	-8.537E-09	-3.702E-12
1.03750	3.661E-08	3.661E-08	-8.777E-20	-8.777E-20	-8.704E-09	-8.704E-09	-3.596E-12
1.05000	3.734E-08	3.734E-08	-8.559E-20	-8.559E-20	-8.866E-09	-8.866E-09	-3.488E-12
1.07500	3.859E-08	3.859E-08	-8.100E-20	-8.100E-20	-9.177E-09	-9.177E-09	-3.267E-12
1.10000	3.961E-08	3.961E-08	-7.620E-20	-7.620E-20	-9.471E-09	-9.471E-09	-3.045E-12
1.15000	4.107E-08	4.107E-08	-6.635E-20	-6.635E-20	-1.000E-08	-1.000E-08	-2.613E-12
1.20000	4.188E-08	4.188E-08	-5.663E-20	-5.663E-20	-1.046E-08	-1.046E-08	-2.221E-12
1.30000	4.211E-08	4.211E-08	-3.926E-20	-3.926E-20	-1.118E-08	-1.118E-08	-1.589E-12
1.40000	4.137E-08	4.137E-08	-2.625E-20	-2.625E-20	-1.166E-08	-1.166E-08	-1.133E-12
1.50000	4.016E-08	4.016E-08	-1.722E-20	-1.722E-20	-1.198E-08	-1.198E-08	-8.169E-13
1.60000	3.870E-08	3.870E-08	-1.100E-20	-1.100E-20	-1.219E-08	-1.219E-08	-6.114E-13
1.70000	3.713E-08	3.713E-08	-6.887E-21	-6.887E-21	-1.232E-08	-1.232E-08	-4.733E-13
1.80000	3.556E-08	3.556E-08	-4.242E-21	-4.242E-21	-1.240E-08	-1.240E-08	-3.785E-13

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 35.000 θ_D= 0. ρ_0= 123.410

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu$-1.0
0.	35.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	35.0000	0.10000	197.919	0.	9.864E-01	-2.326E-09	-2.326E-09	2.326E-09
0.20000	35.0000	0.20000	181.595	0.	9.852E-01	-3.031E-09	-3.031E-09	3.031E-09
0.30000	35.0000	0.30000	166.454	0.	9.850E-01	-3.875E-09	-3.875E-09	3.875E-09
0.40000	35.0000	0.40000	152.850	0.	9.860E-01	-4.832E-09	-4.832E-09	4.832E-09
0.50000	35.0000	0.50000	141.228	0.	9.883E-01	-5.956E-09	-5.957E-09	5.956E-09
0.60000	35.0000	0.60000	132.111	0.	9.906E-01	-7.057E-09	-7.057E-09	7.057E-09
0.70000	35.0000	0.70000	126.045	0.	9.910E-01	-7.899E-09	-7.899E-09	7.899E-09
0.80000	35.0000	0.80000	123.479	2.561E-06	9.892E-01	-8.285E-09	-8.285E-09	8.285E-09
0.85000	35.0000	0.85000	123.588	2.561E-06	9.887E-01	-8.268E-09	-8.268E-09	8.268E-09
0.90000	35.0000	0.90000	124.630	4.269E-06	9.897E-01	-8.110E-09	-8.110E-09	8.110E-09
0.92500	35.0000	0.92500	125.494	4.269E-06	9.909E-01	-7.980E-09	-7.980E-09	7.980E-09
0.95000	35.0000	0.95000	126.581	5.976E-06	9.926E-01	-7.821E-09	-7.821E-09	7.821E-09
0.96250	35.0000	0.96250	127.206	6.830E-06	9.936E-01	-7.730E-09	-7.730E-09	7.730E-09
0.97500	35.0000	0.97500	127.885	6.830E-06	9.948E-01	-7.634E-09	-7.634E-09	7.634E-09
0.98125	35.0000	0.98125	128.244	7.684E-06	9.954E-01	-7.583E-09	-7.583E-09	7.583E-09
0.98750	35.0000	0.98750	128.616	7.684E-06	9.960E-01	-7.530E-09	-7.530E-09	7.530E-09
0.99375	35.0000	0.99375	129.001	1.025E-05	9.966E-01	-7.477E-09	-7.477E-09	7.477E-09
1.00000	35.0000	1.00000	129.399	1.025E-05	9.973E-01	-7.422E-09	-7.422E-09	7.422E-09
1.00625	35.0000	1.00625	129.810	1.281E-05	9.980E-01	-7.365E-09	-7.365E-09	7.365E-09
1.01250	35.0000	1.01250	130.233	1.366E-05	9.987E-01	-7.307E-09	-7.307E-09	7.307E-09
1.01875	35.0000	1.01875	130.669	1.366E-05	9.994E-01	-7.248E-09	-7.248E-09	7.248E-09
1.02500	35.0000	1.02500	131.117	1.366E-05	1.000E 00	-7.188E-09	-7.188E-09	7.188E-09
1.03750	35.0000	1.03750	132.050	1.366E-05	1.002E 00	-7.065E-09	-7.065E-09	7.065E-09
1.05000	35.0000	1.05000	133.030	1.366E-05	1.003E 00	-6.937E-09	-6.937E-09	6.937E-09
1.07500	35.0000	1.07500	135.131	1.366E-05	1.006E 00	-6.671E-09	-6.671E-09	6.671E-09
1.10000	35.0000	1.10000	137.410	1.366E-05	1.009E 00	-6.395E-09	-6.395E-09	6.395E-09
1.15000	35.0000	1.15000	142.469	1.366E-05	1.013E 00	-5.821E-09	-5.821E-09	5.821E-09
1.20000	35.0000	1.20000	148.137	1.366E-05	1.017E 00	-5.239E-09	-5.239E-09	5.239E-09
1.30000	35.0000	1.30000	161.040	1.366E-05	1.020E 00	-4.231E-09	-4.231E-09	4.231E-09
1.40000	35.0000	1.40000	175.638	1.366E-05	1.019E 00	-3.339E-09	-3.339E-09	3.339E-09
1.50000	35.0000	1.50000	191.545	1.793E-05	1.016E 00	-2.580E-09	-2.580E-09	2.580E-09
1.60000	35.0000	1.60000	208.462	2.134E-05	1.013E 00	-1.972E-09	-1.972E-09	1.972E-09
1.70000	35.0000	1.70000	226.161	2.476E-05	1.010E 00	-1.498E-09	-1.498E-09	1.498E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 35.000 θ_D= 0. ρ_0= 123.410

z	$_x\mu'$-1.0	T_0	$_0T_t$-T_0	$_xT_t$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.326E-09	49.901	-1.018E-07	-1.018E-07	1.018E-07	1.018E-07	-3.284E-09	-3.285E-09
0.20000	3.031E-09	99.802	-2.349E-07	-2.349E-07	2.349E-07	2.349E-07	-4.280E-09	-4.280E-09
0.30000	3.875E-09	149.703	-4.067E-07	-4.067E-07	4.067E-07	4.067E-07	-5.471E-09	-5.471E-09
0.40000	4.832E-09	199.605	-6.235E-07	-6.235E-07	6.235E-07	6.235E-07	-6.822E-09	-6.822E-09
0.50000	5.957E-09	249.506	-8.920E-07	-8.920E-07	8.920E-07	8.920E-07	-8.410E-09	-8.410E-09
0.60000	7.057E-09	299.407	-1.217E-06	-1.217E-06	1.217E-06	1.217E-06	-9.964E-09	-9.964E-09
0.70000	7.899E-09	349.308	-1.592E-06	-1.592E-06	1.592E-06	1.592E-06	-1.115E-08	-1.115E-08
0.80000	8.285E-09	399.209	-1.998E-06	-1.998E-06	1.998E-06	1.998E-06	-1.170E-08	-1.170E-08
0.85000	8.268E-09	424.160	-2.205E-06	-2.205E-06	2.205E-06	2.205E-06	-1.167E-08	-1.167E-08
0.90000	8.110E-09	449.110	-2.409E-06	-2.409E-06	2.409E-06	2.409E-06	-1.145E-08	-1.145E-08
0.92500	7.980E-09	461.586	-2.510E-06	-2.510E-06	2.510E-06	2.510E-06	-1.127E-08	-1.127E-08
0.95000	7.821E-09	474.061	-2.608E-06	-2.608E-06	2.608E-06	2.608E-06	-1.104E-08	-1.104E-08
0.96250	7.730E-09	480.299	-2.657E-06	-2.657E-06	2.657E-06	2.657E-06	-1.092E-08	-1.092E-08
0.97500	7.634E-09	486.536	-2.705E-06	-2.705E-06	2.705E-06	2.705E-06	-1.078E-08	-1.078E-08
0.98125	7.583E-09	489.655	-2.729E-06	-2.729E-06	2.729E-06	2.729E-06	-1.071E-08	-1.071E-08
0.98750	7.530E-09	492.774	-2.752E-06	-2.752E-06	2.752E-06	2.752E-06	-1.063E-08	-1.063E-08
0.99375	7.477E-09	495.893	-2.776E-06	-2.776E-06	2.776E-06	2.776E-06	-1.056E-08	-1.056E-08
1.00000	7.422E-09	499.012	-2.799E-06	-2.799E-06	2.799E-06	2.799E-06	-1.048E-08	-1.048E-08
1.00625	7.365E-09	502.130	-2.822E-06	-2.822E-06	2.822E-06	2.822E-06	-1.040E-08	-1.040E-08
1.01250	7.307E-09	505.249	-2.845E-06	-2.845E-06	2.845E-06	2.845E-06	-1.032E-08	-1.032E-08
1.01875	7.248E-09	508.368	-2.867E-06	-2.867E-06	2.867E-06	2.867E-06	-1.023E-08	-1.023E-08
1.02500	7.188E-09	511.487	-2.890E-06	-2.890E-06	2.890E-06	2.890E-06	-1.015E-08	-1.015E-08
1.03750	7.065E-09	517.724	-2.934E-06	-2.934E-06	2.934E-06	2.934E-06	-9.975E-09	-9.975E-09
1.05000	6.937E-09	523.962	-2.978E-06	-2.978E-06	2.978E-06	2.978E-06	-9.795E-09	-9.795E-09
1.07500	6.671E-09	536.437	-3.063E-06	-3.063E-06	3.063E-06	3.063E-06	-9.420E-09	-9.420E-09
1.10000	6.395E-09	548.913	-3.144E-06	-3.144E-06	3.145E-06	3.145E-06	-9.029E-09	-9.029E-09
1.15000	5.821E-09	573.863	-3.297E-06	-3.297E-06	3.297E-06	3.297E-06	-8.219E-09	-8.219E-09
1.20000	5.239E-09	598.814	-3.435E-06	-3.435E-06	3.435E-06	3.435E-06	-7.397E-09	-7.397E-09
1.30000	4.231E-09	648.715	-3.671E-06	-3.671E-06	3.671E-06	3.671E-06	-5.974E-09	-5.974E-09
1.40000	3.339E-09	698.616	-3.859E-06	-3.859E-06	3.859E-06	3.859E-06	-4.714E-09	-4.714E-09
1.50000	2.580E-09	748.517	-4.006E-06	-4.006E-06	4.006E-06	4.006E-06	-3.642E-09	-3.642E-09
1.60000	1.972E-09	798.418	-4.119E-06	-4.119E-06	4.119E-06	4.119E-06	-2.784E-09	-2.784E-09
1.70000	1.498E-09	848.320	-4.205E-06	-4.205E-06	4.205E-06	4.205E-06	-2.115E-09	-2.115E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 35.000 θ_0= 0. ρ_a=123.410

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-5.760E-13
0.10000	3.047E-10	3.047E-10	-9.223E-21	-9.224E-21	-1.115E-10	-1.115E-10	-7.265E-13
0.20000	7.962E-10	7.962E-10	-1.406E-20	-1.406E-20	-2.835E-10	-2.835E-10	-9.346E-13
0.30000	1.519E-09	1.519E-09	-2.078E-20	-2.078E-20	-5.416E-10	-5.416E-10	-1.233E-12
0.40000	2.589E-09	2.589E-09	-2.952E-20	-2.952E-20	-9.154E-10	-9.154E-10	-1.649E-12
0.50000	4.218E-09	4.218E-09	-4.063E-20	-4.063E-20	-1.437E-09	-1.437E-09	-2.150E-12
0.60000	6.440E-09	6.440E-09	-5.245E-20	-5.245E-20	-2.134E-09	-2.134E-09	-2.709E-12
0.70000	9.468E-09	9.468E-09	-6.216E-20	-6.216E-20	-2.996E-09	-2.996E-09	-3.209E-12
0.80000	1.342E-08	1.342E-08	-6.680E-20	-6.680E-20	-3.969E-09	-3.969E-09	-3.462E-12
0.85000	1.566E-08	1.566E-08	-6.659E-20	-6.659E-20	-4.469E-09	-4.469E-09	-3.451E-12
0.90000	1.794E-08	1.794E-08	-6.468E-20	-6.468E-20	-4.961E-09	-4.961E-09	-3.346E-12
0.92500	1.905E-08	1.905E-08	-6.313E-20	-6.313E-20	-5.200E-09	-5.200E-09	-3.262E-12
0.95000	2.010E-08	2.010E-08	-6.124E-20	-6.124E-20	-5.432E-09	-5.432E-09	-3.161E-12
0.96250	2.060E-08	2.060E-08	-6.017E-20	-6.017E-20	-5.546E-09	-5.546E-09	-3.105E-12
0.97500	2.108E-08	2.108E-08	-5.904E-20	-5.904E-20	-5.657E-09	-5.657E-09	-3.046E-12
0.98125	2.131E-08	2.131E-08	-5.845E-20	-5.845E-20	-5.712E-09	-5.712E-09	-3.015E-12
0.98750	2.154E-08	2.154E-08	-5.784E-20	-5.784E-20	-5.767E-09	-5.767E-09	-2.984E-12
0.99375	2.176E-08	2.176E-08	-5.722E-20	-5.722E-20	-5.820E-09	-5.820E-09	-2.952E-12
1.00000	2.198E-08	2.198E-08	-5.659E-20	-5.659E-20	-5.874E-09	-5.874E-09	-2.919E-12
1.00625	2.218E-08	2.218E-08	-5.594E-20	-5.594E-20	-5.926E-09	-5.926E-09	-2.886E-12
1.01250	2.239E-08	2.239E-08	-5.528E-20	-5.528E-20	-5.978E-09	-5.978E-09	-2.853E-12
1.01875	2.258E-08	2.258E-08	-5.461E-20	-5.461E-20	-6.030E-09	-6.030E-09	-2.819E-12
1.02500	2.277E-08	2.277E-08	-5.393E-20	-5.393E-20	-6.080E-09	-6.080E-09	-2.785E-12
1.03750	2.313E-08	2.313E-08	-5.254E-20	-5.254E-20	-6.180E-09	-6.180E-09	-2.715E-12
1.05000	2.346E-08	2.346E-08	-5.112E-20	-5.112E-20	-6.277E-09	-6.277E-09	-2.645E-12
1.07500	2.405E-08	2.405E-08	-4.819E-20	-4.819E-20	-6.463E-09	-6.463E-09	-2.504E-12
1.10000	2.453E-08	2.453E-08	-4.521E-20	-4.521E-20	-6.637E-09	-6.637E-09	-2.363E-12
1.15000	2.526E-08	2.526E-08	-3.924E-20	-3.924E-20	-6.953E-09	-6.953E-09	-2.090E-12
1.20000	2.571E-08	2.571E-08	-3.348E-20	-3.348E-20	-7.225E-09	-7.225E-09	-1.838E-12
1.30000	2.596E-08	2.596E-08	-2.390E-20	-2.390E-20	-7.652E-09	-7.652E-09	-1.379E-12
1.40000	2.567E-08	2.567E-08	-1.639E-20	-1.639E-20	-7.950E-09	-7.950E-09	-1.038E-12
1.50000	2.506E-08	2.506E-08	-1.087E-20	-1.087E-20	-8.152E-09	-8.152E-09	-7.988E-13
1.60000	2.425E-08	2.425E-08	-7.022E-21	-7.022E-21	-8.284E-09	-8.284E-09	-6.290E-13
1.70000	2.335E-08	2.335E-08	-4.442E-21	-4.442E-21	-8.368E-09	-8.368E-09	-5.078E-13

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 45.000 θ_0= 0. ρ_a=152.140

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	45.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	45.0000	0.10000	200.523	0.	9.780E-01	-2.231E-09	-2.231E-09	2.231E-09
0.20000	45.0000	0.20000	187.220	0.	9.776E-01	-2.767E-09	-2.767E-09	2.767E-09
0.30000	45.0000	0.30000	175.554	0.	9.785E-01	-3.343E-09	-3.343E-09	3.343E-09
0.40000	45.0000	0.40000	165.870	0.	9.801E-01	-3.912E-09	-3.912E-09	3.912E-09
0.50000	45.0000	0.50000	158.532	0.	9.815E-01	-4.406E-09	-4.406E-09	4.406E-09
0.60000	45.0000	0.60000	153.876	0.	9.817E-01	-4.752E-09	-4.752E-09	4.752E-09
0.70000	45.0000	0.70000	152.148	2.561E-06	9.808E-01	-4.887E-09	-4.887E-09	4.887E-09
0.80000	45.0000	0.80000	153.448	8.538E-06	9.811E-01	-4.785E-09	-4.785E-09	4.785E-09
0.85000	45.0000	0.85000	155.216	1.323E-05	9.828E-01	-4.650E-09	-4.650E-09	4.650E-09
0.90000	45.0000	0.90000	157.700	1.878E-05	9.859E-01	-4.466E-09	-4.466E-09	4.466E-09
0.92500	45.0000	0.92500	159.200	1.878E-05	9.879E-01	-4.359E-09	-4.359E-09	4.359E-09
0.95000	45.0000	0.95000	160.866	2.049E-05	9.903E-01	-4.243E-09	-4.243E-09	4.243E-09
0.96250	45.0000	0.96250	161.760	2.134E-05	9.915E-01	-4.182E-09	-4.182E-09	4.182E-09
0.97500	45.0000	0.97500	162.693	2.134E-05	9.929E-01	-4.119E-09	-4.119E-09	4.119E-09
0.98125	45.0000	0.98125	163.174	2.391E-05	9.935E-01	-4.087E-09	-4.087E-09	4.087E-09
0.98750	45.0000	0.98750	163.665	2.476E-05	9.942E-01	-4.054E-09	-4.054E-09	4.054E-09
0.99375	45.0000	0.99375	164.166	2.476E-05	9.949E-01	-4.022E-09	-4.022E-09	4.022E-09
1.00000	45.0000	1.00000	164.676	2.647E-05	9.956E-01	-3.988E-09	-3.988E-09	3.988E-09
1.00625	45.0000	1.00625	165.195	2.817E-05	9.963E-01	-3.955E-09	-3.955E-09	3.955E-09
1.01250	45.0000	1.01250	165.723	2.817E-05	9.970E-01	-3.921E-09	-3.921E-09	3.921E-09
1.01875	45.0000	1.01875	166.261	3.074E-05	9.977E-01	-3.887E-09	-3.887E-09	3.887E-09
1.02500	45.0000	1.02500	166.808	3.159E-05	9.984E-01	-3.853E-09	-3.853E-09	3.853E-09
1.03750	45.0000	1.03750	167.929	3.159E-05	9.999E-01	-3.783E-09	-3.783E-09	3.783E-09
1.05000	45.0000	1.05000	169.085	3.159E-05	1.001E 00	-3.713E-09	-3.713E-09	3.713E-09
1.07500	45.0000	1.07500	171.500	3.159E-05	1.004E 00	-3.571E-09	-3.571E-09	3.571E-09
1.10000	45.0000	1.10000	174.048	3.159E-05	1.007E 00	-3.426E-09	-3.426E-09	3.426E-09
1.15000	45.0000	1.15000	179.520	3.159E-05	1.012E 00	-3.135E-09	-3.135E-09	3.135E-09
1.20000	45.0000	1.20000	185.454	3.159E-05	1.015E 00	-2.847E-09	-2.847E-09	2.847E-09
1.30000	45.0000	1.30000	198.544	3.159E-05	1.020E 00	-2.303E-09	-2.303E-09	2.303E-09
1.40000	45.0000	1.40000	213.007	3.159E-05	1.022E 00	-1.838E-09	-1.838E-09	1.838E-09
1.50000	45.0000	1.50000	228.583	3.159E-05	1.021E 00	-1.443E-09	-1.443E-09	1.443E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 45.000 θ_D= 0. ρ_a=152.140

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.234E-09	49.901	-9.973E-08	-9.973E-08	9.973E-08	9.973E-08	-3.150E-09	-3.150E-09
0.20000	2.767E-09	99.802	-2.242E-07	-2.242E-07	2.242E-07	2.242E-07	-3.907E-09	-3.907E-09
0.30000	3.343E-09	149.703	-3.765E-07	-3.765E-07	3.765E-07	3.765E-07	-4.721E-09	-4.721E-09
0.40000	3.912E-09	199.605	-5.577E-07	-5.577E-07	5.577E-07	5.577E-07	-5.523E-09	-5.524E-09
0.50000	4.406E-09	249.506	-7.657E-07	-7.657E-07	7.657E-07	7.657E-07	-6.222E-09	-6.222E-09
0.60000	4.752E-09	299.407	-9.950E-07	-9.950E-07	9.950E-07	9.950E-07	-6.710E-09	-6.710E-09
0.70000	4.887E-09	349.308	-1.236E-06	-1.236E-06	1.236E-06	1.236E-06	-6.900E-09	-6.900E-09
0.80000	4.785E-09	399.209	-1.479E-06	-1.479E-06	1.479E-06	1.479E-06	-6.756E-09	-6.756E-09
0.85000	4.650E-09	424.160	-1.597E-06	-1.597E-06	1.597E-06	1.597E-06	-6.565E-09	-6.565E-09
0.90000	4.466E-09	449.110	-1.710E-06	-1.710E-06	1.710E-06	1.710E-06	-6.306E-09	-6.306E-09
0.92500	4.359E-09	461.586	-1.765E-06	-1.765E-06	1.765E-06	1.765E-06	-6.155E-09	-6.155E-09
0.95000	4.243E-09	474.061	-1.819E-06	-1.819E-06	1.819E-06	1.819E-06	-5.990E-09	-5.990E-09
0.96250	4.182E-09	480.299	-1.845E-06	-1.845E-06	1.845E-06	1.845E-06	-5.904E-09	-5.904E-09
0.97500	4.119E-09	486.536	-1.871E-06	-1.871E-06	1.871E-06	1.871E-06	-5.816E-09	-5.816E-09
0.98125	4.087E-09	489.655	-1.884E-06	-1.884E-06	1.884E-06	1.884E-06	-5.770E-09	-5.770E-09
0.98750	4.054E-09	492.774	-1.897E-06	-1.897E-06	1.897E-06	1.897E-06	-5.725E-09	-5.725E-09
0.99375	4.022E-09	495.893	-1.909E-06	-1.909E-06	1.909E-06	1.909E-06	-5.678E-09	-5.678E-09
1.00000	3.988E-09	499.011	-1.922E-06	-1.922E-06	1.922E-06	1.922E-06	-5.632E-09	-5.632E-09
1.00625	3.955E-09	502.130	-1.934E-06	-1.934E-06	1.934E-06	1.934E-06	-5.584E-09	-5.584E-09
1.01250	3.921E-09	505.249	-1.946E-06	-1.946E-06	1.947E-06	1.947E-06	-5.537E-09	-5.537E-09
1.01875	3.887E-09	508.368	-1.959E-06	-1.959E-06	1.959E-06	1.959E-06	-5.489E-09	-5.489E-09
1.02500	3.853E-09	511.487	-1.971E-06	-1.971E-06	1.971E-06	1.971E-06	-5.440E-09	-5.440E-09
1.03750	3.783E-09	517.724	-1.995E-06	-1.995E-06	1.995E-06	1.995E-06	-5.342E-09	-5.342E-09
1.05000	3.713E-09	523.962	-2.018E-06	-2.018E-06	2.018E-06	2.018E-06	-5.243E-09	-5.243E-09
1.07500	3.571E-09	536.437	-2.063E-06	-2.063E-06	2.063E-06	2.063E-06	-5.041E-09	-5.041E-09
1.10000	3.426E-09	548.913	-2.107E-06	-2.107E-06	2.107E-06	2.107E-06	-4.837E-09	-4.837E-09
1.15000	3.135E-09	573.863	-2.189E-06	-2.189E-06	2.189E-06	2.189E-06	-4.427E-09	-4.427E-09
1.20000	2.847E-09	598.814	-2.263E-06	-2.263E-06	2.264E-06	2.264E-06	-4.020E-09	-4.020E-09
1.30000	2.303E-09	648.715	-2.392E-06	-2.392E-06	2.392E-06	2.392E-06	-3.251E-09	-3.251E-09
1.40000	1.838E-09	698.616	-2.495E-06	-2.495E-06	2.495E-06	2.495E-06	-2.595E-09	-2.595E-09
1.50000	1.443E-09	748.517	-2.576E-06	-2.576E-06	2.576E-06	2.576E-06	-2.037E-09	-2.037E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_o= 45.000 θ_D= 0. ρ_a=152.140

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-8.756E-13
0.10000	3.608E-10	3.608E-10	-8.624E-21	-8.624E-21	-1.077E-10	-1.077E-10	-1.065E-12
0.20000	8.944E-10	8.944E-10	-1.216E-20	-1.216E-20	-2.621E-10	-2.621E-10	-1.296E-12
0.30000	1.624E-09	1.624E-09	-1.643E-20	-1.643E-20	-4.751E-10	-4.751E-10	-1.578E-12
0.40000	2.588E-09	2.588E-09	-2.110E-20	-2.110E-20	-7.557E-10	-7.557E-10	-1.896E-12
0.50000	3.890E-09	3.890E-09	-2.549E-20	-2.549E-20	-1.105E-09	-1.105E-09	-2.209E-12
0.60000	5.537E-09	5.537E-09	-2.875E-20	-2.875E-20	-1.513E-09	-1.513E-09	-2.449E-12
0.70000	7.461E-09	7.461E-09	-3.006E-20	-3.006E-20	-1.955E-09	-1.955E-09	-2.549E-12
0.80000	9.543E-09	9.543E-09	-2.907E-20	-2.907E-20	-2.401E-09	-2.401E-09	-2.476E-12
0.85000	1.057E-08	1.057E-08	-2.777E-20	-2.777E-20	-2.613E-09	-2.613E-09	-2.377E-12
0.90000	1.153E-08	1.153E-08	-2.605E-20	-2.605E-20	-2.815E-09	-2.815E-09	-2.250E-12
0.92500	1.197E-08	1.197E-08	-2.506E-20	-2.506E-20	-2.911E-09	-2.911E-09	-2.178E-12
0.95000	1.238E-08	1.238E-08	-2.400E-20	-2.400E-20	-3.002E-09	-3.002E-09	-2.103E-12
0.96250	1.257E-08	1.257E-08	-2.346E-20	-2.346E-20	-3.047E-09	-3.047E-09	-2.064E-12
0.97500	1.275E-08	1.275E-08	-2.290E-20	-2.290E-20	-3.090E-09	-3.090E-09	-2.024E-12
0.98125	1.284E-08	1.284E-08	-2.262E-20	-2.262E-20	-3.111E-09	-3.111E-09	-2.004E-12
0.98750	1.293E-08	1.293E-08	-2.233E-20	-2.233E-20	-3.132E-09	-3.132E-09	-1.984E-12
0.99375	1.301E-08	1.301E-08	-2.204E-20	-2.204E-20	-3.153E-09	-3.153E-09	-1.964E-12
1.00000	1.309E-08	1.309E-08	-2.176E-20	-2.176E-20	-3.174E-09	-3.174E-09	-1.944E-12
1.00625	1.317E-08	1.317E-08	-2.147E-20	-2.147E-20	-3.194E-09	-3.194E-09	-1.923E-12
1.01250	1.324E-08	1.324E-08	-2.118E-20	-2.118E-20	-3.214E-09	-3.214E-09	-1.903E-12
1.01875	1.332E-08	1.332E-08	-2.088E-20	-2.088E-20	-3.233E-09	-3.233E-09	-1.883E-12
1.02500	1.339E-08	1.339E-08	-2.059E-20	-2.059E-20	-3.253E-09	-3.253E-09	-1.863E-12
1.03750	1.352E-08	1.352E-08	-2.000E-20	-2.000E-20	-3.291E-09	-3.291E-09	-1.822E-12
1.05000	1.365E-08	1.365E-08	-1.942E-20	-1.942E-20	-3.328E-09	-3.328E-09	-1.782E-12
1.07500	1.387E-08	1.387E-08	-1.824E-20	-1.824E-20	-3.398E-09	-3.398E-09	-1.702E-12
1.10000	1.405E-08	1.405E-08	-1.708E-20	-1.708E-20	-3.464E-09	-3.464E-09	-1.623E-12
1.15000	1.433E-08	1.433E-08	-1.483E-20	-1.483E-20	-3.583E-09	-3.583E-09	-1.474E-12
1.20000	1.450E-08	1.450E-08	-1.272E-20	-1.272E-20	-3.686E-09	-3.686E-09	-1.335E-12
1.30000	1.459E-08	1.459E-08	-9.076E-21	-9.076E-21	-3.848E-09	-3.848E-09	-1.096E-12
1.40000	1.442E-08	1.442E-08	-6.243E-21	-6.243E-21	-3.962E-09	-3.962E-09	-9.012E-13
1.50000	1.409E-08	1.409E-08	-4.172E-21	-4.172E-21	-4.039E-09	-4.039E-09	-7.517E-13

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 55.000 θ_0= 0. ρ_0= 176.248

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.127E-09	49.901	-9.736E-08	-9.736E-08	9.736E-08	9.736E-08	-3.004E-09	-3.004E-09
0.20000	2.490E-09	99.802	-2.125E-07	-2.125E-07	2.125E-07	2.125E-07	-3.516E-09	-3.517E-09
0.30000	2.831E-09	149.703	-3.455E-07	-3.455E-07	3.455E-07	3.455E-07	-3.997E-09	-3.997E-09
0.40000	3.103E-09	199.605	-4.939E-07	-4.939E-07	4.939E-07	4.939E-07	-4.381E-09	-4.381E-09
0.50000	3.268E-09	249.506	-6.534E-07	-6.534E-07	6.534E-07	6.534E-07	-4.614E-09	-4.614E-09
0.60000	3.301E-09	299.407	-8.178E-07	-8.178E-07	8.178E-07	8.178E-07	-4.661E-09	-4.661E-09
0.70000	3.196E-09	349.308	-9.805E-07	-9.805E-07	9.805E-07	9.805E-07	-4.512E-09	-4.513E-09
0.80000	2.970E-09	399.209	-1.135E-06	-1.135E-06	1.135E-06	1.135E-06	-4.193E-09	-4.193E-09
0.85000	2.822E-09	424.160	-1.207E-06	-1.207E-06	1.207E-06	1.207E-06	-3.984E-09	-3.984E-09
0.90000	2.657E-09	449.110	-1.275E-06	-1.275E-06	1.275E-06	1.275E-06	-3.751E-09	-3.751E-09
0.92500	2.570E-09	461.586	-1.308E-06	-1.308E-06	1.308E-06	1.308E-06	-3.628E-09	-3.628E-09
0.95000	2.480E-09	474.061	-1.340E-06	-1.340E-06	1.340E-06	1.340E-06	-3.502E-09	-3.502E-09
0.96250	2.435E-09	480.299	-1.355E-06	-1.355E-06	1.355E-06	1.355E-06	-3.438E-09	-3.438E-09
0.97500	2.389E-09	486.536	-1.370E-06	-1.370E-06	1.370E-06	1.370E-06	-3.373E-09	-3.373E-09
0.98125	2.366E-09	489.655	-1.377E-06	-1.377E-06	1.377E-06	1.377E-06	-3.341E-09	-3.341E-09
0.98750	2.343E-09	492.774	-1.385E-06	-1.385E-06	1.385E-06	1.385E-06	-3.308E-09	-3.308E-09
0.99375	2.320E-09	495.893	-1.392E-06	-1.392E-06	1.392E-06	1.392E-06	-3.276E-09	-3.276E-09
1.00000	2.297E-09	499.011	-1.399E-06	-1.399E-06	1.399E-06	1.399E-06	-3.243E-09	-3.243E-09
1.00625	2.274E-09	502.130	-1.406E-06	-1.406E-06	1.406E-06	1.406E-06	-3.211E-09	-3.211E-09
1.01250	2.251E-09	505.249	-1.413E-06	-1.413E-06	1.413E-06	1.413E-06	-3.178E-09	-3.178E-09
1.01875	2.228E-09	508.368	-1.420E-06	-1.420E-06	1.420E-06	1.420E-06	-3.146E-09	-3.146E-09
1.02500	2.206E-09	511.487	-1.427E-06	-1.427E-06	1.427E-06	1.427E-06	-3.115E-09	-3.115E-09
1.03750	2.162E-09	517.724	-1.441E-06	-1.441E-06	1.441E-06	1.441E-06	-3.052E-09	-3.052E-09
1.05000	2.117E-09	523.962	-1.454E-06	-1.454E-06	1.454E-06	1.454E-06	-2.989E-09	-2.989E-09
1.07500	2.028E-09	536.437	-1.480E-06	-1.480E-06	1.480E-06	1.480E-06	-2.864E-09	-2.864E-09
1.10000	1.940E-09	548.913	-1.505E-06	-1.505E-06	1.505E-06	1.505E-06	-2.740E-09	-2.740E-09
1.15000	1.768E-09	573.863	-1.551E-06	-1.551E-06	1.551E-06	1.551E-06	-2.496E-09	-2.496E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0=55.000 $\theta_{(i)}$= 0. ρ_0=176.248

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	55.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	55.0000	0.10000	203.582	0.	9.740E-01	-2.127E-09	-2.127E-09	2.127E-09
0.20000	55.0000	0.20000	193.711	0.	9.741E-01	-2.490E-09	-2.490E-09	2.490E-09
0.30000	55.0000	0.30000	185.817	0.	9.747E-01	-2.831E-09	-2.831E-09	2.831E-09
0.40000	55.0000	0.40000	180.161	0.	9.752E-01	-3.103E-09	-3.103E-09	3.103E-09
0.50000	55.0000	0.50000	176.957	0.	9.752E-01	-3.268E-09	-3.268E-09	3.268E-09
0.60000	55.0000	0.60000	176.340	1.281E-06	9.748E-01	-3.301E-09	-3.301E-09	3.301E-09
0.70000	55.0000	0.70000	178.335	4.696E-06	9.753E-01	-3.196E-09	-3.196E-09	3.196E-09
0.80000	55.0000	0.80000	182.857	5.976E-06	9.786E-01	-2.970E-09	-2.970E-09	2.970E-09
0.85000	55.0000	0.85000	186.012	5.976E-06	9.816E-01	-2.822E-09	-2.822E-09	2.822E-09
0.90000	55.0000	0.90000	189.726	5.976E-06	9.856E-01	-2.657E-09	-2.657E-09	2.657E-09
0.92500	55.0000	0.92500	191.782	9.392E-06	9.878E-01	-2.570E-09	-2.570E-09	2.570E-09
0.95000	55.0000	0.95000	193.966	1.195E-05	9.901E-01	-2.480E-09	-2.480E-09	2.480E-09
0.96250	55.0000	0.96250	195.104	1.281E-05	9.913E-01	-2.435E-09	-2.435E-09	2.435E-09
0.97500	55.0000	0.97500	196.273	1.451E-05	9.926E-01	-2.389E-09	-2.389E-09	2.389E-09
0.98125	55.0000	0.98125	196.868	1.451E-05	9.932E-01	-2.366E-09	-2.366E-09	2.366E-09
0.98750	55.0000	0.98750	197.471	1.451E-05	9.938E-01	-2.343E-09	-2.343E-09	2.343E-09
0.99375	55.0000	0.99375	198.081	1.793E-05	9.944E-01	-2.320E-09	-2.320E-09	2.320E-09
1.00000	55.0000	1.00000	198.699	1.878E-05	9.950E-01	-2.297E-09	-2.297E-09	2.297E-09
1.00625	55.0000	1.00625	199.323	2.049E-05	9.957E-01	-2.274E-09	-2.274E-09	2.274E-09
1.01250	55.0000	1.01250	199.955	2.049E-05	9.963E-01	-2.251E-09	-2.251E-09	2.251E-09
1.01875	55.0000	1.01875	200.593	2.049E-05	9.969E-01	-2.228E-09	-2.228E-09	2.228E-09
1.02500	55.0000	1.02500	201.239	2.305E-05	9.975E-01	-2.206E-09	-2.206E-09	2.206E-09
1.03750	55.0000	1.03750	202.551	2.476E-05	9.987E-01	-2.162E-09	-2.162E-09	2.162E-09
1.05000	55.0000	1.05000	203.890	2.476E-05	9.999E-01	-2.117E-09	-2.117E-09	2.117E-09
1.07500	55.0000	1.07500	206.646	2.561E-05	1.002E 00	-2.028E-09	-2.028E-09	2.028E-09
1.10000	55.0000	1.10000	209.535	2.732E-05	1.005E 00	-1.940E-09	-1.940E-09	1.940E-09
1.15000	55.0000	1.15000	215.511	2.817E-05	1.009E 00	-1.768E-09	-1.768E-09	1.768E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 55.000 θ_D= 0. ρ_a=176.248

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.175E-12
0.10000	4.004E-10	4.004E-10	-7.967E-21	-7.967E-21	-1.033E-10	-1.033E-10	-1.368E-12
0.20000	9.392E-10	9.392E-10	-1.028E-20	-1.028E-20	-2.397E-10	-2.397E-10	-1.575E-12
0.30000	1.622E-09	1.622E-09	-1.261E-20	-1.261E-20	-4.110E-10	-4.110E-10	-1.779E-12
0.40000	2.445E-09	2.445E-09	-1.459E-20	-1.459E-20	-6.151E-10	-6.151E-10	-1.954E-12
0.50000	3.422E-09	3.422E-09	-1.584E-20	-1.584E-20	-8.439E-10	-8.439E-10	-2.066E-12
0.60000	4.547E-09	4.547E-09	-1.610E-20	-1.610E-20	-1.084E-09	-1.084E-09	-2.090E-12
0.70000	5.703E-09	5.703E-09	-1.529E-20	-1.529E-20	-1.320E-09	-1.320E-09	-2.018E-12
0.80000	6.816E-09	6.816E-09	-1.361E-20	-1.361E-20	-1.537E-09	-1.537E-09	-1.869E-12
0.85000	7.306E-09	7.306E-09	-1.254E-20	-1.254E-20	-1.635E-09	-1.635E-09	-1.775E-12
0.90000	7.738E-09	7.738E-09	-1.140E-20	-1.140E-20	-1.725E-09	-1.725E-09	-1.674E-12
0.92500	7.929E-09	7.929E-09	-1.081E-20	-1.081E-20	-1.766E-09	-1.766E-09	-1.623E-12
0.95000	8.103E-09	8.103E-09	-1.021E-20	-1.021E-20	-1.806E-09	-1.806E-09	-1.571E-12
0.96250	8.183E-09	8.183E-09	-9.919E-21	-9.919E-21	-1.824E-09	-1.824E-09	-1.545E-12
0.97500	8.259E-09	8.259E-09	-9.624E-21	-9.624E-21	-1.843E-09	-1.843E-09	-1.519E-12
0.98125	8.295E-09	8.295E-09	-9.477E-21	-9.477E-21	-1.852E-09	-1.852E-09	-1.506E-12
0.98750	8.330E-09	8.330E-09	-9.331E-21	-9.331E-21	-1.860E-09	-1.860E-09	-1.493E-12
0.99375	8.365E-09	8.365E-09	-9.185E-21	-9.185E-21	-1.869E-09	-1.869E-09	-1.481E-12
1.00000	8.398E-09	8.398E-09	-9.040E-21	-9.040E-21	-1.878E-09	-1.878E-09	-1.468E-12
1.00625	8.430E-09	8.430E-09	-8.895E-21	-8.895E-21	-1.886E-09	-1.886E-09	-1.455E-12
1.01250	8.461E-09	8.461E-09	-8.751E-21	-8.751E-21	-1.894E-09	-1.894E-09	-1.443E-12
1.01875	8.490E-09	8.490E-09	-8.608E-21	-8.608E-21	-1.902E-09	-1.902E-09	-1.429E-12
1.02500	8.519E-09	8.519E-09	-8.465E-21	-8.465E-21	-1.910E-09	-1.910E-09	-1.416E-12
1.03750	8.574E-09	8.574E-09	-8.183E-21	-8.183E-21	-1.926E-09	-1.926E-09	-1.390E-12
1.05000	8.624E-09	8.624E-09	-7.904E-21	-7.904E-21	-1.941E-09	-1.941E-09	-1.364E-12
1.07500	8.712E-09	8.712E-09	-7.360E-21	-7.360E-21	-1.969E-09	-1.969E-09	-1.314E-12
1.10000	8.785E-09	8.785E-09	-6.835E-21	-6.835E-21	-1.996E-09	-1.996E-09	-1.265E-12
1.15000	8.888E-09	8.888E-09	-5.851E-21	-5.851E-21	-2.043E-09	-2.043E-09	-1.172E-12

PROPAGATION FREQUENCY= 4.233· 08 ϕ_0= 65.000 θ_D= 0. ρ_a= 195.000

z	ϕ	z_f	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	65.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	65.0000	0.10000	206.986	0.	9.790E-01	-2.018E-09	-2.018E-09	2.018E-09
0.20000	65.0000	0.20000	200.797	0.	9.789E-01	-2.221E-09	-2.221E-09	2.221E-09
0.30000	65.0000	0.30000	196.777	0.	9.789E-01	-2.370E-09	-2.370E-09	2.370E-09
0.40000	65.0000	0.40000	195.061	0.	9.786E-01	-2.437E-09	-2.437E-09	2.437E-09
0.50000	65.0000	0.50000	195.710	0.	9.784E-01	-2.411E-09	-2.411E-09	2.411E-09
0.60000	65.0000	0.60000	198.700	0.	9.788E-01	-2.297E-09	-2.297E-09	2.297E-09
0.70000	65.0000	0.70000	203.929	0.	9.808E-01	-2.116E-09	-2.116E-09	2.116E-09
0.80000	65.0000	0.80000	211.230	0.	9.847E-01	-1.889E-09	-1.889E-09	1.889E-09
0.85000	65.0000	0.85000	215.594	1.708E-06	9.873E-01	-1.765E-09	-1.765E-09	1.765E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 65.000 θ_D= 0. ρ_a=195.000

z	$_x\mu'$-10	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	2.018E-09	49.901	-9.479E-08	-9.479E-08	9.479E-08	9.479E-08	-2.849E-09	-2.849E-09
0.20000	2.221E-09	99.802	-2.008E-07	-2.008E-07	2.008E-07	2.008E-07	-3.136E-09	-3.136E-09
0.30000	2.370E-09	149.703	-3.156E-07	-3.156E-07	3.156E-07	3.156E-07	-3.346E-09	-3.346E-09
0.40000	2.437E-09	199.605	-4.359E-07	-4.359E-07	4.359E-07	4.359E-07	-3.440E-09	-3.440E-09
0.50000	2.411E-09	249.506	-5.572E-07	-5.572E-07	5.572E-07	5.572E-07	-3.404E-09	-3.404E-09
0.60000	2.297E-09	299.407	-6.750E-07	-6.750E-07	6.750E-07	6.750E-07	-3.243E-09	-3.243E-09
0.70000	2.116E-09	349.308	-7.853E-07	-7.853E-07	7.853E-07	7.853E-07	-2.988E-09	-2.988E-09
0.80000	1.889E-09	399.209	-8.854E-07	-8.854E-07	8.854E-07	8.854E-07	-2.667E-09	-2.667E-09
0.85000	1.765E-09	424.160	-9.310E-07	-9.310E-07	9.310E-07	9.310E-07	-2.492E-09	-2.492E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 65.000 θ_D= 0. ρ_a= 195.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.439E-12
0.10000	4.238E-10	4.238E-10	-7.295E-21	-7.295E-21	-9.877E-11	-9.877E-11	-1.599E-12
0.20000	9.407E-10	9.407E-10	-8.563E-21	-8.563E-21	-2.177E-10	-2.177E-10	-1.743E-12
0.30000	1.541E-09	1.541E-09	-9.500E-21	-9.500E-21	-3.533E-10	-3.533E-10	-1.845E-12
0.40000	2.197E-09	2.197E-09	-9.930E-21	-9.930E-21	-4.994E-10	-4.994E-10	-1.891E-12
0.50000	2.883E-09	2.883E-09	-9.765E-21	-9.765E-21	-6.474E-10	-6.474E-10	-1.874E-12
0.60000	3.568E-09	3.568E-09	-9.040E-21	-9.040E-21	-7.887E-10	-7.887E-10	-1.796E-12
0.70000	4.170E-09	4.170E-09	-7.896E-21	-7.896E-21	-9.158E-10	-9.158E-10	-1.669E-12
0.80000	4.682E-09	4.682E-09	-6.537E-21	-6.537E-21	-1.024E-09	-1.024E-09	-1.514E-12
0.85000	4.890E-09	4.890E-09	-5.839E-21	-5.839E-21	-1.070E-09	-1.070E-09	-1.433E-12

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 75.000 θ_D= 0. ρ_a= 207.828

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	75.0000	0.	215.159	0.	1.000E 00	-1.777E-09	-1.777E-09	1.777E-09
0.10000	75.0000	0.10000	210.618	0.	9.993E-01	-1.907E-09	-1.907E-09	1.907E-09
0.20000	75.0000	0.20000	208.213	0.	9.996E-01	-1.980E-09	-1.980E-09	1.980E-09
0.30000	75.0000	0.30000	208.016	0.	9.999E-01	-1.986E-09	-1.986E-09	1.986E-09
0.40000	75.0000	0.40000	210.036	0.	1.000E 00	-1.924E-09	-1.924E-09	1.924E-09
0.50000	75.0000	0.50000	214.208	0.	1.001E 00	-1.804E-09	-1.804E-09	1.804E-09
0.60000	75.0000	0.60000	220.411	0.	1.001E 00	-1.638E-09	-1.638E-09	1.638E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	$_x\mu'$-10	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.777E-09	0.	0.	0.	0.	0.	-2.509E-09	-2.509E-09
0.10000	1.907E-09	49.901	-9.214E-08	-9.214E-08	9.214E-08	9.214E-08	-2.693E-09	-2.693E-09
0.20000	1.980E-09	99.802	-1.894E-07	-1.894E-07	1.894E-07	1.894E-07	-2.795E-09	-2.795E-09
0.30000	1.986E-09	149.703	-2.886E-07	-2.886E-07	2.886E-07	2.886E-07	-2.804E-09	-2.804E-09
0.40000	1.924E-09	199.605	-3.864E-07	-3.864E-07	3.864E-07	3.864E-07	-2.717E-09	-2.717E-09
0.50000	1.804E-09	249.506	-4.797E-07	-4.797E-07	4.797E-07	4.797E-07	-2.547E-09	-2.547E-09
0.60000	1.638E-09	299.407	-5.657E-07	-5.657E-07	5.657E-07	5.657E-07	-2.313E-09	-2.313E-09

PROPAGATION FREQUENCY= 4.2330E 08 ϕ_0= 75.000 θ_D= 0. ρ_a= 207.828

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.905E-21	-5.905E-21	0.	0.	-1.635E-12
0.10000	4.323E-10	4.323E-10	-6.641E-21	-6.641E-21	-9.416E-11	-9.416E-11	-1.732E-12
0.20000	9.034E-10	9.034E-10	-7.068E-21	-7.068E-21	-1.971E-10	-1.971E-10	-1.788E-12
0.30000	1.383E-09	1.383E-09	-7.104E-21	-7.104E-21	-3.037E-10	-3.037E-10	-1.792E-12
0.40000	1.860E-09	1.860E-09	-6.742E-21	-6.742E-21	-4.077E-10	-4.077E-10	-1.746E-12
0.50000	2.289E-09	2.289E-09	-6.052E-21	-6.052E-21	-5.037E-10	-5.037E-10	-1.655E-12
0.60000	2.596E-09	2.596E-09	-5.154E-21	-5.154E-21	-5.877E-10	-5.877E-10	-1.536E-12

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.012 θ_D= 1.921E-07 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	0.0120	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0120	0.10000	193.643	1.381E-09	1.000E-00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0120	0.20000	172.127	2.189E-09	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0120	0.30000	150.611	2.970E-09	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0120	0.40000	129.095	4.898E-09	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0120	0.50000	107.579	6.462E-09	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0120	0.60000	86.064	6.879E-09	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0120	0.70000	64.548	2.918E-08	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0120	0.80000	43.032	9.713E-08	1.000E 00	-7.806E-09	-7.806E-09	7.806E-09
0.85000	0.0120	0.85000	32.274	2.518E-07	1.000E 00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0120	0.90000	21.516	8.830E-07	1.000E 00	-3.843E-08	-3.843E-08	3.843E-08
0.92500	0.0120	0.92500	16.137	2.161E-06	1.000E 00	-7.083E-08	-7.083E-08	7.083E-08
0.95000	0.0120	0.95000	10.758	7.374E-06	1.000E 00	-1.797E-07	-1.797E-07	1.797E-07
0.96250	0.0120	0.96250	8.069	1.764E-05	1.000E 00	-3.544E-07	-3.544E-07	3.544E-07
0.97500	0.0120	0.97500	5.380	5.985E-05	1.000E 00	-1.075E-06	-1.075E-06	1.075E-06
0.98124	0.0120	0.98125	4.036	1.424E-04	1.000E 00	-2.500E-06	-2.501E-06	2.500E-06
0.98749	0.0120	0.98750	2.692	4.847E-04	1.001E 00	-1.056E-05	-1.057E-05	1.055E-05
0.99373	0.0120	0.99375	1.349	4.418E-03	1.003E 00	-3.726E-04	-3.739E-04	3.721E-04
0.99076	0.0362	1.00000	1.992	1.748E 02	3.003E 00	-4.084E-05	-4.078E-05	4.088E-05
0.98456	0.0692	1.00625	3.332	1.748E 02	5.657E 00	-4.932E-06	-4.929E-06	4.934E-06
0.97835	0.1026	1.01250	4.675	1.748E 02	8.283E 00	-1.669E-06	-1.669E-06	1.669E-06
0.97213	0.1365	1.01875	6.018	1.748E 02	1.088E 01	-7.741E-07	-7.739E-07	7.741E-07
0.96591	0.1708	1.02500	7.362	1.748E 02	1.344E 01	-4.639E-07	-4.639E-07	4.639E-07
0.95347	0.2408	1.03750	10.051	1.748E 02	1.848E 01	-2.040E-07	-2.040E-07	2.040E-07
0.94102	0.3126	1.05000	12.740	1.748E 02	2.340E 01	-1.261E-07	-1.261E-07	1.261E-07
0.91615	0.4621	1.07500	18.118	1.748E 02	3.290E 01	-5.655E-08	-5.655E-08	5.655E-08
0.89127	0.6201	1.10000	23.497	1.748E 02	4.196E 01	-3.137E-08	-3.137E-08	3.137E-08
0.84154	0.9639	1.15000	34.255	1.748E 02	5.891E 01	-1.328E-08	-1.328E-08	1.328E-08
0.79185	1.3509	1.20000	45.012	1.748E 02	7.445E 01	-7.065E-09	-7.065E-09	7.065E-09
0.69259	2.2914	1.30000	66.528	1.748E 02	1.019E 02	-2.910E-09	-2.910E-09	2.910E-09
0.59358	3.5461	1.40000	88.044	1.748E 02	1.255E 02	-1.536E-09	-1.536E-09	1.536E-09
0.49497	5.3018	1.50000	109.560	1.748E 02	1.459E 02	-9.537E-10	-9.537E-10	9.537E-10
0.39706	7.9271	1.60000	131.076	1.748E 02	1.638E 02	-6.393E-10	-6.393E-10	6.393E-10
0.30052	12.2538	1.70000	152.592	1.748E 02	1.795E 02	-4.312E-10	-4.312E-10	4.312E-10
0.20728	20.5628	1.80000	174.107	1.748E 02	1.936E 02	-3.041E-10	-3.041E-10	3.041E-10
0.12499	40.8937	1.90000	195.623	1.748E 02	2.061E 02	-2.146E-10	-2.146E-10	2.146E-10
0.09099	86.7818	2.00000	217.139	1.748E 02	2.174E 02	-1.531E-10	-1.531E-10	1.531E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.012 θ_D= 1.921E-07 ρ_a= 1.005

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.462E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.806E-09	399.209	-5.297E-07	-5.297E-07	5.297E-07	5.297E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.015E-07	-8.015E-07	8.015E-07	8.015E-07	-7.170E-08	-7.170E-08
0.90000	3.843E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.083E-08	461.585	-2.067E-06	-2.067E-06	2.067E-06	2.067E-06	-3.355E-07	-3.355E-07
0.95000	1.797E-07	474.060	-3.508E-06	-3.508E-06	3.508E-06	3.508E-06	-8.513E-07	-8.513E-07
0.96250	3.644E-07	480.297	-5.065E-06	-5.065E-06	5.065E-06	5.065E-06	-1.679E-06	-1.679E-06
0.97500	1.075E-06	486.534	-8.975E-06	-8.976E-06	8.975E-06	8.976E-06	-5.092E-06	-5.093E-06
0.98124	2.502E-06	489.652	-1.422E-05	-1.423E-05	1.422E-05	1.423E-05	-1.184E-05	-1.185E-05
0.98749	1.057E-05	492.769	-3.067E-05	-3.068E-05	3.067E-05	3.070E-05	-5.000E-05	-5.005E-05
0.99373	3.747E-04	495.884	-2.572E-04	-2.578E-04	2.577E-04	2.589E-04	-1.765E-03	-1.771E-03
0.99076	4.075E-05	494.402	4.595E 00	4.595E 00	4.634E 00	4.634E 00	-1.935E-04	-1.931E-04
0.98456	4.928E-06	491.307	1.081E 01	1.081E 01	1.085E 01	1.085E 01	-2.336E-05	-2.335E-05
0.97835	1.668E-06	488.206	1.703E 01	1.703E 01	1.707E 01	1.707E 01	-7.906E-06	-7.903E-06
0.97213	7.739E-07	485.103	2.325E 01	2.325E 01	2.329E 01	2.329E 01	-3.666E-06	-3.666E-06
0.96591	4.638E-07	481.999	2.947E 01	2.947E 01	2.951E 01	2.951E 01	-2.197E-06	-2.197E-06
0.95347	2.040E-07	475.791	4.192E 01	4.192E 01	4.196E 01	4.196E 01	-9.662E-07	-9.661E-07
0.94102	1.261E-07	469.582	5.437E 01	5.437E 01	5.440E 01	5.440E 01	-5.972E-07	-5.972E-07
0.91615	5.655E-08	457.167	7.926E 01	7.926E 01	7.929E 01	7.929E 01	-2.678E-07	-2.678E-07
0.89127	3.137E-08	444.755	1.041E 02	1.041E 02	1.042E 02	1.042E 02	-1.486E-07	-1.486E-07
0.84154	1.328E-08	419.940	1.539E 02	1.539E 02	1.539E 02	1.539E 02	-6.292E-08	-6.292E-08
0.79185	7.065E-09	395.142	2.037E 02	2.037E 02	2.037E 02	2.037E 02	-3.346E-08	-3.346E-08
0.69259	2.910E-09	345.611	3.031E 02	3.031E 02	3.031E 02	3.031E 02	-1.378E-08	-1.378E-08
0.59358	1.536E-09	296.204	4.024E 02	4.024E 02	4.024E 02	4.024E 02	-7.276E-09	-7.276E-09
0.49497	9.537E-10	246.997	5.015E 02	5.015E 02	5.015E 02	5.015E 02	-4.517E-09	-4.517E-09
0.39706	6.393E-10	198.136	6.003E 02	6.003E 02	6.003E 02	6.003E 02	-3.028E-09	-3.028E-09
0.30052	4.312E-10	149.961	6.983E 02	6.983E 02	6.984E 02	6.984E 02	-2.042E-09	-2.042E-09
0.20728	3.041E-10	103.437	7.948E 02	7.948E 02	7.948E 02	7.948E 02	-1.441E-09	-1.441E-09
0.12499	2.146E-10	62.373	8.857E 02	8.857E 02	8.858E 02	8.858E 02	-1.016E-09	-1.016E-09
0.09099	1.531E-10	45.407	9.526E 02	9.526E 02	9.526E 02	9.526E 02	-7.254E-10	-7.254E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.012 θ_D= 1.921E-07 ρ_a= 1.005

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-2.289E-20
0.10000	5.181E-13	-1.227E-12	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-3.071E-20
0.20000	-1.036E-12	-4.569E-14	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-4.392E-20
0.30000	1.931E-13	-1.897E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-6.904E-20
0.40000	-4.709E-12	-3.672E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-1.169E-19
0.50000	-1.487E-12	-3.376E-12	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-2.339E-19
0.60000	1.687E-12	-5.363E-12	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-5.470E-19
0.70000	2.093E-12	1.013E-12	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-1.599E-18
0.80000	3.305E-12	5.925E-12	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-7.241E-18
0.85000	3.767E-11	3.021E-11	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-2.098E-17
0.90000	1.646E-10	1.646E-10	-2.289E-18	-2.289E-18	-1.357E-08	-1.357E-08	-9.413E-17
0.92500	4.037E-10	4.174E-10	-5.291E-18	-5.291E-18	-2.697E-08	-2.697E-08	-2.869E-16
0.95000	1.730E-09	1.736E-09	-2.101E-17	-2.101E-17	-6.783E-08	-6.783E-08	-1.288E-15
0.96250	4.677E-09	4.702E-09	-6.101E-17	-6.102E-17	-1.347E-07	-1.347E-07	-3.669E-15
0.97500	2.254E-08	2.251E-08	-3.539E-16	-3.541E-16	-4.308E-07	-4.309E-07	-1.377E-14
0.98124	7.089E-08	7.101E-08	-1.391E-15	-1.392E-15	-1.135E-06	-1.136E-06	-3.323E-14
0.98749	4.996E-07	4.996E-07	-1.512E-14	-1.515E-14	-5.992E-06	-5.999E-06	-8.937E-14
0.99373	3.938E-05	3.954E-05	-1.382E-11	-1.391E-11	-1.145E-03	-1.151E-03	-1.595E-13
0.99076	-3.985E-03	-3.985E-03	-1.835E-13	-1.829E-13	-1.139E 04	-1.143E 04	-1.408E-13
0.98456	-2.111E-03	-2.111E-03	-4.229E-15	-4.224E-15	-1.139E 04	-1.143E 04	-5.323E-14
0.97835	-1.434E-03	-1.434E-03	-7.215E-16	-7.211E-16	-1.139E 04	-1.143E 04	-2.063E-14
0.97213	-1.085E-03	-1.085E-03	-2.127E-16	-2.126E-16	-1.139E 04	-1.143E 04	-9.768E-15
0.96591	-8.730E-04	-8.728E-04	-9.383E-17	-9.381E-17	-1.139E 04	-1.143E 04	-4.863E-15
0.95347	-6.274E-04	-6.273E-04	-2.560E-17	-2.559E-17	-1.139E 04	-1.143E 04	-1.709E-15
0.94102	-4.896E-04	-4.895E-04	-1.209E-17	-1.209E-17	-1.139E 04	-1.143E 04	-6.665E-16
0.91615	-3.402E-04	-3.401E-04	-3.886E-18	-3.886E-18	-1.139E 04	-1.143E 04	-1.796E-16
0.89127	-2.606E-04	-2.606E-04	-1.699E-18	-1.699E-18	-1.139E 04	-1.143E 04	-6.807E-17
0.84154	-1.776E-04	-1.775E-04	-4.396E-19	-4.396E-19	-1.139E 04	-1.143E 04	-1.675E-17
0.79185	-1.347E-04	-1.346E-04	-1.729E-19	-1.729E-19	-1.139E 04	-1.143E 04	-6.116E-18
0.69259	-9.078E-05	-9.076E-05	-4.550E-20	-4.550E-20	-1.139E 04	-1.143E 04	-1.425E-18
0.59358	-6.847E-05	-6.846E-05	-1.774E-20	-1.774E-20	-1.139E 04	-1.143E 04	-5.023E-19
0.49497	-5.496E-05	-5.495E-05	-8.766E-21	-8.766E-21	-1.139E 04	-1.143E 04	-2.179E-19
0.39706	-4.590E-05	-4.590E-05	-4.798E-21	-4.798E-21	-1.139E 04	-1.143E 04	-1.109E-19
0.30052	-3.941E-05	-3.940E-05	-2.641E-21	-2.641E-21	-1.139E 04	-1.143E 04	-6.605E-20
0.20728	-3.453E-05	-3.452E-05	-1.515E-21	-1.515E-21	-1.139E 04	-1.143E 04	-4.244E-20
0.12499	-3.072E-05	-3.071E-05	-8.697E-22	-8.697E-22	-1.139E 04	-1.143E 04	-2.990E-20
0.09099	-2.767E-05	-2.766E-05	-4.985E-22	-4.985E-22	-1.139E 04	-1.143E 04	-2.240E-20

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.015 θ_D= 2.882E-07 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0150	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0150	0.10000	193.643	1.641E-09	1.000E-00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0150	0.20000	172.127	2.345E-09	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0150	0.30000	150.611	3.804E-09	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0150	0.40000	129.095	5.836E-09	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0150	0.50000	107.579	8.546E-09	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0150	0.60000	86.064	9.171E-09	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0150	0.70000	64.548	3.752E-08	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0150	0.80000	43.032	1.209E-07	1.000E 00	-7.806E-09	-7.806E-09	7.806E-09
0.85000	0.0150	0.85000	32.274	3.185E-07	1.000E 00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0150	0.90000	21.516	1.102E-06	1.000E 00	-3.843E-08	-3.843E-08	3.843E-08
0.92500	0.0150	0.92500	16.137	2.691E-06	1.000E 00	-7.083E-08	-7.083E-08	7.083E-08
0.95000	0.0150	0.95000	10.759	9.188E-06	1.000E 00	-1.797E-07	-1.797E-07	1.797E-07
0.96250	0.0150	0.96250	8.069	2.198E-05	1.000E 00	-3.544E-07	-3.544E-07	3.543E-07
0.97500	0.0150	0.97500	5.380	7.455E-05	1.000E 00	-1.075E-06	-1.075E-06	1.075E-06
0.98124	0.0150	0.98125	4.036	1.774E-04	1.000E 00	-2.500E-06	-2.501E-06	2.500E-06
0.98749	0.0150	0.98750	2.692	6.037E-04	1.001E 00	-1.055E-05	-1.056E-05	1.055E-05
0.99373	0.0150	0.99375	1.350	5.502E-03	1.003E 00	-3.719E-04	-3.732E-04	3.714E-04
0.99073	0.0454	1.00000	2.003	1.735E 02	3.019E 00	-3.988E-05	-3.981E-05	3.991E-05
0.98452	0.0865	1.00625	3.347	1.735E 02	5.685E 00	-4.855E-06	-4.852E-06	4.856E-06
0.97831	0.1282	1.01250	4.692	1.735E 02	8.317E 00	-1.651E-06	-1.651E-06	1.651E-06
0.97210	0.1703	1.01875	6.036	1.735E 02	1.092E 01	-7.688E-07	-7.686E-07	7.688E-07
0.96589	0.2131	1.02500	7.381	1.735E 02	1.348E 01	-4.606E-07	-4.606E-07	4.606E-07
0.95348	0.3002	1.03750	10.070	1.735E 02	1.853E 01	-2.033E-07	-2.033E-07	2.033E-07
0.94106	0.3896	1.05000	12.760	1.735E 02	2.345E 01	-1.256E-07	-1.256E-07	1.256E-07
0.91625	0.5757	1.07500	18.139	1.735E 02	3.295E 01	-5.642E-08	-5.642E-08	5.642E-08
0.89144	0.7722	1.10000	23.518	1.735E 02	4.202E 01	-3.131E-08	-3.131E-08	3.131E-08
0.84186	1.1998	1.15000	34.276	1.735E 02	5.898E 01	-1.326E-08	-1.326E-08	1.326E-08
0.79233	1.6809	1.20000	45.034	1.735E 02	7.452E 01	-7.057E-09	-7.057E-09	7.057E-09
0.69348	2.8492	1.30000	66.550	1.735E 02	1.020E 02	-2.908E-09	-2.908E-09	2.908E-09
0.59501	4.4049	1.40000	88.065	1.735E 02	1.256E 02	-1.535E-09	-1.535E-09	1.535E-09
0.49716	6.5752	1.50000	109.581	1.735E 02	1.460E 02	-9.533E-10	-9.533E-10	9.533E-10
0.40036	9.8017	1.60000	131.097	1.735E 02	1.639E 02	-6.390E-10	-6.390E-10	6.390E-10
0.30564	15.0543	1.70000	152.613	1.735E 02	1.797E 02	-4.310E-10	-4.310E-10	4.310E-10
0.21574	24.8360	1.80000	174.129	1.735E 02	1.937E 02	-3.040E-10	-3.040E-10	3.040E-10
0.14024	46.5677	1.90000	195.645	1.735E 02	2.062E 02	-2.145E-10	-2.145E-10	2.145E-10
0.11311	88.5046	2.00000	217.161	1.735E 02	2.175E 02	-1.531E-10	-1.531E-10	1.531E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0=0.015 θ_D=2.882E-07 ρ_c=1.005

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.806E-09	399.209	-5.297E-07	-5.297E-07	5.297E-07	5.297E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.015E-07	-8.015E-07	8.015E-07	8.015E-07	-7.170E-08	-7.170E-08
0.90000	3.843E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.083E-08	461.585	-2.067E-06	-2.067E-06	2.067E-06	2.067E-06	-3.355E-07	-3.355E-07
0.95000	1.797E-07	474.060	-3.508E-06	-3.508E-06	3.508E-06	3.508E-06	-8.513E-07	-8.513E-07
0.96250	3.544E-07	480.297	-5.065E-06	-5.065E-06	5.065E-06	5.065E-06	-1.678E-06	-1.679E-06
0.97500	1.075E-06	486.534	-8.975E-06	-8.976E-06	8.975E-06	8.976E-06	-5.092E-06	-5.093E-06
0.98124	2.502E-06	489.652	-1.422E-05	-1.423E-05	1.422E-05	1.423E-05	-1.184E-05	-1.185E-05
0.98749	1.057E-05	492.769	-3.066E-05	-3.068E-05	3.067E-05	3.070E-05	-4.999E-05	-5.003E-05
0.99373	3.740E-04	495.884	-2.569E-04	-2.575E-04	2.578E-04	2.589E-04	-1.762E-03	-1.768E-03
0.99073	3.978E-05	494.384	4.614E 00	4.614E 00	4.652E 00	4.652E 00	-1.889E-04	-1.886E-04
0.98452	4.850E-06	491.285	1.083E 01	1.083E 01	1.087E 01	1.087E 01	-2.299E-05	-2.298E-05
0.97831	1.651E-06	488.187	1.705E 01	1.705E 01	1.709E 01	1.709E 01	-7.821E-06	-7.819E-06
0.97210	7.686E-07	485.088	2.327E 01	2.327E 01	2.330E 01	2.330E 01	-3.641E-06	-3.641E-06
0.96589	4.605E-07	481.990	2.948E 01	2.948E 01	2.952E 01	2.952E 01	-2.182E-06	-2.182E-06
0.95348	2.033E-07	475.795	4.191E 01	4.191E 01	4.195E 01	4.195E 01	-9.628E-07	-9.628E-07
0.94106	1.256E-07	469.602	5.435E 01	5.435E 01	5.438E 01	5.438E 01	-5.951E-07	-5.951E-07
0.91625	5.642E-08	457.217	7.921E 01	7.921E 01	7.924E 01	7.924E 01	-2.672E-07	-2.672E-07
0.89144	3.131E-08	444.838	1.041E 02	1.041E 02	1.041E 02	1.041E 02	-1.483E-07	-1.483E-07
0.84186	1.326E-08	420.097	1.538E 02	1.538E 02	1.538E 02	1.538E 02	-6.283E-08	-6.283E-08
0.79233	7.057E-09	395.382	2.034E 02	2.034E 02	2.035E 02	2.035E 02	-3.343E-08	-3.343E-08
0.69348	2.908E-09	346.055	3.026E 02	3.026E 02	3.027E 02	3.027E 02	-1.377E-08	-1.377E-08
0.59501	1.535E-09	296.918	4.017E 02	4.017E 02	4.017E 02	4.017E 02	-7.273E-09	-7.273E-09
0.49716	9.533E-10	248.087	5.004E 02	5.004E 02	5.005E 02	5.005E 02	-4.515E-09	-4.515E-09
0.40036	6.390E-10	199.786	5.986E 02	5.986E 02	5.987E 02	5.987E 02	-3.027E-09	-3.027E-09
0.30564	4.310E-10	152.519	6.958E 02	6.958E 02	6.958E 02	6.958E 02	-2.042E-09	-2.042E-09
0.21574	3.040E-10	107.656	7.906E 02	7.906E 02	7.906E 02	7.906E 02	-1.440E-09	-1.440E-09
0.14024	2.145E-10	69.983	8.781E 02	8.781E 02	8.782E 02	8.782E 02	-1.016E-09	-1.016E-09
0.11311	1.531E-10	56.444	9.416E 02	9.416E 02	9.416E 02	9.416E 02	-7.251E-10	-7.251E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.015 θ_D= 2.882E-07 ρ_a= 1.005

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.10000	4.362E-13	-1.059E-12	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-4.798E-20
0.20000	-8.704E-13	-1.920E-14	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-6.862E-20
0.30000	2.261E-13	-1.438E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-1.079E-19
0.40000	-3.936E-12	-3.066E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-1.826E-19
0.50000	-9.728E-13	-2.637E-12	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-3.655E-19
0.60000	2.169E-12	-3.994E-12	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-8.547E-19
0.70000	3.862E-12	2.911E-12	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-2.498E-18
0.80000	1.183E-11	1.380E-11	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-1.131E-17
0.85000	5.676E-11	5.035E-11	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-3.278E-17
0.90000	2.362E-10	2.362E-10	-2.289E-18	-2.289E-18	-1.357E-08	-1.357E-08	-1.471E-16
0.92500	5.819E-10	5.937E-10	-5.291E-18	-5.291E-18	-2.697E-08	-2.697E-08	-4.483E-16
0.95000	2.397E-09	2.403E-09	-2.101E-17	-2.101E-17	-6.783E-08	-6.783E-08	-2.012E-15
0.96250	6.471E-09	6.493E-09	-6.101E-17	-6.102E-17	-1.347E-07	-1.347E-07	-5.733E-15
0.97500	3.101E-08	3.098E-08	-3.539E-16	-3.540E-16	-4.308E-07	-4.309E-07	-2.151E-14
0.98124	9.743E-08	9.755E-08	-1.391E-15	-1.392E-15	-1.135E-06	-1.136E-06	-5.191E-14
0.98749	6.742E-07	6.745E-07	-1.512E-14	-1.514E-14	-5.990E-06	-5.997E-06	-1.396E-13
0.99373	5.233E-05	5.254E-05	-1.376E-11	-1.386E-11	-1.141E-03	-1.148E-03	-2.493E-13
0.99073	-3.783E-03	-3.782E-03	-1.754E-13	-1.748E-13	-1.110E 04	-1.111E 04	-2.184E-13
0.98452	-2.009E-03	-2.004E-03	-4.119E-15	-4.114E-15	-1.110E 04	-1.111E 04	-8.225E-14
0.97831	-1.362E-03	-1.362E-03	-7.091E-16	-7.087E-16	-1.110E 04	-1.111E 04	-3.188E-14
0.97210	-1.032E-03	-1.032E-03	-2.104E-16	-2.103E-16	-1.110E 04	-1.111E 04	-1.509E-14
0.96589	-8.303E-04	-8.301E-04	-9.277E-17	-9.275E-17	-1.110E 04	-1.111E 04	-7.537E-15
0.95348	-5.970E-04	-5.969E-04	-2.546E-17	-2.545E-17	-1.110E 04	-1.111E 04	-2.648E-15
0.94106	-4.661E-04	-4.660E-04	-1.202E-17	-1.202E-17	-1.110E 04	-1.111E 04	-1.035E-15
0.91625	-3.240E-04	-3.239E-04	-3.874E-18	-3.874E-18	-1.110E 04	-1.111E 04	-2.794E-16
0.89144	-2.483E-04	-2.482E-04	-1.694E-18	-1.694E-18	-1.110E 04	-1.111E 04	-1.060E-16
0.84186	-1.692E-04	-1.692E-04	-4.387E-19	-4.387E-19	-1.110E 04	-1.111E 04	-2.610E-17
0.79233	-1.283E-04	-1.283E-04	-1.726E-19	-1.726E-19	-1.110E 04	-1.111E 04	-9.539E-18
0.69348	-8.653E-05	-8.652E-05	-4.546E-20	-4.546E-20	-1.110E 04	-1.111E 04	-2.223E-18
0.59501	-6.527E-05	-6.526E-05	-1.773E-20	-1.773E-20	-1.110E 04	-1.111E 04	-7.841E-19
0.49716	-5.239E-05	-5.239E-05	-8.761E-21	-8.761E-21	-1.110E 04	-1.111E 04	-3.403E-19
0.40036	-4.376E-05	-4.376E-05	-4.795E-21	-4.795E-21	-1.110E 04	-1.111E 04	-1.731E-19
0.30564	-3.757E-05	-3.757E-05	-2.639E-21	-2.639E-21	-1.110E 04	-1.111E 04	-1.031E-19
0.21574	-3.292E-05	-3.291E-05	-1.515E-21	-1.515E-21	-1.110E 04	-1.111E 04	-6.628E-20
0.14024	-2.929E-05	-2.928E-05	-8.692E-22	-8.692E-22	-1.110E 04	-1.111E 04	-4.671E-20
0.11311	-2.638E-05	-2.638E-05	-4.982E-22	-4.982E-22	-1.110E 04	-1.111E 04	-3.500E-20

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.020 θ_D= 3.202E-07 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0200	0.	218.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0200	0.10000	193.643	2.658E-09	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0200	0.20000	172.127	4.012E-09	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0200	0.30000	150.611	5.836E-09	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0200	0.40000	129.095	9.588E-09	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0200	0.50000	107.579	1.292E-08	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0200	0.60000	86.064	1.668E-08	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0200	0.70000	64.548	5.670E-08	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0200	0.80000	43.032	1.934E-07	1.000E 00	-7.806E-09	-7.806E-09	7.806E-09
0.85000	0.0200	0.85000	32.274	4.969E-07	1.000E 00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0200	0.90000	21.516	1.726E-06	1.000E 00	-3.843E-08	-3.843E-08	3.843E-08
0.92500	0.0200	0.92500	16.137	4.209E-06	1.000E 00	-7.083E-08	-7.083E-08	7.083E-08
0.95000	0.0200	0.95000	10.759	1.434E-05	1.000E 00	-1.797E-07	-1.797E-07	1.797E-07
0.96250	0.0200	0.96250	8.070	3.429E-05	1.000E 00	-3.543E-07	-3.544E-07	3.543E-07
0.97499	0.0200	0.97500	5.381	1.162E-04	1.000E 00	-1.075E-06	-1.075E-06	1.075E-06
0.98124	0.0200	0.98125	4.036	2.764E-04	1.000E 00	-2.499E-06	-2.500E-06	2.499E-06
0.98749	0.0200	0.98750	2.693	9.391E-04	1.000E 00	-1.054E-05	-1.055E-05	1.054E-05
0.99373	0.0200	0.99375	1.351	8.385E-03	1.002E 00	-3.692E-04	-3.705E-04	3.687E-04
0.99078	0.0603	1.00000	1.996	1.714E 02	3.009E 00	-4.047E-05	-4.041E-05	4.051E-05
0.98461	0.1151	1.00625	3.339	1.714E 02	5.674E 00	-4.897E-06	-4.894E-06	4.899E-06
0.97844	0.1706	1.01250	4.683	1.714E 02	8.306E 00	-1.661E-06	-1.660E-06	1.661E-06
0.97226	0.2268	1.01875	6.027	1.714E 02	1.091E 01	-7.715E-07	-7.714E-07	7.716E-07
0.96609	0.2838	1.02500	7.371	1.714E 02	1.348E 01	-4.623E-07	-4.623E-07	4.624E-07
0.95374	0.3999	1.03750	10.060	1.714E 02	1.852E 01	-2.036E-07	-2.036E-07	2.036E-07
0.94140	0.5190	1.05000	12.750	1.714E 02	2.345E 01	-1.259E-07	-1.259E-07	1.259E-07
0.91672	0.7670	1.07500	18.128	1.714E 02	3.296E 01	-5.648E-08	-5.648E-08	5.648E-08
0.89207	1.0287	1.10000	23.507	1.714E 02	4.204E 01	-3.134E-08	-3.134E-08	3.134E-08
0.84282	1.5979	1.15000	34.265	1.714E 02	5.901E 01	-1.327E-08	-1.327E-08	1.327E-08
0.79366	2.2378	1.20000	45.023	1.714E 02	7.457E 01	-7.061E-09	-7.061E-09	7.061E-09
0.69570	3.7882	1.30000	66.539	1.714E 02	1.021E 02	-2.909E-09	-2.909E-09	2.909E-09
0.59842	5.8447	1.40000	88.055	1.714E 02	1.257E 02	-1.536E-09	-1.536E-09	1.536E-09
0.50221	8.6940	1.50000	109.571	1.714E 02	1.461E 02	-9.535E-10	-9.535E-10	9.535E-10
0.40782	12.8771	1.60000	131.086	1.714E 02	1.640E 02	-6.391E-10	-6.391E-10	6.391E-10
0.31690	19.5152	1.70000	152.602	1.714E 02	1.798E 02	-4.311E-10	-4.311E-10	4.311E-10
0.23351	31.1625	1.80000	174.118	1.714E 02	1.938E 02	-3.041E-10	-3.041E-10	3.041E-10
0.16922	53.3770	1.90000	195.634	1.714E 02	2.064E 02	-2.145E-10	-2.145E-10	2.145E-10
0.15080	89.2099	2.00000	217.150	1.714E 02	2.177E 02	-1.531E-10	-1.531E-10	1.531E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.020 θ_D= 3.202E-07 ρ_a= 1.005

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.462E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.806E-09	399.209	-5.297E-07	-5.297E-07	5.297E-07	5.297E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.015E-07	-8.015E-07	8.015E-07	8.015E-07	-7.170E-08	-7.170E-08
0.90000	3.843E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.083E-08	461.585	-2.067E-06	-2.067E-06	2.067E-06	2.067E-06	-3.355E-07	-3.355E-07
0.95000	1.797E-07	474.060	-3.508E-06	-3.508E-06	3.508E-06	3.508E-06	-8.512E-07	-8.513E-07
0.96250	3.644E-07	480.297	-5.065E-06	-5.065E-06	5.064E-06	5.065E-06	-1.678E-06	-1.678E-06
0.97499	1.075E-06	486.534	-8.974E-06	-8.975E-06	8.974E-06	8.976E-06	-5.091E-06	-5.092E-06
0.98124	2.501E-06	489.652	-1.422E-05	-1.422E-05	1.422E-05	1.423E-05	-1.184E-05	-1.184E-05
0.98749	1.056E-05	492.769	-3.064E-05	-3.065E-05	3.066E-05	3.069E-05	-4.994E-05	-4.998E-05
0.99373	3.713E-04	495.882	-2.550E-04	-2.556E-04	2.574E-04	2.585E-04	-1.749E-03	-1.755E-03
0.99078	4.037E-05	494.412	4.586E 00	4.586E 00	4.624E 00	4.624E 00	-1.917E-04	-1.914E-04
0.98461	4.893E-06	491.332	1.078E 01	1.078E 01	1.082E 01	1.082E 01	-2.320E-05	-2.318E-05
0.97844	1.660E-06	488.251	1.698E 01	1.698E 01	1.702E 01	1.702E 01	-7.866E-06	-7.864E-06
0.97226	7.713E-07	485.170	2.318E 01	2.318E 01	2.322E 01	2.322E 01	-3.654E-06	-3.654E-06
0.96609	4.622E-07	482.089	2.938E 01	2.938E 01	2.942E 01	2.942E 01	-2.190E-06	-2.190E-06
0.95374	2.036E-07	475.928	4.178E 01	4.178E 01	4.182E 01	4.182E 01	-9.646E-07	-9.645E-07
0.94140	1.259E-07	469.769	5.418E 01	5.418E 01	5.422E 01	5.422E 01	-5.962E-07	-5.962E-07
0.91672	5.648E-08	457.456	7.897E 01	7.897E 01	7.901E 01	7.901E 01	-2.675E-07	-2.675E-07
0.89207	3.134E-08	445.153	1.037E 02	1.037E 02	1.038E 02	1.038E 02	-1.484E-07	-1.484E-07
0.84282	1.327E-08	420.575	1.533E 02	1.533E 02	1.533E 02	1.533E 02	-6.287E-08	-6.287E-08
0.79366	7.061E-09	396.046	2.028E 02	2.028E 02	2.028E 02	2.028E 02	-3.345E-08	-3.345E-08
0.69570	2.909E-09	347.163	3.015E 02	3.015E 02	3.016E 02	3.016E 02	-1.378E-08	-1.378E-08
0.59842	1.536E-09	298.618	4.000E 02	4.000E 02	4.000E 02	4.000E 02	-7.275E-09	-7.275E-09
0.50221	9.536E-10	250.607	4.979E 02	4.979E 02	4.979E 02	4.979E 02	-4.516E-09	-4.516E-09
0.40782	6.391E-10	203.507	5.949E 02	5.949E 02	5.949E 02	5.949E 02	-3.027E-09	-3.027E-09
0.31690	4.811E-10	158.135	6.902E 02	6.902E 02	6.902E 02	6.902E 02	-2.042E-09	-2.042E-09
0.23351	3.041E-10	116.526	7.817E 02	7.817E 02	7.817E 02	7.817E 02	-1.440E-09	-1.440E-09
0.16922	2.145E-10	84.441	8.637E 02	8.637E 02	8.637E 02	8.637E 02	-1.016E-09	-1.016E-09
0.15080	1.531E-10	75.250	9.228E 02	9.228E 02	9.228E 02	9.228E 02	-7.253E-10	-7.253E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.020 θ_D= 3.202E-07 ρ_a= 1.005

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-6.358E-20
0.10000	2.970E-13	-7.800E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-8.529E-20
0.20000	-5.940E-13	2.494E-14	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.220E-19
0.30000	2.812E-13	-1.007E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-1.918E-19
0.40000	-2.648E-12	-2.054E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-3.246E-19
0.50000	-1.161E-13	-1.404E-12	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-6.498E-19
0.60000	2.945E-12	-1.711E-12	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-1.519E-18
0.70000	6.810E-12	6.074E-12	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-4.441E-18
0.80000	2.603E-11	2.692E-11	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-2.011E-17
0.85000	8.859E-11	8.393E-11	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-5.828E-17
0.90000	3.555E-10	3.556E-10	-2.289E-18	-2.289E-18	-1.357E-08	-1.357E-08	-2.615E-16
0.92500	8.789E-10	8.875E-10	-5.291E-18	-5.291E-18	-2.697E-08	-2.697E-08	-7.970E-16
0.95000	3.509E-09	3.513E-09	-2.101E-17	-2.101E-17	-6.782E-08	-6.783E-08	-3.577E-15
0.96250	9.461E-09	9.478E-09	-6.100E-17	-6.101E-17	-1.347E-07	-1.347E-07	-1.019E-14
0.97499	4.512E-08	4.510E-08	-3.538E-16	-3.539E-16	-4.307E-07	-4.308E-07	-3.824E-14
0.98124	1.417E-07	1.418E-07	-1.390E-15	-1.391E-15	-1.135E-06	-1.135E-06	-9.225E-14
0.98749	9.652E-07	9.659E-07	-1.509E-14	-1.512E-14	-5.983E-06	-5.990E-06	-2.480E-13
0.99373	7.390E-05	7.420E-05	-1.357E-11	-1.366E-11	-1.128E-03	-1.134E-03	-4.433E-13
0.99078	-3.490E-03	-3.490E-03	-1.804E-13	-1.798E-13	-1.109E 04	-1.110E 04	-3.901E-13
0.98461	-1.847E-03	-1.847E-03	-4.179E-15	-4.174E-15	-1.109E 04	-1.110E 04	-1.471E-13
0.97844	-1.255E-03	-1.254E-03	-7.157E-16	-7.153E-16	-1.109E 04	-1.110E 04	-5.700E-14
0.97226	-9.496E-04	-9.495E-04	-2.116E-16	-2.115E-16	-1.109E 04	-1.110E 04	-2.699E-14
0.96609	-7.639E-04	-7.638E-04	-9.332E-17	-9.330E-17	-1.109E 04	-1.110E 04	-1.346E-14
0.95374	-5.491E-04	-5.491E-04	-2.553E-17	-2.552E-17	-1.109E 04	-1.110E 04	-4.727E-15
0.94140	-4.286E-04	-4.286E-04	-1.206E-17	-1.206E-17	-1.109E 04	-1.110E 04	-1.846E-15
0.91672	-2.979E-04	-2.978E-04	-3.880E-18	-3.880E-18	-1.109E 04	-1.110E 04	-4.978E-16
0.89207	-2.282E-04	-2.282E-04	-1.696E-18	-1.696E-18	-1.109E 04	-1.110E 04	-1.887E-16
0.84282	-1.555E-04	-1.555E-04	-4.392E-19	-4.392E-19	-1.109E 04	-1.110E 04	-4.646E-17
0.79366	-1.179E-04	-1.179E-04	-1.728E-19	-1.728E-19	-1.109E 04	-1.110E 04	-1.697E-17
0.69570	-7.952E-05	-7.951E-05	-4.548E-20	-4.548E-20	-1.109E 04	-1.110E 04	-3.955E-18
0.59842	-5.998E-05	-5.997E-05	-1.773E-20	-1.773E-20	-1.109E 04	-1.110E 04	-1.395E-18
0.50221	-4.815E-05	-4.814E-05	-8.764E-21	-8.764E-21	-1.109E 04	-1.110E 04	-6.051E-19
0.40782	-4.021E-05	-4.021E-05	-4.796E-21	-4.796E-21	-1.109E 04	-1.110E 04	-3.079E-19
0.31690	-3.463E-05	-3.452E-05	-2.640E-21	-2.640E-21	-1.109E 04	-1.110E 04	-1.834E-19
0.23351	-3.025E-05	-3.024E-05	-1.515E-21	-1.515E-21	-1.109E 04	-1.110E 04	-1.179E-19
0.16922	-2.691E-05	-2.691E-05	-8.694E-22	-8.694E-22	-1.109E 04	-1.110E 04	-8.305E-20
0.15080	-2.424E-05	-2.424E-05	-4.984E-22	-4.984E-22	-1.109E 04	-1.110E 04	-6.222E-20

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.025 θ_D= 4.003E-07 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0250	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0250	0.10000	193.643	3.804E-09	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0250	0.20000	172.127	4.742E-09	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0250	0.30000	150.611	7.087E-09	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0250	0.40000	129.095	1.167E-08	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0250	0.50000	107.579	1.542E-08	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0250	0.60000	86.064	1.542E-08	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0250	0.70000	64.548	6.420E-08	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0250	0.80000	43.032	2.051E-07	1.000E 00	-7.806E-09	-7.806E-09	7.806E-09
0.85000	0.0250	0.85000	32.274	5.386E-07	1.000E 00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0250	0.90000	21.516	1.874E-06	1.000E 00	-3.843E-08	-3.843E-08	3.843E-08
0.92500	0.0250	0.92500	16.137	4.572E-06	1.000E 00	-7.083E-08	-7.083E-08	7.083E-08
0.95000	0.0250	0.95000	10.759	1.562E-05	1.000E 00	-1.797E-07	-1.797E-07	1.797E-07
0.96250	0.0250	0.96250	8.070	3.733E-05	1.000E 00	-3.543E-07	-3.544E-07	3.543E-07
0.97500	0.0250	0.97500	5.381	1.266E-04	1.000E 00	-1.075E-06	-1.075E-06	1.075E-06
0.98124	0.0250	0.98125	4.037	3.011E-04	1.000E 00	-2.499E-06	-2.500E-06	2.499E-06
0.98749	0.0250	0.98750	2.693	1.024E-03	1.000E 00	-1.054E-05	-1.055E-05	1.053E-05
0.99373	0.0250	0.99375	1.352	9.276E-03	1.001E 00	-3.682E-04	-3.695E-04	3.677E-04
0.99081	0.0758	1.00000	1.998	1.692E 02	3.011E 00	-4.031E-05	-4.025E-05	4.035E-05
0.98467	0.1437	1.00625	3.342	1.692E 02	5.681E 00	-4.883E-06	-4.880E-06	4.884E-06
0.97853	0.2129	1.01250	4.686	1.692E 02	8.318E 00	-1.657E-06	-1.657E-06	1.658E-06
0.97240	0.2829	1.01875	6.030	1.692E 02	1.092E 01	-7.705E-07	-7.704E-07	7.706E-07
0.96627	0.3639	1.02500	7.375	1.692E 02	1.349E 01	-4.617E-07	-4.616E-07	4.617E-07
0.95400	0.4986	1.03750	10.064	1.692E 02	1.855E 01	-2.035E-07	-2.035E-07	2.035E-07
0.94175	0.6470	1.05000	12.754	1.692E 02	2.348E 01	-1.258E-07	-1.258E-07	1.258E-07
0.91725	0.9558	1.07500	18.132	1.692E 02	3.300E 01	-5.646E-08	-5.646E-08	5.646E-08
0.89279	1.2815	1.10000	23.511	1.692E 02	4.208E 01	-3.133E-08	-3.133E-08	3.133E-08
0.84395	1.9896	1.15000	34.269	1.692E 02	5.907E 01	-1.327E-08	-1.327E-08	1.327E-08
0.79526	2.7844	1.20000	45.027	1.692E 02	7.464E 01	-7.060E-09	-7.060E-09	7.060E-09
0.69843	4.7056	1.30000	66.543	1.692E 02	1.022E 02	-2.909E-09	-2.909E-09	2.909E-09
0.60264	7.2412	1.40000	88.059	1.692E 02	1.258E 02	-1.536E-09	-1.536E-09	1.536E-09
0.50848	10.7251	1.50000	109.575	1.692E 02	1.463E 02	-9.534E-10	-9.534E-10	9.534E-10
0.41703	15.7629	1.60000	131.091	1.692E 02	1.642E 02	-6.391E-10	-6.391E-10	6.391E-10
0.33059	23.5253	1.70000	152.607	1.692E 02	1.800E 02	-4.311E-10	-4.311E-10	4.311E-10
0.25428	36.3237	1.80000	174.122	1.692E 02	1.940E 02	-3.041E-10	-3.041E-10	3.041E-10
0.20006	57.7952	1.90000	195.638	1.692E 02	2.066E 02	-2.145E-10	-2.145E-10	2.145E-10
0.18814	87.4461	2.00000	217.154	1.692E 02	2.179E 02	-1.531E-10	-1.531E-10	1.531E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.025 θ_D=4.003E-07 ρ_a= 1.005

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.806E-09	399.209	-5.297E-07	-5.297E-07	5.297E-07	5.297E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.015E-07	-8.015E-07	8.015E-07	8.015E-07	-7.170E-08	-7.170E-08
0.90000	3.843E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.083E-08	461.585	-2.067E-06	-2.067E-06	2.067E-06	2.067E-06	-3.355E-07	-3.355E-07
0.95000	1.797E-07	474.060	-3.508E-06	-3.508E-06	3.508E-06	3.508E-06	-8.512E-07	-8.513E-07
0.96250	3.544E-07	480.297	-5.064E-06	-5.065E-06	5.064E-06	5.065E-06	-1.678E-06	-1.678E-06
0.97500	1.075E-06	486.534	-8.974E-06	-8.974E-06	8.974E-06	8.975E-06	-5.090E-06	-5.091E-06
0.98124	2.500E-06	489.652	-1.422E-05	-1.422E-05	1.422E-05	1.423E-05	-1.184E-05	-1.184E-05
0.98749	1.055E-05	492.769	-3.063E-05	-3.064E-05	3.066E-05	3.069E-05	-4.992E-05	-4.996E-05
0.99373	3.703E-04	495.884	-2.543E-04	-2.549E-04	2.573E-04	2.584E-04	-1.744E-03	-1.750E-03
0.99081	4.022E-05	494.424	4.573E 00	4.573E 00	4.611E 00	4.611E 00	-1.909E-04	-1.906E-04
0.98467	4.879E-06	491.362	1.075E 01	1.075E 01	1.079E 01	1.079E 01	-2.313E-05	-2.312E-05
0.97853	1.657E-06	488.300	1.694E 01	1.694E 01	1.697E 01	1.697E 01	-7.850E-06	-7.848E-06
0.97240	7.703E-07	485.238	2.312E 01	2.312E 01	2.315E 01	2.315E 01	-3.650E-06	-3.649E-06
0.96627	4.616E-07	482.178	2.929E 01	2.929E 01	2.933E 01	2.933E 01	-2.187E-06	-2.187E-06
0.95400	2.035E-07	476.059	4.165E 01	4.165E 01	4.169E 01	4.169E 01	-9.639E-07	-9.638E-07
0.94175	1.258E-07	469.943	5.401E 01	5.401E 01	5.404E 01	5.404E 01	-5.958E-07	-5.957E-07
0.91725	5.646E-08	457.720	7.870E 01	7.870E 01	7.874E 01	7.874E 01	-2.674E-07	-2.674E-07
0.89279	3.133E-08	445.512	1.034E 02	1.034E 02	1.034E 02	1.034E 02	-1.484E-07	-1.484E-07
0.84395	1.327E-08	421.142	1.527E 02	1.527E 02	1.527E 02	1.527E 02	-6.286E-08	-6.286E-08
0.79526	7.060E-09	396.845	2.020E 02	2.020E 02	2.020E 02	2.020E 02	-3.344E-08	-3.344E-08
0.69843	2.909E-09	348.527	3.002E 02	3.002E 02	3.002E 02	3.002E 02	-1.378E-08	-1.378E-08
0.60264	1.536E-09	300.726	3.979E 02	3.979E 02	3.979E 02	3.979E 02	-7.274E-09	-7.274E-09
0.50848	9.534E-10	253.736	4.948E 02	4.948E 02	4.948E 02	4.948E 02	-4.516E-09	-4.516E-09
0.41703	6.391E-10	208.105	5.903E 02	5.903E 02	5.903E 02	5.903E 02	-3.027E-09	-3.027E-09
0.33059	4.311E-10	164.966	6.833E 02	6.833E 02	6.834E 02	6.834E 02	-2.042E-09	-2.042E-09
0.25428	3.041E-10	126.887	7.713E 02	7.713E 02	7.714E 02	7.714E 02	-1.440E-09	-1.440E-09
0.20006	2.145E-10	99.835	8.483E 02	8.483E 02	8.483E 02	8.483E 02	-1.016E-09	-1.016E-09
0.18814	1.531E-10	93.882	9.041E 02	9.041E 02	9.042E 02	9.042E 02	-7.252E-10	-7.252E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.025 θ_D= 4.003E-07 ρ_a= 1.005

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-9.934E-20
0.10000	1.688E-13	-5.007E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-1.333E-19
0.20000	-3.177E-13	6.909E-14	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.906E-19
0.30000	3.362E-13	-5.755E-13	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-2.996E-19
0.40000	-1.361E-12	-1.043E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-5.073E-19
0.50000	7.407E-13	-1.710E-13	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-1.015E-18
0.60000	3.730E-12	5.715E-13	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-2.374E-18
0.70000	9.758E-12	9.237E-12	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-6.939E-18
0.80000	4.023E-11	4.004E-11	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-3.143E-17
0.85000	1.204E-10	1.175E-10	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-9.106E-17
0.90000	4.747E-10	4.747E-10	-2.289E-18	-2.289E-18	-1.357E-08	-1.357E-08	-4.086E-16
0.92500	1.176E-09	1.181E-09	-5.291E-18	-5.291E-18	-2.697E-08	-2.697E-08	-1.245E-15
0.95000	4.621E-09	4.624E-09	-2.101E-17	-2.101E-17	-6.782E-08	-6.783E-08	-5.590E-15
0.96250	1.245E-08	1.246E-08	-6.099E-17	-6.100E-17	-1.347E-07	-1.347E-07	-1.592E-14
0.97500	5.923E-08	5.922E-08	-3.537E-16	-3.539E-16	-4.307E-07	-4.308E-07	-5.974E-14
0.98124	1.859E-07	1.861E-07	-1.390E-15	-1.391E-15	-1.135E-06	-1.135E-06	-1.441E-13
0.98749	1.256E-06	1.258E-06	-1.508E-14	-1.511E-14	-5.981E-06	-5.988E-06	-3.875E-13
0.99373	9.555E-05	9.593E-05	-1.349E-11	-1.359E-11	-1.123E-03	-1.130E-03	-6.928E-13
0.99081	-3.183E-03	-3.183E-03	-1.790E-13	-1.785E-13	-1.094E 04	-1.094E 04	-6.087E-13
0.98467	-1.684E-03	-1.683E-03	-4.159E-15	-4.154E-15	-1.094E 04	-1.094E 04	-2.294E-13
0.97853	-1.143E-03	-1.143E-03	-7.134E-16	-7.129E-16	-1.094E 04	-1.094E 04	-8.888E-14
0.97240	-8.655E-04	-8.654E-04	-2.111E-16	-2.111E-16	-1.094E 04	-1.094E 04	-4.208E-14
0.96627	-6.963E-04	-6.962E-04	-9.312E-17	-9.310E-17	-1.094E 04	-1.094E 04	-2.099E-14
0.95400	-5.005E-04	-5.005E-04	-2.550E-17	-2.550E-17	-1.094E 04	-1.094E 04	-7.375E-15
0.94176	-3.907E-04	-3.907E-04	-1.205E-17	-1.204E-17	-1.094E 04	-1.094E 04	-2.881E-15
0.91725	-2.715E-04	-2.715E-04	-3.878E-18	-3.877E-18	-1.094E 04	-1.094E 04	-7.772E-16
0.89279	-2.081E-04	-2.081E-04	-1.695E-18	-1.695E-18	-1.094E 04	-1.094E 04	-2.947E-16
0.84395	-1.418E-04	-1.418E-04	-4.390E-19	-4.390E-19	-1.094E 04	-1.094E 04	-7.257E-17
0.79626	-1.075E-04	-1.075E-04	-1.727E-19	-1.727E-19	-1.094E 04	-1.094E 04	-2.651E-17
0.69843	-7.250E-05	-7.250E-05	-4.547E-20	-4.547E-20	-1.094E 04	-1.094E 04	-6.178E-18
0.60264	-5.469E-05	-5.468E-05	-1.773E-20	-1.773E-20	-1.094E 04	-1.094E 04	-2.179E-18
0.50848	-4.390E-05	-4.390E-05	-8.763E-21	-8.763E-21	-1.094E 04	-1.094E 04	-9.454E-19
0.41703	-3.667E-05	-3.666E-05	-4.796E-21	-4.796E-21	-1.094E 04	-1.094E 04	-4.810E-19
0.33059	-3.148E-05	-3.148E-05	-2.640E-21	-2.640E-21	-1.094E 04	-1.094E 04	-2.866E-19
0.25428	-2.758E-05	-2.758E-05	-1.515E-21	-1.515E-21	-1.094E 04	-1.094E 04	-1.841E-19
0.20006	-2.464E-05	-2.454E-05	-8.693E-22	-8.693E-22	-1.094E 04	-1.094E 04	-1.298E-19
0.18814	-2.210E-05	-2.210E-05	-4.983E-22	-4.983E-22	-1.094E 04	-1.094E 04	-9.722E-20

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.030 θ_D= 4.803E-07 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0300	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0300	0.10000	193.643	5.029E-09	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0300	0.20000	172.127	6.149E-09	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0300	0.30000	150.611	9.067E-09	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0300	0.40000	129.095	1.313E-08	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0300	0.50000	107.579	1.793E-08	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0300	0.60000	86.064	1.793E-08	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0300	0.70000	64.548	7.170E-08	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0300	0.80000	43.032	2.285E-07	1.000E 00	-7.806E-09	-7.806E-09	7.806E-09
0.85000	0.0300	0.85000	32.274	5.970E-07	1.000E 00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0300	0.90000	21.516	2.074E-06	1.000E 00	-3.843E-08	-3.843E-08	3.843E-08
0.92500	0.0300	0.92500	16.138	5.073E-06	1.000E 00	-7.083E-08	-7.083E-08	7.083E-08
0.95000	0.0300	0.95000	10.759	1.734E-05	1.000E 00	-1.797E-07	-1.797E-07	1.797E-07
0.96250	0.0300	0.96250	8.070	4.147E-05	1.000E 00	-3.543E-07	-3.543E-07	3.543E-07
0.97500	0.0300	0.97500	5.381	1.406E-04	1.000E 00	-1.074E-06	-1.075E-06	1.074E-06
0.98124	0.0300	0.98125	4.037	3.347E-04	1.000E 00	-2.498E-06	-2.499E-06	2.498E-06
0.98749	0.0300	0.98750	2.694	1.139E-03	1.000E 00	-1.053E-05	-1.054E-05	1.053E-05
0.99373	0.0300	0.99375	1.353	1.039E-02	1.000E 00	-3.663E-04	-3.676E-04	3.658E-04
0.99090	0.0900	1.00000	1.988	1.670E 02	2.997E 00	-4.127E-05	-4.120E-05	4.130E-05
0.98482	0.1718	1.00626	3.328	1.670E 02	5.663E 00	-4.955E-06	-4.952E-06	4.956E-06
0.97874	0.2548	1.01250	4.670	1.670E 02	8.300E 00	-1.674E-06	-1.673E-06	1.674E-06
0.97266	0.3389	1.01875	6.014	1.670E 02	1.090E 01	-7.753E-07	-7.752E-07	7.754E-07
0.96658	0.4240	1.02500	7.358	1.670E 02	1.348E 01	-4.647E-07	-4.646E-07	4.647E-07
0.95443	0.5975	1.03750	10.047	1.670E 02	1.854E 01	-2.041E-07	-2.041E-07	2.041E-07
0.94228	0.7756	1.05000	12.736	1.670E 02	2.347E 01	-1.262E-07	-1.262E-07	1.262E-07
0.91802	1.1458	1.07500	18.114	1.670E 02	3.300E 01	-5.658E-08	-5.657E-08	5.656E-08
0.89379	1.5361	1.10000	23.493	1.670E 02	4.210E 01	-3.138E-08	-3.138E-08	3.138E-08
0.84548	2.3837	1.15000	34.251	1.670E 02	5.910E 01	-1.329E-08	-1.329E-08	1.329E-08
0.79737	3.3338	1.20000	45.008	1.670E 02	7.469E 01	-7.066E-09	-7.066E-09	7.066E-09
0.70194	5.6232	1.30000	66.524	1.670E 02	1.023E 02	-2.910E-09	-2.910E-09	2.910E-09
0.60798	8.6262	1.40000	88.040	1.670E 02	1.259E 02	-1.536E-09	-1.536E-09	1.536E-09
0.51630	12.7106	1.50000	109.556	1.670E 02	1.464E 02	-9.537E-10	-9.537E-10	9.537E-10
0.42836	18.5128	1.60000	131.072	1.670E 02	1.643E 02	-6.393E-10	-6.393E-10	6.393E-10
0.34701	27.1636	1.70000	152.588	1.670E 02	1.802E 02	-4.312E-10	-4.312E-10	4.312E-10
0.27810	40.5598	1.80000	174.103	1.670E 02	1.942E 02	-3.042E-10	-3.042E-10	3.042E-10
0.23294	60.7496	1.90000	195.619	1.670E 02	2.068E 02	-2.146E-10	-2.146E-10	2.146E-10
0.22625	85.8516	2.00000	217.135	1.670E 02	2.181E 02	-1.532E-10	-1.532E-10	1.532E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.030 θ_D= 4.803E-07 ρ_a= 1.005

z	$_x\mu'-1$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.806E-09	399.209	-5.297E-07	-5.297E-07	5.297E-07	5.297E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.015E-07	-8.015E-07	8.015E-07	8.015E-07	-7.170E-08	-7.170E-08
0.90000	3.843E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.083E-08	461.585	-2.067E-06	-2.067E-06	2.067E-06	2.067E-06	-3.355E-07	-3.355E-07
0.95000	1.797E-07	474.060	-3.508E-06	-3.508E-06	3.508E-06	3.508E-06	-8.512E-07	-8.513E-07
0.96250	3.543E-07	480.297	-5.064E-06	-5.065E-06	5.064E-06	5.065E-06	-1.678E-06	-1.678E-06
0.97500	1.075E-06	486.534	-8.973E-06	-8.974E-06	8.973E-06	8.975E-06	-5.089E-06	-5.091E-06
0.98124	2.500E-06	489.652	-1.422E-05	-1.422E-05	1.422E-05	1.422E-05	-1.183E-05	-1.184E-05
0.98749	1.055E-05	492.770	-3.061E-05	-3.063E-05	3.066E-05	3.068E-05	-4.988E-05	-4.992E-05
0.99373	3.683E-04	495.884	-2.531E-04	-2.536E-04	2.569E-04	2.580E-04	-1.735E-03	-1.741E-03
0.99090	4.117E-05	494.469	4.529E 00	4.529E 00	4.567E 00	4.567E 00	-1.955E-04	-1.952E-04
0.98482	4.951E-06	491.438	1.068E 01	1.068E 01	1.072E 01	1.072E 01	-2.347E-05	-2.346E-05
0.97874	1.673E-06	488.404	1.683E 01	1.683E 01	1.687E 01	1.687E 01	-7.927E-06	-7.925E-06
0.97266	7.751E-07	485.370	2.298E 01	2.298E 01	2.302E 01	2.302E 01	-3.672E-06	-3.672E-06
0.96658	4.646E-07	482.337	2.914E 01	2.914E 01	2.917E 01	2.917E 01	-2.201E-06	-2.201E-06
0.95443	2.041E-07	476.272	4.144E 01	4.144E 01	4.148E 01	4.148E 01	-9.669E-07	-9.668E-07
0.94228	1.262E-07	470.211	5.374E 01	5.374E 01	5.378E 01	5.378E 01	-5.977E-07	-5.976E-07
0.91802	5.657E-08	458.102	7.832E 01	7.832E 01	7.836E 01	7.836E 01	-2.680E-07	-2.680E-07
0.89379	3.138E-08	446.013	1.029E 02	1.029E 02	1.029E 02	1.029E 02	-1.486E-07	-1.486E-07
0.84548	1.329E-08	421.903	1.519E 02	1.519E 02	1.520E 02	1.520E 02	-6.293E-08	-6.293E-08
0.79737	7.066E-09	397.895	2.009E 02	2.009E 02	2.009E 02	2.009E 02	-3.347E-08	-3.347E-08
0.70194	2.910E-09	350.276	2.984E 02	2.984E 02	2.985E 02	2.985E 02	-1.379E-08	-1.379E-08
0.60798	1.536E-09	303.390	3.952E 02	3.952E 02	3.952E 02	3.952E 02	-7.277E-09	-7.277E-09
0.51630	9.537E-10	257.640	4.909E 02	4.909E 02	4.909E 02	4.909E 02	-4.517E-09	-4.517E-09
0.42836	6.393E-10	213.756	5.846E 02	5.846E 02	5.847E 02	5.847E 02	-3.028E-09	-3.028E-09
0.34701	4.312E-10	173.161	6.751E 02	6.751E 02	6.752E 02	6.752E 02	-2.042E-09	-2.042E-09
0.27810	3.042E-10	138.775	7.594E 02	7.594E 02	7.595E 02	7.595E 02	-1.441E-09	-1.441E-09
0.23294	2.146E-10	116.242	8.319E 02	8.319E 02	8.319E 02	8.319E 02	-1.016E-09	-1.016E-09
0.22625	1.532E-10	112.899	8.851E 02	8.851E 02	8.851E 02	8.851E 02	-7.254E-10	-7.254E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o=0.030 θ_D=4.803E-07 ρ_a=1.005

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.431E-19
0.10000	1.094E-13	3.346E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-1.919E-19
0.20000	-1.282E-14	2.092E-13	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-2.745E-19
0.30000	4.119E-13	-3.173E-13	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-4.315E-19
0.40000	3.798E-13	3.798E-13	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-7.304E-19
0.50000	1.617E-12	1.987E-12	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-1.462E-18
0.60000	4.943E-12	2.901E-12	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-3.419E-18
0.70000	1.258E-11	1.361E-11	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-9.992E-18
0.80000	5.658E-11	5.574E-11	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-4.525E-17
0.85000	1.545E-10	1.561E-10	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-1.311E-16
0.90000	5.949E-10	6.027E-10	-2.289E-18	-2.289E-18	-1.357E-08	-1.357E-08	-5.883E-16
0.92500	1.491E-09	1.494E-09	-5.291E-18	-5.291E-18	-2.697E-08	-2.697E-08	-1.793E-15
0.95000	5.766E-09	5.772E-09	-2.101E-17	-2.101E-17	-6.782E-08	-6.783E-08	-8.049E-15
0.96250	1.564E-08	1.553E-08	-6.099E-17	-6.100E-17	-1.347E-07	-1.347E-07	-2.293E-14
0.97500	7.375E-08	7.373E-08	-3.536E-16	-3.538E-16	-4.306E-07	-4.307E-07	-8.601E-14
0.98124	2.314E-07	2.315E-07	-1.389E-15	-1.390E-15	-1.134E-06	-1.135E-06	-2.075E-13
0.98749	1.555E-06	1.557E-06	-1.506E-14	-1.509E-14	-5.976E-06	-5.983E-06	-5.577E-13
0.99373	1.178E-04	1.183E-04	-1.336E-11	-1.345E-11	-1.113E-03	-1.120E-03	-9.978E-13
0.99090	-2.887E-03	-2.887E-03	-1.871E-13	-1.865E-13	-1.092E 04	-1.093E 04	-8.833E-13
0.98482	-1.525E-03	-1.526E-03	-4.261E-15	-4.256E-15	-1.092E 04	-1.093E 04	-3.338E-13
0.97874	-1.034E-03	-1.034E-03	-7.247E-16	-7.243E-16	-1.092E 04	-1.093E 04	-1.293E-13
0.97266	-7.825E-04	-7.825E-04	-2.132E-16	-2.131E-16	-1.092E 04	-1.093E 04	-6.121E-14
0.96658	-6.292E-04	-6.292E-04	-9.407E-17	-9.405E-17	-1.092E 04	-1.093E 04	-3.045E-14
0.95443	-4.521E-04	-4.521E-04	-2.563E-17	-2.562E-17	-1.092E 04	-1.093E 04	-1.070E-14
0.94228	-3.528E-04	-3.528E-04	-1.211E-17	-1.210E-17	-1.092E 04	-1.093E 04	-4.171E-15
0.91802	-2.451E-04	-2.451E-04	-3.889E-18	-3.888E-18	-1.092E 04	-1.093E 04	-1.124E-15
0.89379	-1.877E-04	-1.877E-04	-1.700E-18	-1.700E-18	-1.092E 04	-1.093E 04	-4.257E-16
0.84548	-1.279E-04	-1.279E-04	-4.398E-19	-4.398E-19	-1.092E 04	-1.093E 04	-1.047E-16
0.79737	-9.700E-05	-9.700E-05	-1.729E-19	-1.729E-19	-1.092E 04	-1.093E 04	-3.824E-17
0.70194	-6.539E-05	-6.539E-05	-4.551E-20	-4.551E-20	-1.092E 04	-1.093E 04	-8.905E-18
0.60798	-4.932E-05	-4.932E-05	-1.774E-20	-1.774E-20	-1.092E 04	-1.093E 04	-3.140E-18
0.51630	-3.959E-05	-3.959E-05	-8.767E-21	-8.767E-21	-1.092E 04	-1.093E 04	-1.362E-18
0.42836	-3.307E-05	-3.307E-05	-4.798E-21	-4.798E-21	-1.092E 04	-1.093E 04	-6.930E-19
0.34701	-2.839E-05	-2.839E-05	-2.641E-21	-2.641E-21	-1.092E 04	-1.093E 04	-4.128E-19
0.27810	-2.487E-05	-2.487E-05	-1.516E-21	-1.516E-21	-1.092E 04	-1.093E 04	-2.652E-19
0.23294	-2.213E-05	-2.213E-05	-8.698E-22	-8.698E-22	-1.092E 04	-1.093E 04	-1.869E-19
0.22625	-1.993E-05	-1.993E-05	-4.986E-22	-4.986E-22	-1.092E 04	-1.093E 04	-1.400E-19

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.040 θ_D= 6.404E-07 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0400	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0400	0.10000	193.643	7.921E-09	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0400	0.20000	172.127	1.011E-08	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0400	0.30000	150.611	1.271E-08	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0400	0.40000	129.095	1.793E-08	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0400	0.50000	107.580	2.585E-08	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0400	0.60000	86.064	2.918E-08	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0400	0.70000	64.548	1.042E-07	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0400	0.80000	43.032	3.368E-07	1.000E 00	-7.806E-09	-7.806E-09	7.806E-09
0.85000	0.0400	0.85000	32.274	8.704E-07	1.000E 00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0400	0.90000	21.517	3.045E-06	1.000E 00	-3.843E-08	-3.843E-08	3.843E-08
0.92500	0.0400	0.92500	16.138	7.430E-06	1.000E 00	-7.083E-08	-7.083E-08	7.083E-08
0.95000	0.0400	0.95000	10.759	2.539E-05	1.000E 00	-1.797E-07	-1.797E-07	1.797E-07
0.96250	0.0400	0.96250	8.070	6.071E-05	1.000E 00	-3.542E-07	-3.542E-07	3.542E-07
0.97500	0.0400	0.97500	5.382	2.058E-04	1.000E 00	-1.074E-06	-1.074E-06	1.074E-06
0.98124	0.0400	0.98125	4.038	4.893E-04	1.000E 00	-2.496E-06	-2.497E-06	2.496E-06
0.98749	0.0400	0.98750	2.696	1.461E-03	1.000E 00	-1.050E-05	-1.051E-05	1.050E-05
0.99373	0.0400	0.99375	1.357	1.489E-02	1.000E 00	-3.595E-04	-3.608E-04	3.590E-04
0.99101	0.1193	1.00000	1.985	1.627E 02	3.000E 00	-4.147E-05	-4.140E-05	4.151E-05
0.98505	0.2278	1.00625	3.327	1.627E 02	5.683E 00	-4.959E-06	-4.956E-06	4.960E-06
0.97909	0.3377	1.01250	4.670	1.627E 02	8.334E 00	-1.674E-06	-1.673E-06	1.674E-06
0.97314	0.4490	1.01875	6.014	1.627E 02	1.095E 01	-7.753E-07	-7.751E-07	7.754E-07
0.96719	0.5616	1.02500	7.358	1.627E 02	1.354E 01	-4.646E-07	-4.645E-07	4.646E-07
0.95529	0.7911	1.03750	10.047	1.627E 02	1.862E 01	-2.041E-07	-2.041E-07	2.041E-07
0.94342	1.0264	1.05000	12.737	1.627E 02	2.358E 01	-1.262E-07	-1.262E-07	1.262E-07
0.91972	1.5151	1.07500	18.115	1.627E 02	3.315E 01	-5.657E-08	-5.657E-08	5.657E-08
0.89608	2.0297	1.10000	23.494	1.627E 02	4.228E 01	-3.138E-08	-3.138E-08	3.138E-08
0.84905	3.1448	1.15000	34.252	1.627E 02	5.936E 01	-1.329E-08	-1.329E-08	1.329E-08
0.80238	4.3896	1.20000	45.009	1.627E 02	7.502E 01	-7.066E-09	-7.066E-09	7.066E-09
0.71039	7.3668	1.30000	66.525	1.627E 02	1.027E 02	-2.910E-09	-2.910E-09	2.910E-09
0.62089	11.2156	1.40000	88.041	1.627E 02	1.265E 02	-1.536E-09	-1.536E-09	1.536E-09
0.53512	16.3277	1.50000	109.557	1.627E 02	1.470E 02	-9.537E-10	-9.537E-10	9.537E-10
0.45520	23.3089	1.60000	131.073	1.627E 02	1.650E 02	-6.393E-10	-6.393E-10	6.393E-10
0.38477	33.0406	1.70000	152.589	1.627E 02	1.809E 02	-4.312E-10	-4.312E-10	4.312E-10
0.33000	46.5241	1.80000	174.105	1.627E 02	1.951E 02	-3.042E-10	-3.042E-10	3.042E-10
0.29958	63.9502	1.90000	195.620	1.627E 02	2.077E 02	-2.146E-10	-2.146E-10	2.146E-10
0.30099	83.1188	2.00000	217.136	1.627E 02	2.191E 02	-1.532E-10	-1.532E-10	1.532E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.040 θ_D=6.404E-07 ρ_a=1.005

z	$_x\mu'$-1.0	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.806E-09	399.209	-5.297E-07	-5.297E-07	5.297E-07	5.297E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.015E-07	-8.015E-07	8.014E-07	8.015E-07	-7.170E-08	-7.170E-08
0.90000	3.843E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.083E-08	461.585	-2.067E-06	-2.067E-06	2.067E-06	2.067E-06	-3.355E-07	-3.355E-07
0.95000	1.797E-07	474.060	-3.508E-06	-3.508E-06	3.508E-06	3.508E-06	-8.511E-07	-8.512E-07
0.96250	3.543E-07	480.297	-5.064E-06	-5.064E-06	5.064E-06	5.064E-06	-1.678E-06	-1.678E-06
0.97500	1.074E-06	486.534	-8.971E-06	-8.972E-06	8.972E-06	8.974E-06	-5.087E-06	-5.088E-06
0.98124	2.498E-06	489.652	-1.421E-05	-1.421E-05	1.422E-05	1.422E-05	-1.182E-05	-1.183E-05
0.98749	1.052E-05	492.769	-3.055E-05	-3.056E-05	3.065E-05	3.067E-05	-4.975E-05	-4.979E-05
0.99373	3.615E-04	495.883	-2.481E-04	-2.486E-04	2.562E-04	2.573E-04	-1.703E-03	-1.709E-03
0.99101	4.137E-05	494.525	4.472E 00	4.472E 00	4.510E 00	4.510E 00	-1.964E-04	-1.961E-04
0.98505	4.955E-06	491.551	1.056E 01	1.056E 01	1.060E 01	1.060E 01	-2.349E-05	-2.348E-05
0.97909	1.673E-06	488.579	1.666E 01	1.666E 01	1.669E 01	1.669E 01	-7.928E-06	-7.926E-06
0.97314	7.751E-07	485.607	2.275E 01	2.275E 01	2.278E 01	2.278E 01	-3.672E-06	-3.672E-06
0.96719	4.645E-07	482.637	2.883E 01	2.883E 01	2.887E 01	2.887E 01	-2.201E-06	-2.200E-06
0.95529	2.041E-07	476.703	4.101E 01	4.101E 01	4.104E 01	4.104E 01	-9.668E-07	-9.668E-07
0.94342	1.262E-07	470.777	5.317E 01	5.317E 01	5.321E 01	5.321E 01	-5.976E-07	-5.976E-07
0.91972	5.657E-08	458.949	7.747E 01	7.747E 01	7.751E 01	7.751E 01	-2.679E-07	-2.679E-07
0.89608	3.138E-08	447.156	1.017E 02	1.017E 02	1.018E 02	1.018E 02	-1.486E-07	-1.486E-07
0.84905	1.329E-08	423.687	1.502E 02	1.502E 02	1.502E 02	1.502E 02	-6.293E-08	-6.293E-08
0.80238	7.066E-09	400.397	1.984E 02	1.984E 02	1.984E 02	1.984E 02	-3.347E-08	-3.347E-08
0.71039	2.910E-09	354.495	2.942E 02	2.942E 02	2.942E 02	2.942E 02	-1.378E-08	-1.378E-08
0.62089	1.536E-09	309.833	3.888E 02	3.888E 02	3.888E 02	3.888E 02	-7.277E-09	-7.277E-09
0.53512	9.537E-10	267.032	4.815E 02	4.815E 02	4.815E 02	4.815E 02	-4.517E-09	-4.517E-09
0.45520	6.393E-10	227.148	5.713E 02	5.713E 02	5.713E 02	5.713E 02	-3.028E-09	-3.028E-09
0.38477	4.312E-10	192.006	6.563E 02	6.563E 02	6.563E 02	6.563E 02	-2.042E-09	-2.042E-09
0.33000	3.042E-10	164.672	7.335E 02	7.335E 02	7.336E 02	7.336E 02	-1.441E-09	-1.441E-09
0.29958	2.146E-10	149.492	7.986E 02	7.986E 02	7.987E 02	7.987E 02	-1.016E-09	-1.016E-09
0.30099	1.532E-10	150.196	8.478E 02	8.478E 02	8.479E 02	8.479E 02	-7.254E-10	-7.254E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.040 θ_D= 6.404E-07 ρ_a= 1.005

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-2.543E-19
0.10000	-1.380E-13	6.376E-14	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-3.412E-19
0.20000	7.977E-14	-1.007E-13	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-4.880E-19
0.30000	3.967E-13	2.764E-13	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-7.671E-19
0.40000	9.776E-13	9.776E-13	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-1.299E-18
0.50000	2.261E-12	2.618E-12	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-2.599E-18
0.60000	6.261E-12	5.610E-12	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-6.078E-18
0.70000	1.782E-11	1.824E-11	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-1.776E-17
0.80000	7.715E-11	7.503E-11	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-8.045E-17
0.85000	2.089E-10	2.089E-10	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-2.331E-16
0.90000	8.153E-10	8.127E-10	-2.289E-18	-2.289E-18	-1.357E-08	-1.357E-08	-1.046E-15
0.92500	2.018E-09	2.021E-09	-5.291E-18	-5.291E-18	-2.697E-08	-2.697E-08	-3.188E-15
0.95000	7.843E-09	7.839E-09	-2.100E-17	-2.101E-17	-6.782E-08	-6.782E-08	-1.431E-14
0.96250	2.111E-08	2.112E-08	-6.096E-17	-6.097E-17	-1.347E-07	-1.347E-07	-4.075E-14
0.97500	1.002E-07	1.002E-07	-3.534E-16	-3.535E-16	-4.304E-07	-4.305E-07	-1.528E-13
0.98124	3.145E-07	3.146E-07	-1.387E-15	-1.388E-15	-1.133E-06	-1.134E-06	-3.684E-13
0.98749	2.099E-06	2.102E-06	-1.499E-14	-1.502E-14	-5.958E-06	-5.965E-06	-9.897E-13
0.99373	1.569E-04	1.576E-04	-1.287E-11	-1.296E-11	-1.080E-03	-1.087E-03	-1.776E-12
0.99101	-2.766E-03	-2.766E-03	-1.889E-13	-1.883E-13	-1.066E 04	-1.067E 04	-1.573E-12
0.98505	-1.487E-03	-1.458E-03	-4.267E-15	-4.262E-15	-1.066E 04	-1.067E 04	-5.938E-13
0.97909	-9.882E-04	-9.883E-04	-7.249E-16	-7.245E-16	-1.066E 04	-1.067E 04	-2.299E-13
0.97314	-7.474E-04	-7.475E-04	-2.132E-16	-2.131E-16	-1.066E 04	-1.067E 04	-1.088E-13
0.96719	-6.010E-04	-6.010E-04	-9.406E-17	-9.403E-17	-1.066E 04	-1.067E 04	-5.413E-14
0.95529	-4.318E-04	-4.318E-04	-2.562E-17	-2.562E-17	-1.066E 04	-1.067E 04	-1.901E-14
0.94342	-3.369E-04	-3.369E-04	-1.210E-17	-1.210E-17	-1.066E 04	-1.067E 04	-7.413E-15
0.91972	-2.341E-04	-2.341E-04	-3.888E-18	-3.888E-18	-1.066E 04	-1.067E 04	-1.997E-15
0.89608	-1.793E-04	-1.793E-04	-1.700E-18	-1.700E-18	-1.066E 04	-1.067E 04	-7.567E-16
0.84905	-1.222E-04	-1.222E-04	-4.397E-19	-4.397E-19	-1.066E 04	-1.067E 04	-1.861E-16
0.80238	-9.264E-05	-9.266E-05	-1.729E-19	-1.729E-19	-1.066E 04	-1.067E 04	-6.797E-17
0.71039	-6.246E-05	-6.246E-05	-4.551E-20	-4.551E-20	-1.066E 04	-1.067E 04	-1.583E-17
0.62089	-4.711E-05	-4.711E-05	-1.774E-20	-1.774E-20	-1.066E 04	-1.067E 04	-5.582E-18
0.53512	-3.781E-05	-3.782E-05	-8.767E-21	-8.767E-21	-1.066E 04	-1.067E 04	-2.422E-18
0.45520	-3.158E-05	-3.159E-05	-4.798E-21	-4.798E-21	-1.066E 04	-1.067E 04	-1.232E-18
0.38477	-2.712E-05	-2.712E-05	-2.641E-21	-2.641E-21	-1.066E 04	-1.067E 04	-7.339E-19
0.33000	-2.375E-05	-2.376E-05	-1.516E-21	-1.516E-21	-1.066E 04	-1.067E 04	-4.715E-19
0.29958	-2.114E-05	-2.114E-05	-8.697E-22	-8.697E-22	-1.066E 04	-1.067E 04	-3.323E-19
0.30099	-1.904E-05	-1.904E-05	-4.985E-22	-4.985E-22	-1.066E 04	-1.067E 04	-2.489E-19

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.050 θ_D= 8.003E-07 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0500	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0500	0.10000	193.643	1.235E-08	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0500	0.20000	172.127	1.511E-08	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0500	0.30000	150.611	1.959E-08	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0500	0.40000	129.095	2.626E-08	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0500	0.50000	107.580	3.335E-08	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0500	0.60000	86.064	3.335E-08	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0500	0.70000	64.548	1.267E-07	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0500	0.80000	43.032	4.052E-07	1.000E 00	-7.806E-09	-7.806E-09	7.806E-09
0.85000	0.0500	0.85000	32.274	1.047E-06	1.000E 00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0500	0.90000	21.517	3.642E-06	1.000E-00	-3.843E-08	-3.843E-08	3.843E-08
0.92500	0.0500	0.92500	16.138	8.918E-06	1.000E-00	-7.082E-08	-7.083E-08	7.082E-08
0.95000	0.0500	0.95000	10.760	3.040E-05	1.000E-00	-1.797E-07	-1.797E-07	1.797E-07
0.96250	0.0500	0.96250	8.071	7.276E-05	1.000E-00	-3.541E-07	-3.541E-07	3.541E-07
0.97500	0.0500	0.97500	5.383	2.465E-04	1.000E-00	-1.073E-06	-1.074E-06	1.073E-06
0.98124	0.0500	0.98125	4.040	5.860E-04	1.000E-00	-2.494E-06	-2.495E-06	2.493E-06
0.98749	0.0500	0.98750	2.698	1.988E-03	9.999E-01	-1.047E-05	-1.048E-05	1.047E-05
0.99373	0.0501	0.99375	1.362	1.776E-02	9.997E-01	-3.521E-04	-3.533E-04	3.516E-04
0.99121	0.1476	1.00000	1.971	1.583E 02	2.992E 00	-4.283E-05	-4.276E-05	4.287E-05
0.98542	0.2824	1.00625	3.309	1.583E 02	5.691E 00	-5.051E-06	-5.048E-06	5.053E-06
0.97963	0.4188	1.01250	4.651	1.583E 02	8.358E 00	-1.694E-06	-1.693E-06	1.694E-06
0.97384	0.5570	1.01875	5.995	1.583E 02	1.099E 01	-7.817E-07	-7.816E-07	7.818E-07
0.96806	0.6968	1.02500	7.338	1.583E 02	1.360E 01	-4.682E-07	-4.681E-07	4.682E-07
0.95652	0.9816	1.03750	10.027	1.583E 02	1.871E 01	-2.049E-07	-2.049E-07	2.049E-07
0.94499	1.2733	1.05000	12.715	1.583E 02	2.370E 01	-1.266E-07	-1.266E-07	1.266E-07
0.92202	1.8786	1.07500	18.094	1.583E 02	3.334E 01	-5.671E-08	-5.671E-08	5.671E-08
0.89916	2.5148	1.10000	23.472	1.583E 02	4.254E 01	-3.144E-08	-3.144E-08	3.144E-08
0.85379	3.8890	1.15000	34.230	1.583E 02	5.974E 01	-1.331E-08	-1.331E-08	1.331E-08
0.80897	5.4165	1.20000	44.988	1.583E 02	7.551E 01	-7.074E-09	-7.074E-09	7.074E-09
0.72136	9.0341	1.30000	66.503	1.583E 02	1.034E 02	-2.912E-09	-2.912E-09	2.912E-09
0.63742	13.6273	1.40000	88.019	1.583E 02	1.273E 02	-1.537E-09	-1.537E-09	1.537E-09
0.55879	19.5611	1.50000	109.535	1.583E 02	1.480E 02	-9.541E-10	-9.541E-10	9.541E-10
0.48804	27.3211	1.60000	131.051	1.583E 02	1.662E 02	-6.396E-10	-6.396E-10	6.396E-10
0.42909	37.4482	1.70000	152.566	1.583E 02	1.822E 02	-4.313E-10	-4.313E-10	4.313E-10
0.38737	50.2469	1.80000	174.082	1.583E 02	1.964E 02	-3.043E-10	-3.043E-10	3.043E-10
0.36878	65.1839	1.90000	195.598	1.583E 02	2.091E 02	-2.146E-10	-2.146E-10	2.146E-10
0.37674	80.5525	2.00000	217.114	1.583E 02	2.206E 02	-1.532E-10	-1.532E-10	1.532E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.050 θ_D= 8.003E-07 ρ_a= 1.005

z	$_x\mu'-1$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.806E-09	399.209	-5.297E-07	-5.297E-07	5.297E-07	5.297E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.014E-07	-8.014E-07	8.014E-07	8.015E-07	-7.170E-08	-7.170E-08
0.90000	3.843E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.083E-08	461.585	-2.067E-06	-2.067E-06	2.067E-06	2.067E-06	-3.355E-07	-3.355E-07
0.95000	1.797E-07	474.060	-3.508E-06	-3.508E-06	3.508E-06	3.508E-06	-8.511E-07	-8.511E-07
0.96250	3.542E-07	480.297	-5.064E-06	-5.064E-06	5.064E-06	5.064E-06	-1.677E-06	-1.677E-06
0.97500	1.074E-06	486.534	-8.969E-06	-8.969E-06	8.970E-06	8.972E-06	-5.084E-06	-5.085E-06
0.98124	2.495E-06	489.652	-1.420E-05	-1.420E-05	1.421E-05	1.422E-05	-1.181E-05	-1.182E-05
0.98749	1.049E-05	492.770	-3.048E-05	-3.050E-05	3.063E-05	3.065E-05	-4.960E-05	-4.964E-05
0.99373	3.540E-04	495.884	-2.431E-04	-2.437E-04	2.548E-04	2.559E-04	-1.668E-03	-1.674E-03
0.99121	4.273E-05	494.623	4.374E 00	4.374E 00	4.412E 00	4.412E 00	-2.029E-04	-2.025E-04
0.98542	5.047E-06	491.735	1.038E 01	1.038E 01	1.042E 01	1.042E 01	-2.393E-05	-2.391E-05
0.97963	1.693E-06	488.846	1.639E 01	1.639E 01	1.643E 01	1.643E 01	-8.024E-06	-8.021E-06
0.97384	7.815E-07	485.959	2.239E 01	2.239E 01	2.243E 01	2.243E 01	-3.703E-06	-3.702E-06
0.96806	4.681E-07	483.074	2.840E 01	2.840E 01	2.844E 01	2.844E 01	-2.218E-06	-2.217E-06
0.95652	2.049E-07	477.312	4.040E 01	4.040E 01	4.044E 01	4.044E 01	-9.704E-07	-9.703E-07
0.94499	1.266E-07	471.562	5.239E 01	5.239E 01	5.242E 01	5.242E 01	-5.998E-07	-5.998E-07
0.92202	5.671E-08	460.099	7.632E 01	7.632E 01	7.636E 01	7.636E 01	-2.686E-07	-2.686E-07
0.89916	3.144E-08	448.690	1.002E 02	1.002E 02	1.002E 02	1.002E 02	-1.489E-07	-1.489E-07
0.85379	1.330E-08	426.050	1.478E 02	1.478E 02	1.478E 02	1.478E 02	-6.302E-08	-6.302E-08
0.80897	7.074E-09	403.683	1.951E 02	1.951E 02	1.952E 02	1.952E 02	-3.351E-08	-3.351E-08
0.72136	2.912E-09	359.968	2.887E 02	2.887E 02	2.888E 02	2.888E 02	-1.379E-08	-1.379E-08
0.63742	1.537E-09	318.080	3.805E 02	3.805E 02	3.806E 02	3.806E 02	-7.281E-09	-7.281E-09
0.55879	9.541E-10	278.841	4.697E 02	4.697E 02	4.697E 02	4.697E 02	-4.519E-09	-4.519E-09
0.48804	6.396E-10	243.537	5.549E 02	5.549E 02	5.549E 02	5.549E 02	-3.029E-09	-3.029E-09
0.42909	4.313E-10	214.122	6.342E 02	6.342E 02	6.342E 02	6.342E 02	-2.043E-09	-2.043E-09
0.38737	3.043E-10	193.304	7.049E 02	7.049E 02	7.049E 02	7.049E 02	-1.441E-09	-1.441E-09
0.36878	2.146E-10	184.025	7.641E 02	7.641E 02	7.641E 02	7.641E 02	-1.017E-09	-1.017E-09
0.37674	1.532E-10	188.000	8.100E 02	8.100E 02	8.100E 02	8.100E 02	-7.257E-10	-7.257E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.050 θ_D= 8.003E-07 ρ_a= 1.005

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-3.974E-19
0.10000	1.552E-13	7.928E-14	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-5.331E-19
0.20000	3.379E-13	2.378E-13	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-7.625E-19
0.30000	8.599E-13	8.277E-13	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-1.199E-18
0.40000	1.759E-12	1.559E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-2.029E-18
0.50000	3.482E-12	3.564E-12	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-4.061E-18
0.60000	8.212E-12	8.415E-12	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-9.496E-18
0.70000	2.402E-11	2.425E-11	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-2.776E-17
0.80000	1.002E-10	9.938E-11	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-1.257E-16
0.85000	2.684E-10	2.673E-10	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-3.642E-16
0.90000	1.035E-09	1.025E-09	-2.288E-18	-2.289E-18	-1.357E-08	-1.357E-08	-1.634E-15
0.92500	2.566E-09	2.569E-09	-5.290E-18	-5.290E-18	-2.697E-08	-2.697E-08	-4.980E-15
0.95000	9.934E-09	9.930E-09	-2.100E-17	-2.100E-17	-6.781E-08	-6.781E-08	-2.235E-14
0.96250	2.672E-08	2.672E-08	-6.093E-17	-6.095E-17	-1.347E-07	-1.347E-07	-6.366E-14
0.97500	1.267E-07	1.268E-07	-3.531E-16	-3.532E-16	-4.302E-07	-4.303E-07	-2.386E-13
0.98124	3.945E-07	3.947E-07	-1.385E-15	-1.386E-15	-1.132E-06	-1.133E-06	-5.749E-13
0.98749	2.621E-06	2.624E-06	-1.492E-14	-1.494E-14	-5.938E-06	-5.945E-06	-1.543E-12
0.99373	1.930E-04	1.937E-04	-1.235E-11	-1.244E-11	-1.045E-03	-1.051E-03	-2.778E-12
0.99121	-2.932E-03	-2.933E-03	-2.008E-13	-2.002E-13	-1.042E 04	-1.042E 04	-2.485E-12
0.98542	-1.541E-03	-1.541E-03	-4.399E-15	-4.394E-15	-1.042E 04	-1.042E 04	-9.401E-13
0.97963	-1.043E-03	-1.043E-03	-7.391E-16	-7.387E-16	-1.042E 04	-1.042E 04	-3.636E-13
0.97384	-7.884E-04	-7.885E-04	-2.160E-16	-2.159E-16	-1.042E 04	-1.042E 04	-1.720E-13
0.96806	-6.336E-04	-6.337E-04	-9.522E-17	-9.519E-17	-1.042E 04	-1.042E 04	-8.532E-14
0.95652	-4.549E-04	-4.550E-04	-2.577E-17	-2.577E-17	-1.042E 04	-1.042E 04	-2.997E-14
0.94499	-3.548E-04	-3.549E-04	-1.217E-17	-1.217E-17	-1.042E 04	-1.042E 04	-1.165E-14
0.92202	-2.464E-04	-2.464E-04	-3.901E-18	-3.901E-18	-1.042E 04	-1.042E 04	-3.135E-15
0.89916	-1.887E-04	-1.887E-04	-1.705E-18	-1.705E-18	-1.042E 04	-1.042E 04	-1.187E-15
0.85379	-1.285E-04	-1.286E-04	-4.407E-19	-4.407E-19	-1.042E 04	-1.042E 04	-2.915E-16
0.80897	-9.747E-05	-9.748E-05	-1.732E-19	-1.732E-19	-1.042E 04	-1.042E 04	-1.064E-16
0.72136	-6.570E-05	-6.571E-05	-4.556E-20	-4.556E-20	-1.042E 04	-1.042E 04	-2.477E-17
0.63742	-4.955E-05	-4.956E-05	-1.776E-20	-1.776E-20	-1.042E 04	-1.042E 04	-8.730E-18
0.55879	-3.977E-05	-3.978E-05	-8.773E-21	-8.773E-21	-1.042E 04	-1.042E 04	-3.787E-18
0.48804	-3.322E-05	-3.322E-05	-4.801E-21	-4.801E-21	-1.042E 04	-1.042E 04	-1.926E-18
0.42909	-2.852E-05	-2.852E-05	-2.643E-21	-2.643E-21	-1.042E 04	-1.042E 04	-1.147E-18
0.38737	-2.498E-05	-2.499E-05	-1.516E-21	-1.516E-21	-1.042E 0	-1.042E 04	-7.371E-19
0.36878	-2.223E-05	-2.223E-05	-8.702E-22	-8.702E-22	-1.042E 04	-1.042E 04	-5.193E-19
0.37674	-2.002E-05	-2.002E-05	-4.988E-22	-4.988E-22	-1.042E 04	-1.042E 04	-3.891E-19

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.060 θ_D= 9.603E-07 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0600	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0600	0.10000	193.643	1.704E-08	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0600	0.20000	172.127	2.022E-08	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0600	0.30000	150.611	2.689E-08	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0600	0.40000	129.095	3.293E-08	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0600	0.50000	107.580	4.002E-08	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0600	0.60000	86.064	4.002E-08	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0600	0.70000	64.548	1.451E-07	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0600	0.80000	43.032	4.569E-07	1.000E-00	-7.806E-09	-7.806E-09	7.806E-09
0.85000	0.0600	0.85000	32.275	1.181E-06	1.000E-00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0600	0.90000	21.517	4.115E-06	1.000E-00	-3.843E-08	-3.843E-08	3.842E-08
0.92500	0.0600	0.92500	16.139	1.003E-05	1.000E-00	-7.082E-08	-7.082E-08	7.082E-08
0.95000	0.0600	0.95000	10.761	3.426E-05	1.000E-00	-1.797E-07	-1.797E-07	1.796E-07
0.96250	0.0600	0.96250	8.072	8.192E-05	1.000E-00	-3.540E-07	-3.540E-07	3.540E-07
0.97500	0.0600	0.97500	5.384	2.776E-04	9.999E-01	-1.073E-06	-1.073E-06	1.072E-06
0.98124	0.0600	0.98125	4.042	6.600E-04	9.999E-01	-2.491E-06	-2.492E-06	2.491E-06
0.98749	0.0600	0.98750	2.701	2.237E-03	9.996E-01	-1.043E-05	-1.044E-05	1.043E-05
0.99373	0.0601	0.99375	1.367	1.995E-02	9.988E-01	-3.433E-04	-3.445E-04	3.429E-04
0.99140	0.1754	1.00000	1.963	1.539E 02	2.997E 00	-4.363E-05	-4.356E-05	4.367E-05
0.98580	0.3357	1.00625	3.301	1.539E 02	5.733E 00	-5.097E-06	-5.094E-06	5.098E-06
0.98021	0.4978	1.01250	4.643	1.539E 02	8.431E 00	-1.703E-06	-1.703E-06	1.703E-06
0.97462	0.6619	1.01875	5.986	1.539E 02	1.110E 01	-7.852E-07	-7.851E-07	7.853E-07
0.96905	0.8279	1.02500	7.330	1.539E 02	1.373E 01	-4.697E-07	-4.697E-07	4.698E-07
0.95791	1.1656	1.03750	10.018	1.539E 02	1.890E 01	-2.052E-07	-2.052E-07	2.052E-07
0.94681	1.5113	1.05000	12.707	1.539E 02	2.394E 01	-1.268E-07	-1.268E-07	1.268E-07
0.92472	2.2275	1.07500	18.085	1.539E 02	3.368E 01	-5.676E-08	-5.676E-08	5.676E-08
0.90277	2.9787	1.10000	23.464	1.539E 02	4.298E 01	-3.146E-08	-3.146E-08	3.146E-08
0.85939	4.5955	1.15000	34.221	1.539E 02	6.036E 01	-1.331E-08	-1.331E-08	1.331E-08
0.81676	6.3825	1.20000	44.979	1.539E 02	7.629E 01	-7.077E-09	-7.077E-09	7.077E-09
0.73430	10.5686	1.30000	66.494	1.539E 02	1.045E 02	-2.913E-09	-2.913E-09	2.913E-09
0.65673	15.7773	1.40000	88.010	1.539E 02	1.286E 02	-1.538E-09	-1.538E-09	1.538E-09
0.58599	22.3094	1.50000	109.526	1.539E 02	1.496E 02	-9.543E-10	-9.543E-10	9.543E-10
0.52486	30.4926	1.60000	131.042	1.539E 02	1.679E 02	-6.397E-10	-6.397E-10	6.397E-10
0.47705	40.5623	1.70000	152.558	1.539E 02	1.841E 02	-4.314E-10	-4.314E-10	4.314E-10
0.44685	52.4136	1.80000	174.074	1.539E 02	1.984E 02	-3.043E-10	-3.043E-10	3.043E-10
0.43791	65.3416	1.90000	195.589	1.539E 02	2.113E 02	-2.147E-10	-2.147E-10	2.147E-10
0.45151	78.1336	2.00000	217.105	1.539E 02	2.229E 02	-1.532E-10	-1.532E-10	1.532E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.060 θ_D= 9.603E-07 ρ_a= 1.005

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.806E-09	399.209	-5.296E-07	-5.296E-07	5.296E-07	5.297E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.014E-07	-8.014E-07	8.014E-07	8.014E-07	-7.170E-08	-7.170E-08
0.90000	3.843E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.082E-08	461.585	-2.067E-06	-2.067E-06	2.067E-06	2.067E-06	-3.354E-07	-3.355E-07
0.95000	1.797E-07	474.060	-3.508E-06	-3.508E-06	3.508E-06	3.508E-06	-8.509E-07	-8.510E-07
0.96250	3.540E-07	480.297	-5.063E-06	-5.063E-06	5.063E-06	5.064E-06	-1.677E-06	-1.677E-06
0.97500	1.073E-06	486.534	-8.966E-06	-8.967E-06	8.968E-06	8.970E-06	-5.080E-06	-5.081E-06
0.98124	2.493E-06	489.652	-1.419E-05	-1.419E-05	1.421E-05	1.421E-05	-1.180E-05	-1.180E-05
0.98749	1.045E-05	492.770	-3.041E-05	-3.043E-05	3.060E-05	3.062E-05	-4.942E-05	-4.946E-05
0.99373	3.452E-04	495.884	-2.379E-04	-2.384E-04	2.527E-04	2.538E-04	-1.626E-03	-1.632E-03
0.99140	4.353E-05	494.721	4.276E 00	4.276E 00	4.314E 00	4.314E 00	-2.067E-04	-2.063E-04
0.98580	5.092E-06	491.928	1.019E 01	1.019E 01	1.023E 01	1.023E 01	-2.414E-05	-2.413E-05
0.98021	1.702E-06	489.137	1.610E 01	1.610E 01	1.614E 01	1.614E 01	-8.067E-06	-8.065E-06
0.97462	7.850E-07	486.349	2.200E 01	2.200E 01	2.204E 01	2.204E 01	-3.719E-06	-3.719E-06
0.96905	4.696E-07	483.566	2.791E 01	2.791E 01	2.794E 01	2.794E 01	-2.225E-06	-2.225E-06
0.95791	2.052E-07	478.009	3.970E 01	3.970E 01	3.974E 01	3.974E 01	-9.719E-07	-9.719E-07
0.94681	1.268E-07	472.470	5.148E 01	5.148E 01	5.152E 01	5.152E 01	-6.008E-07	-6.008E-07
0.92472	5.676E-08	461.445	7.498E 01	7.498E 01	7.502E 01	7.502E 01	-2.689E-07	-2.689E-07
0.90277	3.146E-08	450.495	9.840E 01	9.840E 01	9.844E 01	9.844E 01	-1.490E-07	-1.490E-07
0.85939	1.331E-08	428.846	1.450E 02	1.450E 02	1.450E 02	1.450E 02	-6.306E-08	-6.306E-08
0.81676	7.077E-09	407.573	1.912E 02	1.912E 02	1.913E 02	1.913E 02	-3.352E-08	-3.352E-08
0.73430	2.913E-09	366.423	2.823E 02	2.823E 02	2.823E 02	2.823E 02	-1.380E-08	-1.380E-08
0.65673	1.538E-09	327.714	3.709E 02	3.709E 02	3.709E 02	3.709E 02	-7.283E-09	-7.283E-09
0.58599	9.543E-10	292.416	4.561E 02	4.561E 02	4.561E 02	4.561E 02	-4.520E-09	-4.520E-09
0.52486	6.397E-10	261.913	5.365E 02	5.365E 02	5.365E 02	5.365E 02	-3.030E-09	-3.030E-09
0.47705	4.314E-10	238.054	6.103E 02	6.103E 02	6.103E 02	6.103E 02	-2.043E-09	-2.043E-09
0.44685	3.043E-10	222.982	6.752E 02	6.752E 02	6.753E 02	6.753E 02	-1.441E-09	-1.441E-09
0.43791	2.147E-10	218.524	7.296E 02	7.296E 02	7.296E 02	7.296E 02	-1.017E-09	-1.017E-09
0.45151	1.532E-10	225.310	7.727E 02	7.727E 02	7.727E 02	7.727E 02	-7.258E-10	-7.258E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.060 θ_D= 9.603E-07 ρ_a= 1.005

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-5.722E-19
0.10000	6.949E-14	1.181E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-7.676E-19
0.20000	2.779E-13	4.654E-13	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.098E-18
0.30000	8.521E-13	1.093E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-1.726E-18
0.40000	2.125E-12	2.223E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-2.922E-18
0.50000	4.323E-12	4.545E-12	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-5.848E-18
0.60000	9.836E-12	9.965E-12	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-1.367E-17
0.70000	2.899E-11	2.931E-11	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-3.997E-17
0.80000	1.211E-10	1.209E-10	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-1.810E-16
0.85000	3.236E-10	3.225E-10	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-5.245E-16
0.90000	1.248E-09	1.234E-09	-2.288E-18	-2.288E-18	-1.357E-08	-1.357E-08	-2.353E-15
0.92500	3.093E-09	3.097E-09	-5.290E-18	-5.290E-18	-2.697E-08	-2.697E-08	-7.171E-15
0.95000	1.197E-08	1.197E-08	-2.100E-17	-2.100E-17	-6.780E-08	-6.781E-08	-3.217E-14
0.96250	3.219E-08	3.219E-08	-6.090E-17	-6.091E-17	-1.346E-07	-1.346E-07	-9.164E-14
0.97500	1.526E-07	1.526E-07	-3.527E-16	-3.528E-16	-4.299E-07	-4.301E-07	-3.433E-13
0.98124	4.760E-07	4.762E-07	-1.383E-15	-1.384E-15	-1.131E-06	-1.131E-06	-8.266E-13
0.98749	3.149E-06	3.152E-06	-1.482E-14	-1.485E-14	-5.914E-06	-5.922E-06	-2.217E-12
0.99373	2.258E-04	2.267E-04	-1.175E-11	-1.183E-11	-1.003E-03	-1.009E-03	-4.005E-12
0.99140	-3.167E-03	-3.167E-03	-2.080E-13	-2.073E-13	-1.007E 04	-1.007E 04	-3.601E-12
0.98580	-1.657E-03	-1.657E-03	-4.464E-15	-4.459E-15	-1.007E 04	-1.007E 04	-1.363E-12
0.98021	-1.120E-03	-1.121E-03	-7.457E-16	-7.452E-16	-1.007E 04	-1.007E 04	-5.266E-13
0.97462	-8.463E-04	-8.464E-04	-2.175E-16	-2.174E-16	-1.007E 04	-1.007E 04	-2.487E-13
0.96906	-6.799E-04	-6.800E-04	-9.572E-17	-9.570E-17	-1.007E 04	-1.007E 04	-1.233E-13
0.95791	-4.880E-04	-4.881E-04	-2.583E-17	-2.583E-17	-1.007E 04	-1.007E 04	-4.331E-14
0.94681	-3.806E-04	-3.807E-04	-1.220E-17	-1.220E-17	-1.007E 04	-1.007E 04	-1.682E-14
0.92472	-2.643E-04	-2.643E-04	-3.906E-18	-3.906E-18	-1.007E 04	-1.007E 04	-4.523E-15
0.90277	-2.024E-04	-2.024E-04	-1.707E-18	-1.707E-18	-1.007E 04	-1.007E 04	-1.711E-15
0.85939	-1.378E-04	-1.379E-04	-4.411E-19	-4.411E-19	-1.007E 04	-1.007E 04	-4.202E-16
0.81676	-1.045E-04	-1.046E-04	-1.733E-19	-1.733E-19	-1.007E 04	-1.007E 04	-1.533E-16
0.73430	-7.045E-05	-7.046E-05	-4.558E-20	-4.558E-20	-1.007E 04	-1.007E 04	-3.568E-17
0.65673	-5.313E-05	-5.314E-05	-1.776E-20	-1.776E-20	-1.007E 04	-1.007E 04	-1.258E-17
0.58599	-4.265E-05	-4.265E-05	-8.775E-21	-8.775E-21	-1.007E 04	-1.007E 04	-5.455E-18
0.52487	-3.562E-05	-3.562E-05	-4.802E-21	-4.802E-21	-1.007E 04	-1.007E 04	-2.774E-18
0.47720	-3.058E-05	-3.058E-05	-2.643E-21	-2.643E-21	-1.007E 04	-1.007E 04	-1.653E-18
0.44685	-2.679E-05	-2.679E-05	-1.517E-21	-1.517E-21	-1.007E 04	-1.007E 04	-1.062E-18
0.43791	-2.383E-05	-2.384E-05	-8.704E-22	-8.704E-22	-1.007E 04	-1.007E 04	-7.480E-19
0.45151	-2.147E-05	-2.147E-05	-4.989E-22	-4.989E-22	-1.007E 04	-1.007E 04	-5.603E-19

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.070 θ_D= 1.120E-06 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$10
0.	0.0700	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0700	0.10000	193.643	2.678E-08	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0700	0.20000	172.127	2.918E-08	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0700	0.30000	150.611	3.919E-08	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0700	0.40000	129.095	4.461E-08	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0700	0.50000	107.580	6.003E-08	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0700	0.60000	86.064	6.086E-08	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0700	0.70000	64.548	1.884E-07	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0700	0.80000	43.033	6.003E-07	1.000E-00	-7.806E-09	-7.806E-09	7.806E-09
0.85000	0.0700	0.85000	32.275	1.521E-06	1.000E-00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0700	0.90000	21.518	5.276E-06	1.000E-00	-3.842E-08	-3.842E-08	3.842E-08
0.92500	0.0700	0.92500	16.139	1.283E-05	1.000E-00	-7.082E-08	-7.082E-08	7.082E-08
0.95000	0.0700	0.95000	10.761	4.381E-05	1.000E-00	-1.796E-07	-1.796E-07	1.796E-07
0.96250	0.0700	0.96250	8.073	1.046E-04	1.000E-00	-3.538E-07	-3.539E-07	3.538E-07
0.97500	0.0700	0.97500	5.386	3.544E-04	9.999E-01	-1.072E-06	-1.072E-06	1.071E-06
0.98124	0.0700	0.98125	4.044	8.413E-04	9.999E-01	-2.487E-06	-2.488E-06	2.487E-06
0.98749	0.0700	0.98750	2.704	2.845E-03	9.997E-01	-1.038E-05	-1.039E-05	1.038E-05
0.99373	0.0701	0.99375	1.374	2.481E-02	9.989E-01	-3.323E-04	-3.334E-04	3.319E-04
0.99166	0.2019	1.00000	1.948	1.494E 02	2.998E 00	-4.516E-05	-4.509E-05	4.520E-05
0.98629	0.3870	1.00625	3.283	1.495E 02	5.765E 00	-5.191E-06	-5.188E-06	5.193E-06
0.98094	0.5741	1.01250	4.624	1.495E 02	8.493E 00	-1.723E-06	-1.723E-06	1.723E-06
0.97559	0.7634	1.01875	5.967	1.495E 02	1.119E 01	-7.929E-07	-7.928E-07	7.930E-07
0.97025	0.9547	1.02500	7.310	1.495E 02	1.385E 01	-4.732E-07	-4.731E-07	4.732E-07
0.95961	1.3439	1.03750	9.998	1.495E 02	1.907E 01	-2.059E-07	-2.059E-07	2.060E-07
0.94901	1.7417	1.05000	12.687	1.495E 02	2.417E 01	-1.273E-07	-1.273E-07	1.273E-07
0.92795	2.5646	1.07500	18.065	1.495E 02	3.402E 01	-5.689E-08	-5.689E-08	5.689E-08
0.90710	3.4256	1.10000	23.443	1.495E 02	4.342E 01	-3.152E-08	-3.152E-08	3.152E-08
0.86605	5.2707	1.15000	34.201	1.495E 02	6.099E 01	-1.333E-08	-1.333E-08	1.333E-08
0.82598	7.2972	1.20000	44.958	1.495E 02	7.710E 01	-7.084E-09	-7.084E-09	7.084E-09
0.74944	11.9851	1.30000	66.474	1.495E 02	1.056E 02	-2.915E-09	-2.915E-09	2.915E-09
0.67903	17.6906	1.40000	87.990	1.495E 02	1.300E 02	-1.538E-09	-1.538E-09	1.538E-09
0.61685	24.6279	1.50000	109.505	1.495E 02	1.512E 02	-9.546E-10	-9.546E-10	9.546E-10
0.56561	32.9656	1.60000	131.021	1.495E 02	1.697E 02	-6.399E-10	-6.399E-10	6.399E-10
0.52852	42.7090	1.70000	152.537	1.495E 02	1.861E 02	-4.315E-10	-4.315E-10	4.315E-10
0.50868	53.5556	1.80000	174.053	1.495E 02	2.006E 02	-3.044E-10	-3.044E-10	3.044E-10
0.50810	64.8438	1.90000	195.569	1.495E 02	2.136E 02	-2.147E-10	-2.147E-10	2.147E-10
0.52686	75.7374	2.00000	217.085	1.495E 02	2.253E 02	-1.533E-10	-1.533E-10	1.533E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.070 θ_D= 1.120E-06 ρ_a= 1.005

z	$_x\mu$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.679E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.806E-09	399.209	-5.296E-07	-5.296E-07	5.296E-07	5.296E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.014E-07	-8.014E-07	8.014E-07	8.014E-07	-7.169E-08	-7.170E-08
0.90000	3.842E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.082E-08	461.585	-2.067E-06	-2.067E-06	2.067E-06	2.067E-06	-3.354E-07	-3.354E-07
0.95000	1.796E-07	474.060	-3.507E-06	-3.507E-06	3.507E-06	3.508E-06	-8.508E-07	-8.509E-07
0.96250	3.539E-07	480.297	-5.062E-06	-5.062E-06	5.063E-06	5.063E-06	-1.676E-06	-1.676E-06
0.97500	1.072E-06	486.534	-8.962E-06	-8.963E-06	8.966E-06	8.968E-06	-5.076E-06	-5.077E-06
0.98124	2.489E-06	489.652	-1.418E-05	-1.418E-05	1.420E-05	1.421E-05	-1.178E-05	-1.179E-05
0.98749	1.040E-05	492.769	-3.029E-05	-3.030E-05	3.059E-05	3.062E-05	-4.919E-05	-4.923E-05
0.99373	3.341E-04	495.884	-2.291E-04	-2.296E-04	2.521E-04	2.531E-04	-1.574E-03	-1.579E-03
0.99166	4.505E-05	494.848	4.149E 00	4.149E 00	4.187E 00	4.187E 00	-2.139E-04	-2.136E-04
0.98629	5.187E-06	492.171	9.944E 00	9.944E 00	9.982E 00	9.982E 00	-2.459E-05	-2.457E-05
0.98094	1.722E-06	489.498	1.574E 01	1.574E 01	1.577E 01	1.577E 01	-8.162E-06	-8.159E-06
0.97559	7.927E-07	486.830	2.152E 01	2.152E 01	2.156E 01	2.156E 01	-3.756E-06	-3.755E-06
0.97025	4.731E-07	484.166	2.731E 01	2.731E 01	2.734E 01	2.734E 01	-2.241E-06	-2.241E-06
0.95961	2.059E-07	478.855	3.885E 01	3.885E 01	3.889E 01	3.889E 01	-9.755E-07	-9.754E-07
0.94901	1.273E-07	473.567	5.038E 01	5.038E 01	5.042E 01	5.042E 01	-6.029E-07	-6.029E-07
0.92795	5.689E-08	463.060	7.336E 01	7.336E 01	7.340E 01	7.340E 01	-2.695E-07	-2.695E-07
0.90710	3.152E-08	452.653	9.624E 01	9.624E 01	9.628E 01	9.628E 01	-1.493E-07	-1.493E-07
0.86605	1.333E-08	432.168	1.417E 02	1.417E 02	1.417E 02	1.417E 02	-6.314E-08	-6.314E-08
0.82598	7.084E-09	412.176	1.866E 02	1.866E 02	1.867E 02	1.867E 02	-3.355E-08	-3.355E-08
0.74944	2.915E-09	373.981	2.747E 02	2.747E 02	2.748E 02	2.748E 02	-1.381E-08	-1.381E-08
0.67903	1.538E-09	338.844	3.598E 02	3.598E 02	3.598E 02	3.598E 02	-7.286E-09	-7.286E-09
0.61685	9.546E-10	307.814	4.407E 02	4.407E 02	4.407E 02	4.407E 02	-4.522E-09	-4.522E-09
0.56561	6.399E-10	282.247	5.162E 02	5.162E 02	5.162E 02	5.162E 02	-3.031E-09	-3.031E-09
0.52852	4.315E-10	263.738	5.846E 02	5.846E 02	5.846E 02	5.846E 02	-2.044E-09	-2.044E-09
0.50868	3.044E-10	253.835	6.444E 02	6.444E 02	6.444E 02	6.444E 02	-1.442E-09	-1.442E-09
0.50810	2.147E-10	253.549	6.946E 02	6.946E 02	6.946E 02	6.946E 02	-1.017E-09	-1.017E-09
0.52686	1.533E-10	262.911	7.351E 02	7.351E 02	7.351E 02	7.351E 02	-7.260E-10	-7.260E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.070 θ_D= 1.120E-06 ρ_a= 1.005

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-7.788E-19
0.10000	8.258E-14	1.392E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-1.045E-18
0.20000	4.856E-13	3.762E-13	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.494E-18
0.30000	1.029E-12	9.533E-13	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-2.349E-18
0.40000	2.537E-12	2.545E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-3.977E-18
0.50000	4.818E-12	4.902E-12	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-7.960E-18
0.60000	1.130E-11	1.188E-11	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-1.861E-17
0.70000	3.380E-11	3.378E-11	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-5.440E-17
0.80000	1.399E-10	1.408E-10	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-2.464E-16
0.85000	3.761E-10	3.748E-10	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-7.138E-16
0.90000	1.455E-09	1.441E-09	-2.288E-18	-2.288E-18	-1.357E-08	-1.357E-08	-3.202E-15
0.92500	3.610E-09	3.610E-09	-5.289E-18	-5.290E-18	-2.696E-08	-2.697E-08	-9.759E-15
0.95000	1.397E-08	1.397E-08	-2.099E-17	-2.100E-17	-6.779E-06	-6.780E-08	-4.378E-14
0.96250	3.756E-08	3.757E-08	-6.086E-17	-6.087E-17	-1.346E-07	-1.346E-07	-1.247E-13
0.97500	1.780E-07	1.781E-07	-3.522E-16	-3.523E-16	-4.296E-07	-4.297E-07	-4.668E-13
0.98124	5.553E-07	5.556E-07	-1.379E-15	-1.380E-15	-1.129E-06	-1.130E-06	-1.123E-12
0.98749	3.660E-06	3.664E-06	-1.471E-14	-1.473E-14	-5.884E-06	-5.891E-06	-3.008E-12
0.99373	2.554E-04	2.564E-04	-1.102E-11	-1.109E-11	-9.515E-04	-9.568E-04	-5.463E-12
0.99166	-3.353E-03	-3.353E-03	-2.220E-13	-2.213E-13	-9.683E 03	-9.684E 03	-4.961E-12
0.98629	-1.748E-03	-1.748E-03	-4.602E-15	-4.597E-15	-9.683E 03	-9.684E 03	-1.880E-12
0.98094	-1.180E-03	-1.180E-03	-7.599E-16	-7.594E-16	-9.683E 03	-9.684E 03	-7.255E-13
0.97559	-8.906E-04	-8.908E-04	-2.208E-16	-2.208E-16	-9.683E 03	-9.684E 03	-3.416E-13
0.97025	-7.151E-04	-7.153E-04	-9.685E-17	-9.682E-17	-9.683E 03	-9.684E 03	-1.693E-13
0.95961	-5.130E-04	-5.131E-04	-2.598E-17	-2.598E-17	-9.683E 03	-9.684E 03	-5.945E-14
0.94901	-3.999E-04	-4.000E-04	-1.227E-17	-1.227E-17	-9.683E 03	-9.684E 03	-2.303E-14
0.92795	-2.776E-04	-2.776E-04	-3.919E-18	-3.918E-18	-9.683E 03	-9.684E 03	-6.184E-15
0.90710	-2.126E-04	-2.126E-04	-1.712E-18	-1.712E-18	-9.683E 03	-9.684E 03	-2.337E-15
0.86605	-1.447E-04	-1.448E-04	-4.419E-19	-4.419E-19	-9.683E 03	-9.684E 03	-5.732E-16
0.82598	-1.097E-04	-1.097E-04	-1.736E-19	-1.736E-19	-9.683E 03	-9.684E 03	-2.090E-16
0.74944	-7.395E-05	-7.396E-05	-4.562E-20	-4.562E-20	-9.683E 03	-9.684E 03	-4.863E-17
0.67903	-5.577E-05	-5.578E-05	-1.778E-20	-1.778E-20	-9.683E 03	-9.684E 03	-1.713E-17
0.61685	-4.476E-05	-4.477E-05	-8.780E-21	-8.780E-21	-9.683E 03	-9.684E 03	-7.430E-18
0.56561	-3.739E-05	-3.739E-05	-4.805E-21	-4.805E-21	-9.683E 03	-9.684E 03	-3.778E-18
0.52852	-3.210E-05	-3.210E-05	-2.645E-21	-2.645E-21	-9.683E 03	-9.684E 03	-2.250E-18
0.50868	-2.812E-05	-2.812E-05	-1.518E-21	-1.518E-21	-9.683E 03	-9.684E 03	-1.445E-18
0.50810	-2.502E-05	-2.502E-05	-8.709E-22	-8.709E-22	-9.683E 03	-9.684E 03	-1.018E-18
0.52686	-2.253E-05	-2.253E-05	-4.992E-22	-4.992E-22	-9.683E 03	-9.684E 03	-7.628E-19

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.080 θ_D= 1.408E-06 ρ_a= 1.005

z	ϕ	z_t	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0800	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.0800	0.10000	193.643	3.575E-08	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.0800	0.20000	172.127	4.002E-08	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.0800	0.30000	150.611	4.461E-08	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.0800	0.40000	129.095	5.545E-08	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.0800	0.60000	107.580	7.254E-08	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.0800	0.60000	86.064	7.504E-08	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.0800	0.70000	64.548	2.201E-07	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.0800	0.80000	43.033	6.737E-07	1.000E-00	-7.805E-09	-7.805E-09	7.805E-09
0.85000	0.0800	0.85000	32.275	1.694E-06	1.000E-00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.0800	0.90000	21.518	5.883E-06	1.000E-00	-3.842E-08	-3.842E-08	3.842E-08
0.92500	0.0800	0.92500	16.140	1.429E-05	1.000E-00	-7.081E-08	-7.081E-08	7.081E-08
0.95000	0.0800	0.95000	10.762	4.880E-05	1.000E-00	-1.796E-07	-1.796E-07	1.796E-07
0.96250	0.0800	0.96250	8.074	1.166E-04	1.000E-00	-3.537E-07	-3.537E-07	3.536E-07
0.97500	0.0800	0.97500	5.388	3.947E-04	9.999E-01	-1.071E-06	-1.071E-06	1.070E-06
0.98124	0.0800	0.98125	4.046	9.367E-04	9.999E-01	-2.483E-06	-2.484E-06	2.483E-06
0.98749	0.0800	0.98750	2.708	3.162E-03	9.998E-01	-1.033E-05	-1.034E-05	1.033E-05
0.99373	0.0801	0.99375	1.382	2.729E-02	9.993E-01	-3.208E-04	-3.219E-04	3.204E-04
0.99193	0.2278	1.00000	1.934	1.450E 02	3.000E 00	-4.656E-05	-4.648E-05	4.660E-05
0.98683	0.4364	1.00625	3.269	1.450E 02	5.798E 00	-5.272E-06	-5.269E-06	5.273E-06
0.98174	0.6474	1.01250	4.609	1.450E 02	8.556E 00	-1.740E-06	-1.739E-06	1.740E-06
0.97666	0.8607	1.01875	5.952	1.450E 02	1.128E 01	-7.993E-07	-7.991E-07	7.993E-07
0.97160	1.0762	1.02500	7.295	1.450E 02	1.397E 01	-4.760E-07	-4.759E-07	4.760E-07
0.96151	1.5140	1.03750	9.983	1.450E 02	1.925E 01	-2.068E-07	-2.068E-07	2.068E-07
0.95148	1.9610	1.05000	12.671	1.450E 02	2.440E 01	-1.276E-07	-1.276E-07	1.277E-07
0.93161	2.8838	1.07500	18.049	1.450E 02	3.435E 01	-5.700E-08	-5.700E-08	5.700E-08
0.91199	3.8467	1.10000	23.427	1.450E 02	4.385E 01	-3.156E-08	-3.156E-08	3.156E-08
0.87356	5.9006	1.15000	34.185	1.450E 02	6.161E 01	-1.334E-08	-1.334E-08	1.334E-08
0.83636	8.1404	1.20000	44.942	1.450E 02	7.789E 01	-7.090E-09	-7.090E-09	7.090E-09
0.76635	13.2520	1.30000	66.458	1.450E 02	1.067E 02	-2.917E-09	-2.917E-09	2.917E-09
0.70362	19.3318	1.40000	87.974	1.450E 02	1.314E 02	-1.539E-09	-1.539E-09	1.539E-09
0.65029	26.5010	1.60000	109.489	1.450E 02	1.528E 02	-9.549E-10	-9.549E-10	9.549E-10
0.60882	34.7944	1.60000	131.005	1.450E 02	1.715E 02	-6.401E-10	-6.401E-10	6.401E-10
0.58176	44.0728	1.70000	152.521	1.450E 02	1.880E 02	-4.316E-10	-4.316E-10	4.317E-10
0.57117	53.9687	1.80000	174.037	1.450E 02	2.027E 02	-3.045E-10	-3.045E-10	3.045E-10
0.57795	63.9306	1.90000	195.553	1.450E 02	2.158E 02	-2.148E-10	-2.148E-10	2.148E-10
0.60151	73.3858	2.00000	217.069	1.450E 02	2.276E 02	-1.533E-10	-1.533E-10	1.533E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.080 θ_D= 1.408E-06 ρ_a= 1.005

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.462E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.805E-09	399.209	-5.296E-07	-5.296E-07	5.296E-07	5.296E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.014E-07	-8.014E-07	8.014E-07	8.014E-07	-7.169E-08	-7.169E-08
0.90000	3.842E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.081E-08	461.585	-2.066E-06	-2.066E-06	2.066E-06	2.067E-06	-3.354E-07	-3.354E-07
0.95000	1.796E-07	474.060	-3.507E-06	-3.507E-06	3.507E-06	3.507E-06	-8.507E-07	-8.507E-07
0.96250	3.537E-07	480.297	-5.062E-06	-5.062E-06	5.062E-06	5.062E-06	-1.675E-06	-1.675E-06
0.97500	1.071E-06	486.534	-8.958E-06	-8.959E-06	8.963E-06	8.965E-06	-5.071E-06	-5.072E-06
0.98124	2.485E-06	489.652	-1.416E-05	-1.417E-05	1.419E-05	1.420E-05	-1.176E-05	-1.177E-05
0.98749	1.035E-05	492.770	-3.019E-05	-3.020E-05	3.056E-05	3.058E-05	-4.894E-05	-4.898E-05
0.99373	3.225E-04	495.884	-2.216E-04	-2.221E-04	2.495E-04	2.506E-04	-1.520E-03	-1.525E-03
0.99193	4.645E-05	494.983	4.013E 00	4.013E 00	4.051E 00	4.051E 00	-2.205E-04	-2.202E-04
0.98683	5.267E-06	492.437	9.678E 00	9.678E 00	9.716E 00	9.716E 00	-2.497E-05	-2.496E-05
0.98174	1.739E-06	489.897	1.534E 01	1.534E 01	1.537E 01	1.537E 01	-8.240E-06	-8.238E-06
0.97666	7.991E-07	487.364	2.099E 01	2.099E 01	2.103E 01	2.103E 01	-3.786E-06	-3.785E-06
0.97160	4.759E-07	484.838	2.663E 01	2.663E 01	2.667E 01	2.667E 01	-2.255E-06	-2.254E-06
0.96151	2.068E-07	479.805	3.790E 01	3.790E 01	3.794E 01	3.794E 01	-9.797E-07	-9.796E-07
0.95148	1.276E-07	474.802	4.915E 01	4.915E 01	4.918E 01	4.918E 01	-6.046E-07	-6.046E-07
0.93161	5.700E-08	464.884	7.154E 01	7.154E 01	7.158E 01	7.158E 01	-2.700E-07	-2.700E-07
0.91199	3.156E-08	455.091	9.381E 01	9.381E 01	9.384E 01	9.384E 01	-1.495E-07	-1.495E-07
0.87356	1.334E-08	435.918	1.379E 02	1.379E 02	1.380E 02	1.380E 02	-6.321E-08	-6.321E-08
0.83636	7.090E-09	417.356	1.814E 02	1.814E 02	1.815E 02	1.815E 02	-3.358E-08	-3.358E-08
0.76635	2.917E-09	382.418	2.663E 02	2.663E 02	2.663E 02	2.663E 02	-1.381E-08	-1.381E-08
0.70362	1.539E-09	351.115	3.475E 02	3.475E 02	3.475E 02	3.475E 02	-7.289E-09	-7.289E-09
0.65029	9.549E-10	324.500	4.240E 02	4.240E 02	4.240E 02	4.240E 02	-4.523E-09	-4.523E-09
0.60882	6.401E-10	303.808	4.946E 02	4.946E 02	4.946E 02	4.946E 02	-3.032E-09	-3.032E-09
0.58176	4.316E-10	290.307	5.580E 02	5.580E 02	5.580E 02	5.580E 02	-2.045E-09	-2.045E-09
0.57117	3.045E-10	285.022	6.132E 02	6.132E 02	6.132E 02	6.132E 02	-1.442E-09	-1.442E-09
0.57795	2.148E-10	288.404	6.597E 02	6.597E 02	6.597E 02	6.597E 02	-1.017E-09	-1.017E-09
0.60151	1.533E-10	300.161	6.978E 02	6.978E 02	6.979E 02	6.979E 02	-7.262E-10	-7.262E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.000 θ_D= 1.408E-06 ρ_0= 1.005

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.017E-18
0.10000	3.052E-13	2.517E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-1.365E-18
0.20000	4.948E-13	6.018E-13	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.952E-18
0.30000	1.427E-12	1.446E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-3.068E-18
0.40000	2.747E-12	2.747E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-5.194E-18
0.50000	5.895E-12	6.066E-12	-9.267E-21	-9.267E-21	-2.218E-10	-2.218E-10	-1.040E-17
0.60000	1.362E-11	1.362E-11	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-2.431E-17
0.70000	3.942E-11	3.924E-11	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-7.106E-17
0.80000	1.608E-10	1.617E-10	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-3.218E-16
0.85000	4.325E-10	4.316E-10	-5.333E-19	-5.333E-19	-4.921E-09	-4.921E-09	-9.323E-16
0.90000	1.667E-09	1.646E-09	-2.288E-18	-2.288E-18	-1.357E-08	-1.357E-08	-4.182E-15
0.92500	4.135E-09	4.135E-09	-5.289E-18	-5.289E-18	-2.696E-08	-2.696E-08	-1.274E-14
0.95000	1.598E-08	1.598E-08	-2.099E-17	-2.099E-17	-6.778E-08	-6.779E-08	-5.716E-14
0.96250	4.295E-08	4.296E-08	-6.081E-17	-6.083E-17	-1.345E-07	-1.346E-07	-1.628E-13
0.97500	2.033E-07	2.034E-07	-3.516E-16	-3.518E-16	-4.292E-07	-4.293E-07	-6.091E-13
0.98124	6.354E-07	6.357E-07	-1.376E-15	-1.377E-15	-1.127E-06	-1.128E-06	-1.463E-12
0.98749	4.176E-06	4.180E-06	-1.458E-14	-1.461E-14	-5.851E-06	-5.858E-06	-3.916E-12
0.99373	2.834E-04	2.845E-04	-1.028E-11	-1.034E-11	-8.992E-04	-9.042E-04	-7.152E-12
0.99193	-3.296E-03	-3.296E-03	-2.352E-13	-2.344E-13	-9.227E 03	-9.227E 03	-6.552E-12
0.98683	-1.712E-03	-1.712E-03	-4.721E-15	-4.715E-15	-9.227E 03	-9.227E 03	-2.483E-12
0.98174	-1.154E-03	-1.154E-03	-7.718E-16	-7.713E-16	-9.227E 03	-9.227E 03	-9.571E-13
0.97666	-8.703E-04	-8.704E-04	-2.236E-16	-2.235E-16	-9.227E 03	-9.227E 03	-4.495E-13
0.97160	-6.985E-04	-6.986E-04	-9.776E-17	-9.774E-17	-9.227E 03	-9.227E 03	-2.226E-13
0.96151	-5.008E-04	-5.009E-04	-2.616E-17	-2.615E-17	-9.227E 03	-9.227E 03	-7.801E-14
0.95148	-3.903E-04	-3.904E-04	-1.233E-17	-1.233E-17	-9.227E 03	-9.227E 03	-3.023E-14
0.93161	-2.708E-04	-2.709E-04	-3.928E-18	-3.928E-18	-9.227E 03	-9.227E 03	-8.105E-15
0.91199	-2.073E-04	-2.074E-04	-1.716E-18	-1.716E-18	-9.227E 03	-9.227E 03	-3.060E-15
0.87356	-1.412E-04	-1.412E-04	-4.426E-19	-4.426E-19	-9.227E 03	-9.227E 03	-7.500E-16
0.83636	-1.070E-04	-1.070E-04	-1.738E-19	-1.738E-19	-9.227E 03	-9.227E 03	-2.734E-16
0.76635	-7.212E-05	-7.213E-05	-4.566E-20	-4.566E-20	-9.227E 03	-9.227E 03	-6.357E-17
0.70362	-5.438E-05	-5.439E-05	-1.779E-20	-1.779E-20	-9.227E 03	-9.227E 03	-2.239E-17
0.65029	-4.365E-05	-4.366E-05	-8.784E-21	-8.784E-21	-9.227E 03	-9.227E 03	-9.711E-18
0.60882	-3.645E-05	-3.646E-05	-4.807E-21	-4.807E-21	-9.227E 03	-9.227E 03	-4.937E-18
0.58176	-3.130E-05	-3.130E-05	-2.646E-21	-2.646E-21	-9.227E 03	-9.227E 03	-2.940E-18
0.57117	-2.742E-05	-2.742E-05	-1.518E-21	-1.518E-21	-9.227E 03	-9.227E 03	-1.888E-18
0.57795	-2.439E-05	-2.440E-05	-8.713E-22	-8.713E-22	-9.227E 03	-9.227E 03	-1.330E-18
0.60151	-2.197E-05	-2.197E-05	-4.994E-22	-4.994E-22	-9.227E 03	-9.227E 03	-9.966E-19

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.100 θ_D= 2.079E-06 ρ_0= 1.006

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.1000	0.10000	193.643	6.212E-08	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.1000	0.20000	172.127	6.608E-08	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.1000	0.30000	150.611	7.754E-08	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.1000	0.40000	129.096	9.171E-08	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.1000	0.50000	107.580	1.067E-07	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.1000	0.60000	86.064	1.184E-07	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.1000	0.70000	64.548	3.068E-07	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.1000	0.80000	43.033	8.971E-07	1.000E-00	-7.805E-09	-7.805E-09	7.805E-09
0.85000	0.1000	0.85000	32.276	2.254E-06	1.000E-00	-1.514E-08	-1.514E-08	1.514E-08
0.90000	0.1000	0.90000	21.519	7.711E-06	1.000E-00	-3.842E-08	-3.842E-08	3.842E-08
0.92500	0.1000	0.92500	16.141	1.880E-05	1.000E-00	-7.080E-08	-7.080E-08	7.080E-08
0.95000	0.1000	0.95000	10.765	6.398E-05	1.000E-00	-1.795E-07	-1.795E-07	1.795E-07
0.96250	0.1000	0.96250	8.078	1.527E-04	9.999E-01	-3.533E-07	-3.533E-07	3.532E-07
0.97500	0.1000	0.97500	5.393	5.162E-04	9.998E-01	-1.068E-06	-1.068E-06	1.068E-06
0.98124	0.1000	0.98125	4.053	1.223E-03	9.997E-01	-2.474E-06	-2.475E-06	2.473E-06
0.98749	0.1000	0.98750	2.717	4.107E-03	9.994E-01	-1.020E-05	-1.021E-05	1.020E-05
0.99373	0.1001	0.99375	1.400	3.420E-02	9.984E-01	-2.945E-04	-2.954E-04	2.941E-04
0.99262	0.2735	1.00000	1.689	1.357E 02	3.002E 00	-5.162E-05	-5.153E-05	5.167E-05
0.98818	0.5266	1.00625	3.215	1.358E 02	5.893E 00	-5.579E-06	-5.576E-06	5.581E-06
0.98375	0.7823	1.01250	4.552	1.358E 02	8.744E 00	-1.804E-06	-1.803E-06	1.804E-06
0.97933	1.0404	1.01875	5.893	1.358E 02	1.156E 01	-8.241E-07	-8.240E-07	8.242E-07
0.97494	1.3009	1.02500	7.235	1.358E 02	1.434E 01	-4.870E-07	-4.869E-07	4.870E-07
0.96621	1.8290	1.03750	9.921	1.358E 02	1.980E 01	-2.104E-07	-2.104E-07	2.104E-07
0.95757	2.3667	1.05000	12.609	1.358E 02	2.513E 01	-1.291E-07	-1.291E-07	1.291E-07
0.94054	3.4716	1.07500	17.986	1.358E 02	3.543E 01	-5.741E-08	-5.741E-08	5.741E-08
0.92387	4.6168	1.10000	23.364	1.358E 02	4.525E 01	-3.174E-08	-3.174E-08	3.174E-08
0.89170	7.0338	1.15000	34.121	1.358E 02	6.362E 01	-1.340E-08	-1.340E-08	1.340E-08
0.86123	9.6256	1.20000	44.878	1.358E 02	8.045E 01	-7.113E-09	-7.113E-09	7.113E-09
0.80617	15.3680	1.30000	66.393	1.358E 02	1.102E 02	-2.923E-09	-2.923E-09	2.923E-09
0.76033	21.8755	1.40000	87.909	1.358E 02	1.358E 02	-1.541E-09	-1.541E-09	1.541E-09
0.72546	29.1107	1.50000	109.425	1.358E 02	1.579E 02	-9.561E-10	-9.561E-10	9.561E-10
0.70320	36.9373	1.60000	130.940	1.358E 02	1.773E 02	-6.409E-10	-6.409E-10	6.409E-10
0.69475	45.1122	1.70000	152.456	1.358E 02	1.943E 02	-4.321E-10	-4.321E-10	4.321E-10
0.70062	53.3178	1.80000	173.972	1.358E 02	2.095E 02	-3.048E-10	-3.048E-10	3.048E-10
0.72046	61.2278	1.90000	195.488	1.358E 02	2.231E 02	-2.150E-10	-2.150E-10	2.150E-10
0.75316	68.5833	2.00000	217.004	1.358E 02	2.353E 02	-1.535E-10	-1.535E-10	1.535E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.100 θ_D= 2.079E-06 ρ_a= 1.006

z	$_x\mu'-1_0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.805E-09	399.209	-5.296E-07	-5.296E-07	5.296E-07	5.296E-07	-3.697E-08	-3.697E-08
0.85000	1.514E-08	424.160	-8.014E-07	-8.014E-07	8.014E-07	8.014E-07	-7.169E-08	-7.169E-08
0.90000	3.842E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.820E-07	-1.820E-07
0.92500	7.080E-08	461.585	-2.066E-06	-2.066E-06	2.066E-06	2.066E-06	-3.353E-07	-3.354E-07
0.95000	1.795E-07	474.060	-3.506E-06	-3.507E-06	3.507E-06	3.507E-06	-8.503E-07	-8.504E-07
0.96250	3.533E-07	480.297	-5.060E-06	-5.060E-06	5.060E-06	5.061E-06	-1.673E-06	-1.673E-06
0.97500	1.068E-06	486.534	-8.948E-06	-8.948E-06	8.957E-06	8.959E-06	-5.059E-06	-5.060E-06
0.98124	2.476E-06	489.652	-1.413E-05	-1.413E-05	1.418E-05	1.419E-05	-1.172E-05	-1.172E-05
0.98749	1.022E-05	492.769	-2.989E-05	-2.990E-05	3.051E-05	3.054E-05	-4.833E-05	-4.837E-05
0.99373	2.960E-04	495.883	-2.022E-04	-2.027E-04	2.462E-04	2.471E-04	-1.395E-03	-1.399E-03
0.99262	5.149E-05	495.329	3.667E 00	3.667E 00	3.704E 00	3.704E 00	-2.445E-04	-2.441E-04
0.98818	5.574E-06	493.111	9.003E 00	9.003E 00	9.041E 00	9.041E 00	-2.643E-05	-2.641E-05
0.98375	1.803E-06	490.900	1.433E 01	1.433E 01	1.437E 01	1.437E 01	-8.544E-06	-8.541E-06
0.97933	8.239E-07	488.698	1.965E 01	1.965E 01	1.969E 01	1.969E 01	-3.903E-06	-3.903E-06
0.97494	4.869E-07	486.505	2.497E 01	2.497E 01	2.500E 01	2.500E 01	-2.307E-06	-2.306E-06
0.96621	2.103E-07	482.150	3.556E 01	3.556E 01	3.560E 01	3.560E 01	-9.964E-07	-9.964E-07
0.95757	1.291E-07	477.836	4.611E 01	4.611E 01	4.615E 01	4.615E 01	-6.114E-07	-6.114E-07
0.94054	5.741E-08	469.338	6.708E 01	6.708E 01	6.712E 01	6.712E 01	-2.719E-07	-2.719E-07
0.92387	3.174E-08	461.020	8.788E 01	8.788E 01	8.791E 01	8.791E 01	-1.504E-07	-1.503E-07
0.89170	1.340E-08	444.968	1.289E 02	1.289E 02	1.289E 02	1.289E 02	-6.348E-08	-6.348E-08
0.86123	7.113E-09	429.766	1.690E 02	1.690E 02	1.691E 02	1.691E 02	-3.369E-08	-3.369E-08
0.80617	2.923E-09	402.290	2.464E 02	2.464E 02	2.464E 02	2.464E 02	-1.384E-08	-1.384E-08
0.76033	1.541E-09	379.415	3.192E 02	3.192E 02	3.192E 02	3.192E 02	-7.301E-09	-7.301E-09
0.72546	9.561E-10	362.015	3.865E 02	3.865E 02	3.865E 02	3.865E 02	-4.529E-09	-4.529E-09
0.70320	6.409E-10	350.904	4.475E 02	4.475E 02	4.475E 02	4.475E 02	-3.036E-09	-3.036E-09
0.69475	4.321E-10	346.689	5.016E 02	5.016E 02	5.017E 02	5.017E 02	-2.047E-09	-2.047E-09
0.70062	3.048E-10	349.618	5.486E 02	5.486E 02	5.486E 02	5.486E 02	-1.444E-09	-1.444E-09
0.72046	2.150E-10	359.518	5.886E 02	5.886E 02	5.886E 02	5.886E 02	-1.018E-09	-1.018E-09
0.75316	1.536E-10	375.837	6.222E 02	6.222E 02	6.222E 02	6.222E 02	-7.269E-10	-7.269E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o=0.100 θ_D=2.079E-06 ρ_a=1.006

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.589E-18
0.10000	2.293E-13	3.314E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-2.132E-18
0.20000	7.916E-13	7.232E-13	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-3.050E-18
0.30000	1.626E-12	1.670E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-4.794E-18
0.40000	3.663E-12	3.663E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-8.116E-18
0.50000	7.449E-12	7.449E-12	-9.266E-21	-9.266E-21	-2.218E-10	-2.218E-10	-1.625E-17
0.60000	1.709E-11	1.681E-11	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-3.799E-17
0.70000	4.839E-11	4.838E-11	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-1.110E-16
0.80000	2.011E-10	2.000E-10	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-5.028E-16
0.85000	5.369E-10	5.349E-10	-5.332E-19	-5.332E-19	-4.921E-09	-4.921E-09	-1.457E-15
0.90000	2.067E-09	2.060E-09	-2.288E-18	-2.288E-18	-1.357E-08	-1.357E-08	-6.534E-15
0.92500	5.126E-09	5.126E-09	-5.288E-18	-5.288E-18	-2.696E-08	-2.696E-08	-1.991E-14
0.95000	1.981E-08	1.981E-08	-2.097E-17	-2.098E-17	-6.776E-08	-6.776E-08	-8.923E-14
0.96250	5.323E-08	5.324E-08	-6.070E-17	-6.071E-17	-1.344E-07	-1.345E-07	-2.540E-13
0.97500	2.525E-07	2.526E-07	-3.503E-16	-3.505E-16	-4.283E-07	-4.284E-07	-9.490E-13
0.98124	7.845E-07	7.848E-07	-1.367E-15	-1.368E-15	-1.122E-06	-1.123E-06	-2.275E-12
0.98749	5.127E-06	5.132E-06	-1.428E-14	-1.430E-14	-5.771E-06	-5.778E-06	-6.069E-12
0.99373	3.230E-04	3.242E-04	-8.676E-12	-8.731E-12	-7.850E-04	-7.892E-04	-1.125E-11
0.99262	-3.143E-03	-3.143E-03	-2.860E-13	-2.850E-13	-8.256E 03	-8.257E 03	-1.065E-11
0.98818	-1.616E-03	-1.616E-03	-5.184E-15	-5.178E-15	-8.256E 03	-8.257E 03	-4.050E-12
0.98375	-1.084E-03	-1.084E-03	-8.185E-16	-8.180E-16	-8.256E 03	-8.257E 03	-1.555E-12
0.97933	-8.153E-04	-8.153E-04	-2.344E-16	-2.344E-16	-8.256E 03	-8.257E 03	-7.231E-13
0.97494	-6.532E-04	-6.533E-04	-1.014E-16	-1.014E-16	-8.256E 03	-8.257E 03	-3.573E-13
0.96621	-4.674E-04	-4.674E-04	-2.686E-17	-2.686E-17	-8.256E 03	-8.257E 03	-1.244E-13
0.95757	-3.639E-04	-3.639E-04	-1.254E-17	-1.254E-17	-8.256E 03	-8.257E 03	-4.810E-14
0.94054	-2.522E-04	-2.522E-04	-3.967E-18	-3.967E-18	-8.256E 03	-8.257E 03	-1.284E-14
0.92387	-1.929E-04	-1.930E-04	-1.732E-18	-1.732E-18	-8.256E 03	-8.257E 03	-4.833E-15
0.89170	-1.313E-04	-1.313E-04	-4.454E-19	-4.454E-19	-8.256E 03	-8.257E 03	-1.180E-15
0.86123	-9.948E-05	-9.949E-05	-1.746E-19	-1.746E-19	-8.256E 03	-8.257E 03	-4.295E-16
0.80617	-6.702E-05	-6.702E-05	-4.580E-20	-4.580E-20	-8.256E 03	-8.257E 03	-9.970E-17
0.76033	-5.053E-05	-5.053E-05	-1.783E-20	-1.783E-20	-8.256E 03	-8.257E 03	-3.509E-17
0.72546	-4.055E-05	-4.055E-05	-8.800E-21	-8.800E-21	-8.256E 03	-8.257E 03	-1.521E-17
0.70320	-3.386E-05	-3.387E-05	-4.816E-21	-4.816E-21	-8.256E 03	-8.257E 03	-7.728E-18
0.69475	-2.907E-05	-2.907E-05	-2.650E-21	-2.650E-21	-8.256E 03	-8.257E 03	-4.601E-18
0.70062	-2.547E-05	-2.547E-05	-1.521E-21	-1.521E-21	-8.256E 03	-8.257E 03	-2.954E-18
0.72046	-2.266E-05	-2.266E-05	-8.727E-22	-8.727E-22	-8.256E 03	-8.257E 03	-2.081E-18
0.75316	-2.041E-05	-2.041E-05	-5.003E-22	-5.003E-22	-8.256E 03	-8.257E 03	-1.558E-18

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.120 θ_D= 2.109E-06 ρ_a= 1.006

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1200	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.1200	0.10000	193.643	9.995E-08	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.1200	0.20000	172.127	1.101E-07	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.1200	0.30000	150.611	1.230E-07	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.1200	0.40000	129.096	1.376E-07	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.1200	0.50000	107.580	1.584E-07	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.1200	0.60000	86.064	1.651E-07	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.1200	0.70000	64.549	3.869E-07	1.000E 00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.1200	0.80000	43.034	1.094E-06	1.000E-00	-7.805E-09	-7.805E-09	7.805E-09
0.85000	0.1200	0.85000	32.277	2.721E-06	1.000E-00	-1.513E-08	-1.513E-08	1.513E-08
0.90000	0.1200	0.90000	21.520	9.218E-06	1.000E-00	-3.841E-08	-3.841E-08	3.841E-08
0.92500	0.1200	0.92500	16.143	2.237E-05	1.000E-00	-7.079E-08	-7.079E-08	7.078E-08
0.95000	0.1200	0.95000	10.767	7.615E-05	9.999E-01	-1.794E-07	-1.794E-07	1.794E-07
0.96250	0.1200	0.96250	8.081	1.817E-04	9.999E-01	-3.528E-07	-3.528E-07	3.527E-07
0.97500	0.1200	0.97500	5.398	6.134E-04	9.997E-01	-1.065E-06	-1.065E-06	1.065E-06
0.98124	0.1200	0.98125	4.060	1.450E-03	9.995E-01	-2.462E-06	-2.463E-06	2.462E-06
0.98749	0.1200	0.98750	2.729	4.844E-03	9.990E-01	-1.005E-05	-1.006E-05	1.005E-05
0.99373	0.1201	0.99375	1.422	3.897E-02	9.973E-01	-2.660E-04	-2.668E-04	2.657E-04
0.99341	0.3130	1.00000	1.840	1.263E 02	3.068E 00	-5.770E-05	-5.759E-05	5.775E-05
0.98975	0.6048	1.00625	3.158	1.263E 02	5.999E 00	-5.923E-06	-5.919E-06	5.925E-06
0.98610	0.8991	1.01250	4.492	1.263E 02	8.948E 00	-1.873E-06	-1.873E-06	1.874E-06
0.98249	1.1957	1.01875	5.831	1.263E 02	1.186E 01	-8.508E-07	-8.506E-07	8.509E-07
0.97890	1.4946	1.02500	7.172	1.263E 02	1.474E 01	-4.987E-07	-4.987E-07	4.987E-07
0.97180	2.0987	1.03750	9.858	1.263E 02	2.040E 01	-2.141E-07	-2.141E-07	2.141E-07
0.96481	2.7118	1.05000	12.545	1.263E 02	2.593E 01	-1.306E-07	-1.306E-07	1.306E-07
0.95116	3.9647	1.07500	17.921	1.263E 02	3.659E 01	-5.783E-08	-5.783E-08	5.783E-08
0.93799	5.2535	1.10000	23.299	1.263E 02	4.677E 01	-3.193E-08	-3.193E-08	3.193E-08
0.91312	7.9391	1.15000	34.055	1.263E 02	6.580E 01	-1.346E-08	-1.346E-08	1.346E-08
0.89037	10.7686	1.20000	44.812	1.263E 02	8.324E 01	-7.137E-09	-7.137E-09	7.137E-09
0.85187	16.8433	1.30000	66.327	1.263E 02	1.141E 02	-2.929E-09	-2.929E-09	2.929E-09
0.82378	23.4111	1.40000	87.843	1.263E 02	1.405E 02	-1.544E-09	-1.544E-09	1.544E-09
0.80719	30.3442	1.50000	109.358	1.263E 02	1.635E 02	-9.572E-10	-9.572E-10	9.572E-10
0.80280	37.4596	1.60000	130.874	1.263E 02	1.835E 02	-6.417E-10	-6.417E-10	6.417E-10
0.81081	44.5428	1.70000	152.390	1.263E 02	2.012E 02	-4.326E-10	-4.326E-10	4.326E-10
0.83087	51.3856	1.80000	173.906	1.263E 02	2.170E 02	-3.051E-10	-3.051E-10	3.051E-10
0.86214	57.8193	1.90000	195.421	1.263E 02	2.310E 02	-2.153E-10	-2.153E-10	2.153E-10
0.90344	63.7342	2.00000	216.937	1.263E 02	2.437E 02	-1.536E-10	-1.536E-10	1.536E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.120 θ_D= 2.109E-06 ρ_a= 1.006

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.687E-09	-4.687E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.805E-09	399.209	-5.296E-07	-5.296E-07	5.296E-07	5.296E-07	-3.697E-08	-3.697E-08
0.85000	1.513E-08	424.160	-8.014E-07	-8.014E-07	8.014E-07	8.014E-07	-7.169E-08	-7.169E-08
0.90000	3.841E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.819E-07	-1.819E-07
0.92500	7.079E-08	461.585	-2.066E-06	-2.066E-06	2.066E-06	2.066E-06	-3.353E-07	-3.353E-07
0.95000	1.795E-07	474.060	-3.506E-06	-3.506E-06	3.506E-06	3.506E-06	-8.499E-07	-8.500E-07
0.96250	3.528E-07	480.297	-5.057E-06	-5.058E-06	5.058E-06	5.059E-06	-1.671E-06	-1.671E-06
0.97500	1.065E-06	486.534	-8.936E-06	-8.937E-06	8.949E-06	8.951E-06	-5.044E-06	-5.045E-06
0.98124	2.463E-06	489.652	-1.408E-05	-1.409E-05	1.416E-05	1.417E-05	-1.166E-05	-1.167E-05
0.98749	1.006E-05	492.769	-2.956E-05	-2.957E-05	3.043E-05	3.046E-05	-4.761E-05	-4.765E-05
0.99373	2.673E-04	495.884	-1.832E-04	-1.836E-04	2.403E-04	2.411E-04	-1.260E-03	-1.264E-03
0.99341	5.754E-05	495.722	3.274E 00	3.274E 00	3.311E 00	3.311E 00	-2.733E-04	-2.728E-04
0.98975	5.917E-06	493.894	8.220E 00	8.220E 00	8.257E 00	8.257E 00	-2.806E-05	-2.804E-05
0.98610	1.873E-06	492.078	1.316E 01	1.316E 01	1.319E 01	1.319E 01	-8.874E-06	-8.871E-06
0.98249	8.506E-07	490.273	1.808E 01	1.808E 01	1.812E 01	1.812E 01	-4.030E-06	-4.029E-06
0.97890	4.986E-07	488.482	2.299E 01	2.299E 01	2.303E 01	2.303E 01	-2.362E-06	-2.362E-06
0.97180	2.141E-07	484.939	3.277E 01	3.277E 01	3.281E 01	3.281E 01	-1.014E-06	-1.014E-06
0.96481	1.306E-07	481.450	4.250E 01	4.250E 01	4.253E 01	4.253E 01	-6.185E-07	-6.184E-07
0.95116	5.783E-08	474.642	6.178E 01	6.178E 01	6.182E 01	6.182E 01	-2.739E-07	-2.739E-07
0.93799	3.193E-08	468.067	8.083E 01	8.083E 01	8.087E 01	8.087E 01	-1.512E-07	-1.512E-07
0.91312	1.346E-08	455.658	1.182E 02	1.182E 02	1.182E 02	1.182E 02	-6.375E-08	-6.375E-08
0.89037	7.136E-09	444.304	1.545E 02	1.545E 02	1.545E 02	1.545E 02	-3.380E-08	-3.380E-08
0.85187	2.929E-09	425.094	2.236E 02	2.236E 02	2.236E 02	2.236E 02	-1.387E-08	-1.387E-08
0.82378	1.544E-09	411.078	2.875E 02	2.875E 02	2.876E 02	2.876E 02	-7.313E-09	-7.313E-09
0.80719	9.572E-10	402.796	3.457E 02	3.457E 02	3.457E 02	3.457E 02	-4.534E-09	-4.534E-09
0.80280	6.417E-10	400.605	3.978E 02	3.978E 02	3.978E 02	3.978E 02	-3.039E-09	-3.039E-09
0.81081	4.326E-10	404.604	4.437E 02	4.437E 02	4.437E 02	4.437E 02	-2.049E-09	-2.049E-09
0.83087	3.051E-10	414.615	4.836E 02	4.836E 02	4.836E 02	4.836E 02	-1.445E-09	-1.445E-09
0.86214	2.153E-10	430.216	5.179E 02	5.179E 02	5.179E 02	5.179E 02	-1.020E-09	-1.020E-09
0.90344	1.536E-10	450.829	5.472E 02	5.472E 02	5.472E 02	5.472E 02	-7.277E-10	-7.277E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.120 θ_D= 2.109E-06 ρ_a= 1.006

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-2.289E-18
0.10000	2.832E-13	2.481E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-3.071E-18
0.20000	9.315E-13	9.925E-13	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-4.392E-18
0.30000	2.066E-12	2.059E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-6.904E-18
0.40000	4.470E-12	4.480E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-1.169E-17
0.50000	8.918E-12	9.030E-12	-9.266E-21	-9.266E-21	-2.218E-10	-2.218E-10	-2.339E-17
0.60000	2.043E-11	2.035E-11	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-5.470E-17
0.70000	5.794E-11	5.762E-11	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-1.599E-16
0.80000	2.405E-10	2.390E-10	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-7.239E-16
0.85000	6.426E-10	6.398E-10	-5.332E-19	-5.332E-19	-4.921E-09	-4.921E-09	-2.097E-15
0.90000	2.473E-09	2.476E-09	-2.287E-18	-2.287E-18	-1.356E-08	-1.356E-08	-9.407E-15
0.92500	6.132E-09	6.132E-09	-5.286E-18	-5.287E-18	-2.695E-08	-2.696E-08	-2.865E-14
0.95000	2.369E-08	2.369E-08	-2.096E-17	-2.096E-17	-6.773E-08	-6.773E-08	-1.284E-13
0.96250	6.363E-08	6.364E-08	-6.056E-17	-6.058E-17	-1.343E-07	-1.343E-07	-3.653E-13
0.97500	3.010E-07	3.011E-07	-3.488E-16	-3.489E-16	-4.272E-07	-4.273E-07	-1.362E-12
0.98124	9.355E-07	9.360E-07	-1.356E-15	-1.358E-15	-1.116E-06	-1.117E-06	-3.255E-12
0.98749	6.056E-06	6.062E-06	-1.392E-14	-1.394E-14	-5.676E-06	-5.683E-06	-8.654E-12
0.99373	3.456E-04	3.468E-04	-7.093E-12	-7.136E-12	-6.696E-04	-6.730E-04	-1.634E-11
0.99341	-4.569E-03	-4.569E-03	-3.532E-13	-3.519E-13	-7.112E 03	-7.112E 03	-1.607E-11
0.98975	-2.331E-03	-2.332E-03	-5.724E-15	-5.716E-15	-7.112E 03	-7.112E 03	-6.113E-12
0.98610	-1.555E-03	-1.555E-03	-8.704E-16	-8.699E-16	-7.112E 03	-7.112E 03	-2.333E-12
0.98249	-1.166E-03	-1.166E-03	-2.463E-16	-2.462E-16	-7.112E 03	-7.112E 03	-1.074E-12
0.97890	-9.326E-04	-9.327E-04	-1.053E-16	-1.053E-16	-7.112E 03	-7.112E 03	-5.292E-13
0.97180	-6.659E-04	-6.660E-04	-2.761E-17	-2.761E-17	-7.112E 03	-7.112E 03	-1.829E-13
0.96481	-5.178E-04	-5.178E-04	-1.277E-17	-1.277E-17	-7.112E 03	-7.112E 03	-7.061E-14
0.95116	-3.584E-04	-3.584E-04	-4.007E-18	-4.007E-18	-7.112E 03	-7.112E 03	-1.876E-14
0.93799	-2.740E-04	-2.740E-04	-1.748E-18	-1.748E-18	-7.112E 03	-7.112E 03	-7.037E-15
0.91312	-1.863E-04	-1.863E-04	-4.483E-19	-4.483E-19	-7.112E 03	-7.112E 03	-1.712E-15
0.89037	-1.411E-04	-1.411E-04	-1.755E-19	-1.755E-19	-7.112E 03	-7.112E 03	-6.219E-16
0.85187	-9.504E-05	-9.505E-05	-4.594E-20	-4.594E-20	-7.112E 03	-7.112E 03	-1.441E-16
0.82378	-7.165E-05	-7.165E-05	-1.787E-20	-1.787E-20	-7.112E 03	-7.112E 03	-5.067E-17
0.80719	-5.749E-05	-5.749E-05	-8.816E-21	-8.816E-21	-7.112E 03	-7.112E 03	-2.195E-17
0.80280	-4.801E-05	-4.801E-05	-4.825E-21	-4.825E-21	-7.112E 03	-7.112E 03	-1.115E-17
0.81081	-4.121E-05	-4.121E-05	-2.655E-21	-2.655E-21	-7.112E 03	-7.112E 03	-6.636E-18
0.83087	-3.610E-05	-3.610E-05	-1.523E-21	-1.523E-21	-7.112E 03	-7.112E 03	-4.259E-18
0.86214	-3.211E-05	-3.212E-05	-8.742E-22	-8.742E-22	-7.112E 03	-7.112E 03	-2.999E-18
0.90344	-2.892E-05	-2.892E-05	-5.011E-22	-5.011E-22	-7.112E 03	-7.112E 03	-2.246E-18

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.150 θ_D= 2.872E-06 ρ_a= 1.006

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	0.1500	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.1500	0.10000	193.643	1.857E-07	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.1500	0.20000	172.127	1.955E-07	1.000E 00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.1500	0.30000	150.612	2.084E-07	1.000E 00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.1500	0.40000	129.096	2.259E-07	1.000E 00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.1500	0.50000	107.580	2.501E-07	1.000E 00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.1500	0.60000	86.065	2.568E-07	1.000E 00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.1500	0.70000	64.549	5.269E-07	1.000E-00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.1500	0.80000	43.035	1.354E-06	1.000E-00	-7.805E-09	-7.805E-09	7.805E-09
0.85000	0.1500	0.85000	32.278	3.235E-06	1.000E-00	-1.513E-08	-1.513E-08	1.513E-08
0.90000	0.1500	0.90000	21.523	1.093E-05	1.000E-00	-3.840E-08	-3.840E-08	3.840E-08
0.92500	0.1500	0.92500	16.146	2.636E-05	9.999E-01	-7.076E-08	-7.076E-08	7.076E-08
0.95000	0.1500	0.95000	10.772	8.957E-05	9.998E-01	-1.793E-07	-1.793E-07	1.793E-07
0.96250	0.1500	0.96250	8.088	2.134E-04	9.997E-01	-3.519E-07	-3.519E-07	3.518E-07
0.97500	0.1500	0.97500	5.409	7.188E-04	9.993E-01	-1.059E-06	-1.059E-06	1.059E-06
0.98124	0.1500	0.98125	4.074	1.692E-03	9.988E-01	-2.441E-06	-2.442E-06	2.440E-06
0.98749	0.1500	0.98750	2.749	5.600E-03	9.977E-01	-9.780E-06	-9.788E-06	9.776E-06
0.99373	0.1501	0.99375	1.461	4.269E-02	9.952E-01	-2.245E-04	-2.251E-04	2.242E-04
0.99478	0.3563	1.00000	1.744	1.112E 02	2.886E 00	-7.162E-05	-7.148E-05	7.170E-05
0.99256	0.6924	1.00625	3.046	1.113E 02	6.786E 00	-6.669E-06	-6.665E-06	6.672E-06
0.99036	1.0304	1.01250	4.373	1.113E 02	1.032E 01	-2.020E-06	-2.019E-06	2.020E-06
0.98821	1.3700	1.01875	5.709	1.113E 02	1.379E 01	-9.066E-07	-9.064E-07	9.067E-07
0.98608	1.7110	1.02500	7.048	1.113E 02	1.720E 01	-5.229E-07	-5.229E-07	5.230E-07
0.98194	2.3977	1.03750	9.731	1.113E 02	2.389E 01	-2.217E-07	-2.217E-07	2.217E-07
0.97794	3.0900	1.05000	12.417	1.113E 02	3.042E 01	-1.336E-07	-1.336E-07	1.336E-07
0.97037	4.4914	1.07500	17.791	1.113E 02	4.302E 01	-5.869E-08	-5.869E-08	5.869E-08
0.96340	5.9140	1.10000	23.168	1.113E 02	5.503E 01	-3.230E-08	-3.230E-08	3.230E-08
0.95126	8.8173	1.15000	33.924	1.113E 02	7.750E 01	-1.358E-08	-1.358E-08	1.358E-08
0.94162	11.7879	1.20000	44.681	1.113E 02	9.810E 01	-7.184E-09	-7.184E-09	7.184E-09
0.93015	17.8725	1.30000	66.195	1.113E 02	1.345E 02	-2.942E-09	-2.942E-09	2.942E-09
0.92936	24.0377	1.40000	87.711	1.113E 02	1.658E 02	-1.549E-09	-1.549E-09	1.549E-09
0.93927	30.1428	1.50000	109.226	1.113E 02	1.928E 02	-9.596E-10	-9.596E-10	9.596E-10
0.95956	36.0552	1.60000	130.742	1.113E 02	2.165E 02	-6.432E-10	-6.432E-10	6.432E-10
0.98958	41.6659	1.70000	152.257	1.113E 02	2.374E 02	-4.335E-10	-4.335E-10	4.335E-10
1.02849	46.8994	1.80000	173.773	1.113E 02	2.560E 02	-3.058E-10	-3.058E-10	3.058E-10
1.07533	51.7147	1.90000	195.289	1.113E 02	2.726E 02	-2.157E-10	-2.157E-10	2.157E-10
1.12909	56.1000	2.00000	216.805	1.113E 02	2.876E 02	-1.539E-10	-1.539E-10	1.539E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.150 θ_D= 2.872E-06 ρ_a= 1.006

z	$_x\omega'$-10	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.686E-09	-4.686E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.805E-09	399.209	-5.296E-07	-5.296E-07	5.296E-07	5.296E-07	-3.697E-08	-3.697E-08
0.85000	1.513E-08	424.160	-8.014E-07	-8.014E-07	8.014E-07	8.014E-07	-7.168E-08	-7.168E-08
0.90000	3.840E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.819E-07	-1.819E-07
0.92500	7.076E-08	461.585	-2.066E-06	-2.066E-06	2.066E-06	2.066E-06	-3.352E-07	-3.352E-07
0.95000	1.793E-07	474.060	-3.504E-06	-3.504E-06	3.505E-06	3.505E-06	-8.492E-07	-8.492E-07
0.96250	3.519E-07	480.297	-5.053E-06	-5.054E-06	5.055E-06	5.055E-06	-1.667E-06	-1.667E-06
0.97500	1.060E-06	486.534	-8.915E-06	-8.916E-06	8.934E-06	8.935E-06	-5.017E-06	-5.018E-06
0.98124	2.442E-06	489.652	-1.401E-05	-1.402E-05	1.412E-05	1.412E-05	-1.156E-05	-1.157E-05
0.98749	9.793E-06	492.770	-2.904E-05	-2.906E-05	3.022E-05	3.024E-05	-4.633E-05	-4.636E-05
0.99373	2.254E-04	495.884	-1.568E-04	-1.571E-04	2.255E-04	2.262E-04	-1.063E-03	-1.066E-03
0.99478	7.141E-05	496.406	2.589E 00	2.589E 00	2.626E 00	2.626E 00	-3.392E-04	-3.386E-04
0.99256	6.663E-06	495.297	6.817E 00	6.817E 00	6.854E 00	6.854E 00	-3.159E-05	-3.157E-05
0.99036	2.019E-06	494.204	1.103E 01	1.103E 01	1.107E 01	1.107E 01	-9.569E-06	-9.565E-06
0.98821	9.063E-07	493.127	1.522E 01	1.522E 01	1.526E 01	1.526E 01	-4.294E-06	-4.293E-06
0.98608	5.228E-07	492.067	1.940E 01	1.940E 01	1.944E 01	1.944E 01	-2.477E-06	-2.477E-06
0.98194	2.217E-07	490.000	2.771E 01	2.771E 01	2.774E 01	2.774E 01	-1.050E-06	-1.050E-06
0.97794	1.336E-07	488.004	3.594E 01	3.594E 01	3.598E 01	3.598E 01	-6.328E-07	-6.328E-07
0.97037	5.869E-08	484.228	5.219E 01	5.219E 01	5.223E 01	5.223E 01	-2.780E-07	-2.780E-07
0.96340	3.230E-08	480.746	6.815E 01	6.815E 01	6.819E 01	6.819E 01	-1.530E-07	-1.530E-07
0.95126	1.358E-08	474.689	9.916E 01	9.916E 01	9.919E 01	9.919E 01	-6.431E-08	-6.431E-08
0.94162	7.184E-09	469.881	1.289E 02	1.289E 02	1.290E 02	1.290E 02	-3.403E-08	-3.403E-08
0.93015	2.942E-09	464.156	1.845E 02	1.845E 02	1.846E 02	1.846E 02	-1.393E-08	-1.393E-08
0.92936	1.549E-09	463.760	2.348E 02	2.348E 02	2.349E 02	2.349E 02	-7.337E-09	-7.337E-09
0.93927	9.596E-10	468.707	2.798E 02	2.798E 02	2.798E 02	2.798E 02	-4.545E-09	-4.545E-09
0.95956	6.432E-10	478.831	3.196E 02	3.196E 02	3.196E 02	3.196E 02	-3.047E-09	-3.047E-09
0.98958	4.335E-10	493.814	3.545E 02	3.545E 02	3.545E 02	3.545E 02	-2.053E-09	-2.053E-09
1.02849	3.058E-10	513.231	3.850E 02	3.850E 02	3.850E 02	3.850E 02	-1.448E-09	-1.448E-09
1.07533	2.157E-10	536.600	4.115E 02	4.115E 02	4.115E 02	4.115E 02	-1.022E-09	-1.022E-09
1.12909	1.539E-10	563.430	4.346E 02	4.346E 02	4.346E 02	4.346E 02	-7.292E-10	-7.292E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.150 θ_D= 2.872E-06 ρ_a= 1.006

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-3.576E-18
0.10000	4.280E-13	4.004E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-4.798E-18
0.20000	1.265E-12	1.243E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-6.862E-18
0.30000	2.632E-12	2.639E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-1.079E-17
0.40000	5.692E-12	5.602E-12	-5.072E-21	-5.072E-21	-1.177E-10	-1.177E-10	-1.826E-17
0.50000	1.115E-11	1.126E-11	-9.266E-21	-9.266E-21	-2.218E-10	-2.218E-10	-3.655E-17
0.60000	2.555E-11	2.543E-11	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-8.546E-17
0.70000	7.249E-11	7.252E-11	-5.005E-20	-5.005E-20	-8.906E-10	-8.906E-10	-2.498E-16
0.80000	2.996E-10	2.988E-10	-2.003E-19	-2.003E-19	-2.435E-09	-2.435E-09	-1.131E-15
0.85000	8.014E-10	7.996E-10	-5.331E-19	-5.331E-19	-4.920E-09	-4.920E-09	-3.276E-15
0.90000	3.091E-09	3.100E-09	-2.286E-18	-2.286E-18	-1.356E-08	-1.356E-08	-1.469E-14
0.92500	7.664E-09	7.665E-09	-5.284E-18	-5.284E-18	-2.695E-08	-2.695E-08	-4.473E-14
0.95000	2.960E-08	2.960E-08	-2.093E-17	-2.093E-17	-6.767E-08	-6.768E-08	-2.002E-13
0.96250	7.926E-08	7.927E-08	-6.032E-17	-6.033E-17	-1.341E-07	-1.341E-07	-5.695E-13
0.97500	3.736E-07	3.737E-07	-3.459E-16	-3.460E-16	-4.253E-07	-4.254E-07	-2.115E-12
0.98124	1.160E-06	1.161E-06	-1.337E-15	-1.339E-15	-1.106E-06	-1.107E-06	-5.027E-12
0.98749	7.346E-06	7.354E-06	-1.329E-14	-1.331E-14	-5.509E-06	-5.515E-06	-1.329E-11
0.99373	3.509E-04	3.520E-04	-5.070E-12	-5.098E-12	-5.073E-04	-5.097E-04	-2.571E-11
0.99478	-4.408E-03	-4.409E-03	-5.319E-13	-5.298E-13	-5.316E 03	-5.316E 03	-2.785E-11
0.99256	-2.016E-03	-2.016E-03	-6.964E-15	-6.955E-15	-5.316E 03	-5.316E 03	-1.055E-11
0.99036	-1.321E-03	-1.321E-03	-9.839E-16	-9.832E-16	-5.316E 03	-5.316E 03	-3.973E-12
0.98821	-9.834E-04	-9.834E-04	-2.718E-16	-2.717E-16	-5.316E 03	-5.316E 03	-1.789E-12
0.98608	-7.836E-04	-7.837E-04	-1.136E-16	-1.136E-16	-5.316E 03	-5.316E 03	-8.759E-13
0.98194	-5.575E-04	-5.575E-04	-2.917E-17	-2.916E-17	-5.316E 03	-5.316E 03	-2.983E-13
0.97794	-4.327E-04	-4.327E-04	-1.323E-17	-1.323E-17	-5.316E 03	-5.316E 03	-1.147E-13
0.97037	-2.989E-04	-2.989E-04	-4.089E-18	-4.089E-18	-5.316E 03	-5.316E 03	-3.016E-14
0.96340	-2.283E-04	-2.283E-04	-1.781E-18	-1.781E-18	-5.316E 03	-5.316E 03	-1.124E-14
0.95126	-1.551E-04	-1.551E-04	-4.540E-19	-4.540E-19	-5.316E 03	-5.316E 03	-2.714E-15
0.94162	-1.174E-04	-1.174E-04	-1.772E-19	-1.772E-19	-5.316E 03	-5.316E 03	-9.824E-16
0.93015	-7.903E-05	-7.903E-05	-4.624E-20	-4.624E-20	-5.316E 03	-5.316E 03	-2.269E-16
0.92936	-5.956E-05	-5.956E-05	-1.796E-20	-1.796E-20	-5.316E 03	-5.316E 03	-7.962E-17
0.93927	-4.779E-05	-4.779E-05	-8.849E-21	-8.849E-21	-5.316E 03	-5.316E 03	-3.447E-17
0.95956	-3.990E-05	-3.990E-05	-4.843E-21	-4.843E-21	-5.316E 03	-5.316E 03	-1.748E-17
0.98958	-3.425E-05	-3.425E-05	-2.664E-21	-2.664E-21	-5.316E 03	-5.316E 03	-1.040E-17
1.02849	-3.000E-05	-3.000E-05	-1.529E-21	-1.529E-21	-5.316E 03	-5.316E 03	-6.671E-18
1.07533	-2.669E-05	-2.669E-05	-8.772E-22	-8.772E-22	-5.316E 03	-5.316E 03	-4.695E-18
1.12909	-2.403E-05	-2.403E-05	-5.028E-22	-5.028E-22	-5.316E 03	-5.316E 03	-3.515E-18

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.200 θ_D= 8.582E-06 ρ_a= 1.007

z	ϕ	z_r	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	0.2000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.2000	0.10000	193.643	4.313E-07	1.000E 00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.2000	0.20000	172.127	4.411E-07	1.000E-00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.2000	0.30000	150.612	4.561E-07	1.000E-00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.2000	0.40000	129.096	4.853E-07	1.000E-00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.2000	0.50000	107.581	5.253E-07	1.000E-00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.2000	0.60000	86.066	5.336E-07	1.000E-00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.2000	0.70000	64.551	9.205E-07	1.000E-00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.2000	0.80000	43.037	2.076E-06	1.000E-00	-7.804E-09	-7.804E-09	7.804E-09
0.85000	0.2000	0.85000	32.281	4.789E-06	1.000E-00	-1.513E-08	-1.513E-08	1.513E-08
0.90000	0.2000	0.90000	21.528	1.558E-05	9.999E-01	-3.838E-08	-3.838E-08	3.838E-08
0.92500	0.2000	0.92500	16.153	3.749E-05	9.998E-01	-7.070E-08	-7.070E-08	7.070E-08
0.95000	0.2000	0.95000	10.783	1.264E-04	9.996E-01	-1.789E-07	-1.789E-07	1.789E-07
0.96250	0.2000	0.96250	8.103	3.002E-04	9.993E-01	-3.499E-07	-3.499E-07	3.499E-07
0.97500	0.2000	0.97500	5.431	1.004E-03	9.984E-01	-1.047E-06	-1.047E-06	1.047E-06
0.98124	0.2000	0.98125	4.104	2.345E-03	9.974E-01	-2.395E-06	-2.396E-06	2.395E-06
0.98749	0.2001	0.98750	2.793	7.595E-03	9.954E-01	-9.221E-06	-9.228E-06	9.217E-06
0.99373	0.2002	0.99375	1.543	5.134E-02	9.946E-01	-1.589E-04	-1.593E-04	1.588E-04
0.99736	0.3743	1.00000	1.514	8.212E 01	2.225E 00	-1.798E-04	-1.793E-04	1.800E-04
0.99825	0.7289	1.00625	2.760	8.218E 01	5.672E 00	-9.640E-06	-9.633E-06	9.644E-06
0.99918	1.0832	1.01250	4.070	8.219E 01	9.174E 00	-2.448E-06	-2.447E-06	2.448E-06
1.00014	1.4370	1.01875	5.397	8.219E 01	1.260E 01	-1.066E-06	-1.066E-06	1.066E-06
1.00114	1.7902	1.02500	6.731	8.220E 01	1.596E 01	-5.901E-07	-5.900E-07	5.902E-07
1.00326	2.4944	1.03750	9.408	8.220E 01	2.253E 01	-2.423E-07	-2.423E-07	2.423E-07
1.00552	3.1956	1.05000	12.090	8.220E 01	2.894E 01	-1.416E-07	-1.416E-07	1.416E-07
1.01051	4.5881	1.07500	17.462	8.220E 01	4.131E 01	-6.093E-08	-6.093E-08	6.093E-08
1.01608	5.9661	1.10000	22.837	8.220E 01	5.310E 01	-3.327E-08	-3.327E-08	3.327E-08
1.02896	8.6736	1.15000	33.591	8.220E 01	7.515E 01	-1.388E-08	-1.388E-08	1.388E-08
1.04408	11.3083	1.20000	44.347	8.220E 01	9.536E 01	-7.306E-09	-7.306E-09	7.306E-09
1.08064	16.3308	1.30000	65.860	8.220E 01	1.311E 02	-2.974E-09	-2.974E-09	2.974E-09
1.12493	20.9910	1.40000	87.375	8.220E 01	1.618E 02	-1.562E-09	-1.562E-09	1.562E-09
1.17607	25.2725	1.50000	108.891	8.220E 01	1.883E 02	-9.656E-10	-9.656E-10	9.656E-10
1.23322	29.1776	1.60000	130.406	8.220E 01	2.116E 02	-6.473E-10	-6.473E-10	6.473E-10
1.29557	32.7218	1.70000	151.922	8.220E 01	2.321E 02	-4.359E-10	-4.359E-10	4.359E-10
1.36242	35.9296	1.80000	173.437	8.220E 01	2.503E 02	-3.075E-10	-3.075E-10	3.075E-10
1.43313	38.8292	1.90000	194.953	8.220E 01	2.666E 02	-2.169E-10	-2.169E-10	2.169E-10
1.50717	41.4502	2.00000	216.469	8.220E 01	2.813E 02	-1.547E-10	-1.547E-10	1.547E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.200 θ_D= 8.582E-06 ρ_a= 1.007

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.863E-08	-6.863E-08	6.863E-08	6.863E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.686E-09	-4.686E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.646E-09	-7.646E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.804E-09	399.209	-5.296E-07	-5.296E-07	5.296E-07	5.296E-07	-3.696E-08	-3.696E-08
0.85000	1.513E-08	424.160	-8.013E-07	-8.013E-07	8.013E-07	8.013E-07	-7.166E-08	-7.166E-08
0.90000	3.838E-08	449.110	-1.405E-06	-1.405E-06	1.405E-06	1.405E-06	-1.818E-07	-1.818E-07
0.92500	7.070E-08	461.585	-2.065E-06	-2.065E-06	2.065E-06	2.065E-06	-3.349E-07	-3.349E-07
0.95000	1.789E-07	474.060	-3.501E-06	-3.501E-06	3.502E-06	3.502E-06	-8.475E-07	-8.476E-07
0.96250	3.499E-07	480.297	-5.044E-06	-5.045E-06	5.048E-06	5.048E-06	-1.657E-06	-1.657E-06
0.97500	1.047E-06	486.534	-8.867E-06	-8.868E-06	8.904E-06	8.905E-06	-4.960E-06	-4.961E-06
0.98124	2.397E-06	489.652	-1.384E-05	-1.384E-05	1.405E-05	1.405E-05	-1.135E-05	-1.135E-05
0.98749	9.232E-06	492.769	-2.778E-05	-2.779E-05	2.994E-05	2.996E-05	-4.367E-05	-4.371E-05
0.99373	1.596E-04	495.884	-1.089E-04	-1.092E-04	2.084E-04	2.088E-04	-7.528E-04	-7.546E-04
0.99736	1.792E-04	497.697	1.296E 00	1.296E 00	1.336E 00	1.336E 00	-8.515E-04	-8.494E-04
0.99825	9.629E-06	498.140	3.972E 00	3.972E 00	4.012E 00	4.012E 00	-4.566E-05	-4.563E-05
0.99918	2.447E-06	498.601	6.629E 00	6.629E 00	6.669E 00	6.669E 00	-1.159E-05	-1.159E-05
1.00014	1.066E-06	499.082	9.267E 00	9.267E 00	9.308E 00	9.308E 00	-5.049E-06	-5.048E-06
1.00114	5.900E-07	499.582	1.189E 01	1.189E 01	1.193E 01	1.193E 01	-2.795E-06	-2.795E-06
1.00326	2.423E-07	500.637	1.707E 01	1.707E 01	1.711E 01	1.711E 01	-1.148E-06	-1.148E-06
1.00552	1.416E-07	501.769	2.217E 01	2.217E 01	2.222E 01	2.222E 01	-6.708E-07	-6.708E-07
1.01051	6.093E-08	504.255	3.216E 01	3.216E 01	3.220E 01	3.220E 01	-2.886E-07	-2.886E-07
1.01608	3.327E-08	507.036	4.186E 01	4.186E 01	4.190E 01	4.190E 01	-1.576E-07	-1.576E-07
1.02896	1.388E-08	513.463	6.038E 01	6.038E 01	6.042E 01	6.042E 01	-6.573E-08	-6.573E-08
1.04408	7.306E-09	521.008	7.779E 01	7.779E 01	7.783E 01	7.783E 01	-3.460E-08	-3.460E-08
1.08064	2.974E-09	539.252	1.094E 02	1.094E 02	1.095E 02	1.095E 02	-1.409E-08	-1.409E-08
1.12493	1.562E-09	561.352	1.372E 02	1.372E 02	1.373E 02	1.373E 02	-7.399E-09	-7.399E-09
1.17607	9.656E-10	586.873	1.616E 02	1.616E 02	1.617E 02	1.617E 02	-4.574E-09	-4.574E-09
1.23322	6.473E-10	615.390	1.830E 02	1.830E 02	1.831E 02	1.831E 02	-3.066E-09	-3.066E-09
1.29557	4.359E-10	646.505	2.018E 02	2.018E 02	2.018E 02	2.018E 02	-2.065E-09	-2.065E-09
1.36242	3.075E-10	679.863	2.183E 02	2.183E 02	2.184E 02	2.184E 02	-1.456E-09	-1.456E-09
1.43313	2.169E-10	715.149	2.330E 02	2.330E 02	2.330E 02	2.330E 02	-1.027E-09	-1.027E-09
1.50717	1.547E-10	752.093	2.459E 02	2.459E 02	2.459E 02	2.459E 02	-7.330E-10	-7.330E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.200 θ_D= 8.582E-06 ρ_a= 1.007

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-6.358E-18
0.10000	5.616E-13	5.948E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-8.529E-18
0.20000	1.670E-12	1.657E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.220E-17
0.30000	3.546E-12	3.546E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-1.918E-17
0.40000	7.492E-12	7.492E-12	-5.071E-21	-5.071E-21	-1.177E-10	-1.177E-10	-3.246E-17
0.50000	1.504E-11	1.494E-11	-9.266E-21	-9.266E-21	-2.218E-10	-2.218E-10	-6.498E-17
0.60000	3.408E-11	3.401E-11	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-1.519E-16
0.70000	9.695E-11	9.711E-11	-5.004E-20	-5.004E-20	-8.905E-10	-8.905E-10	-4.440E-16
0.80000	3.997E-10	3.996E-10	-2.003E-19	-2.003E-19	-2. -09	-2.435E-09	-2.010E-15
0.85000	1.069E-09	1.068E-09	-5.329E-19	-5.329E-19	-4.91>E-09	-4.919E-09	-5.823E-15
0.90000	4.128E-09	4.133E-09	-2.285E-18	-2.285E-18	-1.356E-08	-1.356E-08	-2.610E-14
0.92500	1.023E-08	1.023E-08	-5.278E-18	-5.278E-18	-2.693E-08	-2.693E-08	-7.938E-14
0.95000	3.943E-08	3.944E-08	-2.087E-17	-2.087E-17	-6.756E-08	-6.756E-08	-3.544E-13
0.96250	1.065E-07	1.065E-07	-5.979E-17	-5.979E-17	-1.336E-07	-1.336E-07	-1.007E-12
0.97500	4.933E-07	4.935E-07	-3.398E-16	-3.399E-16	-4.210E-07	-4.211E-07	-3.712E-12
0.98124	1.514E-06	1.514E-06	-1.297E-15	-1.298E-15	-1.084E-06	-1.084E-06	-8.718E-12
0.98749	9.015E-06	9.025E-06	-1.203E-14	-1.205E-14	-5.166E-06	-5.172E-06	-2.278E-11
0.99373	3.215E-04	3.225E-04	-2.562E-12	-2.574E-12	-2.968E-04	-2.980E-04	-4.653E 11
0.99736	8.802E-03	8.800E-03	-3.268E-12	-3.253E-12	-3.172E 03	-3.172E 03	-4.615E-11
0.99825	2.842E-03	2.842E-03	-1.297E-14	-1.295E-14	-3.172E 03	-3.172E 03	-2.340E-11
0.99918	1.732E-03	1.732E-03	-1.344E-15	-1.343E-15	-3.172E 03	-3.172E 03	-8.972E-12
1.00014	1.253E-03	1.253E-03	-3.494E-16	-3.492E-16	-3.172E 03	-3.172E 03	-3.790E-12
1.00114	9.823E-04	9.823E-04	-1.378E-16	-1.378E-16	-3.172E 03	-3.172E 03	-1.819E-12
1.00326	6.870E-04	6.870E-04	-3.354E-17	-3.354E-17	-3.172E 03	-3.172E 03	-5.941E-13
1.00552	5.285E-04	5.285E-04	-1.449E-17	-1.449E-17	-3.172E 03	-3.172E 03	-2.256E-13
1.01051	3.617E-04	3.617E-04	-4.305E-18	-4.304E-18	-3.172E 03	-3.172E 03	-5.778E-14
1.01608	2.749E-04	2.749E-04	-1.868E-18	-1.868E-18	-3.172E 03	-3.172E 03	-2.115E-14
1.02896	1.858E-04	1.858E-04	-4.690E-19	-4.690E-19	-3.172E 03	-3.172E 03	-5.007E-15
1.04408	1.403E-04	1.403E-04	-1.817E-19	-1.817E-19	-3.172E 03	-3.172E 03	-1.796E-15
1.08064	9.421E-05	9.422E-05	-4.699E-20	-4.699E-20	-3.172E 03	-3.172E 03	-4.114E-16
1.12493	7.091E-05	7.091E-05	-1.818E-20	-1.818E-20	-3.172E 03	-3.172E 03	-1.436E-16
1.17607	5.685E-05	5.685E-05	-8.932E-21	-8.932E-21	-3.172E 03	-3.172E 03	-6.203E-17
1.23322	4.744E-05	4.744E-05	-4.889E-21	-4.889E-21	-3.172E 03	-3.172E 03	-3.137E-17
1.29557	4.071E-05	4.071E-05	-2.687E-21	-2.687E-21	-3.172E 03	-3.172E 03	-1.863E-17
1.36242	3.564E-05	3.564E-05	-1.542E-21	-1.542E-21	-3.172E 03	-3.172E 03	-1.193E-17
1.43313	3.170E-05	3.170E-05	-8.849E-22	-8.849E-22	-3.172E 03	-3.172E 03	-8.388E-18
1.50717	2.855E-05	2.855E-05	-5.072E-22	-5.072E-22	-3.172E 03	-3.172E 03	-6.274E-18

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.250 θ_D= 1.842E-05 ρ_a= 1.013

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	0.2500	0.	216.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.2500	0.10000	193.643	2.835E-08	1.000E-00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.2500	0.20000	172.128	4.336E-08	1.000E-00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.2500	0.30000	150.612	6.170E-08	1.000E-00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.2500	0.40000	129.097	1.051E-07	1.000E-00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.2500	0.50000	107.582	1.534E-07	1.000E-00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.2500	0.60000	86.067	1.701E-07	1.000E-00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.2500	0.70000	64.552	6.737E-07	1.000E-00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.2500	0.80000	43.040	2.228E-06	1.000E-00	-7.803E-09	-7.803E-09	7.803E-09
0.85000	0.2500	0.85000	32.286	5.750E-06	9.999E-01	-1.513E-08	-1.513E-08	1.513E-08
0.90000	0.2500	0.90000	21.535	2.006E-05	9.998E-01	-3.835E-08	-3.835E-08	3.835E-08
0.92500	0.2500	0.92500	16.162	4.877E-05	9.997E-01	-7.063E-08	-7.063E-08	7.063E-08
0.95000	0.2500	0.95000	10.797	1.657E-04	9.993E-01	-1.785E-07	-1.785E-07	1.785E-07
0.96250	0.2500	0.96250	8.122	3.931E-04	9.987E-01	-3.474E-07	-3.474E-07	3.474E-07
0.97500	0.2500	0.97500	5.459	1.307E-03	9.974E-01	-1.032E-06	-1.032E-06	1.032E-06
0.98124	0.2500	0.98125	4.141	3.024E-03	9.959E-01	-2.339E-06	-2.339E-06	2.338E-06
0.98749	0.2501	0.98750	2.849	9.544E-03	9.934E-01	-8.560E-06	-8.566E-06	8.557E-06
0.99373	0.2502	0.99375	1.642	5.670E-02	9.970E-01	-1.046E-04	-1.048E-04	1.045E-04
0.99961	0.3094	1.00000	1.165	3.983E 01	1.265E 00	-1.206E-03	-1.203E-03	1.210E-03
1.00440	0.5378	1.00625	2.234	4.009E 01	3.738E 00	-2.360E-05	-2.357E-05	2.361E-05
1.00920	0.7648	1.01250	3.499	4.011E 01	6.600E 00	-4.137E-06	-4.135E-06	4.138E-06
1.01402	0.9898	1.01875	4.807	4.011E 01	9.494E 00	-1.535E-06	-1.534E-06	1.535E-06
1.01886	1.2128	1.02500	6.132	4.012E 01	1.237E 01	-7.414E-07	-7.413E-07	7.415E-07
1.02858	1.6523	1.03750	8.799	4.012E 01	1.803E 01	-2.866E-07	-2.865E-07	2.866E-07
1.03836	2.0837	1.05000	11.476	4.012E 01	2.357E 01	-1.581E-07	-1.581E-07	1.581E-07
1.05810	2.9224	1.07500	16.843	4.012E 01	3.427E 01	-6.537E-08	-6.537E-08	6.538E-08
1.07806	3.7302	1.10000	22.215	4.012E 01	4.448E 01	-3.549E-08	-3.549E-08	3.549E-08
1.11858	5.2587	1.15000	32.967	4.012E 01	6.358E 01	-1.446E-08	-1.446E-08	1.446E-08
1.15984	6.6794	1.20000	43.721	4.012E 01	8.109E 01	-7.540E-09	-7.540E-09	7.540E-09
1.24428	9.2342	1.30000	65.234	4.012E 01	1.121E 02	-3.035E-09	-3.035E-09	3.035E-09
1.33088	11.4606	1.40000	86.748	4.012E 01	1.386E 02	-1.587E-09	-1.587E-09	1.587E-09
1.41925	13.4124	1.50000	108.263	4.012E 01	1.616E 02	-9.769E-10	-9.769E-10	9.769E-10
1.50906	15.1336	1.60000	129.778	4.012E 01	1.818E 02	-6.549E-10	-6.549E-10	6.549E-10
1.60009	16.6603	1.70000	151.293	4.012E 01	1.996E 02	-4.403E-10	-4.403E-10	4.403E-10
1.69213	18.0217	1.80000	172.809	4.012E 01	2.153E 02	-3.106E-10	-3.106E-10	3.106E-10
1.78503	19.2421	1.90000	194.324	4.012E 01	2.295E 02	-2.191E-10	-2.191E-10	2.191E-10
1.87865	20.3418	2.00000	215.840	4.012E 01	2.422E 02	-1.563E-10	-1.563E-10	1.563E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.250 θ_D= 1.842E-05 ρ_a= 1.013

z	$_x\mu$-1.0	T_0	$_oT_t$-T_0	$_xT_t$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.862E-08	-6.862E-08	6.862E-08	6.862E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.686E-09	-4.686E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.645E-09	-7.645E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.803E-09	399.209	-5.296E-07	-5.296E-07	5.296E-07	5.296E-07	-3.696E-08	-3.696E-08
0.85000	1.513E-08	424.160	-8.012E-07	-8.012E-07	8.012E-07	8.012E-07	-7.164E-08	-7.164E-08
0.90000	3.835E-08	449.110	-1.404E-06	-1.404E-06	1.404E-06	1.404E-06	-1.816E-07	-1.816E-07
0.92500	7.063E-08	461.585	-2.064E-06	-2.064E-06	2.064E-06	2.064E-06	-3.345E-07	-3.345E-07
0.95000	1.785E-07	474.060	-3.497E-06	-3.497E-06	3.498E-06	3.498E-06	-8.454E-07	-8.454E-07
0.96250	3.474E-07	480.297	-5.033E-06	-5.033E-06	5.038E-06	5.039E-06	-1.645E-06	-1.646E-06
0.97500	1.032E-06	486.534	-8.804E-06	-8.805E-06	8.867E-06	8.869E-06	-4.887E-06	-4.888E-06
0.98124	2.340E-06	489.652	-1.362E-05	-1.362E-05	1.396E-05	1.396E-05	-1.108E-05	-1.108E-05
0.98749	8.569E-06	492.769	-2.623E-05	-2.624E-05	2.964E-05	2.966E-05	-4.054E-05	-4.057E-05
0.99373	1.049E-04	495.884	-6.991E-05	-7.007E-05	1.912E-04	1.915E-04	-4.955E-04	-4.964E-04
0.99961	1.203E-03	498.817	1.780E-01	1.780E-01	2.114E-01	2.115E-01	-5.714E-03	-5.699E-03
1.00440	2.356E-05	501.205	9.084E-01	9.084E-01	9.433E-01	9.433E-01	-1.118E-04	-1.116E-04
1.00920	4.134E-06	503.602	1.630E 00	1.630E 00	1.665E 00	1.665E 00	-1.959E-05	-1.958E-05
1.01402	1.534E-06	506.008	2.343E 00	2.343E 00	2.378E 00	2.378E 00	-7.269E-06	-7.267E-06
1.01886	7.412E-07	508.422	3.047E 00	3.047E 00	3.082E 00	3.082E 00	-3.512E-06	-3.511E-06
1.02858	2.865E-07	513.276	4.433E 00	4.433E 00	4.468E 00	4.468E 00	-1.357E-06	-1.357E-06
1.03836	1.581E-07	518.155	5.789E 00	5.789E 00	5.824E 00	5.824E 00	-7.487E-07	-7.487E-07
1.05810	6.837E-08	528.004	8.416E 00	8.416E 00	8.451E 00	8.451E 00	-3.097E-07	-3.096E-07
1.07806	3.649E-08	537.962	1.093E 01	1.093E 01	1.097E 01	1.097E 01	-1.681E-07	-1.681E-07
1.11858	1.446E-08	558.182	1.566E 01	1.566E 01	1.570E 01	1.570E 01	-6.850E-08	-6.850E-08
1.15984	7.540E-09	578.771	2.003E 01	2.003E 01	2.006E 01	2.006E 01	-3.571E-08	-3.571E-08
1.24428	3.035E-09	620.910	2.779E 01	2.779E 01	2.782E 01	2.782E 01	-1.438E-08	-1.438E-08
1.33088	1.587E-09	664.126	3.447E 01	3.447E 01	3.451E 01	3.451E 01	-7.516E-09	-7.516E-09
1.41925	9.769E-10	708.221	4.028E 01	4.028E 01	4.031E 01	4.031E 01	-4.627E-09	-4.627E-09
1.50906	6.549E-10	753.041	4.536E 01	4.536E 01	4.540E 01	4.540E 01	-3.102E-09	-3.102E-09
1.60009	4.403E-10	798.464	4.984E 01	4.984E 01	4.987E 01	4.987E 01	-2.086E-09	-2.086E-09
1.69213	3.106E-10	844.393	5.381E 01	5.381E 01	5.385E 01	5.385E 01	-1.471E-09	-1.471E-09
1.78503	2.191E-10	890.749	5.736E 01	5.736E 01	5.739E 01	5.739E 01	-1.038E-09	-1.038E-09
1.87865	1.563E-10	937.470	6.052E 01	6.052E 01	6.055E 01	6.055E 01	-7.402E-10	-7.402E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0=0.250 θ_D=1.842E-05 ρ_a=1.013

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-9.934E-18
0.10000	7.542E-13	7.859E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-1.333E-17
0.20000	2.109E-12	2.087E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.906E-17
0.30000	4.438E-12	4.467E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-2.996E-17
0.40000	9.471E-12	9.474E-12	-5.071E-21	-5.071E-21	-1.177E-10	-1.177E-10	-5.072E-17
0.50000	1.890E-11	1.880E-11	-9.266E-21	-9.266E-21	-2.218E-10	-2.218E-10	-1.015E-16
0.60000	4.265E-11	4.264E-11	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-2.374E-16
0.70000	1.214E-10	1.215E-10	-5.004E-20	-5.004E-20	-8.905E-10	-8.905E-10	-6.937E-16
0.80000	4.996E-10	4.998E-10	-2.002E-19	-2.002E-19	-2.435E-09	-2.435E-09	-3.140E-15
0.85000	1.336E-09	1.336E-09	-5.327E-19	-5.327E-19	-4.918E-09	-4.918E-09	-9.093E-15
0.90000	5.159E-09	5.161E-09	-2.282E-18	-2.282E-18	-1.355E-08	-1.355E-08	-4.073E-14
0.92500	1.278E-08	1.278E-08	-5.270E-18	-5.271E-18	-2.690E-08	-2.690E-08	-1.237E-13
0.95000	4.917E-08	4.918E-08	-2.078E-17	-2.079E-17	-6.740E-08	-6.741E-08	-5.509E-13
0.96250	1.316E-07	1.316E-07	-5.910E-17	-5.911E-17	-1.330E-07	-1.330E-07	-1.563E-12
0.97500	6.056E-07	6.056E-07	-3.321E-16	-3.322E-16	-4.156E-07	-4.157E-07	-5.704E-12
0.98124	1.838E-06	1.839E-06	-1.248E-15	-1.249E-15	-1.056E-06	-1.057E-06	-1.320E-11
0.98749	1.021E-05	1.022E-05	-1.060E-14	-1.062E-14	-4.773E-06	-4.778E-06	-3.406E-11
0.99373	2.777E-04	2.785E-04	-1.120E-12	-1.124E-12	-1.725E-04	-1.731E-04	-7.601E-11
0.99961	2.475E-02	2.475E-02	-1.662E-10	-1.653E-10	-2.924E 02	-2.924E 02	-5.201E-11
1.00440	7.717E-03	7.717E-03	-6.488E-14	-6.473E-14	-2.924E 02	-2.925E 02	-5.317E-11
1.00920	4.326E-03	4.326E-03	-3.162E-15	-3.158E-15	-2.924E 02	-2.925E 02	-2.054E-11
1.01402	2.987E-03	2.987E-03	-6.295E-16	-6.292E-16	-2.924E 02	-2.925E 02	-8.232E-12
1.01886	2.278E-03	2.278E-03	-1.985E-16	-1.984E-16	-2.924E 02	-2.925E 02	-3.958E-12
1.02858	1.544E-03	1.544E-03	-4.365E-17	-4.364E-17	-2.924E 02	-2.925E 02	-1.173E-12
1.03836	1.167E-03	1.167E-03	-1.720E-17	-1.720E-17	-2.924E 02	-2.925E 02	-4.319E-13
1.05810	7.840E-04	7.840E-04	-4.741E-18	-4.740E-18	-2.924E 02	-2.925E 02	-1.045E-13
1.07806	5.903E-04	5.903E-04	-2.053E-18	-2.053E-18	-2.924E 02	-2.925E 02	-3.656E-14
1.11858	3.950E-04	3.950E-04	-4.985E-19	-4.985E-19	-2.924E 02	-2.925E 02	-8.402E-15
1.15984	2.968E-04	2.968E-04	-1.903E-19	-1.903E-19	-2.924E 02	-2.925E 02	-2.962E-15
1.24428	1.982E-04	1.982E-04	-4.843E-20	-4.843E-20	-2.924E 02	-2.925E 02	-6.670E-16
1.33088	1.488E-04	1.488E-04	-1.860E-20	-1.860E-20	-2.924E 02	-2.925E 02	-2.307E-16
1.41925	1.191E-04	1.191E-04	-9.091E-21	-9.091E-21	-2.924E 02	-2.925E 02	-9.917E-17
1.50906	9.929E-05	9.930E-05	-4.976E-21	-4.976E-21	-2.924E 02	-2.925E 02	-4.986E-17
1.60009	8.513E-05	8.513E-05	-2.731E-21	-2.731E-21	-2.924E 02	-2.925E 02	-2.955E-17
1.69213	7.450E-05	7.451E-05	-1.567E-21	-1.567E-21	-2.924E 02	-2.925E 02	-1.886E-17
1.78503	6.624E-05	6.624E-05	-8.993E-22	-8.993E-22	-2.924E 02	-2.925E 02	-1.323E-17
1.87865	5.962E-05	5.962E-05	-5.155E-22	-5.155E-22	-2.924E 02	-2.925E 02	-9.879E-18

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.300 θ_D= 3.465E-05 ρ_a= 1.128

z	ϕ	z_r	ρ	θ	β	$_0\mu\cdot10$	$_x\mu\cdot10$	$_0\mu'\cdot10$
0.	0.3000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.3000	0.10000	193.643	3.502E-08	1.000E-00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.3000	0.20000	172.128	5.253E-08	1.000E-00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.3000	0.30000	150.613	8.171E-08	1.000E-00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.3000	0.40000	129.097	1.251E-07	1.000E-00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.3000	0.50000	107.582	1.801E-07	1.000E-00	-9.894E-10	-9.894E-10	9.894E-10
0.60000	0.3000	0.60000	86.068	2.068E-07	1.000E-00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.3000	0.70000	64.555	8.204E-07	1.000E-00	-3.103E-09	-3.103E-09	3.103E-09
0.80000	0.3000	0.80000	43.044	2.721E-06	9.999E-01	-7.801E-09	-7.801E-09	7.801E-09
0.85000	0.3000	0.85000	32.291	6.964E-06	9.999E-01	-1.512E-08	-1.512E-08	1.512E-08
0.90000	0.3000	0.90000	21.543	2.433E-05	9.998E-01	-3.831E-08	-3.831E-08	3.831E-08
0.92500	0.3000	0.92500	16.174	5.907E-05	9.996E-01	-7.054E-08	-7.054E-08	7.054E-08
0.95000	0.3000	0.95000	10.814	2.003E-04	9.991E-01	-1.779E-07	-1.779E-07	1.779E-07
0.96250	0.3000	0.96250	8.144	4.722E-04	9.985E-01	-3.444E-07	-3.444E-07	3.443E-07
0.97500	0.3000	0.97500	5.494	1.559E-03	9.970E-01	-1.013E-06	-1.014E-06	1.013E-06
0.98124	0.3000	0.98125	4.187	3.568E-03	9.955E-01	-2.272E-06	-2.273E-06	2.272E-06
0.98749	0.3001	0.98750	2.915	1.093E-02	9.937E-01	-7.832E-06	-7.838E-06	7.829E-06
0.99373	0.3002	0.99375	1.755	5.744E-02	1.001E 00	-6.972E-05	-6.984E-05	6.967E-05
0.99996	0.3019	1.00000	1.134	7.880E-01	7.307E-01	-1.582E-03	-1.582E-03	1.585E-03
1.00619	0.3099	1.00625	1.771	1.494E 00	2.154E 00	-6.742E-05	-6.732E-05	6.748E-05
1.01243	0.3192	1.01250	2.934	1.538E 00	4.176E 00	-7.645E-06	-7.639E-06	7.647E-06
1.01867	0.3286	1.01875	4.207	1.546E 00	6.361E 00	-2.245E-06	-2.244E-06	2.245E-06
1.02492	0.3378	1.02500	5.514	1.548E 00	8.587E 00	-1.003E-06	-1.003E-06	1.003E-06
1.03741	0.3560	1.03750	8.165	1.549E 00	1.303E 01	-3.418E-07	-3.417E-07	3.418E-07
1.06991	0.3738	1.05000	10.834	1.549E 00	1.740E 01	-1.773E-07	-1.773E-07	1.773E-07
1.07490	0.4081	1.07500	16.194	1.549E 00	2.587E 01	-7.038E-08	-7.038E-08	7.038E-08
1.09989	0.4408	1.10000	21.563	1.549E 00	3.397E 01	-3.823E-08	-3.823E-08	3.823E-08
1.14988	0.5021	1.15000	32.311	1.549E 00	4.913E 01	-1.510E-08	-1.510E-08	1.510E-08
1.19986	0.5582	1.20000	43.064	1.549E 00	6.303E 01	-7.793E-09	-7.793E-09	7.793E-09
1.29984	0.6576	1.30000	64.575	1.549E 00	8.764E 01	-3.101E-09	-3.101E-09	3.101E-09
1.39982	0.7426	1.40000	86.088	1.549E 00	1.087E 02	-1.613E-09	-1.613E-09	1.613E-09
1.49980	0.8164	1.50000	107.603	1.549E 00	1.270E 02	-9.890E-10	-9.890E-10	9.890E-10
1.59979	0.8809	1.60000	129.118	1.549E 00	1.430E 02	-6.630E-10	-6.630E-10	6.630E-10
1.69977	0.9379	1.70000	150.633	1.549E 00	1.571E 02	-4.451E-10	-4.451E-10	4.451E-10
1.79976	0.9885	1.80000	172.148	1.549E 00	1.697E 02	-3.140E-10	-3.140E-10	3.140E-10
1.89975	1.0338	1.90000	193.664	1.549E 00	1.809E 02	-2.215E-10	-2.215E-10	2.215E-10
1.99974	1.0746	2.00000	215.179	1.549E 00	1.910E 02	-1.579E-10	-1.579E-10	1.579E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.300 θ_D= 3.465E-05 ρ_a= 1.128

z	$_x\mu'\cdot10$	T_0	$_0T_f-T_0$	$_xT_f-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.862E-08	-6.862E-08	6.862E-08	6.862E-08	-3.141E-09	-3.141E-09
0.50000	9.894E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.686E-09	-4.686E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.645E-09	-7.645E-09
0.70000	3.103E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.470E-08	-1.470E-08
0.80000	7.801E-09	399.209	-5.295E-07	-5.295E-07	5.295E-07	5.295E-07	-3.695E-08	-3.695E-08
0.85000	1.512E-08	424.160	-8.011E-07	-8.011E-07	8.011E-07	8.011E-07	-7.162E-08	-7.162E-08
0.90000	3.831E-08	449.110	-1.404E-06	-1.404E-06	1.404E-06	1.404E-06	-1.815E-07	-1.815E-07
0.92500	7.054E-08	461.585	-2.063E-06	-2.063E-06	2.063E-06	2.063E-06	-3.341E-07	-3.341E-07
0.95000	1.779E-07	474.060	-3.492E-06	-3.492E-06	3.493E-06	3.494E-06	-8.428E-07	-8.429E-07
0.96250	3.444E-07	480.297	-5.018E-06	-5.018E-06	5.026E-06	5.026E-06	-1.631E-06	-1.631E-06
0.97500	1.014E-06	486.534	-8.730E-06	-8.731E-06	8.820E-06	8.821E-06	-4.800E-06	-4.801E-06
0.98124	2.273E-06	489.652	-1.337E-05	-1.337E-05	1.384E-05	1.385E-05	-1.076E-05	-1.077E-05
0.98749	7.840E-06	492.769	-2.469E-05	-2.470E-05	2.917E-05	2.919E-05	-3.710E-05	-3.712E-05
0.99373	6.990E-05	495.884	-4.655E-05	-4.666E-05	1.711E-04	1.713E-04	-3.303E-04	-3.308E-04
0.99996	1.584E-03	498.993	9.730E-03	9.728E-03	1.387E-02	1.387E-02	-7.493E-03	-7.493E-03
1.00619	6.727E-05	502.100	2.634E-02	2.634E-02	3.426E-02	3.426E-02	-3.194E-04	-3.189E-04
1.01243	7.637E-06	505.214	3.093E-02	3.093E-02	3.901E-02	3.901E-02	-3.621E-05	-3.618E-05
1.01867	2.244E-06	508.331	3.351E-02	3.351E-02	4.161E-02	4.161E-02	-1.063E-05	-1.063E-05
1.02492	1.003E-06	511.447	3.537E-02	3.537E-02	4.349E-02	4.349E-02	-4.752E-06	-4.751E-06
1.03741	3.417E-07	517.682	3.833E-02	3.833E-02	4.645E-02	4.645E-02	-1.619E-06	-1.619E-06
1.04991	1.773E-07	523.917	4.083E-02	4.083E-02	4.896E-02	4.896E-02	-8.398E-07	-8.398E-07
1.07490	7.038E-08	536.388	4.495E-02	4.495E-02	5.308E-02	5.308E-02	-3.334E-07	-3.334E-07
1.09989	3.823E-08	548.859	4.609E-02	4.609E-02	5.422E-02	5.422E-02	-1.811E-07	-1.811E-07
1.14988	1.510E-08	573.802	4.837E-02	4.837E-02	5.650E-02	5.650E-02	-7.152E-08	-7.152E-08
1.19986	7.793E-09	598.746	5.065E-02	5.065E-02	5.878E-02	5.878E-02	-3.691E-08	-3.691E-08
1.29984	3.101E-09	648.636	5.521E-02	5.521E-02	6.334E-02	6.334E-02	-1.469E-08	-1.469E-08
1.39982	1.613E-09	698.527	5.977E-02	5.977E-02	6.790E-02	6.790E-02	-7.641E-09	-7.641E-09
1.49980	9.890E-10	748.419	6.433E-02	6.433E-02	7.246E-02	7.246E-02	-4.685E-09	-4.685E-09
1.59979	6.630E-10	798.313	6.889E-02	6.889E-02	7.702E-02	7.702E-02	-3.140E-09	-3.140E-09
1.69977	4.451E-10	848.207	7.345E-02	7.345E-02	8.158E-02	8.158E-02	-2.108E-09	-2.108E-09
1.79976	3.140E-10	898.102	7.801E-02	7.801E-02	8.614E-02	8.614E-02	-1.487E-09	-1.487E-09
1.89975	2.215E-10	947.998	8.257E-02	8.257E-02	9.070E-02	9.070E-02	-1.049E-09	-1.049E-09
1.99974	1.579E-10	997.895	8.713E-02	8.713E-02	9.526E-02	9.526E-02	-7.478E-10	-7.478E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.300 θ_D= 3.465E-05 ρ_0= 1.128

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.431E-17
0.10000	8.828E-13	9.183E-13	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-1.919E-17
0.20000	2.531E-12	2.510E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-2.745E-17
0.30000	5.392E-12	5.392E-12	-2.779E-21	-2.779E-21	-6.072E-11	-6.072E-11	-4.315E-17
0.40000	1.140E-11	1.139E-11	-5.071E-21	-5.071E-21	-1.177E-10	-1.177E-10	-7.304E-17
0.50000	2.263E-11	2.260E-11	-9.266E-21	-9.266E-21	-2.218E-10	-2.218E-10	-1.462E-16
0.60000	5.129E-11	5.129E-11	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-3.418E-16
0.70000	1.458E-10	1.458E-10	-5.003E-20	-5.003E-20	-8.904E-10	-8.904E-10	-9.988E-16
0.80000	5.995E-10	6.001E-10	-2.002E-19	-2.002E-19	-2.434E-09	-2.434E-09	-4.521E-15
0.85000	1.602E-09	1.603E-09	-5.324E-19	-5.325E-19	-4.917E-09	-4.917E-09	-1.309E-14
0.90000	6.188E-09	6.188E-09	-2.279E-18	-2.279E-18	-1.354E-08	-1.354E-08	-5.858E-14
0.92500	1.531E-08	1.531E-08	-5.261E-18	-5.261E-18	-2.687E-08	-2.687E-08	-1.777E-13
0.95000	5.883E-08	5.883E-08	-2.069E-17	-2.069E-17	-6.722E-08	-6.722E-08	-7.882E-13
0.96250	1.556E-07	1.556E-07	-5.828E-17	-5.829E-17	-1.322E-07	-1.323E-07	-2.232E-12
0.97500	7.120E-07	7.122E-07	-3.230E-16	-3.231E-16	-4.091E-07	-4.092E-07	-8.052E-12
0.98124	2.136E-06	2.137E-06	-1.191E-15	-1.191E-15	-1.024E-06	-1.024E-06	-1.833E-11
0.98749	1.113E-05	1.114E-05	-9.123E-15	-9.136E-15	-4.376E-06	-4.381E-06	-4.667E-11
0.99373	2.317E-04	2.323E-04	-5.055E-13	-5.071E-13	-1.063E-04	-1.066E-04	-1.100E-10
0.99996	4.954E-02	4.954E-02	-3.244E-10	-3.244E-10	-7.150E-02	-7.162E-02	-6.722E-11
1.00619	1.621E-02	1.621E-02	-4.744E-13	-4.730E-13	-1.385E-01	-1.385E-01	-1.081E-10
1.01243	8.290E-03	8.291E-03	-8.758E-15	-8.746E-15	-1.386E-01	-1.386E-01	-4.607E-11
1.01867	5.407E-03	5.407E-03	-1.168E-15	-1.167E-15	-1.386E-01	-1.386E-01	-1.805E-11
1.02492	3.980E-03	3.980E-03	-3.180E-16	-3.179E-16	-1.386E-01	-1.386E-01	-7.967E-12
1.03741	2.591E-03	2.592E-03	-5.758E-17	-5.757E-17	-1.386E-01	-1.386E-01	-2.218E-12
1.04991	1.917E-03	1.917E-03	-2.057E-17	-2.057E-17	-1.386E-01	-1.386E-01	-7.830E-13
1.07490	1.269E-03	1.260E-03	-5.245E-18	-5.245E-18	-1.386E-01	-1.386E-01	-1.769E-13
1.09989	9.373E-04	9.374E-04	-2.272E-18	-2.272E-18	-1.386E-01	-1.386E-01	-5.845E-14
1.14988	6.199E-04	6.200E-04	-5.314E-19	-5.314E-19	-1.386E-01	-1.386E-01	-1.307E-14
1.19986	4.631E-04	4.631E-04	-1.999E-19	-1.999E-19	-1.386E-01	-1.386E-01	-4.519E-15
1.29984	3.074E-04	3.075E-04	-4.998E-20	-4.998E-20	-1.386E-01	-1.386E-01	-9.992E-16
1.39982	2.301E-04	2.301E-04	-1.905E-20	-1.905E-20	-1.386E-01	-1.386E-01	-3.421E-16
1.49980	1.839E-04	1.839E-04	-9.261E-21	-9.261E-21	-1.386E-01	-1.386E-01	-1.463E-16
1.59979	1.531E-04	1.531E-04	-5.068E-21	-5.068E-21	-1.386E-01	-1.386E-01	-7.313E-17
1.69977	1.311E-04	1.311E-04	-2.778E-21	-2.778E-21	-1.386E-01	-1.386E-01	-4.321E-17
1.79976	1.147E-04	1.147E-04	-1.594E-21	-1.594E-21	-1.386E-01	-1.386E-01	-2.750E-17
1.89975	1.019E-04	1.019E-04	-9.148E-22	-9.148E-22	-1.386E-01	-1.386E-01	-1.923E-17
1.99974	9.170E-05	9.170E-05	-5.244E-22	-5.244E-22	-1.386E-01	-1.386E-01	-1.434E-17

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.400 θ_D= 0. n_1= 1.502

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.4000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.4000	0.10000	193.644	4.419E-08	1.000E-00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.4000	0.20000	172.128	6.837E-08	1.000E-00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.4000	0.30000	150.613	9.505E-08	1.000E-00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.4000	0.40000	129.099	1.501E-07	1.000E-00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.4000	0.50000	107.585	1.868E-07	1.000E-00	-9.893E-10	-9.893E-10	9.893E-10
0.60000	0.4000	0.60000	86.071	1.868E-07	1.000E-00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.4000	0.70000	64.560	8.805E-07	1.000E-00	-3.102E-09	-3.102E-09	3.102E-09
0.80000	0.4000	0.80000	43.053	3.002E-06	9.999E-01	-7.798E-09	-7.798E-09	7.798E-09
0.85000	0.4000	0.85000	32.304	7.897E-06	9.998E-01	-1.511E-08	-1.511E-08	1.511E-08
0.90000	0.4000	0.90000	21.563	2.759E-05	9.996E-01	-3.822E-08	-3.822E-08	3.822E-08
0.92500	0.4000	0.92500	16.202	6.729E-05	9.993E-01	-7.031E-08	-7.032E-08	7.031E-08
0.95000	0.4000	0.95000	10.858	2.274E-04	9.985E-01	-1.766E-07	-1.766E-07	1.766E-07
0.96250	0.4000	0.96250	8.203	5.316E-04	9.976E-01	-3.376E-07	-3.377E-07	3.376E-07
0.97500	0.4000	0.97500	5.581	1.726E-03	9.955E-01	-9.688E-07	-9.690E-07	9.687E-07
0.98124	0.4000	0.98125	4.301	3.842E-03	9.941E-01	-2.114E-06	-2.115E-06	2.114E-06
0.98749	0.4001	0.98750	3.078	1.102E-02	9.942E-01	-6.444E-06	-6.448E-06	6.442E-06
0.99374	0.4002	0.99375	2.015	4.652E-02	1.007E 00	-3.872E-05	-3.876E-05	3.870E-05
0.99998	0.4010	1.00000	1.506	2.357E-01	6.782E-01	-1.860E-04	-1.860E-04	1.860E-04
1.00621	0.4031	1.00625	2.023	4.230E-01	7.872E-01	-3.804E-05	-3.801E-05	3.807E-05
1.01246	0.4059	1.01250	3.088	4.579E-01	1.740E 00	-6.376E-06	-6.372E-06	6.378E-06
1.01871	0.4087	1.01875	4.313	4.650E-01	2.817E 00	-2.099E-06	-2.099E-06	2.100E-06
1.02495	0.4116	1.02500	5.592	4.671E-01	3.929E 00	-9.631E-07	-9.629E-07	9.632E-07
1.03745	0.4170	1.03750	8.215	4.683E-01	6.168E 00	-3.365E-07	-3.365E-07	3.366E-07
1.04995	0.4223	1.05000	10.870	4.686E-01	8.381E 00	-1.762E-07	-1.762E-07	1.762E-07
1.07495	0.4327	1.07500	16.214	4.688E-01	1.268E 01	-7.022E-08	-7.022E-08	7.022E-08
1.09995	0.4426	1.10000	21.575	4.688E-01	1.680E 01	-3.817E-08	-3.817E-08	3.817E-08
1.14995	0.4612	1.15000	32.316	4.689E-01	2.450E 01	-1.510E-08	-1.510E-08	1.510E-08
1.19995	0.4781	1.20000	43.065	4.689E-01	3.157E 01	-7.793E-09	-7.793E-09	7.793E-09
1.29994	0.5082	1.30000	64.572	4.689E-01	4.409E 01	-3.101E-09	-3.101E-09	3.101E-09
1.39994	0.5340	1.40000	86.084	4.689E-01	5.482E 01	-1.613E-09	-1.613E-09	1.613E-09
1.49994	0.5563	1.50000	107.597	4.689E-01	6.411E 01	-9.891E-10	-9.891E-10	9.891E-10
1.59994	0.5758	1.60000	129.111	4.689E-01	7.225E 01	-6.630E-10	-6.630E-10	6.630E-10
1.69994	0.5931	1.70000	150.626	4.689E-01	7.943E 01	-4.451E-10	-4.451E-10	4.451E-10
1.79994	0.6084	1.80000	172.141	4.689E-01	8.581E 01	-3.140E-10	-3.140E-10	3.140E-10
1.89994	0.6221	1.90000	193.656	4.689E-01	9.152E 01	-2.215E-10	-2.215E-10	2.215E-10
1.99993	0.6346	2.00000	215.171	4.689E-01	9.666E 01	-1.579E-10	-1.579E-10	1.579E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.400 θ_D=0. ρ_a=1.502

z	$_x\mu - {}_o$	Γ_o	$_oT_f - T_o$	$_xT_f - T_o$	$_oT_g - T_o$	$_xT_g - T_o$	$_oD_z - D_o$	$_xD_z - D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.364E-09	-9.364E-09	9.364E-09	9.364E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.862E-08	-6.862E-08	6.862E-08	6.862E-08	-3.141E-09	-3.141E-09
0.50000	9.893E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.686E-09	-4.686E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.644E-09	-7.645E-09
0.70000	3.102E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.469E-08	-1.469E-08
0.80000	7.798E-09	399.209	-5.294E-07	-5.294E-07	5.294E-07	5.294E-07	-3.693E-08	-3.693E-08
0.85000	1.511E-08	424.160	-8.008E-07	-8.008E-07	8.008E-07	8.008E-07	-7.156E-08	-7.156E-08
0.90000	3.823E-08	449.110	-1.403E-06	-1.403E-06	1.403E-06	1.403E-06	-1.811E-07	-1.811E-07
0.92500	7.032E-08	461.585	-2.060E-06	-2.060E-06	2.060E-06	2.060E-06	-3.331E-07	-3.331E-07
0.95000	1.766E-07	474.060	-3.480E-06	-3.480E-06	3.482E-06	3.482E-06	-8.363E-07	-8.364E-07
0.96250	3.377E-07	480.297	-4.986E-06	-4.986E-06	4.996E-06	4.996E-06	-1.599E-06	-1.599E-06
0.97500	9.691E-07	486.534	-8.573E-06	-8.574E-06	8.683E-06	8.685E-06	-4.589E-06	-4.590E-06
0.98124	2.115E-06	489.652	-1.289E-05	-1.289E-05	1.344E-05	1.344E-05	-1.001E-05	-1.002E-05
0.98749	6.450E-06	492.770	-2.247E-05	-2.248E-05	2.702E-05	2.703E-05	-3.052E-05	-3.054E-05
0.99374	3.878E-05	495.886	-3.561E-05	-3.567E-05	1.173E-04	1.174E-04	-1.834E-04	-1.836E-04
0.99998	1.860E-04	498.999	6.384E-04	6.381E-04	1.473E-03	1.474E-03	-8.808E-04	-8.808E-04
1.00621	3.799E-05	502.112	2.667E-03	2.667E-03	4.176E-03	4.176E-03	-1.802E-04	-1.800E-04
1.01246	6.370E-06	505.229	3.229E-03	3.229E-03	4.839E-03	4.839E-03	-3.020E-05	-3.018E-05
1.01871	2.098E-06	508.346	3.370E-03	3.370E-03	5.003E-03	5.003E-03	-9.943E-06	-9.940E-06
1.02495	9.628E-07	511.464	3.429E-03	3.429E-03	5.071E-03	5.071E-03	-4.562E-06	-4.561E-06
1.03745	3.365E-07	517.701	3.499E-03	3.499E-03	5.148E-03	5.148E-03	-1.594E-06	-1.594E-06
1.04995	1.762E-07	523.938	3.555E-03	3.555E-03	5.207E-03	5.208E-03	-8.346E-07	-8.345E-07
1.07495	7.022E-08	536.413	3.661E-03	3.661E-03	5.316E-03	5.316E-03	-3.326E-07	-3.326E-07
1.09995	3.817E-08	548.887	3.766E-03	3.766E-03	5.422E-03	5.422E-03	-1.808E-07	-1.808E-07
1.14995	1.510E-08	573.837	3.975E-03	3.975E-03	5.632E-03	5.632E-03	-7.150E-08	-7.150E-08
1.19995	7.793E-09	598.787	4.183E-03	4.183E-03	5.842E-03	5.842E-03	-3.691E-08	-3.691E-08
1.29994	3.101E-09	648.687	4.601E-03	4.601E-03	6.260E-03	6.260E-03	-1.469E-08	-1.469E-08
1.39994	1.613E-09	698.587	5.019E-03	5.019E-03	6.678E-03	6.678E-03	-7.642E-09	-7.642E-09
1.49994	9.891E-10	748.487	5.436E-03	5.436E-03	7.096E-03	7.096E-03	-4.685E-09	-4.685E-09
1.59994	6.630E-10	798.388	5.854E-03	5.854E-03	7.513E-03	7.513E-03	-3.141E-09	-3.141E-09
1.69994	4.451E-10	848.288	6.272E-03	6.272E-03	7.931E-03	7.931E-03	-2.108E-09	-2.108E-09
1.79994	3.140E-10	898.189	6.690E-03	6.690E-03	8.349E-03	8.349E-03	-1.487E-09	-1.487E-09
1.89994	2.215E-10	948.090	7.108E-03	7.108E-03	8.767E-03	8.767E-03	-1.049E-09	-1.049E-09
1.99993	1.579E-10	997.990	7.525E-03	7.525E-03	9.185E-03	9.185E-03	-7.479E-10	-7.479E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o=0.400 θ_D=0. ρ_a=1.502

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-2.543E-17
0.10000	1.184E-12	1.196E-12	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-3.412E-17
0.20000	3.395E-12	3.389E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-4.880E-17
0.30000	7.201E-12	7.185E-12	-2.779E-21	-2.779E-21	-6.071E-11	-6.071E-11	-7.670E-17
0.40000	1.521E-11	1.523E-11	-5.071E-21	-5.071E-21	-1.177E-10	-1.177E-10	-1.298E-16
0.50000	3.017E-11	3.016E-11	-9.265E-21	-9.265E-21	-2.218E-10	-2.218E-10	-2.599E-16
0.60000	6.835E-11	6.834E-11	-1.907E-20	-1.907E-20	-4.211E-10	-4.211E-10	-6.076E-16
0.70000	1.944E-10	1.943E-10	-5.002E-20	-5.002E-20	-8.903E-10	-8.903E-10	-1.775E-15
0.80000	7.989E-10	7.992E-10	-2.000E-19	-2.000E-19	-2.433E-09	-2.433E-09	-8.030E-15
0.85000	2.134E-09	2.134E-09	-5.318E-19	-5.318E-19	-4.913E-09	-4.913E-09	-2.323E-14
0.90000	8.228E-09	8.228E-09	-2.272E-18	-2.272E-18	-1.351E-08	-1.351E-08	-1.038E-13
0.92500	2.033E-08	2.033E-08	-5.238E-18	-5.238E-18	-2.680E-08	-2.680E-08	-3.136E-13
0.95000	7.768E-08	7.769E-08	-2.044E-17	-2.044E-17	-6.676E-08	-6.676E-08	-1.379E-12
0.96250	2.010E-07	2.010E-07	-5.648E-17	-5.649E-17	-1.305E-07	-1.305E-07	-3.878E-12
0.97500	8.871E-07	8.874E-07	-3.012E-16	-3.013E-16	-3.935E-07	-3.936E-07	-1.363E-11
0.98124	2.592E-06	2.593E-06	-1.059E-15	-1.060E-15	-9.476E-07	-9.480E-07	-2.981E-11
0.98749	1.183E-05	1.183E-05	-6.579E-15	-6.586E-15	-3.577E-06	-3.580E-06	-7.285E-11
0.99374	1.572E-04	1.575E-04	-1.658E-13	-1.661E-13	-4.276E-05	-4.284E-05	-1.539E-10
0.99998	4.007E-02	4.007E-02	-3.494E-12	-3.495E-12	-1.422E-03	-1.423E-03	-1.842E-10
1.00621	3.518E-02	3.518E-02	-1.604E-13	-1.601E-13	-2.774E-03	-2.774E-03	-1.530E-10
1.01246	1.581E-02	1.581E-02	-6.465E-15	-6.457E-15	-2.812E-03	-2.812E-03	-7.217E-11
1.01871	9.707E-03	9.707E-03	-1.047E-15	-1.047E-15	-2.815E-03	-2.815E-03	-2.956E-11
1.02495	6.917E-03	6.917E-03	-2.985E-16	-2.984E-16	-2.815E-03	-2.815E-03	-1.355E-11
1.03745	4.353E-03	4.354E-03	-5.619E-17	-5.618E-17	-2.816E-03	-2.816E-03	-3.861E-12
1.04995	3.166E-03	3.166E-03	-2.037E-17	-2.037E-17	-2.816E-03	-2.816E-03	-1.374E-12
1.07495	2.044E-03	2.044E-03	-5.228E-18	-5.228E-18	-2.816E-03	-2.816E-03	-3.129E-13
1.09995	1.508E-03	1.508E-03	-2.268E-18	-2.268E-18	-2.816E-03	-2.816E-03	-1.037E-13
1.14995	9.886E-04	9.886E-04	-5.311E-19	-5.311E-19	-2.816E-03	-2.816E-03	-2.322E-14
1.19995	7.352E-04	7.353E-04	-1.998E-19	-1.998E-19	-2.816E-03	-2.816E-03	-8.033E-15
1.29994	4.860E-04	4.861E-04	-4.999E-20	-4.999E-20	-2.816E-03	-2.816E-03	-1.777E-15
1.39994	3.630E-04	3.630E-04	-1.906E-20	-1.906E-20	-2.816E-03	-2.816E-03	-6.083E-16
1.49994	2.897E-04	2.897E-04	-9.262E-21	-9.262E-21	-2.816E-03	-2.816E-03	-2.602E-16
1.59994	2.410E-04	2.410E-04	-5.069E-21	-5.069E-21	-2.816E-03	-2.816E-03	-1.300E-16
1.69994	2.063E-04	2.063E-04	-2.778E-21	-2.778E-21	-2.816E-03	-2.816E-03	-7.683E-17
1.79994	1.803E-04	1.803E-04	-1.594E-21	-1.594E-21	-2.816E-03	-2.816E-03	-4.889E-17
1.89994	1.602E-04	1.602E-04	-9.150E-22	-9.150E-22	-2.816E-03	-2.816E-03	-3.419E-17
1.99993	1.441E-04	1.441E-04	-5.245E-22	-5.245E-22	-2.816E-03	-2.816E-03	-2.550E-17

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	$_x\mu'-1$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.363E-09	-9.363E-09	9.363E-09	9.363E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.632E-10	199.605	-6.862E-08	-6.862E-08	6.862E-08	6.862E-08	-3.141E-09	-3.141E-09
0.50000	9.893E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.686E-09	-4.686E-09
0.60000	1.614E-09	299.407	-1.721E-07	-1.721E-07	1.721E-07	1.721E-07	-7.644E-09	-7.644E-09
0.70000	3.101E-09	349.308	-2.840E-07	-2.840E-07	2.840E-07	2.840E-07	-1.469E-08	-1.469E-08
0.80000	7.793E-09	399.209	-5.293E-07	-5.293E-07	5.293E-07	5.293E-07	-3.691E-08	-3.691E-08
0.85000	1.509E-08	424.160	-8.004E-07	-8.004E-07	8.004E-07	8.004E-07	-7.148E-08	-7.148E-08
0.90000	3.811E-08	449.110	-1.401E-06	-1.401E-06	1.401E-06	1.401E-06	-1.805E-07	-1.805E-07
0.92500	7.003E-08	461.585	-2.056E-06	-2.056E-06	2.056E-06	2.056E-06	-3.317E-07	-3.317E-07
0.95000	1.748E-07	474.060	-3.464E-06	-3.464E-06	3.467E-06	3.467E-06	-8.281E-07	-8.281E-07
0.96250	3.309E-07	480.297	-4.943E-06	-4.943E-06	4.960E-06	4.960E-06	-1.567E-06	-1.567E-06
0.97500	9.154E-07	486.534	-8.361E-06	-8.362E-06	8.538E-06	8.539E-06	-4.335E-06	-4.335E-06
0.98124	1.932E-06	489.652	-1.223E-05	-1.223E-05	1.306E-05	1.306E-05	-9.149E-06	-9.152E-06
0.98749	5.239E-06	492.770	-1.952E-05	-1.953E-05	2.543E-05	2.545E-05	-2.480E-05	-2.481E-05
0.99374	2.000E-05	495.887	-1.982E-05	-1.985E-05	9.051E-05	9.056E-05	-9.465E-05	-9.471E-05
0.99998	5.254E-05	499.001	2.288E-04	2.287E-04	5.835E-04	5.837E-04	-2.489E-04	-2.489E-04
1.00622	1.953E-05	502.116	8.797E-04	8.797E-04	1.476E-03	1.476E-03	-9.262E-05	-9.255E-05
1.01247	5.158E-06	505.232	1.160E-03	1.160E-03	1.821E-03	1.821E-03	-2.445E-05	-2.444E-05
1.01871	1.913E-06	508.350	1.244E-03	1.244E-03	1.924E-03	1.924E-03	-9.063E-06	-9.061E-06
1.02496	9.075E-07	511.468	1.277E-03	1.277E-03	1.966E-03	1.966E-03	-4.300E-06	-4.299E-06
1.03746	3.293E-07	517.705	1.311E-03	1.311E-03	2.007E-03	2.007E-03	-1.560E-06	-1.560E-06
1.04996	1.743E-07	523.942	1.334E-03	1.334E-03	2.033E-03	2.033E-03	-8.256E-07	-8.256E-07
1.07496	6.989E-08	536.417	1.375E-03	1.375E-03	2.077E-03	2.077E-03	-3.311E-07	-3.310E-07
1.09996	3.804E-08	548.892	1.415E-03	1.415E-03	2.118E-03	2.118E-03	-1.802E-07	-1.802E-07
1.14996	1.507E-08	573.842	1.495E-03	1.495E-03	2.199E-03	2.199E-03	-7.140E-08	-7.140E-08
1.19996	7.786E-09	598.792	1.575E-03	1.575E-03	2.280E-03	2.280E-03	-3.688E-08	-3.688E-08
1.29996	3.100E-09	648.693	1.736E-03	1.736E-03	2.441E-03	2.441E-03	-1.468E-08	-1.468E-08
1.39995	1.613E-09	698.594	1.896E-03	1.896E-03	2.602E-03	2.602E-03	-7.640E-09	-7.640E-09
1.49995	9.890E-10	748.495	2.057E-03	2.057E-03	2.763E-03	2.763E-03	-4.684E-09	-4.684E-09
1.59995	6.630E-10	798.395	2.218E-03	2.218E-03	2.924E-03	2.924E-03	-3.140E-09	-3.140E-09
1.69995	4.451E-10	848.296	2.378E-03	2.378E-03	3.084E-03	3.084E-03	-2.108E-09	-2.108E-09
1.79995	3.140E-10	898.197	2.539E-03	2.539E-03	3.245E-03	3.245E-03	-1.487E-09	-1.487E-09
1.89995	2.215E-10	948.098	2.700E-03	2.700E-03	3.406E-03	3.406E-03	-1.049E-09	-1.049E-09
1.99995	1.579E-10	997.999	2.860E-03	2.860E-03	3.566E-03	3.566E-03	-7.479E-10	-7.479E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	ϕ	z_r	ρ	θ	β	$_o\mu-1$	$_x\mu-1$	$_o\mu'-1$
0.	0.5000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.5000	0.10000	193.644	4.752E-09	1.000E-00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.5000	0.20000	172.129	8.171E-08	1.000E-00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.5000	0.30000	150.615	1.251E-07	1.000E-00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.5000	0.40000	129.101	1.901E-07	1.000E-00	-6.632E-10	-6.632E-10	6.632E-10
0.50000	0.5000	0.50000	107.588	2.801E-07	1.000E-00	-9.893E-10	-9.893E-10	9.893E-10
0.60000	0.5000	0.60000	86.076	2.868E-07	1.000E-00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.5000	0.70000	64.567	1.227E-06	9.999E-01	-3.101E-09	-3.101E-09	3.101E-09
0.80000	0.5000	0.80000	43.065	4.029E-06	9.999E-01	-7.793E-09	-7.793E-09	7.793E-09
0.85000	0.5000	0.85000	32.320	1.057E-05	9.998E-01	-1.509E-08	-1.509E-08	1.509E-08
0.90000	0.5000	0.90000	21.590	3.677E-05	9.995E-01	-3.811E-08	-3.811E-08	3.811E-08
0.92500	0.5000	0.92500	16.238	8.906E-05	9.991E-01	-7.003E-08	-7.003E-08	7.002E-08
0.95000	0.5000	0.95000	10.913	2.983E-04	9.980E-01	-1.748E-07	-1.748E-07	1.748E-07
0.96250	0.5000	0.96250	8.277	6.923E-04	9.968E-01	-3.308E-07	-3.308E-07	3.308E-07
0.97500	0.5000	0.97500	5.690	2.186E-03	9.947E-01	-9.151E-07	-9.153E-07	9.151E-07
0.98124	0.5001	0.98125	4.444	4.716E-03	9.939E-01	-1.932E-06	-1.932E-06	1.931E-06
0.98749	0.5001	0.98750	3.275	1.255E-02	9.966E-01	-5.235E-06	-5.237E-06	5.234E-06
0.99374	0.5003	0.99375	2.307	4.327E-02	1.011E 00	-1.998E-05	-2.000E-05	1.998E-05
0.99998	0.5008	1.00000	1.881	1.462E-01	9.331E-01	-5.254E-05	-5.254E-05	5.254E-05
1.00622	0.5021	1.00625	2.317	2.482E-01	4.937E-01	-1.955E-05	-1.954E-05	1.956E-05
1.01247	0.5037	1.01250	3.289	2.784E-01	3.218E-01	-5.161E-06	-5.159E-06	5.163E-06
1.01871	0.5054	1.01875	4.459	2.861E-01	5.751E-01	-1.913E-06	-1.913E-06	1.914E-06
1.02496	0.5071	1.02500	5.706	2.886E-01	9.655E-01	-9.077E-07	-9.076E-07	9.078E-07
1.03746	0.5105	1.03750	8.293	2.901E-01	1.805E 00	-3.293E-07	-3.293E-07	3.294E-07
1.04996	0.5139	1.05000	10.930	2.905E-01	2.652E 00	-1.743E-07	-1.743E-07	1.743E-07
1.07496	0.5203	1.07500	16.255	2.907E-01	4.306E 00	-6.989E-08	-6.989E-08	6.989E-08
1.09996	0.5264	1.10000	21.607	2.907E-01	5.895E 00	-3.804E-08	-3.804E-08	3.804E-08
1.14996	0.5379	1.15000	32.337	2.908E-01	8.873E 00	-1.507E-08	-1.507E-08	1.507E-08
1.19996	0.5485	1.20000	43.082	2.908E-01	1.161E 01	-7.786E-09	-7.786E-09	7.786E-09
1.29996	0.5671	1.30000	64.584	2.908E-01	1.645E 01	-3.100E-09	-3.100E-09	3.100E-09
1.39995	0.5831	1.40000	86.093	2.908E-01	2.060E 01	-1.613E-09	-1.613E-09	1.613E-09
1.49995	0.5969	1.50000	107.605	2.908E-01	2.420E 01	-9.890E-10	-9.890E-10	9.890E-10
1.59995	0.6091	1.60000	129.118	2.908E-01	2.734E 01	-6.630E-10	-6.630E-10	6.630E-10
1.69995	0.6197	1.70000	150.632	2.908E-01	3.012E 01	-4.451E-10	-4.451E-10	4.451E-10
1.79995	0.6292	1.80000	172.146	2.908E-01	3.259E 01	-3.140E-10	-3.140E-10	3.140E-10
1.89995	0.6377	1.90000	193.661	2.908E-01	3.480E 01	-2.215E-10	-2.215E-10	2.215E-10
1.99995	0.6454	2.00000	215.176	2.908E-01	3.679E 01	-1.579E-10	-1.579E-10	1.579E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-3.974E-17
0.10000	1.495E-12	1.497E-12	-9.153E-22	-9.153E-22	-1.050E-11	-1.050E-11	-5.331E-17
0.20000	4.233E-12	4.246E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-7.624E-17
0.30000	8.969E-12	8.980E-12	-2.779E-21	-2.779E-21	-6.071E-11	-6.071E-11	-1.198E-16
0.40000	1.902E-11	1.904E-11	-5.071E-21	-5.071E-21	-1.177E-10	-1.177E-10	-2.029E-16
0.50000	3.770E-11	3.773E-11	-9.264E-21	-9.264E-21	-2.218E-10	-2.218E-10	-4.060E-16
0.60000	8.544E-11	8.543E-11	-1.906E-20	-1.906E-20	-4.210E-10	-4.210E-10	-9.491E-16
0.70000	2.429E-10	2.428E-10	-5.000E-20	-5.000E-20	-8.902E-10	-8.902E-10	-2.772E-15
0.80000	9.982E-10	9.982E-10	-1.998E-19	-1.998E-19	-2.432E-09	-2.432E-09	-1.253E-14
0.85000	2.664E-09	2.664E-09	-5.309E-19	-5.309E-19	-4.909E-09	-4.909E-09	-3.622E-14
0.90000	1.025E-08	1.025E-08	-2.263E-18	-2.263E-18	-1.348E-08	-1.348E-08	-1.615E-13
0.92500	2.527E-08	2.527E-08	-5.209E-18	-5.209E-18	-2.670E-08	-2.670E-08	-4.854E-13
0.95000	9.599E-08	9.599E-08	-2.012E-17	-2.013E-17	-6.616E-08	-6.616E-08	-2.110E-12
0.96250	2.438E-07	2.439E-07	-5.469E-17	-5.470E-17	-1.282E-07	-1.282E-07	-5.860E-12
0.97500	1.027E-06	1.027E-06	-2.758E-16	-2.759E-16	-3.750E-07	-3.750E-07	-2.006E-11
0.98124	2.902E-06	2.903E-06	-9.147E-16	-9.152E-16	-8.626E-07	-8.629E-07	-4.192E-11
0.98749	1.155E-05	1.156E-05	-4.666E-15	-4.670E-15	-2.846E-06	-2.848E-06	-9.650E-11
0.99374	1.058E-04	1.060E-04	-4.734E-14	-4.741E-14	-1.817E-05	-1.819E-05	-2.069E-10
0.99998	1.313E-02	1.313E-02	-2.957E-13	-2.957E-13	-1.864E-04	-1.865E-04	-2.683E-10
1.00622	2.752E-02	2.752E-02	-4.544E-14	-4.537E-14	-3.517E-04	-3.517E-04	-2.062E-10
1.01247	4.210E-02	4.210E-02	-4.558E-15	-4.554E-15	-3.666E-04	-3.666E-04	-9.549E-11
1.01871	2.342E-02	2.342E-02	-9.008E-16	-9.003E-16	-3.685E-04	-3.685E-04	-4.148E-11
1.02496	1.386E-02	1.387E-02	-2.723E-16	-2.722E-16	-3.690E-04	-3.690E-04	-1.990E-11
1.03746	7.325E-03	7.325E-03	-5.431E-17	-5.430E-17	-3.693E-04	-3.693E-04	-5.822E-12
1.04996	4.928E-03	4.928E-03	-2.003E-17	-2.003E-17	-3.693E-04	-3.693E-04	-2.099E-12
1.07496	2.964E-03	2.964E-03	-5.195E-18	-5.195E-18	-3.694E-04	-3.694E-04	-4.839E-13
1.09996	2.116E-03	2.116E-03	-2.257E-18	-2.257E-18	-3.694E-04	-3.694E-04	-1.612E-13
1.14996	1.345E-03	1.345E-03	-5.300E-19	-5.300E-19	-3.694E-04	-3.694E-04	-3.619E-14
[illegible]96	9.851E-04	9.851E-04	-1.996E-19	-1.996E-19	-3.694E-04	-3.694E-04	-1.253E-14
[illegible]9996	6.417E-04	6.417E-04	-4.996E-20	-4.996E-20	-3.694E-04	-3.694E-04	-2.774E-15
1.39995	4.758E-04	4.758E-04	-1.905E-20	-1.905E-20	-3.694E-04	-3.694E-04	-9.500E-16
1.49995	3.781E-04	3.781E-04	-9.260E-21	-9.260E-21	-3.694E-04	-3.694E-04	-4.065E-16
1.59995	3.136E-04	3.136E-04	-5.068E-21	-5.068E-21	-3.694E-04	-3.694E-04	-2.031E-16
1.69995	2.680E-04	2.680E-04	-2.778E-21	-2.778E-21	-3.694E-04	-3.694E-04	-1.200E-16
1.79995	2.339E-04	2.339E-04	-1.594E-21	-1.594E-21	-3.694E-04	-3.694E-04	-7.638E-17
1.89995	2.075E-04	2.075E-04	-9.149E-22	-9.149E-22	-3.694E-04	-3.694E-04	-5.342E-17
1.99995	1.865E-04	1.865E-04	-5.245E-22	-5.245E-22	-3.694E-04	-3.694E-04	-3.984E-17

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.600 θ_D= 0. ρ_a= 2.253

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.6000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.6000	0.10000	193.644	7.087E-08	1.000E-00	-2.216E-10	-2.216E-10	2.216E-10
0.20000	0.6000	0.20000	172.130	9.838E-08	1.000E-00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.6000	0.30000	150.616	1.501E-07	1.000E-00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.6000	0.40000	129.103	2.535E-07	1.000E-00	-6.631E-10	-6.631E-10	6.631E-10
0.50000	0.6000	0.50000	107.591	3.602E-07	1.000E-00	-9.892E-10	-9.892E-10	9.892E-10
0.60000	0.6000	0.60000	86.081	3.869E-07	1.000E-00	-1.614E-09	-1.614E-09	1.614E-09
0.70000	0.6000	0.70000	64.575	1.507E-06	9.999E-01	-3.101E-09	-3.101E-09	3.101E-09
0.80000	0.6000	0.80000	43.079	5.176E-06	9.998E-01	-7.787E-09	-7.787E-09	7.787E-09
0.85000	0.6000	0.85000	32.341	1.331E-05	9.996E-01	-1.507E-08	-1.507E-08	1.507E-08
0.90000	0.6000	0.90000	21.622	4.648E-05	9.992E-01	-3.797E-08	-3.797E-08	3.797E-08
0.92500	0.6000	0.92500	16.282	1.123E-04	9.986E-01	-6.968E-08	-6.968E-08	6.967E-08
0.95000	0.6000	0.95000	10.980	3.719E-04	9.971E-01	-1.727E-07	-1.727E-07	1.727E-07
0.96250	0.6000	0.96250	8.366	8.561E-04	9.956E-01	-3.227E-07	-3.228E-07	3.227E-07
0.97500	0.6000	0.97500	5.822	2.621E-03	9.937E-01	-8.548E-07	-8.550E-07	8.547E-07
0.98124	0.6001	0.98125	4.612	5.459E-03	9.941E-01	-1.737E-06	-1.737E-06	1.736E-06
0.98749	0.6001	0.98750	3.501	1.348E-02	1.000E 00	-4.126E-06	-4.127E-06	4.125E-06
0.99374	0.6003	0.99375	2.620	3.921E-02	1.014E 00	-1.162E-05	-1.163E-05	1.162E-05
0.99998	0.6007	1.00000	2.256	1.051E-01	9.979E-01	-2.245E-05	-2.245E-05	2.246E-05
1.00623	0.6016	1.00625	2.632	1.704E-01	7.237E-01	-1.144E-05	-1.143E-05	1.144E-05
1.01247	0.6027	1.01250	3.519	1.956E-01	5.211E-01	-4.048E-06	-4.047E-06	4.049E-06
1.01872	0.6039	1.01875	4.633	2.034E-01	3.419E-01	-1.714E-06	-1.714E-06	1.714E-06
1.02497	0.6051	1.02500	5.844	2.062E-01	2.284E-01	-8.452E-07	-8.451E-07	8.453E-07
1.03747	0.6076	1.03750	8.389	2.080E-01	4.341E-01	-3.207E-07	-3.207E-07	3.207E-07
1.04997	0.6100	1.05000	11.004	2.085E-01	8.202E-01	-1.720E-07	-1.720E-07	1.720E-07
1.07496	0.6146	1.07500	16.306	2.087E-01	1.617E 00	-6.949E-08	-6.949E-08	6.949E-08
1.09996	0.6190	1.10000	21.648	2.088E-01	2.392E 00	-3.787E-08	-3.787E-08	3.787E-08
1.14996	0.6273	1.15000	32.365	2.088E-01	3.849E 00	-1.505E-08	-1.505E-08	1.505E-08
1.19996	0.6348	1.20000	43.103	2.088E-01	5.189E 00	-7.778E-09	-7.778E-09	7.778E-09
1.29996	0.6482	1.30000	64.599	2.089E-01	7.561E 00	-3.098E-09	-3.098E-09	3.098E-09
1.39996	0.6597	1.40000	86.105	2.089E-01	9.597E 00	-1.613E-09	-1.613E-09	1.613E-09
1.49996	0.6696	1.50000	107.615	2.089E-01	1.136E 01	-9.888E-10	-9.888E-10	9.888E-10
1.59996	0.6783	1.60000	129.127	2.089E-01	1.291E 01	-6.628E-10	-6.628E-10	6.628E-10
1.69996	0.6860	1.70000	150.640	2.089E-01	1.427E 01	-4.450E-10	-4.450E-10	4.450E-10
1.79996	0.6928	1.80000	172.154	2.089E-01	1.548E 01	-3.139E-10	-3.139E-10	3.139E-10
1.89996	0.6989	1.90000	193.668	2.089E-01	1.656E 01	-2.215E-10	-2.215E-10	2.215E-10
1.99996	0.7044	2.00000	215.183	2.089E-01	1.754E 01	-1.579E-10	-1.579E-10	1.579E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.600 θ_D= 0. ρ_a= 2.253

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.216E-10	49.901	-9.363E-09	-9.363E-09	9.363E-09	9.363E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.631E-10	199.605	-6.862E-08	-6.862E-08	6.862E-08	6.862E-08	-3.141E-09	-3.141E-09
0.50000	9.892E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.686E-09	-4.686E-09
0.60000	1.614E-09	299.407	-1.720E-07	-1.720E-07	1.720E-07	1.720E-07	-7.643E-09	-7.643E-09
0.70000	3.101E-09	349.308	-2.839E-07	-2.839E-07	2.839E-07	2.839E-07	-1.469E-08	-1.469E-08
0.80000	7.787E-09	399.209	-5.291E-07	-5.291E-07	5.291E-07	5.291E-07	-3.689E-08	-3.689E-08
0.85000	1.507E-08	424.160	-8.000E-07	-8.000E-07	8.000E-07	8.000E-07	-7.138E-08	-7.138E-08
0.90000	3.797E-08	449.110	-1.399E-06	-1.399E-06	1.399E-06	1.399E-06	-1.798E-07	-1.798E-07
0.92500	6.968E-08	461.585	-2.051E-06	-2.051E-06	2.051E-06	2.051E-06	-3.300E-07	-3.300E-07
0.95000	1.727E-07	474.060	-3.445E-06	-3.445E-06	3.450E-06	3.450E-06	-8.182E-07	-8.182E-07
0.96250	3.228E-07	480.297	-4.891E-06	-4.891E-06	4.918E-06	4.918E-06	-1.529E-06	-1.529E-06
0.97500	8.551E-07	486.534	-8.128E-06	-8.128E-06	8.381E-06	8.383E-06	-4.049E-06	-4.050E-06
0.98124	1.737E-06	489.652	-1.153E-05	-1.153E-05	1.264E-05	1.264E-05	-8.225E-06	-8.228E-06
0.98749	4.128E-06	492.770	-1.691E-05	-1.692E-05	2.373E-05	2.374E-05	-1.954E-05	-1.955E-05
0.99374	1.163E-05	495.887	-1.395E-05	-1.396E-05	7.200E-05	7.203E-05	-5.505E-05	-5.508E-05
0.99998	2.246E-05	499.003	1.116E-04	1.116E-04	3.083E-04	3.083E-04	-1.064E-04	-1.064E-04
1.00623	1.143E-05	502.118	4.021E-04	4.021E-04	7.083E-04	7.083E-04	-5.418E-05	-5.416E-05
1.01247	4.046E-06	505.236	5.607E-04	5.607E-04	9.114E-04	9.114E-04	-1.917E-05	-1.917E-05
1.01872	1.714E-06	508.353	6.177E-04	6.177E-04	9.846E-04	9.846E-04	-8.119E-06	-8.117E-06
1.02497	8.460E-07	511.471	6.412E-04	6.412E-04	1.016E-03	1.016E-03	-4.004E-06	-4.003E-06
1.03747	3.207E-07	517.708	6.622E-04	6.622E-04	1.043E-03	1.043E-03	-1.519E-06	-1.519E-06
1.04997	1.720E-07	523.946	6.751E-04	6.751E-04	1.059E-03	1.059E-03	-8.148E-07	-8.147E-07
1.07496	6.949E-08	536.420	6.966E-04	6.966E-04	1.083E-03	1.083E-03	-3.291E-07	-3.291E-07
1.09996	3.787E-08	548.895	7.173E-04	7.173E-04	1.105E-03	1.105E-03	-1.794E-07	-1.794E-07
1.14996	1.505E-08	573.846	7.584E-04	7.584E-04	1.148E-03	1.148E-03	-7.127E-08	-7.127E-08
1.19996	7.778E-09	598.795	7.996E-04	7.996E-04	1.189E-03	1.189E-03	-3.684E-08	-3.684E-08
1.29996	3.098E-09	648.696	8.824E-04	8.824E-04	1.273E-03	1.273E-03	-1.467E-08	-1.467E-08
1.39996	1.613E-09	698.597	9.651E-04	9.651E-04	1.356E-03	1.356E-03	-7.638E-09	-7.638E-09
1.49996	9.888E-10	748.498	1.048E-03	1.048E-03	1.439E-03	1.439E-03	-4.683E-09	-4.683E-09
1.59996	6.628E-10	798.399	1.131E-03	1.131E-03	1.522E-03	1.522E-03	-3.140E-09	-3.140E-09
1.69996	4.650E-10	848.300	1.214E-03	1.214E-03	1.605E-03	1.605E-03	-2.108E-09	-2.108E-09
1.79996	3.139E-10	898.201	1.297E-03	1.297E-03	1.687E-03	1.687E-03	-1.487E-09	-1.487E-09
1.89996	2.215E-10	948.102	1.379E-03	1.379E-03	1.770E-03	1.770E-03	-1.049E-09	-1.049E-09
1.99996	1.579E-10	998.003	1.462E-03	1.462E-03	1.853E-03	1.853E-03	-7.478E-10	-7.478E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.600 θ_D=0. ρ_a= 2.253

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-5.722E-17
0.10000	1.810E-12	1.822E-12	-9.152E-22	-9.153E-22	-1.050E-11	-1.050E-11	-7.676E-17
0.20000	5.079E-12	5.083E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.098E-16
0.30000	1.078E-11	1.077E-11	-2.779E-21	-2.779E-21	-6.071E-11	-6.071E-11	-1.726E-16
0.40000	2.283E-11	2.283E-11	-5.070E-21	-5.070E-21	-1.177E-10	-1.177E-10	-2.921E-16
0.50000	4.525E-11	4.524E-11	-9.264E-21	-9.264E-21	-2.218E-10	-2.218E-10	-5.846E-16
0.60000	1.025E-10	1.025E-10	-1.906E-20	-1.906E-20	-4.210E-10	-4.210E-10	-1.366E-15
0.70000	2.914E-10	2.914E-10	-4.998E-20	-4.998E-20	-8.900E-10	-8.900E-10	-3.990E-15
0.80000	1.197E-09	1.197E-09	-1.996E-19	-1.996E-19	-2.431E-09	-2.431E-09	-1.803E-14
0.85000	3.192E-09	3.193E-09	-5.299E-19	-5.299E-19	-4.903E-09	-4.903E-09	-5.203E-14
0.90000	1.226E-08	1.226E-08	-2.251E-18	-2.251E-18	-1.344E-08	-1.344E-08	-2.313E-13
0.92500	3.012E-08	3.012E-08	-5.173E-18	-5.173E-18	-2.658E-08	-2.658E-08	-6.912E-13
0.95000	1.135E-07	1.135E-07	-1.975E-17	-1.975E-17	-6.545E-08	-6.545E-08	-2.964E-12
0.96250	2.824E-07	2.825E-07	-5.261E-17	-5.262E-17	-1.256E-07	-1.256E-07	-8.107E-12
0.97500	1.133E-06	1.134E-06	-2.481E-16	-2.482E-16	-3.555E-07	-3.555E-07	-2.696E-11
0.98124	3.039E-06	3.040E-06	-7.695E-16	-7.699E-16	-7.757E-07	-7.759E-07	-5.372E-11
0.98749	1.075E-05	1.076E-05	-3.147E-15	-3.150E-15	-2.239E-06	-2.240E-06	-1.181E-10
0.99374	7.473E-05	7.482E-05	-1.780E-14	-1.782E-14	-1.016E-05	-1.017E-05	-2.387E-10
0.99998	1.558E-03	1.560E-03	-5.906E-14	-5.906E-14	-4.688E-05	-4.691E-05	-3.035E-10
1.00623	4.098E-03	4.098E-03	-1.733E-14	-1.731E-14	-8.294E-05	-8.295E-05	-2.360E-10
1.01247	5.776E-03	5.776E-03	-3.050E-15	-3.048E-15	-9.062E-05	-9.063E-05	-1.167E-10
1.01872	8.771E-03	8.771E-03	-7.535E-16	-7.531E-16	-9.205E-05	-9.205E-05	-5.301E-11
1.02497	1.306E-02	1.306E-02	-2.438E-16	-2.437E-16	-9.246E-05	-9.246E-05	-2.668E-11
1.03747	6.789E-03	6.789E-03	-5.210E-17	-5.209E-17	-9.269E-05	-9.269E-05	-8.032E-12
1.04997	3.550E-03	3.551E-03	-1.962E-17	-1.962E-17	-9.275E-05	-9.275E-05	-2.942E-12
1.07496	1.759E-03	1.759E-03	-5.154E-18	-5.154E-18	-9.279E-05	-9.279E-05	-6.878E-13
1.09996	1.162E-03	1.162E-03	-2.243E-18	-2.243E-18	-9.280E-05	-9.280E-05	-2.306E-13
1.14996	6.908E-04	6.909E-04	-5.286E-19	-5.286E-19	-9.281E-05	-9.281E-05	-5.195E-14
1.19996	4.911E-04	4.911E-04	-1.993E-19	-1.993E-19	-9.281E-05	-9.281E-05	-1.801E-14
1.29996	3.111E-04	3.111E-04	-4.993E-20	-4.993E-20	-9.281E-05	-9.281E-05	-3.991E-15
1.39996	2.276E-04	2.276E-04	-1.904E-20	-1.904E-20	-9.281E-05	-9.281E-05	-1.367E-15
1.49996	1.794E-04	1.794E-04	-9.257E-21	-9.257E-21	-9.281E-05	-9.281E-05	-5.851E-16
1.59996	1.481E-04	1.481E-04	-5.067E-21	-5.067E-21	-9.281E-05	-9.281E-05	-2.924E-16
1.69996	1.261E-04	1.261E-04	-2.777E-21	-2.777E-21	-9.281E-05	-9.281E-05	-1.728E-16
1.79996	1.098E-04	1.098E-04	-1.594E-21	-1.594E-21	-9.281E-05	-9.281E-05	-1.100E-16
1.89996	9.717E-05	9.717E-05	-9.147E-22	-9.147E-22	-9.281E-05	-9.281E-05	-7.692E-17
1.99996	8.718E-05	8.718E-05	-5.244E-22	-5.244E-22	-9.281E-05	-9.281E-05	-5.736E-17

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.700 θ_D= 0. ρ_a= 2.629

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.7000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.7000	0.10000	193.645	6.253E-08	1.000E-00	-2.215E-10	-2.215E-10	2.215E-10
0.20000	0.7000	0.20000	172.131	9.005E-08	1.000E-00	-3.141E-10	-3.141E-10	3.141E-10
0.30000	0.7000	0.30000	150.618	1.668E-07	1.000E-00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.7000	0.40000	129.106	2.535E-07	1.000E-00	-6.631E-10	-6.631E-10	6.631E-10
0.50000	0.7000	0.50000	107.596	3.335E-07	1.000E-00	-9.891E-10	-9.891E-10	9.891E-10
0.60000	0.7000	0.60000	86.088	3.869E-07	9.999E-01	-1.613E-09	-1.613E-09	1.613E-09
0.70000	0.7000	0.70000	64.585	1.561E-06	9.999E-01	-3.100E-09	-3.100E-09	3.100E-09
0.80000	0.7000	0.80000	43.096	5.176E-06	9.998E-01	-7.781E-09	-7.781E-09	7.781E-09
0.85000	0.7000	0.85000	32.365	1.355E-05	9.996E-01	-1.505E-08	-1.505E-08	1.505E-08
0.90000	0.7000	0.90000	21.660	4.728E-05	9.991E-01	-3.781E-08	-3.781E-08	3.781E-08
0.92500	0.7000	0.92500	16.334	1.139E-04	9.984E-01	-6.926E-08	-6.927E-08	6.926E-08
0.95000	0.7000	0.95000	11.059	3.751E-04	9.970E-01	-1.703E-07	-1.703E-07	1.703E-07
0.96250	0.7000	0.96250	8.471	8.482E-04	9.957E-01	-3.136E-07	-3.136E-07	3.136E-07
0.97500	0.7000	0.97500	5.973	2.525E-03	9.948E-01	-7.902E-07	-7.904E-07	7.902E-07
0.98125	0.7001	0.98125	4.803	5.074E-03	9.966E-01	-1.539E-06	-1.539E-06	1.539E-06
0.98749	0.7001	0.98750	3.751	1.165E-02	1.003E 00	-3.173E-06	-3.174E-06	3.172E-06
0.99374	0.7002	0.99375	2.947	2.959E-02	1.012E 00	-7.507E-06	-7.510E-06	7.506E-06
0.99999	0.7005	1.00000	2.631	6.726E-02	9.989E-01	-1.146E-05	-1.146E-05	1.146E-05
1.00623	0.7011	1.00625	2.962	1.046E-01	1.008E 00	-7.363E-06	-7.361E-06	7.364E-06
1.01248	0.7018	1.01250	3.774	1.221E-01	9.954E-01	-3.097E-06	-3.096E-06	3.098E-06
1.01873	0.7025	1.01875	4.830	1.285E-01	9.845E-01	-1.513E-06	-1.513E-06	1.513E-06
1.02498	0.7033	1.02500	6.002	1.310E-01	9.787E-01	-7.788E-07	-7.787E-07	7.789E-07
1.03748	0.7048	1.03750	8.502	1.326E-01	9.715E-01	-3.109E-07	-3.109E-07	3.110E-07
1.04997	0.7064	1.05000	11.091	1.331E-01	9.651E-01	-1.694E-07	-1.694E-07	1.694E-07
1.07497	0.7098	1.07500	16.366	1.334E-01	9.518E-01	-6.902E-08	-6.901E-08	6.902E-08
1.09997	0.7121	1.10000	21.692	1.335E-01	9.384E-01	-3.767E-08	-3.767E-08	3.767E-08
1.14997	0.7174	1.15000	32.397	1.335E-01	9.126E-01	-1.501E-08	-1.501E-08	1.501E-08
1.19997	0.7223	1.20000	43.128	1.335E-01	8.887E-01	-7.768E-09	-7.768E-09	7.768E-09
1.29997	0.7308	1.30000	64.617	1.335E-01	8.462E-01	-3.096E-09	-3.096E-09	3.096E-09
1.39997	0.7382	1.40000	86.120	1.335E-01	8.096E-01	-1.612E-09	-1.612E-09	1.612E-09
1.49997	0.7445	1.50000	107.628	1.335E-01	7.780E-01	-9.885E-10	-9.885E-10	9.885E-10
1.59997	0.7501	1.60000	129.138	1.335E-01	7.502E-01	-6.627E-10	-6.627E-10	6.627E-10
1.69997	0.7550	1.70000	150.650	1.335E-01	7.258E-01	-4.449E-10	-4.449E-10	4.449E-10
1.79997	0.7593	1.80000	172.163	1.335E-01	7.040E-01	-3.139E-10	-3.139E-10	3.139E-10
1.89997	0.7633	1.90000	193.677	1.335E-01	6.845E-01	-2.214E-10	-2.214E-10	2.214E-10
1.99997	0.7668	2.00000	215.191	1.335E-01	6.670E-01	-1.578E-10	-1.578E-10	1.578E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.700 θ_D= 0. ρ_a= 2.629

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.215E-10	49.901	-9.363E-09	-9.363E-09	9.363E-09	9.363E-09	-1.049E-09	-1.049E-09
0.20000	3.141E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.631E-10	199.605	-6.862E-08	-6.862E-08	6.862E-08	6.862E-08	-3.141E-09	-3.141E-09
0.50000	9.891E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.685E-09	-4.685E-09
0.60000	1.613E-09	299.407	-1.720E-07	-1.720E-07	1.720E-07	1.720E-07	-7.641E-09	-7.641E-09
0.70000	3.100E-09	349.308	-2.839E-07	-2.839E-07	2.839E-07	2.839E-07	-1.468E-08	-1.468E-08
0.80000	7.781E-09	399.209	-5.289E-07	-5.289E-07	5.289E-07	5.289E-07	-3.685E-08	-3.685E-08
0.85000	1.505E-08	424.160	-7.994E-07	-7.994E-07	7.994E-07	7.994E-07	-7.127E-08	-7.127E-08
0.90000	3.781E-08	449.110	-1.397E-06	-1.397E-06	1.397E-06	1.397E-06	-1.791E-07	-1.791E-07
0.92500	6.927E-08	461.585	-2.045E-06	-2.045E-06	2.046E-06	2.046E-06	-3.281E-07	-3.281E-07
0.95000	1.703E-07	474.060	-3.423E-06	-3.423E-06	3.428E-06	3.428E-06	-8.067E-07	-8.067E-07
0.96250	3.136E-07	480.297	-4.836E-06	-4.836E-06	4.862E-06	4.862E-06	-1.485E-06	-1.485E-06
0.97500	7.904E-07	486.534	-7.917E-06	-7.918E-06	8.153E-06	8.154E-06	-3.743E-06	-3.744E-06
0.98125	1.539E-06	489.653	-1.101E-05	-1.101E-05	1.197E-05	1.198E-05	-7.289E-06	-7.291E-06
0.98749	3.174E-06	492.771	-1.587E-05	-1.587E-05	2.097E-05	2.097E-05	-1.503E-05	-1.503E-05
0.99374	7.511E-06	495.888	-1.795E-05	-1.796E-05	5.101E-05	5.103E-05	-3.556E-05	-3.557E-05
0.99999	1.146E-05	499.005	2.024E-05	2.023E-05	1.517E-04	1.517E-04	-5.429E-05	-5.429E-05
1.00623	7.360E-06	502.122	1.123E-04	1.123E-04	3.057E-04	3.057E-04	-3.488E-05	-3.487E-05
1.01248	3.096E-06	505.239	1.743E-04	1.743E-04	3.992E-04	3.992E-04	-1.467E-05	-1.467E-05
1.01873	1.513E-06	508.357	2.003E-04	2.003E-04	4.388E-04	4.388E-04	-7.167E-06	-7.165E-06
1.02498	7.786E-07	511.475	2.115E-04	2.115E-04	4.568E-04	4.568E-04	-3.689E-06	-3.688E-06
1.03748	3.109E-07	517.712	2.210E-04	2.210E-04	4.726E-04	4.726E-04	-1.473E-06	-1.473E-06
1.04997	1.693E-07	523.949	2.264E-04	2.263E-04	4.807E-04	4.807E-04	-8.022E-07	-8.022E-07
1.07497	6.901E-08	536.424	2.348E-04	2.348E-04	4.919E-04	4.920E-04	-3.269E-07	-3.269E-07
1.09997	3.767E-08	548.899	2.430E-04	2.430E-04	5.015E-04	5.015E-04	-1.784E-07	-1.784E-07
1.14997	1.501E-08	573.850	2.596E-04	2.596E-04	5.192E-04	5.192E-04	-7.112E-08	-7.112E-08
1.19997	7.768E-09	598.800	2.763E-04	2.763E-04	5.365E-04	5.365E-04	-3.679E-08	-3.679E-08
1.29997	3.096E-09	648.701	3.100E-04	3.100E-04	5.706E-04	5.706E-04	-1.467E-08	-1.467E-08
1.39997	1.612E-09	698.602	3.438E-04	3.438E-04	6.046E-04	6.046E-04	-7.635E-09	-7.635E-09
1.49997	9.885E-10	748.503	3.776E-04	3.776E-04	6.386E-04	6.386E-04	-4.682E-09	-4.682E-09
1.59997	6.627E-10	798.404	4.114E-04	4.114E-04	6.725E-04	6.725E-04	-3.139E-09	-3.139E-09
1.69997	4.449E-10	848.305	4.453E-04	4.453E-04	7.064E-04	7.064E-04	-2.108E-09	-2.108E-09
1.79997	3.139E-10	898.207	4.792E-04	4.792E-04	7.403E-04	7.403E-04	-1.487E-09	-1.487E-09
1.89997	2.214E-10	948.108	5.130E-04	5.130E-04	7.742E-04	7.742E-04	-1.049E-09	-1.049E-09
1.99997	1.578E-10	998.009	5.469E-04	5.469E-04	8.082E-04	8.082E-04	-7.477E-10	-7.477E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.700 θ_D= 0. ρ_a= 2.629

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-7.788E-17
0.10000	2.110E-12	2.117E-12	-9.152E-22	-9.152E-22	-1.050E-11	-1.050E-11	-1.045E-16
0.20000	5.926E-12	5.909E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.494E-16
0.30000	1.256E-11	1.257E-11	-2.779E-21	-2.779E-21	-6.071E-11	-6.071E-11	-2.349E-16
0.40000	2.663E-11	2.663E-11	-5.070E-21	-5.070E-21	-1.177E-10	-1.177E-10	-3.975E-16
0.50000	5.277E-11	5.278E-11	-9.262E-21	-9.262E-21	-2.218E-10	-2.218E-10	-7.955E-16
0.60000	1.196E-10	1.196E-10	-1.906E-20	-1.906E-20	-4.209E-10	-4.209E-10	-1.859E-15
0.70000	3.399E-10	3.398E-10	-4.996E-20	-4.996E-20	-8.897E-10	-8.897E-10	-5.428E-15
0.80000	1.395E-09	1.396E-09	-1.994E-19	-1.994E-19	-2.429E-09	-2.429E-09	-2.450E-14
0.85000	3.719E-09	3.719E-09	-5.286E-19	-5.286E-19	-4.897E-09	-4.897E-09	-7.061E-14
0.90000	1.425E-08	1.425E-08	-2.238E-18	-2.238E-18	-1.340E-08	-1.340E-08	-3.128E-13
0.92500	3.490E-08	3.490E-08	-5.131E-18	-5.132E-18	-2.644E-08	-2.645E-08	-9.284E-13
0.95000	1.304E-07	1.304E-07	-1.932E-17	-1.932E-17	-6.463E-08	-6.463E-08	-3.920E-12
0.96250	3.187E-07	3.188E-07	-5.028E-17	-5.029E-17	-1.226E-07	-1.226E-07	-1.054E-11
0.97500	1.220E-06	1.220E-06	-2.197E-16	-2.197E-16	-3.344E-07	-3.344E-07	-3.403E-11
0.98125	3.105E-06	3.106E-06	-6.323E-16	-6.326E-16	-6.899E-07	-6.901E-07	-6.469E-11
0.98749	9.849E-06	9.855E-06	-2.038E-15	-2.040E-15	-1.784E-06	-1.785E-06	-1.383E-10
0.99374	4.984E-05	4.988E-05	-8.492E-15	-8.497E-15	-6.164E-06	-6.168E-06	-2.484E-10
0.99999	3.342E-04	3.345E-04	-1.739E-14	-1.739E-14	-1.922E-05	-1.923E-05	-3.217E-10
1.00623	6.060E-04	6.060E-04	-8.219E-15	-8.213E-15	-3.208E-05	-3.208E-05	-2.459E-10
1.01248	6.490E-04	6.490E-04	-1.959E-15	-1.958E-15	-3.632E-05	-3.632E-05	-1.367E-10
1.01873	6.588E-04	6.588E-04	-6.152E-16	-6.149E-16	-3.738E-05	-3.738E-05	-6.366E-11
1.02498	6.605E-04	6.606E-04	-2.148E-16	-2.147E-16	-3.773E-05	-3.773E-05	-3.357E-11
1.03748	6.583E-04	6.583E-04	-4.963E-17	-4.962E-17	-3.794E-05	-3.794E-05	-1.041E-11
1.04997	6.550E-04	6.550E-04	-1.915E-17	-1.915E-17	-3.799E-05	-3.799E-05	-3.879E-12
1.07497	6.488E-04	6.488E-04	-5.106E-18	-5.106E-18	-3.803E-05	-3.803E-05	-9.219E-13
1.09997	6.431E-04	6.431E-04	-2.227E-18	-2.227E-18	-3.804E-05	-3.804E-05	-3.115E-13
1.14997	6.325E-04	6.326E-04	-5.270E-19	-5.270E-19	-3.805E-05	-3.805E-05	-7.043E-14
1.19997	6.225E-04	6.225E-04	-1.989E-19	-1.989E-19	-3.805E-05	-3.805E-05	-2.446E-14
1.29997	6.035E-04	6.035E-04	-4.988E-20	-4.988E-20	-3.806E-05	-3.806E-05	-5.426E-15
1.39997	5.857E-04	5.857E-04	-1.903E-20	-1.903E-20	-3.806E-05	-3.806E-05	-1.860E-15
1.49997	5.689E-04	5.689E-04	-9.254E-21	-9.254E-21	-3.806E-05	-3.806E-05	-7.960E-16
1.59997	5.531E-04	5.531E-04	-5.065E-21	-5.065E-21	-3.806E-05	-3.806E-05	-3.979E-16
1.69997	5.381E-04	5.381E-04	-2.777E-21	-2.777E-21	-3.806E-05	-3.806E-05	-2.352E-16
1.79997	5.239E-04	5.239E-04	-1.593E-21	-1.593E-21	-3.806E-05	-3.806E-05	-1.497E-16
1.89997	5.104E-04	5.105E-04	-9.145E-22	-9.145E-22	-3.806E-05	-3.806E-05	-1.047E-16
1.99997	4.976E-04	4.976E-04	-5.243E-22	-5.243E-22	-3.806E-05	-3.806E-05	-7.807E-17

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 0.800 θ_D= 0. ρ_a= 3.004

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.8000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	0.8000	0.10000	193.645	8.921E-08	1.000E-00	-2.215E-10	-2.215E-10	2.215E-10
0.20000	0.8000	0.20000	172.132	1.517E-07	1.000E-00	-3.140E-10	-3.140E-10	3.140E-10
0.30000	0.8000	0.30000	150.620	2.201E-07	1.000E-00	-4.452E-10	-4.452E-10	4.452E-10
0.40000	0.8000	0.40000	129.109	3.335E-07	1.000E-00	-6.631E-10	-6.631E-10	6.631E-10
0.50000	0.8000	0.50000	107.600	4.736E-07	1.000E-00	-9.890E-10	-9.890E-10	9.890E-10
0.60000	0.8000	0.60000	86.095	5.069E-07	1.000E-00	-1.613E-09	-1.613E-09	1.613E-09
0.70000	0.8000	0.70000	64.597	2.054E-06	9.999E-01	-3.098E-09	-3.098E-09	3.098E-09
0.80000	0.8000	0.80000	43.116	6.884E-06	9.998E-01	-7.773E-09	-7.773E-09	7.773E-09
0.85000	0.8000	0.85000	32.393	1.761E-05	9.997E-01	-1.502E-08	-1.502E-08	1.502E-08
0.90000	0.8000	0.90000	21.704	6.062E-05	9.993E-01	-3.762E-08	-3.762E-08	3.762E-08
0.92500	0.8000	0.92500	16.394	1.433E-04	9.988E-01	-6.880E-08	-6.880E-08	6.879E-08
0.95000	0.8000	0.95000	11.150	4.711E-04	9.977E-01	-1.676E-07	-1.676E-07	1.676E-07
0.96250	0.8000	0.96250	8.591	1.050E-03	9.968E-01	-3.034E-07	-3.035E-07	3.034E-07
0.97500	0.8000	0.97500	6.144	3.023E-03	9.966E-01	-7.379E-07	-7.380E-07	7.378E-07
0.98124	0.8001	0.98125	5.014	5.853E-03	9.986E-01	-1.346E-06	-1.346E-06	1.346E-06
0.98749	0.8001	0.98750	4.020	1.255E-02	1.004E 00	-2.526E-06	-2.527E-06	2.526E-06
0.99374	0.8002	0.99375	3.285	2.848E-02	1.007E 00	-5.183E-06	-5.184E-06	5.182E-06
0.99999	0.8005	1.00000	3.006	5.747E-02	9.993E-01	-6.950E-06	-6.950E-06	6.950E-06
1.00623	0.8010	1.00625	3.302	8.616E-02	1.005E 00	-5.091E-06	-5.090E-06	5.092E-06
1.01248	0.8015	1.01250	4.048	1.017E-01	9.997E-01	-2.482E-06	-2.482E-06	2.483E-06
1.01873	0.8022	1.01875	5.048	1.082E-01	9.924E-01	-1.318E-06	-1.318E-06	1.318E-06
1.02498	0.8028	1.02500	6.180	1.109E-01	9.882E-01	-7.277E-07	-7.276E-07	7.278E-07
1.03748	0.8041	1.03750	8.630	1.129E-01	9.841E-01	-3.002E-07	-3.001E-07	3.002E-07
1.06998	0.8054	1.05000	11.190	1.135E-01	9.809E-01	-1.664E-07	-1.664E-07	1.664E-07
1.07497	0.8080	1.07500	16.435	1.138E-01	9.742E-01	-6.847E-08	-6.847E-08	6.847E-08
1.09997	0.8104	1.10000	21.746	1.139E-01	9.672E-01	-3.744E-08	-3.744E-08	3.744E-08
1.14997	0.8149	1.15000	32.435	1.139E-01	9.538E-01	-1.498E-08	-1.498E-08	1.498E-08
1.19997	0.8190	1.20000	43.158	1.140E-01	9.412E-01	-7.756E-09	-7.756E-09	7.757E-09
1.29997	0.8268	1.30000	64.639	1.140E-01	9.188E-01	-3.094E-09	-3.094E-09	3.094E-09
1.39997	0.8326	1.40000	86.137	1.140E-01	8.996E-01	-1.611E-09	-1.611E-09	1.611E-09
1.49997	0.8380	1.50000	107.643	1.140E-01	8.829E-01	-9.883E-10	-9.883E-10	9.883E-10
1.59997	0.8427	1.60000	129.151	1.140E-01	8.682E-01	-6.625E-10	-6.625E-10	6.625E-10
1.69997	0.8469	1.70000	150.662	1.140E-01	8.553E-01	-4.449E-10	-4.449E-10	4.449E-10
1.79997	0.8507	1.80000	172.174	1.140E-01	8.439E-01	-3.138E-10	-3.138E-10	3.138E-10
1.89997	0.8540	1.90000	193.687	1.140E-01	8.336E-01	-2.214E-10	-2.214E-10	2.214E-10
1.99997	0.8570	2.00000	215.201	1.140E-01	8.243E-01	-1.578E-10	-1.578E-10	1.578E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.800 θ_D= 0. ρ_a= 3.004

z	$_x\mu'-1$	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.215E-10	49.901	-9.363E-09	-9.363E-09	9.363E-09	9.363E-09	-1.049E-09	-1.049E-09
0.20000	3.140E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.488E-09	-1.488E-09
0.30000	4.452E-10	149.703	-4.135E-08	-4.135E-08	4.135E-08	4.135E-08	-2.109E-09	-2.109E-09
0.40000	6.631E-10	199.605	-6.862E-08	-6.862E-08	6.862E-08	6.862E-08	-3.141E-09	-3.141E-09
0.50000	9.890E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.685E-09	-4.685E-09
0.60000	1.613E-09	299.407	-1.720E-07	-1.720E-07	1.720E-07	1.720E-07	-7.640E-09	-7.640E-09
0.70000	3.098E-09	349.308	-2.838E-07	-2.838E-07	2.838E-07	2.838E-07	-1.468E-08	-1.468E-08
0.80000	7.773E-09	399.209	-5.287E-07	-5.287E-07	5.287E-07	5.287E-07	-3.682E-08	-3.682E-08
0.85000	1.502E-08	424.160	-7.988E-07	-7.988E-07	7.988E-07	7.988E-07	-7.114E-08	-7.114E-08
0.90000	3.762E-08	449.110	-1.395E-06	-1.395E-06	1.395E-06	1.395E-06	-1.782E-07	-1.782E-07
0.92500	6.880E-08	461.585	-2.039E-06	-2.039E-06	2.040E-06	2.040E-06	-3.259E-07	-3.259E-07
0.95000	1.676E-07	474.060	-3.397E-06	-3.397E-06	3.405E-06	3.405E-06	-7.937E-07	-7.938E-07
0.96250	3.035E-07	480.297	-4.769E-06	-4.769E-06	4.810E-06	4.810E-06	-1.437E-06	-1.437E-06
0.97500	7.381E-07	486.534	-7.637E-06	-7.637E-06	7.975E-06	7.976E-06	-3.495E-06	-3.496E-06
0.98124	1.346E-06	489.652	-1.027E-05	-1.027E-05	1.154E-05	1.155E-05	-6.375E-06	-6.377E-06
0.98749	2.527E-06	492.770	-1.386E-05	-1.386E-05	1.977E-05	1.977E-05	-1.197E-05	-1.197E-05
0.99374	5.185E-06	495.888	-1.315E-05	-1.315E-05	4.377E-05	4.378E-05	-2.455E-05	-2.456E-05
0.99999	6.950E-06	499.005	1.458E-05	1.457E-05	1.109E-04	1.110E-04	-3.292E-05	-3.292E-05
1.00623	5.089E-06	502.122	7.421E-05	7.420E-05	2.097E-04	2.097E-04	-2.411E-05	-2.411E-05
1.01248	2.482E-06	505.239	1.198E-04	1.198E-04	2.781E-04	2.781E-04	-1.176E-05	-1.176E-05
1.01873	1.317E-06	508.357	1.417E-04	1.417E-04	3.115E-04	3.115E-04	-6.242E-06	-6.241E-06
1.02498	7.276E-07	511.476	1.518E-04	1.518E-04	3.277E-04	3.277E-04	-3.447E-06	-3.446E-06
1.03748	3.001E-07	517.713	1.604E-04	1.604E-04	3.423E-04	3.423E-04	-1.422E-06	-1.422E-06
1.04998	1.664E-07	523.950	1.646E-04	1.646E-04	3.492E-04	3.492E-04	-7.880E-07	-7.880E-07
1.07497	6.847E-08	536.425	1.709E-04	1.709E-04	3.582E-04	3.582E-04	-3.243E-07	-3.243E-07
1.09997	3.744E-08	548.900	1.768E-04	1.768E-04	3.654E-04	3.654E-04	-1.773E-07	-1.773E-07
1.14997	1.498E-08	573.850	1.888E-04	1.888E-04	3.785E-04	3.785E-04	-7.094E-08	-7.094E-08
1.19997	7.756E-09	598.801	2.009E-04	2.009E-04	3.912E-04	3.912E-04	-3.674E-08	-3.674E-08
1.29997	3.094E-09	648.702	2.254E-04	2.254E-04	4.162E-04	4.162E-04	-1.466E-08	-1.466E-08
1.39997	1.611E-09	698.603	2.500E-04	2.500E-04	4.410E-04	4.410E-04	-7.632E-09	-7.632E-09
1.49997	9.883E-10	748.504	2.746E-04	2.746E-04	4.658E-04	4.658E-04	-4.681E-09	-4.681E-09
1.59997	6.625E-10	798.405	2.993E-04	2.993E-04	4.905E-04	4.905E-04	-3.138E-09	-3.138E-09
1.69997	4.449E-10	848.306	3.240E-04	3.240E-04	5.153E-04	5.153E-04	-2.107E-09	-2.107E-09
1.79997	3.138E-10	898.207	3.486E-04	3.486E-04	5.399E-04	5.399E-04	-1.487E-09	-1.487E-09
1.89997	2.214E-10	948.108	3.733E-04	3.733E-04	5.647E-04	5.647E-04	-1.049E-09	-1.049E-09
1.99997	1.578E-10	998.009	3.980E-04	3.980E-04	5.894E-04	5.894E-04	-7.476E-10	-7.476E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 0.800 θ_D= 0. ρ_a= 3.004

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.017E-16
0.10000	2.426E-12	2.412E-12	-9.152E-22	-9.152E-22	-1.050E-11	-1.050E-11	-1.365E-16
0.20000	6.765E-12	6.775E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-1.952E-16
0.30000	1.436E-11	1.433E-11	-2.779E-21	-2.779E-21	-6.071E-11	-6.071E-11	-3.067E-16
0.40000	3.039E-11	3.040E-11	-5.070E-21	-5.070E-21	-1.177E-10	-1.177E-10	-5.192E-16
0.50000	6.028E-11	6.027E-11	-9.261E-21	-9.261E-21	-2.217E-10	-2.217E-10	-1.039E-15
0.60000	1.366E-10	1.365E-10	-1.905E-20	-1.905E-20	-4.209E-10	-4.209E-10	-2.428E-15
0.70000	3.883E-10	3.883E-10	-4.993E-20	-4.993E-20	-8.895E-10	-8.895E-10	-7.084E-15
0.80000	1.593E-09	1.593E-09	-1.991E-19	-1.991E-19	-2.427E-09	-2.427E-09	-3.194E-14
0.85000	4.243E-09	4.243E-09	-5.272E-19	-5.272E-19	-4.889E-09	-4.889E-09	-9.192E-14
0.90000	1.623E-08	1.623E-08	-2.223E-18	-2.223E-18	-1.335E-08	-1.335E-08	-4.056E-13
0.92500	3.962E-08	3.962E-08	-5.084E-18	-5.084E-18	-2.629E-08	-2.629E-08	-1.194E-12
0.95000	1.468E-07	1.469E-07	-1.884E-17	-1.884E-17	-6.370E-08	-6.370E-08	-4.955E-12
0.96250	3.530E-07	3.531E-07	-4.775E-17	-4.776E-17	-1.194E-07	-1.194E-07	-1.308E-11
0.97500	1.291E-06	1.292E-06	-1.970E-16	-1.971E-16	-3.131E-07	-3.132E-07	-4.021E-11
0.98124	3.094E-06	3.095E-06	-5.087E-16	-5.089E-16	-6.107E-07	-6.109E-07	-7.459E-11
0.98749	8.755E-06	8.759E-06	-1.415E-15	-1.415E-15	-1.452E-06	-1.453E-06	-1.498E-10
0.99374	3.290E-05	3.292E-05	-4.589E-15	-4.592E-15	-4.012E-06	-4.014E-06	-2.452E-10
0.99999	1.296E-04	1.297E-04	-7.455E-15	-7.455E-15	-1.000E-05	-1.001E-05	-3.112E-10
1.00623	2.226E-04	2.226E-04	-4.456E-15	-4.454E-15	-1.591E-05	-1.591E-05	-2.420E-10
1.01248	2.460E-04	2.460E-04	-1.375E-15	-1.374E-15	-1.837E-05	-1.837E-05	-1.462E-10
1.01873	2.520E-04	2.520E-04	-4.915E-16	-4.913E-16	-1.919E-05	-1.919E-05	-7.322E-11
1.02498	2.532E-04	2.532E-04	-1.927E-16	-1.926E-16	-1.948E-05	-1.948E-05	-3.937E-11
1.03748	2.522E-04	2.522E-04	-4.695E-17	-4.694E-17	-1.966E-05	-1.966E-05	-1.288E-11
1.04998	2.502E-04	2.502E-04	-1.863E-17	-1.863E-17	-1.972E-05	-1.972E-05	-4.888E-12
1.07497	2.462E-04	2.462E-04	-5.051E-18	-5.051E-18	-1.976E-05	-1.976E-05	-1.183E-12
1.09997	2.423E-04	2.423E-04	-2.208E-18	-2.208E-18	-1.977E-05	-1.977E-05	-4.034E-13
1.14997	2.351E-04	2.351E-04	-5.250E-19	-5.250E-19	-1.978E-05	-1.978E-05	-9.158E-14
1.19997	2.283E-04	2.283E-04	-1.985E-19	-1.985E-19	-1.978E-05	-1.978E-05	-3.187E-14
1.29997	2.158E-04	2.158E-04	-4.983E-20	-4.983E-20	-1.978E-05	-1.978E-05	-7.077E-15
1.39997	2.047E-04	2.047E-04	-1.902E-20	-1.902E-20	-1.978E-05	-1.978E-05	-2.427E-15
1.49997	1.947E-04	1.947E-04	-9.250E-21	-9.250E-21	-1.978E-05	-1.978E-05	-1.039E-15
1.59997	1.856E-04	1.856E-04	-5.064E-21	-5.064E-21	-1.978E-05	-1.978E-05	-5.195E-16
1.69997	1.773E-04	1.773E-04	-2.776E-21	-2.776E-21	-1.978E-05	-1.978E-05	-3.071E-16
1.79997	1.697E-04	1.697E-04	-1.593E-21	-1.593E-21	-1.978E-05	-1.978E-05	-1.954E-16
1.89997	1.628E-04	1.628E-04	-9.142E-22	-9.142E-22	-1.978E-05	-1.978E-05	-1.367E-16
1.99997	1.564E-04	1.564E-04	-5.241E-22	-5.241E-22	-1.978E-05	-1.978E-05	-1.020E-16

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 1.000 θ_D= 0. ρ_a= 3.755

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	1.0000	0.10000	193.647	9.088E-08	1.000E-00	-2.215E-10	-2.215E-10	2.215E-10
0.20000	1.0000	0.20000	172.135	1.367E-07	1.000E-00	-3.140E-10	-3.140E-10	3.140E-10
0.30000	1.0000	0.30000	150.625	2.568E-07	1.000E-00	-4.451E-10	-4.451E-10	4.451E-10
0.40000	1.0000	0.40000	129.117	4.069E-07	1.000E-00	-6.630E-10	-6.630E-10	6.630E-10
0.50000	1.0000	0.50000	107.612	5.603E-07	1.000E-00	-9.888E-10	-9.888E-10	9.888E-10
0.60000	1.0000	0.60000	86.113	6.403E-07	9.999E-01	-1.612E-09	-1.612E-09	1.612E-09
0.70000	1.0000	0.70000	64.624	2.561E-06	9.999E-01	-3.096E-09	-3.096E-09	3.096E-09
0.80000	1.0000	0.80000	43.163	8.644E-06	9.997E-01	-7.755E-09	-7.755E-09	7.754E-09
0.85000	1.0000	0.85000	32.459	2.225E-05	9.994E-01	-1.495E-08	-1.495E-08	1.495E-08
0.90000	1.0000	0.90000	21.809	7.609E-05	9.987E-01	-3.717E-08	-3.717E-08	3.717E-08
0.92500	1.0000	0.92500	16.536	1.767E-04	9.979E-01	-6.769E-08	-6.769E-08	6.769E-08
0.95000	1.0000	0.95000	11.364	5.690E-04	9.964E-01	-1.613E-07	-1.613E-07	1.613E-07
0.96250	1.0000	0.96250	8.870	1.233E-03	9.958E-01	-2.809E-07	-2.809E-07	2.809E-07
0.97500	1.0001	0.97500	6.534	3.293E-03	9.977E-01	-6.359E-07	-6.360E-07	6.359E-07
0.98124	1.0001	0.98125	5.488	5.936E-03	1.002E 00	-1.016E-06	-1.016E-06	1.016E-06
0.98749	1.0001	0.98750	4.601	1.127E-02	1.007E 00	-1.748E-06	-1.749E-06	1.748E-06
0.99374	1.0002	0.99375	3.979	2.149E-02	1.007E 00	-2.595E-06	-2.595E-06	2.595E-06
0.99999	1.0004	1.00000	3.757	3.701E-02	9.996E-01	-3.152E-06	-3.153E-06	3.152E-06
1.00624	1.0007	1.00625	4.001	5.242E-02	1.006E 00	-2.556E-06	-2.556E-06	2.557E-06
1.01248	1.0010	1.01250	4.639	6.233E-02	1.006E 00	-1.707E-06	-1.707E-06	1.707E-06
1.01873	1.0014	1.01875	5.537	6.747E-02	9.989E-01	-9.914E-07	-9.912E-07	9.915E-07
1.02498	1.0018	1.02500	6.588	7.001E-02	9.939E-01	-6.231E-07	-6.230E-07	6.231E-07
1.03748	1.0027	1.03750	8.930	7.201E-02	9.898E-01	-2.764E-07	-2.764E-07	2.764E-07
1.04998	1.0035	1.05000	11.426	7.266E-02	9.882E-01	-1.595E-07	-1.595E-07	1.595E-07
1.07498	1.0051	1.07500	16.600	7.305E-02	9.857E-01	-6.720E-08	-6.720E-08	6.720E-08
1.09998	1.0067	1.10000	21.874	7.316E-02	9.828E-01	-3.690E-08	-3.690E-08	3.690E-08
1.14998	1.0096	1.15000	32.524	7.323E-02	9.767E-01	-1.489E-08	-1.489E-08	1.489E-08
1.19998	1.0122	1.20000	43.228	7.325E-02	9.707E-01	-7.729E-09	-7.729E-09	7.729E-09
1.29998	1.0169	1.30000	64.690	7.325E-02	9.598E-01	-3.089E-09	-3.089E-09	3.089E-09
1.39998	1.0209	1.40000	86.178	7.326E-02	9.504E-01	-1.610E-09	-1.610E-09	1.610E-09
1.49998	1.0244	1.50000	107.678	7.326E-02	9.422E-01	-9.876E-10	-9.876E-10	9.876E-10
1.59998	1.0275	1.60000	129.183	7.326E-02	9.350E-01	-6.622E-10	-6.622E-10	6.622E-10
1.69998	1.0302	1.70000	150.691	7.326E-02	9.287E-01	-4.447E-10	-4.447E-10	4.447E-10
1.79998	1.0326	1.80000	172.201	7.326E-02	9.230E-01	-3.137E-10	-3.137E-10	3.137E-10
1.89998	1.0347	1.90000	193.712	7.326E-02	9.180E-01	-2.213E-10	-2.213E-10	2.213E-10
1.99998	1.0366	2.00000	215.225	7.326E-02	9.134E-01	-1.578E-10	-1.578E-10	1.578E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 1.000 θ_D= 0. ρ_a= 3.755

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.215E-10	49.901	-9.363E-09	-9.363E-09	9.363E-09	9.363E-09	-1.049E-09	-1.049E-09
0.20000	3.140E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.487E-09	-1.487E-09
0.30000	4.451E-10	149.703	-4.134E-08	-4.134E-08	4.134E-08	4.134E-08	-2.108E-09	-2.108E-09
0.40000	6.630E-10	199.605	-6.861E-08	-6.861E-08	6.861E-08	6.861E-08	-3.140E-09	-3.140E-09
0.50000	9.888E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.684E-09	-4.684E-09
0.60000	1.612E-09	299.407	-1.720E-07	-1.720E-07	1.720E-07	1.720E-07	-7.637E-09	-7.637E-09
0.70000	3.096E-09	349.308	-2.837E-07	-2.837E-07	2.837E-07	2.837E-07	-1.466E-08	-1.466E-08
0.80000	7.756E-09	399.209	-5.282E-07	-5.282E-07	5.282E-07	5.282E-07	-3.673E-08	-3.673E-08
0.85000	1.495E-08	424.160	-7.973E-07	-7.973E-07	7.973E-07	7.973E-07	-7.083E-08	-7.083E-08
0.90000	3.717E-08	449.110	-1.388E-06	-1.389E-06	1.389E-06	1.389E-06	-1.761E-07	-1.761E-07
0.92500	6.769E-08	461.585	-2.024E-06	-2.024E-06	2.025E-06	2.025E-06	-3.206E-07	-3.206E-07
0.95000	1.613E-07	474.060	-3.338E-06	-3.339E-06	3.350E-06	3.350E-06	-7.639E-07	-7.639E-07
0.96250	2.810E-07	480.297	-4.625E-06	-4.625E-06	4.680E-06	4.681E-06	-1.331E-06	-1.331E-06
0.97500	6.361E-07	486.534	-7.116E-06	-7.116E-06	7.517E-06	7.518E-06	-3.012E-06	-3.013E-06
0.98124	1.017E-06	489.653	-9.158E-06	-9.157E-06	1.047E-05	1.047E-05	-4.814E-06	-4.814E-06
0.98749	1.749E-06	492.771	-1.165E-05	-1.165E-05	1.642E-05	1.642E-05	-8.281E-06	-8.283E-06
0.99374	2.596E-06	495.889	-1.211E-05	-1.212E-05	2.956E-05	2.956E-05	-1.229E-05	-1.229E-05
0.99999	3.153E-06	499.006	-3.984E-06	-3.987E-06	5.603E-05	5.603E-05	-1.493E-05	-1.493E-05
1.00624	2.655E-06	502.124	1.344E-05	1.344E-05	9.162E-05	9.163E-05	-1.211E-05	-1.211E-05
1.01248	1.706E-06	505.242	2.898E-05	2.898E-05	1.205E-04	1.205E-04	-8.085E-06	-8.083E-06
1.01873	9.912E-07	508.360	3.825E-05	3.825E-05	1.380E-04	1.380E-04	-4.696E-06	-4.695E-06
1.02498	6.230E-07	511.478	4.314E-05	4.314E-05	1.478E-04	1.478E-04	-2.951E-06	-2.951E-06
1.03748	2.764E-07	517.715	4.731E-05	4.731E-05	1.572E-04	1.572E-04	-1.309E-06	-1.309E-06
1.04998	1.596E-07	523.952	4.913E-05	4.913E-05	1.616E-04	1.616E-04	-7.555E-07	-7.555E-07
1.07498	6.720E-08	536.427	5.149E-05	5.149E-05	1.665E-04	1.665E-04	-3.183E-07	-3.183E-07
1.09998	3.690E-08	548.902	5.372E-05	5.372E-05	1.700E-04	1.700E-04	-1.748E-07	-1.748E-07
1.14998	1.489E-08	573.853	5.843E-05	5.843E-05	1.759E-04	1.759E-04	-7.052E-08	-7.052E-08
1.19998	7.729E-09	598.803	6.332E-05	6.332E-05	1.813E-04	1.813E-04	-3.661E-08	-3.661E-08
1.29998	3.089E-09	648.704	7.330E-05	7.330E-05	1.918E-04	1.918E-04	-1.463E-08	-1.463E-08
1.39998	1.610E-09	698.605	8.339E-05	8.339E-05	2.021E-04	2.021E-04	-7.624E-09	-7.624E-09
1.49998	9.876E-10	748.507	9.353E-05	9.353E-05	2.124E-04	2.124E-04	-4.678E-09	-4.678E-09
1.59998	6.622E-10	798.408	1.037E-04	1.037E-04	2.226E-04	2.226E-04	-3.136E-09	-3.136E-09
1.69998	4.447E-10	848.309	1.139E-04	1.139E-04	2.329E-04	2.329E-04	-2.106E-09	-2.106E-09
1.79998	3.137E-10	898.210	1.241E-04	1.241E-04	2.431E-04	2.431E-04	-1.486E-09	-1.486E-09
1.89998	2.213E-10	948.111	1.343E-04	1.343E-04	2.533E-04	2.533E-04	-1.048E-09	-1.048E-09
1.99998	1.578E-10	998.012	1.444E-04	1.444E-04	2.635E-04	2.635E-04	-7.473E-10	-7.473E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 1.000 θ_D= 0. ρ_a= 3.755

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.589E-16
0.10000	3.029E-12	3.029E-12	-9.152E-22	-9.152E-22	-1.050E-11	-1.050E-11	-2.132E-16
0.20000	8.462E-12	8.463E-12	-1.595E-21	-1.595E-21	-2.881E-11	-2.881E-11	-3.049E-16
0.30000	1.793E-11	1.794E-11	-2.778E-21	-2.778E-21	-6.070E-11	-6.070E-11	-4.792E-16
0.40000	3.801E-11	3.800E-11	-5.068E-21	-5.069E-21	-1.177E-10	-1.177E-10	-8.110E-16
0.50000	7.535E-11	7.534E-11	-9.258E-21	-9.258E-21	-2.217E-10	-2.217E-10	-1.622E-15
0.60000	1.707E-10	1.707E-10	-1.904E-20	-1.904E-20	-4.207E-10	-4.207E-10	-3.790E-15
0.70000	4.849E-10	4.849E-10	-4.987E-20	-4.987E-20	-8.888E-10	-8.888E-10	-1.105E-14
0.80000	1.987E-09	1.987E-09	-1.984E-19	-1.984E-19	-2.422E-09	-2.422E-09	-4.970E-14
0.85000	5.279E-09	5.279E-09	-5.238E-19	-5.238E-19	-4.872E-09	-4.872E-09	-1.425E-13
0.90000	2.004E-08	2.004E-08	-2.187E-18	-2.187E-18	-1.322E-08	-1.322E-08	-6.231E-13
0.92500	4.863E-08	4.863E-08	-4.972E-18	-4.972E-18	-2.592E-08	-2.592E-08	-1.801E-12
0.95000	1.747E-07	1.747E-07	-1.775E-17	-1.775E-17	-6.156E-08	-6.156E-08	-7.176E-12
0.96250	3.974E-07	3.974E-07	-4.231E-17	-4.232E-17	-1.122E-07	-1.122E-07	-1.821E-11
0.97500	1.336E-06	1.337E-06	-1.553E-16	-1.554E-16	-2.703E-07	-2.704E-07	-5.037E-11
0.98124	2.837E-06	2.837E-06	-3.244E-16	-3.245E-16	-4.811E-07	-4.812E-07	-8.974E-11
0.98749	6.870E-06	6.872E-06	-7.780E-16	-7.783E-16	-9.675E-07	-9.677E-07	-1.503E-10
0.99374	1.974E-05	1.975E-05	-1.476E-15	-1.476E-15	-2.016E-06	-2.016E-06	-2.421E-10
0.99999	5.226E-05	5.228E-05	-2.017E-15	-2.017E-15	-3.702E-06	-3.703E-06	-2.814E-10
1.00624	8.333E-05	8.334E-05	-1.442E-15	-1.442E-15	-5.363E-06	-5.364E-06	-2.378E-10
1.01248	9.534E-05	9.534E-05	-7.482E-16	-7.480E-16	-6.381E-06	-6.381E-06	-1.466E-10
1.01873	9.933E-05	9.933E-05	-3.122E-16	-3.121E-16	-6.847E-06	-6.847E-06	-8.736E-11
1.02498	1.007E-04	1.007E-04	-1.504E-16	-1.503E-16	-7.050E-06	-7.051E-06	-4.898E-11
1.03748	1.008E-04	1.008E-04	-4.124E-17	-4.123E-17	-7.203E-06	-7.203E-06	-1.780E-11
1.04998	9.998E-05	9.998E-05	-1.744E-17	-1.744E-17	-7.253E-06	-7.253E-06	-7.029E-12
1.07496	9.803E-05	9.803E-05	-4.923E-18	-4.923E-18	-7.288E-06	-7.288E-06	-1.774E-12
1.09998	9.611E-05	9.611E-05	-2.165E-18	-2.165E-18	-7.300E-06	-7.300E-06	-6.173E-13
1.14998	9.252E-05	9.252E-05	-5.205E-19	-5.204E-19	-7.309E-06	-7.309E-06	-1.416E-13
1.19998	8.921E-05	8.922E-05	-1.974E-19	-1.974E-19	-7.311E-06	-7.311E-06	-4.948E-14
1.29998	8.329E-05	8.329E-05	-4.971E-20	-4.971E-20	-7.313E-06	-7.313E-06	-1.102E-14
1.39998	7.811E-05	7.811E-05	-1.899E-20	-1.899E-20	-7.313E-06	-7.313E-06	-3.785E-15
1.49998	7.353E-05	7.353E-05	-9.241E-21	-9.241E-21	-7.313E-06	-7.313E-06	-1.621E-15
1.59998	6.947E-05	6.947E-05	-5.059E-21	-5.059E-21	-7.313E-06	-7.313E-06	-8.110E-16
1.69998	6.583E-05	6.583E-05	-2.774E-21	-2.774E-21	-7.313E-06	-7.314E-06	-4.794E-16
1.79998	6.255E-05	6.255E-05	-1.592E-21	-1.592E-21	-7.313E-06	-7.314E-06	-3.052E-16
1.89998	5.959E-05	5.959E-05	-9.136E-22	-9.136E-22	-7.313E-06	-7.314E-06	-2.135E-16
1.99998	5.689E-05	5.689E-05	-5.238E-22	-5.238E-22	-7.313E-06	-7.314E-06	-1.592E-16

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.506

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	1.2000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	1.2000	0.10000	193.648	1.034E-07	1.000E-00	-2.215E-10	-2.215E-10	2.215E-10
0.20000	1.2000	0.20000	172.139	1.934E-07	1.000E-00	-3.140E-10	-3.140E-10	3.140E-10
0.30000	1.2000	0.30000	150.631	2.868E-07	1.000E-00	-4.451E-10	-4.451E-10	4.451E-10
0.40000	1.2000	0.40000	129.127	4.269E-07	1.000E-00	-6.629E-10	-6.629E-10	6.629E-10
0.50000	1.2000	0.50000	107.627	5.870E-07	9.999E-01	-9.886E-10	-9.886E-10	9.886E-10
0.60000	1.2000	0.60000	86.134	6.136E-07	9.999E-01	-1.611E-09	-1.611E-09	1.611E-09
0.70000	1.2000	0.70000	64.658	2.535E-06	9.998E-01	-3.092E-09	-3.092E-09	3.092E-09
0.80000	1.2000	0.80000	43.220	8.805E-06	9.995E-01	-7.732E-09	-7.732E-09	7.732E-09
0.85000	1.2000	0.85000	32.540	2.241E-05	9.991E-01	-1.487E-08	-1.487E-08	1.487E-08
0.90000	1.2000	0.90000	21.937	7.620E-05	9.981E-01	-3.664E-08	-3.664E-08	3.664E-08
0.92500	1.2000	0.92500	16.709	1.778E-04	9.971E-01	-6.637E-08	-6.638E-08	6.637E-08
0.95000	1.2000	0.95000	11.620	5.575E-04	9.955E-01	-1.540E-07	-1.540E-07	1.540E-07
0.96250	1.2000	0.96250	9.201	1.165E-03	9.955E-01	-2.565E-07	-2.565E-07	2.565E-07
0.97500	1.2000	0.97500	6.981	2.902E-03	9.994E-01	-5.363E-07	-5.363E-07	5.363E-07
0.98125	1.2001	0.98125	6.017	4.861E-03	1.004E 00	-7.742E-07	-7.743E-07	7.742E-07
0.98749	1.2001	0.98750	5.224	8.385E-03	1.009E 00	-1.178E-06	-1.178E-06	1.178E-06
0.99374	1.2002	0.99375	4.690	1.422E-02	1.006E 00	-1.653E-06	-1.653E-06	1.653E-06
0.99999	1.2003	1.00000	4.507	2.210E-02	9.997E-01	-1.855E-06	-1.855E-06	1.855E-06
1.00624	1.2005	1.00625	4.717	2.991E-02	1.006E 00	-1.625E-06	-1.625E-06	1.625E-06
1.01249	1.2007	1.01250	5.273	3.557E-02	1.009E 00	-1.143E-06	-1.143E-06	1.143E-06
1.01874	1.2009	1.01875	6.080	3.894E-02	1.003E 00	-7.559E-07	-7.559E-07	7.560E-07
1.02499	1.2011	1.02500	7.054	4.083E-02	9.978E-01	-5.217E-07	-5.217E-07	5.218E-07
1.03749	1.2016	1.03750	9.283	4.248E-02	9.925E-01	-2.508E-07	-2.507E-07	2.508E-07
1.04999	1.2021	1.05000	11.708	4.308E-02	9.911E-01	-1.517E-07	-1.517E-07	1.517E-07
1.07499	1.2031	1.07500	16.800	4.345E-02	9.904E-01	-6.569E-08	-6.569E-08	6.569E-08
1.09999	1.2040	1.10000	22.029	4.356E-02	9.894E-01	-3.625E-08	-3.625E-08	3.625E-08
1.14999	1.2057	1.15000	32.634	4.362E-02	9.866E-01	-1.478E-08	-1.478E-08	1.478E-08
1.19998	1.2073	1.20000	43.314	4.364E-02	9.836E-01	-7.696E-09	-7.696E-09	7.696E-09
1.29998	1.2101	1.30000	64.752	4.364E-02	9.779E-01	-3.083E-09	-3.083E-09	3.083E-09
1.39998	1.2125	1.40000	86.229	4.365E-02	9.728E-01	-1.608E-09	-1.608E-09	1.608E-09
1.49998	1.2146	1.50000	107.721	4.365E-02	9.683E-01	-9.868E-10	-9.868E-10	9.868E-10
1.59998	1.2164	1.60000	129.221	4.365E-02	9.644E-01	-6.617E-10	-6.617E-10	6.617E-10
1.69998	1.2180	1.70000	150.726	4.365E-02	9.609E-01	-4.444E-10	-4.444E-10	4.444E-10
1.79998	1.2194	1.80000	172.233	4.365E-02	9.579E-01	-3.135E-10	-3.135E-10	3.135E-10
1.89998	1.2207	1.90000	193.743	4.365E-02	9.551E-01	-2.212E-10	-2.212E-10	2.212E-10
1.99998	1.2218	2.00000	215.253	4.365E-02	9.526E-01	-1.577E-10	-1.577E-10	1.577E-10

PROPAGATION FREQUENCY= 1.4200E 09 ψ_0= 1.200 θ_D= 0. ρ_a= 4.506

z	$_x\mu'-1$ 0	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.215E-10	49.901	-9.363E-09	-9.363E-09	9.363E-09	9.363E-09	-1.049E-09	-1.049E-09
0.20000	3.140E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.487E-09	-1.487E-09
0.30000	4.451E-10	149.703	-4.134E-08	-4.134E-08	4.134E-08	4.134E-08	-2.108E-09	-2.108E-09
0.40000	6.629E-10	199.605	-6.861E-08	-6.861E-08	6.861E-08	6.861E-08	-3.140E-09	-3.140E-09
0.50000	9.886E-10	249.506	-1.093E-07	-1.093E-07	1.093E-07	1.093E-07	-4.682E-09	-4.682E-09
0.60000	1.611E-09	299.407	-1.719E-07	-1.719E-07	1.719E-07	1.719E-07	-7.632E-09	-7.632E-09
0.70000	3.092E-09	349.308	-2.836E-07	-2.836E-07	2.836E-07	2.836E-07	-1.465E-08	-1.465E-08
0.80000	7.732E-09	399.209	-5.275E-07	-5.275E-07	5.275E-07	5.275E-07	-3.662E-08	-3.662E-08
0.85000	1.487E-08	424.160	-7.955E-07	-7.955E-07	7.955E-07	7.955E-07	-7.045E-08	-7.045E-08
0.90000	3.664E-08	449.110	-1.381E-06	-1.381E-06	1.381E-06	1.381E-06	-1.735E-07	-1.735E-07
0.92500	6.638E-08	461.585	-2.006E-06	-2.006E-06	2.007E-06	2.007E-06	-3.144E-07	-3.144E-07
0.95000	1.541E-07	474.060	-3.272E-06	-3.272E-06	3.283E-06	3.284E-06	-7.296E-07	-7.297E-07
0.96250	2.565E-07	480.298	-4.476E-06	-4.477E-06	4.526E-06	4.526E-06	-1.215E-06	-1.215E-06
0.97500	5.864E-07	486.535	-6.667E-06	-6.667E-06	6.978E-06	6.979E-06	-2.540E-06	-2.540E-06
0.98125	7.744E-07	489.653	-8.411E-06	-8.412E-06	9.292E-06	9.293E-06	-3.667E-06	-3.668E-06
0.98749	1.178E-06	492.771	-1.054E-05	-1.054E-05	1.318E-05	1.318E-05	-5.581E-06	-5.582E-06
0.99374	1.653E-06	495.890	-1.249E-05	-1.249E-05	2.012E-05	2.013E-05	-7.828E-06	-7.828E-06
0.99999	1.855E-06	499.008	-1.261E-05	-1.261E-05	3.116E-05	3.116E-05	-8.788E-06	-8.788E-06
1.00624	1.625E-06	502.126	-1.031E-05	-1.032E-05	4.451E-05	4.452E-05	-7.696E-06	-7.695E-06
1.01249	1.143E-06	505.244	-7.418E-06	-7.419E-06	5.609E-05	5.609E-05	-5.413E-06	-5.413E-06
1.01874	7.658E-07	508.362	-5.321E-06	-5.322E-06	6.404E-05	6.404E-05	-3.581E-06	-3.580E-06
1.02499	5.217E-07	511.481	-4.195E-06	-4.196E-06	6.912E-05	6.912E-05	-2.471E-06	-2.471E-06
1.03749	2.507E-07	517.718	-3.335E-06	-3.336E-06	7.450E-05	7.450E-05	-1.188E-06	-1.188E-06
1.04999	1.517E-07	523.955	-3.091E-06	-3.091E-06	7.714E-05	7.714E-05	-7.184E-07	-7.184E-07
1.07499	6.569E-08	536.430	-2.810E-06	-2.811E-06	7.993E-05	7.993E-05	-3.112E-07	-3.112E-07
1.09999	3.625E-08	548.906	-2.333E-06	-2.333E-06	8.164E-05	8.164E-05	-1.717E-07	-1.717E-07
1.14999	1.478E-08	573.856	-9.879E-07	-9.881E-07	8.415E-05	8.415E-05	-7.002E-08	-7.002E-08
1.19998	7.696E-09	598.806	5.880E-07	5.878E-07	8.626E-05	8.626E-05	-3.645E-08	-3.645E-08
1.29998	3.083E-09	648.707	3.971E-06	3.971E-06	9.013E-05	9.013E-05	-1.460E-08	-1.460E-08
1.39998	1.608E-09	698.609	7.495E-06	7.495E-06	9.387E-05	9.387E-05	-7.614E-09	-7.614E-09
1.49998	9.868E-10	748.510	1.105E-05	1.105E-05	9.756E-05	9.756E-05	-4.674E-09	-4.674E-09
1.59998	6.817E-10	798.411	1.465E-05	1.465E-05	1.012E-04	1.012E-04	-3.134E-09	-3.134E-09
1.69998	4.444E-10	848.312	1.824E-05	1.824E-05	1.049E-04	1.049E-04	-2.105E-09	-2.105E-09
1.79998	3.135E-10	898.213	2.184E-05	2.184E-05	1.085E-04	1.085E-04	-1.485E-09	-1.485E-09
1.89998	2.212E-10	948.114	2.545E-05	2.545E-05	1.122E-04	1.122E-04	-1.048E-09	-1.048E-09
1.99998	1.577E-10	998.015	2.906E-05	2.906E-05	1.158E-04	1.158E-04	-7.470E-10	-7.470E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 1.200 θ_D=0. ρ_a= 4.506

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-2.289E-16
0.10000	3.633E-12	3.639E-12	-9.152E-22	-9.152E-22	-1.050E-11	-1.050E-11	-3.070E-16
0.20000	1.015E-11	1.014E-11	-1.594E-21	-1.594E-21	-2.881E-11	-2.881E-11	-4.390E-16
0.30000	2.152E-11	2.153E-11	-2.778E-21	-2.778E-21	-6.070E-11	-6.070E-11	-6.899E-16
0.40000	4.560E-11	4.561E-11	-5.067E-21	-5.067E-21	-1.176E-10	-1.176E-10	-1.168E-15
0.50000	9.042E-11	9.039E-11	-9.254E-21	-9.254E-21	-2.216E-10	-2.216E-10	-2.335E-15
0.60000	2.047E-10	2.048E-10	-1.902E-20	-1.902E-20	-4.206E-10	-4.206E-10	-5.452E-15
0.70000	5.812E-10	5.812E-10	-4.979E-20	-4.979E-20	-8.880E-10	-8.880E-10	-1.588E-14
0.80000	2.377E-09	2.377E-09	-1.975E-19	-1.975E-19	-2.417E-09	-2.417E-09	-7.120E-14
0.85000	6.297E-09	6.297E-09	-5.196E-19	-5.196E-19	-4.850E-09	-4.850E-09	-2.032E-13
0.90000	2.366E-08	2.366E-08	-2.144E-18	-2.144E-18	-1.308E-08	-1.308E-08	-8.790E-13
0.92500	5.705E-08	5.705E-08	-4.840E-18	-4.840E-18	-2.547E-08	-2.547E-08	-2.485E-12
0.95000	1.978E-07	1.978E-07	-1.652E-17	-1.652E-17	-5.911E-08	-5.911E-08	-9.463E-12
0.96250	4.237E-07	4.238E-07	-3.668E-17	-3.668E-17	-1.046E-07	-1.046E-07	-2.307E-11
0.97500	1.299E-06	1.299E-06	-1.183E-16	-1.183E-16	-2.308E-07	-2.309E-07	-5.780E-11
0.98125	2.620E-06	2.621E-06	-2.127E-16	-2.128E-16	-3.823E-07	-3.823E-07	-9.766E-11
0.98749	5.440E-06	5.441E-06	-4.098E-16	-4.099E-16	-6.641E-07	-6.642E-07	-1.498E-10
0.99374	1.287E-05	1.288E-05	-7.100E-16	-7.101E-16	-1.189E-06	-1.189E-06	-2.041E-10
0.99999	2.776E-05	2.777E-05	-8.569E-16	-8.569E-16	-1.944E-06	-1.944E-06	-2.308E-10
1.00624	4.196E-05	4.196E-05	-6.906E-16	-6.905E-16	-2.688E-06	-2.689E-06	-2.006E-10
1.01249	4.875E-05	4.876E-05	-3.900E-16	-3.899E-16	-3.193E-06	-3.193E-06	-1.462E-10
1.01874	5.155E-05	5.155E-05	-2.048E-16	-2.047E-16	-3.463E-06	-3.463E-06	-9.402E-11
1.02499	5.270E-05	5.270E-05	-1.132E-16	-1.132E-16	-3.608E-06	-3.608E-06	-5.589E-11
1.03749	5.319E-05	5.319E-05	-3.540E-17	-3.539E-17	-3.729E-06	-3.729E-06	-2.238E-11
1.04999	5.285E-05	5.285E-05	-1.613E-17	-1.612E-17	-3.773E-06	-3.773E-06	-9.198E-12
1.07499	5.179E-05	5.179E-05	-4.772E-18	-4.772E-18	-3.806E-06	-3.806E-06	-2.432E-12
1.09999	5.070E-05	5.070E-05	-2.113E-18	-2.113E-18	-3.818E-06	-3.818E-06	-8.672E-13
1.14999	4.865E-05	4.865E-05	-5.149E-19	-5.149E-19	-3.826E-06	-3.826E-06	-2.012E-13
1.19998	4.677E-05	4.677E-05	-1.962E-19	-1.962E-19	-3.829E-06	-3.829E-06	-7.071E-14
1.29998	4.343E-05	4.343E-05	-4.956E-20	-4.956E-20	-3.830E-06	-3.830E-06	-1.581E-14
1.39998	4.053E-05	4.054E-05	-1.896E-20	-1.896E-20	-3.831E-06	-3.831E-06	-5.438E-15
1.49998	3.801E-05	3.801E-05	-9.230E-21	-9.230E-21	-3.831E-06	-3.831E-06	-2.331E-15
1.59998	3.578E-05	3.578E-05	-5.054E-21	-5.054E-21	-3.831E-06	-3.831E-06	-1.167E-15
1.69998	3.379E-05	3.379E-05	-2.771E-21	-2.771E-21	-3.831E-06	-3.831E-06	-6.898E-16
1.79998	3.202E-05	3.202E-05	-1.591E-21	-1.591E-21	-3.831E-06	-3.831E-06	-4.392E-16
1.89998	3.042E-05	3.042E-05	-9.129E-22	-9.129E-22	-3.831E-06	-3.831E-06	-3.073E-16
1.99998	2.897E-05	2.898E-05	-5.234E-22	-5.234E-22	-3.831E-06	-3.831E-06	-2.292E-16

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 1.500 θ_D= 0. ρ_a= 5.632

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.215E-10	49.901	-9.363E-09	-9.363E-09	9.363E-09	9.363E-09	-1.049E-09	-1.049E-09
0.20000	3.140E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.487E-09	-1.487E-09
0.30000	4.450E-10	149.703	-4.134E-08	-4.134E-08	4.134E-08	4.134E-08	-2.108E-09	-2.108E-09
0.40000	6.626E-10	199.605	-6.859E-08	-6.859E-08	6.859E-08	6.859E-08	-3.139E-09	-3.139E-09
0.50000	9.881E-10	249.506	-1.092E-07	-1.092E-07	1.092E-07	1.092E-07	-4.680E-09	-4.680E-09
0.60000	1.610E-09	299.407	-1.719E-07	-1.719E-07	1.719E-07	1.719E-07	-7.625E-09	-7.625E-09
0.70000	3.086E-09	349.308	-2.833E-07	-2.833E-07	2.833E-07	2.833E-07	-1.462E-08	-1.462E-08
0.80000	7.691E-09	399.209	-5.264E-07	-5.264E-07	5.264E-07	5.264E-07	-3.643E-08	-3.643E-08
0.85000	1.473E-08	424.160	-7.922E-07	-7.922E-07	7.922E-07	7.922E-07	-6.976E-08	-6.976E-08
0.90000	3.568E-08	449.110	-1.368E-06	-1.368E-06	1.368E-06	1.368E-06	-1.690E-07	-1.690E-07
0.92500	6.405E-08	461.585	-1.973E-06	-1.973E-06	1.975E-06	1.975E-06	-3.034E-07	-3.034E-07
0.95000	1.419E-07	474.060	-3.155E-06	-3.155E-06	3.175E-06	3.175E-06	-6.723E-07	-6.723E-07
0.96250	2.187E-07	480.297	-4.226E-06	-4.226E-06	4.304E-06	4.304E-06	-1.036E-06	-1.036E-06
0.97500	4.021E-07	486.535	-5.923E-06	-5.923E-06	6.317E-06	6.318E-06	-1.904E-06	-1.904E-06
0.98125	5.562E-07	489.653	-7.138E-06	-7.138E-06	8.079E-06	8.080E-06	-2.634E-06	-2.634E-06
0.98749	7.193E-07	492.771	-8.468E-06	-8.468E-06	1.073E-05	1.073E-05	-3.407E-06	-3.407E-06
0.99374	8.761E-07	495.890	-9.513E-06	-9.513E-06	1.466E-05	1.466E-05	-4.149E-06	-4.149E-06
0.99999	9.426E-07	499.008	-9.822E-06	-9.823E-06	2.010E-05	2.010E-05	-4.465E-06	-4.465E-06
1.00624	8.605E-07	502.126	-9.249E-06	-9.249E-06	2.637E-05	2.637E-05	-4.076E-06	-4.076E-06
1.01249	7.020E-07	505.245	-8.270E-06	-8.271E-06	3.221E-05	3.221E-05	-3.325E-06	-3.325E-06
1.01874	5.382E-07	508.363	-7.468E-06	-7.469E-06	3.688E-05	3.689E-05	-2.550E-06	-2.549E-06
1.02499	3.867E-07	511.482	-6.959E-06	-6.959E-06	4.027E-05	4.027E-05	-1.832E-06	-1.832E-06
1.03749	2.115E-07	517.719	-6.537E-06	-6.538E-06	4.428E-05	4.428E-05	-1.002E-06	-1.002E-06
1.04999	1.386E-07	523.956	-6.520E-06	-6.520E-06	4.646E-05	4.646E-05	-6.567E-07	-6.567E-07
1.07499	6.304E-08	536.431	-6.587E-06	-6.587E-06	4.872E-05	4.872E-05	-2.986E-07	-2.986E-07
1.09999	3.510E-08	548.906	-6.500E-06	-6.500E-06	5.000E-05	5.000E-05	-1.663E-07	-1.663E-07
1.14999	1.459E-08	573.857	-5.961E-06	-5.961E-06	5.168E-05	5.168E-05	-6.910E-08	-6.910E-08
1.19999	7.635E-09	598.807	-5.192E-06	-5.192E-06	5.298E-05	5.298E-05	-3.616E-08	-3.616E-08
1.29999	3.071E-09	648.708	-3.424E-06	-3.424E-06	5.523E-05	5.523E-05	-1.455E-08	-1.455E-08
1.39999	1.604E-09	698.609	-1.528E-06	-1.528E-06	5.734E-05	5.734E-05	-7.597E-09	-7.597E-09
1.49999	9.854E-10	748.510	4.034E-07	4.033E-07	5.940E-05	5.940E-05	-4.667E-09	-4.667E-09
1.59999	6.608E-10	798.411	2.356E-06	2.356E-06	6.143E-05	6.143E-05	-3.130E-09	-3.130E-09
1.69999	4.439E-10	848.313	4.337E-06	4.337E-06	6.347E-05	6.347E-05	-2.103E-09	-2.103E-09
1.79999	3.132E-10	898.214	6.316E-06	6.316E-06	6.549E-05	6.549E-05	-1.484E-09	-1.484E-09
1.89999	2.210E-10	948.115	8.298E-06	8.297E-06	6.749E-05	6.749E-05	-1.047E-09	-1.047E-09
1.99999	1.576E-10	998.016	1.028E-05	1.028E-05	6.950E-05	6.950E-05	-7.463E-10	-7.463E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 1.500 θ_D= 0. ρ_a= 5.632

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.5000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	1.5000	0.10000	193.651	1.701E-07	1.000E-00	-2.215E-10	-2.215E-10	2.215E-10
0.20000	1.5000	0.20000	172.146	2.401E-07	1.000E-00	-3.140E-10	-3.140E-10	3.140E-10
0.30000	1.5000	0.30000	150.643	3.669E-07	9.999E-01	-4.450E-10	-4.450E-10	4.450E-10
0.40000	1.5000	0.40000	129.145	5.870E-07	9.999E-01	-6.626E-10	-6.626E-10	6.626E-10
0.50000	1.5000	0.50000	107.653	9.338E-07	9.999E-01	-9.881E-10	-9.881E-10	9.881E-10
0.60000	1.5000	0.60000	86.174	9.872E-07	9.998E-01	-1.610E-09	-1.610E-09	1.610E-09
0.70000	1.5000	0.70000	64.720	3.895E-06	9.996E-01	-3.086E-09	-3.086E-09	3.086E-09
0.80000	1.5000	0.80000	43.326	1.281E-05	9.990E-01	-7.691E-09	-7.691E-09	7.691E-09
0.85000	1.5000	0.85000	32.689	3.287E-05	9.982E-01	-1.473E-08	-1.473E-08	1.473E-08
0.90000	1.5000	0.90000	22.170	1.099E-04	9.965E-01	-3.568E-08	-3.568E-08	3.568E-08
0.92500	1.5000	0.92500	17.022	2.480E-04	9.951E-01	-6.405E-08	-6.405E-08	6.405E-08
0.95000	1.5000	0.95000	12.078	7.381E-04	9.942E-01	-1.419E-07	-1.419E-07	1.419E-07
0.96250	1.5000	0.96250	9.780	1.463E-03	9.964E-01	-2.187E-07	-2.187E-07	2.187E-07
0.97500	1.5001	0.97500	7.738	3.264E-03	1.004E 00	-4.020E-07	-4.020E-07	4.020E-07
0.98125	1.5001	0.98125	6.886	5.025E-03	1.010E 00	-5.561E-07	-5.562E-07	5.561E-07
0.98749	1.5001	0.98750	6.211	7.768E-03	1.012E 00	-7.192E-07	-7.193E-07	7.192E-07
0.99374	1.5002	0.99375	5.775	1.168E-02	1.006E 00	-8.760E-07	-8.760E-07	8.760E-07
0.99999	1.5003	1.00000	5.634	1.644E-02	9.998E-01	-9.426E-07	-9.426E-07	9.426E-07
1.00624	1.5004	1.00625	5.809	2.116E-02	1.007E 00	-8.606E-07	-8.606E-07	8.606E-07
1.01249	1.5005	1.01250	6.274	2.495E-02	1.013E 00	-7.021E-07	-7.020E-07	7.021E-07
1.01874	1.5007	1.01875	6.972	2.756E-02	1.010E 00	-5.383E-07	-5.382E-07	5.383E-07
1.02499	1.5009	1.02500	7.840	2.924E-02	1.004E 00	-3.867E-07	-3.867E-07	3.867E-07
1.03749	1.5012	1.03750	9.901	3.094E-02	9.953E-01	-2.115E-07	-2.115E-07	2.115E-07
1.04999	1.5016	1.05000	12.209	3.164E-02	9.920E-01	-1.387E-07	-1.386E-07	1.387E-07
1.07499	1.5023	1.07500	17.162	3.212E-02	9.910E-01	-6.305E-08	-6.305E-08	6.305E-08
1.09999	1.5030	1.10000	22.313	3.226E-02	9.911E-01	-3.510E-08	-3.510E-08	3.510E-08
1.14999	1.5042	1.15000	32.834	3.234E-02	9.903E-01	-1.459E-08	-1.459E-08	1.459E-08
1.19999	1.5054	1.20000	43.472	3.237E-02	9.890E-01	-7.635E-09	-7.635E-09	7.635E-09
1.29999	1.5075	1.30000	64.867	3.238E-02	9.858E-01	-3.071E-09	-3.071E-09	3.071E-09
1.39999	1.5093	1.40000	86.321	3.239E-02	9.828E-01	-1.604E-09	-1.604E-09	1.604E-09
1.49999	1.5108	1.50000	107.801	3.239E-02	9.801E-01	-9.854E-10	-9.854E-10	9.854E-10
1.59999	1.5122	1.60000	129.292	3.239E-02	9.777E-01	-6.608E-10	-6.608E-10	6.608E-10
1.69999	1.5138	1.70000	150.790	3.240E-02	9.756E-01	-4.439E-10	-4.439E-10	4.439E-10
1.79999	1.5144	1.80000	172.293	3.240E-02	9.737E-01	-3.132E-10	-3.132E-10	3.132E-10
1.89999	1.5154	1.90000	193.799	3.240E-02	9.720E-01	-2.210E-10	-2.210E-10	2.210E-10
1.99999	1.5162	2.00000	215.306	3.240E-02	9.705E-01	-1.576E-10	-1.576E-10	1.576E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 1.500 θ_D= 0. ρ_a= 5.632

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-3.576E-16
0.10000	4.539E-12	4.545E-12	-9.151E-22	-9.151E-22	-1.050E-11	-1.050E-11	-4.796E-16
0.20000	1.269E-11	1.269E-11	-1.594E-21	-1.594E-21	-2.880E-11	-2.880E-11	-6.858E-16
0.30000	2.689E-11	2.690E-11	-2.777E-21	-2.777E-21	-6.069E-11	-6.069E-11	-1.078E-15
0.40000	5.699E-11	5.700E-11	-5.065E-21	-5.065E-21	-1.176E-10	-1.176E-10	-1.823E-15
0.50000	1.129E-10	1.129E-10	-9.247E-21	-9.247E-21	-2.215E-10	-2.215E-10	-3.644E-15
0.60000	2.556E-10	2.556E-10	-1.899E-20	-1.899E-20	-4.202E-10	-4.202E-10	-8.503E-15
0.70000	7.248E-10	7.247E-10	-4.964E-20	-4.964E-20	-8.866E-10	-8.866E-10	-2.472E-14
0.80000	2.953E-09	2.953E-09	-1.960E-19	-1.960E-19	-2.406E-09	-2.406E-09	-1.102E-13
0.85000	7.754E-09	7.754E-09	-5.122E-19	-5.122E-19	-4.810E-09	-4.810E-09	-3.120E-13
0.90000	2.654E-08	2.654E-08	-2.067E-18	-2.067E-18	-1.281E-08	-1.281E-08	-1.324E-12
0.92500	6.782E-08	6.783E-08	-4.610E-18	-4.610E-18	-2.469E-08	-2.469E-08	-3.598E-12
0.95000	2.209E-07	2.209E-07	-1.454E-17	-1.454E-17	-5.512E-08	-5.512E-08	-1.274E-11
0.96250	4.420E-07	4.420E-07	-2.855E-17	-2.855E-17	-9.353E-08	-9.[illegible]4E-08	-2.930E-11
0.97500	1.171E-06	1.171E-06	-7.463E-17	-7.465E-17	-1.812E-07	-1.8[illegible]-07	-6.498E-11
0.98125	2.073E-06	2.073E-06	-1.254E-16	-1.254E-16	-2.734E-07	-2.734E-07	-9.459E-11
0.98749	3.980E-06	3.981E-06	-1.891E-16	-1.891E-16	-4.199E-07	-4.200E-07	-1.359E-10
0.99374	7.931E-06	7.933E-06	-2.577E-16	-2.577E-16	-6.284E-07	-6.285E-07	-1.727E-10
0.99999	1.460E-05	1.460E-05	-2.887E-16	-2.887E-16	-8.890E-07	-8.891E-07	-1.862E-10
1.00624	2.092E-05	2.092E-05	-2.507E-16	-2.507E-16	-1.146E-06	-1.146E-06	-1.697E-10
1.01249	2.444E-05	2.444E-05	-1.820E-16	-1.819E-16	-1.348E-06	-1.348E-06	-1.310E-10
1.01874	2.620E-05	2.620E-05	-1.190E-16	-1.190E-16	-1.487E-06	-1.488E-06	-9.077E-11
1.02499	2.706E-05	2.706E-05	-7.015E-17	-7.014E-17	-1.575E-06	-1.575E-06	-6.249E-11
1.03749	2.766E-05	2.766E-05	-2.710E-17	-2.709E-17	-1.658E-06	-1.658E-06	-2.816E-11
1.04999	2.764E-05	2.764E-05	-1.402E-17	-1.402E-17	-1.695E-06	-1.695E-06	-1.222E-11
1.07499	2.717E-05	2.717E-05	-4.511E-18	-4.511E-18	-1.725E-06	-1.725E-06	-3.485E-12
1.09999	2.659E-05	2.659E-05	-2.022E-18	-2.022E-18	-1.736E-06	-1.736E-06	-1.296E-12
1.14999	2.547E-05	2.547E-05	-5.049E-19	-5.049E-19	-1.744E-06	-1.744E-06	-3.071E-13
1.19999	2.445E-05	2.445E-05	-1.939E-19	-1.939E-19	-1.747E-06	-1.747E-06	-1.089E-13
1.29999	2.264E-05	2.264E-05	-4.929E-20	-4.929E-20	-1.748E-06	-1.748E-06	-2.454E-14
1.39999	2.109E-05	2.109E-05	-1.889E-20	-1.889E-20	-1.749E-06	-1.749E-06	-8.462E-15
1.49999	1.974E-05	1.974E-05	-9.209E-21	-9.209E-21	-1.749E-06	-1.749E-06	-3.631E-15
1.59999	1.855E-05	1.855E-05	-5.044E-21	-5.044E-21	-1.749E-06	-1.749E-06	-1.819E-15
1.69999	1.750E-05	1.750E-05	-2.767E-21	-2.767E-21	-1.749E-06	-1.749E-06	-1.076E-15
1.79999	1.656E-05	1.656E-05	-1.588E-21	-1.588E-21	-1.749E-06	-1.749E-06	-6.854E-16
1.89999	1.571E-05	1.571E-05	-9.116E-22	-9.116E-22	-1.749E-06	-1.749E-06	-4.797E-16
1.99999	1.495E-05	1.495E-05	-5.[illegible]27E-22	-5.227E-22	-1.749E-06	-1.749E-06	-3.579E-16

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 2.000 θ_D= 0. ρ_a= 7.509

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	2.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	2.0000	0.10000	193.658	1.651E-07	9.999E-01	-2.215E-10	-2.215E-10	2.215E-10
0.20000	2.0000	0.20000	172.160	3.402E-07	9.999E-01	-3.139E-10	-3.139E-10	3.139E-10
0.30000	2.0000	0.30000	150.667	4.869E-07	9.998E-01	-4.448E-10	-4.448E-10	4.448E-10
0.40000	2.0000	0.40000	129.183	8.138E-07	9.998E-01	-6.622E-10	-6.622E-10	6.622E-10
0.50000	2.0000	0.50000	107.710	1.041E-06	9.997E-01	-9.870E-10	-9.870E-10	9.870E-10
0.60000	2.0000	0.60000	86.260	1.174E-06	9.994E-01	-1.606E-09	-1.606E-09	1.606E-09
0.70000	2.0000	0.70000	64.853	4.749E-06	9.990E-01	-3.073E-09	-3.073E-09	3.073E-09
0.80000	2.0000	0.80000	43.553	1.611E-05	9.978E-01	-7.604E-09	-7.604E-09	7.604E-09
0.85000	2.0000	0.85000	33.008	3.917E-05	9.963E-01	-1.442E-08	-1.442E-08	1.442E-08
0.90000	2.0000	0.90000	22.665	1.296E-04	9.939E-01	-3.378E-08	-3.378E-08	3.378E-08
0.92500	2.0000	0.92500	17.680	2.837E-04	9.929E-01	-5.944E-08	-5.944E-08	5.944E-08
0.95000	2.0000	0.95000	13.012	7.799E-04	9.961E-01	-1.201E-07	-1.201E-07	1.201E-07
0.96250	2.0000	0.96250	10.927	1.428E-03	1.002E 00	-1.744E-07	-1.744E-07	1.744E-07
0.97500	2.0001	0.97500	9.162	2.693E-03	1.012E 00	-2.593E-07	-2.593E-07	2.593E-07
0.98125	2.0001	0.98125	8.463	3.725E-03	1.015E 00	-3.142E-07	-3.143E-07	3.142E-07
0.98750	2.0001	0.98750	7.933	5.093E-03	1.013E 00	-3.732E-07	-3.732E-07	3.732E-07
0.99375	2.0001	0.99375	7.607	6.780E-03	1.005E 00	-4.226E-07	-4.226E-07	4.226E-07
1.00000	2.0002	1.00000	7.511	8.697E-03	9.999E-01	-4.384E-07	-4.384E-07	4.384E-07
1.00624	2.0003	1.00625	7.653	1.060E-02	1.006E 00	-4.152E-07	-4.152E-07	4.152E-07
1.01249	2.0003	1.01250	8.022	1.228E-02	1.014E 00	-3.608E-07	-3.608E-07	3.608E-07
1.01874	2.0004	1.01875	8.587	1.358E-02	1.017E 00	-3.037E-07	-3.037E-07	3.037E-07
1.02499	2.0005	1.02500	9.314	1.453E-02	1.014E 00	-2.486E-07	-2.486E-07	2.486E-07
1.03749	2.0007	1.03750	11.119	1.570E-02	1.003E 00	-1.685E-07	-1.685E-07	1.685E-07
1.04999	2.0008	1.05000	13.227	1.629E-02	9.964E-01	-1.156E-07	-1.156E-07	1.156E-07
1.07499	2.0012	1.07500	17.918	1.676E-02	9.918E-01	-5.785E-08	-5.785E-08	5.785E-08
1.09999	2.0016	1.10000	22.913	1.691E-02	9.916E-01	-3.304E-08	-3.304E-08	3.304E-08
1.14999	2.0022	1.15000	33.264	1.701E-02	9.925E-01	-1.418E-08	-1.418E-08	1.418E-08
1.19999	2.0029	1.20000	43.811	1.703E-02	9.928E-01	-7.505E-09	-7.505E-09	7.505E-09
1.29999	2.0039	1.30000	65.113	1.705E-02	9.923E-01	-3.047E-09	-3.047E-09	3.047E-09
1.39999	2.0049	1.40000	86.521	1.706E-02	9.913E-01	-1.596E-09	-1.596E-09	1.596E-09
1.49999	2.0057	1.50000	107.972	1.706E-02	9.902E-01	-9.822E-10	-9.822E-10	9.822E-10
1.59999	2.0064	1.60000	129.444	1.706E-02	9.892E-01	-6.589E-10	-6.589E-10	6.589E-10
1.69999	2.0070	1.70000	150.929	1.706E-02	9.883E-01	-4.429E-10	-4.429E-10	4.429E-10
1.79999	2.0076	1.80000	172.422	1.706E-02	9.874E-01	-3.126E-10	-3.126E-10	3.126E-10
1.89999	2.0081	1.90000	193.920	1.706E-02	9.867E-01	-2.206E-10	-2.206E-10	2.206E-10
1.99999	2.0086	2.00000	215.421	1.707E-02	9.860E-01	-1.573E-10	-1.573E-10	1.573E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 2.000 θ_D= 0. ρ_a= 7.509

z	$_x\mu'-1$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.215E-10	49.901	-9.362E-09	-9.362E-09	9.362E-09	9.362E-09	-1.049E-09	-1.049E-09
0.20000	3.139E-10	99.802	-2.259E-08	-2.259E-08	2.259E-08	2.259E-08	-1.487E-09	-1.487E-09
0.30000	4.448E-10	149.703	-4.133E-08	-4.133E-08	4.133E-08	4.133E-08	-2.107E-09	-2.107E-09
0.40000	6.622E-10	199.605	-6.857E-08	-6.857E-08	6.857E-08	6.857E-08	-3.136E-09	-3.136E-09
0.50000	9.870E-10	249.506	-1.092E-07	-1.092E-07	1.092E-07	1.092E-07	-4.675E-09	-4.675E-09
0.60000	1.606E-09	299.407	-1.717E-07	-1.717E-07	1.717E-07	1.717E-07	-7.609E-09	-7.609E-09
0.70000	3.073E-09	349.308	-2.828E-07	-2.828E-07	2.828E-07	2.828E-07	-1.455E-08	-1.455E-08
0.80000	7.604E-09	399.209	-5.238E-07	-5.238E-07	5.238E-07	5.238E-07	-3.602E-08	-3.602E-08
0.85000	1.442E-08	424.160	-7.851E-07	-7.851E-07	7.852E-07	7.852E-07	-6.831E-08	-6.831E-08
0.90000	3.378E-08	449.110	-1.341E-06	-1.341E-06	1.341E-06	1.341E-06	-1.600E-07	-1.600E-07
0.92500	5.944E-08	461.585	-1.907E-06	-1.907E-06	1.910E-06	1.910E-06	-2.815E-07	-2.815E-07
0.95000	1.201E-07	474.060	-2.942E-06	-2.942E-06	2.964E-06	2.964E-06	-5.688E-07	-5.688E-07
0.96250	1.744E-07	480.298	-3.826E-06	-3.826E-06	3.901E-06	3.901E-06	-8.260E-07	-8.261E-07
0.97500	2.593E-07	486.535	-5.047E-06	-5.047E-06	5.315E-06	5.316E-06	-1.228E-06	-1.228E-06
0.98125	3.143E-07	489.653	-5.816E-06	-5.816E-06	6.333E-06	6.334E-06	-1.488E-06	-1.488E-06
0.98750	3.732E-07	492.772	-6.653E-06	-6.653E-06	7.626E-06	7.627E-06	-1.768E-06	-1.768E-06
0.99375	4.226E-07	495.891	-7.521E-06	-7.521E-06	9.257E-06	9.257E-06	-2.002E-06	-2.002E-06
1.00000	4.384E-07	499.009	-8.305E-06	-8.305E-06	1.118E-05	1.118E-05	-2.076E-06	-2.076E-06
1.00624	4.152E-07	502.128	-8.933E-06	-8.933E-06	1.323E-05	1.323E-05	-1.967E-06	-1.967E-06
1.01249	3.608E-07	505.246	-9.396E-06	-9.396E-06	1.520E-05	1.520E-05	-1.709E-06	-1.709E-06
1.01874	3.037E-07	508.365	-9.760E-06	-9.760E-06	1.690E-05	1.690E-05	-1.438E-06	-1.438E-06
1.02499	2.486E-07	511.483	-1.008E-05	-1.008E-05	1.831E-05	1.831E-05	-1.178E-06	-1.178E-06
1.03749	1.685E-07	517.721	-1.060E-05	-1.060E-05	2.032E-05	2.032E-05	-7.982E-07	-7.981E-07
1.04999	1.156E-07	523.958	-1.105E-05	-1.105E-05	2.163E-05	2.163E-05	-5.473E-07	-5.473E-07
1.07499	5.785E-08	536.433	-1.161E-05	-1.161E-05	2.309E-05	2.309E-05	-2.740E-07	-2.740E-07
1.09999	3.304E-08	548.908	-1.192E-05	-1.192E-05	2.388E-05	2.388E-05	-1.565E-07	-1.565E-07
1.14999	1.418E-08	573.859	-1.213E-05	-1.213E-05	2.477E-05	2.477E-05	-6.717E-08	-6.717E-08
1.19999	7.505E-09	598.809	-1.209E-05	-1.209E-05	2.532E-05	2.532E-05	-3.555E-08	-3.555E-08
1.29999	3.047E-09	648.710	-1.176E-05	-1.176E-05	2.613E-05	2.613E-05	-1.443E-08	-1.443E-08
1.39999	1.596E-09	698.611	-1.131E-05	-1.131E-05	2.679E-05	2.679E-05	-7.559E-09	-7.559E-09
1.49999	9.822E-10	748.513	-1.082E-05	-1.082E-05	2.741E-05	2.741E-05	-4.652E-09	-4.652E-09
1.59999	6.589E-10	798.414	-1.031E-05	-1.031E-05	2.801E-05	2.801E-05	-3.121E-09	-3.121E-09
1.69999	4.629E-10	848.315	-9.778E-06	-9.778E-06	2.859E-05	2.859E-05	-2.098E-09	-2.098E-09
1.79999	3.126E-10	898.216	-9.239E-06	-9.240E-06	2.916E-05	2.916E-05	-1.481E-09	-1.481E-09
1.89999	2.206E-10	948.117	-8.703E-06	-8.703E-06	2.973E-05	2.973E-05	-1.045E-09	-1.045E-09
1.99999	1.573E-10	998.018	-8.155E-06	-8.155E-06	3.029E-05	3.029E-05	-7.450E-10	-7.450E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o=2.000 θ_D=0. ρ_a=7.509

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-6.355E-16
0.10000	6.057E-12	6.061E-12	-9.149E-22	-9.149E-22	-1.050E-11	-1.050E-11	-8.524E-16
0.20000	1.692E-11	1.692E-11	-1.594E-21	-1.594E-21	-2.880E-11	-2.880E-11	-1.219E-15
0.30000	3.586E-11	3.585E-11	-2.775E-21	-2.775E-21	-6.067E-11	-6.067E-11	-1.914E-15
0.40000	7.592E-11	7.592E-11	-5.059E-21	-5.059E-21	-1.175E-10	-1.175E-10	-3.237E-15
0.50000	1.504E-10	1.504E-10	-9.233E-21	-9.233E-21	-2.213E-10	-2.213E-10	-6.464E-15
0.60000	3.400E-10	3.400E-10	-1.894E-20	-1.894E-20	-4.195E-10	-4.195E-10	-1.506E-14
0.70000	9.616E-10	9.615E-10	-4.932E-20	-4.932E-20	-8.835E-10	-8.835E-10	-4.358E-14
0.80000	3.879E-09	3.879E-09	-1.927E-19	-1.927E-19	-2.384E-09	-2.384E-09	-1.920E-13
0.85000	1.005E-08	1.005E-08	-4.964E-19	-4.965E-19	-4.727E-09	-4.727E-09	-5.342E-13
0.90000	3.553E-08	3.553E-08	-1.915E-18	-1.915E-18	-1.228E-08	-1.228E-08	-2.176E-12
0.92500	8.135E-08	8.135E-08	-4.161E-18	-4.161E-18	-2.313E-08	-2.313E-08	-5.490E-12
0.95000	2.353E-07	2.358E-07	-1.121E-17	-1.121E-17	-4.808E-08	-4.808E-08	-1.710E-11
0.96250	4.313E-07	4.314E-07	-2.005E-17	-2.005E-17	-7.661E-08	-7.661E-08	-3.358E-11
0.97500	9.566E-07	9.567E-07	-3.730E-17	-3.731E-17	-1.275E-07	-1.275E-07	-6.502E-11
0.98125	1.515E-06	1.515E-06	-5.045E-17	-5.046E-17	-1.684E-07	-1.684E-07	-8.632E-11
0.98750	2.504E-06	2.504E-06	-6.627E-17	-6.627E-17	-2.222E-07	-2.222E-07	-1.071E-10
0.99375	4.147E-06	4.147E-06	-8.083E-17	-8.084E-17	-2.916E-07	-2.916E-07	-1.218E-10
1.00000	6.349E-06	6.350E-06	-8.572E-17	-8.572E-17	-3.704E-07	-3.704E-07	-1.267E-10
1.00624	8.432E-06	8.432E-06	-7.859E-17	-7.859E-17	-4.481E-07	-4.481E-07	-1.195E-10
1.01249	9.871E-06	9.871E-06	-6.280E-17	-6.280E-17	-5.146E-07	-5.147E-07	-1.037E-10
1.01874	1.072E-05	1.072E-05	-4.782E-17	-4.782E-17	-5.659E-07	-5.659E-07	-8.189E-11
1.02499	1.123E-05	1.123E-05	-3.492E-17	-3.492E-17	-6.045E-07	-6.045E-07	-6.144E-11
1.03749	1.170E-05	1.170E-05	-1.900E-17	-1.900E-17	-6.524E-07	-6.524E-07	-3.133E-11
1.04999	1.184E-05	1.184E-05	-1.055E-17	-1.055E-17	-6.794E-07	-6.794E-07	-1.612E-11
1.07499	1.176E-05	1.176E-05	-4.009E-18	-4.009E-18	-7.035E-07	-7.035E-07	-5.211E-12
1.09999	1.154E-05	1.154E-05	-1.848E-18	-1.848E-18	-7.139E-07	-7.139E-07	-2.087E-12
1.14999	1.105E-05	1.105E-05	-4.842E-19	-4.842E-19	-7.212E-07	-7.212E-07	-5.194E-13
1.19999	1.059E-05	1.059E-05	-1.890E-19	-1.890E-19	-7.235E-07	-7.235E-07	-1.880E-13
1.29999	9.788E-06	9.788E-06	-4.871E-20	-4.871E-20	-7.250E-07	-7.250E-07	-4.298E-14
1.39999	9.098E-06	9.098E-06	-1.876E-20	-1.876E-20	-7.254E-07	-7.254E-07	-1.491E-14
1.49999	8.501E-06	8.501E-06	-9.165E-21	-9.165E-21	-7.256E-07	-7.256E-07	-6.413E-15
1.59999	7.978E-06	7.978E-06	-5.022E-21	-5.022E-21	-7.257E-07	-7.257E-07	-3.220E-15
1.69999	7.516E-06	7.516E-06	-2.757E-21	-2.757E-21	-7.258E-07	-7.258E-07	-1.906E-15
1.79999	7.104E-06	7.104E-06	-1.583E-21	-1.583E-21	-7.258E-07	-7.258E-07	-1.215E-15
1.89999	6.736E-06	6.736E-06	-9.088E-22	-9.088E-22	-7.258E-07	-7.259E-07	-8.512E-16
1.99999	6.403E-06	6.403E-06	-5.212E-22	-5.212E-22	-7.259E-07	-7.259E-07	-6.353E-16

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	2.5000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	2.5000	0.10000	193.066	2.668E-07	9.999E-01	-2.215E-10	-2.215E-10	2.215E-10
0.20000	2.5000	0.20000	172.178	3.535E-07	9.998E-01	-3.138E-10	-3.138E-10	3.138E-10
0.30000	2.5000	0.30000	150.699	5.603E-07	9.997E-01	-4.446E-10	-4.446E-10	4.446E-10
0.40000	2.5000	0.40000	129.232	9.472E-07	9.996E-01	-6.616E-10	-6.616E-10	6.616E-10
0.50000	2.5000	0.50000	107.784	1.281E-06	9.994E-01	-9.857E-10	-9.857E-10	9.857E-10
0.60000	2.5000	0.60000	86.370	1.281E-06	9.990E-01	-1.602E-09	-1.602E-09	1.602E-09
0.70000	2.5000	0.70000	65.024	5.603E-06	9.983E-01	-3.056E-09	-3.056E-09	3.056E-09
0.80000	2.5000	0.80000	43.843	1.782E-05	9.963E-01	-7.493E-09	-7.493E-09	7.493E-09
0.85000	2.5000	0.85000	33.414	4.290E-05	9.943E-01	-1.404E-08	-1.404E-08	1.404E-08
0.90000	2.5000	0.90000	23.286	1.413E-04	9.920E-01	-3.196E-08	-3.196E-08	3.196E-08
0.92500	2.5000	0.92500	18.491	2.978E-04	9.928E-01	-5.420E-08	-5.420E-08	5.420E-08
0.95000	2.5000	0.95000	14.123	7.552E-04	1.001E 00	-9.845E-08	-9.845E-08	9.845E-08
0.96250	2.5000	0.96250	12.244	1.235E-03	1.009E 00	-1.378E-07	-1.378E-07	1.378E-07
0.97500	2.5001	0.97500	10.717	2.072E-03	1.017E 00	-1.811E-07	-1.811E-07	1.810E-07
0.98125	2.5001	0.98125	10.137	2.672E-03	1.017E 00	-2.009E-07	-2.009E-07	2.009E-07
0.98750	2.5001	0.98750	9.709	3.403E-03	1.011E 00	-2.230E-07	-2.230E-07	2.230E-07
0.99375	2.5001	0.99375	9.455	4.245E-03	1.003E 00	-2.392E-07	-2.392E-07	2.392E-07
1.00000	2.5001	1.00000	9.388	5.154E-03	9.999E-01	-2.436E-07	-2.436E-07	2.436E-07
1.00625	2.5002	1.00625	9.513	6.061E-03	1.005E 00	-2.354E-07	-2.354E-07	2.354E-07
1.01250	2.5002	1.01250	9.822	6.884E-03	1.014E 00	-2.162E-07	-2.162E-07	2.162E-07
1.01875	2.5003	1.01875	10.299	7.578E-03	1.019E 00	-1.951E-07	-1.951E-07	1.951E-07
1.02500	2.5003	1.02500	10.921	8.133E-03	1.019E 00	-1.746E-07	-1.746E-07	1.746E-07
1.03749	2.5004	1.03750	12.511	8.900E-03	1.011E 00	-1.313E-07	-1.313E-07	1.313E-07
1.04999	2.5006	1.05000	14.432	9.344E-03	1.003E 00	-9.316E-08	-9.316E-08	9.316E-08
1.07499	2.5007	1.07500	18.845	9.748E-03	9.935E-01	-5.206E-08	-5.206E-08	5.206E-08
1.09999	2.5009	1.10000	23.662	9.902E-03	9.915E-01	-3.091E-08	-3.091E-08	3.091E-08
1.14999	2.5013	1.15000	33.808	9.996E-03	9.923E-01	-1.368E-08	-1.368E-08	1.368E-08
1.19999	2.5017	1.20000	44.244	1.003E-02	9.934E-01	-7.344E-09	-7.344E-09	7.344E-09
1.29999	2.5023	1.30000	65.429	1.005E-02	9.943E-01	-3.016E-09	-3.016E-09	3.016E-09
1.39999	2.5029	1.40000	86.777	1.005E-02	9.943E-01	-1.586E-09	-1.586E-09	1.586E-09
1.49999	2.5034	1.50000	108.192	1.005E-02	9.940E-01	-9.782E-10	-9.782E-10	9.782E-10
1.59999	2.5038	1.60000	129.640	1.006E-02	9.936E-01	-6.566E-10	-6.566E-10	6.566E-10
1.69999	2.5041	1.70000	151.108	1.006E-02	9.932E-01	-4.417E-10	-4.417E-10	4.417E-10
1.79999	2.5046	1.80000	172.587	1.006E-02	9.929E-01	-3.117E-10	-3.117E-10	3.117E-10
1.89999	2.5048	1.90000	194.075	1.006E-02	9.925E-01	-2.200E-10	-2.200E-10	2.200E-10
1.99999	2.5050	2.00000	215.568	1.007E-02	9.922E-01	-1.569E-10	-1.569E-10	1.569E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	$_x\mu'$-1.0	T_o	$_oT_1-T_o$	$_xT_1-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.215E-10	49.901	-9.362E-09	-9.362E-09	9.362E-09	9.362E-09	-1.049E-09	-1.049E-09
0.20000	3.138E-10	99.802	-2.258E-08	-2.258E-08	2.258E-08	2.258E-08	-1.486E-09	-1.486E-09
0.30000	4.446E-10	149.703	-4.132E-08	-4.132E-08	4.132E-08	4.132E-08	-2.106E-09	-2.106E-09
0.40000	6.616E-10	199.605	-6.854E-08	-6.854E-08	6.854E-08	6.854E-08	-3.134E-09	-3.134E-09
0.50000	9.857E-10	249.506	-1.091E-07	-1.091E-07	1.091E-07	1.091E-07	-4.669E-09	-4.669E-09
0.60000	1.602E-09	299.407	-1.715E-07	-1.715E-07	1.715E-07	1.715E-07	-7.588E-09	-7.588E-09
0.70000	3.056E-09	349.308	-2.821E-07	-2.821E-07	2.821E-07	2.821E-07	-1.447E-08	-1.447E-08
0.80000	7.493E-09	399.209	-5.206E-07	-5.206E-07	5.206E-07	5.206E-07	-3.549E-08	-3.549E-08
0.85000	1.404E-08	424.160	-7.764E-07	-7.764E-07	7.764E-07	7.764E-07	-6.650E-08	-6.650E-08
0.90000	3.196E-08	449.110	-1.308E-06	-1.308E-06	1.309E-06	1.309E-06	-1.514E-07	-1.514E-07
0.92500	5.420E-08	461.585	-1.830E-06	-1.830E-06	1.833E-06	1.833E-06	-2.567E-07	-2.567E-07
0.95000	9.845E-08	474.060	-2.723E-06	-2.723E-06	2.744E-06	2.744E-06	-4.663E-07	-4.663E-07
0.96250	1.378E-07	480.298	-3.438E-06	-3.438E-06	3.494E-06	3.494E-06	-6.526E-07	-6.526E-07
0.97500	1.811E-07	486.535	-4.381E-06	-4.381E-06	4.540E-06	4.540E-06	-8.576E-07	-8.576E-07
0.98125	2.009E-07	489.654	-4.926E-06	-4.926E-06	5.190E-06	5.190E-06	-9.514E-07	-9.515E-07
0.98750	2.230E-07	492.773	-5.500E-06	-5.500E-06	5.934E-06	5.934E-06	-1.056E-06	-1.056E-06
0.99375	2.392E-07	495.891	-6.100E-06	-6.100E-06	6.781E-06	6.781E-06	-1.133E-06	-1.133E-06
1.00000	2.436E-07	499.010	-6.692E-06	-6.692E-06	7.702E-06	7.702E-06	-1.154E-06	-1.154E-06
1.00625	2.354E-07	502.128	-7.245E-06	-7.245E-06	8.649E-06	8.650E-06	-1.115E-06	-1.115E-06
1.01250	2.162E-07	505.247	-7.742E-06	-7.742E-06	9.565E-06	9.566E-06	-1.024E-06	-1.024E-06
1.01875	1.951E-07	508.366	-8.181E-06	-8.181E-06	1.040E-05	1.040E-05	-9.243E-07	-9.243E-07
1.02500	1.746E-07	511.484	-8.582E-06	-8.582E-06	1.116E-05	1.116E-05	-8.269E-07	-8.269E-07
1.03749	1.313E-07	517.722	-9.262E-06	-9.262E-06	1.238E-05	1.238E-05	-6.221E-07	-6.221E-07
1.04999	9.316E-08	523.959	-9.778E-06	-9.778E-06	1.326E-05	1.326E-05	-4.413E-07	-4.413E-07
1.07499	5.206E-08	536.434	-1.044E-05	-1.044E-05	1.432E-05	1.432E-05	-2.466E-07	-2.466E-07
1.09999	3.091E-08	548.910	-1.083E-05	-1.083E-05	1.493E-05	1.493E-05	-1.464E-07	-1.464E-07
1.14999	1.368E-08	573.860	-1.122E-05	-1.122E-05	1.558E-05	1.558E-05	-6.480E-08	-6.480E-08
1.19999	7.344E-09	598.811	-1.136E-05	-1.136E-05	1.594E-05	1.594E-05	-3.478E-08	-3.478E-08
1.29999	3.016E-09	648.712	-1.139E-05	-1.139E-05	1.638E-05	1.638E-05	-1.428E-08	-1.428E-08
1.39999	1.586E-09	698.613	-1.130E-05	-1.130E-05	1.668E-05	1.668E-05	-7.511E-09	-7.511E-09
1.49999	9.782E-10	748.514	-1.117E-05	-1.117E-05	1.693E-05	1.693E-05	-4.633E-09	-4.633E-09
1.59999	6.566E-10	798.415	-1.102E-05	-1.102E-05	1.717E-05	1.717E-05	-3.110E-09	-3.110E-09
1.69999	4.417E-10	848.316	-1.085E-05	-1.085E-05	1.739E-05	1.739E-05	-2.092E-09	-2.092E-09
1.79999	3.117E-10	898.217	-1.067E-05	-1.067E-05	1.760E-05	1.760E-05	-1.477E-09	-1.477E-09
1.89999	2.200E-10	948.118	-1.050E-05	-1.050E-05	1.781E-05	1.781E-05	-1.042E-09	-1.042E-09
1.99999	1.569E-10	998.020	-1.031E-05	-1.031E-05	1.801E-05	1.801E-05	-7.433E-10	-7.433E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 2.500 θ_0= 0. ρ_0= 9.385

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-9.928E-16
0.10000	7.571E-12	7.574E-12	-9.147E-22	-9.147E-22	-1.050E-11	-1.050E-11	-1.331E-15
0.20000	2.114E-11	2.114E-11	-1.593E-21	-1.593E-21	-2.879E-11	-2.879E-11	-1.903E-15
0.30000	4.479E-11	4.479E-11	-2.773E-21	-2.773E-21	-6.064E-11	-6.064E-11	-2.988E-15
0.40000	9.479E-11	9.479E-11	-5.052E-21	-5.052E-21	-1.174E-10	-1.174E-10	-5.050E-15
0.50000	1.876E-10	1.876E-10	-9.214E-21	-9.214E-21	-2.211E-10	-2.211E-10	-1.007E-14
0.60000	4.236E-10	4.236E-10	-1.886E-20	-1.886E-20	-4.186E-10	-4.186E-10	-2.340E-14
0.70000	1.195E-09	1.195E-09	-4.892E-20	-4.892E-20	-8.796E-10	-8.796E-10	-6.739E-14
0.80000	4.742E-09	4.742E-09	-1.886E-19	-1.886E-19	-2.356E-09	-2.356E-09	-2.925E-13
0.85000	1.210E-08	1.210E-08	-4.772E-19	-4.772E-19	-4.625E-09	-4.625E-09	-7.966E-13
0.90000	4.098E-08	4.098E-08	-1.751E-18	-1.751E-18	-1.166E-08	-1.166E-08	-3.055E-12
0.92500	8.959E-08	8.959E-08	-3.667E-18	-3.667E-18	-2.136E-08	-2.136E-08	-7.186E-12
0.95000	2.320E-07	2.320E-07	-8.222E-18	-8.222E-18	-4.146E-08	-4.146E-08	-1.993E-11
0.96250	4.008E-07	4.008E-07	-1.388E-17	-1.388E-17	-6.182E-08	-6.182E-08	-3.354E-11
0.97500	7.809E-07	7.810E-07	-2.125E-17	-2.125E-17	-9.451E-08	-9.451E-08	-5.676E-11
0.98125	1.146E-06	1.147E-06	-2.499E-17	-2.499E-17	-1.162E-07	-1.162E-07	-7.146E-11
0.98750	1.710E-06	1.710E-06	-2.944E-17	-2.944E-17	-1.415E-07	-1.415E-07	-8.338E-11
0.99375	2.546E-06	2.547E-06	-3.287E-17	-3.287E-17	-1.708E-07	-1.708E-07	-9.117E-11
1.00000	3.582E-06	3.582E-06	-3.383E-17	-3.383E-17	-2.022E-07	-2.022E-07	-9.340E-11
1.00625	4.562E-06	4.563E-06	-3.205E-17	-3.205E-17	-2.332E-07	-2.332E-07	-8.931E-11
1.01250	5.285E-06	5.286E-06	-2.804E-17	-2.804E-17	-2.614E-07	-2.614E-07	-8.027E-11
1.01875	5.755E-06	5.755E-06	-2.389E-17	-2.389E-17	-2.855E-07	-2.855E-07	-6.692E-11
1.02500	6.064E-06	6.064E-06	-2.008E-17	-2.008E-17	-3.061E-07	-3.061E-07	-5.261E-11
1.03749	6.395E-06	6.395E-06	-1.289E-17	-1.289E-17	-3.367E-07	-3.367E-07	-3.093E-11
1.04999	6.540E-06	6.540E-06	-7.544E-18	-7.544E-18	-3.555E-07	-3.555E-07	-1.852E-11
1.07499	6.580E-06	6.580E-06	-3.470E-18	-3.470E-18	-3.744E-07	-3.745E-07	-6.683E-12
1.09999	6.489E-06	6.489E-06	-1.659E-18	-1.659E-18	-3.836E-07	-3.836E-07	-2.873E-12
1.14999	6.230E-06	6.230E-06	-4.592E-19	-4.592E-19	-3.903E-07	-3.903E-07	-7.631E-13
1.19999	5.971E-06	5.971E-06	-1.831E-19	-1.831E-19	-3.925E-07	-3.925E-07	-2.830E-13
1.29999	5.510E-06	5.510E-06	-4.797E-20	-4.797E-20	-3.939E-07	-3.939E-07	-6.589E-14
1.39999	5.117E-06	5.117E-06	-1.858E-20	-1.858E-20	-3.944E-07	-3.944E-07	-2.302E-14
1.49999	4.778E-06	4.778E-06	-9.109E-21	-9.109E-21	-3.946E-07	-3.946E-07	-9.937E-15
1.59999	4.481E-06	4.481E-06	-4.995E-21	-4.995E-21	-3.947E-07	-3.947E-07	-5.002E-15
1.69999	4.219E-06	4.219E-06	-2.744E-21	-2.744E-21	-3.947E-07	-3.947E-07	-2.966E-15
1.79999	3.986E-06	3.986E-06	-1.576E-21	-1.576E-21	-3.948E-07	-3.948E-07	-1.893E-15
1.89999	3.778E-06	3.778E-06	-9.051E-22	-9.051E-22	-3.948E-07	-3.948E-07	-1.327E-15
1.99999	3.590E-06	3.590E-06	-5.192E-22	-5.192E-22	-3.948E-07	-3.948E-07	-9.906E-16

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 3.000 θ_0= 0. ρ_0= 11.261

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	3.0000	0.	216.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	3.0000	0.10000	193.678	2.868E-07	9.998E-01	-2.214E-10	-2.214E-10	2.214E-10
0.20000	3.0000	0.20000	172.201	3.669E-07	9.998E-01	-3.137E-10	-3.137E-10	3.137E-10
0.30000	3.0000	0.30000	150.738	6.403E-07	9.997E-01	-4.443E-10	-4.443E-10	4.443E-10
0.40000	3.0000	0.40000	129.292	1.121E-06	9.995E-01	-6.608E-10	-6.608E-10	6.608E-10
0.50000	3.0000	0.50000	107.874	1.467E-06	9.993E-01	-9.840E-10	-9.840E-10	9.840E-10
0.60000	3.0000	0.60000	86.505	1.494E-06	9.989E-01	-1.597E-09	-1.597E-09	1.597E-09
0.70000	3.0000	0.70000	65.232	6.457E-06	9.980E-01	-3.035E-09	-3.035E-09	3.035E-09
0.80000	3.0000	0.80000	44.196	2.156E-05	9.959E-01	-7.362E-09	-7.362E-09	7.362E-09
0.85000	3.0000	0.85000	33.904	4.845E-05	9.940E-01	-1.359E-08	-1.359E-08	1.359E-08
0.90000	3.0000	0.90000	24.024	1.567E-04	9.928E-01	-2.993E-08	-2.993E-08	2.993E-08
0.92500	3.0000	0.92500	19.437	3.189E-04	9.953E-01	-4.868E-08	-4.868E-08	4.868E-08
0.95000	3.0000	0.95000	15.372	7.330E-04	1.004E 00	-7.874E-08	-7.874E-08	7.874E-08
0.96250	3.0000	0.96250	13.683	1.121E-03	1.011E 00	-1.065E-07	-1.065E-07	1.065E-07
0.97500	3.0001	0.97500	12.355	1.723E-03	1.014E 00	-1.351E-07	-1.351E-07	1.351E-07
0.98125	3.0001	0.98125	11.866	2.119E-03	1.012E 00	-1.474E-07	-1.474E-07	1.474E-07
0.98750	3.0001	0.98750	11.513	2.574E-03	1.007E 00	-1.570E-07	-1.570E-07	1.570E-07
0.99375	3.0001	0.99375	11.310	3.075E-03	1.002E 00	-1.628E-07	-1.628E-07	1.628E-07
1.00000	3.0001	1.00000	11.265	3.600E-03	9.999E-01	-1.642E-07	-1.642E-07	1.642E-07
1.00625	3.0001	1.00625	11.380	4.122E-03	1.003E 00	-1.608E-07	-1.608E-07	1.608E-07
1.01250	3.0002	1.01250	11.650	4.607E-03	1.010E 00	-1.532E-07	-1.532E-07	1.532E-07
1.01875	3.0002	1.01875	12.064	5.041E-03	1.015E 00	-1.423E-07	-1.423E-07	1.423E-07
1.02500	3.0002	1.02500	12.610	5.405E-03	1.017E 00	-1.291E-07	-1.291E-07	1.291E-07
1.03750	3.0003	1.03750	14.027	5.953E-03	1.014E 00	-1.002E-07	-1.002E-07	1.002E-07
1.05000	3.0004	1.05000	15.779	6.306E-03	1.007E 00	-7.424E-08	-7.424E-08	7.424E-08
1.07500	3.0005	1.07500	19.920	6.665E-03	9.970E-01	-4.607E-08	-4.607E-08	4.608E-08
1.09999	3.0007	1.10000	24.546	6.820E-03	9.935E-01	-2.857E-08	-2.857E-08	2.857E-08
1.14999	3.0009	1.15000	34.461	6.924E-03	9.931E-01	-1.310E-08	-1.310E-08	1.310E-08
1.19999	3.0012	1.20000	44.766	6.958E-03	9.942E-01	-7.153E-09	-7.153E-09	7.153E-09
1.29999	3.0016	1.30000	65.813	6.977E-03	9.955E-01	-2.978E-09	-2.978E-09	2.978E-09
1.39999	3.0020	1.40000	87.090	6.986E-03	9.960E-01	-1.573E-09	-1.573E-09	1.573E-09
1.49999	3.0023	1.50000	108.461	6.992E-03	9.961E-01	-9.734E-10	-9.734E-10	9.734E-10
1.59999	3.0026	1.60000	129.879	6.992E-03	9.960E-01	-6.536E-10	-6.536E-10	6.536E-10
1.69999	3.0029	1.70000	151.326	6.998E-03	9.959E-01	-4.401E-10	-4.401E-10	4.401E-10
1.79999	3.0031	1.80000	172.789	7.001E-03	9.957E-01	-3.107E-10	-3.107E-10	3.107E-10
1.89999	3.0033	1.90000	194.265	7.003E-03	9.956E-01	-2.193E-10	-2.193E-10	2.193E-10
1.99999	3.0035	2.00000	215.748	7.003E-03	9.954E-01	-1.565E-10	-1.565E-10	1.565E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 3.000 θ_D= 0. ρ_0= 11.261

z	$_x\mu'-1_0$	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.214E-10	49.901	-9.361E-09	-9.361E-09	9.361E-09	9.361E-09	-1.049E-09	-1.049E-09
0.20000	3.137E-10	99.802	-2.258E-08	-2.258E-08	2.258E-08	2.258E-08	-1.486E-09	-1.486E-09
0.30000	4.443E-10	149.703	-4.131E-08	-4.131E-08	4.131E-08	4.131E-08	-2.105E-09	-2.105E-09
0.40000	6.608E-10	199.605	-6.850E-08	-6.850E-08	6.850E-08	6.850E-08	-3.130E-09	-3.130E-09
0.50000	9.840E-10	249.506	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-4.661E-09	-4.661E-09
0.60000	1.597E-09	299.407	-1.712E-07	-1.712E-07	1.712E-07	1.712E-07	-7.562E-09	-7.562E-09
0.70000	3.035E-09	349.308	-2.812E-07	-2.812E-07	2.812E-07	2.812E-07	-1.438E-08	-1.438E-08
0.80000	7.362E-09	399.209	-5.168E-07	-5.168E-07	5.168E-07	5.168E-07	-3.487E-08	-3.487E-08
0.85000	1.359E-08	424.160	-7.658E-07	-7.658E-07	7.659E-07	7.659E-07	-6.439E-08	-6.439E-08
0.90000	2.993E-08	449.110	-1.271E-06	-1.271E-06	1.272E-06	1.272E-06	-1.418E-07	-1.418E-07
0.92500	4.868E-08	461.585	-1.746E-06	-1.746E-06	1.750E-06	1.750E-06	-2.306E-07	-2.306E-07
0.95000	7.874E-08	474.060	-2.517E-06	-2.517E-06	2.537E-06	2.537E-06	-3.730E-07	-3.730E-07
0.96250	1.065E-07	480.298	-3.080E-06	-3.080E-06	3.126E-06	3.126E-06	-5.045E-07	-5.045E-07
0.97500	1.351E-07	486.535	-3.802E-06	-3.802E-06	3.912E-06	3.912E-06	-6.397E-07	-6.397E-07
0.98125	1.474E-07	489.654	-4.215E-06	-4.215E-06	4.382E-06	4.382E-06	-6.983E-07	-6.983E-07
0.98750	1.570E-07	492.773	-4.650E-06	-4.650E-06	4.898E-06	4.899E-06	-7.438E-07	-7.438E-07
0.99375	1.628E-07	495.891	-5.095E-06	-5.096E-06	5.453E-06	5.453E-06	-7.713E-07	-7.713E-07
1.00000	1.642E-07	499.010	-5.539E-06	-5.539E-06	6.031E-06	6.031E-06	-7.776E-07	-7.776E-07
1.00625	1.606E-07	502.129	-5.968E-06	-5.968E-06	6.618E-06	6.618E-06	-7.618E-07	-7.617E-07
1.01250	1.532E-07	505.248	-6.376E-06	-6.376E-06	7.192E-06	7.192E-06	-7.258E-07	-7.258E-07
1.01875	1.423E-07	508.366	-6.754E-06	-6.754E-06	7.737E-06	7.737E-06	-6.739E-07	-6.739E-07
1.02500	1.291E-07	511.485	-7.100E-06	-7.100E-06	8.238E-06	8.238E-06	-6.113E-07	-6.113E-07
1.03750	1.002E-07	517.722	-7.686E-06	-7.686E-06	9.083E-06	9.083E-06	-4.744E-07	-4.744E-07
1.05000	7.424E-08	523.960	-8.130E-06	-8.130E-06	9.717E-06	9.717E-06	-3.516E-07	-3.516E-07
1.07500	4.607E-08	536.435	-8.755E-06	-8.755E-06	1.057E-05	1.057E-05	-2.182E-07	-2.182E-07
1.09999	2.857E-08	548.910	-9.143E-06	-9.143E-06	1.109E-05	1.109E-05	-1.353E-07	-1.353E-07
1.14999	1.310E-08	573.861	-9.551E-06	-9.551E-06	1.165E-05	1.165E-05	-6.207E-08	-6.207E-08
1.19999	7.153E-09	598.811	-9.735E-06	-9.735E-06	1.194E-05	1.194E-05	-3.388E-08	-3.388E-08
1.29999	2.978E-09	648.712	-9.866E-06	-9.866E-06	1.227E-05	1.227E-05	-1.411E-08	-1.411E-08
1.39999	1.573E-09	698.613	-9.879E-06	-9.879E-06	1.248E-05	1.248E-05	-7.452E-09	-7.452E-09
1.49999	9.734E-10	748.514	-9.845E-06	-9.845E-06	1.263E-05	1.263E-05	-4.610E-09	-4.610E-09
1.59999	6.536E-10	798.416	-9.792E-06	-9.792E-06	1.276E-05	1.276E-05	-3.096E-09	-3.096E-09
1.69999	4.401E-10	848.317	-9.724E-06	-9.724E-06	1.289E-05	1.289E-05	-2.085E-09	-2.085E-09
1.79999	3.107E-10	898.218	-9.648E-06	-9.648E-06	1.300E-05	1.300E-05	-1.472E-09	-1.472E-09
1.89999	2.193E-10	948.119	-9.567E-06	-9.567E-06	1.311E-05	1.311E-05	-1.039E-09	-1.039E-09
1.99999	1.566E-10	998.020	-9.483E-06	-9.483E-06	1.321E-05	1.321E-05	-7.412E-10	-7.412E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 3.000 θ_D= 0. ρ_0=11.261

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.429E-15
0.10000	9.085E-12	9.084E-12	-9.145E-22	-9.145E-22	-1.050E-11	-1.050E-11	-1.916E-15
0.20000	2.536E-11	2.536E-11	-1.592E-21	-1.592E-21	-2.878E-11	-2.878E-11	-2.739E-15
0.30000	5.371E-11	5.371E-11	-2.770E-21	-2.770E-21	-6.060E-11	-6.060E-11	-4.298E-15
0.40000	1.136E-10	1.136E-10	-5.044E-21	-5.044E-21	-1.173E-10	-1.173E-10	-7.258E-15
0.50000	2.247E-10	2.247E-10	-9.190E-21	-9.190E-21	-2.207E-10	-2.207E-10	-1.445E-14
0.60000	5.066E-10	5.065E-10	-1.877E-20	-1.877E-20	-4.175E-10	-4.175E-10	-3.349E-14
0.70000	1.425E-09	1.425E-09	-4.843E-20	-4.843E-20	-8.748E-10	-8.748E-10	-9.582E-14
0.80000	5.559E-09	5.559E-09	-1.837E-19	-1.837E-19	-2.322E-09	-2.322E-09	-4.085E-13
0.85000	1.394E-08	1.394E-08	-4.549E-19	-4.549E-19	-4.503E-09	-4.503E-09	-1.085E-12
0.90000	4.539E-08	4.539E-08	-1.575E-18	-1.575E-18	-1.096E-08	-1.096E-08	-3.895E-12
0.92500	9.468E-08	9.468E-08	-3.166E-18	-3.165E-18	-1.947E-08	-1.947E-08	-8.540E-12
0.95000	2.233E-07	2.233E-07	-5.804E-18	-5.805E-18	-3.610E-08	-3.610E-08	-2.158E-11
0.96250	3.658E-07	3.658E-07	-9.294E-18	-9.294E-18	-5.004E-08	-5.004E-08	-3.207E-11
0.97500	6.333E-07	6.333E-07	-1.346E-17	-1.346E-17	-7.128E-08	-7.128E-08	-4.666E-11
0.98125	8.610E-07	8.611E-07	-1.543E-17	-1.543E-17	-8.480E-08	-8.481E-08	-5.449E-11
0.98750	1.174E-06	1.174E-06	-1.703E-17	-1.703E-17	-1.000E-07	-1.000E-07	-6.132E-11
0.99375	1.572E-06	1.572E-06	-1.802E-17	-1.802E-17	-1.165E-07	-1.165E-07	-6.580E-11
1.00000	2.028E-06	2.026E-06	-1.824E-17	-1.824E-17	-1.335E-07	-1.335E-07	-6.685E-11
1.00625	2.458E-06	2.458E-06	-1.767E-17	-1.767E-17	-1.503E-07	-1.503E-07	-6.421E-11
1.01250	2.807E-06	2.807E-06	-1.639E-17	-1.639E-17	-1.663E-07	-1.663E-07	-5.855E-11
1.01875	3.069E-06	3.069E-06	-1.460E-17	-1.460E-17	-1.808E-07	-1.808E-07	-5.112E-11
1.02500	3.256E-06	3.256E-06	-1.254E-17	-1.254E-17	-1.935E-07	-1.935E-07	-4.323E-11
1.03750	3.477E-06	3.477E-06	-8.445E-18	-8.445E-18	-2.130E-07	-2.130E-07	-2.940E-11
1.05000	3.596E-06	3.596E-06	-5.533E-18	-5.533E-18	-2.257E-07	-2.257E-07	-1.958E-11
1.07500	3.667E-06	3.667E-06	-2.935E-18	-2.935E-18	-2.412E-07	-2.412E-07	-7.793E-12
1.09999	3.642E-06	3.642E-06	-1.461E-18	-1.460E-18	-2.491E-07	-2.491E-07	-3.590E-12
1.14999	3.515E-06	3.515E-06	-4.309E-19	-4.309E-19	-2.551E-07	-2.551E-07	-1.022E-12
1.19999	3.373E-06	3.373E-06	-1.761E-19	-1.761E-19	-2.572E-07	-2.572E-07	-3.898E-13
1.29999	3.113E-06	3.113E-06	-4.709E-20	-4.709E-20	-2.586E-07	-2.586E-07	-9.273E-14
1.39999	2.891E-06	2.891E-06	-1.837E-20	-1.837E-20	-2.590E-07	-2.590E-07	-3.269E-14
1.49999	2.698E-06	2.698E-06	-9.041E-21	-9.041E-21	-2.592E-07	-2.592E-07	-1.416E-14
1.59999	2.530E-06	2.530E-06	-4.961E-21	-4.961E-21	-2.593E-07	-2.593E-07	-7.154E-15
1.69999	2.381E-06	2.381E-06	-2.729E-21	-2.729E-21	-2.594E-07	-2.594E-07	-4.248E-15
1.79999	2.249E-06	2.249E-06	-1.568E-21	-1.568E-21	-2.594E-07	-2.594E-07	-2.715E-15
1.89999	2.131E-06	2.131E-06	-9.007E-22	-9.007E-22	-2.594E-07	-2.594E-07	-1.905E-15
1.99999	2.025E-06	2.025E-06	-5.168E-22	-5.168E-22	-2.595E-07	-2.595E-07	-1.423E-15

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 4.000 θ_D= 0. ρ_a= 15.009

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	4.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	4.0000	0.10000	193.701	2.735E-07	9.997E-01	-2.213E-10	-2.213E-10	2.213E-10
0.20000	4.0000	0.20000	172.258	5.603E-07	9.996E-01	-3.134E-10	-3.134E-10	3.134E-10
0.30000	4.0000	0.30000	150.836	9.738E-07	9.995E-01	-4.436E-10	-4.436E-10	4.436E-10
0.40000	4.0000	0.40000	129.444	1.547E-06	9.992E-01	-6.589E-10	-6.589E-10	6.589E-10
0.50000	4.0000	0.50000	108.102	1.974E-06	9.988E-01	-9.799E-10	-9.799E-10	9.799E-10
0.60000	4.0000	0.60000	86.846	2.615E-06	9.981E-01	-1.583E-09	-1.583E-09	1.583E-09
0.70000	4.0000	0.70000	65.759	6.510E-06	9.967E-01	-2.984E-09	-2.984E-09	2.984E-09
0.80000	4.0000	0.80000	45.080	2.860E-05	9.942E-01	-7.041E-09	-7.041E-09	7.041E-09
0.85000	4.0000	0.85000	35.119	6.318E-05	9.928E-01	-1.255E-08	-1.255E-08	1.255E-08
0.90000	4.0000	0.90000	25.806	1.917E-04	9.951E-01	-2.554E-08	-2.554E-08	2.554E-08
0.92500	4.0000	0.92500	21.657	3.701E-04	1.001E 00	-3.782E-08	-3.782E-08	3.782E-08
0.95000	4.0000	0.95000	18.166	6.770E-04	1.010E 00	-5.624E-08	-5.624E-08	5.624E-08
0.96250	4.0000	0.96250	16.798	9.212E-04	1.013E 00	-6.570E-08	-6.570E-08	6.570E-08
0.97500	4.0001	0.97500	15.775	1.232E-03	1.011E 00	-7.428E-08	-7.428E-08	7.428E-08
0.98125	4.0001	0.98125	15.414	1.413E-03	1.008E 00	-7.819E-08	-7.819E-08	7.819E-08
0.98750	4.0001	0.98750	15.164	1.612E-03	1.004E 00	-8.171E-08	-8.171E-08	8.171E-08
0.99375	4.0001	0.99375	15.031	1.836E-03	1.001E 00	-8.368E-08	-8.368E-08	8.368E-08
1.00000	4.0001	1.00000	15.018	2.064E-03	9.999E-01	-8.388E-08	-8.388E-08	8.388E-08
1.00625	4.0001	1.00625	15.125	2.286E-03	1.002E 00	-8.229E-08	-8.229E-08	8.229E-08
1.01250	4.0001	1.01250	15.349	2.498E-03	1.007E 00	-7.906E-08	-7.906E-08	7.906E-08
1.01875	4.0001	1.01875	15.686	2.696E-03	1.011E 00	-7.523E-08	-7.522E-08	7.523E-08
1.02500	4.0002	1.02500	16.128	2.876E-03	1.015E 00	-7.091E-08	-7.091E-08	7.091E-08
1.03750	4.0002	1.03750	17.295	3.173E-03	1.017E 00	-6.210E-08	-6.210E-08	6.210E-08
1.05000	4.0002	1.05000	18.777	3.388E-03	1.014E 00	-5.247E-08	-5.247E-08	5.247E-08
1.07500	4.0003	1.07500	22.425	3.647E-03	1.004E 00	-3.466E-08	-3.466E-08	3.466E-08
1.10000	4.0004	1.10000	26.665	3.787E-03	9.979E-01	-2.366E-08	-2.366E-08	2.366E-08
1.15000	4.0005	1.15000	36.069	3.900E-03	9.938E-01	-1.178E-08	-1.178E-08	1.178E-08
1.20000	4.0007	1.20000	46.069	3.936E-03	9.940E-01	-6.699E-09	-6.699E-09	6.699E-09
1.30000	4.0009	1.30000	66.780	3.958E-03	9.955E-01	-2.886E-09	-2.886E-09	2.886E-09
1.40000	4.0011	1.40000	87.879	3.972E-03	9.966E-01	-1.543E-09	-1.543E-09	1.543E-09
1.50000	4.0013	1.50000	109.141	3.979E-03	9.971E-01	-9.611E-10	-9.611E-10	9.611E-10
1.60000	4.0015	1.60000	130.486	3.984E-03	9.974E-01	-6.463E-10	-6.463E-10	6.463E-10
1.70000	4.0016	1.70000	151.879	3.984E-03	9.976E-01	-4.362E-10	-4.362E-10	4.362E-10
1.80000	4.0018	1.80000	173.302	3.984E-03	9.977E-01	-3.081E-10	-3.081E-10	3.081E-10
1.90000	4.0019	1.90000	194.746	3.984E-03	9.978E-01	-2.176E-10	-2.176E-10	2.176E-10
2.00000	4.0020	2.00000	216.205	3.984E-03	9.978E-01	-1.554E-10	-1.554E-10	1.554E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 4.000 θ_D= 0. ρ_a= 15.009

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.213E-10	49.901	-9.359E-09	-9.359E-09	9.359E-09	9.359E-09	-1.048E-09	-1.048E-09
0.20000	3.134E-10	99.802	-2.257E-08	-2.257E-08	2.257E-08	2.257E-08	-1.484E-09	-1.484E-09
0.30000	4.436E-10	149.703	-4.127E-08	-4.127E-08	4.127E-08	4.127E-08	-2.101E-09	-2.101E-09
0.40000	6.589E-10	199.605	-6.840E-08	-6.840E-08	6.840E-08	6.840E-08	-3.121E-09	-3.121E-09
0.50000	9.799E-10	249.506	-1.088E-07	-1.088E-07	1.088E-07	1.088E-07	-4.641E-09	-4.641E-09
0.60000	1.583E-09	299.407	-1.706E-07	-1.706E-07	1.706E-07	1.706E-07	-7.498E-09	-7.498E-09
0.70000	2.984E-09	349.308	-2.791E-07	-2.791E-07	2.791E-07	2.791E-07	-1.413E-08	-1.413E-08
0.80000	7.041E-09	399.209	-5.074E-07	-5.074E-07	5.074E-07	5.074E-07	-3.335E-08	-3.335E-08
0.85000	1.255E-08	424.160	-7.410E-07	-7.410E-07	7.411E-07	7.411E-07	-5.943E-08	-5.943E-08
0.90000	2.554E-08	449.110	-1.187E-06	-1.187E-06	1.189E-06	1.189E-06	-1.210E-07	-1.210E-07
0.92500	3.782E-08	461.585	-1.573E-06	-1.573E-06	1.578E-06	1.578E-06	-1.791E-07	-1.791E-07
0.95000	5.624E-08	474.060	-2.151E-06	-2.151E-06	2.168E-06	2.168E-06	-2.664E-07	-2.664E-07
0.96250	6.570E-08	480.298	-2.525E-06	-2.525E-06	2.556E-06	2.556E-06	-3.112E-07	-3.112E-07
0.97500	7.428E-08	486.535	-2.949E-06	-2.949E-06	3.005E-06	3.005E-06	-3.519E-07	-3.519E-07
0.98125	7.819E-08	489.654	-3.178E-06	-3.178E-06	3.252E-06	3.252E-06	-3.703E-07	-3.703E-07
0.98750	8.171E-08	492.773	-3.416E-06	-3.416E-06	3.513E-06	3.513E-06	-3.870E-07	-3.870E-07
0.99375	8.368E-08	495.892	-3.659E-06	-3.659E-06	3.786E-06	3.786E-06	-3.964E-07	-3.964E-07
1.00000	8.388E-08	499.011	-3.904E-06	-3.904E-06	4.065E-06	4.065E-06	-3.973E-07	-3.973E-07
1.00625	8.229E-08	502.129	-4.144E-06	-4.144E-06	4.344E-06	4.344E-06	-3.898E-07	-3.898E-07
1.01250	7.906E-08	505.248	-4.376E-06	-4.376E-06	4.616E-06	4.616E-06	-3.745E-07	-3.745E-07
1.01875	7.522E-08	508.367	-4.596E-06	-4.596E-06	4.877E-06	4.878E-06	-3.563E-07	-3.563E-07
1.02500	7.090E-08	511.486	-4.804E-06	-4.804E-06	5.126E-06	5.126E-06	-3.359E-07	-3.358E-07
1.03750	6.210E-08	517.723	-5.182E-06	-5.182E-06	5.579E-06	5.579E-06	-2.941E-07	-2.941E-07
1.05000	5.247E-08	523.961	-5.509E-06	-5.509E-06	5.967E-06	5.967E-06	-2.485E-07	-2.485E-07
1.07500	3.466E-08	536.436	-6.006E-06	-6.006E-06	6.549E-06	6.549E-06	-1.642E-07	-1.642E-07
1.10000	2.366E-08	548.911	-6.337E-06	-6.337E-06	6.937E-06	6.937E-06	-1.121E-07	-1.121E-07
1.15000	1.178E-08	573.861	-6.718E-06	-6.718E-06	7.383E-06	7.383E-06	-5.582E-08	-5.582E-08
1.20000	6.699E-09	598.812	-6.918E-06	-6.918E-06	7.625E-06	7.625E-06	-3.173E-08	-3.173E-08
1.30000	2.886E-09	648.713	-7.103E-06	-7.103E-06	7.877E-06	7.877E-06	-1.367E-08	-1.367E-08
1.40000	1.543E-09	698.614	-7.176E-06	-7.176E-06	8.015E-06	8.015E-06	-7.307E-09	-7.307E-09
1.50000	9.611E-10	748.515	-7.204E-06	-7.204E-06	8.107E-06	8.107E-06	-4.552E-09	-4.552E-09
1.60000	6.463E-10	798.416	-7.213E-06	-7.213E-06	8.178E-06	8.178E-06	-3.061E-09	-3.061E-09
1.70000	4.362E-10	848.318	-7.208E-06	-7.208E-06	8.235E-06	8.235E-06	-2.066E-09	-2.066E-09
1.80000	3.081E-10	898.219	-7.196E-06	-7.196E-06	8.284E-06	8.284E-06	-1.460E-09	-1.460E-09
1.90000	2.176E-10	948.120	-7.179E-06	-7.179E-06	8.327E-06	8.327E-06	-1.031E-09	-1.031E-09
2.00000	1.554E-10	998.021	-7.159E-06	-7.159E-06	8.365E-06	8.366E-06	-7.360E-10	-7.360E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 4.000 θ_D= 0. ρ_0=15.009

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.10000	1.210E-11	1.210E-11	-9.139E-22	-9.139E-22	-1.049E-11	-1.049E-11	-3.403E-15
0.20000	3.377E-11	3.377E-11	-1.590E-21	-1.590E-21	-2.876E-11	-2.876E-11	-4.860E-15
0.30000	7.146E-11	7.146E-11	-2.763E-21	-2.763E-21	-6.051E-11	-6.051E-11	-7.618E-15
0.40000	1.510E-10	1.510E-10	-5.022E-21	-5.022E-21	-1.170E-10	-1.170E-10	-1.284E-14
0.50000	2.981E-10	2.981E-10	-9.132E-21	-9.132E-21	-2.199E-10	-2.199E-10	-2.545E-14
0.60000	6.690E-10	6.690E-10	-1.853E-20	-1.853E-20	-4.147E-10	-4.147E-10	-5.861E-14
0.70000	1.855E-09	1.855E-09	-4.722E-20	-4.722E-20	-8.628E-10	-8.628E-10	-1.650E-13
0.80000	6.970E-09	6.970E-09	-1.720E-19	-1.720E-19	-2.242E-09	-2.242E-09	-6.737E-13
0.85000	1.668E-08	1.668E-08	-4.041E-19	-4.041E-19	-4.223E-09	-4.223E-09	-1.691E-12
0.90000	4.937E-08	4.937E-08	-1.218E-18	-1.218E-18	-9.509E-09	-9.509E-09	-5.279E-12
0.92500	9.461E-08	9.461E-08	-2.239E-18	-2.239E-18	-1.578E-08	-1.578E-08	-1.020E-11
0.95000	1.935E-07	1.935E-07	-3.857E-18	-3.857E-18	-2.704E-08	-2.704E-08	-1.970E-11
0.96250	2.914E-07	2.914E-07	-4.773E-18	-4.773E-18	-3.511E-08	-3.511E-08	-2.698E-11
0.97500	4.403E-07	4.403E-07	-5.535E-18	-5.536E-18	-4.481E-08	-4.481E-08	-3.480E-11
0.98125	5.433E-07	5.433E-07	-5.750E-18	-5.750E-18	-5.009E-08	-5.009E-08	-3.799E-11
0.98750	6.661E-07	6.661E-07	-6.150E-18	-6.150E-18	-5.562E-08	-5.562E-08	-4.009E-11
0.99375	8.090E-07	8.090E-07	-6.382E-18	-6.382E-18	-6.150E-08	-6.150E-08	-4.127E-11
1.00000	9.605E-07	9.606E-07	-6.406E-18	-6.406E-18	-6.749E-08	-6.750E-08	-4.139E-11
1.00625	1.106E-06	1.106E-06	-6.218E-18	-6.218E-18	-7.341E-08	-7.341E-08	-4.044E-11
1.01250	1.232E-06	1.232E-06	-5.841E-18	-5.841E-18	-7.906E-08	-7.906E-08	-3.854E-11
1.01875	1.334E-06	1.334E-06	-5.588E-18	-5.587E-18	-8.439E-08	-8.439E-08	-3.556E-11
1.02500	1.417E-06	1.417E-06	-5.299E-18	-5.299E-18	-8.950E-08	-8.950E-08	-3.193E-11
1.03750	1.535E-06	1.535E-06	-4.418E-18	-4.418E-18	-9.860E-08	-9.860E-08	-2.398E-11
1.05000	1.611E-06	1.611E-06	-3.507E-18	-3.507E-18	-1.060E-07	-1.060E-07	-1.733E-11
1.07500	1.679E-06	1.679E-06	-1.987E-18	-1.987E-18	-1.161E-07	-1.161E-07	-9.043E-12
1.10000	1.693E-06	1.693E-06	-1.076E-18	-1.076E-18	-1.217E-07	-1.217E-07	-4.686E-12
1.15000	1.655E-06	1.655E-06	-3.683E-19	-3.683E-19	-1.263E-07	-1.263E-07	-1.536E-12
1.20000	1.595E-06	1.595E-06	-1.598E-19	-1.598E-19	-1.282E-07	-1.282E-07	-6.225E-13
1.30000	1.475E-06	1.475E-06	-4.495E-20	-4.495E-20	-1.294E-07	-1.295E-07	-1.557E-13
1.40000	1.369E-06	1.369E-06	-1.785E-20	-1.785E-20	-1.299E-07	-1.299E-07	-5.612E-14
1.50000	1.278E-06	1.278E-06	-8.870E-21	-8.870E-21	-1.301E-07	-1.301E-07	-2.455E-14
1.60000	1.198E-06	1.198E-06	-4.878E-21	-4.878E-21	-1.302E-07	-1.302E-07	-1.250E-14
1.70000	1.127E-06	1.127E-06	-2.690E-21	-2.690E-21	-1.302E-07	-1.302E-07	-7.449E-15
1.80000	1.064E-06	1.064E-06	-1.547E-21	-1.547E-21	-1.303E-07	-1.303E-07	-4.777E-15
1.90000	1.008E-06	1.008E-06	-8.896E-22	-8.896E-22	-1.303E-07	-1.303E-07	-3.360E-15
2.00000	9.580E-07	9.580E-07	-5.107E-22	-5.107E-22	-1.303E-07	-1.303E-07	-2.514E-15

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 5.000 θ_D= 0. ρ_0= 18.752

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	5.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	5.0000	0.10000	193.734	5.403E-07	9.996E-01	-2.212E-10	-2.212E-10	2.212E-10
0.20000	5.0000	0.20000	172.332	8.138E-07	9.995E-01	-3.130E-10	-3.130E-10	3.130E-10
0.30000	5.0000	0.30000	150.962	1.147E-06	9.992E-01	-4.427E-10	-4.427E-10	4.427E-10
0.40000	5.0000	0.40000	129.640	1.841E-06	9.989E-01	-6.566E-10	-6.566E-10	6.566E-10
0.50000	5.0000	0.50000	108.395	2.241E-06	9.984E-01	-9.745E-10	-9.745E-10	9.745E-10
0.60000	5.0000	0.60000	87.283	2.241E-06	9.974E-01	-1.566E-09	-1.566E-09	1.566E-09
0.70000	5.0000	0.70000	66.431	9.498E-06	9.958E-01	-2.919E-09	-2.919E-09	2.919E-09
0.80000	5.0000	0.80000	46.191	3.586E-05	9.934E-01	-6.658E-09	-6.658E-09	6.658E-09
0.85000	5.0000	0.85000	36.621	7.663E-05	9.933E-01	-1.136E-08	-1.136E-08	1.136E-08
0.90000	5.0000	0.90000	27.929	2.190E-04	9.986E-01	-2.115E-08	-2.115E-08	2.115E-08
0.92500	5.0000	0.92500	24.214	3.454E-04	1.005E 00	-2.943E-08	-2.943E-08	2.943E-08
0.95000	5.0000	0.95000	21.224	5.661E-04	1.011E 00	-3.973E-08	-3.973E-08	3.973E-08
0.96250	5.0000	0.96250	20.105	7.214E-04	1.011E 00	-4.512E-08	-4.512E-08	4.512E-08
0.97500	5.0000	0.97500	19.299	9.084E-04	1.007E 00	-4.945E-08	-4.945E-08	4.945E-08
0.98125	5.0001	0.98125	19.026	1.012E-03	1.004E 00	-5.100E-08	-5.100E-08	5.100E-08
0.98750	5.0001	0.98750	18.846	1.124E-03	1.002E 00	-5.206E-08	-5.206E-08	5.206E-08
0.99375	5.0001	0.99375	18.760	1.239E-03	1.000E-00	-5.257E-08	-5.257E-08	5.257E-08
1.00000	5.0001	1.00000	18.770	1.356E-03	9.999E-01	-5.251E-08	-5.251E-08	5.251E-08
1.00625	5.0001	1.00625	18.877	1.477E-03	1.002E 00	-5.188E-08	-5.188E-08	5.188E-08
1.01250	5.0001	1.01250	19.078	1.591E-03	1.005E 00	-5.070E-08	-5.070E-08	5.070E-08
1.01875	5.0001	1.01875	19.370	1.699E-03	1.008E 00	-4.905E-08	-4.905E-08	4.905E-08
1.02500	5.0001	1.02500	19.750	1.801E-03	1.012E 00	-4.697E-08	-4.697E-08	4.697E-08
1.03750	5.0001	1.03750	20.752	1.971E-03	1.016E 00	-4.192E-08	-4.192E-08	4.192E-08
1.05000	5.0002	1.05000	22.038	2.100E-03	1.016E 00	-3.622E-08	-3.622E-08	3.622E-08
1.07500	5.0002	1.07500	25.282	2.204E-03	1.010E 00	-2.676E-08	-2.676E-08	2.676E-08
1.10000	5.0002	1.10000	29.163	2.331E-03	1.003E 00	-1.895E-08	-1.895E-08	1.895E-08
1.15000	5.0003	1.15000	38.037	2.433E-03	9.958E-01	-1.035E-08	-1.035E-08	1.035E-08
1.20000	5.0004	1.20000	47.692	2.476E-03	9.943E-01	-6.173E-09	-6.173E-09	6.173E-09
1.30000	5.0006	1.30000	68.003	2.503E-03	9.952E-01	-2.774E-09	-2.774E-09	2.774E-09
1.40000	5.0007	1.40000	88.883	2.515E-03	9.963E-01	-1.504E-09	-1.504E-09	1.504E-09
1.50000	5.0008	1.50000	110.008	2.520E-03	9.971E-01	-9.457E-10	-9.457E-10	9.457E-10
1.60000	5.0010	1.60000	131.261	2.522E-03	9.976E-01	-6.371E-10	-6.371E-10	6.371E-10
1.70000	5.0010	1.70000	152.587	2.525E-03	9.979E-01	-4.312E-10	-4.312E-10	4.312E-10
1.80000	5.0011	1.80000	173.960	2.525E-03	9.981E-01	-3.049E-10	-3.049E-10	3.049E-10
1.90000	5.0012	1.90000	195.364	2.525E-03	9.982E-01	-2.155E-10	-2.155E-10	2.155E-10
2.00000	5.0013	2.00000	216.790	2.525E-03	9.983E-01	-1.540E-10	-1.540E-10	1.540E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 5.000 θ_0= 0. ρ_0= 18.752

z	$_x\mu'-1_0$	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.212E-10	49.901	-9.357E-09	-9.357E-09	9.357E-09	9.357E-09	-1.048E-09	-1.048E-09
0.20000	3.130E-10	99.802	-2.256E-08	-2.256E-08	2.256E-08	2.256E-08	-1.483E-09	-1.483E-09
0.30000	4.427E-10	149.703	-4.123E-08	-4.123E-08	4.123E-08	4.123E-08	-2.097E-09	-2.097E-09
0.40000	6.266E-10	199.605	-6.828E-08	-6.828E-08	6.828E-08	6.828E-08	-3.110E-09	-3.110E-09
0.50000	9.745E-10	249.506	-1.085E-07	-1.085E-07	1.085E-07	1.085E-07	-4.616E-09	-4.616E-09
0.60000	1.566E-09	299.407	-1.698E-07	-1.698E-07	1.698E-07	1.698E-07	-7.416E-09	-7.416E-09
0.70000	2.919E-09	349.308	-2.764E-07	-2.764E-07	2.764E-07	2.764E-07	-1.383E-08	-1.383E-08
0.80000	6.658E-09	399.209	-4.960E-07	-4.960E-07	4.960E-07	4.960E-07	-3.154E-08	-3.154E-08
0.85000	1.136E-08	424.160	-7.124E-07	-7.124E-07	7.126E-07	7.126E-07	-5.383E-08	-5.383E-08
0.90000	2.115E-08	449.110	-1.099E-06	-1.099E-06	1.101E-06	1.101E-06	-1.002E-07	-1.002E-07
0.92500	2.943E-08	461.585	-1.412E-06	-1.412E-06	1.416E-06	1.416E-06	-1.394E-07	-1.394E-07
0.95000	3.973E-08	474.060	-1.836E-06	-1.836E-06	1.847E-06	1.847E-06	-1.882E-07	-1.882E-07
0.96250	4.512E-08	480.298	-2.097E-06	-2.097E-06	2.116E-06	2.116E-06	-2.137E-07	-2.137E-07
0.97500	4.945E-08	486.536	-2.387E-06	-2.387E-06	2.417E-06	2.417E-06	-2.342E-07	-2.342E-07
0.98125	5.100E-08	489.654	-2.540E-06	-2.540E-06	2.578E-06	2.578E-06	-2.416E-07	-2.416E-07
0.98750	5.206E-08	492.773	-2.696E-06	-2.696E-06	2.743E-06	2.744E-06	-2.466E-07	-2.466E-07
0.99375	5.257E-08	495.892	-2.854E-06	-2.854E-06	2.912E-06	2.912E-06	-2.490E-07	-2.490E-07
1.00000	5.251E-08	499.011	-3.012E-06	-3.012E-06	3.082E-06	3.082E-06	-2.487E-07	-2.487E-07
1.00626	5.188E-08	502.130	-3.168E-06	-3.168E-06	3.252E-06	3.252E-06	-2.457E-07	-2.457E-07
1.01250	5.070E-08	505.248	-3.321E-06	-3.321E-06	3.419E-06	3.419E-06	-2.402E-07	-2.402E-07
1.01875	4.905E-08	508.367	-3.470E-06	-3.470E-06	3.582E-06	3.582E-06	-2.323E-07	-2.323E-07
1.02500	4.697E-08	511.486	-3.613E-06	-3.613E-06	3.739E-06	3.739E-06	-2.225E-07	-2.225E-07
1.03750	4.192E-08	517.723	-3.877E-06	-3.877E-06	4.030E-06	4.030E-06	-1.985E-07	-1.985E-07
1.05000	3.622E-08	523.961	-4.109E-06	-4.109E-06	4.285E-06	4.285E-06	-1.715E-07	-1.715E-07
1.07500	2.676E-08	536.436	-4.488E-06	-4.488E-06	4.687E-06	4.687E-06	-1.268E-07	-1.268E-07
1.10000	1.895E-08	548.911	-4.757E-06	-4.757E-06	4.984E-06	4.984E-06	-8.974E-08	-8.974E-08
1.15000	1.035E-08	573.862	-5.095E-06	-5.095E-06	5.354E-06	5.354E-06	-4.903E-08	-4.903E-08
1.20000	6.173E-09	598.812	-5.284E-06	-5.284E-06	5.563E-06	5.563E-06	-2.924E-08	-2.924E-08
1.30000	2.774E-09	648.713	-5.475E-06	-5.475E-06	5.784E-06	5.784E-06	-1.314E-08	-1.314E-08
1.40000	1.504E-09	698.615	-5.563E-06	-5.563E-06	5.900E-06	5.900E-06	-7.125E-09	-7.125E-09
1.50000	9.457E-10	748.516	-5.609E-06	-5.609E-06	5.972E-06	5.972E-06	-4.480E-09	-4.480E-09
1.60000	6.371E-10	798.417	-5.636E-06	-5.636E-06	6.023E-06	6.023E-06	-3.018E-09	-3.018E-09
1.70000	4.312E-10	848.318	-5.649E-06	-5.649E-06	6.063E-06	6.063E-06	-2.042E-09	-2.042E-09
1.80000	3.049E-10	898.219	-5.655E-06	-5.655E-06	6.093E-06	6.093E-06	-1.444E-09	-1.444E-09
1.90000	2.155E-10	948.120	-5.656E-06	-5.656E-06	6.118E-06	6.118E-06	-1.021E-09	-1.021E-09
2.00000	1.540E-10	998.021	-5.653E-06	-5.653E-06	6.138E-06	6.138E-06	-7.293E-10	-7.293E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 5.000 θ_0= 0. ρ_0=18.752

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-3.964E-15
0.10000	1.512E-11	1.511E-11	-9.131E-22	-9.131E-22	-1.049E-11	-1.049E-11	-5.310E-15
0.20000	4.214E-11	4.214E-11	-1.587E-21	-1.587E-21	-2.873E-11	-2.873E-11	-7.576E-15
0.30000	8.909E-11	8.909E-11	-2.754E-21	-2.754E-21	-6.040E-11	-6.040E-11	-1.186E-14
0.40000	1.879E-10	1.879E-10	-4.995E-21	-4.995E-21	-1.167E-10	-1.167E-10	-1.993E-14
0.50000	3.702E-10	3.702E-10	-9.057E-21	-9.057E-21	-2.188E-10	-2.188E-10	-3.931E-14
0.60000	8.266E-10	8.266E-10	-1.824E-20	-1.824E-20	-4.112E-10	-4.112E-10	-8.975E-14
0.70000	2.255E-09	2.255E-09	-4.572E-20	-4.572E-20	-8.478E-10	-8.478E-10	-2.477E-13
0.80000	8.091E-09	8.091E-09	-1.584E-19	-1.584E-19	-2.146E-09	-2.146E-09	-9.611E-13
0.85000	1.838E-08	1.838E-08	-3.490E-19	-3.490E-19	-3.912E-09	-3.912E-09	-2.268E-12
0.90000	4.965E-08	4.966E-08	-8.972E-19	-8.972E-19	-8.117E-09	-8.117E-09	-6.194E-12
0.92500	8.815E-08	8.815E-08	-1.532E-18	-1.532E-18	-1.259E-08	-1.259E-08	-1.048E-11
0.95000	1.625E-07	1.625E-07	-2.395E-18	-2.395E-18	-1.986E-08	-1.986E-08	-1.712E-11
0.96250	2.280E-07	2.280E-07	-2.851E-18	-2.851E-18	-2.477E-08	-2.477E-08	-2.087E-11
0.97500	3.166E-07	3.166E-07	-3.233E-18	-3.233E-18	-3.048E-08	-3.048E-08	-2.434E-11
0.98125	3.713E-07	3.713E-07	-3.373E-18	-3.373E-18	-3.357E-08	-3.357E-08	-2.570E-11
0.98750	4.317E-07	4.317E-07	-3.470E-18	-3.470E-18	-3.677E-08	-3.677E-08	-2.666E-11
0.99375	4.968E-07	4.968E-07	-3.516E-18	-3.516E-18	-4.004E-08	-4.004E-08	-2.714E-11
1.00000	5.632E-07	5.632E-07	-3.511E-18	-3.511E-18	-4.333E-08	-4.333E-08	-2.708E-11
1.00625	6.271E-07	6.271E-07	-3.453E-18	-3.453E-18	-4.659E-08	-4.659E-08	-2.650E-11
1.01250	6.854E-07	6.854E-07	-3.346E-18	-3.346E-18	-4.977E-08	-4.977E-08	-2.544E-11
1.01875	7.363E-07	7.363E-07	-3.197E-18	-3.197E-18	-5.284E-08	-5.284E-08	-2.401E-11
1.02500	7.806E-07	7.806E-07	-3.014E-18	-3.014E-18	-5.574E-08	-5.574E-08	-2.231E-11
1.03750	8.504E-07	8.504E-07	-2.578E-18	-2.578E-18	-6.098E-08	-6.098E-08	-1.858E-11
1.05000	8.977E-07	8.977E-07	-2.110E-18	-2.110E-18	-6.536E-08	-6.536E-08	-1.499E-11
1.07500	9.490E-07	9.490E-07	-1.314E-18	-1.314E-18	-7.169E-08	-7.169E-08	-8.903E-12
1.10000	9.678E-07	9.678E-07	-7.510E-19	-7.510E-19	-7.548E-08	-7.548E-08	-5.338E-12
1.15000	9.596E-07	9.596E-07	-3.040E-19	-3.040E-19	-7.914E-08	-7.914E-08	-1.985E-12
1.20000	9.301E-07	9.301E-07	-1.417E-19	-1.417E-19	-8.070E-08	-8.070E-08	-8.567E-13
1.30000	8.631E-07	8.631E-07	-4.239E-20	-4.239E-20	-8.188E-08	-8.188E-08	-2.269E-13
1.40000	8.020E-07	8.020E-07	-1.720E-20	-1.720E-20	-8.229E-08	-8.229E-08	-8.391E-14
1.50000	7.484E-07	7.484E-07	-8.657E-21	-8.657E-21	-8.247E-08	-8.247E-08	-3.713E-14
1.60000	7.015E-07	7.015E-07	-4.773E-21	-4.773E-21	-8.257E-08	-8.257E-08	-1.910E-14
1.70000	6.602E-07	6.602E-07	-2.641E-21	-2.641E-21	-8.262E-08	-8.262E-08	-1.144E-14
1.80000	6.234E-07	6.234E-07	-1.521E-21	-1.521E-21	-8.265E-08	-8.265E-08	-7.368E-15
1.90000	5.906E-07	5.906E-07	-8.755E-22	-8.755E-22	-8.267E-08	-8.267E-08	-5.198E-15
2.00000	5.610E-07	5.610E-07	-5.030E-22	-5.030E-22	-8.268E-08	-8.268E-08	-3.896E-15

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 6.000 θ_D= 0. ρ_a=22.490

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	6.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	6.0000	0.10000	193.774	6.270E-07	9.994E-01	-2.211E-10	-2.211E-10	2.211E-10
0.20000	6.0000	0.20000	172.422	8.271E-07	9.992E-01	-3.126E-10	-3.126E-10	3.126E-10
0.30000	6.0000	0.30000	151.116	1.441E-06	9.988E-01	-4.416E-10	-4.416E-10	4.416E-10
0.40000	6.0000	0.40000	129.879	2.241E-06	9.983E-01	-6.536E-10	-6.536E-10	6.536E-10
0.50000	6.0000	0.50000	108.752	2.455E-06	9.975E-01	-9.681E-10	-9.681E-10	9.681E-10
0.60000	6.0000	0.60000	87.814	3.202E-06	9.962E-01	-1.545E-09	-1.545E-09	1.545E-09
0.70000	6.0000	0.70000	67.242	9.712E-06	9.942E-01	-2.843E-09	-2.843E-09	2.843E-09
0.80000	6.0000	0.80000	47.513	3.863E-05	9.924E-01	-6.229E-09	-6.229E-09	6.229E-09
0.85000	6.0000	0.85000	38.376	8.324E-05	9.943E-01	-1.012E-08	-1.012E-08	1.012E-08
0.90000	6.0000	0.90000	30.322	2.083E-04	1.003E 00	-1.722E-08	-1.722E-08	1.722E-08
0.92500	6.0000	0.92500	27.011	3.078E-04	1.009E 00	-2.295E-08	-2.295E-08	2.295E-08
0.95000	6.0000	0.95000	24.445	4.619E-04	1.012E 00	-2.883E-08	-2.883E-08	2.883E-08
0.96250	6.0000	0.96250	23.522	5.609E-04	1.010E 00	-3.130E-08	-3.130E-08	3.130E-08
0.97500	6.0000	0.97500	22.879	6.753E-04	1.005E 00	-3.314E-08	-3.314E-08	3.314E-08
0.98125	6.0000	0.98125	22.671	7.368E-04	1.003E 00	-3.376E-08	-3.376E-08	3.376E-08
0.98750	6.0001	0.98750	22.541	8.000E-04	1.001E 00	-3.420E-08	-3.420E-08	3.420E-08
0.99375	6.0001	0.99375	22.491	8.657E-04	9.996E-01	-3.440E-08	-3.440E-08	3.440E-08
1.00000	6.0001	1.00000	22.521	9.298E-04	9.999E-01	-3.428E-08	-3.428E-08	3.428E-08
1.00625	6.0001	1.00625	22.632	9.955E-04	1.001E 00	-3.388E-08	-3.388E-08	3.388E-08
1.01250	6.0001	1.01250	22.821	1.059E-03	1.004E 00	-3.331E-08	-3.331E-08	3.331E-08
1.01875	6.0001	1.01875	23.087	1.122E-03	1.007E 00	-3.253E-08	-3.253E-08	3.253E-08
1.02500	6.0001	1.02500	23.427	1.178E-03	1.011E 00	-3.156E-08	-3.156E-08	3.156E-08
1.03750	6.0001	1.03750	24.317	1.279E-03	1.016E 00	-2.916E-08	-2.916E-08	2.916E-08
1.05000	6.0001	1.05000	25.462	1.363E-03	1.018E 00	-2.634E-08	-2.634E-08	2.634E-08
1.07500	6.0001	1.07500	28.384	1.492E-03	1.015E 00	-2.031E-08	-2.031E-08	2.031E-0
1.10000	6.0002	1.10000	31.951	1.574E-03	1.008E 00	-1.546E-08	-1.546E-08	1.546E-08
1.15000	6.0002	1.15000	40.310	1.667E-03	9.988E-01	-8.952E-09	-8.952E-09	8.952E-09
1.20000	6.0003	1.20000	49.602	1.709E-03	9.951E-01	-5.607E-09	-5.607E-09	5.607E-09
1.30000	6.0004	1.30000	69.468	1.740E-03	9.945E-01	-2.645E-09	-2.645E-09	2.645E-09
1.40000	6.0005	1.40000	90.095	1.754E-03	9.955E-01	-1.459E-09	-1.459E-09	1.459E-09
1.50000	6.0006	1.50000	111.059	1.759E-03	9.964E-01	-9.274E-10	-9.274E-10	9.274E-10
1.60000	6.0007	1.60000	132.201	1.764E-03	9.970E-01	-6.260E-10	-6.260E-10	6.260E-10
1.70000	6.0007	1.70000	153.447	1.766E-03	9.975E-01	-4.252E-10	-4.252E-10	4.252E-10
1.80000	6.0008	1.80000	174.759	1.771E-03	9.978E-01	-3.009E-10	-3.009E-10	3.009E-10
1.90000	6.0008	1.90000	196.116	1.774E-03	9.981E-01	-2.128E-10	-2.128E-10	2.128E-10
2.00000	6.0009	2.00000	217.504	1.776E-03	9.983E-01	-1.523E-10	-1.523E-10	1.523E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 6.000 θ_D= 0. ρ_a=22.490

z	$_x\mu'$-1.0	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.211E-10	49.901	-9.354E-09	-9.354E-09	9.354E-09	9.354E-09	-1.047E-09	-1.047E-09
0.20000	3.126E-10	99.802	-2.254E-08	-2.254E-08	2.254E-08	2.254E-08	-1.481E-09	-1.481E-09
0.30000	4.416E-10	149.703	-4.117E-08	-4.117E-08	4.117E-08	4.117E-08	-2.092E-09	-2.092E-09
0.40000	6.536E-10	199.605	-6.813E-08	-6.813E-08	6.813E-08	6.813E-08	-3.096E-09	-3.096E-09
0.50000	9.681E-10	249.506	-1.081E-07	-1.081E-07	1.081E-07	1.081E-07	-4.586E-09	-4.586E-09
0.60000	1.545E-09	299.407	-1.688E-07	-1.688E-07	1.688E-07	1.688E-07	-7.319E-09	-7.319E-09
0.70000	2.843E-09	349.308	-2.733E-07	-2.733E-07	2.733E-07	2.733E-07	-1.347E-08	-1.347E-08
0.80000	6.229E-09	399.209	-4.829E-07	-4.829E-07	4.830E-07	4.830E-07	-2.950E-08	-2.950E-08
0.85000	1.012E-08	424.160	-6.814E-07	-6.814E-07	6.816E-07	6.816E-07	-4.794E-08	-4.794E-08
0.90000	1.722E-08	449.110	-1.017E-06	-1.017E-06	1.018E-06	1.018E-06	-8.155E-08	-8.155E-08
0.92500	2.295E-08	461.585	-1.265E-06	-1.265E-06	1.268E-06	1.268E-06	-1.087E-07	-1.087E-07
0.95000	2.883E-08	474.061	-1.587E-06	-1.587E-06	1.594E-06	1.594E-06	-1.366E-07	-1.366E-07
0.96250	3.130E-08	480.298	-1.772E-06	-1.772E-06	1.784E-06	1.784E-06	-1.482E-07	-1.482E-07
0.97500	3.314E-08	486.536	-1.971E-06	-1.971E-06	1.988E-06	1.988E-06	-1.570E-07	-1.570E-07
0.98125	3.376E-08	489.655	-2.074E-06	-2.074E-06	2.094E-06	2.094E-06	-1.599E-07	-1.599E-07
0.98750	3.420E-08	492.773	-2.178E-06	-2.178E-06	2.202E-06	2.202E-06	-1.620E-07	-1.620E-07
0.99375	3.440E-08	495.892	-2.283E-06	-2.283E-06	2.311E-06	2.311E-06	-1.629E-07	-1.629E-07
1.00000	3.428E-08	499.011	-2.388E-06	-2.388E-06	2.421E-06	2.421E-06	-1.624E-07	-1.624E-07
1.00625	3.388E-08	502.130	-2.492E-06	-2.492E-06	2.530E-06	2.530E-06	-1.605E-07	-1.605E-07
1.01250	3.331E-08	505.249	-2.594E-06	-2.594E-06	2.637E-06	2.637E-06	-1.578E-07	-1.578E-07
1.01875	3.253E-08	508.367	-2.694E-06	-2.694E-06	2.743E-06	2.743E-06	-1.541E-07	-1.541E-07
1.02500	3.156E-08	511.486	-2.791E-06	-2.791E-06	2.845E-06	2.845E-06	-1.495E-07	-1.495E-07
1.03750	2.916E-08	517.724	-2.976E-06	-2.976E-06	3.040E-06	3.040E-06	-1.381E-07	-1.381E-07
1.05000	2.634E-08	523.961	-3.144E-06	-3.144E-06	3.218E-06	3.218E-06	-1.247E-07	-1.247E-07
1.07500	2.031E-08	536.436	-3.427E-06	-3.427E-06	3.517E-06	3.518E-06	-9.618E-08	-9.618E-08
1.10000	1.546E-08	548.912	-3.640E-06	-3.640E-06	3.744E-06	3.744E-06	-7.324E-08	-7.324E-08
1.15000	8.952E-09	573.862	-3.930E-06	-3.930E-06	4.052E-06	4.052E-06	-4.240E-08	-4.240E-08
1.20000	5.607E-09	598.813	-4.104E-06	-4.104E-06	4.237E-06	4.237E-06	-2.656E-08	-2.656E-08
1.30000	2.645E-09	648.714	-4.288E-06	-4.288E-06	4.438E-06	4.438E-06	-1.253E-08	-1.253E-08
1.40000	1.459E-09	698.615	-4.379E-06	-4.379E-06	4.542E-06	4.542E-06	-6.913E-09	-6.913E-09
1.50000	9.274E-10	748.516	-4.430E-06	-4.430E-06	4.606E-06	4.606E-06	-4.393E-09	-4.393E-09
1.60000	6.260E-10	798.417	-4.462E-06	-4.462E-06	4.651E-06	4.651E-06	-2.965E-09	-2.965E-09
1.70000	4.252E-10	848.318	-4.481E-06	-4.481E-06	4.683E-06	4.683E-06	-2.014E-09	-2.014E-09
1.80000	3.009E-10	898.219	-4.493E-06	-4.493E-06	4.707E-06	4.707E-06	-1.425E-09	-1.425E-09
1.90000	2.128E-10	948.121	-4.499E-06	-4.499E-06	4.726E-06	4.726E-06	-1.008E-09	-1.008E-09
2.00000	1.523E-10	998.022	-4.502E-06	-4.502E-06	4.742E-06	4.742E-06	-7.213E-10	-7.213E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 6.000 θ_D= 0. ρ_a=22.490

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-5.701E-15
0.10000	1.811E-11	1.811E-11	-9.122E-22	-9.122E-22	-1.048E-11	-1.048E-11	-7.634E-15
0.20000	5.045E-11	5.046E-11	-1.583E-21	-1.583E-21	-2.869E-11	-2.869E-11	-1.088E-14
0.30000	1.066E-10	1.066E-10	-2.743E-21	-2.743E-21	-6.026E-11	-6.026E-11	-1.699E-14
0.40000	2.242E-10	2.242E-10	-4.962E-21	-4.962E-21	-1.162E-10	-1.162E-10	-2.849E-14
0.50000	4.406E-10	4.406E-10	-8.967E-21	-8.967E-21	-2.175E-10	-2.175E-10	-5.581E-14
0.60000	9.737E-10	9.738E-10	-1.789E-20	-1.789E-20	-4.070E-10	-4.070E-10	-1.262E-13
0.70000	2.607E-09	2.607E-09	-4.397E-20	-4.397E-20	-8.305E-10	-8.305E-10	-3.401E-13
0.80000	8.878E-09	8.878E-09	-1.436E-19	-1.436E-19	-2.039E-09	-2.039E-09	-1.247E-12
0.85000	1.918E-08	1.918E-08	-2.941E-19	-2.941E-19	-3.591E-09	-3.591E-09	-2.765E-12
0.90000	4.754E-08	4.754E-08	-6.452E-19	-6.452E-19	-6.975E-09	-6.975E-09	-6.682E-12
0.92500	7.937E-08	7.938E-08	-1.024E-18	-1.024E-18	-1.005E-08	-1.005E-08	-1.004E-11
0.95000	1.361E-07	1.361E-07	-1.482E-18	-1.482E-18	-1.473E-08	-1.473E-08	-1.454E-11
0.96250	1.818E-07	1.818E-07	-1.693E-18	-1.693E-18	-1.770E-08	-1.770E-08	-1.687E-11
0.97500	2.375E-07	2.375E-07	-1.857E-18	-1.857E-18	-2.103E-08	-2.103E-08	-1.882E-11
0.98125	2.712E-07	2.712E-07	-1.913E-18	-1.913E-18	-2.279E-08	-2.279E-08	-1.951E-11
0.98750	3.074E-07	3.074E-07	-1.951E-18	-1.951E-18	-2.460E-08	-2.460E-08	-1.994E-11
0.99375	3.449E-07	3.449E-07	-1.966E-18	-1.966E-18	-2.644E-08	-2.644E-08	-2.009E-11
1.00000	3.825E-07	3.825E-07	-1.957E-18	-1.957E-18	-2.827E-08	-2.827E-08	-2.000E-11
1.00625	4.188E-07	4.188E-07	-1.924E-18	-1.924E-18	-3.009E-08	-3.009E-08	-1.965E-11
1.01250	4.527E-07	4.527E-07	-1.873E-18	-1.873E-18	-3.186E-08	-3.186E-08	-1.901E-11
1.01875	4.833E-07	4.833E-07	-1.802E-18	-1.802E-18	-3.358E-08	-3.358E-08	-1.816E-11
1.02500	5.104E-07	5.104E-07	-1.716E-18	-1.716E-18	-3.523E-08	-3.523E-08	-1.715E-11
1.03750	5.541E-07	5.541E-07	-1.509E-18	-1.509E-18	-3.825E-08	-3.825E-08	-1.484E-11
1.05000	5.850E-07	5.850E-07	-1.280E-18	-1.280E-18	-4.086E-08	-4.086E-08	-1.247E-11
1.07500	6.232E-07	6.232E-07	-8.403E-19	-8.403E-19	-4.480E-08	-4.480E-08	-8.427E-12
1.10000	6.405E-07	6.405E-07	-5.504E-19	-5.504E-19	-4.733E-08	-4.733E-08	-5.440E-12
1.15000	6.427E-07	6.427E-07	-2.453E-19	-2.453E-19	-5.017E-08	-5.017E-08	-2.330E-12
1.20000	6.271E-07	6.271E-07	-1.229E-19	-1.229E-19	-5.151E-08	-5.151E-08	-1.072E-12
1.30000	5.847E-07	5.847E-07	-3.950E-20	-3.950E-20	-5.257E-08	-5.257E-08	-3.012E-13
1.40000	5.439E-07	5.439E-07	-1.646E-20	-1.646E-20	-5.295E-08	-5.295E-08	-1.147E-13
1.50000	5.078E-07	5.078E-07	-8.406E-21	-8.406E-21	-5.313E-08	-5.313E-08	-5.145E-14
1.60000	4.760E-07	4.760E-07	-4.649E-21	-4.649E-21	-5.322E-08	-5.322E-08	-2.679E-14
1.70000	4.479E-07	4.479E-07	-2.583E-21	-2.583E-21	-5.327E-08	-5.327E-08	-1.613E-14
1.80000	4.230E-07	4.230E-07	-1.490E-21	-1.490E-21	-5.330E-08	-5.330E-08	-1.045E-14
1.90000	4.007E-07	4.007E-07	-8.587E-22	-8.587E-22	-5.332E-08	-5.332E-08	-7.396E-15
2.00000	3.806E-07	3.806E-07	-4.938E-22	-4.938E-22	-5.333E-08	-5.333E-08	-5.556E-15

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 7.000 θ_0= 0. ρ_0= 26.221

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	7.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	7.0000	0.10000	193.821	7.137E-07	9.993E-01	-2.209E-10	-2.209E-10	2.209E-10
0.20000	7.0000	0.20000	172.528	9.472E-07	9.991E-01	-3.120E-10	-3.120E-10	3.120E-10
0.30000	7.0000	0.30000	151.297	1.281E-06	9.987E-01	-4.403E-10	-4.403E-10	4.403E-10
0.40000	7.0000	0.40000	130.160	1.281E-06	9.982E-01	-6.502E-10	-6.502E-10	6.502E-10
0.50000	7.0000	0.50000	109.171	3.468E-06	9.973E-01	-9.606E-10	-9.606E-10	9.606E-10
0.60000	7.0000	0.60000	88.437	5.229E-06	9.961E-01	-1.521E-09	-1.521E-09	1.521E-09
0.70000	7.0000	0.70000	68.187	1.110E-05	9.944E-01	-2.757E-09	-2.757E-09	2.757E-09
0.80000	7.0000	0.80000	49.029	4.034E-05	9.942E-01	-5.771E-09	-5.771E-09	5.771E-09
0.85000	7.0000	0.85000	40.351	8.410E-05	9.974E-01	-8.934E-09	-8.934E-09	8.934E-09
0.90000	7.0000	0.90000	32.925	1.861E-04	1.005E 00	-1.450E-08	-1.450E-08	1.450E-08
0.92500	7.0000	0.92500	29.980	2.634E-04	1.008E 00	-1.762E-08	-1.762E-08	1.762E-08
0.95000	7.0000	0.95000	27.773	3.407E-04	1.008E 00	-2.144E-08	-2.144E-08	2.144E-08
0.96250	7.0000	0.96250	27.007	3.748E-04	1.005E 00	-2.295E-08	-2.295E-08	2.295E-08
0.97500	7.0000	0.97500	26.492	4.542E-04	1.002E 00	-2.403E-08	-2.403E-08	2.403E-08
0.98125	7.0000	0.98125	26.334	4.952E-04	1.001E 00	-2.437E-08	-2.437E-08	2.437E-08
0.98750	7.0000	0.98750	26.244	5.345E-04	9.999E-01	-2.457E-08	-2.457E-08	2.457E-08
0.99375	7.0000	0.99375	26.223	5.729E-04	9.995E-01	-2.461E-08	-2.461E-08	2.461E-08
1.00000	7.0001	1.00000	26.270	6.139E-04	9.999E-01	-2.451E-08	-2.451E-08	2.451E-08
1.00625	7.0001	1.00625	26.387	6.514E-04	1.001E 00	-2.426E-08	-2.426E-08	2.426E-08
1.01250	7.0001	1.01250	26.571	6.898E-04	1.003E 00	-2.386E-08	-2.386E-08	2.386E-08
1.01875	7.0001	1.01875	26.821	7.266E-04	1.005E 00	-2.334E-08	-2.334E-08	2.334E-08
1.02500	7.0001	1.02500	27.135	7.624E-04	1.007E 00	-2.269E-08	-2.269E-08	2.269E-08
1.03750	7.0001	1.03750	27.948	8.299E-04	1.011E 00	-2.111E-08	-2.111E-08	2.111E-08
1.05000	7.0001	1.05000	28.989	8.862E-04	1.013E 00	-1.924E-08	-1.924E-08	1.924E-08
1.07500	7.0001	1.07500	31.659	9.750E-04	1.014E 00	-1.576E-08	-1.576E-08	1.576E-08
1.10000	7.0001	1.10000	34.958	1.038E-03	1.010E 00	-1.268E-08	-1.268E-08	1.268E-08
1.15000	7.0002	1.15000	42.840	1.113E-03	1.002E 00	-7.882E-09	-7.882E-09	7.882E-09
1.20000	7.0002	1.20000	51.768	1.151E-03	9.979E-01	-5.099E-09	-5.099E-09	5.099E-09
1.30000	7.0003	1.30000	71.159	1.180E-03	9.956E-01	-2.504E-09	-2.504E-09	2.504E-09
1.40000	7.0004	1.40000	91.505	1.192E-03	9.959E-01	-1.409E-09	-1.409E-09	1.409E-09
1.50000	7.0004	1.50000	112.288	1.195E-03	9.966E-01	-9.065E-10	-9.065E-10	9.065E-10
1.60000	7.0005	1.60000	133.304	1.199E-03	9.972E-01	-6.133E-10	-6.133E-10	6.133E-10
1.70000	7.0005	1.70000	154.457	1.200E-03	9.976E-01	-4.183E-10	-4.183E-10	4.183E-10
1.80000	7.0005	1.80000	175.699	1.204E-03	9.980E-01	-2.964E-10	-2.964E-10	2.964E-10
1.90000	7.0006	1.90000	197.000	1.207E-03	9.982E-01	-2.098E-10	-2.098E-10	2.098E-10
2.00000	7.0006	2.00000	218.343	1.207E-03	9.984E-01	-1.503E-10	-1.503E-10	1.503E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 7.000 θ_D= 0. ρ_a= 26.221

z	$_x\mu'-1$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.209E-10	49.901	-9.350E-09	-9.350E-09	9.350E-09	9.350E-09	-1.046E-09	-1.046E-09
0.20000	3.120E-10	99.802	-2.252E-08	-2.252E-08	2.252E-08	2.252E-08	-1.478E-09	-1.478E-09
0.30000	4.403E-10	149.703	-4.111E-08	-4.111E-08	4.111E-08	4.111E-08	-2.086E-09	-2.086E-09
0.40000	6.502E-10	199.605	-6.795E-08	-6.795E-08	6.795E-08	6.795E-08	-3.080E-09	-3.080E-09
0.50000	9.606E-10	249.506	-1.076E-07	-1.076E-07	1.076E-07	1.076E-07	-4.550E-09	-4.550E-09
0.60000	1.521E-09	299.407	-1.676E-07	-1.676E-07	1.676E-07	1.676E-07	-7.205E-09	-7.205E-09
0.70000	2.757E-09	349.308	-2.696E-07	-2.696E-07	2.696E-07	2.696E-07	-1.306E-08	-1.306E-08
0.80000	5.771E-09	399.209	-4.690E-07	-4.690E-07	4.691E-07	4.691E-07	-2.734E-08	-2.734E-08
0.85000	8.934E-09	424.160	-6.502E-07	-6.502E-07	6.504E-07	6.504E-07	-4.232E-08	-4.232E-08
0.90000	1.450E-08	449.110	-9.384E-07	-9.384E-07	9.396E-07	9.396E-07	-6.869E-08	-6.869E-08
0.92500	1.762E-08	461.585	-1.138E-06	-1.138E-06	1.141E-06	1.141E-06	-8.345E-08	-8.345E-08
0.95000	2.144E-08	474.061	-1.382E-06	-1.382E-06	1.386E-06	1.386E-06	-1.016E-07	-1.016E-07
0.96250	2.295E-08	480.298	-1.520E-06	-1.520E-06	1.525E-06	1.525E-06	-1.087E-07	-1.087E-07
0.97500	2.403E-08	486.536	-1.665E-06	-1.665E-06	1.673E-06	1.673E-06	-1.138E-07	-1.138E-07
0.98125	2.437E-08	489.655	-1.740E-06	-1.740E-06	1.749E-06	1.749E-06	-1.154E-07	-1.154E-07
0.98750	2.457E-08	492.774	-1.815E-06	-1.815E-06	1.826E-06	1.826E-06	-1.164E-07	-1.164E-07
0.99375	2.461E-08	495.892	-1.891E-06	-1.891E-06	1.904E-06	1.904E-06	-1.166E-07	-1.166E-07
1.00000	2.451E-08	499.011	-1.967E-06	-1.967E-06	1.981E-06	1.981E-06	-1.161E-07	-1.161E-07
1.00625	2.426E-08	502.130	-2.042E-06	-2.042E-06	2.058E-06	2.058E-06	-1.149E-07	-1.149E-07
1.01250	2.386E-08	505.249	-2.116E-06	-2.116E-06	2.134E-06	2.134E-06	-1.130E-07	-1.130E-07
1.01875	2.334E-08	508.368	-2.189E-06	-2.189E-06	2.209E-06	2.209E-06	-1.105E-07	-1.105E-07
1.02500	2.269E-08	511.486	-2.259E-06	-2.259E-06	2.282E-06	2.282E-06	-1.075E-07	-1.075E-07
1.03750	2.111E-08	517.724	-2.394E-06	-2.394E-06	2.421E-06	2.421E-06	-9.999E-08	-9.999E-08
1.05000	1.924E-08	523.962	-2.518E-06	-2.518E-06	2.549E-06	2.549E-06	-9.114E-08	-9.114E-08
1.07500	1.576E-08	536.437	-2.731E-06	-2.731E-06	2.770E-06	2.770E-06	-7.467E-08	-7.467E-08
1.10000	1.268E-08	548.912	-2.905E-06	-2.905E-06	2.950E-06	2.950E-06	-6.006E-08	-6.006E-08
1.15000	7.882E-09	573.862	-3.151E-06	-3.151E-06	3.205E-06	3.205E-06	-3.733E-08	-3.733E-08
1.20000	5.099E-09	598.813	-3.307E-06	-3.307E-06	3.367E-06	3.367E-06	-2.415E-08	-2.415E-08
1.30000	2.504E-09	648.714	-3.481E-06	-3.481E-06	3.550E-06	3.550E-06	-1.186E-08	-1.186E-08
1.40000	1.409E-09	698.615	-3.571E-06	-3.571E-06	3.647E-06	3.647E-06	-6.673E-09	-6.673E-09
1.50000	9.065E-10	748.516	-3.624E-06	-3.624E-06	3.706E-06	3.706E-06	-4.294E-09	-4.294E-09
1.60000	6.133E-10	798.417	-3.659E-06	-3.659E-06	3.746E-06	3.746E-06	-2.905E-09	-2.905E-09
1.70000	4.183E-10	848.319	-3.681E-06	-3.681E-06	3.774E-06	3.774E-06	-1.981E-09	-1.981E-09
1.80000	2.964E-10	898.220	-3.696E-06	-3.696E-06	3.795E-06	3.795E-06	-1.404E-09	-1.404E-09
1.90000	2.098E-10	948.121	-3.705E-06	-3.705E-06	3.811E-06	3.811E-06	-9.938E-10	-9.938E-10
2.00000	1.503E-10	998.022	-3.712E-06	-3.712E-06	3.822E-06	3.822E-06	-7.120E-10	-7.120E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 7.000 θ_D= 0. ρ_a= 26.221

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-7.750E-15
0.10000	2.111E-11	2.110E-11	-9.111E-22	-9.111E-22	-1.048E-11	-1.048E-11	-1.037E-14
0.20000	5.873E-11	5.873E-11	-1.579E-21	-1.579E-21	-2.865E-11	-2.865E-11	-1.476E-14
0.30000	1.239E-10	1.239E-10	-2.731E-21	-2.731E-21	-6.010E-11	-6.010E-11	-2.300E-14
0.40000	2.601E-10	2.601E-10	-4.923E-21	-4.923E-21	-1.157E-10	-1.157E-10	-3.842E-14
0.50000	5.095E-10	5.095E-10	-8.862E-21	-8.862E-21	-2.160E-10	-2.160E-10	-7.471E-14
0.60000	1.114E-09	1.114E-09	-1.749E-20	-1.749E-20	-4.021E-10	-4.021E-10	-1.669E-13
0.70000	2.928E-09	2.928E-09	-4.201E-20	-4.201E-20	-8.104E-10	-8.104E-10	-4.384E-13
0.80000	9.502E-09	9.502E-09	-1.282E-19	-1.282E-19	-1.928E-09	-1.928E-09	-1.516E-12
0.85000	1.959E-08	1.959E-08	-2.445E-19	-2.445E-19	-3.283E-09	-3.283E-09	-3.151E-12
0.90000	4.487E-08	4.487E-08	-5.005E-19	-5.005E-19	-5.983E-09	-5.983E-09	-6.579E-12
0.92500	7.062E-08	7.062E-08	-6.677E-19	-6.677E-19	-8.163E-09	-8.163E-09	-9.503E-12
0.95000	1.126E-07	1.126E-07	-9.175E-19	-9.175E-19	-1.113E-08	-1.113E-08	-1.235E-11
0.96250	1.411E-07	1.411E-07	-1.025E-18	-1.025E-18	-1.294E-08	-1.294E-08	-1.365E-11
0.97500	1.742E-07	1.742E-07	-1.104E-18	-1.104E-18	-1.494E-08	-1.494E-08	-1.464E-11
0.98125	1.923E-07	1.923E-07	-1.129E-18	-1.129E-18	-1.599E-08	-1.599E-08	-1.496E-11
0.98750	2.111E-07	2.111E-07	-1.144E-18	-1.144E-18	-1.705E-08	-1.705E-08	-1.515E-11
0.99375	2.303E-07	2.303E-07	-1.147E-18	-1.147E-18	-1.812E-08	-1.812E-08	-1.519E-11
1.00000	2.494E-07	2.494E-07	-1.139E-18	-1.139E-18	-1.919E-08	-1.919E-08	-1.509E-11
1.00625	2.679E-07	2.679E-07	-1.120E-18	-1.120E-18	-2.025E-08	-2.025E-08	-1.485E-11
1.01250	2.853E-07	2.853E-07	-1.091E-18	-1.091E-18	-2.128E-08	-2.128E-08	-1.448E-11
1.01875	3.015E-07	3.015E-07	-1.052E-18	-1.052E-18	-2.229E-08	-2.229E-08	-1.400E-11
1.02500	3.162E-07	3.162E-07	-1.006E-18	-1.006E-18	-2.325E-08	-2.325E-08	-1.342E-11
1.03750	3.418E-07	3.418E-07	-8.947E-19	-8.947E-19	-2.503E-08	-2.503E-08	-1.209E-11
1.05000	3.623E-07	3.623E-07	-7.701E-19	-7.701E-19	-2.659E-08	-2.659E-08	-1.065E-11
1.07500	3.897E-07	3.897E-07	-5.663E-19	-5.663E-19	-2.905E-08	-2.905E-08	-7.663E-12
1.10000	4.039E-07	4.039E-07	-4.105E-19	-4.105E-19	-3.087E-08	-3.087E-08	-5.256E-12
1.15000	4.102E-07	4.102E-07	-2.032E-19	-2.032E-19	-3.305E-08	-3.305E-08	-2.497E-12
1.20000	4.033E-07	4.033E-07	-1.064E-19	-1.064E-19	-3.417E-08	-3.417E-08	-1.240E-12
1.30000	3.787E-07	3.787E-07	-3.642E-20	-3.642E-20	-3.511E-08	-3.511E-08	-3.744E-13
1.40000	3.532E-07	3.532E-07	-1.563E-20	-1.563E-20	-3.547E-08	-3.547E-08	-1.471E-13
1.50000	3.301E-07	3.301E-07	-8.121E-21	-8.121E-21	-3.564E-08	-3.564E-08	-6.698E-14
1.60000	3.095E-07	3.095E-07	-4.508E-21	-4.508E-21	-3.573E-08	-3.573E-08	-3.536E-14
1.70000	2.914E-07	2.914E-07	-2.517E-21	-2.517E-21	-3.578E-08	-3.578E-08	-2.143E-14
1.80000	2.752E-07	2.752E-07	-1.455E-21	-1.455E-21	-3.581E-08	-3.581E-08	-1.396E-14
1.90000	2.607E-07	2.607E-07	-8.393E-22	-8.393E-22	-3.583E-08	-3.583E-08	-9.927E-15
2.00000	2.476E-07	2.476E-07	-4.832E-22	-4.832E-22	-3.584E-08	-3.584E-08	-7.477E-15

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 8.000 θ_D= 0. ρ_a=29.944

z	ϕ	z_r	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	8.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	8.0000	0.10000	193.876	6.737E-07	9.994E-01	-2.207E-10	-2.207E-10	2.207E-10
0.20000	8.0000	0.20000	172.650	1.121E-06	9.992E-01	-3.114E-10	-3.114E-10	3.114E-10
0.30000	8.0000	0.30000	151.506	1.628E-06	9.989E-01	-4.388E-10	-4.388E-10	4.388E-10
0.40000	8.0000	0.40000	130.484	2.615E-06	9.985E-01	-6.463E-10	-6.463E-10	6.463E-10
0.50000	8.0000	0.50000	109.653	3.949E-06	9.979E-01	-9.520E-10	-9.520E-10	9.520E-10
0.60000	8.0000	0.60000	89.149	5.870E-06	9.969E-01	-1.494E-09	-1.494E-09	1.494E-09
0.70000	8.0000	0.70000	69.261	9.392E-06	9.958E-01	-2.663E-09	-2.663E-09	2.663E-09
0.80000	8.0000	0.80000	50.721	5.357E-05	9.963E-01	-5.331E-09	-5.331E-09	5.331E-09
0.85000	8.0000	0.85000	42.515	9.135E-05	9.992E-01	-8.012E-09	-8.012E-09	8.012E-09
0.90000	8.0000	0.90000	35.692	1.682E-04	1.004E 00	-1.208E-08	-1.208E-08	1.208E-08
0.92500	8.0000	0.92500	33.074	2.211E-04	1.005E 00	-1.436E-08	-1.436E-08	1.436E-08
0.95000	8.0000	0.95000	31.173	2.758E-04	1.004E 00	-1.628E-08	-1.628E-08	1.628E-08
0.96250	8.0000	0.96250	30.535	3.065E-04	1.002E 00	-1.698E-08	-1.698E-08	1.698E-08
0.97500	8.0000	0.97500	30.124	3.560E-04	1.001E 00	-1.744E-08	-1.744E-08	1.744E-08
0.98125	8.0000	0.98125	30.007	3.816E-04	1.000E 00	-1.758E-08	-1.758E-08	1.758E-08
0.98750	8.0000	0.98750	29.950	4.073E-04	9.996E-01	-1.766E-08	-1.766E-08	1.766E-08
0.99375	8.0000	0.99375	29.954	4.312E-04	9.996E-01	-1.766E-08	-1.766E-08	1.766E-08
1.00000	8.0000	1.00000	30.018	4.568E-04	9.999E-01	-1.757E-08	-1.757E-08	1.757E-08
1.00625	8.0000	1.00625	30.141	4.815E-04	1.001E 00	-1.742E-08	-1.742E-08	1.742E-08
1.01250	8.0000	1.01250	30.324	5.063E-04	1.001E 00	-1.721E-08	-1.721E-08	1.721E-08
1.01875	8.0001	1.01875	30.565	5.302E-04	1.003E 00	-1.694E-08	-1.694E-08	1.694E-08
1.02500	8.0001	1.02500	30.863	5.490E-04	1.004E 00	-1.661E-08	-1.661E-08	1.661E-08
1.03750	8.0001	1.03750	31.622	5.917E-04	1.006E 00	-1.580E-08	-1.580E-08	1.580E-08
1.05000	8.0001	1.05000	32.586	6.318E-04	1.008E 00	-1.483E-08	-1.483E-08	1.483E-08
1.07500	8.0001	1.07500	35.058	6.933E-04	1.010E 00	-1.260E-08	-1.260E-08	1.260E-08
1.10000	8.0001	1.10000	38.133	7.342E-04	1.008E 00	-1.029E-08	-1.029E-08	1.029E-08
1.15000	8.0001	1.15000	45.583	7.906E-04	1.003E 00	-6.865E-09	-6.865E-09	6.865E-09
1.20000	8.0002	1.20000	54.157	8.247E-04	9.996E-01	-4.608E-09	-4.608E-09	4.608E-09
1.30000	8.0002	1.30000	73.060	8.555E-04	9.971E-01	-2.354E-09	-2.354E-09	2.354E-09
1.40000	8.0003	1.40000	93.104	8.640E-04	9.971E-01	-1.354E-09	-1.354E-09	1.354E-09
1.50000	8.0003	1.50000	113.688	8.657E-04	9.975E-01	-8.832E-10	-8.832E-10	8.832E-10
1.60000	8.0003	1.60000	134.563	8.691E-04	9.979E-01	-5.991E-10	-5.991E-10	5.991E-10
1.70000	8.0004	1.70000	155.613	8.743E-04	9.982E-01	-4.105E-10	-4.105E-10	4.105E-10
1.80000	8.0004	1.80000	176.776	8.760E-04	9.985E-01	-2.913E-10	-2.913E-10	2.913E-10
1.90000	8.0004	1.90000	198.014	8.811E-04	9.987E-01	-2.064E-10	-2.064E-10	2.064E-10
2.00000	8.0004	2.00000	219.307	8.811E-04	9.988E-01	-1.481E-10	-1.481E-10	1.481E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 8.000 θ_D= 0. ρ_a= 29.944

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.207E-10	49.901	-9.346E-09	-9.346E-09	9.346E-09	9.346E-09	-1.045E-09	-1.045E-09
0.20000	3.114E-10	99.802	-2.250E-08	-2.250E-08	2.250E-08	2.250E-08	-1.475E-09	-1.475E-09
0.30000	4.388E-10	149.703	-4.104E-08	-4.104E-08	4.104E-08	4.104E-08	-2.078E-09	-2.078E-09
0.40000	6.463E-10	199.605	-6.774E-08	-6.774E-08	6.774E-08	6.774E-08	-3.061E-09	-3.061E-09
0.50000	9.520E-10	249.506	-1.071E-07	-1.071E-07	1.071E-07	1.071E-07	-4.509E-09	-4.509E-09
0.60000	1.494E-09	299.407	-1.663E-07	-1.663E-07	1.663E-07	1.663E-07	-7.078E-09	-7.078E-09
0.70000	2.663E-09	349.308	-2.656E-07	-2.656E-07	2.656E-07	2.656E-07	-1.261E-08	-1.261E-08
0.80000	5.331E-09	399.209	-4.542E-07	-4.542E-07	4.543E-07	4.543E-07	-2.525E-08	-2.525E-08
0.85000	8.012E-09	424.160	-6.186E-07	-6.186E-07	6.188E-07	6.189E-07	-3.795E-08	-3.795E-08
0.90000	1.208E-08	449.110	-8.648E-07	-8.648E-07	8.658E-07	8.658E-07	-5.723E-08	-5.723E-08
0.92500	1.436E-08	461.585	-1.030E-06	-1.030E-06	1.031E-06	1.031E-06	-6.801E-08	-6.801E-08
0.95000	1.628E-08	474.061	-1.221E-06	-1.221E-06	1.223E-06	1.223E-06	-7.710E-08	-7.710E-08
0.96250	1.698E-08	480.298	-1.324E-06	-1.324E-06	1.328E-06	1.328E-06	-8.042E-08	-8.042E-08
0.97500	1.744E-08	486.536	-1.431E-06	-1.431E-06	1.436E-06	1.436E-06	-8.262E-08	-8.262E-08
0.98125	1.758E-08	489.655	-1.485E-06	-1.485E-06	1.491E-06	1.491E-06	-8.326E-08	-8.326E-08
0.98750	1.766E-08	492.774	-1.540E-06	-1.540E-06	1.546E-06	1.546E-06	-8.367E-08	-8.367E-08
0.99375	1.766E-08	495.892	-1.595E-06	-1.595E-06	1.602E-06	1.602E-06	-8.364E-08	-8.364E-08
1.00000	1.757E-08	499.011	-1.649E-06	-1.649E-06	1.657E-06	1.657E-06	-8.321E-08	-8.321E-08
1.00625	1.742E-08	502.130	-1.703E-06	-1.703E-06	1.712E-06	1.712E-06	-8.253E-08	-8.253E-08
1.01250	1.721E-08	505.249	-1.757E-06	-1.757E-06	1.767E-06	1.767E-06	-8.154E-08	-8.154E-08
1.01875	1.694E-08	508.368	-1.809E-06	-1.809E-06	1.820E-06	1.820E-06	-8.025E-08	-8.025E-08
1.02500	1.661E-08	511.486	-1.861E-06	-1.861E-06	1.873E-06	1.873E-06	-7.869E-08	-7.869E-08
1.03750	1.580E-08	517.724	-1.962E-06	-1.962E-06	1.975E-06	1.975E-06	-7.485E-08	-7.485E-08
1.05000	1.483E-08	523.962	-2.056E-06	-2.056E-06	2.072E-06	2.072E-06	-7.024E-08	-7.024E-08
1.07500	1.260E-08	536.437	-2.226E-06	-2.226E-06	2.245E-06	2.245E-06	-5.967E-08	-5.967E-08
1.10000	1.029E-08	548.912	-2.367E-06	-2.367E-06	2.389E-06	2.389E-06	-4.872E-08	-4.872E-08
1.15000	6.865E-09	573.863	-2.574E-06	-2.574E-06	2.602E-06	2.602E-06	-3.252E-08	-3.252E-08
1.20000	4.608E-09	598.813	-2.713E-06	-2.713E-06	2.744E-06	2.744E-06	-2.183E-08	-2.183E-08
1.30000	2.354E-09	648.714	-2.875E-06	-2.875E-06	2.911E-06	2.911E-06	-1.115E-08	-1.115E-08
1.40000	1.354E-09	698.615	-2.962E-06	-2.962E-06	3.002E-06	3.002E-06	-6.411E-09	-6.411E-09
1.50000	8.832E-10	748.517	-3.015E-06	-3.015E-06	3.057E-06	3.057E-06	-4.183E-09	-4.183E-09
1.60000	5.991E-10	798.418	-3.050E-06	-3.050E-06	3.095E-06	3.096E-06	-2.838E-09	-2.838E-09
1.70000	4.105E-10	848.319	-3.073E-06	-3.073E-06	3.122E-06	3.122E-06	-1.945E-09	-1.945E-09
1.80000	2.913E-10	898.220	-3.088E-06	-3.088E-06	3.141E-06	3.141E-06	-1.380E-09	-1.380E-09
1.90000	2.064E-10	948.121	-3.099E-06	-3.099E-06	3.155E-06	3.155E-06	-9.776E-10	-9.776E-10
2.00000	1.481E-10	998.022	-3.106E-06	-3.106E-06	3.165E-06	3.165E-06	-7.014E-10	-7.014E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 8.000 θ_D= 0. ρ_a=29.944

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.011E-14
0.10000	2.409E-11	2.409E-11	-9.098E-22	-9.098E-22	-1.047E-11	-1.047E-11	-1.351E-14
0.20000	6.696E-11	6.696E-11	-1.574E-21	-1.574E-21	-2.860E-11	-2.860E-11	-1.921E-14
0.30000	1.411E-10	1.411E-10	-2.716E-21	-2.716E-21	-5.992E-11	-5.992E-11	-2.985E-14
0.40000	2.955E-10	2.955E-10	-4.878E-21	-4.878E-21	-1.151E-10	-1.151E-10	-4.966E-14
0.50000	5.772E-10	5.772E-10	-8.744E-21	-8.744E-21	-2.142E-10	-2.142E-10	-9.574E-14
0.60000	1.248E-09	1.248E-09	-1.704E-20	-1.704E-20	-3.966E-10	-3.966E-10	-2.112E-13
0.70000	3.228E-09	3.228E-09	-3.990E-20	-3.990E-20	-7.888E-10	-7.888E-10	-5.391E-13
0.80000	9.969E-09	9.969E-09	-1.139E-19	-1.139E-19	-1.814E-09	-1.814E-09	-1.746E-12
0.85000	1.963E-08	1.963E-08	-2.082E-19	-2.082E-19	-2.987E-09	-2.987E-09	-3.350E-12
0.90000	4.146E-08	4.146E-08	-3.821E-19	-3.821E-19	-5.122E-09	-5.122E-09	-6.347E-12
0.92500	6.154E-08	6.154E-08	-4.933E-19	-4.933E-19	-6.758E-09	-6.758E-09	-8.435E-12
0.95000	9.063E-08	9.063E-08	-5.938E-19	-5.938E-19	-8.798E-09	-8.798E-09	-1.061E-11
0.96250	1.091E-07	1.091E-07	-6.319E-19	-6.319E-19	-9.946E-09	-9.946E-09	-1.152E-11
0.97500	1.297E-07	1.297E-07	-6.578E-19	-6.578E-19	-1.115E-08	-1.115E-08	-1.216E-11
0.98125	1.406E-07	1.406E-07	-6.653E-19	-6.653E-19	-1.177E-08	-1.177E-08	-1.236E-11
0.98750	1.517E-07	1.517E-07	-6.705E-19	-6.705E-19	-1.240E-08	-1.240E-08	-1.244E-11
0.99375	1.628E-07	1.628E-07	-6.702E-19	-6.702E-19	-1.302E-08	-1.302E-08	-1.243E-11
1.00000	1.737E-07	1.737E-07	-6.646E-19	-6.646E-19	-1.365E-08	-1.365E-08	-1.234E-11
1.00625	1.844E-07	1.844E-07	-6.567E-19	-6.567E-19	-1.427E-08	-1.427E-08	-1.214E-11
1.01250	1.947E-07	1.947E-07	-6.450E-19	-6.450E-19	-1.488E-08	-1.488E-08	-1.185E-11
1.01875	2.044E-07	2.044E-07	-6.301E-19	-6.301E-19	-1.547E-08	-1.547E-08	-1.148E-11
1.02500	2.135E-07	2.135E-07	-6.120E-19	-6.120E-19	-1.605E-08	-1.605E-08	-1.105E-11
1.03750	2.297E-07	2.297E-07	-5.683E-19	-5.683E-19	-1.716E-08	-1.716E-08	-1.004E-11
1.05000	2.430E-07	2.430E-07	-5.173E-19	-5.173E-19	-1.817E-08	-1.817E-08	-8.934E-12
1.07500	2.618E-07	2.618E-07	-4.065E-19	-4.065E-19	-1.990E-08	-1.990E-08	-6.782E-12
1.10000	2.726E-07	2.726E-07	-3.012E-19	-3.012E-19	-2.122E-08	-2.122E-08	-5.017E-12
1.15000	2.796E-07	2.796E-07	-1.657E-19	-1.657E-19	-2.290E-08	-2.290E-08	-2.576E-12
1.20000	2.767E-07	2.767E-07	-9.106E-20	-9.106E-20	-2.383E-08	-2.383E-08	-1.365E-12
1.30000	2.616E-07	2.616E-07	-3.324E-20	-3.324E-20	-2.466E-08	-2.466E-08	-4.433E-13
1.40000	2.447E-07	2.447E-07	-1.474E-20	-1.474E-20	-2.500E-08	-2.500E-08	-1.800E-13
1.50000	2.289E-07	2.289E-07	-7.809E-21	-7.809E-21	-2.516E-08	-2.516E-08	-8.323E-14
1.60000	2.148E-07	2.149E-07	-4.351E-21	-4.351E-21	-2.524E-08	-2.524E-08	-4.462E-14
1.70000	2.023E-07	2.023E-07	-2.443E-21	-2.443E-21	-2.529E-08	-2.529E-08	-2.723E-14
1.80000	1.911E-07	1.911E-07	-1.415E-21	-1.415E-21	-2.532E-08	-2.532E-08	-1.786E-14
1.90000	1.811E-07	1.811E-07	-8.176E-22	-8.176E-22	-2.534E-08	-2.534E-08	-1.276E-14
2.00000	1.721E-07	1.721E-07	-4.713E-22	-4.713E-22	-2.535E-08	-2.535E-08	-9.639E-15

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0=10.000 θ_D= 0. ρ_a= 37.362

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	10.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	10.0000	0.10000	194.006	1.041E-06	9.989E-01	-2.203E-10	-2.203E-10	2.203E-10
0.20000	10.0000	0.20000	172.942	1.441E-06	9.986E-01	-3.099E-10	-3.099E-10	3.099E-10
0.30000	10.0000	0.30000	152.006	3.468E-06	9.981E-01	-4.353E-10	-4.353E-10	4.353E-10
0.40000	10.0000	0.40000	131.256	4.055E-06	9.974E-01	-6.371E-10	-6.371E-10	6.371E-10
0.50000	10.0000	0.50000	110.800	5.443E-06	9.964E-01	-9.319E-10	-9.319E-10	9.319E-10
0.60000	10.0000	0.60000	90.834	9.285E-06	9.952E-01	-1.433E-09	-1.433E-09	1.433E-09
0.70000	10.0000	0.70000	71.771	2.156E-05	9.946E-01	-2.454E-09	-2.454E-09	2.454E-09
0.80000	10.0000	0.80000	54.562	6.916E-05	9.977E-01	-4.530E-09	-4.530E-09	4.530E-09
0.85000	10.0000	0.85000	47.299	1.037E-04	1.002E 00	-6.296E-09	-6.296E-09	6.296E-09
0.90000	10.0000	0.90000	41.580	1.618E-04	1.005E 00	-8.398E-09	-8.398E-09	8.398E-09
0.92500	10.0000	0.92500	39.516	1.972E-04	1.005E 00	-9.388E-09	-9.388E-09	9.388E-09
0.95000	10.0000	0.95000	38.105	2.416E-04	1.002E 00	-1.030E-08	-1.030E-08	1.030E-08
0.96250	10.0000	0.96250	37.669	2.655E-04	1.001E 00	-1.060E-08	-1.060E-08	1.060E-08
0.97500	10.0000	0.97500	37.422	2.946E-04	9.997E-01	-1.078E-08	-1.078E-08	1.078E-08
0.98125	10.0000	0.98125	37.370	3.091E-04	9.993E-01	-1.082E-08	-1.082E-08	1.082E-08
0.98750	10.0000	0.98750	37.367	3.236E-04	9.992E-01	-1.082E-08	-1.082E-08	1.082E-08
0.99375	10.0000	0.99375	37.412	3.381E-04	9.994E-01	-1.079E-08	-1.079E-08	1.079E-08
1.00000	10.0000	1.00000	37.505	3.518E-04	9.998E-01	-1.072E-08	-1.072E-08	1.072E-08
1.00625	10.0000	1.00625	37.646	3.688E-04	1.000E 00	-1.062E-08	-1.062E-08	1.062E-08
1.01250	10.0000	1.01250	37.834	3.816E-04	1.001E 00	-1.049E-08	-1.049E-08	1.049E-08
1.01875	10.0000	1.01875	38.069	3.962E-04	1.002E 00	-1.033E-08	-1.033E-08	1.033E-08
1.02500	10.0000	1.02500	38.350	4.115E-04	1.004E 00	-1.014E-08	-1.014E-08	1.014E-08
1.03750	10.0001	1.03750	39.044	4.363E-04	1.006E 00	-9.685E-09	-9.685E-09	9.685E-09
1.05000	10.0001	1.05000	39.908	4.593E-04	1.008E 00	-9.148E-09	-9.148E-09	9.148E-09
1.07500	10.0001	1.07500	42.101	4.926E-04	1.011E 00	-8.180E-09	-8.180E-09	8.180E-09
1.10000	10.0001	1.10000	44.835	5.182E-04	1.012E 00	-7.128E-09	-7.128E-09	7.128E-09
1.15000	10.0001	1.15000	51.567	5.567E-04	1.008E 00	-5.143E-09	-5.143E-09	5.143E-09
1.20000	10.0001	1.20000	59.495	5.840E-04	1.004E 00	-3.675E-09	-3.675E-09	3.675E-09
1.30000	10.0002	1.30000	77.427	6.130E-04	9.983E-01	-2.042E-09	-2.042E-09	2.042E-09
1.40000	10.0002	1.40000	96.831	6.301E-04	9.969E-01	-1.233E-09	-1.233E-09	1.233E-09
1.50000	10.0002	1.50000	116.975	6.352E-04	9.968E-01	-8.309E-10	-8.309E-10	8.309E-10
1.60000	10.0002	1.60000	137.536	6.403E-04	9.970E-01	-5.669E-10	-5.669E-10	5.669E-10
1.70000	10.0003	1.70000	158.351	6.420E-04	9.974E-01	-3.927E-10	-3.927E-10	3.927E-10
1.80000	10.0003	1.80000	179.331	6.437E-04	9.977E-01	-2.794E-10	-2.794E-10	2.794E-10
1.90000	10.0003	1.90000	200.425	6.489E-04	9.980E-01	-1.985E-10	-1.985E-10	1.985E-10
2.00000	10.0003	2.00000	221.600	6.489E-04	9.982E-01	-1.429E-10	-1.429E-10	1.429E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	$_x\mu'-1_0$	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.879E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.203E-10	49.901	-9.336E-09	-9.336E-09	9.336E-09	9.336E-09	-1.043E-09	-1.043E-09
0.20000	3.099E-10	99.802	-2.244E-08	-2.244E-08	2.244E-08	2.244E-08	-1.468E-09	-1.468E-09
0.30000	4.353E-10	149.703	-4.086E-08	-4.086E-08	4.086E-08	4.086E-08	-2.062E-09	-2.062E-09
0.40000	6.371E-10	199.605	-6.726E-08	-6.726E-08	6.726E-08	6.726E-08	-3.018E-09	-3.018E-09
0.50000	9.319E-10	249.506	-1.060E-07	-1.060E-07	1.060E-07	1.060E-07	-4.414E-09	-4.414E-09
0.60000	1.433E-09	299.407	-1.632E-07	-1.632E-07	1.632E-07	1.632E-07	-6.786E-09	-6.786E-09
0.70000	2.454E-09	349.308	-2.566E-07	-2.566E-07	2.566E-07	2.566E-07	-1.163E-08	-1.163E-08
0.80000	4.530E-09	399.209	-4.237E-07	-4.237E-07	4.239E-07	4.239E-07	-2.146E-08	-2.146E-08
0.85000	6.297E-09	424.160	-5.572E-07	-5.572E-07	5.575E-07	5.575E-07	-2.982E-08	-2.982E-08
0.90000	8.398E-09	449.110	-7.404E-07	-7.404E-07	7.413E-07	7.413E-07	-3.978E-08	-3.978E-08
0.92500	9.388E-09	461.585	-8.510E-07	-8.510E-07	8.524E-07	8.524E-07	-4.447E-08	-4.447E-08
0.95000	1.030E-08	474.061	-9.739E-07	-9.739E-07	9.760E-07	9.760E-07	-4.880E-08	-4.880E-08
0.96250	1.060E-08	480.298	-1.039E-06	-1.039E-06	1.041E-06	1.041E-06	-5.023E-08	-5.023E-08
0.97500	1.078E-08	486.536	-1.105E-06	-1.105E-06	1.109E-06	1.109E-06	-5.106E-08	-5.106E-08
0.98125	1.082E-08	489.655	-1.139E-06	-1.139E-06	1.142E-06	1.142E-06	-5.123E-08	-5.123E-08
0.98750	1.082E-08	492.774	-1.172E-06	-1.172E-06	1.176E-06	1.176E-06	-5.124E-08	-5.124E-08
0.99375	1.079E-08	495.892	-1.206E-06	-1.206E-06	1.210E-06	1.210E-06	-5.109E-08	-5.109E-08
1.00000	1.072E-08	499.011	-1.239E-06	-1.239E-06	1.244E-06	1.244E-06	-5.078E-08	-5.078E-08
1.00625	1.062E-08	502.130	-1.272E-06	-1.272E-06	1.278E-06	1.278E-06	-5.031E-08	-5.031E-08
1.01250	1.049E-08	505.249	-1.305E-06	-1.305E-06	1.311E-06	1.311E-06	-4.969E-08	-4.969E-08
1.01875	1.033E-08	508.368	-1.337E-06	-1.337E-06	1.343E-06	1.343E-06	-4.892E-08	-4.892E-08
1.02500	1.014E-08	511.486	-1.369E-06	-1.369E-06	1.376E-06	1.376E-06	-4.802E-08	-4.802E-08
1.03750	9.685E-09	517.724	-1.430E-06	-1.430E-06	1.438E-06	1.438E-06	-4.587E-08	-4.587E-08
1.05000	9.148E-09	523.962	-1.489E-06	-1.489E-06	1.497E-06	1.497E-06	-4.333E-08	-4.333E-08
1.07500	8.180E-09	536.437	-1.596E-06	-1.596E-06	1.606E-06	1.606E-06	-3.875E-08	-3.875E-08
1.10000	7.128E-09	548.912	-1.691E-06	-1.691E-06	1.702E-06	1.702E-06	-3.376E-08	-3.376E-08
1.15000	5.143E-09	573.863	-1.842E-06	-1.842E-06	1.855E-06	1.855E-06	-2.436E-08	-2.436E-08
1.20000	3.675E-09	598.813	-1.950E-06	-1.950E-06	1.966E-06	1.966E-06	-1.741E-08	-1.741E-08
1.30000	2.042E-09	648.714	-2.088E-06	-2.088E-06	2.106E-06	2.106E-06	-9.674E-09	-9.674E-09
1.40000	1.233E-09	698.616	-2.166E-06	-2.166E-06	2.187E-06	2.187E-06	-5.841E-09	-5.841E-09
1.50000	8.309E-10	748.517	-2.215E-06	-2.215E-06	2.238E-06	2.238E-06	-3.935E-09	-3.935E-09
1.60000	5.669E-10	798.418	-2.249E-06	-2.249E-06	2.274E-06	2.274E-06	-2.685E-09	-2.685E-09
1.70000	3.927E-10	848.319	-2.271E-06	-2.271E-06	2.298E-06	2.298E-06	-1.860E-09	-1.860E-09
1.80000	2.794E-10	898.220	-2.287E-06	-2.287E-06	2.316E-06	2.316E-06	-1.324E-09	-1.324E-09
1.90000	1.985E-10	948.121	-2.298E-06	-2.298E-06	2.328E-06	2.328E-06	-9.404E-10	-9.404E-10
2.00000	1.429E-10	998.022	-2.306E-06	-2.306E-06	2.338E-06	2.338E-06	-6.768E-10	-6.768E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.573E-14
0.10000	2.999E-11	2.999E-11	-9.067E-22	-9.067E-22	-1.045E-11	-1.045E-11	-2.100E-14
0.20000	8.314E-11	8.314E-11	-1.562E-21	-1.562E-21	-2.848E-11	-2.848E-11	-2.974E-14
0.30000	1.745E-10	1.746E-10	-2.681E-21	-2.681E-21	-5.947E-11	-5.947E-11	-4.593E-14
0.40000	3.632E-10	3.632E-10	-4.774E-21	-4.774E-21	-1.137E-10	-1.137E-10	-7.571E-14
0.50000	7.033E-10	7.033E-10	-8.467E-21	-8.467E-21	-2.102E-10	-2.102E-10	-1.430E-13
0.60000	1.472E-09	1.472E-09	-1.602E-20	-1.602E-20	-3.840E-10	-3.840E-10	-3.065E-13
0.70000	3.611E-09	3.611E-09	-3.536E-20	-3.536E-20	-7.413E-10	-7.413E-10	-7.355E-13
0.80000	1.010E-08	1.010E-08	-8.869E-20	-8.870E-20	-1.592E-09	-1.592E-09	-2.064E-12
0.85000	1.829E-08	1.829E-08	-1.459E-19	-1.459E-19	-2.451E-09	-2.451E-09	-3.500E-12
0.90000	3.446E-08	3.446E-08	-2.232E-19	-2.232E-19	-3.826E-09	-3.826E-09	-5.687E-12
0.92500	4.732E-08	4.732E-08	-2.631E-19	-2.631E-19	-4.734E-09	-4.734E-09	-6.905E-12
0.95000	6.442E-08	6.442E-08	-3.020E-19	-3.020E-19	-5.795E-09	-5.795E-09	-7.825E-12
0.96250	7.439E-08	7.439E-08	-3.151E-19	-3.151E-19	-6.373E-09	-6.373E-09	-8.148E-12
0.97500	8.501E-08	8.501E-08	-3.228E-19	-3.228E-19	-6.970E-09	-6.970E-09	-8.339E-12
0.98125	9.044E-08	9.044E-08	-3.244E-19	-3.244E-19	-7.273E-09	-7.273E-09	-8.380E-12
0.98750	9.590E-08	9.590E-08	-3.245E-19	-3.245E-19	-7.576E-09	-7.576E-09	-8.383E-12
0.99375	1.013E-07	1.013E-07	-3.231E-19	-3.231E-19	-7.879E-09	-7.879E-09	-8.348E-12
1.00000	1.067E-07	1.067E-07	-3.202E-19	-3.202E-19	-8.180E-09	-8.180E-09	-8.275E-12
1.00625	1.119E-07	1.119E-07	-3.158E-19	-3.158E-19	-8.477E-09	-8.477E-09	-8.167E-12
1.01250	1.169E-07	1.169E-07	-3.100E-19	-3.100E-19	-8.770E-09	-8.770E-09	-8.025E-12
1.01875	1.217E-07	1.217E-07	-3.030E-19	-3.030E-19	-9.057E-09	-9.057E-09	-7.853E-12
1.02500	1.262E-07	1.262E-07	-2.948E-19	-2.948E-19	-9.336E-09	-9.336E-09	-7.655E-12
1.03750	1.345E-07	1.345E-07	-2.755E-19	-2.755E-19	-9.870E-09	-9.870E-09	-7.196E-12
1.05000	1.416E-07	1.416E-07	-2.533E-19	-2.533E-19	-1.036E-08	-1.036E-08	-6.681E-12
1.07500	1.523E-07	1.523E-07	-2.147E-19	-2.147E-19	-1.124E-08	-1.124E-08	-5.421E-12
1.10000	1.592E-07	1.592E-07	-1.752E-19	-1.752E-19	-1.197E-08	-1.197E-08	-4.265E-12
1.15000	1.652E-07	1.652E-07	-1.078E-19	-1.078E-19	-1.301E-08	-1.301E-08	-2.554E-12
1.20000	1.653E-07	1.653E-07	-6.436E-20	-6.436E-20	-1.364E-08	-1.364E-08	-1.516E-12
1.30000	1.584E-07	1.584E-07	-2.694E-20	-2.694E-20	-1.429E-08	-1.429E-08	-5.614E-13
1.40000	1.491E-07	1.491E-07	-1.287E-20	-1.287E-20	-1.457E-08	-1.457E-08	-2.431E-13
1.50000	1.398E-07	1.398E-07	-7.122E-21	-7.122E-21	-1.471E-08	-1.471E-08	-1.161E-13
1.60000	1.314E-07	1.314E-07	-4.004E-21	-4.004E-21	-1.479E-08	-1.479E-08	-6.439E-14
1.70000	1.238E-07	1.238E-07	-2.276E-21	-2.276E-21	-1.484E-08	-1.484E-08	-3.991E-14
1.80000	1.170E-07	1.170E-07	-1.324E-21	-1.324E-21	-1.487E-08	-1.487E-08	-2.659E-14
1.90000	1.109E-07	1.109E-07	-7.683E-22	-7.683E-22	-1.488E-08	-1.488E-08	-1.921E-14
2.00000	1.054E-07	1.054E-07	-4.442E-22	-4.442E-22	-1.489E-08	-1.489E-08	-1.461E-14

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 12.000 θ_D= 0. ρ_a=44.734

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	12.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	12.0000	0.10000	194.165	9.205E-07	9.985E-01	-2.197E-10	-2.197E-10	2.197E-10
0.20000	12.0000	0.20000	173.299	2.508E-06	9.980E-01	-3.082E-10	-3.082E-10	3.082E-10
0.30000	12.0000	0.30000	152.613	2.508E-06	9.973E-01	-4.310E-10	-4.310E-10	4.310E-10
0.40000	12.0000	0.40000	132.193	4.696E-06	9.963E-01	-6.261E-10	-6.261E-10	6.261E-10
0.50000	12.0000	0.50000	112.183	6.830E-06	9.951E-01	-9.083E-10	-9.083E-10	9.083E-10
0.60000	12.0000	0.60000	92.849	1.323E-05	9.939E-01	-1.362E-09	-1.362E-09	1.362E-09
0.70000	12.0000	0.70000	74.717	2.946E-05	9.941E-01	-2.230E-09	-2.230E-09	2.230E-09
0.80000	12.0000	0.80000	58.910	7.471E-05	9.992E-01	-3.767E-09	-3.767E-09	3.767E-09
0.85000	12.0000	0.85000	52.549	1.029E-04	1.003E 00	-4.933E-09	-4.933E-09	4.933E-09
0.90000	12.0000	0.90000	47.790	1.443E-04	1.005E 00	-6.143E-09	-6.143E-09	6.143E-09
0.92500	12.0000	0.92500	46.173	1.708E-04	1.004E 00	-6.664E-09	-6.664E-09	6.664E-09
0.95000	12.0000	0.95000	45.142	1.998E-04	1.001E 00	-7.019E-09	-7.019E-09	7.019E-09
0.96250	12.0000	0.96250	44.861	2.160E-04	9.997E-01	-7.119E-09	-7.119E-09	7.119E-09
0.97500	12.0000	0.97500	44.739	2.331E-04	9.989E-01	-7.163E-09	-7.163E-09	7.163E-09
0.98125	12.0000	0.98125	44.739	2.408E-04	9.988E-01	-7.163E-09	-7.163E-09	7.163E-09
0.98750	12.0000	0.98750	44.779	2.519E-04	9.989E-01	-7.148E-09	-7.148E-09	7.148E-09
0.99375	12.0000	0.99375	44.860	2.613E-04	9.992E-01	-7.119E-09	-7.119E-09	7.119E-09
1.00000	12.0000	1.00000	44.981	2.698E-04	9.997E-01	-7.076E-09	-7.076E-09	7.076E-09
1.00625	12.0000	1.00625	45.141	2.783E-04	1.000E 00	-7.019E-09	-7.019E-09	7.019E-09
1.01250	12.0000	1.01250	45.341	2.877E-04	1.001E 00	-6.949E-09	-6.949E-09	6.949E-09
1.01875	12.0000	1.01875	45.579	2.946E-04	1.002E 00	-6.866E-09	-6.866E-09	6.866E-09
1.02500	12.0000	1.02500	45.856	3.048E-04	1.003E 00	-6.771E-09	-6.771E-09	6.771E-09
1.03750	12.0000	1.03750	46.521	3.202E-04	1.006E 00	-6.548E-09	-6.548E-09	6.548E-09
1.05000	12.0000	1.05000	47.330	3.321E-04	1.008E 00	-6.287E-09	-6.287E-09	6.287E-09
1.07500	12.0001	1.07500	49.350	3.543E-04	1.012E 00	-5.679E-09	-5.679E-09	5.679E-09
1.10000	12.0001	1.10000	51.851	3.740E-04	1.013E 00	-5.081E-09	-5.081E-09	5.081E-09
1.15000	12.0001	1.15000	58.037	3.996E-04	1.012E 00	-3.909E-09	-3.909E-09	3.909E-09
1.20000	12.0001	1.20000	65.419	4.218E-04	1.007E 00	-3.017E-09	-3.017E-09	3.017E-09
1.30000	12.0001	1.30000	82.442	4.440E-04	1.000E 00	-1.767E-09	-1.767E-09	1.767E-09
1.40000	12.0001	1.40000	101.190	4.610E-04	9.974E-01	-1.114E-09	-1.114E-09	1.114E-09
1.50000	12.0002	1.50000	120.864	4.679E-04	9.965E-01	-7.729E-10	-7.729E-10	7.729E-10
1.60000	12.0002	1.60000	141.077	4.730E-04	9.965E-01	-5.308E-10	-5.308E-10	5.308E-10
1.70000	12.0002	1.70000	161.627	4.747E-04	9.968E-01	-3.724E-10	-3.724E-10	3.724E-10
1.80000	12.0002	1.80000	182.400	4.764E-04	9.971E-01	-2.659E-10	-2.659E-10	2.659E-10
1.90000	12.0002	1.90000	203.327	4.832E-04	9.974E-01	-1.898E-10	-1.898E-10	1.898E-10
2.00000	12.0002	2.00000	224.365	4.849E-04	9.976E-01	-1.369E-10	-1.369E-10	1.369E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 12.000 θ_D= 0. ρ_a=44.734

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.197E-10	49.901	-9.324E-09	-9.324E-09	9.324E-09	9.324E-09	-1.041E-09	-1.041E-09
0.20000	3.082E-10	99.802	-2.237E-08	-2.237E-08	2.237E-08	2.237E-08	-1.460E-09	-1.460E-09
0.30000	4.310E-10	149.703	-4.065E-08	-4.065E-08	4.065E-08	4.065E-08	-2.042E-09	-2.042E-09
0.40000	6.261E-10	199.605	-6.667E-08	-6.667E-08	6.667E-08	6.667E-08	-2.966E-09	-2.966E-09
0.50000	9.083E-10	249.506	-1.046E-07	-1.046E-07	1.046E-07	1.046E-07	-4.302E-09	-4.302E-09
0.60000	1.362E-09	299.407	-1.597E-07	-1.597E-07	1.597E-07	1.597E-07	-6.453E-09	-6.453E-09
0.70000	2.230E-09	349.308	-2.466E-07	-2.466E-07	2.466E-07	2.466E-07	-1.056E-08	-1.056E-08
0.80000	3.767E-09	399.209	-3.934E-07	-3.934E-07	3.935E-07	3.935E-07	-1.784E-08	-1.785E-08
0.85000	4.933E-09	424.160	-5.017E-07	-5.017E-07	5.020E-07	5.020E-07	-2.337E-08	-2.337E-08
0.90000	6.143E-09	449.110	-6.395E-07	-6.395E-07	6.402E-07	6.402E-07	-2.910E-08	-2.910E-08
0.92500	6.664E-09	461.585	-7.193E-07	-7.193E-07	7.204E-07	7.204E-07	-3.156E-08	-3.156E-08
0.95000	7.019E-09	474.061	-8.047E-07	-8.047E-07	8.061E-07	8.061E-07	-3.325E-08	-3.325E-08
0.96250	7.119E-09	480.298	-8.487E-07	-8.487E-07	8.504E-07	8.504E-07	-3.372E-08	-3.372E-08
0.97500	7.163E-09	486.536	-8.931E-07	-8.931E-07	8.951E-07	8.951E-07	-3.393E-08	-3.393E-08
0.98125	7.163E-09	489.655	-9.154E-07	-9.154E-07	9.175E-07	9.175E-07	-3.393E-08	-3.393E-08
0.98750	7.148E-09	492.774	-9.376E-07	-9.376E-07	9.399E-07	9.399E-07	-3.386E-08	-3.386E-08
0.99375	7.119E-09	495.892	-9.597E-07	-9.597E-07	9.623E-07	9.623E-07	-3.372E-08	-3.372E-08
1.00000	7.076E-09	499.011	-9.818E-07	-9.818E-07	9.845E-07	9.845E-07	-3.352E-08	-3.352E-08
1.00625	7.019E-09	502.130	-1.004E-06	-1.004E-06	1.007E-06	1.007E-06	-3.325E-08	-3.325E-08
1.01250	6.949E-09	505.249	-1.025E-06	-1.025E-06	1.029E-06	1.029E-06	-3.292E-08	-3.292E-08
1.01875	6.866E-09	508.368	-1.047E-06	-1.047E-06	1.050E-06	1.050E-06	-3.252E-08	-3.252E-08
1.02500	6.771E-09	511.487	-1.068E-06	-1.068E-06	1.072E-06	1.072E-06	-3.207E-08	-3.207E-08
1.03750	6.548E-09	517.724	-1.109E-06	-1.109E-06	1.113E-06	1.113E-06	-3.102E-08	-3.102E-08
1.05000	6.287E-09	523.962	-1.149E-06	-1.149E-06	1.154E-06	1.154E-06	-2.978E-08	-2.978E-08
1.07500	5.679E-09	536.437	-1.224E-06	-1.224E-06	1.229E-06	1.229E-06	-2.690E-08	-2.690E-08
1.10000	5.081E-09	548.912	-1.290E-06	-1.290E-06	1.296E-06	1.296E-06	-2.407E-08	-2.407E-08
1.15000	3.909E-09	573.863	-1.402E-06	-1.402E-06	1.409E-06	1.409E-06	-1.852E-08	-1.852E-08
1.20000	3.017E-09	598.813	-1.487E-06	-1.487E-06	1.495E-06	1.495E-06	-1.429E-08	-1.429E-08
1.30000	1.767E-09	648.714	-1.602E-06	-1.602E-06	1.612E-06	1.612E-06	-8.371E-09	-8.371E-09
1.40000	1.114E-09	698.616	-1.672E-06	-1.672E-06	1.683E-06	1.683E-06	-5.278E-09	-5.278E-09
1.50000	7.729E-10	748.517	-1.718E-06	-1.718E-06	1.730E-06	1.730E-06	-3.661E-09	-3.661E-09
1.60000	5.308E-10	798.418	-1.749E-06	-1.749E-06	1.763E-06	1.763E-06	-2.514E-09	-2.514E-09
1.70000	3.724E-10	848.319	-1.771E-06	-1.771E-06	1.786E-06	1.786E-06	-1.764E-09	-1.764E-09
1.80000	2.659E-10	898.220	-1.786E-06	-1.786E-06	1.802E-06	1.802E-06	-1.259E-09	-1.259E-09
1.90000	1.898E-10	948.121	-1.797E-06	-1.797E-06	1.814E-06	1.814E-06	-8.989E-10	-8.989E-10
2.00000	1.369E-10	998.022	-1.804E-06	-1.804E-06	1.822E-06	1.822E-06	-6.484E-10	-6.484E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-2.256E-14
0.10000	3.584E-11	3.584E-11	-9.030E-22	-9.030E-22	-1.043E-11	-1.043E-11	-3.003E-14
0.20000	9.900E-11	9.900E-11	-1.547E-21	-1.547E-21	-2.833E-11	-2.833E-11	-4.235E-14
0.30000	2.069E-10	2.069E-10	-2.639E-21	-2.639E-21	-5.894E-11	-5.894E-11	-6.493E-14
0.40000	4.263E-10	4.263E-10	-4.650E-21	-4.650E-21	-1.120E-10	-1.120E-10	-1.058E-13
0.50000	8.189E-10	8.189E-10	-8.145E-21	-8.145E-21	-2.054E-10	-2.054E-10	-1.953E-13
0.60000	1.642E-09	1.642E-09	-1.488E-20	-1.488E-20	-3.698E-10	-3.698E-10	-4.052E-13
0.70000	3.831E-09	3.831E-09	-3.069E-20	-3.069E-20	-6.907E-10	-6.907E-10	-9.114E-13
0.80000	9.828E-09	9.829E-09	-6.686E-20	-6.686E-20	-1.388E-09	-1.388E-09	-2.246E-12
0.85000	1.655E-08	1.655E-08	-1.011E-19	-1.011E-19	-2.012E-09	-2.012E-09	-3.406E-12
0.90000	2.837E-08	2.837E-08	-1.406E-19	-1.406E-19	-2.913E-09	-2.913E-09	-4.835E-12
0.92500	3.696E-08	3.696E-08	-1.586E-19	-1.586E-19	-3.474E-09	-3.474E-09	-5.480E-12
0.95000	4.749E-08	4.749E-08	-1.712E-19	-1.712E-19	-4.093E-09	-4.093E-09	-5.958E-12
0.96250	5.338E-08	5.338E-08	-1.749E-19	-1.749E-19	-4.416E-09	-4.416E-09	-6.099E-12
0.97500	5.952E-08	5.952E-08	-1.764E-19	-1.764E-19	-4.745E-09	-4.745E-09	-6.161E-12
0.98125	6.262E-08	6.262E-08	-1.764E-19	-1.764E-19	-4.910E-09	-4.910E-09	-6.161E-12
0.98750	6.572E-08	6.572E-08	-1.759E-19	-1.759E-19	-5.075E-09	-5.075E-09	-6.141E-12
0.99375	6.878E-08	6.878E-08	-1.749E-19	-1.749E-19	-5.239E-09	-5.239E-09	-6.100E-12
1.00000	7.178E-08	7.178E-08	-1.733E-19	-1.733E-19	-5.402E-09	-5.402E-09	-6.039E-12
1.00625	7.471E-08	7.471E-08	-1.712E-19	-1.712E-19	-5.563E-09	-5.563E-09	-5.959E-12
1.01250	7.753E-08	7.753E-08	-1.687E-19	-1.687E-19	-5.722E-09	-5.722E-09	-5.862E-12
1.01875	8.024E-08	8.024E-08	-1.658E-19	-1.658E-19	-5.878E-09	-5.878E-09	-5.749E-12
1.02500	8.282E-08	8.283E-08	-1.624E-19	-1.624E-19	-6.032E-09	-6.032E-09	-5.622E-12
1.03750	8.756E-08	8.756E-08	-1.545E-19	-1.545E-19	-6.328E-09	-6.328E-09	-5.333E-12
1.05000	9.169E-08	9.169E-08	-1.458E-19	-1.455E-19	-6.609E-09	-6.609E-09	-5.009E-12
1.07500	9.817E-08	9.817E-08	-1.252E-19	-1.252E-19	-7.116E-09	-7.116E-09	-4.316E-12
1.10000	1.027E-07	1.027E-07	-1.058E-19	-1.058E-19	-7.547E-09	-7.547E-09	-3.585E-12
1.15000	1.073E-07	1.073E-07	-7.076E-20	-7.076E-20	-8.204E-09	-8.204E-09	-2.370E-12
1.20000	1.082E-07	1.082E-07	-4.800E-20	-4.800E-20	-8.639E-09	-8.639E-09	-1.498E-12
1.30000	1.049E-07	1.049E-07	-2.177E-20	-2.177E-20	-9.134E-09	-9.134E-09	-6.383E-13
1.40000	9.929E-08	9.929E-08	-1.108E-20	-1.108E-20	-9.368E-09	-9.368E-09	-2.961E-13
1.50000	9.345E-08	9.346E-08	-6.387E-21	-6.387E-21	-9.496E-09	-9.496E-09	-1.470E-13
1.60000	8.800E-08	8.800E-08	-3.625E-21	-3.625E-21	-9.569E-09	-9.569E-09	-8.465E-14
1.70000	8.302E-08	8.302E-08	-2.092E-21	-2.092E-21	-9.610E-09	-9.610E-09	-5.336E-14
1.80000	7.851E-08	7.851E-08	-1.223E-21	-1.223E-21	-9.635E-09	-9.635E-09	-3.619E-14
1.90000	7.444E-08	7.444E-08	-7.127E-22	-7.127E-22	-9.649E-09	-9.649E-09	-2.642E-14
2.00000	7.075E-08	7.075E-08	-4.135E-22	-4.135E-22	-9.657E-09	-9.657E-09	-2.030E-14

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 15.000 θ_D= 0. ρ_a= 55.687

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	15.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	15.0000	0.10000	194.456	1.347E-06	9.968E-01	-2.187E-10	-2.187E-10	2.187E-10
0.20000	15.0000	0.20000	173.950	2.081E-06	9.959E-01	-3.049E-10	-3.049E-10	3.049E-10
0.30000	15.0000	0.30000	153.721	3.682E-06	9.947E-01	-4.233E-10	-4.233E-10	4.233E-10
0.40000	15.0000	0.40000	133.894	4.802E-06	9.932E-01	-6.066E-10	-6.066E-10	6.066E-10
0.50000	15.0000	0.50000	114.677	7.897E-06	9.918E-01	-8.671E-10	-8.671E-10	8.671E-10
0.60000	15.0000	0.60000	96.436	1.430E-05	9.914E-01	-1.245E-09	-1.245E-09	1.245E-09
0.70000	15.0000	0.70000	79.842	2.775E-05	9.942E-01	-1.888E-09	-1.888E-09	1.888E-09
0.80000	15.0000	0.80000	66.148	4.525E-05	1.002E 00	-2.946E-09	-2.946E-09	2.946E-09
0.85000	15.0000	0.85000	61.018	4.525E-05	1.005E 00	-3.480E-09	-3.480E-09	3.480E-09
0.90000	15.0000	0.90000	57.465	4.525E-05	1.004E 00	-4.005E-09	-4.005E-09	4.005E-09
0.92500	15.0000	0.92500	56.379	6.147E-05	1.001E 00	-4.194E-09	-4.194E-09	4.194E-09
0.95000	15.0000	0.95000	55.793	7.684E-05	9.987E-01	-4.300E-09	-4.300E-09	4.300E-09
0.96250	15.0000	0.96250	55.692	8.367E-05	9.979E-01	-4.318E-09	-4.318E-09	4.318E-09
0.97500	15.0000	0.97500	55.722	9.135E-05	9.977E-01	-4.312E-09	-4.312E-09	4.312E-09
0.98125	15.0000	0.98125	55.785	9.477E-05	9.978E-01	-4.301E-09	-4.301E-09	4.301E-09
0.98750	15.0000	0.98750	55.880	9.818E-05	9.982E-01	-4.284E-09	-4.284E-09	4.284E-09
0.99375	15.0000	0.99375	56.008	1.033E-04	9.987E-01	-4.260E-09	-4.260E-09	4.260E-09
1.00000	15.0000	1.00000	56.168	1.076E-04	9.994E-01	-4.232E-09	-4.232E-09	4.232E-09
1.00625	15.0000	1.00625	56.359	1.144E-04	1.000E 00	-4.198E-09	-4.198E-09	4.198E-09
1.01250	15.0000	1.01250	56.582	1.170E-04	1.001E 00	-4.158E-09	-4.158E-09	4.158E-09
1.01875	15.0000	1.01875	56.835	1.195E-04	1.002E 00	-4.114E-09	-4.114E-09	4.114E-09
1.02500	15.0000	1.02500	57.119	1.238E-04	1.004E 00	-4.064E-09	-4.064E-09	4.064E-09
1.03750	15.0000	1.03750	57.777	1.306E-04	1.006E 00	-3.953E-09	-3.953E-09	3.953E-09
1.05000	15.0000	1.05000	58.552	1.383E-04	1.009E 00	-3.825E-09	-3.825E-09	3.825E-09
1.07500	15.0000	1.07500	60.430	1.477E-04	1.014E 00	-3.547E-09	-3.547E-09	3.547E-09
1.10000	15.0000	1.10000	62.716	1.545E-04	1.017E 00	-3.294E-09	-3.294E-09	3.294E-09
1.15000	15.0000	1.15000	68.335	1.690E-04	1.018E 00	-2.744E-09	-2.744E-09	2.744E-09
1.20000	15.0000	1.20000	75.083	1.793E-04	1.015E 00	-2.204E-09	-2.204E-09	2.204E-09
1.30000	15.0001	1.30000	90.927	1.947E-04	1.006E 00	-1.429E-09	-1.429E-09	1.429E-09
1.40000	15.0001	1.40000	108.737	2.083E-04	1.000E 00	-9.684E-10	-9.684E-10	9.684E-10
1.50000	15.0001	1.50000	127.693	2.117E-04	9.976E-01	-6.808E-10	-6.808E-10	6.808E-10
1.60000	15.0001	1.60000	147.354	2.117E-04	9.964E-01	-4.723E-10	-4.723E-10	4.723E-10
1.70000	15.0001	1.70000	167.472	2.203E-04	9.960E-01	-3.387E-10	-3.387E-10	3.387E-10
1.80000	15.0001	1.80000	187.900	2.220E-04	9.960E-01	-2.432E-10	-2.432E-10	2.432E-10
1.90000	15.0001	1.90000	208.547	2.220E-04	9.962E-01	-1.750E-10	-1.750E-10	1.750E-10
2.00000	15.0001	2.00000	229.353	2.220E-04	9.964E-01	-1.267E-10	-1.267E-10	1.267E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 15.000 θ_D= 0. ρ_a= 55.687

z	$_x\mu'-0$	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.187E-10	49.901	-9.302E-09	-9.302E-09	9.302E-09	9.302E-09	-1.036E-09	-1.036E-09
0.20000	3.049E-10	99.802	-2.225E-08	-2.225E-08	2.225E-08	2.225E-08	-1.444E-09	-1.444E-09
0.30000	4.233E-10	149.703	-4.027E-08	-4.027E-08	4.027E-08	4.027E-08	-2.005E-09	-2.005E-09
0.40000	6.066E-10	199.605	-6.562E-08	-6.562E-08	6.562E-08	6.562E-08	-2.873E-09	-2.873E-09
0.50000	8.671E-10	249.506	-1.021E-07	-1.021E-07	1.021E-07	1.021E-07	-4.107E-09	-4.107E-09
0.60000	1.246E-09	299.407	-1.538E-07	-1.538E-07	1.538E-07	1.538E-07	-5.899E-09	-5.899E-09
0.70000	1.888E-09	349.308	-2.312E-07	-2.312E-07	2.312E-07	2.312E-07	-8.944E-09	-8.944E-09
0.80000	2.946E-09	399.209	-3.510E-07	-3.510E-07	3.511E-07	3.511E-07	-1.395E-08	-1.395E-08
0.85000	3.480E-09	424.160	-4.313E-07	-4.313E-07	4.314E-07	4.314E-07	-1.648E-08	-1.648E-08
0.90000	4.005E-09	449.110	-5.248E-07	-5.248E-07	5.248E-07	5.248E-07	-1.897E-08	-1.897E-08
0.92500	4.194E-09	461.586	-5.760E-07	-5.760E-07	5.761E-07	5.761E-07	-1.987E-08	-1.987E-08
0.95000	4.300E-09	474.061	-6.290E-07	-6.290E-07	6.292E-07	6.292E-07	-2.037E-08	-2.037E-08
0.96250	4.318E-09	480.299	-6.559E-07	-6.559E-07	6.561E-07	6.561E-07	-2.045E-08	-2.045E-08
0.97500	4.312E-09	486.536	-6.828E-07	-6.828E-07	6.831E-07	6.831E-07	-2.043E-08	-2.043E-08
0.98125	4.301E-09	489.655	-6.962E-07	-6.962E-07	6.965E-07	6.965E-07	-2.037E-08	-2.037E-08
0.98750	4.284E-09	492.774	-7.095E-07	-7.095E-07	7.099E-07	7.099E-07	-2.029E-08	-2.029E-08
0.99375	4.260E-09	495.893	-7.229E-07	-7.229E-07	7.233E-07	7.233E-07	-2.018E-08	-2.018E-08
1.00000	4.232E-09	499.011	-7.361E-07	-7.361E-07	7.365E-07	7.365E-07	-2.004E-08	-2.004E-08
1.00625	4.198E-09	502.130	-7.492E-07	-7.492E-07	7.497E-07	7.497E-07	-1.988E-08	-1.988E-08
1.01250	4.158E-09	505.249	-7.622E-07	-7.622E-07	7.627E-07	7.627E-07	-1.970E-08	-1.970E-08
1.01875	4.114E-09	508.368	-7.751E-07	-7.751E-07	7.757E-07	7.757E-07	-1.948E-08	-1.948E-08
1.02500	4.064E-09	511.487	-7.878E-07	-7.878E-07	7.884E-07	7.884E-07	-1.925E-08	-1.925E-08
1.03750	3.953E-09	517.724	-8.128E-07	-8.128E-07	8.135E-07	8.135E-07	-1.872E-08	-1.872E-08
1.05000	3.825E-09	523.962	-8.370E-07	-8.370E-07	8.378E-07	8.378E-07	-1.812E-08	-1.812E-08
1.07500	3.547E-09	536.437	-8.829E-07	-8.829E-07	8.838E-07	8.838E-07	-1.680E-08	-1.680E-08
1.10000	3.294E-09	548.913	-9.256E-07	-9.256E-07	9.266E-07	9.266E-07	-1.560E-08	-1.560E-08
1.15000	2.744E-09	573.863	-1.001E-06	-1.001E-06	1.002E-06	1.002E-06	-1.300E-08	-1.300E-08
1.20000	2.204E-09	598.814	-1.062E-06	-1.062E-06	1.064E-06	1.064E-06	-1.044E-08	-1.044E-08
1.30000	1.429E-09	648.715	-1.151E-06	-1.151E-06	1.153E-06	1.153E-06	-6.770E-09	-6.770E-09
1.40000	9.684E-10	698.616	-1.209E-06	-1.209E-06	1.211E-06	1.211E-06	-4.587E-09	-4.587E-09
1.50000	6.808E-10	748.517	-1.250E-06	-1.250E-06	1.252E-06	1.252E-06	-3.224E-09	-3.224E-09
1.60000	4.723E-10	798.418	-1.278E-06	-1.278E-06	1.281E-06	1.281E-06	-2.237E-09	-2.237E-09
1.70000	3.387E-10	848.319	-1.298E-06	-1.298E-06	1.301E-06	1.301E-06	-1.604E-09	-1.604E-09
1.80000	2.432E-10	898.221	-1.312E-06	-1.312E-06	1.315E-06	1.315E-06	-1.152E-09	-1.152E-09
1.90000	1.750E-10	948.122	-1.322E-06	-1.322E-06	1.326E-06	1.326E-06	-8.289E-10	-8.289E-10
2.00000	1.267E-10	998.023	-1.330E-06	-1.330E-06	1.333E-06	1.333E-06	-6.001E-10	-6.001E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0=15.000 θ_D= 0. ρ_a=55.687

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-3.496E-14
0.10000	4.416E-11	4.416E-11	-8.963E-22	-8.963E-22	-1.039E-11	-1.039E-11	-4.634E-14
0.20000	1.217E-10	1.217E-10	-1.522E-21	-1.522E-21	-2.807E-11	-2.807E-11	-6.485E-14
0.30000	2.523E-10	2.523E-10	-2.565E-21	-2.565E-21	-5.798E-11	-5.798E-11	-9.809E-14
0.40000	5.117E-10	5.117E-10	-4.434E-21	-4.434E-21	-1.090E-10	-1.090E-10	-1.568E-13
0.50000	9.639E-10	9.639E-10	-7.596E-21	-7.596E-21	-1.970E-10	-1.970E-10	-2.779E-13
0.60000	1.823E-09	1.823E-09	-1.305E-20	-1.305E-20	-3.462E-10	-3.462E-10	-5.471E-13
0.70000	3.911E-09	3.911E-09	-2.399E-20	-2.399E-20	-6.166E-10	-6.166E-10	-1.120E-12
0.80000	8.972E-09	8.972E-09	-4.634E-20	-4.634E-20	-1.132E-09	-1.132E-09	-2.221E-12
0.85000	1.393E-08	1.393E-08	-5.931E-20	-5.931E-20	-1.527E-09	-1.527E-09	-3.052E-12
0.90000	2.171E-08	2.171E-08	-7.344E-20	-7.344E-20	-2.024E-09	-2.024E-09	-3.802E-12
0.92500	2.694E-08	2.694E-08	-7.881E-20	-7.881E-20	-2.309E-09	-2.309E-09	-4.071E-12
0.95000	3.295E-08	3.295E-08	-8.188E-20	-8.188E-20	-2.610E-09	-2.610E-09	-4.229E-12
0.96250	3.613E-08	3.613E-08	-8.241E-20	-8.241E-20	-2.764E-09	-2.764E-09	-4.257E-12
0.97500	3.936E-08	3.936E-08	-8.226E-20	-8.226E-20	-2.918E-09	-2.918E-09	-4.249E-12
0.98125	4.097E-08	4.097E-08	-8.192E-20	-8.192E-20	-2.995E-09	-2.995E-09	-4.231E-12
0.98750	4.256E-08	4.256E-08	-8.141E-20	-8.141E-20	-3.071E-09	-3.071E-09	-4.205E-12
0.99375	4.412E-08	4.412E-08	-8.074E-20	-8.074E-20	-3.147E-09	-3.147E-09	-4.171E-12
1.00000	4.565E-08	4.565E-08	-7.990E-20	-7.990E-20	-3.222E-09	-3.222E-09	-4.128E-12
1.00625	4.714E-08	4.714E-08	-7.892E-20	-7.892E-20	-3.296E-09	-3.296E-09	-4.077E-12
1.01250	4.858E-08	4.858E-08	-7.778E-20	-7.778E-20	-3.370E-09	-3.370E-09	-4.020E-12
1.01875	4.997E-08	4.997E-08	-7.651E-20	-7.651E-20	-3.442E-09	-3.442E-09	-3.956E-12
1.02500	5.130E-08	5.130E-08	-7.511E-20	-7.511E-20	-3.513E-09	-3.513E-09	-3.886E-12
1.03750	5.377E-08	5.377E-08	-7.197E-20	-7.197E-20	-3.650E-09	-3.650E-09	-3.731E-12
1.05000	5.597E-08	5.597E-08	-6.843E-20	-6.843E-20	-3.782E-09	-3.782E-09	-3.559E-12
1.07500	5.959E-08	5.959E-08	-6.101E-20	-6.101E-20	-4.023E-09	-4.023E-09	-3.175E-12
1.10000	6.223E-08	6.223E-08	-5.466E-20	-5.466E-20	-4.240E-09	-4.240E-09	-2.737E-12
1.15000	6.516E-08	6.516E-08	-4.172E-20	-4.172E-20	-4.600E-09	-4.600E-09	-1.964E-12
1.20000	6.611E-08	6.611E-08	-3.015E-20	-3.015E-20	-4.867E-09	-4.867E-09	-1.390E-12
1.30000	6.494E-08	6.494E-08	-1.597E-20	-1.597E-20	-5.197E-09	-5.197E-09	-6.794E-13
1.40000	6.206E-08	6.206E-08	-8.971E-21	-8.971E-21	-5.376E-09	-5.376E-09	-3.429E-13
1.50000	5.876E-08	5.876E-08	-5.275E-21	-5.275E-21	-5.481E-09	-5.481E-09	-1.860E-13
1.60000	5.555E-08	5.555E-08	-3.041E-21	-3.041E-21	-5.541E-09	-5.541E-09	-1.135E-13
1.70000	5.253E-08	5.253E-08	-1.799E-21	-1.799E-21	-5.577E-09	-5.577E-09	-7.346E-14
1.80000	4.975E-08	4.975E-08	-1.062E-21	-1.062E-21	-5.598E-09	-5.598E-09	-5.130E-14
1.90000	4.722E-08	4.722E-08	-6.226E-22	-6.226E-22	-5.610E-09	-5.610E-09	-3.814E-14
2.00000	4.490E-08	4.490E-08	-3.634E-22	-3.634E-22	-5.617E-09	-5.617E-09	-2.979E-14

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 20.000 θ_D= 0. ρ_a= 73.589

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	20.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	20.0000	0.10000	195.079	2.268E-06	9.933E-01	-2.165E-10	-2.165E-10	2.165E-10
0.20000	20.0000	0.20000	175.341	2.615E-06	9.917E-01	-2.981E-10	-2.981E-10	2.981E-10
0.30000	20.0000	0.30000	156.073	3.415E-06	9.899E-01	-4.075E-10	-4.075E-10	4.075E-10
0.40000	20.0000	0.40000	137.474	5.976E-06	9.885E-01	-5.676E-10	-5.676E-10	5.676E-10
0.50000	20.0000	0.50000	119.855	9.605E-06	9.881E-01	-7.875E-10	-7.875E-10	7.875E-10
0.60000	20.0000	0.60000	103.717	1.537E-05	9.904E-01	-1.063E-09	-1.063E-09	1.063E-09
0.70000	20.0000	0.70000	89.861	2.476E-05	9.964E-01	-1.468E-09	-1.468E-09	1.468E-09
0.80000	20.0000	0.80000	79.490	3.330E-05	1.002E 00	-1.910E-09	-1.910E-09	1.910E-09
0.85000	20.0000	0.85000	76.077	3.543E-05	1.002E 00	-2.134E-09	-2.134E-09	2.134E-09
0.90000	20.0000	0.90000	74.083	4.013E-05	9.981E-01	-2.277E-09	-2.277E-09	2.277E-09
0.92500	20.0000	0.92500	73.657	4.610E-05	9.961E-01	-2.308E-09	-2.308E-09	2.308E-09
0.95000	20.0000	0.95000	73.622	5.550E-05	9.951E-01	-2.311E-09	-2.311E-09	2.311E-09
0.96250	20.0000	0.96250	73.752	5.635E-05	9.952E-01	-2.301E-09	-2.301E-09	2.301E-09
0.97500	20.0000	0.97500	73.980	6.147E-05	9.959E-01	-2.284E-09	-2.284E-09	2.284E-09
0.98125	20.0000	0.98125	74.130	6.233E-05	9.964E-01	-2.273E-09	-2.273E-09	2.273E-09
0.98750	20.0000	0.98750	74.304	6.318E-05	9.970E-01	-2.260E-09	-2.260E-09	2.260E-09
0.99375	20.0000	0.99375	74.502	6.830E-05	9.978E-01	-2.246E-09	-2.246E-09	2.246E-09
1.00000	20.0000	1.00000	74.724	7.001E-05	9.987E-01	-2.230E-09	-2.230E-09	2.230E-09
1.00625	20.0000	1.00625	74.969	7.172E-05	9.997E-01	-2.212E-09	-2.212E-09	2.212E-09
1.01250	20.0000	1. 1250	75.238	7.513E-05	1.001E 00	-2.193E-09	-2.193E-09	2.193E-09
1.01875	20.0000	1.01875	75.629	7.599E-05	1.002E 00	-2.172E-09	-2.172E-09	2.172E-09
1.02500	20.0000	1.02500	75.843	7.769E-05	1.003E 00	-2.150E-09	-2.150E-09	2.150E-09
1.03750	20.0000	1.03750	76.539	8.196E-05	1.006E 00	-2.102E-09	-2.102E-09	2.102E-09
1.05000	20.0000	1.05000	77.321	8.452E-05	1.009E 00	-2.049E-09	-2.049E-09	2.049E-09
1.07500	20.0000	1.07500	79.138	8.452E-05	1.014E 00	-1.932E-09	-1.932E-09	1.932E-09
1.10000	20.0000	1.10000	81.271	8.452E-05	1.018E 00	-1.820E-09	-1.820E-09	1.820E-09
1.15000	20.0000	1.15000	86.388	8.452E-05	1.023E 00	-1.601E-09	-1.601E-09	1.601E-09
1.20000	20.0000	1.20000	92.478	8.452E-05	1.023E 00	-1.375E-09	-1.375E-09	1.375E-09
1.30000	20.0000	1.30000	106.889	9.050E-05	1.017E 00	-1.002E-09	-1.002E-09	1.002E-09
1.40000	20.0000	1.40000	123.386	9.562E-05	1.009E 00	-7.375E-10	-7.375E-10	7.375E-10
1.50000	20.0000	1.50000	141.240	1.025E-04	1.004E 00	-5.292E-10	-5.292E-10	5.292E-10
1.60000	20.0000	1.60000	159.998	1.076E-04	1.000E 00	-3.824E-10	-3.824E-10	3.824E-10
1.70000	20.0001	1.70000	179.377	1.144E-04	9.982E-01	-2.792E-10	-2.792E-10	2.792E-10
1.80000	20.0001	1.80000	199.194	1.178E-04	9.970E-01	-2.025E-10	-2.025E-10	2.025E-10
1.90000	20.0001	1.90000	219.332	1.212E-04	9.963E-01	-1.480E-10	-1.480E-10	1.480E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 20.000 θ_D= 0. ρ_a= 73.589

z	$_x\mu'$-1.0	T_0	$_0T_1$-T_0	$_xT_1$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.165E-10	49.901	-9.254E-09	-9.254E-09	9.254E-09	9.254E-09	-1.025E-09	-1.025E-09
0.20000	2.981E-10	99.802	-2.199E-08	-2.199E-08	2.199E-08	2.199E-08	-1.412E-09	-1.412E-09
0.30000	4.075E-10	149.703	-3.947E-08	-3.947E-08	3.947E-08	3.947E-08	-1.930E-09	-1.930E-09
0.40000	5.676E-10	199.605	-6.349E-08	-6.349E-08	6.349E-08	6.349E-08	-2.688E-09	-2.688E-09
0.50000	7.875E-10	249.506	-9.707E-08	-9.707E-08	9.707E-08	9.707E-08	-3.730E-09	-3.730E-09
0.60000	1.063E-09	299.407	-1.430E-07	-1.430E-07	1.430E-07	1.430E-07	-5.035E-09	-5.035E-09
0.70000	1.468E-09	349.308	-2.054E-07	-2.054E-07	2.054E-07	2.054E-07	-6.953E-09	-6.953E-09
0.80000	1.910E-09	399.209	-2.898E-07	-2.898E-07	2.898E-07	2.898E-07	-9.047E-09	-9.047E-09
0.85000	2.134E-09	424.160	-3.404E-07	-3.404E-07	3.404E-07	3.404E-07	-1.011E-08	-1.011E-08
0.90000	2.277E-09	449.110	-3.956E-07	-3.956E-07	3.957E-07	3.957E-07	-1.078E-08	-1.078E-08
0.92500	2.308E-09	461.586	-4.242E-07	-4.242E-07	4.243E-07	4.243E-07	-1.093E-08	-1.093E-08
0.95000	2.311E-09	474.061	-4.530E-07	-4.530E-07	4.532E-07	4.532E-07	-1.095E-08	-1.095E-08
0.96250	2.301E-09	480.299	-4.674E-07	-4.674E-07	4.675E-07	4.675E-07	-1.090E-08	-1.090E-08
0.97500	2.284E-09	486.536	-4.817E-07	-4.817E-07	4.819E-07	4.819E-07	-1.082E-08	-1.082E-08
0.98125	2.273E-09	489.655	-4.888E-07	-4.888E-07	4.890E-07	4.890E-07	-1.077E-08	-1.077E-08
0.98750	2.260E-09	492.774	-4.959E-07	-4.959E-07	4.960E-07	4.960E-07	-1.071E-08	-1.071E-08
0.99375	2.246E-09	495.893	-5.029E-07	-5.029E-07	5.031E-07	5.031E-07	-1.064E-08	-1.064E-08
1.00000	2.230E-09	499.012	-5.099E-07	-5.099E-07	5.101E-07	5.101E-07	-1.056E-08	-1.056E-08
1.00625	2.212E-09	502.130	-5.168E-07	-5.168E-07	5.170E-07	5.170E-07	-1.048E-08	-1.048E-08
1.01250	2.193E-09	505.249	-5.237E-07	-5.237E-07	5.239E-07	5.239E-07	-1.039E-08	-1.039E-08
1.01875	2.172E-09	508.368	-5.305E-07	-5.305E-07	5.307E-07	5.307E-07	-1.029E-08	-1.029E-08
1.02500	2.150E-09	511.487	-5.372E-07	-5.372E-07	5.374E-07	5.374E-07	-1.018E-08	-1.018E-08
1.03750	2.102E-09	517.724	-5.505E-07	-5.505E-07	5.507E-07	5.507E-07	-9.957E-09	-9.957E-09
1.05000	2.049E-09	523.962	-5.634E-07	-5.634E-07	5.637E-07	5.637E-07	-9.707E-09	-9.707E-09
1.07500	1.932E-09	536.437	-5.882E-07	-5.882E-07	5.885E-07	5.885E-07	-9.151E-09	-9.151E-09
1.10000	1.820E-09	548.913	-6.116E-07	-6.116E-07	6.119E-07	6.119E-07	-8.620E-09	-8.620E-09
1.15000	1.601E-09	573.863	-6.543E-07	-6.543E-07	6.547E-07	6.547E-07	-7.584E-09	-7.584E-09
1.20000	1.376E-09	598.814	-6.914E-07	-6.914E-07	6.918E-07	6.918E-07	-6.513E-09	-6.513E-09
1.30000	1.002E-09	648.715	-7.498E-07	-7.498E-07	7.503E-07	7.503E-07	-4.747E-09	-4.747E-09
1.40000	7.376E-10	698.616	-7.930E-07	-7.930E-07	7.935E-07	7.935E-07	-3.493E-09	-3.493E-09
1.50000	5.292E-10	748.517	-8.243E-07	-8.243E-07	8.249E-07	8.249E-07	-2.507E-09	-2.507E-09
1.60000	3.824E-10	798.418	-8.466E-07	-8.466E-07	8.473E-07	8.473E-07	-1.811E-09	-1.811E-09
1.70000	2.792E-10	848.319	-8.630E-07	-8.630E-07	8.638E-07	8.638E-07	-1.323E-09	-1.323E-09
1.80000	2.025E-10	898.221	-8.748E-07	-8.748E-07	8.758E-07	8.758E-07	-9.591E-10	-9.591E-10
1.90000	1.480E-10	948.122	-8.835E-07	-8.835E-07	8.845E-07	8.845E-07	-7.011E-10	-7.011E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 20.000 θ_D= 0. ρ_0= 73.589

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-6.104E-14
0.10000	5.693E-11	5.693E-11	-8.820E-22	-8.820E-22	-1.030E-11	-1.030E-11	-8.019E-14
0.20000	1.565E-10	1.565E-10	-1.468E-21	-1.468E-21	-2.752E-11	-2.752E-11	-1.104E-13
0.30000	3.191E-10	3.191E-10	-2.414E-21	-2.414E-21	-5.601E-11	-5.601E-11	-1.625E-13
0.40000	6.191E-10	6.191E-10	-4.011E-21	-4.011E-21	-1.029E-10	-1.029E-10	-2.498E-13
0.50000	1.134E-09	1.134E-09	-6.570E-21	-6.570E-21	-1.807E-10	-1.807E-10	-4.099E-13
0.60000	1.995E-09	1.995E-09	-1.033E-20	-1.033E-20	-3.055E-10	-3.055E-10	-7.233E-13
0.70000	3.758E-09	3.758E-09	-1.660E-20	-1.660E-20	-5.025E-10	-5.025E-10	-1.238E-12
0.80000	7.395E-09	7.395E-09	-2.440E-20	-2.440E-20	-8.086E-10	-8.086E-10	-1.987E-12
0.85000	1.042E-08	1.042E-08	-2.875E-20	-2.875E-20	-1.008E-09	-1.008E-09	-2.314E-12
0.90000	1.456E-08	1.456E-08	-3.164E-20	-3.164E-20	-1.235E-09	-1.235E-09	-2.544E-12
0.92500	1.701E-08	1.701E-08	-3.230E-20	-3.230E-20	-1.355E-09	-1.355E-09	-2.598E-12
0.95000	1.964E-08	1.964E-08	-3.235E-20	-3.235E-20	-1.476E-09	-1.476E-09	-2.602E-12
0.96250	2.098E-08	2.098E-08	-3.215E-20	-3.215E-20	-1.536E-09	-1.536E-09	-2.586E-12
0.97500	2.231E-08	2.231E-08	-3.180E-20	-3.180E-20	-1.596E-09	-1.596E-09	-2.558E-12
0.98125	2.296E-08	2.296E-08	-3.157E-20	-3.157E-20	-1.626E-09	-1.626E-09	-2.539E-12
0.98750	2.361E-08	2.361E-08	-3.131E-20	-3.131E-20	-1.655E-09	-1.655E-09	-2.518E-12
0.99375	2.424E-08	2.424E-08	-3.101E-20	-3.101E-20	-1.684E-09	-1.684E-09	-2.494E-12
1.00000	2.485E-08	2.485E-08	-3.068E-20	-3.068E-20	-1.713E-09	-1.713E-09	-2.468E-12
1.00625	2.545E-08	2.545E-08	-3.032E-20	-3.032E-20	-1.741E-09	-1.741E-09	-2.439E-12
1.01250	2.603E-08	2.603E-08	-2.993E-20	-2.993E-20	-1.770E-09	-1.770E-09	-2.408E-12
1.01875	2.658E-08	2.658E-08	-2.951E-20	-2.951E-20	-1.797E-09	-1.797E-09	-2.375E-12
1.02500	2.711E-08	2.711E-08	-2.907E-20	-2.907E-20	-1.825E-09	-1.825E-09	-2.341E-12
1.03750	2.811E-08	2.811E-08	-2.812E-20	-2.812E-20	-1.878E-09	-1.878E-09	-2.267E-12
1.05000	2.900E-08	2.900E-08	-2.708E-20	-2.708E-20	-1.930E-09	-1.930E-09	-2.187E-12
1.07500	3.051E-08	3.051E-08	-2.481E-20	-2.481E-20	-2.027E-09	-2.027E-09	-2.019E-12
1.10000	3.168E-08	3.168E-08	-2.272E-20	-2.272E-20	-2.116E-09	-2.116E-09	-1.827E-12
1.15000	3.314E-08	3.314E-08	-1.885E-20	-1.885E-20	-2.271E-09	-2.271E-09	-1.440E-12
1.20000	3.377E-08	3.377E-08	-1.509E-20	-1.509E-20	-2.398E-09	-2.398E-09	-1.114E-12
1.30000	3.362E-08	3.362E-08	-9.448E-21	-9.448E-21	-2.577E-09	-2.577E-09	-6.411E-13
1.40000	3.254E-08	3.254E-08	-5.951E-21	-5.951E-21	-2.690E-09	-2.690E-09	-3.683E-13
1.50000	3.114E-08	3.114E-08	-3.609E-21	-3.609E-21	-2.761E-09	-2.761E-09	-2.281E-13
1.60000	2.965E-08	2.965E-08	-2.181E-21	-2.181E-21	-2.803E-09	-2.803E-09	-1.496E-13
1.70000	2.819E-08	2.819E-08	-1.323E-21	-1.323E-21	-2.829E-09	-2.829E-09	-1.031E-13
1.80000	2.679E-08	2.679E-08	-7.931E-22	-7.931E-22	-2.844E-09	-2.844E-09	-7.580E-14
1.90000	2.549E-08	2.549E-08	-4.710E-22	-4.710E-22	-2.853E-09	-2.853E-09	-5.819E-14

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0=25.000 θ_D= 0. ρ_0= 90.930

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	25.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	25.0000	0.10000	195.870	1.628E-06	9.886E-01	-2.137E-10	-2.137E-10	2.137E-10
0.20000	25.0000	0.20000	177.095	2.721E-06	9.865E-01	-2.898E-10	-2.898E-10	2.898E-10
0.30000	25.0000	0.30000	159.016	4.802E-06	9.847E-01	-3.885E-10	-3.885E-10	3.885E-10
0.40000	25.0000	0.40000	141.900	1.153E-05	9.841E-01	-5.227E-10	-5.227E-10	5.227E-10
0.50000	25.0000	0.50000	126.137	2.006E-05	9.857E-01	-7.007E-10	-7.007E-10	7.007E-10
0.60000	25.0000	0.60000	112.302	2.433E-05	9.902E-01	-9.063E-10	-9.063E-10	9.063E-10
0.70000	25.0000	0.70000	101.186	2.946E-05	9.962E-01	-1.114E-09	-1.114E-09	1.114E-09
0.80000	25.0000	0.80000	93.763	3.458E-05	9.980E-01	-1.331E-09	-1.331E-09	1.331E-09
0.85000	25.0000	0.85000	91.734	3.842E-05	9.955E-01	-1.401E-09	-1.401E-09	1.401E-09
0.90000	25.0000	0.90000	90.940	4.354E-05	9.923E-01	-1.429E-09	-1.429E-09	1.429E-09
0.92500	25.0000	0.92500	91.019	4.440E-05	9.915E-01	-1.426E-09	-1.426E-09	1.426E-09
0.95000	25.0000	0.95000	91.415	4.867E-05	9.920E-01	-1.412E-09	-1.412E-09	1.412E-09
0.96250	25.0000	0.96250	91.730	5.123E-05	9.929E-01	-1.401E-09	-1.401E-09	1.401E-09
0.97500	25.0000	0.97500	92.123	5.293E-05	9.941E-01	-1.387E-09	-1.387E-09	1.387E-09
0.98125	25.0000	0.98125	92.349	5.550E-05	9.949E-01	-1.379E-09	-1.379E-09	1.379E-09
0.98750	25.0000	0.98750	92.593	5.550E-05	9.958E-01	-1.371E-09	-1.371E-09	1.371E-09
0.99375	25.0000	0.99375	92.856	5.891E-05	9.967E-01	-1.362E-09	-1.362E-09	1.362E-09
1.00000	25.0000	1.00000	93.138	5.976E-05	9.978E-01	-1.352E-09	-1.352E-09	1.352E-09
1.00625	25.0000	1.00625	93.438	5.976E-05	9.989E-01	-1.342E-09	-1.342E-09	1.342E-09
1.01250	25.0000	1.01250	93.757	6.318E-05	1.000E 00	-1.332E-09	-1.332E-09	1.332E-09
1.01875	25.0000	1.01875	94.093	6.318E-05	1.001E 00	-1.321E-09	-1.321E-09	1.321E-09
1.02500	25.0000	1.02500	94.448	6.574E-05	1.003E 00	-1.309E-09	-1.309E-09	1.309E-09
1.03750	25.0000	1.03750	95.211	6.745E-05	1.005E 00	-1.284E-09	-1.284E-09	1.284E-09
1.05000	25.0000	1.05000	96.042	7.001E-05	1.008E 00	-1.258E-09	-1.258E-09	1.258E-09
1.07500	25.0000	1.07500	97.906	7.001E-05	1.014E 00	-1.200E-09	-1.200E-09	1.200E-09
1.10000	25.0000	1.10000	100.025	7.086E-05	1.018E 00	-1.139E-09	-1.139E-09	1.139E-09
1.15000	25.0000	1.15000	104.964	7.086E-05	1.025E 00	-1.039E-09	-1.039E-09	1.039E-09
1.20000	25.0000	1.20000	110.731	7.172E-05	1.028E 00	-9.331E-10	-9.331E-10	9.331E-10
1.30000	25.0000	1.30000	124.272	7.428E-05	1.025E 00	-7.255E-10	-7.255E-10	7.255E-10
1.40000	25.0000	1.40000	139.827	7.769E-05	1.019E 00	-5.433E-10	-5.433E-10	5.433E-10
1.50000	25.0000	1.50000	156.797	8.367E-05	1.012E 00	-4.027E-10	-4.027E-10	4.027E-10
1.60000	25.0000	1.60000	174.771	8.879E-05	1.007E 00	-3.009E-10	-3.009E-10	3.009E-10
1.70000	25.0000	1.70000	193.470	9.050E-05	1.003E 00	-2.222E-10	-2.222E-10	2.222E-10
1.80000	25.0000	1.80000	212.702	9.221E-05	1.001E 00	-1.641E-10	-1.641E-10	1.641E-10
1.90000	25.0000	1.90000	232.335	9.392E-05	9.991E-01	-1.210E-10	-1.210E-10	1.210E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_D= 25.000 θ_D= 0. ρ_a= 90.930

z	$_x\mu'_{-1}$ 0	T_o	$_oT_f - T_o$	$_xT_f - T_o$	$_oT_g - T_o$	$_xT_g - T_o$	$_oD_z - D_o$	$_xD_z - D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.137E-10	49.901	-9.196E-09	-9.196E-09	9.196E-09	9.196E-09	-1.012E-09	-1.012E-09
0.20000	2.898E-10	99.802	-2.167E-08	-2.167E-08	2.167E-08	2.167E-08	-1.372E-09	-1.372E-09
0.30000	3.885E-10	149.703	-3.849E-08	-3.849E-08	3.849E-08	3.849E-08	-1.840E-09	-1.840E-09
0.40000	5.227E-10	199.605	-6.095E-08	-6.095E-08	6.095E-08	6.095E-08	-2.476E-09	-2.476E-09
0.50000	7.007E-10	249.506	-9.136E-08	-9.136E-08	9.137E-08	9.137E-08	-3.319E-09	-3.319E-09
0.60000	9.063E-10	299.407	-1.314E-07	-1.314E-07	1.314E-07	1.314E-07	-4.293E-09	-4.293E-09
0.70000	1.114E-09	349.308	-1.819E-07	-1.819E-07	1.819E-07	1.819E-07	-5.278E-09	-5.278E-09
0.80000	1.331E-09	399.209	-2.431E-07	-2.431E-07	2.431E-07	2.431E-07	-6.307E-09	-6.307E-09
0.85000	1.401E-09	424.160	-2.772E-07	-2.772E-07	2.773E-07	2.773E-07	-6.635E-09	-6.635E-09
0.90000	1.429E-09	449.110	-3.126E-07	-3.126E-07	3.127E-07	3.127E-07	-6.768E-09	-6.768E-09
0.92500	1.426E-09	461.586	-3.304E-07	-3.304E-07	3.305E-07	3.305E-07	-6.755E-09	-6.755E-09
0.95000	1.412E-09	474.061	-3.481E-07	-3.481E-07	3.482E-07	3.482E-07	-6.688E-09	-6.688E-09
0.96250	1.401E-09	480.299	-3.569E-07	-3.569E-07	3.570E-07	3.570E-07	-6.636E-09	-6.636E-09
0.97500	1.387E-09	486.536	-3.656E-07	-3.656E-07	3.657E-07	3.657E-07	-6.571E-09	-6.571E-09
0.98125	1.379E-09	489.655	-3.699E-07	-3.699E-07	3.700E-07	3.700E-07	-6.534E-09	-6.534E-09
0.98750	1.371E-09	492.774	-3.742E-07	-3.742E-07	3.743E-07	3.743E-07	-6.494E-09	-6.494E-09
0.99375	1.362E-09	495.893	-3.784E-07	-3.784E-07	3.786E-07	3.786E-07	-6.451E-09	-6.451E-09
1.00000	1.352E-09	499.011	-3.827E-07	-3.827E-07	3.828E-07	3.828E-07	-6.406E-09	-6.406E-09
1.00625	1.342E-09	502.130	-3.869E-07	-3.869E-07	3.870E-07	3.870E-07	-6.358E-09	-6.358E-09
1.01250	1.332E-09	505.249	-3.910E-07	-3.910E-07	3.912E-07	3.912E-07	-6.308E-09	-6.308E-09
1.01875	1.321E-09	508.368	-3.952E-07	-3.952E-07	3.953E-07	3.953E-07	-6.255E-09	-6.255E-09
1.02500	1.309E-09	511.487	-3.993E-07	-3.993E-07	3.994E-07	3.994E-07	-6.199E-09	-6.199E-09
1.03750	1.284E-09	517.724	-4.073E-07	-4.073E-07	4.075E-07	4.075E-07	-6.082E-09	-6.082E-09
1.05000	1.258E-09	523.962	-4.153E-07	-4.153E-07	4.155E-07	4.155E-07	-5.957E-09	-5.957E-09
1.07500	1.200E-09	536.437	-4.306E-07	-4.306E-07	4.308E-07	4.308E-07	-5.686E-09	-5.686E-09
1.10000	1.139E-09	548.913	-4.452E-07	-4.452E-07	4.454E-07	4.454E-07	-5.393E-09	-5.393E-09
1.15000	1.039E-09	573.863	-4.724E-07	-4.724E-07	4.726E-07	4.726E-07	-4.920E-09	-4.920E-09
1.20000	9.331E-10	598.814	-4.969E-07	-4.969E-07	4.972E-07	4.972E-07	-4.420E-09	-4.420E-09
1.30000	7.255E-10	648.715	-5.382E-07	-5.382E-07	5.385E-07	5.385E-07	-3.436E-09	-3.436E-09
1.40000	5.433E-10	698.616	-5.697E-07	-5.697E-07	5.701E-07	5.701E-07	-2.573E-09	-2.573E-09
1.50000	4.027E-10	748.517	-5.931E-07	-5.931E-07	5.935E-07	5.935E-07	-1.908E-09	-1.908E-09
1.60000	3.009E-10	798.418	-6.105E-07	-6.105E-07	6.109E-07	6.110E-07	-1.425E-09	-1.425E-09
1.70000	2.222E-10	848.319	-6.234E-07	-6.234E-07	6.239E-07	6.239E-07	-1.052E-09	-1.052E-09
1.80000	1.641E-10	898.221	-6.329E-07	-6.329E-07	6.335E-07	6.335E-07	-7.771E-10	-7.771E-10
1.90000	1.210E-10	948.122	-6.400E-07	-6.400E-07	6.406E-07	6.406E-07	-5.729E-10	-5.729E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 25.000 θ_D= 0. ρ_a= 90.930

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-9.321E-14
0.10000	6.912E-11	6.912E-11	-8.641E-22	-8.641E-22	-1.019E-11	-1.019E-11	-1.210E-13
0.20000	1.872E-10	1.872E-10	-1.403E-21	-1.403E-21	-2.684E-11	-2.684E-11	-1.634E-13
0.30000	3.735E-10	3.735E-10	-2.237E-21	-2.237E-21	-5.364E-11	-5.364E-11	-2.326E-13
0.40000	6.909E-10	6.909E-10	-3.543E-21	-3.543E-21	-9.598E-11	-9.598E-11	-3.424E-13
0.50000	1.219E-09	1.219E-09	-5.510E-21	-5.510E-21	-1.629E-10	-1.629E-10	-5.178E-13
0.60000	2.029E-09	2.029E-09	-8.118E-21	-8.118E-21	-2.641E-10	-2.641E-10	-8.039E-13
0.70000	3.475E-09	3.475E-09	-1.108E-20	-1.108E-20	-4.077E-10	-4.077E-10	-1.222E-12
0.80000	6.090E-09	6.090E-09	-1.439E-20	-1.439E-20	-5.988E-10	-5.988E-10	-1.616E-12
0.85000	8.020E-09	8.020E-09	-1.550E-20	-1.550E-20	-7.110E-10	-7.110E-10	-1.752E-12
0.90000	1.039E-08	1.039E-08	-1.596E-20	-1.596E-20	-8.291E-10	-8.291E-10	-1.809E-12
0.92500	1.171E-08	1.171E-08	-1.591E-20	-1.591E-20	-8.887E-10	-8.887E-10	-1.803E-12
0.95000	1.305E-08	1.305E-08	-1.568E-20	-1.568E-20	-9.479E-10	-9.479E-10	-1.775E-12
0.96250	1.372E-08	1.372E-08	-1.550E-20	-1.550E-20	-9.770E-10	-9.770E-10	-1.752E-12
0.97500	1.436E-08	1.436E-08	-1.528E-20	-1.528E-20	-1.006E-09	-1.006E-09	-1.725E-12
0.98125	1.468E-08	1.468E-08	-1.516E-20	-1.516E-20	-1.020E-09	-1.020E-09	-1.709E-12
0.98750	1.499E-08	1.499E-08	-1.502E-20	-1.502E-20	-1.034E-09	-1.034E-09	-1.693E-12
0.99375	1.529E-08	1.529E-08	-1.488E-20	-1.488E-20	-1.048E-09	-1.048E-09	-1.675E-12
1.00000	1.559E-08	1.559E-08	-1.473E-20	-1.473E-20	-1.062E-09	-1.062E-09	-1.657E-12
1.00625	1.587E-08	1.587E-08	-1.457E-20	-1.457E-20	-1.076E-09	-1.076E-09	-1.637E-12
1.01250	1.615E-08	1.615E-08	-1.440E-20	-1.440E-20	-1.089E-09	-1.089E-09	-1.617E-12
1.01875	1.641E-08	1.641E-08	-1.422E-20	-1.422E-20	-1.103E-09	-1.103E-09	-1.596E-12
1.02500	1.667E-08	1.667E-08	-1.404E-20	-1.404E-20	-1.116E-09	-1.116E-09	-1.574E-12
1.03750	1.715E-08	1.715E-08	-1.365E-20	-1.365E-20	-1.142E-09	-1.142E-09	-1.529E-12
1.05000	1.759E-08	1.759E-08	-1.324E-20	-1.324E-20	-1.167E-09	-1.167E-09	-1.482E-12
1.07500	1.834E-08	1.834E-08	-1.237E-20	-1.237E-20	-1.215E-09	-1.215E-09	-1.383E-12
1.10000	1.893E-08	1.893E-08	-1.145E-20	-1.145E-20	-1.259E-09	-1.259E-09	-1.283E-12
1.15000	1.972E-08	1.972E-08	-9.971E-21	-9.971E-21	-1.339E-09	-1.339E-09	-1.053E-12
1.20000	2.011E-08	2.011E-08	-8.484E-21	-8.484E-21	-1.408E-09	-1.408E-09	-8.505E-13
1.30000	2.014E-08	2.014E-08	-5.805E-21	-5.805E-21	-1.515E-09	-1.515E-09	-5.476E-13
1.40000	1.966E-08	1.966E-08	-3.755E-21	-3.755E-21	-1.585E-09	-1.585E-09	-3.604E-13
1.50000	1.896E-08	1.896E-08	-2.369E-21	-2.369E-21	-1.630E-09	-1.630E-09	-2.445E-13
1.60000	1.818E-08	1.818E-08	-1.490E-21	-1.490E-21	-1.659E-09	-1.659E-09	-1.707E-13
1.70000	1.736E-08	1.736E-08	-9.194E-22	-9.194E-22	-1.676E-09	-1.676E-09	-1.256E-13
1.80000	1.657E-08	1.657E-08	-5.592E-22	-5.592E-22	-1.687E-09	-1.687E-09	-9.636E-14
1.90000	1.581E-08	1.581E-08	-3.364E-22	-3.364E-22	-1.694E-09	-1.694E-09	-7.697E-14

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	30.0000	0.	216.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	30.0000	0.10000	196.820	7.204E-07	9.849E-01	-2.104E-10	-2.104E-10	2.104E-10
0.20000	30.0000	0.20000	179.189	2.615E-06	9.830E-01	-2.801E-10	-2.801E-10	2.801E-10
0.30000	30.0000	0.30000	162.496	5.229E-06	9.819E-01	-3.672E-10	-3.672E-10	3.672E-10
0.40000	30.0000	0.40000	147.062	1.110E-05	9.826E-01	-4.749E-10	-4.749E-10	4.749E-10
0.50000	30.0000	0.50000	133.325	1.302E-05	9.854E-01	-6.131E-10	-6.131E-10	6.131E-10
0.60000	30.0000	0.60000	121.859	1.494E-05	9.899E-01	-7.587E-10	-7.587E-10	7.587E-10
0.70000	30.0000	0.70000	113.355	1.708E-05	9.932E-01	-8.887E-10	-8.887E-10	8.887E-10
0.80000	30.0000	0.80000	108.513	1.836E-05	9.916E-01	-9.724E-10	-9.724E-10	9.724E-10
0.85000	30.0000	0.85000	107.635	1.964E-05	9.894E-01	-9.884E-10	-9.884E-10	9.884E-10
0.90000	30.0000	0.90000	107.828	2.134E-05	9.884E-01	-9.849E-10	-9.849E-10	9.849E-10
0.92500	30.0000	0.92500	108.325	2.391E-05	9.890E-01	-9.758E-10	-9.758E-10	9.758E-10
0.95000	30.0000	0.95000	109.086	2.391E-05	9.906E-01	-9.621E-10	-9.621E-10	9.621E-10
0.96250	30.0000	0.96250	109.564	2.391E-05	9.918E-01	-9.536E-10	-9.536E-10	9.536E-10
0.97500	30.0000	0.97500	110.105	2.647E-05	9.933E-01	-9.441E-10	-9.441E-10	9.441E-10
0.98125	30.0000	0.98125	110.399	2.647E-05	9.942E-01	-9.389E-10	-9.389E-10	9.389E-10
0.98750	30.0000	0.98750	110.709	2.817E-05	9.951E-01	-9.335E-10	-9.335E-10	9.335E-10
0.99375	30.0000	0.99375	111.034	3.159E-05	9.960E-01	-9.279E-10	-9.279E-10	9.279E-10
1.00000	30.0000	1.00000	111.374	3.169E-05	9.970E-01	-9.220E-10	-9.220E-10	9.220E-10
1.00625	30.0000	1.00625	111.730	3.330E-05	9.980E-01	-9.160E-10	-9.160E-10	9.160E-10
1.01250	30.0000	1.01250	112.101	3.500E-05	9.991E-01	-9.097E-10	-9.097E-10	9.097E-10
1.01875	30.0000	1.01875	112.486	3.586E-05	1.000E 00	-9.032E-10	-9.032E-10	9.032E-10
1.02500	30.0000	1.02500	112.886	3.842E-05	1.001E 00	-8.965E-10	-8.965E-10	8.965E-10
1.03750	30.0000	1.03750	113.730	3.927E-05	1.004E 00	-8.825E-10	-8.825E-10	8.825E-10
1.05000	30.0000	1.05000	114.631	4.183E-05	1.006E 00	-8.679E-10	-8.679E-10	8.679E-10
1.07500	30.0000	1.07500	116.598	4.183E-05	1.011E 00	-8.367E-10	-8.367E-10	8.367E-10
1.10000	30.0000	1.10000	118.776	4.183E-05	1.015E 00	-8.035E-10	-8.035E-10	8.035E-10
1.15000	30.0000	1.15000	123.719	4.183E-05	1.022E 00	-7.329E-10	-7.329E-10	7.329E-10
1.20000	30.0000	1.20000	129.371	4.183E-05	1.026E 00	-6.598E-10	-6.598E-10	6.598E-10
1.30000	30.0000	1.30000	142.450	4.183E-05	1.028E 00	-5.174E-10	-5.174E-10	5.174E-10
1.40000	30.0000	1.40000	157.394	4.525E-05	1.024E 00	-3.988E-10	-3.988E-10	3.988E-10
1.50000	30.0000	1.50000	173.723	4.525E-05	1.018E 00	-3.060E-10	-3.060E-10	3.060E-10
1.60000	30.0000	1.60000	191.082	4.610E-05	1.013E 00	-2.310E-10	-2.310E-10	2.310E-10
1.70000	30.0000	1.70000	209.215	5.293E-05	1.009E 00	-1.732E-10	-1.732E-10	1.732E-10
1.80000	30.0000	1.80000	227.937	5.293E-05	1.006E 00	-1.295E-10	-1.295E-10	1.295E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	$_x\mu'$-1.0	T_o	$_oT_i$-T_o	$_xT_i$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.104E-10	49.901	-9.129E-09	-9.129E-09	9.129E-09	9.129E-09	-9.967E-10	-9.967E-10
0.20000	2.801E-10	99.802	-2.130E-08	-2.130E-08	2.130E-08	2.130E-08	-1.327E-09	-1.327E-09
0.30000	3.672E-10	149.703	-3.737E-08	-3.737E-08	3.737E-08	3.737E-08	-1.739E-09	-1.739E-09
0.40000	4.749E-10	199.605	-5.826E-08	-5.826E-08	5.826E-08	5.826E-08	-2.249E-09	-2.249E-09
0.50000	6.131E-10	249.506	-8.534E-08	-8.534E-08	8.534E-08	8.534E-08	-2.904E-09	-2.904E-09
0.60000	7.587E-10	299.407	-1.196E-07	-1.196E-07	1.196E-07	1.196E-07	-3.594E-09	-3.594E-09
0.70000	8.887E-10	349.308	-1.608E-07	-1.608E-07	1.608E-07	1.608E-07	-4.209E-09	-4.209E-09
0.80000	9.724E-10	399.209	-2.075E-07	-2.075E-07	2.075E-07	2.075E-07	-4.606E-09	-4.606E-09
0.85000	9.884E-10	424.160	-2.320E-07	-2.320E-07	2.320E-07	2.320E-07	-4.682E-09	-4.682E-09
0.90000	9.849E-10	449.110	-2.567E-07	-2.567E-07	2.567E-07	2.567E-07	-4.665E-09	-4.665E-09
0.92500	9.758E-10	461.586	-2.689E-07	-2.689E-07	2.689E-07	2.689E-07	-4.622E-09	-4.622E-09
0.95000	9.621E-10	474.061	-2.810E-07	-2.810E-07	2.810E-07	2.810E-07	-4.557E-09	-4.557E-09
0.96250	9.536E-10	480.299	-2.870E-07	-2.870E-07	2.870E-07	2.870E-07	-4.517E-09	-4.517E-09
0.97500	9.441E-10	486.536	-2.929E-07	-2.929E-07	2.929E-07	2.929E-07	-4.472E-09	-4.472E-09
0.98125	9.389E-10	489.655	-2.958E-07	-2.958E-07	2.958E-07	2.958E-07	-4.447E-09	-4.447E-09
0.98750	9.335E-10	492.774	-2.987E-07	-2.987E-07	2.988E-07	2.988E-07	-4.422E-09	-4.422E-09
0.99375	9.279E-10	495.893	-3.016E-07	-3.016E-07	3.017E-07	3.017E-07	-4.395E-09	-4.395E-09
1.00000	9.220E-10	499.012	-3.045E-07	-3.045E-07	3.045E-07	3.045E-07	-4.367E-09	-4.367E-09
1.00625	9.160E-10	502.130	-3.074E-07	-3.074E-07	3.074E-07	3.074E-07	-4.339E-09	-4.339E-09
1.01250	9.097E-10	505.249	-3.102E-07	-3.102E-07	3.103E-07	3.103E-07	-4.309E-09	-4.309E-09
1.01875	9.032E-10	508.368	-3.130E-07	-3.130E-07	3.131E-07	3.131E-07	-4.278E-09	-4.278E-09
1.02500	8.965E-10	511.487	-3.158E-07	-3.158E-07	3.159E-07	3.159E-07	-4.246E-09	-4.246E-09
1.03750	8.825E-10	517.724	-3.214E-07	-3.214E-07	3.215E-07	3.215E-07	-4.180E-09	-4.180E-09
1.05000	8.679E-10	523.962	-3.268E-07	-3.268E-07	3.269E-07	3.269E-07	-4.111E-09	-4.111E-09
1.07500	8.367E-10	536.437	-3.375E-07	-3.375E-07	3.376E-07	3.376E-07	-3.963E-09	-3.963E-09
1.10000	8.035E-10	548.913	-3.477E-07	-3.477E-07	3.478E-07	3.478E-07	-3.806E-09	-3.806E-09
1.15000	7.329E-10	573.863	-3.669E-07	-3.669E-07	3.670E-07	3.670E-07	-3.472E-09	-3.472E-09
1.20000	6.598E-10	598.814	-3.843E-07	-3.843E-07	3.843E-07	3.843E-07	-3.125E-09	-3.125E-09
1.30000	5.174E-10	648.715	-4.136E-07	-4.136E-07	4.137E-07	4.137E-07	-2.451E-09	-2.451E-09
1.40000	3.988E-10	698.616	-4.363E-07	-4.363E-07	4.364E-07	4.364E-07	-1.889E-09	-1.889E-09
1.50000	3.060E-10	748.517	-4.538E-07	-4.538E-07	4.539E-07	4.539E-07	-1.450E-09	-1.450E-09
1.60000	2.310E-10	798.418	-4.671E-07	-4.671E-07	4.672E-07	4.672E-07	-1.094E-09	-1.094E-09
1.70000	1.732E-10	848.320	-4.771E-07	-4.771E-07	4.772E-07	4.772E-07	-8.204E-10	-8.204E-10
1.80000	1.295E-10	898.221	-4.846E-07	-4.846E-07	4.848E-07	4.848E-07	-6.134E-10	-6.134E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 30.000 θ_D= 0. ρ_0=107.579

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_\dagger$	$_x\kappa_\dagger$	α
0.10000	8.039E-11	8.039E-11	-8.432E-22	-8.432E-22	-1.006E-11	-1.006E-11	-1.671E-13
0.20000	2.138E-10	2.138E-10	-1.329E-21	-1.329E-21	-2.606E-11	-2.606E-11	-2.206E-13
0.30000	4.168E-10	4.168E-10	-2.045E-21	-2.045E-21	-5.098E-11	-5.098E-11	-3.025E-13
0.40000	7.388E-10	7.388E-10	-3.066E-21	-3.066E-21	-8.873E-11	-8.873E-11	-4.258E-13
0.50000	1.252E-09	1.252E-09	-4.505E-21	-4.505E-21	-1.449E-10	-1.449E-10	-5.941E-13
0.60000	1.991E-09	1.991E-09	-6.211E-21	-6.211E-21	-2.249E-10	-2.249E-10	-8.235E-13
0.70000	3.163E-09	3.163E-09	-7.882E-21	-7.882E-21	-3.306E-10	-3.306E-10	-1.085E-12
0.80000	5.007E-09	5.007E-09	-9.027E-21	-9.027E-21	-4.581E-10	-4.581E-10	-1.289E-12
0.85000	6.212E-09	6.212E-09	-9.252E-21	-9.252E-21	-5.266E-10	-5.266E-10	-1.332E-12
0.90000	7.548E-09	7.548E-09	-9.202E-21	-9.202E-21	-5.958E-10	-5.958E-10	-1.322E-12
0.92500	8.239E-09	8.239E-09	-9.075E-21	-9.075E-21	-6.300E-10	-6.300E-10	-1.298E-12
0.95000	8.918E-09	8.918E-09	-8.884E-21	-8.884E-21	-6.636E-10	-6.636E-10	-1.263E-12
0.96250	9.246E-09	9.246E-09	-8.766E-21	-8.766E-21	-6.801E-10	-6.801E-10	-1.241E-12
0.97500	9.563E-09	9.563E-09	-8.634E-21	-8.634E-21	-6.964E-10	-6.964E-10	-1.217E-12
0.98125	9.716E-09	9.716E-09	-8.563E-21	-8.563E-21	-7.044E-10	-7.044E-10	-1.204E-12
0.98750	9.866E-09	9.866E-09	-8.489E-21	-8.489E-21	-7.124E-10	-7.124E-10	-1.191E-12
0.99375	1.001E-08	1.001E-08	-8.412E-21	-8.412E-21	-7.203E-10	-7.203E-10	-1.177E-12
1.00000	1.015E-08	1.015E-08	-8.332E-21	-8.332E-21	-7.281E-10	-7.281E-10	-1.163E-12
1.00625	1.029E-08	1.029E-08	-8.249E-21	-8.249E-21	-7.359E-10	-7.359E-10	-1.149E-12
1.01250	1.043E-08	1.043E-08	-8.164E-21	-8.164E-21	-7.436E-10	-7.436E-10	-1.134E-12
1.01875	1.056E-08	1.056E-08	-8.076E-21	-8.076E-21	-7.512E-10	-7.512E-10	-1.119E-12
1.02500	1.068E-08	1.068E-08	-7.986E-21	-7.986E-21	-7.587E-10	-7.587E-10	-1.104E-12
1.03750	1.091E-08	1.091E-08	-7.800E-21	-7.800E-21	-7.734E-10	-7.734E-10	-1.072E-12
1.05000	1.113E-08	1.113E-08	-7.606E-21	-7.606E-21	-7.878E-10	-7.878E-10	-1.040E-12
1.07500	1.150E-08	1.150E-08	-7.198E-21	-7.198E-21	-8.155E-10	-8.155E-10	-9.739E-13
1.10000	1.181E-08	1.181E-08	-6.772E-21	-6.772E-21	-8.416E-10	-8.416E-10	-9.076E-13
1.15000	1.224E-08	1.224E-08	-5.896E-21	-5.896E-21	-8.890E-10	-8.890E-10	-7.790E-13
1.20000	1.248E-08	1.248E-08	-5.033E-21	-5.033E-21	-9.299E-10	-9.299E-10	-6.619E-13
1.30000	1.255E-08	1.255E-08	-3.489E-21	-3.489E-21	-9.932E-10	-9.932E-10	-4.737E-13
1.40000	1.233E-08	1.233E-08	-2.333E-21	-2.333E-21	-1.036E-09	-1.036E-09	-3.378E-13
1.50000	1.197E-08	1.197E-08	-1.531E-21	-1.531E-21	-1.065E-09	-1.065E-09	-2.435E-13
1.60000	1.154E-08	1.154E-08	-9.778E-22	-9.778E-22	-1.083E-09	-1.083E-09	-1.822E-13
1.70000	1.107E-08	1.107E-08	-6.120E-22	-6.120E-22	-1.095E-09	-1.095E-09	-1.411E-13
1.80000	1.060E-08	1.060E-08	-3.770E-22	-3.770E-22	-1.102E-09	-1.102E-09	-1.128E-13

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0=35.000 θ_D= 0. ρ_0=123.410

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	35.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	35.0000	0.10000	197.919	0.	9.864E-01	-2.067E-10	-2.067E-10	2.067E-10
0.20000	35.0000	0.20000	181.595	0.	9.852E-01	-2.694E-10	-2.694E-10	2.694E-10
0.30000	35.0000	0.30000	166.454	0.	9.850E-01	-3.443E-10	-3.443E-10	3.443E-10
0.40000	35.0000	0.40000	152.850	0.	9.860E-01	-4.293E-10	-4.293E-10	4.293E-10
0.50000	35.0000	0.50000	141.228	0.	9.883E-01	-5.293E-10	-5.293E-10	5.293E-10
0.60000	35.0000	0.60000	132.111	0.	9.906E-01	-6.271E-10	-6.271E-10	6.271E-10
0.70000	35.0000	0.70000	126.045	0.	9.910E-01	-7.019E-10	-7.019E-10	7.019E-10
0.80000	35.0000	0.80000	123.479	2.561E-06	9.892E-01	-7.362E-10	-7.362E-10	7.362E-10
0.85000	35.0000	0.85000	123.588	2.561E-06	9.887E-01	-7.347E-10	-7.347E-10	7.347E-10
0.90000	35.0000	0.90000	124.630	4.269E-06	9.897E-01	-7.206E-10	-7.206E-10	7.206E-10
0.92500	35.0000	0.92500	125.494	4.269E-06	9.909E-01	-7.092E-10	-7.092E-10	7.092E-10
0.95000	35.0000	0.95000	126.581	5.976E-06	9.926E-01	-6.950E-10	-6.950E-10	6.950E-10
0.96250	35.0000	0.96250	127.206	6.830E-06	9.936E-01	-6.870E-10	-6.870E-10	6.870E-10
0.97500	35.0000	0.97500	127.885	7.684E-06	9.948E-01	-6.783E-10	-6.783E-10	6.783E-10
0.98125	35.0000	0.98125	128.244	8.538E-06	9.954E-01	-6.738E-10	-6.738E-10	6.738E-10
0.98750	35.0000	0.98750	128.616	8.538E-06	9.960E-01	-6.692E-10	-6.692E-10	6.692E-10
0.99375	35.0000	0.99375	129.001	1.110E-05	9.966E-01	-6.644E-10	-6.644E-10	6.644E-10
1.00000	35.0000	1.00000	129.399	1.110E-05	9.973E-01	-6.595E-10	-6.595E-10	6.595E-10
1.00625	35.0000	1.00625	129.810	1.451E-05	9.980E-01	-6.545E-10	-6.545E-10	6.545E-10
1.01250	35.0000	1.01250	130.233	1.622E-05	9.987E-01	-6.494E-10	-6.494E-10	6.494E-10
1.01875	35.0000	1.01875	130.669	1.622E-05	9.994E-01	-6.441E-10	-6.441E-10	6.441E-10
1.02500	35.0000	1.02500	131.117	1.622E-05	1.000E 00	-6.388E-10	-6.388E-10	6.388E-10
1.03750	35.0000	1.03750	132.050	1.622E-05	1.002E 00	-6.278E-10	-6.278E-10	6.278E-10
1.05000	35.0000	1.05000	133.030	1.622E-05	1.003E 00	-6.165E-10	-6.165E-10	6.165E-10
1.07500	35.0000	1.07500	135.131	1.622E-05	1.006E 00	-5.928E-10	-5.928E-10	5.928E-10
1.10000	35.0000	1.10000	137.410	1.622E-05	1.009E 00	-5.683E-10	-5.683E-10	5.683E-10
1.15000	35.0000	1.15000	142.469	1.622E-05	1.013E 00	-5.172E-10	-5.172E-10	5.172E-10
1.20000	35.0000	1.20000	148.137	1.622E-05	1.017E 00	-4.655E-10	-4.655E-10	4.655E-10
1.30000	35.0000	1.30000	161.040	1.622E-05	1.020E 00	-3.759E-10	-3.759E-10	3.759E-10
1.40000	35.0000	1.40000	175.638	1.622E-05	1.019E 00	-2.967E-10	-2.967E-10	2.967E-10
1.50000	35.0000	1.50000	191.545	2.049E-05	1.016E 00	-2.292E-10	-2.292E-10	2.292E-10
1.60000	35.0000	1.60000	208.462	2.391E-05	1.013E 00	-1.752E-10	-1.752E-10	1.752E-10
1.70000	35.0000	1.70000	226.161	2.732E-05	1.010E 00	-1.331E-10	-1.331E-10	1.331E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 35.000 θ_D= 0. ρ_a=123.410

z	$_x\mu'-1_0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	2.067E-10	49.901	-9.048E-09	-9.048E-09	9.048E-09	9.048E-09	-9.791E-10	-9.791E-10
0.20000	2.694E-10	99.802	-2.087E-08	-2.087E-08	2.087E-08	2.087E-08	-1.276E-09	-1.276E-09
0.30000	3.443E-10	149.703	-3.614E-08	-3.614E-08	3.614E-08	3.614E-08	-1.631E-09	-1.631E-09
0.40000	4.293E-10	199.605	-5.541E-08	-5.541E-08	5.541E-08	5.541E-08	-2.034E-09	-2.034E-09
0.50000	5.293E-10	249.506	-7.927E-08	-7.927E-08	7.927E-08	7.927E-08	-2.507E-09	-2.507E-09
0.60000	6.271E-10	299.407	-1.082E-07	-1.082E-07	1.082E-07	1.082E-07	-2.970E-09	-2.970E-09
0.70000	7.019E-10	349.308	-1.415E-07	-1.415E-07	1.415E-07	1.415E-07	-3.325E-09	-3.325E-09
0.80000	7.362E-10	399.209	-1.776E-07	-1.776E-07	1.776E-07	1.776E-07	-3.487E-09	-3.487E-09
0.85000	7.347E-10	424.160	-1.959E-07	-1.959E-07	1.959E-07	1.959E-07	-3.480E-09	-3.480E-09
0.90000	7.206E-10	449.110	-2.141E-07	-2.141E-07	2.141E-07	2.141E-07	-3.413E-09	-3.413E-09
0.92500	7.092E-10	461.586	-2.230E-07	-2.230E-07	2.230E-07	2.230E-07	-3.359E-09	-3.359E-09
0.95000	6.950E-10	474.061	-2.318E-07	-2.318E-07	2.318E-07	2.318E-07	-3.292E-09	-3.292E-09
0.96250	6.870E-10	480.299	-2.361E-07	-2.361E-07	2.361E-07	2.361E-07	-3.254E-09	-3.254E-09
0.97500	6.783E-10	486.536	-2.404E-07	-2.404E-07	2.404E-07	2.404E-07	-3.213E-09	-3.213E-09
0.98125	6.738E-10	489.655	-2.425E-07	-2.425E-07	2.425E-07	2.425E-07	-3.192E-09	-3.192E-09
0.98750	6.692E-10	492.774	-2.446E-07	-2.446E-07	2.446E-07	2.446E-07	-3.170E-09	-3.170E-09
0.99375	6.644E-10	495.893	-2.466E-07	-2.466E-07	2.466E-07	2.466E-07	-3.147E-09	-3.147E-09
1.00000	6.595E-10	499.012	-2.487E-07	-2.487E-07	2.487E-07	2.487E-07	-3.124E-09	-3.124E-09
1.00625	6.545E-10	502.130	-2.508E-07	-2.508E-07	2.508E-07	2.508E-07	-3.100E-09	-3.100E-09
1.01250	6.494E-10	505.249	-2.528E-07	-2.528E-07	2.528E-07	2.528E-07	-3.076E-09	-3.076E-09
1.01875	6.441E-10	508.368	-2.548E-07	-2.548E-07	2.548E-07	2.548E-07	-3.051E-09	-3.051E-09
1.02500	6.388E-10	511.487	-2.568E-07	-2.568E-07	2.568E-07	2.568E-07	-3.026E-09	-3.026E-09
1.03750	6.278E-10	517.724	-2.608E-07	-2.608E-07	2.608E-07	2.608E-07	-2.974E-09	-2.974E-09
1.05000	6.165E-10	523.962	-2.646E-07	-2.646E-07	2.646E-07	2.646E-07	-2.920E-09	-2.920E-09
1.07500	5.928E-10	536.437	-2.722E-07	-2.722E-07	2.722E-07	2.722E-07	-2.808E-09	-2.808E-09
1.10000	5.683E-10	548.913	-2.794E-07	-2.794E-07	2.794E-07	2.794E-07	-2.692E-09	-2.692E-09
1.15000	5.172E-10	573.863	-2.930E-07	-2.930E-07	2.930E-07	2.930E-07	-2.450E-09	-2.450E-09
1.20000	4.655E-10	598.814	-3.052E-07	-3.052E-07	3.052E-07	3.052E-07	-2.205E-09	-2.205E-09
1.30000	3.759E-10	648.715	-3.262E-07	-3.262E-07	3.262E-07	3.262E-07	-1.781E-09	-1.781E-09
1.40000	2.967E-10	698.616	-3.429E-07	-3.429E-07	3.429E-07	3.429E-07	-1.405E-09	-1.405E-09
1.50000	2.292E-10	748.517	-3.560E-07	-3.560E-07	3.560E-07	3.560E-07	-1.086E-09	-1.086E-09
1.60000	1.752E-10	798.418	-3.660E-07	-3.660E-07	3.660E-07	3.660E-07	-8.300E-10	-8.300E-10
1.70000	1.331E-10	848.320	-3.737E-07	-3.737E-07	3.737E-07	3.737E-07	-6.306E-10	-6.306E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 35.000 θ_D= 0. ρ_a=123.410

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-1.717E-13
0.10000	9.084E-11	9.084E-11	-8.196E-22	-8.196E-22	-9.910E-12	-9.910E-12	-2.166E-13
0.20000	2.373E-10	2.373E-10	-1.249E-21	-1.249E-21	-2.519E-11	-2.519E-11	-2.786E-13
0.30000	4.529E-10	4.529E-10	-1.847E-21	-1.847E-21	-4.813E-11	-4.813E-11	-3.675E-13
0.40000	7.718E-10	7.718E-10	-2.623E-21	-2.623E-21	-8.134E-11	-8.134E-11	-4.916E-13
0.50000	1.257E-09	1.257E-09	-3.610E-21	-3.610E-21	-1.277E-10	-1.277E-10	-6.410E-13
0.60000	1.920E-09	1.920E-09	-4.661E-21	-4.661E-21	-1.897E-10	-1.897E-10	-8.076E-13
0.70000	2.822E-09	2.822E-09	-5.524E-21	-5.524E-21	-2.662E-10	-2.662E-10	-9.567E-13
0.80000	3.999E-09	3.999E-09	-5.936E-21	-5.936E-21	-3.527E-10	-3.527E-10	-1.032E-12
0.85000	4.667E-09	4.667E-09	-5.918E-21	-5.918E-21	-3.971E-10	-3.971E-10	-1.029E-12
0.90000	5.349E-09	5.349E-09	-5.747E-21	-5.747E-21	-4.408E-10	-4.408E-10	-9.975E-13
0.92500	5.679E-09	5.679E-09	-5.610E-21	-5.610E-21	-4.621E-10	-4.621E-10	-9.725E-13
0.95000	5.993E-09	5.993E-09	-5.442E-21	-5.442E-21	-4.827E-10	-4.827E-10	-9.424E-13
0.96250	6.142E-09	6.142E-09	-5.347E-21	-5.347E-21	-4.928E-10	-4.928E-10	-9.256E-13
0.97500	6.285E-09	6.285E-09	-5.247E-21	-5.247E-21	-5.027E-10	-5.027E-10	-9.079E-13
0.98125	6.354E-09	6.354E-09	-5.194E-21	-5.194E-21	-5.076E-10	-5.076E-10	-8.988E-13
0.98750	6.421E-09	6.421E-09	-5.140E-21	-5.140E-21	-5.124E-10	-5.124E-10	-8.894E-13
0.99375	6.487E-09	6.487E-09	-5.085E-21	-5.085E-21	-5.172E-10	-5.172E-10	-8.799E-13
1.00000	6.551E-09	6.551E-09	-5.029E-21	-5.029E-21	-5.220E-10	-5.220E-10	-8.702E-13
1.00625	6.613E-09	6.613E-09	-4.971E-21	-4.971E-21	-5.266E-10	-5.266E-10	-8.604E-13
1.01250	6.673E-09	6.673E-09	-4.913E-21	-4.913E-21	-5.312E-10	-5.312E-10	-8.504E-13
1.01875	6.731E-09	6.731E-09	-4.853E-21	-4.853E-21	-5.358E-10	-5.358E-10	-8.403E-13
1.02500	6.788E-09	6.788E-09	-4.792E-21	-4.792E-21	-5.403E-10	-5.403E-10	-8.301E-13
1.03750	6.895E-09	6.895E-09	-4.669E-21	-4.669E-21	-5.492E-10	-5.492E-10	-8.095E-13
1.05000	6.994E-09	6.994E-09	-4.542E-21	-4.542E-21	-5.578E-10	-5.578E-10	-7.886E-13
1.07500	7.169E-09	7.169E-09	-4.283E-21	-4.283E-21	-5.743E-10	-5.743E-10	-7.465E-13
1.10000	7.313E-09	7.313E-09	-4.018E-21	-4.018E-21	-5.898E-10	-5.898E-10	-7.044E-13
1.15000	7.531E-09	7.531E-09	-3.487E-21	-3.487E-21	-6.179E-10	-6.179E-10	-6.230E-13
1.20000	7.665E-09	7.665E-09	-2.975E-21	-2.975E-21	-6.420E-10	-6.420E-10	-5.478E-13
1.30000	7.738E-09	7.738E-09	-2.123E-21	-2.123E-21	-6.799E-10	-6.799E-10	-4.110E-13
1.40000	7.653E-09	7.653E-09	-1.457E-21	-1.457E-21	-7.065E-10	-7.065E-10	-3.095E-13
1.50000	7.469E-09	7.469E-09	-9.662E-22	-9.662E-22	-7.244E-10	-7.244E-10	-2.381E-13
1.60000	7.228E-09	7.228E-09	-6.240E-22	-6.240E-22	-7.361E-10	-7.361E-10	-1.875E-13
1.70000	6.961E-09	6.961E-09	-3.947E-22	-3.947E-22	-7.436E-10	-7.436E-10	-1.514E-13

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	45.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	45.0000	0.10000	200.523	0.	9.780E-01	-1.982E-10	-1.982E-10	1.982E-10
0.20000	45.0000	0.20000	187.220	0.	9.776E-01	-2.459E-10	-2.459E-10	2.459E-10
0.30000	45.0000	0.30000	175.554	0.	9.785E-01	-2.971E-10	-2.971E-10	2.971E-10
0.40000	45.0000	0.40000	165.870	0.	9.801E-01	-3.476E-10	-3.476E-10	3.476E-10
0.50000	45.0000	0.50000	158.532	0.	9.815E-01	-3.916E-10	-3.916E-10	3.916E-10
0.60000	45.0000	0.60000	153.876	0.	9.817E-01	-4.223E-10	-4.223E-10	4.223E-10
0.70000	45.0000	0.70000	152.148	2.561E-06	9.808E-01	-4.343E-10	-4.343E-10	4.343E-10
0.80000	45.0000	0.80000	153.448	8.538E-06	9.811E-01	-4.252E-10	-4.252E-10	4.252E-10
0.85000	45.0000	0.85000	155.216	1.323E-05	9.828E-01	-4.132E-10	-4.132E-10	4.132E-10
0.90000	45.0000	0.90000	157.700	1.878E-05	9.859E-01	-3.969E-10	-3.969E-10	3.969E-10
0.92500	45.0000	0.92500	159.200	1.878E-05	9.879E-01	-3.873E-10	-3.873E-10	3.873E-10
0.95000	45.0000	0.95000	160.866	2.049E-05	9.903E-01	-3.770E-10	-3.770E-10	3.770E-10
0.96250	45.0000	0.96250	161.760	2.134E-05	9.915E-01	-3.716E-10	-3.716E-10	3.716E-10
0.97500	45.0000	0.97500	162.693	2.134E-05	9.929E-01	-3.660E-10	-3.660E-10	3.660E-10
0.98125	45.0000	0.98125	163.174	2.391E-05	9.935E-01	-3.632E-10	-3.632E-10	3.632E-10
0.98750	45.0000	0.98750	163.665	2.476E-05	9.942E-01	-3.603E-10	-3.603E-10	3.603E-10
0.99375	45.0000	0.99375	164.166	2.476E-05	9.949E-01	-3.574E-10	-3.574E-10	3.574E-10
1.00000	45.0000	1.00000	164.676	2.647E-05	9.956E-01	-3.544E-10	-3.544E-10	3.544E-10
1.00625	45.0000	1.00625	165.195	2.817E-05	9.963E-01	-3.514E-10	-3.514E-10	3.514E-10
1.01250	45.0000	1.01250	165.723	2.817E-05	9.970E-01	-3.484E-10	-3.484E-10	3.484E-10
1.01875	45.0000	1.01875	166.261	3.074E-05	9.977E-01	-3.454E-10	-3.454E-10	3.454E-10
1.02500	45.0000	1.02500	166.808	3.159E-05	9.984E-01	-3.424E-10	-3.424E-10	3.424E-10
1.03750	45.0000	1.03750	167.929	3.159E-05	9.999E-01	-3.362E-10	-3.362E-10	3.362E-10
1.05000	45.0000	1.05000	169.085	3.159E-05	1.001E 00	-3.300E-10	-3.300E-10	3.300E-10
1.07500	45.0000	1.07500	171.500	3.159E-05	1.004E 00	-3.173E-10	-3.173E-10	3.173E-10
1.10000	45.0000	1.10000	174.048	3.159E-05	1.007E 00	-3.044E-10	-3.044E-10	3.044E-10
1.15000	45.0000	1.15000	179.520	3.159E-05	1.012E 00	-2.786E-10	-2.786E-10	2.786E-10
1.20000	45.0000	1.20000	185.454	3.159E-05	1.015E 00	-2.530E-10	-2.530E-10	2.530E-10
1.30000	45.0000	1.30000	198.544	3.159E-05	1.020E 00	-2.046E-10	-2.046E-10	2.046E-10
1.40000	45.0000	1.40000	213.007	3.159E-05	1.022E 00	-1.633E-10	-1.633E-10	1.633E-10
1.50000	45.0000	1.50000	228.583	3.159E-05	1.021E 00	-1.282E-10	-1.282E-10	1.282E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_x\mu'$-1.0	T_0	$_0T_f-T_0$	$_xT_f-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	1.982E-10	49.901	-8.862E-09	-8.862E-09	8.862E-09	8.862E-09	-9.390E-10	-9.390E-10
0.20000	2.459E-10	99.882	-1.992E-08	-1.992E-08	1.992E-08	1.992E-08	-1.165E-09	-1.165E-09
0.30000	2.971E-10	149.703	-3.346E-08	-3.346E-08	3.346E-08	3.346E-08	-1.407E-09	-1.407E-09
0.40000	3.476E-10	199.605	-4.956E-08	-4.956E-08	4.956E-08	4.956E-08	-1.647E-09	-1.647E-09
0.50000	3.916E-10	249.506	-6.805E-08	-6.805E-08	6.804E-08	6.805E-08	-1.855E-09	-1.855E-09
0.60000	4.223E-10	299.407	-8.842E-08	-8.842E-08	8.842E-08	8.842E-08	-2.000E-09	-2.000E-09
0.70000	4.343E-10	349.308	-1.099E-07	-1.099E-07	1.099E-07	1.099E-07	-2.057E-09	-2.057E-09
0.80000	4.252E-10	399.209	-1.314E-07	-1.314E-07	1.314E-07	1.314E-07	-2.014E-09	-2.014E-09
0.85000	4.132E-10	424.160	-1.419E-07	-1.419E-07	1.419E-07	1.419E-07	-1.957E-09	-1.957E-09
0.90000	3.969E-10	449.110	-1.520E-07	-1.520E-07	1.520E-07	1.520E-07	-1.880E-09	-1.880E-09
0.92500	3.873E-10	461.586	-1.569E-07	-1.569E-07	1.569E-07	1.569E-07	-1.835E-09	-1.835E-09
0.95000	3.770E-10	474.061	-1.616E-07	-1.616E-07	1.617E-07	1.617E-07	-1.786E-09	-1.786E-09
0.96250	3.716E-10	480.299	-1.640E-07	-1.640E-07	1.640E-07	1.640E-07	-1.760E-09	-1.760E-09
0.97500	3.660E-10	486.536	-1.663E-07	-1.663E-07	1.663E-07	1.663E-07	-1.734E-09	-1.734E-09
0.98125	3.632E-10	489.655	-1.674E-07	-1.674E-07	1.674E-07	1.674E-07	-1.720E-09	-1.720E-09
0.98750	3.603E-10	492.774	-1.685E-07	-1.685E-07	1.686E-07	1.686E-07	-1.706E-09	-1.706E-09
0.99375	3.574E-10	495.893	-1.697E-07	-1.697E-07	1.697E-07	1.697E-07	-1.693E-09	-1.693E-09
1.00000	3.544E-10	499.011	-1.708E-07	-1.708E-07	1.708E-07	1.708E-07	-1.679E-09	-1.679E-09
1.00625	3.514E-10	502.130	-1.719E-07	-1.719E-07	1.719E-07	1.719E-07	-1.665E-09	-1.665E-09
1.01250	3.484E-10	505.249	-1.730E-07	-1.730E-07	1.730E-07	1.730E-07	-1.650E-09	-1.650E-09
1.01875	3.454E-10	508.368	-1.740E-07	-1.740E-07	1.741E-07	1.741E-07	-1.636E-09	-1.636E-09
1.02500	3.424E-10	511.487	-1.751E-07	-1.751E-07	1.751E-07	1.751E-07	-1.622E-09	-1.622E-09
1.03750	3.362E-10	517.724	-1.772E-07	-1.772E-07	1.773E-07	1.773E-07	-1.592E-09	-1.592E-09
1.05000	3.300E-10	523.962	-1.793E-07	-1.793E-07	1.793E-07	1.793E-07	-1.563E-09	-1.563E-09
1.07500	3.173E-10	536.437	-1.833E-07	-1.833E-07	1.834E-07	1.834E-07	-1.503E-09	-1.503E-09
1.10000	3.044E-10	548.913	-1.872E-07	-1.872E-07	1.873E-07	1.873E-07	-1.442E-09	-1.442E-09
1.15000	2.786E-10	573.863	-1.945E-07	-1.945E-07	1.945E-07	1.945E-07	-1.320E-09	-1.320E-09
1.20000	2.530E-10	598.814	-2.011E-07	-2.011E-07	2.012E-07	2.012E-07	-1.198E-09	-1.198E-09
1.30000	2.046E-10	648.715	-2.125E-07	-2.125E-07	2.126E-07	2.126E-07	-9.692E-10	-9.692E-10
1.40000	1.633E-10	698.616	-2.217E-07	-2.217E-07	2.217E-07	2.217E-07	-7.735E-10	-7.735E-10
1.50000	1.282E-10	748.517	-2.289E-07	-2.289E-07	2.290E-07	2.290E-07	-6.073E-10	-6.073E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_o= 45.000 θ_D= 0. ρ_a=152.140

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-2.610E-13
0.10000	1.075E-10	1.075E-10	-7.663E-22	-7.663E-22	-9.568E-12	-9.568E-12	-3.174E-13
0.20000	2.666E-10	2.666E-10	-1.080E-21	-1.080E-21	-2.329E-11	-2.329E-11	-3.863E-13
0.30000	4.842E-10	4.842E-10	-1.460E-21	-1.460E-21	-4.222E-11	-4.222E-11	-4.704E-13
0.40000	7.716E-10	7.716E-10	-1.875E-21	-1.875E-21	-6.715E-11	-6.715E-11	-5.652E-13
0.50000	1.159E-09	1.159E-09	-2.265E-21	-2.265E-21	-9.820E-11	-9.820E-11	-6.584E-13
0.60000	1.650E-09	1.650E-09	-2.555E-21	-2.555E-21	-1.344E-10	-1.344E-10	-7.302E-13
0.70000	2.224E-09	2.224E-09	-2.671E-21	-2.671E-21	-1.738E-10	-1.738E-10	-7.599E-13
0.80000	2.845E-09	2.845E-09	-2.583E-21	-2.583E-21	-2.133E-10	-2.133E-10	-7.375E-13
0.85000	3.152E-09	3.152E-09	-2.468E-21	-2.468E-21	-2.322E-10	-2.322E-10	-7.086E-13
0.90000	3.438E-09	3.438E-09	-2.315E-21	-2.315E-21	-2.501E-10	-2.501E-10	-6.708E-13
0.92500	3.569E-09	3.569E-09	-2.227E-21	-2.227E-21	-2.586E-10	-2.586E-10	-6.494E-13
0.95000	3.691E-09	3.691E-09	-2.133E-21	-2.133E-21	-2.668E-10	-2.668E-10	-6.268E-13
0.96250	3.748E-09	3.748E-09	-2.084E-21	-2.084E-21	-2.707E-10	-2.707E-10	-6.151E-13
0.97500	3.802E-09	3.802E-09	-2.035E-21	-2.035E-21	-2.746E-10	-2.746E-10	-6.033E-13
0.98125	3.828E-09	3.828E-09	-2.010E-21	-2.010E-21	-2.765E-10	-2.765E-10	-5.974E-13
0.98750	3.853E-09	3.853E-09	-1.984E-21	-1.984E-21	-2.784E-10	-2.784E-10	-5.914E-13
0.99375	3.878E-09	3.878E-09	-1.959E-21	-1.959E-21	-2.802E-10	-2.802E-10	-5.854E-13
1.00000	3.902E-09	3.902E-09	-1.933E-21	-1.933E-21	-2.820E-10	-2.820E-10	-5.794E-13
1.00625	3.925E-09	3.925E-09	-1.908E-21	-1.908E-21	-2.838E-10	-2.838E-10	-5.734E-13
1.01250	3.948E-09	3.948E-09	-1.882E-21	-1.882E-21	-2.856E-10	-2.856E-10	-5.673E-13
1.01875	3.970E-09	3.970E-09	-1.856E-21	-1.856E-21	-2.873E-10	-2.873E-10	-5.613E-13
1.02500	3.991E-09	3.991E-09	-1.830E-21	-1.830E-21	-2.891E-10	-2.891E-10	-5.552E-13
1.03750	4.031E-09	4.031E-09	-1.778E-21	-1.778E-21	-2.924E-10	-2.924E-10	-5.432E-13
1.05000	4.068E-09	4.068E-09	-1.725E-21	-1.725E-21	-2.957E-10	-2.957E-10	-5.311E-13
1.07500	4.134E-09	4.134E-09	-1.621E-21	-1.621E-21	-3.020E-10	-3.020E-10	-5.073E-13
1.10000	4.188E-09	4.188E-09	-1.518E-21	-1.518E-21	-3.078E-10	-3.078E-10	-4.840E-13
1.15000	4.271E-09	4.271E-09	-1.318E-21	-1.318E-21	-3.184E-10	-3.184E-10	-4.393E-13
1.20000	4.322E-09	4.322E-09	-1.131E-21	-1.131E-21	-3.276E-10	-3.276E-10	-3.979E-13
1.30000	4.348E-09	4.348E-09	-8.065E-22	-8.065E-22	-3.420E-10	-3.420E-10	-3.268E-13
1.40000	4.298E-09	4.298E-09	-5.548E-22	-5.548E-22	-3.521E-10	-3.521E-10	-2.686E-13
1.50000	4.200E-09	4.200E-09	-3.707E-22	-3.707E-22	-3.589E-10	-3.589E-10	-2.241E-13

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_O=55.000 θ_D= 0. ρ_a=176.248

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	55.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	55.0000	0.10000	203.582	0.	9.740E-01	-1.890E-10	-1.890E-10	1.890E-10
0.20000	55.0000	0.20000	193.711	0.	9.741E-01	-2.213E-10	-2.213E-10	2.213E-10
0.30000	55.0000	0.30000	185.817	0.	9.747E-01	-2.515E-10	-2.515E-10	2.515E-10
0.40000	55.0000	0.40000	180.161	0.	9.752E-01	-2.757E-10	-2.757E-10	2.757E-10
0.50000	55.0000	0.50000	176.957	0.	9.752E-01	-2.904E-10	-2.904E-10	2.904E-10
0.60000	55.0000	0.60000	176.340	1.281E-06	9.748E-01	-2.933E-10	-2.933E-10	2.933E-10
0.70000	55.0000	0.70000	178.335	4.696E-06	9.753E-01	-2.840E-10	-2.840E-10	2.840E-10
0.80000	55.0000	0.80000	182.857	5.976E-06	9.786E-01	-2.639E-10	-2.639E-10	2.639E-10
0.85000	55.0000	0.85000	186.012	5.976E-06	9.816E-01	-2.507E-10	-2.507E-10	2.507E-10
0.90000	55.0000	0.90000	189.726	5.976E-06	9.856E-01	-2.361E-10	-2.361E-10	2.361E-10
0.92500	55.0000	0.92500	191.782	9.392E-06	9.878E-01	-2.283E-10	-2.283E-10	2.283E-10
0.95000	55.0000	0.95000	193.966	1.195E-05	9.901E-01	-2.204E-10	-2.204E-10	2.204E-10
0.96250	55.0000	0.96250	195.104	1.281E-05	9.913E-01	-2.164E-10	-2.164E-10	2.164E-10
0.97500	55.0000	0.97500	196.273	1.451E-05	9.926E-01	-2.123E-10	-2.123E-10	2.123E-10
0.98125	55.0000	0.98125	196.868	1.451E-05	9.932E-01	-2.103E-10	-2.103E-10	2.103E-10
0.98750	55.0000	0.98750	197.471	1.451E-05	9.938E-01	-2.082E-10	-2.082E-10	2.082E-10
0.99375	55.0000	0.99375	198.081	1.793E-05	9.944E-01	-2.062E-10	-2.062E-10	2.062E-10
1.00000	55.0000	1.00000	198.699	1.878E-05	9.950E-01	-2.041E-10	-2.041E-10	2.041E-10
1.00625	55.0000	1.00625	199.323	2.049E-05	9.957E-01	-2.021E-10	-2.021E-10	2.021E-10
1.01250	55.0000	1.01250	199.955	2.049E-05	9.963E-01	-2.000E-10	-2.000E-10	2.000E-10
1.01875	55.0000	1.01875	200.593	2.049E-05	9.969E-01	-1.980E-10	-1.980E-10	1.980E-10
1.02500	55.0000	1.02500	201.239	2.305E-05	9.975E-01	-1.960E-10	-1.960E-10	1.960E-10
1.03750	55.0000	1.03750	202.551	2.476E-05	9.987E-01	-1.921E-10	-1.921E-10	1.921E-10
1.05000	55.0000	1.05000	203.890	2.476E-05	9.999E-01	-1.881E-10	-1.881E-10	1.881E-10
1.07500	55.0000	1.07500	206.646	2.561E-05	1.002E 00	-1.803E-10	-1.803E-10	1.803E-10
1.10000	55.0000	1.10000	209.505	2.732E-05	1.005E 00	-1.724E-10	-1.724E-10	1.724E-10
1.15000	55.0000	1.15000	215.511	2.817E-05	1.009E 00	-1.571E-10	-1.571E-10	1.571E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 55.000 θ_D= 0. ρ_a=176.248

z	$_x\mu'-1_0$	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	1.890E-10	49.901	-8.651E-09	-8.651E-09	8.651E-09	8.651E-09	-8.954E-10	-8.954E-10
0.20000	2.213E-10	99.802	-1.889E-08	-1.889E-08	1.889E-08	1.889E-08	-1.048E-09	-1.048E-09
0.30000	2.515E-10	149.703	-3.070E-08	-3.070E-08	3.070E-08	3.070E-08	-1.191E-09	-1.191E-09
0.40000	2.757E-10	199.605	-4.389E-08	-4.389E-08	4.389E-08	4.389E-08	-1.306E-09	-1.306E-09
0.50000	2.904E-10	249.506	-5.806E-08	-5.806E-08	5.806E-08	5.806E-08	-1.376E-09	-1.376E-09
0.60000	2.933E-10	299.407	-7.268E-08	-7.268E-08	7.268E-08	7.268E-08	-1.389E-09	-1.389E-09
0.70000	2.840E-10	349.308	-8.713E-08	-8.713E-08	8.713E-08	8.713E-08	-1.345E-09	-1.345E-09
0.80000	2.639E-10	399.209	-1.008E-07	-1.008E-07	1.008E-07	1.008E-07	-1.250E-09	-1.250E-09
0.85000	2.507E-10	424.160	-1.073E-07	-1.073E-07	1.073E-07	1.073E-07	-1.188E-09	-1.188E-09
0.90000	2.361E-10	449.110	-1.133E-07	-1.133E-07	1.133E-07	1.133E-07	-1.118E-09	-1.118E-09
0.92500	2.283E-10	461.586	-1.162E-07	-1.162E-07	1.162E-07	1.162E-07	-1.082E-09	-1.082E-09
0.95000	2.204E-10	474.061	-1.190E-07	-1.190E-07	1.190E-07	1.190E-07	-1.044E-09	-1.044E-09
0.96250	2.164E-10	480.299	-1.204E-07	-1.204E-07	1.204E-07	1.204E-07	-1.025E-09	-1.025E-09
0.97500	2.123E-10	486.536	-1.217E-07	-1.217E-07	1.217E-07	1.217E-07	-1.006E-09	-1.006E-09
0.98125	2.103E-10	489.655	-1.224E-07	-1.224E-07	1.224E-07	1.224E-07	-9.959E-10	-9.959E-10
0.98750	2.082E-10	492.774	-1.230E-07	-1.230E-07	1.231E-07	1.231E-07	-9.862E-10	-9.862E-10
0.99375	2.062E-10	495.893	-1.237E-07	-1.237E-07	1.237E-07	1.237E-07	-9.765E-10	-9.765E-10
1.00000	2.041E-10	499.011	-1.243E-07	-1.243E-07	1.243E-07	1.243E-07	-9.668E-10	-9.668E-10
1.00625	2.021E-10	502.130	-1.250E-07	-1.250E-07	1.250E-07	1.250E-07	-9.571E-10	-9.571E-10
1.01250	2.000E-10	505.249	-1.256E-07	-1.256E-07	1.256E-07	1.256E-07	-9.473E-10	-9.473E-10
1.01875	1.980E-10	508.368	-1.262E-07	-1.262E-07	1.262E-07	1.262E-07	-9.379E-10	-9.379E-10
1.02500	1.960E-10	511.487	-1.268E-07	-1.268E-07	1.268E-07	1.268E-07	-9.286E-10	-9.286E-10
1.03750	1.921E-10	517.724	-1.280E-07	-1.280E-07	1.281E-07	1.281E-07	-9.098E-10	-9.098E-10
1.05000	1.881E-10	523.962	-1.292E-07	-1.292E-07	1.292E-07	1.292E-07	-8.911E-10	-8.911E-10
1.07500	1.803E-10	536.437	-1.315E-07	-1.315E-07	1.315E-07	1.315E-07	-8.538E-10	-8.538E-10
1.10000	1.724E-10	548.913	-1.337E-07	-1.337E-07	1.337E-07	1.337E-07	-8.167E-10	-8.167E-10
1.15000	1.571E-10	573.863	-1.378E-07	-1.378E-07	1.379E-07	1.379E-07	-7.440E-10	-7.440E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 55.000 θ_D= 0. ρ_a=176.248

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-3.503E-13
0.10000	1.194E-10	1.194E-10	-7.080E-22	-7.080E-22	-9.183E-12	-9.183E-12	-4.079E-13
0.20000	2.800E-10	2.800E-10	-9.137E-22	-9.137E-22	-2.130E-11	-2.130E-11	-4.696E-13
0.30000	4.834E-10	4.834E-10	-1.120E-21	-1.120E-21	-3.653E-11	-3.653E-11	-5.304E-13
0.40000	7.288E-10	7.288E-10	-1.296E-21	-1.296E-21	-5.466E-11	-5.466E-11	-5.826E-13
0.50000	1.020E-09	1.020E-09	-1.408E-21	-1.408E-21	-7.499E-11	-7.499E-11	-6.160E-13
0.60000	1.355E-09	1.355E-09	-1.431E-21	-1.431E-21	-9.634E-11	-9.634E-11	-6.229E-13
0.70000	1.700E-09	1.700E-09	-1.359E-21	-1.359E-21	-1.173E-10	-1.173E-10	-6.015E-13
0.80000	2.032E-09	2.032E-09	-1.209E-21	-1.209E-21	-1.366E-10	-1.366E-10	-5.570E-13
0.85000	2.178E-09	2.178E-09	-1.115E-21	-1.115E-21	-1.453E-10	-1.453E-10	-5.291E-13
0.90000	2.307E-09	2.307E-09	-1.013E-21	-1.013E-21	-1.533E-10	-1.533E-10	-4.991E-13
0.92500	2.364E-09	2.364E-09	-9.603E-22	-9.603E-22	-1.570E-10	-1.570E-10	-4.837E-13
0.95000	2.415E-09	2.415E-09	-9.077E-22	-9.077E-22	-1.604E-10	-1.604E-10	-4.683E-13
0.96250	2.439E-09	2.439E-09	-8.814E-22	-8.814E-22	-1.621E-10	-1.621E-10	-4.606E-13
0.97500	2.462E-09	2.462E-09	-8.552E-22	-8.552E-22	-1.637E-10	-1.637E-10	-4.529E-13
0.98125	2.473E-09	2.473E-09	-8.422E-22	-8.422E-22	-1.645E-10	-1.645E-10	-4.490E-13
0.98750	2.483E-09	2.483E-09	-8.292E-22	-8.292E-22	-1.653E-10	-1.653E-10	-4.452E-13
0.99375	2.493E-09	2.493E-09	-8.162E-22	-8.162E-22	-1.661E-10	-1.661E-10	-4.414E-13
1.00000	2.503E-09	2.503E-09	-8.033E-22	-8.033E-22	-1.668E-10	-1.668E-10	-4.376E-13
1.00625	2.513E-09	2.513E-09	-7.905E-22	-7.905E-22	-1.676E-10	-1.676E-10	-4.338E-13
1.01250	2.522E-09	2.522E-09	-7.777E-22	-7.777E-22	-1.683E-10	-1.683E-10	-4.300E-13
1.01875	2.531E-09	2.531E-09	-7.649E-22	-7.649E-22	-1.690E-10	-1.690E-10	-4.261E-13
1.02500	2.540E-09	2.540E-09	-7.523E-22	-7.523E-22	-1.698E-10	-1.698E-10	-4.222E-13
1.03750	2.556E-09	2.556E-09	-7.271E-22	-7.271E-22	-1.711E-10	-1.711E-10	-4.144E-13
1.05000	2.571E-09	2.571E-09	-7.024E-22	-7.024E-22	-1.725E-10	-1.725E-10	-4.067E-13
1.07500	2.597E-09	2.597E-09	-6.540E-22	-6.540E-22	-1.750E-10	-1.750E-10	-3.917E-13
1.10000	2.619E-09	2.619E-09	-6.074E-22	-6.074E-22	-1.774E-10	-1.774E-10	-3.771E-13
1.15000	2.649E-09	2.649E-09	-5.200E-22	-5.200E-22	-1.816E-10	-1.816E-10	-3.494E-13

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 65.000 θ_D= 0. ρ_a=195.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	65.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	65.0000	0.10000	206.986	0.	9.790E-01	-1.793E-10	-1.793E-10	1.793E-10
0.20000	65.0000	0.20000	200.797	0.	9.789E-01	-1.974E-10	-1.974E-10	1.974E-10
0.30000	65.0000	0.30000	196.777	0.	9.789E-01	-2.106E-10	-2.106E-10	2.106E-10
0.40000	65.0000	0.40000	195.061	0.	9.786E-01	-2.165E-10	-2.165E-10	2.165E-10
0.50000	65.0000	0.50000	195.710	0.	9.784E-01	-2.143E-10	-2.143E-10	2.143E-10
0.60000	65.0000	0.60000	198.700	0.	9.788E-01	-2.041E-10	-2.041E-10	2.041E-10
0.70000	65.0000	0.70000	203.929	0.	9.808E-01	-1.880E-10	-1.880E-10	1.880E-10
0.80000	65.0000	0.80000	211.230	0.	9.847E-01	-1.679E-10	-1.679E-10	1.679E-10
0.85000	65.0000	0.85000	215.694	1.708E-06	9.873E-01	-1.569E-10	-1.569E-10	1.569E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 65.000 θ_D= 0. ρ_a=195.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	1.793E-10	49.901	-8.423E-09	-8.423E-09	8.423E-09	8.423E-09	-8.493E-10	-8.493E-10
0.20000	1.974E-10	99.802	-1.784E-08	-1.784E-08	1.784E-08	1.784E-08	-9.350E-10	-9.350E-10
0.30000	2.106E-10	149.703	-2.804E-08	-2.804E-08	2.804E-08	2.804E-08	-9.974E-10	-9.974E-10
0.40000	2.165E-10	199.605	-3.873E-08	-3.873E-08	3.873E-08	3.873E-08	-1.026E-09	-1.026E-09
0.50000	2.143E-10	249.506	-4.952E-08	-4.952E-08	4.952E-08	4.952E-08	-1.015E-09	-1.015E-09
0.60000	2.041E-10	299.407	-5.999E-08	-5.999E-08	5.999E-08	5.999E-08	-9.668E-10	-9.668E-10
0.70000	1.880E-10	349.308	-6.979E-08	-6.979E-08	6.979E-08	6.979E-08	-8.906E-10	-8.906E-10
0.80000	1.679E-10	399.209	-7.868E-08	-7.868E-08	7.868E-08	7.868E-08	-7.951E-10	-7.951E-10
0.85000	1.569E-10	424.160	-8.273E-08	-8.273E-08	8.273E-08	8.273E-08	-7.430E-10	-7.430E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 65.000 θ_D= 0. ρ_a=195.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-4.289E-13
0.10000	1.263E-10	1.263E-10	-6.483E-22	-6.483E-22	-8.777E-12	-8.777E-12	-4.767E-13
0.20000	2.804E-10	2.804E-10	-7.609E-22	-7.609E-22	-1.934E-11	-1.934E-11	-5.196E-13
0.30000	4.593E-10	4.593E-10	-8.442E-22	-8.442E-22	-3.140E-11	-3.140E-11	-5.500E-13
0.40000	6.550E-10	6.550E-10	-8.824E-22	-8.824E-22	-4.437E-11	-4.437E-11	-5.638E-13
0.50000	8.594E-10	8.594E-10	-8.677E-22	-8.677E-22	-5.753E-11	-5.753E-11	-5.586E-13
0.60000	1.064E-09	1.064E-09	-8.033E-22	-8.033E-22	-7.009E-11	-7.009E-11	-5.355E-13
0.70000	1.243E-09	1.243E-09	-7.017E-22	-7.017E-22	-8.138E-11	-8.138E-11	-4.975E-13
0.80000	1.396E-09	1.396E-09	-5.809E-22	-5.809E-22	-9.099E-11	-9.099E-11	-4.512E-13
0.85000	1.458E-09	1.458E-09	-5.188E-22	-5.188E-22	-9.510E-11	-9.510E-11	-4.272E-13

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	75.0000	0.	215.159	0.	1.000E 00	-1.579E-10	-1.579E-10	1.579E-10
0.10000	75.0000	0.10000	210.618	0.	9.993E-01	-1.695E-10	-1.695E-10	1.695E-10
0.20000	75.0000	0.20000	208.213	0.	9.996E-01	-1.759E-10	-1.759E-10	1.759E-10
0.30000	75.0000	0.30000	208.016	0.	9.999E-01	-1.765E-10	-1.765E-10	1.765E-10
0.40000	75.0000	0.40000	210.036	0.	1.000E 00	-1.710E-10	-1.710E-10	1.710E-10
0.50000	75.0000	0.50000	214.208	0.	1.001E 00	-1.603E-10	-1.603E-10	1.603E-10
0.60000	75.0000	0.60000	220.411	0.	1.001E 00	-1.456E-10	-1.456E-10	1.456E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 75.000 θ_D= 0. ρ_a= 207.828

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.579E-10	0.	0.	0.	0.	0.	-7.480E-10	-7.480E-10
0.10000	1.696E-10	49.901	-8.187E-09	-8.187E-09	8.187E-09	8.187E-09	-8.027E-10	-8.027E-10
0.20000	1.759E-10	99.802	-1.683E-08	-1.683E-08	1.683E-08	1.683E-08	-8.333E-10	-8.333E-10
0.30000	1.765E-10	149.703	-2.565E-08	-2.565E-08	2.565E-08	2.565E-08	-8.358E-10	-8.358E-10
0.40000	1.710E-10	199.605	-3.434E-08	-3.434E-08	3.434E-08	3.434E-08	-8.100E-10	-8.100E-10
0.50000	1.603E-10	249.506	-4.262E-08	-4.262E-08	4.262E-08	4.262E-08	-7.592E-10	-7.592E-10
0.60000	1.456E-10	299.407	-5.027E-08	-5.027E-08	5.027E-08	5.027E-08	-6.895E-10	-6.895E-10

PROPAGATION FREQUENCY= 1.4200E 09 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-5.247E-22	-5.247E-22	0.	0.	-4.873E-13
0.10000	1.289E-10	1.289E-10	-5.901E-22	-5.901E-22	-8.367E-12	-8.367E-12	-5.162E-13
0.20000	2.693E-10	2.693E-10	-6.280E-22	-6.280E-22	-1.752E-11	-1.752E-11	-5.329E-13
0.30000	4.122E-10	4.122E-10	-6.312E-22	-6.312E-22	-2.698E-11	-2.698E-11	-5.343E-13
0.40000	5.545E-10	5.545E-10	-5.991E-22	-5.991E-22	-3.623E-11	-3.623E-11	-5.204E-13
0.50000	6.824E-10	6.824E-10	-5.378E-22	-5.378E-22	-4.476E-11	-4.476E-11	-4.935E-13
0.60000	7.739E-10	7.739E-10	-4.580E-22	-4.580E-22	-5.223E-11	-5.223E-11	-4.579E-13

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.012 θ_D= 1.159E-07 ρ_a= 1.003

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0120	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0120	0.10000	193.643	1.381E-09	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0120	0.20000	172.127	2.189E-09	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0120	0.30000	150.611	2.970E-09	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0120	0.40000	129.095	4.898E-09	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0120	0.50000	107.579	6.462E-09	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0120	0.60000	86.064	6.879E-09	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0120	0.70000	64.548	2.918E-08	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0120	0.80000	43.032	9.630E-08	1.000E 00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0120	0.85000	32.274	2.510E-07	1.000E 00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0120	0.90000	21.516	8.805E-07	1.000E 00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0120	0.92500	16.137	2.158E-06	1.000E 00	-2.719E-08	-2.719E-08	2.719E-08
0.95000	0.0120	0.95000	10.758	7.354E-06	1.000E 00	-6.898E-08	-6.899E-08	6.898E-08
0.96250	0.0120	0.96250	8.069	1.759E-05	1.000E 00	-1.360E-07	-1.360E-07	1.360E-07
0.97500	0.0120	0.97500	5.380	5.962E-05	1.000E 00	-4.126E-07	-4.127E-07	4.126E-07
0.98124	0.0120	0.98125	4.036	1.417E-04	1.000E 00	-9.598E-07	-9.600E-07	9.597E-07
0.98749	0.0120	0.98750	2.692	4.798E-04	1.001E 00	-4.053E-06	-4.055E-06	4.052E-06
0.99373	0.0120	0.99375	1.349	4.040E-03	1.003E 00	-1.431E-04	-1.434E-04	1.430E-04
0.99078	0.0362	1.00000	1.988	1.748E 02	2.979E 00	-1.583E-05	-1.582E-05	1.584E-05
0.98458	0.0692	1.00625	3.328	1.748E 02	5.617E 00	-1.902E-06	-1.901E-06	1.902E-06
0.97837	0.1027	1.01250	4.670	1.748E 02	8.229E 00	-6.423E-07	-6.422E-07	6.424E-07
0.97215	0.1366	1.01875	6.014	1.748E 02	1.081E 01	-2.976E-07	-2.975E-07	2.976E-07
0.96593	0.1709	1.02500	7.358	1.748E 02	1.336E 01	-1.783E-07	-1.783E-07	1.784E-07
0.95349	0.2410	1.03750	10.047	1.748E 02	1.837E 01	-7.835E-08	-7.835E-08	7.836E-08
0.94104	0.3130	1.05000	12.736	1.748E 02	2.327E 01	-4.843E-08	-4.843E-08	4.843E-08
0.91617	0.4627	1.07500	18.114	1.748E 02	3.272E 01	-2.172E-08	-2.172E-08	2.172E-08
0.89129	0.6209	1.10000	23.493	1.748E 02	4.174E 01	-1.204E-08	-1.204E-08	1.204E-08
0.84156	0.9652	1.15000	34.251	1.748E 02	5.860E 01	-5.100E-09	-5.100E-09	5.100E-09
0.79187	1.3528	1.20000	45.008	1.748E 02	7.406E 01	-2.712E-09	-2.712E-09	2.712E-09
0.69262	2.2946	1.30000	66.524	1.748E 02	1.014E 02	-1.117E-09	-1.117E-09	1.117E-09
0.59361	3.5511	1.40000	88.040	1.748E 02	1.248E 02	-5.897E-10	-5.897E-10	5.897E-10
0.49500	5.3094	1.50000	109.556	1.748E 02	1.452E 02	-3.661E-10	-3.661E-10	3.661E-10
0.39709	7.9382	1.60000	131.072	1.748E 02	1.629E 02	-2.454E-10	-2.454E-10	2.454E-10
0.30056	12.2704	1.70000	152.588	1.748E 02	1.786E 02	-1.655E-10	-1.655E-10	1.655E-10
0.20735	20.5881	1.80000	174.103	1.748E 02	1.926E 02	-1.168E-10	-1.168E-10	1.168E-10
0.12510	40.9270	1.90000	195.619	1.748E 02	2.050E 02	-8.236E-11	-8.236E-11	8.236E-11
0.09113	86.8066	2.00000	217.135	1.748E 02	2.163E 02	-5.879E-11	-5.879E-11	5.879E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.012 θ_D=1.159E-07 ρ_a=1.003

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.395E-07	-5.395E-07	5.395E-07	5.395E-07	-1.128E-07	-1.128E-07
0.92500	2.719E-08	461.585	-7.933E-07	-7.933E-07	7.933E-07	7.933E-07	-2.079E-07	-2.079E-07
0.95000	6.899E-08	474.060	-1.347E-06	-1.347E-06	1.347E-06	1.347E-06	-5.274E-07	-5.274E-07
0.96250	1.360E-07	480.297	-1.944E-06	-1.944E-06	1.944E-06	1.944E-06	-1.040E-06	-1.040E-06
0.97500	4.127E-07	486.534	-3.445E-06	-3.445E-06	3.445E-06	3.445E-06	-3.155E-06	-3.155E-06
0.98124	9.601E-07	489.652	-5.460E-06	-5.460E-06	5.460E-06	5.461E-06	-7.338E-06	-7.340E-06
0.98749	4.056E-06	492.769	-1.177E-05	-1.177E-05	1.178E-05	1.178E-05	-3.098E-05	-3.100E-05
0.99373	1.436E-04	495.884	-9.866E-05	-9.880E-05	9.922E-05	9.950E-05	-1.094E-03	-1.096E-03
0.99078	1.581E-05	494.413	4.589E 00	4.589E 00	4.619E 00	4.619E 00	-1.211E-04	-1.209E-04
0.98458	1.901E-06	491.317	1.080E 01	1.080E 01	1.083E 01	1.083E 01	-1.454E-05	-1.453E-05
0.97837	6.422E-07	488.216	1.702E 01	1.702E 01	1.705E 01	1.705E 01	-4.911E-06	-4.910E-06
0.97215	2.975E-07	485.113	2.325E 01	2.325E 01	2.328E 01	2.328E 01	-2.275E-06	-2.275E-06
0.96593	1.783E-07	482.009	2.947E 01	2.947E 01	2.950E 01	2.950E 01	-1.364E-06	-1.363E-06
0.95349	7.835E-08	475.801	4.191E 01	4.191E 01	4.194E 01	4.194E 01	-5.990E-07	-5.990E-07
0.94104	4.843E-08	469.592	5.436E 01	5.436E 01	5.439E 01	5.439E 01	-3.703E-07	-3.703E-07
0.91617	2.172E-08	457.177	7.925E 01	7.925E 01	7.928E 01	7.928E 01	-1.660E-07	-1.660E-07
0.89129	1.204E-08	444.765	1.041E 02	1.041E 02	1.042E 02	1.042E 02	-9.209E-08	-9.208E-08
0.84156	5.100E-09	419.950	1.539E 02	1.539E 02	1.539E 02	1.539E 02	-3.899E-08	-3.899E-08
0.79187	2.712E-09	395.153	2.037E 02	2.037E 02	2.037E 02	2.037E 02	-2.074E-08	-2.074E-08
0.69262	1.117E-09	345.623	3.031E 02	3.031E 02	3.031E 02	3.031E 02	-8.540E-09	-8.540E-09
0.59361	5.897E-10	296.218	4.024E 02	4.024E 02	4.024E 02	4.024E 02	-4.509E-09	-4.509E-09
0.49500	3.661E-10	247.012	5.015E 02	5.015E 02	5.015E 02	5.015E 02	-2.799E-09	-2.799E-09
0.39709	2.454E-10	198.154	6.003E 02	6.003E 02	6.003E 02	6.003E 02	-1.876E-09	-1.876E-09
0.30056	1.655E-10	149.985	6.983E 02	6.983E 02	6.984E 02	6.984E 02	-1.265E-09	-1.265E-09
0.20735	1.168E-10	103.470	7.947E 02	7.947E 02	7.948E 02	7.948E 02	-8.926E-10	-8.926E-10
0.12510	8.236E-11	62.425	8.857E 02	8.857E 02	8.857E 02	8.857E 02	-6.297E-10	-6.297E-10
0.09113	5.879E-11	45.474	9.525E 02	9.525E 02	9.526E 02	9.526E 02	-4.494E-10	-4.494E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0=0.012 θ_D=1.159E-07 ρ_a=1.003

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-1.418E-20
0.10000	-7.688E-14	-4.950E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-1.902E-20
0.20000	1.906E-13	-8.363E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-2.721E-20
0.30000	1.804E-13	1.804E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-4.277E-20
0.40000	-7.931E-13	-2.281E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-7.241E-20
0.50000	-4.130E-13	-3.827E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-1.449E-19
0.60000	-3.115E-12	-4.082E-12	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-3.389E-19
0.70000	-1.474E-12	-3.133E-12	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-9.905E-19
0.80000	3.919E-12	6.034E-12	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-4.486E-18
0.85000	2.174E-11	1.859E-11	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-1.300E-17
0.90000	9.742E-11	9.908E-11	-8.785E-19	-8.785E-19	-5.208E-09	-5.208E-09	-5.832E-17
0.92500	2.678E-10	2.568E-10	-2.031E-18	-2.031E-18	-1.035E-08	-1.035E-08	-1.778E-16
0.95000	1.037E-09	1.042E-09	-8.065E-18	-8.065E-18	-2.603E-08	-2.604E-08	-7.980E-16
0.96250	2.881E-09	2.875E-09	-2.342E-17	-2.342E-17	-5.171E-08	-5.172E-08	-2.273E-15
0.97500	1.391E-08	1.394E-08	-1.359E-16	-1.359E-16	-1.654E-07	-1.654E-07	-8.530E-15
0.98124	4.397E-08	4.393E-08	-5.340E-16	-5.342E-16	-4.358E-07	-4.360E-07	-2.059E-14
0.98749	3.096E-07	3.097E-07	-5.806E-15	-5.813E-15	-2.300E-06	-2.302E-06	-5.537E-14
0.99373	2.441E-05	2.447E-05	-5.309E-12	-5.332E-12	-4.399E-04	-4.415E-04	-9.876E-14
0.99078	-1.676E-03	-1.676E-03	-7.178E-14	-7.164E-14	-5.259E 04	-5.264E 04	-8.755E-14
0.98458	-8.819E-04	-8.818E-04	-1.635E-15	-1.634E-15	-5.259E 04	-5.264E 04	-3.309E-14
0.97837	-5.982E-04	-5.981E-04	-2.781E-16	-2.780E-16	-5.259E 04	-5.264E 04	-1.281E-14
0.97215	-4.525E-04	-4.525E-04	-8.184E-17	-8.182E-17	-5.259E 04	-5.264E 04	-6.067E-15
0.96593	-3.638E-04	-3.638E-04	-3.611E-17	-3.610E-17	-5.259E 04	-5.264E 04	-3.018E-15
0.95349	-2.614E-04	-2.614E-04	-9.836E-18	-9.835E-18	-5.259E 04	-5.264E 04	-1.060E-15
0.94104	-2.040E-04	-2.040E-04	-4.647E-18	-4.646E-18	-5.259E 04	-5.264E 04	-4.134E-16
0.91617	-1.417E-04	-1.417E-04	-1.493E-18	-1.493E-18	-5.259E 04	-5.264E 04	-1.114E-16
0.89129	-1.085E-04	-1.085E-04	-6.524E-19	-6.524E-19	-5.259E 04	-5.264E 04	-4.220E-17
0.84156	-7.395E-05	-7.395E-05	-1.688E-19	-1.688E-19	-5.259E 04	-5.264E 04	-1.038E-17
0.79187	-5.608E-05	-5.608E-05	-6.638E-20	-6.638E-20	-5.259E 04	-5.264E 04	-3.790E-18
0.69262	-3.780E-05	-3.780E-05	-1.747E-20	-1.747E-20	-5.259E 04	-5.264E 04	-8.828E-19
0.59361	-2.851E-05	-2.851E-05	-6.810E-21	-6.810E-21	-5.259E 04	-5.264E 04	-3.113E-19
0.49500	-2.289E-05	-2.289E-05	-3.365E-21	-3.365E-21	-5.259E 04	-5.264E 04	-1.350E-19
0.39709	-1.911E-05	-1.911E-05	-1.842E-21	-1.842E-21	-5.259E 04	-5.264E 04	-6.870E-20
0.30056	-1.641E-05	-1.641E-05	-1.014E-21	-1.014E-21	-5.259E 04	-5.264E 04	-4.092E-20
0.20735	-1.438E-05	-1.438E-05	-5.818E-22	-5.818E-22	-5.259E 04	-5.264E 04	-2.629E-20
0.12510	-1.279E-05	-1.279E-05	-3.338E-22	-3.338E-22	-5.259E 04	-5.264E 04	-1.853E-20
0.09113	-1.152E-05	-1.152E-05	-1.914E-22	-1.914E-22	-5.259E 04	-5.264E 04	-1.388E-20

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.015 θ_D= 1.448E-07 ρ_a= 1.003

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0150	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0150	0.10000	193.643	1.641E-09	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0150	0.20000	172.127	2.345E-09	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0150	0.30000	150.611	3.804E-09	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0150	0.40000	129.095	5.836E-09	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0150	0.50000	107.579	8.546E-09	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0150	0.60000	86.064	9.171E-09	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0150	0.70000	64.548	3.752E-08	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0150	0.80000	43.032	1.201E-07	1.000E 00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0150	0.85000	32.274	3.177E-07	1.000E 00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0150	0.90000	21.516	1.099E-06	1.000E 00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0150	0.92500	16.137	2.683E-06	1.000E 00	-2.719E-08	-2.719E-08	2.719E-08
0.95000	0.0150	0.95000	10.759	9.168E-06	1.000E 00	-6.898E-08	-6.899E-08	6.898E-08
0.96250	0.0150	0.96250	8.069	2.191E-05	1.000E 00	-1.360E-07	-1.360E-07	1.360E-07
0.97500	0.0150	0.97500	5.380	7.426E-05	1.000E 00	-4.126E-07	-4.127E-07	4.126E-07
0.98124	0.0150	0.98125	4.036	1.765E-04	1.000E 00	-9.597E-07	-9.599E-07	9.596E-07
0.98749	0.0150	0.98750	2.692	5.977E-04	1.001E 00	-4.052E-06	-4.054E-06	4.051E-06
0.99373	0.0150	0.99375	1.350	5.030E-03	1.002E 00	-1.428E-04	-1.431E-04	1.427E-04
0.99078	0.0452	1.00000	1.991	1.735E 02	2.986E 00	-1.571E-05	-1.570E-05	1.572E-05
0.98458	0.0865	1.00625	3.333	1.735E 02	5.633E 00	-1.891E-06	-1.891E-06	1.892E-06
0.97838	0.1282	1.01250	4.676	1.735E 02	8.251E 00	-6.400E-07	-6.399E-07	6.401E-07
0.97217	0.1706	1.01875	6.020	1.735E 02	1.084E 01	-2.969E-07	-2.969E-07	2.969E-07
0.96597	0.2134	1.02500	7.365	1.735E 02	1.339E 01	-1.779E-07	-1.779E-07	1.779E-07
0.95356	0.3009	1.03750	10.054	1.735E 02	1.841E 01	-7.826E-08	-7.826E-08	7.826E-08
0.94115	0.3906	1.05000	12.743	1.735E 02	2.332E 01	-4.837E-08	-4.837E-08	4.837E-08
0.91633	0.5774	1.07500	18.121	1.735E 02	3.278E 01	-2.170E-08	-2.170E-08	2.170E-08
0.89153	0.7746	1.10000	23.500	1.735E 02	4.181E 01	-1.204E-08	-1.204E-08	1.204E-08
0.84195	1.2038	1.15000	34.258	1.735E 02	5.870E 01	-5.098E-09	-5.098E-09	5.098E-09
0.79243	1.6867	1.20000	45.016	1.735E 02	7.418E 01	-2.711E-09	-2.711E-09	2.711E-09
0.69358	2.8592	1.30000	66.531	1.735E 02	1.016E 02	-1.117E-09	-1.117E-09	1.117E-09
0.59513	4.4205	1.40000	88.047	1.735E 02	1.250E 02	-5.896E-10	-5.896E-10	5.896E-10
0.49729	6.5983	1.50000	109.563	1.735E 02	1.454E 02	-3.660E-10	-3.660E-10	3.660E-10
0.40052	9.8353	1.60000	131.079	1.735E 02	1.632E 02	-2.454E-10	-2.454E-10	2.454E-10
0.30584	15.1032	1.70000	152.595	1.735E 02	1.789E 02	-1.655E-10	-1.655E-10	1.655E-10
0.21600	24.9055	1.80000	174.111	1.735E 02	1.929E 02	-1.167E-10	-1.167E-10	1.167E-10
0.14062	46.6387	1.90000	195.627	1.735E 02	2.054E 02	-8.235E-11	-8.235E-11	8.235E-11
0.11354	88.5753	2.00000	217.143	1.735E 02	2.166E 02	-5.878E-11	-5.878E-11	5.878E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.015 θ_D= 1.448E-07 ρ_a= 1.003

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.395E-07	-5.395E-07	5.395E-07	5.395E-07	-1.128E-07	-1.128E-07
0.92500	2.719E-08	461.585	-7.933E-07	-7.933E-07	7.933E-07	7.933E-07	-2.079E-07	-2.079E-07
0.95000	6.899E-08	474.060	-1.347E-06	-1.347E-06	1.347E-06	1.347E-06	-5.274E-07	-5.274E-07
0.96250	1.360E-07	480.297	-1.944E-06	-1.944E-06	1.944E-06	1.944E-06	-1.040E-06	-1.040E-06
0.97500	4.127E-07	486.534	-3.445E-06	-3.445E-06	3.445E-06	3.446E-06	-3.155E-06	-3.155E-06
0.98124	9.601E-07	489.652	-5.459E-06	-5.460E-06	5.460E-06	5.461E-06	-7.337E-06	-7.339E-06
0.98749	4.055E-06	492.769	-1.177E-05	-1.177E-05	1.178E-05	1.178E-05	-3.098E-05	-3.099E-05
0.99373	1.433E-04	495.884	-9.838E-05	-9.852E-05	9.927E-05	9.955E-05	-1.092E-03	-1.094E-03
0.99078	1.569E-05	494.411	4.591E 00	4.591E 00	4.620E 00	4.620E 00	-1.201E-04	-1.200E-04
0.98458	1.890E-06	491.318	1.080E 01	1.080E 01	1.083E 01	1.083E 01	-1.446E-05	-1.446E-05
0.97838	6.398E-07	488.223	1.702E 01	1.702E 01	1.705E 01	1.705E 01	-4.893E-06	-4.892E-06
0.97217	2.968E-07	485.126	2.323E 01	2.323E 01	2.326E 01	2.326E 01	-2.270E-06	-2.270E-06
0.96597	1.779E-07	482.029	2.945E 01	2.945E 01	2.948E 01	2.948E 01	-1.360E-06	-1.360E-06
0.95356	7.826E-08	475.836	4.188E 01	4.188E 01	4.191E 01	4.191E 01	-5.983E-07	-5.983E-07
0.94115	4.837E-08	469.643	5.431E 01	5.431E 01	5.434E 01	5.434E 01	-3.698E-07	-3.698E-07
0.91633	2.170E-08	457.260	7.917E 01	7.917E 01	7.920E 01	7.920E 01	-1.659E-07	-1.659E-07
0.89153	1.204E-08	444.882	1.040E 02	1.040E 02	1.041E 02	1.041E 02	-9.203E-08	-9.203E-08
0.84195	5.098E-09	420.143	1.537E 02	1.537E 02	1.537E 02	1.537E 02	-3.897E-08	-3.897E-08
0.79243	2.711E-09	395.430	2.034E 02	2.034E 02	2.034E 02	2.034E 02	-2.073E-08	-2.073E-08
0.69358	1.117E-09	346.107	3.026E 02	3.026E 02	3.026E 02	3.026E 02	-8.538E-09	-8.538E-09
0.59513	5.896E-10	296.976	4.016E 02	4.016E 02	4.017E 02	4.017E 02	-4.508E-09	-4.508E-09
0.49729	3.660E-10	248.154	5.004E 02	5.004E 02	5.004E 02	5.004E 02	-2.798E-09	-2.798E-09
0.40052	2.454E-10	199.864	5.985E 02	5.985E 02	5.986E 02	5.986E 02	-1.876E-09	-1.876E-09
0.30584	1.655E-10	152.616	6.957E 02	6.957E 02	6.957E 02	6.957E 02	-1.265E-09	-1.265E-09
0.21600	1.167E-10	107.784	7.904E 02	7.904E 02	7.905E 02	7.905E 02	-8.925E-10	-8.925E-10
0.14062	8.235E-11	70.169	8.779E 02	8.779E 02	8.780E 02	8.780E 02	-6.296E-10	-6.296E-10
0.11354	5.878E-11	56.658	9.414E 02	9.414E 02	9.414E 02	9.414E 02	-4.494E-10	-4.494E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.015 θ_D= 1.448E-07 ρ_a= 1.003

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-2.216E-20
0.10000	-7.618E-14	-4.274E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-2.972E-20
0.20000	1.679E-13	-7.024E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-4.251E-20
0.30000	1.928E-13	1.928E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-6.683E-20
0.40000	-5.966E-13	-1.924E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-1.131E-19
0.50000	-1.736E-13	-3.153E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-2.265E-19
0.60000	-2.245E-12	-3.120E-12	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-5.295E-19
0.70000	-1.776E-14	-1.517E-12	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-1.548E-18
0.80000	9.018E-12	1.061E-11	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-7.009E-18
0.85000	3.358E-11	3.094E-11	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-2.031E-17
0.90000	1.420E-10	1.440E-10	-8.785E-19	-8.785E-19	-5.208E-09	-5.208E-09	-9.112E-17
0.92500	3.760E-10	3.665E-10	-2.031E-18	-2.031E-18	-1.035E-08	-1.035E-08	-2.778E-16
0.95000	1.455E-09	1.459E-09	-8.065E-18	-8.065E-18	-2.603E-08	-2.604E-08	-1.247E-15
0.96250	3.995E-09	3.990E-09	-2.342E-17	-2.342E-17	-5.171E-08	-5.171E-08	-3.552E-15
0.97500	1.916E-08	1.919E-08	-1.358E-16	-1.359E-16	-1.654E-07	-1.654E-07	-1.333E-14
0.98124	6.041E-08	6.038E-08	-5.339E-16	-5.342E-16	-4.358E-07	-4.359E-07	-3.216E-14
0.98749	4.178E-07	4.180E-07	-5.804E-15	-5.810E-15	-2.300E-06	-2.301E-06	-8.650E-14
0.99373	3.244E-05	3.252E-05	-5.289E-12	-5.312E-12	-4.385E-04	-4.401E-04	-1.543E-13
0.99078	-1.942E-03	-1.942E-03	-7.072E-14	-7.058E-14	-5.206E 04	-5.210E 04	-1.364E-13
0.98458	-1.022E-03	-1.022E-03	-1.621E-15	-1.620E-15	-5.206E 04	-5.210E 04	-5.150E-14
0.97838	-6.935E-04	-6.935E-04	-2.765E-16	-2.764E-16	-5.206E 04	-5.210E 04	-1.995E-14
0.97217	-5.247E-04	-5.247E-04	-8.153E-17	-8.151E-17	-5.206E 04	-5.210E 04	-9.445E-15
0.96597	-4.220E-04	-4.220E-04	-3.597E-17	-3.596E-17	-5.206E 04	-5.210E 04	-4.703E-15
0.95356	-3.032E-04	-3.032E-04	-9.817E-18	-9.817E-18	-5.206E 04	-5.210E 04	-1.652E-15
0.94115	-2.366E-04	-2.366E-04	-4.638E-18	-4.637E-18	-5.206E 04	-5.210E 04	-6.447E-16
0.91633	-1.644E-04	-1.644E-04	-1.491E-18	-1.491E-18	-5.206E 04	-5.210E 04	-1.738E-16
0.89153	-1.260E-04	-1.260E-04	-8.518E-19	-8.518E-19	-5.206E 04	-5.210E 04	-6.586E-17
0.84195	-8.582E-05	-8.582E-05	-1.687E-19	-1.687E-19	-5.206E 04	-5.210E 04	-1.620E-17
0.79243	-6.508E-05	-6.508E-05	-6.635E-20	-6.635E-20	-5.206E 04	-5.210E 04	-5.919E-18
0.69358	-4.388E-05	-4.387E-05	-1.746E-20	-1.746E-20	-5.206E 04	-5.210E 04	-1.379E-18
0.59513	-3.309E-05	-3.309E-05	-6.808E-21	-6.808E-21	-5.206E 04	-5.210E 04	-4.862E-19
0.49729	-2.656E-05	-2.656E-05	-3.365E-21	-3.365E-21	-5.206E 04	-5.210E 04	-2.109E-19
0.40052	-2.219E-05	-2.219E-05	-1.841E-21	-1.841E-21	-5.206E 04	-5.210E 04	-1.073E-19
0.30584	-1.905E-05	-1.905E-05	-1.014E-21	-1.014E-21	-5.206E 04	-5.210E 04	-6.393E-20
0.21600	-1.669E-05	-1.669E-05	-5.817E-22	-5.817E-22	-5.206E 04	-5.210E 04	-4.108E-20
0.14062	-1.485E-05	-1.485E-05	-3.338E-22	-3.338E-22	-5.206E 04	-5.210E 04	-2.895E-20
0.11354	-1.337E-05	-1.337E-05	-1.913E-22	-1.913E-22	-5.206E 04	-5.210E 04	-2.169E-20

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.020 θ_0= 1.931E-07 ρ_a= 1.003

z	ϕ	z_f	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	0.0200	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0200	0.10000	193.643	2.658E-09	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0200	0.20000	172.127	4.012E-09	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0200	0.30000	150.611	5.836E-09	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0200	0.40000	129.095	9.588E-09	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0200	0.50000	107.579	1.292E-08	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0200	0.60000	86.064	1.668E-08	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0200	0.70000	64.548	5.670E-08	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0200	0.80000	43.032	1.918E-07	1.000E 00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0200	0.85000	32.274	4.919E-07	1.000E 00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0200	0.90000	21.516	1.723E-06	1.000E 00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0200	0.92500	16.137	4.202E-06	1.000E 00	-2.719E-08	-2.719E-08	2.719E-08
0.95000	0.0200	0.95000	10.759	1.433E-05	1.000E 00	-6.898E-08	-6.898E-08	6.898E-08
0.96250	0.0200	0.96250	8.070	3.420E-05	1.000E 00	-1.360E-07	-1.360E-07	1.360E-07
0.97499	0.0200	0.97500	5.381	1.158E-04	1.000E 00	-4.125E-07	-4.126E-07	4.125E-07
0.98124	0.0200	0.98125	4.036	2.752E-04	1.000E 00	-9.594E-07	-9.596E-07	9.593E-07
0.98749	0.0200	0.98750	2.693	9.310E-04	1.000E 00	-4.047E-06	-4.050E-06	4.046E-06
0.99373	0.0200	0.99375	1.351	7.759E-03	1.002E 00	-1.418E-04	-1.421E-04	1.417E-04
0.99081	0.0602	1.00000	1.990	1.713E 02	2.988E 00	-1.574E-05	-1.572E-05	1.575E-05
0.98464	0.1151	1.00625	3.333	1.714E 02	5.645E 00	-1.892E-06	-1.891E-06	1.892E-06
0.97847	0.1707	1.01250	4.676	1.714E 02	8.270E 00	-6.400E-07	-6.399E-07	6.401E-07
0.97229	0.2270	1.01875	6.020	1.714E 02	1.086E 01	-2.969E-07	-2.968E-07	2.969E-07
0.96612	0.2841	1.02500	7.365	1.714E 02	1.343E 01	-1.779E-07	-1.779E-07	1.779E-07
0.95377	0.4004	1.03750	10.054	1.714E 02	1.846E 01	-7.826E-08	-7.825E-08	7.826E-08
0.94143	0.5198	1.05000	12.743	1.714E 02	2.338E 01	-4.837E-08	-4.837E-08	4.837E-08
0.91676	0.7682	1.07500	18.122	1.714E 02	3.286E 01	-2.170E-08	-2.170E-08	2.170E-08
0.89210	1.0304	1.10000	23.501	1.714E 02	4.192E 01	-1.204E-08	-1.204E-08	1.204E-08
0.84286	1.6007	1.15000	34.258	1.714E 02	5.885E 01	-5.097E-09	-5.097E-09	5.097E-09
0.79370	2.2417	1.20000	45.016	1.714E 02	7.436E 01	-2.711E-09	-2.711E-09	2.711E-09
0.69575	3.7950	1.30000	66.532	1.714E 02	1.018E 02	-1.117E-09	-1.117E-09	1.117E-09
0.59848	5.8552	1.40000	88.048	1.714E 02	1.254E 02	-5.896E-10	-5.896E-10	5.896E-10
0.50228	8.7095	1.50000	109.564	1.714E 02	1.457E 02	-3.660E-10	-3.660E-10	3.660E-10
0.40792	12.8992	1.60000	131.080	1.714E 02	1.636E 02	-2.454E-10	-2.454E-10	2.454E-10
0.31702	19.5462	1.70000	152.595	1.714E 02	1.793E 02	-1.655E-10	-1.655E-10	1.655E-10
0.23369	31.2029	1.80000	174.111	1.714E 02	1.933E 02	-1.167E-10	-1.167E-10	1.167E-10
0.16947	53.4105	1.90000	195.627	1.714E 02	2.059E 02	-8.235E-11	-8.235E-11	8.235E-11
0.15109	89.1825	2.00000	217.143	1.714E 02	2.171E 02	-5.878E-11	-5.878E-11	5.878E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.020 θ_0= 1.931E-07 ρ_a= 1.003

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.395E-07	-5.395E-07	5.395E-07	5.395E-07	-1.128E-07	-1.128E-07
0.92500	2.719E-08	461.585	-7.933E-07	-7.933E-07	7.933E-07	7.933E-07	-2.079E-07	-2.079E-07
0.95000	6.899E-08	474.060	-1.347E-06	-1.347E-06	1.347E-06	1.347E-06	-5.274E-07	-5.274E-07
0.96250	1.360E-07	480.297	-1.944E-06	-1.944E-06	1.944E-06	1.944E-06	-1.040E-06	-1.040E-06
0.97499	4.126E-07	486.534	-3.444E-06	-3.445E-06	3.445E-06	3.445E-06	-3.154E-06	-3.154E-06
0.98124	9.597E-07	489.652	-5.458E-06	-5.458E-06	5.460E-06	5.461E-06	-7.335E-06	-7.337E-06
0.98749	4.051E-06	492.769	-1.175E-05	-1.175E-05	1.178E-05	1.179E-05	-3.094E-05	-3.096E-05
0.99373	1.423E-04	495.882	-9.728E-05	-9.742E-05	9.949E-05	9.977E-05	-1.084E-03	-1.086E-03
0.99081	1.572E-05	494.425	4.576E 00	4.576E 00	4.605E 00	4.605E 00	-1.203E-04	-1.202E-04
0.98464	1.891E-06	491.347	1.077E 01	1.077E 01	1.080E 01	1.080E 01	-1.446E-05	-1.446E-05
0.97847	6.398E-07	488.266	1.697E 01	1.697E 01	1.700E 01	1.700E 01	-4.893E-06	-4.892E-06
0.97229	2.968E-07	485.186	2.317E 01	2.317E 01	2.320E 01	2.320E 01	-2.270E-06	-2.269E-06
0.96612	1.779E-07	482.105	2.937E 01	2.937E 01	2.940E 01	2.940E 01	-1.360E-06	-1.360E-06
0.95377	7.825E-08	475.944	4.177E 01	4.177E 01	4.180E 01	4.180E 01	-5.983E-07	-5.983E-07
0.94143	4.837E-08	469.785	5.417E 01	5.417E 01	5.420E 01	5.420E 01	-3.698E-07	-3.698E-07
0.91676	2.170E-08	457.474	7.895E 01	7.895E 01	7.898E 01	7.898E 01	-1.659E-07	-1.659E-07
0.89210	1.204E-08	445.171	1.037E 02	1.037E 02	1.038E 02	1.038E 02	-9.202E-08	-9.202E-08
0.84286	5.097E-09	420.595	1.533E 02	1.533E 02	1.533E 02	1.533E 02	-3.897E-08	-3.897E-08
0.79370	2.711E-09	396.066	2.027E 02	2.027E 02	2.028E 02	2.028E 02	-2.073E-08	-2.073E-08
0.69575	1.117E-09	347.188	3.015E 02	3.015E 02	3.015E 02	3.015E 02	-8.538E-09	-8.538E-09
0.59848	5.896E-10	298.648	4.000E 02	4.000E 02	4.000E 02	4.000E 02	-4.508E-09	-4.508E-09
0.50228	3.660E-10	250.644	4.979E 02	4.979E 02	4.979E 02	4.979E 02	-2.798E-09	-2.798E-09
0.40792	2.454E-10	203.555	5.949E 02	5.949E 02	5.949E 02	5.949E 02	-1.876E-09	-1.876E-09
0.31702	1.655E-10	158.198	6.901E 02	6.901E 02	6.901E 02	6.901E 02	-1.265E-09	-1.265E-09
0.23369	1.167E-10	116.615	7.816E 02	7.816E 02	7.816E 02	7.816E 02	-8.925E-10	-8.925E-10
0.16947	8.235E-11	84.568	8.635E 02	8.635E 02	8.636E 02	8.636E 02	-6.296E-10	-6.296E-10
0.15109	5.878E-11	75.397	9.226E 02	9.226E 02	9.226E 02	9.226E 02	-4.494E-10	-4.494E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.020 θ_D= 1.931E-07 ρ_a= 1.003

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-3.939E-20
0.10000	-7.502E-14	-3.147E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-5.284E-20
0.20000	1.299E-13	-4.794E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-7.558E-20
0.30000	2.135E-13	2.135E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-1.188E-19
0.40000	-2.690E-13	-1.328E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-2.011E-19
0.50000	2.255E-13	-2.029E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-4.026E-19
0.60000	-7.953E-13	-1.515E-12	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-9.414E-19
0.70000	2.409E-12	1.175E-12	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-2.751E-18
0.80000	1.752E-11	1.823E-11	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-1.246E-17
0.85000	5.332E-11	5.152E-11	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-3.611E-17
0.90000	2.164E-10	2.188E-10	-8.785E-19	-8.785E-19	-5.208E-09	-5.208E-09	-1.620E-16
0.92500	5.564E-10	5.495E-10	-2.031E-18	-2.031E-18	-1.035E-08	-1.035E-08	-4.938E-16
0.95000	2.152E-09	2.155E-09	-8.064E-18	-8.065E-18	-2.603E-08	-2.603E-08	-2.216E-15
0.96250	5.851E-09	5.849E-09	-2.341E-17	-2.342E-17	-5.171E-08	-5.171E-08	-6.314E-15
0.97499	2.791E-08	2.794E-08	-1.358E-16	-1.358E-16	-1.653E-07	-1.654E-07	-2.369E-14
0.98124	8.781E-08	8.780E-08	-5.336E-16	-5.339E-16	-4.356E-07	-4.358E-07	-5.715E-14
0.98749	5.982E-07	5.984E-07	-5.793E-15	-5.800E-15	-2.297E-06	-2.299E-06	-1.537E-13
0.99373	4.581E-05	4.593E-05	-5.213E-12	-5.235E-12	-4.333E-04	-4.349E-04	-2.745E-13
0.99081	-2.389E-03	-2.389E-03	-7.097E-14	-7.082E-14	-5.177E 04	-5.178E 04	-2.427E-13
0.98466	-1.258E-03	-1.258E-03	-1.621E-15	-1.620E-15	-5.177E 04	-5.178E 04	-9.158E-14
0.97847	-8.530E-04	-8.530E-04	-2.765E-16	-2.764E-16	-5.177E 04	-5.178E 04	-3.546E-14
0.97229	-6.453E-04	-6.454E-04	-8.153E-17	-8.151E-17	-5.177E 04	-5.178E 04	-1.679E-14
0.96612	-5.190E-04	-5.190E-04	-3.596E-17	-3.596E-17	-5.177E 04	-5.178E 04	-8.360E-15
0.95377	-3.729E-04	-3.729E-04	-9.817E-18	-9.816E-18	-5.177E 04	-5.178E 04	-2.937E-15
0.94143	-2.910E-04	-2.910E-04	-4.637E-18	-4.637E-18	-5.177E 04	-5.178E 04	-1.146E-15
0.91676	-2.022E-04	-2.022E-04	-1.491E-18	-1.491E-18	-5.177E 04	-5.178E 04	-3.089E-16
0.89210	-1.549E-04	-1.549E-04	-6.517E-19	-6.517E-19	-5.177E 04	-5.178E 04	-1.171E-16
0.84286	-1.056E-04	-1.056E-04	-1.687E-19	-1.687E-19	-5.177E 04	-5.178E 04	-2.881E-17
0.79370	-8.004E-05	-8.005E-05	-6.634E-20	-6.634E-20	-5.177E 04	-5.178E 04	-1.052E-17
0.69575	-5.396E-05	-5.396E-05	-1.746E-20	-1.746E-20	-5.177E 04	-5.178E 04	-2.451E-18
0.59848	-4.070E-05	-4.070E-05	-6.808E-21	-6.808E-21	-5.177E 04	-5.178E 04	-8.643E-19
0.50228	-3.267E-05	-3.267E-05	-3.365E-21	-3.365E-21	-5.177E 04	-5.178E 04	-3.750E-19
0.40792	-2.729E-05	-2.729E-05	-1.841E-21	-1.841E-21	-5.177E 04	-5.178E 04	-1.908E-19
0.31702	-2.343E-05	-2.343E-05	-1.014E-21	-1.014E-21	-5.177E 04	-5.178E 04	-1.137E-19
0.23369	-2.052E-05	-2.053E-05	-5.816E-22	-5.816E-22	-5.177E 04	-5.178E 04	-7.303E-20
0.16947	-1.826E-05	-1.826E-05	-3.338E-22	-3.338E-22	-5.177E 04	-5.178E 04	-5.146E-20
0.15109	-1.645E-05	-1.645E-05	-1.913E-22	-1.913E-22	-5.177E 04	-5.178E 04	-3.855E-20

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.025 θ_D= 3.218E-07 ρ_a= 1.003

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0250	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0250	0.10000	193.643	3.804E-09	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0250	0.20000	172.127	4.742E-09	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0250	0.30000	150.611	7.087E-09	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0250	0.40000	129.095	1.167E-08	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0250	0.50000	107.579	1.542E-08	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0250	0.60000	86.064	1.542E-08	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0250	0.70000	64.548	6.420E-08	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0250	0.80000	43.032	2.051E-07	1.000E 00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0250	0.85000	32.274	5.336E-07	1.000E 00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0250	0.90000	21.516	1.864E-06	1.000E 00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0250	0.92500	16.137	4.559E-06	1.000E 00	-2.719E-08	-2.719E-08	2.719E-08
0.95000	0.0250	0.95000	10.759	1.557E-05	1.000E 00	-6.898E-08	-6.898E-08	6.898E-08
0.96250	0.0250	0.96250	8.070	3.723E-05	1.000E 00	-1.360E-07	-1.360E-07	1.360E-07
0.97500	0.0250	0.97500	5.381	1.261E-04	1.000E 00	-4.125E-07	-4.126E-07	4.125E-07
0.98124	0.0250	0.98125	4.037	2.996E-04	1.000E 00	-9.593E-07	-9.595E-07	9.592E-07
0.98749	0.0250	0.98750	2.693	1.014E-03	1.000E 00	-4.046E-06	-4.048E-06	4.045E-06
0.99373	0.0250	0.99375	1.352	8.497E-03	1.001E 00	-1.414E-04	-1.417E-04	1.413E-04
0.99087	0.0751	1.00000	1.985	1.692E 02	2.985E 00	-1.593E-05	-1.592E-05	1.594E-05
0.98475	0.1435	1.00625	3.325	1.692E 02	5.645E 00	-1.906E-06	-1.906E-06	1.907E-06
0.97862	0.2130	1.01250	4.668	1.692E 02	8.276E 00	-6.433E-07	-6.431E-07	6.433E-07
0.97249	0.2833	1.01875	6.012	1.692E 02	1.088E 01	-2.978E-07	-2.978E-07	2.978E-07
0.96636	0.3545	1.02500	7.356	1.692E 02	1.345E 01	-1.785E-07	-1.785E-07	1.785E-07
0.95410	0.4998	1.03750	10.045	1.692E 02	1.849E 01	-7.838E-08	-7.838E-08	7.838E-08
0.94185	0.6488	1.05000	12.734	1.692E 02	2.342E 01	-4.845E-08	-4.845E-08	4.845E-08
0.91736	0.9589	1.07500	18.112	1.692E 02	3.293E 01	-2.172E-08	-2.172E-08	2.172E-08
0.89290	1.2859	1.10000	23.491	1.692E 02	4.200E 01	-1.205E-08	-1.205E-08	1.205E-08
0.84407	1.9968	1.15000	34.249	1.692E 02	5.897E 01	-5.101E-09	-5.101E-09	5.101E-09
0.79540	2.7948	1.20000	45.006	1.692E 02	7.453E 01	-2.713E-09	-2.713E-09	2.713E-09
0.69859	4.7236	1.30000	66.522	1.692E 02	1.021E 02	-1.117E-09	-1.117E-09	1.117E-09
0.60284	7.2689	1.40000	88.038	1.692E 02	1.256E 02	-5.897E-10	-5.897E-10	5.897E-10
0.50872	10.7651	1.50000	109.554	1.692E 02	1.461E 02	-3.661E-10	-3.661E-10	3.661E-10
0.41735	15.8187	1.60000	131.070	1.692E 02	1.640E 02	-2.454E-10	-2.454E-10	2.454E-10
0.33100	23.5996	1.70000	152.586	1.692E 02	1.798E 02	-1.655E-10	-1.655E-10	1.655E-10
0.25483	36.4099	1.80000	174.101	1.692E 02	1.938E 02	-1.168E-10	-1.168E-10	1.168E-10
0.20080	57.8476	1.90000	195.617	1.692E 02	2.064E 02	-8.236E-11	-8.236E-11	8.236E-11
0.18895	87.3816	2.00000	217.133	1.692E 02	2.177E 02	-5.879E-11	-5.879E-11	5.879E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.025 θ_D= 3.218E-07 ρ_a= 1.003

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.966E-09	-1.966E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.395E-07	-5.395E-07	5.395E-07	5.395E-07	-1.128E-07	-1.128E-07
0.92500	2.719E-08	461.585	-7.933E-07	-7.933E-07	7.933E-07	7.933E-07	-2.079E-07	-2.079E-07
0.95000	6.898E-08	474.060	-1.347E-06	-1.347E-06	1.347E-06	1.347E-06	-5.274E-07	-5.274E-07
0.96250	1.360E-07	480.297	-1.944E-06	-1.944E-06	1.944E-06	1.944E-06	-1.040E-06	-1.040E-06
0.97500	4.126E-07	486.534	-3.444E-06	-3.444E-06	3.445E-06	3.445E-06	-3.154E-06	-3.154E-06
0.98124	9.596E-07	489.652	-5.457E-06	-5.458E-06	5.460E-06	5.461E-06	-7.334E-06	-7.336E-06
0.98749	4.049E-06	492.769	-1.175E-05	-1.175E-05	1.178E-05	1.179E-05	-3.093E-05	-3.095E-05
0.99373	1.419E-04	495.884	-9.690E-05	-9.704E-05	9.956E-05	9.984E-05	-1.081E-03	-1.083E-03
0.99087	1.591E-05	494.455	4.547E 00	4.547E 00	4.576E 00	4.576E 00	-1.218E-04	-1.217E-04
0.98475	1.905E-06	491.400	1.072E 01	1.072E 01	1.075E 01	1.075E 01	-1.457E-05	-1.457E-05
0.97862	6.431E-07	488.341	1.690E 01	1.690E 01	1.693E 01	1.693E 01	-4.918E-06	-4.917E-06
0.97249	2.978E-07	485.282	2.308E 01	2.308E 01	2.311E 01	2.311E 01	-2.277E-06	-2.277E-06
0.96636	1.785E-07	482.223	2.925E 01	2.925E 01	2.928E 01	2.928E 01	-1.365E-06	-1.365E-06
0.95410	7.838E-08	476.106	4.161E 01	4.161E 01	4.164E 01	4.164E 01	-5.993E-07	-5.992E-07
0.94185	4.845E-08	469.992	5.396E 01	5.396E 01	5.399E 01	5.399E 01	-3.704E-07	-3.704E-07
0.91736	2.172E-08	457.773	7.865E 01	7.865E 01	7.868E 01	7.868E 01	-1.661E-07	-1.661E-07
0.89290	1.205E-08	445.567	1.033E 02	1.033E 02	1.034E 02	1.034E 02	-9.210E-08	-9.210E-08
0.84407	5.101E-09	421.203	1.527E 02	1.527E 02	1.527E 02	1.527E 02	-3.900E-08	-3.900E-08
0.79540	2.713E-09	396.911	2.019E 02	2.019E 02	2.019E 02	2.019E 02	-2.074E-08	-2.074E-08
0.69859	1.117E-09	348.607	3.001E 02	3.001E 02	3.001E 02	3.001E 02	-8.541E-09	-8.541E-09
0.60284	5.897E-10	300.824	3.978E 02	3.978E 02	3.978E 02	3.978E 02	-4.509E-09	-4.509E-09
0.50872	3.661E-10	253.858	4.946E 02	4.946E 02	4.947E 02	4.947E 02	-2.799E-09	-2.799E-09
0.41735	2.454E-10	208.261	5.901E 02	5.901E 02	5.902E 02	5.902E 02	-1.876E-09	-1.876E-09
0.33100	1.655E-10	165.171	6.831E 02	6.831E 02	6.832E 02	6.832E 02	-1.265E-09	-1.265E-09
0.25483	1.168E-10	127.164	7.710E 02	7.710E 02	7.711E 02	7.711E 02	-8.926E-10	-8.926E-10
0.20080	8.236E-11	100.201	8.479E 02	8.479E 02	8.479E 02	8.479E 02	-6.297E-10	-6.297E-10
0.18895	5.879E-11	94.286	9.037E 02	9.037E 02	9.038E 02	9.038E 02	-4.495E-10	-4.495E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.025 θ_D= 3.218E-07 ρ_a= 1.003

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-6.155E-20
0.10000	-7.386E-14	-2.021E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-8.257E-20
0.20000	9.197E-14	-2.564E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-1.181E-19
0.30000	2.341E-13	2.341E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-1.856E-19
0.40000	5.861E-14	-7.329E-13	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-3.143E-19
0.50000	6.245E-13	-9.051E-13	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-6.290E-19
0.60000	6.544E-13	8.956E-14	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-1.471E-18
0.70000	4.836E-12	3.868E-12	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-4.299E-18
0.80000	2.601E-11	2.586E-11	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-1.947E-17
0.85000	7.306E-11	7.210E-11	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-5.641E-17
0.90000	2.907E-10	2.936E-10	-8.785E-19	-8.785E-19	-5.208E-09	-5.208E-09	-2.531E-16
0.92500	7.368E-10	7.325E-10	-2.031E-18	-2.031E-18	-1.035E-08	-1.035E-08	-7.715E-16
0.95000	2.849E-09	2.851E-09	-8.064E-18	-8.065E-18	-2.603E-08	-2.603E-08	-3.463E-15
0.96250	7.708E-09	7.707E-09	-2.341E-17	-2.342E-17	-5.171E-08	-5.171E-08	-9.865E-15
0.97500	3.667E-08	3.669E-08	-1.358E-16	-1.358E-16	-1.653E-07	-1.653E-07	-3.701E-14
0.98124	1.152E-07	1.152E-07	-5.335E-16	-5.338E-16	-4.356E-07	-4.357E-07	-8.928E-14
0.98749	7.786E-07	7.791E-07	-5.790E-15	-5.796E-15	-2.296E-06	-2.298E-06	-2.400E-13
0.99373	5.923E-05	5.938E-05	-5.185E-12	-5.208E-12	-4.315E-04	-4.330E-04	-4.289E-13
0.99087	-2.842E-03	-2.842E-03	-7.262E-14	-7.247E-14	-5.153E 04	-5.154E 04	-3.808E-13
0.98475	-1.495E-03	-1.495E-03	-1.642E-15	-1.641E-15	-5.153E 04	-5.154E 04	-1.439E-13
0.97862	-1.013E-03	-1.013E-03	-2.788E-16	-2.787E-16	-5.153E 04	-5.154E 04	-5.570E-14
0.97249	-7.665E-04	-7.665E-04	-8.194E-17	-8.193E-17	-5.153E 04	-5.154E 04	-2.637E-14
0.96636	-6.162E-04	-6.163E-04	-3.615E-17	-3.615E-17	-5.153E 04	-5.154E 04	-1.311E-14
0.95410	-4.427E-04	-4.427E-04	-9.841E-18	-9.841E-18	-5.153E 04	-5.154E 04	-4.606E-15
0.94185	-3.454E-04	-3.454E-04	-4.649E-18	-4.649E-18	-5.153E 04	-5.154E 04	-1.795E-15
0.91736	-2.399E-04	-2.399E-04	-1.493E-18	-1.493E-18	-5.153E 04	-5.154E 04	-4.836E-16
0.89290	-1.838E-04	-1.838E-04	-6.526E-19	-6.526E-19	-5.153E 04	-5.154E 04	-1.832E-16
0.84407	-1.252E-04	-1.252E-04	-1.688E-19	-1.688E-19	-5.153E 04	-5.154E 04	-4.506E-17
0.79540	-9.496E-05	-9.496E-05	-6.639E-20	-6.639E-20	-5.153E 04	-5.154E 04	-1.645E-17
0.69859	-6.401E-05	-6.401E-05	-1.747E-20	-1.747E-20	-5.153E 04	-5.154E 04	-3.832E-18
0.60284	-4.828E-05	-4.828E-05	-6.811E-21	-6.811E-21	-5.153E 04	-5.154E 04	-1.351E-18
0.50872	-3.875E-05	-3.876E-05	-3.365E-21	-3.365E-21	-5.153E 04	-5.154E 04	-5.861E-19
0.41735	-3.237E-05	-3.237E-05	-1.842E-21	-1.842E-21	-5.153E 04	-5.154E 04	-2.982E-19
0.33100	-2.779E-05	-2.779E-05	-1.014E-21	-1.014E-21	-5.153E 04	-5.154E 04	-1.776E-19
0.25483	-2.434E-05	-2.435E-05	-5.818E-22	-5.818E-22	-5.153E 04	-5.154E 04	-1.141E-19
0.20080	-2.166E-05	-2.166E-05	-3.339E-22	-3.339E-22	-5.153E 04	-5.154E 04	-8.042E-20
0.18895	-1.951E-05	-1.951E-05	-1.914E-22	-1.914E-22	-5.153E 04	-5.154E 04	-6.025E-20

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.030 θ_D= 3.862E-07 ρ_a= 1.003

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0300	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0300	0.10000	193.643	5.029E-09	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0300	0.20000	172.127	6.149E-09	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0300	0.30000	150.611	9.067E-09	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0300	0.40000	129.095	1.313E-08	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0300	0.50000	107.579	1.793E-08	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0300	0.60000	86.064	1.793E-08	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0300	0.70000	64.548	7.170E-08	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0300	0.80000	43.032	2.285E-07	1.000E 00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0300	0.85000	32.274	5.936E-07	1.000E 00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0300	0.90000	21.516	2.064E-06	1.000E 00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0300	0.92500	16.138	5.063E-06	1.000E 00	-2.719E-08	-2.719E-08	2.719E-08
0.95000	0.0300	0.95000	10.759	1.728E-05	1.000E 00	-6.898E-08	-6.898E-08	6.898E-08
0.96250	0.0300	0.96250	8.070	4.135E-05	1.000E 00	-1.360E-07	-1.360E-07	1.360E-07
0.97500	0.0300	0.97500	5.381	1.401E-04	1.000E 00	-4.124E-07	-4.125E-07	4.124E-07
0.98124	0.0300	0.98125	4.037	3.330E-04	1.000E 00	-9.591E-07	-9.593E-07	9.589E-07
0.98749	0.0300	0.98750	2.694	1.127E-03	1.000E 00	-4.043E-06	-4.045E-06	4.042E-06
0.99373	0.0300	0.99375	1.353	9.461E-03	1.000E 00	-1.407E-04	-1.410E-04	1.405E-04
0.99090	0.0900	1.00000	1.987	1.670E 02	2.994E 00	-1.584E-05	-1.582E-05	1.585E-05
0.98481	0.1720	1.00625	3.329	1.670E 02	5.666E 00	-1.898E-06	-1.897E-06	1.898E-06
0.97873	0.2550	1.01250	4.673	1.670E 02	8.305E 00	-6.413E-07	-6.412E-07	6.413E-07
0.97265	0.3391	1.01875	6.017	1.670E 02	1.091E 01	-2.972E-07	-2.972E-07	2.972E-07
0.96657	0.4242	1.02500	7.362	1.670E 02	1.349E 01	-1.781E-07	-1.781E-07	1.781E-07
0.96441	0.5978	1.03750	10.051	1.670E 02	1.855E 01	-7.830E-08	-7.830E-08	7.830E-08
0.94227	0.7759	1.05000	12.740	1.670E 02	2.348E 01	-4.840E-08	-4.840E-08	4.840E-08
0.91800	1.1461	1.07500	18.118	1.670E 02	3.302E 01	-2.171E-08	-2.170E-08	2.171E-08
0.89377	1.5364	1.10000	23.497	1.670E 02	4.211E 01	-1.204E-08	-1.204E-08	1.204E-08
0.84546	2.3841	1.15000	34.255	1.670E 02	5.913E 01	-5.098E-09	-5.098E-09	5.098E-09
0.79735	3.3343	1.20000	45.013	1.670E 02	7.472E 01	-2.712E-09	-2.712E-09	2.712E-09
0.70192	5.6239	1.30000	66.529	1.670E 02	1.023E 02	-1.117E-09	-1.117E-09	1.117E-09
0.60796	8.6272	1.40000	88.045	1.670E 02	1.260E 02	-5.897E-10	-5.897E-10	5.897E-10
0.51628	12.7120	1.50000	109.560	1.670E 02	1.464E 02	-3.660E-10	-3.660E-10	3.660E-10
0.42834	18.5147	1.60000	131.076	1.670E 02	1.644E 02	-2.454E-10	-2.454E-10	2.454E-10
0.34699	27.1665	1.70000	152.592	1.670E 02	1.802E 02	-1.655E-10	-1.655E-10	1.655E-10
0.27809	40.5640	1.80000	174.108	1.670E 02	1.943E 02	-1.167E-10	-1.167E-10	1.167E-10
0.23294	60.7551	1.90000	195.624	1.670E 02	2.068E 02	-8.235E-11	-8.235E-11	8.235E-11
0.22625	85.8567	2.00000	217.140	1.670E 02	2.182E 02	-5.878E-11	-5.878E-11	5.878E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.030 θ_D= 3.862E-07 ρ_a= 1.003

z	$_x\mu'$-1.0	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.395E-07	-5.395E-07	5.395E-07	5.395E-07	-1.128E-07	-1.128E-07
0.92500	2.719E-08	461.585	-7.933E-07	-7.933E-07	7.933E-07	7.933E-07	-2.079E-07	-2.079E-07
0.95000	6.898E-08	474.060	-1.347E-06	-1.347E-06	1.347E-06	1.347E-06	-5.274E-07	-5.274E-07
0.96250	1.360E-07	480.297	-1.944E-06	-1.944E-06	1.944E-06	1.944E-06	-1.040E-06	-1.040E-06
0.97500	4.125E-07	486.534	-3.444E-06	-3.444E-06	3.445E-06	3.445E-06	-3.153E-06	-3.154E-06
0.98124	9.594E-07	489.652	-5.456E-06	-5.457E-06	5.460E-06	5.461E-06	-7.332E-06	-7.334E-06
0.98749	4.046E-06	492.770	-1.174E-05	-1.174E-05	1.178E-05	1.179E-05	-3.091E-05	-3.093E-05
0.99373	1.411E-04	495.884	-9.626E-05	-9.640E-05	9.958E-05	9.985E-05	-1.075E-03	-1.078E-03
0.99090	1.582E-05	494.469	4.532E 00	4.532E 00	4.562E 00	4.562E 00	-1.211E-04	-1.210E-04
0.98481	1.897E-06	491.434	1.069E 01	1.069E 01	1.072E 01	1.072E 01	-1.451E-05	-1.451E-05
0.97873	6.411E-07	488.398	1.684E 01	1.684E 01	1.687E 01	1.687E 01	-4.903E-06	-4.902E-06
0.97265	2.972E-07	485.363	2.299E 01	2.299E 01	2.302E 01	2.302E 01	-2.272E-06	-2.272E-06
0.96657	1.781E-07	482.329	2.915E 01	2.915E 01	2.918E 01	2.918E 01	-1.362E-06	-1.362E-06
0.95441	7.830E-08	476.263	4.146E 01	4.145E 01	4.148E 01	4.148E 01	-5.986E-07	-5.986E-07
0.94227	4.840E-08	470.202	5.375E 01	5.375E 01	5.378E 01	5.378E 01	-3.700E-07	-3.700E-07
0.91800	2.170E-08	458.093	7.833E 01	7.833E 01	7.836E 01	7.836E 01	-1.659E-07	-1.659E-07
0.89377	1.204E-08	446.004	1.029E 02	1.029E 02	1.029E 02	1.029E 02	-9.205E-08	-9.205E-08
0.84546	5.098E-09	421.893	1.520E 02	1.520E 02	1.520E 02	1.520E 02	-3.898E-08	-3.898E-08
0.79735	2.712E-09	397.885	2.009E 02	2.009E 02	2.009E 02	2.009E 02	-2.073E-08	-2.073E-08
0.70192	1.117E-09	350.266	2.984E 02	2.984E 02	2.985E 02	2.985E 02	-8.539E-09	-8.539E-09
0.60796	5.897E-10	303.381	3.952E 02	3.952E 02	3.953E 02	3.953E 02	-4.508E-09	-4.508E-09
0.51628	3.660E-10	257.631	4.909E 02	4.909E 02	4.909E 02	4.909E 02	-2.799E-09	-2.799E-09
0.42834	2.454E-10	213.748	5.847E 02	5.847E 02	5.847E 02	5.847E 02	-1.876E-09	-1.876E-09
0.34699	1.655E-10	173.154	6.752E 02	6.752E 02	6.752E 02	6.752E 02	-1.265E-09	-1.265E-09
0.27809	1.167E-10	138.770	7.594E 02	7.594E 02	7.595E 02	7.595E 02	-8.925E-10	-8.925E-10
0.23294	8.235E-11	116.241	8.319E 02	8.319E 02	8.319E 02	8.319E 02	-6.296E-10	-6.296E-10
0.22625	5.878E-11	112.904	8.851E 02	8.851E 02	8.851E 02	8.851E 02	-4.494E-10	-4.494E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.030 θ_D= 3.862E-07 ρ_a= 1.003

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-8.063E-20
0.10000	-1.791E-13	1.791E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-1.189E-19
0.20000	1.714E-13	8.310E-14	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-1.701E-19
0.30000	5.782E-13	1.005E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-2.673E-19
0.40000	4.883E-13	-3.105E-14	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-4.525E-19
0.50000	1.193E-12	4.863E-13	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-9.058E-19
0.60000	2.396E-12	1.932E-12	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-2.118E-18
0.70000	7.515E-12	5.889E-12	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-6.191E-18
0.80000	3.434E-11	3.438E-11	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-2.804E-17
0.85000	9.540E-11	9.271E-11	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-8.124E-17
0.90000	3.672E-10	3.746E-10	-8.785E-19	-8.785E-19	-5.208E-09	-5.208E-09	-3.645E-16
0.92500	9.209E-10	9.259E-10	-2.031E-18	-2.031E-18	-1.035E-08	-1.035E-08	-1.111E-15
0.95000	3.574E-09	3.572E-09	-8.064E-18	-8.064E-18	-2.603E-08	-2.603E-08	-4.986E-15
0.96250	9.618E-09	9.618E-09	-2.341E-17	-2.341E-17	-5.170E-08	-5.171E-08	-1.421E-14
0.97500	4.567E-08	4.569E-08	-1.358E-16	-1.358E-16	-1.653E-07	-1.653E-07	-5.329E-14
0.98124	1.434E-07	1.434E-07	-5.333E-16	-5.336E-16	-4.355E-07	-4.356E-07	-1.285E-13
0.98749	9.638E-07	9.645E-07	-5.782E-15	-5.789E-15	-2.294E-06	-2.296E-06	-3.455E-13
0.99373	7.302E-05	7.321E-05	-5.132E-12	-5.154E-12	-4.278E-04	-4.294E-04	-6.178E-13
0.99090	-3.339E-03	-3.339E-03	-7.184E-14	-7.169E-14	-5.081E 04	-5.082E 04	-5.473E-13
0.98481	-1.756E-03	-1.756E-03	-1.630E-15	-1.629E-15	-5.081E 04	-5.082E 04	-2.065E-13
0.97873	-1.191E-03	-1.191E-03	-2.774E-16	-2.773E-16	-5.081E 04	-5.082E 04	-7.995E-14
0.97265	-9.009E-04	-9.009E-04	-8.168E-17	-8.166E-17	-5.081E 04	-5.082E 04	-3.785E-14
0.96657	-7.244E-04	-7.245E-04	-3.603E-17	-3.603E-17	-5.081E 04	-5.082E 04	-1.884E-14
0.95441	-5.205E-04	-5.205E-04	-9.825E-18	-9.825E-18	-5.081E 04	-5.082E 04	-6.617E-15
0.94227	-4.062E-04	-4.062E-04	-4.641E-18	-4.641E-18	-5.081E 04	-5.082E 04	-2.581E-15
0.91800	-2.822E-04	-2.822E-04	-1.492E-18	-1.492E-18	-5.081E 04	-5.082E 04	-6.955E-16
0.89377	-2.162E-04	-2.162E-04	-6.520E-19	-6.520E-19	-5.081E 04	-5.082E 04	-2.636E-16
0.84546	-1.473E-04	-1.473E-04	-1.687E-19	-1.687E-19	-5.081E 04	-5.082E 04	-6.484E-17
0.79735	-1.117E-04	-1.117E-04	-6.636E-20	-6.636E-20	-5.081E 04	-5.082E 04	-2.368E-17
0.70192	-7.531E-05	-7.531E-05	-1.747E-20	-1.747E-20	-5.081E 04	-5.082E 04	-5.516E-18
0.60796	-5.680E-05	-5.680E-05	-6.809E-21	-6.809E-21	-5.081E 04	-5.082E 04	-1.945E-18
0.51628	-4.559E-05	-4.559E-05	-3.365E-21	-3.365E-21	-5.081E 04	-5.082E 04	-8.439E-19
0.42834	-3.808E-05	-3.808E-05	-1.842E-21	-1.842E-21	-5.081E 04	-5.082E 04	-4.293E-19
0.34699	-3.269E-05	-3.269E-05	-1.014E-21	-1.014E-21	-5.081E 04	-5.082E 04	-2.557E-19
0.27809	-2.864E-05	-2.864E-05	-5.817E-22	-5.817E-22	-5.081E 04	-5.082E 04	-1.643E-19
0.23294	-2.548E-05	-2.548E-05	-3.338E-22	-3.338E-22	-5.081E 04	-5.082E 04	-1.158E-19
0.22625	-2.295E-05	-2.295E-05	-1.913E-22	-1.913E-22	-5.081E 04	-5.082E 04	-8.675E-20

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.040 θ_D= 5.149E-07 ρ_a= 1.003

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0400	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0400	0.10000	193.643	7.921E-09	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0400	0.20000	172.127	1.011E-08	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0400	0.30000	150.611	1.271E-08	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0400	0.40000	129.095	1.793E-08	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0400	0.50000	107.580	2.585E-08	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0400	0.60000	86.064	2.918E-08	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0400	0.70000	64.548	1.042E-07	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0400	0.80000	43.032	3.335E-07	1.000E 00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0400	0.85000	32.274	8.671E-07	1.000E 00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0400	0.90000	21.517	3.032E-06	1.000E 00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0400	0.92500	16.138	7.417E-06	1.000E 00	-2.719E-08	-2.719E-08	2.719E-08
0.95000	0.0400	0.95000	10.759	2.533E-05	1.000E 00	-6.897E-08	-6.898E-08	6.897E-08
0.96250	0.0400	0.96250	8.070	6.052E-05	1.000E 00	-1.360E-07	-1.360E-07	1.360E-07
0.97500	0.0400	0.97500	5.382	2.050E-04	1.000E 00	-4.122E-07	-4.123E-07	4.122E-07
0.98124	0.0400	0.98125	4.038	4.869E-04	1.000E 00	-9.583E-07	-9.585E-07	9.581E-07
0.98749	0.0400	0.98750	2.696	1.645E-03	1.000E 00	-4.032E-06	-4.034E-06	4.031E-06
0.99373	0.0400	0.99375	1.357	1.367E-02	1.000E 00	-1.381E-04	-1.384E-04	1.379E-04
0.99104	0.1191	1.00000	1.979	1.627E 02	2.996E 00	-1.614E-05	-1.613E-05	1.615E-05
0.98508	0.2278	1.00625	3.320	1.627E 02	5.683E 00	-1.917E-06	-1.916E-06	1.917E-06
0.97913	0.3379	1.01250	4.663	1.627E 02	8.338E 00	-6.453E-07	-6.452E-07	6.454E-07
0.97317	0.4494	1.01875	6.007	1.627E 02	1.096E 01	-2.984E-07	-2.984E-07	2.984E-07
0.96723	0.5622	1.02500	7.351	1.627E 02	1.355E 01	-1.788E-07	-1.788E-07	1.788E-07
0.95534	0.7922	1.03750	10.040	1.627E 02	1.864E 01	-7.845E-08	-7.845E-08	7.845E-08
0.94346	1.0279	1.05000	12.729	1.627E 02	2.361E 01	-4.849E-08	-4.849E-08	4.849E-08
0.91977	1.5176	1.07500	18.108	1.627E 02	3.320E 01	-2.173E-08	-2.173E-08	2.173E-08
0.89614	2.0331	1.10000	23.486	1.627E 02	4.235E 01	-1.205E-08	-1.205E-08	1.205E-08
0.84912	3.1501	1.15000	34.244	1.627E 02	5.947E 01	-5.102E-09	-5.102E-09	5.102E-09
0.80246	4.3975	1.20000	45.002	1.627E 02	7.515E 01	-2.713E-09	-2.713E-09	2.713E-09
0.71051	7.3801	1.30000	66.518	1.627E 02	1.029E 02	-1.117E-09	-1.117E-09	1.117E-09
0.62105	11.2351	1.40000	88.033	1.627E 02	1.267E 02	-5.898E-10	-5.898E-10	5.898E-10
0.53533	16.3546	1.50000	109.549	1.627E 02	1.473E 02	-3.661E-10	-3.661E-10	3.661E-10
0.45548	23.3431	1.60000	131.065	1.627E 02	1.654E 02	-2.454E-10	-2.454E-10	2.454E-10
0.38514	33.0795	1.70000	152.581	1.627E 02	1.813E 02	-1.655E-10	-1.655E-10	1.655E-10
0.33048	46.5581	1.80000	174.097	1.627E 02	1.954E 02	-1.168E-10	-1.168E-10	1.168E-10
0.30015	63.9605	1.90000	195.613	1.627E 02	2.081E 02	-8.237E-11	-8.237E-11	8.237E-11
0.30161	83.0896	2.00000	217.129	1.627E 02	2.195E 02	-5.879E-11	-5.879E-11	5.879E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.040 θ_0= 5.149E-07 ρ_a= 1.003

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.395E-07	-5.395E-07	5.395E-07	5.395E-07	-1.128E-07	-1.128E-07
0.92500	2.719E-08	461.585	-7.933E-07	-7.933E-07	7.933E-07	7.933E-07	-2.078E-07	-2.078E-07
0.95000	6.898E-08	474.060	-1.347E-06	-1.347E-06	1.347E-06	1.347E-06	-5.273E-07	-5.273E-07
0.96250	1.360E-07	480.297	-1.944E-06	-1.944E-06	1.944E-06	1.944E-06	-1.039E-06	-1.040E-06
0.97500	4.123E-07	486.534	-3.443E-06	-3.443E-06	3.444E-06	3.445E-06	-3.152E-06	-3.152E-06
0.98124	9.586E-07	489.652	-5.451E-06	-5.452E-06	5.460E-06	5.461E-06	-7.326E-06	-7.328E-06
0.98749	4.035E-06	492.769	-1.170E-05	-1.170E-05	1.180E-05	1.180E-05	-3.083E-05	-3.084E-05
0.99373	1.385E-04	495.883	-9.333E-05	-9.346E-05	1.003E-04	1.006E-04	-1.056E-03	-1.058E-03
0.99104	1.612E-05	494.540	4.462E 00	4.462E 00	4.491E 00	4.491E 00	-1.234E-04	-1.233E-04
0.98508	1.916E-06	491.568	1.055E 01	1.055E 01	1.058E 01	1.058E 01	-1.466E-05	-1.465E-05
0.97913	6.452E-07	488.596	1.664E 01	1.664E 01	1.667E 01	1.667E 01	-4.934E-06	-4.933E-06
0.97317	2.983E-07	485.626	2.273E 01	2.273E 01	2.276E 01	2.276E 01	-2.281E-06	-2.281E-06
0.96723	1.788E-07	482.657	2.882E 01	2.882E 01	2.885E 01	2.885E 01	-1.367E-06	-1.367E-06
0.95534	7.845E-08	476.724	4.099E 01	4.099E 01	4.102E 01	4.102E 01	-5.998E-07	-5.998E-07
0.94346	4.849E-08	470.799	5.315E 01	5.315E 01	5.318E 01	5.318E 01	-3.707E-07	-3.707E-07
0.91977	2.173E-08	458.974	7.745E 01	7.745E 01	7.748E 01	7.748E 01	-1.661E-07	-1.661E-07
0.89614	1.205E-08	447.184	1.017E 02	1.017E 02	1.017E 02	1.017E 02	-9.214E-08	-9.214E-08
0.84912	5.102E-09	423.721	1.501E 02	1.501E 02	1.502E 02	1.502E 02	-3.901E-08	-3.901E-08
0.80246	2.713E-09	400.437	1.984E 02	1.984E 02	1.984E 02	1.984E 02	-2.074E-08	-2.074E-08
0.71051	1.117E-09	354.552	2.942E 02	2.942E 02	2.942E 02	2.942E 02	-8.542E-09	-8.542E-09
0.62105	5.898E-10	309.910	3.887E 02	3.887E 02	3.887E 02	3.887E 02	-4.509E-09	-4.509E-09
0.53533	3.661E-10	267.136	4.814E 02	4.814E 02	4.814E 02	4.814E 02	-2.799E-09	-2.799E-09
0.45548	2.454E-10	227.287	5.711E 02	5.711E 02	5.711E 02	5.711E 02	-1.876E-09	-1.876E-09
0.38514	1.655E-10	192.191	6.561E 02	6.561E 02	6.561E 02	6.561E 02	-1.265E-09	-1.265E-09
0.33048	1.168E-10	164.911	7.333E 02	7.333E 02	7.333E 02	7.333E 02	-8.927E-10	-8.927E-10
0.30015	8.237E-11	149.780	7.983E 02	7.983E 02	7.984E 02	7.984E 02	-6.297E-10	-6.297E-10
0.30161	5.879E-11	150.509	8.475E 02	8.475E 02	8.475E 02	8.475E 02	-4.495E-10	-4.495E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.040 θ_0= 5.149E-07 ρ_a= 1.003

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-1.576E-19
0.10000	-2.114E-15	-3.853E-14	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-2.114E-19
0.20000	3.008E-14	1.201E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-3.023E-19
0.30000	2.516E-13	1.544E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-4.752E-19
0.40000	6.903E-13	7.288E-13	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-8.045E-19
0.50000	1.324E-12	1.468E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-1.610E-18
0.60000	3.750E-12	3.704E-12	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-3.765E-18
0.70000	1.113E-11	1.089E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-1.101E-17
0.80000	4.705E-11	4.692E-11	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-4.984E-17
0.85000	1.273E-10	1.266E-10	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-1.444E-16
0.90000	4.973E-10	5.056E-10	-8.784E-19	-8.784E-19	-5.208E-09	-5.208E-09	-6.479E-16
0.92500	1.254E-09	1.256E-09	-2.031E-18	-2.031E-18	-1.035E-08	-1.035E-08	-1.975E-15
0.95000	4.859E-09	4.856E-09	-8.063E-18	-8.063E-18	-2.603E-08	-2.603E-08	-8.863E-15
0.96250	1.308E-08	1.308E-08	-2.340E-17	-2.340E-17	-5.170E-08	-5.170E-08	-2.525E-14
0.97500	6.208E-08	6.211E-08	-1.356E-16	-1.357E-16	-1.652E-07	-1.652E-07	-9.468E-14
0.98124	1.948E-07	1.949E-07	-5.326E-16	-5.328E-16	-4.351E-07	-4.352E-07	-2.282E-13
0.98749	1.301E-06	1.302E-06	-5.756E-15	-5.763E-15	-2.287E-06	-2.289E-06	-6.131E-13
0.99373	9.728E-05	9.752E-05	-4.946E-12	-4.968E-12	-4.151E-04	-4.166E-04	-1.099E-12
0.99104	-3.882E-03	-3.882E-03	-7.446E-14	-7.431E-14	-4.974E 04	-4.974E 04	-9.791E-13
0.98508	-2.038E-03	-2.038E-03	-1.657E-15	-1.656E-15	-4.974E 04	-4.974E 04	-3.698E-13
0.97913	-1.381E-03	-1.381E-03	-2.803E-16	-2.802E-16	-4.974E 04	-4.974E 04	-1.431E-13
0.97317	-1.044E-03	-1.044E-03	-8.219E-17	-8.218E-17	-4.974E 04	-4.974E 04	-6.771E-14
0.96723	-8.391E-04	-8.392E-04	-3.626E-17	-3.626E-17	-4.974E 04	-4.974E 04	-3.364E-14
0.95534	-6.027E-04	-6.028E-04	-9.855E-18	-9.854E-18	-4.974E 04	-4.974E 04	-1.182E-14
0.94346	-4.702E-04	-4.703E-04	-4.655E-18	-4.655E-18	-4.974E 04	-4.974E 04	-4.603E-15
0.91977	-3.266E-04	-3.267E-04	-1.494E-18	-1.494E-18	-4.974E 04	-4.974E 04	-1.239E-15
0.89614	-2.502E-04	-2.502E-04	-6.531E-19	-6.531E-19	-4.974E 04	-4.974E 04	-4.694E-16
0.84912	-1.705E-04	-1.705E-04	-1.689E-19	-1.689E-19	-4.974E 04	-4.974E 04	-1.154E-16
0.80246	-1.293E-04	-1.293E-04	-6.642E-20	-6.642E-20	-4.974E 04	-4.974E 04	-4.214E-17
0.71051	-8.713E-05	-8.714E-05	-1.747E-20	-1.747E-20	-4.974E 04	-4.974E 04	-9.812E-18
0.62105	-6.572E-05	-6.572E-05	-6.812E-21	-6.812E-21	-4.974E 04	-4.974E 04	-3.459E-18
0.53533	-5.275E-05	-5.276E-05	-3.366E-21	-3.366E-21	-4.974E 04	-4.974E 04	-1.501E-18
0.45548	-4.406E-05	-4.406E-05	-1.842E-21	-1.842E-21	-4.974E 04	-4.974E 04	-7.635E-19
0.38514	-3.783E-05	-3.783E-05	-1.014E-21	-1.014E-21	-4.974E 04	-4.974E 04	-4.548E-19
0.33048	-3.314E-05	-3.314E-05	-5.819E-22	-5.819E-22	-4.974E 04	-4.974E 04	-2.922E-19
0.30015	-2.948E-05	-2.949E-05	-3.339E-22	-3.339E-22	-4.974E 04	-4.974E 04	-2.059E-19
0.30161	-2.656E-05	-2.656E-05	-1.914E-22	-1.914E-22	-4.974E 04	-4.974E 04	-1.542E-19

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.050 θ_D= 5.630E-07 ρ_a= 1.003

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0500	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0500	0.10000	193.643	1.235E-08	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0500	0.20000	172.127	1.511E-08	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0500	0.30000	150.611	1.959E-08	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0500	0.40000	129.095	2.626E-08	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0500	0.50000	107.580	3.335E-08	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0500	0.60000	86.064	3.335E-08	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0500	0.70000	64.548	1.267E-07	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0500	0.80000	43.032	4.019E-07	1.000E 00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0500	0.85000	32.274	1.047E-06	1.000E 00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0500	0.90000	21.517	3.635E-06	1.000E-00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0500	0.92500	16.138	8.905E-06	1.000E-00	-2.718E-08	-2.719E-08	2.718E-08
0.95000	0.0500	0.95000	10.760	3.035E-05	1.000E-00	-6.897E-08	-6.897E-08	6.897E-08
0.96250	0.0500	0.96250	8.071	7.253E-05	1.000E-00	-1.359E-07	-1.359E-07	1.359E-07
0.97500	0.0500	0.97500	5.383	2.455E-04	1.000E-00	-4.120E-07	-4.121E-07	4.120E-07
0.98124	0.0500	0.98125	4.040	5.830E-04	1.000E-00	-9.574E-07	-9.576E-07	9.572E-07
0.98749	0.0500	0.98750	2.698	1.968E-03	9.999E-01	-4.020E-06	-4.022E-06	4.019E-06
0.99373	0.0500	0.99375	1.362	1.628E-02	9.997E-01	-1.352E-04	-1.355E-04	1.351E-04
0.99122	0.1475	1.00000	1.967	1.583E 02	2.993E 00	-1.658E-05	-1.656E-05	1.659E-05
0.98544	0.2824	1.00625	3.306	1.583E 02	5.698E 00	-1.946E-06	-1.945E-06	1.946E-06
0.97965	0.4191	1.01250	4.648	1.583E 02	8.371E 00	-6.515E-07	-6.514E-07	6.516E-07
0.97386	0.5574	1.01875	5.991	1.583E 02	1.101E 01	-3.005E-07	-3.005E-07	3.005E-07
0.96808	0.6974	1.02500	7.335	1.583E 02	1.362E 01	-1.799E-07	-1.799E-07	1.799E-07
0.95654	0.9825	1.03750	10.024	1.583E 02	1.875E 01	-7.868E-08	-7.868E-08	7.868E-08
0.94502	1.2746	1.05000	12.713	1.583E 02	2.375E 01	-4.863E-08	-4.863E-08	4.864E-08
0.93205	1.8806	1.07500	18.091	1.583E 02	3.341E 01	-2.177E-08	-2.177E-08	2.177E-08
0.89919	2.5175	1.10000	23.469	1.583E 02	4.263E 01	-1.207E-08	-1.207E-08	1.207E-08
0.85383	3.8933	1.15000	34.227	1.583E 02	5.986E 01	-5.108E-09	-5.108E-09	5.108E-09
0.80902	5.4224	1.20000	44.985	1.583E 02	7.566E 01	-2.716E-09	-2.716E-09	2.716E-09
0.72145	9.0439	1.30000	66.500	1.583E 02	1.036E 02	-1.118E-09	-1.118E-09	1.118E-09
0.63754	13.6412	1.40000	88.016	1.583E 02	1.276E 02	-5.901E-10	-5.901E-10	5.901E-10
0.55896	19.5793	1.50000	109.532	1.583E 02	1.483E 02	-3.662E-10	-3.662E-10	3.662E-10
0.48827	27.3427	1.60000	131.048	1.583E 02	1.665E 02	-2.455E-10	-2.455E-10	2.455E-10
0.42939	37.4703	1.70000	152.564	1.583E 02	1.825E 02	-1.656E-10	-1.656E-10	1.656E-10
0.38775	50.2631	1.80000	174.080	1.583E 02	1.968E 02	-1.168E-10	-1.168E-10	1.168E-10
0.36922	65.1857	1.90000	195.595	1.583E 02	2.095E 02	-8.239E-11	-8.239E-11	8.239E-11
0.37722	80.5350	2.00000	217.111	1.583E 02	2.210E 02	-5.881E-11	-5.881E-11	5.881E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.050 θ_D= 5.630E-07 ρ_a= 1.003

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.395E-07	-5.395E-07	5.395E-07	5.395E-07	-1.128E-07	-1.128E-07
0.92500	2.719E-08	461.585	-7.933E-07	-7.933E-07	7.933E-07	7.933E-07	-2.078E-07	-2.078E-07
0.95000	6.897E-08	474.060	-1.346E-06	-1.346E-06	1.346E-06	1.346E-06	-5.273E-07	-5.273E-07
0.96250	1.359E-07	480.297	-1.944E-06	-1.944E-06	1.944E-06	1.944E-06	-1.039E-06	-1.039E-06
0.97500	4.121E-07	486.534	-3.442E-06	-3.442E-06	3.444E-06	3.444E-06	-3.150E-06	-3.150E-06
0.98124	9.577E-07	489.652	-5.447E-06	-5.448E-06	5.460E-06	5.461E-06	-7.319E-06	-7.321E-06
0.98749	4.023E-06	492.770	-1.166E-05	-1.166E-05	1.180E-05	1.181E-05	-3.073E-05	-3.075E-05
0.99373	1.357E-04	495.884	-9.067E-05	-9.080E-05	1.006E-04	1.009E-04	-1.034E-03	-1.036E-03
0.99122	1.656E-05	494.632	4.369E 00	4.369E 00	4.398E 00	4.398E 00	-1.268E-04	-1.266E-04
0.98544	1.945E-06	491.744	1.038E 01	1.038E 01	1.041E 01	1.041E 01	-1.488E-05	-1.487E-05
0.97965	6.513E-07	488.855	1.638E 01	1.638E 01	1.641E 01	1.641E 01	-4.981E-06	-4.980E-06
0.97386	3.005E-07	485.968	2.239E 01	2.239E 01	2.242E 01	2.242E 01	-2.298E-06	-2.297E-06
0.96808	1.799E-07	483.083	2.839E 01	2.839E 01	2.842E 01	2.842E 01	-1.375E-06	-1.375E-06
0.95654	7.867E-08	477.323	4.039E 01	4.039E 01	4.042E 01	4.042E 01	-6.015E-07	-6.015E-07
0.94502	4.863E-08	471.574	5.238E 01	5.238E 01	5.241E 01	5.241E 01	-3.718E-07	-3.718E-07
0.92205	2.177E-08	460.113	7.631E 01	7.631E 01	7.634E 01	7.634E 01	-1.665E-07	-1.665E-07
0.89919	1.207E-08	448.706	1.002E 02	1.002E 02	1.002E 02	1.002E 02	-9.228E-08	-9.228E-08
0.85383	5.108E-09	426.073	1.478E 02	1.478E 02	1.478E 02	1.478E 02	-3.905E-08	-3.905E-08
0.80902	2.716E-09	403.712	1.951E 02	1.951E 02	1.951E 02	1.951E 02	-2.076E-08	-2.076E-08
0.72145	1.118E-09	360.012	2.887E 02	2.887E 02	2.887E 02	2.887E 02	-8.547E-09	-8.547E-09
0.63754	5.901E-10	318.142	3.805E 02	3.805E 02	3.805E 02	3.805E 02	-4.511E-09	-4.511E-09
0.55896	3.662E-10	278.927	4.696E 02	4.696E 02	4.696E 02	4.696E 02	-2.800E-09	-2.800E-09
0.48827	2.455E-10	243.652	5.548E 02	5.548E 02	5.548E 02	5.548E 02	-1.877E-09	-1.877E-09
0.42939	1.656E-10	214.272	6.340E 02	6.340E 02	6.341E 02	6.341E 02	-1.266E-09	-1.266E-09
0.38775	1.168E-10	193.492	7.047E 02	7.047E 02	7.047E 02	7.047E 02	-8.929E-10	-8.929E-10
0.36922	8.239E-11	184.245	7.639E 02	7.639E 02	7.639E 02	7.639E 02	-6.299E-10	-6.299E-10
0.37722	5.881E-11	188.237	8.098E 02	8.098E 02	8.098E 02	8.098E 02	-4.496E-10	-4.496E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 0.050 θ_D= 5.630E-07 ρ_a= 1.003

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-2.462E-19
0.10000	4.311E-14	8.350E-14	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-3.303E-19
0.20000	2.296E-13	2.101E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-4.724E-19
0.30000	5.010E-13	5.288E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-7.426E-19
0.40000	1.005E-12	1.085E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-1.257E-18
0.50000	2.044E-12	2.111E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-2.516E-18
0.60000	5.069E-12	5.017E-12	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-5.884E-18
0.70000	1.461E-11	1.489E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-1.720E-17
0.80000	6.153E-11	6.198E-11	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-7.788E-17
0.85000	1.652E-10	1.656E-10	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-2.256E-16
0.90000	6.420E-10	6.420E-10	-8.784E-19	-8.784E-19	-5.208E-09	-5.208E-09	-1.012E-15
0.92500	1.589E-09	1.591E-09	-2.031E-18	-2.031E-18	-1.035E-08	-1.035E-08	-3.086E-15
0.95000	6.154E-09	6.152E-09	-8.061E-18	-8.062E-18	-2.603E-08	-2.603E-08	-1.385E-14
0.96250	1.655E-08	1.655E-08	-2.339E-17	-2.339E-17	-5.169E-08	-5.169E-08	-3.944E-14
0.97500	7.853E-08	7.797E-08	-1.365E-16	-1.356E-16	-1.651E-07	-1.652E-07	-1.478E-13
0.98124	2.444E-07	2.445E-07	-5.318E-16	-5.320E-16	-4.346E-07	-4.348E-07	-3.562E-13
0.98749	1.624E-06	1.625E-06	-5.727E-15	-5.734E-15	-2.280E-06	-2.282E-06	-9.561E-13
0.99373	1.196E-04	1.199E-04	-4.746E-12	-4.767E-12	-4.014E-04	-4.028E-04	-1.720E-12
0.99122	-4.075E-03	-4.075E-03	-7.833E-14	-7.817E-14	-4.849E 04	-4.849E 04	-1.544E-12
0.98544	-2.133E-03	-2.133E-03	-1.698E-15	-1.697E-15	-4.849E 04	-4.849E 04	-5.840E-13
0.97965	-1.443E-03	-1.443E-03	-2.846E-16	-2.845E-16	-4.849E 04	-4.849E 04	-2.258E-13
0.97386	-1.090E-03	-1.091E-03	-8.312E-17	-8.310E-17	-4.849E 04	-4.849E 04	-1.0o7E-13
0.96808	-8.762E-04	-8.763E-04	-3.661E-17	-3.661E-17	-4.849E 04	-4.849E 04	-5.293E-14
0.95654	-6.290E-04	-6.291E-04	-9.899E-18	-9.899E-18	-4.849E 04	-4.849E 04	-1.859E-14
0.94502	-4.906E-04	-4.907E-04	-4.677E-18	-4.677E-18	-4.849E 04	-4.849E 04	-7.226E-15
0.92205	-3.407E-04	-3.407E-04	-1.498E-18	-1.498E-18	-4.849E 04	-4.849E 04	-1.944E-15
0.89919	-2.609E-04	-2.610E-04	-6.547E-19	-6.547E-19	-4.849E 04	-4.849E 04	-7.355E-16
0.85383	-1.777E-04	-1.777E-04	-1.692E-19	-1.692E-19	-4.849E 04	-4.849E 04	-1.807E-16
0.80902	-1.348E-04	-1.348E-04	-6.650E-20	-6.650E-20	-4.849E 04	-4.849E 04	-6.593E-17
0.72145	-9.083E-05	-9.084E-05	-1.749E-20	-1.749E-20	-4.849E 04	-4.849E 04	-1.535E-17
0.63754	-6.850E-05	-6.851E-05	-6.816E-21	-6.816E-21	-4.849E 04	-4.849E 04	-5.409E-18
0.55896	-5.499E-05	-5.499E-05	-3.368E-21	-3.368E-21	-4.849E 04	-4.849E 04	-2.346E-18
0.48827	-4.592E-05	-4.593E-05	-1.843E-21	-1.843E-21	-4.849E 04	-4.849E 04	-1.193E-18
0.42939	-3.943E-05	-3.943E-05	-1.014E-21	-1.014E-21	-4.849E 04	-4.849E 04	-7.109E-19
0.38775	-3.454E-05	-3.454E-05	-5.821E-22	-5.821E-22	-4.849E 04	-4.849E 04	-4.567E-19
0.36922	-3.073E-05	-3.073E-05	-3.341E-22	-3.341E-22	-4.849E 04	-4.849E 04	-3.218E-19
0.37722	-2.768E-05	-2.768E-05	-1.915E-22	-1.915E-22	-4.849E 04	-4.849E 04	-2.411E-19

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 0.060 θ_D= 5.791E-07 ρ_a= 1.003

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0600	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0600	0.10000	193.643	1.704E-08	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0600	0.20000	172.127	2.022E-08	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0600	0.30000	150.611	2.689E-08	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0600	0.40000	129.095	3.293E-08	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0600	0.50000	107.580	4.002E-08	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0600	0.60000	86.064	4.002E-08	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0600	0.70000	64.548	1.451E-07	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0600	0.80000	43.032	4.536E-07	1.000E-00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0600	0.85000	32.275	1.177E-06	1.000E-00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0600	0.90000	21.517	4.095E-06	1.000E-00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0600	0.92500	16.139	1.001E-05	1.000E-00	-2.718E-08	-2.718E-08	2.718E-08
0.95000	0.0600	0.95000	10.761	3.415E-05	1.000E-00	-6.896E-08	-6.896E-08	6.896E-08
0.96250	0.0600	0.96250	8.072	8.166E-05	1.000E-00	-1.359E-07	-1.359E-07	1.359E-07
0.97500	0.0600	0.97500	5.384	2.765E-04	9.999E-01	-4.117E-07	-4.118E-07	4.117E-07
0.98124	0.0600	0.98125	4.042	6.563E-04	9.999E-01	-9.563E-07	-9.565E-07	9.561E-07
0.98749	0.0600	0.98750	2.701	2.213E-03	9.996E-01	-4.005E-06	-4.008E-06	4.004E-06
0.99373	0.0601	0.99375	1.367	1.821E-02	9.988E-01	-1.319E-04	-1.321E-04	1.317E-04
0.99142	0.1753	1.00000	1.959	1.539E 02	3.001E 00	-1.689E-05	-1.687E-05	1.690E-05
0.98582	0.3357	1.00625	3.298	1.539E 02	5.739E 00	-1.963E-06	-1.962E-06	1.963E-06
0.98023	0.4981	1.01250	4.640	1.539E 02	8.442E 00	-6.550E-07	-6.549E-07	6.551E-07
0.97464	0.6624	1.01875	5.983	1.539E 02	1.111E 01	-3.019E-07	-3.018E-07	3.019E-07
0.96907	0.8285	1.02500	7.327	1.539E 02	1.375E 01	-1.805E-07	-1.805E-07	1.805E-07
0.95793	1.1667	1.03750	10.015	1.539E 02	1.892E 01	-7.880E-08	-7.880E-08	7.880E-08
0.94684	1.5127	1.05000	12.704	1.539E 02	2.398E 01	-4.871E-08	-4.871E-08	4.871E-08
0.92475	2.2298	1.07500	18.082	1.539E 02	3.373E 01	-2.180E-08	-2.179E-08	2.180E-08
0.90281	2.9818	1.10000	23.461	1.539E 02	4.304E 01	-1.208E-08	-1.208E-08	1.208E-08
0.85945	4.6002	1.15000	34.218	1.539E 02	6.045E 01	-5.111E-09	-5.111E-09	5.111E-09
0.81683	6.3891	1.20000	44.976	1.539E 02	7.641E 01	-2.717E-09	-2.717E-09	2.717E-09
0.73441	10.5790	1.30000	66.492	1.539E 02	1.046E 02	-1.118E-09	-1.118E-09	1.118E-09
0.65689	15.7916	1.40000	88.008	1.539E 02	1.288E 02	-5.902E-10	-5.902E-10	5.902E-10
0.58621	22.3271	1.50000	109.523	1.539E 02	1.498E 02	-3.663E-10	-3.663E-10	3.663E-10
0.52516	30.5122	1.60000	131.039	1.539E 02	1.682E 02	-2.455E-10	-2.455E-10	2.455E-10
0.47742	40.5800	1.70000	152.555	1.539E 02	1.844E 02	-1.656E-10	-1.656E-10	1.656E-10
0.44730	52.4237	1.80000	174.071	1.539E 02	1.988E 02	-1.168E-10	-1.168E-10	1.168E-10
0.43843	65.3383	1.90000	195.587	1.539E 02	2.116E 02	-8.240E-11	-8.240E-11	8.240E-11
0.45206	78.1145	2.00000	217.103	1.539E 02	2.232E 02	-5.882E-11	-5.882E-11	5.882E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.060 θ_D= 5.791E-07 ρ_a= 1.003

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.395E-07	-5.395E-07	5.395E-07	5.395E-07	-1.128E-07	-1.128E-07
0.92500	2.718E-08	461.585	-7.932E-07	-7.932E-07	7.932E-07	7.933E-07	-2.078E-07	-2.078E-07
0.95000	6.896E-08	474.060	-1.346E-06	-1.346E-06	1.346E-06	1.346E-06	-5.272E-07	-5.272E-07
0.96250	1.359E-07	480.297	-1.943E-06	-1.943E-06	1.944E-06	1.944E-06	-1.039E-06	-1.039E-06
0.97500	4.118E-07	486.534	-3.441E-06	-3.441E-06	3.443E-06	3.444E-06	-3.148E-06	-3.148E-06
0.98124	9.566E-07	489.652	-5.443E-06	-5.443E-06	5.458E-06	5.460E-06	-7.311E-06	-7.313E-06
0.98749	4.009E-06	492.770	-1.162E-05	-1.162E-05	1.180E-05	1.181E-05	-3.062E-05	-3.064E-05
0.99373	1.323E-04	495.884	-8.797E-05	-8.810E-05	1.004E-04	1.007E-04	-1.008E-03	-1.010E-03
0.99142	1.686E-05	494.730	4.271E 00	4.271E 00	4.300E 00	4.300E 00	-1.291E-04	-1.290E-04
0.98582	1.962E-06	491.936	1.018E 01	1.018E 01	1.021E 01	1.021E 01	-1.501E-05	-1.500E-05
0.98023	6.548E-07	489.146	1.609E 01	1.609E 01	1.612E 01	1.612E 01	-5.008E-06	-5.007E-06
0.97464	3.018E-07	486.358	2.200E 01	2.200E 01	2.203E 01	2.203E 01	-2.308E-06	-2.308E-06
0.96907	1.805E-07	483.575	2.790E 01	2.790E 01	2.793E 01	2.793E 01	-1.380E-06	-1.380E-06
0.95793	7.880E-08	478.021	3.969E 01	3.969E 01	3.972E 01	3.972E 01	-6.025E-07	-6.024E-07
0.94684	4.871E-08	472.483	5.147E 01	5.147E 01	5.150E 01	5.150E 01	-3.724E-07	-3.724E-07
0.92475	2.179E-08	461.461	7.497E 01	7.497E 01	7.499E 01	7.499E 01	-1.666E-07	-1.666E-07
0.90281	1.208E-08	450.515	9.839E 01	9.839E 01	9.842E 01	9.842E 01	-9.235E-08	-9.235E-08
0.85945	5.111E-09	428.873	1.450E 02	1.450E 02	1.450E 02	1.450E 02	-3.907E-08	-3.907E-08
0.81683	2.717E-09	407.610	1.912E 02	1.912E 02	1.912E 02	1.912E 02	-2.077E-08	-2.077E-08
0.73441	1.118E-09	366.480	2.822E 02	2.822E 02	2.823E 02	2.823E 02	-8.549E-09	-8.549E-09
0.65689	5.902E-10	327.795	3.708E 02	3.708E 02	3.708E 02	3.708E 02	-4.512E-09	-4.512E-09
0.58621	3.663E-10	292.527	4.560E 02	4.560E 02	4.560E 02	4.560E 02	-2.800E-09	-2.800E-09
0.52516	2.455E-10	262.059	5.363E 02	5.363E 02	5.364E 02	5.364E 02	-1.877E-09	-1.877E-09
0.47742	1.656E-10	238.239	6.101E 02	6.101E 02	6.101E 02	6.101E 02	-1.266E-09	-1.266E-09
0.44730	1.168E-10	223.206	6.750E 02	6.750E 02	6.750E 02	6.750E 02	-8.931E-10	-8.931E-10
0.43843	8.240E-11	218.780	7.293E 02	7.293E 02	7.294E 02	7.294E 02	-6.300E-10	-6.300E-10
0.45206	5.882E-11	225.584	7.724E 02	7.724E 02	7.725E 02	7.725E 02	-4.497E-10	-4.497E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.060 θ_D= 5.791E-07 ρ_a= 1.003

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-3.545E-19
0.10000	8.970E-14	1.261E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-4.756E-19
0.20000	2.186E-13	2.355E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-6.802E-19
0.30000	5.681E-13	5.681E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-1.069E-18
0.40000	1.188E-12	1.340E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-1.810E-18
0.50000	2.745E-12	2.691E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-3.623E-18
0.60000	6.144E-12	6.293E-12	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-8.472E-18
0.70000	1.802E-11	1.813E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-2.476E-17
0.80000	7.411E-11	7.447E-11	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-1.121E-16
0.85000	1.994E-10	1.992E-10	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-3.249E-16
0.90000	7.722E-10	7.719E-10	-8.784E-19	-8.784E-19	-5.208E-09	-5.208E-09	-1.458E-15
0.92500	1.917E-09	1.917E-09	-2.030E-18	-2.031E-18	-1.035E-08	-1.035E-08	-4.443E-15
0.95000	7.415E-09	7.415E-09	-8.060E-18	-8.060E-18	-2.603E-08	-2.603E-08	-1.993E-14
0.96250	1.994E-08	1.994E-08	-2.338E-17	-2.338E-17	-5.168E-08	-5.168E-08	-5.677E-14
0.97500	9.455E-08	9.367E-08	-1.354E-16	-1.354E-16	-1.650E-07	-1.651E-07	-2.127E-13
0.98124	2.949E-07	2.950E-07	-5.308E-16	-5.310E-16	-4.341E-07	-4.342E-07	-5.121E-13
0.98749	1.951E-06	1.952E-06	-5.692E-15	-5.698E-15	-2.271E-06	-2.272E-06	-1.373E-12
0.99373	1.400E-04	1.403E-04	-4.515E-12	-4.534E-12	-3.853E-04	-3.867E-04	-2.480E-12
0.99142	-4.033E-03	-4.034E-03	-8.111E-14	-8.094E-14	-4.662E 04	-4.662E 04	-2.237E-12
0.98582	-2.103E-03	-2.103E-03	-1.723E-15	-1.722E-15	-4.662E 04	-4.662E 04	-8.463E-13
0.98023	-1.422E-03	-1.422E-03	-2.871E-16	-2.870E-16	-4.662E 04	-4.662E 04	-3.269E-13
0.97464	-1.074E-03	-1.074E-03	-8.369E-17	-8.367E-17	-4.662E 04	-4.662E 04	-1.543E-13
0.96907	-8.624E-04	-8.625E-04	-3.681E-17	-3.680E-17	-4.662E 04	-4.662E 04	-7.650E-14
0.95793	-6.189E-04	-6.190E-04	-9.923E-18	-9.922E-18	-4.662E 04	-4.662E 04	-2.686E-14
0.94684	-4.827E-04	-4.827E-04	-4.688E-18	-4.688E-18	-4.662E 04	-4.662E 04	-1.043E-14
0.92475	-3.351E-04	-3.351E-04	-1.500E-18	-1.500E-18	-4.662E 04	-4.662E 04	-2.804E-15
0.90281	-2.566E-04	-2.567E-04	-6.555E-19	-6.555E-19	-4.662E 04	-4.662E 04	-1.061E-15
0.85945	-1.748E-04	-1.748E-04	-1.693E-19	-1.693E-19	-4.662E 04	-4.662E 04	-2.604E-16
0.81683	-1.325E-04	-1.325E-04	-6.654E-20	-6.654E-20	-4.662E 04	-4.662E 04	-9.501E-17
0.73441	-8.933E-05	-8.934E-05	-1.750E-20	-1.750E-20	-4.662E 04	-4.662E 04	-2.211E-17
0.65689	-6.737E-05	-6.738E-05	-6.818E-21	-6.818E-21	-4.662E 04	-4.662E 04	-7.792E-18
0.58621	-5.408E-05	-5.408E-05	-3.368E-21	-3.368E-21	-4.662E 04	-4.662E 04	-3.380E-18
0.52516	-4.516E-05	-4.517E-05	-1.844E-21	-1.843E-21	-4.662E 04	-4.662E 04	-1.719E-18
0.47742	-3.877E-05	-3.878E-05	-1.015E-21	-1.015E-21	-4.662E 04	-4.662E 04	-1.024E-18
0.44730	-3.397E-05	-3.397E-05	-5.823E-22	-5.823E-22	-4.662E 04	-4.662E 04	-6.577E-19
0.43843	-3.022E-05	-3.023E-05	-3.341E-22	-3.341E-22	-4.662E 04	-4.662E 04	-4.634E-19
0.45206	-2.722E-05	-2.722E-05	-1.915E-22	-1.915E-22	-4.662E 04	-4.662E 04	-3.472E-19

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.070 θ_D= 7.880E-07 ρ_a= 1.003

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0700	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0700	0.10000	193.643	2.678E-08	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0700	0.20000	172.127	2.918E-08	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0700	0.30000	150.611	3.919E-08	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0700	0.40000	129.095	4.461E-08	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0700	0.50000	107.580	6.003E-08	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0700	0.60000	86.064	6.086E-08	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0700	0.70000	64.548	1.884E-07	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0700	0.80000	43.033	5.936E-07	1.000E-00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0700	0.85000	32.275	1.507E-06	1.000E-00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0700	0.90000	21.518	5.256E-06	1.000E-00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0700	0.92500	16.139	1.279E-05	1.000E-00	-2.718E-08	-2.718E-08	2.718E-08
0.95000	0.0700	0.95000	10.761	4.368E-05	1.000E-00	-6.895E-08	-6.895E-08	6.895E-08
0.96250	0.0700	0.96250	8.073	1.043E-04	1.000E-00	-1.358E-07	-1.358E-07	1.358E-07
0.97500	0.0700	0.97500	5.386	3.530E-04	9.999E-01	-4.113E-07	-4.114E-07	4.113E-07
0.98124	0.0700	0.98125	4.044	8.373E-04	9.999E-01	-9.548E-07	-9.551E-07	9.547E-07
0.98749	0.0700	0.98750	2.704	2.818E-03	9.997E-01	-3.987E-06	-3.989E-06	3.986E-06
0.99373	0.0701	0.99375	1.374	2.285E-02	9.989E-01	-1.276E-04	-1.279E-04	1.275E-04
0.99168	0.2017	1.00000	1.943	1.494E 02	2.998E 00	-1.751E-05	-1.749E-05	1.752E-05
0.98632	0.3870	1.00625	3.279	1.494E 02	5.765E 00	-2.002E-06	-2.001E-06	2.002E-06
0.98096	0.5744	1.01250	4.620	1.494E 02	8.496E 00	-6.632E-07	-6.631E-07	6.632E-07
0.97562	0.7639	1.01875	5.963	1.494E 02	1.119E 01	-3.050E-07	-3.050E-07	3.050E-07
0.97028	0.9555	1.02500	7.306	1.494E 02	1.386E 01	-1.819E-07	-1.819E-07	1.819E-07
0.95964	1.3451	1.03750	9.994	1.494E 02	1.909E 01	-7.914E-08	-7.914E-08	7.914E-08
0.94905	1.7435	1.05000	12.683	1.494E 02	2.419E 01	-4.889E-08	-4.889E-08	4.890E-08
0.92801	2.5674	1.07500	18.061	1.494E 02	3.405E 01	-2.185E-08	-2.185E-08	2.185E-08
0.90716	3.4294	1.10000	23.439	1.494E 02	4.346E 01	-1.210E-08	-1.210E-08	1.210E-08
0.86614	5.2768	1.15000	34.197	1.494E 02	6.105E 01	-5.118E-09	-5.118E-09	5.118E-09
0.82610	7.3056	1.20000	44.954	1.494E 02	7.718E 01	-2.720E-09	-2.720E-09	2.720E-09
0.74962	11.9980	1.30000	66.470	1.494E 02	1.057E 02	-1.119E-09	-1.119E-09	1.119E-09
0.67929	17.7077	1.40000	87.986	1.494E 02	1.302E 02	-5.905E-10	-5.905E-10	5.905E-10
0.61719	24.6480	1.50000	109.501	1.494E 02	1.514E 02	-3.665E-10	-3.665E-10	3.665E-10
0.56605	32.9857	1.60000	131.017	1.494E 02	1.699E 02	-2.456E-10	-2.456E-10	2.456E-10
0.52907	42.7247	1.70000	152.533	1.494E 02	1.863E 02	-1.657E-10	-1.657E-10	1.657E-10
0.50932	53.5611	1.80000	174.049	1.494E 02	2.008E 02	-1.169E-10	-1.169E-10	1.169E-10
0.50882	64.8341	1.90000	195.565	1.494E 02	2.138E 02	-8.243E-11	-8.243E-11	8.243E-11
0.52763	75.7111	2.00000	217.081	1.494E 02	2.255E 02	-5.884E-11	-5.884E-11	5.884E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.070 θ_D=7.880E-07 ρ_a=1.003

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.394E-07	-5.394E-07	5.394E-07	5.394E-07	-1.128E-07	-1.128E-07
0.92500	2.718E-08	461.585	-7.932E-07	-7.932E-07	7.932E-07	7.932E-07	-2.078E-07	-2.078E-07
0.95000	6.895E-08	474.060	-1.346E-06	-1.346E-06	1.346E-06	1.346E-06	-5.271E-07	-5.271E-07
0.96250	1.358E-07	480.297	-1.943E-06	-1.943E-06	1.943E-06	1.943E-06	-1.038E-06	-1.038E-06
0.97500	4.114E-07	486.534	-3.439E-06	-3.439E-06	3.443E-06	3.443E-06	-3.145E-06	-3.145E-06
0.98124	9.552E-07	489.652	-5.434E-06	-5.434E-06	5.460E-06	5.461E-06	-7.300E-06	-7.302E-06
0.98749	3.990E-06	492.769	-1.154E-05	-1.154E-05	1.183E-05	1.184E-05	-3.048E-05	-3.050E-05
0.99373	1.280E-04	495.884	-8.256E-05	-8.268E-05	1.022E-04	1.025E-04	-9.757E-04	-9.777E-04
0.99168	1.748E-05	494.858	4.142E 00	4.142E 00	4.171E 00	4.171E 00	-1.339E-04	-1.337E-04
0.98632	2.001E-06	492.183	9.937E 00	9.937E 00	9.965E 00	9.965E 00	-1.530E-05	-1.530E-05
0.98096	6.630E-07	489.511	1.573E 01	1.573E 01	1.576E 01	1.576E 01	-5.070E-06	-5.069E-06
0.97562	3.050E-07	486.844	2.151E 01	2.151E 01	2.154E 01	2.154E 01	-2.332E-06	-2.332E-06
0.97028	1.819E-07	484.181	2.729E 01	2.729E 01	2.732E 01	2.732E 01	-1.391E-06	-1.391E-06
0.95964	7.914E-08	478.873	3.884E 01	3.884E 01	3.887E 01	3.887E 01	-6.051E-07	-6.050E-07
0.94905	4.889E-08	473.587	5.036E 01	5.036E 01	5.039E 01	5.039E 01	-3.738E-07	-3.738E-07
0.92801	2.185E-08	463.086	7.334E 01	7.334E 01	7.337E 01	7.337E 01	-1.670E-07	-1.670E-07
0.90716	1.210E-08	452.685	9.622E 01	9.622E 01	9.625E 01	9.625E 01	-9.253E-08	-9.253E-08
0.86614	5.118E-09	432.212	1.416E 02	1.416E 02	1.417E 02	1.417E 02	-3.913E-08	-3.913E-08
0.82610	2.720E-09	412.233	1.866E 02	1.866E 02	1.866E 02	1.866E 02	-2.079E-08	-2.079E-08
0.74962	1.119E-09	374.071	2.746E 02	2.746E 02	2.747E 02	2.747E 02	-8.556E-09	-8.556E-09
0.67929	5.905E-10	338.971	3.596E 02	3.596E 02	3.597E 02	3.597E 02	-4.515E-09	-4.515E-09
0.61719	3.665E-10	307.985	4.405E 02	4.405E 02	4.406E 02	4.406E 02	-2.802E-09	-2.802E-09
0.56605	2.456E-10	282.467	5.159E 02	5.159E 02	5.160E 02	5.160E 02	-1.878E-09	-1.878E-09
0.52907	1.657E-10	264.010	5.843E 02	5.843E 02	5.843E 02	5.843E 02	-1.266E-09	-1.266E-09
0.50932	1.169E-10	254.155	6.441E 02	6.441E 02	6.441E 02	6.441E 02	-8.934E-10	-8.934E-10
0.50882	8.243E-11	253.907	6.942E 02	6.942E 02	6.942E 02	6.942E 02	-6.302E-10	-6.302E-10
0.52763	5.884E-11	263.293	7.347E 02	7.347E 02	7.347E 02	7.347E 02	-4.498E-10	-4.498E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.070 θ_D= 7.880E-07 ρ_a= 1.003

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-4.825E-19
0.10000	7.282E-14	1.611E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-6.473E-19
0.20000	2.672E-13	2.703E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-9.259E-19
0.30000	6.196E-13	7.372E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-1.455E-18
0.40000	1.446E-12	1.580E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-2.464E-18
0.50000	3.223E-12	2.940E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-4.932E-18
0.60000	7.024E-12	7.137E-12	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-1.153E-17
0.70000	2.065E-11	2.105E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-3.370E-17
0.80000	8.649E-11	8.734E-11	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-1.526E-16
0.85000	2.336E-10	2.329E-10	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-4.422E-16
0.90000	9.014E-10	9.008E-10	-8.783E-19	-8.783E-19	-5.208E-09	-5.208E-09	-1.984E-15
0.92500	2.238E-09	2.237E-09	-2.030E-18	-2.030E-18	-1.035E-08	-1.035E-08	-6.046E-15
0.95000	8.659E-09	8.656E-09	-8.058E-18	-8.059E-18	-2.602E-08	-2.602E-08	-2.712E-14
0.96250	2.328E-08	2.327E-08	-2.336E-17	-2.336E-17	-5.166E-08	-5.167E-08	-7.724E-14
0.97500	1.103E-07	1.094E-07	-1.352E-16	-1.352E-16	-1.649E-07	-1.649E-07	-2.892E-13
0.98124	3.441E-07	3.442E-07	-5.295E-16	-5.298E-16	-4.334E-07	-4.335E-07	-6.956E-13
0.98749	2.268E-06	2.270E-06	-5.647E-15	-5.653E-15	-2.259E-06	-2.261E-06	-1.864E-12
0.99373	1.583E-04	1.587E-04	-4.233E-12	-4.250E-12	-3.656E-04	-3.668E-04	-3.382E-12
0.99168	-3.842E-03	-3.843E-03	-8.686E-14	-8.668E-14	-4.476E 04	-4.476E 04	-3.085E-12
0.98632	-1.995E-03	-1.995E-03	-1.780E-15	-1.778E-15	-4.476E 04	-4.476E 04	-1.168E-12
0.98096	-1.346E-03	-1.346E-03	-2.929E-16	-2.928E-16	-4.476E 04	-4.476E 04	-4.508E-13
0.97562	-1.016E-03	-1.016E-03	-8.506E-17	-8.504E-17	-4.476E 04	-4.476E 04	-2.121E-13
0.97028	-8.154E-04	-8.155E-04	-3.727E-17	-3.726E-17	-4.476E 04	-4.476E 04	-1.051E-13
0.95964	-5.848E-04	-5.849E-04	-9.990E-18	-9.990E-18	-4.476E 04	-4.476E 04	-3.687E-14
0.94905	-4.559E-04	-4.559E-04	-4.716E-18	-4.716E-18	-4.476E 04	-4.476E 04	-1.429E-14
0.92801	-3.164E-04	-3.164E-04	-1.505E-18	-1.505E-18	-4.476E 04	-4.476E 04	-3.835E-15
0.90716	-2.423E-04	-2.423E-04	-6.575E-19	-6.575E-19	-4.476E 04	-4.476E 04	-1.449E-15
0.88614	-1.650E-04	-1.650E-04	-1.697E-19	-1.697E-19	-4.476E 04	-4.476E 04	-3.553E-16
0.82610	-1.251E-04	-1.251E-04	-6.665E-20	-6.665E-20	-4.476E 04	-4.476E 04	-1.296E-16
0.74962	-8.428E-05	-8.429E-05	-1.751E-20	-1.751E-20	-4.476E 04	-4.476E 04	-3.013E-17
0.67929	-6.356E-05	-6.357E-05	-6.824E-21	-6.824E-21	-4.476E 04	-4.476E 04	-1.062E-17
0.61719	-5.101E-05	-5.102E-05	-3.370E-21	-3.370E-21	-4.476E 04	-4.476E 04	-4.604E-18
0.58605	-4.261E-05	-4.261E-05	-1.845E-21	-1.845E-21	-4.476E 04	-4.476E 04	-2.341E-18
0.52907	-3.658E-05	-3.658E-05	-1.015E-21	-1.015E-21	-4.476E 04	-4.476E 04	-1.394E-18
0.50932	-3.204E-05	-3.205E-05	-5.826E-22	-5.826E-22	-4.476E 04	-4.476E 04	-8.956E-19
0.50882	-2.851E-05	-2.851E-05	-3.343E-22	-3.343E-22	-4.476E 04	-4.476E 04	-6.310E-19
0.52763	-2.568E-05	-2.568E-05	-1.916E-22	-1.916E-22	-4.476E 04	-4.476E 04	-4.726E-19

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.080 θ_D= 9.004E-07 ρ_a= 1.003

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0800	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.0800	0.10000	193.643	3.575E-08	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.0800	0.20000	172.127	4.002E-08	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.0800	0.30000	150.611	4.461E-08	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.0800	0.40000	129.095	5.545E-08	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.0800	0.50000	107.580	7.254E-08	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.0800	0.60000	86.064	7.504E-08	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.0800	0.70000	64.548	2.201E-07	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.0800	0.80000	43.033	6.670E-07	1.000E-00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.0800	0.85000	32.275	1.688E-06	1.000E-00	-5.810E-09	-5.810E-09	5.810E-09
0.90000	0.0800	0.90000	21.518	5.850E-06	1.000E-00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.0800	0.92500	16.140	1.426E-05	1.000E-00	-2.718E-08	-2.718E-08	2.718E-08
0.95000	0.0800	0.95000	10.762	4.867E-05	1.000E-00	-6.894E-08	-6.894E-08	6.894E-08
0.96250	0.0800	0.96250	8.074	1.162E-04	1.000E-00	-1.358E-07	-1.358E-07	1.357E-07
0.97500	0.0800	0.97500	5.388	3.932E-04	9.999E-01	-4.109E-07	-4.110E-07	4.109E-07
0.98124	0.0800	0.98125	4.046	9.318E-04	9.999E-01	-9.533E-07	-9.535E-07	9.532E-07
0.98749	0.0800	0.98750	2.708	3.130E-03	9.998E-01	-3.966E-06	-3.969E-06	3.965E-06
0.99373	0.0801	0.99375	1.382	2.513E-02	9.993E-01	-1.232E-04	-1.235E-04	1.231E-04
0.99196	0.2271	1.00000	1.927	1.449E 02	2.997E 00	-1.815E-05	-1.813E-05	1.816E-05
0.98686	0.4362	1.00625	3.261	1.449E 02	5.794E 00	-2.040E-06	-2.039E-06	2.040E-06
0.98178	0.6476	1.01250	4.601	1.449E 02	8.554E 00	-6.711E-07	-6.710E-07	6.712E-07
0.97671	0.8612	1.01875	5.943	1.449E 02	1.128E 01	-3.081E-07	-3.081E-07	3.081E-07
0.97165	1.0771	1.02500	7.287	1.449E 02	1.397E 01	-1.833E-07	-1.833E-07	1.833E-07
0.96158	1.5157	1.03750	9.974	1.449E 02	1.926E 01	-7.958E-08	-7.957E-08	7.958E-08
0.95156	1.9636	1.05000	12.663	1.449E 02	2.442E 01	-4.907E-08	-4.907E-08	4.907E-08
0.93171	2.8881	1.07500	18.040	1.449E 02	3.439E 01	-2.190E-08	-2.190E-08	2.190E-08
0.91211	3.8526	1.10000	23.419	1.449E 02	4.390E 01	-1.212E-08	-1.212E-08	1.212E-08
0.87374	5.9099	1.15000	34.176	1.449E 02	6.168E 01	-5.125E-09	-5.125E-09	5.125E-09
0.83659	8.1530	1.20000	44.934	1.449E 02	7.798E 01	-2.723E-09	-2.723E-09	2.723E-09
0.76670	13.2712	1.30000	66.449	1.449E 02	1.068E 02	-1.120E-09	-1.120E-09	1.120E-09
0.70411	19.3557	1.40000	87.965	1.449E 02	1.315E 02	-5.908E-10	-5.908E-10	5.908E-10
0.65093	26.5277	1.50000	109.481	1.449E 02	1.530E 02	-3.666E-10	-3.666E-10	3.666E-10
0.60963	34.8185	1.60000	130.996	1.449E 02	1.717E 02	-2.457E-10	-2.457E-10	2.457E-10
0.58274	44.0874	1.70000	152.512	1.449E 02	1.882E 02	-1.657E-10	-1.657E-10	1.657E-10
0.57230	53.9669	1.80000	174.028	1.449E 02	2.029E 02	-1.169E-10	-1.169E-10	1.169E-10
0.57919	63.9075	1.90000	195.544	1.449E 02	2.161E 02	-8.246E-11	-8.246E-11	8.246E-11
0.60283	73.3398	2.00000	217.060	1.449E 02	2.279E 02	-5.886E-11	-5.886E-11	5.886E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.080 θ_D= 9.004E-07 ρ_a= 1.003

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.291E-08	-2.291E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.394E-07	-5.394E-07	5.394E-07	5.394E-07	-1.127E-07	-1.128E-07
0.92500	2.718E-08	461.585	-7.932E-07	-7.932E-07	7.932E-07	7.932E-07	-2.078E-07	-2.078E-07
0.95000	6.894E-08	474.060	-1.346E-06	-1.346E-06	1.346E-06	1.346E-06	-5.270E-07	-5.271E-07
0.96250	1.358E-07	480.297	-1.943E-06	-1.943E-06	1.943E-06	1.943E-06	-1.038E-06	-1.038E-06
0.97500	4.110E-07	486.534	-3.437E-06	-3.437E-06	3.442E-06	3.443E-06	-3.142E-06	-3.142E-06
0.98124	9.537E-07	489.652	-5.427E-06	-5.427E-06	5.459E-06	5.460E-06	-7.288E-06	-7.290E-06
0.98749	3.970E-06	492.770	-1.148E-05	-1.148E-05	1.184E-05	1.185E-05	-3.032E-05	-3.034E-05
0.99373	1.236E-04	495.884	-7.858E-05	-7.870E-05	1.024E-04	1.026E-04	-9.420E-04	-9.439E-04
0.99196	1.812E-05	494.999	4.002E 00	4.002E 00	4.030E 00	4.030E 00	-1.387E-04	-1.386E-04
0.98686	2.039E-06	492.457	9.662E 00	9.662E 00	9.691E 00	9.691E 00	-1.559E-05	-1.559E-05
0.98178	6.709E-07	489.920	1.532E 01	1.532E 01	1.535E 01	1.535E 01	-5.131E-06	-5.130E-06
0.97671	3.080E-07	487.390	2.097E 01	2.097E 01	2.100E 01	2.100E 01	-2.355E-06	-2.355E-06
0.97165	1.833E-07	484.866	2.661E 01	2.661E 01	2.664E 01	2.664E 01	-1.401E-06	-1.401E-06
0.96158	7.957E-08	479.840	3.787E 01	3.787E 01	3.790E 01	3.790E 01	-6.084E-07	-6.084E-07
0.95156	4.907E-08	474.841	4.911E 01	4.911E 01	4.914E 01	4.914E 01	-3.752E-07	-3.752E-07
0.93171	2.190E-08	464.934	7.149E 01	7.149E 01	7.152E 01	7.152E 01	-1.674E-07	-1.674E-07
0.91211	1.212E-08	455.153	9.375E 01	9.375E 01	9.378E 01	9.378E 01	-9.270E-08	-9.270E-08
0.87374	5.125E-09	436.004	1.378E 02	1.378E 02	1.379E 02	1.379E 02	-3.918E-08	-3.918E-08
0.83659	2.723E-09	417.469	1.813E 02	1.813E 02	1.814E 02	1.814E 02	-2.081E-08	-2.081E-08
0.76670	1.120E-09	382.591	2.661E 02	2.661E 02	2.661E 02	2.661E 02	-8.561E-09	-8.561E-09
0.70411	5.908E-10	351.357	3.472E 02	3.472E 02	3.473E 02	3.473E 02	-4.517E-09	-4.517E-09
0.65093	3.666E-10	324.819	4.237E 02	4.237E 02	4.237E 02	4.237E 02	-2.803E-09	-2.803E-09
0.60963	2.457E-10	304.210	4.942E 02	4.942E 02	4.942E 02	4.942E 02	-1.879E-09	-1.879E-09
0.58274	1.657E-10	290.793	5.575E 02	5.575E 02	5.575E 02	5.575E 02	-1.267E-09	-1.267E-09
0.57230	1.169E-10	285.582	6.126E 02	6.126E 02	6.127E 02	6.127E 02	-8.937E-10	-8.937E-10
0.57919	8.246E-11	289.023	6.591E 02	6.591E 02	6.591E 02	6.591E 02	-6.304E-10	-6.304E-10
0.60283	5.886E-11	300.818	6.972E 02	6.972E 02	6.972E 02	6.972E 02	-4.500E-10	-4.500E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.080 θ_D= 9.004E-07 ρ_a= 1.003

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-6.302E-19
0.10000	1.543E-13	1.055E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-8.455E-19
0.20000	4.290E-13	4.665E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-1.209E-18
0.30000	9.306E-13	9.306E-13	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-1.901E-18
0.40000	1.893E-12	1.807E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-3.218E-18
0.50000	3.604E-12	3.871E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-6.441E-18
0.60000	8.440E-12	8.455E-12	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-1.506E-17
0.70000	2.435E-11	2.433E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-4.402E-17
0.80000	9.895E-11	1.009E-10	-7.689E-20	-7.689E-20	-9.348E-10	-9.348E-10	-1.994E-16
0.85000	2.672E-10	2.678E-10	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-5.776E-16
0.90000	1.033E-09	1.031E-09	-8.782E-19	-8.783E-19	-5.208E-09	-5.208E-09	-2.591E-15
0.92500	2.561E-09	2.560E-09	-2.030E-18	-2.030E-18	-1.035E-08	-1.035E-08	-7.896E-15
0.95000	9.901E-09	9.899E-09	-8.056E-18	-8.056E-18	-2.602E-08	-2.602E-08	-3.541E-14
0.96250	2.661E-08	2.661E-08	-2.334E-17	-2.335E-17	-5.165E-08	-5.165E-08	-1.008E-13
0.97500	1.260E-07	1.252E-07	-1.350E-16	-1.350E-16	-1.648E-07	-1.648E-07	-3.773E-13
0.98124	3.937E-07	3.938E-07	-5.281E-16	-5.284E-16	-4.326E-07	-4.328E-07	-9.066E-13
0.98749	2.588E-06	2.589E-06	-5.598E-15	-5.605E-15	-2.246E-06	-2.248E-06	-2.426E-12
0.99373	1.758E-04	1.762E-04	-3.948E-12	-3.965E-12	-3.455E-04	-3.466E-04	-4.428E-12
0.99196	-3.475E-03	-3.475E-03	-9.294E-14	-9.274E-14	-4.258E 04	-4.258E 04	-4.083E-12
0.98686	-1.797E-03	-1.797E-03	-1.836E-15	-1.835E-15	-4.258E 04	-4.258E 04	-1.548E-12
0.98178	-1.210E-03	-1.211E-03	-2.987E-16	-2.986E-16	-4.258E 04	-4.258E 04	-5.962E-13
0.97671	-9.124E-04	-9.125E-04	-8.638E-17	-8.636E-17	-4.258E 04	-4.258E 04	-2.796E-13
0.97165	-7.321E-04	-7.322E-04	-3.771E-17	-3.771E-17	-4.258E 04	-4.258E 04	-1.384E-13
0.96158	-5.248E-04	-5.248E-04	-1.008E-17	-1.008E-17	-4.258E 04	-4.258E 04	-4.847E-14
0.95156	-4.089E-04	-4.090E-04	-4.742E-18	-4.742E-18	-4.258E 04	-4.258E 04	-1.877E-14
0.93171	-2.837E-04	-2.837E-04	-1.510E-18	-1.510E-18	-4.258E 04	-4.258E 04	-5.031E-15
0.91211	-2.172E-04	-2.172E-04	-6.595E-19	-6.595E-19	-4.258E 04	-4.258E 04	-1.899E-15
0.87374	-1.478E-04	-1.479E-04	-1.700E-19	-1.700E-19	-4.258E 04	-4.258E 04	-4.651E-16
0.83659	-1.121E-04	-1.121E-04	-6.675E-20	-6.675E-20	-4.258E 04	-4.258E 04	-1.695E-16
0.76670	-7.552E-05	-7.553E-05	-1.753E-20	-1.753E-20	-4.258E 04	-4.258E 04	-3.940E-17
0.70411	-5.695E-05	-5.695E-05	-6.829E-21	-6.829E-21	-4.258E 04	-4.258E 04	-1.388E-17
0.65093	-4.571E-05	-4.571E-05	-3.372E-21	-3.372E-21	-4.258E 04	-4.258E 04	-6.018E-18
0.60963	-3.817E-05	-3.818E-05	-1.846E-21	-1.846E-21	-4.258E 04	-4.258E 04	-3.060E-18
0.58274	-3.277E-05	-3.277E-05	-1.016E-21	-1.016E-21	-4.258E 04	-4.258E 04	-1.822E-18
0.57230	-2.871E-05	-2.871E-05	-5.829E-22	-5.829E-22	-4.258E 04	-4.258E 04	-1.170E-18
0.57919	-2.554E-05	-2.554E-05	-3.345E-22	-3.345E-22	-4.258E 04	-4.258E 04	-8.244E-19
0.60283	-2.300E-05	-2.301E-05	-1.917E-22	-1.917E-22	-4.258E 04	-4.258E 04	-6.175E-19

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.100 θ_D= 9.642E-07 ρ_a= 1.003

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.1000	0.10000	193.643	6.212E-08	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.1000	0.20000	172.127	6.608E-08	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.1000	0.30000	150.611	7.754E-08	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.1000	0.40000	129.096	9.171E-08	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.1000	0.50000	107.580	1.067E-07	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.1000	0.60000	86.064	1.184E-07	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.1000	0.70000	64.548	3.068E-07	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.1000	0.80000	43.033	8.905E-07	1.000E-00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.1000	0.85000	32.276	2.234E-06	1.000E-00	-5.810E-09	-5.810E-09	5.809E-09
0.90000	0.1000	0.90000	21.519	7.671E-06	1.000E-00	-1.475E-08	-1.475E-08	1.475E-08
0.92500	0.1000	0.92500	16.141	1.874E-05	1.000E-00	-2.718E-08	-2.718E-08	2.718E-08
0.95000	0.1000	0.95000	10.765	6.379E-05	1.000E-00	-6.891E-08	-6.891E-08	6.891E-08
0.96250	0.1000	0.96250	8.078	1.523E-04	9.999E-01	-1.356E-07	-1.356E-07	1.356E-07
0.97500	0.1000	0.97500	5.393	5.142E-04	9.998E-01	-4.099E-07	-4.100E-07	4.099E-07
0.98124	0.1000	0.98125	4.053	1.217E-03	9.997E-01	-9.496E-07	-9.498E-07	9.495E-07
0.98749	0.1000	0.98750	2.717	4.068E-03	9.994E-01	-3.917E-06	-3.919E-06	3.916E-06
0.99373	0.1001	0.99375	1.400	3.174E-02	9.984E-01	-1.131E-04	-1.133E-04	1.130E-04
0.99264	0.2731	1.00000	1.885	1.357E 02	2.995E 00	-1.997E-05	-1.995E-05	1.998E-05
0.98819	0.5266	1.00625	3.212	1.357E 02	5.883E 00	-2.148E-06	-2.147E-06	2.148E-06
0.98377	0.7826	1.01250	4.549	1.357E 02	8.733E 00	-6.935E-07	-6.934E-07	6.936E-07
0.97936	1.0409	1.01875	5.890	1.357E 02	1.155E 01	-3.167E-07	-3.167E-07	3.168E-07
0.97497	1.3016	1.02500	7.232	1.357E 02	1.433E 01	-1.871E-07	-1.871E-07	1.871E-07
0.96625	1.8302	1.03750	9.919	1.357E 02	1.978E 01	-8.080E-08	-8.080E-08	8.080E-08
0.95761	2.3683	1.05000	12.607	1.357E 02	2.511E 01	-4.957E-08	-4.956E-08	4.957E-08
0.94059	3.4740	1.07500	17.984	1.357E 02	3.540E 01	-2.204E-08	-2.204E-08	2.204E-08
0.92394	4.6201	1.10000	23.362	1.357E 02	4.521E 01	-1.219E-08	-1.219E-08	1.219E-08
0.89181	7.0382	1.15000	34.118	1.357E 02	6.357E 01	-5.145E-09	-5.145E-09	5.145E-09
0.86138	9.6320	1.20000	44.876	1.357E 02	8.039E 01	-2.731E-09	-2.730E-09	2.731E-09
0.80640	15.3768	1.30000	66.391	1.357E 02	1.102E 02	-1.122E-09	-1.122E-09	1.122E-09
0.76065	21.8854	1.40000	87.907	1.357E 02	1.357E 02	-5.917E-10	-5.917E-10	5.917E-10
0.72588	29.1197	1.50000	109.422	1.357E 02	1.578E 02	-3.670E-10	-3.670E-10	3.670E-10
0.70371	36.9430	1.60000	130.938	1.357E 02	1.771E 02	-2.460E-10	-2.460E-10	2.460E-10
0.69535	45.1121	1.70000	152.454	1.357E 02	1.942E 02	-1.659E-10	-1.659E-10	1.659E-10
0.70129	53.3094	1.80000	173.970	1.357E 02	2.094E 02	-1.170E-10	-1.170E-10	1.170E-10
0.72119	61.2111	1.90000	195.486	1.357E 02	2.229E 02	-8.254E-11	-8.254E-11	8.254E-11
0.75394	68.5578	2.00000	217.002	1.357E 02	2.352E 02	-5.891E-11	-5.891E-11	5.891E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.100 θ_D= 9.642E-07 ρ_a= 1.003

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.107E-09	-9.107E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.290E-08	-2.290E-08
0.85000	5.810E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.442E-08	-4.442E-08
0.90000	1.475E-08	449.110	-5.394E-07	-5.394E-07	5.394E-07	5.394E-07	-1.127E-07	-1.127E-07
0.92500	2.718E-08	461.585	-7.931E-07	-7.931E-07	7.931E-07	7.931E-07	-2.078E-07	-2.078E-07
0.95000	6.891E-08	474.060	-1.346E-06	-1.346E-06	1.346E-06	1.346E-06	-5.268E-07	-5.268E-07
0.96250	1.356E-07	480.297	-1.942E-06	-1.942E-06	1.943E-06	1.943E-06	-1.037E-06	-1.037E-06
0.97500	4.100E-07	486.534	-3.432E-06	-3.432E-06	3.441E-06	3.442E-06	-3.134E-06	-3.135E-06
0.98124	9.499E-07	489.652	-5.405E-06	-5.406E-06	5.460E-06	5.461E-06	-7.260E-06	-7.261E-06
0.98749	3.920E-06	492.769	-1.128E-05	-1.129E-05	1.190E-05	1.191E-05	-2.995E-05	-2.996E-05
0.99373	1.134E-04	495.883	-6.710E-05	-6.721E-05	1.051E-04	1.053E-04	-8.647E-04	-8.664E-04
0.99264	1.994E-05	495.338	3.663E 00	3.663E 00	3.691E 00	3.691E 00	-1.527E-04	-1.525E-04
0.98819	2.147E-06	493.120	8.999E 00	8.999E 00	9.027E 00	9.027E 00	-1.642E-05	-1.642E-05
0.98377	6.933E-07	490.911	1.433E 01	1.433E 01	1.436E 01	1.436E 01	-5.302E-06	-5.301E-06
0.97936	3.167E-07	488.710	1.965E 01	1.965E 01	1.968E 01	1.968E 01	-2.422E-06	-2.421E-06
0.97497	1.871E-07	486.519	2.496E 01	2.496E 01	2.498E 01	2.498E 01	-1.430E-06	-1.430E-06
0.96625	8.080E-08	482.168	3.555E 01	3.555E 01	3.557E 01	3.557E 01	-6.177E-07	-6.177E-07
0.95761	4.956E-08	477.857	4.609E 01	4.609E 01	4.612E 01	4.612E 01	-3.789E-07	-3.789E-07
0.94059	2.204E-08	469.367	6.706E 01	6.706E 01	6.709E 01	6.709E 01	-1.685E-07	-1.685E-07
0.92394	1.219E-08	461.058	8.784E 01	8.784E 01	8.787E 01	8.787E 01	-9.317E-08	-9.317E-08
0.89181	5.145E-09	445.023	1.288E 02	1.288E 02	1.289E 02	1.289E 02	-3.933E-08	-3.933E-08
0.86138	2.730E-09	429.839	1.690E 02	1.690E 02	1.690E 02	1.690E 02	-2.088E-08	-2.088E-08
0.80640	1.122E-09	402.403	2.463E 02	2.463E 02	2.463E 02	2.463E 02	-8.577E-09	-8.577E-09
0.76065	5.917E-10	379.573	3.190E 02	3.190E 02	3.191E 02	3.191E 02	-4.524E-09	-4.524E-09
0.72588	3.670E-10	362.220	3.863E 02	3.863E 02	3.863E 02	3.863E 02	-2.806E-09	-2.806E-09
0.70371	2.460E-10	351.157	4.473E 02	4.473E 02	4.473E 02	4.473E 02	-1.881E-09	-1.881E-09
0.69535	1.659E-10	346.986	5.013E 02	5.013E 02	5.014E 02	5.014E 02	-1.268E-09	-1.268E-09
0.70129	1.170E-10	349.954	5.483E 02	5.483E 02	5.483E 02	5.483E 02	-8.945E-10	-8.945E-10
0.72119	8.254E-11	359.884	5.882E 02	5.882E 02	5.883E 02	5.883E 02	-6.310E-10	-6.310E-10
0.75394	5.891E-11	376.225	6.218E 02	6.218E 02	6.218E 02	6.218E 02	-4.504E-10	-4.504E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0=0.100 θ_0=9.642E-07 ρ_0=1.003

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-9.848E-19
0.10000	1.591E-13	1.867E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-1.321E-18
0.20000	3.338E-13	4.514E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-1.890E-18
0.30000	1.102E-12	1.084E-12	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-2.970E-18
0.40000	2.291E-12	2.291E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-5.028E-18
0.50000	4.516E-12	4.516E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-1.006E-17
0.60000	1.066E-11	1.066E-11	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-2.353E-17
0.70000	2.991E-11	3.003E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-6.878E-17
0.80000	1.239E-10	1.243E-10	-7.689E-20	-7.689E-20	-9.347E-10	-9.347E-10	-3.115E-16
0.85000	3.311E-10	3.311E-10	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-9.024E-16
0.90000	1.281E-09	1.281E-09	-8.781E-19	-8.781E-19	-5.207E-09	-5.207E-09	-4.048E-15
0.92500	3.175E-09	3.176E-09	-2.030E-18	-2.030E-18	-1.035E-08	-1.035E-08	-1.233E-14
0.95000	1.227E-08	1.227E-08	-8.051E-18	-8.051E-18	-2.601E-08	-2.601E-08	-5.529E-14
0.96250	3.298E-08	3.298E-08	-2.330E-17	-2.330E-17	-5.161E-08	-5.161E-08	-1.574E-13
0.97500	1.565E-07	1.563E-07	-1.345E-16	-1.345E-16	-1.644E-07	-1.644E-07	-5.880E-13
0.98124	4.860E-07	4.862E-07	-5.248E-16	-5.250E-16	-4.308E-07	-4.309E-07	-1.409E-12
0.98749	3.177E-06	3.179E-06	-5.481E-15	-5.487E-15	-2.216E-06	-2.217E-06	-3.760E-12
0.99373	1.991E-04	1.995E-04	-3.334E-12	-3.347E-12	-3.016E-04	-3.026E-04	-6.964E-12
0.99264	-2.400E-03	-2.400E-03	-1.114E-13	-1.112E-13	-3.769E 04	-3.769E 04	-6.621E-12
0.98819	-1.229E-03	-1.230E-03	-2.000E-15	-1.998E-15	-3.769E 04	-3.769E 04	-2.515E-12
0.98377	-8.241E-04	-8.241E-04	-3.150E-16	-3.149E-16	-3.769E 04	-3.769E 04	-9.649E-13
0.97936	-6.196E-04	-6.197E-04	-9.017E-17	-9.015E-17	-3.769E 04	-3.769E 04	-4.486E-13
0.97497	-4.964E-04	-4.964E-04	-3.898E-17	-3.898E-17	-3.769E 04	-3.769E 04	-2.216E-13
0.96625	-3.551E-04	-3.552E-04	-1.032E-17	-1.032E-17	-3.769E 04	-3.769E 04	-7.712E-14
0.95761	-2.765E-04	-2.765E-04	-4.817E-18	-4.817E-18	-3.769E 04	-3.769E 04	-2.982E-14
0.94059	-1.916E-04	-1.916E-04	-1.523E-18	-1.523E-18	-3.769E 04	-3.769E 04	-7.959E-15
0.92394	-1.466E-04	-1.466E-04	-6.649E-19	-6.649E-19	-3.769E 04	-3.769E 04	-2.996E-15
0.89181	-9.973E-05	-9.973E-05	-1.710E-19	-1.710E-19	-3.769E 04	-3.769E 04	-7.313E-16
0.86138	-7.557E-05	-7.558E-05	-6.704E-20	-6.704E-20	-3.769E 04	-3.769E 04	-2.661E-16
0.80640	-5.091E-05	-5.091E-05	-1.758E-20	-1.758E-20	-3.769E 04	-3.769E 04	-6.178E-17
0.76065	-3.838E-05	-3.839E-05	-6.843E-21	-6.843E-21	-3.769E 04	-3.769E 04	-2.174E-17
0.72588	-3.080E-05	-3.081E-05	-3.378E-21	-3.378E-21	-3.769E 04	-3.769E 04	-9.423E-18
0.70371	-2.572E-05	-2.573E-05	-1.849E-21	-1.849E-21	-3.769E 04	-3.769E 04	-4.788E-18
0.69535	-2.208E-05	-2.208E-05	-1.017E-21	-1.017E-21	-3.769E 04	-3.769E 04	-2.851E-18
0.70129	-1.934E-05	-1.935E-05	-5.838E-22	-5.838E-22	-3.769E 04	-3.769E 04	-1.830E-18
0.72119	-1.721E-05	-1.721E-05	-3.350E-22	-3.350E-22	-3.769E 04	-3.769E 04	-1.289E-18
0.75394	-1.550E-05	-1.550E-05	-1.920E-22	-1.920E-22	-3.769E 04	-3.769E 04	-9.655E-19

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.120 θ_0= 1.156E-06 ρ_0= 1.003

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1200	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.1200	0.10000	193.643	9.995E-08	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.1200	0.20000	172.127	1.101E-07	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.1200	0.30000	150.611	1.230E-07	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.1200	0.40000	129.096	1.376E-07	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.1200	0.50000	107.580	1.584E-07	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.1200	0.60000	86.064	1.651E-07	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.1200	0.70000	64.549	3.869E-07	1.000E 00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.1200	0.80000	43.034	1.094E-06	1.000E-00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.1200	0.85000	32.277	2.708E-06	1.000E-00	-5.809E-09	-5.809E-09	5.809E-09
0.90000	0.1200	0.90000	21.520	9.205E-06	1.000E-00	-1.474E-08	-1.474E-08	1.474E-08
0.92500	0.1200	0.92500	16.143	2.234E-05	1.000E-00	-2.717E-08	-2.717E-08	2.717E-08
0.95000	0.1200	0.95000	10.767	7.599E-05	9.999E-01	-6.888E-08	-6.888E-08	6.887E-08
0.96250	0.1200	0.96250	8.081	1.812E-04	9.999E-01	-1.354E-07	-1.354E-07	1.354E-07
0.97500	0.1200	0.97500	5.398	6.111E-04	9.997E-01	-4.088E-07	-4.088E-07	4.087E-07
0.98124	0.1200	0.98125	4.060	1.443E-03	9.995E-01	-9.451E-07	-9.453E-07	9.450E-07
0.98749	0.1200	0.98750	2.729	4.798E-03	9.990E-01	-3.859E-06	-3.861E-06	3.858E-06
0.99373	0.1201	0.99375	1.422	3.631E-02	9.973E-01	-1.021E-04	-1.023E-04	1.021E-04
0.99341	0.3128	1.00000	1.839	1.263E 02	3.057E 00	-2.219E-05	-2.217E-05	2.221E-05
0.98975	0.6051	1.00625	3.159	1.263E 02	5.987E 00	-2.272E-06	-2.271E-06	2.272E-06
0.98610	0.8995	1.01250	4.494	1.263E 02	8.933E 00	-7.185E-07	-7.183E-07	7.185E-07
0.98249	1.1962	1.01875	5.833	1.263E 02	1.185E 01	-3.263E-07	-3.262E-07	3.263E-07
0.97890	1.4951	1.02500	7.174	1.263E 02	1.472E 01	-1.913E-07	-1.913E-07	1.913E-07
0.97180	2.0994	1.03750	9.860	1.263E 02	2.037E 01	-8.212E-08	-8.212E-08	8.212E-08
0.96481	2.7126	1.05000	12.547	1.263E 02	2.589E 01	-5.010E-08	-5.009E-08	5.010E-08
0.95117	3.9656	1.07500	17.924	1.263E 02	3.653E 01	-2.219E-08	-2.219E-08	2.219E-08
0.93799	5.2545	1.10000	23.301	1.263E 02	4.669E 01	-1.225E-08	-1.225E-08	1.225E-08
0.91313	7.9404	1.15000	34.058	1.263E 02	6.569E 01	-5.165E-09	-5.165E-09	5.165E-09
0.89038	10.7700	1.20000	44.815	1.263E 02	8.310E 01	-2.739E-09	-2.739E-09	2.739E-09
0.85190	16.8450	1.30000	66.330	1.263E 02	1.139E 02	-1.124E-09	-1.124E-09	1.124E-09
0.82383	23.4127	1.40000	87.846	1.263E 02	1.403E 02	-5.926E-10	-5.926E-10	5.926E-10
0.80725	30.3456	1.50000	109.361	1.263E 02	1.632E 02	-3.674E-10	-3.674E-10	3.674E-10
0.80287	37.4603	1.60000	130.877	1.263E 02	1.832E 02	-2.463E-10	-2.463E-10	2.463E-10
0.81090	44.5429	1.70000	152.393	1.263E 02	2.009E 02	-1.660E-10	-1.660E-10	1.660E-10
0.83097	51.3848	1.80000	173.908	1.263E 02	2.166E 02	-1.171E-10	-1.171E-10	1.171E-10
0.86224	57.8175	1.90000	195.424	1.263E 02	2.307E 02	-8.262E-11	-8.262E-11	8.262E-11
0.90356	63.7315	2.00000	216.940	1.263E 02	2.433E 02	-5.897E-11	-5.897E-11	5.897E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.120 θ_D= 1.156E-06 ρ_a= 1.003

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.904E-09	-2.904E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.106E-09	-9.106E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.290E-08	-2.290E-08
0.85000	5.809E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.441E-08	-4.441E-08
0.90000	1.474E-08	449.110	-5.394E-07	-5.394E-07	5.394E-07	5.394E-07	-1.127E-07	-1.127E-07
0.92500	2.717E-08	461.585	-7.931E-07	-7.931E-07	7.931E-07	7.931E-07	-2.077E-07	-2.077E-07
0.95000	6.888E-08	474.060	-1.346E-06	-1.346E-06	1.346E-06	1.346E-06	-5.266E-07	-5.266E-07
0.96250	1.354E-07	480.297	-1.941E-06	-1.941E-06	1.942E-06	1.942E-06	-1.035E-06	-1.035E-06
0.97500	4.088E-07	486.534	-3.426E-06	-3.426E-06	3.439E-06	3.440E-06	-3.125E-06	-3.126E-06
0.98124	9.454E-07	489.652	-5.382E-06	-5.383E-06	5.459E-06	5.461E-06	-7.225E-06	-7.227E-06
0.98749	3.862E-06	492.769	-1.108E-05	-1.109E-05	1.195E-05	1.195E-05	-2.950E-05	-2.952E-05
0.99373	1.024E-04	495.884	-5.644E-05	-5.654E-05	1.062E-04	1.064E-04	-7.809E-04	-7.824E-04
0.99341	2.215E-05	495.724	3.276E 00	3.276E 00	3.304E 00	3.304E 00	-1.697E-04	-1.695E-04
0.98975	2.270E-06	493.894	8.225E 00	8.225E 00	8.252E 00	8.252E 00	-1.737E-05	-1.736E-05
0.98610	7.182E-07	492.077	1.316E 01	1.316E 01	1.319E 01	1.319E 01	-5.493E-06	-5.492E-06
0.98249	3.262E-07	490.272	1.808E 01	1.808E 01	1.811E 01	1.811E 01	-2.494E-06	-2.494E-06
0.97890	1.913E-07	488.481	2.299E 01	2.299E 01	2.302E 01	2.302E 01	-1.462E-06	-1.462E-06
0.97180	8.212E-08	484.938	3.278E 01	3.278E 01	3.280E 01	3.280E 01	-6.278E-07	-6.278E-07
0.96481	5.009E-08	481.450	4.250E 01	4.250E 01	4.253E 01	4.253E 01	-3.830E-07	-3.830E-07
0.95117	2.219E-08	474.643	6.178E 01	6.178E 01	6.181E 01	6.181E 01	-1.697E-07	-1.697E-07
0.93799	1.225E-08	468.069	8.083E 01	8.083E 01	8.086E 01	8.086E 01	-9.367E-08	-9.367E-08
0.91313	5.165E-09	455.663	1.182E 02	1.182E 02	1.182E 02	1.182E 02	-3.949E-08	-3.949E-08
0.89038	2.739E-09	444.312	1.545E 02	1.545E 02	1.545E 02	1.545E 02	-2.094E-08	-2.094E-08
0.85190	1.124E-09	425.110	2.236E 02	2.236E 02	2.236E 02	2.236E 02	-8.595E-09	-8.594E-09
0.82383	5.926E-10	411.100	2.875E 02	2.875E 02	2.875E 02	2.875E 02	-4.531E-09	-4.531E-09
0.80725	3.674E-10	402.826	3.457E 02	3.457E 02	3.457E 02	3.457E 02	-2.809E-09	-2.809E-09
0.80287	2.463E-10	400.642	3.978E 02	3.978E 02	3.978E 02	3.978E 02	-1.883E-09	-1.883E-09
0.81090	1.660E-10	404.648	4.437E 02	4.437E 02	4.437E 02	4.437E 02	-1.269E-09	-1.269E-09
0.83097	1.171E-10	414.663	4.835E 02	4.835E 02	4.836E 02	4.836E 02	-8.954E-10	-8.954E-10
0.86224	8.262E-11	430.270	5.178E 02	5.178E 02	5.179E 02	5.179E 02	-6.317E-10	-6.317E-10
0.90356	5.897E-11	450.886	5.471E 02	5.471E 02	5.472E 02	5.472E 02	-4.508E-10	-4.508E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.120 θ_D= 1.156E-06 ρ_a= 1.003

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-1.418E-18
0.10000	2.056E-13	2.093E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-1.902E-18
0.20000	5.766E-13	5.766E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-2.721E-18
0.30000	1.259E-12	1.264E-12	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-4.277E-18
0.40000	2.702E-12	2.702E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-7.241E-18
0.50000	5.532E-12	5.492E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-1.449E-17
0.60000	1.271E-11	1.258E-11	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-3.389E-17
0.70000	3.608E-11	3.598E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-9.905E-17
0.80000	1.483E-10	1.489E-10	-7.688E-20	-7.688E-20	-9.347E-10	-9.347E-10	-4.485E-16
0.85000	3.966E-10	3.962E-10	-2.047E-19	-2.047E-19	-1.889E-09	-1.889E-09	-1.299E-15
0.90000	1.533E-09	1.532E-09	-8.779E-19	-8.779E-19	-5.206E-09	-5.207E-09	-5.828E-15
0.92500	3.798E-09	3.798E-09	-2.029E-18	-2.029E-18	-1.035E-08	-1.035E-08	-1.775E-14
0.95000	1.468E-08	1.468E-08	-8.045E-18	-8.045E-18	-2.600E-08	-2.600E-08	-7.953E-14
0.96250	3.942E-08	3.943E-08	-2.325E-17	-2.325E-17	-5.156E-08	-5.157E-08	-2.263E-13
0.97500	1.865E-07	1.868E-07	-1.339E-16	-1.339E-16	-1.640E-07	-1.640E-07	-8.439E-13
0.98124	5.796E-07	5.798E-07	-5.207E-16	-5.210E-16	-4.286E-07	-4.287E-07	-2.016E-12
0.98749	3.753E-06	3.755E-06	-5.344E-15	-5.349E-15	-2.179E-06	-2.181E-06	-5.362E-12
0.99373	2.134E-04	2.138E-04	-2.725E-12	-2.735E-12	-2.573E-04	-2.581E-04	-1.012E-11
0.99341	-2.150E-03	-2.150E-03	-1.361E-13	-1.358E-13	-3.203E 04	-3.203E 04	-9.969E-12
0.98975	-1.086E-03	-1.086E-03	-2.194E-15	-2.192E-15	-3.203E 04	-3.203E 04	-3.785E-12
0.98610	-7.241E-04	-7.241E-04	-3.336E-16	-3.335E-16	-3.203E 04	-3.203E 04	-1.444E-12
0.98249	-5.429E-04	-5.429E-04	-9.441E-17	-9.439E-17	-3.203E 04	-3.203E 04	-6.649E-13
0.97890	-4.342E-04	-4.342E-04	-4.038E-17	-4.038E-17	-3.203E 04	-3.203E 04	-3.276E-13
0.97180	-3.100E-04	-3.101E-04	-1.059E-17	-1.059E-17	-3.203E 04	-3.203E 04	-1.132E-13
0.96481	-2.411E-04	-2.411E-04	-4.898E-18	-4.898E-18	-3.203E 04	-3.203E 04	-4.371E-14
0.95117	-1.669E-04	-1.669E-04	-1.538E-18	-1.538E-18	-3.203E 04	-3.203E 04	-1.161E-14
0.93799	1.276E-04	-1.276E-04	-6.707E-19	-6.707E-19	-3.203E 04	-3.203E 04	-4.358E-15
0.91313	-8.675E-05	-8.676E-05	-1.720E-19	-1.720E-19	-3.203E 04	-3.203E 04	-1.060E-15
0.89038	-6.572E-05	-6.572E-05	-6.735E-20	-6.735E-20	-3.203E 04	-3.203E 04	-3.852E-16
0.85190	-4.426E-05	-4.426E-05	-1.763E-20	-1.763E-20	-3.203E 04	-3.203E 04	-8.927E-17
0.82383	-3.336E-05	-3.336E-05	-6.859E-21	-6.859E-21	-3.203E 04	-3.203E 04	-3.139E-17
0.80725	-2.677E-05	-2.677E-05	-3.384E-21	-3.384E-21	-3.203E 04	-3.203E 04	-1.360E-17
0.80287	-2.235E-05	-2.236E-05	-1.852E-21	-1.852E-21	-3.203E 04	-3.203E 04	-6.906E-18
0.81090	-1.919E-05	-1.919E-05	-1.019E-21	-1.019E-21	-3.203E 04	-3.203E 04	-4.111E-18
0.83097	-1.681E-05	-1.681E-05	-5.847E-22	-5.847E-22	-3.203E 04	-3.203E 04	-2.639E-18
0.86224	-1.495E-05	-1.495E-05	-3.355E-22	-3.355E-22	-3.203E 04	-3.203E 04	-1.858E-18
0.90356	-1.347E-05	-1.347E-05	-1.923E-22	-1.923E-22	-3.203E 04	-3.203E 04	-1.391E-18

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.150 θ_D= 1.684E-06 ρ_a= 1.004

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1500	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.1500	0.10000	193.643	1.857E-07	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.1500	0.20000	172.127	1.955E-07	1.000E 00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.1500	0.30000	150.612	2.084E-07	1.000E 00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.1500	0.40000	129.096	2.259E-07	1.000E 00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.1500	0.50000	107.580	2.501E-07	1.000E 00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.1500	0.60030	86.065	2.568E-07	1.000E 00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.1500	0.70000	64.549	5.269E-07	1.000E-00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.1500	0.80000	43.035	1.334E-06	1.000E-00	-2.996E-09	-2.996E-09	2.996E-09
0.85000	0.1500	0.85000	32.278	3.208E-06	1.000E-00	-5.809E-09	-5.809E-09	5.809E-09
0.90000	0.1500	0.90000	21.523	1.085E-05	1.000E-00	-1.474E-08	-1.474E-08	1.474E-08
0.92500	0.1500	0.92500	16.146	2.628E-05	9.999E-01	-2.716E-08	-2.716E-08	2.716E-08
0.95000	0.1500	0.95000	10.772	8.933E-05	9.994E-01	-6.881E-08	-6.882E-08	6.881E-08
0.96250	0.1500	0.96250	8.088	2.127E-04	9.997E-01	-1.351E-07	-1.351E-07	1.351E-07
0.97500	0.1500	0.97500	5.409	7.160E-04	9.993E-01	-4.066E-07	-4.066E-07	4.066E-07
0.98124	0.1500	0.98125	4.074	1.684E-03	9.988E-01	-9.369E-07	-9.371E-07	9.368E-07
0.98749	0.1500	0.98750	2.749	5.545E-03	9.977E-01	-3.755E-06	-3.757E-06	3.754E-06
0.99373	0.1501	0.99375	1.461	3.992E-02	9.952E-01	-8.619E-05	-8.634E-05	8.613E-05
0.99480	0.3555	1.00000	1.739	1.111E 02	2.870E 00	-2.780E-05	-2.777E-05	2.782E-05
0.99259	0.6918	1.00625	3.040	1.111E 02	6.763E 00	-2.575E-06	-2.573E-06	2.575E-06
0.99041	1.0300	1.01250	4.368	1.112E 02	1.030E 01	-7.781E-07	-7.780E-07	7.782E-07
0.98826	1.3697	1.01875	5.703	1.112E 02	1.376E 01	-3.490E-07	-3.490E-07	3.490E-07
0.98615	1.7110	1.02500	7.042	1.112E 02	1.716E 01	-2.012E-07	-2.011E-07	2.012E-07
0.98203	2.3980	1.03750	9.725	1.112E 02	2.385E 01	-8.523E-08	-8.522E-08	8.523E-08
0.97805	3.0908	1.05000	12.411	1.112E 02	3.037E 01	-5.133E-08	-5.133E-08	5.133E-08
0.97053	4.4928	1.07500	17.786	1.112E 02	4.294E 01	-2.254E-08	-2.254E-08	2.254E-08
0.96359	5.9159	1.10000	23.162	1.112E 02	5.495E 01	-1.240E-08	-1.240E-08	1.240E-08
0.95155	8.8198	1.15000	33.918	1.112E 02	7.739E 01	-5.213E-09	-5.213E-09	5.213E-09
0.94201	11.7904	1.20000	44.675	1.112E 02	9.795E 01	-2.758E-09	-2.758E-09	2.758E-09
0.93072	17.8732	1.30000	66.189	1.112E 02	1.343E 02	-1.129E-09	-1.129E-09	1.129E-09
0.93011	24.0342	1.40000	87.705	1.112E 02	1.655E 02	-5.947E-10	-5.947E-10	5.947E-10
0.94020	30.1328	1.50000	109.220	1.112E 02	1.926E 02	-3.684E-10	-3.684E-10	3.684E-10
0.96064	36.0368	1.60000	130.736	1.112E 02	2.162E 02	-2.469E-10	-2.469E-10	2.469E-10
0.99081	41.6384	1.70000	152.252	1.112E 02	2.371E 02	-1.664E-10	-1.664E-10	1.664E-10
1.02983	46.8624	1.80000	173.767	1.112E 02	2.556E 02	-1.174E-10	-1.174E-10	1.174E-10
1.07676	51.6684	1.90000	195.283	1.112E 02	2.722E 02	-8.281E-11	-8.281E-11	8.281E-11
1.13061	56.0452	2.00000	216.799	1.112E 02	2.872E 02	-5.909E-11	-5.909E-11	5.909E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.150 θ_D=1.684E-06 ρ =1.004

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.903E-09	-2.903E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.106E-09	-9.106E-09
0.80000	2.996E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.290E-08	-2.290E-08
0.85000	5.809E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.441E-08	-4.441E-08
0.90000	1.474E-08	449.110	-5.393E-07	-5.393E-07	5.393E-07	5.393E-07	-1.127E-07	-1.127E-07
0.92500	2.716E-08	461.585	-7.929E-07	-7.929E-07	7.929E-07	7.929E-07	-2.076E-07	-2.076E-07
0.95000	6.882E-08	474.060	-1.345E-06	-1.345E-06	1.345E-06	1.345E-06	-5.261E-07	-5.261E-07
0.96250	1.351E-07	480.297	-1.939E-06	-1.939E-06	1.941E-06	1.941E-06	-1.033E-06	-1.033E-06
0.97500	4.067E-07	486.534	-3.416E-06	-3.416E-06	3.435E-06	3.435E-06	-3.109E-06	-3.109E-06
0.98124	9.373E-07	489.652	-5.347E-06	-5.347E-06	5.452E-06	5.453E-06	-7.163E-06	-7.165E-06
0.98749	3.758E-06	492.770	-1.080E-05	-1.080E-05	1.195E-05	1.196E-05	-2.870E-05	-2.872E-05
0.99373	8.642E-05	495.884	-4.352E-05	-4.360E-05	1.037E-04	1.038E-04	-6.590E-04	-6.601E-04
0.99480	2.775E-05	496.416	2.584E 00	2.584E 00	2.610E 00	2.610E 00	-2.126E-04	-2.123E-04
0.99259	2.573E-06	495.313	6.806E 00	6.806E 00	6.832E 00	6.832E 00	-1.968E-05	-1.967E-05
0.99041	7.779E-07	494.225	1.101E 01	1.101E 01	1.104E 01	1.104E 01	-5.949E-06	-5.948E-06
0.98826	3.489E-07	493.153	1.520E 01	1.520E 01	1.523E 01	1.523E 01	-2.668E-06	-2.668E-06
0.98615	2.011E-07	492.099	1.938E 01	1.938E 01	1.940E 01	1.940E 01	-1.538E-06	-1.538E-06
0.98203	8.522E-08	490.043	2.767E 01	2.767E 01	2.770E 01	2.770E 01	-6.516E-07	-6.515E-07
0.97805	5.133E-08	488.058	3.589E 01	3.589E 01	3.592E 01	3.592E 01	-3.924E-07	-3.924E-07
0.97053	2.254E-08	484.304	5.212E 01	5.212E 01	5.215E 01	5.215E 01	-1.723E-07	-1.723E-07
0.96359	1.240E-08	480.845	6.806E 01	6.806E 01	6.808E 01	6.808E 01	-9.483E-08	-9.483E-08
0.95155	5.213E-09	474.834	9.902E 01	9.902E 01	9.904E 01	9.904E 01	-3.986E-08	-3.986E-08
0.94201	2.758E-09	470.073	1.287E 02	1.287E 02	1.288E 02	1.288E 02	-2.109E-08	-2.109E-08
0.93072	1.129E-09	464.441	1.843E 02	1.843E 02	1.843E 02	1.843E 02	-8.634E-09	-8.634E-09
0.93011	5.947E-10	464.136	2.345E 02	2.345E 02	2.345E 02	2.345E 02	-4.547E-09	-4.547E-09
0.94020	3.684E-10	469.169	2.793E 02	2.793E 02	2.794E 02	2.794E 02	-2.816E-09	-2.816E-09
0.96064	2.469E-10	479.371	3.190E 02	3.190E 02	3.191E 02	3.191E 02	-1.888E-09	-1.888E-09
0.99081	1.664E-10	494.423	3.539E 02	3.539E 02	3.539E 02	3.539E 02	-1.272E-09	-1.272E-09
1.02983	1.174E-10	513.899	3.843E 02	3.843E 02	3.843E 02	3.843E 02	-8.975E-10	-8.975E-10
1.07676	8.281E-11	537.318	4.108E 02	4.108E 02	4.108E 02	4.108E 02	-6.331E-10	-6.331E-10
1.13061	5.909E-11	564.189	4.338E 02	4.338E 02	4.338E 02	4.338E 02	-4.518E-10	-4.518E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.150 θ_D= 1.684E-06 ρ_a= 1.004

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-2.216E-18
0.10000	2.941E-13	2.807E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-2.972E-18
0.20000	7.282E-13	7.911E-13	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-4.251E-18
0.30000	1.639E-12	1.639E-12	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-6.683E-18
0.40000	3.391E-12	3.490E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-1.131E-17
0.50000	6.824E-12	6.924E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-2.265E-17
0.60000	1.592E-11	1.589E-11	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-5.295E-17
0.70000	4.516E-11	4.497E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-1.548E-16
0.80000	1.859E-10	1.856E-10	-7.688E-20	-7.688E-20	-9.347E-10	-9.347E-10	-7.007E-16
0.85000	4.952E-10	4.952E-10	-2.046E-19	-2.046E-19	-1.889E-09	-1.889E-09	-2.030E-15
0.90000	1.915E-09	1.916E-09	-8.776E-19	-8.776E-19	-5.205E-09	-5.205E-09	-9.103E-15
0.92500	4.748E-09	4.748E-09	-2.028E-18	-2.028E-18	-1.034E-08	-1.034E-08	-2.771E-14
0.95000	1.834E-08	1.834E-08	-8.033E-18	-8.034E-18	-2.598E-08	-2.598E-08	-1.240E-13
0.96250	4.911E-08	4.911E-08	-2.315E-17	-2.315E-17	-5.148E-08	-5.148E-08	-3.528E-13
0.97500	2.315E-07	2.320E-07	-1.328E-16	-1.328E-16	-1.632E-07	-1.633E-07	-1.311E-12
0.98124	7.190E-07	7.192E-07	-5.135E-16	-5.137E-16	-4.246E-07	-4.247E-07	-3.114E-12
0.98749	4.552E-06	4.555E-06	-5.102E-15	-5.107E-15	-2.115E-06	-2.116E-06	-8.232E-12
0.99373	2.172E-04	2.176E-04	-1.948E-12	-1.955E-12	-1.951E-04	-1.957E-04	-1.592E-11
0.99680	4.775E-03	4.775E-03	-2.086E-13	-2.081E-13	-2.293E 04	-2.293E 04	-1.736E-11
0.99259	1.880E-03	1.880E-03	-2.698E-15	-2.696E-15	-2.293E 04	-2.293E 04	-6.569E-12
0.99041	1.223E-03	1.223E-03	-3.798E-16	-3.796E-16	-2.293E 04	-2.293E 04	-2.471E-12
0.98826	9.092E-04	9.092E-04	-1.048E-16	-1.048E-16	-2.293E 04	-2.293E 04	-1.112E-12
0.98615	7.241E-04	7.241E-04	-4.376E-17	-4.376E-17	-2.293E 04	-2.293E 04	-5.441E-13
0.98203	5.148E-04	5.148E-04	-1.122E-17	-1.122E-17	-2.293E 04	-2.293E 04	-1.852E-13
0.97805	3.995E-04	3.995E-04	-5.087E-18	-5.087E-18	-2.293E 04	-2.293E 04	-7.117E-14
0.97053	2.759E-04	2.759E-04	-1.571E-18	-1.571E-18	-2.293E 04	-2.293E 04	-1.871E-14
0.96359	2.107E-04	2.107E-04	-6.843E-19	-6.842E-19	-2.293E 04	-2.293E 04	-6.971E-15
0.95155	1.431E-04	1.431E-04	-1.744E-19	-1.744E-19	-2.293E 04	-2.293E 04	-1.682E-15
0.94201	1.083E-04	1.083E-04	-6.805E-20	-6.805E-20	-2.293E 04	-2.293E 04	-6.089E-16
0.93072	7.292E-05	7.292E-05	-1.775E-20	-1.775E-20	-2.293E 04	-2.293E 04	-1.406E-16
0.93011	5.496E-05	5.496E-05	-6.894E-21	-6.894E-21	-2.293E 04	-2.293E 04	-4.934E-17
0.94020	4.409E-05	4.409E-05	-3.397E-21	-3.397E-21	-2.293E 04	-2.293E 04	-2.136E-17
0.96064	3.681E-05	3.682E-05	-1.859E-21	-1.859E-21	-2.293E 04	-2.293E 04	-1.083E-17
0.99081	3.160E-05	3.160E-05	-1.023E-21	-1.023E-21	-2.293E 04	-2.293E 04	-6.444E-18
1.02983	2.768E-05	2.768E-05	-5.868E-22	-5.868E-22	-2.293E 04	-2.293E 04	-4.134E-18
1.07676	2.462E-05	2.462E-05	-3.368E-22	-3.368E-22	-2.293E 04	-2.293E 04	-2.909E-18
1.13061	2.217E-05	2.217E-05	-1.930E-22	-1.930E-22	-2.293E 04	-2.293E 04	-2.178E-18

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.200 θ_D= 3.834E-06 ρ_a= 1.005

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.2000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.2000	0.10000	193.643	4.313E-07	1.000E 00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.2000	0.20000	172.127	4.411E-07	1.000E-00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.2000	0.30000	150.612	4.561E-07	1.000E-00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.2000	0.40000	129.096	4.853E-07	1.000E-00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.2000	0.50000	107.581	5.253E-07	1.000E-00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.2000	0.60000	86.066	5.336E-07	1.000E-00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.2000	0.70000	64.551	9.205E-07	1.000E-00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.2000	0.80000	43.037	2.074E-06	1.000E-00	-2.995E-09	-2.995E-09	2.995E-09
0.85000	0.2000	0.85000	32.281	4.776E-06	1.000E-00	-5.807E-09	-5.807E-09	5.807E-09
0.90000	0.2000	0.90000	21.528	1.553E-05	9.999E-01	-1.473E-08	-1.473E-08	1.473E-08
0.92500	0.2000	0.92500	16.153	3.733E-05	9.998E-01	-2.714E-08	-2.714E-08	2.714E-08
0.95000	0.2000	0.95000	10.783	1.259E-04	9.996E-01	-6.868E-08	-6.868E-08	6.868E-08
0.96250	0.2000	0.96250	8.103	2.994E-04	9.993E-01	-1.343E-07	-1.343E-07	1.343E-07
0.97500	0.2000	0.97500	5.431	1.000E-03	9.984E-01	-4.019E-07	-4.020E-07	4.019E-07
0.98124	0.2000	0.98125	4.104	2.333E-03	9.974E-01	-9.195E-07	-9.197E-07	9.194E-07
0.98749	0.2001	0.98750	2.793	7.527E-03	9.954E-01	-3.540E-06	-3.542E-06	3.539E-06
0.99373	0.2002	0.99375	1.543	4.877E-02	9.946E-01	-6.103E-05	-6.112E-05	6.099E-05
0.99735	0.3743	1.00000	1.515	8.236E 01	2.221E 00	-6.855E-05	-6.845E-05	6.861E-05
0.99821	0.7294	1.00625	2.764	8.239E 01	5.670E 00	-3.684E-06	-3.682E-06	3.685E-06
0.99911	1.0841	1.01250	4.074	8.240E 01	9.172E 00	-9.372E-07	-9.370E-07	9.373E-07
1.00006	1.4382	1.01875	5.401	8.240E 01	1.259E 01	-4.083E-07	-4.082E-07	4.083E-07
1.00104	1.7917	1.02500	6.735	8.240E 01	1.595E 01	-2.261E-07	-2.261E-07	2.261E-07
1.00311	2.4964	1.03750	9.412	8.240E 01	2.253E 01	-9.289E-08	-9.289E-08	9.289E-08
1.00533	3.1982	1.05000	12.095	8.240E 01	2.893E 01	-5.432E-08	-5.431E-08	5.432E-08
1.01023	4.5920	1.07500	17.467	8.240E 01	4.128E 01	-2.337E-08	-2.337E-08	2.337E-08
1.01572	5.9716	1.10000	22.842	8.240E 01	5.307E 01	-1.276E-08	-1.276E-08	1.276E-08
1.02844	8.6826	1.15000	33.596	8.240E 01	7.510E 01	-5.325E-09	-5.325E-09	5.325E-09
1.04340	11.3217	1.20000	44.352	8.240E 01	9.530E 01	-2.804E-09	-2.804E-09	2.804E-09
1.07966	16.3541	1.30000	65.865	8.240E 01	1.310E 02	-1.141E-09	-1.141E-09	1.141E-09
1.12368	21.0261	1.40000	87.380	8.240E 01	1.616E 02	-5.995E-10	-5.995E-10	5.995E-10
1.17459	25.3198	1.50000	108.896	8.240E 01	1.882E 02	-3.706E-10	-3.706E-10	3.706E-10
1.23152	29.2369	1.60000	130.411	8.240E 01	2.114E 02	-2.484E-10	-2.484E-10	2.484E-10
1.29369	32.7929	1.70000	151.927	8.240E 01	2.319E 02	-1.673E-10	-1.673E-10	1.673E-10
1.36038	36.0117	1.80000	173.442	8.240E 01	2.501E 02	-1.180E-10	-1.180E-10	1.180E-10
1.43095	38.9215	1.90000	194.958	8.240E 01	2.664E 02	-8.325E-11	-8.325E-11	8.325E-11
1.50486	41.5517	2.00000	216.474	8.240E 01	2.811E 02	-5.939E-11	-5.939E-11	5.939E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.200 θ_D= 3.834E-06 ρ_a= 1.005

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.903E-09	-2.903E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.106E-09	-9.106E-09
0.80000	2.995E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.290E-08	-2.290E-08
0.85000	5.837E-09	424.160	-3.076E-07	-3.076E-07	3.076E-07	3.076E-07	-4.440E-08	-4.440E-08
0.90000	1.473E-08	449.110	-5.392E-07	-5.392E-07	5.392E-07	5.392E-07	-1.126E-07	-1.126E-07
0.92500	2.714E-08	461.585	-7.926E-07	-7.926E-07	7.927E-07	7.927E-07	-2.075E-07	-2.075E-07
0.95000	6.868E-08	474.060	-1.344E-06	-1.344E-06	1.344E-06	1.344E-06	-5.251E-07	-5.251E-07
0.96250	1.343E-07	480.297	-1.935E-06	-1.935E-06	1.938E-06	1.939E-06	-1.027E-06	-1.027E-06
0.97500	4.020E-07	486.534	-3.392E-06	-3.392E-06	3.429E-06	3.429E-06	-3.073E-06	-3.073E-06
0.98124	9.198E-07	489.652	-5.251E-06	-5.252E-06	5.454E-06	5.455E-06	-7.030E-06	-7.031E-06
0.98749	3.542E-06	492.769	-1.002E-05	-1.002E-05	1.214E-05	1.215E-05	-2.706E-05	-2.708E-05
0.99373	6.117E-05	495.884	-1.601E-05	-1.607E-05	1.058E-04	1.059E-04	-4.666E-04	-4.673E-04
0.99735	6.840E-05	497.687	1.314E 00	1.314E 00	1.337E 00	1.337E 00	-5.241E-04	-5.233E-04
0.99821	3.681E-06	498.119	4.000E 00	4.000E 00	4.024E 00	4.024E 00	-2.816E-05	-2.815E-05
0.99911	9.369E-07	498.570	6.668E 00	6.668E 00	6.692E 00	6.692E 00	-7.165E-06	-7.164E-06
1.00006	4.082E-07	499.040	9.317E 00	9.317E 00	9.341E 00	9.341E 00	-3.121E-06	-3.121E-06
1.00104	2.261E-07	499.529	1.195E 01	1.195E 01	1.197E 01	1.197E 01	-1.729E-06	-1.729E-06
1.00311	9.288E-08	500.563	1.715E 01	1.715E 01	1.717E 01	1.717E 01	-7.102E-07	-7.101E-07
1.00533	5.431E-08	501.673	2.228E 01	2.228E 01	2.230E 01	2.230E 01	-4.153E-07	-4.152E-07
1.01023	2.337E-08	504.117	3.231E 01	3.231E 01	3.233E 01	3.233E 01	-1.787E-07	-1.787E-07
1.01572	1.276E-08	506.857	4.204E 01	4.204E 01	4.207E 01	4.207E 01	-9.758E-08	-9.758E-08
1.02844	5.325E-09	513.203	6.065E 01	6.065E 01	6.067E 01	6.067E 01	-4.071E-08	-4.071E-08
1.04340	2.804E-09	520.668	7.813E 01	7.813E 01	7.816E 01	7.816E 01	-2.143E-08	-2.143E-08
1.07966	1.141E-09	538.764	1.099E 02	1.099E 02	1.100E 02	1.100E 02	-8.725E-09	-8.725E-09
1.12368	5.995E-10	560.731	1.379E 02	1.379E 02	1.379E 02	1.379E 02	-4.584E-09	-4.584E-09
1.17459	3.706E-10	586.132	1.624E 02	1.624E 02	1.624E 02	1.624E 02	-2.833E-09	-2.833E-09
1.23152	2.484E-10	614.543	1.839E 02	1.839E 02	1.839E 02	1.839E 02	-1.899E-09	-1.899E-09
1.29369	1.673E-10	645.567	2.027E 02	2.027E 02	2.028E 02	2.028E 02	-1.279E-09	-1.279E-09
1.36038	1.180E-10	678.844	2.194E 02	2.194E 02	2.194E 02	2.194E 02	-9.022E-10	-9.022E-10
1.43095	8.325E-11	714.060	2.341E 02	2.341E 02	2.341E 02	2.341E 02	-6.364E-10	-6.364E-10
1.50486	5.939E-11	750.943	2.471E 02	2.471E 02	2.471E 02	2.471E 02	-4.541E-10	-4.541E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.200 θ_D= 3.834E-06 ρ_a= 1.005

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-3.939E-18
0.10000	3.592E-13	3.701E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-5.284E-18
0.20000	1.022E-12	1.019E-12	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-7.558E-18
0.30000	2.191E-12	2.187E-12	-1.067E-21	-1.067E-21	-2.331E-11	-2.331E-11	-1.188E-17
0.40000	4.668E-12	4.694E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-2.011E-17
0.50000	9.264E-12	9.307E-12	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-4.026E-17
0.60000	2.110E-11	2.107E-11	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-9.413E-17
0.70000	6.012E-11	6.010E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-2.751E-16
0.80000	2.476E-10	2.477E-10	-7.686E-20	-7.686E-20	-9.346E-10	-9.346E-10	-1.246E-15
0.85000	6.617E-10	6.618E-10	-2.046E-19	-2.046E-19	-1.888E-09	-1.888E-09	-3.607E-15
0.90000	2.557E-09	2.557E-09	-8.769E-19	-8.769E-19	-5.203E-09	-5.203E-09	-1.617E-14
0.92500	6.336E-09	6.336E-09	-2.026E-18	-2.026E-18	-1.034E-08	-1.034E-08	-4.918E-14
0.95000	2.443E-08	2.443E-08	-8.009E-18	-8.010E-18	-2.593E-08	-2.593E-08	-2.196E-13
0.96250	6.600E-08	6.600E-08	-2.295E-17	-2.295E-17	-5.129E-08	-5.130E-08	-6.239E-13
0.97500	3.057E-07	3.060E-07	-1.304E-16	-1.305E-16	-1.616E-07	-1.616E-07	-2.300E-12
0.98124	9.379E-07	9.382E-07	-4.980E-16	-4.983E-16	-4.160E-07	-4.162E-07	-5.401E-12
0.98749	5.587E-06	5.590E-06	-4.617E-15	-4.622E-15	-1.983E-06	-1.985E-06	-1.411E-11
0.99373	1.994E-04	1.998E-04	-9.841E-13	-9.870E-13	-1.140E-04	-1.143E-04	-2.882E-11
0.99735	1.771E-02	1.771E-02	-1.238E-12	-1.235E-12	-8.884E 03	-8.885E 03	-2.859E-11
0.99821	6.493E-03	6.493E-03	-4.941E-15	-4.936E-15	-8.884E 03	-8.885E 03	-1.446E-11
0.99911	3.978E-03	3.978E-03	-5.138E-16	-5.135E-16	-8.884E 03	-8.885E 03	-5.540E-12
1.00006	2.879E-03	2.879E-03	-1.336E-16	-1.336E-16	-8.884E 03	-8.885E 03	-2.342E-12
1.00104	2.259E-03	2.259E-03	-5.277E-17	-5.276E-17	-8.884E 03	-8.885E 03	-1.125E-12
1.00311	1.580E-03	1.580E-03	-1.285E-17	-1.285E-17	-8.884E 03	-8.885E 03	-3.675E-13
1.00533	1.216E-03	1.216E-03	-5.556E-18	-5.555E-18	-8.884E 03	-8.885E 03	-1.396E-13
1.01023	8.320E-04	8.320E-04	-1.651E-18	-1.651E-18	-8.884E 03	-8.885E 03	-3.576E-14
1.01572	6.325E-04	6.325E-04	-7.166E-19	-7.166E-19	-8.884E 03	-8.885E 03	-1.309E-14
1.02844	4.275E-04	4.275E-04	-1.799E-19	-1.799E-19	-8.884E 03	-8.885E 03	-3.100E-15
1.04340	3.229E-04	3.229E-04	-6.971E-20	-6.971E-20	-8.884E 03	-8.885E 03	-1.113E-15
1.07966	2.168E-04	2.168E-04	-1.803E-20	-1.803E-20	-8.884E 03	-8.885E 03	-2.548E-16
1.12368	1.632E-04	1.632E-04	-6.976E-21	-6.976E-21	-8.884E 03	-8.885E 03	-8.897E-17
1.17459	1.308E-04	1.308E-04	-3.428E-21	-3.428E-21	-8.884E 03	-8.885E 03	-3.842E-17
1.23152	1.092E-04	1.092E-04	-1.876E-21	-1.876E-21	-8.884E 03	-8.885E 03	-1.943E-17
1.29369	9.366E-05	9.366E-05	-1.031E-21	-1.031E-21	-8.884E 03	-8.885E 03	-1.154E-17
1.36038	8.202E-05	8.202E-05	-5.918E-22	-5.918E-22	-8.884E 03	-8.885E 03	-7.393E-18
1.43095	7.295E-05	7.295E-05	-3.396E-22	-3.396E-22	-8.884E 03	-8.885E 03	-5.196E-18
1.50486	6.568E-05	6.569E-05	-1.947E-22	-1.947E-22	-8.884E 03	-8.885E 03	-3.887E-18

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.250 θ_D= 1.087E-05 ρ_a= 1.009

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.2500	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.2500	0.10000	193.643	2.835E-08	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.2500	0.20000	172.128	4.336E-08	1.000E-00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.2500	0.30000	150.612	6.170E-08	1.000E-00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.2500	0.40000	129.097	1.051E-07	1.000E-00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.2500	0.50000	107.582	1.534E-07	1.000E-00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.2500	0.60000	86.067	1.701E-07	1.000E-00	-6.196E-10	-6.196E-10	6.196E-10
0.70000	0.2500	0.70000	64.552	6.737E 07	1.000E-00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.2500	0.80000	43.040	2.214E-06	1.000E-00	-2.995E-09	-2.995E-09	2.995E-09
0.85000	0.2500	0.85000	32.286	5.723E-06	9.999E-01	-5.806E-09	-5.806E-09	5.806E-09
0.90000	0.2500	0.90000	21.535	1.998E-05	9.998E-01	-1.472E-08	-1.472E-08	1.472E-08
0.92500	0.2500	0.92500	16.162	4.869E-05	9.997E-01	-2.711E-08	-2.711E-08	2.711E-08
0.95000	0.2500	0.95000	10.797	1.653E-04	9.993E-01	-6.851E-08	-6.851E-08	6.851E-08
0.96250	0.2500	0.96250	8.122	3.922E-04	9.987E-01	-1.333E-07	-1.333E-07	1.333E-07
0.97500	0.2500	0.97500	5.459	1.303E-03	9.974E-01	-3.960E-07	-3.961E-07	3.960E-07
0.98124	0.2500	0.98125	4.141	3.010E-03	9.959E-01	-8.977E-07	-8.979E-07	8.976E-07
0.98749	0.2501	0.98750	2.849	9.466E-03	9.934E-01	-3.286E-06	-3.288E-06	3.285E-06
0.99373	0.2502	0.99375	1.642	5.469E-02	9.970E-01	-4.016E-05	-4.021E-05	4.014E-05
0.99962	0.3076	1.00000	1.158	3.930E 01	1.257E 00	-4.863E-04	-4.854E-04	4.869E-04
1.00444	0.5333	1.00625	2.223	3.954E 01	3.719E 00	-9.289E-06	-9.282E-06	9.292E-06
1.00928	0.7576	1.01250	3.487	3.956E 01	6.576E 00	-1.608E-06	-1.608E-06	1.608E-06
1.01414	0.9800	1.01875	4.795	3.956E 01	9.467E 00	-5.936E-07	-5.935E-07	5.937E-07
1.01902	1.2003	1.02500	6.119	3.956E 01	1.234E 01	-2.859E-07	-2.859E-07	2.859E-07
1.02881	1.6347	1.03750	8.786	3.957E 01	1.800E 01	-1.104E-07	-1.104E-07	1.104E-07
1.03866	2.0609	1.05000	11.463	3.957E 01	2.354E 01	-6.081E-08	-6.081E-08	6.081E-08
1.05854	2.8894	1.07500	16.830	3.957E 01	3.423E 01	-2.513E-08	-2.513E-08	2.513E-08
1.07863	3.6873	1.10000	22.202	3.957E 01	4.444E 01	-1.364E-08	-1.364E-08	1.364E-08
1.11940	5.1963	1.15000	32.954	3.957E 01	6.354E 01	-5.555E-09	-5.555E-09	5.555E-09
1.16090	6.5984	1.20000	43.708	3.957E 01	8.105E 01	-2.896E-09	-2.896E-09	2.896E-09
1.24576	9.1188	1.30000	65.221	3.957E 01	1.120E 02	-1.165E-09	-1.165E-09	1.165E-09
1.33273	11.3140	1.40000	86.735	3.957E 01	1.386E 02	-6.093E-10	-6.093E-10	6.093E-10
1.42141	13.2378	1.50000	108.250	3.957E 01	1.616E 02	-3.751E-10	-3.751E-10	3.751E-10
1.51150	14.9341	1.60000	129.765	3.957E 01	1.817E 02	-2.514E-10	-2.514E-10	2.514E-10
1.60277	16.4383	1.70000	151.281	3.957E 01	1.995E 02	-1.691E-10	-1.691E-10	1.691E-10
1.69503	17.7796	1.80000	172.796	3.957E 01	2.153E 02	-1.193E-10	-1.193E-10	1.193E-10
1.78812	18.9819	1.90000	194.312	3.957E 01	2.294E 02	-8.412E-11	-8.412E-11	8.412E-11
1.88192	20.0648	2.00000	215.827	3.957E 01	2.421E 02	-5.999E-11	-5.999E-11	5.999E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.250 θ_D= 1.087E-05 ρ_a= 1.009

z	$_x\mu'$-1.0	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.903E-09	-2.903E-09
0.60000	6.196E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.105E-09	-9.105E-09
0.80000	2.995E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.290E-08	-2.290E-08
0.85000	5.806E-09	424.160	-3.075E-07	-3.075E-07	3.075E-07	3.075E-07	-4.439E-08	-4.439E-08
0.90000	1.472E-08	449.110	-5.391E-07	-5.391E-07	5.391E-07	5.391E-07	-1.125E-07	-1.125E-07
0.92500	2.711E-08	461.585	-7.922E-07	-7.922E-07	7.923E-07	7.923E-07	-2.073E-07	-2.073E-07
0.95000	6.851E-08	474.060	-1.342E-06	-1.342E-06	1.343E-06	1.343E-06	-5.238E-07	-5.238E-07
0.96250	1.334E-07	480.297	-1.930E-06	-1.930E-06	1.936E-06	1.936E-06	-1.019E-06	-1.019E-06
0.97500	3.961E-07	486.534	-3.360E-06	-3.360E-06	3.423E-06	3.423E-06	-3.028E-06	-3.028E-06
0.98124	8.980E-07	489.652	-5.124E-06	-5.125E-06	5.462E-06	5.463E-06	-6.863E-06	-6.865E-06
0.98749	3.288E-06	492.769	-9.043E-06	-9.045E-06	1.240E-05	1.241E-05	-2.512E-05	-2.513E-05
0.99373	4.024E-05	495.884	6.340E-06	6.301E-06	1.066E-04	1.067E-04	-3.071E-04	-3.074E-04
0.99962	4.853E-04	498.821	1.799E-01	1.799E-01	2.009E-01	2.009E-01	-3.718E-03	-3.711E-03
1.00444	9.279E-06	501.227	8.925E-01	8.925E-01	9.140E-01	9.140E-01	-7.102E-05	-7.096E-05
1.00928	1.607E-06	503.643	1.595E 00	1.595E 00	1.617E 00	1.617E 00	-1.229E-05	-1.229E-05
1.01414	5.935E-07	506.068	2.289E 00	2.289E 00	2.311E 00	2.311E 00	-4.539E-06	-4.538E-06
1.01902	2.859E-07	508.501	2.976E 00	2.976E 00	2.997E 00	2.997E 00	-2.186E-06	-2.186E-06
1.02881	1.104E-07	513.389	4.325E 00	4.325E 00	4.347E 00	4.347E 00	-8.438E-07	-8.438E-07
1.03866	6.081E-08	518.306	5.646E 00	5.646E 00	5.667E 00	5.667E 00	-4.649E-07	-4.649E-07
1.05854	2.513E-08	528.224	8.203E 00	8.203E 00	8.224E 00	8.224E 00	-1.921E-07	-1.921E-07
1.07863	1.364E-08	538.249	1.065E 01	1.065E 01	1.067E 01	1.067E 01	-1.043E-07	-1.043E-07
1.11940	5.555E-09	558.595	1.526E 01	1.526E 01	1.528E 01	1.528E 01	-4.247E-08	-4.247E-08
1.16090	2.896E-09	579.301	1.950E 01	1.950E 01	1.952E 01	1.952E 01	-2.214E-08	-2.214E-08
1.24576	1.165E-09	621.650	2.705E 01	2.705E 01	2.708E 01	2.708E 01	-8.910E-09	-8.910E-09
1.33273	6.093E-10	665.047	3.356E 01	3.356E 01	3.358E 01	3.358E 01	-4.658E-09	-4.658E-09
1.42141	3.751E-10	709.300	3.921E 01	3.921E 01	3.923E 01	3.923E 01	-2.868E-09	-2.868E-09
1.51150	2.514E-10	754.258	4.415E 01	4.415E 01	4.417E 01	4.417E 01	-1.922E-09	-1.922E-09
1.60277	1.691E-10	799.803	4.851E 01	4.851E 01	4.853E 01	4.853E 01	-1.292E-09	-1.292E-09
1.69503	1.193E-10	845.840	5.237E 01	5.237E 01	5.239E 01	5.239E 01	-9.117E-10	-9.117E-10
1.78812	8.412E-11	892.292	5.582E 01	5.582E 01	5.584E 01	5.584E 01	-6.432E-10	-6.432E-10
1.88192	5.999E-11	939.098	5.889E 01	5.889E 01	5.891E 01	5.891E 01	-4.587E-10	-4.587E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.250 θ_D= 1.087E-05 ρ_a= 1.009

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-6.155E-18
0.10000	4.642E-13	4.560E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-8.257E-18
0.20000	1.305E-12	1.322E-12	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-1.181E-17
0.30000	2.782E-12	2.768E-12	-1.067E-21	-1.067E-21	-2.330E-11	-2.330E-11	-1.856E-17
0.40000	5.898E-12	5.863E-12	-1.947E-21	-1.947E-21	-4.518E-11	-4.518E-11	-3.143E-17
0.50000	1.164E-11	1.164E-11	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-6.290E-17
0.60000	2.646E-11	2.643E-11	-7.320E-21	-7.320E-21	-1.616E-10	-1.616E-10	-1.471E-16
0.70000	7.530E-11	7.526E-11	-1.921E-20	-1.921E-20	-3.418E-10	-3.418E-10	-4.298E-16
0.80000	3.097E-10	3.096E-10	-7.685E-20	-7.685E-20	-9.345E-10	-9.345E-10	-1.946E-15
0.85000	8.276E-10	8.278E-10	-2.045E-19	-2.045E-19	-1.888E-09	-1.888E-09	-5.634E-15
0.90000	3.197E-09	3.197E-09	-8.760E-19	-8.760E-19	-5.200E-09	-5.200E-09	-2.524E-14
0.92500	7.916E-09	7.916E-09	-2.023E-18	-2.023E-18	-1.033E-08	-1.033E-08	-7.666E-14
0.95000	3.047E-08	3.047E-08	-7.978E-18	-7.978E-18	-2.587E-08	-2.587E-08	-3.413E-13
0.96250	8.151E-08	8.152E-08	-2.268E-17	-2.269E-17	-5.106E-08	-5.106E-08	-9.682E-13
0.97500	3.751E-07	3.752E-07	-1.275E-16	-1.275E-16	-1.595E-07	-1.595E-07	-3.534E-12
0.98124	1.139E-06	1.139E-06	-4.790E-16	-4.792E-16	-4.054E-07	-4.055E-07	-8.181E-12
0.98749	6.327E-06	6.331E-06	-4.071E-15	-4.075E-15	-1.832E-06	-1.834E-06	-2.110E-11
0.99373	1.724E-04	1.727E-04	-4.301E-13	-4.312E-13	-6.625E-05	-6.639E-05	-4.708E-11
0.99962	3.324E-02	3.324E-02	-7.093E-11	-7.069E-11	-9.900E 02	-9.900E 02	-3.170E-11
1.00444	1.076E-02	1.076E-02	-2.612E-14	-2.609E-14	-9.900E 02	-9.900E 02	-3.310E-11
1.00928	6.037E-03	6.037E-03	-1.239E-15	-1.238E-15	-9.900E 02	-9.900E 02	-1.283E-11
1.01414	4.166E-03	4.166E-03	-2.447E-16	-2.446E-16	-9.900E 02	-9.900E 02	-5.139E-12
1.01902	3.176E-03	3.176E-03	-7.677E-17	-7.676E-17	-9.900E 02	-9.900E 02	-2.471E-12
1.02881	2.151E-03	2.151E-03	-1.685E-17	-1.684E-17	-9.900E 02	-9.900E 02	-7.304E-13
1.03866	1.626E-03	1.626E-03	-6.626E-18	-6.625E-18	-9.900E 02	-9.900E 02	-2.687E-13
1.05854	1.092E-03	1.092E-03	-1.823E-18	-1.823E-18	-9.900E 02	-9.900E 02	-6.494E-14
1.07863	8.218E-04	8.218E-04	-7.894E-19	-7.894E-19	-9.900E 02	-9.900E 02	-2.269E-14
1.11940	5.498E-04	5.498E-04	-1.916E-19	-1.916E-19	-9.900E 02	-9.900E 02	-5.213E-15
1.16090	4.131E-04	4.131E-04	-7.312E-20	-7.312E-20	-9.900E 02	-9.900E 02	-1.837E-15
1.24576	2.759E-04	2.759E-04	-1.860E-20	-1.860E-20	-9.900E 02	-9.900E 02	-4.135E-16
1.33273	2.071E-04	2.071E-04	-7.143E-21	-7.143E-21	-9.900E 02	-9.900E 02	-1.430E-16
1.42141	1.658E-04	1.658E-04	-3.491E-21	-3.491E-21	-9.900E 02	-9.900E 02	-6.147E-17
1.51150	1.382E-04	1.382E-04	-1.910E-21	-1.910E-21	-9.900E 02	-9.900E 02	-3.090E-17
1.60277	1.185E-04	1.185E-04	-1.049E-21	-1.049E-21	-9.900E 02	-9.900E 02	-1.831E-17
1.69503	1.037E-04	1.037E-04	-6.017E-22	-6.017E-22	-9.900E 02	-9.900E 02	-1.169E-17
1.78812	9.217E-05	9.217E-05	-3.453E-22	-3.453E-22	-9.900E 02	-9.900E 02	-8.196E-18
1.88192	8.296E-05	8.296E-05	-1.980E-22	-1.980E-22	-9.900E 02	-9.900E 02	-6.121E-18

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.300 θ_D= 0. ρ_a= 1.127

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.3000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.3000	0.10000	193.643	3.502E-08	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.3000	0.20000	172.128	5.253E-08	1.000E-00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.3000	0.30000	150.613	8.171E-08	1.000E-00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.3000	0.40000	129.097	1.251E-07	1.000E-00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.3000	0.50000	107.582	1.801E-07	1.000E-00	-3.798E-10	-3.798E-10	3.798E-10
0.60000	0.3000	0.60000	86.068	2.068E-07	1.000E-00	-6.195E-10	-6.195E-10	6.195E-10
0.70000	0.3000	0.70000	64.555	8.204E-07	1.000E-00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.3000	0.80000	43.044	2.708E-06	9.999E-01	-2.994E-09	-2.994E-09	2.994E-09
0.85000	0.3000	0.85000	32.291	6.937E-06	9.999E-01	-5.804E-09	-5.804E-09	5.804E-09
0.90000	0.3000	0.90000	21.543	2.425E-05	9.998E-01	-1.471E-08	-1.471E-08	1.471E-08
0.92500	0.3000	0.92500	16.174	5.902E-05	9.996E-01	-2.708E-08	-2.708E-08	2.708E-08
0.95000	0.3000	0.95000	10.814	1.997E-04	9.991E-01	-6.830E-08	-6.830E-08	6.830E-08
0.96250	0.3000	0.96250	8.144	4.709E-04	9.985E-01	-1.322E-07	-1.322E-07	1.322E-07
0.97500	0.3000	0.97500	5.494	1.555E-03	9.970E-01	-3.891E-07	-3.891E-07	3.890E-07
0.98124	0.3000	0.98125	4.187	3.550E-03	9.955E-01	-8.721E-07	-8.723E-07	8.720E-07
0.98749	0.3001	0.98750	2.915	1.085E-02	9.937E-01	-3.007E-06	-3.008E-06	3.006E-06
0.99373	0.3002	0.99375	1.755	5.591E-02	1.001E 00	-2.677E-05	-2.680E-05	2.676E-05
1.00619	0.3071	1.00625	1.764	1.055E 00	2.150E 00	-2.627E-05	-2.624E-05	2.628E-05
1.01243	0.3138	1.01250	2.926	1.099E 00	4.169E 00	-2.966E-06	-2.964E-06	2.966E-06
1.01868	0.3205	1.01875	4.198	1.107E 00	6.354E 00	-8.662E-07	-8.660E-07	8.663E-07
1.02492	0.3271	1.02500	5.505	1.109E 00	8.581E 00	-3.868E-07	-3.867E-07	3.868E-07
1.03742	0.3401	1.03750	8.156	1.110E 00	1.302E 01	-1.316E-07	-1.316E-07	1.316E-07
1.04992	0.3529	1.05000	10.826	1.110E 00	1.740E 01	-6.816E-08	-6.816E-08	6.816E-08
1.07491	0.3774	1.07500	16.185	1.110E 00	2.588E 01	-2.704E-08	-2.704E-08	2.704E-08
1.09991	0.4009	1.10000	21.554	1.110E 00	3.398E 01	-1.469E-08	-1.469E-08	1.469E-08
1.14990	0.4448	1.15000	32.302	1.110E 00	4.915E 01	-5.799E-09	-5.799E-09	5.799E-09
1.19989	0.4850	1.20000	43.055	1.110E 00	6.307E 01	-2.993E-09	-2.993E-09	2.993E-09
1.29988	0.5562	1.30000	64.566	1.110E 00	8.769E 01	-1.190E-09	-1.190E-09	1.190E-09
1.39987	0.6172	1.40000	86.080	1.110E 00	1.088E 02	-6.194E-10	-6.194E-10	6.194E-10
1.49986	0.6700	1.50000	107.594	1.110E 00	1.271E 02	-3.797E-10	-3.797E-10	3.797E-10
1.59985	0.7163	1.60000	129.109	1.110E 00	1.431E 02	-2.545E-10	-2.545E-10	2.545E-10
1.69985	0.7571	1.70000	150.624	1.110E 00	1.572E 02	-1.709E-10	-1.709E-10	1.709E-10
1.79984	0.7934	1.80000	172.139	1.110E 00	1.698E 02	-1.205E-10	-1.205E-10	1.205E-10
1.89984	0.8259	1.90000	193.655	1.110E 00	1.810E 02	-8.502E-11	-8.502E-11	8.503E-11
1.99983	0.8551	2.00000	215.170	1.110E 00	1.911E 02	-6.061E-11	-6.061E-11	6.061E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.300 θ_D= 0. ρ_a= 1.127

z	$_x\mu'-1_0$	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.673E-09	-8.673E-09	8.673E-09	8.673E-09	-9.217E-10	-9.217E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.307E-09	-1.307E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.798E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.903E-09	-2.903E-09
0.60000	6.195E-10	299.407	-6.605E-08	-6.605E-08	6.605E-08	6.605E-08	-4.737E-09	-4.737E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.105E-09	-9.105E-09
0.80000	2.994E-09	399.209	-2.033E-07	-2.033E-07	2.033E-07	2.033E-07	-2.289E-08	-2.289E-08
0.85000	5.804E-09	424.160	-3.075E-07	-3.075E-07	3.075E-07	3.075E-07	-4.437E-08	-4.437E-08
0.90000	1.471E-08	449.110	-5.389E-07	-5.389E-07	5.389E-07	5.389E-07	-1.124E-07	-1.124E-07
0.92500	2.708E-08	461.585	-7.917E-07	-7.917E-07	7.919E-07	7.919E-07	-2.070E-07	-2.070E-07
0.95000	6.830E-08	474.060	-1.340E-06	-1.340E-06	1.341E-06	1.341E-06	-5.222E-07	-5.222E-07
0.96250	1.322E-07	480.297	-1.924E-06	-1.924E-06	1.932E-06	1.932E-06	-1.011E-06	-1.011E-06
0.97500	3.891E-07	486.534	-3.324E-06	-3.324E-06	3.413E-06	3.413E-06	-2.974E-06	-2.974E-06
0.98124	8.724E-07	489.652	-4.988E-06	-4.989E-06	5.458E-06	5.459E-06	-6.668E-06	-6.669E-06
0.98749	3.009E-06	492.769	-8.133E-06	-8.135E-06	1.255E-05	1.255E-05	-2.299E-05	-2.300E-05
0.99373	2.681E-05	495.884	1.723E-05	1.721E-05	1.008E-04	1.009E-04	-2.047E-04	-2.049E-04
1.00619	2.623E-05	502.101	1.975E-02	1.975E-02	2.283E-02	2.283E-02	-2.008E-04	-2.006E-04
1.01243	2.964E-06	505.215	2.168E-02	2.168E-02	2.482E-02	2.482E-02	-2.267E-05	-2.266E-05
1.01868	8.659E-07	508.332	2.213E-02	2.213E-02	2.528E-02	2.528E-02	-6.622E-06	-6.621E-06
1.02492	3.867E-07	511.449	2.236E-02	2.236E-02	2.551E-02	2.551E-02	-2.957E-06	-2.957E-06
1.03742	1.316E-07	517.685	2.270E-02	2.270E-02	2.585E-02	2.585E-02	-1.006E-06	-1.006E-06
1.04992	6.816E-08	523.921	2.300E-02	2.300E-02	2.615E-02	2.615E-02	-5.211E-07	-5.211E-07
1.07491	2.704E-08	536.394	2.359E-02	2.359E-02	2.675E-02	2.675E-02	-2.067E-07	-2.067E-07
1.09991	1.469E-08	548.867	2.418E-02	2.418E-02	2.733E-02	2.733E-02	-1.123E-07	-1.123E-07
1.14990	5.799E-09	573.814	2.535E-02	2.535E-02	2.851E-02	2.851E-02	-4.434E-08	-4.434E-08
1.19989	2.993E-09	598.761	2.652E-02	2.652E-02	2.968E-02	2.968E-02	-2.288E-08	-2.288E-08
1.29988	1.190E-09	648.656	2.886E-02	2.886E-02	3.202E-02	3.202E-02	-9.101E-09	-9.101E-09
1.39987	6.194E-10	698.552	3.120E-02	3.120E-02	3.436E-02	3.436E-02	-4.735E-09	-4.735E-09
1.49986	3.797E-10	748.449	3.355E-02	3.355E-02	3.670E-02	3.670E-02	-2.903E-09	-2.903E-09
1.59985	2.545E-10	798.346	3.589E-02	3.589E-02	3.904E-02	3.904E-02	-1.946E-09	-1.946E-09
1.69985	1.709E-10	848.244	3.823E-02	3.823E-02	4.139E-02	4.139E-02	-1.306E-09	-1.306E-09
1.79984	1.205E-10	898.142	4.057E-02	4.057E-02	4.373E-02	4.373E-02	-9.215E-10	-9.215E-10
1.89984	8.502E-11	948.040	4.291E-02	4.291E-02	4.607E-02	4.607E-02	-6.500E-10	-6.500E-10
1.99983	6.061E-11	997.939	4.525E-02	4.525E-02	4.841E-02	4.841E-02	-4.634E-10	-4.634E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.300 θ_D= 0. ρ_a= 1.127

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-8.863E-18
0.10000	5.599E-13	5.626E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-1.189E-17
0.20000	1.559E-12	1.556E-12	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-1.701E-17
0.30000	3.336E-12	3.348E-12	-1.067E-21	-1.067E-21	-2.330E-11	-2.330E-11	-2.673E-17
0.40000	7.080E-12	7.046E-12	-1.947E-21	-1.947E-21	-4.517E-11	-4.517E-11	-4.525E-17
0.50000	1.400E-11	1.398E-11	-3.557E-21	-3.557E-21	-8.514E-11	-8.514E-11	-9.057E-17
0.60000	3.178E-11	3.179E-11	-7.319E-21	-7.319E-21	-1.616E-10	-1.616E-10	-2.118E-16
0.70000	9.034E-11	9.037E-11	-1.920E-20	-1.920E-20	-3.418E-10	-3.418E-10	-6.188E-16
0.80000	3.717E-10	3.714E-10	-7.683E-20	-7.683E-20	-9.343E-10	-9.343E-10	-2.801E-15
0.85000	9.931E-10	9.932E-10	-2.044E-19	-2.044E-19	-1.887E-09	-1.887E-09	-8.107E-15
0.90000	3.834E-09	3.833E-09	-8.749E-19	-8.749E-19	-5.196E-09	-5.196E-09	-3.629E-14
0.92500	9.488E-09	9.488E-09	-2.019E-18	-2.020E-18	-1.031E-08	-1.031E-08	-1.101E-13
0.95000	3.645E-08	3.645E-08	-7.940E-18	-7.941E-18	-2.580E-08	-2.580E-08	-4.883E-13
0.96250	9.641E-08	9.642E-08	-2.237E-17	-2.237E-17	-5.076E-08	-5.076E-08	-1.383E-12
0.97500	4.412E-07	4.413E-07	-1.240E-16	-1.240E-16	-1.570E-07	-1.571E-07	-4.989E-12
0.98124	1.324E-06	1.324E-06	-4.570E-16	-4.572E-16	-3.930E-07	-3.931E-07	-1.135E-11
0.98749	6.895E-06	6.899E-06	-3.503E-15	-3.506E-15	-1.680E-06	-1.681E-06	-2.891E-11
0.99373	1.441E-04	1.443E-04	-1.941E-13	-1.945E-13	-4.081E-05	-4.088E-05	-6.812E-11
1.00619	1.746E-02	1.746E-02	-1.873E-13	-1.869E-13	-5.468E-02	-5.468E-02	-6.745E-11
1.01243	8.936E-03	8.936E-03	-3.423E-15	-3.420E-15	-5.472E-02	-5.472E-02	-2.870E-11
1.01868	5.825E-03	5.825E-03	-4.521E-16	-4.519E-16	-5.472E-02	-5.472E-02	-1.126E-11
1.02492	4.287E-03	4.287E-03	-1.229E-16	-1.229E-16	-5.472E-02	-5.472E-02	-4.960E-12
1.03742	2.790E-03	2.790E-03	-2.222E-17	-2.221E-17	-5.472E-02	-5.472E-02	-1.379E-12
1.04992	2.064E-03	2.064E-03	-7.915E-18	-7.915E-18	-5.472E-02	-5.472E-02	-4.867E-13
1.07491	1.355E-03	1.355E-03	-2.016E-18	-2.016E-18	-5.472E-02	-5.472E-02	-1.099E-13
1.09991	1.009E-03	1.009E-03	-8.733E-19	-8.733E-19	-5.472E-02	-5.472E-02	-3.626E-14
1.14990	6.670E-04	6.670E-04	-2.041E-19	-2.041E-19	-5.472E-02	-5.472E-02	-8.107E-15
1.19989	4.982E-04	4.982E-04	-7.676E-20	-7.676E-20	-5.472E-02	-5.472E-02	-2.802E-15
1.29988	3.308E-04	3.308E-04	-1.919E-20	-1.919E-20	-5.472E-02	-5.472E-02	-6.194E-16
1.39987	2.475E-04	2.475E-04	-7.316E-21	-7.316E-21	-5.472E-02	-5.472E-02	-2.120E-16
1.49986	1.978E-04	1.978E-04	-3.555E-21	-3.555E-21	-5.472E-02	-5.472E-02	-9.069E-17
1.59985	1.647E-04	1.647E-04	-1.946E-21	-1.946E-21	-5.472E-02	-5.472E-02	-4.532E-17
1.69985	1.411E-04	1.411E-04	-1.066E-21	-1.066E-21	-5.472E-02	-5.472E-02	-2.678E-17
1.79984	1.234E-04	1.234E-04	-6.120E-22	-6.120E-22	-5.472E-02	-5.472E-02	-1.704E-17
1.89984	1.096E-04	1.096E-04	-3.512E-22	-3.512E-22	-5.472E-02	-5.472E-02	-1.192E-17
1.99983	9.864E-05	9.864E-05	-2.013E-22	-2.013E-22	-5.472E-02	-5.472E-02	-8.886E-18

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.400 θ_D= 0. ρ_a= 1.502

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.4000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.4000	0.10000	193.644	4.419E-08	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.4000	0.20000	172.128	6.837E-08	1.000E-00	-1.206E-10	-1.206E-10	1.206E-10
0.30000	0.4000	0.30000	150.613	9.505E-08	1.000E-00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.4000	0.40000	129.099	1.501E-07	1.000E-00	-2.546E-10	-2.546E-10	2.546E-10
0.50000	0.4000	0.50000	107.585	1.868E-07	1.000E-00	-3.797E-10	-3.797E-10	3.797E-10
0.60000	0.4000	0.60000	86.071	1.868E-07	1.000E-00	-6.195E-10	-6.195E-10	6.195E-10
0.70000	0.4000	0.70000	64.560	8.805E-07	1.000E-00	-1.191E-09	-1.191E-09	1.191E-09
0.80000	0.4000	0.80000	43.053	2.948E-06	9.999E-01	-2.993E-09	-2.993E-09	2.993E-09
0.85000	0.4000	0.85000	32.304	7.871E-06	9.998E-01	-5.799E-09	-5.799E-09	5.799E-09
0.90000	0.4000	0.90000	21.563	2.748E-05	9.996E-01	-1.467E-08	-1.467E-08	1.467E-08
0.92500	0.4000	0.92500	16.202	6.713E-05	9.993E-01	-2.699E-08	-2.699E-08	2.699E-08
0.95000	0.4000	0.95000	10.858	2.267E-04	9.985E-01	-6.777E-08	-6.778E-08	6.777E-08
0.96250	0.4000	0.96250	8.203	5.309E-04	9.976E-01	-1.296E-07	-1.296E-07	1.296E-07
0.97500	0.4000	0.97500	5.581	1.720E-03	9.955E-01	-3.719E-07	-3.719E-07	3.719E-07
0.98124	0.4000	0.98125	4.301	3.822E-03	9.941E-01	-8.114E-07	-8.116E-07	8.114E-07
0.98749	0.4001	0.98750	3.078	1.092E-02	9.942E-01	-2.474E-06	-2.475E-06	2.473E-06
0.99374	0.4002	0.99375	2.015	4.541E-02	1.007E 00	-1.486E-05	-1.487E-05	1.486E-05
0.99998	0.4009	1.00000	1.506	2.160E-01	6.803E-01	-7.142E-05	-7.142E-05	7.143E-05
1.00621	0.4029	1.00625	2.023	3.850E-01	7.880E-01	-1.462E-05	-1.461E-05	1.463E-05
1.01246	0.4054	1.01250	3.087	4.190E-01	1.741E 00	-2.449E-06	-2.448E-06	2.450E-06
1.01871	0.4080	1.01875	4.312	4.261E-01	2.819E 00	-8.062E-07	-8.061E-07	8.063E-07
1.02495	0.4105	1.02500	5.591	4.281E-01	3.932E 00	-3.698E-07	-3.698E-07	3.699E-07
1.03745	0.4155	1.03750	8.214	4.293E-01	6.172E 00	-1.292E-07	-1.292E-07	1.292E-07
1.04995	0.4205	1.05000	10.869	4.296E-01	8.386E 00	-6.764E-08	-6.764E-08	6.764E-08
1.07495	0.4300	1.07500	16.213	4.298E-01	1.269E 01	-2.696E-08	-2.696E-08	2.696E-08
1.09995	0.4391	1.10000	21.574	4.298E-01	1.681E 01	-1.465E-08	-1.465E-08	1.465E-08
1.14995	0.4561	1.15000	32.315	4.298E-01	2.452E 01	-5.795E-09	-5.795E-09	5.795E-09
1.19995	0.4716	1.20000	43.064	4.299E-01	3.159E 01	-2.991E-09	-2.991E-09	2.991E-09
1.29994	0.4992	1.30000	64.571	4.299E-01	4.412E 01	-1.190E-09	-1.190E-09	1.190E-09
1.39994	0.5228	1.40000	86.083	4.299E-01	5.485E 01	-6.193E-10	-6.193E-10	6.193E-10
1.49994	0.5433	1.50000	107.596	4.299E-01	6.416E 01	-3.797E-10	-3.797E-10	3.797E-10
1.59994	0.5612	1.60000	129.110	4.299E-01	7.230E 01	-2.545E-10	-2.545E-10	2.545E-10
1.69994	0.5770	1.70000	150.625	4.299E-01	7.949E 01	-1.709E-10	-1.709E-10	1.709E-10
1.79994	0.5911	1.80000	172.140	4.299E-01	8.587E 01	-1.205E-10	-1.205E-10	1.205E-10
1.89994	0.6036	1.90000	193.655	4.299E-01	9.159E 01	-8.503E-11	-8.503E-11	8.503E-11
1.99994	0.6149	2.00000	215.170	4.299E-01	9.673E 01	-6.061E-11	-6.061E-11	6.061E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.400 θ_D= 0. ρ_a= 1.502

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.206E-10	99.802	-8.672E-09	-8.672E-09	8.672E-09	8.672E-09	-9.216E-10	-9.216E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.306E-09	-1.306E-09
0.40000	2.546E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.966E-09	-1.966E-09
0.50000	3.797E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.903E-09	-2.903E-09
0.60000	6.195E-10	299.407	-6.604E-08	-6.604E-08	6.604E-08	6.604E-08	-4.736E-09	-4.736E-09
0.70000	1.191E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.103E-09	-9.103E-09
0.80000	2.993E-09	399.209	-2.032E-07	-2.032E-07	2.032E-07	2.032E-07	-2.288E-08	-2.288E-08
0.85000	5.799E-09	424.160	-3.074E-07	-3.074E-07	3.074E-07	3.074E-07	-4.433E-08	-4.433E-08
0.90000	1.467E-08	449.110	-5.384E-07	-5.384E-07	5.384E-07	5.384E-07	-1.122E-07	-1.122E-07
0.92500	2.699E-08	461.585	-7.906E-07	-7.906E-07	7.907E-07	7.907E-07	-2.063E-07	-2.063E-07
0.95000	6.778E-08	474.060	-1.335E-06	-1.335E-06	1.337E-06	1.337E-06	-5.181E-07	-5.182E-07
0.96250	1.296E-07	480.297	-1.910E-06	-1.910E-06	1.921E-06	1.921E-06	-9.908E-07	-9.909E-07
0.97500	3.719E-07	486.534	-3.257E-06	-3.257E-06	3.367E-06	3.367E-06	-2.843E-06	-2.843E-06
0.98124	8.117E-07	489.652	-4.781E-06	-4.782E-06	5.326E-06	5.327E-06	-6.204E-06	-6.205E-06
0.98749	2.475E-06	492.770	-7.260E-06	-7.262E-06	1.174E-05	1.174E-05	-1.891E-05	-1.892E-05
0.99374	1.488E-05	495.886	9.586E-06	9.573E-06	6.829E-05	6.832E-05	-1.136E-04	-1.137E-04
0.99998	7.143E-05	498.999	7.260E-04	7.259E-04	1.046E-03	1.047E-03	-5.461E-04	-5.461E-04
1.00621	1.461E-05	502.112	2.545E-03	2.545E-03	3.124E-03	3.124E-03	-1.118E-04	-1.117E-04
1.01246	2.448E-06	505.229	3.068E-03	3.068E-03	3.687E-03	3.687E-03	-1.873E-05	-1.872E-05
1.01871	8.060E-07	508.346	3.200E-03	3.200E-03	3.827E-03	3.827E-03	-6.164E-06	-6.163E-06
1.02495	3.698E-07	511.464	3.255E-03	3.255E-03	3.885E-03	3.885E-03	-2.828E-06	-2.827E-06
1.03745	1.292E-07	517.701	3.317E-03	3.317E-03	3.950E-03	3.950E-03	-9.879E-07	-9.878E-07
1.04995	6.764E-08	523.938	3.365E-03	3.365E-03	4.000E-03	4.000E-03	-5.171E-07	-5.171E-07
1.07495	2.695E-08	536.413	3.455E-03	3.455E-03	4.091E-03	4.091E-03	-2.061E-07	-2.061E-07
1.09995	1.465E-08	548.888	3.544E-03	3.544E-03	4.180E-03	4.180E-03	-1.120E-07	-1.120E-07
1.14995	5.795E-09	573.837	3.719E-03	3.719E-03	4.356E-03	4.356E-03	-4.430E-08	-4.430E-08
1.19995	2.991E-09	598.787	3.895E-03	3.895E-03	4.532E-03	4.532E-03	-2.287E-08	-2.287E-08
1.29994	1.190E-09	648.688	4.246E-03	4.246E-03	4.883E-03	4.883E-03	-9.100E-09	-9.100E-09
1.39994	6.193E-10	698.588	4.597E-03	4.597E-03	5.234E-03	5.234E-03	-4.735E-09	-4.735E-09
1.49994	3.797E-10	748.488	4.948E-03	4.948E-03	5.585E-03	5.585E-03	-2.903E-09	-2.903E-09
1.59994	2.545E-10	798.389	5.300E-03	5.300E-03	5.937E-03	5.937E-03	-1.946E-09	-1.946E-09
1.69994	1.709E-10	848.290	5.651E-03	5.651E-03	6.288E-03	6.288E-03	-1.306E-09	-1.306E-09
1.79994	1.205E-10	898.190	6.002E-03	6.002E-03	6.639E-03	6.639E-03	-9.215E-10	-9.215E-10
1.89994	8.503E-11	948.091	6.353E-03	6.353E-03	6.990E-03	6.990E-03	-6.500E-10	-6.500E-10
1.99994	6.061E-11	997.992	6.704E-03	6.704E-03	7.341E-03	7.341E-03	-4.634E-10	-4.634E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.400 θ_D=0. ρ_a= 1.502

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-1.576E-17
0.10000	7.544E-13	7.468E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-2.114E-17
0.20000	2.101E-12	2.086E-12	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-3.023E-17
0.30000	4.450E-12	4.460E-12	-1.067E-21	-1.067E-21	-2.330E-11	-2.330E-11	-4.752E-17
0.40000	9.417E-12	9.441E-12	-1.946E-21	-1.946E-21	-4.517E-11	-4.517E-11	-8.044E-17
0.50000	1.867E-11	1.868E-11	-3.556E-21	-3.556E-21	-8.513E-11	-8.513E-11	-1.610E-16
0.60000	4.235E-11	4.236E-11	-7.318E-21	-7.318E-21	-1.616E-10	-1.616E-10	-3.764E-16
0.70000	1.205E-10	1.204E-10	-1.920E-20	-1.920E-20	-3.417E-10	-3.417E-10	-1.100E-15
0.80000	4.951E-10	4.950E-10	-7.677E-20	-7.678E-20	-9.340E-10	-9.340E-10	-4.975E-15
0.85000	1.322E-09	1.322E-09	-2.041E-19	-2.041E-19	-1.886E-09	-1.886E-09	-1.439E-14
0.90000	5.097E-09	5.098E-09	-8.721E-19	-8.721E-19	-5.187E-09	-5.187E-09	-6.430E-14
0.92500	1.260E-08	1.260E-08	-2.011E-18	-2.011E-18	-1.029E-08	-1.029E-08	-1.943E-13
0.95000	4.813E-08	4.813E-08	-7.845E-18	-7.845E-18	-2.562E-08	-2.562E-08	-8.542E-13
0.96250	1.245E-07	1.245E-07	-2.168E-17	-2.168E-17	-5.007E-08	-5.008E-08	-2.403E-12
0.97500	5.497E-07	5.497E-07	-1.156E-16	-1.157E-16	-1.510E-07	-1.511E-07	-8.444E-12
0.98124	1.606E-06	1.607E-06	-4.065E-16	-4.067E-16	-3.637E-07	-3.638E-07	-1.847E-11
0.98749	7.327E-06	7.331E-06	-2.526E-15	-2.528E-15	-1.373E-06	-1.374E-06	-4.513E-11
0.99374	9.741E-05	9.752E-05	-6.366E-14	-6.375E-14	-1.642E-05	-1.644E-05	-9.532E-11
0.99998	3.151E-02	3.151E-02	-1.343E-12	-1.343E-12	-5.462E-04	-5.466E-04	-1.141E-10
1.00621	2.769E-02	2.769E-02	-6.173E-14	-6.165E-14	-1.066E-03	-1.067E-03	-9.483E-11
1.01246	1.245E-02	1.245E-02	-2.485E-15	-2.483E-15	-1.081E-03	-1.081E-03	-4.475E-11
1.01871	7.645E-03	7.645E-03	-4.023E-16	-4.021E-16	-1.082E-03	-1.082E-03	-1.833E-11
1.02495	5.448E-03	5.448E-03	-1.147E-16	-1.146E-16	-1.082E-03	-1.082E-03	-8.399E-12
1.03745	3.429E-03	3.429E-03	-2.158E-17	-2.158E-17	-1.082E-03	-1.082E-03	-2.393E-12
1.04995	2.493E-03	2.493E-03	-7.821E-18	-7.821E-18	-1.082E-03	-1.082E-03	-8.515E-13
1.07495	1.610E-03	1.610E-03	-2.007E-18	-2.007E-18	-1.082E-03	-1.082E-03	-1.939E-13
1.09995	1.188E-03	1.188E-03	-8.706E-19	-8.706E-19	-1.082E-03	-1.082E-03	-6.425E-14
1.14995	7.786E-04	7.787E-04	-2.039E-19	-2.039E-19	-1.082E-03	-1.082E-03	-1.439E-14
1.19995	5.791E-04	5.791E-04	-7.671E-20	-7.671E-20	-1.082E-03	-1.082E-03	-4.977E-15
1.29994	3.828E-04	3.828E-04	-1.919E-20	-1.919E-20	-1.082E-03	-1.082E-03	-1.101E-15
1.39994	2.859E-04	2.859E-04	-7.315E-21	-7.315E-21	-1.082E-03	-1.082E-03	-3.769E-16
1.49994	2.281E-04	2.281E-04	-3.555E-21	-3.555E-21	-1.082E-03	-1.082E-03	-1.612E-16
1.59994	1.898E-04	1.898E-04	-1.946E-21	-1.946E-21	-1.082E-03	-1.082E-03	-8.057E-17
1.69994	1.625E-04	1.625E-04	-1.066E-21	-1.066E-21	-1.082E-03	-1.082E-03	-4.760E-17
1.79994	1.420E-04	1.420E-04	-6.120E-22	-6.120E-22	-1.082E-03	-1.082E-03	-3.029E-17
1.89994	1.262E-04	1.262E-04	-3.512E-22	-3.512E-22	-1.082E-03	-1.082E-03	-2.119E-17
1.99994	1.135E-04	1.135E-04	-2.013E-22	-2.013E-22	-1.082E-03	-1.082E-03	-1.580E-17

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.5000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.5000	0.10000	193.644	4.752E-08	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.5000	0.20000	172.129	8.171E-08	1.000E-00	-1.205E-10	-1.205E-10	1.205E-10
0.30000	0.5000	0.30000	150.615	1.251E-07	1.000E-00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.5000	0.40000	129.101	1.901E-07	1.000E-00	-2.545E-10	-2.545E-10	2.545E-10
0.50000	0.5000	0.50000	107.588	2.801E-07	1.000E-00	-3.797E-10	-3.797E-10	3.797E-10
0.60000	0.5000	0.60000	86.076	2.868E-07	1.000E-00	-6.194E-10	-6.194E-10	6.194E-10
0.70000	0.5000	0.70000	64.567	1.227E-06	9.999E-01	-1.190E-09	-1.190E-09	1.190E-09
0.80000	0.5000	0.80000	43.065	4.029E-06	9.999E-01	-2.991E-09	-2.991E-09	2.991E-09
0.85000	0.5000	0.85000	32.320	1.046E-05	9.998E-01	-5.792E-09	-5.792E-09	5.792E-09
0.90000	0.5000	0.90000	21.590	3.666E-05	9.995E-01	-1.463E-08	-1.463E-08	1.463E-08
0.92500	0.5000	0.92500	16.238	8.885E-05	9.991E-01	-2.688E-08	-2.688E-08	2.688E-08
0.95000	0.5000	0.95000	10.913	2.981E-04	9.980E-01	-6.710E-08	-6.711E-08	6.710E-08
0.96250	0.5000	0.96250	8.277	6.906E-04	9.968E-01	-1.270E-07	-1.270E-07	1.270E-07
0.97500	0.5000	0.97500	5.690	2.179E-03	9.947E-01	-3.513E-07	-3.513E-07	3.513E-07
0.98124	0.5001	0.98125	4.444	4.694E-03	9.939E-01	-7.415E-07	-7.416E-07	7.414E-07
0.98749	0.5001	0.98750	3.275	1.246E-02	9.966E-01	-2.010E-06	-2.010E-06	2.009E-06
0.99374	0.5002	0.99375	2.307	4.260E-02	1.011E 00	-7.671E-06	-7.674E-06	7.669E-06
0.99998	0.5008	1.00000	1.881	1.416E-01	9.340E-01	-2.017E-05	-2.017E-05	2.017E-05
1.00622	0.5020	1.00625	2.317	2.397E-01	4.932E-01	-7.507E-06	-7.504E-06	7.509E-06
1.01247	0.5036	1.01250	3.289	2.692E-01	3.213E-01	-1.981E-06	-1.981E-06	1.982E-06
1.01871	0.5052	1.01875	4.459	2.769E-01	5.754E-01	-7.345E-07	-7.344E-07	7.346E-07
1.02496	0.5069	1.02500	5.706	2.794E-01	9.662E-01	-3.485E-07	-3.484E-07	3.485E-07
1.03746	0.5102	1.03750	8.293	2.809E-01	1.807E 00	-1.264E-07	-1.264E-07	1.264E-07
1.04996	0.5134	1.05000	10.929	2.813E-01	2.653E 00	-6.691E-08	-6.691E-08	6.691E-08
1.07496	0.5197	1.07500	16.254	2.815E-01	4.309E 00	-2.683E-08	-2.683E-08	2.683E-08
1.09996	0.5256	1.10000	21.606	2.815E-01	5.898E 00	-1.460E-08	-1.460E-08	1.460E-08
1.14996	0.5367	1.15000	32.337	2.816E-01	8.878E 00	-5.786E-09	-5.786E-09	5.786E-09
1.19996	0.5469	1.20000	43.081	2.816E-01	1.161E 01	-2.989E-09	-2.989E-09	2.989E-09
1.29996	0.5650	1.30000	64.583	2.816E-01	1.646E 01	-1.190E-09	-1.190E-09	1.190E-09
1.39996	0.5805	1.40000	86.093	2.816E-01	2.061E 01	-6.192E-10	-6.192E-10	6.192E-10
1.49995	0.5939	1.50000	107.604	2.816E-01	2.421E 01	-3.796E-10	-3.796E-10	3.796E-10
1.59995	0.6056	1.60000	129.117	2.816E-01	2.736E 01	-2.545E-10	-2.545E-10	2.545E-10
1.69995	0.6160	1.70000	150.631	2.816E-01	3.013E 01	-1.708E-10	-1.708E-10	1.708E-10
1.79995	0.6252	1.80000	172.146	2.816E-01	3.261E 01	-1.205E-10	-1.205E-10	1.205E-10
1.89995	0.6334	1.90000	193.661	2.816E-01	3.482E 01	-8.502E-11	-8.502E-11	8.502E-11
1.99995	0.6408	2.00000	215.176	2.816E-01	3.680E 01	-6.060E-11	-6.060E-11	6.060E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	$_x\mu'-1.0$	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.205E-10	99.802	-8.672E-09	-8.672E-09	8.672E-09	8.672E-09	-9.216E-10	-9.216E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.306E-09	-1.306E-09
0.40000	2.545E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.797E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.903E-09	-2.903E-09
0.60000	6.194E-10	299.407	-6.604E-08	-6.604E-08	6.604E-08	6.604E-08	-4.736E-09	-4.736E-09
0.70000	1.190E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.101E-09	-9.101E-09
0.80000	2.991E-09	399.209	-2.032E-07	-2.032E-07	2.032E-07	2.032E-07	-2.287E-08	-2.287E-08
0.85000	5.793E-09	424.160	-3.072E-07	-3.072E-07	3.072E-07	3.072E-07	-4.429E-08	-4.429E-08
0.90000	1.463E-08	449.110	-5.378E-07	-5.378E-07	5.379E-07	5.379E-07	-1.118E-07	-1.118E-07
0.92500	2.688E-08	461.585	-7.890E-07	-7.890E-07	7.893E-07	7.893E-07	-2.055E-07	-2.055E-07
0.95000	6.711E-08	474.060	-1.329E-06	-1.329E-06	1.332E-06	1.332E-06	-5.130E-07	-5.131E-07
0.96250	1.270E-07	480.297	-1.892E-06	-1.892E-06	1.909E-06	1.909E-06	-9.708E-07	-9.708E-07
0.97500	3.513E-07	486.534	-3.155E-06	-3.156E-06	3.331E-06	3.332E-06	-2.686E-06	-2.686E-06
0.98124	7.417E-07	489.652	-4.444E-06	-4.444E-06	5.265E-06	5.266E-06	-5.669E-06	-5.670E-06
0.98749	2.010E-06	492.770	-5.716E-06	-5.718E-06	1.154E-05	1.154E-05	-1.536E-05	-1.537E-05
0.99374	7.676E-06	495.887	1.309E-05	1.309E-05	5.545E-05	5.546E-05	-5.865E-05	-5.867E-05
0.99998	2.017E-05	499.001	3.126E-04	3.126E-04	4.488E-04	4.489E-04	-1.542E-04	-1.542E-04
1.00622	7.503E-06	502.116	9.836E-04	9.836E-04	1.213E-03	1.213E-03	-5.740E-05	-5.737E-05
1.01247	1.981E-06	505.232	1.268E-03	1.268E-03	1.522E-03	1.522E-03	-1.515E-05	-1.514E-05
1.01871	7.343E-07	508.350	1.353E-03	1.353E-03	1.615E-03	1.615E-03	-5.616E-06	-5.615E-06
1.02496	3.484E-07	511.468	1.388E-03	1.388E-03	1.652E-03	1.652E-03	-2.664E-06	-2.664E-06
1.03746	1.264E-07	517.705	1.421E-03	1.421E-03	1.689E-03	1.689E-03	-9.665E-07	-9.665E-07
1.04996	6.691E-08	523.942	1.444E-03	1.444E-03	1.712E-03	1.712E-03	-5.115E-07	-5.115E-07
1.07496	2.683E-08	536.417	1.484E-03	1.484E-03	1.753E-03	1.753E-03	-2.051E-07	-2.051E-07
1.09996	1.460E-08	548.892	1.522E-03	1.522E-03	1.792E-03	1.792E-03	-1.116E-07	-1.116E-07
1.14996	5.786E-09	573.842	1.597E-03	1.597E-03	1.867E-03	1.867E-03	-4.424E-08	-4.424E-08
1.19996	2.989E-09	598.792	1.672E-03	1.672E-03	1.943E-03	1.943E-03	-2.285E-08	-2.285E-08
1.29996	1.190E-09	648.693	1.823E-03	1.823E-03	2.094E-03	2.094E-03	-9.096E-09	-9.096E-09
1.39996	6.192E-10	698.594	1.974E-03	1.974E-03	2.245E-03	2.245E-03	-4.734E-09	-4.734E-09
1.49995	3.796E-10	748.495	2.124E-03	2.124E-03	2.395E-03	2.395E-03	-2.902E-09	-2.902E-09
1.59995	2.545E-10	798.396	2.275E-03	2.275E-03	2.546E-03	2.546E-03	-1.946E-09	-1.946E-09
1.69995	1.708E-10	848.297	2.426E-03	2.426E-03	2.697E-03	2.697E-03	-1.306E-09	-1.306E-09
1.79995	1.205E-10	898.197	2.576E-03	2.576E-03	2.847E-03	2.847E-03	-9.214E-10	-9.214E-10
1.89995	8.502E-11	948.098	2.727E-03	2.727E-03	2.998E-03	2.998E-03	-6.500E-10	-6.500E-10
1.99995	6.060E-11	997.999	2.878E-03	2.878E-03	3.149E-03	3.149E-03	-4.633E-10	-4.633E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-2.462E-17
0.10000	9.327E-13	9.359E-13	-3.513E-22	-3.513E-22	-4.032E-12	-4.032E-12	-3.303E-17
0.20000	2.620E-12	2.623E-12	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-4.723E-17
0.30000	5.553E-12	5.569E-12	-1.067E-21	-1.067E-21	-2.330E-11	-2.330E-11	-7.425E-17
0.40000	1.178E-11	1.178E-11	-1.946E-21	-1.946E-21	-4.517E-11	-4.517E-11	-1.257E-16
0.50000	2.335E-11	2.336E-11	-3.556E-21	-3.556E-21	-8.513E-11	-8.513E-11	-2.515E-16
0.60000	5.294E-11	5.294E-11	-7.317E-21	-7.317E-21	-1.616E-10	-1.616E-10	-5.880E-16
0.70000	1.505E-10	1.505E-10	-1.919E-20	-1.919E-20	-3.417E-10	-3.417E-10	-1.718E-15
0.80000	6.184E-10	6.185E-10	-7.671E-20	-7.671E-20	-9.335E-10	-9.335E-10	-7.765E-15
0.85000	1.651E-09	1.651E-09	-2.038E-19	-2.038E-19	-1.884E-09	-1.884E-09	-2.244E-14
0.90000	6.353E-09	6.353E-09	-8.685E-19	-8.685E-19	-5.175E-09	-5.175E-09	-1.000E-13
0.92500	1.566E-08	1.566E-08	-1.999E-18	-1.999E-18	-1.025E-08	-1.025E-08	-3.007E-13
0.95000	5.947E-08	5.947E-08	-7.725E-18	-7.725E-18	-2.540E-08	-2.540E-08	-1.307E-12
0.96250	1.511E-07	1.511E-07	-2.099E-17	-2.100E-17	-4.922E-08	-4.923E-08	-3.630E-12
0.97500	6.364E-07	6.365E-07	-1.059E-16	-1.059E-16	-1.439E-07	-1.439E-07	-1.243E-11
0.98124	1.798E-06	1.798E-06	-3.511E-16	-3.513E-16	-3.311E-07	-3.312E-07	-2.597E-11
0.98749	7.157E-06	7.161E-06	-1.791E-15	-1.792E-15	-1.093E-06	-1.093E-06	-5.978E-11
0.99374	6.559E-05	6.565E-05	-1.818E-14	-1.819E-14	-6.975E-06	-6.980E-06	-1.282E-10
0.99998	6.616E-03	6.617E-03	-1.135E-13	-1.135E-13	-7.155E-05	-7.158E-05	-1.662E-10
1.00622	1.446E-02	1.446E-02	-1.745E-14	-1.743E-14	-1.350E-04	-1.350E-04	-1.278E-10
1.01247	2.218E-02	2.218E-02	-1.750E-15	-1.749E-15	-1.407E-04	-1.407E-04	-5.917E-11
1.01871	1.231E-02	1.231E-02	-3.458E-16	-3.457E-16	-1.415E-04	-1.415E-04	-2.570E-11
1.02496	7.289E-03	7.289E-03	-1.045E-16	-1.045E-16	-1.417E-04	-1.417E-04	-1.233E-11
1.03746	3.851E-03	3.851E-03	-2.085E-17	-2.085E-17	-1.418E-04	-1.418E-04	-3.607E-12
1.04996	2.591E-03	2.591E-03	-7.690E-18	-7.689E-18	-1.418E-04	-1.418E-04	-1.301E-12
1.07496	1.559E-03	1.559E-03	-1.994E-18	-1.994E-18	-1.418E-04	-1.418E-04	-2.998E-13
1.09996	1.113E-03	1.113E-03	-8.663E-19	-8.662E-19	-1.418E-04	-1.418E-04	-9.987E-14
1.14996	7.070E-04	7.071E-04	-2.035E-19	-2.035E-19	-1.418E-04	-1.418E-04	-2.242E-14
1.19996	5.180E-04	5.180E-04	-7.661E-20	-7.661E-20	-1.418E-04	-1.418E-04	-7.765E-15
1.29996	3.374E-04	3.374E-04	-1.918E-20	-1.918E-20	-1.418E-04	-1.418E-04	-1.719E-15
1.39996	2.502E-04	2.502E-04	-7.313E-21	-7.313E-21	-1.418E-04	-1.418E-04	-5.886E-16
1.49995	1.988E-04	1.988E-04	-3.554E-21	-3.554E-21	-1.418E-04	-1.418E-04	-2.518E-16
1.59995	1.649E-04	1.649E-04	-1.945E-21	-1.945E-21	-1.418E-04	-1.418E-04	-1.259E-16
1.69995	1.409E-04	1.409E-04	-1.066E-21	-1.066E-21	-1.418E-04	-1.418E-04	-7.437E-17
1.79995	1.230E-04	1.230E-04	-6.119E-22	-6.119E-22	-1.418E-04	-1.418E-04	-4.732E-17
1.89995	1.091E-04	1.091E-04	-3.512E-22	-3.512E-22	-1.418E-04	-1.418E-04	-3.310E-17
1.99995	9.806E-05	9.807E-05	-2.013E-22	-2.013E-22	-1.418E-04	-1.418E-04	-2.468E-17

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.600 θ_D= 0. ρ_a= 2.253

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.6000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.6000	0.10000	193.644	7.087E-08	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.6000	0.20000	172.130	9.838E-08	1.000E-00	-1.205E-10	-1.205E-10	1.205E-10
0.30000	0.6000	0.30000	150.616	1.501E-07	1.000E-00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.6000	0.40000	129.103	2.535E-07	1.000E-00	-2.545E-10	-2.545E-10	2.545E-10
0.50000	0.6000	0.50000	107.591	3.602E-07	1.000E-00	-3.797E-10	-3.797E-10	3.797E-10
0.60000	0.6000	0.60000	86.081	3.869E-07	1.000E-00	-6.193E-10	-6.193E-10	6.193E-10
0.70000	0.6000	0.70000	64.575	1.507E-06	9.999E-01	-1.190E-09	-1.190E-09	1.190E-09
0.80000	0.6000	0.80000	43.079	5.149E-06	9.998E-01	-2.989E-09	-2.989E-09	2.989E-09
0.85000	0.6000	0.85000	32.341	1.326E-05	9.996E-01	-5.785E-09	-5.785E-09	5.785E-09
0.90000	0.6000	0.90000	21.622	4.632E-05	9.992E-01	-1.457E-08	-1.457E-08	1.457E-08
0.92500	0.6000	0.92500	16.282	1.118E-04	9.986E-01	-2.674E-08	-2.674E-08	2.674E-08
0.95000	0.6000	0.95000	10.980	3.711E-04	9.971E-01	-6.630E-08	-6.630E-08	6.630E-08
0.96250	0.6000	0.96250	8.366	8.531E-04	9.956E-01	-1.239E-07	-1.239E-07	1.239E-07
0.97500	0.6000	0.97500	5.822	2.613E-03	9.937E-01	-3.281E-07	-3.282E-07	3.281E-07
0.98124	0.6001	0.98125	4.612	5.437E-03	9.941E-01	-6.666E-07	-6.667E-07	6.665E-07
0.98749	0.6001	0.98750	3.501	1.340E-02	1.000E 00	-1.584E-06	-1.584E-06	1.583E-06
0.99374	0.6003	0.99375	2.620	3.881E-02	1.014E 00	-4.462E-06	-4.463E-06	4.461E-06
0.99998	0.6007	1.00000	2.256	1.031E-01	9.983E-01	-8.619E-06	-8.620E-06	8.620E-06
1.00623	0.6015	1.00625	2.632	1.667E-01	7.240E-01	-4.391E-06	-4.390E-06	4.391E-06
1.01247	0.6026	1.01250	3.519	1.916E-01	5.214E-01	-1.554E-06	-1.554E-06	1.554E-06
1.01872	0.6038	1.01875	4.632	1.994E-01	3.422E-01	-6.580E-07	-6.579E-07	6.580E-07
1.02497	0.6050	1.02500	5.844	2.022E-01	2.284E-01	-3.244E-07	-3.244E-07	3.245E-07
1.03747	0.6074	1.03750	8.389	2.040E-01	4.332E-01	-1.231E-07	-1.231E-07	1.231E-07
1.04997	0.6098	1.05000	11.004	2.044E-01	8.190E-01	-6.603E-08	-6.603E-08	6.603E-08
1.07496	0.6143	1.07500	16.306	2.047E-01	1.615E 00	-2.667E-08	-2.667E-08	2.667E-08
1.09996	0.6186	1.10000	21.646	2.048E-01	2.389E 00	-1.454E-08	-1.454E-08	1.454E-08
1.14996	0.6267	1.15000	32.364	2.048E-01	3.846E 00	-5.776E-09	-5.776E-09	5.776E-09
1.19996	0.6341	1.20000	43.103	2.048E-01	5.184E 00	-2.985E-09	-2.985E-09	2.985E-09
1.29996	0.6473	1.30000	64.599	2.048E-01	7.556E 00	-1.189E-09	-1.189E-09	1.189E-09
1.39996	0.6585	1.40000	86.105	2.048E-01	9.589E 00	-6.190E-10	-6.190E-10	6.190E-10
1.49996	0.6683	1.50000	107.615	2.048E-01	1.135E 01	-3.795E-10	-3.795E-10	3.795E-10
1.59996	0.6768	1.60000	129.127	2.048E-01	1.290E 01	-2.544E-10	-2.544E-10	2.544E-10
1.69996	0.6844	1.70000	150.640	2.048E-01	1.426E 01	-1.708E-10	-1.708E-10	1.708E-10
1.79996	0.6910	1.80000	172.154	2.048E-01	1.547E 01	-1.205E-10	-1.205E-10	1.205E-10
1.89996	0.6970	1.90000	193.668	2.048E-01	1.655E 01	-8.501E-11	-8.501E-11	8.501E-11
1.99996	0.7024	2.00000	215.183	2.048E-01	1.752E 01	-6.060E-11	-6.060E-11	6.060E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.600 θ_D= 0. ρ_a= 2.253

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.502E-10	-6.502E-10
0.20000	1.205E-10	99.802	-8.672E-09	-8.672E-09	8.672E-09	8.672E-09	-9.216E-10	-9.216E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.306E-09	-1.306E-09
0.40000	2.545E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.797E-10	249.506	-4.196E-08	-4.196E-08	4.196E-08	4.196E-08	-2.903E-09	-2.903E-09
0.60000	6.193E-10	299.407	-6.604E-08	-6.604E-08	6.604E-08	6.604E-08	-4.735E-09	-4.735E-09
0.70000	1.190E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.099E-09	-9.099E-09
0.80000	2.989E-09	399.209	-2.031E-07	-2.031E-07	2.031E-07	2.031E-07	-2.285E-08	-2.285E-08
0.85000	5.785E-09	424.160	-3.071E-07	-3.071E-07	3.071E-07	3.071E-07	-4.423E-08	-4.423E-08
0.90000	1.457E-08	449.110	-5.371E-07	-5.371E-07	5.372E-07	5.372E-07	-1.114E-07	-1.114E-07
0.92500	2.674E-08	461.585	-7.871E-07	-7.871E-07	7.875E-07	7.876E-07	-2.045E-07	-2.045E-07
0.95000	6.630E-08	474.060	-1.321E-06	-1.321E-06	1.326E-06	1.326E-06	-5.069E-07	-5.069E-07
0.96250	1.239E-07	480.297	-1.869E-06	-1.869E-06	1.896E-06	1.896E-06	-9.471E-07	-9.472E-07
0.97500	3.282E-07	486.534	-3.042E-06	-3.042E-06	3.295E-06	3.295E-06	-2.509E-06	-2.509E-06
0.98124	6.668E-07	489.652	-4.088E-06	-4.089E-06	5.190E-06	5.191E-06	-5.096E-06	-5.097E-06
0.98749	1.584E-06	492.770	-4.432E-06	-4.433E-06	1.117E-05	1.117E-05	-1.211E-05	-1.211E-05
0.99374	4.464E-06	495.887	1.195E-05	1.194E-05	4.494E-05	4.495E-05	-3.411E-05	-3.412E-05
0.99998	8.620E-06	499.003	1.642E-04	1.642E-04	2.396E-04	2.397E-04	-6.590E-05	-6.590E-05
1.00623	4.389E-06	502.118	4.729E-04	4.729E-04	5.904E-04	5.904E-04	-3.357E-05	-3.356E-05
1.01247	1.553E-06	505.235	6.392E-04	6.392E-04	7.739E-04	7.739E-04	-1.188E-05	-1.188E-05
1.01872	6.578E-07	508.353	6.994E-04	6.994E-04	8.403E-04	8.403E-04	-5.031E-06	-5.030E-06
1.02497	3.244E-07	511.471	7.245E-04	7.245E-04	8.683E-04	8.683E-04	-2.480E-06	-2.480E-06
1.03747	1.231E-07	517.708	7.469E-04	7.469E-04	8.932E-04	8.932E-04	-9.412E-07	-9.411E-07
1.04997	6.602E-08	523.945	7.602E-04	7.602E-04	9.076E-04	9.076E-04	-5.048E-07	-5.048E-07
1.07496	2.667E-08	536.420	7.817E-04	7.817E-04	9.302E-04	9.302E-04	-2.039E-07	-2.039E-07
1.09996	1.453E-08	548.895	8.020E-04	8.020E-04	9.509E-04	9.509E-04	-1.111E-07	-1.111E-07
1.14996	5.776E-09	573.845	8.419E-04	8.419E-04	9.913E-04	9.913E-04	-4.416E-08	-4.416E-08
1.19996	2.985E-09	598.795	8.817E-04	8.817E-04	1.031E-03	1.031E-03	-2.282E-08	-2.282E-08
1.29996	1.189E-09	648.696	9.614E-04	9.614E-04	1.111E-03	1.111E-03	-9.092E-09	-9.092E-09
1.39996	6.190E-10	698.597	1.041E-03	1.041E-03	1.191E-03	1.191E-03	-4.732E-09	-4.732E-09
1.49996	3.795E-10	748.498	1.121E-03	1.121E-03	1.271E-03	1.271E-03	-2.902E-09	-2.902E-09
1.59996	2.544E-10	798.399	1.201E-03	1.201E-03	1.351E-03	1.351E-03	-1.945E-09	-1.945E-09
1.69996	1.708E-10	848.300	1.280E-03	1.280E-03	1.430E-03	1.430E-03	-1.306E-09	-1.306E-09
1.79996	1.205E-10	898.201	1.360E-03	1.360E-03	1.510E-03	1.510E-03	-9.213E-10	-9.213E-10
1.89996	8.501E-11	948.102	1.440E-03	1.440E-03	1.590E-03	1.590E-03	-6.499E-10	-6.499E-10
1.99996	6.060E-11	998.003	1.519E-03	1.519E-03	1.669E-03	1.669E-03	-4.633E-10	-4.633E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.600 θ_D= 0. ρ_a= 2.253

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-3.545E-17
0.10000	1.120E-12	1.128E-12	-3.513E-22	-3.513E-22	-4.031E-12	-4.031E-12	-4.756E-17
0.20000	3.146E-12	3.157E-12	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-6.802E-17
0.30000	6.671E-12	6.677E-12	-1.067E-21	-1.067E-21	-2.330E-11	-2.330E-11	-1.069E-16
0.40000	1.414E-11	1.414E-11	-1.946E-21	-1.946E-21	-4.517E-11	-4.517E-11	-1.810E-16
0.50000	2.802E-11	2.803E-11	-3.556E-21	-3.556E-21	-8.512E-11	-8.512E-11	-3.622E-16
0.60000	6.353E-11	6.354E-11	-7.316E-21	-7.316E-21	-1.616E-10	-1.616E-10	-8.465E-16
0.70000	1.806E-10	1.805E-10	-1.919E-20	-1.919E-20	-3.416E-10	-3.416E-10	-2.472E-15
0.80000	7.416E-10	7.416E-10	-7.663E-20	-7.663E-20	-9.330E-10	-9.330E-10	-1.117E-14
0.85000	1.978E-09	1.978E-09	-2.034E-19	-2.034E-19	-1.882E-09	-1.882E-09	-3.223E-14
0.90000	7.597E-09	7.597E-09	-8.641E-19	-8.641E-19	-5.160E-09	-5.160E-09	-1.433E-13
0.92500	1.866E-08	1.866E-08	-1.986E-18	-1.986E-18	-1.020E-08	-1.020E-08	-4.282E-13
0.95000	7.032E-08	7.032E-08	-7.581E-18	-7.581E-18	-2.512E-08	-2.512E-08	-1.836E-12
0.96250	1.750E-07	1.750E-07	-2.020E-17	-2.020E-17	-4.822E-08	-4.822E-08	-5.023E-12
0.97500	7.021E-07	7.023E-07	-9.524E-17	-9.526E-17	-1.364E-07	-1.365E-07	-1.670E-11
0.98124	1.883E-06	1.883E-06	-2.954E-16	-2.955E-16	-2.977E-07	-2.978E-07	-3.328E-11
0.98749	6.662E-06	6.665E-06	-1.208E-15	-1.209E-15	-8.595E-07	-8.598E-07	-7.318E-11
0.99374	4.631E-05	4.634E-05	-6.833E-15	-6.837E-15	-3.901E-06	-3.903E-06	-1.479E-10
0.99998	9.680E-04	9.687E-04	-2.267E-14	-2.267E-14	-1.800E-05	-1.801E-05	-1.880E-10
1.00623	2.564E-03	2.565E-03	-6.651E-15	-6.647E-15	-3.184E-05	-3.184E-05	-1.462E-10
1.01247	3.614E-03	3.614E-03	-1.171E-15	-1.170E-15	-3.479E-05	-3.479E-05	-7.233E-11
1.01872	5.485E-03	5.485E-03	-2.892E-16	-2.891E-16	-3.534E-05	-3.534E-05	-3.284E-11
1.02497	8.173E-03	8.173E-03	-9.359E-17	-9.357E-17	-3.549E-05	-3.549E-05	-1.653E-11
1.03747	4.258E-03	4.258E-03	-2.000E-17	-2.000E-17	-3.558E-05	-3.558E-05	-4.977E-12
1.04997	2.226E-03	2.226E-03	-7.532E-18	-7.532E-18	-3.560E-05	-3.560E-05	-1.823E-12
1.07496	1.102E-03	1.102E-03	-1.978E-18	-1.978E-18	-3.562E-05	-3.562E-05	-4.261E-13
1.09996	7.283E-04	7.283E-04	-8.610E-19	-8.609E-19	-3.562E-05	-3.562E-05	-1.429E-13
1.14996	4.328E-04	4.328E-04	-2.029E-19	-2.029E-19	-3.563E-05	-3.563E-05	-3.219E-14
1.19996	3.077E-04	3.077E-04	-7.649E-20	-7.649E-20	-3.563E-05	-3.563E-05	-1.116E-14
1.29996	1.949E-04	1.949E-04	-1.916E-20	-1.916E-20	-3.563E-05	-3.563E-05	-2.472E-15
1.39996	1.426E-04	1.426E-04	-7.309E-21	-7.309E-21	-3.563E-05	-3.563E-05	-8.471E-16
1.49996	1.124E-04	1.124E-04	-3.553E-21	-3.553E-21	-3.563E-05	-3.563E-05	-3.625E-16
1.59996	9.277E-05	9.277E-05	-1.945E-21	-1.945E-21	-3.563E-05	-3.563E-05	-1.812E-16
1.69996	7.898E-05	7.898E-05	-1.066E-21	-1.066E-21	-3.563E-05	-3.563E-05	-1.071E-16
1.79996	6.875E-05	6.875E-05	-6.118E-22	-6.118E-22	-3.563E-05	-3.563E-05	-6.813E-17
1.89996	6.087E-05	6.087E-05	-3.511E-22	-3.511E-22	-3.563E-05	-3.563E-05	-4.766E-17
1.99996	5.461E-05	5.461E-05	-2.013E-22	-2.013E-22	-3.563E-05	-3.563E-05	-3.554E-17

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.700 θ_D= 0. ρ_a= 2.629

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.7000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.7000	0.10000	193.645	6.253E-08	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.7000	0.20000	172.131	9.005E-08	1.000E-00	-1.205E-10	-1.205E-10	1.205E-10
0.30000	0.7000	0.30000	150.618	1.668E-07	1.000E-00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.7000	0.40000	129.106	2.535E-07	1.000E-00	-2.545E-10	-2.545E-10	2.545E-10
0.50000	0.7000	0.50000	107.596	3.335E-07	1.000E-00	-3.797E-10	-3.797E-10	3.797E-10
0.60000	0.7000	0.60000	86.088	3.869E-07	9.999E-01	-6.192E-10	-6.192E-10	6.192E-10
0.70000	0.7000	0.70000	64.585	1.561E-06	9.999E-01	-1.190E-09	-1.190E-09	1.190E-09
0.80000	0.7000	0.80000	43.096	5.123E-06	9.998E-01	-2.986E-09	-2.986E-09	2.986E-09
0.85000	0.7000	0.85000	32.365	1.350E-05	9.996E-01	-5.776E-09	-5.776E-09	5.775E-09
0.90000	0.7000	0.90000	21.660	4.706E-05	9.991E-01	-1.451E-08	-1.451E-08	1.451E-08
0.92500	0.7000	0.92500	16.334	1.136E-04	9.984E-01	-2.659E-08	-2.659E-08	2.659E-08
0.95000	0.7000	0.95000	11.059	3.742E-04	9.970E-01	-6.537E-08	-6.537E-08	6.537E-08
0.96250	0.7000	0.96250	8.471	8.465E-04	9.957E-01	-1.204E-07	-1.204E-07	1.204E-07
0.97500	0.7000	0.97500	5.973	2.516E-03	9.948E-01	-3.033E-07	-3.034E-07	3.033E-07
0.98125	0.7001	0.98125	4.803	5.053E-03	9.966E-01	-5.907E-07	-5.908E-07	5.907E-07
0.98749	0.7001	0.98750	3.751	1.159E-02	1.003E 00	-1.218E-06	-1.218E-06	1.218E-06
0.99374	0.7002	0.99375	2.947	2.932E-02	1.012E 00	-2.882E-06	-2.882E-06	2.881E-06
0.99999	0.7005	1.00000	2.631	6.640E-02	9.990E-01	-4.400E-06	-4.400E-06	4.400E-06
1.00623	0.7010	1.00625	2.962	1.031E-01	1.008E 00	-2.826E-06	-2.826E-06	2.827E-06
1.01248	0.7017	1.01250	3.774	1.204E-01	9.962E-01	-1.189E-06	-1.189E-06	1.189E-06
1.01873	0.7025	1.01875	4.830	1.268E-01	9.857E-01	-5.808E-07	-5.807E-07	5.808E-07
1.02498	0.7033	1.02500	6.002	1.293E-01	9.802E-01	-2.989E-07	-2.989E-07	2.989E-07
1.03748	0.7048	1.03750	8.502	1.309E-01	9.737E-01	-1.194E-07	-1.193E-07	1.194E-07
1.04997	0.7063	1.05000	11.091	1.314E-01	9.680E-01	-6.501E-08	-6.501E-08	6.501E-08
1.07497	0.7092	1.07500	16.366	1.317E-01	9.560E-01	-2.649E-08	-2.649E-08	2.649E-08
1.09997	0.7120	1.10000	21.692	1.317E-01	9.438E-01	-1.446E-08	-1.446E-08	1.446E-08
1.14997	0.7172	1.15000	32.397	1.318E-01	9.203E-01	-5.763E-09	-5.763E-09	5.763E-09
1.19997	0.7220	1.20000	43.128	1.318E-01	8.985E-01	-2.982E-09	-2.982E-09	2.982E-09
1.29997	0.7304	1.30000	64.617	1.318E-01	8.597E-01	-1.188E-09	-1.188E-09	1.188E-09
1.39997	0.7377	1.40000	86.120	1.318E-01	8.264E-01	-6.187E-10	-6.187E-10	6.187E-10
1.49997	0.7439	1.50000	107.628	1.318E-01	7.975E-01	-3.794E-10	-3.794E-10	3.794E-10
1.59997	0.7494	1.60000	129.138	1.318E-01	7.722E-01	-2.544E-10	-2.544E-10	2.544E-10
1.69997	0.7543	1.70000	150.650	1.318E-01	7.499E-01	-1.708E-10	-1.708E-10	1.708E-10
1.79997	0.7586	1.80000	172.163	1.318E-01	7.300E-01	-1.205E-10	-1.205E-10	1.205E-10
1.89997	0.7624	1.90000	193.677	1.318E-01	7.123E-01	-8.499E-11	-8.499E-11	8.499E-11
1.99997	0.7659	2.00000	215.191	1.318E-01	6.963E-01	-6.059E-11	-6.059E-11	6.059E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.700 θ_D= 0. ρ_0= 2.629

z	$_x\mu'-1_0$	T_0	$_0T_1-T_0$	$_xT_1-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	6.062E-11	C.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.501E-10	-6.501E-10
0.20000	1.205E-10	99.802	-8.672E-09	-8.672E-09	8.672E-09	8.672E-09	-9.216E-10	-9.216E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.306E-09	-1.306E-09
0.40000	2.545E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.797E-10	249.506	-4.195E-08	-4.195E-08	4.195E-08	4.195E-08	-2.903E-09	-2.903E-09
0.60000	6.192E-10	299.407	-6.603E-08	-6.603E-08	6.603E-08	6.603E-08	-4.734E-09	-4.734E-09
0.70000	1.190E-09	349.308	-1.090E-07	-1.090E-07	1.090E-07	1.090E-07	-9.096E-09	-9.096E-09
0.80000	2.986E-09	399.209	-2.030E-07	-2.030E-07	2.030E-07	2.030E-07	-2.283E-08	-2.283E-08
0.85000	5.776E-09	424.160	-3.068E-07	-3.068E-07	3.068E-07	3.068E-07	-4.416E-08	-4.416E-08
0.90000	1.491E-08	449.110	-5.362E-07	-5.362E-07	5.363E-07	5.363E-07	-1.109E-07	-1.109E-07
0.92500	2.659E-08	461.585	-7.850E-07	-7.850E-07	7.854E-07	7.854E-07	-2.033E-07	-2.033E-07
0.95000	6.537E-08	474.060	-1.312E-06	-1.312E-06	1.317E-06	1.317E-06	-4.998E-07	-4.998E-07
0.96250	1.204E-07	480.297	-1.848E-06	-1.848E-06	1.874E-06	1.874E-06	-9.202E-07	-9.202E-07
0.97500	3.034E-07	486.534	-2.967E-06	-2.967E-06	3.202E-06	3.202E-06	-2.319E-06	-2.319E-06
0.98125	5.908E-07	489.653	-3.936E-06	-3.936E-06	4.888E-06	4.888E-06	-4.516E-06	-4.517E-06
0.98749	1.218E-06	492.771	-4.551E-06	-4.551E-06	9.589E-06	9.591E-06	-9.311E-06	-9.312E-06
0.99374	2.883E-06	495.888	2.996E-06	2.994E-06	2.947E-05	2.947E-05	-2.203E-05	-2.204E-05
0.99999	4.400E-06	499.005	5.854E-05	5.854E-05	1.090E-04	1.090E-04	-3.364E-05	-3.364E-05
1.00623	2.825E-06	502.122	1.661E-04	1.661E-04	2.404E-04	2.404E-04	-2.161E-05	-2.160E-05
1.01248	1.188E-06	505.239	2.359E-04	2.359E-04	3.222E-04	3.222E-04	-9.089E-06	-9.087E-06
1.01873	5.806E-07	508.357	2.654E-04	2.654E-04	3.570E-04	3.570E-04	-4.440E-06	-4.439E-06
1.02498	2.989E-07	511.475	2.785E-04	2.785E-04	3.726E-04	3.726E-04	-2.285E-06	-2.285E-06
1.03748	1.193E-07	517.712	2.897E-04	2.897E-04	3.862E-04	3.862E-04	-9.125E-07	-9.124E-07
1.04997	6.500E-08	523.949	2.957E-04	2.957E-04	3.933E-04	3.933E-04	-4.970E-07	-4.970E-07
1.07497	2.649E-08	536.424	3.048E-04	3.048E-04	4.035E-04	4.035E-04	-2.025E-07	-2.025E-07
1.09997	1.446E-08	548.899	3.132E-04	3.132E-04	4.124E-04	4.124E-04	-1.105E-07	-1.105E-07
1.14997	5.763E-09	573.850	3.297E-04	3.297E-04	4.293E-04	4.293E-04	-4.406E-08	-4.406E-08
1.19997	2.982E-09	598.800	3.462E-04	3.462E-04	4.460E-04	4.460E-04	-2.280E-08	-2.280E-08
1.29997	1.188E-09	648.701	3.791E-04	3.791E-04	4.791E-04	4.791E-04	-9.086E-09	-9.086E-09
1.39997	6.187E-10	698.602	4.121E-04	4.121E-04	5.122E-04	5.122E-04	-4.730E-09	-4.730E-09
1.49997	3.794E-10	748.503	4.451E-04	4.451E-04	5.452E-04	5.452E-04	-2.901E-09	-2.901E-09
1.59997	2.544E-10	798.404	4.781E-04	4.781E-04	5.783E-04	5.783E-04	-1.945E-09	-1.945E-09
1.69997	1.708E-10	848.306	5.111E-04	5.111E-04	6.114E-04	6.114E-04	-1.306E-09	-1.306E-09
1.79997	1.205E-10	898.207	5.441E-04	5.441E-04	6.444E-04	6.444E-04	-9.211E-10	-9.211E-10
1.89997	8.499E-11	948.108	5.771E-04	5.771E-04	6.774E-04	6.774E-04	-6.498E-10	-6.498E-10
1.99997	6.059E-11	998.009	6.102E-04	6.102E-04	7.105E-04	7.105E-04	-4.632E-10	-4.632E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.700 θ_D= 0. ρ_0= 2.629

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	C.	-2.014E-22	-2.014E-22	0.	0.	-4.825E-17
0.10000	1.306E-12	1.304E-12	-3.513E-22	-3.513E-22	-4.031E-12	-4.031E-12	-6.473E-17
0.20000	3.671E-12	3.675E-12	-6.122E-22	-6.122E-22	-1.106E-11	-1.106E-11	-9.257E-17
0.30000	7.772E-12	7.777E-12	-1.067E-21	-1.067E-21	-2.330E-11	-2.330E-11	-1.455E-16
0.40000	1.649E-11	1.649E-11	-1.946E-21	-1.946E-21	-4.517E-11	-4.517E-11	-2.463E-16
0.50000	3.267E-11	3.269E-11	-3.555E-21	-3.555E-21	-8.512E-11	-8.512E-11	-4.929E-16
0.60000	7.410E-11	7.407E-11	-7.314E-21	-7.314E-21	-1.616E-10	-1.616E-10	-1.152E-15
0.70000	2.105E-10	2.106E-10	-1.918E-20	-1.918E-20	-3.415E-10	-3.415E-10	-3.363E-15
0.80000	8.645E-10	8.645E-10	-7.653E-20	-7.653E-20	-9.323E-10	-9.323E-10	-1.518E-14
0.85000	2.304E-09	2.304E-09	-2.029E-19	-2.029E-19	-1.880E-09	-1.880E-09	-4.375E-14
0.90000	8.830E-09	8.830E-09	-8.590E-19	-8.590E-19	-5.143E-09	-5.143E-09	-1.938E-13
0.92500	2.162E-08	2.162E-08	-1.970E-18	-1.970E-18	-1.015E-08	-1.015E-08	-5.752E-13
0.95000	8.077E-08	8.078E-08	-7.416E-18	-7.416E-18	-2.481E-08	-2.481E-08	-2.428E-12
0.96250	1.975E-07	1.975E-07	-1.930E-17	-1.930E-17	-4.705E-08	-4.705E-08	-6.531E-12
0.97500	7.559E-07	7.560E-07	-8.432E-17	-8.434E-17	-1.283E-07	-1.284E-07	-2.138E-11
0.98125	1.924E-06	1.924E-06	-2.427E-16	-2.428E-16	-2.648E-07	-2.649E-07	-4.008E-11
0.98749	6.103E-06	6.105E-06	-7.825E-16	-7.828E-16	-6.848E-07	-6.850E-07	-8.571E-11
0.99374	3.088E-05	3.090E-05	-3.260E-15	-3.261E-15	-2.366E-06	-2.367E-06	-1.539E-10
0.99999	2.071E-04	2.072E-04	-6.674E-15	-6.674E-15	-7.378E-06	-7.381E-06	-1.993E-10
1.00623	3.755E-04	3.756E-04	-3.155E-15	-3.153E-15	-1.231E-05	-1.231E-05	-1.524E-10
1.01248	4.019E-04	4.019E-04	-7.520E-16	-7.517E-16	-1.394E-05	-1.394E-05	-8.467E-11
1.01873	4.078E-04	4.078E-04	-2.361E-16	-2.361E-16	-1.435E-05	-1.435E-05	-3.944E-11
1.02498	4.088E-04	4.088E-04	-8.243E-17	-8.241E-17	-1.448E-05	-1.448E-05	-2.080E-11
1.03748	4.071E-04	4.071E-04	-1.905E-17	-1.905E-17	-1.456E-05	-1.456E-05	-6.450E-12
1.04997	4.047E-04	4.047E-04	-7.352E-18	-7.351E-18	-1.458E-05	-1.458E-05	-2.403E-12
1.07497	4.004E-04	4.004E-04	-1.960E-18	-1.960E-18	-1.460E-05	-1.460E-05	-5.712E-13
1.09997	3.963E-04	3.963E-04	-8.547E-19	-8.547E-19	-1.460E-05	-1.460E-05	-1.930E-13
1.14997	3.888E-04	3.888E-04	-2.023E-19	-2.023E-19	-1.461E-05	-1.461E-05	-4.364E-14
1.19997	3.816E-04	3.816E-04	-7.635E-20	-7.635E-20	-1.461E-05	-1.461E-05	-1.515E-14
1.29997	3.682E-04	3.682E-04	-1.915E-20	-1.915E-20	-1.461E-05	-1.461E-05	-3.361E-15
1.39997	3.556E-04	3.556E-04	-7.305E-21	-7.305E-21	-1.461E-05	-1.461E-05	-1.152E-15
1.49997	3.440E-04	3.440E-04	-3.552E-21	-3.552E-21	-1.461E-05	-1.461E-05	-4.931E-16
1.59997	3.330E-04	3.330E-04	-1.944E-21	-1.944E-21	-1.461E-05	-1.461E-05	-2.465E-16
1.69997	3.228E-04	3.228E-04	-1.066E-21	-1.066E-21	-1.461E-05	-1.461E-05	-1.457E-16
1.79997	3.131E-04	3.131E-04	-6.116E-22	-6.116E-22	-1.461E-05	-1.461E-05	-9.272E-17
1.89997	3.040E-04	3.040E-04	-3.510E-22	-3.510E-22	-1.461E-05	-1.461E-05	-6.486E-17
1.99997	2.955E-04	2.955E-04	-2.012E-22	-2.012E-22	-1.461E-05	-1.461E-05	-4.837E-17

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.800 ϑ_D= 0. ρ_a= 3.004

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.8000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	0.8000	0.10000	193.645	8.921E-08	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	0.8000	0.20000	172.132	1.517E-07	1.000E-00	-1.205E-10	-1.205E-10	1.205E-10
0.30000	0.8000	0.30000	150.620	2.201E-07	1.000E-00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	0.8000	0.40000	129.109	3.335E-07	1.000E-00	-2.545E-10	-2.545E-10	2.545E-10
0.50000	0.8000	0.50000	107.600	4.736E-07	1.000E-00	-3.796E-10	-3.796E-10	3.796E-10
0.60000	0.8000	0.60000	86.095	5.069E-07	1.000E-00	-6.191E-10	-6.191E-10	6.191E-10
0.70000	0.8000	0.70000	64.597	2.054E-06	9.999E-01	-1.189E-09	-1.189E-09	1.189E-09
0.80000	0.8000	0.80000	43.116	6.777E-06	9.998E-01	-2.984E-09	-2.984E-09	2.984E-09
0.85000	0.8000	0.85000	32.393	1.761E-05	9.997E-01	-5.765E-09	-5.765E-09	5.765E-09
0.90000	0.8000	0.90000	21.704	6.046E-05	9.993E-01	-1.444E-08	-1.444E-08	1.444E-08
0.92500	0.8000	0.92500	16.394	1.431E-04	9.988E-01	-2.641E-08	-2.641E-08	2.641E-08
0.95000	0.8000	0.95000	11.150	4.702E-04	9.977E-01	-6.432E-08	-6.432E-08	6.432E-08
0.96250	0.8000	0.96250	8.591	1.047E-03	9.968E-01	-1.165E-07	-1.165E-07	1.165E-07
0.97500	0.8000	0.97500	6.144	3.014E-03	9.966E-01	-2.832E-07	-2.833E-07	2.832E-07
0.98124	0.8001	0.98125	5.014	5.831E-03	9.986E-01	-5.167E-07	-5.167E-07	5.166E-07
0.98749	0.8001	0.98750	4.020	1.249E-02	1.004E 00	-9.698E-07	-9.699E-07	9.697E-07
0.99374	0.8002	0.99375	3.285	2.827E-02	1.007E 00	-1.990E-06	-1.990E-06	1.989E-06
0.99999	0.8005	1.00000	3.006	5.698E-02	9.993E-01	-2.668E-06	-2.668E-06	2.668E-06
1.00623	0.8010	1.00625	3.302	8.538E-02	1.005E 00	-1.954E-06	-1.954E-06	1.954E-06
1.01248	0.8015	1.01250	4.048	1.008E-01	9.999E-01	-9.528E-07	-9.527E-07	9.529E-07
1.01873	0.8022	1.01875	5.048	1.072E-01	9.926E-01	-5.058E-07	-5.057E-07	5.058E-07
1.02498	0.8028	1.02500	6.180	1.100E-01	9.886E-01	-2.793E-07	-2.793E-07	2.793E-07
1.03748	0.8041	1.03750	8.630	1.119E-01	9.846E-01	-1.152E-07	-1.152E-07	1.152E-07
1.04998	0.8054	1.05000	11.190	1.125E-01	9.815E-01	-6.386E-08	-6.386E-08	6.386E-08
1.07497	0.8079	1.07500	16.435	1.128E-01	9.751E-01	-2.628E-08	-2.628E-08	2.628E-08
1.09997	0.8103	1.10000	21.746	1.129E-01	9.685E-01	-1.437E-08	-1.437E-08	1.437E-08
1.14997	0.8147	1.15000	32.434	1.130E-01	9.556E-01	-5.749E-09	-5.749E-09	5.749E-09
1.19997	0.8188	1.20000	43.158	1.130E-01	9.435E-01	-2.977E-09	-2.977E-09	2.977E-09
1.29997	0.8261	1.30000	64.639	1.130E-01	9.220E-01	-1.188E-09	-1.188E-09	1.188E-09
1.39997	0.8323	1.40000	86.137	1.130E-01	9.035E-01	-6.185E-10	-6.185E-10	6.185E-10
1.49997	0.8377	1.50000	107.642	1.130E-01	8.874E-01	-3.793E-10	-3.793E-10	3.793E-10
1.59997	0.8424	1.60000	129.151	1.130E-01	8.734E-01	-2.543E-10	-2.543E-10	2.543E-10
1.69997	0.8465	1.70000	150.662	1.130E-01	8.610E-01	-1.708E-10	-1.708E-10	1.708E-10
1.79997	0.8502	1.80000	172.174	1.130E-01	8.499E-01	-1.205E-10	-1.205E-10	1.205E-10
1.89997	0.8535	1.90000	193.687	1.130E-01	8.401E-01	-8.498E-11	-8.498E-11	8.498E-11
1.99997	0.8565	2.00000	215.201	1.130E-01	8.312E-01	-6.058E-11	-6.058E-11	6.058E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.800 ϑ_D= 0. ρ_a= 3.004

z	$_x\mu'$-1.0	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.501E-10	-6.501E-10
0.20000	1.205E-10	99.802	-8.672E-09	-8.672E-09	8.672E-09	8.672E-09	-9.216E-10	-9.216E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.306E-09	-1.306E-09
0.40000	2.545E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.796E-10	249.506	-4.195E-08	-4.195E-08	4.195E-08	4.195E-08	-2.902E-09	-2.902E-09
0.60000	6.191E-10	299.407	-6.603E-08	-6.603E-08	6.603E-08	6.603E-08	-4.733E-09	-4.733E-09
0.70000	1.189E-09	349.308	-1.089E-07	-1.089E-07	1.089E-07	1.089E-07	-9.092E-09	-9.092E-09
0.80000	2.984E-09	399.209	-2.029E-07	-2.029E-07	2.029E-07	2.029E-07	-2.281E-08	-2.281E-08
0.85000	5.765E-09	424.160	-3.066E-07	-3.066E-07	3.066E-07	3.066E-07	-4.407E-08	-4.407E-08
0.90000	1.444E-08	449.110	-5.352E-07	-5.352E-07	5.354E-07	5.354E-07	-1.104E-07	-1.104E-07
0.92500	2.641E-08	461.585	-7.824E-07	-7.824E-07	7.831E-07	7.831E-07	-2.019E-07	-2.019E-07
0.95000	6.432E-08	474.060	-1.302E-06	-1.302E-06	1.310E-06	1.310E-06	-4.918E-07	-4.918E-07
0.96250	1.165E-07	480.297	-1.818E-06	-1.818E-06	1.858E-06	1.858E-06	-8.904E-07	-8.905E-07
0.97500	2.833E-07	486.534	-2.828E-06	-2.828E-06	3.165E-06	3.165E-06	-2.165E-06	-2.166E-06
0.98124	5.168E-07	489.652	-3.553E-06	-3.553E-06	4.820E-06	4.821E-06	-3.950E-06	-3.951E-06
0.98749	9.700E-07	492.770	-3.525E-06	-3.526E-06	9.381E-06	9.382E-06	-7.414E-06	-7.415E-06
0.99374	1.990E-06	495.888	4.170E-06	4.169E-06	2.602E-05	2.602E-05	-1.521E-05	-1.521E-05
0.99999	2.668E-06	499.005	4.319E-05	4.319E-05	8.019E-05	8.019E-05	-2.040E-05	-2.040E-05
1.00623	1.954E-06	502.122	1.134E-04	1.134E-04	1.654E-04	1.654E-04	-1.494E-05	-1.494E-05
1.01248	9.526E-07	505.239	1.650E-04	1.650E-04	2.257E-04	2.257E-04	-7.285E-06	-7.284E-06
1.01873	5.057E-07	508.357	1.900E-04	1.900E-04	2.552E-04	2.552E-04	-3.867E-06	-3.867E-06
1.02498	2.793E-07	511.476	2.018E-04	2.018E-04	2.694E-04	2.694E-04	-2.136E-06	-2.135E-06
1.03748	1.152E-07	517.713	2.121E-04	2.121E-04	2.819E-04	2.819E-04	-8.809E-07	-8.808E-07
1.04998	6.386E-08	523.950	2.171E-04	2.171E-04	2.879E-04	2.879E-04	-4.882E-07	-4.882E-07
1.07497	2.628E-08	536.425	2.241E-04	2.241E-04	2.960E-04	2.960E-04	-2.009E-07	-2.009E-07
1.09997	1.437E-08	548.900	2.303E-04	2.303E-04	3.027E-04	3.027E-04	-1.099E-07	-1.099E-07
1.14997	5.749E-09	573.850	2.424E-04	2.424E-04	3.153E-04	3.153E-04	-4.395E-08	-4.395E-08
1.19997	2.977E-09	598.801	2.545E-04	2.545E-04	3.276E-04	3.276E-04	-2.276E-08	-2.276E-08
1.29997	1.188E-09	648.702	2.787E-04	2.787E-04	3.520E-04	3.520E-04	-9.080E-09	-9.080E-09
1.39997	6.185E-10	698.603	3.030E-04	3.030E-04	3.763E-04	3.763E-04	-4.728E-09	-4.728E-09
1.49997	3.793E-10	748.504	3.272E-04	3.272E-04	4.006E-04	4.006E-04	-2.900E-09	-2.900E-09
1.59997	2.543E-10	798.405	3.515E-04	3.515E-04	4.249E-04	4.249E-04	-1.944E-09	-1.944E-09
1.69997	1.708E-10	848.306	3.758E-04	3.758E-04	4.492E-04	4.492E-04	-1.305E-09	-1.305E-09
1.79997	1.205E-10	898.207	4.000E-04	4.000E-04	4.734E-04	4.734E-04	-9.210E-10	-9.210E-10
1.89997	8.498E-11	948.108	4.243E-04	4.243E-04	4.977E-04	4.977E-04	-6.497E-10	-6.497E-10
1.99997	6.058E-11	998.009	4.485E-04	4.485E-04	5.220E-04	5.220E-04	-4.631E-10	-4.631E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 0.800 θ_D= 0. ρ_a= 3.004

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-6.302E-17
0.10000	1.501E-12	1.498E-12	-3.513E-22	-3.513E-22	-4.031E-12	-4.031E-12	-8.454E-17
0.20000	4.197E-12	4.189E-12	-6.121E-22	-6.121E-22	-1.106E-11	-1.106E-11	-1.209E-16
0.30000	8.887E-12	8.893E-12	-1.067E-21	-1.067E-21	-2.330E-11	-2.330E-11	-1.930E-16
0.40000	1.883E-11	1.883E-11	-1.946E-21	-1.946E-21	-4.517E-11	-4.517E-11	-3.217E-16
0.50000	3.737E-11	3.735E-11	-3.555E-21	-3.555E-21	-8.511E-11	-8.511E-11	-6.436E-16
0.60000	8.464E-11	8.464E-11	-7.312E-21	-7.312E-21	-1.615E-10	-1.615E-10	-1.504E-15
0.70000	2.406E-10	2.406E-10	-1.917E-20	-1.917E-20	-3.414E-10	-3.414E-10	-4.389E-15
0.80000	9.872E-10	9.872E-10	-7.642E-20	-7.642E-20	-9.316E-10	-9.316E-10	-1.979E-14
0.85000	2.629E-09	2.629E-09	-2.024E-19	-2.024E-19	-1.877E-09	-1.877E-09	-5.695E-14
0.90000	1.006E-08	1.006E-08	-8.531E-19	-8.532E-19	-5.123E-09	-5.123E-09	-2.513E-13
0.92500	2.455E-08	2.455E-08	-1.951E-18	-1.951E-18	-1.009E-08	-1.009E-08	-7.400E-13
0.95000	9.098E-08	9.098E-08	-7.231E-18	-7.231E-18	-2.445E-08	-2.445E-08	-3.070E-12
0.96250	2.187E-07	2.187E-07	-1.833E-17	-1.833E-17	-4.581E-08	-4.582E-08	-8.105E-12
0.97500	8.001E-07	8.002E-07	-7.562E-17	-7.563E-17	-1.202E-07	-1.202E-07	-2.491E-11
0.98124	1.917E-06	1.917E-06	-1.953E-16	-1.953E-16	-2.344E-07	-2.345E-07	-4.621E-11
0.98749	5.425E-06	5.426E-06	-5.430E-16	-5.432E-16	-5.575E-07	-5.576E-07	-9.278E-11
0.99374	2.039E-05	2.040E-05	-1.762E-15	-1.762E-15	-1.540E-06	-1.541E-06	-1.519E-10
0.99999	8.031E-05	8.034E-05	-2.862E-15	-2.862E-15	-3.839E-06	-3.840E-06	-1.928E-10
1.00623	1.379E-04	1.379E-04	-1.710E-15	-1.710E-15	-6.106E-06	-6.106E-06	-1.499E-10
1.01248	1.524E-04	1.524E-04	-5.277E-16	-5.276E-16	-7.053E-06	-7.053E-06	-9.061E-11
1.01873	1.561E-04	1.561E-04	-1.887E-16	-1.886E-16	-7.366E-06	-7.366E-06	-4.537E-11
1.02498	1.568E-04	1.568E-04	-7.396E-17	-7.395E-17	-7.476E-06	-7.477E-06	-2.439E-11
1.03748	1.562E-04	1.562E-04	-1.802E-17	-1.802E-17	-7.548E-06	-7.548E-06	-7.978E-12
1.04998	1.549E-04	1.549E-04	-7.150E-18	-7.150E-18	-7.569E-06	-7.569E-06	-3.028E-12
1.07497	1.524E-04	1.524E-04	-1.939E-18	-1.939E-18	-7.583E-06	-7.583E-06	-7.331E-13
1.09997	1.499E-04	1.499E-04	-8.476E-19	-8.476E-19	-7.588E-06	-7.588E-06	-2.499E-13
1.14997	1.454E-04	1.454E-04	-2.015E-19	-2.015E-19	-7.592E-06	-7.592E-06	-5.674E-14
1.19997	1.411E-04	1.411E-04	-7.618E-20	-7.618E-20	-7.592E-06	-7.593E-06	-1.974E-14
1.29997	1.333E-04	1.333E-04	-1.913E-20	-1.913E-20	-7.593E-06	-7.593E-06	-4.385E-15
1.39997	1.263E-04	1.263E-04	-7.301E-21	-7.301E-21	-7.593E-06	-7.593E-06	-1.504E-15
1.49997	1.200E-04	1.200E-04	-3.551E-21	-3.551E-21	-7.593E-06	-7.593E-06	-6.437E-16
1.59997	1.143E-04	1.143E-04	-1.944E-21	-1.944E-21	-7.593E-06	-7.593E-06	-3.219E-16
1.69997	1.091E-04	1.091E-04	-1.065E-21	-1.065E-21	-7.593E-06	-7.593E-06	-1.902E-16
1.79997	1.044E-04	1.044E-04	-6.115E-22	-6.115E-22	-7.593E-06	-7.593E-06	-1.211E-16
1.89997	1.001E-04	1.001E-04	-3.509E-22	-3.509E-22	-7.593E-06	-7.593E-06	-8.470E-17
1.99997	9.610E-05	9.610E-05	-2.012E-22	-2.012E-22	-7.593E-06	-7.593E-06	-6.316E-17

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 1.000 θ_D= 0. ρ_a= 3.755

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	1.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	1.0000	0.10000	193.647	9.088E-08	1.000E-00	-8.504E-11	-8.504E-11	8.504E-11
0.20000	1.0000	0.20000	172.135	1.367E-07	1.000E-00	-1.205E-10	-1.205E-10	1.205E-10
0.30000	1.0000	0.30000	150.625	2.568E-07	1.000E-00	-1.709E-10	-1.709E-10	1.709E-10
0.40000	1.0000	0.40000	129.117	4.069E-07	1.000E-00	-2.545E-10	-2.545E-10	2.545E-10
0.50000	1.0000	0.50000	107.612	5.603E-07	1.000E-00	-3.795E-10	-3.795E-10	3.795E-10
0.60000	1.0000	0.60000	86.113	6.403E-07	9.999E-01	-6.188E-10	-6.188E-10	6.188E-10
0.70000	1.0000	0.70000	64.624	2.561E-06	9.999E-01	-1.188E-09	-1.188E-09	1.188E-09
0.80000	1.0000	0.80000	43.163	8.591E-06	9.997E-01	-2.976E-09	-2.976E-09	2.976E-09
0.85000	1.0000	0.85000	32.459	2.220E-05	9.994E-01	-5.740E-09	-5.740E-09	5.740E-09
0.90000	1.0000	0.90000	21.809	7.599E-05	9.987E-01	-1.427E-08	-1.427E-08	1.427E-08
0.92500	1.0000	0.92500	16.536	1.768E-04	9.979E-01	-2.598E-08	-2.598E-08	2.598E-08
0.95000	1.0000	0.95000	11.364	5.680E-04	9.964E-01	-6.190E-08	-6.190E-08	6.190E-08
0.96250	1.0000	0.96250	8.870	1.228E-03	9.958E-01	-1.078E-07	-1.078E-07	1.078E-07
0.97500	1.0001	0.97500	6.534	3.283E-03	9.977E-01	-2.441E-07	-2.441E-07	2.441E-07
0.98124	1.0001	0.98125	5.488	5.915E-03	1.002E 00	-3.901E-07	-3.901E-07	3.901E-07
0.98749	1.0001	0.98750	4.601	1.122E-02	1.007E 00	-6.711E-07	-6.712E-07	6.711E-07
0.99374	1.0002	0.99375	3.979	2.139E-02	1.007E 00	-9.961E-07	-9.962E-07	9.961E-07
0.99999	1.0004	1.00000	3.757	3.677E-02	9.996E-01	-1.210E-06	-1.210E-06	1.210E-06
1.00624	1.0007	1.00625	4.001	5.206E-02	1.006E 00	-9.812E-07	-9.811E-07	9.812E-07
1.01248	1.0010	1.01250	4.639	6.192E-02	1.006E 00	-6.551E-07	-6.551E-07	6.552E-07
1.01873	1.0014	1.01875	5.536	6.703E-02	9.990E-01	-3.805E-07	-3.805E-07	3.805E-07
1.02498	1.0018	1.02500	6.588	6.956E-02	9.941E-01	-2.392E-07	-2.391E-07	2.392E-07
1.03748	1.0027	1.03750	8.930	7.155E-02	9.899E-01	-1.061E-07	-1.061E-07	1.061E-07
1.04998	1.0035	1.05000	11.426	7.220E-02	9.884E-01	-6.122E-08	-6.122E-08	6.122E-08
1.07498	1.0051	1.07500	16.600	7.259E-02	9.860E-01	-2.579E-08	-2.579E-08	2.579E-08
1.09998	1.0066	1.10000	21.874	7.269E-02	9.832E-01	-1.416E-08	-1.416E-08	1.416E-08
1.14998	1.0095	1.15000	32.524	7.275E-02	9.773E-01	-5.715E-09	-5.715E-09	5.715E-09
1.19998	1.0121	1.20000	43.228	7.277E-02	9.714E-01	-2.967E-09	-2.967E-09	2.967E-09
1.29998	1.0168	1.30000	64.690	7.278E-02	9.608E-01	-1.186E-09	-1.186E-09	1.186E-09
1.39998	1.0208	1.40000	86.178	7.278E-02	9.516E-01	-6.178E-10	-6.178E-10	6.178E-10
1.49998	1.0243	1.50000	107.678	7.278E-02	9.436E-01	-3.791E-10	-3.791E-10	3.791E-10
1.59998	1.0273	1.60000	129.183	7.279E-02	9.366E-01	-2.542E-10	-2.542E-10	2.542E-10
1.69998	1.0300	1.70000	150.691	7.279E-02	9.304E-01	-1.707E-10	-1.707E-10	1.707E-10
1.79998	1.0324	1.80000	172.201	7.279E-02	9.249E-01	-1.204E-10	-1.204E-10	1.204E-10
1.89998	1.0345	1.90000	193.712	7.279E-02	9.200E-01	-8.495E-11	-8.495E-11	8.495E-11
1.99998	1.0364	2.00000	215.225	7.279E-02	9.155E-01	-6.056E-11	-6.056E-11	6.056E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 1.000 θ_D= 0. ρ_a= 3.755

z	$_x\mu'-1_0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.504E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.501E-10	-6.501E-10
0.20000	1.205E-10	99.802	-8.672E-09	-8.672E-09	8.672E-09	8.672E-09	-9.215E-10	-9.215E-10
0.30000	1.709E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.306E-09	-1.306E-09
0.40000	2.545E-10	199.605	-2.634E-08	-2.634E-08	2.634E-08	2.634E-08	-1.946E-09	-1.946E-09
0.50000	3.795E-10	249.506	-4.195E-08	-4.195E-08	4.195E-08	4.195E-08	-2.902E-09	-2.902E-09
0.60000	6.188E-10	299.407	-6.601E-08	-6.601E-08	6.601E-08	6.601E-08	-4.731E-09	-4.731E-09
0.70000	1.188E-09	349.308	-1.089E-07	-1.089E-07	1.089E-07	1.089E-07	-9.084E-09	-9.084E-09
0.80000	2.976E-09	399.209	-2.027E-07	-2.027E-07	2.027E-07	2.027E-07	-2.276E-08	-2.276E-08
0.85000	5.740E-09	424.160	-3.060E-07	-3.060E-07	3.060E-07	3.060E-07	-4.388E-08	-4.388E-08
0.90000	1.427E-08	449.110	-5.329E-07	-5.329E-07	5.331E-07	5.331E-07	-1.091E-07	-1.091E-07
0.92500	2.598E-08	461.585	-7.764E-07	-7.764E-07	7.775E-07	7.775E-07	-1.986E-07	-1.986E-07
0.95000	6.191E-08	474.060	-1.278E-06	-1.278E-06	1.290E-06	1.290E-06	-4.733E-07	-4.733E-07
0.96250	1.078E-07	480.297	-1.758E-06	-1.758E-06	1.813E-06	1.814E-06	-8.244E-07	-8.244E-07
0.97500	2.441E-07	486.534	-2.609E-06	-2.609E-06	3.008E-06	3.008E-06	-1.866E-06	-1.866E-06
0.98124	3.902E-07	489.653	-3.114E-06	-3.114E-06	4.419E-06	4.419E-06	-2.982E-06	-2.983E-06
0.98749	6.712E-07	492.771	-3.024E-06	-3.025E-06	7.749E-06	7.750E-06	-5.131E-06	-5.131E-06
0.99374	9.963E-07	495.889	6.376E-07	6.369E-07	1.663E-05	1.663E-05	-7.616E-06	-7.616E-06
0.99999	1.210E-06	499.006	1.418E-05	1.418E-05	3.721E-05	3.722E-05	-9.251E-06	-9.251E-06
1.00624	9.811E-07	502.124	3.681E-05	3.681E-05	6.682E-05	6.682E-05	-7.502E-06	-7.501E-06
1.01248	6.550E-07	505.242	5.619E-05	5.619E-05	9.133E-05	9.133E-05	-5.009E-06	-5.008E-06
1.01873	3.805E-07	508.360	6.783E-05	6.783E-05	1.061E-04	1.061E-04	-2.809E-06	-2.909E-06
1.02498	2.391E-07	511.478	7.415E-05	7.415E-05	1.143E-04	1.143E-04	-1.828E-06	-1.828E-06
1.03748	1.061E-07	517.715	7.984E-05	7.984E-05	1.220E-04	1.220E-04	-8.110E-07	-8.110E-07
1.04998	6.122E-08	523.952	8.243E-05	8.243E-05	1.256E-04	1.256E-04	-4.681E-07	-4.680E-07
1.07498	2.579E-08	536.427	8.555E-05	8.555E-05	1.297E-04	1.297E-04	-1.972E-07	-1.972E-07
1.09998	1.416E-08	548.902	8.813E-05	8.813E-05	1.328E-04	1.328E-04	-1.083E-07	-1.083E-07
1.14998	5.715E-09	573.853	9.311E-05	9.311E-05	1.382E-04	1.382E-04	-4.369E-08	-4.369E-08
1.19998	2.967E-09	598.803	9.810E-05	9.809E-05	1.434E-04	1.434E-04	-2.268E-08	-2.268E-08
1.29998	1.186E-09	648.704	1.081E-04	1.081E-04	1.536E-04	1.536E-04	-9.065E-09	-9.065E-09
1.39998	6.178E-10	698.605	1.181E-04	1.181E-04	1.637E-04	1.637E-04	-4.723E-09	-4.723E-09
1.49998	3.791E-10	748.507	1.282E-04	1.282E-04	1.738E-04	1.738E-04	-2.898E-09	-2.898E-09
1.59998	2.542E-10	798.408	1.382E-04	1.382E-04	1.839E-04	1.839E-04	-1.943E-09	-1.943E-09
1.69998	1.707E-10	848.309	1.483E-04	1.483E-04	1.940E-04	1.940E-04	-1.305E-09	-1.305E-09
1.79998	1.204E-10	898.210	1.584E-04	1.584E-04	2.041E-04	2.041E-04	-9.206E-10	-9.206E-10
1.89998	8.495E-11	948.111	1.684E-04	1.684E-04	2.141E-04	2.141E-04	-6.494E-10	-6.494E-10
1.99998	6.056E-11	998.012	1.785E-04	1.785E-04	2.242E-04	2.242E-04	-4.630E-10	-4.630E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 1.000 θ_D= 0. ρ_a= 3.755

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-9.847E-17
0.10000	1.874E-12	1.871E-12	-3.513E-22	-3.513E-22	-4.031E-12	-4.031E-12	-1.321E-16
0.20000	5.232E-12	5.242E-12	-6.121E-22	-6.121E-22	-1.106E-11	-1.106E-11	-1.889E-16
0.30000	1.112E-11	1.111E-11	-1.066E-21	-1.066E-21	-2.330E-11	-2.330E-11	-2.969E-16
0.40000	2.354E-11	2.354E-11	-1.945E-21	-1.945E-21	-4.516E-11	-4.516E-11	-5.025E-16
0.50000	4.669E-11	4.667E-11	-3.554E-21	-3.554E-21	-8.509E-11	-8.509E-11	-1.005E-15
0.60000	1.058E-10	1.057E-10	-7.307E-21	-7.307E-21	-1.615E-10	-1.615E-10	-2.348E-15
0.70000	3.004E-10	3.004E-10	-1.914E-20	-1.914E-20	-3.412E-10	-3.412E-10	-6.846E-15
0.80000	1.231E-09	1.231E-09	-7.615E-20	-7.615E-20	-9.298E-10	-9.298E-10	-3.079E-14
0.85000	3.271E-09	3.271E-09	-2.010E-19	-2.010E-19	-1.870E-09	-1.870E-09	-8.828E-14
0.90000	1.242E-08	1.242E-08	-8.393E-19	-8.393E-19	-5.076E-09	-5.076E-09	-3.860E-13
0.92500	3.013E-08	3.013E-08	-1.908E-18	-1.909E-18	-9.948E-09	-9.948E-09	-1.116E-12
0.95000	1.082E-07	1.082E-07	-6.812E-18	-6.812E-18	-2.363E-08	-2.363E-08	-4.446E-12
0.96250	2.462E-07	2.462E-07	-1.624E-17	-1.624E-17	-4.306E-08	-4.306E-08	-1.128E-11
0.97500	8.280E-07	8.280E-07	-5.962E-17	-5.963E-17	-1.038E-07	-1.038E-07	-3.121E-11
0.98124	1.758E-06	1.758E-06	-1.245E-16	-1.245E-16	-1.847E-07	-1.847E-07	-5.560E-11
0.98749	4.256E-06	4.257E-06	-2.986E-16	-2.987E-16	-3.714E-07	-3.714E-07	-9.312E-11
0.99374	1.223E-05	1.223E-05	-5.665E-16	-5.666E-16	-7.738E-07	-7.739E-07	-1.500E-10
0.99999	3.238E-05	3.239E-05	-7.743E-16	-7.743E-16	-1.421E-06	-1.421E-06	-1.743E-10
1.00624	5.163E-05	5.163E-05	-5.535E-16	-5.534E-16	-2.059E-06	-2.059E-06	-1.473E-10
1.01248	5.907E-05	5.907E-05	-2.872E-16	-2.871E-16	-2.449E-06	-2.449E-06	-9.081E-11
1.01873	6.154E-05	6.154E-05	-1.198E-16	-1.198E-16	-2.628E-06	-2.628E-06	-5.412E-11
1.02498	6.238E-05	6.238E-05	-5.771E-17	-5.770E-17	-2.706E-06	-2.706E-06	-3.034E-11
1.03748	6.245E-05	6.245E-05	-1.583E-17	-1.583E-17	-2.765E-06	-2.765E-06	-1.103E-11
1.04998	6.193E-05	6.193E-05	-6.695E-18	-6.695E-18	-2.784E-06	-2.784E-06	-4.355E-12
1.07498	6.072E-05	6.072E-05	-1.890E-18	-1.890E-18	-2.797E-06	-2.797E-06	-1.099E-12
1.09998	5.952E-05	5.952E-05	-8.309E-19	-8.309E-19	-2.802E-06	-2.802E-06	-3.825E-13
1.14998	5.729E-05	5.729E-05	-1.998E-19	-1.998E-19	-2.805E-06	-2.805E-06	-8.771E-14
1.19998	5.524E-05	5.524E-05	-7.578E-20	-7.578E-20	-2.806E-06	-2.806E-06	-3.065E-14
1.29998	5.155E-05	5.155E-05	-1.908E-20	-1.908E-20	-2.807E-06	-2.807E-06	-6.830E-15
1.39998	4.833E-05	4.833E-05	-7.290E-21	-7.290E-21	-2.807E-06	-2.807E-06	-2.345E-15
1.49998	4.549E-05	4.549E-05	-3.547E-21	-3.547E-21	-2.807E-06	-2.807E-06	-1.004E-15
1.59998	4.297E-05	4.297E-05	-1.942E-21	-1.942E-21	-2.807E-06	-2.807E-06	-5.025E-16
1.69998	4.071E-05	4.071E-05	-1.065E-21	-1.065E-21	-2.807E-06	-2.807E-06	-2.970E-16
1.79998	3.868E-05	3.868E-05	-6.110E-22	-6.110E-22	-2.807E-06	-2.807E-06	-1.891E-16
1.89998	3.684E-05	3.684E-05	-3.507E-22	-3.507E-22	-2.807E-06	-2.807E-06	-1.323E-16
1.99998	3.517E-05	3.517E-05	-2.011E-22	-2.011E-22	-2.807E-06	-2.807E-06	-9.866E-17

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.506

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.2000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	1.2000	0.10000	193.648	1.034E-07	1.000E-00	-8.503E-11	-8.503E-11	8.503E-11
0.20000	1.2000	0.20000	172.139	1.934E-07	1.000E-00	-1.205E-10	-1.205E-10	1.205E-10
0.30000	1.2000	0.30000	150.631	2.868E-07	1.000E-00	-1.708E-10	-1.708E-10	1.708E-10
0.40000	1.2000	0.40000	129.127	4.269E-07	1.000E-00	-2.544E-10	-2.544E-10	2.544E-10
0.50000	1.2000	0.50000	107.627	5.870E-07	9.999E-01	-3.794E-10	-3.794E-10	3.794E-10
0.60000	1.2000	0.60000	86.134	6.136E-07	9.999E-01	-6.185E-10	-6.185E-10	6.185E-10
0.70000	1.2000	0.70000	64.658	2.535E-06	9.998E-01	-1.187E-09	-1.187E-09	1.187E-09
0.80000	1.2000	0.80000	43.220	8.751E-06	9.995E-01	-2.968E-09	-2.968E-09	2.968E-09
0.85000	1.2000	0.85000	32.540	2.236E-05	9.991E-01	-5.709E-09	-5.709E-09	5.709E-09
0.90000	1.2000	0.90000	21.937	7.631E-05	9.981E-01	-1.406E-08	-1.406E-08	1.406E-08
0.92500	1.2000	0.92500	16.709	1.782E-04	9.971E-01	-2.548E-08	-2.548E-08	2.548E-08
0.95000	1.2000	0.95000	11.620	5.571E-04	9.955E-01	-5.913E-08	-5.913E-08	5.913E-08
0.96250	1.2000	0.96250	9.201	1.163E-03	9.955E-01	-9.846E-08	-9.846E-08	9.846E-08
0.97500	1.2000	0.97500	6.981	2.894E-03	9.994E-01	-2.059E-07	-2.059E-07	2.058E-07
0.98125	1.2001	0.98125	6.017	4.845E-03	1.004E 00	-2.972E-07	-2.972E-07	2.972E-07
0.98749	1.2001	0.98750	5.224	8.351E-03	1.009E 00	-4.523E-07	-4.523E-07	4.523E-07
0.99374	1.2002	0.99375	4.690	1.415E-02	1.006E 00	-6.343E-07	-6.344E-07	6.343E-07
0.99999	1.2003	1.00000	4.507	2.197E-02	9.997E-01	-7.122E-07	-7.122E-07	7.122E-07
1.00624	1.2005	1.00625	4.717	2.974E-02	1.006E 00	-6.236E-07	-6.236E-07	6.236E-07
1.01249	1.2007	1.01250	5.273	3.536E-02	1.009E 00	-4.387E-07	-4.386E-07	4.387E-07
1.01874	1.2009	1.01875	6.080	3.872E-02	1.003E 00	-2.902E-07	-2.901E-07	2.902E-07
1.02499	1.2011	1.02500	7.054	4.060E-02	9.978E-01	-2.003E-07	-2.002E-07	2.003E-07
1.03749	1.2016	1.03750	9.283	4.224E-02	9.925E-01	-9.625E-08	-9.625E-08	9.625E-08
1.04999	1.2021	1.05000	11.708	4.283E-02	9.912E-01	-5.821E-08	-5.821E-08	5.822E-08
1.07499	1.2030	1.07500	16.800	4.321E-02	9.905E-01	-2.522E-08	-2.521E-08	2.522E-08
1.09999	1.2040	1.10000	22.029	4.331E-02	9.895E-01	-1.392E-08	-1.392E-08	1.392E-08
1.14999	1.2057	1.15000	32.634	4.337E-02	9.868E-01	-5.674E-09	-5.674E-09	5.674E-09
1.19998	1.2072	1.20000	43.314	4.339E-02	9.839E-01	-2.954E-09	-2.954E-09	2.954E-09
1.29998	1.2100	1.30000	64.752	4.340E-02	9.782E-01	-1.183E-09	-1.183E-09	1.183E-09
1.39998	1.2124	1.40000	86.229	4.340E-02	9.732E-01	-6.171E-10	-6.171E-10	6.171E-10
1.49998	1.2145	1.50000	107.721	4.341E-02	9.688E-01	-3.788E-10	-3.788E-10	3.788E-10
1.59998	1.2163	1.60000	129.221	4.341E-02	9.650E-01	-2.540E-10	-2.540E-10	2.540E-10
1.69998	1.2179	1.70000	150.726	4.341E-02	9.616E-01	-1.706E-10	-1.706E-10	1.706E-10
1.79998	1.2193	1.80000	172.233	4.341E-02	9.585E-01	-1.203E-10	-1.203E-10	1.203E-10
1.89998	1.2206	1.90000	193.743	4.341E-02	9.558E-01	-8.490E-11	-8.490E-11	8.490E-11
1.99998	1.2217	2.00000	215.253	4.341E-02	9.534E-01	-6.053E-11	-6.053E-11	6.053E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.506

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.503E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.501E-10	-6.501E-10
0.20000	1.205E-10	99.802	-8.672E-09	-8.672E-09	8.672E-09	8.672E-09	-9.215E-10	-9.215E-10
0.30000	1.708E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.306E-09	-1.306E-09
0.40000	2.544E-10	199.605	-2.633E-08	-2.633E-08	2.633E-08	2.633E-08	-1.945E-09	-1.945E-09
0.50000	3.794E-10	249.506	-4.194E-08	-4.194E-08	4.194E-08	4.194E-08	-2.901E-09	-2.901E-09
0.60000	6.185E-10	299.407	-6.600E-08	-6.600E-08	6.600E-08	6.600E-08	-4.729E-09	-4.729E-09
0.70000	1.187E-09	349.308	-1.089E-07	-1.089E-07	1.089E-07	1.089E-07	-9.074E-09	-9.074E-09
0.80000	2.968E-09	399.209	-2.025E-07	-2.025E-07	2.025E-07	2.025E-07	-2.269E-08	-2.269E-08
0.85000	5.709E-09	424.160	-3.053E-07	-3.053E-07	3.053E-07	3.053E-07	-4.365E-08	-4.365E-08
0.90000	1.406E-08	449.110	-5.301E-07	-5.301E-07	5.303E-07	5.303E-07	-1.075E-07	-1.075E-07
0.92500	2.548E-08	461.585	-7.695E-07	-7.695E-07	7.706E-07	7.706E-07	-1.948E-07	-1.948E-07
0.95000	5.913E-08	474.060	-1.253E-06	-1.253E-06	1.264E-06	1.264E-06	-4.520E-07	-4.521E-07
0.96250	9.846E-08	480.298	-1.703E-06	-1.703E-06	1.753E-06	1.753E-06	-7.527E-07	-7.528E-07
0.97500	2.059E-07	486.535	-2.464E-06	-2.464E-06	2.774E-06	2.774E-06	-1.574E-06	-1.574E-06
0.98125	2.972E-07	489.653	-2.960E-06	-2.960E-06	3.835E-06	3.836E-06	-2.272E-06	-2.272E-06
0.98749	4.523E-07	492.771	-3.244E-06	-3.245E-06	5.861E-06	5.862E-06	-3.458E-06	-3.458E-06
0.99374	6.344E-07	495.890	-2.480E-06	-2.481E-06	1.004E-05	1.004E-05	-4.850E-06	-4.850E-06
0.99999	7.122E-07	499.008	7.745E-07	7.741E-07	1.757E-05	1.757E-05	-5.445E-06	-5.445E-06
1.00624	6.236E-07	502.126	6.385E-06	6.384E-06	2.743E-05	2.743E-05	-4.768E-06	-4.767E-06
1.01249	4.386E-07	505.244	1.186E-05	1.186E-05	3.624E-05	3.624E-05	-3.354E-06	-3.353E-06
1.01874	2.901E-07	508.362	1.571E-05	1.571E-05	4.233E-05	4.233E-05	-2.218E-06	-2.218E-06
1.02499	2.002E-07	511.481	1.803E-05	1.803E-05	4.617E-05	4.617E-05	-1.531E-06	-1.531E-06
1.03749	9.624E-08	517.718	2.024E-05	2.024E-05	5.012E-05	5.012E-05	-7.359E-07	-7.358E-07
1.04999	5.821E-08	523.955	2.121E-05	2.121E-05	5.200E-05	5.200E-05	-4.451E-07	-4.451E-07
1.07499	2.521E-08	536.430	2.225E-05	2.225E-05	5.401E-05	5.401E-05	-1.928E-07	-1.928E-07
1.09999	1.392E-08	548.906	2.309E-05	2.309E-05	5.533E-05	5.533E-05	-1.064E-07	-1.064E-07
1.14999	5.674E-09	573.856	2.477E-05	2.477E-05	5.745E-05	5.745E-05	-4.338E-08	-4.338E-08
1.19998	2.954E-09	598.806	2.649E-05	2.649E-05	5.938E-05	5.938E-05	-2.258E-08	-2.258E-08
1.29998	1.183E-09	648.707	2.999E-05	2.999E-05	6.306E-05	6.306E-05	-9.047E-09	-9.047E-09
1.39998	6.171E-10	698.609	3.354E-05	3.354E-05	6.669E-05	6.669E-05	-4.718E-09	-4.718E-09
1.49998	3.788E-10	748.510	3.710E-05	3.710E-05	7.030E-05	7.030E-05	-2.896E-09	-2.896E-09
1.59998	2.540E-10	798.411	4.067E-05	4.067E-05	7.391E-05	7.391E-05	-1.942E-09	-1.942E-09
1.69998	1.706E-10	848.312	4.424E-05	4.424E-05	7.750E-05	7.750E-05	-1.304E-09	-1.304E-09
1.79998	1.203E-10	898.213	4.781E-05	4.781E-05	8.108E-05	8.108E-05	-9.201E-10	-9.201E-10
1.89998	8.490E-11	948.114	5.139E-05	5.139E-05	8.467E-05	8.467E-05	-6.491E-10	-6.491E-10
1.99998	6.053E-11	998.015	5.496E-05	5.496E-05	8.825E-05	8.825E-05	-4.628E-10	-4.628E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 1.200 θ_D= 0. ρ_0= 4.506

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-1.418E-16
0.10000	2.253E-12	2.250E-12	-3.513E-22	-3.513E-22	-4.031E-12	-4.031E-12	-1.902E-16
0.20000	6.289E-12	6.293E-12	-6.120E-22	-6.120E-22	-1.106E-11	-1.106E-11	-2.720E-16
0.30000	1.333E-11	1.334E-11	-1.066E-21	-1.066E-21	-2.330E-11	-2.330E-11	-4.274E-16
0.40000	2.825E-11	2.825E-11	-1.945E-21	-1.945E-21	-4.515E-11	-4.515E-11	-7.233E-16
0.50000	5.601E-11	5.601E-11	-3.552E-21	-3.552E-21	-8.507E-11	-8.507E-11	-1.447E-15
0.60000	1.268E-10	1.268E-10	-7.302E-21	-7.302E-21	-1.614E-10	-1.614E-10	-3.378E-15
0.70000	3.601E-10	3.601E-10	-1.911E-20	-1.911E-20	-3.409E-10	-3.409E-10	-9.838E-15
0.80000	1.473E-09	1.473E-09	-7.582E-20	-7.583E-20	-9.276E-10	-9.276E-10	-4.411E-14
0.85000	3.902E-09	3.901E-09	-1.995E-19	-1.995E-19	-1.862E-09	-1.862E-09	-1.259E-13
0.90000	1.466E-08	1.466E-08	-8.228E-19	-8.228E-19	-5.020E-09	-5.020E-09	-5.446E-13
0.92500	3.535E-08	3.535E-08	-1.858E-18	-1.858E-18	-9.778E-09	-9.778E-09	-1.539E-12
0.95000	1.225E-07	1.225E-07	-6.342E-18	-6.342E-18	-2.269E-08	-2.269E-08	-5.863E-12
0.96250	2.625E-07	2.626E-07	-1.408E-17	-1.408E-17	-4.014E-08	-4.014E-08	-1.429E-11
0.97500	8.045E-07	8.046E-07	-4.541E-17	-4.541E-17	-8.860E-08	-8.861E-08	-3.581E-11
0.98125	1.561E-06	1.562E-06	-8.166E-17	-8.167E-17	-1.467E-07	-1.467E-07	-6.051E-11
0.98749	3.370E-06	3.371E-06	-1.573E-16	-1.573E-16	-2.549E-07	-2.549E-07	-9.283E-11
0.99374	7.976E-06	7.978E-06	-2.725E-16	-2.726E-16	-4.562E-07	-4.563E-07	-1.265E-10
0.99999	1.720E-05	1.720E-05	-3.289E-16	-3.289E-16	-7.460E-07	-7.461E-07	-1.430E-10
1.00624	2.599E-05	2.600E-05	-2.651E-16	-2.651E-16	-1.032E-06	-1.032E-06	-1.243E-10
1.01249	3.021E-05	3.021E-05	-1.497E-16	-1.497E-16	-1.226E-06	-1.226E-06	-9.059E-11
1.01874	3.194E-05	3.194E-05	-7.860E-17	-7.858E-17	-1.329E-06	-1.329E-06	-5.825E-11
1.02499	3.265E-05	3.265E-05	-4.345E-17	-4.345E-17	-1.385E-06	-1.385E-06	-3.462E-11
1.03749	3.295E-05	3.295E-05	-1.359E-17	-1.359E-17	-1.431E-06	-1.431E-06	-1.387E-11
1.04999	3.274E-05	3.274E-05	-6.190E-18	-6.189E-18	-1.448E-06	-1.448E-06	-5.699E-12
1.07499	3.208E-05	3.208E-05	-1.832E-18	-1.832E-18	-1.461E-06	-1.461E-06	-1.507E-12
1.09999	3.141E-05	3.141E-05	-8.110E-19	-8.110E-19	-1.466E-06	-1.466E-06	-5.372E-13
1.14999	3.013E-05	3.013E-05	-1.976E-19	-1.976E-19	-1.469E-06	-1.469E-06	-1.247E-13
1.19998	2.897E-05	2.897E-05	-7.530E-20	-7.530E-20	-1.470E-06	-1.470E-06	-4.381E-14
1.29998	2.690E-05	2.690E-05	-1.902E-20	-1.902E-20	-1.470E-06	-1.470E-06	-9.798E-15
1.39998	2.510E-05	2.510E-05	-7.276E-21	-7.276E-21	-1.470E-06	-1.470E-06	-3.369E-15
1.49998	2.354E-05	2.354E-05	-3.543E-21	-3.543E-21	-1.470E-06	-1.470E-06	-1.444E-15
1.59998	2.215E-05	2.215E-05	-1.940E-21	-1.940E-21	-1.470E-06	-1.471E-06	-7.228E-16
1.69998	2.092E-05	2.092E-05	-1.064E-21	-1.064E-21	-1.471E-06	-1.471E-06	-4.274E-16
1.79998	1.982E-05	1.982E-05	-6.105E-22	-6.105E-22	-1.471E-06	-1.471E-06	-2.721E-16
1.89998	1.883E-05	1.883E-05	-3.504E-22	-3.504E-22	-1.471E-06	-1.471E-06	-1.904E-16
1.99998	1.794E-05	1.794E-05	-2.009E-22	-2.009E-22	-1.471E-06	-1.471E-06	-1.420E-16

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 1.500 θ_D= 0. ρ_0= 5.632

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	1.5000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	1.5000	0.10000	193.651	1.701E-07	1.000E-00	-8.503E-11	-8.503E-11	8.503E-11
0.20000	1.5000	0.20000	172.146	2.401E-07	1.000E-00	-1.205E-10	-1.205E-10	1.205E-10
0.30000	1.5000	0.30000	150.643	3.669E-07	9.999E-01	-1.708E-10	-1.708E-10	1.708E-10
0.40000	1.5000	0.40000	129.145	5.870E-07	9.999E-01	-2.543E-10	-2.543E-10	2.543E-10
0.50000	1.5000	0.50000	107.653	9.338E-07	9.999E-01	-3.793E-10	-3.793E-10	3.793E-10
0.60000	1.5000	0.60000	86.174	9.872E-07	9.998E-01	-6.179E-10	-6.179E-10	6.179E-10
0.70000	1.5000	0.70000	64.720	3.895E-06	9.996E-01	-1.185E-09	-1.185E-09	1.185E-09
0.80000	1.5000	0.80000	43.326	1.270E-05	9.990E-01	-2.952E-09	-2.952E-09	2.952E-09
0.85000	1.5000	0.85000	32.689	3.287E-05	9.982E-01	-5.653E-09	-5.653E-09	5.653E-09
0.90000	1.5000	0.90000	22.170	1.102E-04	9.965E-01	-1.369E-08	-1.369E-08	1.369E-08
0.92500	1.5000	0.92500	17.022	2.484E-04	9.951E-01	-2.459E-08	-2.459E-08	2.459E-08
0.95000	1.5000	0.95000	12.078	7.372E-04	9.942E-01	-5.448E-08	-5.448E-08	5.448E-08
0.96250	1.5000	0.96250	9.780	1.460E-03	9.964E-01	-8.394E-08	-8.395E-08	8.394E-08
0.97500	1.5001	0.97500	7.738	3.256E-03	1.004E 00	-1.543E-07	-1.543E-07	1.543E-07
0.98125	1.5001	0.98125	6.886	5.013E-03	1.010E 00	-2.135E-07	-2.135E-07	2.135E-07
0.98749	1.5001	0.98750	6.211	7.745E-03	1.012E 00	-2.761E-07	-2.761E-07	2.761E-07
0.99374	1.5002	0.99375	5.775	1.164E-02	1.006E 00	-3.362E-07	-3.363E-07	3.362E-07
0.99999	1.5003	1.00000	5.634	1.639E-02	9.998E-01	-3.618E-07	-3.618E-07	3.618E-07
1.00624	1.5004	1.00625	5.809	2.108E-02	1.007E 00	-3.303E-07	-3.303E-07	3.303E-07
1.01249	1.5005	1.01250	6.274	2.485E-02	1.013E 00	-2.695E-07	-2.695E-07	2.695E-07
1.01874	1.5007	1.01875	6.972	2.746E-02	1.010E 00	-2.066E-07	-2.066E-07	2.066E-07
1.02499	1.5009	1.02500	7.840	2.913E-02	1.004E 00	-1.484E-07	-1.484E-07	1.484E-07
1.03749	1.5012	1.03750	9.901	3.082E-02	9.953E-01	-8.120E-08	-8.119E-08	8.120E-08
1.04999	1.5016	1.05000	12.209	3.152E-02	9.920E-01	-5.322E-08	-5.322E-08	5.322E-08
1.07499	1.5023	1.07500	17.162	3.200E-02	9.911E-01	-2.420E-08	-2.420E-08	2.420E-08
1.09999	1.5029	1.10000	22.312	3.214E-02	9.911E-01	-1.347E-08	-1.347E-08	1.347E-08
1.14999	1.5042	1.15000	32.834	3.222E-02	9.904E-01	-5.599E-09	-5.599E-09	5.599E-09
1.19999	1.5054	1.20000	43.472	3.225E-02	9.891E-01	-2.930E-09	-2.930E-09	2.930E-09
1.29999	1.5075	1.30000	64.867	3.226E-02	9.860E-01	-1.179E-09	-1.179E-09	1.179E-09
1.39999	1.5092	1.40000	86.321	3.227E-02	9.830E-01	-6.156E-10	-6.156E-10	6.156E-10
1.49999	1.5108	1.50000	107.801	3.227E-02	9.803E-01	-3.782E-10	-3.782E-10	3.782E-10
1.59999	1.5121	1.60000	129.292	3.227E-02	9.780E-01	-2.536E-10	-2.536E-10	2.536E-10
1.69999	1.5133	1.70000	150.790	3.228E-02	9.759E-01	-1.704E-10	-1.704E-10	1.704E-10
1.79999	1.5144	1.80000	172.293	3.228E-02	9.740E-01	-1.202E-10	-1.202E-10	1.202E-10
1.89999	1.5153	1.90000	193.799	3.228E-02	9.723E-01	-8.483E-11	-8.483E-11	8.483E-11
1.99999	1.5161	2.00000	215.306	3.228E-02	9.708E-01	-6.048E-11	-6.048E-11	6.048E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 1.500 θ_D= 0. ρ_a= 5.632

z	$_x\mu'-1_0$	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.503E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.501E-10	-6.501E-10
0.20000	1.205E-10	99.802	-8.671E-09	-8.671E-09	8.671E-09	8.671E-09	-9.214E-10	-9.214E-10
0.30000	1.708E-10	149.703	-1.587E-08	-1.587E-08	1.587E-08	1.587E-08	-1.306E-09	-1.306E-09
0.40000	2.543E-10	199.605	-2.633E-08	-2.633E-08	2.633E-08	2.633E-08	-1.945E-09	-1.945E-09
0.50000	3.793E-10	249.506	-4.193E-08	-4.193E-08	4.193E-08	4.193E-08	-2.900E-09	-2.900E-09
0.60000	6.179E-10	299.407	-6.597E-08	-6.597E-08	6.597E-08	6.597E-08	-4.724E-09	-4.724E-09
0.70000	1.185E-09	349.308	-1.088E-07	-1.088E-07	1.088E-07	1.088E-07	-9.056E-09	-9.056E-09
0.80000	2.952E-09	399.209	-2.020E-07	-2.020E-07	2.020E-07	2.020E-07	-2.257E-08	-2.257E-08
0.85000	5.653E-09	424.160	-3.040E-07	-3.041E-07	3.041E-07	3.041E-07	-4.322E-08	-4.322E-08
0.90000	1.369E-08	449.110	-5.250E-07	-5.250E-07	5.254E-07	5.254E-07	-1.047E-07	-1.047E-07
0.92500	2.459E-08	461.585	-7.565E-07	-7.565E-07	7.587E-07	7.587E-07	-1.880E-07	-1.880E-07
0.95000	5.448E-08	474.060	-1.205E-06	-1.205E-06	1.225E-06	1.225E-06	-4.165E-07	-4.165E-07
0.96250	8.395E-08	480.297	-1.598E-06	-1.598E-06	1.676E-06	1.676E-06	-6.418E-07	-6.418E-07
0.97500	1.543E-07	486.535	-2.153E-06	-2.153E-06	2.545E-06	2.546E-06	-1.180E-06	-1.180E-06
0.98125	2.135E-07	489.653	-2.452E-06	-2.452E-06	3.389E-06	3.389E-06	-1.632E-06	-1.632E-06
0.98749	2.761E-07	492.771	-2.559E-06	-2.559E-06	4.810E-06	4.810E-06	-2.111E-06	-2.111E-06
0.99374	3.363E-07	495.890	-2.081E-06	-2.081E-06	7.198E-06	7.198E-06	-2.571E-06	-2.571E-06
0.99999	3.618E-07	499.008	-6.393E-07	-6.395E-07	1.085E-05	1.085E-05	-2.766E-06	-2.766E-06
1.00624	3.303E-07	502.126	1.663E-06	1.663E-06	1.533E-05	1.533E-05	-2.525E-06	-2.525E-06
1.01249	2.695E-07	505.245	4.114E-06	4.114E-06	1.965E-05	1.965E-05	-2.060E-06	-2.060E-06
1.01874	2.066E-07	508.363	6.087E-06	6.087E-06	2.311E-05	2.311E-05	-1.580E-06	-1.579E-06
1.02499	1.484E-07	511.482	7.468E-06	7.468E-06	2.559E-05	2.559E-05	-1.135E-06	-1.135E-06
1.03749	8.119E-08	517.719	8.976E-06	8.976E-06	2.848E-05	2.848E-05	-6.208E-07	-6.208E-07
1.04999	5.322E-08	523.956	9.653E-06	9.653E-06	2.999E-05	2.999E-05	-4.069E-07	-4.069E-07
1.07499	2.420E-08	536.431	1.030E-05	1.030E-05	3.153E-05	3.153E-05	-1.850E-07	-1.850E-07
1.09999	1.347E-08	548.906	1.075E-05	1.075E-05	3.244E-05	3.244E-05	-1.030E-07	-1.030E-07
1.14999	5.599E-09	573.857	1.163E-05	1.163E-05	3.375E-05	3.375E-05	-4.281E-08	-4.281E-08
1.19999	2.930E-09	598.807	1.255E-05	1.255E-05	3.487E-05	3.487E-05	-2.240E-08	-2.240E-08
1.29999	1.179E-09	648.708	1.445E-05	1.445E-05	3.697E-05	3.697E-05	-9.013E-09	-9.013E-09
1.39999	6.156E-10	698.609	1.640E-05	1.640E-05	3.900E-05	3.900E-05	-4.707E-09	-4.707E-09
1.49999	3.782E-10	748.510	1.835E-05	1.835E-05	4.100E-05	4.100E-05	-2.892E-09	-2.892E-09
1.59999	2.536E-10	798.411	2.032E-05	2.032E-05	4.300E-05	4.300E-05	-1.939E-09	-1.939E-09
1.69999	1.704E-10	848.313	2.230E-05	2.230E-05	4.500E-05	4.500E-05	-1.303E-09	-1.303E-09
1.79999	1.202E-10	898.214	2.428E-05	2.428E-05	4.699E-05	4.699E-05	-9.192E-10	-9.192E-10
1.89999	8.483E-11	948.115	2.625E-05	2.625E-05	4.897E-05	4.897E-05	-6.485E-10	-6.485E-10
1.99999	6.048E-11	998.016	2.823E-05	2.823E-05	5.096E-05	5.096E-05	-4.624E-10	-4.624E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 1.500 θ_D= 0. ρ_a= 5.632

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-2.215E-16
0.10000	2.816E-12	2.817E-12	-3.512E-22	-3.512E-22	-4.031E-12	-4.031E-12	-2.971E-16
0.20000	7.864E-12	7.866E-12	-6.119E-22	-6.119E-22	-1.106E-11	-1.106E-11	-4.249E-16
0.30000	1.667E-11	1.666E-11	-1.066E-21	-1.066E-21	-2.329E-11	-2.329E-11	-6.676E-16
0.40000	3.531E-11	3.531E-11	-1.944E-21	-1.944E-21	-4.514E-11	-4.514E-11	-1.130E-15
0.50000	6.996E-11	6.996E-11	-3.550E-21	-3.550E-21	-8.503E-11	-8.504E-11	-2.258E-15
0.60000	1.584E-10	1.584E-10	-7.291E-21	-7.291E-21	-1.613E-10	-1.613E-10	-5.268E-15
0.70000	4.490E-10	4.490E-10	-1.905E-20	-1.905E-20	-3.403E-10	-3.403E-10	-1.531E-14
0.80000	1.830E-09	1.830E-09	-7.523E-20	-7.523E-20	-9.236E-10	-9.236E-10	-6.828E-14
0.85000	4.804E-09	4.804E-09	-1.966E-19	-1.966E-19	-1.846E-09	-1.846E-09	-1.933E-13
0.90000	1.768E-08	1.768E-08	-7.934E-19	-7.935E-19	-4.919E-09	-4.919E-09	-8.200E-13
0.92500	4.202E-08	4.202E-08	-1.769E-18	-1.769E-18	-9.477E-09	-9.477E-09	-2.229E-12
0.95000	1.368E-07	1.369E-07	-5.581E-18	-5.582E-18	-2.116E-08	-2.116E-08	-7.884E-12
0.96250	2.738E-07	2.738E-07	-1.096E-17	-1.096E-17	-3.590E-08	-3.590E-08	-1.815E-11
0.97500	7.255E-07	7.256E-07	-2.865E-17	-2.865E-17	-6.955E-08	-6.956E-08	-4.026E-11
0.98125	1.284E-06	1.284E-06	-4.812E-17	-4.813E-17	-1.049E-07	-1.050E-07	-5.860E-11
0.98749	2.466E-06	2.466E-06	-7.259E-17	-7.259E-17	-1.612E-07	-1.612E-07	-8.417E-11
0.99374	4.914E-06	4.914E-06	-9.892E-17	-9.892E-17	-2.412E-07	-2.412E-07	-1.070E-10
0.99999	9.043E-06	9.044E-06	-1.108E-16	-1.108E-16	-3.412E-07	-3.413E-07	-1.153E-10
1.00624	1.296E-05	1.296E-05	-9.623E-17	-9.623E-17	-4.399E-07	-4.399E-07	-1.051E-10
1.01249	1.514E-05	1.514E-05	-6.984E-17	-6.983E-17	-5.172E-07	-5.172E-07	-8.115E-11
1.01874	1.623E-05	1.623E-05	-4.567E-17	-4.567E-17	-5.710E-07	-5.710E-07	-5.624E-11
1.02499	1.676E-05	1.677E-05	-2.693E-17	-2.692E-17	-6.044E-07	-6.044E-07	-3.871E-11
1.03749	1.714E-05	1.714E-05	-1.040E-17	-1.040E-17	-6.364E-07	-6.364E-07	-1.745E-11
1.04999	1.712E-05	1.712E-05	-5.382E-18	-5.382E-18	-6.507E-07	-6.507E-07	-7.572E-12
1.07499	1.683E-05	1.683E-05	-1.731E-18	-1.731E-18	-6.620E-07	-6.620E-07	-2.159E-12
1.09999	1.647E-05	1.647E-05	-7.760E-19	-7.760E-19	-6.665E-07	-6.665E-07	-8.029E-13
1.14999	1.578E-05	1.578E-05	-1.938E-19	-1.938E-19	-6.695E-07	-6.695E-07	-1.903E-13
1.19999	1.515E-05	1.515E-05	-7.442E-20	-7.442E-20	-6.704E-07	-6.704E-07	-6.750E-14
1.29999	1.403E-05	1.403E-05	-1.892E-20	-1.892E-20	-6.710E-07	-6.710E-07	-1.520E-14
1.39999	1.306E-05	1.306E-05	-7.252E-21	-7.252E-21	-6.712E-07	-6.712E-07	-5.242E-15
1.49999	1.223E-05	1.223E-05	-3.535E-21	-3.535E-21	-6.712E-07	-6.712E-07	-2.250E-15
1.59999	1.149E-05	1.149E-05	-1.936E-21	-1.936E-21	-6.713E-07	-6.713E-07	-1.127E-15
1.69999	1.084E-05	1.084E-05	-1.062E-21	-1.062E-21	-6.713E-07	-6.713E-07	-6.667E-16
1.79999	1.025E-05	1.025E-05	-6.096E-22	-6.096E-22	-6.713E-07	-6.713E-07	-4.247E-16
1.89999	9.732E-06	9.732E-06	-3.499E-22	-3.499E-22	-6.713E-07	-6.713E-07	-2.972E-16
1.99999	9.260E-06	9.260E-06	-2.006E-22	-2.006E-22	-6.713E-07	-6.713E-07	-2.217E-16

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 2.000 θ_0= 0. ρ_a= 7.509

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	2.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	2.0000	0.10000	193.658	1.651E-07	9.999E-01	-8.502E-11	-8.502E-11	8.502E-11
0.20000	2.0000	0.20000	172.160	3.402E-07	9.999E-01	-1.205E-10	-1.205E-10	1.205E-10
0.30000	2.0000	0.30000	150.667	4.869E-07	9.998E-01	-1.707E-10	-1.707E-10	1.707E-10
0.40000	2.0000	0.40000	129.183	8.138E-07	9.998E-01	-2.542E-10	-2.542E-10	2.542E-10
0.50000	2.0000	0.50000	107.710	1.041E-06	9.997E-01	-3.789E-10	-3.789E-10	3.789E-10
0.60000	2.0000	0.60000	86.260	1.174E-06	9.994E-01	-6.166E-10	-6.166E-10	6.166E-10
0.70000	2.0000	0.70000	64.853	4.749E-06	9.990E-01	-1.179E-09	-1.179E-09	1.179E-09
0.80000	2.0000	0.80000	43.553	1.590E-05	9.978E-01	-2.919E-09	-2.919E-09	2.919E-09
0.85000	2.0000	0.85000	33.008	3.917E-05	9.963E-01	-5.535E-09	-5.536E-09	5.535E-09
0.90000	2.0000	0.90000	22.665	1.300E-04	9.939E-01	-1.297E-08	-1.297E-08	1.297E-08
0.92500	2.0000	0.92500	17.680	2.826E-04	9.929E-01	-2.281E-08	-2.281E-08	2.281E-08
0.95000	2.0000	0.95000	13.012	7.778E-04	9.961E-01	-4.609E-08	-4.609E-08	4.609E-08
0.96250	2.0000	0.96250	10.927	1.425E-03	1.002E 00	-6.694E-08	-6.694E-08	6.694E-08
0.97500	2.0001	0.97500	9.162	2.689E-03	1.012E 00	-9.952E-08	-9.953E-08	9.952E-08
0.98125	2.0001	0.98125	8.463	3.718E-03	1.015E 00	-1.206E-07	-1.206E-07	1.206E-07
0.98750	2.0001	0.98750	7.933	5.080E-03	1.013E 00	-1.432E-07	-1.432E-07	1.432E-07
0.99375	2.0001	0.99375	7.607	6.764E-03	1.005E 00	-1.622E-07	-1.622E-07	1.622E-07
0.99999	2.0002	1.00000	7.511	8.676E-03	9.999E-01	-1.683E-07	-1.683E-07	1.683E-07
1.00624	2.0003	1.00625	7.653	1.057E-02	1.006E 00	-1.594E-07	-1.594E-07	1.594E-07
1.01249	2.0003	1.01250	8.022	1.225E-02	1.014E 00	-1.385E-07	-1.385E-07	1.385E-07
1.01874	2.0004	1.01875	8.587	1.355E-02	1.017E 00	-1.166E-07	-1.166E-07	1.166E-07
1.02499	2.0005	1.02500	9.314	1.449E-02	1.014E 00	-9.543E-08	-9.543E-08	9.543E-08
1.03749	2.0007	1.03750	11.119	1.566E-02	1.003E 00	-6.468E-08	-6.468E-08	6.468E-08
1.04999	2.0008	1.05000	13.227	1.625E-02	9.964E-01	-4.435E-08	-4.435E-08	4.435E-08
1.07499	2.0012	1.07500	17.918	1.671E-02	9.918E-01	-2.221E-08	-2.221E-08	2.221E-08
1.09999	2.0016	1.10000	22.913	1.687E-02	9.916E-01	-1.268E-08	-1.268E-08	1.268E-08
1.14999	2.0022	1.15000	33.264	1.696E-02	9.925E-01	-5.443E-09	-5.443E-09	5.443E-09
1.19999	2.0028	1.20000	43.811	1.698E-02	9.928E-01	-2.881E-09	-2.881E-09	2.881E-09
1.29999	2.0039	1.30000	65.113	1.701E-02	9.923E-01	-1.169E-09	-1.169E-09	1.169E-09
1.39999	2.0049	1.40000	86.521	1.701E-02	9.913E-01	-6.126E-10	-6.126E-10	6.126E-10
1.49999	2.0057	1.50000	107.972	1.701E-02	9.903E-01	-3.770E-10	-3.770E-10	3.770E-10
1.59999	2.0064	1.60000	129.444	1.702E-02	9.893E-01	-2.529E-10	-2.529E-10	2.529E-10
1.69999	2.0070	1.70000	150.929	1.702E-02	9.884E-01	-1.700E-10	-1.700E-10	1.700E-10
1.79999	2.0076	1.80000	172.422	1.702E-02	9.875E-01	-1.200E-10	-1.200E-10	1.200E-10
1.89999	2.0081	1.90000	193.920	1.702E-02	9.868E-01	-8.466E-11	-8.466E-11	8.466E-11
1.99999	2.0085	2.00000	215.421	1.702E-02	9.861E-01	-6.037E-11	-6.037E-11	6.037E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 2.000 θ_0= 0. ρ_a= 7.509

z	$_x\mu'$-1.0	T_0	$_0T_t$-T_0	$_xT_t$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.502E-11	49.901	-3.594E-09	-3.594E-09	3.594E-09	3.594E-09	-6.500E-10	-6.500E-10
0.20000	1.205E-10	99.802	-8.670E-09	-8.670E-09	8.670E-09	8.670E-09	-9.212E-10	-9.212E-10
0.30000	1.707E-10	149.703	-1.586E-08	-1.586E-08	1.586E-08	1.586E-08	-1.305E-09	-1.305E-09
0.40000	2.542E-10	199.605	-2.632E-08	-2.632E-08	2.632E-08	2.632E-08	-1.943E-09	-1.943E-09
0.50000	3.789E-10	249.506	-4.191E-08	-4.191E-08	4.191E-08	4.191E-08	-2.896E-09	-2.896E-09
0.60000	6.166E-10	299.407	-6.591E-08	-6.591E-08	6.591E-08	6.591E-08	-4.714E-09	-4.714E-09
0.70000	1.179E-09	349.308	-1.085E-07	-1.085E-07	1.085E-07	1.085E-07	-9.017E-09	-9.017E-09
0.80000	2.919E-09	399.209	-2.011E-07	-2.011E-07	2.011E-07	2.011E-07	-2.231E-08	-2.231E-08
0.85000	5.536E-09	424.160	-3.013E-07	-3.013E-07	3.014E-07	3.014E-07	-4.232E-08	-4.232E-08
0.90000	1.297E-08	449.110	-5.145E-07	-5.145E-07	5.151E-07	5.151E-07	-9.912E-08	-9.913E-08
0.92500	2.281E-08	461.585	-7.310E-07	-7.310E-07	7.338E-07	7.338E-07	-1.744E-07	-1.744E-07
0.95000	4.609E-08	474.060	-1.123E-06	-1.123E-06	1.144E-06	1.144E-06	-3.524E-07	-3.524E-07
0.96250	6.694E-08	480.298	-1.446E-06	-1.446E-06	1.520E-06	1.520E-06	-5.118E-07	-5.118E-07
0.97500	9.953E-08	486.535	-1.855E-06	-1.855E-06	2.123E-06	2.123E-06	-7.609E-07	-7.609E-07
0.98125	1.206E-07	489.653	-2.074E-06	-2.074E-06	2.590E-06	2.590E-06	-9.222E-07	-9.222E-07
0.98750	1.432E-07	492.772	-2.256E-06	-2.256E-06	3.225E-06	3.225E-06	-1.095E-06	-1.095E-06
0.99375	1.622E-07	495.891	-2.356E-06	-2.356E-06	4.084E-06	4.084E-06	-1.240E-06	-1.240E-06
0.99999	1.683E-07	499.009	-2.309E-06	-2.309E-06	5.170E-06	5.170E-06	-1.286E-06	-1.286E-06
1.00624	1.594E-07	502.128	-2.116E-06	-2.116E-06	6.392E-06	6.392E-06	-1.218E-06	-1.218E-06
1.01249	1.385E-07	505.246	-1.833E-06	-1.833E-06	7.609E-06	7.609E-06	-1.059E-06	-1.059E-06
1.01874	1.166E-07	508.365	-1.565E-06	-1.565E-06	8.669E-06	8.669E-06	-8.912E-07	-8.912E-07
1.02499	9.543E-08	511.483	-1.357E-06	-1.357E-06	9.538E-06	9.538E-06	-7.296E-07	-7.296E-07
1.03749	6.468E-08	517.721	-1.099E-06	-1.099E-06	1.077E-05	1.077E-05	-4.945E-07	-4.945E-07
1.04999	4.435E-08	523.958	-1.005E-06	-1.005E-06	1.154E-05	1.154E-05	-3.391E-07	-3.391E-07
1.07499	2.221E-08	536.433	-9.546E-07	-9.546E-07	1.237E-05	1.237E-05	-1.698E-07	-1.698E-07
1.09999	1.268E-08	548.908	-9.257E-07	-9.257E-07	1.282E-05	1.282E-05	-9.697E-08	-9.696E-08
1.14999	5.443E-09	573.859	-7.987E-07	-7.987E-07	1.336E-05	1.336E-05	-4.161E-08	-4.161E-08
1.19999	2.881E-09	598.809	-6.018E-07	-6.018E-07	1.376E-05	1.376E-05	-2.202E-08	-2.202E-08
1.29999	1.169E-09	648.710	-1.265E-07	-1.265E-07	1.442E-05	1.442E-05	-8.941E-09	-8.941E-09
1.39999	6.126E-10	698.611	3.855E-07	3.855E-07	1.501E-05	1.501E-05	-4.683E-09	-4.683E-09
1.49999	3.770E-10	748.512	9.116E-07	9.116E-07	1.559E-05	1.559E-05	-2.882E-09	-2.882E-09
1.59999	2.529E-10	798.414	1.450E-06	1.450E-06	1.616E-05	1.616E-05	-1.934E-09	-1.934E-09
1.69999	1.700E-10	848.315	1.991E-06	1.991E-06	1.672E-05	1.672E-05	-1.300E-09	-1.300E-09
1.79999	1.200E-10	898.216	2.538E-06	2.538E-06	1.728E-05	1.728E-05	-9.173E-10	-9.173E-10
1.89999	8.466E-11	948.117	3.079E-06	3.079E-06	1.783E-05	1.783E-05	-6.473E-10	-6.473E-10
1.99999	6.037E-11	998.018	3.630E-06	3.630E-06	1.839E-05	1.839E-05	-4.616E-10	-4.616E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 2.000 θ_D= 0. ρ_a= 7.509

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-3.937E-16
0.10000	3.755E-12	3.754E-12	-3.512E-22	-3.512E-22	-4.031E-12	-4.031E-12	-5.281E-16
0.20000	1.048E-11	1.048E-11	-6.117E-22	-6.117E-22	-1.105E-11	-1.105E-11	-7.550E-16
0.30000	2.221E-11	2.221E-11	-1.065E-21	-1.065E-21	-2.329E-11	-2.329E-11	-1.186E-15
0.40000	4.704E-11	4.704E-11	-1.942E-21	-1.942E-21	-4.511E-11	-4.511E-11	-2.006E-15
0.50000	9.316E-11	9.316E-11	-3.544E-21	-3.544E-21	-8.495E-11	-8.495E-11	-4.005E-15
0.60000	2.106E-10	2.106E-10	-7.268E-21	-7.268E-21	-1.610E-10	-1.610E-10	-9.328E-15
0.70000	5.957E-10	5.957E-10	-1.893E-20	-1.893E-20	-3.391E-10	-3.391E-10	-2.700E-14
0.80000	2.403E-09	2.403E-09	-7.397E-20	-7.397E-20	-9.151E-10	-9.151E-10	-1.190E-13
0.85000	6.229E-09	6.229E-09	-1.906E-19	-1.906E-19	-1.815E-09	-1.815E-09	-3.310E-13
0.90000	2.201E-08	2.201E-08	-7.351E-19	-7.351E-19	-4.715E-09	-4.715E-09	-1.348E-12
0.92500	5.040E-08	5.040E-08	-1.597E-18	-1.597E-18	-8.878E-09	-8.878E-09	-3.401E-12
0.95000	1.458E-07	1.458E-07	-4.301E-18	-4.302E-18	-1.845E-08	-1.845E-08	-1.059E-11
0.96250	2.672E-07	2.672E-07	-7.695E-18	-7.695E-18	-2.940E-08	-2.941E-08	-2.081E-11
0.97500	5.927E-07	5.927E-07	-1.432E-17	-1.432E-17	-4.893E-08	-4.893E-08	-4.028E-11
0.98125	9.388E-07	9.389E-07	-1.937E-17	-1.937E-17	-6.463E-08	-6.463E-08	-5.348E-11
0.98750	1.551E-06	1.551E-06	-2.544E-17	-2.544E-17	-8.529E-08	-8.530E-08	-6.638E-11
0.99375	2.569E-06	2.569E-06	-3.103E-17	-3.103E-17	-1.119E-07	-1.119E-07	-7.543E-11
0.99999	3.933E-06	3.934E-06	-3.290E-17	-3.290E-17	-1.422E-07	-1.422E-07	-7.850E-11
1.00624	5.224E-06	5.224E-06	-3.017E-17	-3.017E-17	-1.720E-07	-1.720E-07	-7.405E-11
1.01249	6.116E-06	6.116E-06	-2.410E-17	-2.410E-17	-1.975E-07	-1.975E-07	-6.426E-11
1.01874	6.644E-06	6.644E-06	-1.836E-17	-1.835E-17	-2.172E-07	-2.172E-07	-5.073E-11
1.02499	6.954E-06	6.955E-06	-1.340E-17	-1.340E-17	-2.320E-07	-2.320E-07	-3.807E-11
1.03749	7.248E-06	7.248E-06	-7.294E-18	-7.294E-18	-2.504E-07	-2.504E-07	-1.941E-11
1.04999	7.332E-06	7.332E-06	-4.051E-18	-4.051E-18	-2.608E-07	-2.608E-07	-9.985E-12
1.07499	7.286E-06	7.286E-06	-1.539E-18	-1.539E-18	-2.700E-07	-2.700E-07	-3.229E-12
1.09999	7.149E-06	7.149E-06	-7.093E-19	-7.093E-19	-2.740E-07	-2.740E-07	-1.293E-12
1.14999	6.847E-06	6.847E-06	-1.859E-19	-1.859E-19	-2.768E-07	-2.768E-07	-3.218E-13
1.19999	6.563E-06	6.563E-06	-7.256E-20	-7.256E-20	-2.777E-07	-2.777E-07	-1.165E-13
1.29999	6.064E-06	6.064E-06	-1.870E-20	-1.870E-20	-2.783E-07	-2.783E-07	-2.663E-14
1.39999	5.637E-06	5.637E-06	-7.199E-21	-7.199E-21	-2.785E-07	-2.785E-07	-9.236E-15
1.49999	5.266E-06	5.266E-06	-3.518E-21	-3.518E-21	-2.785E-07	-2.785E-07	-3.973E-15
1.59999	4.942E-06	4.942E-06	-1.928E-21	-1.928E-21	-2.786E-07	-2.786E-07	-1.995E-15
1.69999	4.656E-06	4.656E-06	-1.058E-21	-1.058E-21	-2.786E-07	-2.786E-07	-1.181E-15
1.79999	4.401E-06	4.401E-06	-6.076E-22	-6.076E-22	-2.786E-07	-2.786E-07	-7.530E-16
1.89999	4.173E-06	4.173E-06	-3.488E-22	-3.488E-22	-2.786E-07	-2.786E-07	-5.274E-16
1.99999	3.967E-06	3.967E-06	-2.000E-22	-2.000E-22	-2.786E-07	-2.786E-07	-3.936E-16

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	2.5000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	2.5000	0.10000	193.666	2.668E-07	9.999E-01	-8.501E-11	-8.501E-11	8.501E-11
0.20000	2.5000	0.20000	172.178	3.535E-07	9.998E-01	-1.205E-10	-1.205E-10	1.205E-10
0.30000	2.5000	0.30000	150.699	5.603E-07	9.997E-01	-1.707E-10	-1.707E-10	1.707E-10
0.40000	2.5000	0.40000	129.232	9.472E-07	9.996E-01	-2.539E-10	-2.539E-10	2.539E-10
0.50000	2.5000	0.50000	107.784	1.281E-06	9.994E-01	-3.783E-10	-3.783E-10	3.783E-10
0.60000	2.5000	0.60000	86.370	1.281E-06	9.990E-01	-6.149E-10	-6.149E-10	6.149E-10
0.70000	2.5000	0.70000	65.024	5.603E-06	9.983E-01	-1.173E-09	-1.173E-09	1.173E-09
0.80000	2.5000	0.80000	43.843	1.665E-05	9.963E-01	-2.876E-09	-2.876E-09	2.876E-09
0.85000	2.5000	0.85000	33.414	4.280E-05	9.943E-01	-5.389E-09	-5.389E-09	5.389E-09
0.90000	2.5000	0.90000	23.286	1.413E-04	9.920E-01	-1.227E-08	-1.227E-08	1.227E-08
0.92500	2.5000	0.92500	18.491	2.978E-04	9.928E-01	-2.080E-08	-2.080E-08	2.080E-08
0.95000	2.5000	0.95000	14.123	7.535E-04	1.001E 00	-3.779E-08	-3.779E-08	3.779E-08
0.96250	2.5000	0.96250	12.244	1.233E-03	1.009E 00	-5.288E-08	-5.288E-08	5.288E-08
0.97500	2.5001	0.97500	10.717	2.069E-03	1.017E 00	-6.949E-08	-6.950E-08	6.949E-08
0.98125	2.5001	0.98125	10.137	2.668E-03	1.017E 00	-7.710E-08	-7.710E-08	7.710E-08
0.98750	2.5001	0.98750	9.709	3.397E-03	1.011E 00	-8.560E-08	-8.560E-08	8.560E-08
0.99375	2.5001	0.99375	9.455	4.238E-03	1.003E 00	-9.181E-08	-9.181E-08	9.181E-08
1.00000	2.5001	1.00000	9.388	5.144E-03	9.999E-01	-9.352E-08	-9.352E-08	9.352E-08
1.00625	2.5002	1.00625	9.513	6.045E-03	1.005E 00	-9.036E-08	-9.036E-08	9.036E-08
1.01250	2.5002	1.01250	9.822	6.866E-03	1.014E 00	-8.299E-08	-8.299E-08	8.299E-08
1.01875	2.5003	1.01875	10.299	7.558E-03	1.019E 00	-7.490E-08	-7.490E-08	7.490E-08
1.02500	2.5003	1.02500	10.921	8.116E-03	1.019E 00	-6.701E-08	-6.701E-08	6.701E-08
1.03749	2.5004	1.03750	12.511	8.881E-03	1.011E 00	-5.042E-08	-5.041E-08	5.042E-08
1.04999	2.5005	1.05000	14.432	9.320E-03	1.003E 00	-3.576E-08	-3.576E-08	3.576E-08
1.07499	2.5007	1.07500	18.845	9.726E-03	9.935E-01	-1.998E-08	-1.998E-08	1.998E-08
1.09999	2.5009	1.10000	23.662	9.882E-03	9.915E-01	-1.187E-08	-1.187E-08	1.187E-08
1.14999	2.5013	1.15000	33.808	9.977E-03	9.923E-01	-5.251E-09	-5.251E-09	5.251E-09
1.19999	2.5017	1.20000	44.244	1.001E-02	9.934E-01	-2.819E-09	-2.819E-09	2.819E-09
1.29999	2.5023	1.30000	65.429	1.003E-02	9.943E-01	-1.158E-09	-1.158E-09	1.158E-09
1.39999	2.5029	1.40000	86.777	1.004E-02	9.943E-01	-6.086E-10	-6.086E-10	6.086E-10
1.49999	2.5034	1.50000	108.192	1.004E-02	9.940E-01	-3.755E-10	-3.755E-10	3.755E-10
1.59999	2.5038	1.60000	129.640	1.005E-02	9.937E-01	-2.520E-10	-2.520E-10	2.520E-10
1.69999	2.5041	1.70000	151.108	1.005E-02	9.933E-01	-1.695E-10	-1.695E-10	1.695E-10
1.79999	2.5045	1.80000	172.587	1.005E-02	9.929E-01	-1.197E-10	-1.197E-10	1.197E-10
1.89999	2.5048	1.90000	194.075	1.005E-02	9.925E-01	-8.445E-11	-8.445E-11	8.445E-11
1.99999	2.5050	2.00000	215.568	1.005E-02	9.922E-01	-6.024E-11	-6.024E-11	6.024E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 2.500 θ_D=0. ρ_a=9.385

z	$_x\mu'-1.0$	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.501E-11	49.901	-3.593E-09	-3.593E-09	3.593E-09	3.593E-09	-6.499E-10	-6.499E-10
0.20000	1.205E-10	99.802	-8.669E-09	-8.669E-09	8.669E-09	8.669E-09	-9.209E-10	-9.209E-10
0.30000	1.707E-10	149.703	-1.586E-08	-1.586E-08	1.586E-08	1.586E-08	-1.305E-09	-1.305E-09
0.40000	2.539E-10	199.605	-2.631E-08	-2.631E-08	2.631E-08	2.631E-08	-1.941E-09	-1.941E-09
0.50000	3.783E-10	249.506	-4.188E-08	-4.188E-08	4.188E-08	4.188E-08	-2.893E-09	-2.893E-09
0.60000	6.149E-10	299.407	-6.582E-08	-6.582E-08	6.582E-08	6.582E-08	-4.701E-09	-4.701E-09
0.70000	1.173E-09	349.308	-1.083E-07	-1.083E-07	1.083E-07	1.083E-07	-8.967E-09	-8.967E-09
0.80000	2.876E-09	399.209	-1.998E-07	-1.998E-07	1.998E-07	1.998E-07	-2.199E-08	-2.199E-08
0.85000	5.389E-09	424.160	-2.980E-07	-2.980E-07	2.980E-07	2.980E-07	-4.120E-08	-4.120E-08
0.90000	1.227E-08	449.110	-5.020E-07	-5.020E-07	5.026E-07	5.026E-07	-9.379E-08	-9.379E-08
0.92500	2.081E-08	461.585	-7.016E-07	-7.016E-07	7.047E-07	7.047E-07	-1.591E-07	-1.591E-07
0.95000	3.779E-08	474.060	-1.039E-06	-1.039E-06	1.059E-06	1.059E-06	-2.889E-07	-2.889E-07
0.96250	5.288E-08	480.298	-1.303E-06	-1.303E-06	1.358E-06	1.358E-06	-4.043E-07	-4.043E-07
0.97500	6.950E-08	486.535	-1.633E-06	-1.633E-06	1.791E-06	1.792E-06	-5.313E-07	-5.313E-07
0.98125	7.710E-08	489.654	-1.808E-06	-1.808E-06	2.074E-06	2.074E-06	-5.895E-07	-5.895E-07
0.98750	8.560E-08	492.773	-1.978E-06	-1.978E-06	2.411E-06	2.411E-06	-6.545E-07	-6.545E-07
0.99375	9.181E-08	495.891	-2.133E-06	-2.133E-06	2.811E-06	2.811E-06	-7.019E-07	-7.019E-07
1.00000	9.352E-08	499.010	-2.260E-06	-2.260E-06	3.265E-06	3.265E-06	-7.150E-07	-7.150E-07
1.00625	9.036E-08	502.128	-2.352E-06	-2.352E-06	3.749E-06	3.749E-06	-6.908E-07	-6.908E-07
1.01250	8.298E-08	505.247	-2.415E-06	-2.415E-06	4.229E-06	4.229E-06	-6.345E-07	-6.344E-07
1.01875	7.490E-08	508.366	-2.461E-06	-2.461E-06	4.673E-06	4.673E-06	-5.727E-07	-5.726E-07
1.02500	6.701E-08	511.484	-2.506E-06	-2.506E-06	5.071E-06	5.071E-06	-5.123E-07	-5.123E-07
1.03749	5.041E-08	517.722	-2.600E-06	-2.600E-06	5.709E-06	5.709E-06	-3.854E-07	-3.854E-07
1.04999	3.576E-08	523.959	-2.689E-06	-2.689E-06	6.155E-06	6.155E-06	-2.734E-07	-2.734E-07
1.07499	1.998E-08	536.434	-2.820E-06	-2.820E-06	6.684E-06	6.684E-06	-1.528E-07	-1.528E-07
1.09999	1.187E-08	548.910	-2.904E-06	-2.904E-06	6.986E-06	6.986E-06	-9.071E-08	-9.071E-08
1.14999	5.251E-09	573.860	-2.968E-06	-2.968E-06	7.318E-06	7.318E-06	-4.015E-08	-4.015E-08
1.19999	2.819E-09	598.811	-2.955E-06	-2.955E-06	7.522E-06	7.522E-06	-2.155E-08	-2.155E-08
1.29999	1.158E-09	648.712	-2.844E-06	-2.844E-06	7.813E-06	7.813E-06	-8.850E-09	-8.850E-09
1.39999	6.086E-10	698.613	-2.691E-06	-2.691E-06	8.050E-06	8.050E-06	-4.653E-09	-4.653E-09
1.49999	3.755E-10	748.514	-2.520E-06	-2.520E-06	8.268E-06	8.268E-06	-2.871E-09	-2.871E-09
1.59999	2.520E-10	798.415	-2.342E-06	-2.342E-06	8.478E-06	8.478E-06	-1.927E-09	-1.927E-09
1.69999	1.695E-10	848.316	-2.159E-06	-2.159E-06	8.681E-06	8.681E-06	-1.296E-09	-1.296E-09
1.79999	1.197E-10	898.217	-1.969E-06	-1.969E-06	8.886E-06	8.886E-06	-9.148E-10	-9.148E-10
1.89999	8.445E-11	948.118	-1.784E-06	-1.784E-06	9.080E-06	9.080E-06	-6.456E-10	-6.456E-10
1.99999	6.024E-11	998.020	-1.596E-06	-1.596E-06	9.276E-06	9.276E-06	-4.605E-10	-4.605E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 2.500 θ_D=0. ρ_a=9.385

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-6.151E-16
0.10000	4.689E-12	4.692E-12	-3.511E-22	-3.511E-22	-4.030E-12	-4.030E-12	-8.249E-16
0.20000	1.310E-11	1.310E-11	-6.114E-22	-6.114E-22	-1.105E-11	-1.105E-11	-1.179E-15
0.30000	2.775E-11	2.775E-11	-1.064E-21	-1.064E-21	-2.327E-11	-2.327E-11	-1.851E-15
0.40000	5.873E-11	5.873E-11	-1.939E-21	-1.939E-21	-4.508E-11	-4.508E-11	-3.129E-15
0.50000	1.162E-10	1.162E-10	-3.537E-21	-3.537E-21	-8.485E-11	-8.485E-11	-6.239E-15
0.60000	2.624E-10	2.624E-10	-7.239E-21	-7.239E-21	-1.607E-10	-1.607E-10	-1.450E-14
0.70000	7.403E-10	7.403E-10	-1.878E-20	-1.878E-20	-3.376E-10	-3.376E-10	-4.175E-14
0.80000	2.938E-09	2.938E-09	-7.239E-20	-7.239E-20	-9.043E-10	-9.043E-10	-1.812E-13
0.85000	7.494E-09	7.494E-09	-1.832E-19	-1.832E-19	-1.775E-09	-1.775E-09	-4.935E-13
0.90000	2.539E-08	2.539E-08	-6.722E-19	-6.722E-19	-4.474E-09	-4.474E-09	-1.893E-12
0.92500	5.551E-08	5.551E-08	-1.407E-18	-1.407E-18	-8.197E-09	-8.197E-09	-4.452E-12
0.95000	1.438E-07	1.438E-07	-3.156E-18	-3.156E-18	-1.591E-08	-1.591E-08	-1.235E-11
0.96250	2.483E-07	2.483E-07	-5.329E-18	-5.329E-18	-2.373E-08	-2.373E-08	-2.078E-11
0.97500	4.838E-07	4.839E-07	-8.158E-18	-8.158E-18	-3.623E-08	-3.628E-08	-3.517E-11
0.98125	7.103E-07	7.103E-07	-9.592E-18	-9.592E-18	-4.458E-08	-4.458E-08	-4.428E-11
0.98750	1.059E-06	1.059E-06	-1.130E-17	-1.130E-17	-5.432E-08	-5.432E-08	-5.166E-11
0.99375	1.578E-06	1.578E-06	-1.262E-17	-1.262E-17	-6.556E-08	-6.556E-08	-5.648E-11
1.00000	2.219E-06	2.219E-06	-1.298E-17	-1.298E-17	-7.761E-08	-7.762E-08	-5.787E-11
1.00625	2.827E-06	2.827E-06	-1.230E-17	-1.230E-17	-8.951E-08	-8.952E-08	-5.533E-11
1.01250	3.275E-06	3.275E-06	-1.076E-17	-1.076E-17	-1.003E-07	-1.004E-07	-4.973E-11
1.01875	3.565E-06	3.565E-06	-9.169E-18	-9.169E-18	-1.096E-07	-1.096E-07	-4.146E-11
1.02500	3.757E-06	3.757E-06	-7.708E-18	-7.707E-18	-1.175E-07	-1.175E-07	-3.259E-11
1.03749	3.962E-06	3.962E-06	-4.947E-18	-4.946E-18	-1.293E-07	-1.293E-07	-1.916E-11
1.04999	4.052E-06	4.052E-06	-2.896E-18	-2.896E-18	-1.365E-07	-1.365E-07	-1.147E-11
1.07499	4.076E-06	4.076E-06	-1.332E-18	-1.332E-18	-1.437E-07	-1.437E-07	-4.140E-12
1.09999	4.020E-06	4.021E-06	-6.368E-19	-6.368E-19	-1.472E-07	-1.472E-07	-1.780E-12
1.14999	3.860E-06	3.860E-06	-1.763E-19	-1.763E-19	-1.498E-07	-1.498E-07	-4.727E-13
1.19999	3.699E-06	3.699E-06	-7.027E-20	-7.027E-20	-1.506E-07	-1.506E-07	-1.753E-13
1.29999	3.414E-06	3.414E-06	-1.841E-20	-1.841E-20	-1.512E-07	-1.512E-07	-4.082E-14
1.39999	3.170E-06	3.170E-06	-7.132E-21	-7.132E-21	-1.514E-07	-1.514E-07	-1.426E-14
1.49999	2.960E-06	2.960E-06	-3.496E-21	-3.496E-21	-1.514E-07	-1.514E-07	-6.156E-15
1.59999	2.776E-06	2.776E-06	-1.917E-21	-1.917E-21	-1.515E-07	-1.515E-07	-3.099E-15
1.69999	2.614E-06	2.614E-06	-1.053E-21	-1.053E-21	-1.515E-07	-1.515E-07	-1.837E-15
1.79999	2.470E-06	2.470E-06	-6.050E-22	-6.050E-22	-1.515E-07	-1.515E-07	-1.173E-15
1.89999	2.341E-06	2.341E-06	-3.474E-22	-3.474E-22	-1.515E-07	-1.515E-07	-8.219E-16
1.99999	2.224E-06	2.224E-06	-1.993E-22	-1.993E-22	-1.515E-07	-1.515E-07	-6.137E-16

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 3.000 θ_D= 0. ρ_a=11.261

z	ϕ	z_r	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	3.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	3.0000	0.10000	193.676	2.868E-07	9.998E-01	-8.500E-11	-8.500E-11	8.500E-11
0.20000	3.0000	0.20000	172.201	3.669E-07	9.998E-01	-1.204E-10	-1.204E-10	1.204E-10
0.30000	3.0000	0.30000	150.738	6.403E-07	9.997E-01	-1.705E-10	-1.705E-10	1.705E-10
0.40000	3.0000	0.40000	129.292	1.121E-06	9.995E-01	-2.536E-10	-2.536E-10	2.536E-10
0.50000	3.0000	0.50000	107.874	1.467E-06	9.993E-01	-3.777E-10	-3.777E-10	3.777E-10
0.60000	3.0000	0.60000	86.505	1.494E-06	9.989E-01	-6.128E-10	-6.128E-10	6.128E-10
0.70000	3.0000	0.70000	65.232	6.457E-06	9.980E-01	-1.165E-09	-1.165E-09	1.165E-09
0.80000	3.0000	0.80000	44.196	2.156E-05	9.959E-01	-2.826E-09	-2.826E-09	2.826E-09
0.85000	3.0000	0.85000	33.904	4.845E-05	9.940E-01	-5.218E-09	-5.218E-09	5.218E-09
0.90000	3.0000	0.90000	24.024	1.567E-04	9.928E-01	-1.149E-08	-1.149E-08	1.149E-08
0.92500	3.0000	0.92500	19.437	3.185E-04	9.953E-01	-1.868E-08	-1.868E-08	1.868E-08
0.95000	3.0000	0.95000	15.372	7.313E-04	1.004E 00	-3.022E-08	-3.022E-08	3.022E-08
0.96250	3.0000	0.96250	13.683	1.119E-03	1.011E 00	-4.088E-08	-4.088E-08	4.088E-08
0.97500	3.0001	0.97500	12.355	1.720E-03	1.014E 00	-5.184E-08	-5.184E-08	5.184E-08
0.98125	3.0001	0.98125	11.866	2.115E-03	1.012E 00	-5.659E-08	-5.659E-08	5.659E-08
0.98750	3.0001	0.98750	11.513	2.571E-03	1.007E 00	-6.028E-08	-6.028E-08	6.028E-08
0.99375	3.0001	0.99375	11.310	3.072E-03	1.002E 00	-6.251E-08	-6.251E-08	6.251E-08
1.00000	3.0001	1.00000	11.265	3.597E-03	9.999E-01	-6.301E-08	-6.301E-08	6.301E-08
1.00625	3.0001	1.00625	11.380	4.116E-03	1.003E 00	-6.173E-08	-6.173E-08	6.173E-08
1.01250	3.0002	1.01250	11.650	4.602E-03	1.010E 00	-5.882E-08	-5.882E-08	5.882E-08
1.01875	3.0002	1.01875	12.064	5.032E-03	1.015E 00	-5.461E-08	-5.461E-08	5.461E-08
1.02500	3.0002	1.02500	12.610	5.399E-03	1.017E 00	-4.954E-08	-4.954E-08	4.954E-08
1.03750	3.0003	1.03750	14.027	5.946E-03	1.014E 00	-3.844E-08	-3.844E-08	3.844E-08
1.05000	3.0004	1.05000	15.779	6.297E-03	1.007E 00	-2.850E-08	-2.850E-08	2.850E-08
1.07500	3.0005	1.07500	19.920	6.654E-03	9.970E-01	-1.769E-08	-1.769E-08	1.769E-08
1.09999	3.0006	1.10000	24.546	6.808E-03	9.935E-01	-1.097E-08	-1.097E-08	1.097E-08
1.14999	3.0009	1.15000	34.461	6.912E-03	9.932E-01	-5.030E-09	-5.030E-09	5.030E-09
1.19999	3.0012	1.20000	44.766	6.948E-03	9.942E-01	-2.746E-09	-2.746E-09	2.746E-09
1.29999	3.0016	1.30000	65.813	6.967E-03	9.955E-01	-1.143E-09	-1.143E-09	1.143E-09
1.39999	3.0020	1.40000	87.090	6.975E-03	9.960E-01	-6.039E-10	-6.039E-10	6.039E-10
1.49999	3.0023	1.50000	108.461	6.982E-03	9.961E-01	-3.736E-10	-3.736E-10	3.736E-10
1.59999	3.0026	1.60000	129.879	6.982E-03	9.960E-01	-2.509E-10	-2.509E-10	2.509E-10
1.69999	3.0029	1.70000	151.326	6.987E-03	9.959E-01	-1.689E-10	-1.689E-10	1.689E-10
1.79999	3.0031	1.80000	172.789	6.991E-03	9.957E-01	-1.193E-10	-1.193E-10	1.193E-10
1.89999	3.0033	1.90000	194.265	6.992E-03	9.956E-01	-8.419E-11	-8.419E-11	8.419E-11
1.99999	3.0035	2.00000	215.748	6.992E-03	9.954E-01	-6.007E-11	-6.007E-11	6.007E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 3.000 θ_D= 0. ρ_a= 11.261

z	$_x\mu'$-1.0	T_o	$_oT_1$-T_o	$_xT_1$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.500E-11	49.901	-3.593E-09	-3.593E-09	3.593E-09	3.593E-09	-6.498E-10	-6.498E-10
0.20000	1.204E-10	99.802	-8.667E-09	-8.667E-09	8.667E-09	8.667E-09	-9.206E-10	-9.206E-10
0.30000	1.705E-10	149.703	-1.585E-08	-1.585E-08	1.585E-08	1.585E-08	-1.304E-09	-1.304E-09
0.40000	2.536E-10	199.605	-2.629E-08	-2.629E-08	2.629E-08	2.629E-08	-1.939E-09	-1.939E-09
0.50000	3.777E-10	249.506	-4.184E-08	-4.184E-08	4.184E-08	4.184E-08	-2.888E-09	-2.888E-09
0.60000	6.128E-10	299.407	-6.573E-08	-6.573E-08	6.573E-08	6.573E-08	-4.685E-09	-4.685E-09
0.70000	1.165E-09	349.308	-1.080E-07	-1.080E-07	1.080E-07	1.080E-07	-8.907E-09	-8.907E-09
0.80000	2.826E-09	399.209	-1.984E-07	-1.984E-07	1.984E-07	1.984E-07	-2.160E-08	-2.160E-08
0.85000	5.218E-09	424.160	-2.939E-07	-2.939E-07	2.940E-07	2.940E-07	-3.989E-08	-3.989E-08
0.90000	1.149E-08	449.110	-4.875E-07	-4.875E-07	4.884E-07	4.884E-07	-8.784E-08	-8.784E-08
0.92500	1.868E-08	461.585	-6.692E-07	-6.692E-07	6.728E-07	6.728E-07	-1.428E-07	-1.429E-07
0.95000	3.022E-08	474.060	-9.603E-07	-9.603E-07	9.796E-07	9.796E-07	-2.311E-07	-2.311E-07
0.96250	4.088E-08	480.298	-1.168E-06	-1.168E-06	1.214E-06	1.214E-06	-3.125E-07	-3.125E-07
0.97500	5.184E-08	486.535	-1.426E-06	-1.426E-06	1.535E-06	1.535E-06	-3.963E-07	-3.964E-07
0.98125	5.659E-08	489.654	-1.567E-06	-1.567E-06	1.733E-06	1.733E-06	-4.326E-07	-4.327E-07
0.98750	6.028E-08	492.773	-1.708E-06	-1.708E-06	1.956E-06	1.957E-06	-4.608E-07	-4.608E-07
0.99375	6.251E-08	495.891	-1.846E-06	-1.846E-06	2.203E-06	2.203E-06	-4.779E-07	-4.779E-07
1.00000	6.301E-08	499.010	-1.975E-06	-1.975E-06	2.466E-06	2.466E-06	-4.817E-07	-4.817E-07
1.00625	6.173E-08	502.129	-2.092E-06	-2.092E-06	2.739E-06	2.739E-06	-4.719E-07	-4.719E-07
1.01250	5.882E-08	505.248	-2.197E-06	-2.197E-06	3.011E-06	3.011E-06	-4.497E-07	-4.497E-07
1.01875	5.461E-08	508.366	-2.291E-06	-2.291E-06	3.271E-06	3.271E-06	-4.175E-07	-4.175E-07
1.02500	4.954E-08	511.485	-2.376E-06	-2.376E-06	3.511E-06	3.511E-06	-3.787E-07	-3.787E-07
1.03750	3.844E-08	517.722	-2.521E-06	-2.521E-06	3.915E-06	3.915E-06	-2.939E-07	-2.939E-07
1.05000	2.850E-08	523.960	-2.634E-06	-2.634E-06	4.216E-06	4.216E-06	-2.179E-07	-2.179E-07
1.07500	1.768E-08	536.435	-2.804E-06	-2.804E-06	4.613E-06	4.613E-06	-1.352E-07	-1.352E-07
1.09999	1.097E-08	548.910	-2.914E-06	-2.914E-06	4.851E-06	4.851E-06	-8.385E-08	-8.385E-08
1.14999	5.030E-09	573.861	-3.024E-06	-3.024E-06	5.112E-06	5.112E-06	-3.845E-08	-3.845E-08
1.19999	2.746E-09	598.811	-3.060E-06	-3.060E-06	5.261E-06	5.261E-06	-2.099E-08	-2.099E-08
1.29999	1.143E-09	648.712	-3.050E-06	-3.050E-06	5.448E-06	5.448E-06	-8.740E-09	-8.740E-09
1.39999	6.039E-10	698.613	-2.996E-06	-2.996E-06	5.584E-06	5.584E-06	-4.617E-09	-4.617E-09
1.49999	3.736E-10	748.514	-2.924E-06	-2.924E-06	5.703E-06	5.703E-06	-2.856E-09	-2.856E-09
1.59999	2.509E-10	798.416	-2.847E-06	-2.847E-06	5.811E-06	5.811E-06	-1.918E-09	-1.918E-09
1.69999	1.689E-10	848.317	-2.762E-06	-2.762E-06	5.916E-06	5.916E-06	-1.291E-09	-1.291E-09
1.79999	1.193E-10	898.218	-2.675E-06	-2.675E-06	6.018E-06	6.018E-06	-9.118E-10	-9.118E-10
1.89999	8.419E-11	948.119	-2.586E-06	-2.586E-06	6.117E-06	6.117E-06	-6.436E-10	-6.436E-10
1.99999	6.007E-11	998.020	-2.497E-06	-2.497E-06	6.213E-06	6.213E-06	-4.592E-10	-4.592E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 3.000 θ_D= 0. ρ_a=11.261

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	C.	0.	-2.014E-22	-2.014E-22	0.	0.	-8.855E-16
0.10000	5.628E-12	5.629E-12	-3.510E-22	-3.510E-22	-4.030E-12	-4.030E-12	-1.187E-15
0.20000	1.571E-11	1.571E-11	-6.111E-22	-6.111E-22	-1.105E-11	-1.105E-11	-1.697E-15
0.30000	3.327E-11	3.327E-11	-1.063E-21	-1.063E-21	-2.326E-11	-2.326E-11	-2.663E-15
0.40000	7.038E-11	7.039E-11	-1.936E-21	-1.936E-21	-4.503E-11	-4.503E-11	-4.497E-15
0.50000	1.392E-10	1.392E-10	-3.528E-21	-3.528E-21	-8.472E-11	-8.472E-11	-8.952E-15
0.60000	3.138E-10	3.138E-10	-7.203E-21	-7.203E-21	-1.603E-10	-1.603E-10	-2.075E-14
0.70000	8.826E-10	8.826E-10	-1.859E-20	-1.859E-20	-3.358E-10	-3.358E-10	-5.936E-14
0.80000	3.444E-09	3.444E-09	-7.052E-20	-7.052E-20	-8.914E-10	-8.914E-10	-2.531E-13
0.85000	8.637E-09	8.637E-09	-1.746E-19	-1.746E-19	-1.728E-09	-1.728E-09	-6.725E-13
0.90000	2.812E-08	2.812E-08	-6.044E-19	-6.044E-19	-4.207E-09	-4.207E-09	-2.413E-12
0.92500	5.866E-08	5.866E-08	-1.215E-18	-1.215E-18	-7.474E-09	-7.474E-09	-5.291E-12
0.95000	1.383E-07	1.383E-07	-2.228E-18	-2.228E-18	-1.385E-08	-1.386E-08	-1.337E-11
0.96250	2.266E-07	2.266E-07	-3.567E-18	-3.567E-18	-1.921E-08	-1.921E-08	-1.987E-11
0.97500	3.923E-07	3.924E-07	-5.166E-18	-5.166E-18	-2.736E-08	-2.736E-08	-2.891E-11
0.98125	5.335E-07	5.335E-07	-5.923E-18	-5.923E-18	-3.255E-08	-3.255E-08	-3.376E-11
0.98750	7.274E-07	7.274E-07	-6.535E-18	-6.535E-18	-3.839E-08	-3.839E-08	-3.799E-11
0.99375	9.738E-07	9.739E-07	-6.916E-18	-6.916E-18	-4.470E-08	-4.470E-08	-4.076E-11
1.00000	1.255E-06	1.255E-06	-7.003E-18	-7.003E-18	-5.123E-08	-5.123E-08	-4.142E-11
1.00625	1.523E-06	1.523E-06	-6.782E-18	-6.782E-18	-5.770E-08	-5.770E-08	-3.978E-11
1.01250	1.739E-06	1.739E-06	-6.290E-18	-6.290E-18	-6.383E-08	-6.383E-08	-3.627E-11
1.01875	1.901E-06	1.901E-06	-5.603E-18	-5.603E-18	-6.940E-08	-6.940E-08	-3.167E-11
1.02500	2.017E-06	2.017E-06	-4.813E-18	-4.813E-18	-7.427E-08	-7.427E-08	-2.679E-11
1.03750	2.154E-06	2.154E-06	-3.242E-18	-3.242E-18	-8.178E-08	-8.178E-08	-1.822E-11
1.05000	2.228E-06	2.228E-06	-2.124E-18	-2.124E-18	-8.662E-08	-8.662E-08	-1.213E-11
1.07500	2.272E-06	2.272E-06	-1.127E-18	-1.126E-18	-9.259E-08	-9.259E-08	-4.828E-12
1.09999	2.257E-06	2.257E-06	-5.606E-19	-5.606E-19	-9.562E-08	-9.562E-08	-2.224E-12
1.14999	2.178E-06	2.178E-06	-1.654E-19	-1.654E-19	-9.793E-08	-9.793E-08	-6.335E-13
1.19999	2.090E-06	2.090E-06	-6.759E-20	-6.759E-20	-9.873E-08	-9.873E-08	-2.415E-13
1.29999	1.929E-06	1.929E-06	-1.808E-20	-1.808E-20	-9.926E-08	-9.926E-08	-5.745E-14
1.39999	1.791E-06	1.791E-06	-7.051E-21	-7.051E-21	-9.943E-08	-9.943E-08	-2.026E-14
1.49999	1.672E-06	1.672E-06	-3.470E-21	-3.470E-21	-9.951E-08	-9.951E-08	-8.776E-15
1.59999	1.567E-06	1.567E-06	-1.904E-21	-1.904E-21	-9.955E-08	-9.955E-08	-4.432E-15
1.69999	1.475E-06	1.475E-06	-1.047E-21	-1.047E-21	-9.957E-08	-9.957E-08	-2.632E-15
1.79999	1.394E-06	1.394E-06	-6.018E-22	-6.018E-22	-9.958E-08	-9.958E-08	-1.682E-15
1.89999	1.321E-06	1.321E-06	-3.457E-22	-3.457E-22	-9.959E-08	-9.959E-08	-1.180E-15
1.99999	1.255E-06	1.255E-06	-1.984E-22	-1.984E-22	-9.959E-08	-9.959E-08	-8.815E-16

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 4.000 θ_D= 0. ρ_a=15.009

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	4.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	4.0000	0.10000	196.701	2.735E-07	9.997E-01	-8.496E-11	-8.496E-11	8.496E-11
0.20000	4.0000	0.20000	172.258	5.603E-07	9.996E-01	-1.203E-10	-1.203E-10	1.203E-10
0.30000	4.0000	0.30000	150.836	9.738E-07	9.995E-01	-1.703E-10	-1.703E-10	1.703E-10
0.40000	4.0000	0.40000	129.444	1.547E-06	9.992E-01	-2.529E-10	-2.529E-10	2.529E-10
0.50000	4.0000	0.50000	108.102	1.974E-06	9.988E-01	-3.761E-10	-3.761E-10	3.761E-10
0.60000	4.0000	0.60000	86.846	2.615E-06	9.981E-01	-6.076E-10	-6.076E-10	6.076E-10
0.70000	4.0000	0.70000	65.759	6.510E-06	9.967E-01	-1.145E-09	-1.145E-09	1.145E-09
0.80000	4.0000	0.80000	45.080	2.860E-05	9.942E-01	-2.703E-09	-2.703E-09	2.703E-09
0.85000	4.0000	0.85000	35.119	6.318E-05	9.928E-01	-4.816E-09	-4.816E-09	4.816E-09
0.90000	4.0000	0.90000	25.806	1.908E-04	9.951E-01	-9.805E-09	-9.805E-09	9.805E-09
0.92500	4.0000	0.92500	21.657	3.697E-04	1.001E 00	-1.452E-08	-1.452E-08	1.452E-08
0.95000	4.0000	0.95000	18.166	6.766E-04	1.010E 00	-2.159E-08	-2.159E-08	2.159E-08
0.96250	4.0000	0.96250	16.798	9.204E-04	1.013E 00	-2.522E-08	-2.522E-08	2.522E-08
0.97500	4.0001	0.97500	15.775	1.232E-03	1.011E 00	-2.851E-08	-2.851E-08	2.851E-08
0.98125	4.0001	0.98125	15.414	1.412E-03	1.008E 00	-3.001E-08	-3.001E-08	3.001E-08
0.98750	4.0001	0.98750	15.164	1.611E-03	1.004E 00	-3.136E-08	-3.136E-08	3.136E-08
0.99375	4.0001	0.99375	15.031	1.835E-03	1.001E 00	-3.212E-08	-3.212E-08	3.212E-08
1.00000	4.0001	1.00000	15.018	2.062E-03	9.999E-01	-3.220E-08	-3.220E-08	3.220E-08
1.00625	4.0001	1.00625	15.125	2.284E-03	1.002E 00	-3.159E-08	-3.159E-08	3.159E-08
1.01250	4.0001	1.01250	15.349	2.496E-03	1.007E 00	-3.034E-08	-3.034E-08	3.034E-08
1.01875	4.0001	1.01875	15.686	2.695E-03	1.011E 00	-2.887E-08	-2.887E-08	2.887E-08
1.02500	4.0002	1.02500	16.128	2.872E-03	1.015E 00	-2.722E-08	-2.722E-08	2.722E-08
1.03750	4.0002	1.03750	17.295	3.169E-03	1.017E 00	-2.384E-08	-2.384E-08	2.384E-08
1.05000	4.0002	1.05000	18.777	3.383E-03	1.014E 00	-2.014E-08	-2.014E-08	2.014E-08
1.07500	4.0003	1.07500	22.425	3.642E-03	1.004E 00	-1.330E-08	-1.330E-08	1.330E-08
1.10000	4.0004	1.10000	26.665	3.781E-03	9.979E-01	-9.082E-09	-9.082E-09	9.083E-09
1.15000	4.0005	1.15000	36.069	3.897E-03	9.938E-01	-4.523E-09	-4.523E-09	4.524E-09
1.20000	4.0007	1.20000	46.069	3.931E-03	9.940E-01	-2.571E-09	-2.571E-09	2.571E-09
1.30000	4.0009	1.30000	66.780	3.950E-03	9.955E-01	-1.108E-09	-1.108E-09	1.108E-09
1.40000	4.0011	1.40000	87.879	3.962E-03	9.966E-01	-5.921E-10	-5.921E-10	5.921E-10
1.50000	4.0013	1.50000	109.141	3.968E-03	9.971E-01	-3.689E-10	-3.689E-10	3.689E-10
1.60000	4.0015	1.60000	130.486	3.968E-03	9.975E-01	-2.481E-10	-2.481E-10	2.481E-10
1.70000	4.0016	1.70000	151.879	3.970E-03	9.976E-01	-1.674E-10	-1.674E-10	1.674E-10
1.80000	4.0018	1.80000	173.302	3.970E-03	9.977E-01	-1.183E-10	-1.183E-10	1.183E-10
1.90000	4.0019	1.90000	194.746	3.970E-03	9.978E-01	-8.353E-11	-8.353E-11	8.353E-11
2.00000	4.0020	2.00000	216.205	3.970E-03	9.978E-01	-5.964E-11	-5.964E-11	5.964E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 4.000 θ_D= 0. ρ_a=15.009

z	$_x\mu'-1_0$	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	6.062E-11	C.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.496E-11	49.961	-3.592E-09	-3.592E-09	3.592E-09	3.592E-09	-6.496E-10	-6.496E-10
0.20000	1.203E-10	99.802	-8.663E-09	-8.663E-09	8.663E-09	8.663E-09	-9.197E-10	-9.197E-10
0.30000	1.703E-10	149.703	-1.584E-08	-1.584E-08	1.584E-08	1.584E-08	-1.302E-09	-1.302E-09
0.40000	2.529E-10	199.665	-2.626E-08	-2.626E-08	2.626E-08	2.626E-08	-1.934E-09	-1.934E-09
0.50000	3.761E-10	249.536	-4.175E-08	-4.175E-08	4.175E-08	4.175E-08	-2.875E-09	-2.875E-09
0.60000	6.076E-10	299.407	-6.548E-08	-6.548E-08	6.548E-08	6.548E-08	-4.645E-09	-4.645E-09
0.70000	1.145E-09	349.308	-1.071E-07	-1.071E-07	1.071E-07	1.071E-07	-8.755E-09	-8.755E-09
0.80000	2.703E-09	399.209	-1.947E-07	-1.947E-07	1.948E-07	1.948E-07	-2.066E-08	-2.066E-08
0.85000	4.816E-09	424.160	-2.844E-07	-2.844E-07	2.845E-07	2.845E-07	-3.682E-08	-3.682E-08
0.90000	9.805E-09	449.110	-4.554E-07	-4.554E-07	4.566E-07	4.566E-07	-7.496E-08	-7.496E-08
0.92500	1.452E-08	461.585	-6.024E-07	-6.024E-07	6.072E-07	6.072E-07	-1.110E-07	-1.110E-07
0.95000	2.159E-08	474.060	-8.207E-07	-8.207E-07	8.372E-07	8.372E-07	-1.650E-07	-1.650E-07
0.96250	2.522E-08	480.298	-9.596E-07	-9.596E-07	9.905E-07	9.905E-07	-1.928E-07	-1.928E-07
0.97500	2.851E-08	486.535	-1.115E-06	-1.115E-06	1.171E-06	1.171E-06	-2.180E-07	-2.180E-07
0.98125	3.001E-08	489.654	-1.197E-06	-1.197E-06	1.271E-06	1.271E-06	-2.294E-07	-2.294E-07
0.98750	3.136E-08	492.773	-1.281E-06	-1.281E-06	1.378E-06	1.378E-06	-2.398E-07	-2.398E-07
0.99375	3.212E-08	495.892	-1.365E-06	-1.365E-06	1.492E-06	1.492E-06	-2.456E-07	-2.456E-07
1.00000	3.220E-08	499.011	-1.449E-06	-1.449E-06	1.610E-06	1.610E-06	-2.461E-07	-2.461E-07
1.00625	3.159E-08	502.129	-1.529E-06	-1.529E-06	1.729E-06	1.729E-06	-2.415E-07	-2.415E-07
1.01250	3.034E-08	505.248	-1.606E-06	-1.606E-06	1.846E-06	1.846E-06	-2.320E-07	-2.320E-07
1.01875	2.887E-08	508.367	-1.678E-06	-1.678E-06	1.959E-06	1.959E-06	-2.208E-07	-2.208E-07
1.02500	2.722E-08	511.486	-1.745E-06	-1.745E-06	2.066E-06	2.066E-06	-2.081E-07	-2.081E-07
1.03750	2.384E-08	517.723	-1.867E-06	-1.867E-06	2.263E-06	2.263E-06	-1.822E-07	-1.822E-07
1.05000	2.014E-08	523.961	-1.974E-06	-1.974E-06	2.431E-06	2.431E-06	-1.540E-07	-1.540E-07
1.07500	1.330E-08	536.436	-2.139E-06	-2.139E-06	2.680E-06	2.680E-06	-1.017E-07	-1.017E-07
1.10000	9.082E-09	548.911	-2.249E-06	-2.249E-06	2.846E-06	2.846E-06	-6.944E-08	-6.944E-08
1.15000	4.523E-09	573.861	-2.375E-06	-2.375E-06	3.038E-06	3.038E-06	-3.458E-08	-3.458E-08
1.20000	2.571E-09	598.812	-2.439E-06	-2.439E-06	3.143E-06	3.143E-06	-1.966E-08	-1.966E-08
1.30000	1.108E-09	648.713	-2.490E-06	-2.490E-06	3.260E-06	3.260E-06	-8.470E-09	-8.470E-09
1.40000	5.921E-10	698.614	-2.498E-06	-2.498E-06	3.333E-06	3.333E-06	-4.527E-09	-4.527E-09
1.50000	3.689E-10	748.515	-2.490E-06	-2.490E-06	3.387E-06	3.387E-06	-2.820E-09	-2.820E-09
1.60000	2.481E-10	798.416	-2.475E-06	-2.475E-06	3.432E-06	3.432E-06	-1.897E-09	-1.897E-09
1.70000	1.674E-10	848.318	-2.454E-06	-2.454E-06	3.474E-06	3.474E-06	-1.280E-09	-1.280E-09
1.80000	1.183E-10	898.219	-2.431E-06	-2.431E-06	3.511E-06	3.511E-06	-9.043E-10	-9.043E-10
1.90000	8.353E-11	948.120	-2.406E-06	-2.406E-06	3.546E-06	3.546E-06	-6.386E-10	-6.386E-10
2.00000	5.964E-11	998.021	-2.381E-06	-2.381E-06	3.578E-06	3.578E-06	-4.560E-10	-4.560E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 4.000 θ_D= 0. ρ_a=15.009

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	C.	C.	-2.014E-22	-2.014E-22	C.	0.	-1.573E-15
0.10000	7.498E-12	7.499E-12	-3.508E-22	-3.508E-22	-4.028E-12	-4.028E-12	-2.108E-15
0.20000	2.092E-11	2.092E-11	-6.101E-22	-6.101E-22	-1.104E-11	-1.104E-11	-3.011E-15
0.30000	4.427E-11	4.427E-11	-1.061E-21	-1.061E-21	-2.323E-11	-2.323E-11	-4.720E-15
0.40000	9.353E-11	9.353E-11	-1.928E-21	-1.928E-21	-4.492E-11	-4.492E-11	-7.955E-15
0.50000	1.847E-10	1.847E-10	-3.505E-21	-3.505E-21	-8.440E-11	-8.440E-11	-1.577E-14
0.60000	4.145E-10	4.145E-10	-7.114E-21	-7.114E-21	-1.592E-10	-1.592E-10	-3.631E-14
0.70000	1.149E-09	1.149E-09	-1.812E-20	-1.812E-20	-3.312E-10	-3.312E-10	-1.022E-13
0.80000	4.318E-09	4.318E-09	-6.603E-20	-6.603E-20	-8.604E-10	-8.604E-10	-4.174E-13
0.85000	1.033E-08	1.033E-08	-1.551E-19	-1.551E-19	-1.621E-09	-1.621E-09	-1.048E-12
0.90000	3.058E-08	3.058E-08	-4.676E-19	-4.676E-19	-3.650E-09	-3.650E-09	-3.270E-12
0.92500	5.861E-08	5.861E-08	-8.594E-19	-8.594E-19	-6.059E-09	-6.059E-09	-6.322E-12
0.95000	1.199E-07	1.199E-07	-1.481E-18	-1.481E-18	-1.038E-08	-1.038E-08	-1.221E-11
0.96250	1.805E-07	1.805E-07	-1.832E-18	-1.832E-18	-1.348E-08	-1.348E-08	-1.671E-11
0.97500	2.728E-07	2.728E-07	-2.125E-18	-2.125E-18	-1.720E-08	-1.720E-08	-2.156E-11
0.98125	3.366E-07	3.366E-07	-2.207E-18	-2.207E-18	-1.923E-08	-1.923E-08	-2.353E-11
0.98750	4.127E-07	4.127E-07	-2.360E-18	-2.360E-18	-2.135E-08	-2.135E-08	-2.484E-11
0.99375	5.012E-07	5.012E-07	-2.450E-18	-2.450E-18	-2.360E-08	-2.361E-08	-2.557E-11
1.00000	5.951E-07	5.951E-07	-2.459E-18	-2.459E-18	-2.591E-08	-2.591E-08	-2.565E-11
1.00625	6.850E-07	6.850E-07	-2.387E-18	-2.387E-18	-2.818E-08	-2.818E-08	-2.505E-11
1.01250	7.632E-07	7.632E-07	-2.242E-18	-2.242E-18	-3.035E-08	-3.035E-08	-2.388E-11
1.01875	8.267E-07	8.267E-07	-2.145E-18	-2.145E-18	-3.239E-08	-3.239E-08	-2.203E-11
1.02500	8.781E-07	8.781E-07	-2.034E-18	-2.034E-18	-3.435E-08	-3.435E-08	-1.978E-11
1.03750	9.511E-07	9.511E-07	-1.696E-18	-1.696E-18	-3.785E-08	-3.785E-08	-1.486E-11
1.05000	9.979E-07	9.979E-07	-1.346E-18	-1.346E-18	-4.069E-08	-4.069E-08	-1.074E-11
1.07500	1.040E-06	1.040E-06	-7.626E-19	-7.625E-19	-4.457E-08	-4.457E-08	-5.603E-12
1.10000	1.049E-06	1.049E-06	-4.131E-19	-4.131E-19	-4.671E-08	-4.671E-08	-2.903E-12
1.15000	1.026E-06	1.026E-06	-1.414E-19	-1.414E-19	-4.850E-08	-4.850E-08	-9.517E-13
1.20000	9.884E-07	9.884E-07	-6.135E-20	-6.135E-20	-4.919E-08	-4.919E-08	-3.856E-13
1.30000	9.138E-07	9.138E-07	-1.726E-20	-1.726E-20	-4.969E-08	-4.969E-08	-9.649E-14
1.40000	8.484E-07	8.484E-07	-6.850E-21	-6.850E-21	-4.985E-08	-4.985E-08	-3.477E-14
1.50000	7.917E-07	7.917E-07	-3.405E-21	-3.405E-21	-4.992E-08	-4.992E-08	-1.521E-14
1.60000	7.421E-07	7.421E-07	-1.872E-21	-1.872E-21	-4.996E-08	-4.996E-08	-7.744E-15
1.70000	6.984E-07	6.984E-07	-1.033E-21	-1.033E-21	-4.998E-08	-4.998E-08	-4.615E-15
1.80000	6.596E-07	6.596E-07	-5.939E-22	-5.939E-22	-5.000E-08	-5.000E-08	-2.960E-15
1.90000	6.248E-07	6.248E-07	-3.415E-22	-3.415E-22	-5.000E-08	-5.000E-08	-2.081E-15
2.00000	5.936E-07	5.936E-07	-1.960E-22	-1.960E-22	-5.001E-08	-5.001E-08	-1.557E-15

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 5.000 θ_0= 0. ρ_a=18.752

z	ϕ	z_r	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	5.0000	0.	215.159	0.	1.00CE 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	5.0000	0.10000	193.734	5.403E-07	9.996E-01	-8.492E-11	-8.492E-11	8.492E-11
0.20000	5.0000	0.20000	172.332	8.138E-07	9.995E-01	-1.202E-10	-1.202E-10	1.202E-10
0.30000	5.0000	0.30000	150.962	1.147E-06	9.992E-01	-1.699E-10	-1.699E-10	1.699E-10
0.40000	5.0000	0.40000	129.640	1.841E-06	9.989E-01	-2.520E-10	-2.520E-10	2.520E-10
0.50000	5.0000	0.50000	108.395	2.241E-06	9.984E-01	-3.741E-10	-3.741E-10	3.741E-10
0.60000	5.0000	0.60000	87.283	2.241E-06	9.974E-01	-6.010E-10	-6.010E-10	6.010E-10
0.70000	5.0000	0.70000	66.431	9.498E-06	9.958E-01	-1.120E-09	-1.120E-09	1.120E-09
0.80000	5.0000	0.80000	46.191	3.586E-05	9.934E-01	-2.556E-09	-2.556E-09	2.556E-09
0.85000	5.0000	0.85000	36.621	7.620E-05	9.933E-01	-4.362E-09	-4.362E-09	4.362E-09
0.90000	5.0000	0.90000	27.929	2.186E-04	9.986E-01	-8.116E-09	-8.116E-09	8.116E-09
0.92500	5.0000	0.92500	24.214	3.458E-04	1.005E 00	-1.130E-08	-1.130E-08	1.130E-08
0.95000	5.0000	0.95000	21.224	5.661E-04	1.011E 00	-1.525E-08	-1.525E-08	1.525E-08
0.96250	5.0000	0.96250	20.105	7.223E-04	1.011E 00	-1.732E-08	-1.732E-08	1.732E-08
0.97500	5.0000	0.97500	19.299	9.076E-04	1.007E 00	-1.898E-08	-1.898E-08	1.898E-08
0.98125	5.0001	0.98125	19.026	1.012E-03	1.004E 00	-1.958E-08	-1.958E-08	1.958E-08
0.98750	5.0001	0.98750	18.846	1.121E-03	1.002E 00	-1.998E-08	-1.998E-08	1.998E-08
0.99375	5.0001	0.99375	18.760	1.238E-03	1.000E 00	-2.018E-08	-2.018E-08	2.018E-08
1.00000	5.0001	1.00000	18.770	1.357E-03	9.999E-01	-2.015E-08	-2.015E-08	2.015E-08
1.00625	5.0001	1.00625	18.877	1.474E-03	1.002E 00	-1.991E-08	-1.991E-08	1.991E-08
1.01250	5.0001	1.01250	19.078	1.590E-03	1.005E 00	-1.946E-08	-1.946E-08	1.946E-08
1.01875	5.0001	1.01875	19.370	1.698E-03	1.008E 00	-1.883E-08	-1.883E-08	1.883E-08
1.02500	5.0001	1.02500	19.750	1.799E-03	1.012E 00	-1.803E-08	-1.803E-08	1.803E-08
1.03750	5.0001	1.03750	20.752	1.969E-03	1.016E 00	-1.609E-08	-1.609E-08	1.609E-08
1.05000	5.0002	1.05000	22.038	2.099E-03	1.016E 00	-1.390E-08	-1.390E-08	1.390E-08
1.07500	5.0002	1.07500	25.282	2.203E-03	1.010E 00	-1.027E-08	-1.027E-08	1.027E-08
1.10000	5.0002	1.10000	29.163	2.329E-03	1.003E 00	-7.272E-09	-7.272E-09	7.272E-09
1.15000	5.0003	1.15000	38.037	2.430E-03	9.958E-01	-3.973E-09	-3.973E-09	3.973E-09
1.20000	5.0004	1.20000	47.692	2.556E-03	9.943E-01	-2.369E-09	-2.369E-09	2.369E-09
1.30000	5.0006	1.30000	68.003	2.568E-03	9.952E-01	-1.065E-09	-1.065E-09	1.065E-09
1.40000	5.0007	1.40000	88.883	2.580E-03	9.963E-01	-5.774E-10	-5.774E-10	5.774E-10
1.50000	5.0009	1.50000	110.008	2.585E-03	9.971E-01	-3.630E-10	-3.630E-10	3.630E-10
1.60000	5.0010	1.60000	131.261	2.587E-03	9.976E-01	-2.445E-10	-2.445E-10	2.445E-10
1.70000	5.0011	1.70000	152.587	2.590E-03	9.979E-01	-1.655E-10	-1.655E-10	1.655E-10
1.80000	5.0012	1.80000	173.960	2.590E-03	9.981E-01	-1.170E-10	-1.170E-10	1.170E-10
1.90000	5.0012	1.90000	195.364	2.590E-03	9.982E-01	-8.270E-11	-8.270E-11	8.270E-11
2.00000	5.0013	2.00000	216.790	2.590E-03	9.983E-01	-5.910E-11	-5.910E-11	5.910E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 5.000 θ_0= 0. ρ_a= 18.752

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.492E-11	49.901	-3.591E-09	-3.591E-09	3.591E-09	3.591E-09	-6.492E-10	-6.492E-10
0.20000	1.202E-10	99.802	-8.658E-09	-8.658E-09	8.658E-09	8.658E-09	-9.186E-10	-9.186E-10
0.30000	1.699E-10	149.703	-1.582E-08	-1.582E-08	1.582E-08	1.582E-08	-1.299E-09	-1.299E-09
0.40000	2.520E-10	199.605	-2.621E-08	-2.621E-08	2.621E-08	2.621E-08	-1.927E-09	-1.927E-09
0.50000	3.741E-10	249.506	-4.163E-08	-4.163E-08	4.163E-08	4.163E-08	-2.860E-09	-2.860E-09
0.60000	6.010E-10	299.407	-6.516E-08	-6.516E-08	6.516E-08	6.516E-08	-4.595E-09	-4.595E-09
0.70000	1.120E-09	349.308	-1.061E-07	-1.061E-07	1.061E-07	1.061E-07	-8.566E-09	-8.566E-09
0.80000	2.556E-09	399.209	-1.904E-07	-1.904E-07	1.904E-07	1.904E-07	-1.954E-08	-1.954E-08
0.85000	4.362E-09	424.160	-2.734E-07	-2.734E-07	2.736E-07	2.736E-07	-3.335E-08	-3.335E-08
0.90000	8.117E-09	449.110	-4.215E-07	-4.215E-07	4.231E-07	4.231E-07	-6.205E-08	-6.205E-08
0.92500	1.130E-08	461.585	-5.407E-07	-5.407E-07	5.449E-07	5.450E-07	-8.636E-08	-8.636E-08
0.95000	1.525E-08	474.060	-7.011E-07	-7.011E-07	7.127E-07	7.127E-07	-1.166E-07	-1.166E-07
0.96250	1.732E-08	480.298	-7.990E-07	-7.990E-07	8.181E-07	8.181E-07	-1.324E-07	-1.324E-07
0.97500	1.898E-08	486.536	-9.068E-07	-9.068E-07	9.373E-07	9.373E-07	-1.451E-07	-1.451E-07
0.98125	1.958E-08	489.654	-9.631E-07	-9.631E-07	1.001E-06	1.001E-06	-1.497E-07	-1.497E-07
0.98750	1.998E-08	492.773	-1.020E-06	-1.020E-06	1.068E-06	1.068E-06	-1.528E-07	-1.528E-07
0.99375	2.018E-08	495.892	-1.078E-06	-1.078E-06	1.136E-06	1.136E-06	-1.543E-07	-1.543E-07
1.00000	2.015E-08	499.011	-1.135E-06	-1.135E-06	1.205E-06	1.205E-06	-1.541E-07	-1.541E-07
1.00625	1.991E-08	502.130	-1.191E-06	-1.191E-06	1.274E-06	1.274E-06	-1.522E-07	-1.522E-07
1.01250	1.946E-08	505.248	-1.245E-06	-1.245E-06	1.342E-06	1.342E-06	-1.488E-07	-1.488E-07
1.01875	1.883E-08	508.367	-1.298E-06	-1.298E-06	1.409E-06	1.409E-06	-1.439E-07	-1.439E-07
1.02500	1.803E-08	511.486	-1.348E-06	-1.348E-06	1.474E-06	1.474E-06	-1.378E-07	-1.378E-07
1.03750	1.609E-08	517.723	-1.441E-06	-1.441E-06	1.594E-06	1.594E-06	-1.230E-07	-1.230E-07
1.05000	1.390E-08	523.961	-1.523E-06	-1.523E-06	1.699E-06	1.699E-06	-1.063E-07	-1.063E-07
1.07500	1.027E-08	536.436	-1.662E-06	-1.662E-06	1.860E-06	1.860E-06	-7.854E-08	-7.854E-08
1.10000	7.272E-09	548.911	-1.756E-06	-1.756E-06	1.983E-06	1.983E-06	-5.560E-08	-5.560E-08
1.15000	3.973E-09	573.862	-1.876E-06	-1.876E-06	2.134E-06	2.134E-06	-3.037E-08	-3.037E-08
1.20000	2.369E-09	598.812	-1.932E-06	-1.932E-06	2.230E-06	2.230E-06	-1.812E-08	-1.812E-08
1.30000	1.065E-09	648.713	-1.997E-06	-1.997E-06	2.323E-06	2.323E-06	-8.140E-09	-8.140E-09
1.40000	5.774E-10	698.615	-2.022E-06	-2.022E-06	2.376E-06	2.376E-06	-4.414E-09	-4.414E-09
1.50000	3.630E-10	748.516	-2.031E-06	-2.031E-06	2.412E-06	2.412E-06	-2.775E-09	-2.775E-09
1.60000	2.445E-10	798.417	-2.033E-06	-2.033E-06	2.440E-06	2.440E-06	-1.870E-09	-1.870E-09
1.70000	1.655E-10	848.318	-2.029E-06	-2.029E-06	2.464E-06	2.464E-06	-1.265E-09	-1.265E-09
1.80000	1.170E-10	898.219	-2.023E-06	-2.023E-06	2.484E-06	2.484E-06	-8.947E-10	-8.947E-10
1.90000	8.270E-11	948.120	-2.016E-06	-2.016E-06	2.501E-06	2.501E-06	-6.323E-10	-6.323E-10
2.00000	5.910E-11	998.021	-2.007E-06	-2.007E-06	2.517E-06	2.517E-06	-4.519E-10	-4.519E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 5.000 θ_0= 0. ρ_a= 18.752

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-2.456E-15
0.10000	9.364E-12	9.365E-12	-3.505E-22	-3.505E-22	-4.027E-12	-4.027E-12	-3.290E-15
0.20000	2.611E-11	2.611E-11	-6.090E-22	-6.090E-22	-1.103E-11	-1.103E-11	-4.694E-15
0.30000	5.520E-11	5.520E-11	-1.057E-21	-1.057E-21	-2.318E-11	-2.318E-11	-7.346E-15
0.40000	1.164E-10	1.164E-10	-1.917E-21	-1.917E-21	-4.478E-11	-4.478E-11	-1.235E-14
0.50000	2.294E-10	2.294E-10	-3.477E-21	-3.477E-21	-8.399E-11	-8.399E-11	-2.435E-14
0.60000	5.121E-10	5.121E-10	-7.001E-21	-7.001E-21	-1.578E-10	-1.578E-10	-5.561E-14
0.70000	1.397E-09	1.397E-09	-1.755E-20	-1.755E-20	-3.254E-10	-3.254E-10	-1.535E-13
0.80000	5.013E-09	5.013E-09	-6.079E-20	-6.079E-20	-8.238E-10	-8.238E-10	-5.954E-13
0.85000	1.139E-08	1.139E-08	-1.340E-19	-1.340E-19	-1.502E-09	-1.502E-09	-1.405E-12
0.90000	3.076E-08	3.076E-08	-3.444E-19	-3.444E-19	-3.116E-09	-3.116E-09	-3.837E-12
0.92500	5.462E-08	5.462E-08	-5.881E-19	-5.881E-19	-4.832E-09	-4.832E-09	-6.493E-12
0.95000	1.007E-07	1.007E-07	-9.195E-19	-9.195E-19	-7.624E-09	-7.624E-09	-1.061E-11
0.96250	1.412E-07	1.412E-07	-1.094E-18	-1.094E-18	-9.509E-09	-9.509E-09	-1.293E-11
0.97500	1.961E-07	1.961E-07	-1.241E-18	-1.241E-18	-1.170E-08	-1.170E-08	-1.508E-11
0.98125	2.300E-07	2.300E-07	-1.295E-18	-1.295E-18	-1.289E-08	-1.289E-08	-1.592E-11
0.98750	2.675E-07	2.675E-07	-1.332E-18	-1.332E-18	-1.411E-08	-1.412E-08	-1.652E-11
0.99375	3.078E-07	3.078E-07	-1.350E-18	-1.350E-18	-1.537E-08	-1.537E-08	-1.681E-11
1.00000	3.489E-07	3.489E-07	-1.347E-18	-1.347E-18	-1.663E-08	-1.663E-08	-1.678E-11
1.00625	3.885E-07	3.885E-07	-1.325E-18	-1.325E-18	-1.788E-08	-1.788E-08	-1.642E-11
1.01250	4.246E-07	4.246E-07	-1.284E-18	-1.284E-18	-1.911E-08	-1.911E-08	-1.576E-11
1.01875	4.562E-07	4.562E-07	-1.227E-18	-1.227E-18	-2.028E-08	-2.028E-08	-1.487E-11
1.02500	4.836E-07	4.836E-07	-1.157E-18	-1.157E-18	-2.140E-08	-2.140E-08	-1.382E-11
1.03750	5.268E-07	5.268E-07	-9.896E-19	-9.896E-19	-2.341E-08	-2.341E-08	-1.151E-11
1.05000	5.561E-07	5.562E-07	-8.099E-19	-8.099E-19	-2.509E-08	-2.509E-08	-9.289E-12
1.07500	5.879E-07	5.879E-07	-5.043E-19	-5.043E-19	-2.752E-08	-2.752E-08	-5.516E-12
1.10000	5.996E-07	5.996E-07	-2.883E-19	-2.883E-19	-2.897E-08	-2.897E-08	-3.307E-12
1.15000	5.945E-07	5.945E-07	-1.167E-19	-1.167E-19	-3.038E-08	-3.038E-08	-1.230E-12
1.20000	5.763E-07	5.763E-07	-5.437E-20	-5.437E-20	-3.096E-08	-3.096E-08	-5.338E-13
1.30000	5.347E-07	5.347E-07	-1.627E-20	-1.627E-20	-3.142E-08	-3.142E-08	-1.406E-13
1.40000	4.969E-07	4.969E-07	-6.604E-21	-6.604E-21	-3.157E-08	-3.157E-08	-5.199E-14
1.50000	4.637E-07	4.637E-07	-3.323E-21	-3.323E-21	-3.164E-08	-3.164E-08	-2.301E-14
1.60000	4.346E-07	4.346E-07	-1.832E-21	-1.832E-21	-3.168E-08	-3.168E-08	-1.184E-14
1.70000	4.090E-07	4.090E-07	-1.014E-21	-1.014E-21	-3.170E-08	-3.170E-08	-7.087E-15
1.80000	3.863E-07	3.863E-07	-5.839E-22	-5.839E-22	-3.171E-08	-3.171E-08	-4.565E-15
1.90000	3.659E-07	3.659E-07	-3.361E-22	-3.361E-22	-3.172E-08	-3.172E-08	-3.220E-15
2.00000	3.476E-07	3.476E-07	-1.931E-22	-1.931E-22	-3.172E-08	-3.172E-08	-2.414E-15

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 6.000 θ_0= 0. ρ_a= 22.490

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	6.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	6.0000	0.10000	193.774	6.270E-07	9.994E-01	-8.486E-11	-8.486E-11	8.486E-11
0.20000	6.0000	0.20000	172.422	8.271E-07	9.992E-01	-1.200E-10	-1.200E-10	1.200E-10
0.30000	6.0000	0.30000	151.116	1.441E-06	9.988E-01	-1.695E-10	-1.695E-10	1.695E-10
0.40000	6.0000	0.40000	129.879	2.241E-06	9.983E-01	-2.509E-10	-2.509E-10	2.509E-10
0.50000	6.0000	0.50000	108.752	2.455E-06	9.975E-01	-3.716E-10	-3.716E-10	3.716E-10
0.60000	6.0000	0.60000	87.814	3.202E-06	9.962E-01	-5.931E-10	-5.931E-10	5.931E-10
0.70000	6.0000	0.70000	67.242	9.712E-06	9.942E-01	-1.091E-09	-1.091E-09	1.091E-09
0.80000	6.0000	0.80000	47.513	3.863E-05	9.924E-01	-2.391E-09	-2.391E-09	2.391E-09
0.85000	6.0000	0.85000	38.376	8.324E-05	9.943E-01	-3.885E-09	-3.885E-09	3.885E-09
0.90000	6.0000	0.90000	30.322	2.083E-04	1.003E 00	-6.609E-09	-6.609E-09	6.609E-09
0.92500	6.0000	0.92500	27.011	3.078E-04	1.009E 00	-8.808E-09	-8.808E-09	8.808E-09
0.95000	6.0000	0.95000	24.445	4.619E-04	1.012E 00	-1.107E-08	-1.107E-08	1.107E-08
0.96250	6.0000	0.96250	23.522	5.609E-04	1.010E 00	-1.201E-08	-1.201E-08	1.201E-08
0.97500	6.0000	0.97500	22.879	6.745E-04	1.005E 00	-1.272E-08	-1.272E-08	1.272E-08
0.98125	6.0000	0.98125	22.671	7.351E-04	1.003E 00	-1.296E-08	-1.296E-08	1.296E-08
0.98750	6.0001	0.98750	22.541	7.983E-04	1.001E 00	-1.313E-08	-1.313E-08	1.313E-08
0.99375	6.0001	0.99375	22.491	8.640E-04	9.996E-01	-1.320E-08	-1.320E-08	1.320E-08
1.00000	6.0001	1.00000	22.521	9.263E-04	9.999E-01	-1.316E-08	-1.316E-08	1.316E-08
1.00625	6.0001	1.00625	22.632	9.955E-04	1.001E 00	-1.300E-08	-1.300E-08	1.300E-08
1.01250	6.0001	1.01250	22.821	1.059E-03	1.004E 00	-1.279E-08	-1.279E-08	1.279E-08
1.01875	6.0001	1.01875	23.087	1.118E-03	1.007E 00	-1.249E-08	-1.249E-08	1.249E-08
1.02500	6.0001	1.02500	23.427	1.175E-03	1.011E 00	-1.212E-08	-1.212E-08	1.212E-08
1.03750	6.0001	1.03750	24.317	1.276E-03	1.016E 00	-1.119E-08	-1.119E-08	1.119E-08
1.05000	6.0001	1.05000	25.462	1.363E-03	1.018E 00	-1.011E-08	-1.011E-08	1.011E-08
1.07500	6.0001	1.07500	28.384	1.487E-03	1.015E 00	-7.794E-09	-7.794E-09	7.794E-09
1.10000	6.0002	1.10000	31.951	1.571E-03	1.008E 00	-5.935E-09	-5.935E-09	5.935E-09
1.15000	6.0002	1.15000	40.310	1.658E-03	9.988E-01	-3.436E-09	-3.436E-09	3.436E-09
1.20000	6.0003	1.20000	49.602	1.704E-03	9.951E-01	-2.152E-09	-2.152E-09	2.152E-09
1.30000	6.0004	1.30000	69.468	1.735E-03	9.945E-01	-1.015E-09	-1.015E-09	1.015E-09
1.40000	6.0005	1.40000	90.095	1.749E-03	9.955E-01	-5.602E-10	-5.602E-10	5.602E-10
1.50000	6.0006	1.50000	111.059	1.754E-03	9.964E-01	-3.560E-10	-3.560E-10	3.560E-10
1.60000	6.0007	1.60000	132.201	1.759E-03	9.970E-01	-2.403E-10	-2.403E-10	2.403E-10
1.70000	6.0007	1.70000	153.447	1.760E-03	9.975E-01	-1.632E-10	-1.632E-10	1.632E-10
1.80000	6.0008	1.80000	174.759	1.766E-03	9.978E-01	-1.155E-10	-1.155E-10	1.155E-10
1.90000	6.0008	1.90000	196.116	1.769E-03	9.981E-01	-8.170E-11	-8.170E-11	8.170E-11
2.00000	6.0009	2.00000	217.504	1.771E-03	9.983E-01	-5.845E-11	-5.845E-11	5.845E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 6.000 θ_D= 0. ρ_a=22.490

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.486E-11	49.901	-3.590E-09	-3.590E-09	3.590E-09	3.590E-09	-6.488E-10	-6.488E-10
0.20000	1.200E-10	99.802	-8.651E-09	-8.651E-09	8.651E-09	8.651E-09	-9.173E-10	-9.173E-10
0.30000	1.695E-10	149.703	-1.580E-08	-1.580E-08	1.580E-08	1.580E-08	-1.296E-09	-1.296E-09
0.40000	2.509E-10	199.605	-2.615E-08	-2.615E-08	2.615E-08	2.615E-08	-1.918E-09	-1.918E-09
0.50000	3.716E-10	249.506	-4.149E-08	-4.149E-08	4.149E-08	4.149E-08	-2.841E-09	-2.841E-09
0.60000	5.931E-10	299.407	-6.477E-08	-6.477E-08	6.477E-08	6.477E-08	-4.534E-09	-4.534E-09
0.70000	1.091E-09	349.308	-1.049E-07	-1.049E-07	1.049E-07	1.049E-07	-8.344E-09	-8.344E-09
0.80000	2.391E-09	399.209	-1.854E-07	-1.854E-07	1.854E-07	1.854E-07	-1.828E-08	-1.828E-08
0.85000	3.885E-09	424.160	-2.615E-07	-2.615E-07	2.617E-07	2.617E-07	-2.970E-08	-2.970E-08
0.90000	6.609E-09	449.110	-3.898E-07	-3.898E-07	3.913E-07	3.913E-07	-5.052E-08	-5.053E-08
0.92500	8.808E-09	461.585	-4.846E-07	-4.846E-07	4.879E-07	4.879E-07	-6.734E-08	-6.734E-08
0.95000	1.137E-08	474.061	-6.066E-07	-6.066E-07	6.143E-07	6.143E-07	-8.460E-08	-8.460E-08
0.96250	1.201E-08	480.298	-6.768E-07	-6.768E-07	6.883E-07	6.883E-07	-9.185E-08	-9.185E-08
0.97500	1.272E-08	486.536	-7.514E-07	-7.514E-07	7.683E-07	7.683E-07	-9.725E-08	-9.725E-08
0.98125	1.296E-08	489.655	-7.898E-07	-7.898E-07	8.100E-07	8.100E-07	-9.907E-08	-9.907E-08
0.98750	1.313E-08	492.773	-8.286E-07	-8.286E-07	8.526E-07	8.526E-07	-1.004E-07	-1.004E-07
0.99375	1.320E-08	495.892	-8.676E-07	-8.676E-07	8.958E-07	8.958E-07	-1.009E-07	-1.009E-07
1.00000	1.316E-08	499.011	-9.065E-07	-9.065E-07	9.391E-07	9.391E-07	-1.006E-07	-1.006E-07
1.00625	1.300E-08	502.130	-9.447E-07	-9.447E-07	9.826E-07	9.826E-07	-9.942E-08	-9.942E-08
1.01250	1.279E-08	505.249	-9.823E-07	-9.823E-07	1.025E-06	1.025E-06	-9.776E-08	-9.776E-08
1.01875	1.249E-08	508.367	-1.019E-06	-1.019E-06	1.068E-06	1.068E-06	-9.547E-08	-9.547E-08
1.02500	1.212E-08	511.486	-1.055E-06	-1.055E-06	1.109E-06	1.109E-06	-9.263E-08	-9.263E-08
1.03750	1.119E-08	517.724	-1.122E-06	-1.122E-06	1.187E-06	1.187E-06	-8.557E-08	-8.557E-08
1.05000	1.011E-08	523.961	-1.184E-06	-1.184E-06	1.258E-06	1.258E-06	-7.729E-08	-7.729E-08
1.07500	7.794E-09	536.436	-1.288E-06	-1.288E-06	1.378E-06	1.378E-06	-5.959E-08	-5.959E-08
1.10000	5.935E-09	548.912	-1.366E-06	-1.366E-06	1.469E-06	1.469E-06	-4.538E-08	-4.538E-08
1.15000	3.436E-09	573.862	-1.472E-06	-1.472E-06	1.592E-06	1.592E-06	-2.627E-08	-2.627E-08
1.20000	2.152E-09	598.813	-1.534E-06	-1.534E-06	1.667E-06	1.667E-06	-1.645E-08	-1.645E-08
1.30000	1.015E-09	648.714	-1.600E-06	-1.600E-06	1.749E-06	1.749E-06	-7.762E-09	-7.762E-09
1.40000	5.602E-10	698.615	-1.631E-06	-1.631E-06	1.793E-06	1.793E-06	-4.283E-09	-4.283E-09
1.50000	3.560E-10	748.516	-1.647E-06	-1.647E-06	1.822E-06	1.822E-06	-2.722E-09	-2.722E-09
1.60000	2.433E-10	798.417	-1.655E-06	-1.655E-06	1.843E-06	1.843E-06	-1.837E-09	-1.837E-09
1.70000	1.632E-10	848.318	-1.659E-06	-1.659E-06	1.859E-06	1.859E-06	-1.248E-09	-1.248E-09
1.80000	1.155E-10	898.219	-1.659E-06	-1.659E-06	1.872E-06	1.872E-06	-8.832E-10	-8.832E-10
1.90000	8.170E-11	948.121	-1.658E-06	-1.658E-06	1.884E-06	1.884E-06	-6.246E-10	-6.246E-10
2.00000	5.845E-11	998.022	-1.655E-06	-1.655E-06	1.893E-06	1.893E-06	-4.469E-10	-4.469E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 6.000 θ_D= 0. ρ_a=22.490

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-3.532E-15
0.10000	1.122E-11	1.122E-11	-3.501E-22	-3.501E-22	-4.024E-12	-4.024E-12	-4.729E-15
0.20000	3.126E-11	3.126E-11	-6.076E-22	-6.076E-22	-1.101E-11	-1.101E-11	-6.740E-15
0.30000	6.601E-11	6.601E-11	-1.053E-21	-1.053E-21	-2.313E-11	-2.313E-11	-1.053E-14
0.40000	1.389E-10	1.389E-10	-1.904E-21	-1.904E-21	-4.461E-11	-4.461E-11	-1.765E-14
0.50000	2.729E-10	2.729E-10	-3.442E-21	-3.442E-21	-8.349E-11	-8.349E-11	-3.457E-14
0.60000	6.033E-10	6.033E-10	-6.867E-21	-6.867E-21	-1.562E-10	-1.562E-10	-7.816E-14
0.70000	1.615E-09	1.615E-09	-1.688E-20	-1.688E-20	-3.188E-10	-3.188E-10	-2.107E-13
0.80000	5.500E-09	5.500E-09	-5.510E-20	-5.510E-20	-7.826E-10	-7.826E-10	-7.728E-13
0.85000	1.188E-08	1.188E-08	-1.129E-19	-1.129E-19	-1.378E-09	-1.378E-09	-1.713E-12
0.90000	2.945E-08	2.945E-08	-2.476E-19	-2.476E-19	-2.677E-09	-2.677E-09	-4.140E-12
0.92500	4.918E-08	4.918E-08	-3.931E-19	-3.931E-19	-3.856E-09	-3.856E-09	-6.217E-12
0.95000	8.434E-08	8.434E-08	-5.688E-19	-5.688E-19	-5.653E-09	-5.653E-09	-9.006E-12
0.96250	1.126E-07	1.126E-07	-6.497E-19	-6.497E-19	-6.795E-09	-6.795E-09	-1.045E-11
0.97500	1.471E-07	1.471E-07	-7.127E-19	-7.127E-19	-8.072E-09	-8.072E-09	-1.166E-11
0.98125	1.680E-07	1.680E-07	-7.344E-19	-7.344E-19	-8.749E-09	-8.749E-09	-1.209E-11
0.98750	1.904E-07	1.904E-07	-7.488E-19	-7.488E-19	-9.443E-09	-9.443E-09	-1.235E-11
0.99375	2.137E-07	2.137E-07	-7.547E-19	-7.547E-19	-1.015E-08	-1.015E-08	-1.245E-11
1.00000	2.370E-07	2.370E-07	-7.512E-19	-7.512E-19	-1.085E-08	-1.085E-08	-1.239E-11
1.00625	2.595E-07	2.595E-07	-7.386E-19	-7.386E-19	-1.155E-08	-1.155E-08	-1.218E-11
1.01250	2.805E-07	2.805E-07	-7.188E-19	-7.188E-19	-1.223E-08	-1.223E-08	-1.178E-11
1.01875	2.994E-07	2.994E-07	-6.918E-19	-6.918E-19	-1.289E-08	-1.289E-08	-1.125E-11
1.02500	3.162E-07	3.162E-07	-6.587E-19	-6.587E-19	-1.352E-08	-1.352E-08	-1.062E-11
1.03750	3.433E-07	3.433E-07	-5.794E-19	-5.794E-19	-1.468E-08	-1.468E-08	-9.194E-12
1.05000	3.625E-07	3.625E-07	-4.913E-19	-4.913E-19	-1.568E-08	-1.568E-08	-7.725E-12
1.07500	3.861E-07	3.861E-07	-3.225E-19	-3.225E-19	-1.720E-08	-1.720E-08	-5.221E-12
1.10000	3.968E-07	3.968E-07	-2.113E-19	-2.113E-19	-1.817E-08	-1.817E-08	-3.370E-12
1.15000	3.982E-07	3.982E-07	-9.415E-20	-9.415E-20	-1.926E-08	-1.926E-08	-1.444E-12
1.20000	3.885E-07	3.885E-07	-4.717E-20	-4.717E-20	-1.977E-08	-1.977E-08	-6.641E-13
1.30000	3.622E-07	3.622E-07	-1.516E-20	-1.516E-20	-2.018E-08	-2.018E-08	-1.866E-13
1.40000	3.370E-07	3.370E-07	-6.317E-21	-6.317E-21	-2.032E-08	-2.032E-08	-7.107E-14
1.50000	3.146E-07	3.146E-07	-3.226E-21	-3.226E-21	-2.039E-08	-2.039E-08	-3.187E-14
1.60000	2.949E-07	2.949E-07	-1.784E-21	-1.784E-21	-2.043E-08	-2.043E-08	-1.660E-14
1.70000	2.775E-07	2.775E-07	-9.915E-22	-9.915E-22	-2.045E-08	-2.045E-08	-9.994E-15
1.80000	2.620E-07	2.620E-07	-5.720E-22	-5.720E-22	-2.046E-08	-2.046E-08	-6.472E-15
1.90000	2.482E-07	2.482E-07	-3.296E-22	-3.296E-22	-2.047E-08	-2.047E-08	-4.582E-15
2.00000	2.358E-07	2.358E-07	-1.895E-22	-1.895E-22	-2.047E-08	-2.047E-08	-3.442E-15

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 7.000 θ_D= 0. ρ_a= 26.221

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	7.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	7.0000	0.10000	193.821	7.137E-07	9.993E-01	-8.480E-11	-8.480E-11	8.480E-11
0.20000	7.0000	0.20000	172.528	9.472E-07	9.991E-01	-1.198E-10	-1.198E-10	1.198E-10
0.30000	7.0000	0.30000	151.297	1.281E-06	9.987E-01	-1.690E-10	-1.690E-10	1.690E-10
0.40000	7.0000	0.40000	130.160	1.281E-06	9.982E-01	-2.496E-10	-2.496E-10	2.496E-10
0.50000	7.0000	0.50000	109.171	3.468E-06	9.973E-01	-3.687E-10	-3.687E-10	3.687E-10
0.60000	7.0000	0.60000	88.437	5.229E-06	9.961E-01	-5.839E-10	-5.839E-10	5.839E-10
0.70000	7.0000	0.70000	68.187	1.110E-05	9.944E-01	-1.058E-09	-1.058E-09	1.058E-09
0.80000	7.0000	0.80000	49.029	4.034E-05	9.942E-01	-2.215E-09	-2.215E-09	2.215E-09
0.85000	7.0000	0.85000	40.351	8.410E-05	9.974E-01	-3.429E-09	-3.429E-09	3.429E-09
0.90000	7.0000	0.90000	32.925	1.861E-04	1.005E 00	-5.566E-09	-5.566E-09	5.566E-09
0.92500	7.0000	0.92500	29.980	2.638E-04	1.008E 00	-6.763E-09	-6.763E-09	6.763E-09
0.95000	7.0000	0.95000	27.773	3.415E-04	1.008E 00	-8.230E-09	-8.230E-09	8.230E-09
0.96250	7.0000	0.96250	27.007	3.740E-04	1.005E 00	-8.811E-09	-8.811E-09	8.811E-09
0.97500	7.0000	0.97500	26.492	4.525E-04	1.002E 00	-9.224E-09	-9.224E-09	9.224E-09
0.98125	7.0000	0.98125	26.334	4.943E-04	1.001E 00	-9.354E-09	-9.354E-09	9.354E-09
0.98750	7.0000	0.98750	26.244	5.328E-04	9.999E-01	-9.429E-09	-9.429E-09	9.429E-09
0.99375	7.0000	0.99375	26.223	5.695E-04	9.995E-01	-9.447E-09	-9.447E-09	9.447E-09
1.00000	7.0001	1.00000	26.270	6.104E-04	9.999E-01	-9.407E-09	-9.407E-09	9.407E-09
1.00625	7.0001	1.00625	26.387	6.497E-04	1.001E 00	-9.310E-09	-9.310E-09	9.310E-09
1.01250	7.0001	1.01250	26.571	6.890E-04	1.003E 00	-9.159E-09	-9.159E-09	9.159E-09
1.01875	7.0001	1.01875	26.821	7.266E-04	1.005E 00	-8.958E-09	-8.958E-09	8.958E-09
1.02500	7.0001	1.02500	27.135	7.616E-04	1.007E 00	-8.710E-09	-8.710E-09	8.710E-09
1.03750	7.0001	1.03750	27.948	8.256E-04	1.011E 00	-8.102E-09	-8.102E-09	8.102E-09
1.05000	7.0001	1.05000	28.989	8.845E-04	1.013E 00	-7.386E-09	-7.386E-09	7.386E-09
1.07500	7.0001	1.07500	31.659	9.699E-04	1.014E 00	-6.051E-09	-6.051E-09	6.051E-09
1.10000	7.0001	1.10000	34.958	1.033E-03	1.010E 00	-4.867E-09	-4.867E-09	4.867E-09
1.15000	7.0002	1.15000	42.840	1.108E-03	1.002E 00	-3.025E-09	-3.025E-09	3.025E-09
1.20000	7.0002	1.20000	51.768	1.147E-03	9.979E-01	-1.957E-09	-1.957E-09	1.957E-09
1.30000	7.0003	1.30000	71.159	1.180E-03	9.956E-01	-9.610E-10	-9.610E-10	9.610E-10
1.40000	7.0004	1.40000	91.505	1.192E-03	9.959E-01	-5.408E-10	-5.408E-10	5.408E-10
1.50000	7.0004	1.50000	112.288	1.195E-03	9.966E-01	-3.480E-10	-3.480E-10	3.480E-10
1.60000	7.0005	1.60000	133.304	1.199E-03	9.972E-01	-2.354E-10	-2.354E-10	2.354E-10
1.70000	7.0005	1.70000	154.457	1.200E-03	9.976E-01	-1.606E-10	-1.606E-10	1.606E-10
1.80000	7.0005	1.80000	175.699	1.202E-03	9.980E-01	-1.138E-10	-1.138E-10	1.138E-10
1.90000	7.0006	1.90000	197.000	1.206E-03	9.982E-01	-8.054E-11	-8.054E-11	8.054E-11
2.00000	7.0006	2.00000	218.343	1.206E-03	9.984E-01	-5.769E-11	-5.769E-11	5.769E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 7.000 θ_D= 0. ρ_a= 26.221

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.480E-11	49.901	-3.589E-09	-3.589E-09	3.589E-09	3.589E-09	-6.483E-10	-6.483E-10
0.20000	1.198E-10	99.802	-8.643E-09	-8.643E-09	8.643E-09	8.643E-09	-9.157E-10	-9.157E-10
0.30000	1.690E-10	149.703	-1.578E-08	-1.578E-08	1.578E-08	1.578E-08	-1.292E-09	-1.292E-09
0.40000	2.496E-10	199.605	-2.608E-08	-2.608E-08	2.608E-08	2.608E-08	-1.908E-09	-1.908E-09
0.50000	3.687E-10	249.506	-4.132E-08	-4.132E-08	4.132E-08	4.132E-08	-2.819E-09	-2.819E-09
0.60000	5.839E-10	299.407	-6.433E-08	-6.433E-08	6.433E-08	6.433E-08	-4.464E-09	-4.464E-09
0.70000	1.058E-09	349.308	-1.035E-07	-1.035E-07	1.035E-07	1.035E-07	-8.091E-09	-8.091E-09
0.80000	2.215E-09	399.209	-1.800E-07	-1.800E-07	1.801E-07	1.801E-07	-1.694E-08	-1.694E-08
0.85000	3.429E-09	424.160	-2.495E-07	-2.495E-07	2.497E-07	2.497E-07	-2.622E-08	-2.622E-08
0.90000	5.566E-09	449.110	-3.598E-07	-3.598E-07	3.610E-07	3.610E-07	-4.255E-08	-4.255E-08
0.92500	6.763E-09	461.585	-4.361E-07	-4.361E-07	4.386E-07	4.386E-07	-5.170E-08	-5.170E-08
0.95000	8.230E-09	474.061	-5.290E-07	-5.290E-07	5.332E-07	5.332E-07	-6.292E-08	-6.292E-08
0.96250	8.811E-09	480.298	-5.817E-07	-5.817E-07	5.868E-07	5.868E-07	-6.736E-08	-6.736E-08
0.97500	9.224E-09	486.536	-6.368E-07	-6.368E-07	6.444E-07	6.444E-07	-7.052E-08	-7.052E-08
0.98125	9.354E-09	489.655	-6.650E-07	-6.650E-07	6.741E-07	6.741E-07	-7.152E-08	-7.152E-08
0.98750	9.429E-09	492.774	-6.936E-07	-6.936E-07	7.042E-07	7.042E-07	-7.209E-08	-7.209E-08
0.99375	9.447E-09	495.892	-7.222E-07	-7.222E-07	7.345E-07	7.345E-07	-7.223E-08	-7.223E-08
1.00000	9.407E-09	499.011	-7.507E-07	-7.507E-07	7.648E-07	7.648E-07	-7.192E-08	-7.192E-08
1.00625	9.310E-09	502.130	-7.789E-07	-7.789E-07	7.950E-07	7.950E-07	-7.118E-08	-7.118E-08
1.01250	9.159E-09	505.249	-8.066E-07	-8.066E-07	8.249E-07	8.249E-07	-7.003E-08	-7.003E-08
1.01875	8.958E-09	508.368	-8.338E-07	-8.338E-07	8.543E-07	8.543E-07	-6.848E-08	-6.848E-08
1.02500	8.710E-09	511.486	-8.603E-07	-8.603E-07	8.829E-07	8.829E-07	-6.659E-08	-6.659E-08
1.03750	8.102E-09	517.724	-9.107E-07	-9.107E-07	9.375E-07	9.375E-07	-6.195E-08	-6.195E-08
1.05000	7.386E-09	523.962	-9.568E-07	-9.568E-07	9.881E-07	9.881E-07	-5.647E-08	-5.647E-08
1.07500	6.051E-09	536.437	-1.037E-06	-1.037E-06	1.075E-06	1.075E-06	-4.626E-08	-4.626E-08
1.10000	4.867E-09	548.912	-1.101E-06	-1.101E-06	1.146E-06	1.146E-06	-3.721E-08	-3.721E-08
1.15000	3.025E-09	573.862	-1.193E-06	-1.193E-06	1.247E-06	1.247E-06	-2.313E-08	-2.313E-08
1.20000	1.957E-09	598.813	-1.251E-06	-1.251E-06	1.311E-06	1.311E-06	-1.496E-08	-1.496E-08
1.30000	9.610E-10	648.714	-1.315E-06	-1.315E-06	1.384E-06	1.384E-06	-7.347E-09	-7.347E-09
1.40000	5.408E-10	698.615	-1.348E-06	-1.348E-06	1.423E-06	1.423E-06	-4.134E-09	-4.134E-09
1.50000	3.480E-10	748.516	-1.366E-06	-1.366E-06	1.448E-06	1.448E-06	-2.660E-09	-2.660E-09
1.60000	2.354E-10	798.417	-1.378E-06	-1.378E-06	1.465E-06	1.465E-06	-1.800E-09	-1.800E-09
1.70000	1.606E-10	848.319	-1.384E-06	-1.384E-06	1.477E-06	1.477E-06	-1.228E-09	-1.228E-09
1.80000	1.138E-10	898.220	-1.388E-06	-1.388E-06	1.487E-06	1.487E-06	-8.698E-10	-8.698E-10
1.90000	8.054E-11	948.121	-1.390E-06	-1.390E-06	1.495E-06	1.495E-06	-6.157E-10	-6.157E-10
2.00000	5.769E-11	998.022	-1.391E-06	-1.391E-06	1.501E-06	1.501E-06	-4.411E-10	-4.411E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 7.000 θ_D= 0. ρ_a=26.221

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-4.801E-15
0.10000	1.308E-11	1.308E-11	-3.497E-22	-3.497E-22	-4.022E-12	-4.022E-12	-6.424E-15
0.20000	3.638E-11	3.638E-11	-6.059E-22	-6.059E-22	-1.100E-11	-1.100E-11	-9.144E-15
0.30000	7.674E-11	7.674E-11	-1.048E-21	-1.048E-21	-2.307E-11	-2.307E-11	-1.425E-14
0.40000	1.611E-10	1.611E-10	-1.889E-21	-1.889E-21	-4.441E-11	-4.441E-11	-2.380E-14
0.50000	3.156E-10	3.156E-10	-3.402E-21	-3.402E-21	-8.290E-11	-8.290E-11	-4.628E-14
0.60000	6.902E-10	6.902E-10	-6.712E-21	-6.712E-21	-1.543E-10	-1.543E-10	-1.044E-13
0.70000	1.814E-09	1.814E-09	-1.613E-20	-1.613E-20	-3.111E-10	-3.111E-10	-2.716E-13
0.80000	5.887E-09	5.887E-09	-4.923E-20	-4.923E-20	-7.400E-10	-7.400E-10	-9.391E-13
0.85000	1.214E-08	1.214E-08	-9.386E-20	-9.386E-20	-1.260E-09	-1.260E-09	-1.952E-12
0.90000	2.780E-08	2.780E-08	-1.921E-19	-1.921E-19	-2.297E-09	-2.297E-09	-4.076E-12
0.92500	4.375E-08	4.375E-08	-2.563E-19	-2.563E-19	-3.133E-09	-3.133E-09	-5.887E-12
0.95000	6.974E-08	6.974E-08	-3.522E-19	-3.522E-19	-4.273E-09	-4.273E-09	-7.654E-12
0.96250	8.741E-08	8.741E-08	-3.933E-19	-3.933E-19	-4.969E-09	-4.969E-09	-8.457E-12
0.97500	1.079E-07	1.079E-07	-4.236E-19	-4.236E-19	-5.735E-09	-5.735E-09	-9.068E-12
0.98125	1.191E-07	1.191E-07	-4.333E-19	-4.333E-19	-6.136E-09	-6.136E-09	-9.269E-12
0.98750	1.308E-07	1.308E-07	-4.390E-19	-4.390E-19	-6.544E-09	-6.544E-09	-9.386E-12
0.99375	1.427E-07	1.427E-07	-4.403E-19	-4.403E-19	-6.955E-09	-6.955E-09	-9.414E-12
1.00000	1.545E-07	1.545E-07	-4.373E-19	-4.373E-19	-7.366E-09	-7.366E-09	-9.352E-12
1.00625	1.660E-07	1.660E-07	-4.300E-19	-4.300E-19	-7.772E-09	-7.772E-09	-9.202E-12
1.01250	1.768E-07	1.768E-07	-4.188E-19	-4.188E-19	-8.169E-09	-8.169E-09	-8.972E-12
1.01875	1.868E-07	1.868E-07	-4.040E-19	-4.040E-19	-8.554E-09	-8.554E-09	-8.673E-12
1.02500	1.959E-07	1.959E-07	-3.861E-19	-3.861E-19	-8.923E-09	-8.924E-09	-8.317E-12
1.03750	2.118E-07	2.118E-07	-3.434E-19	-3.434E-19	-9.607E-09	-9.607E-09	-7.490E-12
1.05000	2.245E-07	2.245E-07	-2.956E-19	-2.956E-19	-1.020E-08	-1.020E-08	-6.598E-12
1.07500	2.414E-07	2.414E-07	-2.174E-19	-2.174E-19	-1.115E-08	-1.115E-08	-4.748E-12
1.10000	2.502E-07	2.502E-07	-1.575E-19	-1.575E-19	-1.185E-08	-1.185E-08	-3.256E-12
1.15000	2.541E-07	2.541E-07	-7.800E-20	-7.800E-20	-1.269E-08	-1.269E-08	-1.547E-12
1.20000	2.498E-07	2.498E-07	-4.083E-20	-4.083E-20	-1.312E-08	-1.312E-08	-7.681E-13
1.30000	2.346E-07	2.346E-07	-1.398E-20	-1.398E-20	-1.348E-08	-1.348E-08	-2.319E-13
1.40000	2.188E-07	2.188E-07	-6.000E-21	-6.000E-21	-1.362E-08	-1.362E-08	-9.116E-14
1.50000	2.044E-07	2.044E-07	-3.117E-21	-3.117E-21	-1.368E-08	-1.368E-08	-4.150E-14
1.60000	1.917E-07	1.917E-07	-1.730E-21	-1.730E-21	-1.371E-08	-1.371E-08	-2.191E-14
1.70000	1.805E-07	1.805E-07	-9.660E-22	-9.660E-22	-1.373E-08	-1.373E-08	-1.328E-14
1.80000	1.704E-07	1.704E-07	-5.583E-22	-5.583E-22	-1.375E-08	-1.375E-08	-8.649E-15
1.90000	1.615E-07	1.615E-07	-3.222E-22	-3.222E-22	-1.375E-08	-1.375E-08	-6.150E-15
2.00000	1.534E-07	1.534E-07	-1.855E-22	-1.855E-22	-1.376E-08	-1.376E-08	-4.632E-15

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 8.000 θ_D= 0. ρ_a=29.944

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	8.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	8.0000	0.10000	193.876	6.737E-07	9.994E-01	-8.472E-11	-8.472E-11	8.472E-11
0.20000	8.0000	0.20000	172.650	1.121E-06	9.992E-01	-1.195E-10	-1.195E-10	1.195E-10
0.30000	8.0000	0.30000	151.506	1.628E-06	9.989E-01	-1.684E-10	-1.684E-10	1.684E-10
0.40000	8.0000	0.40000	130.484	2.615E-06	9.985E-01	-2.481E-10	-2.481E-10	2.481E-10
0.50000	8.0000	0.50000	109.653	3.949E-06	9.979E-01	-3.654E-10	-3.654E-10	3.654E-10
0.60000	8.0000	0.60000	89.149	5.870E-06	9.969E-01	-5.736E-10	-5.736E-10	5.736E-10
0.70000	8.0000	0.70000	69.261	9.392E-06	9.958E-01	-1.022E-09	-1.022E-09	1.022E-09
0.80000	8.0000	0.80000	50.721	5.357E-05	9.963E-01	-2.046E-09	-2.046E-09	2.046E-09
0.85000	8.0000	0.85000	42.515	9.093E-05	9.992E-01	-3.075E-09	-3.075E-09	3.075E-09
0.90000	8.0000	0.90000	35.692	1.686E-04	1.004E 00	-4.638E-09	-4.638E-09	4.638E-09
0.92500	8.0000	0.92500	33.074	2.203E-04	1.005E 00	-5.512E-09	-5.512E-09	5.512E-09
0.95000	8.0000	0.95000	31.173	2.758E-04	1.004E 00	-6.248E-09	-6.248E-09	6.248E-09
0.96250	8.0000	0.96250	30.535	3.057E-04	1.002E 00	-6.517E-09	-6.517E-09	6.517E-09
0.97500	8.0000	0.97500	30.124	3.552E-04	1.001E 00	-6.695E-09	-6.695E-09	6.695E-09
0.98125	8.0000	0.98125	30.007	3.816E-04	1.000E 00	-6.747E-09	-6.747E-09	6.747E-09
0.98750	8.0000	0.98750	29.950	4.064E-04	9.996E-01	-6.780E-09	-6.780E-09	6.780E-09
0.99375	8.0000	0.99375	29.954	4.312E-04	9.996E-01	-6.778E-09	-6.778E-09	6.778E-09
1.00000	8.0000	1.00000	30.018	4.568E-04	9.999E-01	-6.743E-09	-6.743E-09	6.743E-09
1.00625	8.0000	1.00625	30.141	4.815E-04	1.001E 00	-6.688E-09	-6.688E-09	6.688E-09
1.01250	8.0000	1.01250	30.324	5.037E-04	1.001E 00	-6.608E-09	-6.608E-09	6.608E-09
1.01875	8.0001	1.01875	30.565	5.259E-04	1.003E 00	-6.504E-09	-6.504E-09	6.504E-09
1.02500	8.0001	1.02500	30.863	5.490E-04	1.004E 00	-6.377E-09	-6.377E-09	6.377E-09
1.03750	8.0001	1.03750	31.622	5.908E-04	1.006E 00	-6.066E-09	-6.066E-09	6.066E-09
1.05000	8.0001	1.05000	32.586	6.275E-04	1.008E 00	-5.692E-09	-5.692E-09	5.692E-09
1.07500	8.0001	1.07500	35.058	6.890E-04	1.010E 00	-4.836E-09	-4.836E-09	4.836E-09
1.10000	8.0001	1.10000	38.133	7.342E-04	1.008E 00	-3.948E-09	-3.948E-09	3.948E-09
1.15000	8.0001	1.15000	45.583	7.855E-04	1.003E 00	-2.635E-09	-2.635E-09	2.635E-09
1.20000	8.0002	1.20000	54.157	8.196E-04	9.996E-01	-1.769E-09	-1.769E-09	1.769E-09
1.30000	8.0002	1.30000	73.060	8.521E-04	9.971E-01	-9.034E-10	-9.034E-10	9.034E-10
1.40000	8.0003	1.40000	93.104	8.606E-04	9.971E-01	-5.196E-10	-5.196E-10	5.196E-10
1.50000	8.0003	1.50000	113.688	8.623E-04	9.975E-01	-3.390E-10	-3.390E-10	3.390E-10
1.60000	8.0003	1.60000	134.563	8.657E-04	9.979E-01	-2.300E-10	-2.300E-10	2.300E-10
1.70000	8.0004	1.70000	155.613	8.708E-04	9.982E-01	-1.576E-10	-1.576E-10	1.576E-10
1.80000	8.0004	1.80000	176.776	8.726E-04	9.985E-01	-1.118E-10	-1.118E-10	1.118E-10
1.90000	8.0004	1.90000	198.014	8.777E-04	9.987E-01	-7.922E-11	-7.922E-11	7.922E-11
2.00000	8.0004	2.00000	219.307	8.777E-04	9.988E-01	-5.684E-11	-5.684E-11	5.684E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 8.000 θ_D= 0. ρ_a=29.944

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	6.062E-11	C.	C.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.472E-11	49.901	-3.587E-09	-3.587E-09	3.587E-09	3.587E-09	-6.477E-10	-6.477E-10
0.20000	1.195E-10	99.802	-8.635E-09	-8.635E-09	8.635E-09	8.635E-09	-9.139E-10	-9.139E-10
0.30000	1.684E-10	149.703	-1.575E-08	-1.575E-08	1.575E-08	1.575E-08	-1.288E-09	-1.288E-09
0.40000	2.481E-10	199.605	-2.600E-08	-2.600E-08	2.600E-08	2.600E-08	-1.897E-09	-1.897E-09
0.50000	3.654E-10	249.506	-4.113E-08	-4.113E-08	4.113E-08	4.113E-08	-2.794E-09	-2.794E-09
0.60000	5.736E-10	299.407	-6.382E-08	-6.382E-08	6.382E-08	6.382E-08	-4.385E-09	-4.385E-09
0.70000	1.022E-09	349.308	-1.019E-07	-1.019E-07	1.019E-07	1.019E-07	-7.814E-09	-7.814E-09
0.80000	2.046E-09	399.209	-1.743E-07	-1.743E-07	1.744E-07	1.744E-07	-1.564E-08	-1.564E-08
0.85000	3.075E-09	424.160	-2.374E-07	-2.374E-07	2.376E-07	2.376E-07	-2.351E-08	-2.351E-08
0.90000	4.638E-09	449.110	-3.316E-07	-3.316E-07	3.326E-07	3.326E-07	-3.546E-08	-3.546E-08
0.92500	5.512E-09	461.585	-3.946E-07	-3.946E-07	3.963E-07	3.963E-07	-4.214E-08	-4.214E-08
0.95000	6.248E-09	474.061	-4.677E-07	-4.677E-07	4.704E-07	4.704E-07	-4.777E-08	-4.777E-08
0.96250	6.517E-09	480.298	-5.072E-07	-5.072E-07	5.106E-07	5.106E-07	-4.982E-08	-4.982E-08
0.97500	6.695E-09	486.536	-5.478E-07	-5.478E-07	5.525E-07	5.525E-07	-5.119E-08	-5.119E-08
0.98125	6.747E-09	489.655	-5.684E-07	-5.684E-07	5.739E-07	5.739E-07	-5.158E-08	-5.158E-08
0.98750	6.780E-09	492.774	-5.891E-07	-5.891E-07	5.953E-07	5.953E-07	-5.184E-08	-5.184E-08
0.99375	6.778E-09	495.892	-6.099E-07	-6.099E-07	6.169E-07	6.169E-07	-5.182E-08	-5.182E-08
1.00000	6.743E-09	499.011	-6.305E-07	-6.305E-07	6.385E-07	6.385E-07	-5.155E-08	-5.155E-08
1.00625	6.688E-09	502.130	-6.510E-07	-6.510E-07	6.599E-07	6.599E-07	-5.113E-08	-5.113E-08
1.01250	6.608E-09	505.249	-6.713E-07	-6.713E-07	6.811E-07	6.811E-07	-5.052E-08	-5.052E-08
1.01875	6.503E-09	508.368	-6.913E-07	-6.913E-07	7.020E-07	7.020E-07	-4.972E-08	-4.972E-08
1.02500	6.377E-09	511.486	-7.109E-07	-7.109E-07	7.226E-07	7.226E-07	-4.875E-08	-4.875E-08
1.03750	6.066E-09	517.724	-7.487E-07	-7.487E-07	7.625E-07	7.625E-07	-4.637E-08	-4.637E-08
1.05000	5.692E-09	523.962	-7.844E-07	-7.844E-07	8.001E-07	8.001E-07	-4.352E-08	-4.352E-08
1.07500	4.836E-09	536.437	-8.483E-07	-8.483E-07	8.677E-07	8.677E-07	-3.697E-08	-3.697E-08
1.10000	3.948E-09	548.912	-9.015E-07	-9.015E-07	9.241E-07	9.241E-07	-3.018E-08	-3.018E-08
1.15000	2.635E-09	573.863	-9.799E-07	-9.799E-07	1.007E-06	1.007E-06	-2.015E-08	-2.015E-08
1.20000	1.769E-09	598.813	-1.032E-06	-1.032E-06	1.063E-06	1.063E-06	-1.352E-08	-1.352E-08
1.30000	9.034E-10	648.714	-1.092E-06	-1.092E-06	1.128E-06	1.128E-06	-6.907E-09	-6.907E-09
1.40000	5.196E-10	698.615	-1.125E-06	-1.125E-06	1.164E-06	1.164E-06	-3.972E-09	-3.972E-09
1.50000	3.390E-10	748.517	-1.144E-06	-1.144E-06	1.187E-06	1.187E-06	-2.592E-09	-2.592E-09
1.60000	2.300E-10	798.418	-1.157E-06	-1.157E-06	1.202E-06	1.202E-06	-1.758E-09	-1.758E-09
1.70000	1.576E-10	848.319	-1.164E-06	-1.164E-06	1.213E-06	1.213E-06	-1.205E-09	-1.205E-09
1.80000	1.118E-10	898.220	-1.169E-06	-1.169E-06	1.222E-06	1.222E-06	-8.547E-10	-8.547E-10
1.90000	7.922E-11	948.121	-1.172E-06	-1.172E-06	1.228E-06	1.228E-06	-6.057E-10	-6.057E-10
2.00000	5.684E-11	998.022	-1.174E-06	-1.174E-06	1.233E-06	1.233E-06	-4.345E-10	-4.345E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 8.000 θ_D= 0. ρ_a=29.944

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-6.262E-15
0.10000	1.492E-11	1.492E-11	-3.492E-22	-3.492E-22	-4.019E-12	-4.019E-12	-8.371E-15
0.20000	4.149E-11	4.149E-11	-6.040E-22	-6.040E-22	-1.098E-11	-1.098E-11	-1.190E-14
0.30000	8.739E-11	8.739E-11	-1.042E-21	-1.042E-21	-2.300E-11	-2.300E-11	-1.849E-14
0.40000	1.831E-10	1.831E-10	-1.872E-21	-1.872E-21	-4.418E-11	-4.418E-11	-3.077E-14
0.50000	3.576E-10	3.576E-10	-3.356E-21	-3.356E-21	-8.224E-11	-8.224E-11	-5.931E-14
0.60000	7.735E-10	7.735E-10	-6.540E-21	-6.540E-21	-1.522E-10	-1.522E-10	-1.309E-13
0.70000	2.000E-09	2.000E-09	-1.531E-20	-1.531E-20	-3.028E-10	-3.028E-10	-3.340E-13
0.80000	6.176E-09	6.176E-09	-4.370E-20	-4.370E-20	-6.963E-10	-6.963E-10	-1.082E-12
0.85000	1.216E-08	1.216E-08	-7.991E-20	-7.991E-20	-1.147E-09	-1.147E-09	-2.076E-12
0.90000	2.569E-08	2.569E-08	-1.467E-19	-1.467E-19	-1.966E-09	-1.966E-09	-3.932E-12
0.92500	3.813E-08	3.813E-08	-1.893E-19	-1.893E-19	-2.594E-09	-2.594E-09	-5.226E-12
0.95000	5.615E-08	5.615E-08	-2.279E-19	-2.279E-19	-3.377E-09	-3.377E-09	-6.576E-12
0.96250	6.759E-08	6.759E-08	-2.426E-19	-2.426E-19	-3.818E-09	-3.818E-09	-7.139E-12
0.97500	8.038E-08	8.038E-08	-2.525E-19	-2.525E-19	-4.281E-09	-4.281E-09	-7.536E-12
0.98125	8.712E-08	8.712E-08	-2.554E-19	-2.554E-19	-4.519E-09	-4.519E-09	-7.655E-12
0.98750	9.397E-08	9.397E-08	-2.574E-19	-2.574E-19	-4.759E-09	-4.759E-09	-7.705E-12
0.99375	1.008E-07	1.008E-07	-2.573E-19	-2.573E-19	-4.999E-09	-4.999E-09	-7.702E-12
1.00000	1.076E-07	1.076E-07	-2.551E-19	-2.551E-19	-5.239E-09	-5.239E-09	-7.645E-12
1.00625	1.143E-07	1.143E-07	-2.520E-19	-2.520E-19	-5.476E-09	-5.476E-09	-7.520E-12
1.01250	1.206E-07	1.206E-07	-2.476E-19	-2.476E-19	-5.710E-09	-5.710E-09	-7.340E-12
1.01875	1.266E-07	1.266E-07	-2.418E-19	-2.418E-19	-5.939E-09	-5.939E-09	-7.112E-12
1.02500	1.323E-07	1.323E-07	-2.349E-19	-2.349E-19	-6.162E-09	-6.162E-09	-6.844E-12
1.03750	1.423E-07	1.423E-07	-2.182E-19	-2.182E-19	-6.586E-09	-6.586E-09	-6.219E-12
1.05000	1.505E-07	1.505E-07	-1.986E-19	-1.986E-19	-6.976E-09	-6.976E-09	-5.535E-12
1.07500	1.622E-07	1.622E-07	-1.560E-19	-1.560E-19	-7.639E-09	-7.639E-09	-4.202E-12
1.10000	1.689E-07	1.689E-07	-1.156E-19	-1.156E-19	-8.146E-09	-8.146E-09	-3.108E-12
1.15000	1.732E-07	1.732E-07	-6.361E-20	-6.361E-20	-8.792E-09	-8.792E-09	-1.596E-12
1.20000	1.713E-07	1.713E-07	-3.495E-20	-3.495E-20	-9.148E-09	-9.148E-09	-8.455E-13
1.30000	1.620E-07	1.620E-07	-1.276E-20	-1.276E-20	-9.467E-09	-9.467E-09	-2.747E-13
1.40000	1.515E-07	1.515E-07	-5.659E-21	-5.659E-21	-9.594E-09	-9.594E-09	-1.115E-13
1.50000	1.417E-07	1.417E-07	-2.997E-21	-2.997E-21	-9.656E-09	-9.656E-09	-5.156E-14
1.60000	1.330E-07	1.330E-07	-1.670E-21	-1.670E-21	-9.690E-09	-9.690E-09	-2.765E-14
1.70000	1.253E-07	1.253E-07	-9.376E-22	-9.376E-22	-9.708E-09	-9.708E-09	-1.687E-14
1.80000	1.184E-07	1.184E-07	-5.430E-22	-5.430E-22	-9.719E-09	-9.719E-09	-1.107E-14
1.90000	1.121E-07	1.121E-07	-3.138E-22	-3.138E-22	-9.726E-09	-9.726E-09	-7.906E-15
2.00000	1.065E-07	1.065E-07	-1.809E-22	-1.809E-22	-9.729E-09	-9.729E-09	-5.972E-15

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 10.000 θ_D= 0. ρ_a=37.362

z	ϕ	z_t	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	10.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	10.0000	0.10000	194.006	1.041E-06	9.989E-01	-8.454E-11	-8.454E-11	8.454E-11
0.20000	10.0000	0.20000	172.942	1.441E-06	9.986E-01	-1.190E-10	-1.190E-10	1.190E-10
0.30000	10.0000	0.30000	152.006	3.468E-06	9.981E-01	-1.671E-10	-1.671E-10	1.671E-10
0.40000	10.0000	0.40000	131.256	4.055E-06	9.974E-01	-2.446E-10	-2.446E-10	2.446E-10
0.50000	10.0000	0.50000	110.800	5.443E-06	9.964E-01	-3.577E-10	-3.577E-10	3.577E-10
0.60000	10.0000	0.60000	90.834	9.285E-06	9.952E-01	-5.499E-10	-5.499E-10	5.499E-10
0.70000	10.0000	0.70000	71.771	2.156E-05	9.946E-01	-9.421E-10	-9.421E-10	9.421E-10
0.80000	10.0000	0.80000	54.562	6.916E-05	9.977E-01	-1.739E-09	-1.739E-09	1.739E-09
0.85000	10.0000	0.85000	47.299	1.037E-04	1.002E 00	-2.417E-09	-2.417E-09	2.417E-09
0.90000	10.0000	0.90000	41.580	1.609E-04	1.005E 00	-3.223E-09	-3.223E-09	3.223E-09
0.92500	10.0000	0.92500	39.516	1.981E-04	1.005E 00	-3.604E-09	-3.604E-09	3.604E-09
0.95000	10.0000	0.95000	38.105	2.408E-04	1.002E 00	-3.955E-09	-3.955E-09	3.955E-09
0.96250	10.0000	0.96250	37.669	2.672E-04	1.001E 00	-4.070E-09	-4.070E-09	4.070E-09
0.97500	10.0000	0.97500	37.422	2.946E-04	9.997E-01	-4.137E-09	-4.137E-09	4.137E-09
0.98125	10.0000	0.98125	37.370	3.091E-04	9.993E-01	-4.152E-09	-4.152E-09	4.152E-09
0.98750	10.0000	0.98750	37.367	3.236E-04	9.992E-01	-4.152E-09	-4.152E-09	4.152E-09
0.99375	10.0000	0.99375	37.412	3.389E-04	9.994E-01	-4.140E-09	-4.140E-09	4.140E-09
1.00000	10.0000	1.00000	37.505	3.526E-04	9.998E-01	-4.115E-09	-4.115E-09	4.115E-09
1.00625	10.0000	1.00625	37.646	3.697E-04	1.000E 00	-4.077E-09	-4.077E-09	4.077E-09
1.01250	10.0000	1.01250	37.834	3.825E-04	1.001E 00	-4.026E-09	-4.026E-09	4.026E-09
1.01875	10.0000	1.01875	38.069	3.970E-04	1.002E 00	-3.964E-09	-3.964E-09	3.964E-09
1.02500	10.0000	1.02500	38.350	4.132E-04	1.004E 00	-3.892E-09	-3.892E-09	3.892E-09
1.03750	10.0001	1.03750	39.044	4.380E-04	1.006E 00	-3.717E-09	-3.717E-09	3.717E-09
1.05000	10.0001	1.05000	39.908	4.610E-04	1.008E 00	-3.511E-09	-3.511E-09	3.511E-09
1.07500	10.0001	1.07500	42.101	4.943E-04	1.011E 00	-3.140E-09	-3.140E-09	3.140E-09
1.10000	10.0001	1.10000	44.835	5.199E-04	1.012E 00	-2.736E-09	-2.736E-09	2.736E-09
1.15000	10.0001	1.15000	51.567	5.584E-04	1.008E 00	-1.974E-09	-1.974E-09	1.974E-09
1.20000	10.0001	1.20000	59.495	5.857E-04	1.004E 00	-1.411E-09	-1.411E-09	1.411E-09
1.30000	10.0002	1.30000	77.427	6.147E-04	9.983E-01	-7.839E-10	-7.839E-10	7.839E-10
1.40000	10.0002	1.40000	96.831	6.318E-04	9.969E-01	-4.733E-10	-4.733E-10	4.733E-10
1.50000	10.0002	1.50000	116.975	6.369E-04	9.968E-01	-3.189E-10	-3.189E-10	3.189E-10
1.60000	10.0002	1.60000	137.536	6.420E-04	9.970E-01	-2.176E-10	-2.176E-10	2.176E-10
1.70000	10.0003	1.70000	158.351	6.437E-04	9.974E-01	-1.507E-10	-1.507E-10	1.507E-10
1.80000	10.0003	1.80000	179.331	6.455E-04	9.977E-01	-1.073E-10	-1.073E-10	1.073E-10
1.90000	10.0003	1.90000	200.425	6.506E-04	9.980E-01	-7.621E-11	-7.621E-11	7.621E-11
2.00000	10.0003	2.00000	221.600	6.506E-04	9.982E-01	-5.485E-11	-5.485E-11	5.485E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.454E-11	49.901	-3.583E-09	-3.583E-09	3.583E-09	3.583E-09	-6.463E-10	-6.463E-10
0.20000	1.190E-10	99.802	-8.613E-09	-8.613E-09	8.613E-09	8.613E-09	-9.096E-10	-9.096E-10
0.30000	1.671E-10	149.703	-1.568E-08	-1.568E-08	1.568E-08	1.568E-08	-1.277E-09	-1.277E-09
0.40000	2.446E-10	199.605	-2.582E-08	-2.582E-08	2.582E-08	2.582E-08	-1.870E-09	-1.870E-09
0.50000	3.577E-10	249.506	-4.067E-08	-4.067E-08	4.067E-08	4.067E-08	-2.735E-09	-2.735E-09
0.60000	5.499E-10	299.407	-6.265E-08	-6.265E-08	6.265E-08	6.265E-08	-4.204E-09	-4.204E-09
0.70000	9.421E-10	349.308	-9.847E-08	-9.847E-08	9.849E-08	9.849E-08	-7.202E-09	-7.202E-09
0.80000	1.739E-09	399.209	-1.626E-07	-1.626E-07	1.627E-07	1.627E-07	-1.329E-08	-1.329E-08
0.85000	2.417E-09	424.160	-2.138E-07	-2.138E-07	2.141E-07	2.141E-07	-1.848E-08	-1.848E-08
0.90000	3.223E-09	449.110	-2.839E-07	-2.839E-07	2.848E-07	2.848E-07	-2.464E-08	-2.464E-08
0.92500	3.604E-09	461.585	-3.262E-07	-3.262E-07	3.276E-07	3.276E-07	-2.755E-08	-2.755E-08
0.95000	3.955E-09	474.061	-3.732E-07	-3.732E-07	3.753E-07	3.753E-07	-3.024E-08	-3.024E-08
0.96250	4.070E-09	480.298	-3.980E-07	-3.980E-07	4.006E-07	4.006E-07	-3.112E-08	-3.112E-08
0.97500	4.137E-09	486.536	-4.233E-07	-4.233E-07	4.265E-07	4.265E-07	-3.163E-08	-3.163E-08
0.98125	4.152E-09	489.655	-4.360E-07	-4.360E-07	4.396E-07	4.396E-07	-3.174E-08	-3.174E-08
0.98750	4.152E-09	492.774	-4.488E-07	-4.488E-07	4.527E-07	4.527E-07	-3.175E-08	-3.175E-08
0.99375	4.140E-09	495.892	-4.615E-07	-4.615E-07	4.659E-07	4.659E-07	-3.165E-08	-3.165E-08
1.00000	4.115E-09	499.011	-4.742E-07	-4.742E-07	4.789E-07	4.789E-07	-3.146E-08	-3.146E-08
1.00625	4.077E-09	502.130	-4.867E-07	-4.867E-07	4.920E-07	4.920E-07	-3.117E-08	-3.117E-08
1.01250	4.026E-09	505.249	-4.992E-07	-4.992E-07	5.048E-07	5.048E-07	-3.078E-08	-3.078E-08
1.01875	3.964E-09	508.368	-5.114E-07	-5.114E-07	5.175E-07	5.175E-07	-3.031E-08	-3.031E-08
1.02500	3.892E-09	511.486	-5.234E-07	-5.234E-07	5.300E-07	5.300E-07	-2.975E-08	-2.975E-08
1.03750	3.717E-09	517.724	-5.467E-07	-5.467E-07	5.542E-07	5.542E-07	-2.842E-08	-2.842E-08
1.05000	3.511E-09	523.962	-5.688E-07	-5.688E-07	5.773E-07	5.773E-07	-2.685E-08	-2.685E-08
1.07500	3.140E-09	536.437	-6.096E-07	-6.096E-07	6.195E-07	6.195E-07	-2.401E-08	-2.401E-08
1.10000	2.736E-09	548.912	-6.456E-07	-6.456E-07	6.569E-07	6.569E-07	-2.092E-08	-2.092E-08
1.15000	1.974E-09	573.863	-7.027E-07	-7.027E-07	7.163E-07	7.163E-07	-1.509E-08	-1.509E-08
1.20000	1.411E-09	598.813	-7.437E-07	-7.437E-07	7.593E-07	7.593E-07	-1.078E-08	-1.078E-08
1.30000	7.839E-10	648.714	-7.956E-07	-7.956E-07	8.142E-07	8.142E-07	-5.993E-09	-5.993E-09
1.40000	4.733E-10	698.616	-8.247E-07	-8.247E-07	8.460E-07	8.460E-07	-3.619E-09	-3.619E-09
1.50000	3.189E-10	748.517	-8.432E-07	-8.432E-07	8.663E-07	8.663E-07	-2.438E-09	-2.438E-09
1.60000	2.176E-10	798.418	-8.554E-07	-8.554E-07	8.805E-07	8.805E-07	-1.664E-09	-1.664E-09
1.70000	1.507E-10	848.319	-8.636E-07	-8.636E-07	8.904E-07	8.904E-07	-1.152E-09	-1.152E-09
1.80000	1.073E-10	898.220	-8.691E-07	-8.691E-07	8.976E-07	8.976E-07	-8.200E-10	-8.200E-10
1.90000	7.621E-11	948.121	-8.726E-07	-8.726E-07	9.032E-07	9.032E-07	-5.826E-10	-5.826E-10
2.00000	5.485E-11	998.022	-8.751E-07	-8.751E-07	9.072E-07	9.072E-07	-4.193E-10	-4.193E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0=10.000 θ_D= 0. ρ_a=37.362

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-9.748E-15
0.10000	1.858E-11	1.858E-11	-3.480E-22	-3.480E-22	-4.012E-12	-4.012E-12	-1.301E-14
0.20000	5.151E-11	5.151E-11	-5.995E-22	-5.995E-22	-1.093E-11	-1.093E-11	-1.842E-14
0.30000	1.081E-10	1.081E-10	-1.029E-21	-1.029E-21	-2.283E-11	-2.283E-11	-2.846E-14
0.40000	2.250E-10	2.250E-10	-1.832E-21	-1.832E-21	-4.363E-11	-4.363E-11	-4.690E-14
0.50000	4.357E-10	4.357E-10	-3.250E-21	-3.250E-21	-8.067E-11	-8.067E-11	-8.862E-14
0.60000	9.117E-10	9.117E-10	-6.149E-21	-6.149E-21	-1.474E-10	-1.474E-10	-1.899E-13
0.70000	2.237E-09	2.237E-09	-1.357E-20	-1.357E-20	-2.845E-10	-2.845E-10	-4.556E-13
0.80000	6.258E-09	6.258E-09	-3.404E-20	-3.404E-20	-6.111E-10	-6.111E-10	-1.279E-12
0.85000	1.133E-08	1.133E-08	-5.598E-20	-5.598E-20	-9.407E-10	-9.407E-10	-2.168E-12
0.90000	2.135E-08	2.135E-08	-8.566E-20	-8.566E-20	-1.469E-09	-1.469E-09	-3.523E-12
0.92500	2.932E-08	2.932E-08	-1.010E-19	-1.010E-19	-1.817E-09	-1.817E-09	-4.278E-12
0.95000	3.991E-08	3.991E-08	-1.159E-19	-1.159E-19	-2.224E-09	-2.224E-09	-4.848E-12
0.96250	4.609E-08	4.609E-08	-1.209E-19	-1.209E-19	-2.446E-09	-2.446E-09	-5.048E-12
0.97500	5.267E-08	5.267E-08	-1.239E-19	-1.239E-19	-2.675E-09	-2.675E-09	-5.167E-12
0.98125	5.603E-08	5.603E-08	-1.245E-19	-1.245E-19	-2.791E-09	-2.791E-09	-5.192E-12
0.98750	5.941E-08	5.941E-08	-1.246E-19	-1.246E-19	-2.908E-09	-2.908E-09	-5.194E-12
0.99375	6.278E-08	6.278E-08	-1.240E-19	-1.240E-19	-3.024E-09	-3.024E-09	-5.172E-12
1.00000	6.608E-08	6.608E-08	-1.229E-19	-1.229E-19	-3.140E-09	-3.140E-09	-5.127E-12
1.00625	6.930E-08	6.930E-08	-1.212E-19	-1.212E-19	-3.254E-09	-3.254E-09	-5.060E-12
1.01250	7.241E-08	7.241E-08	-1.190E-19	-1.190E-19	-3.366E-09	-3.366E-09	-4.972E-12
1.01875	7.538E-08	7.538E-08	-1.163E-19	-1.163E-19	-3.476E-09	-3.476E-09	-4.865E-12
1.02500	7.820E-08	7.820E-08	-1.132E-19	-1.132E-19	-3.584E-09	-3.584E-09	-4.743E-12
1.03750	8.332E-08	8.332E-08	-1.058E-19	-1.058E-19	-3.788E-09	-3.789E-09	-4.458E-12
1.05000	8.772E-08	8.772E-08	-9.721E-20	-9.721E-20	-3.978E-09	-3.978E-09	-4.139E-12
1.07500	9.438E-08	9.438E-08	-8.241E-20	-8.241E-20	-4.314E-09	-4.314E-09	-3.359E-12
1.10000	9.862E-08	9.862E-08	-6.724E-20	-6.724E-20	-4.594E-09	-4.594E-09	-2.642E-12
1.15000	1.024E-07	1.024E-07	-4.136E-20	-4.136E-20	-4.994E-09	-4.994E-09	-1.582E-12
1.20000	1.024E-07	1.024E-07	-2.471E-20	-2.471E-20	-5.237E-09	-5.237E-09	-9.390E-13
1.30000	9.815E-08	9.815E-08	-1.034E-20	-1.034E-20	-5.484E-09	-5.484E-09	-3.478E-13
1.40000	9.235E-08	9.235E-08	-4.939E-21	-4.939E-21	-5.592E-09	-5.592E-09	-1.506E-13
1.50000	8.662E-08	8.662E-08	-2.734E-21	-2.734E-21	-5.647E-09	-5.647E-09	-7.191E-14
1.60000	8.141E-08	8.141E-08	-1.537E-21	-1.537E-21	-5.679E-09	-5.679E-09	-3.989E-14
1.70000	7.673E-08	7.673E-08	-8.737E-22	-8.737E-22	-5.696E-09	-5.696E-09	-2.473E-14
1.80000	7.251E-08	7.251E-08	-5.083E-22	-5.083E-22	-5.706E-09	-5.706E-09	-1.647E-14
1.90000	6.872E-08	6.872E-08	-2.949E-22	-2.949E-22	-5.712E-09	-5.712E-09	-1.190E-14
2.00000	6.530E-08	6.530E-08	-1.705E-22	-1.705E-22	-5.715E-09	-5.715E-09	-9.052E-15

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	12.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	12.0000	0.10000	194.165	9.205E-07	9.985E-01	-8.432E-11	-8.432E-11	8.432E-11
0.20000	12.0000	0.20000	173.299	2.508E-06	9.980E-01	-1.183E-10	-1.183E-10	1.183E-10
0.30000	12.0000	0.30000	152.613	2.508E-06	9.973E-01	-1.654E-10	-1.654E-10	1.654E-10
0.40000	12.0000	0.40000	132.193	4.696E-06	9.963E-01	-2.403E-10	-2.403E-10	2.403E-10
0.50000	12.0000	0.50000	112.183	6.830E-06	9.951E-01	-3.486E-10	-3.486E-10	3.486E-10
0.60000	12.0000	0.60000	92.849	1.323E-05	9.939E-01	-5.229E-10	-5.229E-10	5.229E-10
0.70000	12.0000	0.70000	74.717	2.946E-05	9.941E-01	-8.561E-10	-8.561E-10	8.561E-10
0.80000	12.0000	0.80000	58.910	7.471E-05	9.992E-01	-1.446E-09	-1.446E-09	1.446E-09
0.85000	12.0000	0.85000	52.549	1.029E-04	1.003E 00	-1.894E-09	-1.894E-09	1.894E-09
0.90000	12.0000	0.90000	47.790	1.443E-04	1.005E 00	-2.358E-09	-2.358E-09	2.358E-09
0.92500	12.0000	0.92500	46.173	1.708E-04	1.004E 00	-2.558E-09	-2.558E-09	2.558E-09
0.95000	12.0000	0.95000	45.142	1.989E-04	1.001E 00	-2.694E-09	-2.694E-09	2.694E-09
0.96250	12.0000	0.96250	44.861	2.160E-04	9.997E-01	-2.733E-09	-2.733E-09	2.733E-09
0.97500	12.0000	0.97500	44.739	2.331E-04	9.989E-01	-2.749E-09	-2.749E-09	2.749E-09
0.98125	12.0000	0.98125	44.739	2.408E-04	9.988E-01	-2.749E-09	-2.749E-09	2.749E-09
0.98750	12.0000	0.98750	44.779	2.519E-04	9.989E-01	-2.744E-09	-2.744E-09	2.744E-09
0.99375	12.0000	0.99375	44.860	2.613E-04	9.992E-01	-2.733E-09	-2.733E-09	2.733E-09
1.00000	12.0000	1.00000	44.981	2.698E-04	9.997E-01	-2.716E-09	-2.716E-09	2.716E-09
1.00625	12.0000	1.00625	45.141	2.783E-04	1.000E 00	-2.694E-09	-2.694E-09	2.694E-09
1.01250	12.0000	1.01250	45.341	2.877E-04	1.001E 00	-2.667E-09	-2.667E-09	2.667E-09
1.01875	12.0000	1.01875	45.579	2.946E-04	1.002E 00	-2.635E-09	-2.635E-09	2.635E-09
1.02500	12.0000	1.02500	45.856	3.048E-04	1.003E 00	-2.599E-09	-2.599E-09	2.599E-09
1.03750	12.0000	1.03750	46.521	3.210E-04	1.006E 00	-2.513E-09	-2.513E-09	2.513E-09
1.05000	12.0000	1.05000	47.330	3.321E-04	1.008E 00	-2.413E-09	-2.413E-09	2.413E-09
1.07500	12.0001	1.07500	49.350	3.569E-04	1.012E 00	-2.180E-09	-2.180E-09	2.180E-09
1.10000	12.0001	1.10000	51.851	3.740E-04	1.013E 00	-1.950E-09	-1.950E-09	1.950E-09
1.15000	12.0001	1.15000	58.037	4.013E-04	1.012E 00	-1.501E-09	-1.501E-09	1.501E-09
1.20000	12.0001	1.20000	65.419	4.218E-04	1.007E 00	-1.158E-09	-1.158E-09	1.158E-09
1.30000	12.0001	1.30000	82.442	4.440E-04	1.000E 00	-6.784E-10	-6.784E-10	6.784E-10
1.40000	12.0001	1.40000	101.190	4.610E-04	9.974E-01	-4.277E-10	-4.277E-10	4.277E-10
1.50000	12.0002	1.50000	120.864	4.679E-04	9.965E-01	-2.967E-10	-2.967E-10	2.967E-10
1.60000	12.0002	1.60000	141.077	4.730E-04	9.965E-01	-2.037E-10	-2.037E-10	2.037E-10
1.70000	12.0002	1.70000	161.627	4.747E-04	9.968E-01	-1.429E-10	-1.429E-10	1.429E-10
1.80000	12.0002	1.80000	182.400	4.764E-04	9.971E-01	-1.021E-10	-1.021E-10	1.021E-10
1.90000	12.0002	1.90000	203.327	4.832E-04	9.974E-01	-7.285E-11	-7.285E-11	7.285E-11
2.00000	12.0002	2.00000	224.365	4.849E-04	9.976E-01	-5.254E-11	-5.254E-11	5.254E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 12.000 θ_D= 0. ρ_a=44.734

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.432E-11	49.901	-3.579E-09	-3.579E-09	3.579E-09	3.579E-09	-6.447E-10	-6.447E-10
0.20000	1.183E-10	99.802	-8.588E-09	-8.588E-09	8.588E-09	8.588E-09	-9.043E-10	-9.043E-10
0.30000	1.654E-10	149.703	-1.560E-08	-1.560E-08	1.560E-08	1.560E-08	-1.265E-09	-1.265E-09
0.40000	2.403E-10	199.605	-2.559E-08	-2.559E-08	2.559E-08	2.559E-08	-1.837E-09	-1.837E-09
0.50000	3.486E-10	249.506	-4.013E-08	-4.013E-08	4.013E-08	4.013E-08	-2.665E-09	-2.665E-09
0.60000	5.229E-10	299.407	-6.131E-08	-6.131E-08	6.131E-08	6.131E-08	-3.998E-09	-3.998E-09
0.70000	8.561E-10	349.308	-9.464E-08	-9.464E-08	9.467E-08	9.467E-08	-6.545E-09	-6.545E-09
0.80000	1.446E-09	399.209	-1.509E-07	-1.509E-07	1.511E-07	1.511E-07	-1.106E-08	-1.106E-08
0.85000	1.894E-09	424.160	-1.925E-07	-1.925E-07	1.928E-07	1.928E-07	-1.448E-08	-1.448E-08
0.90000	2.358E-09	449.110	-2.452E-07	-2.452E-07	2.460E-07	2.460E-07	-1.803E-08	-1.803E-08
0.92500	2.558E-09	461.585	-2.758E-07	-2.758E-07	2.768E-07	2.768E-07	-1.956E-08	-1.956E-08
0.95000	2.694E-09	474.061	-3.084E-07	-3.084E-07	3.099E-07	3.099E-07	-2.060E-08	-2.060E-08
0.96250	2.733E-09	480.298	-3.252E-07	-3.252E-07	3.269E-07	3.269E-07	-2.089E-08	-2.089E-08
0.97500	2.749E-09	486.536	-3.422E-07	-3.422E-07	3.442E-07	3.442E-07	-2.102E-08	-2.102E-08
0.98125	2.749E-09	489.655	-3.507E-07	-3.507E-07	3.528E-07	3.528E-07	-2.102E-08	-2.102E-08
0.98750	2.744E-09	492.774	-3.591E-07	-3.591E-07	3.615E-07	3.615E-07	-2.098E-08	-2.098E-08
0.99375	2.733E-09	495.892	-3.676E-07	-3.676E-07	3.702E-07	3.702E-07	-2.089E-08	-2.089E-08
1.00000	2.716E-09	499.011	-3.760E-07	-3.760E-07	3.788E-07	3.788E-07	-2.077E-08	-2.077E-08
1.00625	2.694E-09	502.130	-3.843E-07	-3.843E-07	3.873E-07	3.873E-07	-2.060E-08	-2.060E-08
1.01250	2.667E-09	505.249	-3.926E-07	-3.926E-07	3.958E-07	3.958E-07	-2.039E-08	-2.039E-08
1.01875	2.635E-09	508.368	-4.008E-07	-4.008E-07	4.041E-07	4.041E-07	-2.015E-08	-2.015E-08
1.02500	2.599E-09	511.487	-4.088E-07	-4.088E-07	4.124E-07	4.124E-07	-1.987E-08	-1.987E-08
1.03750	2.513E-09	517.724	-4.245E-07	-4.245E-07	4.286E-07	4.286E-07	-1.922E-08	-1.922E-08
1.05000	2.413E-09	523.962	-4.397E-07	-4.397E-07	4.441E-07	4.441E-07	-1.845E-08	-1.845E-08
1.07500	2.180E-09	536.437	-4.680E-07	-4.680E-07	4.732E-07	4.732E-07	-1.666E-08	-1.666E-08
1.10000	1.950E-09	548.912	-4.934E-07	-4.934E-07	4.993E-07	4.993E-07	-1.491E-08	-1.491E-08
1.15000	1.501E-09	573.863	-5.359E-07	-5.359E-07	5.429E-07	5.429E-07	-1.147E-08	-1.147E-08
1.20000	1.158E-09	598.813	-5.681E-07	-5.681E-07	5.763E-07	5.763E-07	-8.853E-09	-8.853E-09
1.30000	6.784E-10	648.714	-6.120E-07	-6.120E-07	6.218E-07	6.218E-07	-5.186E-09	-5.186E-09
1.40000	4.277E-10	698.616	-6.382E-07	-6.382E-07	6.495E-07	6.495E-07	-3.270E-09	-3.270E-09
1.50000	2.967E-10	748.517	-6.555E-07	-6.555E-07	6.680E-07	6.680E-07	-2.268E-09	-2.268E-09
1.60000	2.037E-10	798.418	-6.673E-07	-6.673E-07	6.809E-07	6.809E-07	-1.558E-09	-1.558E-09
1.70000	1.429E-10	848.319	-6.753E-07	-6.753E-07	6.899E-07	6.899E-07	-1.093E-09	-1.093E-09
1.80000	1.021E-10	898.220	-6.809E-07	-6.809E-07	6.964E-07	6.964E-07	-7.802E-10	-7.802E-10
1.90000	7.285E-11	948.121	-6.845E-07	-6.845E-07	7.014E-07	7.014E-07	-5.569E-10	-5.569E-10
2.00000	5.254E-11	998.022	-6.871E-07	-6.871E-07	7.050E-07	7.050E-07	-4.017E-10	-4.017E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 12.000 θ_D= 0. ρ_a=44.734

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-1.397E-14
0.10000	2.220E-11	2.220E-11	-3.466E-22	-3.466E-22	-4.003E-12	-4.003E-12	-1.860E-14
0.20000	6.133E-11	6.133E-11	-5.940E-22	-5.940E-22	-1.088E-11	-1.088E-11	-2.624E-14
0.30000	1.282E-10	1.282E-10	-1.013E-21	-1.013E-21	-2.262E-11	-2.262E-11	-4.023E-14
0.40000	2.641E-10	2.641E-10	-1.785E-21	-1.785E-21	-4.298E-11	-4.298E-11	-6.556E-14
0.50000	5.074E-10	5.074E-10	-3.127E-21	-3.127E-21	-7.883E-11	-7.883E-11	-1.210E-13
0.60000	1.017E-09	1.017E-09	-5.712E-21	-5.712E-21	-1.419E-10	-1.419E-10	-2.510E-13
0.70000	2.374E-09	2.374E-09	-1.178E-20	-1.178E-20	-2.651E-10	-2.651E-10	-5.647E-13
0.80000	6.089E-09	6.089E-09	-2.566E-20	-2.566E-20	-5.329E-10	-5.329E-10	-1.392E-12
0.85000	1.025E-08	1.025E-08	-3.880E-20	-3.880E-20	-7.724E-10	-7.724E-10	-2.110E-12
0.90000	1.758E-08	1.758E-08	-5.398E-20	-5.398E-20	-1.118E-09	-1.118E-09	-2.995E-12
0.92500	2.290E-08	2.290E-08	-6.088E-20	-6.088E-20	-1.333E-09	-1.333E-09	-3.395E-12
0.95000	2.942E-08	2.942E-08	-6.573E-20	-6.573E-20	-1.571E-09	-1.571E-09	-3.691E-12
0.96250	3.307E-08	3.307E-08	-6.712E-20	-6.712E-20	-1.695E-09	-1.695E-09	-3.778E-12
0.97500	3.687E-08	3.687E-08	-6.772E-20	-6.772E-20	-1.821E-09	-1.821E-09	-3.817E-12
0.98125	3.880E-08	3.880E-08	-6.773E-20	-6.773E-20	-1.885E-09	-1.885E-09	-3.817E-12
0.98750	4.071E-08	4.071E-08	-6.752E-20	-6.752E-20	-1.948E-09	-1.948E-09	-3.805E-12
0.99375	4.261E-08	4.261E-08	-6.712E-20	-6.712E-20	-2.011E-09	-2.011E-09	-3.779E-12
1.00000	4.447E-08	4.447E-08	-6.652E-20	-6.652E-20	-2.073E-09	-2.073E-09	-3.741E-12
1.00625	4.628E-08	4.628E-08	-6.573E-20	-6.573E-20	-2.135E-09	-2.135E-09	-3.692E-12
1.01250	4.804E-08	4.804E-08	-6.476E-20	-6.476E-20	-2.196E-09	-2.196E-09	-3.632E-12
1.01875	4.971E-08	4.971E-08	-6.362E-20	-6.362E-20	-2.256E-09	-2.256E-09	-3.562E-12
1.02500	5.131E-08	5.131E-08	-6.233E-20	-6.233E-20	-2.315E-09	-2.315E-09	-3.483E-12
1.03750	5.425E-08	5.425E-08	-5.932E-20	-5.932E-20	-2.429E-09	-2.429E-09	-3.304E-12
1.05000	5.680E-08	5.680E-08	-5.586E-20	-5.586E-20	-2.537E-09	-2.537E-09	-3.103E-12
1.07500	6.082E-08	6.082E-08	-4.807E-20	-4.807E-20	-2.731E-09	-2.731E-09	-2.674E-12
1.10000	6.364E-08	6.364E-08	-4.061E-20	-4.061E-20	-2.897E-09	-2.897E-09	-2.221E-12
1.15000	6.646E-08	6.646E-08	-2.716E-20	-2.716E-20	-3.149E-09	-3.149E-09	-1.468E-12
1.20000	6.701E-08	6.701E-08	-1.842E-20	-1.842E-20	-3.316E-09	-3.316E-09	-9.278E-13
1.30000	6.497E-08	6.497E-08	-8.357E-21	-8.357E-21	-3.506E-09	-3.506E-09	-3.954E-13
1.40000	6.152E-08	6.152E-08	-4.254E-21	-4.254E-21	-3.596E-09	-3.596E-09	-1.834E-13
1.50000	5.789E-08	5.789E-08	-2.452E-21	-2.452E-21	-3.645E-09	-3.645E-09	-9.108E-14
1.60000	5.452E-08	5.452E-08	-1.392E-21	-1.392E-21	-3.673E-09	-3.673E-09	-5.244E-14
1.70000	5.144E-08	5.144E-08	-8.028E-22	-8.028E-22	-3.689E-09	-3.689E-09	-3.306E-14
1.80000	4.864E-08	4.864E-08	-4.696E-22	-4.696E-22	-3.698E-09	-3.698E-09	-2.242E-14
1.90000	4.612E-08	4.612E-08	-2.736E-22	-2.736E-22	-3.704E-09	-3.704E-09	-1.637E-14
2.00000	4.383E-08	4.383E-08	-1.587E-22	-1.587E-22	-3.707E-09	-3.707E-09	-1.257E-14

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0=15.000 θ_D= 0. ρ_a=55.687

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	15.0000	C.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	15.0000	0.10000	194.456	1.347E-06	9.968E-01	-8.393E-11	-8.393E-11	8.393E-11
0.20000	15.0000	0.20000	173.950	2.081E-06	9.959E-01	-1.170E-10	-1.170E-10	1.170E-10
0.30000	15.0000	0.30000	153.721	3.682E-06	9.947E-01	-1.625E-10	-1.625E-10	1.625E-10
0.40000	15.0000	0.40000	133.894	4.802E-06	9.932E-01	-2.328E-10	-2.328E-10	2.328E-10
0.50000	15.0000	0.50000	114.677	7.897E-06	9.918E-01	-3.328E-10	-3.328E-10	3.328E-10
0.60000	15.0000	0.60000	96.436	1.430E-05	9.914E-01	-4.780E-10	-4.780E-10	4.780E-10
0.70000	15.0000	0.70000	79.842	2.775E-05	9.942E-01	-7.248E-10	-7.248E-10	7.248E-10
0.80000	15.0000	0.80000	66.148	4.525E-05	1.002E 00	-1.131E-09	-1.131E-09	1.131E-09
0.85000	15.0000	0.85000	61.018	4.525E-05	1.005E 00	-1.336E-09	-1.336E-09	1.336E-09
0.90000	15.0000	0.90000	57.465	4.525E-05	1.004E 00	-1.537E-09	-1.537E-09	1.537E-09
0.92500	15.0000	0.92500	56.379	6.147E-05	1.001E 00	-1.610E-09	-1.610E-09	1.610E-09
0.95000	15.0000	0.95000	55.793	7.684E-05	9.987E-01	-1.650E-09	-1.650E-09	1.650E-09
0.96250	15.0000	0.96250	55.692	8.367E-05	9.979E-01	-1.657E-09	-1.657E-09	1.657E-09
0.97500	15.0000	0.97500	55.722	9.135E-05	9.977E-01	-1.655E-09	-1.655E-09	1.655E-09
0.98125	15.0000	0.98125	55.785	9.477E-05	9.978E-01	-1.651E-09	-1.651E-09	1.651E-09
0.98750	15.0000	0.98750	55.880	9.818E-05	9.982E-01	-1.644E-09	-1.644E-09	1.644E-09
0.99375	15.0000	0.99375	56.008	1.033E-04	9.987E-01	-1.635E-09	-1.635E-09	1.635E-09
1.00000	15.0000	1.00000	56.168	1.076E-04	9.994E-01	-1.624E-09	-1.624E-09	1.624E-09
1.00625	15.0000	1.00625	56.359	1.144E-04	1.000E 00	-1.611E-09	-1.611E-09	1.611E-09
1.01250	15.0000	1.01250	56.582	1.170E-04	1.001E 00	-1.596E-09	-1.596E-09	1.596E-09
1.01875	15.0000	1.01875	56.835	1.195E-04	1.002E 00	-1.579E-09	-1.579E-09	1.579E-09
1.02500	15.0000	1.02500	57.119	1.238E-04	1.004E 00	-1.560E-09	-1.560E-09	1.560E-09
1.03750	15.0000	1.03750	57.777	1.306E-04	1.006E 00	-1.517E-09	-1.517E-09	1.517E-09
1.05000	15.0000	1.05000	58.552	1.383E-04	1.009E 00	-1.468E-09	-1.468E-09	1.468E-09
1.07500	15.0000	1.07500	60.430	1.477E-04	1.014E 00	-1.362E-09	-1.362E-09	1.362E-09
1.10000	15.0000	1.10000	62.716	1.545E-04	1.017E 00	-1.264E-09	-1.264E-09	1.264E-09
1.15000	15.0000	1.15000	68.335	1.690E-04	1.018E 00	-1.053E-09	-1.053E-09	1.053E-09
1.20000	15.0000	1.20000	75.083	1.793E-04	1.015E 00	-8.459E-10	-8.459E-10	8.459E-10
1.30000	15.0001	1.30000	90.927	1.947E-04	1.006E 00	-5.486E-10	-5.486E-10	5.486E-10
1.40000	15.0001	1.40000	108.737	2.083E-04	1.000E 00	-3.717E-10	-3.717E-10	3.717E-10
1.50000	15.0001	1.50000	127.693	2.117E-04	9.976E-01	-2.613E-10	-2.613E-10	2.613E-10
1.60000	15.0001	1.60000	147.354	2.117E-04	9.964E-01	-1.813E-10	-1.813E-10	1.813E-10
1.70000	15.0001	1.70000	167.472	2.203E-04	9.960E-01	-1.300E-10	-1.300E-10	1.300E-10
1.80000	15.0001	1.80000	187.900	2.220E-04	9.960E-01	-9.334E-11	-9.334E-11	9.334E-11
1.90000	15.0001	1.90000	208.547	2.220E-04	9.962E-01	-6.717E-11	-6.717E-11	6.717E-11
2.00000	15.0001	2.00000	229.353	2.220E-04	9.964E-01	-4.863E-11	-4.863E-11	4.863E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 15.000 θ_D= 0. ρ_a= 55.687

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	C.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.393E-11	49.901	-3.570E-09	-3.570E-09	3.570E-09	3.570E-09	-6.416E-10	-6.416E-10
0.20000	1.170E-10	99.802	-8.541E-09	-8.541E-09	8.541E-09	8.541E-09	-8.948E-10	-8.948E-10
0.30000	1.625E-10	149.703	-1.546E-08	-1.546E-08	1.546E-08	1.546E-08	-1.242E-09	-1.242E-09
0.40000	2.328E-10	199.605	-2.519E-08	-2.519E-08	2.519E-08	2.519E-08	-1.780E-09	-1.780E-09
0.50000	3.328E-10	249.506	-3.917E-08	-3.917E-08	3.917E-08	3.917E-08	-2.545E-09	-2.545E-09
0.60000	4.780E-10	299.407	-5.902E-08	-5.902E-08	5.903E-08	5.903E-08	-3.655E-09	-3.655E-09
0.70000	7.248E-10	349.308	-8.873E-08	-8.873E-08	8.875E-08	8.875E-08	-5.541E-09	-5.541E-09
0.80000	1.131E-09	399.209	-1.347E-07	-1.347E-07	1.348E-07	1.348E-07	-8.645E-09	-8.645E-09
0.85000	1.336E-09	424.160	-1.655E-07	-1.655E-07	1.656E-07	1.656E-07	-1.021E-08	-1.021E-08
0.90000	1.537E-09	449.110	-2.014E-07	-2.014E-07	2.015E-07	2.015E-07	-1.175E-08	-1.175E-08
0.92500	1.610E-09	461.586	-2.210E-07	-2.210E-07	2.212E-07	2.212E-07	-1.231E-08	-1.231E-08
0.95000	1.650E-09	474.061	-2.414E-07	-2.414E-07	2.416E-07	2.416E-07	-1.262E-08	-1.262E-08
0.96250	1.657E-09	480.299	-2.517E-07	-2.517E-07	2.519E-07	2.519E-07	-1.267E-08	-1.267E-08
0.97500	1.655E-09	486.536	-2.620E-07	-2.620E-07	2.623E-07	2.623E-07	-1.266E-08	-1.266E-08
0.98125	1.651E-09	489.655	-2.671E-07	-2.671E-07	2.674E-07	2.674E-07	-1.262E-08	-1.262E-08
0.98750	1.644E-09	492.774	-2.722E-07	-2.722E-07	2.726E-07	2.726E-07	-1.257E-08	-1.257E-08
0.99375	1.635E-09	495.893	-2.773E-07	-2.773E-07	2.777E-07	2.777E-07	-1.250E-08	-1.250E-08
1.00000	1.624E-09	499.011	-2.824E-07	-2.824E-07	2.828E-07	2.828E-07	-1.242E-08	-1.242E-08
1.00625	1.611E-09	502.130	-2.874E-07	-2.874E-07	2.879E-07	2.879E-07	-1.232E-08	-1.232E-08
1.01250	1.596E-09	505.249	-2.924E-07	-2.924E-07	2.929E-07	2.929E-07	-1.220E-08	-1.220E-08
1.01875	1.579E-09	508.368	-2.973E-07	-2.973E-07	2.979E-07	2.979E-07	-1.207E-08	-1.207E-08
1.02500	1.560E-09	511.487	-3.022E-07	-3.022E-07	3.028E-07	3.028E-07	-1.193E-08	-1.193E-08
1.03750	1.517E-09	517.724	-3.118E-07	-3.118E-07	3.125E-07	3.125E-07	-1.160E-08	-1.160E-08
1.05000	1.468E-09	523.962	-3.210E-07	-3.210E-07	3.218E-07	3.218E-07	-1.122E-08	-1.122E-08
1.07500	1.362E-09	536.437	-3.386E-07	-3.386E-07	3.395E-07	3.395E-07	-1.041E-08	-1.041E-08
1.10000	1.264E-09	548.913	-3.550E-07	-3.550E-07	3.560E-07	3.560E-07	-9.665E-09	-9.665E-09
1.15000	1.053E-09	573.863	-3.838E-07	-3.838E-07	3.850E-07	3.850E-07	-8.053E-09	-8.053E-09
1.20000	8.459E-10	598.814	-4.073E-07	-4.073E-07	4.088E-07	4.088E-07	-6.467E-09	-6.467E-09
1.30000	5.486E-10	648.715	-4.411E-07	-4.411E-07	4.430E-07	4.430E-07	-4.195E-09	-4.195E-09
1.40000	3.717E-10	698.616	-4.633E-07	-4.633E-07	4.656E-07	4.656E-07	-2.842E-09	-2.842E-09
1.50000	2.613E-10	748.517	-4.789E-07	-4.789E-07	4.814E-07	4.814E-07	-1.998E-09	-1.998E-09
1.60000	1.813E-10	798.418	-4.897E-07	-4.897E-07	4.924E-07	4.924E-07	-1.386E-09	-1.386E-09
1.70000	1.300E-10	848.319	-4.972E-07	-4.972E-07	5.003E-07	5.003E-07	-9.939E-10	-9.939E-10
1.80000	9.334E-11	898.221	-5.026E-07	-5.026E-07	5.060E-07	5.060E-07	-7.136E-10	-7.136E-10
1.90000	6.717E-11	948.122	-5.065E-07	-5.065E-07	5.100E-07	5.100E-07	-5.136E-10	-5.136E-10
2.00000	4.863E-11	998.023	-5.092E-07	-5.092E-07	5.130E-07	5.130E-07	-3.718E-10	-3.718E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0=15.000 θ_0= 0. ρ_0=55.687

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-2.166E-14
0.10000	2.736E-11	2.736E-11	-3.440E-22	-3.440E-22	-3.987E-12	-3.987E-12	-2.871E-14
0.20000	7.541E-11	7.541E-11	-5.841E-22	-5.841E-22	-1.077E-11	-1.077E-11	-4.018E-14
0.30000	1.563E-10	1.563E-10	-9.846E-22	-9.846E-22	-2.226E-11	-2.226E-11	-6.077E-14
0.40000	3.170E-10	3.170E-10	-1.702E-21	-1.702E-21	-4.182E-11	-4.182E-11	-9.712E-14
0.50000	5.972E-10	5.972E-10	-2.916E-21	-2.916E-21	-7.561E-11	-7.561E-11	-1.722E-13
0.60000	1.129E-09	1.129E-09	-5.010E-21	-5.010E-21	-1.329E-10	-1.329E-10	-3.390E-13
0.70000	2.423E-09	2.423E-09	-9.207E-21	-9.207E-21	-2.367E-10	-2.367E-10	-6.942E-13
0.80000	5.559E-09	5.559E-09	-1.779E-20	-1.779E-20	-4.345E-10	-4.345E-10	-1.376E-12
0.85000	8.630E-09	8.630E-09	-2.277E-20	-2.277E-20	-5.862E-10	-5.862E-10	-1.891E-12
0.90000	1.345E-08	1.345E-08	-2.819E-20	-2.819E-20	-7.768E-10	-7.768E-10	-2.355E-12
0.92500	1.669E-08	1.669E-08	-3.025E-20	-3.025E-20	-8.863E-10	-8.863E-10	-2.522E-12
0.95000	2.041E-08	2.041E-08	-3.143E-20	-3.143E-20	-1.002E-09	-1.002E-09	-2.620E-12
0.96250	2.239E-08	2.239E-08	-3.163E-20	-3.163E-20	-1.061E-09	-1.061E-09	-2.637E-12
0.97500	2.439E-08	2.439E-08	-3.157E-20	-3.157E-20	-1.120E-09	-1.120E-09	-2.632E-12
0.98125	2.538E-08	2.538E-08	-3.144E-20	-3.144E-20	-1.150E-09	-1.150E-09	-2.622E-12
0.98750	2.637E-08	2.637E-08	-3.125E-20	-3.125E-20	-1.179E-09	-1.179E-09	-2.605E-12
0.99375	2.734E-08	2.734E-08	-3.099E-20	-3.099E-20	-1.208E-09	-1.208E-09	-2.584E-12
1.00000	2.828E-08	2.828E-08	-3.067E-20	-3.067E-20	-1.237E-09	-1.237E-09	-2.557E-12
1.00625	2.921E-08	2.921E-08	-3.029E-20	-3.029E-20	-1.265E-09	-1.265E-09	-2.526E-12
1.01250	3.010E-08	3.010E-08	-2.986E-20	-2.986E-20	-1.293E-09	-1.293E-09	-2.491E-12
1.01875	3.096E-08	3.096E-08	-2.937E-20	-2.937E-20	-1.321E-09	-1.321E-09	-2.451E-12
1.02500	3.178E-08	3.178E-08	-2.883E-20	-2.883E-20	-1.348E-09	-1.348E-09	-2.407E-12
1.03750	3.331E-08	3.331E-08	-2.762E-20	-2.762E-20	-1.401E-09	-1.401E-09	-2.311E-12
1.05000	3.468E-08	3.468E-08	-2.627E-20	-2.627E-20	-1.452E-09	-1.452E-09	-2.205E-12
1.07500	3.692E-08	3.692E-08	-2.342E-20	-2.342E-20	-1.544E-09	-1.544E-09	-1.967E-12
1.10000	3.855E-08	3.855E-08	-2.098E-20	-2.098E-20	-1.627E-09	-1.627E-09	-1.696E-12
1.15000	4.037E-08	4.037E-08	-1.601E-20	-1.601E-20	-1.766E-09	-1.766E-09	-1.217E-12
1.20000	4.096E-08	4.096E-08	-1.157E-20	-1.157E-20	-1.868E-09	-1.868E-09	-8.609E-13
1.30000	4.023E-08	4.023E-08	-6.128E-21	-6.128E-21	-1.995E-09	-1.995E-09	-4.209E-13
1.40000	3.845E-08	3.845E-08	-3.443E-21	-3.443E-21	-2.064E-09	-2.064E-09	-2.124E-13
1.50000	3.641E-08	3.641E-08	-2.025E-21	-2.025E-21	-2.104E-09	-2.104E-09	-1.152E-13
1.60000	3.442E-08	3.442E-08	-1.167E-21	-1.167E-21	-2.127E-09	-2.127E-09	-7.033E-14
1.70000	3.255E-08	3.255E-08	-6.904E-22	-6.904E-22	-2.141E-09	-2.141E-09	-4.551E-14
1.80000	3.082E-08	3.082E-08	-4.075E-22	-4.075E-22	-2.149E-09	-2.149E-09	-3.178E-14
1.90000	2.925E-08	2.925E-08	-2.390E-22	-2.390E-22	-2.153E-09	-2.153E-09	-2.363E-14
2.00000	2.782E-08	2.782E-08	-1.395E-22	-1.395E-22	-2.156E-09	-2.156E-09	-1.845E-14

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 20.000 θ_0= 0. ρ_a= 73.589

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	20.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	20.0000	0.10000	195.079	2.268E-06	9.933E-01	-8.308E-11	-8.308E-11	8.308E-11
0.20000	20.0000	0.20000	175.341	2.615E-06	9.917E-01	-1.144E-10	-1.144E-10	1.144E-10
0.30000	20.0000	0.30000	156.073	3.415E-06	9.899E-01	-1.564E-10	-1.564E-10	1.564E-10
0.40000	20.0000	0.40000	137.474	5.976E-06	9.885E-01	-2.179E-10	-2.179E-10	2.179E-10
0.50000	20.0000	0.50000	119.855	9.605E-06	9.881E-01	-3.023E-10	-3.023E-10	3.023E-10
0.60000	20.0000	0.60000	103.717	1.537E-05	9.904E-01	-4.081E-10	-4.081E-10	4.081E-10
0.70000	20.0000	0.70000	89.861	2.476E-05	9.964E-01	-5.635E-10	-5.635E-10	5.635E-10
0.80000	20.0000	0.80000	79.490	3.330E-05	1.002E 00	-7.331E-10	-7.331E-10	7.331E-10
0.85000	20.0000	0.85000	76.077	3.543E-05	1.002E 00	-8.191E-10	-8.191E-10	8.191E-10
0.90000	20.0000	0.90000	74.083	4.013E-05	9.981E-01	-8.739E-10	-8.739E-10	8.739E-10
0.92500	20.0000	0.92500	73.657	4.610E-05	9.961E-01	-8.861E-10	-8.861E-10	8.861E-10
0.95000	20.0000	0.95000	73.622	5.550E-05	9.951E-01	-8.871E-10	-8.871E-10	8.871E-10
0.96250	20.0000	0.96250	73.752	5.635E-05	9.952E-01	-8.833E-10	-8.833E-10	8.833E-10
0.97500	20.0000	0.97500	73.980	6.147E-05	9.959E-01	-8.768E-10	-8.768E-10	8.768E-10
0.98125	20.0000	0.98125	74.130	6.233E-05	9.964E-01	-8.726E-10	-8.726E-10	8.726E-10
0.98750	20.0000	0.98750	74.304	6.318E-05	9.970E-01	-8.676E-10	-8.676E-10	8.676E-10
0.99375	20.0000	0.99375	74.502	6.830E-05	9.978E-01	-8.621E-10	-8.621E-10	8.621E-10
1.00000	20.0000	1.00000	74.724	7.001E-05	9.987E-01	-8.559E-10	-8.559E-10	8.559E-10
1.00625	20.0000	1.00625	74.969	7.172E-05	9.997E-01	-8.491E-10	-8.491E-10	8.491E-10
1.01250	20.0000	1.01250	75.238	7.513E-05	1.001E 00	-8.417E-10	-8.417E-10	8.417E-10
1.01875	20.0000	1.01875	75.529	7.599E-05	1.002E 00	-8.338E-10	-8.338E-10	8.338E-10
1.02500	20.0000	1.02500	75.843	7.769E-05	1.003E 00	-8.253E-10	-8.253E-10	8.253E-10
1.03750	20.0000	1.03750	76.539	8.196E-05	1.006E 00	-8.069E-10	-8.069E-10	8.069E-10
1.05000	20.0000	1.05000	77.321	8.452E-05	1.009E 00	-7.866E-10	-7.866E-10	7.866E-10
1.07500	20.0000	1.07500	79.138	8.452E-05	1.014E 00	-7.415E-10	-7.415E-10	7.415E-10
1.10000	20.0000	1.10000	81.271	8.452E-05	1.018E 00	-6.985E-10	-6.985E-10	6.985E-10
1.15000	20.0000	1.15000	86.388	8.452E-05	1.023E 00	-6.146E-10	-6.146E-10	6.146E-10
1.20000	20.0000	1.20000	92.478	8.452E-05	1.023E 00	-5.278E-10	-5.278E-10	5.278E-10
1.30000	20.0000	1.30000	106.889	9.050E-05	1.017E 00	-3.847E-10	-3.847E-10	3.847E-10
1.40000	20.0000	1.40000	123.386	9.562E-05	1.009E 00	-2.831E-10	-2.831E-10	2.831E-10
1.50000	20.0000	1.50000	141.240	1.025E-04	1.004E 00	-2.031E-10	-2.031E-10	2.031E-10
1.60000	20.0000	1.60000	159.998	1.076E-04	1.000E 00	-1.468E-10	-1.468E-10	1.468E-10
1.70000	20.0001	1.70000	179.377	1.144E-04	9.982E-01	-1.072E-10	-1.072E-10	1.072E-10
1.80000	20.0001	1.80000	199.194	1.178E-04	9.970E-01	-7.772E-11	-7.772E-11	7.772E-11
1.90000	20.0001	1.90000	219.332	1.212E-04	9.963E-01	-5.681E-11	-5.681E-11	5.681E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 20.000 θ_D= 0. ρ_a= 73.589

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	6.062E-11	C.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.308E-11	49.901	-3.552E-09	-3.552E-09	3.552E-09	3.552E-09	-6.352E-10	-6.352E-10
0.20000	1.144E-10	99.802	-8.442E-09	-8.442E-09	8.442E-09	8.442E-09	-8.749E-10	-8.749E-10
0.30000	1.564E-10	149.703	-1.515E-08	-1.515E-08	1.515E-08	1.515E-08	-1.196E-09	-1.196E-09
0.40000	2.179E-10	199.605	-2.437E-08	-2.437E-08	2.437E-08	2.437E-08	-1.666E-09	-1.666E-09
0.50000	3.023E-10	249.506	-3.726E-08	-3.726E-08	3.726E-08	3.726E-08	-2.311E-09	-2.311E-09
0.60000	4.081E-10	299.407	-5.490E-08	-5.490E-08	5.490E-08	5.490E-08	-3.120E-09	-3.120E-09
0.70000	5.635E-10	349.308	-7.884E-08	-7.884E-08	7.886E-08	7.886E-08	-4.308E-09	-4.308E-09
0.80000	7.331E-10	399.209	-1.112E-07	-1.112E-07	1.113E-07	1.113E-07	-5.605E-09	-5.605E-09
0.85000	8.191E-10	424.160	-1.306E-07	-1.306E-07	1.307E-07	1.307E-07	-6.262E-09	-6.262E-09
0.90000	8.739E-10	449.110	-1.518E-07	-1.518E-07	1.519E-07	1.519E-07	-6.681E-09	-6.681E-09
0.92500	8.861E-10	461.586	-1.628E-07	-1.628E-07	1.629E-07	1.629E-07	-6.774E-09	-6.774E-09
0.95000	8.871E-10	474.061	-1.739E-07	-1.739E-07	1.740E-07	1.740E-07	-6.782E-09	-6.782E-09
0.96250	8.833E-10	480.299	-1.794E-07	-1.794E-07	1.795E-07	1.795E-07	-6.753E-09	-6.753E-09
0.97500	8.768E-10	486.536	-1.849E-07	-1.849E-07	1.850E-07	1.850E-07	-6.704E-09	-6.704E-09
0.98125	8.726E-10	489.655	-1.876E-07	-1.876E-07	1.877E-07	1.877E-07	-6.671E-09	-6.671E-09
0.98750	8.676E-10	492.774	-1.903E-07	-1.903E-07	1.904E-07	1.904E-07	-6.633E-09	-6.633E-09
0.99375	8.621E-10	495.893	-1.930E-07	-1.930E-07	1.932E-07	1.932E-07	-6.591E-09	-6.591E-09
1.00000	8.559E-10	499.012	-1.957E-07	-1.957E-07	1.958E-07	1.958E-07	-6.543E-09	-6.543E-09
1.00625	8.491E-10	502.130	-1.983E-07	-1.983E-07	1.985E-07	1.985E-07	-6.492E-09	-6.492E-09
1.01250	8.417E-10	505.249	-2.009E-07	-2.009E-07	2.012E-07	2.012E-07	-6.435E-09	-6.435E-09
1.01875	8.338E-10	508.368	-2.035E-07	-2.035E-07	2.038E-07	2.038E-07	-6.375E-09	-6.375E-09
1.02500	8.253E-10	511.487	-2.061E-07	-2.061E-07	2.064E-07	2.064E-07	-6.310E-09	-6.310E-09
1.03750	8.069E-10	517.724	-2.112E-07	-2.112E-07	2.115E-07	2.115E-07	-6.169E-09	-6.169E-09
1.05000	7.866E-10	523.962	-2.162E-07	-2.162E-07	2.165E-07	2.165E-07	-6.014E-09	-6.014E-09
1.07500	7.415E-10	536.437	-2.257E-07	-2.257E-07	2.260E-07	2.260E-07	-5.669E-09	-5.669E-09
1.10000	6.985E-10	548.913	-2.347E-07	-2.347E-07	2.350E-07	2.350E-07	-5.340E-09	-5.340E-09
1.15000	6.146E-10	573.863	-2.511E-07	-2.511E-07	2.514E-07	2.514E-07	-4.699E-09	-4.699E-09
1.20000	5.278E-10	598.814	-2.653E-07	-2.653E-07	2.656E-07	2.656E-07	-4.035E-09	-4.035E-09
1.30000	3.847E-10	648.715	-2.877E-07	-2.877E-07	2.881E-07	2.881E-07	-2.941E-09	-2.941E-09
1.40000	2.831E-10	698.616	-3.042E-07	-3.042E-07	3.047E-07	3.047E-07	-2.164E-09	-2.164E-09
1.50000	2.031E-10	748.517	-3.162E-07	-3.162E-07	3.168E-07	3.168E-07	-1.553E-09	-1.553E-09
1.60000	1.468E-10	798.418	-3.248E-07	-3.248E-07	3.255E-07	3.255E-07	-1.122E-09	-1.122E-09
1.70000	1.072E-10	848.319	-3.310E-07	-3.310E-07	3.318E-07	3.318E-07	-8.194E-10	-8.194E-10
1.80000	7.772E-11	898.221	-3.355E-07	-3.355E-07	3.365E-07	3.365E-07	-5.942E-10	-5.942E-10
1.90000	5.681E-11	948.122	-3.388E-07	-3.388E-07	3.398E-07	3.398E-07	-4.344E-10	-4.344E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 20.000 θ_D= 0. ρ_a= 73.589

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	C.	-3.782E-14
0.10000	3.527E-11	3.527E-11	-3.385E-22	-3.385E-22	-3.953E-12	-3.953E-12	-4.968E-14
0.20000	9.697E-11	9.697E-11	-5.635E-22	-5.635E-22	-1.056E-11	-1.056E-11	-6.842E-14
0.30000	1.977E-10	1.977E-10	-9.266E-22	-9.266E-22	-2.150E-11	-2.150E-11	-1.007E-13
0.40000	3.836E-10	3.836E-10	-1.539E-21	-1.539E-21	-3.951E-11	-3.951E-11	-1.547E-13
0.50000	7.025E-10	7.025E-10	-2.522E-21	-2.522E-21	-6.937E-11	-6.937E-11	-2.540E-13
0.60000	1.236E-09	1.236E-09	-3.963E-21	-3.963E-21	-1.173E-10	-1.173E-10	-4.481E-13
0.70000	2.328E-09	2.328E-09	-6.372E-21	-6.372E-21	-1.929E-10	-1.929E-10	-7.673E-13
0.80000	4.581E-09	4.581E-09	-9.364E-21	-9.364E-21	-3.104E-10	-3.104E-10	-1.231E-12
0.85000	6.457E-09	6.457E-09	-1.103E-20	-1.103E-20	-3.869E-10	-3.869E-10	-1.434E-12
0.90000	9.022E-09	9.022E-09	-1.215E-20	-1.215E-20	-4.740E-10	-4.740E-10	-1.576E-12
0.92500	1.054E-08	1.054E-08	-1.240E-20	-1.240E-20	-5.200E-10	-5.200E-10	-1.610E-12
0.95000	1.216E-08	1.216E-08	-1.242E-20	-1.242E-20	-5.664E-10	-5.664E-10	-1.612E-12
0.96250	1.300E-08	1.300E-08	-1.234E-20	-1.234E-20	-5.896E-10	-5.896E-10	-1.602E-12
0.97500	1.382E-08	1.382E-08	-1.221E-20	-1.221E-20	-6.126E-10	-6.126E-10	-1.585E-12
0.98125	1.423E-08	1.423E-08	-1.212E-20	-1.212E-20	-6.239E-10	-6.239E-10	-1.573E-12
0.98750	1.462E-08	1.462E-08	-1.202E-20	-1.202E-20	-6.352E-10	-6.352E-10	-1.560E-12
0.99375	1.502E-08	1.502E-08	-1.190E-20	-1.190E-20	-6.464E-10	-6.464E-10	-1.545E-12
1.00000	1.540E-08	1.540E-08	-1.178E-20	-1.178E-20	-6.575E-10	-6.575E-10	-1.529E-12
1.00625	1.577E-08	1.577E-08	-1.164E-20	-1.164E-20	-6.684E-10	-6.684E-10	-1.511E-12
1.01250	1.612E-08	1.612E-08	-1.149E-20	-1.149E-20	-6.792E-10	-6.792E-10	-1.492E-12
1.01875	1.647E-08	1.647E-08	-1.133E-20	-1.133E-20	-6.899E-10	-6.899E-10	-1.472E-12
1.02500	1.680E-08	1.680E-08	-1.116E-20	-1.116E-20	-7.004E-10	-7.004E-10	-1.450E-12
1.03750	1.742E-08	1.742E-08	-1.079E-20	-1.079E-20	-7.209E-10	-7.209E-10	-1.404E-12
1.05000	1.797E-08	1.797E-08	-1.039E-20	-1.039E-20	-7.408E-10	-7.408E-10	-1.355E-12
1.07500	1.890E-08	1.890E-08	-9.524E-21	-9.524E-21	-7.780E-10	-7.780E-10	-1.251E-12
1.10000	1.962E-08	1.962E-08	-8.722E-21	-8.722E-21	-8.121E-10	-8.121E-10	-1.132E-12
1.15000	2.053E-08	2.053E-08	-7.234E-21	-7.234E-21	-8.718E-10	-8.718E-10	-8.919E-13
1.20000	2.092E-08	2.092E-08	-5.790E-21	-5.790E-21	-9.204E-10	-9.204E-10	-6.903E-13
1.30000	2.083E-08	2.083E-08	-3.626E-21	-3.626E-21	-9.891E-10	-9.891E-10	-3.972E-13
1.40000	2.016E-08	2.016E-08	-2.284E-21	-2.284E-21	-1.033E-09	-1.033E-09	-2.282E-13
1.50000	1.929E-08	1.929E-08	-1.385E-21	-1.385E-21	-1.060E-09	-1.060E-09	-1.413E-13
1.60000	1.837E-08	1.837E-08	-8.373E-22	-8.373E-22	-1.076E-09	-1.076E-09	-9.259E-14
1.70000	1.746E-08	1.746E-08	-5.077E-22	-5.077E-22	-1.086E-09	-1.086E-09	-6.385E-14
1.80000	1.660E-08	1.660E-08	-3.044E-22	-3.044E-22	-1.092E-09	-1.092E-09	-4.696E-14
1.90000	1.579E-08	1.579E-08	-1.808E-22	-1.808E-22	-1.095E-09	-1.095E-09	-3.605E-14

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 25.000 θ_D= 0. ρ_a= 90.930

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	25.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	25.0000	0.10000	195.870	1.628E-06	9.886E-01	-8.202E-11	-8.202E-11	8.202E-11
0.20000	25.0000	0.20000	177.095	2.721E-06	9.865E-01	-1.112E-10	-1.112E-10	1.112E-10
0.30000	25.0000	0.30000	159.016	4.802E-06	9.847E-01	-1.491E-10	-1.491E-10	1.491E-10
0.40000	25.0000	0.40000	141.900	1.153E-05	9.841E-01	-2.006E-10	-2.006E-10	2.006E-10
0.50000	25.0000	0.50000	126.137	2.006E-05	9.857E-01	-2.690E-10	-2.690E-10	2.690E-10
0.60000	25.0000	0.60000	112.302	2.433E-05	9.902E-01	-3.479E-10	-3.479E-10	3.479E-10
0.70000	25.0000	0.70000	101.186	2.946E-05	9.962E-01	-4.277E-10	-4.277E-10	4.277E-10
0.80000	25.0000	0.80000	93.763	3.458E-05	9.980E-01	-5.111E-10	-5.111E-10	5.111E-10
0.85000	25.0000	0.85000	91.734	3.842E-05	9.955E-01	-5.377E-10	-5.377E-10	5.377E-10
0.90000	25.0000	0.90000	90.940	4.354E-05	9.923E-01	-5.485E-10	-5.485E-10	5.485E-10
0.92500	25.0000	0.92500	91.019	4.440E-05	9.915E-01	-5.474E-10	-5.474E-10	5.474E-10
0.95000	25.0000	0.95000	91.415	4.867E-05	9.920E-01	-5.420E-10	-5.420E-10	5.420E-10
0.96250	25.0000	0.96250	91.730	5.123E-05	9.929E-01	-5.377E-10	-5.377E-10	5.377E-10
0.97500	25.0000	0.97500	92.123	5.293E-05	9.941E-01	-5.325E-10	-5.325E-10	5.325E-10
0.98125	25.0000	0.98125	92.349	5.550E-05	9.949E-01	-5.295E-10	-5.295E-10	5.295E-10
0.98750	25.0000	0.98750	92.593	5.550E-05	9.958E-01	-5.262E-10	-5.262E-10	5.262E-10
0.99375	25.0000	0.99375	92.856	5.891E-05	9.967E-01	-5.228E-10	-5.228E-10	5.228E-10
1.00000	25.0000	1.00000	93.138	5.976E-05	9.978E-01	-5.191E-10	-5.191E-10	5.191E-10
1.00625	25.0000	1.00625	93.438	5.976E-05	9.989E-01	-5.152E-10	-5.152E-10	5.152E-10
1.01250	25.0000	1.01250	93.757	6.318E-05	1.000E 00	-5.111E-10	-5.111E-10	5.111E-10
1.01875	25.0000	1.01875	94.093	6.318E-05	1.001E 00	-5.069E-10	-5.069E-10	5.069E-10
1.02500	25.0000	1.02500	94.448	6.574E-05	1.003E 00	-5.024E-10	-5.024E-10	5.024E-10
1.03750	25.0000	1.03750	95.211	6.745E-05	1.005E 00	-4.929E-10	-4.929E-10	4.929E-10
1.05000	25.0000	1.05000	96.042	7.001E-05	1.008E 00	-4.827E-10	-4.827E-10	4.827E-10
1.07500	25.0000	1.07500	97.906	7.001E-05	1.014E 00	-4.608E-10	-4.608E-10	4.608E-10
1.10000	25.0000	1.10000	100.025	7.086E-05	1.018E 00	-4.370E-10	-4.370E-10	4.370E-10
1.15000	25.0000	1.15000	104.964	7.086E-05	1.025E 00	-3.987E-10	-3.987E-10	3.987E-10
1.20000	25.0000	1.20000	110.731	7.172E-05	1.028E 00	-3.582E-10	-3.582E-10	3.582E-10
1.30000	25.0000	1.30000	124.272	7.428E-05	1.025E 00	-2.785E-10	-2.785E-10	2.785E-10
1.40000	25.0000	1.40000	139.827	7.769E-05	1.019E 00	-2.085E-10	-2.085E-10	2.085E-10
1.50000	25.0000	1.50000	156.797	8.367E-05	1.012E 00	-1.546E-10	-1.546E-10	1.546E-10
1.60000	25.0000	1.60000	174.771	8.879E-05	1.007E 00	-1.155E-10	-1.155E-10	1.155E-10
1.70000	25.0000	1.70000	193.470	9.050E-05	1.003E 00	-8.528E-11	-8.528E-11	8.528E-11
1.80000	25.0000	1.80000	212.702	9.221E-05	1.001E 00	-6.298E-11	-6.298E-11	6.298E-11
1.90000	25.0000	1.90000	232.335	9.392E-05	9.991E-01	-4.643E-11	-4.643E-11	4.643E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 25.000 θ_D= 0. ρ_a= 90.930

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.202E-11	49.901	-3.530E-09	-3.530E-09	3.530E-09	3.530E-09	-6.271E-10	-6.271E-10
0.20000	1.112E-10	99.802	-8.319E-09	-8.319E-09	8.319E-09	8.319E-09	-8.503E-10	-8.503E-10
0.30000	1.491E-10	149.703	-1.478E-08	-1.478E-08	1.478E-08	1.478E-08	-1.140E-09	-1.140E-09
0.40000	2.006E-10	199.605	-2.340E-08	-2.340E-08	2.340E-08	2.340E-08	-1.534E-09	-1.534E-09
0.50000	2.690E-10	249.506	-3.507E-08	-3.507E-08	3.507E-08	3.507E-08	-2.056E-09	-2.056E-09
0.60000	3.479E-10	299.407	-5.042E-08	-5.042E-08	5.044E-08	5.044E-08	-2.659E-09	-2.659E-09
0.70000	4.277E-10	349.308	-6.980E-08	-6.980E-08	6.982E-08	6.982E-08	-3.270E-09	-3.270E-09
0.80000	5.111E-10	399.209	-9.328E-08	-9.328E-08	9.332E-08	9.332E-08	-3.907E-09	-3.907E-09
0.85000	5.377E-10	424.160	-1.064E-07	-1.064E-07	1.064E-07	1.064E-07	-4.111E-09	-4.111E-09
0.90000	5.485E-10	449.110	-1.200E-07	-1.200E-07	1.200E-07	1.200E-07	-4.193E-09	-4.193E-09
0.92500	5.474E-10	461.586	-1.268E-07	-1.268E-07	1.269E-07	1.269E-07	-4.185E-09	-4.185E-09
0.95000	5.420E-10	474.061	-1.336E-07	-1.336E-07	1.337E-07	1.337E-07	-4.144E-09	-4.144E-09
0.96250	5.377E-10	480.299	-1.370E-07	-1.370E-07	1.371E-07	1.371E-07	-4.111E-09	-4.111E-09
0.97500	5.325E-10	486.536	-1.403E-07	-1.403E-07	1.404E-07	1.404E-07	-4.071E-09	-4.071E-09
0.98125	5.295E-10	489.655	-1.419E-07	-1.419E-07	1.421E-07	1.421E-07	-4.048E-09	-4.048E-09
0.98750	5.262E-10	492.774	-1.436E-07	-1.436E-07	1.437E-07	1.437E-07	-4.023E-09	-4.023E-09
0.99375	5.228E-10	495.893	-1.452E-07	-1.452E-07	1.453E-07	1.453E-07	-3.997E-09	-3.997E-09
1.00000	5.191E-10	499.011	-1.468E-07	-1.468E-07	1.470E-07	1.470E-07	-3.969E-09	-3.969E-09
1.00625	5.152E-10	502.130	-1.485E-07	-1.485E-07	1.486E-07	1.486E-07	-3.939E-09	-3.939E-09
1.01250	5.111E-10	505.249	-1.500E-07	-1.500E-07	1.502E-07	1.502E-07	-3.908E-09	-3.908E-09
1.01875	5.069E-10	508.368	-1.516E-07	-1.516E-07	1.518E-07	1.518E-07	-3.875E-09	-3.875E-09
1.02500	5.024E-10	511.487	-1.532E-07	-1.532E-07	1.534E-07	1.534E-07	-3.841E-09	-3.841E-09
1.03750	4.929E-10	517.724	-1.563E-07	-1.563E-07	1.565E-07	1.565E-07	-3.768E-09	-3.768E-09
1.05000	4.827E-10	523.962	-1.593E-07	-1.593E-07	1.595E-07	1.595E-07	-3.691E-09	-3.691E-09
1.07500	4.608E-10	536.437	-1.652E-07	-1.652E-07	1.654E-07	1.654E-07	-3.523E-09	-3.523E-09
1.10000	4.370E-10	548.913	-1.708E-07	-1.708E-07	1.710E-07	1.710E-07	-3.341E-09	-3.341E-09
1.15000	3.987E-10	573.863	-1.812E-07	-1.812E-07	1.815E-07	1.815E-07	-3.048E-09	-3.048E-09
1.20000	3.582E-10	598.814	-1.907E-07	-1.907E-07	1.909E-07	1.909E-07	-2.738E-09	-2.738E-09
1.30000	2.785E-10	648.715	-2.065E-07	-2.065E-07	2.068E-07	2.068E-07	-2.129E-09	-2.129E-09
1.40000	2.085E-10	698.616	-2.186E-07	-2.186E-07	2.189E-07	2.189E-07	-1.594E-09	-1.594E-09
1.50000	1.546E-10	748.517	-2.275E-07	-2.275E-07	2.279E-07	2.279E-07	-1.182E-09	-1.182E-09
1.60000	1.155E-10	798.418	-2.342E-07	-2.342E-07	2.347E-07	2.347E-07	-8.830E-10	-8.830E-10
1.70000	8.528E-11	848.319	-2.391E-07	-2.391E-07	2.397E-07	2.397E-07	-6.520E-10	-6.520E-10
1.80000	6.298E-11	898.221	-2.428E-07	-2.428E-07	2.433E-07	2.433E-07	-4.815E-10	-4.815E-10
1.90000	4.643E-11	948.122	-2.454E-07	-2.454E-07	2.461E-07	2.461E-07	-3.549E-10	-3.549E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0=25.000 θ_D= 0. ρ_a=90.930

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-5.775E-14
0.10000	4.282E-11	4.282E-11	-3.317E-22	-3.317E-22	-3.911E-12	-3.911E-12	-7.499E-14
0.20000	1.160E-10	1.160E-10	-5.385E-22	-5.385E-22	-1.030E-11	-1.030E-11	-1.013E-13
0.30000	2.314E-10	2.314E-10	-8.588E-22	-8.588E-22	-2.059E-11	-2.059E-11	-1.441E-13
0.40000	4.281E-10	4.281E-10	-1.360E-21	-1.360E-21	-3.684E-11	-3.684E-11	-2.121E-13
0.50000	7.551E-10	7.551E-10	-2.115E-21	-2.115E-21	-6.253E-11	-6.253E-11	-3.208E-13
0.60000	1.257E-09	1.257E-09	-3.116E-21	-3.116E-21	-1.014E-10	-1.014E-10	-4.981E-13
0.70000	2.153E-09	2.153E-09	-4.255E-21	-4.255E-21	-1.565E-10	-1.565E-10	-7.572E-13
0.80000	3.773E-09	3.773E-09	-5.525E-21	-5.525E-21	-2.298E-10	-2.298E-10	-1.091E-12
0.85000	4.969E-09	4.969E-09	-5.950E-21	-5.950E-21	-2.729E-10	-2.729E-10	-1.085E-12
0.90000	6.439E-09	6.439E-09	-6.125E-21	-6.125E-21	-3.182E-10	-3.182E-10	-1.121E-12
0.92500	7.255E-09	7.255E-09	-6.108E-21	-6.108E-21	-3.411E-10	-3.411E-10	-1.117E-12
0.95000	8.087E-09	8.087E-09	-6.020E-21	-6.020E-21	-3.638E-10	-3.638E-10	-1.100E-12
0.96250	8.498E-09	8.498E-09	-5.951E-21	-5.951E-21	-3.750E-10	-3.750E-10	-1.086E-12
0.97500	8.900E-09	8.900E-09	-5.866E-21	-5.866E-21	-3.861E-10	-3.861E-10	-1.069E-12
0.98125	9.095E-09	9.095E-09	-5.818E-21	-5.818E-21	-3.915E-10	-3.915E-10	-1.059E-12
0.98750	9.287E-09	9.287E-09	-5.766E-21	-5.766E-21	-3.970E-10	-3.970E-10	-1.049E-12
0.99375	9.474E-09	9.474E-09	-5.711E-21	-5.711E-21	-4.023E-10	-4.023E-10	-1.038E-12
1.00000	9.656E-09	9.656E-09	-5.652E-21	-5.652E-21	-4.076E-10	-4.076E-10	-1.026E-12
1.00625	9.833E-09	9.833E-09	-5.591E-21	-5.591E-21	-4.129E-10	-4.129E-10	-1.014E-12
1.01250	1.000E-08	1.000E-08	-5.526E-21	-5.526E-21	-4.181E-10	-4.181E-10	-1.002E-12
1.01875	1.017E-08	1.017E-08	-5.458E-21	-5.458E-21	-4.232E-10	-4.232E-10	-9.888E-13
1.02500	1.033E-08	1.033E-08	-5.388E-21	-5.388E-21	-4.283E-10	-4.283E-10	-9.753E-13
1.03750	1.063E-08	1.063E-08	-5.240E-21	-5.240E-21	-4.382E-10	-4.382E-10	-9.473E-13
1.05000	1.090E-08	1.090E-08	-5.083E-21	-5.083E-21	-4.479E-10	-4.479E-10	-9.181E-13
1.07500	1.136E-08	1.136E-08	-4.748E-21	-4.748E-21	-4.663E-10	-4.663E-10	-8.571E-13
1.10000	1.173E-08	1.173E-08	-4.395E-21	-4.395E-21	-4.834E-10	-4.834E-10	-7.947E-13
1.15000	1.222E-08	1.222E-08	-3.827E-21	-3.827E-21	-5.141E-10	-5.141E-10	-6.524E-13
1.20000	1.246E-08	1.246E-08	-3.256E-21	-3.256E-21	-5.406E-10	-5.406E-10	-5.269E-13
1.30000	1.248E-08	1.248E-08	-2.228E-21	-2.228E-21	-5.814E-10	-5.814E-10	-3.392E-13
1.40000	1.218E-08	1.218E-08	-1.441E-21	-1.441E-21	-6.085E-10	-6.085E-10	-2.233E-13
1.50000	1.175E-08	1.175E-08	-9.094E-22	-9.094E-22	-6.257E-10	-6.257E-10	-1.515E-13
1.60000	1.126E-08	1.126E-08	-5.718E-22	-5.718E-22	-6.367E-10	-6.367E-10	-1.057E-13
1.70000	1.076E-08	1.076E-08	-3.529E-22	-3.529E-22	-6.434E-10	-6.434E-10	-7.784E-14
1.80000	1.027E-08	1.027E-08	-2.146E-22	-2.146E-22	-6.476E-10	-6.476E-10	-5.970E-14
1.90000	9.794E-09	9.794E-09	-1.291E-22	-1.291E-22	-6.501E-10	-6.501E-10	-4.769E-14

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 30.000 θ_D= 0. ρ_a=197.579

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	30.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	30.0000	0.10000	196.820	7.204E-07	9.849E-01	-8.077E-11	-8.077E-11	8.077E-11
0.20000	30.0000	0.20000	179.189	2.615E-06	9.830E-01	-1.075E-10	-1.075E-10	1.075E-10
0.30000	30.0000	0.30000	162.496	5.229E-06	9.819E-01	-1.409E-10	-1.409E-10	1.409E-10
0.40000	30.0000	0.40000	147.062	1.110E-05	9.826E-01	-1.823E-10	-1.823E-10	1.823E-10
0.50000	30.0000	0.50000	133.325	1.302E-05	9.854E-01	-2.353E-10	-2.353E-10	2.353E-10
0.60000	30.0000	0.60000	121.859	1.494E-05	9.899E-01	-2.912E-10	-2.912E-10	2.912E-10
0.70000	30.0000	0.70000	113.355	1.708E-05	9.932E-01	-3.411E-10	-3.411E-10	3.411E-10
0.80000	30.0000	0.80000	108.513	1.836E-05	9.916E-01	-3.732E-10	-3.732E-10	3.732E-10
0.85000	30.0000	0.85000	107.635	1.964E-05	9.894E-01	-3.794E-10	-3.794E-10	3.794E-10
0.90000	30.0000	0.90000	107.828	2.134E-05	9.884E-01	-3.780E-10	-3.780E-10	3.780E-10
0.92500	30.0000	0.92500	108.325	2.391E-05	9.890E-01	-3.746E-10	-3.746E-10	3.746E-10
0.95000	30.0000	0.95000	109.086	2.391E-05	9.906E-01	-3.693E-10	-3.693E-10	3.693E-10
0.96250	30.0000	0.96250	109.564	2.391E-05	9.918E-01	-3.660E-10	-3.660E-10	3.660E-10
0.97500	30.0000	0.97500	110.105	2.647E-05	9.933E-01	-3.624E-10	-3.624E-10	3.624E-10
0.98125	30.0000	0.98125	110.399	2.647E-05	9.942E-01	-3.604E-10	-3.604E-10	3.604E-10
0.98750	30.0000	0.98750	110.709	2.817E-05	9.951E-01	-3.583E-10	-3.583E-10	3.583E-10
0.99375	30.0000	0.99375	111.034	3.159E-05	9.960E-01	-3.562E-10	-3.562E-10	3.562E-10
1.00000	30.0000	1.00000	111.374	3.159E-05	9.970E-01	-3.539E-10	-3.539E-10	3.539E-10
1.00625	30.0000	1.00625	111.730	3.330E-05	9.980E-01	-3.516E-10	-3.516E-10	3.516E-10
1.01250	30.0000	1.01250	112.101	3.500E-05	9.991E-01	-3.492E-10	-3.492E-10	3.492E-10
1.01875	30.0000	1.01875	112.486	3.586E-05	1.000E 00	-3.467E-10	-3.467E-10	3.467E-10
1.02500	30.0000	1.02500	112.886	3.842E-05	1.001E 00	-3.441E-10	-3.441E-10	3.441E-10
1.03750	30.0000	1.03750	113.730	3.927E-05	1.004E 00	-3.387E-10	-3.387E-10	3.387E-10
1.05000	30.0000	1.05000	114.631	4.183E-05	1.006E 00	-3.331E-10	-3.331E-10	3.331E-10
1.07500	30.0000	1.07500	116.598	4.183E-05	1.011E 00	-3.212E-10	-3.212E-10	3.212E-10
1.10000	30.0000	1.10000	118.776	4.183E-05	1.015E 00	-3.084E-10	-3.084E-10	3.084E-10
1.15000	30.0000	1.15000	123.719	4.183E-05	1.022E 00	-2.813E-10	-2.813E-10	2.813E-10
1.20000	30.0000	1.20000	129.371	4.183E-05	1.026E 00	-2.533E-10	-2.533E-10	2.533E-10
1.30000	30.0000	1.30000	142.450	4.183E-05	1.028E 00	-1.986E-10	-1.986E-10	1.986E-10
1.40000	30.0000	1.40000	157.394	4.525E-05	1.024E 00	-1.531E-10	-1.531E-10	1.531E-10
1.50000	30.0000	1.50000	173.723	4.525E-05	1.018E 00	-1.175E-10	-1.175E-10	1.175E-10
1.60000	30.0000	1.60000	191.082	4.610E-05	1.013E 00	-8.865E-11	-8.865E-11	8.865E-11
1.70000	30.0000	1.70000	209.215	5.293E-05	1.009E 00	-6.648E-11	-6.648E-11	6.648E-11
1.80000	30.0000	1.80000	227.937	5.293E-05	1.006E 00	-4.971E-11	-4.971E-11	4.971E-11

PROPAGATION FREQUENCY= 2.292CE 09 ϕ_0= 3C.CCC θ_D= 0. ρ_a=107.579

z	$_x\mu'-1_0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	8.077E-11	49.901	-3.504E-09	-3.504E-09	3.504E-09	3.504E-09	-6.175E-10	-6.175E-10
0.20000	1.075E-10	99.802	-8.175E-09	-8.175E-09	8.175E-09	8.175E-09	-8.219E-10	-8.219E-10
0.30000	1.409E-10	149.703	-1.434E-08	-1.434E-08	1.434E-08	1.434E-08	-1.077E-09	-1.077E-09
0.40000	1.823E-10	199.605	-2.236E-08	-2.236E-08	2.236E-08	2.236E-08	-1.394E-09	-1.394E-09
0.50000	2.353E-10	249.506	-3.276E-08	-3.276E-08	3.276E-08	3.276E-08	-1.799E-09	-1.799E-09
0.60000	2.912E-10	299.407	-4.590E-08	-4.590E-08	4.590E-08	4.590E-08	-2.227E-09	-2.227E-09
0.70000	3.411E-10	349.308	-6.172E-08	-6.172E-08	6.173E-08	6.173E-08	-2.608E-09	-2.608E-09
0.80000	3.732E-10	399.209	-7.964E-08	-7.964E-08	7.965E-08	7.965E-08	-2.854E-09	-2.854E-09
0.85000	3.794E-10	424.160	-8.904E-08	-8.904E-08	8.906E-08	8.906E-08	-2.901E-09	-2.901E-09
0.90000	3.780E-10	449.110	-9.851E-08	-9.851E-08	9.852E-08	9.852E-08	-2.890E-09	-2.890E-09
0.92500	3.746E-10	461.586	-1.032E-07	-1.032E-07	1.032E-07	1.032E-07	-2.864E-09	-2.864E-09
0.95000	3.693E-10	474.061	-1.078E-07	-1.078E-07	1.079E-07	1.079E-07	-2.823E-09	-2.823E-09
0.96250	3.660E-10	480.299	-1.101E-07	-1.101E-07	1.102E-07	1.102E-07	-2.798E-09	-2.798E-09
0.97500	3.624E-10	486.536	-1.124E-07	-1.124E-07	1.124E-07	1.124E-07	-2.770E-09	-2.770E-09
0.98125	3.604E-10	489.655	-1.135E-07	-1.135E-07	1.136E-07	1.136E-07	-2.755E-09	-2.755E-09
0.98750	3.583E-10	492.774	-1.147E-07	-1.147E-07	1.147E-07	1.147E-07	-2.739E-09	-2.739E-09
0.99375	3.562E-10	495.893	-1.158E-07	-1.158E-07	1.158E-07	1.158E-07	-2.723E-09	-2.723E-09
1.00000	3.539E-10	499.012	-1.169E-07	-1.169E-07	1.169E-07	1.169E-07	-2.706E-09	-2.706E-09
1.00625	3.516E-10	502.130	-1.180E-07	-1.180E-07	1.180E-07	1.180E-07	-2.688E-09	-2.688E-09
1.01250	3.492E-10	505.249	-1.191E-07	-1.191E-07	1.191E-07	1.191E-07	-2.669E-09	-2.669E-09
1.01875	3.467E-10	508.368	-1.201E-07	-1.201E-07	1.202E-07	1.202E-07	-2.650E-09	-2.650E-09
1.02500	3.441E-10	511.487	-1.212E-07	-1.212E-07	1.213E-07	1.213E-07	-2.631E-09	-2.631E-09
1.03750	3.387E-10	517.724	-1.233E-07	-1.233E-07	1.234E-07	1.234E-07	-2.590E-09	-2.590E-09
1.05000	3.331E-10	523.962	-1.254E-07	-1.254E-07	1.255E-07	1.255E-07	-2.547E-09	-2.547E-09
1.07500	3.212E-10	536.437	-1.295E-07	-1.295E-07	1.296E-07	1.296E-07	-2.455E-09	-2.455E-09
1.10000	3.084E-10	548.913	-1.334E-07	-1.334E-07	1.335E-07	1.335E-07	-2.358E-09	-2.358E-09
1.15000	2.813E-10	573.863	-1.408E-07	-1.408E-07	1.409E-07	1.409E-07	-2.151E-09	-2.151E-09
1.20000	2.533E-10	598.814	-1.475E-07	-1.475E-07	1.476E-07	1.476E-07	-1.936E-09	-1.936E-09
1.30000	1.986E-10	648.715	-1.587E-07	-1.587E-07	1.588E-07	1.588E-07	-1.518E-09	-1.518E-09
1.40000	1.531E-10	698.616	-1.674E-07	-1.674E-07	1.675E-07	1.675E-07	-1.170E-09	-1.170E-09
1.50000	1.175E-10	748.517	-1.741E-07	-1.741E-07	1.743E-07	1.743E-07	-8.981E-10	-8.981E-10
1.60000	8.865E-11	798.418	-1.792E-07	-1.792E-07	1.794E-07	1.794E-07	-6.777E-10	-6.777E-10
1.70000	6.648E-11	848.320	-1.831E-07	-1.831E-07	1.832E-07	1.832E-07	-5.083E-10	-5.083E-10
1.80000	4.971E-11	898.221	-1.859E-07	-1.859E-07	1.861E-07	1.861E-07	-3.800E-10	-3.800E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-8.083E-14
0.10000	4.980E-11	4.980E-11	-3.237E-22	-3.237E-22	-3.861E-12	-3.861E-12	-1.036E-13
0.20000	1.324E-10	1.324E-10	-5.102E-22	-5.102E-22	-1.000E-11	-1.000E-11	-1.366E-13
0.30000	2.582E-10	2.582E-10	-7.850E-22	-7.850E-22	-1.957E-11	-1.957E-11	-1.874E-13
0.40000	4.577E-10	4.577E-10	-1.177E-21	-1.177E-21	-3.406E-11	-3.406E-11	-2.638E-13
0.50000	7.759E-10	7.759E-10	-1.729E-21	-1.729E-21	-5.563E-11	-5.563E-11	-3.681E-13
0.60000	1.234E-09	1.234E-09	-2.384E-21	-2.384E-21	-8.632E-11	-8.632E-11	-5.132E-13
0.70000	1.960E-09	1.960E-09	-3.025E-21	-3.025E-21	-1.269E-10	-1.269E-10	-6.724E-13
0.80000	3.102E-09	3.102E-09	-3.465E-21	-3.465E-21	-1.758E-10	-1.758E-10	-7.986E-13
0.85000	3.849E-09	3.849E-09	-3.551E-21	-3.551E-21	-2.021E-10	-2.021E-10	-8.250E-13
0.90000	4.676E-09	4.676E-09	-3.532E-21	-3.532E-21	-2.287E-10	-2.287E-10	-8.192E-13
0.92500	5.105E-09	5.105E-09	-3.483E-21	-3.483E-21	-2.418E-10	-2.418E-10	-8.043E-13
0.95000	5.525E-09	5.525E-09	-3.410E-21	-3.410E-21	-2.547E-10	-2.547E-10	-7.823E-13
0.96250	5.728E-09	5.728E-09	-3.365E-21	-3.365E-21	-2.611E-10	-2.611E-10	-7.689E-13
0.97500	5.925E-09	5.925E-09	-3.314E-21	-3.314E-21	-2.673E-10	-2.673E-10	-7.540E-13
0.98125	6.020E-09	6.020E-09	-3.287E-21	-3.287E-21	-2.704E-10	-2.704E-10	-7.461E-13
0.98750	6.113E-09	6.113E-09	-3.258E-21	-3.258E-21	-2.734E-10	-2.734E-10	-7.379E-13
0.99375	6.203E-09	6.203E-09	-3.229E-21	-3.229E-21	-2.765E-10	-2.765E-10	-7.295E-13
1.00000	6.291E-09	6.291E-09	-3.198E-21	-3.198E-21	-2.795E-10	-2.795E-10	-7.207E-13
1.00625	6.377E-09	6.377E-09	-3.166E-21	-3.166E-21	-2.825E-10	-2.825E-10	-7.118E-13
1.01250	6.460E-09	6.460E-09	-3.134E-21	-3.134E-21	-2.854E-10	-2.854E-10	-7.026E-13
1.01875	6.540E-09	6.540E-09	-3.100E-21	-3.100E-21	-2.883E-10	-2.883E-10	-6.932E-13
1.02500	6.617E-09	6.617E-09	-3.065E-21	-3.065E-21	-2.912E-10	-2.912E-10	-6.837E-13
1.03750	6.762E-09	6.762E-09	-2.994E-21	-2.994E-21	-2.969E-10	-2.969E-10	-6.642E-13
1.05000	6.895E-09	6.895E-09	-2.919E-21	-2.919E-21	-3.024E-10	-3.024E-10	-6.442E-13
1.07500	7.126E-09	7.126E-09	-2.763E-21	-2.763E-21	-3.130E-10	-3.130E-10	-6.034E-13
1.10000	7.315E-09	7.315E-09	-2.599E-21	-2.599E-21	-3.231E-10	-3.231E-10	-5.623E-13
1.15000	7.586E-09	7.586E-09	-2.263E-21	-2.263E-21	-3.412E-10	-3.412E-10	-4.826E-13
1.20000	7.735E-09	7.735E-09	-1.932E-21	-1.932E-21	-3.569E-10	-3.569E-10	-4.101E-13
1.30000	7.777E-09	7.777E-09	-1.339E-21	-1.339E-21	-3.812E-10	-3.812E-10	-2.935E-13
1.40000	7.640E-09	7.640E-09	-8.955E-22	-8.955E-22	-3.977E-10	-3.977E-10	-2.093E-13
1.50000	7.417E-09	7.417E-09	-5.875E-22	-5.875E-22	-4.087E-10	-4.087E-10	-1.509E-13
1.60000	7.147E-09	7.147E-09	-3.753E-22	-3.753E-22	-4.158E-10	-4.158E-10	-1.129E-13
1.70000	6.858E-09	6.858E-09	-2.349E-22	-2.349E-22	-4.203E-10	-4.203E-10	-8.740E-14
1.80000	6.567E-09	6.567E-09	-1.447E-22	-1.447E-22	-4.231E-10	-4.231E-10	-6.991E-14

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 35.000 θ_D= 0. ρ_a=123.410

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	35.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	35.0000	0.10000	197.919	0.	9.864E-01	-7.934E-11	-7.934E-11	7.934E-11
0.20000	35.0000	0.20000	1.595	0.	9.852E-01	-1.034E-10	-1.034E-10	1.034E-10
0.30000	35.0000	0.30000	166.454	0.	9.850E-01	-1.322E-10	-1.322E-10	1.322E-10
0.40000	35.0000	0.4[illegible]	152.850	0.	9.860E-01	-1.648E-10	-1.648E-10	1.648E-10
0.50000	35.0000	0.50000	141.228	0.	9.883E-01	-2.032E-10	-2.032E-10	2.032E-10
0.60000	35.0000	[illegible]0000	132.111	0.	9.906E-01	-2.407E-10	-2.407E-10	2.407E-10
0.70000	35.0000	0.70000	126.045	0.	9.910E-01	-2.694E-10	-2.694E-10	2.694E-10
0.80000	35.0000	0.80000	123.479	2.561E-06	9.892E-01	-2.826E-10	-2.826E-10	2.826E-10
0.85000	35.0000	0.85000	123.588	2.561E-06	9.887E-01	-2.820E-10	-2.820E-10	2.820E-10
0.90000	35.0000	0.90000	124.630	4.269E-06	9.897E-01	-2.766E-10	-2.766E-10	2.766E-10
0.92500	35.0000	0.92500	125.494	4.269E-06	9.909E-01	-2.722E-10	-2.722E-10	2.722E-10
0.95000	35.0000	0.95000	126.581	5.976E-06	9.926E-01	-2.668E-10	-2.668E-10	2.668E-10
0.96250	35.0000	0.96250	127.206	6.830E-06	9.936E-01	-2.637E-10	-2.637E-10	2.637E-10
0.97500	35.0000	0.97500	127.885	7.684E-06	9.948E-01	-2.604E-10	-2.604E-10	2.604E-10
0.98125	35.0000	0.98125	128.244	8.538E-06	9.954E-01	-2.586E-10	-2.586E-10	2.586E-10
0.98750	35.0000	0.98750	128.616	8.538E-06	9.960E-01	-2.569E-10	-2.569E-10	2.569E-10
0.99375	35.0000	0.99375	129.001	1.110E-05	9.966E-01	-2.550E-10	-2.550E-10	2.550E-10
1.00000	35.0000	1.00000	129.399	1.110E-05	9.973E-01	-2.531E-10	-2.531E-10	2.531E-10
1.00625	35.0000	1.00625	129.810	1.451E-05	9.980E-01	-2.512E-10	-2.512E-10	2.512E-10
1.01250	35.0000	1.01250	130.233	1.622E-05	9.987E-01	-2.492E-10	-2.492E-10	2.492E-10
1.01875	35.0000	1.01875	130.669	1.622E-05	9.994E-01	-2.472E-10	-2.472E-10	2.472E-10
1.02500	35.0000	1.02500	131.117	1.622E-05	1.000E 00	-2.452E-10	-2.452E-10	2.452E-10
1.03750	35.0000	1.03750	132.050	1.622E-05	1.002E 00	-2.410E-10	-2.410E-10	2.410E-10
1.05000	35.0000	1.05000	133.030	1.622E-05	1.003E 00	-2.366E-10	-2.366E-10	2.366E-10
1.07500	35.0000	1.07500	135.131	1.622E-05	1.006E 00	-2.276E-10	-2.276E-10	2.276E-10
1.10000	35.0000	1.10000	137.410	1.622E-05	1.009E 00	-2.181E-10	-2.181E-10	2.181E-10
1.15000	35.0000	1.15000	142.469	1.622E-05	1.013E 00	-1.985E-10	-1.985E-10	1.985E-10
1.20000	35.0000	1.20000	148.137	1.622E-05	1.017E 00	-1.787E-10	-1.787E-10	1.787E-10
1.30000	35.0000	1.30000	161.040	1.622E-05	1.020E 00	-1.443E-10	-1.443E-10	1.443E-10
1.40000	35.0000	1.40000	175.638	1.622E-05	1.019E 00	-1.139E-10	-1.139E-10	1.139E-10
1.50000	35.0000	1.50000	191.545	2.049E-05	1.016E 00	-8.798E-11	-8.798E-11	8.798E-11
1.60000	35.0000	1.60000	208.462	2.391E-05	1.013E 00	-6.726E-11	-6.726E-11	6.726E-11
1.70000	35.0000	1.70000	226.161	2.732E-05	1.010E 00	-5.110E-11	-5.110E-11	5.110E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 35.000 θ_D= 0. ρ_a= 123.410

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	7.934E-11	49.901	-3.473E-09	-3.473E-09	3.473E-09	3.473E-09	-6.066E-10	-6.066E-10
0.20000	1.034E-10	99.802	-8.012E-09	-8.012E-09	8.012E-09	8.012E-09	-7.905E-10	-7.905E-10
0.30000	1.322E-10	149.703	-1.387E-08	-1.387E-08	1.387E-08	1.387E-08	-1.010E-09	-1.010E-09
0.40000	1.648E-10	199.605	-2.127E-08	-2.127E-08	2.127E-08	2.127E-08	-1.260E-09	-1.260E-09
0.50000	2.032E-10	249.506	-3.043E-08	-3.043E-08	3.043E-08	3.043E-08	-1.553E-09	-1.553E-09
0.60000	2.407E-10	299.407	-4.152E-08	-4.152E-08	4.152E-08	4.152E-08	-1.840E-09	-1.840E-09
0.70000	2.694E-10	349.308	-5.430E-08	-5.430E-08	5.430E-08	5.430E-08	-2.060E-09	-2.060E-09
0.80000	2.826E-10	399.209	-6.815E-08	-6.815E-08	6.815E-08	6.815E-08	-2.161E-09	-2.161E-09
0.85000	2.820E-10	424.160	-7.521E-08	-7.521E-08	7.521E-08	7.521E-08	-2.156E-09	-2.156E-09
0.90000	2.766E-10	449.110	-8.218E-08	-8.218E-08	8.218E-08	8.218E-08	-2.115E-09	-2.115E-09
0.92500	2.722E-10	461.586	-8.561E-08	-8.561E-08	8.561E-08	8.561E-08	-2.081E-09	-2.081E-09
0.95000	2.668E-10	474.061	-8.897E-08	-8.897E-08	8.897E-08	8.897E-08	-2.039E-09	-2.039E-09
0.96250	2.637E-10	480.299	-9.062E-08	-9.062E-08	9.063E-08	9.063E-08	-2.016E-09	-2.016E-09
0.97500	2.604E-10	486.536	-9.226E-08	-9.226E-08	9.226E-08	9.226E-08	-1.991E-09	-1.991E-09
0.98125	2.586E-10	489.655	-9.307E-08	-9.307E-08	9.307E-08	9.307E-08	-1.977E-09	-1.977E-09
0.98750	2.569E-10	492.774	-9.387E-08	-9.387E-08	9.387E-08	9.387E-08	-1.964E-09	-1.964E-09
0.99375	2.550E-10	495.893	-9.467E-08	-9.467E-08	9.467E-08	9.467E-08	-1.950E-09	-1.950E-09
1.00000	2.531E-10	499.012	-9.546E-08	-9.546E-08	9.547E-08	9.547E-08	-1.935E-09	-1.935E-09
1.00625	2.512E-10	502.130	-9.625E-08	-9.625E-08	9.625E-08	9.625E-08	-1.921E-09	-1.921E-09
1.01250	2.492E-10	505.249	-9.703E-08	-9.703E-08	9.704E-08	9.704E-08	-1.906E-09	-1.906E-09
1.01875	2.472E-10	508.368	-9.780E-08	-9.780E-08	9.781E-08	9.781E-08	-1.890E-09	-1.890E-09
1.02500	2.452E-10	511.487	-9.857E-08	-9.857E-08	9.858E-08	9.858E-08	-1.875E-09	-1.875E-09
1.03750	2.410E-10	517.724	-1.001E-07	-1.001E-07	1.001E-07	1.001E-07	-1.842E-09	-1.842E-09
1.05000	2.366E-10	523.962	-1.016E-07	-1.016E-07	1.016E-07	1.016E-07	-1.809E-09	-1.809E-09
1.07500	2.276E-10	536.437	-1.045E-07	-1.045E-07	1.045E-07	1.045E-07	-1.740E-09	-1.740E-09
1.10000	2.181E-10	548.913	-1.072E-07	-1.072E-07	1.073E-07	1.073E-07	-1.668E-09	-1.668E-09
1.15000	1.985E-10	573.863	-1.124E-07	-1.124E-07	1.125E-07	1.125E-07	-1.518E-09	-1.518E-09
1.20000	1.787E-10	598.814	-1.172E-07	-1.172E-07	1.172E-07	1.172E-07	-1.366E-09	-1.366E-09
1.30000	1.443E-10	648.715	-1.252E-07	-1.252E-07	1.252E-07	1.252E-07	-1.103E-09	-1.103E-09
1.40000	1.139E-10	698.616	-1.316E-07	-1.316E-07	1.316E-07	1.316E-07	-8.707E-10	-8.707E-10
1.50000	8.798E-11	748.517	-1.366E-07	-1.366E-07	1.367E-07	1.367E-07	-6.727E-10	-6.727E-10
1.60000	6.726E-11	798.418	-1.405E-07	-1.405E-07	1.405E-07	1.405E-07	-5.143E-10	-5.143E-10
1.70000	5.110E-11	848.320	-1.434E-07	-1.434E-07	1.435E-07	1.435E-07	-3.907E-10	-3.907E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 35.000 θ_0= 0. ρ_a=123.410

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-1.064E-13
0.10000	5.628E-11	5.628E-11	-3.146E-22	-3.146E-22	-3.804E-12	-3.804E-12	-1.342E-13
0.20000	1.470E-10	1.470E-10	-4.795E-22	-4.795E-22	-9.670E-12	-9.670E-12	-1.726E-13
0.30000	2.806E-10	2.806E-10	-7.088E-22	-7.088E-22	-1.847E-11	-1.847E-11	-2.277E-13
0.40000	4.782E-10	4.782E-10	-1.007E-21	-1.007E-21	-3.122E-11	-3.122E-11	-3.046E-13
0.50000	7.791E-10	7.791E-10	-1.386E-21	-1.386E-21	-4.902E-11	-4.902E-11	-3.971E-13
0.60000	1.189E-09	1.189E-09	-1.789E-21	-1.789E-21	-7.280E-11	-7.280E-11	-5.004E-13
0.70000	1.749E-09	1.749E-09	-2.120E-21	-2.120E-21	-1.022E-10	-1.022E-10	-5.927E-13
0.80000	2.478E-09	2.478E-09	-2.278E-21	-2.278E-21	-1.354E-10	-1.354E-10	-6.394E-13
0.85000	2.892E-09	2.892E-09	-2.271E-21	-2.271E-21	-1.524E-10	-1.524E-10	-6.374E-13
0.90000	3.314E-09	3.314E-09	-2.206E-21	-2.206E-21	-1.692E-10	-1.692E-10	-6.180E-13
0.92500	3.518E-09	3.518E-09	-2.153E-21	-2.153E-21	-1.774E-10	-1.774E-10	-6.025E-13
0.95000	3.713E-09	3.713E-09	-2.089E-21	-2.089E-21	-1.853E-10	-1.853E-10	-5.838E-13
0.96250	3.805E-09	3.805E-09	-2.052E-21	-2.052E-21	-1.892E-10	-1.892E-10	-5.735E-13
0.97500	3.894E-09	3.894E-09	-2.014E-21	-2.014E-21	-1.930E-10	-1.930E-10	-5.625E-13
0.98125	3.936E-09	3.936E-09	-1.994E-21	-1.994E-21	-1.948E-10	-1.948E-10	-5.568E-13
0.98750	3.978E-09	3.978E-09	-1.973E-21	-1.973E-21	-1.967E-10	-1.967E-10	-5.510E-13
0.99375	4.019E-09	4.019E-09	-1.952E-21	-1.952E-21	-1.985E-10	-1.985E-10	-5.451E-13
1.00000	4.059E-09	4.059E-09	-1.930E-21	-1.930E-21	-2.003E-10	-2.003E-10	-5.391E-13
1.00625	4.097E-09	4.097E-09	-1.908E-21	-1.908E-21	-2.021E-10	-2.021E-10	-5.330E-13
1.01250	4.134E-09	4.134E-09	-1.886E-21	-1.886E-21	-2.039E-10	-2.039E-10	-5.269E-13
1.01875	4.170E-09	4.170E-09	-1.863E-21	-1.863E-21	-2.057E-10	-2.057E-10	-5.206E-13
1.02500	4.205E-09	4.205E-09	-1.839E-21	-1.839E-21	-2.074E-10	-2.074E-10	-5.143E-13
1.03750	4.272E-09	4.272E-09	-1.792E-21	-1.792E-21	-2.108E-10	-2.108E-10	-5.015E-13
1.05000	4.333E-09	4.333E-09	-1.743E-21	-1.743E-21	-2.141E-10	-2.141E-10	-4.886E-13
1.07500	4.441E-09	4.441E-09	-1.644E-21	-1.644E-21	-2.204E-10	-2.204E-10	-4.625E-13
1.10000	4.531E-09	4.531E-09	-1.542E-21	-1.542E-21	-2.264E-10	-2.264E-10	-4.364E-13
1.15000	4.666E-09	4.666E-09	-1.338E-21	-1.338E-21	-2.372E-10	-2.372E-10	-3.860E-13
1.20000	4.749E-09	4.749E-09	-1.142E-21	-1.142E-21	-2.464E-10	-2.464E-10	-3.394E-13
1.30000	4.794E-09	4.794E-09	-8.151E-22	-8.151E-22	-2.610E-10	-2.610E-10	-2.547E-13
1.40000	4.741E-09	4.741E-09	-5.592E-22	-5.592E-22	-2.712E-10	-2.712E-10	-1.917E-13
1.50000	4.627E-09	4.627E-09	-3.709E-22	-3.709E-22	-2.781E-10	-2.781E-10	-1.475E-13
1.60000	4.478E-09	4.478E-09	-2.395E-22	-2.395E-22	-2.826E-10	-2.826E-10	-1.162E-13
1.70000	4.313E-09	4.313E-09	-1.515E-22	-1.515E-22	-2.854E-10	-2.854E-10	-9.379E-14

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 45.000 θ_0= 0. ρ_a=152.140

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	45.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	45.0000	0.10000	200.523	0.	9.780E-01	-7.609E-11	-7.609E-11	7.609E-11
0.20000	45.0000	0.20000	187.220	0.	9.776E-01	-9.438E-11	-9.438E-11	9.438E-11
0.30000	45.0000	0.30000	175.554	0.	9.785E-01	-1.140E-10	-1.140E-10	1.140E-10
0.40000	45.0000	0.40000	165.870	0.	9.801E-01	-1.334E-10	-1.334E-10	1.334E-10
0.50000	45.0000	0.50000	158.532	0.	9.815E-01	-1.503E-10	-1.503E-10	1.503E-10
0.60000	45.0000	0.60000	153.876	0.	9.817E-01	-1.621E-10	-1.621E-10	1.621E-10
0.70000	45.0000	0.70000	152.148	2.561E-06	9.808E-01	-1.667E-10	-1.667E-10	1.667E-10
0.80000	45.0000	0.80000	153.448	8.538E-06	9.811E-01	-1.632E-10	-1.632E-10	1.632E-10
0.85000	45.0000	0.85000	155.216	1.323E-05	9.828E-01	-1.586E-10	-1.586E-10	1.586E-10
0.90000	45.0000	0.90000	157.700	1.878E-05	9.859E-01	-1.523E-10	-1.523E-10	1.523E-10
0.92500	45.0000	0.92500	159.200	1.878E-05	9.879E-01	-1.487E-10	-1.487E-10	1.487E-10
0.95000	45.0000	0.95000	160.866	2.049E-05	9.903E-01	-1.447E-10	-1.447E-10	1.447E-10
0.96250	45.0000	0.96250	161.760	2.134E-05	9.915E-01	-1.426E-10	-1.426E-10	1.426E-10
0.97500	45.0000	0.97500	162.693	2.134E-05	9.929E-01	-1.405E-10	-1.405E-10	1.405E-10
0.98125	45.0000	0.98125	163.174	2.391E-05	9.935E-01	-1.394E-10	-1.394E-10	1.394E-10
0.98750	45.0000	0.98750	163.665	2.476E-05	9.942E-01	-1.383E-10	-1.383E-10	1.383E-10
0.99375	45.0000	0.99375	164.166	2.476E-05	9.949E-01	-1.372E-10	-1.372E-10	1.372E-10
1.00000	45.0000	1.00000	164.676	2.647E-05	9.956E-01	-1.360E-10	-1.360E-10	1.360E-10
1.00625	45.0000	1.00625	165.195	2.817E-05	9.963E-01	-1.349E-10	-1.349E-10	1.349E-10
1.01250	45.0000	1.01250	165.723	2.817E-05	9.970E-01	-1.337E-10	-1.337E-10	1.337E-10
1.01875	45.0000	1.01875	166.261	3.074E-05	9.977E-01	-1.326E-10	-1.326E-10	1.326E-10
1.02500	45.0000	1.02500	166.808	3.159E-05	9.984E-01	-1.314E-10	-1.314E-10	1.314E-10
1.03750	45.0000	1.03750	167.929	3.159E-05	9.999E-01	-1.290E-10	-1.290E-10	1.290E-10
1.05000	45.0000	1.05000	169.085	3.159E-05	1.001E 00	-1.267E-10	-1.267E-10	1.267E-10
1.07500	45.0000	1.07500	171.500	3.159E-05	1.004E 00	-1.218E-10	-1.218E-10	1.218E-10
1.10000	45.0000	1.10000	174.048	3.159E-05	1.007E 00	-1.169E-10	-1.169E-10	1.169E-10
1.15000	45.0000	1.15000	179.520	3.159E-05	1.012E 00	-1.069E-10	-1.069E-10	1.069E-10
1.20000	45.0000	1.20000	185.454	3.159E-05	1.015E 00	-9.712E-11	-9.712E-11	9.712E-11
1.30000	45.0000	1.30000	198.544	3.159E-05	1.020E 00	-7.854E-11	-7.854E-11	7.854E-11
1.40000	45.0000	1.40000	213.007	3.159E-05	1.022E 00	-6.268E-11	-6.268E-11	6.268E-11
1.50000	45.0000	1.50000	228.583	3.159E-05	1.021E 00	-4.921E-11	-4.921E-11	4.921E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_x\mu'$-1.0	T_0	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	7.609E-11	49.901	-3.402E-09	-3.402E-09	3.402E-09	3.402E-09	-5.817E-10	-5.817E-10
0.20000	9.438E-11	99.802	-7.646E-09	-7.646E-09	7.646E-09	7.646E-09	-7.215E-10	-7.215E-10
0.30000	1.140E-10	149.703	-1.284E-08	-1.284E-08	1.284E-08	1.284E-08	-8.718E-10	-8.718E-10
0.40000	1.334E-10	199.605	-1.902E-08	-1.902E-08	1.902E-08	1.902E-08	-1.020E-09	-1.020E-09
0.50000	1.503E-10	249.506	-2.612E-08	-2.612E-08	2.612E-08	2.612E-08	-1.149E-09	-1.149E-09
0.60000	1.621E-10	299.407	-3.394E-08	-3.394E-08	3.394E-08	3.394E-08	-1.239E-09	-1.239E-09
0.70000	1.667E-10	349.308	-4.217E-08	-4.217E-08	4.217E-08	4.217E-08	-1.274E-09	-1.274E-09
0.80000	1.632E-10	399.209	-5.044E-08	-5.044E-08	5.044E-08	5.044E-08	-1.248E-09	-1.248E-09
0.85000	1.586E-10	424.160	-5.445E-08	-5.445E-08	5.446E-08	5.446E-08	-1.213E-09	-1.213E-09
0.90000	1.523E-10	449.110	-5.833E-08	-5.833E-08	5.835E-08	5.835E-08	-1.165E-09	-1.165E-09
0.92500	1.487E-10	461.586	-6.021E-08	-6.021E-08	6.022E-08	6.022E-08	-1.137E-09	-1.137E-09
0.95000	1.447E-10	474.061	-6.204E-08	-6.204E-08	6.206E-08	6.206E-08	-1.106E-09	-1.106E-09
0.96250	1.426E-10	480.299	-6.294E-08	-6.294E-08	6.295E-08	6.295E-08	-1.090E-09	-1.090E-09
0.97500	1.405E-10	486.536	-6.382E-08	-6.382E-08	6.384E-08	6.384E-08	-1.074E-09	-1.074E-09
0.98125	1.394E-10	489.655	-6.425E-08	-6.425E-08	6.427E-08	6.427E-08	-1.066E-09	-1.066E-09
0.98750	1.383E-10	492.774	-6.468E-08	-6.468E-08	6.471E-08	6.471E-08	-1.057E-09	-1.057E-09
0.99375	1.372E-10	495.893	-6.511E-08	-6.511E-08	6.514E-08	6.514E-08	-1.049E-09	-1.049E-09
1.00000	1.360E-10	499.011	-6.554E-08	-6.554E-08	6.557E-08	6.557E-08	-1.040E-09	-1.040E-09
1.00625	1.349E-10	502.130	-6.596E-08	-6.596E-08	6.599E-08	6.599E-08	-1.031E-09	-1.031E-09
1.01250	1.337E-10	505.249	-6.638E-08	-6.638E-08	6.641E-08	6.641E-08	-1.023E-09	-1.023E-09
1.01875	1.326E-10	508.368	-6.679E-08	-6.679E-08	6.683E-08	6.683E-08	-1.014E-09	-1.014E-09
1.02500	1.314E-10	511.487	-6.720E-08	-6.720E-08	6.724E-08	6.724E-08	-1.005E-09	-1.005E-09
1.03750	1.290E-10	517.724	-6.801E-08	-6.801E-08	6.805E-08	6.805E-08	-9.866E-10	-9.866E-10
1.05000	1.267E-10	523.962	-6.881E-08	-6.881E-08	6.885E-08	6.885E-08	-9.683E-10	-9.683E-10
1.07500	1.218E-10	536.437	-7.035E-08	-7.035E-08	7.040E-08	7.040E-08	-9.311E-10	-9.311E-10
1.10000	1.169E-10	548.913	-7.184E-08	-7.184E-08	7.190E-08	7.190E-08	-8.934E-10	-8.934E-10
1.15000	1.069E-10	573.863	-7.463E-08	-7.463E-08	7.469E-08	7.469E-08	-8.175E-10	-8.175E-10
1.20000	9.712E-11	598.814	-7.718E-08	-7.718E-08	7.723E-08	7.723E-08	-7.425E-10	-7.425E-10
1.30000	7.854E-11	648.715	-8.155E-08	-8.155E-08	8.161E-08	8.161E-08	-6.005E-10	-6.005E-10
1.40000	6.268E-11	698.616	-8.507E-08	-8.507E-08	8.512E-08	8.512E-08	-4.792E-10	-4.792E-10
1.50000	4.921E-11	748.517	-8.785E-08	-8.785E-08	8.790E-08	8.790E-08	-3.762E-10	-3.762E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-1.617E-13
0.10000	6.663E-11	6.663E-11	-2.941E-22	-2.941E-22	-3.672E-12	-3.672E-12	-1.966E-13
0.20000	1.652E-10	1.652E-10	-4.147E-22	-4.147E-22	-8.940E-12	-8.940E-12	-2.393E-13
0.30000	3.000E-10	3.000E-10	-5.604E-22	-5.604E-22	-1.621E-11	-1.621E-11	-2.915E-13
0.40000	4.780E-10	4.780E-10	-7.195E-22	-7.195E-22	-2.578E-11	-2.578E-11	-3.502E-13
0.50000	7.184E-10	7.184E-10	-8.696E-22	-8.696E-22	-3.769E-11	-3.769E-11	-4.079E-13
0.60000	1.023E-09	1.023E-09	-9.806E-22	-9.806E-22	-5.160E-11	-5.160E-11	-4.524E-13
0.70000	1.378E-09	1.378E-09	-1.025E-21	-1.025E-21	-6.670E-11	-6.670E-11	-4.708E-13
0.80000	1.763E-09	1.763E-09	-9.915E-22	-9.915E-22	-8.188E-11	-8.188E-11	-4.569E-13
0.85000	1.953E-09	1.953E-09	-9.473E-22	-9.473E-22	-8.914E-11	-8.914E-11	-4.390E-13
0.90000	2.130E-09	2.130E-09	-8.885E-22	-8.885E-22	-9.602E-11	-9.602E-11	-4.156E-13
0.92500	2.211E-09	2.211E-09	-8.547E-22	-8.547E-22	-9.928E-11	-9.928E-11	-4.023E-13
0.95000	2.287E-09	2.287E-09	-8.187E-22	-8.187E-22	-1.024E-10	-1.024E-10	-3.883E-13
0.96250	2.322E-09	2.322E-09	-8.001E-22	-8.001E-22	-1.039E-10	-1.039E-10	-3.811E-13
0.97500	2.356E-09	2.356E-09	-7.810E-22	-7.810E-22	-1.054E-10	-1.054E-10	-3.738E-13
0.98125	2.372E-09	2.372E-09	-7.714E-22	-7.714E-22	-1.061E-10	-1.061E-10	-3.701E-13
0.98750	2.387E-09	2.387E-09	-7.617E-22	-7.617E-22	-1.068E-10	-1.068E-10	-3.664E-13
0.99375	2.403E-09	2.403E-09	-7.519E-22	-7.519E-22	-1.075E-10	-1.075E-10	-3.627E-13
1.00000	2.418E-09	2.418E-09	-7.421E-22	-7.421E-22	-1.082E-10	-1.082E-10	-3.590E-13
1.00625	2.432E-09	2.432E-09	-7.322E-22	-7.322E-22	-1.089E-10	-1.089E-10	-3.552E-13
1.01250	2.446E-09	2.446E-09	-7.223E-22	-7.223E-22	-1.096E-10	-1.096E-10	-3.515E-13
1.01875	2.459E-09	2.459E-09	-7.123E-22	-7.123E-22	-1.103E-10	-1.103E-10	-3.477E-13
1.02500	2.472E-09	2.472E-09	-7.023E-22	-7.023E-22	-1.109E-10	-1.109E-10	-3.440E-13
1.03750	2.497E-09	2.497E-09	-6.823E-22	-6.823E-22	-1.122E-10	-1.122E-10	-3.365E-13
1.05000	2.520E-09	2.520E-09	-6.622E-22	-6.622E-22	-1.135E-10	-1.135E-10	-3.291E-13
1.07500	2.561E-09	2.561E-09	-6.222E-22	-6.222E-22	-1.159E-10	-1.159E-10	-3.143E-13
1.10000	2.595E-09	2.595E-09	-5.826E-22	-5.826E-22	-1.182E-10	-1.182E-10	-2.998E-13
1.15000	2.646E-09	2.646E-09	-5.059E-22	-5.059E-22	-1.222E-10	-1.222E-10	-2.721E-13
1.20000	2.678E-09	2.678E-09	-4.340E-22	-4.340E-22	-1.257E-10	-1.257E-10	-2.465E-13
1.30000	2.694E-09	2.694E-09	-3.096E-22	-3.096E-22	-1.313E-10	-1.313E-10	-2.025E-13
1.40000	2.663E-09	2.663E-09	-2.129E-22	-2.129E-22	-1.351E-10	-1.351E-10	-1.664E-13
1.50000	2.602E-09	2.602E-09	-1.423E-22	-1.423E-22	-1.378E-10	-1.378E-10	-1.388E-13

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 55.000 θ_0= 0. ρ_a=176.248

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	55.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	55.0000	0.10000	203.582	0.	9.740E-01	-7.256E-11	-7.256E-11	7.256E-11
0.20000	55.0000	0.20000	193.711	0.	9.741E-01	-8.495E-11	-8.495E-11	8.495E-11
0.30000	55.0000	0.30000	185.817	0.	9.747E-01	-9.655E-11	-9.655E-11	9.655E-11
0.40000	55.0000	0.40000	180.161	0.	9.752E-01	-1.058E-10	-1.058E-10	1.058E-10
0.50000	55.0000	0.50000	176.957	0.	9.752E-01	-1.115E-10	-1.115E-10	1.115E-10
0.60000	55.0000	0.60000	176.340	1.281E-06	9.748E-01	-1.126E-10	-1.126E-10	1.126E-10
0.70000	55.0000	0.70000	178.335	4.696E-06	9.753E-01	-1.090E-10	-1.090E-10	1.090E-10
0.80000	55.0000	0.80000	182.857	5.976E-06	9.786E-01	-1.013E-10	-1.013E-10	1.013E-10
0.85000	55.0000	0.85000	186.012	5.976E-06	9.816E-01	-9.624E-11	-9.624E-11	9.624E-11
0.90000	55.0000	0.90000	189.726	5.976E-06	9.856E-01	-9.062E-11	-9.062E-11	9.062E-11
0.92500	55.0000	0.92500	191.782	9.392E-06	9.878E-01	-8.765E-11	-8.765E-11	8.765E-11
0.95000	55.0000	0.95000	193.966	1.195E-05	9.901E-01	-8.460E-11	-8.460E-11	8.460E-11
0.96250	55.0000	0.96250	195.104	1.281E-05	9.913E-01	-8.305E-11	-8.305E-11	8.305E-11
0.97500	55.0000	0.97500	196.273	1.451E-05	9.926E-01	-8.149E-11	-8.149E-11	8.149E-11
0.98125	55.0000	0.98125	196.868	1.451E-05	9.932E-01	-8.071E-11	-8.071E-11	8.071E-11
0.98750	55.0000	0.98750	197.471	1.451E-05	9.938E-01	-7.992E-11	-7.992E-11	7.992E-11
0.99375	55.0000	0.99375	198.081	1.793E-05	9.944E-01	-7.913E-11	-7.913E-11	7.913E-11
1.00000	55.0000	1.00000	198.699	1.878E-05	9.950E-01	-7.835E-11	-7.835E-11	7.835E-11
1.00625	55.0000	1.00625	199.323	2.049E-05	9.957E-01	-7.756E-11	-7.756E-11	7.756E-11
1.01250	55.0000	1.01250	199.955	2.049E-05	9.963E-01	-7.677E-11	-7.677E-11	7.677E-11
1.01875	55.0000	1.01875	200.593	2.049E-05	9.969E-01	-7.601E-11	-7.601E-11	7.601E-11
1.02500	55.0000	1.02500	201.239	2.305E-05	9.975E-01	-7.525E-11	-7.525E-11	7.525E-11
1.03750	55.0000	1.03750	202.551	2.476E-05	9.987E-01	-7.373E-11	-7.373E-11	7.373E-11
1.05000	55.0000	1.05000	203.890	2.476E-05	9.999E-01	-7.221E-11	-7.221E-11	7.221E-11
1.07500	55.0000	1.07500	206.646	2.561E-05	1.002E 00	-6.919E-11	-6.919E-11	6.919E-11
1.10000	55.0000	1.10000	209.505	2.732E-05	1.005E 00	-6.618E-11	-6.618E-11	6.618E-11
1.15000	55.0000	1.15000	215.511	2.817E-05	1.009E 00	-6.029E-11	-6.029E-11	6.029E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 55.000 θ_0= 0. ρ_a=176.248

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	7.256E-11	49.901	-3.321E-09	-3.321E-09	3.321E-09	3.321E-09	-5.547E-10	-5.547E-10
0.20000	8.495E-11	99.802	-7.249E-09	-7.249E-09	7.249E-09	7.249E-09	-6.494E-10	-6.494E-10
0.30000	9.655E-11	149.703	-1.178E-08	-1.178E-08	1.178E-08	1.178E-08	-7.381E-10	-7.382E-10
0.40000	1.058E-10	199.605	-1.685E-08	-1.685E-08	1.685E-08	1.685E-08	-8.091E-10	-8.091E-10
0.50000	1.115E-10	249.506	-2.229E-08	-2.229E-08	2.229E-08	2.229E-08	-8.522E-10	-8.522E-10
0.60000	1.126E-10	299.407	-2.790E-08	-2.790E-08	2.790E-08	2.790E-08	-8.608E-10	-8.608E-10
0.70000	1.090E-10	349.308	-3.344E-08	-3.344E-08	3.344E-08	3.344E-08	-8.334E-10	-8.334E-10
0.80000	1.013E-10	399.209	-3.871E-08	-3.871E-08	3.871E-08	3.871E-08	-7.745E-10	-7.745E-10
0.85000	9.624E-11	424.160	-4.117E-08	-4.117E-08	4.117E-08	4.117E-08	-7.358E-10	-7.358E-10
0.90000	9.062E-11	449.110	-4.350E-08	-4.350E-08	4.350E-08	4.350E-08	-6.928E-10	-6.928E-10
0.92500	8.765E-11	461.586	-4.461E-08	-4.461E-08	4.462E-08	4.462E-08	-6.701E-10	-6.701E-10
0.95000	8.460E-11	474.061	-4.569E-08	-4.569E-08	4.569E-08	4.569E-08	-6.468E-10	-6.468E-10
0.96250	8.305E-11	480.299	-4.621E-08	-4.621E-08	4.622E-08	4.622E-08	-6.349E-10	-6.349E-10
0.97500	8.149E-11	486.536	-4.672E-08	-4.672E-08	4.673E-08	4.673E-08	-6.230E-10	-6.230E-10
0.98125	8.071E-11	489.655	-4.698E-08	-4.698E-08	4.698E-08	4.698E-08	-6.170E-10	-6.170E-10
0.98750	7.992E-11	492.774	-4.723E-08	-4.723E-08	4.723E-08	4.723E-08	-6.110E-10	-6.110E-10
0.99375	7.913E-11	495.893	-4.747E-08	-4.747E-08	4.748E-08	4.748E-08	-6.050E-10	-6.050E-10
1.00000	7.835E-11	499.011	-4.772E-08	-4.772E-08	4.773E-08	4.773E-08	-5.990E-10	-5.990E-10
1.00625	7.756E-11	502.130	-4.796E-08	-4.796E-08	4.797E-08	4.797E-08	-5.929E-10	-5.929E-10
1.01250	7.677E-11	505.249	-4.820E-08	-4.820E-08	4.822E-08	4.822E-08	-5.869E-10	-5.869E-10
1.01875	7.601E-11	508.368	-4.844E-08	-4.844E-08	4.845E-08	4.845E-08	-5.811E-10	-5.811E-10
1.02500	7.525E-11	511.487	-4.867E-08	-4.867E-08	4.869E-08	4.869E-08	-5.753E-10	-5.753E-10
1.03750	7.373E-11	517.724	-4.913E-08	-4.913E-08	4.916E-08	4.916E-08	-5.637E-10	-5.637E-10
1.05000	7.221E-11	523.962	-4.959E-08	-4.959E-08	4.961E-08	4.961E-08	-5.521E-10	-5.521E-10
1.07500	6.919E-11	536.437	-5.047E-08	-5.047E-08	5.050E-08	5.050E-08	-5.290E-10	-5.290E-10
1.10000	6.618E-11	548.913	-5.131E-08	-5.131E-08	5.134E-08	5.134E-08	-5.060E-10	-5.060E-10
1.15000	6.029E-11	573.863	-5.289E-08	-5.289E-08	5.292E-08	5.292E-08	-4.609E-10	-4.609E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 55.000 θ_D= 0. ρ_a=176.248

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-2.171E-13
0.10000	7.395E-11	7.395E-11	-2.718E-22	-2.718E-22	-3.525E-12	-3.525E-12	-2.527E-13
0.20000	1.735E-10	1.735E-10	-3.507E-22	-3.507E-22	-8.175E-12	-8.175E-12	-2.909E-13
0.30000	2.995E-10	2.995E-10	-4.300E-22	-4.300E-22	-1.402E-11	-1.402E-11	-3.286E-13
0.40000	4.515E-10	4.515E-10	-4.976E-22	-4.976E-22	-2.098E-11	-2.098E-11	-3.609E-13
0.50000	6.320E-10	6.320E-10	-5.404E-22	-5.404E-22	-2.878E-11	-2.878E-11	-3.816E-13
0.60000	8.398E-10	8.398E-10	-5.491E-22	-5.491E-22	-3.698E-11	-3.698E-11	-3.859E-13
0.70000	1.053E-09	1.053E-09	-5.216E-22	-5.216E-22	-4.503E-11	-4.503E-11	-3.726E-13
0.80000	1.259E-09	1.259E-09	-4.641E-22	-4.641E-22	-5.243E-11	-5.243E-11	-3.451E-13
0.85000	1.369E-09	1.369E-09	-4.278E-22	-4.278E-22	-5.577E-11	-5.577E-11	-3.278E-13
0.90000	1.429E-09	1.429E-09	-3.887E-22	-3.887E-22	-5.883E-11	-5.883E-11	-3.092E-13
0.92500	1.464E-09	1.464E-09	-3.686E-22	-3.686E-22	-6.024E-11	-6.024E-11	-2.997E-13
0.95000	1.496E-09	1.496E-09	-3.484E-22	-3.484E-22	-6.158E-11	-6.158E-11	-2.901E-13
0.96250	1.511E-09	1.511E-09	-3.383E-22	-3.383E-22	-6.223E-11	-6.223E-11	-2.853E-13
0.97500	1.525E-09	1.525E-09	-3.283E-22	-3.283E-22	-6.285E-11	-6.285E-11	-2.806E-13
0.98125	1.532E-09	1.532E-09	-3.233E-22	-3.233E-22	-6.315E-11	-6.315E-11	-2.782E-13
0.98750	1.539E-09	1.539E-09	-3.183E-22	-3.183E-22	-6.345E-11	-6.345E-11	-2.758E-13
0.99375	1.545E-09	1.545E-09	-3.133E-22	-3.133E-22	-6.375E-11	-6.375E-11	-2.735E-13
1.00000	1.551E-09	1.551E-09	-3.083E-22	-3.083E-22	-6.404E-11	-6.404E-11	-2.711E-13
1.00625	1.557E-09	1.557E-09	-3.034E-22	-3.034E-22	-6.433E-11	-6.433E-11	-2.688E-13
1.01250	1.563E-09	1.563E-09	-2.985E-22	-2.985E-22	-6.461E-11	-6.461E-11	-2.664E-13
1.01875	1.568E-09	1.568E-09	-2.936E-22	-2.936E-22	-6.488E-11	-6.488E-11	-2.640E-13
1.02500	1.573E-09	1.573E-09	-2.887E-22	-2.887E-22	-6.516E-11	-6.516E-11	-2.616E-13
1.03750	1.583E-09	1.583E-09	-2.791E-22	-2.791E-22	-6.569E-11	-6.569E-11	-2.567E-13
1.05000	1.593E-09	1.593E-09	-2.696E-22	-2.696E-22	-6.620E-11	-6.620E-11	-2.520E-13
1.07500	1.609E-09	1.609E-09	-2.510E-22	-2.510E-22	-6.717E-11	-6.717E-11	-2.427E-13
1.10000	1.623E-09	1.623E-09	-2.331E-22	-2.331E-22	-6.808E-11	-6.808E-11	-2.336E-13
1.15000	1.641E-09	1.641E-09	-1.996E-22	-1.996E-22	-6.970E-11	-6.970E-11	-2.165E-13

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 65.000 θ_D= 0. ρ_a=195.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	65.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	65.0000	0.10000	206.986	0.	9.790E-01	-6.882E-11	-6.882E-11	6.882E-11
0.20000	65.0000	0.20000	200.797	0.	9.789E-01	-7.577E-11	-7.577E-11	7.577E-11
0.30000	65.0000	0.30000	196.777	0.	9.789E-01	-8.083E-11	-8.083E-11	8.083E-11
0.40000	65.0000	0.40000	195.061	0.	9.786E-01	-8.311E-11	-8.311E-11	8.311E-11
0.50000	65.0000	0.50000	195.710	0.	9.784E-01	-8.224E-11	-8.224E-11	8.224E-11
0.60000	65.0000	0.60000	198.700	0.	9.788E-01	-7.834E-11	-7.834E-11	7.834E-11
0.70000	65.0000	0.70000	203.929	0.	9.808E-01	-7.217E-11	-7.217E-11	7.217E-11
0.80000	65.0000	0.80000	211.230	0.	9.847E-01	-6.443E-11	-6.443E-11	6.443E-11
0.85000	65.0000	0.85000	215.594	1.708E-06	9.873E-01	-6.021E-11	-6.021E-11	6.021E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 65.000 θ_D= 0. ρ_a= 195.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	6.882E-11	49.901	-3.233E-09	-3.233E-09	3.233E-09	3.233E-09	-5.262E-10	-5.262E-10
0.20000	7.577E-11	99.802	-6.848E-09	-6.848E-09	6.848E-09	6.848E-09	-5.793E-10	-5.793E-10
0.30000	8.083E-11	149.703	-1.076E-08	-1.076E-08	1.076E-08	1.076E-08	-6.179E-10	-6.179E-10
0.40000	8.311E-11	199.605	-1.487E-08	-1.487E-08	1.487E-08	1.487E-08	-6.354E-10	-6.354E-10
0.50000	8.224E-11	249.506	-1.901E-08	-1.901E-08	1.901E-08	1.901E-08	-6.287E-10	-6.287E-10
0.60000	7.834E-11	299.407	-2.302E-08	-2.302E-08	2.302E-08	2.302E-08	-5.990E-10	-5.990E-10
0.70000	7.217E-11	349.308	-2.679E-08	-2.679E-08	2.679E-08	2.679E-08	-5.518E-10	-5.518E-10
0.80000	6.443E-11	399.209	-3.020E-08	-3.020E-08	3.020E-08	3.020E-08	-4.926E-10	-4.926E-10
0.85000	6.021E-11	424.160	-3.176E-08	-3.176E-08	3.176E-08	3.176E-08	-4.603E-10	-4.603E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_o= 65.000 θ_D= 0. ρ_a=195.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-2.658E-13
0.10000	7.827E-11	7.827E-11	-2.488E-22	-2.488E-22	-3.369E-12	-3.369E-12	-2.953E-13
0.20000	1.737E-10	1.737E-10	-2.921E-22	-2.921E-22	-7.424E-12	-7.424E-12	-3.219E-13
0.30000	2.846E-10	2.846E-10	-3.240E-22	-3.240E-22	-1.205E-11	-1.205E-11	-3.407E-13
0.40000	4.058E-10	4.058E-10	-3.387E-22	-3.387E-22	-1.703E-11	-1.703E-11	-3.493E-13
0.50000	5.325E-10	5.325E-10	-3.331E-22	-3.331E-22	-2.208E-11	-2.208E-11	-3.461E-13
0.60000	6.590E-10	6.590E-10	-3.083E-22	-3.083E-22	-2.690E-11	-2.690E-11	-3.317E-13
0.70000	7.701E-10	7.701E-10	-2.693E-22	-2.693E-22	-3.124E-11	-3.124E-11	-3.082E-13
0.80000	8.647E-10	8.647E-10	-2.230E-22	-2.230E-22	-3.492E-11	-3.492E-11	-2.796E-13
0.85000	9.030E-10	9.030E-10	-1.991E-22	-1.991E-22	-3.650E-11	-3.650E-11	-2.646E-13

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	75.0000	0.	215.159	0.	1.000E 00	-6.062E-11	-6.062E-11	6.062E-11
0.10000	75.0000	0.10000	210.618	0.	9.993E-01	-6.505E-11	-6.505E-11	6.505E-11
0.20000	75.0000	0.20000	208.213	0.	9.996E-01	-6.752E-11	-6.752E-11	6.752E-11
0.30000	75.0000	0.30000	208.016	0.	9.999E-01	-6.773E-11	-6.773E-11	6.773E-11
0.40000	75.0000	0.40000	210.036	0.	1.000E 00	-6.564E-11	-6.564E-11	6.564E-11
0.50000	75.0000	0.50000	214.208	0.	1.001E 00	-6.152E-11	-6.152E-11	6.152E-11
0.60000	75.0000	0.60000	220.411	0.	1.001E 00	-5.587E-11	-5.587E-11	5.587E-11

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 75.000 θ_D= 0. ρ_a= 207.828

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	6.062E-11	0.	0.	0.	0.	0.	-4.635E-10	-4.635E-10
0.10000	6.505E-11	49.901	-3.143E-09	-3.143E-09	3.143E-09	3.143E-09	-4.973E-10	-4.973E-10
0.20000	6.752E-11	99.802	-6.459E-09	-6.459E-09	6.459E-09	6.459E-09	-5.162E-10	-5.162E-10
0.30000	6.773E-11	149.703	-9.844E-09	-9.844E-09	9.844E-09	9.844E-09	-5.178E-10	-5.178E-10
0.40000	6.564E-11	199.605	-1.318E-08	-1.318E-08	1.318E-08	1.318E-08	-5.018E-10	-5.018E-10
0.50000	6.152E-11	249.506	-1.636E-08	-1.636E-08	1.636E-08	1.636E-08	-4.703E-10	-4.703E-10
0.60000	5.587E-11	299.407	-1.930E-08	-1.930E-08	1.930E-08	1.930E-08	-4.271E-10	-4.271E-10

PROPAGATION FREQUENCY= 2.2920E 09 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-2.014E-22	-2.014E-22	0.	0.	-3.019E-13
0.10000	7.984E-11	7.984E-11	-2.265E-22	-2.265E-22	-3.212E-12	-3.212E-12	-3.198E-13
0.20000	1.668E-10	1.668E-10	-2.411E-22	-2.411E-22	-6.724E-12	-6.724E-12	-3.301E-13
0.30000	2.553E-10	2.553E-10	-2.423E-22	-2.423E-22	-1.036E-11	-1.036E-11	-3.310E-13
0.40000	3.435E-10	3.435E-10	-2.300E-22	-2.300E-22	-1.391E-11	-1.391E-11	-3.224E-13
0.50000	4.228E-10	4.228E-10	-2.064E-22	-2.064E-22	-1.718E-11	-1.718E-11	-3.057E-13
0.60000	4.795E-10	4.795E-10	-1.758E-22	-1.758E-22	-2.005E-11	-2.005E-11	-2.837E-13

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.012 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0120	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0120	0.10000	193.643	1.381E-09	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0120	0.20000	172.127	2.189E-09	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0120	0.30000	150.611	2.970E-09	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0120	0.40000	129.095	4.898E-09	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0120	0.50000	107.579	6.462E-09	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0120	0.60000	86.064	6.879E-09	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0120	0.70000	64.548	2.918E-08	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0120	0.80000	43.032	9.630E-08	1.000E 00	-2.621E-10	-2.621E-10	2.621E-10
0.85000	0.0120	0.85000	32.274	2.510E-07	1.000E 00	-5.082E-10	-5.082E-10	5.082E-10
0.90000	0.0120	0.90000	21.516	8.796E-07	1.000E 00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0120	0.92500	16.137	2.154E-06	1.000E 00	-2.378E-09	-2.378E-09	2.378E-09
0.95000	0.0120	0.95000	10.758	7.347E-06	1.000E 00	-6.034E-09	-6.034E-09	6.034E-09
0.96250	0.0120	0.96250	8.069	1.757E-05	1.000E 00	-1.190E-08	-1.190E-08	1.190E-08
0.97500	0.0120	0.97500	5.380	5.950E-05	1.000E 00	-3.609E-08	-3.609E-08	3.609E-08
0.98124	0.0120	0.98125	4.036	1.413E-04	1.000E 00	-8.395E-08	-8.396E-08	8.395E-08
0.98749	0.0120	0.98750	2.692	4.771E-04	1.001E 00	-3.545E-07	-3.546E-07	3.545E-07
0.99373	0.0120	0.99375	1.349	3.825E-03	1.003E 00	-1.253E-05	-1.253E-05	1.252E-05
0.99076	0.0361	1.00000	1.992	1.748E 02	2.982E 00	-1.370E-06	-1.369E-06	1.370E-06
0.98454	0.0691	1.00625	3.337	1.748E 02	5.627E 00	-1.647E-07	-1.647E-07	1.647E-07
0.97831	0.1024	1.01250	4.682	1.748E 02	8.242E 00	-5.579E-08	-5.578E-08	5.579E-08
0.97209	0.1362	1.01875	6.026	1.748E 02	1.082E 01	-2.591E-08	-2.591E-08	2.591E-08
0.96587	0.1705	1.02500	7.371	1.748E 02	1.338E 01	-1.552E-08	-1.552E-08	1.552E-08
0.95342	0.2403	1.03750	10.060	1.748E 02	1.839E 01	-6.836E-09	-6.836E-09	6.836E-09
0.94098	0.3120	1.05000	12.750	1.748E 02	2.328E 01	-4.225E-09	-4.225E-09	4.225E-09
0.91610	0.4611	1.07500	18.129	1.748E 02	3.272E 01	-1.896E-09	-1.896E-09	1.896E-09
0.89122	0.6186	1.10000	23.508	1.748E 02	4.174E 01	-1.052E-09	-1.052E-09	1.052E-09
0.84149	0.9616	1.15000	34.266	1.748E 02	5.859E 01	-4.456E-10	-4.456E-10	4.456E-10
0.79179	1.3476	1.20000	45.024	1.748E 02	7.404E 01	-2.370E-10	-2.370E-10	2.370E-10
0.69253	2.2857	1.30000	66.539	1.748E 02	1.014E 02	-9.766E-11	-9.766E-11	9.766E-11
0.59351	3.5372	1.40000	88.055	1.748E 02	1.248E 02	-5.156E-11	-5.156E-11	5.156E-11
0.49490	5.2886	1.50000	109.571	1.748E 02	1.451E 02	-3.201E-11	-3.201E-11	3.201E-11
0.39697	7.9077	1.60000	131.087	1.748E 02	1.629E 02	-2.146E-11	-2.146E-11	2.146E-11
0.30041	12.2249	1.70000	152.603	1.748E 02	1.785E 02	-1.447E-11	-1.447E-11	1.447E-11
0.20715	20.5193	1.80000	174.119	1.748E 02	1.925E 02	-1.021E-11	-1.021E-11	1.021E-11
0.12479	40.8397	1.90000	195.635	1.748E 02	2.050E 02	-7.202E-12	-7.202E-12	7.202E-12
0.09076	86.7267	2.00000	217.151	1.748E 02	2.162E 02	-5.140E-12	-5.140E-12	5.140E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.012 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.536E-09	-9.536E-09	9.536E-09	9.536E-09	-2.693E-09	-2.693E-09
0.80000	2.621E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.082E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.335E-08	-3.335E-08
0.92500	2.378E-09	461.585	-6.938E-08	-6.938E-08	6.938E-08	6.938E-08	-6.147E-08	-6.147E-08
0.95000	6.034E-09	474.060	-1.178E-07	-1.178E-07	1.178E-07	1.178E-07	-1.560E-07	-1.560E-07
0.96250	1.190E-08	480.297	-1.700E-07	-1.700E-07	1.700E-07	1.700E-07	-3.076E-07	-3.076E-07
0.97500	3.609E-08	486.534	-3.013E-07	-3.013E-07	3.014E-07	3.014E-07	-9.330E-07	-9.331E-07
0.98124	8.396E-08	489.652	-4.772E-07	-4.772E-07	4.779E-07	4.780E-07	-2.170E-06	-2.170E-06
0.98749	3.546E-07	492.769	-1.026E-06	-1.026E-06	1.034E-06	1.034E-06	-9.165E-06	-9.167E-06
0.99373	1.254E-05	495.884	-8.384E-06	-8.388E-06	8.935E-06	8.942E-06	-3.238E-04	-3.240E-04
0.99076	1.369E-06	494.402	4.608E 00	4.608E 00	4.612E 00	4.612E 00	-3.540E-05	-3.539E-05
0.98454	1.647E-07	491.296	1.083E 01	1.083E 01	1.084E 01	1.084E 01	-4.258E-06	-4.257E-06
0.97831	5.578E-08	488.190	1.706E 01	1.706E 01	1.706E 01	1.706E 01	-1.442E-06	-1.442E-06
0.97209	2.591E-08	485.084	2.328E 01	2.328E 01	2.329E 01	2.329E 01	-6.697E-07	-6.697E-07
0.96587	1.552E-08	481.979	2.951E 01	2.951E 01	2.951E 01	2.951E 01	-4.013E-07	-4.013E-07
0.95342	6.836E-09	475.769	4.195E 01	4.195E 01	4.196E 01	4.196E 01	-1.767E-07	-1.767E-07
0.94098	4.225E-09	469.559	5.440E 01	5.440E 01	5.441E 01	5.441E 01	-1.092E-07	-1.092E-07
0.91610	1.896E-09	457.142	7.929E 01	7.929E 01	7.930E 01	7.930E 01	-4.902E-08	-4.902E-08
0.89122	1.052E-09	444.729	1.042E 02	1.042E 02	1.042E 02	1.042E 02	-2.720E-08	-2.720E-08
0.84149	4.456E-10	419.912	1.539E 02	1.539E 02	1.540E 02	1.540E 02	-1.152E-08	-1.152E-08
0.79179	2.370E-10	395.113	2.037E 02	2.037E 02	2.037E 02	2.037E 02	-6.128E-09	-6.128E-09
0.69253	9.766E-11	345.580	3.031E 02	3.031E 02	3.031E 02	3.031E 02	-2.525E-09	-2.525E-09
0.59351	5.156E-11	296.171	4.024E 02	4.024E 02	4.024E 02	4.024E 02	-1.333E-09	-1.333E-09
0.49490	3.201E-11	246.959	5.016E 02	5.016E 02	5.016E 02	5.016E 02	-8.275E-10	-8.275E-10
0.39697	2.146E-11	198.093	6.003E 02	6.003E 02	6.003E 02	6.003E 02	-5.547E-10	-5.547E-10
0.30041	1.447E-11	149.910	6.984E 02	6.984E 02	6.984E 02	6.984E 02	-3.741E-10	-3.741E-10
0.20715	1.021E-11	103.370	7.948E 02	7.948E 02	7.949E 02	7.949E 02	-2.639E-10	-2.639E-10
0.12479	7.202E-12	62.274	8.858E 02	8.858E 02	8.859E 02	8.859E 02	-1.862E-10	-1.862E-10
0.09076	5.140E-12	45.288	9.527E 02	9.527E 02	9.527E 02	9.527E 02	-1.329E-10	-1.329E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.012 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-4.194E-21
0.10000	-4.029E-14	-2.092E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-5.626E-21
0.20000	4.029E-14	4.029E-14	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-8.047E-21
0.30000	-4.609E-13	-3.535E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-1.265E-20
0.40000	1.950E-13	-5.458E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-2.141E-20
0.50000	-4.594E-13	1.671E-14	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-4.286E-20
0.60000	-1.064E-12	2.670E-13	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-1.002E-19
0.70000	-2.668E-13	1.242E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-2.929E-19
0.80000	-7.991E-15	1.603E-12	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-1.327E-18
0.85000	6.983E-12	6.445E-12	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-3.844E-18
0.90000	3.126E-11	3.022E-11	-7.684E-20	-7.684E-20	-4.555E-10	-4.555E-10	-1.725E-17
0.92500	7.911E-11	7.354E-11	-1.776E-19	-1.776E-19	-9.054E-10	-9.054E-10	-5.257E-17
0.95000	3.156E-10	3.119E-10	-7.054E-19	-7.054E-19	-2.277E-09	-2.277E-09	-2.360E-16
0.96250	8.530E-10	8.500E-10	-2.048E-18	-2.048E-18	-4.523E-09	-4.523E-09	-6.723E-16
0.97500	4.116E-09	4.106E-09	-1.188E-17	-1.188E-17	-1.446E-08	-1.446E-08	-2.523E-15
0.98124	1.299E-08	1.299E-08	-4.671E-17	-4.672E-17	-3.812E-08	-3.813E-08	-6.088E-15
0.98749	9.157E-08	9.162E-08	-5.080E-16	-5.082E-16	-2.013E-07	-2.013E-07	-1.637E-14
0.99373	7.226E-06	7.231E-06	-4.650E-13	-4.656E-13	-3.852E-05	-3.856E-05	-2.920E-14
0.99076	5.003E-03	5.002E-03	-6.146E-15	-6.143E-15	-3.390E 04	-3.389E 04	-2.580E-14
0.98454	2.634E-03	2.634E-03	-1.407E-16	-1.407E-16	-3.390E 04	-3.389E 04	-9.718E-15
0.97831	1.787E-03	1.787E-03	-2.405E-17	-2.405E-17	-3.390E 04	-3.389E 04	-3.763E-15
0.97209	1.352E-03	1.352E-03	-7.105E-18	-7.104E-18	-3.390E 04	-3.389E 04	-1.781E-15
0.96587	1.088E-03	1.088E-03	-3.133E-18	-3.133E-18	-3.390E 04	-3.389E 04	-8.877E-16
0.95342	7.818E-04	7.817E-04	-8.570E-19	-8.570E-19	-3.390E 04	-3.389E 04	-3.118E-16
0.94098	6.101E-04	6.101E-04	-4.048E-19	-4.048E-19	-3.390E 04	-3.389E 04	-1.218E-16
0.91610	4.240E-04	4.239E-04	-1.302E-19	-1.302E-19	-3.390E 04	-3.389E 04	-3.284E-17
0.89122	3.248E-04	3.248E-04	-5.694E-20	-5.694E-20	-3.390E 04	-3.389E 04	-1.245E-17
0.84149	2.213E-04	2.213E-04	-1.474E-20	-1.474E-20	-3.390E 04	-3.389E 04	-3.065E-18
0.79179	1.679E-04	1.678E-04	-5.800E-21	-5.799E-21	-3.390E 04	-3.389E 04	-1.120E-18
0.69253	1.132E-04	1.132E-04	-1.527E-21	-1.527E-21	-3.390E 04	-3.389E 04	-2.608E-19
0.59351	8.536E-05	8.535E-05	-5.953E-22	-5.953E-22	-3.390E 04	-3.389E 04	-9.199E-20
0.49490	6.852E-05	6.851E-05	-2.942E-22	-2.942E-22	-3.390E 04	-3.389E 04	-3.991E-20
0.39697	5.723E-05	5.722E-05	-1.610E-22	-1.610E-22	-3.390E 04	-3.389E 04	-2.031E-20
0.30041	4.913E-05	4.913E-05	-8.863E-23	-8.863E-23	-3.390E 04	-3.389E 04	-1.210E-20
0.20715	4.305E-05	4.304E-05	-5.086E-23	-5.086E-23	-3.390E 04	-3.389E 04	-7.774E-21
0.12479	3.830E-05	3.830E-05	-2.919E-23	-2.919E-23	-3.390E 04	-3.389E 04	-5.478E-21
0.09076	3.450E-05	3.449E-05	-1.673E-23	-1.673E-23	-3.390E 04	-3.389E 04	-4.104E-21

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.015 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0150	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0150	0.10000	193.643	1.641E-09	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0150	0.20000	172.127	2.345E-09	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0150	0.30000	150.611	3.804E-09	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0150	0.40000	129.095	5.836E-09	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0150	0.50000	107.579	8.546E-09	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0150	0.60000	86.064	9.171E-09	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0150	0.70000	64.548	3.752E-08	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0150	0.80000	43.032	1.201E-07	1.000E 00	-2.621E-10	-2.621E-10	2.621E-10
0.85000	0.0150	0.85000	32.274	3.177E-07	1.000E 00	-5.082E-10	-5.082E-10	5.082E-10
0.90000	0.0150	0.90000	21.516	1.097E-06	1.000E 00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0150	0.92500	16.137	2.678E-06	1.000E 00	-2.378E-09	-2.378E-09	2.378E-09
0.95000	0.0150	0.95000	10.759	9.155E-06	1.000E 00	-6.034E-09	-6.034E-09	6.034E-09
0.96250	0.0150	0.96250	8.069	2.188E-05	1.000E 00	-1.190E-08	-1.190E-08	1.190E-08
0.97500	0.0150	0.97500	5.380	7.409E-05	1.000E 00	-3.609E-08	-3.609E-08	3.609E-08
0.98124	0.0150	0.98125	4.036	1.760E-04	1.000E 00	-8.395E-08	-8.395E-08	8.394E-08
0.98749	0.0150	0.98750	2.692	5.942E-04	1.001E 00	-3.544E-07	-3.545E-07	3.544E-07
0.99373	0.0150	0.99375	1.350	4.761E-03	1.002E 00	-1.250E-05	-1.251E-05	1.250E-05
0.99078	0.0451	1.00000	1.992	1.735E 02	2.983E 00	-1.372E-06	-1.372E-06	1.372E-06
0.98457	0.0863	1.00625	3.336	1.735E 02	5.633E 00	-1.649E-07	-1.648E-07	1.649E-07
0.97836	0.1280	1.01250	4.681	1.735E 02	8.252E 00	-5.582E-08	-5.582E-08	5.582E-08
0.97215	0.1702	1.01875	6.025	1.735E 02	1.084E 01	-2.592E-08	-2.592E-08	2.592E-08
0.96594	0.2130	1.02500	7.370	1.735E 02	1.339E 01	-1.553E-08	-1.553E-08	1.553E-08
0.95353	0.3002	1.03750	10.059	1.735E 02	1.841E 01	-6.838E-09	-6.838E-09	6.838E-09
0.94112	0.3897	1.05000	12.749	1.735E 02	2.331E 01	-4.226E-09	-4.226E-09	4.226E-09
0.91630	0.5760	1.07500	18.128	1.735E 02	3.277E 01	-1.896E-09	-1.896E-09	1.896E-09
0.89149	0.7726	1.10000	23.507	1.735E 02	4.180E 01	-1.052E-09	-1.052E-09	1.052E-09
0.84191	1.2007	1.15000	34.265	1.735E 02	5.867E 01	-4.456E-10	-4.456E-10	4.456E-10
0.79239	1.6823	1.20000	45.023	1.735E 02	7.414E 01	-2.371E-10	-2.371E-10	2.371E-10
0.69354	2.8516	1.30000	66.538	1.735E 02	1.015E 02	-9.766E-11	-9.766E-11	9.766E-11
0.59507	4.4088	1.40000	88.054	1.735E 02	1.250E 02	-5.156E-11	-5.156E-11	5.156E-11
0.49722	6.5810	1.50000	109.570	1.735E 02	1.453E 02	-3.201E-11	-3.201E-11	3.201E-11
0.40044	9.8100	1.60000	131.086	1.735E 02	1.631E 02	-2.146E-11	-2.146E-11	2.146E-11
0.30572	15.0662	1.70000	152.602	1.735E 02	1.788E 02	-1.447E-11	-1.447E-11	1.447E-11
0.21583	24.8518	1.80000	174.118	1.735E 02	1.928E 02	-1.021E-11	-1.021E-11	1.021E-11
0.14037	46.5787	1.90000	195.634	1.735E 02	2.052E 02	-7.202E-12	-7.202E-12	7.202E-12
0.11323	88.5408	2.00000	217.150	1.735E 02	2.165E 02	-5.141E-12	-5.141E-12	5.141E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.015 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.536E-09	-9.536E-09	9.536E-09	9.536E-09	-2.693E-09	-2.693E-09
0.80000	2.621E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.082E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.335E-08	-3.335E-08
0.92500	2.378E-09	461.585	-6.938E-08	-6.938E-08	6.938E-08	6.938E-08	-6.147E-08	-6.147E-08
0.95000	6.034E-09	474.060	-1.178E-07	-1.178E-07	1.178E-07	1.178E-07	-1.560E-07	-1.560E-07
0.96250	1.190E-08	480.297	-1.700E-07	-1.700E-07	1.700E-07	1.700E-07	-3.076E-07	-3.076E-07
0.97500	3.609E-08	486.534	-3.012E-07	-3.012E-07	3.014E-07	3.014E-07	-9.330E-07	-9.330E-07
0.98124	8.396E-08	489.652	-4.770E-07	-4.770E-07	4.781E-07	4.781E-07	-2.170E-06	-2.170E-06
0.98749	3.545E-07	492.769	-1.023E-06	-1.023E-06	1.036E-06	1.037E-06	-9.163E-06	-9.164E-06
0.99373	1.251E-05	495.884	-8.223E-06	-8.226E-06	9.077E-06	9.084E-06	-3.232E-04	-3.234E-04
0.99078	1.371E-06	494.409	4.600E 00	4.600E 00	4.604E 00	4.604E 00	-3.547E-05	-3.546E-05
0.98457	1.648E-07	491.311	1.082E 01	1.082E 01	1.082E 01	1.082E 01	-4.262E-06	-4.261E-06
0.97836	5.582E-08	488.212	1.703E 01	1.703E 01	1.704E 01	1.704E 01	-1.443E-06	-1.443E-06
0.97215	2.592E-08	485.114	2.325E 01	2.325E 01	2.326E 01	2.326E 01	-6.700E-07	-6.700E-07
0.96594	1.553E-08	482.016	2.947E 01	2.947E 01	2.947E 01	2.947E 01	-4.014E-07	-4.014E-07
0.95353	6.838E-09	475.821	4.190E 01	4.190E 01	4.191E 01	4.191E 01	-1.768E-07	-1.768E-07
0.94112	4.226E-09	469.628	5.433E 01	5.433E 01	5.434E 01	5.434E 01	-1.093E-07	-1.093E-07
0.91630	1.896E-09	457.244	7.919E 01	7.919E 01	7.920E 01	7.920E 01	-4.902E-08	-4.902E-08
0.89149	1.052E-09	444.865	1.040E 02	1.040E 02	1.041E 02	1.041E 02	-2.720E-08	-2.720E-08
0.84191	4.456E-10	420.124	1.537E 02	1.537E 02	1.537E 02	1.537E 02	-1.152E-08	-1.152E-08
0.79239	2.371E-10	395.410	2.034E 02	2.034E 02	2.034E 02	2.034E 02	-6.128E-09	-6.128E-09
0.69354	9.766E-11	346.083	3.026E 02	3.026E 02	3.026E 02	3.026E 02	-2.525E-09	-2.525E-09
0.59507	5.156E-11	296.948	4.017E 02	4.017E 02	4.017E 02	4.017E 02	-1.333E-09	-1.333E-09
0.49722	3.201E-11	248.120	5.004E 02	5.004E 02	5.004E 02	5.004E 02	-8.275E-10	-8.275E-10
0.40044	2.146E-11	199.822	5.986E 02	5.986E 02	5.986E 02	5.986E 02	-5.547E-10	-5.547E-10
0.30572	1.447E-11	152.559	6.958E 02	6.958E 02	6.958E 02	6.958E 02	-3.741E-10	-3.741E-10
0.21583	1.021E-11	107.704	7.905E 02	7.905E 02	7.905E 02	7.905E 02	-2.639E-10	-2.639E-10
0.14037	7.202E-12	70.044	8.781E 02	8.781E 02	8.781E 02	8.781E 02	-1.862E-10	-1.862E-10
0.11323	5.141E-12	56.502	9.415E 02	9.415E 02	9.415E 02	9.415E 02	-1.329E-10	-1.329E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0=0.015 θ_D=0. ρ_a=1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-6.553E-21
0.10000	-3.547E-14	-1.806E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-8.791E-21
0.20000	3.547E-14	3.547E-14	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-1.257E-20
0.30000	-3.915E-13	-2.969E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-1.976E-20
0.40000	1.932E-13	-4.519E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-3.346E-20
0.50000	-3.414E-13	6.636E-14	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-6.697E-20
0.60000	-7.932E-13	3.595E-13	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-1.566E-19
0.70000	1.422E-13	1.455E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-4.577E-19
0.80000	1.628E-12	3.047E-12	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-2.073E-18
0.85000	1.033E-11	9.969E-12	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-6.006E-18
0.90000	4.426E-11	4.330E-11	-7.684E-20	-7.684E-20	-4.555E-10	-4.555E-10	-2.695E-17
0.92500	1.113E-10	1.063E-10	-1.776E-19	-1.776E-19	-9.054E-10	-9.054E-10	-8.215E-17
0.95000	4.379E-10	4.349E-10	-7.054E-19	-7.054E-19	-2.277E-09	-2.277E-09	-3.687E-16
0.96250	1.182E-09	1.180E-09	-2.048E-18	-2.048E-18	-4.523E-09	-4.523E-09	-1.050E-15
0.97500	5.669E-09	5.661E-09	-1.188E-17	-1.188E-17	-1.446E-08	-1.446E-08	-3.942E-15
0.98124	1.786E-08	1.785E-08	-4.670E-17	-4.671E-17	-3.812E-08	-3.812E-08	-9.512E-15
0.98749	1.236E-07	1.236E-07	-5.078E-16	-5.080E-16	-2.012E-07	-2.012E-07	-2.558E-14
0.99373	9.602E-06	9.609E-06	-4.633E-13	-4.639E-13	-3.840E-05	-3.844E-05	-4.562E-14
0.99078	4.373E-03	4.373E-03	-6.167E-15	-6.164E-15	-3.478E 04	-3.478E 04	-4.033E-14
0.98457	2.301E-03	2.301E-03	-1.409E-16	-1.409E-16	-3.478E 04	-3.478E 04	-1.520E-14
0.97836	1.561E-03	1.561E-03	-2.407E-17	-2.407E-17	-3.478E 04	-3.478E 04	-5.883E-15
0.97215	1.181E-03	1.181E-03	-7.109E-18	-7.109E-18	-3.478E 04	-3.478E 04	-2.785E-15
0.96594	9.499E-04	9.498E-04	-3.135E-18	-3.135E-18	-3.478E 04	-3.478E 04	-1.388E-15
0.95353	6.827E-04	6.826E-04	-8.572E-19	-8.572E-19	-3.478E 04	-3.478E 04	-4.874E-16
0.94112	5.328E-04	5.327E-04	-4.049E-19	-4.049E-19	-3.478E 04	-3.478E 04	-1.903E-16
0.91630	3.702E-04	3.702E-04	-1.303E-19	-1.303E-19	-3.478E 04	-3.478E 04	-5.132E-17
0.89149	2.836E-04	2.836E-04	-5.695E-20	-5.695E-20	-3.478E 04	-3.478E 04	-1.946E-17
0.84191	1.933E-04	1.933E-04	-1.474E-20	-1.474E-20	-3.478E 04	-3.478E 04	-4.789E-18
0.79239	1.466E-04	1.466E-04	-5.800E-21	-5.800E-21	-3.478E 04	-3.478E 04	-1.749E-18
0.69354	9.882E-05	9.881E-05	-1.527E-21	-1.527E-21	-3.478E 04	-3.478E 04	-4.076E-19
0.59507	7.453E-05	7.453E-05	-5.953E-22	-5.953E-22	-3.478E 04	-3.478E 04	-1.437E-19
0.49722	5.983E-05	5.982E-05	-2.942E-22	-2.942E-22	-3.478E 04	-3.478E 04	-6.237E-20
0.40044	4.997E-05	4.997E-05	-1.610E-22	-1.610E-22	-3.478E 04	-3.478E 04	-3.173E-20
0.30572	4.290E-05	4.290E-05	-8.864E-23	-8.864E-23	-3.478E 04	-3.478E 04	-1.890E-20
0.21583	3.759E-05	3.758E-05	-5.086E-23	-5.086E-23	-3.478E 04	-3.478E 04	-1.215E-20
0.14037	3.344E-05	3.344E-05	-2.919E-23	-2.919E-23	-3.478E 04	-3.478E 04	-8.560E-21
0.11323	3.012E-05	3.012E-05	-1.673E-23	-1.673E-23	-3.478E 04	-3.478E 04	-6.413E-21

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.020 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0200	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0200	0.10000	193.643	2.658E-09	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0200	0.20000	172.127	4.012E-09	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0200	0.30000	150.611	5.836E-09	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0200	0.40000	129.095	9.588E-09	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0200	0.50000	107.579	1.292E-08	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0200	0.60000	86.064	1.668E-08	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0200	0.70000	64.548	5.670E-08	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0200	0.80000	43.032	1.918E-07	1.000E 00	-2.621E-10	-2.621E-10	2.621E-10
0.85000	0.0200	0.85000	32.274	4.919E-07	1.000E 00	-5.082E-10	-5.082E-10	5.082E-10
0.90000	0.0200	0.90000	21.516	1.721E-06	1.000E 00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0200	0.92500	16.137	4.195E-06	1.000E 00	-2.378E-09	-2.378E-09	2.378E-09
0.95000	0.0200	0.95000	10.759	1.431E-05	1.000E 00	-6.033E-09	-6.034E-09	6.033E-09
0.96250	0.0200	0.96250	8.070	3.417E-05	1.000E 00	-1.190E-08	-1.190E-08	1.190E-08
0.97499	0.0200	0.97500	5.381	1.156E-04	1.000E 00	-3.608E-08	-3.608E-08	3.608E-08
0.98124	0.0200	0.98125	4.036	2.745E-04	1.000E 00	-8.392E-08	-8.392E-08	8.392E-08
0.98749	0.0200	0.98750	2.693	9.264E-04	1.000E 00	-3.541E-07	-3.541E-07	3.540E-07
0.99373	0.0200	0.99375	1.351	7.404E-03	1.002E 00	-1.241E-05	-1.242E-05	1.241E-05
0.99081	0.0600	1.00000	1.989	1.714E 02	2.983E 00	-1.380E-06	-1.379E-06	1.380E-06
0.98464	0.1148	1.00625	3.333	1.714E 02	5.641E 00	-1.653E-07	-1.653E-07	1.653E-07
0.97846	0.1703	1.01250	4.678	1.714E 02	8.266E 00	-5.592E-08	-5.592E-08	5.592E-08
0.97228	0.2266	1.01875	6.022	1.714E 02	1.086E 01	-2.595E-08	-2.594E-08	2.595E-08
0.96611	0.2835	1.02500	7.367	1.714E 02	1.342E 01	-1.555E-08	-1.555E-08	1.555E-08
0.95376	0.3996	1.03750	10.056	1.714E 02	1.845E 01	-6.841E-09	-6.841E-09	6.841E-09
0.94142	0.5187	1.05000	12.746	1.714E 02	2.336E 01	-4.229E-09	-4.228E-09	4.229E-09
0.91674	0.7666	1.07500	18.125	1.714E 02	3.284E 01	-1.897E-09	-1.897E-09	1.897E-09
0.89208	1.0282	1.10000	23.504	1.714E 02	4.189E 01	-1.052E-09	-1.052E-09	1.052E-09
0.84283	1.5972	1.15000	34.262	1.714E 02	5.881E 01	-4.457E-10	-4.457E-10	4.457E-10
0.79367	2.2368	1.20000	45.019	1.714E 02	7.431E 01	-2.371E-10	-2.371E-10	2.371E-10
0.69571	3.7867	1.30000	66.535	1.714E 02	1.017E 02	-9.767E-11	-9.767E-11	9.767E-11
0.59843	5.8425	1.40000	88.051	1.714E 02	1.253E 02	-5.156E-11	-5.156E-11	5.156E-11
0.50221	8.6908	1.50000	109.567	1.714E 02	1.456E 02	-3.201E-11	-3.201E-11	3.201E-11
0.40782	12.8724	1.60000	131.083	1.714E 02	1.635E 02	-2.146E-11	-2.146E-11	2.146E-11
0.31689	19.5084	1.70000	152.599	1.714E 02	1.792E 02	-1.447E-11	-1.447E-11	1.447E-11
0.23350	31.1526	1.80000	174.115	1.714E 02	1.932E 02	-1.021E-11	-1.021E-11	1.021E-11
0.16919	53.3653	1.90000	195.631	1.714E 02	2.057E 02	-7.202E-12	-7.202E-12	7.202E-12
0.15075	89.2084	2.00000	217.147	1.714E 02	2.170E 02	-5.141E-12	-5.141E-12	5.141E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.020 θ_D=0. ρ_a=1.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.536E-09	-9.536E-09	9.536E-09	9.536E-09	-2.693E-09	-2.693E-09
0.80000	2.621E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.084E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.335E-08	-3.335E-08
0.92500	2.376E-09	461.585	-6.938E-08	-6.938E-08	6.938E-08	6.938E-08	-6.147E-08	-6.147E-08
0.95000	6.034E-09	474.060	-1.178E-07	-1.178E-07	1.178E-07	1.178E-07	-1.560E-07	-1.560E-07
0.96250	1.190E-08	480.297	-1.700E-07	-1.700E-07	1.700E-07	1.701E-07	-3.075E-07	-3.075E-07
0.97499	3.609E-08	486.534	-3.010E-07	-3.010E-07	3.015E-07	3.015E-07	-9.328E-07	-9.328E-07
0.98124	8.393E-08	489.652	-4.761E-07	-4.761E-07	4.789E-07	4.789E-07	-2.169E-06	-2.170E-06
0.98749	3.542E-07	492.769	-1.013E-06	-1.013E-06	1.045E-06	1.046E-06	-9.153E-06	-9.154E-06
0.99373	1.246E-05	495.882	-7.577E-06	-7.581E-06	9.645E-06	9.653E-06	-3.208E-04	-3.210E-04
0.99081	1.379E-06	494.428	4.582E 00	4.582E 00	4.586E 00	4.586E 00	-3.567E-05	-3.566E-05
0.98464	1.653E-07	491.345	1.078E 01	1.078E 01	1.079E 01	1.079E 01	-4.274E-06	-4.274E-06
0.97846	5.592E-08	488.263	1.698E 01	1.698E 01	1.699E 01	1.699E 01	-1.446E-06	-1.446E-06
0.97228	2.594E-08	485.180	2.319E 01	2.319E 01	2.319E 01	2.319E 01	-6.707E-07	-6.707E-07
0.96611	1.555E-08	482.099	2.939E 01	2.939E 01	2.939E 01	2.939E 01	-4.019E-07	-4.019E-07
0.95376	6.841E-09	475.937	4.179E 01	4.179E 01	4.179E 01	4.179E 01	-1.769E-07	-1.769E-07
0.94142	4.228E-09	469.778	5.418E 01	5.418E 01	5.419E 01	5.419E 01	-1.093E-07	-1.093E-07
0.91674	1.897E-09	457.465	7.897E 01	7.897E 01	7.897E 01	7.897E 01	-4.904E-08	-4.904E-08
0.89208	1.052E-09	445.161	1.038E 02	1.038E 02	1.038E 02	1.038E 02	-2.721E-08	-2.721E-08
0.84283	4.457E-10	420.583	1.533E 02	1.533E 02	1.533E 02	1.533E 02	-1.152E-08	-1.152E-08
0.79367	2.371E-10	396.052	2.028E 02	2.028E 02	2.028E 02	2.028E 02	-6.129E-09	-6.129E-09
0.69571	9.767E-11	347.169	3.015E 02	3.015E 02	3.015E 02	3.015E 02	-2.525E-09	-2.525E-09
0.59843	5.156E-11	298.623	4.000E 02	4.000E 02	4.000E 02	4.000E 02	-1.333E-09	-1.333E-09
0.50221	3.201E-11	250.611	4.979E 02	4.979E 02	4.979E 02	4.979E 02	-8.275E-10	-8.275E-10
0.40782	2.146E-11	203.509	5.949E 02	5.949E 02	5.949E 02	5.949E 02	-5.547E-10	-5.547E-10
0.31689	1.447E-11	158.134	6.902E 02	6.902E 02	6.902E 02	6.902E 02	-3.741E-10	-3.741E-10
0.23350	1.021E-11	116.520	7.817E 02	7.817E 02	7.817E 02	7.817E 02	-2.639E-10	-2.639E-10
0.16919	7.202E-12	84.426	8.637E 02	8.637E 02	8.637E 02	8.637E 02	-1.862E-10	-1.862E-10
0.15075	5.141E-12	75.225	9.228E 02	9.228E 02	9.228E 02	9.228E 02	-1.329E-10	-1.329E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0=0.020 θ_D=0. ρ_a=1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.165E-20
0.10000	-2.746E-14	-1.330E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-1.563E-20
0.20000	2.746E-14	2.746E-14	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-2.235E-20
0.30000	-2.758E-13	-2.026E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-3.514E-20
0.40000	1.903E-13	-2.954E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-5.948E-20
0.50000	-1.448E-13	1.491E-13	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-1.191E-19
0.60000	-3.423E-13	5.136E-13	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-2.784E-19
0.70000	8.238E-13	1.808E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-8.137E-19
0.80000	4.356E-12	5.454E-12	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-3.685E-18
0.85000	1.592E-11	1.584E-11	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-1.068E-17
0.90000	6.592E-11	6.508E-11	-7.683E-20	-7.684E-20	-4.555E-10	-4.555E-10	-4.791E-17
0.92500	1.648E-10	1.610E-10	-1.776E-19	-1.776E-19	-9.054E-10	-9.054E-10	-1.460E-16
0.95000	6.419E-10	6.399E-10	-7.053E-19	-7.053E-19	-2.277E-09	-2.277E-09	-6.555E-16
0.96250	1.731E-09	1.730E-09	-2.048E-18	-2.048E-18	-4.523E-09	-4.523E-09	-1.867E-15
0.97499	8.258E-09	8.253E-09	-1.188E-17	-1.188E-17	-1.446E-08	-1.446E-08	-7.006E-15
0.98124	2.596E-08	2.596E-08	-4.668E-17	-4.669E-17	-3.811E-08	-3.811E-08	-1.690E-14
0.98749	1.769E-07	1.770E-07	-5.069E-16	-5.071E-16	-2.010E-07	-2.010E-07	-4.545E-14
0.99373	1.356E-05	1.357E-05	-4.566E-13	-4.571E-13	-3.794E-05	-3.798E-05	-8.114E-14
0.99081	3.326E-03	3.326E-03	-6.234E-15	-6.230E-15	-2.977E 04	-2.977E 04	-7.184E-14
0.98464	1.748E-03	1.748E-03	-1.416E-16	-1.416E-16	-2.977E 04	-2.977E 04	-2.707E-14
0.97846	1.185E-03	1.185E-03	-2.414E-17	-2.414E-17	-2.977E 04	-2.977E 04	-1.048E-14
0.97228	8.967E-04	8.965E-04	-7.122E-18	-7.121E-18	-2.977E 04	-2.977E 04	-4.959E-15
0.96611	7.211E-04	7.210E-04	-3.141E-18	-3.141E-18	-2.977E 04	-2.977E 04	-2.470E-15
0.95376	5.182E-04	5.181E-04	-8.580E-19	-8.579E-19	-2.977E 04	-2.977E 04	-8.676E-16
0.94142	4.044E-04	4.043E-04	-4.053E-19	-4.053E-19	-2.977E 04	-2.977E 04	-3.386E-16
0.91674	2.810E-04	2.809E-04	-1.303E-19	-1.303E-19	-2.977E 04	-2.977E 04	-9.129E-17
0.89208	2.153E-04	2.152E-04	-5.698E-20	-5.698E-20	-2.977E 04	-2.977E 04	-3.460E-17
0.84283	1.467E-04	1.467E-04	-1.475E-20	-1.475E-20	-2.977E 04	-2.977E 04	-8.517E-18
0.79367	1.112E-04	1.112E-04	-5.801E-21	-5.801E-21	-2.977E 04	-2.977E 04	-3.111E-18
0.69571	7.499E-05	7.498E-05	-1.527E-21	-1.527E-21	-2.977E 04	-2.977E 04	-7.247E-19
0.59843	5.656E-05	5.655E-05	-5.954E-22	-5.954E-22	-2.977E 04	-2.977E 04	-2.556E-19
0.50221	4.540E-05	4.540E-05	-2.942E-22	-2.942E-22	-2.977E 04	-2.977E 04	-1.109E-19
0.40782	3.792E-05	3.792E-05	-1.610E-22	-1.610E-22	-2.977E 04	-2.977E 04	-5.642E-20
0.31689	3.256E-05	3.255E-05	-8.864E-23	-8.864E-23	-2.977E 04	-2.977E 04	-3.361E-20
0.23350	2.852E-05	2.852E-05	-5.087E-23	-5.087E-23	-2.977E 04	-2.977E 04	-2.160E-20
0.16919	2.538E-05	2.537E-05	-2.919E-23	-2.919E-23	-2.977E 04	-2.977E 04	-1.522E-20
0.15075	2.286E-05	2.285E-05	-1.673E-23	-1.673E-23	-2.977E 04	-2.977E 04	-1.140E-20

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.025 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	0.0250	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0250	0.10000	193.643	3.804E-09	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0250	0.20000	172.127	4.742E-09	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0250	0.30000	150.611	7.087E-09	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0250	0.40000	129.095	1.167E-08	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0250	0.50000	107.579	1.542E-08	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0250	0.60000	86.064	1.542E-08	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0250	0.70000	64.548	6.420E-08	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0250	0.80000	43.032	2.051E-07	1.000E 00	-2.621E-10	-2.621E-10	2.621E-10
0.85000	0.0250	0.85000	32.274	5.336E-07	1.000E 00	-5.082E-10	-5.082E-10	5.082E-10
0.90000	0.0250	0.90000	21.516	1.861E-06	1.000E 00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0250	0.92500	16.137	4.549E-06	1.000E 00	-2.378E-09	-2.378E-09	2.378E-09
0.95000	0.0250	0.95000	10.759	1.555E-05	1.000E 00	-6.033E-09	-6.033E-09	6.033E-09
0.96250	0.0250	0.96250	8.070	3.716E-05	1.000E 00	-1.190E-08	-1.190E-08	1.190E-08
0.97500	0.0250	0.97500	5.381	1.258E-04	1.000E 00	-3.608E-08	-3.608E-08	3.608E-08
0.98124	0.0250	0.98125	4.037	2.988E-04	1.000E 00	-8.391E-08	-8.392E-08	8.391E-08
0.98749	0.0250	0.98750	2.693	1.008E-03	1.000E 00	-3.539E-07	-3.540E-07	3.539E-07
0.99373	0.0250	0.99375	1.352	8.054E-03	1.001E 00	-1.238E-05	-1.238E-05	1.237E-05
0.99085	0.0749	1.00000	1.988	1.692E 02	2.986E 00	-1.383E-06	-1.383E-06	1.384E-06
0.98472	0.1433	1.00625	3.332	1.692E 02	5.651E 00	-1.656E-07	-1.656E-07	1.656E-07
0.97858	0.2125	1.01250	4.676	1.692E 02	8.282E 00	-5.598E-08	-5.598E-08	5.598E-08
0.97244	0.2826	1.01875	6.021	1.692E 02	1.088E 01	-2.596E-08	-2.596E-08	2.596E-08
0.96631	0.3536	1.02500	7.365	1.692E 02	1.345E 01	-1.556E-08	-1.556E-08	1.556E-08
0.95405	0.4984	1.03750	10.055	1.692E 02	1.849E 01	-6.844E-09	-6.843E-09	6.844E-09
0.94179	0.6469	1.05000	12.744	1.692E 02	2.341E 01	-4.230E-09	-4.230E-09	4.230E-09
0.91730	0.9558	1.07500	18.123	1.692E 02	3.292E 01	-1.897E-09	-1.897E-09	1.897E-09
0.89283	1.2817	1.10000	23.502	1.692E 02	4.198E 01	-1.053E-09	-1.053E-09	1.053E-09
0.84400	1.9900	1.15000	34.260	1.692E 02	5.894E 01	-4.458E-10	-4.458E-10	4.458E-10
0.79531	2.7852	1.20000	45.018	1.692E 02	7.448E 01	-2.371E-10	-2.371E-10	2.371E-10
0.69849	4.7073	1.30000	66.533	1.692E 02	1.020E 02	-9.768E-11	-9.768E-11	9.768E-11
0.60270	7.2439	1.40000	88.049	1.692E 02	1.256E 02	-5.157E-11	-5.157E-11	5.157E-11
0.50854	10.7291	1.50000	109.565	1.692E 02	1.460E 02	-3.201E-11	-3.201E-11	3.201E-11
0.41710	15.7684	1.60000	131.381	1.692E 02	1.639E 02	-2.146E-11	-2.146E-11	2.146E-11
0.33067	23.5322	1.70000	152.597	1.692E 02	1.796E 02	-1.447E-11	-1.447E-11	1.447E-11
0.25437	36.3300	1.80000	174.113	1.692E 02	1.936E 02	-1.021E-11	-1.021E-11	1.021E-11
0.20017	57.7938	1.90000	195.629	1.692E 02	2.062E 02	-7.202E-12	-7.202E-12	7.202E-12
0.18824	87.4279	2.00000	217.145	1.692E 02	2.175E 02	-5.141E-12	-5.141E-12	5.141E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.025 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-10	T_0	$_0T_f-T_0$	$_xT_f-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.536E-09	-9.536E-09	9.536E-09	9.536E-09	-2.693E-09	-2.693E-09
0.80000	2.621E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.082E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.335E-08	-3.335E-08
0.92500	2.378E-09	461.585	-6.938E-08	-6.938E-08	6.938E-08	6.938E-08	-6.147E-08	-6.147E-08
0.95000	6.033E-09	474.060	-1.178E-07	-1.178E-07	1.178E-07	1.178E-07	-1.560E-07	-1.560E-07
0.96250	1.190E-08	480.297	-1.700E-07	-1.700E-07	1.701E-07	1.701E-07	-3.075E-07	-3.075E-07
0.97500	3.608E-08	486.534	-3.010E-07	-3.010E-07	3.016E-07	3.016E-07	-9.327E-07	-9.328E-07
0.98124	8.392E-08	489.652	-4.758E-07	-4.758E-07	4.791E-07	4.791E-07	-2.169E-06	-2.169E-06
0.98749	3.540E-07	492.769	-1.010E-06	-1.010E-06	1.048E-06	1.048E-06	-9.150E-06	-9.151E-06
0.99373	1.239E-05	495.884	-7.373E-06	-7.377E-06	9.821E-06	9.829E-06	-3.200E-04	-3.202E-04
0.99085	1.383E-06	494.447	4.563E 00	4.563E 00	4.566E 00	4.566E 00	-3.576E-05	-3.575E-05
0.98472	1.656E-07	491.384	1.074E 01	1.074E 01	1.075E 01	1.075E 01	-4.281E-06	-4.280E-06
0.97858	5.597E-08	488.322	1.693E 01	1.693E 01	1.693E 01	1.693E 01	-1.447E-06	-1.447E-06
0.97244	2.596E-08	485.261	2.311E 01	2.311E 01	2.311E 01	2.311E 01	-6.712E-07	-6.711E-07
0.96631	1.556E-08	482.200	2.928E 01	2.928E 01	2.929E 01	2.929E 01	-4.022E-07	-4.021E-07
0.95405	6.843E-09	476.081	4.164E 01	4.164E 01	4.165E 01	4.165E 01	-1.769E-07	-1.769E-07
0.94179	4.230E-09	469.965	5.400E 01	5.400E 01	5.400E 01	5.400E 01	-1.093E-07	-1.093E-07
0.91730	1.897E-09	457.743	7.869E 01	7.869E 01	7.870E 01	7.870E 01	-4.905E-08	-4.905E-08
0.89283	1.053E-09	445.535	1.034E 02	1.034E 02	1.034E 02	1.034E 02	-2.721E-08	-2.721E-08
0.84400	4.458E-10	421.166	1.527E 02	1.527E 02	1.527E 02	1.527E 02	-1.152E-08	-1.152E-08
0.79531	2.371E-10	396.869	2.019E 02	2.019E 02	2.019E 02	2.019E 02	-6.130E-09	-6.130E-09
0.69849	9.768E-11	348.553	3.002E 02	3.002E 02	3.002E 02	3.002E 02	-2.525E-09	-2.525E-09
0.60270	5.157E-11	300.754	3.979E 02	3.979E 02	3.979E 02	3.979E 02	-1.333E-09	-1.333E-09
0.50854	3.201E-11	253.767	4.947E 02	4.947E 02	4.948E 02	4.948E 02	-8.276E-10	-8.276E-10
0.41710	2.146E-11	208.140	5.903E 02	5.903E 02	5.903E 02	5.903E 02	-5.547E-10	-5.547E-10
0.33067	1.447E-11	165.007	6.833E 02	6.833E 02	6.833E 02	6.833E 02	-3.742E-10	-3.742E-10
0.25437	1.021E-11	126.935	7.713E 02	7.713E 02	7.713E 02	7.713E 02	-2.639E-10	-2.639E-10
0.20017	7.202E-12	99.889	8.482E 02	8.482E 02	8.482E 02	8.482E 02	-1.862E-10	-1.862E-10
0.18824	5.141E-12	93.934	9.041E 02	9.041E 02	9.041E 02	9.041E 02	-1.329E-10	-1.329E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.025 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.820E-20
0.10000	-1.944E-14	-8.540E-14	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-2.442E-20
0.20000	1.944E-14	1.944E-14	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-3.493E-20
0.30000	-1.602E-13	-1.084E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-5.490E-20
0.40000	1.873E-13	-1.390E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-9.294E-20
0.50000	5.188E-14	2.319E-13	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-1.860E-19
0.60000	1.085E-13	6.676E-13	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-4.350E-19
0.70000	1.505E-12	2.162E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-1.271E-18
0.80000	7.083E-12	7.861E-12	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-5.758E-18
0.85000	2.151E-11	2.172E-11	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-1.668E-17
0.90000	8.759E-11	8.687E-11	-7.683E-20	-7.683E-20	-4.555E-10	-4.555E-10	-7.486E-17
0.92500	2.164E-10	2.157E-10	-1.776E-19	-1.776E-19	-9.054E-10	-9.054E-10	-2.282E-16
0.95000	8.458E-10	8.449E-10	-7.053E-19	-7.053E-19	-2.277E-09	-2.277E-09	-1.024E-15
0.96250	2.279E-09	2.279E-09	-2.048E-18	-2.048E-18	-4.523E-09	-4.523E-09	-2.918E-15
0.97500	1.085E-08	1.084E-08	-1.188E-17	-1.188E-17	-1.446E-08	-1.446E-08	-1.095E-14
0.98124	3.407E-08	3.407E-08	-4.667E-17	-4.668E-17	-3.810E-08	-3.810E-08	-2.641E-14
0.98749	2.303E-07	2.304E-07	-5.066E-16	-5.067E-16	-2.009E-07	-2.009E-07	-7.099E-14
0.99373	1.753E-05	1.755E-05	-4.542E-13	-4.548E-13	-3.778E-05	-3.782E-05	-1.268E-13
0.99085	2.278E-03	2.278E-03	-6.265E-15	-6.261E-15	-2.559E 04	-2.559E 04	-1.123E-13
0.98472	1.196E-03	1.195E-03	-1.420E-16	-1.419E-16	-2.559E 04	-2.559E 04	-4.234E-14
0.97858	8.106E-04	8.105E-04	-2.418E-17	-2.418E-17	-2.559E 04	-2.559E 04	-1.639E-14
0.97244	6.132E-04	6.131E-04	-7.129E-18	-7.129E-18	-2.559E 04	-2.559E 04	-7.757E-15
0.96631	4.931E-04	4.930E-04	-3.144E-18	-3.144E-18	-2.559E 04	-2.559E 04	-3.863E-15
0.95405	3.543E-04	3.542E-04	-8.584E-19	-8.584E-19	-2.559E 04	-2.559E 04	-1.357E-15
0.94179	2.765E-04	2.764E-04	-4.055E-19	-4.055E-19	-2.559E 04	-2.559E 04	-5.294E-16
0.91730	1.921E-04	1.921E-04	-1.304E-19	-1.304E-19	-2.559E 04	-2.559E 04	-1.427E-16
0.89283	1.472E-04	1.472E-04	-5.699E-20	-5.699E-20	-2.559E 04	-2.559E 04	-5.409E-17
0.84400	1.003E-04	1.003E-04	-1.475E-20	-1.475E-20	-2.559E 04	-2.559E 04	-1.331E-17
0.79531	7.605E-05	7.604E-05	-5.802E-21	-5.802E-21	-2.559E 04	-2.559E 04	-4.862E-18
0.69849	5.127E-05	5.126E-05	-1.527E-21	-1.527E-21	-2.559E 04	-2.559E 04	-1.133E-18
0.60270	3.867E-05	3.866E-05	-5.954E-22	-5.954E-22	-2.559E 04	-2.559E 04	-3.994E-19
0.50854	3.104E-05	3.104E-05	-2.943E-22	-2.943E-22	-2.559E 04	-2.559E 04	-1.733E-19
0.41710	2.593E-05	2.592E-05	-1.610E-22	-1.610E-22	-2.559E 04	-2.559E 04	-8.816E-20
0.33067	2.226E-05	2.226E-05	-8.865E-23	-8.865E-23	-2.559E 04	-2.559E 04	-5.252E-20
0.25437	1.950E-05	1.950E-05	-5.087E-23	-5.087E-23	-2.559E 04	-2.559E 04	-3.374E-20
0.20017	1.735E-05	1.735E-05	-2.919E-23	-2.919E-23	-2.559E 04	-2.559E 04	-2.378E-20
0.18824	1.563E-05	1.563E-05	-1.673E-23	-1.673E-23	-2.559E 04	-2.559E 04	-1.782E-20

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.030 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0300	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0300	0.10000	193.643	5.029E-09	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0300	0.20000	172.127	6.149E-09	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0300	0.30000	150.611	9.067E-09	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0300	0.40000	129.095	1.313E-08	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0300	0.50000	107.579	1.793E-08	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0300	0.60000	86.064	1.793E-08	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0300	0.70000	64.548	7.170E-08	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0300	0.80000	43.032	2.285E-07	1.000E 00	-2.621E-10	-2.621E-10	2.621E-10
0.85000	0.0300	0.85000	32.274	5.936E-07	1.000E 00	-5.082E-10	-5.082E-10	5.082E-10
0.90000	0.0300	0.90000	21.516	2.061E-06	1.000E 00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0300	0.92500	16.138	5.056E-06	1.000E 00	-2.378E-09	-2.378E-09	2.378E-09
0.95000	0.0300	0.95000	10.759	1.725E-05	1.000E 00	-6.033E-09	-6.033E-09	6.033E-09
0.96250	0.0300	0.96250	8.070	4.127E-05	1.000E 00	-1.189E-08	-1.189E-08	1.189E-08
0.97500	0.0300	0.97500	5.381	1.398E-04	1.000E 00	-3.608E-08	-3.608E-08	3.607E-08
0.98124	0.0300	0.98125	4.037	3.319E-04	1.000E 00	-8.389E-08	-8.390E-08	8.389E-08
0.98749	0.0300	0.98750	2.694	1.120E-03	1.000E 00	-3.537E-07	-3.537E-07	3.536E-07
0.99373	0.0300	0.99375	1.353	8.933E-03	1.000E 00	-1.231E-05	-1.232E-05	1.231E-05
0.99091	0.0896	1.00000	1.985	1.670E 02	2.986E 00	-1.393E-06	-1.392E-06	1.393E-06
0.98482	0.1715	1.00625	3.328	1.670E 02	5.658E 00	-1.662E-07	-1.662E-07	1.662E-07
0.97873	0.2545	1.01250	4.673	1.670E 02	8.295E 00	-5.610E-08	-5.610E-08	5.611E-08
0.97265	0.3384	1.01875	6.017	1.670E 02	1.090E 01	-2.600E-08	-2.600E-08	2.600E-08
0.96657	0.4234	1.02500	7.362	1.670E 02	1.347E 01	-1.558E-08	-1.558E-08	1.558E-08
0.95441	0.5967	1.03750	10.051	1.670E 02	1.853E 01	-6.848E-09	-6.848E-09	6.848E-09
0.94226	0.7744	1.05000	12.740	1.670E 02	2.346E 01	-4.233E-09	-4.233E-09	4.233E-09
0.91799	1.1440	1.07500	18.119	1.670E 02	3.299E 01	-1.898E-09	-1.898E-09	1.898E-09
0.89376	1.5337	1.10000	23.498	1.670E 02	4.208E 01	-1.053E-09	-1.053E-09	1.053E-09
0.84544	2.3799	1.15000	34.256	1.670E 02	5.907E 01	-4.459E-10	-4.459E-10	4.459E-10
0.79732	3.3285	1.20000	45.014	1.670E 02	7.465E 01	-2.372E-10	-2.372E-10	2.372E-10
0.70188	5.6141	1.30000	66.529	1.670E 02	1.022E 02	-9.769E-11	-9.769E-11	9.769E-11
0.60790	8.6126	1.40000	88.045	1.670E 02	1.258E 02	-5.157E-11	-5.157E-11	5.157E-11
0.51619	12.6913	1.50000	109.561	1.670E 02	1.463E 02	-3.202E-11	-3.202E-11	3.202E-11
0.42821	18.4865	1.60000	131.077	1.670E 02	1.642E 02	-2.146E-11	-2.146E-11	2.146E-11
0.34681	27.1302	1.70000	152.593	1.670E 02	1.800E 02	-1.447E-11	-1.447E-11	1.447E-11
0.27782	40.5240	1.80000	174.109	1.670E 02	1.941E 02	-1.021E-11	-1.021E-11	1.021E-11
0.23259	60.7302	1.90000	195.625	1.670E 02	2.067E 02	-7.203E-12	-7.203E-12	7.203E-12
0.22585	85.8736	2.00000	217.141	1.670E 02	2.180E 02	-5.141E-12	-5.141E-12	5.141E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.030 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.324E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.536E-09	-9.536E-09	9.536E-09	9.536E-09	-2.693E-09	-2.693E-09
0.80000	2.621E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.082E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.335E-08	-3.335E-08
0.92500	2.378E-09	461.585	-6.938E-08	-6.938E-08	6.938E-08	6.938E-08	-6.147E-08	-6.147E-08
0.95000	6.033E-09	474.060	-1.178E-07	-1.178E-07	1.178E-07	1.178E-07	-1.560E-07	-1.560E-07
0.96250	1.196E-08	480.297	-1.700E-07	-1.700E-07	1.701E-07	1.701E-07	-3.075E-07	-3.075E-07
0.97500	3.608E-08	486.534	-3.009E-07	-3.009E-07	3.016E-07	3.016E-07	-9.326E-07	-9.326E-07
0.98124	8.390E-08	489.652	-4.753E-07	-4.754E-07	4.794E-07	4.795E-07	-2.169E-06	-2.169E-06
0.98749	3.538E-07	492.770	-1.005E-06	-1.005E-06	1.052E-06	1.052E-06	-9.143E-06	-9.144E-06
0.99373	1.234E-05	495.884	-7.064E-06	-7.068E-06	1.008E-05	1.008E-05	-3.183E-04	-3.185E-04
0.99091	1.392E-06	494.474	4.536E 00	4.536E 00	4.539E 00	4.539E 00	-3.600E-05	-3.599E-05
0.98482	1.662E-07	491.436	1.069E 01	1.069E 01	1.070E 01	1.070E 01	-4.296E-06	-4.296E-06
0.97873	5.610E-08	488.399	1.685E 01	1.685E 01	1.685E 01	1.685E 01	-1.450E-06	-1.450E-06
0.97265	2.600E-08	485.363	2.300E 01	2.300E 01	2.301E 01	2.301E 01	-6.721E-07	-6.721E-07
0.96657	1.558E-08	482.328	2.916E 01	2.916E 01	2.916E 01	2.916E 01	-4.027E-07	-4.027E-07
0.95441	6.848E-09	476.261	4.146E 01	4.146E 01	4.147E 01	4.147E 01	-1.770E-07	-1.770E-07
0.94226	4.233E-09	470.198	5.376E 01	5.376E 01	5.377E 01	5.377E 01	-1.094E-07	-1.094E-07
0.91799	1.898E-09	458.088	7.835E 01	7.835E 01	7.835E 01	7.835E 01	-4.907E-08	-4.907E-08
0.89376	1.053E-09	445.997	1.029E 02	1.029E 02	1.029E 02	1.029E 02	-2.722E-08	-2.722E-08
0.84544	4.459E-10	421.883	1.520E 02	1.520E 02	1.520E 02	1.520E 02	-1.153E-08	-1.153E-08
0.79732	2.372E-10	397.872	2.009E 02	2.009E 02	2.009E 02	2.009E 02	-6.131E-09	-6.131E-09
0.70188	9.769E-11	350.244	2.985E 02	2.985E 02	2.985E 02	2.985E 02	-2.525E-09	-2.525E-09
0.60790	5.157E-11	303.349	3.953E 02	3.953E 02	3.953E 02	3.953E 02	-1.333E-09	-1.333E-09
0.51619	3.202E-11	257.585	4.909E 02	4.909E 02	4.909E 02	4.909E 02	-8.276E-10	-8.276E-10
0.42821	2.146E-11	213.681	5.847E 02	5.847E 02	5.847E 02	5.847E 02	-5.548E-10	-5.548E-10
0.34681	1.447E-11	173.060	6.753E 02	6.753E 02	6.753E 02	6.753E 02	-3.742E-10	-3.742E-10
0.27782	1.021E-11	138.636	7.596E 02	7.596E 02	7.596E 02	7.596E 02	-2.640E-10	-2.640E-10
0.23259	7.203E-12	116.063	8.321E 02	8.321E 02	8.321E 02	8.321E 02	-1.862E-10	-1.862E-10
0.22585	5.141E-12	112.700	8.853E 02	8.853E 02	8.853E 02	8.853E 02	-1.329E-10	-1.329E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.030 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-2.621E-20
0.10000	-0.	-1.866E-14	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-3.516E-20
0.20000	-1.640E-15	7.408E-14	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-5.029E-20
0.30000	-3.646E-15	-4.375E-15	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-7.906E-20
0.40000	1.745E-13	2.638E-14	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-1.338E-19
0.50000	3.355E-13	3.952E-13	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-2.679E-19
0.60000	6.396E-13	9.396E-13	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-6.264E-19
0.70000	2.135E-12	2.564E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-1.831E-18
0.80000	9.748E-12	1.050E-11	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-8.292E-18
0.85000	2.679E-11	2.734E-11	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-2.402E-17
0.90000	1.105E-10	1.095E-10	-7.683E-20	-7.683E-20	-4.555E-10	-4.555E-10	-1.078E-16
0.92500	2.741E-10	2.721E-10	-1.776E-19	-1.776E-19	-9.054E-10	-9.054E-10	-3.286E-16
0.95000	1.057E-09	1.058E-09	-7.053E-19	-7.053E-19	-2.277E-09	-2.277E-09	-1.475E-15
0.96250	2.846E-09	2.847E-09	-2.048E-18	-2.048E-18	-4.522E-09	-4.522E-09	-4.201E-15
0.97500	1.351E-08	1.351E-08	-1.187E-17	-1.188E-17	-1.446E-08	-1.446E-08	-1.576E-14
0.98124	4.240E-08	4.241E-08	-4.665E-17	-4.666E-17	-3.809E-08	-3.809E-08	-3.801E-14
0.98749	2.851E-07	2.852E-07	-5.059E-16	-5.061E-16	-2.007E-07	-2.008E-07	-1.022E-13
0.99373	2.161E-05	2.163E-05	-4.495E-13	-4.500E-13	-3.746E-05	-3.750E-05	-1.826E-13
0.99091	1.788E-03	1.787E-03	-6.345E-15	-6.341E-15	-3.246E 04	-3.245E 04	-1.621E-13
0.98482	9.367E-04	9.365E-04	-1.428E-16	-1.428E-16	-3.246E 04	-3.245E 04	-6.113E-14
0.97873	6.348E-04	6.347E-04	-2.427E-17	-2.427E-17	-3.246E 04	-3.245E 04	-2.365E-14
0.97265	4.801E-04	4.800E-04	-7.145E-18	-7.144E-18	-3.246E 04	-3.245E 04	-1.120E-14
0.96657	3.860E-04	3.860E-04	-3.151E-18	-3.151E-18	-3.246E 04	-3.245E 04	-5.571E-15
0.95441	2.774E-04	2.773E-04	-8.593E-19	-8.593E-19	-3.246E 04	-3.245E 04	-1.957E-15
0.94226	2.164E-04	2.164E-04	-4.059E-19	-4.059E-19	-3.246E 04	-3.245E 04	-7.632E-16
0.91799	1.504E-04	1.503E-04	-1.304E-19	-1.304E-19	-3.246E 04	-3.245E 04	-2.057E-16
0.89376	1.152E-04	1.152E-04	-5.702E-20	-5.702E-20	-3.246E 04	-3.245E 04	-7.794E-17
0.84544	7.849E-05	7.847E-05	-1.476E-20	-1.476E-20	-3.246E 04	-3.245E 04	-1.917E-17
0.79732	5.952E-05	5.951E-05	-5.804E-21	-5.804E-21	-3.246E 04	-3.245E 04	-7.003E-18
0.70188	4.013E-05	4.012E-05	-1.528E-21	-1.528E-21	-3.246E 04	-3.245E 04	-1.631E-18
0.60790	3.026E-05	3.026E-05	-5.955E-22	-5.955E-22	-3.246E 04	-3.245E 04	-5.752E-19
0.51619	2.429E-05	2.429E-05	-2.943E-22	-2.943E-22	-3.246E 04	-3.245E 04	-2.496E-19
0.42821	2.029E-05	2.029E-05	-1.611E-22	-1.611E-22	-3.246E 04	-3.245E 04	-1.270E-19
0.34681	1.742E-05	1.742E-05	-8.866E-23	-8.866E-23	-3.246E 04	-3.245E 04	-7.563E-20
0.27782	1.526E-05	1.526E-05	-5.088E-23	-5.088E-23	-3.246E 04	-3.245E 04	-4.859E-20
0.23259	1.358E-05	1.358E-05	-2.920E-23	-2.920E-23	-3.246E 04	-3.245E 04	-3.424E-20
0.22585	1.223E-05	1.223E-05	-1.673E-23	-1.673E-23	-3.246E 04	-3.245E 04	-2.566E-20

PROPAGATION FREQUENCY= 7.750CE 09 ϕ_0= 0.040 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0400	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0400	0.10000	193.643	7.921E-09	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0400	0.20000	172.127	1.011E-08	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0400	0.30000	150.611	1.271E-08	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0400	0.40000	129.095	1.793E-08	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0400	0.50000	107.580	2.585E-08	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0400	0.60000	86.064	2.918E-08	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0400	0.70000	64.548	1.042E-07	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0400	0.80000	43.032	3.335E-07	1.000E 00	-2.621E-10	-2.621E-10	2.621E-10
0.85000	0.0400	0.85000	32.274	8.671E-07	1.000E 00	-5.082E-10	-5.082E-10	5.082E-10
0.90000	0.0400	0.90000	21.517	3.032E-06	1.000E 00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0400	0.92500	16.138	7.404E-06	1.000E 00	-2.378E-09	-2.378E-09	2.378E-09
0.95000	0.0400	0.95000	10.759	2.529E-05	1.000E 00	-6.033E-09	-6.033E-09	6.033E-09
0.96250	0.0400	0.96250	8.070	6.042E-05	1.000E 00	-1.189E-08	-1.189E-08	1.189E-08
0.97500	0.0400	0.97500	5.382	2.045E-04	1.000E 00	-3.606E-08	-3.606E-08	3.606E-08
0.98124	0.0400	0.98125	4.038	4.854E-04	1.000E 00	-8.382E-08	-8.383E-08	8.382E-08
0.98749	0.0400	0.98750	2.696	1.636E-03	1.000E 00	-3.527E-07	-3.528E-07	3.527E-07
0.99373	0.0400	0.99375	1.357	1.298E-02	1.000E 00	-1.209E-05	-1.209E-05	1.208E-05
0.99105	0.1187	1.00000	1.977	1.627E 02	2.986E 00	-1.418E-06	-1.418E-06	1.419E-06
0.98508	0.2273	1.00625	3.319	1.627E 02	5.673E 00	-1.678E-07	-1.678E-07	1.678E-07
0.97912	0.3372	1.01250	4.663	1.627E 02	8.326E 00	-5.644E-08	-5.644E-08	5.645E-08
0.97317	0.4485	1.01875	6.007	1.627E 02	1.095E 01	-2.610E-08	-2.609E-08	2.610E-08
0.96722	0.5612	1.02500	7.352	1.627E 02	1.354E 01	-1.564E-08	-1.564E-08	1.564E-08
0.95533	0.7907	1.03750	10.041	1.627E 02	1.862E 01	-6.861E-09	-6.860E-09	6.861E-09
0.94345	1.0261	1.05000	12.730	1.627E 02	2.358E 01	-4.241E-09	-4.240E-09	4.241E-09
0.91975	1.5149	1.07500	18.109	1.627E 02	3.316E 01	-1.901E-09	-1.901E-09	1.901E-09
0.89611	2.0296	1.10000	23.487	1.627E 02	4.230E 01	-1.054E-09	-1.054E-09	1.054E-09
0.84908	3.1447	1.15000	34.245	1.627E 02	5.939E 01	-4.462E-10	-4.462E-10	4.462E-10
0.80241	4.3900	1.20000	45.003	1.627E 02	7.506E 01	-2.373E-10	-2.373E-10	2.373E-10
0.71043	7.3678	1.30000	66.519	1.627E 02	1.028E 02	-9.772E-11	-9.772E-11	9.772E-11
0.62094	11.2171	1.40000	88.035	1.627E 02	1.265E 02	-5.159E-11	-5.159E-11	5.159E-11
0.53517	16.3299	1.50000	109.551	1.627E 02	1.471E 02	-3.202E-11	-3.202E-11	3.202E-11
0.45525	23.3114	1.60000	131.067	1.627E 02	1.652E 02	-2.146E-11	-2.146E-11	2.146E-11
0.38484	33.0430	1.70000	152.582	1.627E 02	1.810E 02	-1.448E-11	-1.448E-11	1.448E-11
0.33007	46.5248	1.80000	174.098	1.627E 02	1.952E 02	-1.021E-11	-1.021E-11	1.021E-11
0.29966	63.9470	1.90000	195.614	1.627E 02	2.078E 02	-7.204E-12	-7.204E-12	7.204E-12
0.30107	83.1099	2.00000	217.130	1.627E 02	2.192E 02	-5.142E-12	-5.142E-12	5.142E-12

PROPAGATION FREQUENCY= 7.750CE 09 ϕ_0= 0.040 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.536E-09	-9.536E-09	9.536E-09	9.536E-09	-2.693E-09	-2.693E-09
0.80000	2.621E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.082E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.335E-08	-3.335E-08
0.92500	2.378E-09	461.585	-6.938E-08	-6.938E-08	6.938E-08	6.938E-08	-6.147E-08	-6.147E-08
0.95000	6.033E-09	474.060	-1.178E-07	-1.178E-07	1.178E-07	1.178E-07	-1.560E-07	-1.560E-07
0.96250	1.189E-08	480.297	-1.699E-07	-1.699E-07	1.701E-07	1.701E-07	-3.074E-07	-3.074E-07
0.97500	3.606E-08	486.534	-3.004E-07	-3.004E-07	3.020E-07	3.020E-07	-9.321E-07	-9.322E-07
0.98124	8.383E-08	489.652	-4.728E-07	-4.728E-07	4.816E-07	4.816E-07	-2.167E-06	-2.167E-06
0.98749	3.528E-07	492.769	-9.773E-07	-9.773E-07	1.078E-06	1.078E-06	-9.118E-06	-9.120E-06
0.99373	1.210E-05	495.883	-5.294E-06	-5.298E-06	1.165E-05	1.166E-05	-3.124E-04	-3.126E-04
0.99105	1.418E-06	494.544	4.466E 00	4.466E 00	4.470E 00	4.470E 00	-3.667E-05	-3.666E-05
0.98508	1.678E-07	491.568	1.056E 01	1.056E 01	1.056E 01	1.056E 01	-4.337E-06	-4.337E-06
0.97912	5.644E-08	488.595	1.665E 01	1.665E 01	1.666E 01	1.666E 01	-1.459E-06	-1.459E-06
0.97317	2.609E-08	485.623	2.274E 01	2.274E 01	2.275E 01	2.275E 01	-6.746E-07	-6.746E-07
0.96722	1.564E-08	482.653	2.883E 01	2.883E 01	2.884E 01	2.884E 01	-4.042E-07	-4.042E-07
0.95533	6.860E-09	476.719	4.100E 01	4.100E 01	4.101E 01	4.101E 01	-1.774E-07	-1.774E-07
0.94345	4.240E-09	470.792	5.317E 01	5.317E 01	5.317E 01	5.317E 01	-1.096E-07	-1.096E-07
0.91975	1.901E-09	458.964	7.747E 01	7.747E 01	7.748E 01	7.748E 01	-4.913E-08	-4.913E-08
0.89611	1.054E-09	447.171	1.017E 02	1.017E 02	1.017E 02	1.017E 02	-2.725E-08	-2.725E-08
0.84908	4.462E-10	423.703	1.502E 02	1.502E 02	1.502E 02	1.502E 02	-1.154E-08	-1.154E-08
0.80241	2.373E-10	400.414	1.984E 02	1.984E 02	1.984E 02	1.984E 02	-6.134E-09	-6.134E-09
0.71043	9.772E-11	354.514	2.942E 02	2.942E 02	2.942E 02	2.942E 02	-2.526E-09	-2.526E-09
0.62094	5.159E-11	309.854	3.888E 02	3.888E 02	3.888E 02	3.888E 02	-1.334E-09	-1.334E-09
0.53517	3.202E-11	267.056	4.815E 02	4.815E 02	4.815E 02	4.815E 02	-8.278E-10	-8.278E-10
0.45525	2.146E-11	227.176	5.712E 02	5.712E 02	5.712E 02	5.712E 02	-5.549E-10	-5.549E-10
0.38484	1.448E-11	192.039	6.563E 02	6.563E 02	6.563E 02	6.563E 02	-3.742E-10	-3.742E-10
0.33007	1.021E-11	164.710	7.335E 02	7.335E 02	7.335E 02	7.335E 02	-2.640E-10	-2.640E-10
0.29966	7.204E-12	149.532	7.986E 02	7.986E 02	7.986E 02	7.986E 02	-1.862E-10	-1.862E-10
0.30107	5.142E-12	150.235	8.478E 02	8.478E 02	8.478E 02	8.478E 02	-1.329E-10	-1.329E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.040 θ_D= 0. ρ_0= 1.000

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-4.660E-20
0.10000	-8.143E-15	-4.618E-14	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-6.251E-20
0.20000	-1.718E-14	-9.982E-14	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-8.941E-20
0.30000	4.714E-14	7.733E-14	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-1.405E-19
0.40000	2.193E-13	1.740E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-2.379E-19
0.50000	4.450E-13	3.842E-13	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-4.763E-19
0.60000	1.146E-12	1.056E-12	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-1.114E-18
0.70000	3.276E-12	3.276E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-3.255E-18
0.80000	1.422E-11	1.392E-11	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-1.474E-17
0.85000	3.733E-11	3.773E-11	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-4.271E-17
0.90000	1.492E-10	1.499E-10	-7.683E-20	-7.683E-20	-4.555E-10	-4.555E-10	-1.916E-16
0.92500	3.721E-10	3.715E-10	-1.776E-19	-1.776E-19	-9.054E-10	-9.054E-10	-5.841E-16
0.95000	1.437E-09	1.437E-09	-7.052E-19	-7.052E-19	-2.277E-09	-2.277E-09	-2.621E-15
0.96250	3.868E-09	3.869E-09	-2.047E-18	-2.047E-18	-4.522E-09	-4.522E-09	-7.467E-15
0.97500	1.836E-08	1.837E-08	-1.187E-17	-1.187E-17	-1.445E-08	-1.445E-08	-2.800E-14
0.98124	5.762E-08	5.762E-08	-4.659E-17	-4.660E-17	-3.806E-08	-3.806E-08	-6.750E-14
0.98749	3.848E-07	3.849E-07	-5.037E-16	-5.038E-16	-2.001E-07	-2.002E-07	-1.813E-13
0.99373	2.879E-05	2.881E-05	-4.332E-13	-4.338E-13	-3.635E-05	-3.639E-05	-3.250E-13
0.99105	-3.140E-04	-3.142E-04	-6.569E-15	-6.565E-15	-3.244E 04	-3.244E 04	-2.900E-13
0.98508	-1.656E-04	-1.657E-04	-1.451E-16	-1.451E-16	-3.244E 04	-3.244E 04	-1.094E-13
0.97912	-1.122E-04	-1.123E-04	-2.451E-17	-2.451E-17	-3.244E 04	-3.244E 04	-4.231E-14
0.97317	-8.487E-05	-8.493E-05	-7.187E-18	-7.187E-18	-3.244E 04	-3.244E 04	-2.002E-14
0.96722	-6.823E-05	-6.828E-05	-3.171E-18	-3.170E-18	-3.244E 04	-3.244E 04	-9.947E-15
0.95533	-4.901E-05	-4.904E-05	-8.617E-19	-8.617E-19	-3.244E 04	-3.244E 04	-3.493E-15
0.94345	-3.824E-05	-3.826E-05	-4.071E-19	-4.071E-19	-3.244E 04	-3.244E 04	-1.361E-15
0.91975	-2.656E-05	-2.658E-05	-1.307E-19	-1.307E-19	-3.244E 04	-3.244E 04	-3.664E-16
0.89611	-2.035E-05	-2.036E-05	-5.711E-20	-5.711E-20	-3.244E 04	-3.244E 04	-1.388E-16
0.84908	-1.386E-05	-1.387E-05	-1.477E-20	-1.477E-20	-3.244E 04	-3.244E 04	-3.413E-17
0.80241	-1.051E-05	-1.052E-05	-5.808E-21	-5.808E-21	-3.244E 04	-3.244E 04	-1.246E-17
0.71043	-7.085E-06	-7.090E-06	-1.528E-21	-1.528E-21	-3.244E 04	-3.244E 04	-2.902E-18
0.62094	-5.344E-06	-5.348E-06	-5.958E-22	-5.958E-22	-3.244E 04	-3.244E 04	-1.023E-18
0.53517	-4.290E-06	-4.293E-06	-2.944E-22	-2.944E-22	-3.244E 04	-3.244E 04	-4.438E-19
0.45525	-3.583E-06	-3.585E-06	-1.611E-22	-1.611E-22	-3.244E 04	-3.244E 04	-2.258E-19
0.38484	-3.076E-06	-3.078E-06	-8.868E-23	-8.868E-23	-3.244E 04	-3.244E 04	-1.345E-19
0.33007	-2.695E-06	-2.697E-06	-5.089E-23	-5.089E-23	-3.244E 04	-3.244E 04	-8.641E-20
0.29966	-2.398E-06	-2.399E-06	-2.920E-23	-2.920E-23	-3.244E 04	-3.244E 04	-6.089E-20
0.30107	-2.159E-06	-2.161E-06	-1.674E-23	-1.674E-23	-3.244E 04	-3.244E 04	-4.562E-20

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.050 θ_D= 0. ρ_0= 1.000

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	0.0500	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0500	0.10000	193.643	1.235E-08	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0500	0.20000	172.127	1.511E-08	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0500	0.30000	150.611	1.959E-08	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0500	0.40000	129.095	2.626E-08	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0500	0.50000	107.580	3.335E-08	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0500	0.60000	86.064	3.335E-08	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0500	0.70000	64.548	1.267E-07	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0500	0.80000	43.032	4.019E-07	1.000E 00	-2.620E-10	-2.620E-10	2.620E-10
0.85000	0.0500	0.85000	32.274	1.047E-06	1.000E 00	-5.082E-10	-5.082E-10	5.082E-10
0.90000	0.0500	0.90000	21.517	3.629E-06	1.000E-00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0500	0.92500	16.138	8.885E-06	1.000E-00	-2.378E-09	-2.378E-09	2.378E-09
0.95000	0.0500	0.95000	10.760	3.028E-05	1.000E-00	-6.032E-09	-6.032E-09	6.032E-09
0.96250	0.0500	0.96250	8.071	7.241E-05	1.000E-00	-1.189E-08	-1.189E-08	1.189E-08
0.97500	0.0500	0.97500	5.383	2.449E-04	1.000E-00	-3.604E-08	-3.604E-08	3.604E-08
0.98124	0.0500	0.98125	4.040	5.813E-04	1.000E-00	-8.374E-08	-8.375E-08	8.374E-08
0.98749	0.0500	0.98750	2.698	1.957E-03	9.999E-01	-3.517E-07	-3.517E-07	3.516E-07
0.99373	0.0500	0.99375	1.362	1.543E-02	9.997E-01	-1.184E-05	-1.184E-05	1.183E-05
0.99122	0.1471	1.00000	1.968	1.583E 02	2.988E 00	-1.448E-06	-1.447E-06	1.448E-06
0.98542	0.2819	1.00625	3.309	1.583E 02	5.695E 00	-1.696E-07	-1.696E-07	1.696E-07
0.97962	0.4183	1.01250	4.652	1.583E 02	8.368E 00	-5.684E-08	-5.683E-08	5.684E-08
0.97383	0.5563	1.01875	5.996	1.583E 02	1.101E 01	-2.622E-08	-2.622E-08	2.622E-08
0.96805	0.6959	1.02500	7.340	1.583E 02	1.361E 01	-1.571E-08	-1.571E-08	1.571E-08
0.95649	0.9803	1.03750	10.029	1.583E 02	1.873E 01	-6.875E-09	-6.875E-09	6.875E-09
0.94497	1.2717	1.05000	12.718	1.583E 02	2.373E 01	-4.249E-09	-4.249E-09	4.249E-09
0.92199	1.8762	1.07500	18.097	1.583E 02	3.338E 01	-1.903E-09	-1.903E-09	1.903E-09
0.89912	2.5115	1.10000	23.475	1.583E 02	4.259E 01	-1.055E-09	-1.055E-09	1.055E-09
0.85373	3.8839	1.15000	34.233	1.583E 02	5.980E 01	-4.466E-10	-4.466E-10	4.466E-10
0.80890	5.4093	1.20000	44.991	1.583E 02	7.558E 01	-2.374E-10	-2.374E-10	2.374E-10
0.72126	9.0426	1.30000	66.507	1.583E 02	1.035E 02	-9.776E-11	-9.776E-11	9.776E-11
0.63727	13.6108	1.40000	88.023	1.583E 02	1.274E 02	-5.160E-11	-5.160E-11	5.160E-11
0.55858	19.5395	1.50000	109.538	1.583E 02	1.482E 02	-3.203E-11	-3.203E-11	3.203E-11
0.48776	27.2954	1.60000	131.054	1.583E 02	1.663E 02	-2.147E-11	-2.147E-11	2.147E-11
0.42873	37.4220	1.70000	152.570	1.583E 02	1.823E 02	-1.448E-11	-1.448E-11	1.448E-11
0.38692	50.2277	1.80000	174.086	1.583E 02	1.966E 02	-1.021E-11	-1.021E-11	1.021E-11
0.36825	65.1819	1.90000	195.602	1.583E 02	2.093E 02	-7.205E-12	-7.205E-12	7.205E-12
0.37618	80.5738	2.00000	217.118	1.583E 02	2.208E 02	-5.143E-12	-5.143E-12	5.143E-12

PROPAGATION FREQUENCY= 7.7503E 09 ϕ_0= 0.050 θ_D= 0. ρ_a= 1.000

z	$_x\mu$	T_o	$_oT_f T_o$	$_xT_f T_o$	$_oT_g T_o$	$_xT_g T_o$	$_oD_z D_o$	$_xD_z D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.931	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.324E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.620E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.082E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.335E-08	-3.335E-08
0.92500	2.378E-09	461.585	-6.938E-08	-6.938E-08	6.938E-08	6.938E-08	-6.147E-08	-6.147E-08
0.95000	6.032E-09	474.060	-1.177E-07	-1.177E-07	1.178E-07	1.178E-07	-1.559E-07	-1.559E-07
0.96250	1.189E-08	480.297	-1.699E-07	-1.699E-07	1.701E-07	1.701E-07	-3.073E-07	-3.073E-07
0.97500	3.604E-08	486.534	-3.000E-07	-3.000E-07	3.022E-07	3.023E-07	-9.316E-07	-9.316E-07
0.98124	8.375E-08	489.652	-4.707E-07	-4.707E-07	4.833E-07	4.833E-07	-2.165E-06	-2.165E-06
0.98749	3.518E-07	492.770	-9.543E-07	-9.543E-07	1.098E-06	1.098E-06	-9.091E-06	-9.093E-06
0.99373	1.185E-05	495.884	-3.876E-06	-3.879E-06	1.287E-05	1.287E-05	-3.060E-04	-3.062E-04
0.99122	1.447E-06	494.630	4.380E 00	4.380E 00	4.384E 00	4.384E 00	-3.743E-05	-3.742E-05
0.98542	1.696E-07	491.735	1.039E 01	1.039E 01	1.040E 01	1.040E 01	-4.385E-06	-4.385E-06
0.97962	5.683E-08	488.842	1.640E 01	1.640E 01	1.641E 01	1.641E 01	-1.469E-06	-1.469E-06
0.97383	2.624E-08	485.953	2.241E 01	2.242E 01	2.242E 01	2.242E 01	-6.779E-07	-6.778E-07
0.96805	1.571E-08	483.066	2.842E 01	2.842E 01	2.842E 01	2.842E 01	-4.060E-07	-4.060E-07
0.95649	6.875E-09	477.302	4.042E 01	4.042E 01	4.042E 01	4.042E 01	-1.777E-07	-1.777E-07
0.94497	4.249E-09	471.550	5.241E 01	5.241E 01	5.241E 01	5.241E 01	-1.099E-07	-1.099E-07
0.92199	1.903E-09	460.083	7.635E 01	7.635E 01	7.636E 01	7.636E 01	-4.920E-08	-4.920E-08
0.89912	1.055E-09	448.670	1.002E 02	1.002E 02	1.002E 02	1.002E 02	-2.728E-08	-2.728E-08
0.85373	4.466E-10	426.024	1.478E 02	1.478E 02	1.478E 02	1.478E 02	-1.154E-08	-1.154E-08
0.80890	2.374E-10	403.649	1.952E 02	1.952E 02	1.952E 02	1.952E 02	-6.138E-09	-6.138E-09
0.72126	9.776E-11	359.916	2.888E 02	2.888E 02	2.888E 02	2.888E 02	-2.527E-09	-2.527E-09
0.63727	5.160E-11	318.005	3.806E 02	3.806E 02	3.806E 02	3.806E 02	-1.334E-09	-1.334E-09
0.55858	3.203E-11	278.738	4.698E 02	4.698E 02	4.698E 02	4.698E 02	-8.280E-10	-8.280E-10
0.48776	2.147E-11	243.399	5.550E 02	5.550E 02	5.550E 02	5.550E 02	-5.550E-10	-5.550E-10
0.42873	1.448E-11	213.942	6.344E 02	6.344E 02	6.344E 02	6.344E 02	-3.743E-10	-3.743E-10
0.38692	1.021E-11	193.080	7.051E 02	7.051E 02	7.051E 02	7.051E 02	-2.641E-10	-2.641E-10
0.36825	7.205E-12	183.762	7.644E 02	7.644E 02	7.644E 02	7.644E 02	-1.863E-10	-1.863E-10
0.37618	5.143E-12	187.717	8.103E 02	8.103E 02	8.103E 02	8.103E 02	-1.330E-10	-1.330E-10

PROPAGATION FREQUENCY= 7.7503E 09 ϕ_0= 0.050 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-7.281E-20
0.10000	2.647E-14	5.744E-16	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-9.767E-20
0.20000	5.351E-14	6.233E-14	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-1.397E-19
0.30000	1.412E-13	1.757E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-2.196E-19
0.40000	3.353E-13	3.347E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-3.718E-19
0.50000	6.362E-13	6.503E-13	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-7.441E-19
0.60000	1.484E-12	1.529E-12	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-1.740E-18
0.70000	4.439E-12	4.278E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-5.086E-18
0.80000	1.832E-11	1.804E-11	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-2.303E-17
0.85000	4.891E-11	4.891E-11	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-6.673E-17
0.90000	1.897E-10	1.896E-10	-7.683E-20	-7.683E-20	-4.555E-10	-4.555E-10	-2.994E-16
0.92500	4.668E-10	4.704E-10	-1.776E-19	-1.776E-19	-9.053E-10	-9.054E-10	-9.125E-16
0.95000	1.820E-09	1.820E-09	-7.051E-19	-7.051E-19	-2.277E-09	-2.277E-09	-4.095E-15
0.96250	4.896E-09	4.895E-09	-2.046E-18	-2.046E-18	-4.521E-09	-4.521E-09	-1.166E-14
0.97500	2.322E-08	2.323E-08	-1.185E-17	-1.186E-17	-1.444E-08	-1.445E-08	-4.372E-14
0.98124	7.230E-08	7.231E-08	-4.652E-17	-4.652E-17	-3.802E-08	-3.802E-08	-1.053E-13
0.98749	4.805E-07	4.806E-07	-5.011E-16	-5.013E-16	-1.995E-07	-1.995E-07	-2.828E-13
0.99373	3.541E-05	3.543E-05	-4.157E-13	-4.162E-13	-3.515E-05	-3.518E-05	-5.084E-13
0.99122	-1.608E-03	-1.608E-03	-6.829E-15	-6.825E-15	-2.874E 04	-2.874E 04	-4.564E-13
0.98542	-8.404E-04	-8.405E-04	-1.477E-16	-1.477E-16	-2.874E 04	-2.874E 04	-1.723E-13
0.97962	-5.686E-04	-5.686E-04	-2.479E-17	-2.479E-17	-2.874E 04	-2.874E 04	-6.659E-14
0.97383	-4.296E-04	-4.296E-04	-7.242E-18	-7.242E-18	-2.874E 04	-2.874E 04	-3.149E-14
0.96805	-3.452E-04	-3.452E-04	-3.193E-18	-3.193E-18	-2.874E 04	-2.874E 04	-1.562E-14
0.95649	-2.478E-04	-2.479E-04	-8.645E-19	-8.645E-19	-2.874E 04	-2.874E 04	-5.485E-15
0.94497	-1.933E-04	-1.933E-04	-4.084E-19	-4.084E-19	-2.874E 04	-2.874E 04	-2.134E-15
0.92199	-1.343E-04	-1.343E-04	-1.309E-19	-1.309E-19	-2.874E 04	-2.874E 04	-5.741E-16
0.89912	-1.028E-04	-1.028E-04	-5.721E-20	-5.721E-20	-2.874E 04	-2.874E 04	-2.173E-16
0.85373	-7.005E-05	-7.006E-05	-1.479E-20	-1.479E-20	-2.874E 04	-2.874E 04	-5.339E-17
0.80890	-5.311E-05	-5.312E-05	-5.814E-21	-5.814E-21	-2.874E 04	-2.874E 04	-1.949E-17
0.72126	-3.580E-05	-3.581E-05	-1.529E-21	-1.529E-21	-2.874E 04	-2.874E 04	-4.537E-18
0.63727	-2.700E-05	-2.700E-05	-5.960E-22	-5.960E-22	-2.874E 04	-2.874E 04	-1.599E-18
0.55858	-2.107E-05	-2.168E-05	-2.945E-22	-2.945E-22	-2.874E 04	-2.874E 04	-6.938E-19
0.48776	-1.810E-05	-1.810E-05	-1.612E-22	-1.612E-22	-2.874E 04	-2.874E 04	-3.529E-19
0.42873	-1.554E-05	-1.554E-05	-8.871E-23	-8.871E-23	-2.874E 04	-2.874E 04	-2.102E-19
0.38692	-1.362E-05	-1.362E-05	-5.091E-23	-5.091E-23	-2.874E 04	-2.874E 04	-1.350E-19
0.36825	-1.211E-05	-1.212E-05	-2.921E-23	-2.921E-23	-2.874E 04	-2.874E 04	-9.515E-20
0.37618	-1.091E-05	-1.091E-05	-1.674E-23	-1.674E-23	-2.874E 04	-2.874E 04	-7.128E-20

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.060 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0600	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0600	0.10000	193.643	1.704E-08	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0600	0.20000	172.127	2.022E-08	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0600	0.30000	150.611	2.689E-08	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0600	0.40000	129.095	3.293E-08	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0600	0.50000	107.580	4.002E-08	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0600	0.60000	86.064	4.002E-08	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0600	0.70000	64.548	1.451E-07	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0600	0.80000	43.032	4.536E-07	1.000E-00	-2.620E-10	-2.620E-10	2.620E-10
0.85000	0.0600	0.85000	32.275	1.177E-06	1.000E-00	-5.082E-10	-5.082E-10	5.082E-10
0.90000	0.0600	0.90000	21.517	4.082E-06	1.000E-00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0600	0.92500	16.139	9.992E-06	1.000E-00	-2.378E-09	-2.378E-09	2.378E-09
0.95000	0.0600	0.95000	10.761	3.408E-05	1.000E-00	-6.031E-09	-6.031E-09	6.031E-09
0.96250	0.0600	0.96250	8.072	8.151E-05	1.000E-00	-1.188E-08	-1.188E-08	1.188E-08
0.97500	0.0600	0.97500	5.384	2.758E-04	9.999E-01	-3.601E-08	-3.601E-08	3.601E-08
0.98124	0.0600	0.98125	4.042	6.543E-04	9.999E-01	-8.364E-08	-8.365E-08	8.364E-08
0.98749	0.0600	0.98750	2.701	2.200E-03	9.996E-01	-3.504E-07	-3.505E-07	3.504E-07
0.99373	0.0601	0.99375	1.367	1.723E-02	9.988E-01	-1.154E-05	-1.155E-05	1.154E-05
0.99143	0.1746	1.00000	1.956	1.539E 02	2.990E 00	-1.487E-06	-1.487E-06	1.488E-06
0.98583	0.3350	1.00625	3.295	1.539E 02	5.723E 00	-1.721E-07	-1.720E-07	1.721E-07
0.98023	0.4972	1.01250	4.638	1.539E 02	8.421E 00	-5.735E-08	-5.735E-08	5.735E-08
0.97464	0.6613	1.01875	5.981	1.539E 02	1.109E 01	-2.642E-08	-2.642E-08	2.642E-08
0.96906	0.8272	1.02500	7.325	1.539E 02	1.372E 01	-1.580E-08	-1.579E-08	1.580E-08
0.95793	1.1650	1.03750	10.014	1.539E 02	1.889E 01	-6.894E-09	-6.893E-09	6.894E-09
0.94683	1.5106	1.05000	12.703	1.539E 02	2.393E 01	-4.261E-09	-4.261E-09	4.261E-09
0.92473	2.2268	1.07500	18.081	1.539E 02	3.367E 01	-1.906E-09	-1.906E-09	1.906E-09
0.90279	2.9779	1.10000	23.460	1.539E 02	4.296E 01	-1.057E-09	-1.057E-09	1.057E-09
0.85940	4.5944	1.15000	34.217	1.539E 02	6.034E 01	-4.470E-10	-4.470E-10	4.470E-10
0.81677	6.3812	1.20000	44.975	1.539E 02	7.627E 01	-2.376E-10	-2.376E-10	2.376E-10
0.73430	10.5668	1.30000	66.491	1.539E 02	1.045E 02	-9.781E-11	-9.781E-11	9.781E-11
0.65672	15.7749	1.40000	88.007	1.539E 02	1.286E 02	-5.162E-11	-5.162E-11	5.162E-11
0.58598	22.3064	1.50000	109.523	1.539E 02	1.495E 02	-3.204E-11	-3.204E-11	3.204E-11
0.52484	30.4891	1.60000	131.038	1.539E 02	1.679E 02	-2.148E-11	-2.148E-11	2.148E-11
0.47702	40.5586	1.70000	152.554	1.539E 02	1.840E 02	-1.448E-11	-1.448E-11	1.448E-11
0.44681	52.4104	1.80000	174.070	1.539E 02	1.984E 02	-1.022E-11	-1.022E-11	1.022E-11
0.43786	65.3395	1.90000	195.586	1.539E 02	2.112E 02	-7.207E-12	-7.207E-12	7.207E-12
0.45146	78.1333	2.00000	217.102	1.539E 02	2.228E 02	-5.144E-12	-5.144E-12	5.144E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.060 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.620E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.082E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.335E-08	-3.335E-08
0.92500	2.378E-09	461.585	-6.938E-08	-6.938E-08	6.938E-08	6.938E-08	-6.146E-08	-6.146E-08
0.95000	6.031E-09	474.060	-1.177E-07	-1.177E-07	1.178E-07	1.178E-07	-1.559E-07	-1.559E-07
0.96250	1.188E-08	480.297	-1.699E-07	-1.699E-07	1.701E-07	1.701E-07	-3.072E-07	-3.072E-07
0.97500	3.601E-08	486.534	-2.996E-07	-2.997E-07	3.025E-07	3.025E-07	-9.309E-07	-9.310E-07
0.98124	8.365E-08	489.652	-4.688E-07	-4.688E-07	4.847E-07	4.848E-07	-2.162E-06	-2.162E-06
0.98749	3.505E-07	492.770	-9.336E-07	-9.337E-07	1.115E-06	1.115E-06	-9.058E-06	-9.060E-06
0.99373	1.155E-05	495.884	-2.643E-06	-2.646E-06	1.385E-05	1.385E-05	-2.983E-04	-2.985E-04
0.99143	1.487E-06	494.736	4.274E 00	4.274E 00	4.278E 00	4.278E 00	-3.845E-05	-3.844E-05
0.98583	1.720E-07	491.939	1.019E 01	1.019E 01	1.019E 01	1.019E 01	-4.448E-06	-4.448E-06
0.98023	5.735E-08	489.147	1.610E 01	1.610E 01	1.610E 01	1.610E 01	-1.483E-06	-1.483E-06
0.97464	2.642E-08	486.358	2.201E 01	2.201E 01	2.201E 01	2.201E 01	-6.830E-07	-6.830E-07
0.96906	1.579E-08	483.574	2.791E 01	2.791E 01	2.792E 01	2.792E 01	-4.083E-07	-4.083E-07
0.95793	6.893E-09	478.017	3.971E 01	3.971E 01	3.971E 01	3.971E 01	-1.782E-07	-1.782E-07
0.94683	4.261E-09	472.477	5.148E 01	5.148E 01	5.149E 01	5.149E 01	-1.102E-07	-1.102E-07
0.92473	1.906E-09	461.451	7.498E 01	7.498E 01	7.499E 01	7.499E 01	-4.928E-08	-4.928E-08
0.90279	1.057E-09	450.521	9.841E 01	9.841E 01	9.841E 01	9.841E 01	-2.731E-08	-2.731E-08
0.85940	4.470E-10	428.850	1.450E 02	1.450E 02	1.450E 02	1.450E 02	-1.156E-08	-1.156E-08
0.81677	2.376E-10	407.577	1.912E 02	1.912E 02	1.912E 02	1.912E 02	-6.143E-09	-6.143E-09
0.73430	9.781E-11	366.425	2.823E 02	2.823E 02	2.823E 02	2.823E 02	-2.529E-09	-2.529E-09
0.65672	5.162E-11	327.713	3.709E 02	3.709E 02	3.709E 02	3.709E 02	-1.334E-09	-1.334E-09
0.58598	3.204E-11	292.411	4.561E 02	4.561E 02	4.561E 02	4.561E 02	-8.282E-10	-8.282E-10
0.52484	2.148E-11	261.903	5.365E 02	5.365E 02	5.365E 02	5.365E 02	-5.552E-10	-5.552E-10
0.47702	1.448E-11	238.039	6.103E 02	6.103E 02	6.103E 02	6.103E 02	-3.744E-10	-3.744E-10
0.44681	1.022E-11	222.962	6.753E 02	6.753E 02	6.753E 02	6.753E 02	-2.641E-10	-2.641E-10
0.43786	7.207E-12	218.499	7.296E 02	7.296E 02	7.296E 02	7.296E 02	-1.863E-10	-1.863E-10
0.45146	5.144E-12	225.282	7.727E 02	7.727E 02	7.727E 02	7.727E 02	-1.330E-10	-1.330E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.060 θ_D= 0. ρ_a= 1.000

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.048E-19
0.10000	2.725E-14	4.265E-14	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-1.407E-19
0.20000	8.056E-14	5.687E-14	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-2.012E-19
0.30000	1.469E-13	1.674E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-3.162E-19
0.40000	4.247E-13	4.052E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-5.353E-19
0.50000	8.188E-13	7.942E-13	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-1.072E-18
0.60000	1.877E-12	1.839E-12	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-2.506E-18
0.70000	5.432E-12	5.215E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-7.323E-18
0.80000	2.213E-11	2.200E-11	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-3.317E-17
0.85000	5.914E-11	5.907E-11	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-9.609E-17
0.90000	2.287E-10	2.285E-10	-7.682E-20	-7.682E-20	-4.555E-10	-4.555E-10	-4.311E-16
0.92500	5.609E-10	5.670E-10	-1.776E-19	-1.776E-19	-9.053E-10	-9.053E-10	-1.314E-15
0.95000	2.193E-09	2.194E-09	-7.050E-19	-7.050E-19	-2.276E-09	-2.276E-09	-5.895E-15
0.96250	5.898E-09	5.898E-09	-2.045E-18	-2.045E-18	-4.520E-09	-4.520E-09	-1.679E-14
0.97500	2.797E-08	2.797E-08	-1.184E-17	-1.184E-17	-1.444E-08	-1.444E-08	-6.291E-14
0.98124	8.723E-08	8.723E-08	-4.643E-17	-4.644E-17	-3.797E-08	-3.797E-08	-1.514E-13
0.98749	5.772E-07	5.773E-07	-4.980E-16	-4.982E-16	-1.987E-07	-1.987E-07	-4.062E-13
0.99373	4.143E-05	4.146E-05	-3.954E-13	-3.959E-13	-3.374E-05	-3.378E-05	-7.332E-13
0.99143	-1.758E-03	-1.758E-03	-7.188E-15	-7.183E-15	-3.317E 04	-3.317E 04	-6.634E-13
0.98583	-9.149E-04	-9.150E-04	-1.513E-16	-1.512E-16	-3.317E 04	-3.317E 04	-2.507E-13
0.98023	-6.181E-04	-6.181E-04	-2.515E-17	-2.515E-17	-3.317E 04	-3.317E 04	-9.680E-14
0.97464	-4.667E-04	-4.667E-04	-7.328E-18	-7.328E-18	-3.317E 04	-3.317E 04	-4.566E-14
0.96906	-3.748E-04	-3.749E-04	-3.222E-18	-3.222E-18	-3.317E 04	-3.317E 04	-2.264E-14
0.95793	-2.690E-04	-2.690E-04	-8.682E-19	-8.682E-19	-3.317E 04	-3.317E 04	-7.949E-15
0.94683	-2.098E-04	-2.098E-04	-4.102E-19	-4.102E-19	-3.317E 04	-3.317E 04	-3.086E-15
0.92473	-1.456E-04	-1.456E-04	-1.312E-19	-1.312E-19	-3.317E 04	-3.317E 04	-8.294E-16
0.90279	-1.115E-04	-1.115E-04	-5.734E-20	-5.734E-20	-3.317E 04	-3.317E 04	-3.137E-16
0.85940	-7.596E-05	-7.596E-05	-1.481E-20	-1.481E-20	-3.317E 04	-3.317E 04	-7.702E-17
0.81677	-5.759E-05	-5.759E-05	-5.820E-21	-5.820E-21	-3.317E 04	-3.317E 04	-2.810E-17
0.73430	-3.882E-05	-3.882E-05	-1.530E-21	-1.530E-21	-3.317E 04	-3.317E 04	-6.539E-18
0.65672	-2.927E-05	-2.928E-05	-5.964E-22	-5.964E-22	-3.317E 04	-3.317E 04	-2.305E-18
0.58598	-2.350E-05	-2.350E-05	-2.946E-22	-2.946E-22	-3.317E 04	-3.317E 04	-9.996E-19
0.52484	-1.962E-05	-1.963E-05	-1.612E-22	-1.612E-22	-3.317E 04	-3.317E 04	-5.084E-19
0.47702	-1.685E-05	-1.685E-05	-8.875E-23	-8.875E-23	-3.317E 04	-3.317E 04	-3.028E-19
0.44681	-1.476E-05	-1.476E-05	-5.093E-23	-5.093E-23	-3.317E 04	-3.317E 04	-1.945E-19
0.43786	-1.313E-05	-1.313E-05	-2.922E-23	-2.922E-23	-3.317E 04	-3.317E 04	-1.371E-19
0.45146	-1.183E-05	-1.183E-05	-1.675E-23	-1.675E-23	-3.317E 04	-3.317E 04	-1.027E-19

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.070 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0700	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0700	0.10000	193.643	2.678E-08	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0700	0.20000	172.127	2.918E-08	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0700	0.30000	150.611	3.919E-08	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0700	0.40000	129.095	4.461E-08	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0700	0.50000	107.580	6.003E-08	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0700	0.60000	86.064	6.086E-08	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0700	0.70000	64.548	1.884E-07	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0700	0.80000	43.033	5.936E-07	1.000E-00	-2.620E-10	-2.620E-10	2.620E-10
0.85000	0.0700	0.85000	32.275	1.507E-06	1.000E-00	-5.082E-10	-5.082E-10	5.082E-10
0.90000	0.0700	0.90000	21.518	5.243E-06	1.000E-00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0700	0.92500	16.139	1.275E-05	1.000E-00	-2.377E-09	-2.377E-09	2.377E-09
0.95000	0.0700	0.95000	10.761	4.361E-05	1.000E-00	-6.031E-09	-6.031E-09	6.030E-09
0.96250	0.0700	0.96250	8.073	1.042E-04	1.000E-00	-1.188E-08	-1.188E-08	1.188E-08
0.97500	0.0700	0.97500	5.386	3.523E-04	9.999E-01	-3.598E-08	-3.598E-08	3.598E-08
0.98124	0.0700	0.98125	4.044	8.348E-04	9.999E-01	-8.352E-08	-8.353E-08	8.352E-08
0.98749	0.0700	0.98750	2.704	2.802E-03	9.996E-01	-3.487E-07	-3.488E-07	3.487E-07
0.99373	0.0701	0.99375	1.374	2.173E-02	9.989E-01	-1.117E-05	-1.118E-05	1.117E-05
0.99168	0.2010	1.00000	1.942	1.495E 02	2.991E 00	-1.535E-06	-1.535E-06	1.535E-06
0.98631	0.3861	1.00625	3.279	1.495E 02	5.755E 00	-1.750E-07	-1.750E-07	1.750E-07
0.98095	0.5733	1.01250	4.621	1.495E 02	8.482E 00	-5.796E-08	-5.796E-08	5.796E-08
0.97559	0.7625	1.01875	5.964	1.495E 02	1.118E 01	-2.666E-08	-2.666E-08	2.666E-08
0.97026	0.9537	1.02500	7.308	1.495E 02	1.384E 01	-1.590E-08	-1.590E-08	1.590E-08
0.95961	1.3427	1.03750	9.996	1.495E 02	1.906E 01	-6.918E-09	-6.918E-09	6.918E-09
0.94901	1.7403	1.05000	12.685	1.495E 02	2.416E 01	-4.275E-09	-4.275E-09	4.275E-09
0.92795	2.5628	1.07500	18.063	1.495E 02	3.400E 01	-1.910E-09	-1.910E-09	1.910E-09
0.90709	3.4232	1.10000	23.441	1.495E 02	4.339E 01	-1.058E-09	-1.058E-09	1.058E-09
0.86602	5.2674	1.15000	34.199	1.495E 02	6.096E 01	-4.476E-10	-4.476E-10	4.476E-10
0.82594	7.2928	1.20000	44.957	1.495E 02	7.706E 01	-2.378E-10	-2.378E-10	2.378E-10
0.74938	11.9785	1.30000	66.472	1.495E 02	1.055E 02	-9.787E-11	-9.787E-11	9.787E-11
0.67893	17.6819	1.40000	87.988	1.495E 02	1.300E 02	-5.165E-11	-5.165E-11	5.165E-11
0.61670	24.6178	1.50000	109.504	1.495E 02	1.511E 02	-3.205E-11	-3.205E-11	3.205E-11
0.56542	32.9550	1.60000	131.020	1.495E 02	1.696E 02	-2.148E-11	-2.148E-11	2.148E-11
0.52828	42.7003	1.70000	152.536	1.495E 02	1.860E 02	-1.449E-11	-1.449E-11	1.449E-11
0.50839	53.5514	1.80000	174.051	1.495E 02	2.005E 02	-1.022E-11	-1.022E-11	1.022E-11
0.50778	64.8462	1.90000	195.567	1.495E 02	2.135E 02	-7.209E-12	-7.209E-12	7.209E-12
0.52652	75.7473	2.00000	217.083	1.495E 02	2.252E 02	-5.146E-12	-5.146E-12	5.146E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 0.070 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1_0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.389E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.620E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.082E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.335E-08	-3.335E-08
0.92500	2.377E-09	461.585	-6.937E-08	-6.937E-08	6.938E-08	6.938E-08	-6.146E-08	-6.146E-08
0.95000	6.031E-09	474.060	-1.177E-07	-1.177E-07	1.178E-07	1.178E-07	-1.559E-07	-1.559E-07
0.96250	1.188E-08	480.297	-1.698E-07	-1.698E-07	1.702E-07	1.702E-07	-3.071E-07	-3.071E-07
0.97500	3.598E-08	486.534	-2.987E-07	-2.987E-07	3.033E-07	3.033E-07	-9.301E-07	-9.301E-07
0.98124	8.353E-08	489.652	-4.634E-07	-4.634E-07	4.894E-07	4.894E-07	-2.159E-06	-2.159E-06
0.98749	3.488E-07	492.769	-8.749E-07	-8.750E-07	1.170E-06	1.170E-06	-9.016E-06	-9.017E-06
0.99373	1.118E-05	495.884	8.320E-07	8.288E-07	1.700E-05	1.701E-05	-2.887E-04	-2.889E-04
0.99168	1.534E-06	494.859	4.151E 00	4.151E 00	4.155E 00	4.155E 00	-3.968E-05	-3.967E-05
0.98631	1.749E-07	492.178	9.950E 00	9.950E 00	9.954E 00	9.954E 00	-4.523E-06	-4.523E-06
0.98095	5.796E-08	489.503	1.574E 01	1.574E 01	1.575E 01	1.575E 01	-1.498E-06	-1.498E-06
0.97559	2.666E-08	486.833	2.153E 01	2.153E 01	2.154E 01	2.154E 01	-6.892E-07	-6.891E-07
0.97026	1.590E-08	484.169	2.732E 01	2.732E 01	2.732E 01	2.732E 01	-4.110E-07	-4.110E-07
0.95961	6.918E-09	478.856	3.887E 01	3.887E 01	3.887E 01	3.887E 01	-1.788E-07	-1.788E-07
0.94901	4.275E-09	473.566	5.039E 01	5.039E 01	5.040E 01	5.040E 01	-1.105E-07	-1.105E-07
0.92795	1.910E-09	463.056	7.338E 01	7.338E 01	7.338E 01	7.338E 01	-4.939E-08	-4.939E-08
0.90709	1.058E-09	452.646	9.626E 01	9.626E 01	9.627E 01	9.627E 01	-2.736E-08	-2.736E-08
0.86602	4.476E-10	432.155	1.417E 02	1.417E 02	1.417E 02	1.417E 02	-1.157E-08	-1.157E-08
0.82594	2.378E-10	412.156	1.867E 02	1.867E 02	1.867E 02	1.867E 02	-6.149E-09	-6.149E-09
0.74938	9.787E-11	373.947	2.748E 02	2.748E 02	2.748E 02	2.748E 02	-2.530E-09	-2.530E-09
0.67893	5.165E-11	338.793	3.598E 02	3.598E 02	3.598E 02	3.598E 02	-1.335E-09	-1.335E-09
0.61670	3.205E-11	307.743	4.408E 02	4.408E 02	4.408E 02	4.408E 02	-8.285E-10	-8.285E-10
0.56542	2.148E-11	282.153	5.163E 02	5.163E 02	5.163E 02	5.163E 02	-5.554E-10	-5.554E-10
0.52828	1.449E-11	263.620	5.847E 02	5.847E 02	5.847E 02	5.847E 02	-3.745E-10	-3.745E-10
0.50839	1.022E-11	253.694	6.445E 02	6.445E 02	6.445E 02	6.445E 02	-2.642E-10	-2.642E-10
0.50778	7.209E-12	253.390	6.947E 02	6.947E 02	6.947E 02	6.947E 02	-1.864E-10	-1.864E-10
0.52652	5.146E-12	262.740	7.353E 02	7.353E 02	7.353E 02	7.353E 02	-1.330E-10	-1.330E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 0.070 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.427E-19
0.10000	1.408E-14	5.086E-15	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-1.914E-19
0.20000	7.251E-14	6.351E-14	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-2.738E-19
0.30000	2.226E-13	1.857E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-4.304E-19
0.40000	4.108E-13	4.301E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-7.287E-19
0.50000	9.636E-13	9.019E-13	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-1.459E-18
0.60000	2.133E-12	2.109E-12	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-3.410E-18
0.70000	6.225E-12	6.055E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-9.968E-18
0.80000	2.568E-11	2.545E-11	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-4.514E-17
0.85000	6.899E-11	6.900E-11	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-1.308E-16
0.90000	2.666E-10	2.665E-10	-7.682E-20	-7.682E-20	-4.555E-10	-4.555E-10	-5.868E-16
0.92500	6.540E-10	6.613E-10	-1.776E-19	-1.776E-19	-9.053E-10	-9.053E-10	-1.788E-15
0.95000	2.559E-09	2.559E-09	-7.048E-19	-7.048E-19	-2.276E-09	-2.276E-09	-8.021E-15
0.96250	6.883E-09	6.883E-09	-2.043E-18	-2.043E-18	-4.519E-09	-4.519E-09	-2.284E-14
0.97500	3.262E-08	3.262E-08	-1.183E-17	-1.183E-17	-1.442E-08	-1.442E-08	-8.553E-14
0.98124	1.018E-07	1.018E-07	-4.632E-17	-4.633E-17	-3.791E-08	-3.791E-08	-2.057E-13
0.98749	6.709E-07	6.711E-07	-4.941E-16	-4.942E-16	-1.976E-07	-1.977E-07	-5.512E-13
0.99373	4.686E-05	4.689E-05	-3.707E-13	-3.712E-13	-3.201E-05	-3.204E-05	-1.000E-12
0.99168	-2.414E-03	-2.414E-03	-7.629E-15	-7.625E-15	-2.564E 04	-2.564E 04	-9.132E-13
0.98631	-1.249E-03	-1.249E-03	-1.555E-16	-1.555E-16	-2.564E 04	-2.564E 04	-3.455E-13
0.98095	-8.426E-04	-8.427E-04	-2.559E-17	-2.559E-17	-2.564E 04	-2.564E 04	-1.332E-13
0.97559	-6.357E-04	-6.357E-04	-7.430E-18	-7.430E-18	-2.564E 04	-2.564E 04	-6.267E-14
0.97026	-5.103E-04	-5.104E-04	-3.256E-18	-3.256E-18	-2.564E 04	-2.564E 04	-3.105E-14
0.95961	-3.660E-04	-3.660E-04	-8.731E-19	-8.730E-19	-2.564E 04	-2.564E 04	-1.090E-14
0.94901	-2.853E-04	-2.853E-04	-4.122E-19	-4.122E-19	-2.564E 04	-2.564E 04	-4.223E-15
0.92795	-1.980E-04	-1.980E-04	-1.316E-19	-1.316E-19	-2.564E 04	-2.564E 04	-1.133E-15
0.90709	-1.516E-04	-1.516E-04	-5.749E-20	-5.749E-20	-2.564E 04	-2.564E 04	-4.283E-16
0.86602	-1.032E-04	-1.032E-04	-1.484E-20	-1.484E-20	-2.564E 04	-2.564E 04	-1.050E-16
0.82594	-7.827E-05	-7.827E-05	-5.828E-21	-5.828E-21	-2.564E 04	-2.564E 04	-3.831E-17
0.74938	-5.275E-05	-5.275E-05	-1.532E-21	-1.532E-21	-2.564E 04	-2.564E 04	-8.910E-18
0.67893	-3.978E-05	-3.978E-05	-5.968E-22	-5.968E-22	-2.564E 04	-2.564E 04	-3.139E-18
0.61670	-3.193E-05	-3.193E-05	-2.948E-22	-2.948E-22	-2.564E 04	-2.564E 04	-1.362E-18
0.56542	-2.667E-05	-2.667E-05	-1.613E-22	-1.613E-22	-2.564E 04	-2.564E 04	-6.923E-19
0.52828	-2.289E-05	-2.289E-05	-8.879E-23	-8.879E-23	-2.564E 04	-2.564E 04	-4.123E-19
0.50839	-2.006E-05	-2.006E-05	-5.095E-23	-5.095E-23	-2.564E 04	-2.564E 04	-2.648E-19
0.50778	-1.784E-05	-1.784E-05	-2.924E-23	-2.924E-23	-2.564E 04	-2.564E 04	-1.866E-19
0.52652	-1.607E-05	-1.607E-05	-1.676E-23	-1.676E-23	-2.564E 04	-2.564E 04	-1.398E-19

PROPAGATION FREQUENCY= 7.750JE 09 ϕ_0= 0.080 θ_D= 0. ρ_a= 1.000

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu$-1.0
0.	0.0800	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.0800	0.10000	193.643	3.575E-08	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.0800	0.20000	172.127	4.002E-08	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.0800	0.30000	150.611	4.461E-08	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.0800	0.40000	129.095	5.545E-08	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.0800	0.50000	107.580	7.254E-08	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.0800	0.60000	86.064	7.504E-08	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.0800	0.70000	64.548	2.201E-07	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.0800	0.80000	43.033	6.670E-07	1.000E-00	-2.620E-10	-2.620E-10	2.620E-10
0.85000	0.0800	0.85000	32.275	1.688E-06	1.000E-00	-5.081E-10	-5.081E-10	5.081E-10
0.90000	0.0800	0.90000	21.518	5.843E-06	1.000E-00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.0800	0.92500	16.140	1.422E-05	1.000E-00	-2.377E-09	-2.377E-09	2.377E-09
0.95000	0.0800	0.95000	10.762	4.856E-05	1.000E-00	-6.030E-09	-6.030E-09	6.029E-09
0.96250	0.0800	0.96250	8.074	1.161E-04	1.000E-00	-1.187E-08	-1.187E-08	1.187E-08
0.97500	0.0800	0.97500	5.388	3.923E-04	9.999E-01	-3.594E-08	-3.594E-08	3.594E-08
0.98124	0.0800	0.98125	4.046	9.292E-04	9.999E-01	-8.339E-08	-8.339E-08	8.338E-08
0.98749	0.0800	0.98750	2.708	3.113E-03	9.998E-01	-3.470E-07	-3.470E-07	3.469E-07
0.99373	0.0801	0.99375	1.382	2.391E-02	9.992E-01	-1.078E-05	-1.079E-05	1.078E-05
0.99196	0.2263	1.00000	1.925	1.450E 02	2.991E 00	-1.595E-06	-1.595E-06	1.595E-06
0.98686	0.4353	1.00625	3.260	1.450E 02	5.785E 00	-1.786E-07	-1.786E-07	1.786E-07
0.98177	0.6466	1.01250	4.601	1.450E 02	8.543E 00	-5.871E-08	-5.871E-08	5.871E-08
0.97670	0.8600	1.01875	5.943	1.450E 02	1.127E 01	-2.695E-08	-2.695E-08	2.695E-08
0.97164	1.0756	1.02500	7.287	1.450E 02	1.396E 01	-1.603E-08	-1.603E-08	1.603E-08
0.96155	1.5137	1.03750	9.974	1.450E 02	1.924E 01	-6.959E-09	-6.959E-09	6.960E-09
0.95153	1.9610	1.05000	12.663	1.450E 02	2.440E 01	-4.292E-09	-4.292E-09	4.292E-09
0.93166	2.8843	1.07500	18.041	1.450E 02	3.435E 01	-1.915E-09	-1.915E-09	1.915E-09
0.91205	3.8477	1.10000	23.419	1.450E 02	4.385E 01	-1.060E-09	-1.060E-09	1.060E-09
0.87364	5.9027	1.15000	34.177	1.450E 02	6.162E 01	-4.482E-10	-4.482E-10	4.482E-10
0.83646	8.1435	1.20000	44.934	1.450E 02	7.790E 01	-2.381E-10	-2.381E-10	2.381E-10
0.76648	13.2571	1.30000	66.450	1.450E 02	1.067E 02	-9.794E-11	-9.794E-11	9.794E-11
0.70380	19.3380	1.40000	87.966	1.450E 02	1.314E 02	-5.167E-11	-5.167E-11	5.167E-11
0.65051	26.5082	1.50000	109.481	1.450E 02	1.528E 02	-3.206E-11	-3.206E-11	3.206E-11
0.60910	34.8004	1.60000	130.997	1.450E 02	1.715E 02	-2.149E-11	-2.149E-11	2.149E-11
0.58210	44.0755	1.70000	152.513	1.450E 02	1.880E 02	-1.449E-11	-1.449E-11	1.449E-11
0.57155	53.9658	1.80000	174.029	1.450E 02	2.027E 02	-1.022E-11	-1.022E-11	1.022E-11
0.57836	63.9205	1.90000	195.545	1.450E 02	2.159E 02	-7.212E-12	-7.212E-12	7.212E-12
0.60195	73.3679	2.00000	217.061	1.450E 02	2.277E 02	-5.148E-12	-5.148E-12	5.148E-12

PROPAGATION FREQUENCY= 7.750CE 09 ϕ_0= 0.080 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.620E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.081E-10	424.160	-2.691E-08	-2.691E-08	2.691E-08	2.691E-08	-1.314E-08	-1.314E-08
0.90000	1.290E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.334E-08	-3.335E-08
0.92500	2.377E-09	461.585	-6.937E-08	-6.937E-08	6.938E-08	6.938E-08	-6.146E-08	-6.146E-08
0.95000	6.030E-09	474.060	-1.177E-07	-1.177E-07	1.178E-07	1.178E-07	-1.559E-07	-1.559E-07
0.96250	1.187E-08	480.297	-1.697E-07	-1.697E-07	1.702E-07	1.702E-07	-3.069E-07	-3.070E-07
0.97500	3.595E-08	486.534	-2.980E-07	-2.980E-07	3.037E-07	3.037E-07	-9.292E-07	-9.292E-07
0.98124	8.340E-08	489.652	-4.600E-07	-4.600E-07	4.922E-07	4.922E-07	-2.156E-06	-2.156E-06
0.98749	3.471E-07	492.770	-8.380E-07	-8.381E-07	1.202E-06	1.202E-06	-8.970E-06	-8.971E-06
0.99373	1.079E-05	495.884	2.872E-06	2.869E-06	1.871E-05	1.872E-05	-2.788E-04	-2.789E-04
0.99196	1.594E-06	495.002	4.008E 00	4.008E 00	4.012E 00	4.012E 00	-4.123E-05	-4.122E-05
0.98686	1.785E-07	492.456	9.673E 00	9.673E 00	9.677E 00	9.677E 00	-4.616E-06	-4.616E-06
0.98177	5.871E-08	489.916	1.533E 01	1.533E 01	1.534E 01	1.534E 01	-1.518E-06	-1.518E-06
0.97670	2.695E-08	487.384	2.098E 01	2.098E 01	2.099E 01	2.099E 01	-6.966E-07	-6.966E-07
0.97164	1.603E-08	484.858	2.663E 01	2.663E 01	2.663E 01	2.663E 01	-4.144E-07	-4.144E-07
0.96155	6.959E-09	479.827	3.790E 01	3.790E 01	3.790E 01	3.790E 01	-1.799E-07	-1.799E-07
0.95153	4.292E-09	474.825	4.914E 01	4.914E 01	4.914E 01	4.914E 01	-1.109E-07	-1.109E-07
0.93166	1.915E-09	464.910	7.153E 01	7.153E 01	7.153E 01	7.153E 01	-4.951E-08	-4.951E-08
0.91205	1.060E-09	455.122	9.379E 01	9.379E 01	9.379E 01	9.379E 01	-2.741E-08	-2.741E-08
0.87364	4.482E-10	435.956	1.379E 02	1.379E 02	1.379E 02	1.379E 02	-1.159E-08	-1.159E-08
0.83646	2.381E-10	417.402	1.814E 02	1.814E 02	1.814E 02	1.814E 02	-6.156E-09	-6.156E-09
0.76648	9.794E-11	382.484	2.662E 02	2.662E 02	2.662E 02	2.662E 02	-2.532E-09	-2.532E-09
0.70380	5.167E-11	351.203	3.474E 02	3.474E 02	3.474E 02	3.474E 02	-1.336E-09	-1.336E-09
0.65051	3.206E-11	324.613	4.239E 02	4.239E 02	4.239E 02	4.239E 02	-8.289E-10	-8.289E-10
0.60910	2.149E-11	303.947	4.945E 02	4.945E 02	4.945E 02	4.945E 02	-5.556E-10	-5.556E-10
0.58210	1.449E-11	290.473	5.578E 02	5.578E 02	5.578E 02	5.578E 02	-3.747E-10	-3.747E-10
0.57155	1.022E-11	285.211	6.130E 02	6.130E 02	6.130E 02	6.130E 02	-2.643E-10	-2.643E-10
0.57836	7.212E-12	288.610	6.595E 02	6.595E 02	6.595E 02	6.595E 02	-1.864E-10	-1.864E-10
0.60195	5.148E-12	300.378	6.976E 02	6.976E 02	6.976E 02	6.976E 02	-1.331E-10	-1.331E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.080 θ_0= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.864E-19
0.10000	3.501E-14	3.621E-14	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-2.500E-19
0.20000	1.391E-13	1.233E-13	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-3.576E-19
0.30000	2.529E-13	2.529E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-5.622E-19
0.40000	5.559E-13	4.671E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-9.517E-19
0.50000	1.098E-12	1.098E-12	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-1.905E-18
0.60000	2.536E-12	2.543E-12	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-4.454E-18
0.70000	7.157E-12	7.152E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-1.302E-17
0.80000	2.944E-11	2.926E-11	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-5.896E-17
0.85000	7.942E-11	7.887E-11	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-1.708E-16
0.90000	3.055E-10	3.053E-10	-7.681E-20	-7.681E-20	-4.555E-10	-4.555E-10	-7.663E-16
0.92500	7.480E-10	7.569E-10	-1.776E-19	-1.776E-19	-9.052E-10	-9.052E-10	-2.335E-15
0.95000	2.929E-09	2.929E-09	-7.046E-19	-7.046E-19	-2.276E-09	-2.276E-09	-1.047E-14
0.96250	7.870E-09	7.870E-09	-2.042E-18	-2.042E-18	-4.517E-09	-4.517E-09	-2.982E-14
0.97500	3.726E-08	3.726E-08	-1.181E-17	-1.181E-17	-1.441E-08	-1.441E-08	-1.116E-13
0.98124	1.165E-07	1.165E-07	-4.620E-17	-4.621E-17	-3.784E-08	-3.785E-08	-2.681E-13
0.98749	7.654E-07	7.656E-07	-4.898E-16	-4.900E-16	-1.965E-07	-1.966E-07	-7.175E-13
0.99373	5.203E-05	5.207E-05	-3.458E-13	-3.462E-13	-3.025E-05	-3.028E-05	-1.30 ?
0.99196	-3.291E-03	-3.291E-03	-8.205E-15	-8.200E-15	-3.547E 04	-3.546E 04	-1.21 ?
0.98686	-1.694E-03	-1.694E-03	-1.608E-16	-1.608E-16	-3.547E 04	-3.546E 04	-4.581E-13
0.98177	-1.140E-03	-1.140E-03	-2.613E-17	-2.613E-17	-3.547E 04	-3.546E 04	-1.764E-13
0.97670	-8.593E-04	-8.593E-04	-7.556E-18	-7.555E-18	-3.547E 04	-3.546E 04	-8.270E-14
0.97164	-6.894E-04	-6.895E-04	-3.298E-18	-3.298E-18	-3.547E 04	-3.546E 04	-4.094E-14
0.96155	-4.941E-04	-4.941E-04	-8.812E-19	-8.812E-19	-3.547E 04	-3.546E 04	-1.433E-14
0.95153	-3.850E-04	-3.851E-04	-4.147E-19	-4.147E-19	-3.547E 04	-3.546E 04	-5.551E-15
0.93166	-2.671E-04	-2.671E-04	-1.320E-19	-1.320E-19	-3.547E 04	-3.546E 04	-1.488E-15
0.91205	-2.045E-04	-2.045E-04	-5.767E-20	-5.767E-20	-3.547E 04	-3.546E 04	-5.615E-16
0.87364	-1.392E-04	-1.392E-04	-1.487E-20	-1.487E-20	-3.547E 04	-3.546E 04	-1.375E-16
0.83646	-1.055E-04	-1.055E-04	-5.838E-21	-5.838E-21	-3.547E 04	-3.546E 04	-5.013E-17
0.76648	-7.111E-05	-7.111E-05	-1.533E-21	-1.533E-21	-3.547E 04	-3.546E 04	-1.165E-17
0.70380	-5.362E-05	-5.362E-05	-5.973E-22	-5.973E-22	-3.547E 04	-3.546E 04	-4.104E-18
0.65051	-4.303E-05	-4.304E-05	-2.950E-22	-2.950E-22	-3.547E 04	-3.546E 04	-1.780E-18
0.60910	-3.594E-05	-3.594E-05	-1.614E-22	-1.614E-22	-3.547E 04	-3.546E 04	-9.048E-19
0.58210	-3.085E-05	-3.086E-05	-8.884E-23	-8.884E-23	-3.547E 04	-3.546E 04	-5.388E-19
0.57155	-2.703E-05	-2.703E-05	-5.098E-23	-5.098E-23	-3.547E 04	-3.546E 04	-3.461E-19
0.57836	-2.405E-05	-2.405E-05	-2.926E-23	-2.926E-23	-3.547E 04	-3.546E 04	-2.438E-19
0.60195	-2.166E-05	-2.166E-05	-1.677E-23	-1.677E-23	-3.547E 04	-3.546E 04	-1.826E-19

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.100 θ_0= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.1000	0.10000	193.643	6.212E-08	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.1000	0.20000	172.127	6.608E-08	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.1000	0.30000	150.611	7.754E-08	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.1000	0.40000	129.096	9.171E-08	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.1000	0.50000	107.580	1.067E-07	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.1000	0.60000	86.064	1.184E-07	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.1000	0.70000	64.548	3.068E-07	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.1000	0.80000	43.033	8.905E-07	1.000E-00	-2.620E-10	-2.620E-10	2.620E-10
0.85000	0.1000	0.85000	32.276	2.234E-06	1.000E-00	-5.081E-10	-5.081E-10	5.081E-10
0.90000	0.1000	0.90000	21.519	7.671E-06	1.000E-00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.1000	0.92500	16.141	1.873E-05	1.000E-00	-2.377E-09	-2.377E-09	2.377E-09
0.95000	0.1000	0.95000	10.765	6.377E-05	1.000E-00	-6.027E-09	-6.027E-09	6.027E-09
0.96250	0.1000	0.96250	8.078	1.521E-04	9.999E-01	-1.186E-08	-1.186E-08	1.186E-08
0.97500	0.1000	0.97500	5.393	5.132E-04	9.998E-01	-3.586E-08	-3.586E-08	3.586E-08
0.98124	0.1000	0.98125	4.053	1.213E-03	9.997E-01	-8.306E-08	-8.307E-08	8.306E-08
0.98749	0.1000	0.98750	2.717	4.046E-03	9.994E-01	-3.427E-07	-3.427E-07	3.426E-07
0.99373	0.1001	0.99375	1.400	3.034E-02	9.983E-01	-9.899E-06	-9.904E-06	9.896E-06
0.99263	0.2725	1.00000	1.885	1.358E 02	2.994E 00	-1.746E-06	-1.745E-06	1.746E-06
0.98817	0.5259	1.00625	3.214	1.358E 02	5.886E 00	-1.874E-07	-1.874E-07	1.874E-07
0.98373	0.7815	1.01250	4.552	1.358E 02	8.738E 00	-6.054E-08	-6.053E-08	6.054E-08
0.97931	1.0395	1.01875	5.894	1.358E 02	1.155E 01	-2.765E-08	-2.765E-08	2.765E-08
0.97491	1.2998	1.02500	7.236	1.358E 02	1.433E 01	-1.634E-08	-1.634E-08	1.634E-08
0.96618	1.8276	1.03750	9.923	1.358E 02	1.979E 01	-7.059E-09	-7.059E-09	7.059E-09
0.95752	2.3649	1.05000	12.611	1.358E 02	2.512E 01	-4.332E-09	-4.332E-09	4.332E-09
0.94047	3.4689	1.07500	17.988	1.358E 02	3.541E 01	-1.927E-09	-1.927E-09	1.927E-09
0.92379	4.6132	1.10000	23.366	1.358E 02	4.522E 01	-1.065E-09	-1.065E-09	1.065E-09
0.89158	7.0280	1.15000	34.123	1.358E 02	6.358E 01	-4.498E-10	-4.498E-10	4.498E-10
0.86107	9.6188	1.20000	44.881	1.358E 02	8.040E 01	-2.388E-10	-2.388E-10	2.388E-10
0.80593	15.3586	1.30000	66.396	1.358E 02	1.102E 02	-9.811E-11	-9.811E-11	9.811E-11
0.75999	21.8650	1.40000	87.912	1.358E 02	1.357E 02	-5.174E-11	-5.174E-11	5.174E-11
0.72502	29.1011	1.50000	109.428	1.358E 02	1.578E 02	-3.210E-11	-3.210E-11	3.210E-11
0.70265	36.9313	1.60000	130.943	1.358E 02	1.771E 02	-2.151E-11	-2.151E-11	2.151E-11
0.69411	45.1125	1.70000	152.459	1.358E 02	1.942E 02	-1.451E-11	-1.451E-11	1.451E-11
0.69990	53.3261	1.80000	173.975	1.358E 02	2.094E 02	-1.023E-11	-1.023E-11	1.023E-11
0.71967	61.2460	1.90000	195.491	1.358E 02	2.230E 02	-7.218E-12	-7.218E-12	7.218E-12
0.75233	68.6109	2.00000	217.007	1.358E 02	2.352E 02	-5.152E-12	-5.152E-12	5.152E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 0.100 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1.0$	T_o	$_o T_f - T_o$	$_x T_f - T_o$	$_o T_g - T_o$	$_x T_g - T_o$	$_o D_z - D_o$	$_x D_z - D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.324E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.620E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.081E-10	424.160	-2.690E-08	-2.690E-08	2.690E-08	2.690E-08	-1.314E-08	-1.314E-08
0.90000	1.296E-09	449.110	-4.718E-08	-4.718E-08	4.718E-08	4.718E-08	-3.334E-08	-3.334E-08
0.92500	2.377E-09	461.585	-6.936E-08	-6.936E-08	6.938E-08	6.938E-08	-6.145E-08	-6.145E-08
0.95000	6.027E-09	474.060	-1.176E-07	-1.176E-07	1.178E-07	1.178E-07	-1.558E-07	-1.558E-07
0.96250	1.186E-08	480.297	-1.695E-07	-1.695E-07	1.703E-07	1.703E-07	-3.066E-07	-3.066E-07
0.97500	3.586E-08	486.534	-2.957E-07	-2.957E-07	3.054E-07	3.055E-07	-9.269E-07	-9.270E-07
0.98124	8.307E-08	489.652	-4.477E-07	-4.478E-07	5.026E-07	5.027E-07	-2.147E-06	-2.147E-06
0.98749	3.428E-07	492.769	-7.069E-07	-7.070E-07	1.321E-06	1.321E-06	-8.859E-06	-8.860E-06
0.99373	9.907E-06	495.883	9.844E-06	9.841E-06	2.491E-05	2.492E-05	-2.559E-04	-2.560E-04
0.99263	1.745E-06	495.334	3.676E 00	3.676E 00	3.680E 00	3.680E 00	-4.513E-05	-4.512E-05
0.98817	1.874E-07	493.109	9.020E 00	9.020E 00	9.024E 00	9.024E 00	-4.845E-06	-4.844E-06
0.98373	6.053E-08	490.894	1.435E 01	1.435E 01	1.436E 01	1.436E 01	-1.565E-06	-1.565E-06
0.97931	2.765E-08	488.688	1.968E 01	1.968E 01	1.968E 01	1.968E 01	-7.148E-07	-7.148E-07
0.97491	1.634E-08	486.493	2.499E 01	2.499E 01	2.500E 01	2.500E 01	-4.224E-07	-4.224E-07
0.96618	7.059E-09	482.133	3.559E 01	3.559E 01	3.559E 01	3.559E 01	-1.825E-07	-1.825E-07
0.95752	4.332E-09	477.815	4.615E 01	4.615E 01	4.615E 01	4.615E 01	-1.120E-07	-1.120E-07
0.94047	1.927E-09	469.307	6.713E 01	6.713E 01	6.713E 01	6.713E 01	-4.981E-08	-4.981E-08
0.92379	1.065E-09	460.980	8.793E 01	8.793E 01	8.793E 01	8.793E 01	-2.754E-08	-2.754E-08
0.89158	4.498E-10	444.909	1.290E 02	1.290E 02	1.290E 02	1.290E 02	-1.163E-08	-1.163E-08
0.86107	2.388E-10	429.686	1.691E 02	1.691E 02	1.691E 02	1.691E 02	-6.172E-09	-6.172E-09
0.80593	9.811E-11	402.167	2.465E 02	2.465E 02	2.466E 02	2.466E 02	-2.536E-09	-2.536E-09
0.75999	5.174E-11	379.244	3.194E 02	3.194E 02	3.194E 02	3.194E 02	-1.338E-09	-1.338E-09
0.72502	3.210E-11	361.793	3.867E 02	3.867E 02	3.867E 02	3.867E 02	-8.297E-10	-8.297E-10
0.70265	2.151E-11	350.632	4.478E 02	4.478E 02	4.478E 02	4.478E 02	-5.562E-10	-5.562E-10
0.69411	1.451E-11	346.369	5.019E 02	5.019E 02	5.020E 02	5.020E 02	-3.750E-10	-3.750E-10
0.69990	1.023E-11	349.258	5.490E 02	5.490E 02	5.490E 02	5.490E 02	-2.645E-10	-2.645E-10
0.71967	7.218E-12	359.124	5.890E 02	5.890E 02	5.890E 02	5.890E 02	-1.866E-10	-1.866E-10
0.75233	5.152E-12	375.419	6.226E 02	6.226E 02	6.226E 02	6.226E 02	-1.332E-10	-1.332E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 0.100 θ_D= 0. ρ_a= 1.000

z	$_o D_y$	$_x D_y$	$_o \kappa$	$_x \kappa$	$_o \kappa_t$	$_x \kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-2.912E-19
0.10000	5.061E-14	6.219E-14	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-3.907E-19
0.20000	1.269E-13	1.289E-13	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-5.588E-19
0.30000	3.074E-13	3.152E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-8.784E-19
0.40000	6.812E-13	6.580E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-1.487E-18
0.50000	1.332E-12	1.379E-12	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-2.977E-18
0.60000	3.124E-12	3.093E-12	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-6.960E-18
0.70000	8.830E-12	8.856E-12	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-2.034E-17
0.80000	3.661E-11	3.656E-11	-6.725E-21	-6.725E-21	-8.176E-11	-8.176E-11	-9.212E-17
0.85000	9.806E-11	9.802E-11	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-2.669E-16
0.90000	3.789E-10	3.790E-10	-7.680E-20	-7.680E-20	-4.554E-10	-4.554E-10	-1.197E-15
0.92500	9.363E-10	9.395E-10	-1.775E-19	-1.775E-19	-9.051E-10	-9.051E-10	-3.647E-15
0.95000	3.630E-09	3.630E-09	-7.042E-19	-7.042E-19	-2.275E-09	-2.275E-09	-1.635E-14
0.96250	9.754E-09	9.754E-09	-2.038E-18	-2.038E-18	-4.514E-09	-4.514E-09	-4.655E-14
0.97500	4.628E-08	4.628E-08	-1.176E-17	-1.176E-17	-1.438E-08	-1.438E-08	-1.739E-13
0.98124	1.438E-07	1.438E-07	-4.591E-17	-4.591E-17	-3.768E-08	-3.769E-08	-4.167E-13
0.98749	9.398E-07	9.400E-07	-4.796E-16	-4.798E-16	-1.938E-07	-1.939E-07	-1.112E-12
0.99373	5.892E-05	5.896E-05	-2.920E-13	-2.923E-13	-2.641E-05	-2.643E-05	-2.059E-12
0.99263	-3.378E-03	-3.378E-03	-9.736E-15	-9.730E-15	-3.192E 04	-3.192E 04	-1.958E-12
0.98817	-1.712E-03	-1.712E-03	-1.742E-16	-1.742E-16	-3.192E 04	-3.192E 04	-7.425E-13
0.98373	-1.146E-03	-1.147E-03	-2.746E-17	-2.746E-17	-3.192E 04	-3.192E 04	-2.848E-13
0.97931	-8.618E-04	-8.619E-04	-7.864E-18	-7.863E-18	-3.192E 04	-3.192E 04	-1.324E-13
0.97491	-6.904E-04	-6.905E-04	-3.401E-18	-3.401E-18	-3.192E 04	-3.192E 04	-6.542E-14
0.96618	-4.940E-04	-4.940E-04	-9.011E-19	-9.010E-19	-3.192E 04	-3.192E 04	-2.278E-14
0.95752	-3.846E-04	-3.846E-04	-4.208E-19	-4.208E-19	-3.192E 04	-3.192E 04	-8.809E-15
0.94047	-2.665E-04	-2.665E-04	-1.331E-19	-1.331E-19	-3.192E 04	-3.192E 04	-2.351E-15
0.92379	-2.039E-04	-2.039E-04	-5.812E-20	-5.811E-20	-3.192E 04	-3.192E 04	-8.852E-16
0.89158	-1.387E-04	-1.388E-04	-1.495E-20	-1.495E-20	-3.192E 04	-3.192E 04	-2.162E-16
0.86107	-1.051E-04	-1.051E-04	-5.861E-21	-5.861E-21	-3.192E 04	-3.192E 04	-7.867E-17
0.80593	-7.083E-05	-7.084E-05	-1.537E-21	-1.537E-21	-3.192E 04	-3.192E 04	-1.826E-17
0.75999	-5.340E-05	-5.341E-05	-5.984E-22	-5.984E-22	-3.192E 04	-3.192E 04	-6.428E-18
0.72502	-4.286E-05	-4.286E-05	-2.954E-22	-2.954E-22	-3.192E 04	-3.192E 04	-2.786E-18
0.70265	-3.579E-05	-3.579E-05	-1.617E-22	-1.617E-22	-3.192E 04	-3.192E 04	-1.416E-18
0.69411	-3.073E-05	-3.073E-05	-8.896E-23	-8.896E-23	-3.192E 04	-3.192E 04	-8.430E-19
0.69990	-2.692E-05	-2.692E-05	-5.105E-23	-5.105E-23	-3.192E 04	-3.192E 04	-5.413E-19
0.71967	-2.395E-05	-2.395E-05	-2.930E-23	-2.930E-23	-3.192E 04	-3.192E 04	-3.812E-19
0.75233	-2.157E-05	-2.157E-05	-1.679E-23	-1.679E-23	-3.192E 04	-3.192E 04	-2.855E-19

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.120 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1200	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.1200	0.10000	193.643	9.995E-08	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.1200	0.20000	172.127	1.101E-07	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.1200	0.30000	150.611	1.230E-07	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.1200	0.40000	129.096	1.376E-07	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.1200	0.50000	107.580	1.584E-07	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.1200	0.60000	86.064	1.651E-07	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.1200	0.70000	64.549	3.869E-07	1.000E 00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.1200	0.80000	43.034	1.094E-06	1.000E-00	-2.620E-10	-2.620E-10	2.620E-10
0.85000	0.1200	0.85000	32.277	2.708E-06	1.000E-00	-5.081E-10	-5.081E-10	5.081E-10
0.90000	0.1200	0.90000	21.520	9.191E-06	1.000E-00	-1.290E-09	-1.290E-09	1.290E-09
0.92500	0.1200	0.92500	16.143	2.229E-05	1.000E-00	-2.376E-09	-2.376E-09	2.376E-09
0.95000	0.1200	0.95000	10.767	7.583E-05	9.999E-01	-6.024E-09	-6.024E-09	6.024E-09
0.96250	0.1200	0.96250	8.081	1.809E-04	9.999E-01	-1.184E-08	-1.184E-08	1.184E-08
0.97500	0.1200	0.97500	5.398	6.099E-04	9.997E-01	-3.575E-08	-3.575E-08	3.575E-08
0.98124	0.1200	0.98125	4.060	1.439E-03	9.995E-01	-8.267E-08	-8.267E-08	8.266E-08
0.98749	0.1200	0.98750	2.729	4.772E-03	9.990E-01	-3.376E-07	-3.376E-07	3.375E-07
0.99373	0.1201	0.99375	1.422	3.480E-02	9.973E-01	-8.940E-06	-8.944E-06	8.937E-06
0.99342	0.3118	1.00000	1.835	1.263E 02	3.053E 00	-1.955E-06	-1.954E-06	1.955E-06
0.98974	0.6040	1.00625	3.156	1.263E 02	5.978E 00	-1.992E-07	-1.992E-07	1.992E-07
0.98610	0.8983	1.01250	4.491	1.263E 02	8.921E 00	-6.293E-08	-6.292E-08	6.293E-08
0.98247	1.1949	1.01875	5.831	1.263E 02	1.183E 01	-2.857E-08	-2.857E-08	2.857E-08
0.97888	1.4936	1.02500	7.172	1.263E 02	1.470E 01	-1.674E-08	-1.674E-08	1.674E-08
0.97177	2.0976	1.03750	9.858	1.263E 02	2.035E 01	-7.186E-09	-7.186E-09	7.186E-09
0.96477	2.7104	1.05000	12.545	1.263E 02	2.586E 01	-4.383E-09	-4.383E-09	4.383E-09
0.95111	3.9628	1.07500	17.922	1.263E 02	3.649E 01	-1.941E-09	-1.941E-09	1.941E-09
0.93792	5.2511	1.10000	23.299	1.263E 02	4.664E 01	-1.072E-09	-1.072E-09	1.072E-09
0.91302	7.9358	1.15000	34.056	1.263E 02	6.562E 01	-4.518E-10	-4.518E-10	4.518E-10
0.89023	10.7645	1.20000	44.813	1.263E 02	8.302E 01	-2.396E-10	-2.396E-10	2.396E-10
0.85166	16.8384	1.30000	66.328	1.263E 02	1.138E 02	-9.833E-11	-9.833E-11	9.833E-11
0.82349	23.4066	1.40000	87.844	1.263E 02	1.402E 02	-5.183E-11	-5.183E-11	5.183E-11
0.80682	30.3417	1.50000	109.360	1.263E 02	1.630E 02	-3.214E-11	-3.214E-11	3.214E-11
0.80235	37.4603	1.60000	130.875	1.263E 02	1.831E 02	-2.154E-11	-2.154E-11	2.154E-11
0.81030	44.5483	1.70000	152.391	1.263E 02	2.007E 02	-1.452E-11	-1.452E-11	1.452E-11
0.83030	51.3964	1.80000	173.907	1.263E 02	2.164E 02	-1.024E-11	-1.024E-11	1.024E-11
0.86152	57.8357	1.90000	195.423	1.263E 02	2.304E 02	-7.226E-12	-7.226E-12	7.226E-12
0.90279	63.7560	2.00000	216.939	1.263E 02	2.431E 02	-5.157E-12	-5.157E-12	5.157E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.120 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_o	$_oT_1$-T_o	$_xT_1$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.620E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.774E-09	-6.774E-09
0.85000	5.081E-10	424.160	-2.690E-08	-2.690E-08	2.690E-08	2.690E-08	-1.313E-08	-1.313E-08
0.90000	1.290E-09	449.110	-4.717E-08	-4.717E-08	4.718E-08	4.718E-08	-3.334E-08	-3.334E-08
0.92500	2.376E-09	461.585	-6.936E-08	-6.936E-08	6.937E-08	6.937E-08	-6.143E-08	-6.143E-08
0.95000	6.024E-09	474.060	-1.176E-07	-1.176E-07	1.178E-07	1.178E-07	-1.557E-07	-1.557E-07
0.96250	1.184E-08	480.297	-1.692E-07	-1.692E-07	1.704E-07	1.704E-07	-3.062E-07	-3.062E-07
0.97500	3.576E-08	486.534	-2.933E-07	-2.933E-07	3.071E-07	3.071E-07	-9.243E-07	-9.243E-07
0.98124	8.268E-08	489.652	-4.355E-07	-4.356E-07	5.128E-07	5.128E-07	-2.137E-06	-2.137E-06
0.98749	3.376E-07	492.769	-5.799E-07	-5.800E-07	1.435E-06	1.435E-06	-8.726E-06	-8.728E-06
0.99373	8.947E-06	495.884	1.575E-05	1.575E-05	2.999E-05	2.999E-05	-2.311E-04	-2.312E-04
0.99342	1.954E-06	495.727	3.283E 00	3.283E 00	3.287E 00	3.287E 00	-5.053E-05	-5.051E-05
0.98974	1.992E-07	493.893	8.235E 00	8.235E 00	8.239E 00	8.239E 00	-5.150E-06	-5.149E-06
0.98610	6.292E-08	492.073	1.317E 01	1.317E 01	1.318E 01	1.318E 01	-1.627E-06	-1.627E-06
0.98247	2.857E-08	490.266	1.810E 01	1.810E 01	1.810E 01	1.810E 01	-7.385E-07	-7.385E-07
0.97888	1.674E-08	488.472	2.301E 01	2.301E 01	2.302E 01	2.302E 01	-4.328E-07	-4.328E-07
0.97177	7.186E-09	484.925	3.280E 01	3.280E 01	3.280E 01	3.280E 01	-1.858E-07	-1.858E-07
0.96477	4.383E-09	481.432	4.253E 01	4.253E 01	4.253E 01	4.253E 01	-1.133E-07	-1.133E-07
0.95111	1.941E-09	474.616	6.182E 01	6.182E 01	6.182E 01	6.182E 01	-5.019E-08	-5.019E-08
0.93792	1.072E-09	468.033	8.088E 01	8.088E 01	8.088E 01	8.088E 01	-2.771E-08	-2.771E-08
0.91302	4.518E-10	455.606	1.183E 02	1.183E 02	1.183E 02	1.183E 02	-1.168E-08	-1.168E-08
0.89023	2.396E-10	444.235	1.546E 02	1.546E 02	1.546E 02	1.546E 02	-6.193E-09	-6.193E-09
0.85166	9.833E-11	424.988	2.237E 02	2.237E 02	2.237E 02	2.237E 02	-2.542E-09	-2.542E-09
0.82349	5.183E-11	410.932	2.877E 02	2.877E 02	2.877E 02	2.877E 02	-1.340E-09	-1.340E-09
0.80682	3.214E-11	402.611	3.459E 02	3.459E 02	3.459E 02	3.459E 02	-8.307E-10	-8.307E-10
0.80235	2.154E-11	400.383	3.980E 02	3.980E 02	3.980E 02	3.980E 02	-5.569E-10	-5.569E-10
0.81030	1.452E-11	404.348	4.440E 02	4.440E 02	4.440E 02	4.440E 02	-3.754E-10	-3.754E-10
0.83030	1.024E-11	414.329	4.839E 02	4.839E 02	4.839E 02	4.839E 02	-2.648E-10	-2.648E-10
0.86152	7.226E-12	429.908	5.182E 02	5.182E 02	5.182E 02	5.182E 02	-1.868E-10	-1.868E-10
0.90279	5.157E-12	450.502	5.475E 02	5.475E 02	5.475E 02	5.475E 02	-1.333E-10	-1.333E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.120 θ_0= 0. ρ_0= 1.000

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-4.194E-19
0.10000	6.835E-14	5.193E-14	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-5.626E-19
0.20000	1.801E-13	1.637E-13	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-8.047E-19
0.30000	3.914E-13	3.764E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-1.265E-18
0.40000	8.235E-13	8.251E-13	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-2.141E-18
0.50000	1.662E-12	1.646E-12	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-4.286E-18
0.60000	3.760E-12	3.733E-12	-6.403E-22	-6.403E-22	-1.414E-11	-1.414E-11	-1.002E-17
0.70000	1.067E-11	1.066E-11	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-2.929E-17
0.80000	4.379E-11	4.391E-11	-6.725E-21	-6.725E-21	-8.175E-11	-8.175E-11	-1.326E-16
0.85000	1.173E-10	1.171E-10	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-3.843E-16
0.90000	4.531E-10	4.530E-10	-7.679E-20	-7.679E-20	-4.554E-10	-4.554E-10	-1.724E-15
0.92500	1.124E-09	1.123E-09	-1.775E-19	-1.775E-19	-9.049E-10	-9.049E-10	-5.250E-15
0.95000	4.341E-09	4.342E-09	-7.036E-19	-7.036E-19	-2.274E-09	-2.274E-09	-2.352E-14
0.96250	1.166E-08	1.166E-08	-2.033E-18	-2.033E-18	-4.510E-09	-4.510E-09	-6.694E-14
0.97500	5.516E-08	5.516E-08	-1.171E-17	-1.171E-17	-1.434E-08	-1.435E-08	-2.496E-13
0.98124	1.714E-07	1.715E-07	-4.555E-17	-4.556E-17	-3.749E-08	-3.749E-08	-5.963E-13
0.98749	1.110E-06	1.110E-06	-4.676E-16	-4.677E-16	-1.907E-07	-1.907E-07	-1.586E-12
0.99373	6.315E-05	6.319E-05	-2.387E-13	-2.389E-13	-2.252E-05	-2.254E-05	-2.992E-12
0.99342	-7.737E-03	-7.738E-03	-1.206E-14	-1.205E-14	-3.296E 04	-3.296E 04	-2.958E-12
0.98974	-3.926E-03	-3.926E-03	-1.927E-16	-1.927E-16	-3.296E 04	-3.296E 04	-1.122E-12
0.98610	-2.615E-03	-2.615E-03	-2.924E-17	-2.924E-17	-3.296E 04	-3.296E 04	-4.278E-13
0.98247	-1.960E-03	-1.960E-03	-8.271E-18	-8.271E-18	-3.296E 04	-3.296E 04	-1.968E-13
0.97888	-1.567E-03	-1.567E-03	-3.536E-18	-3.536E-18	-3.296E 04	-3.296E 04	-9.696E-14
0.97177	-1.119E-03	-1.119E-03	-9.268E-19	-9.268E-19	-3.296E 04	-3.296E 04	-3.351E-14
0.96477	-8.698E-04	-8.699E-04	-4.286E-19	-4.286E-19	-3.296E 04	-3.296E 04	-1.294E-14
0.95111	-6.020E-04	-6.020E-04	-1.345E-19	-1.345E-19	-3.296E 04	-3.296E 04	-3.436E-15
0.93792	-4.603E-04	-4.603E-04	-5.868E-20	-5.868E-20	-3.296E 04	-3.296E 04	-1.289E-15
0.91302	-3.129E-04	-3.129E-04	-1.505E-20	-1.505E-20	-3.296E 04	-3.296E 04	-3.136E-16
0.89023	-2.371E-04	-2.371E-04	-5.891E-21	-5.891E-21	-3.296E 04	-3.296E 04	-1.139E-16
0.85166	-1.596E-04	-1.596E-04	-1.542E-21	-1.542E-21	-3.296E 04	-3.296E 04	-2.640E-17
0.82349	-1.203E-04	-1.203E-04	-5.999E-22	-5.999E-22	-3.296E 04	-3.296E 04	-9.283E-18
0.80682	-9.657E-05	-9.657E-05	-2.960E-22	-2.960E-22	-3.296E 04	-3.296E 04	-4.022E-18
0.80235	-8.064E-05	-8.064E-05	-1.620E-22	-1.620E-22	-3.296E 04	-3.296E 04	-2.043E-18
0.81030	-6.922E-05	-6.922E-05	-8.912E-23	-8.912E-23	-3.296E 04	-3.296E 04	-1.216E-18
0.83030	-6.063E-05	-6.063E-05	-5.114E-23	-5.114E-23	-3.296E 04	-3.296E 04	-7.804E-19
0.86152	-5.394E-05	-5.394E-05	-2.935E-23	-2.935E-23	-3.296E 04	-3.296E 04	-5.495E-19
0.90279	-4.858E-05	-4.858E-05	-1.682E-23	-1.682E-23	-3.296E 04	-3.296E 04	-4.115E-19

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.150 θ_0= 0. ρ_0= 1.000

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.1500	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.1500	0.10000	193.643	1.857E-07	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.1500	0.20000	172.127	1.955E-07	1.000E 00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.1500	0.30000	150.612	2.084E-07	1.000E 00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.1500	0.40000	129.096	2.259E-07	1.000E 00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.1500	0.50000	107.580	2.501E-07	1.000E 00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.1500	0.60000	86.065	2.568E-07	1.000E 00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.1500	0.70000	64.549	5.269E-07	1.000E-00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.1500	0.80000	43.035	1.334E-06	1.000E-00	-2.620E-10	-2.620E-10	2.620E-10
0.85000	0.1500	0.85000	32.278	3.208E-06	1.000E-00	-5.080E-10	-5.080E-10	5.080E-10
0.90000	0.1500	0.90000	21.523	1.086E-05	1.000E-00	-1.289E-09	-1.289E-09	1.289E-09
0.92500	0.1500	0.92500	16.146	2.625E-05	9.999E-01	-2.376E-09	-2.376E-09	2.376E-09
0.95000	0.1500	0.95000	10.772	8.917E-05	9.998E-01	-6.019E-09	-6.019E-09	6.019E-09
0.96250	0.1500	0.96250	8.088	2.125E-04	9.997E-01	-1.181E-08	-1.181E-08	1.181E-08
0.97500	0.1500	0.97500	5.409	7.143E-04	9.993E-01	-3.556E-08	-3.556E-08	3.556E-08
0.98124	0.1500	0.98125	4.074	1.679E-03	9.988E-01	-8.195E-08	-8.196E-08	8.195E-08
0.98749	0.1500	0.98750	2.749	5.514E-03	9.977E-01	-3.284E-07	-3.285E-07	3.284E-07
0.99373	0.1501	0.99375	1.461	3.833E-02	9.952E-01	-7.547E-06	-7.547E-06	7.541E-06
0.99479	0.3550	1.00000	1.740	1.113E 02	2.875E 00	-2.427E-06	-2.426E-06	2.428E-06
0.99255	0.6916	1.00625	3.043	1.113E 02	6.721E 00	-2.244E-07	-2.243E-07	2.244E-07
0.99036	1.0298	1.01250	4.372	1.113E 02	1.039E 01	-6.786E-08	-6.786E-08	6.786E-08
0.98819	1.3694	1.01875	5.708	1.113E 02	1.388E 01	-3.044E-08	-3.044E-08	3.045E-08
0.98607	1.7105	1.02500	7.048	1.113E 02	1.732E 01	-1.756E-08	-1.756E-08	1.756E-08
0.98192	2.3971	1.03750	9.731	1.113E 02	2.405E 01	-7.442E-09	-7.442E-09	7.442E-09
0.97791	3.0894	1.05000	12.417	1.113E 02	3.062E 01	-4.485E-09	-4.485E-09	4.485E-09
0.97033	4.4906	1.07500	17.792	1.113E 02	4.330E 01	-1.970E-09	-1.970E-09	1.970E-09
0.96334	5.9131	1.10000	23.169	1.113E 02	5.539E 01	-1.084E-09	-1.084E-09	1.084E-09
0.95117	8.8162	1.15000	33.925	1.113E 02	7.801E 01	-4.558E-10	-4.558E-10	4.558E-10
0.94151	11.7868	1.20000	44.681	1.113E 02	9.873E 01	-2.412E-10	-2.412E-10	2.412E-10
0.92997	17.8719	1.30000	66.196	1.113E 02	1.354E 02	-9.875E-11	-9.875E-11	9.875E-11
0.92912	24.0385	1.40000	87.711	1.113E 02	1.668E 02	-5.200E-11	-5.200E-11	5.200E-11
0.93898	30.1457	1.50000	109.227	1.113E 02	1.941E 02	-3.221E-11	-3.221E-11	3.221E-11
0.95922	36.0606	1.60000	130.743	1.113E 02	2.179E 02	-2.159E-11	-2.159E-11	2.159E-11
0.98920	41.6742	1.70000	152.258	1.113E 02	2.389E 02	-1.455E-11	-1.455E-11	1.455E-11
1.02807	46.9107	1.80000	173.774	1.113E 02	2.576E 02	-1.027E-11	-1.027E-11	1.027E-11
1.07487	51.7289	1.90000	195.290	1.113E 02	2.744E 02	-7.242E-12	-7.242E-12	7.242E-12
1.12862	56.1169	2.00000	216.806	1.113E 02	2.894E 02	-5.168E-12	-5.168E-12	5.168E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.150 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1_0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.144E-10	-3.144E-10	3.144E-10	3.144E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.62GE-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.773E-09	-6.773E-09
0.85000	5.080E-10	424.160	-2.690E-08	-2.690E-08	2.690E-08	2.690E-08	-1.313E-08	-1.313E-08
0.90000	1.289E-09	449.110	-4.717E-08	-4.717E-08	4.717E-08	4.717E-08	-3.333E-08	-3.333E-08
0.92500	2.376E-09	461.585	-6.934E-08	-6.934E-08	6.936E-08	6.936E-08	-6.141E-08	-6.141E-08
0.95000	6.019E-09	474.060	-1.175E-07	-1.175E-07	1.178E-07	1.178E-07	-1.556E-07	-1.556E-07
0.96250	1.184E-08	480.297	-1.689E-07	-1.689E-07	1.705E-07	1.705E-07	-3.054E-07	-3.054E-07
0.97500	3.557E-08	486.534	-2.902E-07	-2.902E-07	3.091E-07	3.091E-07	-9.194E-07	-9.194E-07
0.98124	8.196E-08	489.652	-4.197E-07	-4.197E-07	5.248E-07	5.248E-07	-2.119E-06	-2.119E-06
0.98749	3.285E-07	492.770	-4.244E-07	-4.245E-07	1.566E-06	1.566E-06	-8.491E-06	-8.492E-06
0.99373	7.549E-06	495.884	2.131E-05	2.130E-05	3.419E-05	3.419E-05	-1.950E-04	-1.951E-04
0.99479	2.426E-06	496.410	2.600E 00	2.600E 00	2.604E 00	2.604E 00	-6.275E-05	-6.272E-05
0.99255	2.243E-07	495.296	6.832E 00	6.832E 00	6.837E 00	6.837E 00	-5.800E-06	-5.799E-06
0.99036	6.786E-08	494.200	1.105E 01	1.105E 01	1.105E 01	1.105E 01	-1.754E-06	-1.754E-06
0.98819	3.044E-08	493.121	1.525E 01	1.525E 01	1.525E 01	1.525E 01	-7.870E-07	-7.870E-07
0.98607	1.756E-08	492.059	1.943E 01	1.943E 01	1.943E 01	1.943E 01	-4.539E-07	-4.539E-07
0.98192	7.442E-09	489.988	2.773E 01	2.773E 01	2.774E 01	2.774E 01	-1.924E-07	-1.924E-07
0.97791	4.485E-09	487.988	3.597E 01	3.597E 01	3.598E 01	3.598E 01	-1.159E-07	-1.159E-07
0.97033	1.97CE-09	484.205	5.223E 01	5.223E 01	5.223E 01	5.223E 01	-5.093E-08	-5.093E-08
0.96334	1.084E-09	480.716	6.819E 01	6.819E 01	6.820E 01	6.820E 01	-2.803E-08	-2.803E-08
0.95117	4.558E-10	474.645	9.922E 01	9.922E 01	9.922E 01	9.922E 01	-1.178E-08	-1.178E-08
0.94151	2.412E-10	469.822	1.290E 02	1.290E 02	1.290E 02	1.290E 02	-6.234E-09	-6.234E-09
0.92997	9.875E-11	464.068	1.846E 02	1.846E 02	1.846E 02	1.846E 02	-2.553E-09	-2.553E-09
0.92912	5.200E-11	463.643	2.350E 02	2.350E 02	2.350E 02	2.350E 02	-1.344E-09	-1.344E-09
0.93898	3.221E-11	468.563	2.800E 02	2.800E 02	2.800E 02	2.800E 02	-8.328E-10	-8.328E-10
0.95922	2.159E-11	478.662	3.198E 02	3.198E 02	3.198E 02	3.198E 02	-5.582E-10	-5.582E-10
0.98920	1.455E-11	493.623	3.547E 02	3.547E 02	3.547E 02	3.547E 02	-3.762E-10	-3.762E-10
1.02807	1.027E-11	513.021	3.852E 02	3.852E 02	3.852E 02	3.852E 02	-2.654E-10	-2.654E-10
1.07487	7.242E-12	536.375	4.117E 02	4.117E 02	4.117E 02	4.117E 02	-1.872E-10	-1.872E-10
1.12862	5.168E-12	563.192	4.348E 02	4.348E 02	4.348E 02	4.348E 02	-1.336E-10	-1.336E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.150 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-6.553E-19
0.10000	7.411E-14	7.217E-14	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-8.791E-19
0.20000	2.162E-13	2.219E-13	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-1.257E-18
0.30000	4.851E-13	4.775E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-1.976E-18
0.40000	1.048E-12	1.048E-12	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-3.346E-18
0.50000	2.067E-12	2.067E-12	-3.111E-22	-3.111E-22	-7.447E-12	-7.447E-12	-6.697E-18
0.60000	4.655E-12	4.690E-12	-6.402E-22	-6.402E-22	-1.414E-11	-1.414E-11	-1.566E-17
0.70000	1.330E-11	1.334E-11	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-4.577E-17
0.80000	5.476E-11	5.490E-11	-6.724E-21	-6.724E-21	-8.175E-11	-8.175E-11	-2.072E-16
0.85000	1.466E-10	1.466E-10	-1.790E-20	-1.790E-20	-1.652E-10	-1.652E-10	-6.003E-16
0.90000	5.664E-10	5.665E-10	-7.676E-20	-7.676E-20	-4.553E-10	-4.553E-10	-2.692E-15
0.92500	1.408E-09	1.404E-09	-1.774E-19	-1.774E-19	-9.046E-10	-9.046E-10	-8.196E-15
0.95000	5.423E-09	5.423E-09	-7.026E-19	-7.027E-19	-2.272E-09	-2.272E-09	-3.668E-14
0.96250	1.452E-08	1.452E-08	-2.025E-18	-2.025E-18	-4.502E-09	-4.503E-09	-1.043E-13
0.97500	6.847E-08	6.847E-08	-1.161E-17	-1.162E-17	-1.428E-08	-1.428E-08	-3.876E-13
0.98124	2.127E-07	2.127E-07	-4.492E-17	-4.492E-17	-3.714E-08	-3.715E-08	-9.211E-13
0.98749	1.347E-06	1.347E-06	-4.464E-16	-4.465E-16	-1.850E-07	-1.851E-07	-2.435E-12
0.99373	6.427E-05	6.431E-05	-1.706E-13	-1.707E-13	-1.708E-05	-1.710E-05	-4.707E-12
0.99479	-2.046E-03	-2.046E-03	-1.818E-14	-1.817E-14	-3.792E 04	-3.792E 04	-5.129E-12
0.99255	-9.100E-04	-9.101E-04	-2.346E-16	-2.345E-16	-3.792E 04	-3.792E 04	-1.937E-12
0.99036	-5.864E-04	-5.864E-04	-3.306E-17	-3.306E-17	-3.792E 04	-3.792E 04	-7.285E-13
0.98819	-4.364E-04	-4.364E-04	-9.129E-18	-9.128E-18	-3.792E 04	-3.792E 04	-3.279E-13
0.98607	-3.477E-04	-3.477E-04	-3.815E-18	-3.815E-18	-3.792E 04	-3.792E 04	-1.605E-13
0.98192	-2.473E-04	-2.473E-04	-9.791E-19	-9.791E-19	-3.792E 04	-3.792E 04	-5.466E-14
0.97791	-1.919E-04	-1.919E-04	-4.442E-19	-4.442E-19	-3.792E 04	-3.792E 04	-2.101E-14
0.97033	-1.326E-04	-1.326E-04	-1.373E-19	-1.373E-19	-3.792E 04	-3.792E 04	-5.526E-15
0.96334	-1.013E-04	-1.013E-04	-5.979E-20	-5.979E-20	-3.792E 04	-3.792E 04	-2.059E-15
0.95117	-6.880E-05	-6.880E-05	-1.524E-20	-1.524E-20	-3.792E 04	-3.792E 04	-4.971E-16
0.94151	-5.209E-05	-5.209E-05	-5.949E-21	-5.949E-21	-3.792E 04	-3.792E 04	-1.800E-16
0.92997	-3.506E-05	-3.506E-05	-1.552E-21	-1.552E-21	-3.792E 04	-3.792E 04	-4.157E-17
0.92912	-2.642E-05	-2.643E-05	-6.028E-22	-6.028E-22	-3.792E 04	-3.792E 04	-1.459E-17
0.93898	-2.120E-05	-2.120E-05	-2.971E-22	-2.971E-22	-3.792E 04	-3.792E 04	-6.315E-18
0.95922	-1.770E-05	-1.770E-05	-1.626E-22	-1.626E-22	-3.792E 04	-3.792E 04	-3.203E-18
0.98920	-1.519E-05	-1.520E-05	-8.943E-23	-8.943E-23	-3.792E 04	-3.792E 04	-1.906E-18
1.02807	-1.331E-05	-1.331E-05	-5.132E-23	-5.132E-23	-3.792E 04	-3.792E 04	-1.222E-18
1.07487	-1.184E-05	-1.184E-05	-2.945E-23	-2.945E-23	-3.792E 04	-3.792E 04	-8.603E-19
1.12862	-1.066E-05	-1.066E-05	-1.688E-23	-1.688E-23	-3.792E 04	-3.792E 04	-6.440E-19

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.200 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.2000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.2000	0.10000	193.643	4.313E-07	1.000E 00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.2000	0.20000	172.127	4.411E-07	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.2000	0.30000	150.612	4.561E-07	1.000E-00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.2000	0.40000	129.096	4.853E-07	1.000E-00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.2000	0.50000	107.581	5.253E-07	1.000E-00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.2000	0.60000	86.066	5.336E-07	1.000E-00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.2000	0.70000	64.551	9.205E-07	1.000E-00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.2000	0.80000	43.037	2.074E-06	1.000E-00	-2.620E-10	-2.620E-10	2.620E-10
0.85000	0.2000	0.85000	32.281	4.776E-06	1.000E-00	-5.079E-10	-5.079E-10	5.079E-10
0.90000	0.2000	0.90000	21.528	1.553E-05	9.999E-01	-1.288E-09	-1.288E-09	1.288E-09
0.92500	0.2000	0.92500	16.153	3.727E-05	9.998E-01	-2.374E-09	-2.374E-09	2.374E-09
0.95000	0.2000	0.95000	10.783	1.258E-04	9.996E-01	-6.007E-09	-6.007E-09	6.007E-09
0.96250	0.2000	0.96250	8.103	2.989E-04	9.993E-01	-1.175E-08	-1.175E-08	1.175E-08
0.97500	0.2000	0.97500	5.431	9.983E-04	9.984E-01	-3.516E-08	-3.516E-08	3.515E-08
0.98124	0.2000	0.98125	4.104	2.327E-03	9.974E-01	-8.043E-08	-8.043E-08	8.042E-08
0.98749	0.2001	0.98750	2.793	7.489E-03	9.954E-01	-3.097E-07	-3.097E-07	3.096E-07
0.99373	0.2002	0.99375	1.543	4.732E-02	9.946E-01	-5.341E-06	-5.343E-06	5.340E-06
0.99735	0.3732	1.00000	1.511	8.232E 01	2.219E 00	-6.105E-06	-6.102E-06	6.106E-06
0.99823	0.7286	1.00625	2.760	8.232E 01	6.363E 00	-3.236E-07	-3.236E-07	3.237E-07
0.99914	1.0833	1.01250	4.071	8.232E 01	9.242E 00	-8.213E-08	-8.212E-08	8.213E-08
1.00009	1.4374	1.01875	5.398	8.232E 01	1.269E 01	-3.576E-08	-3.576E-08	3.576E-08
1.00107	1.7908	1.02500	6.732	8.232E 01	1.608E 01	-1.980E-08	-1.980E-08	1.980E-08
1.00316	2.4955	1.03750	9.410	8.232E 01	2.270E 01	-8.130E-09	-8.130E-09	8.130E-09
1.00540	3.1971	1.05000	12.093	8.232E 01	2.916E 01	-4.753E-09	-4.753E-09	4.753E-09
1.01033	4.5904	1.07500	17.464	8.232E 01	4.161E 01	-2.045E-09	-2.045E-09	2.045E-09
1.01585	5.9694	1.10000	22.839	8.232E 01	5.348E 01	-1.117E-09	-1.117E-09	1.117E-09
1.02863	8.6791	1.15000	33.593	8.232E 01	7.569E 01	-4.658E-10	-4.658E-10	4.658E-10
1.04365	11.3166	1.20000	44.349	8.232E 01	9.604E 01	-2.452E-10	-2.452E-10	2.452E-10
1.08002	16.3453	1.30000	65.863	8.232E 01	1.320E 02	-9.982E-11	-9.982E-11	9.982E-11
1.12414	21.0.31	1.40000	87.378	8.232E 01	1.629E 02	-5.244E-11	-5.244E-11	5.244E-11
1.17513	25.3023	1.50000	108.893	8.232E 01	1.896E 02	-3.242E-11	-3.242E-11	3.242E-11
1.23214	29.2150	1.60000	130.409	8.232E 01	2.130E 02	-2.173E-11	-2.173E-11	2.173E-11
1.29438	32.7667	1.70000	151.924	8.232E 01	2.337E 02	-1.463E-11	-1.463E-11	1.463E-11
1.36113	35.9815	1.80000	173.440	8.232E 01	2.521E 02	-1.032E-11	-1.032E-11	1.032E-11
1.43175	38.8875	1.90000	194.956	8.232E 01	2.685E 02	-7.281E-12	-7.281E-12	7.281E-12
1.50571	41.5143	2.00000	216.471	8.232E 01	2.833E 02	-5.195E-12	-5.195E-12	5.195E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.200 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.620E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.773E-09	-6.773E-09
0.85000	5.079E-10	424.160	-2.690E-08	-2.690E-08	2.690E-08	2.690E-08	-1.313E-08	-1.313E-08
0.90000	1.288E-09	449.110	-4.716E-08	-4.716E-08	4.717E-08	4.717E-08	-3.331E-08	-3.331E-08
0.92500	2.374E-09	461.585	-6.930E-08	-6.930E-08	6.935E-08	6.935E-08	-6.136E-08	-6.136E-08
0.95000	6.007E-09	474.060	-1.173E-07	-1.173E-07	1.178E-07	1.178E-07	-1.553E-07	-1.553E-07
0.96250	1.175E-08	480.297	-1.678E-07	-1.678E-07	1.710E-07	1.710E-07	-3.037E-07	-3.037E-07
0.97500	3.516E-08	486.534	-2.798E-07	-2.799E-07	3.168E-07	3.168E-07	-9.088E-07	-9.088E-07
0.98124	8.044E-08	489.652	-3.672E-07	-3.672E-07	5.691E-07	5.692E-07	-2.079E-06	-2.079E-06
0.98749	3.097E-07	492.769	8.318E-08	8.312E-08	2.021E-06	2.022E-06	-8.005E-06	-8.006E-06
0.99373	5.344E-06	495.884	3.694E-05	3.694E-05	4.761E-05	4.761E-05	-1.381E-04	-1.381E-04
0.99735	6.101E-06	497.691	1.318E 00	1.318E 00	1.324E 00	1.324E 00	-1.578E-04	-1.577E-04
0.99823	3.236E-07	498.126	4.001E 00	4.001E 00	4.007E 00	4.007E 00	-8.367E-06	-8.365E-06
0.99914	8.212E-08	498.581	6.665E 00	6.665E 00	6.671E 00	6.671E 00	-2.123E-06	-2.123E-06
1.00009	3.576E-08	499.055	9.310E 00	9.310E 00	9.316E 00	9.316E 00	-9.245E-07	-9.244E-07
1.00107	1.980E-08	499.548	1.194E 01	1.194E 01	1.194E 01	1.194E 01	-5.118E-07	-5.118E-07
1.00316	8.130E-09	500.590	1.713E 01	1.713E 01	1.714E 01	1.714E 01	-2.102E-07	-2.102E-07
1.00540	4.753E-09	501.708	2.225E 01	2.225E 01	2.226E 01	2.226E 01	-1.229E-07	-1.229E-07
1.01033	2.045E-09	504.168	3.227E 01	3.227E 01	3.227E 01	3.227E 01	-5.287E-08	-5.286E-08
1.01585	1.117E-09	506.923	4.199E 01	4.199E 01	4.199E 01	4.199E 01	-2.886E-08	-2.886E-08
1.02863	4.658E-10	513.298	6.056E 01	6.056E 01	6.057E 01	6.057E 01	-1.204E-08	-1.204E-08
1.04365	2.452E-10	520.793	7.802E 01	7.802E 01	7.802E 01	7.802E 01	-6.340E-09	-6.340E-09
1.08002	9.982E-11	538.943	1.098E 02	1.098E 02	1.098E 02	1.098E 02	-2.581E-09	-2.581E-09
1.12414	5.244E-11	560.959	1.377E 02	1.377E 02	1.377E 02	1.377E 02	-1.356E-09	-1.356E-09
1.17513	3.242E-11	586.404	1.621E 02	1.621E 02	1.621E 02	1.621E 02	-8.380E-10	-8.380E-10
1.23214	2.173E-11	614.854	1.836E 02	1.836E 02	1.836E 02	1.836E 02	-5.617E-10	-5.617E-10
1.29438	1.463E-11	645.911	2.024E 02	2.024E 02	2.024E 02	2.024E 02	-3.783E-10	-3.783E-10
1.36113	1.032E-11	679.218	2.190E 02	2.190E 02	2.190E 02	2.190E 02	-2.668E-10	-2.668E-10
1.43175	7.281E-12	714.461	2.337E 02	2.337E 02	2.337E 02	2.337E 02	-1.882E-10	-1.882E-10
1.50571	5.195E-12	751.366	2.467E 02	2.467E 02	2.467E 02	2.467E 02	-1.343E-10	-1.343E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.200 θ_D= 0. ρ_a= 1.000

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.165E-18
0.10000	1.054E-13	1.054E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-1.563E-18
0.20000	2.977E-13	3.000E-13	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-2.235E-18
0.30000	6.442E-13	6.442E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-3.514E-18
0.40000	1.377E-12	1.381E-12	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-5.948E-18
0.50000	2.756E-12	2.760E-12	-3.111E-22	-3.111E-22	-7.446E-12	-7.446E-12	-1.191E-17
0.60000	6.222E-12	6.237E-12	-6.402E-22	-6.402E-22	-1.414E-11	-1.414E-11	-2.784E-17
0.70000	1.777E-11	1.776E-11	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-8.136E-17
0.80000	7.320E-11	7.323E-11	-6.723E-21	-6.723E-21	-8.174E-11	-8.174E-11	-3.683E-16
0.85000	1.957E-10	1.957E-10	-1.789E-20	-1.789E-20	-1.652E-10	-1.652E-10	-1.067E-15
0.90000	7.563E-10	7.561E-10	-7.670E-20	-7.670E-20	-4.551E-10	-4.551E-10	-4.782E-15
0.92500	1.876E-09	1.874E-09	-1.772E-19	-1.772E-19	-9.040E-10	-9.040E-10	-1.454E-14
0.95000	7.226E-09	7.226E-09	-7.005E-19	-7.005E-19	-2.268E-09	-2.268E-09	-6.494E-14
0.96250	1.952E-08	1.952E-08	-2.007E-18	-2.007E-18	-4.486E-09	-4.486E-09	-1.845E-13
0.97500	9.040E-08	9.041E-08	-1.141E-17	-1.141E-17	-1.413E-08	-1.413E-08	-6.801E-13
0.98124	2.774E-07	2.774E-07	-4.357E-17	-4.357E-17	-3.639E-08	-3.639E-08	-1.597E-12
0.98749	1.653E-06	1.653E-06	-4.040E-16	-4.041E-16	-1.735E-07	-1.736E-07	-4.173E-12
0.99373	5.901E-05	5.904E-05	-8.616E-14	-8.623E-14	-9.980E-06	-9.987E-06	-8.522E-12
0.99735	9.252E-03	9.252E-03	-1.122E-13	-1.121E-13	-4.771E 04	-4.771E 04	-8.445E-12
0.99823	3.100E-03	3.100E-03	-4.354E-16	-4.353E-16	-4.771E 04	-4.771E 04	-4.289E-12
0.99914	2.118E-03	2.118E-03	-4.507E-17	-4.507E-17	-4.771E 04	-4.771E 04	-1.643E-12
1.00009	1.533E-03	1.533E-03	-1.171E-17	-1.171E-17	-4.771E 04	-4.771E 04	-6.938E-13
1.00107	1.202E-03	1.202E-03	-4.623E-18	-4.622E-18	-4.771E 04	-4.771E 04	-3.330E-13
1.00316	8.413E-04	8.413E-04	-1.125E-18	-1.125E-18	-4.771E 04	-4.771E 04	-1.088E-13
1.00540	6.472E-04	6.472E-04	-4.863E-19	-4.862E-19	-4.771E 04	-4.771E 04	-4.131E-14
1.01033	4.430E-04	4.430E-04	-1.445E-19	-1.445E-19	-4.771E 04	-4.771E 04	-1.058E-14
1.01585	3.368E-04	3.368E-04	-6.270E-20	-6.270E-20	-4.771E 04	-4.771E 04	-3.874E-15
1.02863	2.276E-04	2.276E-04	-1.574E-20	-1.574E-20	-4.771E 04	-4.771E 04	-9.171E-16
1.04365	1.719E-04	1.719E-04	-6.098E-21	-6.098E-21	-4.771E 04	-4.771E 04	-3.291E-16
1.08002	1.154E-04	1.154E-04	-1.577E-21	-1.577E-21	-4.771E 04	-4.771E 04	-7.536E-17
1.12414	8.687E-05	8.687E-05	-6.102E-22	-6.102E-22	-4.771E 04	-4.771E 04	-2.631E-17
1.17513	6.965E-05	6.965E-05	-2.999E-22	-2.999E-22	-4.771E 04	-4.771E 04	-1.136E-17
1.23214	5.812E-05	5.812E-05	-1.641E-22	-1.641E-22	-4.771E 04	-4.771E 04	-5.747E-18
1.29438	4.987E-05	4.987E-05	-9.020E-23	-9.020E-23	-4.771E 04	-4.771E 04	-3.414E-18
1.36113	4.367E-05	4.367E-05	-5.176E-23	-5.176E-23	-4.771E 04	-4.771E 04	-2.186E-18
1.43175	3.884E-05	3.884E-05	-2.970E-23	-2.970E-23	-4.771E 04	-4.771E 04	-1.537E-18
1.50571	3.497E-05	3.497E-05	-1.703E-23	-1.703E-23	-4.771E 04	-4.771E 04	-1.150E-18

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.250 θ_D= 0. ρ_a= 1.002

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.2500	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.2500	0.10000	193.643	2.835E-08	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.2500	0.20000	172.128	4.336E-08	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.2500	0.30000	150.612	6.170E-08	1.000E-00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.2500	0.40000	129.097	1.051E-07	1.000E-00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.2500	0.50000	107.582	1.534E-07	1.000E-00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.2500	0.60000	86.067	1.701E-07	1.000E-00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.2500	0.70000	64.552	6.737E-07	1.000E-00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.2500	0.80000	43.040	2.214E-06	1.000E-00	-2.619E-10	-2.619E-10	2.619E-10
0.85000	0.2500	0.85000	32.286	5.723E-06	9.999E-01	-5.078E-10	-5.078E-10	5.078E-10
0.90000	0.2500	0.90000	21.535	1.996E-05	9.998E-01	-1.287E-09	-1.287E-09	1.287E-09
0.92500	0.2500	0.92500	16.162	4.861E-05	9.997E-01	-2.371E-09	-2.371E-09	2.371E-09
0.95000	0.2500	0.95000	10.797	1.651E-04	9.993E-01	-5.992E-09	-5.992E-09	5.992E-09
0.96250	0.2500	0.96250	8.122	3.917E-04	9.987E-01	-1.166E-08	-1.166E-08	1.166E-08
0.97500	0.2500	0.97500	5.459	1.300E-03	9.974E-01	-3.464E-08	-3.464E-08	3.464E-08
0.98124	0.2500	0.98125	4.141	3.004E-03	9.959E-01	-7.852E-08	-7.853E-08	7.852E-08
0.98749	0.2501	0.98750	2.849	9.421E-03	9.934E-01	-2.875E-07	-2.875E-07	2.874E-07
0.99373	0.2502	0.99375	1.642	5.356E-02	9.970E-01	-3.514E-06	-3.516E-06	3.514E-06
0.99964	0.3045	1.00000	1.146	3.838E 01	1.248E 00	-4.636E-05	-4.633E-05	4.637E-05
1.00453	0.5256	1.00625	2.205	3.855E 01	4.061E 00	-8.451E-07	-8.449E-07	8.452E-07
1.00944	0.7452	1.01250	3.469	3.857E 01	6.575E 00	-1.434E-07	-1.434E-07	1.434E-07
1.01437	0.9628	1.01875	4.776	3.857E 01	9.476E 00	-5.253E-08	-5.253E-08	5.253E-08
1.01931	1.1784	1.02500	6.100	3.857E 01	1.236E 01	-2.518E-08	-2.518E-08	2.519E-08
1.02923	1.6033	1.03750	8.767	3.857E 01	1.805E 01	-9.703E-09	-9.703E-09	9.703E-09
1.03921	2.0402	1.05000	11.445	3.857E 01	2.361E 01	-5.337E-09	-5.337E-09	5.337E-09
1.05934	2.8302	1.07500	16.811	3.857E 01	3.435E 01	-2.203E-09	-2.203E-09	2.203E-09
1.07966	3.6099	1.10000	22.184	3.857E 01	4.461E 01	-1.196E-09	-1.196E-09	1.196E-09
1.12088	5.0837	1.15000	32.935	3.857E 01	6.379E 01	-4.865E-10	-4.865E-10	4.865E-10
1.16279	6.4522	1.20000	43.690	3.857E 01	8.137E 01	-2.535E-10	-2.535E-10	2.535E-10
1.24840	8.9401	1.30000	65.202	3.857E 01	1.125E 02	-1.020E-10	-1.020E-10	1.020E-10
1.33601	11.0492	1.40000	86.716	3.857E 01	1.392E 02	-5.331E-11	-5.331E-11	5.331E-11
1.42526	12.9228	1.50000	108.231	3.857E 01	1.623E 02	-3.282E-11	-3.282E-11	3.282E-11
1.51584	14.5740	1.60000	129.747	3.857E 01	1.825E 02	-2.200E-11	-2.200E-11	2.200E-11
1.60754	16.0380	1.70000	151.262	3.857E 01	2.003E 02	-1.479E-11	-1.479E-11	1.479E-11
1.70018	17.3431	1.80000	172.777	3.857E 01	2.162E 02	-1.043E-11	-1.043E-11	1.043E-11
1.79361	18.5129	1.90000	194.293	3.857E 01	2.304E 02	-7.360E-12	-7.360E-12	7.360E-12
1.88771	19.5665	2.00000	215.809	3.857E 01	2.432E 02	-5.249E-12	-5.249E-12	5.249E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.250 θ_D= 0. ρ_0= 1.002

z	$_x\mu$-10	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.587E-10	-8.587E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.619E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.772E-09	-6.772E-09
0.85000	5.078E-10	424.160	-2.690E-08	-2.690E-08	2.690E-08	2.690E-08	-1.313E-08	-1.313E-08
0.90000	1.287E-09	449.110	-4.714E-08	-4.714E-08	4.716E-08	4.716E-08	-3.328E-08	-3.328E-08
0.92500	2.371E-09	461.585	-6.925E-08	-6.925E-08	6.933E-08	6.934E-08	-6.130E-08	-6.130E-08
0.95000	5.992E-09	474.060	-1.169E-07	-1.169E-07	1.179E-07	1.179E-07	-1.549E-07	-1.549E-07
0.96250	1.166E-08	480.297	-1.662E-07	-1.662E-07	1.719E-07	1.719E-07	-3.015E-07	-3.015E-07
0.97500	3.464E-08	486.534	-2.653E-07	-2.653E-07	3.280E-07	3.280E-07	-8.955E-07	-8.955E-07
0.98124	7.853E-08	489.652	-2.948E-07	-2.948E-07	6.312E-07	6.312E-07	-2.030E-06	-2.030E-06
0.98749	2.875E-07	492.769	7.272E-07	7.272E-07	2.603E-06	2.603E-06	-7.431E-06	-7.432E-06
0.99373	3.516E-06	495.884	4.978E-05	4.978E-05	5.855E-05	5.855E-05	-9.085E-05	-9.088E-05
0.99964	4.632E-05	498.832	1.750E-01	1.750E-01	1.839E-01	1.839E-01	-1.198E-03	-1.198E-03
1.00453	8.448E-07	501.273	8.535E-01	8.535E-01	8.624E-01	8.624E-01	-2.185E-05	-2.184E-05
1.00944	1.436E-07	503.722	1.522E 00	1.522E 00	1.531E 00	1.531E 00	-3.706E-06	-3.706E-06
1.01437	5.253E-08	506.180	2.183E 00	2.183E 00	2.192E 00	2.192E 00	-1.358E-06	-1.358E-06
1.01931	2.518E-08	508.646	2.837E 00	2.837E 00	2.846E 00	2.846E 00	-6.511E-07	-6.510E-07
1.02923	9.703E-09	513.599	4.122E 00	4.122E 00	4.131E 00	4.131E 00	-2.508E-07	-2.508E-07
1.03921	5.337E-09	518.579	5.379E 00	5.379E 00	5.388E 00	5.388E 00	-1.380E-07	-1.380E-07
1.05934	2.203E-09	528.621	7.812E 00	7.812E 00	7.821E 00	7.821E 00	-5.694E-08	-5.694E-08
1.07966	1.196E-09	538.764	1.014E 01	1.014E 01	1.015E 01	1.015E 01	-3.091E-08	-3.091E-08
1.12088	4.865E-10	559.334	1.452E 01	1.452E 01	1.453E 01	1.453E 01	-1.258E-08	-1.258E-08
1.16279	2.535E-10	580.248	1.856E 01	1.856E 01	1.857E 01	1.857E 01	-6.554E-09	-6.554E-09
1.24840	1.026E-10	622.968	2.574E 01	2.574E 01	2.575E 01	2.575E 01	-2.637E-09	-2.637E-09
1.33601	5.331E-11	666.686	3.193E 01	3.193E 01	3.193E 01	3.193E 01	-1.378E-09	-1.378E-09
1.42526	3.282E-11	711.219	3.729E 01	3.729E 01	3.730E 01	3.730E 01	-8.484E-10	-8.484E-10
1.51584	2.200E-11	756.422	4.199E 01	4.199E 01	4.200E 01	4.200E 01	-5.687E-10	-5.687E-10
1.60754	1.479E-11	802.183	4.613E 01	4.613E 01	4.614E 01	4.614E 01	-3.823E-10	-3.823E-10
1.70018	1.043E-11	848.410	4.981E 01	4.981E 01	4.982E 01	4.982E 01	-2.697E-10	-2.697E-10
1.79361	7.360E-12	895.032	5.309E 01	5.309E 01	5.309E 01	5.309E 01	-1.903E-10	-1.903E-10
1.88771	5.249E-12	941.990	5.600E 01	5.600E 01	5.601E 01	5.601E 01	-1.357E-10	-1.357E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.250 θ_D= 0. ρ_0= 1.002

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.820E-18
0.10000	1.394E-13	1.337E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-2.442E-18
0.20000	3.835E-13	3.765E-13	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-3.492E-18
0.30000	8.133E-13	8.133E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-5.490E-18
0.40000	1.738E-12	1.738E-12	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-9.294E-18
0.50000	3.435E-12	3.441E-12	-3.111E-22	-3.111E-22	-7.446E-12	-7.446E-12	-1.860E-17
0.60000	7.805E-12	7.815E-12	-6.402E-22	-6.402E-22	-1.414E-11	-1.414E-11	-4.349E-17
0.70000	2.224E-11	2.226E-11	-1.680E-21	-1.680E-21	-2.990E-11	-2.990E-11	-1.271E-16
0.80000	9.159E-11	9.158E-11	-6.721E-21	-6.721E-21	-8.173E-11	-8.173E-11	-5.754E-16
0.85000	2.448E-10	2.448E-10	-1.788E-20	-1.788E-20	-1.651E-10	-1.651E-10	-1.666E-15
0.90000	9.453E-10	9.453E-10	-7.662E-20	-7.662E-20	-4.548E-10	-4.548E-10	-7.463E-15
0.92500	2.342E-09	2.341E-09	-1.769E-19	-1.769E-19	-9.032E-10	-9.032E-10	-2.267E-14
0.95000	9.010E-09	9.010E-09	-6.978E-19	-6.978E-19	-2.263E-09	-2.263E-09	-1.009E-13
0.96250	2.411E-08	2.411E-08	-1.984E-18	-1.984E-18	-4.466E-09	-4.466E-09	-2.864E-13
0.97500	1.109E-07	1.110E-07	-1.115E-17	-1.115E-17	-1.395E-08	-1.395E-08	-1.045E-12
0.98124	3.368E-07	3.368E-07	-4.190E-17	-4.191E-17	-3.546E-08	-3.546E-08	-2.419E-12
0.98749	1.872E-06	1.872E-06	-3.562E-16	-3.563E-16	-1.603E-07	-1.603E-07	-6.240E-12
0.99373	5.102E-05	5.105E-05	-3.765E-14	-3.768E-14	-5.799E-06	-5.802E-06	-1.392E-11
0.99964	2.258E-02	2.258E-02	-7.476E-12	-7.468E-12	-2.552E 04	-2.552E 04	-9.142E-12
1.00453	6.785E-03	6.785E-03	-2.462E-15	-2.461E-15	-2.552E 04	-2.552E 04	-9.864E-12
1.00944	4.101E-03	4.161E-03	-1.119E-16	-1.119E-16	-2.552E 04	-2.552E 04	-3.841E-12
1.01437	2.869E-03	2.869E-03	-2.181E-17	-2.181E-17	-2.552E 04	-2.552E 04	-1.537E-12
1.01931	2.186E-03	2.186E-03	-6.791E-18	-6.790E-18	-2.552E 04	-2.552E 04	-7.389E-13
1.02923	1.479E-03	1.479E-03	-1.485E-18	-1.485E-18	-2.552E 04	-2.552E 04	-2.177E-13
1.03921	1.117E-03	1.117E-03	-5.825E-19	-5.825E-19	-2.552E 04	-2.552E 04	-7.999E-14
1.05934	7.501E-04	7.501E-04	-1.599E-19	-1.599E-19	-2.552E 04	-2.552E 04	-1.929E-14
1.07966	5.645E-04	5.645E-04	-6.925E-20	-6.924E-20	-2.552E 04	-2.552E 04	-6.731E-15
1.12088	3.776E-04	3.776E-04	-1.679E-20	-1.679E-20	-2.552E 04	-2.552E 04	-1.545E-15
1.16279	2.836E-04	2.836E-04	-6.404E-21	-6.404E-21	-2.552E 04	-2.552E 04	-5.442E-16
1.24840	1.894E-04	1.894E-04	-1.628E-21	-1.628E-21	-2.552E 04	-2.552E 04	-1.224E-16
1.33601	1.422E-04	1.422E-04	-6.252E-22	-6.252E-22	-2.552E 04	-2.552E 04	-4.233E-17
1.42526	1.138E-04	1.138E-04	-3.055E-22	-3.055E-22	-2.552E 04	-2.552E 04	-1.819E-17
1.51584	9.485E-05	9.485E-05	-1.672E-22	-1.672E-22	-2.552E 04	-2.552E 04	-9.144E-18
1.60754	8.132E-05	8.132E-05	-9.176E-23	-9.176E-23	-2.552E 04	-2.552E 04	-5.418E-18
1.70018	7.117E-05	7.117E-05	-5.265E-23	-5.265E-23	-2.552E 04	-2.552E 04	-3.458E-18
1.79361	6.327E-05	6.327E-05	-3.022E-23	-3.022E-23	-2.552E 04	-2.552E 04	-2.425E-18
1.88771	5.695E-05	5.695E-05	-1.732E-23	-1.732E-23	-2.552E 04	-2.552E 04	-1.811E-18

PROPAGATION FREQUENCY= 7.750CE 09 ϕ_0= 0.300 θ_D= 0. ρ_a= 1.127

z	ϕ	z_r	ρ	θ	β	$_0\mu^{-1}0$	$_x\mu^{-1}0$	$_0\mu^{-1}0$
0.	0.3000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.3000	0.10000	193.643	3.502E-08	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.3000	0.20000	172.128	5.253E-08	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.3000	0.30000	150.613	8.171E-08	1.000E-00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.3000	0.40000	129.097	1.251E-07	1.000E-00	-2.227E-11	-2.227E-11	2.227E-11
0.50000	0.3000	0.50000	107.582	1.801E-07	1.000E-00	-3.322E-11	-3.322E-11	3.322E-11
0.60000	0.3000	0.60000	86.068	2.068E-07	1.000E-00	-5.419E-11	-5.419E-11	5.419E-11
0.70000	0.3000	0.70000	64.555	8.204E-07	1.000E-00	-1.042E-10	-1.042E-10	1.042E-10
0.80000	0.3000	0.80000	43.044	2.708E-06	9.999E-01	-2.619E-10	-2.619E-10	2.619E-10
0.85000	0.3000	0.85000	32.291	6.937E-06	9.999E-01	-5.076E-10	-5.076E-10	5.076E-10
0.90000	0.3000	0.90000	21.543	2.420E-05	9.998E-01	-1.286E-09	-1.286E-09	1.286E-09
0.92500	0.3000	0.92500	16.174	5.886E-05	9.996E-01	-2.368E-09	-2.368E-09	2.368E-09
0.95000	0.3000	0.95000	10.814	1.995E-04	9.991E-01	-5.974E-09	-5.974E-09	5.974E-09
0.96250	0.3000	0.96250	8.144	4.704E-04	9.985E-01	-1.156E-08	-1.156E-08	1.156E-08
0.97500	0.3000	0.97500	5.494	1.551E-03	9.970E-01	-3.402E-08	-3.403E-08	3.402E-08
0.98124	0.3000	0.98125	4.187	3.542E-03	9.955E-01	-7.628E-08	-7.629E-08	7.628E-08
0.98749	0.3001	0.98750	2.915	1.080E-02	9.937E-01	-2.630E-07	-2.630E-07	2.630E-07
0.99373	0.3002	0.99375	1.755	5.504E-02	1.001E 00	-2.342E-06	-2.343E-06	2.342E-06
0.99996	0.3014	1.00000	1.132	4.316E-01	7.310E-01	-5.418E-05	-5.418E-05	5.419E-05
1.00619	0.3056	1.00625	1.760	8.049E-01	2.286E 00	-2.317E-06	-2.316E-06	2.317E-06
1.01243	0.3107	1.01250	2.921	8.487E-01	4.168E 00	-2.609E-07	-2.609E-07	2.610E-07
1.01868	0.3158	1.01875	4.193	8.559E-01	6.355E 00	-7.599E-08	-7.598E-08	7.599E-08
1.02493	0.3210	1.02500	5.500	8.579E-01	8.583E 00	-3.391E-08	-3.391E-08	3.391E-08
1.03742	0.3311	1.03750	8.151	8.590E-01	1.303E 01	-1.153E-08	-1.153E-08	1.153E-08
1.04992	0.3409	1.05000	10.821	8.592E-01	1.741E 01	-5.967E-09	-5.967E-09	5.967E-09
1.07492	0.3599	1.07500	16.180	8.594E-01	2.590E 01	-2.366E-09	-2.366E-09	2.366E-09
1.09992	0.3781	1.10000	21.549	8.594E-01	3.401E 01	-1.285E-09	-1.285E-09	1.285E-09
1.14991	0.4121	1.15000	32.297	8.594E-01	4.920E 01	-5.074E-10	-5.074E-10	5.074E-10
1.19991	0.4432	1.20000	43.050	8.594E-01	6.313E 01	-2.618E-10	-2.618E-10	2.618E-10
1.29990	0.4983	1.30000	64.561	8.594E-01	8.778E 01	-1.041E-10	-1.041E-10	1.041E-10
1.39989	0.5456	1.40000	86.075	8.594E-01	1.089E 02	-5.418E-11	-5.418E-11	5.418E-11
1.49989	0.5865	1.50000	107.589	8.594E-01	1.272E 02	-3.321E-11	-3.321E-11	3.321E-11
1.59988	0.6223	1.60000	129.104	8.594E-01	1.432E 02	-2.226E-11	-2.226E-11	2.226E-11
1.69988	0.6539	1.70000	150.619	8.594E-01	1.574E 02	-1.495E-11	-1.495E-11	1.495E-11
1.79987	0.6820	1.80000	172.134	8.594E-01	1.700E 02	-1.054E-11	-1.054E-11	1.054E-11
1.89987	0.7071	1.90000	193.650	8.594E-01	1.812E 02	-7.437E-12	-7.437E-12	7.437E-12
1.99987	0.7297	2.00000	215.165	8.594E-01	1.913E 02	-5.301E-12	-5.301E-12	5.301E-12

PROPAGATION FREQUENCY= 7.750CE 09 ϕ_0= 0.300 θ_D= 0. ρ_a= 1.127

z	$_x\mu^{-1}0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.227E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.322E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.586E-10	-8.586E-10
0.60000	5.419E-11	299.407	-5.777E-09	-5.777E-09	5.777E-09	5.777E-09	-1.401E-09	-1.401E-09
0.70000	1.042E-10	349.308	-9.535E-09	-9.535E-09	9.535E-09	9.535E-09	-2.693E-09	-2.693E-09
0.80000	2.619E-10	399.209	-1.778E-08	-1.778E-08	1.778E-08	1.778E-08	-6.770E-09	-6.770E-09
0.85000	5.076E-10	424.160	-2.689E-08	-2.689E-08	2.689E-08	2.689E-08	-1.312E-08	-1.312E-08
0.90000	1.286E-09	449.110	-4.712E-08	-4.712E-08	4.714E-08	4.714E-08	-3.325E-08	-3.325E-08
0.92500	2.368E-09	461.585	-6.919E-08	-6.919E-08	6.931E-08	6.931E-08	-6.122E-08	-6.122E-08
0.95000	5.974E-09	474.060	-1.165E-07	-1.165E-07	1.180E-07	1.180E-07	-1.544E-07	-1.544E-07
0.96250	1.156E-08	480.297	-1.646E-07	-1.646E-07	1.726E-07	1.726E-07	-2.989E-07	-2.989E-07
0.97500	3.403E-08	486.534	-2.500E-07	-2.501E-07	3.392E-07	3.392E-07	-8.796E-07	-8.796E-07
0.98124	7.629E-08	489.652	-2.229E-07	-2.229E-07	6.908E-07	6.908E-07	-1.972E-06	-1.972E-06
0.98749	2.631E-07	492.769	1.284E-06	1.284E-06	3.093E-06	3.093E-06	-6.799E-06	-6.800E-06
0.99373	2.343E-06	495.884	5.356E-05	5.356E-05	6.087E-05	6.087E-05	-6.055E-05	-6.057E-05
0.99996	5.419E-05	498.993	3.470E-03	3.470E-03	3.610E-03	3.610E-03	-1.401E-03	-1.401E-03
1.00619	2.316E-06	502.101	1.225E-02	1.225E-02	1.252E-02	1.252E-02	-5.989E-05	-5.987E-05
1.01243	2.609E-07	505.215	1.372E-02	1.372E-02	1.399E-02	1.399E-02	-6.746E-06	-6.745E-06
1.01868	7.598E-08	508.332	1.404E-02	1.404E-02	1.432E-02	1.432E-02	-1.964E-06	-1.964E-06
1.02493	3.391E-08	511.450	1.419E-02	1.419E-02	1.447E-02	1.447E-02	-8.767E-07	-8.767E-07
1.03742	1.153E-08	517.686	1.441E-02	1.441E-02	1.468E-02	1.468E-02	-2.981E-07	-2.981E-07
1.04992	5.967E-09	523.923	1.459E-02	1.459E-02	1.487E-02	1.487E-02	-1.543E-07	-1.542E-07
1.07492	2.366E-09	536.397	1.495E-02	1.495E-02	1.522E-02	1.522E-02	-6.118E-08	-6.117E-08
1.09992	1.285E-09	548.870	1.530E-02	1.530E-02	1.558E-02	1.558E-02	-3.323E-08	-3.323E-08
1.14991	5.074E-10	573.819	1.600E-02	1.600E-02	1.628E-02	1.628E-02	-1.312E-08	-1.312E-08
1.19991	2.618E-10	598.767	1.670E-02	1.670E-02	1.698E-02	1.698E-02	-6.768E-09	-6.768E-09
1.29990	1.041E-10	648.664	1.811E-02	1.811E-02	1.838E-02	1.838E-02	-2.692E-09	-2.692E-09
1.39989	5.418E-11	698.562	1.951E-02	1.951E-02	1.979E-02	1.979E-02	-1.401E-09	-1.401E-09
1.49989	3.321E-11	748.461	2.091E-02	2.091E-02	2.119E-02	2.119E-02	-8.585E-10	-8.585E-10
1.59988	2.226E-11	798.360	2.232E-02	2.232E-02	2.259E-02	2.259E-02	-5.755E-10	-5.755E-10
1.69988	1.495E-11	848.259	2.372E-02	2.372E-02	2.400E-02	2.400E-02	-3.864E-10	-3.864E-10
1.79987	1.054E-11	898.158	2.512E-02	2.512E-02	2.540E-02	2.540E-02	-2.725E-10	-2.725E-10
1.89987	7.437E-12	948.058	2.653E-02	2.653E-02	2.681E-02	2.681E-02	-1.923E-10	-1.923E-10
1.99987	5.301E-12	997.957	2.793E-02	2.793E-02	2.821E-02	2.821E-02	-1.370E-10	-1.370E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.300 θ_D= 0. ρ_a= 1.127

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-2.621E-18
0.10000	1.624E-13	1.660E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-3.516E-18
0.20000	4.642E-13	4.617E-13	-5.355E-23	-5.355E-23	-9.673E-13	-9.673E-13	-5.029E-18
0.30000	9.870E-13	9.918E-13	-9.331E-23	-9.331E-23	-2.038E-12	-2.038E-12	-7.905E-18
0.40000	2.095E-12	2.093E-12	-1.703E-22	-1.703E-22	-3.951E-12	-3.951E-12	-1.338E-17
0.50000	4.141E-12	4.149E-12	-3.111E-22	-3.111E-22	-7.446E-12	-7.446E-12	-2.679E-17
0.60000	9.380E-12	9.406E-12	-6.402E-22	-6.402E-22	-1.414E-11	-1.414E-11	-6.263E-17
0.70000	2.674E-11	2.672E-11	-1.680E-21	-1.680E-21	-2.989E-11	-2.989E-11	-1.830E-16
0.80000	1.099E-10	1.099E-10	-6.720E-21	-6.720E-21	-8.172E-11	-8.172E-11	-8.283E-16
0.85000	2.937E-10	2.937E-10	-1.788E-20	-1.788E-20	-1.651E-10	-1.651E-10	-2.398E-15
0.90000	1.134E-09	1.134E-09	-7.652E-20	-7.652E-20	-4.545E-10	-4.545E-10	-1.073E-14
0.92500	2.806E-09	2.806E-09	-1.766E-19	-1.766E-19	-9.022E-10	-9.022E-10	-3.255E-14
0.95000	1.078E-08	1.078E-08	-6.945E-19	-6.945E-19	-2.257E-09	-2.257E-09	-1.444E-13
0.96250	2.851E-08	2.851E-08	-1.957E-18	-1.957E-18	-4.440E-09	-4.440E-09	-4.090E-13
0.97500	1.305E-07	1.305E-07	-1.084E-17	-1.085E-17	-1.374E-08	-1.374E-08	-1.475E-12
0.98124	3.915E-07	3.915E-07	-3.998E-17	-3.999E-17	-3.438E-08	-3.438E-08	-3.358E-12
0.98749	2.040E-06	2.040E-06	-3.064E-16	-3.065E-16	-1.470E-07	-1.470E-07	-8.551E-12
0.99373	4.263E-05	4.265E-05	-1.699E-14	-1.700E-14	-3.571E-06	-3.573E-06	-2.015E-11
0.99996	3.963E-02	3.963E-02	-1.153E-11	-1.153E-11	-2.462E-03	-2.462E-03	-1.212E-11
1.00619	1.251E-02	1.251E-02	-1.664E-14	-1.663E-14	-4.856E-03	-4.856E-03	-2.003E-11
1.01243	6.815E-03	6.815E-03	-3.024E-16	-3.023E-16	-4.860E-03	-4.860E-03	-8.517E-12
1.01868	4.442E-03	4.442E-03	-3.973E-17	-3.972E-17	-4.860E-03	-4.860E-03	-3.343E-12
1.02493	3.268E-03	3.268E-03	-1.079E-17	-1.079E-17	-4.860E-03	-4.860E-03	-1.471E-12
1.03742	2.127E-03	2.127E-03	-1.949E-18	-1.949E-18	-4.860E-03	-4.860E-03	-4.084E-13
1.04992	1.573E-03	1.573E-03	-6.932E-19	-6.932E-19	-4.860E-03	-4.860E-03	-1.442E-13
1.07492	1.033E-03	1.033E-03	-1.765E-19	-1.765E-19	-4.860E-03	-4.860E-03	-3.253E-14
1.09992	7.685E-04	7.685E-04	-7.644E-20	-7.644E-20	-4.860E-03	-4.860E-03	-1.673E-14
1.14991	5.082E-04	5.082E-04	-1.786E-20	-1.786E-20	-4.860E-03	-4.860E-03	-2.399E-15
1.19991	3.796E-04	3.796E-04	-6.716E-21	-6.716E-21	-4.860E-03	-4.860E-03	-8.290E-16
1.29990	2.520E-04	2.520E-04	-1.679E-21	-1.679E-21	-4.860E-03	-4.860E-03	-1.832E-16
1.39989	1.886E-04	1.886E-04	-6.400E-22	-6.400E-22	-4.860E-03	-4.860E-03	-6.272E-17
1.49989	1.507E-04	1.507E-04	-3.110E-22	-3.110E-22	-4.860E-03	-4.860E-03	-2.683E-17
1.59988	1.255E-04	1.255E-04	-1.702E-22	-1.702E-22	-4.860E-03	-4.860E-03	-1.341E-17
1.69988	1.075E-04	1.075E-04	-9.329E-23	-9.329E-23	-4.860E-03	-4.860E-03	-7.920E-18
1.79987	9.399E-05	9.399E-05	-5.354E-23	-5.354E-23	-4.860E-03	-4.860E-03	-5.040E-18
1.89987	8.352E-05	8.352E-05	-3.072E-23	-3.072E-23	-4.860E-03	-4.860E-03	-3.525E-18
1.99987	7.514E-05	7.514E-05	-1.761E-23	-1.761E-23	-4.860E-03	-4.860E-03	-2.628E-18

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.400 θ_D= 0. ρ_a= 1.502

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.4000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.4000	0.10000	193.644	4.419E-08	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.4000	0.20000	172.128	6.837E-08	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.4000	0.30000	150.613	9.505E-08	1.000E-00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.4000	0.40000	129.099	1.501E-07	1.000E-00	-2.226E-11	-2.226E-11	2.226E-11
0.50000	0.4000	0.50000	107.585	1.868E-07	1.000E-00	-3.321E-11	-3.321E-11	3.321E-11
0.60000	0.4000	0.60000	86.071	1.868E-07	1.000E-00	-5.418E-11	-5.418E-11	5.418E-11
0.70000	0.4000	0.70000	64.560	8.805E-07	1.000E-00	-1.041E-10	-1.041E-10	1.041E-10
0.80000	0.4000	0.80000	43.053	2.948E-06	9.999E-01	-2.618E-10	-2.618E-10	2.618E-10
0.85000	0.4000	0.85000	32.304	7.871E-06	9.998E-01	-5.072E-10	-5.072E-10	5.072E-10
0.90000	0.4000	0.90000	21.563	2.743E-05	9.996E-01	-1.283E-09	-1.283E-09	1.283E-09
0.92500	0.4000	0.92500	16.202	6.702E-05	9.993E-01	-2.361E-09	-2.361E-09	2.361E-09
0.95000	0.4000	0.95000	10.858	2.264E-04	9.985E-01	-5.928E-09	-5.928E-09	5.928E-09
0.96250	0.4000	0.96250	8.203	5.304E-04	9.976E-01	-1.134E-08	-1.134E-08	1.134E-08
0.97500	0.4000	0.97500	5.581	1.716E-03	9.955E-01	-3.253E-08	-3.253E-08	3.253E-08
0.98124	0.4000	0.98125	4.301	3.811E-03	9.941E-01	-7.098E-08	-7.098E-08	7.097E-08
0.98749	0.4001	0.98750	3.078	1.087E-02	9.942E-01	-2.164E-07	-2.164E-07	2.164E-07
0.99374	0.4002	0.99375	2.015	4.480E-02	1.007E 00	-1.300E-06	-1.301E-06	1.300E-06
0.99998	0.4009	1.00000	1.505	2.049E-01	6.851E-01	-6.249E-06	-6.249E-06	6.249E-06
1.00621	0.4028	1.00625	2.022	3.637E-01	7.044E-01	-1.280E-06	-1.280E-06	1.280E-06
1.01246	0.4051	1.01250	3.087	3.971E-01	1.721E 00	-2.143E-07	-2.143E-07	2.143E-07
1.01871	0.4075	1.01875	4.311	4.042E-01	2.791E 00	-7.053E-08	-7.053E-08	7.054E-08
1.02495	0.4100	1.02500	5.591	4.062E-01	3.895E 00	-3.236E-08	-3.235E-08	3.236E-08
1.03745	0.4148	1.03750	8.213	4.074E-01	6.118E 00	-1.130E-08	-1.130E-08	1.130E-08
1.04995	0.4194	1.05000	10.868	4.077E-01	8.316E 00	-5.917E-09	-5.917E-09	5.917E-09
1.07495	0.4285	1.07500	16.212	4.079E-01	1.259E 01	-2.358E-09	-2.358E-09	2.358E-09
1.09995	0.4371	1.10000	21.574	4.079E-01	1.667E 01	-1.282E-09	-1.282E-09	1.282E-09
1.14995	0.4532	1.15000	32.314	4.080E-01	2.433E 01	-5.068E-10	-5.068E-10	5.068E-10
1.19995	0.4680	1.20000	43.063	4.080E-01	3.135E 01	-2.616E-10	-2.616E-10	2.616E-10
1.29995	0.4942	1.30000	64.571	4.080E-01	4.378E 01	-1.041E-10	-1.041E-10	1.041E-10
1.39994	0.5166	1.40000	86.082	4.080E-01	5.444E 01	-5.417E-11	-5.417E-11	5.417E-11
1.49994	0.5360	1.50000	107.595	4.080E-01	6.367E 01	-3.321E-11	-3.321E-11	3.321E-11
1.59994	0.5530	1.60000	129.109	4.080E-01	7.175E 01	-2.226E-11	-2.226E-11	2.226E-11
1.69994	0.5680	1.70000	150.624	4.080E-01	7.888E 01	-1.494E-11	-1.494E-11	1.494E-11
1.79994	0.5813	1.80000	172.139	4.080E-01	8.522E 01	-1.054E-11	-1.054E-11	1.054E-11
1.89994	0.5933	1.90000	193.654	4.080E-01	9.090E 01	-7.437E-12	-7.437E-12	7.437E-12
1.99994	0.6040	2.00000	215.170	4.080E-01	9.600E 01	-5.301E-12	-5.301E-12	5.301E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.400 θ_D= 0. ρ_a= 1.502

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.226E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.756E-10	-5.756E-10
0.50000	3.321E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.586E-10	-8.586E-10
0.60000	5.418E-11	299.407	-5.776E-09	-5.776E-09	5.776E-09	5.776E-09	-1.401E-09	-1.401E-09
0.70000	1.041E-10	349.308	-9.534E-09	-9.534E-09	9.534E-09	9.534E-09	-2.692E-09	-2.692E-09
0.80000	2.618E-10	399.209	-1.777E-08	-1.777E-08	1.777E-08	1.777E-08	-6.767E-09	-6.767E-09
0.85000	5.072E-10	424.160	-2.688E-08	-2.688E-08	2.688E-08	2.688E-08	-1.311E-08	-1.311E-08
0.90000	1.283E-09	449.110	-4.708E-08	-4.708E-08	4.711E-08	4.711E-08	-3.317E-08	-3.317E-08
0.92500	2.361E-09	461.585	-6.907E-08	-6.907E-08	6.923E-08	6.923E-08	-6.102E-08	-6.102E-08
0.95000	5.928E-09	474.060	-1.159E-07	-1.159E-07	1.178E-07	1.178E-07	-1.532E-07	-1.532E-07
0.96250	1.134E-08	480.297	-1.624E-07	-1.624E-07	1.727E-07	1.727E-07	-2.930E-07	-2.930E-07
0.97500	3.253E-08	486.534	-2.351E-07	-2.351E-07	3.442E-07	3.442E-07	-8.409E-07	-8.409E-07
0.98124	7.098E-08	489.652	-1.713E-07	-1.713E-07	7.127E-07	7.128E-07	-1.835E-06	-1.835E-06
0.98749	2.164E-07	492.770	1.386E-06	1.386E-06	3.048E-06	3.048E-06	-5.594E-06	-5.595E-06
0.99374	1.301E-06	495.886	3.532E-05	3.532E-05	4.046E-05	4.046E-05	-3.361E-05	-3.362E-05
0.99998	6.249E-06	498.999	7.834E-04	7.834E-04	8.116E-04	8.116E-04	-1.616E-04	-1.616E-04
1.00621	1.279E-06	502.112	2.503E-03	2.503E-03	2.554E-03	2.554E-03	-3.308E-05	-3.308E-05
1.01246	2.143E-07	505.229	3.007E-03	3.007E-03	3.061E-03	3.062E-03	-5.540E-06	-5.540E-06
1.01871	7.053E-08	508.346	3.135E-03	3.135E-03	3.190E-03	3.190E-03	-1.823E-06	-1.823E-06
1.02495	3.235E-08	511.464	3.186E-03	3.186E-03	3.242E-03	3.242E-03	-8.364E-07	-8.364E-07
1.03745	1.136E-08	517.701	3.244E-03	3.244E-03	3.300E-03	3.300E-03	-2.922E-07	-2.922E-07
1.04995	5.917E-09	523.938	3.289E-03	3.289E-03	3.345E-03	3.345E-03	-1.530E-07	-1.530E-07
1.07495	2.358E-09	536.413	3.371E-03	3.371E-03	3.426E-03	3.426E-03	-6.095E-08	-6.095E-08
1.09995	1.282E-09	548.888	3.450E-03	3.450E-03	3.506E-03	3.506E-03	-3.313E-08	-3.313E-08
1.14995	5.068E-10	573.838	3.609E-03	3.609E-03	3.665E-03	3.665E-03	-1.310E-08	-1.310E-08
1.19995	2.616E-10	598.788	3.767E-03	3.767E-03	3.823E-03	3.823E-03	-6.764E-09	-6.764E-09
1.29995	1.041E-10	648.688	4.083E-03	4.083E-03	4.139E-03	4.139E-03	-2.691E-09	-2.691E-09
1.39994	5.417E-11	698.588	4.400E-03	4.400E-03	4.456E-03	4.456E-03	-1.400E-09	-1.400E-09
1.49994	3.321E-11	748.489	4.716E-03	4.716E-03	4.772E-03	4.772E-03	-8.584E-10	-8.584E-10
1.59994	2.226E-11	798.389	5.033E-03	5.033E-03	5.088E-03	5.088E-03	-5.755E-10	-5.755E-10
1.69994	1.494E-11	848.290	5.349E-03	5.349E-03	5.405E-03	5.405E-03	-3.863E-10	-3.863E-10
1.79994	1.054E-11	898.191	5.665E-03	5.665E-03	5.721E-03	5.721E-03	-2.725E-10	-2.725E-10
1.89994	7.437E-12	948.092	5.981E-03	5.981E-03	6.037E-03	6.037E-03	-1.922E-10	-1.922E-10
1.99994	5.301E-12	997.992	6.298E-03	6.298E-03	6.354E-03	6.354E-03	-1.370E-10	-1.370E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.400 θ_D= 0. ρ_a= 1.502

z	$_oD_y$	$_xD_y$	σ^κ	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-4.660E-18
0.10000	2.184E-13	2.205E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-6.251E-18
0.20000	6.202E-13	6.202E-13	-5.354E-23	-5.354E-23	-9.672E-13	-9.672E-13	-8.941E-18
0.30000	1.314E-12	1.316E-12	-9.330E-23	-9.330E-23	-2.038E-12	-2.038E-12	-1.405E-17
0.40000	2.784E-12	2.790E-12	-1.702E-22	-1.702E-22	-3.951E-12	-3.951E-12	-2.379E-17
0.50000	5.533E-12	5.530E-12	-3.110E-22	-3.110E-22	-7.446E-12	-7.446E-12	-4.762E-17
0.60000	1.252E-11	1.253E-11	-6.401E-22	-6.401E-22	-1.414E-11	-1.414E-11	-1.113E-16
0.70000	3.561E-11	3.562E-11	-1.679E-21	-1.679E-21	-2.989E-11	-2.989E-11	-3.252E-16
0.80000	1.464E-10	1.464E-10	-6.715E-21	-6.715E-21	-8.169E-11	-8.169E-11	-1.471E-15
0.85000	3.911E-10	3.911E-10	-1.785E-20	-1.785E-20	-1.649E-10	-1.649E-10	-4.256E-15
0.90000	1.508E-09	1.508E-09	-7.627E-20	-7.628E-20	-4.537E-10	-4.537E-10	-1.902E-14
0.92500	3.725E-09	3.725E-09	-1.759E-19	-1.759E-19	-8.996E-10	-8.996E-10	-5.745E-14
0.95000	1.423E-08	1.423E-08	-6.862E-19	-6.862E-19	-2.241E-09	-2.241E-09	-2.526E-13
0.96250	3.683E-08	3.683E-08	-1.896E-18	-1.896E-18	-4.380E-09	-4.380E-09	-7.106E-13
0.97500	1.626E-07	1.626E-07	-1.011E-17	-1.011E-17	-1.321E-08	-1.321E-08	-2.497E-12
0.98124	4.751E-07	4.751E-07	-3.556E-17	-3.556E-17	-3.182E-08	-3.182E-08	-5.461E-12
0.98749	2.167E-06	2.168E-06	-2.210E-16	-2.210E-16	-1.201E-07	-1.201E-07	-1.335E-11
0.99374	2.882E-05	2.883E-05	-5.571E-15	-5.573E-15	-1.437E-06	-1.437E-06	-2.819E-11
0.99998	2.831E-02	2.831E-02	-1.176E-13	-1.176E-13	-4.816E-05	-4.817E-05	-3.373E-11
1.00621	2.758E-02	2.758E-02	-5.406E-15	-5.404E-15	-9.371E-05	-9.371E-05	-2.805E-11
1.01246	1.122E-02	1.122E-02	-2.175E-16	-2.174E-16	-9.498E-05	-9.498E-05	-1.324E-11
1.01871	6.877E-03	6.877E-03	-3.520E-17	-3.520E-17	-9.506E-05	-9.506E-05	-5.423E-12
1.02495	4.897E-03	4.897E-03	-1.003E-17	-1.003E-17	-9.508E-05	-9.508E-05	-2.485E-12
1.03745	3.080E-03	3.080E-03	-1.888E-18	-1.888E-18	-9.509E-05	-9.509E-05	-7.079E-13
1.04995	2.239E-03	2.239E-03	-6.842E-19	-6.841E-19	-9.509E-05	-9.509E-05	-2.519E-13
1.07495	1.445E-03	1.445E-03	-1.756E-19	-1.756E-19	-9.509E-05	-9.509E-05	-5.736E-14
1.09995	1.066E-03	1.066E-03	-7.615E-20	-7.615E-20	-9.509E-05	-9.509E-05	-1.900E-14
1.14995	6.988E-04	6.988E-04	-1.783E-20	-1.783E-20	-9.509E-05	-9.509E-05	-4.256E-15
1.19995	5.196E-04	5.196E-04	-6.710E-21	-6.710E-21	-9.509E-05	-9.509E-05	-1.472E-15
1.29995	3.435E-04	3.435E-04	-1.678E-21	-1.678E-21	-9.509E-05	-9.509E-05	-3.255E-16
1.39994	2.565E-04	2.565E-04	-6.398E-22	-6.398E-22	-9.509E-05	-9.509E-05	-1.115E-16
1.49994	2.047E-04	2.047E-04	-3.110E-22	-3.110E-22	-9.509E-05	-9.509E-05	-4.768E-17
1.59994	1.703E-04	1.703E-04	-1.702E-22	-1.702E-22	-9.509E-05	-9.509E-05	-2.383E-17
1.69994	1.458E-04	1.458E-04	-9.328E-23	-9.328E-23	-9.509E-05	-9.509E-05	-1.408E-17
1.79994	1.274E-04	1.274E-04	-5.353E-23	-5.353E-23	-9.509E-05	-9.509E-05	-8.958E-18
1.89994	1.132E-04	1.132E-04	-3.072E-23	-3.072E-23	-9.509E-05	-9.509E-05	-6.265E-18
1.99994	1.018E-04	1.018E-04	-1.761E-23	-1.761E-23	-9.509E-05	-9.509E-05	-4.672E-18

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.5000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.5000	0.10000	193.644	4.752E-08	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.5000	0.20000	172.129	8.171E-08	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.5000	0.30000	150.615	1.251E-07	1.000E-00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.5000	0.40000	129.101	1.901E-07	1.000E-00	-2.226E-11	-2.226E-11	2.226E-11
0.50000	0.5000	0.50000	107.588	2.801E-07	1.000E-00	-3.321E-11	-3.321E-11	3.321E-11
0.60000	0.5000	0.60000	86.076	2.868E-07	1.000E-00	-5.418E-11	-5.418E-11	5.418E-11
0.70000	0.5000	0.70000	64.567	1.227E-06	9.999E-01	-1.041E-10	-1.041E-10	1.041E-10
0.80000	0.5000	0.80000	43.065	4.029E-06	9.999E-01	-2.616E-10	-2.616E-10	2.616E-10
0.85000	0.5000	0.85000	32.320	1.046E-05	9.998E-01	-5.066E-10	-5.066E-10	5.066E-10
0.90000	0.5000	0.90000	21.590	3.661E-05	9.995E-01	-1.279E-09	-1.279E-09	1.279E-09
0.92500	0.5000	0.92500	16.238	8.885E-05	9.991E-01	-2.351E-09	-2.351E-09	2.351E-09
0.95000	0.5000	0.95000	10.913	2.975E-04	9.980E-01	-5.869E-09	-5.869E-09	5.869E-09
0.96250	0.5000	0.96250	8.277	6.898E-04	9.968E-01	-1.111E-08	-1.111E-08	1.111E-08
0.97500	0.5000	0.97500	5.690	2.175E-03	9.947E-01	-3.073E-08	-3.073E-08	3.072E-08
0.98124	0.5001	0.98125	4.444	4.681E-03	9.939E-01	-6.485E-08	-6.486E-08	6.485E-08
0.98749	0.5001	0.98750	3.275	1.241E-02	9.966E-01	-1.758E-07	-1.758E-07	1.758E-07
0.99374	0.5002	0.99375	2.307	4.223E-02	1.011E 00	-6.710E-07	-6.711E-07	6.710E-07
0.99998	0.5008	1.00000	1.880	1.389E-01	9.390E-01	-1.764E-06	-1.764E-06	1.764E-06
1.00622	0.5020	1.00625	2.317	2.348E-01	5.572E-01	-6.567E-07	-6.566E-07	6.567E-07
1.01247	0.5035	1.01250	3.288	2.641E-01	3.120E-01	-1.733E-07	-1.733E-07	1.733E-07
1.01871	0.5051	1.01875	4.458	2.717E-01	5.391E-01	-6.425E-08	-6.424E-08	6.425E-08
1.02496	0.5068	1.02500	5.706	2.742F-01	9.161E-01	-3.048E-08	-3.048E-08	3.048E-08
1.03746	0.5100	1.03750	8.293	2.757E-01	1.733E 00	-1.106E-08	-1.106E-08	1.106E-08
1.04996	0.5132	1.05000	10.929	2.761E-01	2.557E 00	-5.852E-09	-5.852E-09	5.852E-09
1.07496	0.5193	1.07500	16.254	2.763E-01	4.168E 00	-2.347E-09	-2.347E-09	2.347E-09
1.09996	0.5251	1.10000	21.606	2.763E-01	5.716E 00	-1.277E-09	-1.277E-09	1.277E-09
1.14996	0.5361	1.15000	32.337	2.764E-01	8.617E 00	-5.061E-10	-5.061E-10	5.061E-10
1.19996	0.5461	1.20000	43.081	2.764E-01	1.128E 01	-2.614E-10	-2.614E-10	2.614E-10
1.29996	0.5638	1.30000	64.583	2.764E-01	1.599E 01	-1.041E-10	-1.041E-10	1.041E-10
1.39996	0.5790	1.40000	86.092	2.764E-01	2.004E 01	-5.415E-11	-5.415E-11	5.415E-11
1.49995	0.5921	1.50000	107.604	2.764E-01	2.354E 01	-3.320E-11	-3.320E-11	3.320E-11
1.59995	0.6037	1.60000	129.117	2.764E-01	2.661E 01	-2.226E-11	-2.226E-11	2.226E-11
1.69995	0.6138	1.70000	150.631	2.764E-01	2.931E 01	-1.494E-11	-1.494E-11	1.494E-11
1.79995	0.6229	1.80000	172.146	2.764E-01	3.172E 01	-1.054E-11	-1.054E-11	1.054E-11
1.89995	0.6309	1.90000	193.660	2.764E-01	3.387E 01	-7.436E-12	-7.436E-12	7.436E-12
1.99995	0.6382	2.00000	215.175	2.764E-01	3.581E 01	-5.301E-12	-5.301E-12	5.301E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.226E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.755E-10	-5.755E-10
0.50000	3.321E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.586E-10	-8.586E-10
0.60000	5.418E-11	299.407	-5.776E-09	-5.776E-09	5.776E-09	5.776E-09	-1.401E-09	-1.401E-09
0.70000	1.041E-10	349.308	-9.533E-09	-9.533E-09	9.533E-09	9.533E-09	-2.692E-09	-2.692E-09
0.80000	2.616E-10	399.209	-1.777E-08	-1.777E-08	1.777E-08	1.777E-08	-6.763E-09	-6.763E-09
0.85000	5.066E-10	424.160	-2.687E-08	-2.687E-08	2.687E-08	2.687E-08	-1.310E-08	-1.310E-08
0.90000	1.279E-09	449.110	-4.702E-08	-4.702E-08	4.706E-08	4.706E-08	-3.307E-08	-3.307E-08
0.92500	2.351E-09	461.585	-6.888E-08	-6.888E-08	6.916E-08	6.916E-08	-6.077E-08	-6.077E-08
0.95000	5.869E-09	474.060	-1.147E-07	-1.147E-07	1.179E-07	1.179E-07	-1.517E-07	-1.517E-07
0.96250	1.111E-08	480.297	-1.575E-07	-1.575E-07	1.749E-07	1.749E-07	-2.871E-07	-2.871E-07
0.97500	3.073E-08	486.534	-1.960E-07	-1.960E-07	3.713E-07	3.713E-07	-7.943E-07	-7.943E-07
0.98124	6.486E-08	489.652	-1.600E-08	-1.601E-08	8.332E-07	8.332E-07	-1.677E-06	-1.677E-06
0.98749	1.758E-07	492.770	2.135E-06	2.135E-06	3.645E-06	3.645E-06	-4.544E-06	-4.545E-06
0.99374	6.712E-07	495.887	3.183E-05	3.183E-05	3.553E-05	3.553E-05	-1.735E-05	-1.735E-05
0.99998	1.764E-06	499.001	3.608E-04	3.608E-04	3.727E-04	3.727E-04	-4.561E-05	-4.561E-05
1.00622	6.565E-07	502.116	1.044E-03	1.044E-03	1.064E-03	1.064E-03	-1.698E-05	-1.697E-05
1.01247	1.733E-07	505.232	1.331E-03	1.331E-03	1.353E-03	1.353E-03	-4.480E-06	-4.480E-06
1.01871	6.424E-08	508.350	1.418E-03	1.418E-03	1.441E-03	1.441E-03	-1.661E-06	-1.661E-06
1.02496	3.048E-08	511.468	1.453E-03	1.453E-03	1.476E-03	1.476E-03	-7.879E-07	-7.879E-07
1.03746	1.106E-08	517.705	1.486E-03	1.486E-03	1.510E-03	1.510E-03	-2.858E-07	-2.858E-07
1.04996	5.852E-09	523.942	1.509E-03	1.509E-03	1.532E-03	1.532E-03	-1.513E-07	-1.513E-07
1.07496	2.347E-09	536.417	1.547E-03	1.547E-03	1.571E-03	1.571E-03	-6.066E-08	-6.066E-08
1.09996	1.277E-09	548.892	1.584E-03	1.584E-03	1.608E-03	1.608E-03	-3.301E-08	-3.301E-08
1.14996	5.061E-10	573.842	1.657E-03	1.657E-03	1.681E-03	1.681E-03	-1.308E-08	-1.308E-08
1.19996	2.614E-10	598.792	1.730E-03	1.730E-03	1.754E-03	1.754E-03	-6.758E-09	-6.758E-09
1.29996	1.041E-10	648.693	1.875E-03	1.875E-03	1.899E-03	1.899E-03	-2.690E-09	-2.690E-09
1.39996	5.415E-11	698.594	2.020E-03	2.020E-03	2.044E-03	2.044E-03	-1.400E-09	-1.400E-09
1.49995	3.320E-11	748.495	2.165E-03	2.165E-03	2.189E-03	2.189E-03	-8.583E-10	-8.583E-10
1.59995	2.226E-11	798.396	2.311E-03	2.311E-03	2.334E-03	2.334E-03	-5.754E-10	-5.754E-10
1.69995	1.494E-11	848.297	2.456E-03	2.456E-03	2.480E-03	2.480E-03	-3.863E-10	-3.863E-10
1.79995	1.054E-11	898.198	2.601E-03	2.601E-03	2.625E-03	2.625E-03	-2.725E-10	-2.725E-10
1.89995	7.436E-12	948.099	2.746E-03	2.746E-03	2.770E-03	2.770E-03	-1.922E-10	-1.922E-10
1.99995	5.301E-12	998.000	2.891E-03	2.891E-03	2.915E-03	2.915E-03	-1.370E-10	-1.370E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-7.281E-18
0.10000	2.762E-13	2.753E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-9.767E-18
0.20000	7.762E-13	7.774E-13	-5.354E-23	-5.354E-23	-9.672E-13	-9.672E-13	-1.397E-17
0.30000	1.643E-12	1.643E-12	-9.330E-23	-9.330E-23	-2.038E-12	-2.038E-12	-2.196E-17
0.40000	3.483E-12	3.482E-12	-1.702E-22	-1.702E-22	-3.951E-12	-3.951E-12	-3.717E-17
0.50000	6.907E-12	6.909E-12	-3.110E-22	-3.110E-22	-7.446E-12	-7.446E-12	-7.439E-17
0.60000	1.565E-11	1.566E-11	-6.400E-22	-6.400E-22	-1.413E-11	-1.413E-11	-1.739E-16
0.70000	4.451E-11	4.451E-11	-1.679E-21	-1.679E-21	-2.988E-11	-2.988E-11	-5.080E-16
0.80000	1.829E-10	1.829E-10	-6.709E-21	-6.709E-21	-8.165E-11	-8.165E-11	-2.296E-15
0.85000	4.882E-10	4.882E-10	-1.782E-20	-1.782E-20	-1.648E-10	-1.648E-10	-6.637E-15
0.90000	1.879E-09	1.879E-09	-7.596E-20	-7.596E-20	-4.526E-10	-4.526E-10	-2.958E-14
0.92500	4.630E-09	4.630E-09	-1.749E-19	-1.749E-19	-8.964E-10	-8.964E-10	-8.894E-14
0.95000	1.759E-08	1.759E-08	-6.756E-19	-6.757E-19	-2.221E-09	-2.221E-09	-3.867E-13
0.96250	4.468E-08	4.468E-08	-1.836E-18	-1.836E-18	-4.305E-09	-4.305E-09	-1.074E-12
0.97500	1.882E-07	1.882E-07	-9.259E-18	-9.260E-18	-1.259E-08	-1.259E-08	-3.675E-12
0.98124	5.318E-07	5.318E-07	-3.071E-17	-3.072E-17	-2.896E-08	-2.896E-08	-7.680E-12
0.98749	2.117E-06	2.117E-06	-1.567E-16	-1.567E-16	-9.557E-08	-9.558E-08	-1.768E-11
0.99374	1.940E-05	1.941E-05	-1.590E-15	-1.591E-15	-6.102E-07	-6.104E-07	-3.790E-11
0.99998	4.998E-03	4.998E-03	-9.931E-15	-9.931E-15	-6.259E-06	-6.260E-06	-4.916E-11
1.00622	8.901E-03	8.901E-03	-1.526E-15	-1.526E-15	-1.181E-05	-1.181E-05	-3.779E-11
1.01247	1.584E-02	1.584E-02	-1.531E-16	-1.530E-16	-1.231E-05	-1.231E-05	-1.750E-11
1.01871	9.109E-03	9.109E-03	-3.025E-17	-3.025E-17	-1.238E-05	-1.238E-05	-7.602E-12
1.02496	5.328E-03	5.328E-03	-9.144E-18	-9.144E-18	-1.239E-05	-1.239E-05	-3.647E-12
1.03746	2.783E-03	2.783E-03	-1.824E-18	-1.824E-18	-1.240E-05	-1.240E-05	-1.067E-12
1.04996	1.864E-03	1.864E-03	-6.726E-19	-6.726E-19	-1.240E-05	-1.240E-05	-3.847E-13
1.07496	1.117E-03	1.117E-03	-1.744E-19	-1.744E-19	-1.241E-05	-1.241E-05	-8.867E-14
1.09996	7.958E-04	7.958E-04	-7.577E-20	-7.577E-20	-1.241E-05	-1.241E-05	-2.954E-14
1.14996	5.049E-04	5.049E-04	-1.779E-20	-1.779E-20	-1.241E-05	-1.241E-05	-6.632E-15
1.19996	3.696E-04	3.696E-04	-6.701E-21	-6.701E-21	-1.241E-05	-1.241E-05	-2.296E-15
1.29996	2.406E-04	2.406E-04	-1.677E-21	-1.677E-21	-1.241E-05	-1.241E-05	-5.083E-16
1.39996	1.784E-04	1.784E-04	-6.396E-22	-6.396E-22	-1.241E-05	-1.241E-05	-1.741E-16
1.49995	1.417E-04	1.417E-04	-3.109E-22	-3.109E-22	-1.241E-05	-1.241E-05	-7.448E-17
1.59995	1.175E-04	1.175E-04	-1.702E-22	-1.702E-22	-1.241E-05	-1.241E-05	-3.722E-17
1.69995	1.004E-04	1.004E-04	-9.326E-23	-9.326E-23	-1.241E-05	-1.241E-05	-2.199E-17
1.79995	8.764E-05	8.764E-05	-5.352E-23	-5.352E-23	-1.241E-05	-1.241E-05	-1.460E-17
1.89995	7.775E-05	7.775E-05	-3.071E-23	-3.071E-23	-1.241E-05	-1.241E-05	-9.789E-18
1.99995	6.987E-05	6.987E-05	-1.761E-23	-1.761E-23	-1.241E-05	-1.241E-05	-7.300E-18

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.600 θ_D= 0. ρ_a= 2.253

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.6000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.6000	0.10000	193.644	7.087E-08	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.6000	0.20000	172.130	9.838E-08	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.6000	0.30000	150.616	1.501E-07	1.000E-00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.6000	0.40000	129.103	2.535E-07	1.000E-00	-2.226E-11	-2.226E-11	2.226E-11
0.50000	0.6000	0.50000	107.591	3.602E-07	1.000E-00	-3.321E-11	-3.321E-11	3.321E-11
0.60000	0.6000	0.60000	86.081	3.869E-07	1.000E-00	-5.417E-11	-5.417E-11	5.417E-11
0.70000	0.6000	0.70000	64.575	1.507E-06	9.999E-01	-1.041E-10	-1.041E-10	1.041E-10
0.80000	0.6000	0.80000	43.079	5.149E-06	9.998E-01	-2.614E-10	-2.614E-10	2.614E-10
0.85000	0.6000	0.85000	32.341	1.326E-05	9.996E-01	-5.059E-10	-5.059E-10	5.059E-10
0.90000	0.6000	0.90000	21.622	4.621E-05	9.992E-01	-1.275E-09	-1.275E-09	1.275E-09
0.92500	0.6000	0.92500	16.282	1.117E-04	9.986E-01	-2.339E-09	-2.339E-09	2.339E-09
0.95000	0.6000	0.95000	10.980	3.712E-04	9.971E-01	-5.799E-09	-5.799E-09	5.799E-09
0.96250	0.6000	0.96250	8.366	8.521E-04	9.956E-01	-1.084E-08	-1.084E-08	1.084E-08
0.97500	0.6000	0.97500	5.822	2.608E-03	9.937E-01	-2.870E-08	-2.870E-08	2.870E-08
0.98124	0.6001	0.98125	4.612	5.425E-03	9.941E-01	-5.831E-08	-5.831E-08	5.830E-08
0.98749	0.6001	0.98750	3.501	1.335E-02	1.000E 00	-1.385E-07	-1.385E-07	1.385E-07
0.99374	0.6003	0.99375	2.620	3.859E-02	1.014E 00	-3.903E-07	-3.903E-07	3.903E-07
0.99998	0.6007	1.00000	2.256	1.019E-01	9.986E-01	-7.539E-07	-7.539E-07	7.539E-07
1.00623	0.6015	1.00625	2.632	1.647E-01	8.930E-01	-3.840E-07	-3.840E-07	3.840E-07
1.01247	0.6026	1.01250	3.519	1.894E-01	5.279E-01	-1.359E-07	-1.359E-07	1.359E-07
1.01872	0.6038	1.01875	4.632	1.971E-01	3.493E-01	-5.755E-08	-5.755E-08	5.755E-08
1.02497	0.6050	1.02500	5.844	1.999E-01	2.293E-01	-2.838E-08	-2.838E-08	2.838E-08
1.03747	0.6073	1.03750	8.389	2.017E-01	4.136E-01	-1.077E-08	-1.077E-08	1.077E-08
1.04997	0.6097	1.05000	11.003	2.021E-01	7.915E-01	-5.775E-09	-5.775E-09	5.775E-09
1.07496	0.6141	1.07500	16.306	2.024E-01	1.575E 00	-2.333E-09	-2.333E-09	2.333E-09
1.09996	0.6184	1.10000	21.646	2.025E-01	2.337E 00	-1.271E-09	-1.271E-09	1.271E-09
1.14996	0.6264	1.15000	32.364	2.025E-01	3.771E 00	-5.052E-10	-5.052E-10	5.052E-10
1.19996	0.6338	1.20000	43.103	2.025E-01	5.088E 00	-2.611E-10	-2.611E-10	2.611E-10
1.29996	0.6467	1.30000	64.599	2.025E-01	7.423E 00	-1.040E-10	-1.040E-10	1.040E-10
1.39996	0.6579	1.40000	86.105	2.025E-01	9.425E 00	-5.414E-11	-5.414E-11	5.414E-11
1.49996	0.6675	1.50000	107.615	2.025E-01	1.116E 01	-3.319E-11	-3.319E-11	3.319E-11
1.59996	0.6760	1.60000	129.127	2.025E-01	1.268E 01	-2.225E-11	-2.225E-11	2.225E-11
1.69996	0.6834	1.70000	150.640	2.025E-01	1.402E 01	-1.494E-11	-1.494E-11	1.494E-11
1.79996	0.6900	1.80000	172.154	2.025E-01	1.521E 01	-1.054E-11	-1.054E-11	1.054E-11
1.89996	0.6959	1.90000	193.668	2.025E-01	1.628E 01	-7.435E-12	-7.435E-12	7.435E-12
1.99996	0.7013	2.00000	215.183	2.025E-01	1.724E 01	-5.300E-12	-5.300E-12	5.300E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.600 θ_D= 0. ρ_a= 2.253

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.226E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.755E-10	-5.755E-10
0.50000	3.321E-11	249.506	-3.670E-09	-3.670E-09	3.670E-09	3.670E-09	-8.585E-10	-8.585E-10
0.60000	5.417E-11	299.407	-5.776E-09	-5.776E-09	5.776E-09	5.776E-09	-1.400E-09	-1.400E-09
0.70000	1.041E-10	349.308	-9.532E-09	-9.532E-09	9.532E-09	9.532E-09	-2.691E-09	-2.691E-09
0.80000	2.614E-10	399.209	-1.776E-08	-1.776E-08	1.776E-08	1.776E-08	-6.758E-09	-6.758E-09
0.85000	5.059E-10	424.160	-2.685E-08	-2.685E-08	2.686E-08	2.686E-08	-1.308E-08	-1.308E-08
0.90000	1.275E-09	449.110	-4.694E-08	-4.694E-08	4.702E-08	4.702E-08	-3.295E-08	-3.295E-08
0.92500	2.339E-09	461.585	-6.864E-08	-6.864E-08	6.908E-08	6.908E-08	-6.047E-08	-6.047E-08
0.95000	5.799E-09	474.060	-1.132E-07	-1.132E-07	1.182E-07	1.182E-07	-1.499E-07	-1.499E-07
0.96250	1.084E-08	480.297	-1.514E-07	-1.514E-07	1.779E-07	1.779E-07	-2.801E-07	-2.801E-07
0.97500	2.870E-08	486.534	-1.511E-07	-1.511E-07	4.032E-07	4.032E-07	-7.419E-07	-7.420E-07
0.98124	5.831E-08	489.652	1.430E-07	1.430E-07	9.546E-07	9.546E-07	-1.507E-06	-1.507E-06
0.98749	1.385E-07	492.770	2.663E-06	2.663E-06	4.028E-06	4.028E-06	-3.581E-06	-3.581E-06
0.99374	3.903E-07	495.887	2.667E-05	2.667E-05	2.956E-05	2.956E-05	-1.009E-05	-1.009E-05
0.99998	7.539E-07	499.002	1.941E-04	1.941E-04	2.007E-04	2.007E-04	-1.949E-05	-1.949E-05
1.00623	3.840E-07	502.118	5.133E-04	5.133E-04	5.235E-04	5.235E-04	-9.927E-06	-9.927E-06
1.01247	1.359E-07	505.235	6.841E-04	6.841E-04	6.959E-04	6.959E-04	-3.513E-06	-3.513E-06
1.01872	5.755E-08	508.353	7.462E-04	7.462E-04	7.585E-04	7.585E-04	-1.488E-06	-1.488E-06
1.02497	2.838E-08	511.471	7.721E-04	7.721E-04	7.847E-04	7.847E-04	-7.336E-07	-7.336E-07
1.03747	1.077E-08	517.708	7.953E-04	7.953E-04	8.081E-04	8.081E-04	-2.784E-07	-2.783E-07
1.04997	5.775E-09	523.945	8.088E-04	8.088E-04	8.217E-04	8.217E-04	-1.493E-07	-1.493E-07
1.07496	2.333E-09	536.420	8.303E-04	8.303E-04	8.433E-04	8.433E-04	-6.031E-08	-6.031E-08
1.09996	1.271E-09	548.895	8.503E-04	8.503E-04	8.634E-04	8.634E-04	-3.286E-08	-3.286E-08
1.14996	5.052E-10	573.845	8.896E-04	8.896E-04	9.026E-04	9.026E-04	-1.306E-08	-1.306E-08
1.19996	2.611E-10	598.795	9.286E-04	9.286E-04	9.417E-04	9.417E-04	-6.750E-09	-6.750E-09
1.29996	1.046E-10	648.696	1.007E-03	1.007E-03	1.020E-03	1.020E-03	-2.689E-09	-2.689E-09
1.39996	5.414E-11	698.597	1.085E-03	1.085E-03	1.098E-03	1.098E-03	-1.399E-09	-1.399E-09
1.49996	3.319E-11	748.498	1.162E-03	1.162E-03	1.176E-03	1.176E-03	-8.581E-10	-8.581E-10
1.59996	2.225E-11	798.399	1.240E-03	1.240E-03	1.254E-03	1.254E-03	-5.753E-10	-5.753E-10
1.69996	1.494E-11	848.300	1.318E-03	1.318E-03	1.332E-03	1.332E-03	-3.862E-10	-3.862E-10
1.79996	1.054E-11	898.201	1.396E-03	1.396E-03	1.409E-03	1.409E-03	-2.725E-10	-2.725E-10
1.89996	7.435E-12	948.102	1.474E-03	1.474E-03	1.487E-03	1.487E-03	-1.922E-10	-1.922E-10
1.99996	5.300E-12	998.003	1.552E-03	1.552E-03	1.565E-03	1.565E-03	-1.370E-10	-1.370E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0=0.600 θ_D=0. ρ_a=2.253

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.048E-17
0.10000	3.328E-13	3.345E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-1.406E-17
0.20000	9.339E-13	9.315E-13	-5.354E-23	-5.354E-23	-9.672E-13	-9.672E-13	-2.012E-17
0.30000	1.972E-12	1.975E-12	-9.330E-23	-9.330E-23	-2.038E-12	-2.038E-12	-3.162E-17
0.40000	4.181E-12	4.180E-12	-1.702E-22	-1.702E-22	-3.951E-12	-3.951E-12	-5.352E-17
0.50000	8.291E-12	8.289E-12	-3.110E-22	-3.110E-22	-7.445E-12	-7.445E-12	-1.071E-16
0.60000	1.879E-11	1.879E-11	-6.399E-22	-6.399E-22	-1.413E-11	-1.413E-11	-2.504E-16
0.70000	5.340E-11	5.340E-11	-1.678E-21	-1.678E-21	-2.988E-11	-2.988E-11	-7.311E-16
0.80000	2.193E-10	2.193E-10	-6.702E-21	-6.702E-21	-8.160E-11	-8.160E-11	-3.303E-15
0.85000	5.850E-10	5.850E-10	-1.779E-20	-1.779E-20	-1.646E-10	-1.646E-10	-9.533E-15
0.90000	2.247E-09	2.247E-09	-7.558E-20	-7.558E-20	-4.513E-10	-4.513E-10	-4.237E-14
0.92500	5.519E-09	5.519E-09	-1.737E-19	-1.737E-19	-8.924E-10	-8.924E-10	-1.266E-13
0.95000	2.080E-08	2.080E-08	-6.631E-19	-6.631E-19	-2.197E-09	-2.197E-09	-5.431E-13
0.96250	5.175E-08	5.175E-08	-1.766E-18	-1.766E-18	-4.217E-09	-4.217E-09	-1.485E-12
0.97500	2.077E-07	2.077E-07	-8.330E-18	-8.331E-18	-1.193E-08	-1.194E-08	-4.940E-12
0.98124	5.568E-07	5.569E-07	-2.584E-17	-2.584E-17	-2.604E-08	-2.605E-08	-9.844E-12
0.98749	1.971E-06	1.971E-06	-1.057E-16	-1.057E-16	-7.518E-08	-7.519E-08	-2.164E-11
0.99374	1.370E-05	1.370E-05	-5.977E-16	-5.978E-16	-3.413E-07	-3.413E-07	-4.374E-11
0.99998	2.873E-04	2.873E-04	-1.983E-15	-1.983E-15	-1.574E-06	-1.575E-06	-5.561E-11
1.00623	6.190E-04	6.190E-04	-5.816E-16	-5.815E-16	-2.785E-06	-2.785E-06	-4.325E-11
1.01247	1.063E-03	1.063E-03	-1.024E-16	-1.024E-16	-3.043E-06	-3.043E-06	-2.139E-11
1.01872	1.600E-03	1.600E-03	-2.530E-17	-2.529E-17	-3.091E-06	-3.091E-06	-9.714E-12
1.02497	2.424E-03	2.424E-03	-8.186E-18	-8.185E-18	-3.105E-06	-3.105E-06	-4.888E-12
1.03747	1.328E-03	1.328E-03	-1.749E-18	-1.749E-18	-3.112E-06	-3.112E-06	-1.472E-12
1.04997	6.857E-04	6.857E-04	-6.588E-19	-6.588E-19	-3.114E-06	-3.114E-06	-5.390E-13
1.07496	3.366E-04	3.366E-04	-1.730E-19	-1.730E-19	-3.116E-06	-3.116E-06	-1.260E-13
1.09996	2.217E-04	2.217E-04	-7.530E-20	-7.530E-20	-3.116E-06	-3.116E-06	-4.226E-14
1.14996	1.314E-04	1.314E-04	-1.775E-20	-1.775E-20	-3.116E-06	-3.116E-06	-9.519E-15
1.19996	9.334E-05	9.334E-05	-6.690E-21	-6.690E-21	-3.116E-06	-3.116E-06	-3.300E-15
1.29996	5.906E-05	5.906E-05	-1.676E-21	-1.676E-21	-3.116E-06	-3.116E-06	-7.312E-16
1.39996	4.319E-05	4.319E-05	-6.393E-22	-6.393E-22	-3.116E-06	-3.116E-06	-2.505E-16
1.49996	3.404E-05	3.404E-05	-3.108E-22	-3.108E-22	-3.116E-06	-3.116E-06	-1.072E-16
1.59996	2.809E-05	2.809E-05	-1.701E-22	-1.701E-22	-3.116E-06	-3.116E-06	-5.358E-17
1.69996	2.391E-05	2.391E-05	-9.324E-23	-9.324E-23	-3.116E-06	-3.116E-06	-3.166E-17
1.79996	2.081E-05	2.081E-05	-5.351E-23	-5.351E-23	-3.116E-06	-3.116E-06	-2.015E-17
1.89996	1.843E-05	1.843E-05	-3.071E-23	-3.071E-23	-3.116E-06	-3.116E-06	-1.409E-17
1.99996	1.653E-05	1.653E-05	-1.760E-23	-1.760E-23	-3.116E-06	-3.116E-06	-1.051E-17

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.700 θ_D= 0. ρ_0= 2.629

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.7000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.7000	0.10000	193.645	6.253E-08	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.7000	0.20000	172.131	9.005E-08	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.7000	0.30000	150.618	1.668E-07	1.000E-00	-1.495E-11	-1.495E-11	1.495E-11
0.40000	0.7000	0.40000	129.106	2.535E-07	1.000E-00	-2.226E-11	-2.226E-11	2.226E-11
0.50000	0.7000	0.50000	107.596	3.335E-07	1.000E-00	-3.321E-11	-3.321E-11	3.321E-11
0.60000	0.7000	0.60000	86.088	3.869E-07	9.999E-01	-5.416E-11	-5.416E-11	5.416E-11
0.70000	0.7000	0.70000	64.585	1.561E-06	9.999E-01	-1.041E-10	-1.041E-10	1.041E-10
0.80000	0.7000	0.80000	43.096	5.123E-06	9.998E-01	-2.612E-10	-2.612E-10	2.612E-10
0.85000	0.7000	0.85000	32.365	1.350E-05	9.996E-01	-5.051E-10	-5.051E-10	5.051E-10
0.90000	0.7000	0.90000	21.660	4.717E-05	9.991E-01	-1.269E-09	-1.269E-09	1.269E-09
0.92500	0.7000	0.92500	16.334	1.133E-04	9.984E-01	-2.325E-09	-2.325E-09	2.325E-09
0.95000	0.7000	0.95000	11.059	3.746E-04	9.970E-01	-5.718E-09	-5.718E-09	5.718E-09
0.96250	0.7000	0.96250	8.471	8.459E-04	9.957E-01	-1.053E-08	-1.053E-08	1.053E-08
0.97500	0.7000	0.97500	5.973	2.512E-03	9.948E-01	-2.653E-08	-2.653E-08	2.653E-08
0.98125	0.7001	0.98125	4.803	5.039E-03	9.966E-01	-5.167E-08	-5.167E-08	5.167E-08
0.98749	0.7001	0.98750	3.751	1.155E-02	1.003E 00	-1.065E-07	-1.065E-07	1.065E-07
0.99374	0.7002	0.99375	2.947	2.916E-02	1.012E 00	-2.521E-07	-2.521E-07	2.521E-07
0.99999	0.7005	1.00000	2.631	6.590E-02	9.990E-01	-3.848E-07	-3.848E-07	3.848E-07
1.00623	0.7010	1.00625	2.962	1.023E-01	1.008E 00	-2.472E-07	-2.472E-07	2.472E-07
1.01248	0.7017	1.01250	3.774	1.195E-01	9.967E-01	-1.040E-07	-1.040E-07	1.040E-07
1.01873	0.7025	1.01875	4.830	1.258E-01	9.863E-01	-5.079E-08	-5.079E-08	5.080E-08
1.02498	0.7032	1.02500	6.002	1.283E-01	9.810E-01	-2.614E-08	-2.614E-08	2.615E-08
1.03748	0.7048	1.03750	8.502	1.299E-01	9.749E-01	-1.044E-08	-1.044E-08	1.044E-08
1.04997	0.7062	1.05000	11.091	1.304E-01	9.695E-01	-5.686E-09	-5.686E-09	5.686E-09
1.07497	0.7091	1.07500	16.366	1.307E-01	9.583E-01	-2.317E-09	-2.317E-09	2.317E-09
1.09997	0.7119	1.10000	21.692	1.308E-01	9.468E-01	-1.265E-09	-1.265E-09	1.265E-09
1.14997	0.7171	1.15000	32.397	1.308E-01	9.246E-01	-5.041E-10	-5.041E-10	5.041E-10
1.19997	0.7218	1.20000	43.128	1.308E-01	9.040E-01	-2.608E-10	-2.608E-10	2.608E-10
1.29997	0.7302	1.30000	64.617	1.308E-01	8.673E-01	-1.039E-10	-1.039E-10	1.039E-10
1.39997	0.7374	1.40000	86.120	1.308E-01	8.358E-01	-5.412E-11	-5.412E-11	5.412E-11
1.49997	0.7436	1.50000	107.628	1.308E-01	8.084E-01	-3.319E-11	-3.319E-11	3.319E-11
1.59997	0.7491	1.60000	129.138	1.308E-01	7.845E-01	-2.225E-11	-2.225E-11	2.225E-11
1.69997	0.7539	1.70000	150.650	1.308E-01	7.634E-01	-1.494E-11	-1.494E-11	1.494E-11
1.79997	0.7581	1.80000	172.163	1.308E-01	7.446E-01	-1.054E-11	-1.054E-11	1.054E-11
1.89997	0.7620	1.90000	193.677	1.308E-01	7.278E-01	-7.434E-12	-7.434E-12	7.434E-12
1.99997	0.7654	2.00000	215.191	1.308E-01	7.127E-01	-5.299E-12	-5.299E-12	5.299E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.700 θ_D= 0. ρ_0= 2.629

z	$_x\mu'$-1.0	T_o	$_oT_1$-T_o	$_xT_1$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.495E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.864E-10	-3.864E-10
0.40000	2.226E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.755E-10	-5.755E-10
0.50000	3.321E-11	249.506	-3.669E-09	-3.669E-09	3.669E-09	3.669E-09	-8.584E-10	-8.584E-10
0.60000	5.416E-11	299.407	-5.775E-09	-5.775E-09	5.775E-09	5.775E-09	-1.400E-09	-1.400E-09
0.70000	1.041E-10	349.308	-9.530E-09	-9.530E-09	9.530E-09	9.530E-09	-2.690E-09	-2.690E-09
0.80000	2.612E-10	399.209	-1.776E-08	-1.776E-08	1.776E-08	1.776E-08	-6.753E-09	-6.753E-09
0.85000	5.051E-10	424.160	-2.683E-08	-2.683E-08	2.684E-08	2.684E-08	-1.306E-08	-1.306E-08
0.90000	1.269E-09	449.110	-4.687E-08	-4.687E-08	4.694E-08	4.694E-08	-3.281E-08	-3.281E-08
0.92500	2.325E-09	461.585	-6.845E-08	-6.845E-08	6.890E-08	6.890E-08	-6.011E-08	-6.011E-08
0.95000	5.718E-09	474.060	-1.125E-07	-1.125E-07	1.175E-07	1.175E-07	-1.478E-07	-1.478E-07
0.96250	1.053E-08	480.297	-1.497E-07	-1.497E-07	1.759E-07	1.759E-07	-2.721E-07	-2.721E-07
0.97500	2.653E-08	486.534	-1.529E-07	-1.529E-07	3.867E-07	3.867E-07	-6.859E-07	-6.859E-07
0.98125	5.167E-08	489.653	8.761E-08	8.760E-08	8.594E-07	8.594E-07	-1.336E-06	-1.336E-06
0.98749	1.065E-07	492.771	1.884E-06	1.884E-06	3.121E-06	3.121E-06	-2.754E-06	-2.754E-06
0.99374	2.521E-07	495.888	1.490E-05	1.490E-05	1.722E-05	1.722E-05	-6.516E-06	-6.516E-06
0.99999	3.848E-07	499.005	8.030E-05	8.030E-05	8.472E-05	8.472E-05	-9.948E-06	-9.948E-06
1.00623	2.472E-07	502.122	1.967E-04	1.967E-04	2.032E-04	2.032E-04	-6.390E-06	-6.390E-06
1.01248	1.040E-07	505.239	2.709E-04	2.709E-04	2.784E-04	2.784E-04	-2.688E-06	-2.688E-06
1.01873	5.079E-08	508.357	3.024E-04	3.024E-04	3.104E-04	3.104E-04	-1.313E-06	-1.313E-06
1.02498	2.614E-08	511.475	3.165E-04	3.165E-04	3.247E-04	3.247E-04	-6.759E-07	-6.759E-07
1.03748	1.044E-08	517.712	3.286E-04	3.286E-04	3.371E-04	3.371E-04	-2.699E-07	-2.699E-07
1.04997	5.686E-09	523.949	3.351E-04	3.351E-04	3.436E-04	3.436E-04	-1.470E-07	-1.470E-07
1.07497	2.317E-09	536.424	3.445E-04	3.445E-04	3.531E-04	3.531E-04	-5.990E-08	-5.990E-08
1.09997	1.265E-09	548.899	3.530E-04	3.530E-04	3.617E-04	3.617E-04	-3.269E-08	-3.269E-08
1.14997	5.041E-10	573.850	3.694E-04	3.694E-04	3.782E-04	3.782E-04	-1.303E-08	-1.303E-08
1.19997	2.608E-10	598.800	3.858E-04	3.858E-04	3.945E-04	3.945E-04	-6.742E-09	-6.742E-09
1.29997	1.039E-10	648.701	4.183E-04	4.183E-04	4.271E-04	4.271E-04	-2.687E-09	-2.687E-09
1.39997	5.412E-11	698.602	4.508E-04	4.508E-04	4.596E-04	4.596E-04	-1.399E-09	-1.399E-09
1.49997	3.319E-11	748.503	4.834E-04	4.834E-04	4.921E-04	4.921E-04	-8.579E-10	-8.579E-10
1.59997	2.225E-11	798.404	5.159E-04	5.159E-04	5.247E-04	5.247E-04	-5.751E-10	-5.751E-10
1.69997	1.494E-11	848.305	5.484E-04	5.484E-04	5.572E-04	5.572E-04	-3.862E-10	-3.862E-10
1.79997	1.054E-11	898.207	5.809E-04	5.809E-04	5.897E-04	5.897E-04	-2.724E-10	-2.724E-10
1.89997	7.434E-12	948.108	6.135E-04	6.135E-04	6.222E-04	6.222E-04	-1.922E-10	-1.922E-10
1.99997	5.299E-12	998.009	6.460E-04	6.460E-04	6.548E-04	6.548E-04	-1.370E-10	-1.370E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.700 θ_D= 0. ρ_a= 2.629

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.427E-17
0.10000	3.846E-13	3.905E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-1.914E-17
0.20000	1.085E-12	1.088E-12	-5.354E-23	-5.354E-23	-9.672E-13	-9.672E-13	-2.738E-17
0.30000	2.302E-12	2.301E-12	-9.329E-23	-9.329E-23	-2.038E-12	-2.038E-12	-4.303E-17
0.40000	4.881E-12	4.878E-12	-1.702E-22	-1.702E-22	-3.951E-12	-3.951E-12	-7.284E-17
0.50000	9.667E-12	9.665E-12	-3.110E-22	-3.110E-22	-7.445E-12	-7.445E-12	-1.458E-16
0.60000	2.191E-11	2.191E-11	-6.397E-22	-6.397E-22	-1.413E-11	-1.413E-11	-3.407E-16
0.70000	6.227E-11	6.227E-11	-1.677E-21	-1.677E-21	-2.987E-11	-2.987E-11	-9.945E-16
0.80000	2.557E-10	2.557E-10	-6.693E-21	-6.693E-21	-8.155E-11	-8.155E-11	-4.488E-15
0.85000	6.814E-10	6.814E-10	-1.775E-20	-1.775E-20	-1.644E-10	-1.644E-10	-1.294E-14
0.90000	2.611E-09	2.611E-09	-7.513E-20	-7.513E-20	-4.498E-10	-4.498E-10	-5.732E-14
0.92500	6.395E-09	6.395E-09	-1.723E-19	-1.723E-19	-8.878E-10	-8.878E-10	-1.701E-13
0.95000	2.389E-08	2.389E-08	-6.486E-19	-6.486E-19	-2.170E-09	-2.170E-09	-7.182E-13
0.96250	5.840E-08	5.841E-08	-1.688E-18	-1.688E-18	-4.115E-09	-4.115E-09	-1.931E-12
0.97500	2.236E-07	2.236E-07	-7.375E-18	-7.376E-18	-1.123E-08	-1.123E-08	-6.235E-12
0.98125	5.690E-07	5.690E-07	-2.123E-17	-2.123E-17	-2.316E-08	-2.316E-08	-1.185E-11
0.98749	1.805E-06	1.805E-06	-6.845E-17	-6.846E-17	-5.990E-08	-5.990E-08	-2.535E-11
0.99374	9.135E-06	9.136E-06	-2.852E-16	-2.852E-16	-2.070E-07	-2.070E-07	-4.552E-11
0.99999	6.157E-05	6.158E-05	-5.837E-16	-5.837E-16	-6.454E-07	-6.455E-07	-5.895E-11
1.00623	1.114E-04	1.114E-04	-2.759E-16	-2.758E-16	-1.077E-06	-1.077E-06	-4.506E-11
1.01248	1.192E-04	1.192E-04	-6.577E-17	-6.576E-17	-1.219E-06	-1.219E-06	-2.504E-11
1.01873	1.209E-04	1.209E-04	-2.065E-17	-2.065E-17	-1.255E-06	-1.255E-06	-1.166E-11
1.02498	1.211E-04	1.211E-04	-7.209E-18	-7.209E-18	-1.267E-06	-1.267E-06	-6.150E-12
1.03748	1.206E-04	1.206E-04	-1.666E-18	-1.666E-18	-1.274E-06	-1.274E-06	-1.908E-12
1.04997	1.199E-04	1.199E-04	-6.430E-19	-6.430E-19	-1.276E-06	-1.276E-06	-7.108E-13
1.07497	1.185E-04	1.185E-04	-1.714E-19	-1.714E-19	-1.277E-06	-1.277E-06	-1.689E-13
1.09997	1.172E-04	1.172E-04	-7.476E-20	-7.476E-20	-1.277E-06	-1.277E-06	-5.708E-14
1.14997	1.148E-04	1.148E-04	-1.769E-20	-1.769E-20	-1.278E-06	-1.278E-06	-1.291E-14
1.19997	1.125E-04	1.125E-04	-6.677E-21	-6.677E-21	-1.278E-06	-1.278E-06	-4.482E-15
1.29997	1.082E-04	1.082E-04	-1.675E-21	-1.675E-21	-1.278E-06	-1.278E-06	-9.941E-16
1.39997	1.043E-04	1.043E-04	-6.390E-22	-6.390E-22	-1.278E-06	-1.278E-06	-3.407E-16
1.49997	1.006E-04	1.006E-04	-3.107E-22	-3.107E-22	-1.278E-06	-1.278E-06	-1.458E-16
1.59997	9.723E-05	9.723E-05	-1.701E-22	-1.701E-22	-1.278E-06	-1.278E-06	-7.291E-17
1.69997	9.404E-05	9.404E-05	-9.322E-23	-9.322E-23	-1.278E-06	-1.278E-06	-4.309E-17
1.79997	9.105E-05	9.105E-05	-5.350E-23	-5.350E-23	-1.278E-06	-1.278E-06	-2.742E-17
1.89997	8.825E-05	8.825E-05	-3.070E-23	-3.070E-23	-1.278E-06	-1.278E-06	-1.918E-17
1.99997	8.562E-05	8.562E-05	-1.760E-23	-1.760E-23	-1.278E-06	-1.278E-06	-1.430E-17

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.800 θ_D= 0. ρ_a= 3.004

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.8000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	0.8000	0.10000	193.645	8.921E-08	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	0.8000	0.20000	172.132	1.517E-07	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	0.8000	0.30000	150.620	2.201E-07	1.000E-00	-1.494E-11	-1.494E-11	1.494E-11
0.40000	0.8000	0.40000	129.109	3.335E-07	1.000E-00	-2.226E-11	-2.226E-11	2.226E-11
0.50000	0.8000	0.50000	107.600	4.736E-07	1.000E-00	-3.320E-11	-3.320E-11	3.320E-11
0.60000	0.8000	0.60000	86.095	5.069E-07	1.000E-00	-5.415E-11	-5.415E-11	5.415E-11
0.70000	0.8000	0.70000	64.597	2.054E-06	9.999E-01	-1.040E-10	-1.040E-10	1.040E-10
0.80000	0.8000	0.80000	43.116	6.777E-06	9.998E-01	-2.609E-10	-2.610E-10	2.609E-10
0.85000	0.8000	0.85000	32.393	1.761E-05	9.997E-01	-5.042E-10	-5.042E-10	5.042E-10
0.90000	0.8000	0.90000	21.704	6.035E-05	9.993E-01	-1.263E-09	-1.263E-09	1.263E-09
0.92500	0.8000	0.92500	16.394	1.432E-04	9.988E-01	-2.310E-09	-2.310E-09	2.310E-09
0.95000	0.8000	0.95000	11.150	4.704E-04	9.977E-01	-5.626E-09	-5.626E-09	5.626E-09
0.96250	0.8000	0.96250	8.591	1.047E-03	9.968E-01	-1.019E-08	-1.019E-08	1.019E-08
0.97500	0.8000	0.97500	6.144	3.011E-03	9.966E-01	-2.477E-08	-2.477E-08	2.477E-08
0.98124	0.8001	0.98125	5.014	5.818E-03	9.986E-01	-4.519E-08	-4.519E-08	4.519E-08
0.98749	0.8001	0.98750	4.020	1.246E-02	1.004E 00	-8.482E-08	-8.483E-08	8.482E-08
0.99374	0.8002	0.99375	3.285	2.816E-02	1.007E 00	-1.740E-07	-1.740E-07	1.740E-07
0.99999	0.8005	1.00000	3.006	5.670E-02	9.994E-01	-2.333E-07	-2.333E-07	2.333E-07
1.00623	0.8009	1.00625	3.302	8.493E-02	1.005E 00	-1.709E-07	-1.709E-07	1.709E-07
1.01248	0.8015	1.01250	4.048	1.002E-01	1.000E-00	-8.333E-08	-8.333E-08	8.334E-08
1.01873	0.8021	1.01875	5.048	1.067E-01	9.928E-01	-4.424E-08	-4.424E-08	4.424E-08
1.02498	0.8028	1.02500	6.180	1.094E-01	9.888E-01	-2.443E-08	-2.443E-08	2.443E-08
1.03748	0.8041	1.03750	8.630	1.114E-01	9.849E-01	-1.008E-08	-1.008E-08	1.008E-08
1.04998	0.8054	1.05000	11.190	1.119E-01	9.819E-01	-5.585E-09	-5.585E-09	5.585E-09
1.07497	0.8079	1.07500	16.435	1.123E-01	9.757E-01	-2.299E-09	-2.299E-09	2.299E-09
1.09997	0.8102	1.10000	21.746	1.124E-01	9.692E-01	-1.257E-09	-1.257E-09	1.257E-09
1.14997	0.8147	1.15000	32.434	1.124E-01	9.566E-01	-5.028E-10	-5.028E-10	5.028E-10
1.19997	0.8187	1.20000	43.158	1.124E-01	9.448E-01	-2.604E-10	-2.604E-10	2.604E-10
1.29997	0.8260	1.30000	64.639	1.124E-01	9.238E-01	-1.039E-10	-1.039E-10	1.039E-10
1.39997	0.8321	1.40000	86.137	1.124E-01	9.057E-01	-5.409E-11	-5.409E-11	5.409E-11
1.49997	0.8375	1.50000	107.642	1.124E-01	8.900E-01	-3.318E-11	-3.318E-11	3.318E-11
1.59997	0.8422	1.60000	129.151	1.124E-01	8.763E-01	-2.224E-11	-2.224E-11	2.224E-11
1.69997	0.8463	1.70000	150.662	1.124E-01	8.642E-01	-1.493E-11	-1.493E-11	1.493E-11
1.79997	0.8500	1.80000	172.174	1.124E-01	8.534E-01	-1.054E-11	-1.054E-11	1.054E-11
1.89997	0.8533	1.90000	193.687	1.125E-01	8.438E-01	-7.433E-12	-7.433E-12	7.433E-12
1.99997	0.8562	2.00000	215.201	1.125E-01	8.351E-01	-5.298E-12	-5.298E-12	5.298E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.800 θ_D= 0. ρ_0= 3.004

z	$_x\mu'-1$ 0	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	5.304E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.726E-10	-2.726E-10
0.30000	1.494E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.863E-10	-3.863E-10
0.40000	2.226E-11	199.605	-2.304E-09	-2.304E-09	2.304E-09	2.304E-09	-5.755E-10	-5.755E-10
0.50000	3.320E-11	249.506	-3.669E-09	-3.669E-09	3.669E-09	3.669E-09	-8.584E-10	-8.584E-10
0.60000	5.415E-11	299.407	-5.775E-09	-5.775E-09	5.775E-09	5.775E-09	-1.400E-09	-1.400E-09
0.70000	1.040E-10	349.308	-9.529E-09	-9.529E-09	9.529E-09	9.529E-09	-2.689E-09	-2.689E-09
0.80000	2.610E-10	399.209	-1.775E-08	-1.775E-08	1.775E-08	1.775E-08	-6.746E-09	-6.746E-09
0.85000	5.042E-10	424.160	-2.681E-08	-2.681E-08	2.682E-08	2.682E-08	-1.303E-08	-1.303E-08
0.90000	1.263E-09	449.110	-4.676E-08	-4.676E-08	4.688E-08	4.688E-08	-3.265E-08	-3.265E-08
0.92500	2.316E-09	461.585	-6.810E-08	-6.810E-08	6.882E-08	6.882E-08	-5.971E-08	-5.971E-08
0.95000	5.626E-09	474.060	-1.102E-07	-1.102E-07	1.182E-07	1.182E-07	-1.454E-07	-1.454E-07
0.96250	1.019E-08	480.297	-1.408E-07	-1.408E-07	1.808E-07	1.808E-07	-2.633E-07	-2.633E-07
0.97500	2.477E-08	486.534	-9.416E-08	-9.416E-08	4.300E-07	4.300E-07	-6.404E-07	-6.404E-07
0.98124	4.519E-08	489.652	2.649E-07	2.648E-07	9.972E-07	9.972E-07	-1.168E-06	-1.168E-06
0.98749	8.483E-08	492.770	2.348E-06	2.348E-06	3.477E-06	3.477E-06	-2.193E-06	-2.193E-06
0.99374	1.740E-07	495.888	1.402E-05	1.402E-05	1.593E-05	1.593E-05	-4.499E-06	-4.499E-06
0.99999	2.335E-07	499.005	5.946E-05	5.946E-05	6.270E-05	6.270E-05	-6.032E-06	-6.032E-06
1.00623	1.709E-07	502.122	1.356E-04	1.356E-04	1.402E-04	1.402E-04	-4.418E-06	-4.418E-06
1.01248	8.333E-08	505.239	1.907E-04	1.907E-04	1.960E-04	1.960E-04	-2.154E-06	-2.154E-06
1.01873	4.424E-08	508.357	2.175E-04	2.175E-04	2.232E-04	2.232E-04	-1.144E-06	-1.144E-06
1.02498	2.443E-08	511.476	2.303E-04	2.303E-04	2.362E-04	2.362E-04	-6.316E-07	-6.315E-07
1.03748	1.008E-08	517.713	2.415E-04	2.415E-04	2.477E-04	2.477E-04	-2.605E-07	-2.605E-07
1.04998	5.585E-09	523.950	2.469E-04	2.469E-04	2.531E-04	2.531E-04	-1.444E-07	-1.444E-07
1.07497	2.299E-09	536.425	2.543E-04	2.543E-04	2.606E-04	2.606E-04	-5.943E-08	-5.943E-08
1.09997	1.257E-09	548.900	2.607E-04	2.607E-04	2.670E-04	2.670E-04	-3.249E-08	-3.249E-08
1.14997	5.028E-10	573.850	2.729E-04	2.729E-04	2.793E-04	2.793E-04	-1.300E-08	-1.300E-08
1.19997	2.604E-10	598.801	2.850E-04	2.850E-04	2.914E-04	2.914E-04	-6.732E-09	-6.732E-09
1.29997	1.039E-10	648.702	3.091E-04	3.091E-04	3.155E-04	3.155E-04	-2.685E-09	-2.685E-09
1.39997	5.409E-11	698.603	3.331E-04	3.331E-04	3.395E-04	3.395E-04	-1.398E-09	-1.398E-09
1.49997	3.318E-11	748.504	3.572E-04	3.572E-04	3.636E-04	3.636E-04	-8.577E-10	-8.577E-10
1.59997	2.224E-11	798.405	3.812E-04	3.812E-04	3.876E-04	3.876E-04	-5.750E-10	-5.750E-10
1.69997	1.493E-11	848.306	4.053E-04	4.053E-04	4.117E-04	4.117E-04	-3.861E-10	-3.861E-10
1.79997	1.054E-11	898.207	4.293E-04	4.293E-04	4.357E-04	4.357E-04	-2.724E-10	-2.724E-10
1.89997	7.433E-12	948.108	4.533E-04	4.533E-04	4.597E-04	4.597E-04	-1.921E-10	-1.921E-10
1.99997	5.298E-12	998.009	4.773E-04	4.773E-04	4.838E-04	4.838E-04	-1.370E-10	-1.370E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 0.800 θ_D= 0. ρ_0= 3.004

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.864E-17
0.10000	4.422E-13	4.415E-13	-3.073E-23	-3.073E-23	-3.526E-13	-3.526E-13	-2.500E-17
0.20000	1.239E-12	1.241E-12	-5.354E-23	-5.354E-23	-9.672E-13	-9.672E-13	-3.576E-17
0.30000	2.628E-12	2.630E-12	-9.329E-23	-9.329E-23	-2.038E-12	-2.038E-12	-5.620E-17
0.40000	5.569E-12	5.572E-12	-1.702E-22	-1.702E-22	-3.950E-12	-3.950E-12	-9.513E-17
0.50000	1.104E-11	1.104E-11	-3.109E-22	-3.109E-22	-7.444E-12	-7.444E-12	-1.903E-16
0.60000	2.503E-11	2.503E-11	-6.395E-22	-6.395E-22	-1.413E-11	-1.413E-11	-4.448E-16
0.70000	7.114E-11	7.113E-11	-1.676E-21	-1.676E-21	-2.986E-11	-2.986E-11	-1.298E-15
0.80000	2.920E-10	2.920E-10	-6.684E-21	-6.684E-21	-8.148E-11	-8.148E-11	-5.852E-15
0.85000	7.775E-10	7.775E-10	-1.770E-20	-1.770E-20	-1.641E-10	-1.641E-10	-1.684E-14
0.90000	2.974E-09	2.974E-09	-7.462E-20	-7.462E-20	-4.481E-10	-4.481E-10	-7.433E-14
0.92500	7.260E-09	7.260E-09	-1.707E-19	-1.707E-19	-8.825E-10	-8.825E-10	-2.188E-13
0.95000	2.691E-08	2.691E-08	-6.325E-19	-6.325E-19	-2.138E-09	-2.138E-09	-9.078E-13
0.96250	6.469E-08	6.469E-08	-1.603E-18	-1.603E-18	-4.007E-09	-4.007E-09	-2.397E-12
0.97500	2.366E-07	2.366E-07	-6.614E-18	-6.615E-18	-1.051E-08	-1.051E-08	-7.368E-12
0.98124	5.669E-07	5.669E-07	-1.708E-17	-1.708E-17	-2.050E-08	-2.051E-08	-1.367E-11
0.98749	1.604E-06	1.605E-06	-4.750E-17	-4.750E-17	-4.876E-08	-4.877E-08	-2.744E-11
0.99374	6.030E-06	6.031E-06	-1.541E-16	-1.541E-16	-1.347E-07	-1.347E-07	-4.493E-11
0.99999	2.376E-05	2.376E-05	-2.503E-16	-2.503E-16	-3.358E-07	-3.358E-07	-5.702E-11
1.00623	4.078E-05	4.078E-05	-1.496E-16	-1.496E-16	-5.341E-07	-5.341E-07	-4.435E-11
1.01248	4.507E-05	4.507E-05	-4.615E-17	-4.615E-17	-6.169E-07	-6.169E-07	-2.680E-11
1.01873	4.616E-05	4.616E-05	-1.650E-17	-1.650E-17	-6.442E-07	-6.442E-07	-1.342E-11
1.02498	4.638E-05	4.638E-05	-6.469E-18	-6.468E-18	-6.539E-07	-6.539E-07	-7.214E-12
1.03748	4.618E-05	4.618E-05	-1.576E-18	-1.576E-18	-6.602E-07	-6.602E-07	-2.359E-12
1.04998	4.580E-05	4.580E-05	-6.254E-19	-6.254E-19	-6.620E-07	-6.620E-07	-8.956E-13
1.07497	4.504E-05	4.504E-05	-1.696E-19	-1.696E-19	-6.633E-07	-6.633E-07	-2.168E-13
1.09997	4.432E-05	4.432E-05	-7.414E-20	-7.414E-20	-6.637E-07	-6.637E-07	-7.391E-14
1.14997	4.295E-05	4.295E-05	-1.763E-20	-1.763E-20	-6.640E-07	-6.640E-07	-1.678E-14
1.19997	4.168E-05	4.168E-05	-6.663E-21	-6.663E-21	-6.641E-07	-6.641E-07	-5.839E-15
1.29997	3.935E-05	3.935E-05	-1.673E-21	-1.673E-21	-6.641E-07	-6.641E-07	-1.297E-15
1.39997	3.726E-05	3.726E-05	-6.386E-22	-6.386E-22	-6.641E-07	-6.641E-07	-4.447E-16
1.49997	3.539E-05	3.539E-05	-3.105E-22	-3.105E-22	-6.641E-07	-6.641E-07	-1.904E-16
1.59997	3.370E-05	3.370E-05	-1.700E-22	-1.700E-22	-6.642E-07	-6.642E-07	-9.519E-17
1.69997	3.216E-05	3.216E-05	-9.319E-23	-9.319E-23	-6.642E-07	-6.642E-07	-5.626E-17
1.79997	3.076E-05	3.076E-05	-5.348E-23	-5.348E-23	-6.642E-07	-6.642E-07	-3.581E-17
1.89997	2.947E-05	2.947E-05	-3.069E-23	-3.069E-23	-6.642E-07	-6.642E-07	-2.505E-17
1.99997	2.829E-05	2.829E-05	-1.760E-23	-1.760E-23	-6.642E-07	-6.642E-07	-1.868E-17

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 1.000 θ_D= 0. ρ_a= 3.755

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	1.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	1.0000	0.10000	193.647	9.088E-08	1.000E-00	-7.438E-12	-7.438E-12	7.438E-12
0.20000	1.0000	0.20000	172.135	1.367E-07	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	1.0000	0.30000	150.625	2.568E-07	1.000E-00	-1.494E-11	-1.494E-11	1.494E-11
0.40000	1.0000	0.40000	129.117	4.069E-07	1.000E-00	-2.226E-11	-2.226E-11	2.226E-11
0.50000	1.0000	0.50000	107.612	5.603E-07	1.000E-00	-3.320E-11	-3.320E-11	3.320E-11
0.60000	1.0000	0.60000	86.113	6.403E-07	9.999E-01	-5.413E-11	-5.413E-11	5.413E-11
0.70000	1.0000	0.70000	64.624	2.561E-06	9.999E-01	-1.039E-10	-1.039E-10	1.039E-10
0.80000	1.0000	0.80000	43.163	8.591E-06	9.997E-01	-2.603E-10	-2.603E-10	2.603E-10
0.85000	1.0000	0.85000	32.459	2.220E-05	9.994E-01	-5.020E-10	-5.020E-10	5.020E-10
0.90000	1.0000	0.90000	21.809	7.577E-05	9.987E-01	-1.248E-09	-1.248E-09	1.248E-09
0.92500	1.0000	0.92500	16.536	1.769E-04	9.979E-01	-2.272E-09	-2.272E-09	2.272E-09
0.95000	1.0000	0.95000	11.364	5.682E-04	9.964E-01	-5.414E-09	-5.414E-09	5.414E-09
0.96250	1.0000	0.96250	8.870	1.227E-03	9.958E-01	-9.432E-09	-9.432E-09	9.431E-09
0.97500	1.0001	0.97500	6.534	3.278E-03	9.977E-01	-2.135E-08	-2.135E-08	2.135E-08
0.98124	1.0001	0.98125	5.488	5.906E-03	1.002E 00	-3.412E-08	-3.412E-08	3.412E-08
0.98749	1.0001	0.98750	4.601	1.119E-02	1.007E 00	-5.870E-08	-5.870E-08	5.870E-08
0.99374	1.0002	0.99375	3.979	2.133E-02	1.007E 00	-8.713E-08	-8.713E-08	8.713E-08
0.99999	1.0004	1.00000	3.757	3.665E-02	9.996E-01	-1.058E-07	-1.058E-07	1.058E-07
1.00624	1.0007	1.00625	4.001	5.187E-02	1.006E 00	-8.582E-08	-8.581E-08	8.582E-08
1.01248	1.0010	1.01250	4.639	6.169E-02	1.006E 00	-5.730E-08	-5.730E-08	5.730E-08
1.01873	1.0014	1.01875	5.536	6.679E-02	9.991E-01	-3.328E-08	-3.328E-08	3.328E-08
1.02498	1.0018	1.02500	6.588	6.932E-02	9.941E-01	-2.092E-08	-2.092E-08	2.092E-08
1.03748	1.0027	1.03750	8.930	7.131E-02	9.900E-01	-9.278E-09	-9.278E-09	9.278E-09
1.04998	1.0035	1.05000	11.426	7.196E-02	9.885E-01	-5.355E-09	-5.355E-09	5.355E-09
1.07498	1.0051	1.07500	16.600	7.235E-02	9.862E-01	-2.256E-09	-2.256E-09	2.256E-09
1.09998	1.0066	1.10000	21.874	7.245E-02	9.834E-01	-1.239E-09	-1.239E-09	1.239E-09
1.14998	1.0095	1.15000	32.524	7.252E-02	9.776E-01	-4.999E-10	-4.999E-10	4.999E-10
1.19998	1.0121	1.20000	43.228	7.253E-02	9.718E-01	-2.595E-10	-2.595E-10	2.595E-10
1.29998	1.0167	1.30000	64.690	7.254E-02	9.614E-01	-1.037E-10	-1.037E-10	1.037E-10
1.39998	1.0207	1.40000	86.178	7.254E-02	9.523E-01	-5.404E-11	-5.404E-11	5.404E-11
1.49998	1.0242	1.50000	107.678	7.254E-02	9.444E-01	-3.316E-11	-3.316E-11	3.316E-11
1.59998	1.0272	1.60000	129.183	7.255E-02	9.375E-01	-2.223E-11	-2.223E-11	2.223E-11
1.69998	1.0299	1.70000	150.691	7.255E-02	9.314E-01	-1.493E-11	-1.493E-11	1.493E-11
1.79998	1.0323	1.80000	172.201	7.255E-02	9.260E-01	-1.053E-11	-1.053E-11	1.053E-11
1.89998	1.0344	1.90000	193.712	7.255E-02	9.211E-01	-7.430E-12	-7.430E-12	7.430E-12
1.99998	1.0363	2.00000	215.225	7.255E-02	9.168E-01	-5.297E-12	-5.297E-12	5.297E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 1.000 θ_D= 0. ρ_a= 3.755

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.438E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.725E-10	-2.725E-10
0.30000	1.494E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.863E-10	-3.863E-10
0.40000	2.226E-11	199.605	-2.303E-09	-2.303E-09	2.303E-09	2.303E-09	-5.754E-10	-5.754E-10
0.50000	3.320E-11	249.506	-3.669E-09	-3.669E-09	3.669E-09	3.669E-09	-8.582E-10	-8.582E-10
0.60000	5.413E-11	299.407	-5.774E-09	-5.774E-09	5.774E-09	5.774E-09	-1.399E-09	-1.399E-09
0.70000	1.039E-10	349.308	-9.525E-09	-9.525E-09	9.525E-09	9.525E-09	-2.687E-09	-2.687E-09
0.80000	2.603E-10	399.209	-1.773E-08	-1.773E-08	1.773E-08	1.773E-08	-6.730E-09	-6.730E-09
0.85000	5.020E-10	424.160	-2.676E-08	-2.676E-08	2.677E-08	2.677E-08	-1.298E-08	-1.298E-08
0.90000	1.248E-09	449.110	-4.652E-08	-4.652E-08	4.672E-08	4.672E-08	-3.226E-08	-3.226E-08
0.92500	2.272E-09	461.585	-6.741E-08	-6.741E-08	6.851E-08	6.851E-08	-5.875E-08	-5.875E-08
0.95000	5.414E-09	474.060	-1.064E-07	-1.064E-07	1.181E-07	1.181E-07	-1.400E-07	-1.400E-07
0.96250	9.432E-09	480.297	-1.287E-07	-1.287E-07	1.837E-07	1.837E-07	-2.438E-07	-2.438E-07
0.97500	2.135E-08	486.534	-4.651E-08	-4.651E-08	4.448E-07	4.448E-07	-5.519E-07	-5.519E-07
0.98124	3.412E-08	489.653	3.208E-07	3.208E-07	9.797E-07	9.797E-07	-8.820E-07	-8.821E-07
0.98749	5.870E-08	492.771	1.880E-06	1.880E-06	2.823E-06	2.823E-06	-1.517E-06	-1.518E-06
0.99374	8.713E-08	495.889	7.890E-06	7.890E-06	9.289E-06	9.289E-06	-2.252E-06	-2.252E-06
0.99999	1.058E-07	499.006	2.451E-05	2.451E-05	2.653E-05	2.653E-05	-2.736E-06	-2.736E-06
1.00624	8.581E-08	502.124	5.012E-05	5.012E-05	5.274E-05	5.274E-05	-2.218E-06	-2.218E-06
1.01248	5.730E-08	505.242	7.169E-05	7.169E-05	7.476E-05	7.476E-05	-1.481E-06	-1.481E-06
1.01873	3.328E-08	508.360	8.469E-05	8.469E-05	8.804E-05	8.804E-05	-8.604E-07	-8.603E-07
1.02498	2.092E-08	511.478	9.182E-05	9.182E-05	9.533E-05	9.533E-05	-5.407E-07	-5.407E-07
1.03748	9.278E-09	517.715	9.839E-05	9.839E-05	1.021E-04	1.021E-04	-2.399E-07	-2.399E-07
1.04998	5.355E-09	523.952	1.014E-04	1.014E-04	1.052E-04	1.052E-04	-1.384E-07	-1.384E-07
1.07498	2.256E-09	536.427	1.050E-04	1.050E-04	1.088E-04	1.088E-04	-5.832E-08	-5.832E-08
1.09998	1.239E-09	548.902	1.078E-04	1.078E-04	1.117E-04	1.117E-04	-3.202E-08	-3.202E-08
1.14998	4.999E-10	573.853	1.129E-04	1.129E-04	1.169E-04	1.169E-04	-1.292E-08	-1.292E-08
1.19998	2.595E-10	598.803	1.180E-04	1.180E-04	1.219E-04	1.219E-04	-6.708E-09	-6.708E-09
1.29998	1.037E-10	648.704	1.280E-04	1.280E-04	1.320E-04	1.320E-04	-2.681E-09	-2.681E-09
1.39998	5.404E-11	698.605	1.380E-04	1.380E-04	1.420E-04	1.420E-04	-1.397E-09	-1.397E-09
1.49998	3.316E-11	748.507	1.480E-04	1.480E-04	1.520E-04	1.520E-04	-8.571E-10	-8.571E-10
1.59998	2.223E-11	798.408	1.580E-04	1.580E-04	1.620E-04	1.620E-04	-5.747E-10	-5.747E-10
1.69998	1.493E-11	848.309	1.680E-04	1.680E-04	1.720E-04	1.720E-04	-3.859E-10	-3.859E-10
1.79998	1.053E-11	898.210	1.780E-04	1.780E-04	1.820E-04	1.820E-04	-2.722E-10	-2.722E-10
1.89998	7.430E-12	948.111	1.880E-04	1.880E-04	1.920E-04	1.920E-04	-1.921E-10	-1.921E-10
1.99998	5.297E-12	998.012	1.980E-04	1.980E-04	2.020E-04	2.020E-04	-1.369E-10	-1.369E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 1.000 θ_D= 0. ρ_a= 3.755

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-2.912E-17
0.10000	5.535E-13	5.541E-13	-3.072E-23	-3.072E-23	-3.526E-13	-3.526E-13	-3.906E-17
0.20000	1.551E-12	1.550E-12	-5.353E-23	-5.353E-23	-9.671E-13	-9.671E-13	-5.587E-17
0.30000	3.287E-12	3.288E-12	-9.328E-23	-9.328E-23	-2.038E-12	-2.038E-12	-8.780E-17
0.40000	6.964E-12	6.967E-12	-1.702E-22	-1.702E-22	-3.950E-12	-3.950E-12	-1.486E-16
0.50000	1.381E-11	1.380E-11	-3.108E-22	-3.108E-22	-7.443E-12	-7.443E-12	-2.973E-16
0.60000	3.128E-11	3.128E-11	-6.391E-22	-6.391E-22	-1.412E-11	-1.412E-11	-6.944E-16
0.70000	8.884E-11	8.883E-11	-1.674E-21	-1.674E-21	-2.984E-11	-2.984E-11	-2.025E-15
0.80000	3.640E-10	3.640E-10	-6.660E-21	-6.660E-21	-8.132E-11	-8.132E-11	-9.106E-15
0.85000	9.673E-10	9.673E-10	-1.758E-20	-1.758E-20	-1.635E-10	-1.635E-10	-2.611E-14
0.90000	3.673E-09	3.673E-09	-7.341E-20	-7.341E-20	-4.440E-10	-4.440E-10	-1.142E-13
0.92500	8.910E-09	8.910E-09	-1.669E-19	-1.669E-19	-8.701E-10	-8.701E-10	-3.299E-13
0.95000	3.200E-08	3.201E-08	-5.958E-19	-5.958E-19	-2.067E-09	-2.067E-09	-1.315E-12
0.96250	7.281E-08	7.281E-08	-1.421E-18	-1.421E-18	-3.766E-09	-3.766E-09	-3.337E-12
0.97500	2.449E-07	2.449E-07	-5.215E-18	-5.215E-18	-9.076E-09	-9.077E-09	-9.230E-12
0.98124	5.198E-07	5.198E-07	-1.089E-17	-1.089E-17	-1.615E-08	-1.615E-08	-1.644E-11
0.98749	1.259E-06	1.259E-06	-2.612E-17	-2.612E-17	-3.248E-08	-3.248E-08	-2.754E-11
0.99374	3.617E-06	3.618E-06	-4.955E-17	-4.955E-17	-6.768E-08	-6.769E-08	-4.435E-11
0.99999	9.577E-06	9.578E-06	-6.772E-17	-6.772E-17	-1.243E-07	-1.243E-07	-5.156E-11
1.00624	1.527E-05	1.527E-05	-4.841E-17	-4.840E-17	-1.801E-07	-1.801E-07	-4.357E-11
1.01248	1.747E-05	1.747E-05	-2.512E-17	-2.512E-17	-2.142E-07	-2.142E-07	-2.686E-11
1.01873	1.820E-05	1.820E-05	-1.048E-17	-1.048E-17	-2.299E-07	-2.299E-07	-1.601E-11
1.02498	1.845E-05	1.845E-05	-5.047E-18	-5.047E-18	-2.367E-07	-2.367E-07	-8.974E-12
1.03748	1.847E-05	1.847E-05	-1.384E-18	-1.384E-18	-2.418E-07	-2.418E-07	-3.262E-12
1.04998	1.831E-05	1.831E-05	-5.856E-19	-5.856E-19	-2.435E-07	-2.435E-07	-1.288E-12
1.07498	1.795E-05	1.795E-05	-1.653E-19	-1.653E-19	-2.447E-07	-2.447E-07	-3.251E-13
1.09998	1.760E-05	1.760E-05	-7.267E-20	-7.267E-20	-2.451E-07	-2.451E-07	-1.131E-13
1.14998	1.694E-05	1.694E-05	-1.747E-20	-1.747E-20	-2.454E-07	-2.454E-07	-2.594E-14
1.19998	1.633E-05	1.633E-05	-6.628E-21	-6.628E-21	-2.455E-07	-2.455E-07	-9.066E-15
1.29998	1.524E-05	1.524E-05	-1.669E-21	-1.669E-21	-2.455E-07	-2.455E-07	-2.020E-15
1.39998	1.428E-05	1.428E-05	-6.376E-22	-6.376E-22	-2.455E-07	-2.455E-07	-6.936E-16
1.49998	1.344E-05	1.344E-05	-3.102E-22	-3.102E-22	-2.455E-07	-2.455E-07	-2.971E-16
1.59998	1.270E-05	1.270E-05	-1.698E-22	-1.698E-22	-2.455E-07	-2.455E-07	-1.486E-16
1.69998	1.203E-05	1.203E-05	-9.312E-23	-9.312E-23	-2.455E-07	-2.455E-07	-8.784E-17
1.79998	1.143E-05	1.143E-05	-5.344E-23	-5.344E-23	-2.455E-07	-2.455E-07	-5.592E-17
1.89998	1.088E-05	1.088E-05	-3.067E-23	-3.067E-23	-2.455E-07	-2.455E-07	-3.912E-17
1.99998	1.039E-05	1.039E-05	-1.759E-23	-1.759E-23	-2.455E-07	-2.455E-07	-2.918E-17

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.506

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	1.2000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	1.2000	0.10000	193.648	1.034E-07	1.000E-00	-7.437E-12	-7.437E-12	7.437E-12
0.20000	1.2000	0.20000	172.139	1.934E-07	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	1.2000	0.30000	150.631	2.868E-07	1.000E-00	-1.494E-11	-1.494E-11	1.494E-11
0.40000	1.2000	0.40000	129.127	4.269E-07	1.000E-00	-2.225E-11	-2.225E-11	2.225E-11
0.50000	1.2000	0.50000	107.627	5.870E-07	9.999E-01	-3.319E-11	-3.319E-11	3.319E-11
0.60000	1.2000	0.60000	86.134	6.136E-07	9.999E-01	-5.410E-11	-5.410E-11	5.410E-11
0.70000	1.2000	0.70000	64.658	2.535E-06	9.998E-01	-1.038E-10	-1.038E-10	1.038E-10
0.80000	1.2000	0.80000	43.220	8.751E-06	9.995E-01	-2.596E-10	-2.596E-10	2.596E-10
0.85000	1.2000	0.85000	32.540	2.236E-05	9.991E-01	-4.993E-10	-4.993E-10	4.993E-10
0.90000	1.2000	0.90000	21.937	7.652E-05	9.981E-01	-1.230E-09	-1.230E-09	1.230E-09
0.92500	1.2000	0.92500	16.709	1.784E-04	9.971E-01	-2.228E-09	-2.228E-09	2.228E-09
0.95000	1.2000	0.95000	11.620	5.562E-04	9.955E-01	-5.172E-09	-5.172E-09	5.172E-09
0.96250	1.2000	0.96250	9.201	1.162E-03	9.955E-01	-8.612E-09	-8.612E-09	8.611E-09
0.97500	1.2000	0.97500	6.981	2.890E-03	9.994E-01	-1.800E-08	-1.801E-08	1.800E-08
0.98125	1.2001	0.98125	6.017	4.837E-03	1.004E 00	-2.599E-08	-2.599E-08	2.599E-08
0.98749	1.2001	0.98750	5.224	8.333E-03	1.009E 00	-3.956E-08	-3.956E-08	3.956E-08
0.99374	1.2002	0.99375	4.690	1.411E-02	1.006E 00	-5.548E-08	-5.548E-08	5.548E-08
0.99999	1.2003	1.00000	4.507	2.191E-02	9.997E-01	-6.229E-08	-6.229E-08	6.229E-08
1.00624	1.2005	1.00625	4.717	2.965E-02	1.006E 00	-5.454E-08	-5.454E-08	5.454E-08
1.01249	1.2007	1.01250	5.273	3.525E-02	1.009E 00	-3.837E-08	-3.836E-08	3.837E-08
1.01874	1.2009	1.01875	6.080	3.861E-02	1.003E 00	-2.538E-08	-2.538E-08	2.538E-08
1.02499	1.2011	1.02500	7.054	4.048E-02	9.979E-01	-1.752E-08	-1.751E-08	1.752E-08
1.03749	1.2016	1.03750	9.283	4.213E-02	9.925E-01	-8.418E-09	-8.418E-09	8.418E-09
1.04999	1.2021	1.05000	11.707	4.272E-02	9.912E-01	-5.092E-09	-5.092E-09	5.092E-09
1.07499	1.2030	1.07500	16.800	4.309E-02	9.905E-01	-2.205E-09	-2.205E-09	2.205E-09
1.09999	1.2039	1.10000	22.029	4.320E-02	9.896E-01	-1.217E-09	-1.217E-09	1.217E-09
1.14999	1.2057	1.15000	32.634	4.326E-02	9.870E-01	-4.963E-10	-4.963E-10	4.963E-10
1.19998	1.2072	1.20000	43.314	4.327E-02	9.840E-01	-2.584E-10	-2.584E-10	2.584E-10
1.29998	1.2100	1.30000	64.752	4.328E-02	9.784E-01	-1.035E-10	-1.035E-10	1.035E-10
1.39998	1.2124	1.40000	86.229	4.328E-02	9.734E-01	-5.397E-11	-5.397E-11	5.397E-11
1.49998	1.2144	1.50000	107.721	4.329E-02	9.691E-01	-3.313E-11	-3.313E-11	3.313E-11
1.59998	1.2162	1.60000	129.221	4.329E-02	9.653E-01	-2.221E-11	-2.221E-11	2.221E-11
1.69998	1.2178	1.70000	150.726	4.329E-02	9.619E-01	-1.492E-11	-1.492E-11	1.492E-11
1.79998	1.2192	1.80000	172.233	4.329E-02	9.589E-01	-1.053E-11	-1.053E-11	1.053E-11
1.89998	1.2205	1.90000	193.743	4.329E-02	9.562E-01	-7.426E-12	-7.426E-12	7.426E-12
1.99998	1.2217	2.00000	215.253	4.329E-02	9.538E-01	-5.294E-12	-5.294E-12	5.294E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 1.200 θ_D= 0. ρ_0= 4.506

z	$_x\mu'-1.0$	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.437E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.585E-10	-7.585E-10	7.585E-10	7.585E-10	-2.725E-10	-2.725E-10
0.30000	1.494E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.863E-10	-3.863E-10
0.40000	2.225E-11	199.605	-2.303E-09	-2.303E-09	2.303E-09	2.303E-09	-5.753E-10	-5.753E-10
0.50000	3.319E-11	249.506	-3.668E-09	-3.668E-09	3.668E-09	3.668E-09	-8.579E-10	-8.579E-10
0.60000	5.410E-11	299.407	-5.772E-09	-5.772E-09	5.772E-09	5.772E-09	-1.398E-09	-1.398E-09
0.70000	1.038E-10	349.308	-9.520E-09	-9.520E-09	9.521E-09	9.521E-09	-2.684E-09	-2.684E-09
0.80000	2.596E-10	399.209	-1.771E-08	-1.771E-08	1.771E-08	1.771E-08	-6.710E-09	-6.710E-09
0.85000	4.993E-10	424.160	-2.670E-08	-2.670E-08	2.671E-08	2.671E-08	-1.291E-08	-1.291E-08
0.90000	1.230E-09	449.110	-4.627E-08	-4.627E-08	4.647E-08	4.647E-08	-3.180E-08	-3.180E-08
0.92500	2.228E-09	461.585	-6.679E-08	-6.679E-08	6.791E-08	6.791E-08	-5.760E-08	-5.760E-08
0.95000	5.172E-09	474.060	-1.045E-07	-1.045E-07	1.156E-07	1.156E-07	-1.337E-07	-1.337E-07
0.96250	8.612E-09	480.298	-1.264E-07	-1.264E-07	1.758E-07	1.758E-07	-2.226E-07	-2.226E-07
0.97500	1.801E-08	486.535	-7.432E-08	-7.432E-08	3.838E-07	3.838E-07	-4.654E-07	-4.655E-07
0.98125	2.599E-08	489.653	1.391E-07	1.391E-07	7.335E-07	7.335E-07	-6.720E-07	-6.720E-07
0.98749	3.956E-08	492.771	9.046E-07	9.046E-07	1.701E-06	1.701E-06	-1.023E-06	-1.023E-06
0.99374	5.548E-08	495.890	3.212E-06	3.212E-06	4.306E-06	4.306E-06	-1.434E-06	-1.434E-06
0.99999	6.229E-08	499.008	8.388E-06	8.388E-06	9.857E-06	9.857E-06	-1.610E-06	-1.610E-06
1.00624	5.454E-08	502.126	1.589E-05	1.589E-05	1.773E-05	1.773E-05	-1.410E-06	-1.410E-06
1.01249	3.836E-08	505.244	2.284E-05	2.284E-05	2.498E-05	2.498E-05	-9.918E-07	-9.918E-07
1.01874	2.538E-08	508.362	2.769E-05	2.769E-05	3.002E-05	3.002E-05	-6.560E-07	-6.560E-07
1.02499	1.751E-08	511.481	3.068E-05	3.068E-05	3.314E-05	3.314E-05	-4.528E-07	-4.528E-07
1.03749	8.418E-09	517.718	3.368E-05	3.368E-05	3.629E-05	3.629E-05	-2.176E-07	-2.176E-07
1.04999	5.092E-09	523.955	3.506E-05	3.506E-05	3.776E-05	3.776E-05	-1.316E-07	-1.316E-07
1.07499	2.205E-09	536.430	3.653E-05	3.653E-05	3.931E-05	3.931E-05	-5.701E-08	-5.701E-08
1.09999	1.217E-09	548.906	3.760E-05	3.760E-05	4.041E-05	4.041E-05	-3.146E-08	-3.146E-08
1.14999	4.963E-10	573.856	3.946E-05	3.946E-05	4.232E-05	4.232E-05	-1.283E-08	-1.283E-08
1.19998	2.584E-10	598.806	4.126E-05	4.126E-05	4.413E-05	4.413E-05	-6.679E-09	-6.679E-09
1.29998	1.035E-10	648.707	4.482E-05	4.482E-05	4.771E-05	4.771E-05	-2.675E-09	-2.675E-09
1.39998	5.397E-11	698.609	4.839E-05	4.839E-05	5.129E-05	5.129E-05	-1.395E-09	-1.395E-09
1.49998	3.313E-11	748.510	5.195E-05	5.195E-05	5.486E-05	5.486E-05	-8.564E-10	-8.564E-10
1.59998	2.221E-11	798.411	5.552E-05	5.552E-05	5.843E-05	5.843E-05	-5.743E-10	-5.743E-10
1.69998	1.492E-11	848.312	5.908E-05	5.908E-05	6.199E-05	6.199E-05	-3.857E-10	-3.857E-10
1.79998	1.053E-11	898.213	6.264E-05	6.264E-05	6.555E-05	6.555E-05	-2.721E-10	-2.721E-10
1.89998	7.426E-12	948.114	6.620E-05	6.620E-05	6.911E-05	6.911E-05	-1.920E-10	-1.920E-10
1.99998	5.294E-12	998.015	6.975E-05	6.975E-05	7.267E-05	7.267E-05	-1.369E-10	-1.369E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 1.200 θ_D= 0. ρ_0= 4.506

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-4.193E-17
0.10000	6.651E-13	6.652E-13	-3.072E-23	-3.072E-23	-3.526E-13	-3.526E-13	-5.625E-17
0.20000	1.861E-12	1.859E-12	-5.353E-23	-5.353E-23	-9.671E-13	-9.671E-13	-8.044E-17
0.30000	3.943E-12	3.944E-12	-9.326E-23	-9.326E-23	-2.038E-12	-2.038E-12	-1.264E-16
0.40000	8.355E-12	8.355E-12	-1.701E-22	-1.701E-22	-3.949E-12	-3.949E-12	-2.139E-16
0.50000	1.656E-11	1.656E-11	-3.107E-22	-3.107E-22	-7.441E-12	-7.441E-12	-4.278E-16
0.60000	3.751E-11	3.752E-11	-6.386E-22	-6.386E-22	-1.412E-11	-1.412E-11	-9.989E-16
0.70000	1.065E-10	1.065E-10	-1.671E-21	-1.671E-21	-2.981E-11	-2.981E-11	-2.910E-15
0.80000	4.355E-10	4.355E-10	-6.632E-21	-6.632E-21	-8.113E-11	-8.113E-11	-1.304E-14
0.85000	1.154E-09	1.154E-09	-1.745E-20	-1.745E-20	-1.628E-10	-1.628E-10	-3.723E-14
0.90000	4.335E-09	4.335E-09	-7.196E-20	-7.196E-20	-4.390E-10	-4.390E-10	-1.611E-13
0.92500	1.045E-08	1.045E-08	-1.625E-19	-1.625E-19	-8.552E-10	-8.552E-10	-4.552E-13
0.95000	3.624E-08	3.624E-08	-5.547E-19	-5.547E-19	-1.984E-09	-1.984E-09	-1.734E-12
0.96250	7.764E-08	7.765E-08	-1.231E-18	-1.231E-18	-3.511E-09	-3.511E-09	-4.226E-12
0.97500	2.379E-07	2.380E-07	-3.972E-18	-3.972E-18	-7.749E-09	-7.750E-09	-1.059E-11
0.98125	4.618E-07	4.618E-07	-7.142E-18	-7.143E-18	-1.283E-08	-1.283E-08	-1.789E-11
0.98749	9.968E-07	9.968E-07	-1.376E-17	-1.376E-17	-2.230E-08	-2.230E-08	-2.745E-11
0.99374	2.359E-06	2.359E-06	-2.384E-17	-2.384E-17	-3.990E-08	-3.991E-08	-3.740E-11
0.99999	5.087E-06	5.087E-06	-2.877E-17	-2.877E-17	-6.525E-08	-6.526E-08	-4.229E-11
1.00624	7.688E-06	7.688E-06	-2.318E-17	-2.318E-17	-9.026E-08	-9.026E-08	-3.676E-11
1.01249	8.933E-06	8.933E-06	-1.309E-17	-1.309E-17	-1.072E-07	-1.072E-07	-2.679E-11
1.01874	9.445E-06	9.445E-06	-6.874E-18	-6.874E-18	-1.162E-07	-1.162E-07	-1.723E-11
1.02499	9.657E-06	9.657E-06	-3.801E-18	-3.800E-18	-1.211E-07	-1.211E-07	-1.024E-11
1.03749	9.745E-06	9.745E-06	-1.188E-18	-1.188E-18	-1.252E-07	-1.252E-07	-4.101E-12
1.04999	9.682E-06	9.682E-06	-5.414E-19	-5.414E-19	-1.267E-07	-1.267E-07	-1.685E-12
1.07499	9.488E-06	9.488E-06	-1.602E-19	-1.602E-19	-1.278E-07	-1.278E-07	-4.457E-13
1.09999	9.287E-06	9.287E-06	-7.093E-20	-7.093E-20	-1.282E-07	-1.282E-07	-1.589E-13
1.14999	8.911E-06	8.911E-06	-1.729E-20	-1.729E-20	-1.285E-07	-1.285E-07	-3.687E-14
1.19998	8.566E-06	8.566E-06	-6.586E-21	-6.586E-21	-1.285E-07	-1.285E-07	-1.296E-14
1.29998	7.953E-06	7.953E-06	-1.664E-21	-1.664E-21	-1.286E-07	-1.286E-07	-2.898E-15
1.39998	7.422E-06	7.422E-06	-6.364E-22	-6.364E-22	-1.286E-07	-1.286E-07	-9.964E-16
1.49998	6.958E-06	6.958E-06	-3.099E-22	-3.099E-22	-1.286E-07	-1.286E-07	-4.271E-16
1.59998	6.549E-06	6.549E-06	-1.697E-22	-1.697E-22	-1.286E-07	-1.286E-07	-2.138E-16
1.69998	6.186E-06	6.186E-06	-9.303E-23	-9.303E-23	-1.286E-07	-1.286E-07	-1.264E-16
1.79998	5.860E-06	5.860E-06	-5.340E-23	-5.340E-23	-1.286E-07	-1.286E-07	-8.047E-17
1.89998	5.567E-06	5.567E-06	-3.065E-23	-3.065E-23	-1.286E-07	-1.286E-07	-5.631E-17
1.99998	5.303E-06	5.303E-06	-1.757E-23	-1.757E-23	-1.286E-07	-1.286E-07	-4.200E-17

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 1.500 θ_D= 0. ρ_a= 5.632

z	ϕ	z_r	ρ	θ	β	$_0\mu'$-1.0	$_x\mu'$-1.0	$_0\mu'$-1.0
0.	1.5000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	1.5000	0.10000	193.651	1.701E-07	1.000E-00	-7.437E-12	-7.437E-12	7.437E-12
0.20000	1.5000	0.20000	172.146	2.401E-07	1.000E-00	-1.054E-11	-1.054E-11	1.054E-11
0.30000	1.5000	0.30000	150.643	3.669E-07	9.999E-01	-1.494E-11	-1.494E-11	1.494E-11
0.40000	1.5000	0.40000	129.145	5.870E-07	9.999E-01	-2.225E-11	-2.225E-11	2.225E-11
0.50000	1.5000	0.50000	107.653	9.338E-07	9.999E-01	-3.317E-11	-3.317E-11	3.317E-11
0.60000	1.5000	0.60000	86.174	9.872E-07	9.998E-01	-5.404E-11	-5.404E-11	5.404E-11
0.70000	1.5000	0.70000	64.720	3.895E-06	9.996E-01	-1.036E-10	-1.036E-10	1.036E-10
0.80000	1.5000	0.80000	43.326	1.270E-05	9.990E-01	-2.582E-10	-2.582E-10	2.582E-10
0.85000	1.5000	0.85000	32.689	3.287E-05	9.982E-01	-4.945E-10	-4.945E-10	4.945E-10
0.90000	1.5000	0.90000	22.170	1.102E-04	9.965E-01	-1.198E-09	-1.198E-09	1.198E-09
0.92500	1.5000	0.92500	17.022	2.484E-04	9.951E-01	-2.150E-09	-2.150E-09	2.150E-09
0.95000	1.5000	0.95000	12.078	7.362E-04	9.942E-01	-4.765E-09	-4.765E-09	4.765E-09
0.96250	1.5000	0.96250	9.780	1.459E-03	9.964E-01	-7.342E-09	-7.342E-09	7.342E-09
0.97500	1.5001	0.97500	7.738	3.254E-03	1.004E 00	-1.350E-08	-1.350E-08	1.350E-08
0.98125	1.5001	0.98125	6.886	5.007E-03	1.010E 00	-1.867E-08	-1.867E-08	1.867E-08
0.98749	1.5001	0.98750	6.211	7.736E-03	1.012E 00	-2.415E-08	-2.415E-08	2.415E-08
0.99374	1.5002	0.99375	5.775	1.162E-02	1.006E 00	-2.941E-08	-2.941E-08	2.941E-08
0.99999	1.5003	1.00000	5.634	1.636E-02	9.998E-01	-3.164E-08	-3.164E-08	3.164E-08
1.00624	1.5004	1.00625	5.809	2.104E-02	1.007E 00	-2.889E-08	-2.889E-08	2.889E-08
1.01249	1.5005	1.01250	6.274	2.481E-02	1.013E 00	-2.357E-08	-2.357E-08	2.357E-08
1.01874	1.5007	1.01875	6.972	2.741E-02	1.010E 00	-1.807E-08	-1.807E-08	1.807E-08
1.02499	1.5009	1.02500	7.840	2.908E-02	1.004E 00	-1.298E-08	-1.298E-08	1.298E-08
1.03749	1.5012	1.03750	9.901	3.077E-02	9.953E-01	-7.102E-09	-7.102E-09	7.102E-09
1.04999	1.5016	1.05000	12.209	3.147E-02	9.920E-01	-4.655E-09	-4.655E-09	4.655E-09
1.07499	1.5023	1.07500	17.162	3.195E-02	9.911E-01	-2.117E-09	-2.117E-09	2.117E-09
1.09999	1.5029	1.10000	22.312	3.209E-02	9.912E-01	-1.178E-09	-1.178E-09	1.178E-09
1.14999	1.5042	1.15000	32.834	3.217E-02	9.905E-01	-4.897E-10	-4.897E-10	4.897E-10
1.19999	1.5054	1.20000	43.472	3.220E-02	9.891E-01	-2.563E-10	-2.563E-10	2.563E-10
1.29999	1.5074	1.30000	64.867	3.221E-02	9.860E-01	-1.031E-10	-1.031E-10	1.031E-10
1.39999	1.5092	1.40000	86.321	3.222E-02	9.831E-01	-5.384E-11	-5.384E-11	5.384E-11
1.49999	1.5107	1.50000	107.801	3.222E-02	9.804E-01	-3.308E-11	-3.308E-11	3.308E-11
1.59999	1.5121	1.60000	129.292	3.222E-02	9.781E-01	-2.218E-11	-2.218E-11	2.218E-11
1.69999	1.5132	1.70000	150.790	3.223E-02	9.760E-01	-1.490E-11	-1.490E-11	1.490E-11
1.79999	1.5143	1.80000	172.293	3.223E-02	9.742E-01	-1.052E-11	-1.052E-11	1.052E-11
1.89999	1.5153	1.90000	193.799	3.223E-02	9.725E-01	-7.419E-12	-7.419E-12	7.419E-12
1.99999	1.5161	2.00000	215.306	3.223E-02	9.710E-01	-5.290E-12	-5.290E-12	5.290E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 1.500 θ_D= 0. ρ_a= 5.632

z	$_x\mu'$-1.0	T_0	$_0T_f-T_0$	$_xT_f-T_0$	$_0T_g-T_0$	$_xT_g-T_0$	$_0D_z-D_0$	$_xD_z-D_0$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.437E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.923E-10	-1.923E-10
0.20000	1.054E-11	99.802	-7.584E-10	-7.584E-10	7.584E-10	7.584E-10	-2.725E-10	-2.725E-10
0.30000	1.494E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.862E-10	-3.862E-10
0.40000	2.225E-11	199.605	-2.303E-09	-2.303E-09	2.303E-09	2.303E-09	-5.751E-10	-5.751E-10
0.50000	3.317E-11	249.506	-3.667E-09	-3.667E-09	3.667E-09	3.667E-09	-8.575E-10	-8.575E-10
0.60000	5.404E-11	299.407	-5.770E-09	-5.770E-09	5.770E-09	5.770E-09	-1.397E-09	-1.397E-09
0.70000	1.036E-10	349.308	-9.512E-09	-9.512E-09	9.512E-09	9.512E-09	-2.678E-09	-2.678E-09
0.80000	2.582E-10	399.209	-1.767E-08	-1.767E-08	1.767E-08	1.767E-08	-6.675E-09	-6.675E-09
0.85000	4.945E-10	424.160	-2.658E-08	-2.658E-08	2.661E-08	2.661E-08	-1.278E-08	-1.278E-08
0.90000	1.198E-09	449.110	-4.572E-08	-4.572E-08	4.614E-08	4.614E-08	-3.096E-08	-3.096E-08
0.92500	2.150E-09	461.585	-6.518E-08	-6.518E-08	6.735E-08	6.735E-08	-5.559E-08	-5.559E-08
0.95000	4.765E-09	474.060	-9.647E-08	-9.647E-08	1.160E-07	1.160E-07	-1.232E-07	-1.232E-07
0.96250	7.342E-09	480.297	-1.043E-07	-1.043E-07	1.821E-07	1.821E-07	-1.898E-07	-1.898E-07
0.97500	1.350E-08	486.535	-9.329E-09	-9.330E-09	4.016E-07	4.016E-07	-3.489E-07	-3.489E-07
0.98125	1.867E-08	489.653	2.119E-07	2.119E-07	7.228E-07	7.228E-07	-4.827E-07	-4.827E-07
0.98749	2.415E-08	492.771	8.006E-07	8.006E-07	1.445E-06	1.445E-06	-6.242E-07	-6.242E-07
0.99374	2.941E-08	495.890	2.145E-06	2.145E-06	2.957E-06	2.957E-06	-7.603E-07	-7.603E-07
0.99999	3.164E-08	499.008	4.582E-06	4.582E-06	5.587E-06	5.587E-06	-8.180E-07	-8.180E-07
1.00624	2.889E-08	502.126	7.869E-06	7.869E-06	9.065E-06	9.065E-06	-7.469E-07	-7.469E-07
1.01249	2.357E-08	505.245	1.116E-05	1.116E-05	1.252E-05	1.252E-05	-6.093E-07	-6.093E-07
1.01874	1.807E-08	508.363	1.380E-05	1.380E-05	1.529E-05	1.529E-05	-4.671E-07	-4.671E-07
1.02499	1.298E-08	511.482	1.568E-05	1.568E-05	1.726E-05	1.726E-05	-3.356E-07	-3.356E-07
1.03749	7.102E-09	517.719	1.781E-05	1.781E-05	1.952E-05	1.952E-05	-1.836E-07	-1.836E-07
1.04999	4.655E-09	523.956	1.887E-05	1.887E-05	2.065E-05	2.065E-05	-1.203E-07	-1.203E-07
1.07499	2.117E-09	536.431	1.992E-05	1.992E-05	2.177E-05	2.177E-05	-5.472E-08	-5.472E-08
1.09999	1.178E-09	548.906	2.058E-05	2.058E-05	2.248E-05	2.248E-05	-3.047E-08	-3.047E-08
1.14999	4.897E-10	573.857	2.165E-05	2.165E-05	2.359E-05	2.359E-05	-1.266E-08	-1.266E-08
1.19999	2.563E-10	598.807	2.266E-05	2.266E-05	2.462E-05	2.462E-05	-6.626E-09	-6.626E-09
1.29999	1.031E-10	648.708	2.465E-05	2.465E-05	2.662E-05	2.662E-05	-2.666E-09	-2.666E-09
1.39999	5.384E-11	698.609	2.662E-05	2.662E-05	2.860E-05	2.860E-05	-1.392E-09	-1.392E-09
1.49999	3.308E-11	748.510	2.859E-05	2.859E-05	3.057E-05	3.057E-05	-8.552E-10	-8.552E-10
1.59999	2.218E-11	798.411	3.057E-05	3.057E-05	3.256E-05	3.256E-05	-5.735E-10	-5.735E-10
1.69999	1.490E-11	848.313	3.256E-05	3.256E-05	3.454E-05	3.454E-05	-3.853E-10	-3.853E-10
1.79999	1.052E-11	898.214	3.453E-05	3.453E-05	3.652E-05	3.652E-05	-2.718E-10	-2.718E-10
1.89999	7.419E-12	948.115	3.651E-05	3.651E-05	3.850E-05	3.850E-05	-1.918E-10	-1.918E-10
1.99999	5.290E-12	998.016	3.848E-05	3.848E-05	4.047E-05	4.047E-05	-1.367E-10	-1.367E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 1.500 θ_0= 0. ρ_a= 5.632

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-6.551E-17
0.10000	8.327E-13	8.310E-13	-3.072E-23	-3.072E-23	-3.526E-13	-3.526E-13	-8.788E-17
0.20000	2.325E-12	2.323E-12	-5.352E-23	-5.352E-23	-9.670E-13	-9.670E-13	-1.257E-16
0.30000	4.929E-12	4.928E-12	-9.323E-23	-9.323E-23	-2.037E-12	-2.037E-12	-1.975E-16
0.40000	1.044E-11	1.044E-11	-1.700E-22	-1.700E-22	-3.948E-12	-3.948E-12	-3.341E-16
0.50000	2.069E-11	2.069E-11	-3.105E-22	-3.105E-22	-7.437E-12	-7.437E-12	-6.677E-16
0.60000	4.684E-11	4.684E-11	-6.377E-22	-6.377E-22	-1.411E-11	-1.411E-11	-1.558E-15
0.70000	1.328E-10	1.328E-10	-1.666E-21	-1.666E-21	-2.976E-11	-2.976E-11	-4.529E-15
0.80000	5.411E-10	5.411E-10	-6.580E-21	-6.580E-21	-8.078E-11	-8.078E-11	-2.019E-14
0.85000	1.421E-09	1.421E-09	-1.719E-20	-1.719E-20	-1.615E-10	-1.615E-10	-5.716E-14
0.90000	5.229E-09	5.229E-09	-6.940E-20	-6.940E-20	-4.302E-10	-4.302E-10	-2.425E-13
0.92500	1.243E-08	1.243E-08	-1.548E-19	-1.548E-19	-8.289E-10	-8.289E-10	-6.593E-13
0.95000	4.047E-08	4.047E-08	-4.882E-19	-4.882E-19	-1.850E-09	-1.850E-09	-2.332E-12
0.96250	8.098E-08	8.098E-08	-9.585E-19	-9.586E-19	-3.140E-09	-3.140E-09	-5.369E-12
0.97500	2.146E-07	2.146E-07	-2.506E-18	-2.506E-18	-6.084E-09	-6.084E-09	-1.191E-11
0.98125	3.798E-07	3.798E-07	-4.209E-18	-4.209E-18	-9.179E-09	-9.179E-09	-1.733E-11
0.98749	7.294E-07	7.294E-07	-6.349E-18	-6.349E-18	-1.410E-08	-1.410E-08	-2.489E-11
0.99374	1.453E-06	1.453E-06	-8.652E-18	-8.652E-18	-2.110E-08	-2.110E-08	-3.164E-11
0.99999	2.674E-06	2.675E-06	-9.692E-18	-9.692E-18	-2.985E-08	-2.985E-08	-3.411E-11
1.00624	3.833E-06	3.833E-06	-8.417E-18	-8.417E-18	-3.848E-08	-3.848E-08	-3.109E-11
1.01249	4.479E-06	4.479E-06	-6.108E-18	-6.108E-18	-4.524E-08	-4.524E-08	-2.400E-11
1.01874	4.800E-06	4.800E-06	-3.995E-18	-3.995E-18	-4.994E-08	-4.994E-08	-1.663E-11
1.02499	4.958E-06	4.958E-06	-2.355E-18	-2.355E-18	-5.286E-08	-5.286E-08	-1.145E-11
1.03749	5.068E-06	5.068E-06	-9.097E-19	-9.097E-19	-5.566E-08	-5.566E-08	-5.160E-12
1.04999	5.064E-06	5.064E-06	-4.707E-19	-4.707E-19	-5.691E-08	-5.691E-08	-2.239E-12
1.07499	4.978E-06	4.978E-06	-1.514E-19	-1.514E-19	-5.790E-08	-5.790E-08	-6.385E-13
1.09999	4.871E-06	4.871E-06	-6.787E-20	-6.787E-20	-5.829E-08	-5.829E-08	-2.374E-13
1.14999	4.666E-06	4.666E-06	-1.695E-20	-1.695E-20	-5.856E-08	-5.856E-08	-5.627E-14
1.19999	4.479E-06	4.479E-06	-6.509E-21	-6.509E-21	-5.864E-08	-5.864E-08	-1.996E-14
1.29999	4.148E-06	4.148E-06	-1.655E-21	-1.655E-21	-5.869E-08	-5.869E-08	-4.496E-15
1.39999	3.863E-06	3.863E-06	-6.343E-22	-6.343E-22	-5.870E-08	-5.870E-08	-1.550E-15
1.49999	3.615E-06	3.615E-06	-3.092E-22	-3.092E-22	-5.871E-08	-5.871E-08	-6.653E-16
1.59999	3.398E-06	3.398E-06	-1.693E-22	-1.693E-22	-5.871E-08	-5.871E-08	-3.333E-16
1.69999	3.205E-06	3.205E-06	-9.288E-23	-9.288E-23	-5.871E-08	-5.871E-08	-1.972E-16
1.79999	3.032E-06	3.032E-06	-5.332E-23	-5.332E-23	-5.871E-08	-5.872E-08	-1.256E-16
1.89999	2.878E-06	2.878E-06	-3.060E-23	-3.060E-23	-5.872E-08	-5.872E-08	-8.790E-17
1.99999	2.738E-06	2.738E-06	-1.755E-23	-1.755E-23	-5.872E-08	-5.872E-08	-6.558E-17

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 2.000 θ_0= 0. ρ_a= 7.509

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	2.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	2.0000	0.10000	193.658	1.651E-07	9.999E-01	-7.436E-12	-7.436E-12	7.436E-12
0.20000	2.0000	0.20000	172.160	3.402E-07	9.999E-01	-1.054E-11	-1.054E-11	1.054E-11
0.30000	2.0000	0.30000	150.667	4.869E-07	9.998E-01	-1.493E-11	-1.493E-11	1.493E-11
0.40000	2.0000	0.40000	129.183	8.138E-07	9.998E-01	-2.223E-11	-2.223E-11	2.223E-11
0.50000	2.0000	0.50000	107.710	1.041E-06	9.997E-01	-3.314E-11	-3.314E-11	3.314E-11
0.60000	2.0000	0.60000	86.260	1.174E-06	9.994E-01	-5.393E-11	-5.393E-11	5.393E-11
0.70000	2.0000	0.70000	64.853	4.749E-06	9.990E-01	-1.032E-10	-1.032E-10	1.032E-10
0.80000	2.0000	0.80000	43.553	1.590E-05	9.978E-01	-2.553E-10	-2.553E-10	2.553E-10
0.85000	2.0000	0.85000	33.008	3.917E-05	9.963E-01	-4.842E-10	-4.842E-10	4.842E-10
0.90000	2.0000	0.90000	22.665	1.298E-04	9.939E-01	-1.134E-09	-1.134E-09	1.134E-09
0.92500	2.0000	0.92500	17.680	2.828E-04	9.929E-01	-1.995E-09	-1.995E-09	1.995E-09
0.95000	2.0000	0.95000	13.012	7.782E-04	9.961E-01	-4.031E-09	-4.031E-09	4.031E-09
0.96250	2.0000	0.96250	10.927	1.423E-03	1.002E 00	-5.855E-09	-5.855E-09	5.855E-09
0.97500	2.0001	0.97500	9.162	2.685E-03	1.012E 00	-8.705E-09	-8.705E-09	8.705E-09
0.98125	2.0001	0.98125	8.463	3.713E-03	1.015E 00	-1.055E-08	-1.055E-08	1.055E-08
0.98750	2.0001	0.98750	7.933	5.073E-03	1.013E 00	-1.253E-08	-1.253E-08	1.253E-08
0.99375	2.0001	0.99375	7.607	6.752E-03	1.005E 00	-1.419E-08	-1.419E-08	1.419E-08
0.99999	2.0002	1.00000	7.511	8.660E-03	9.999E-01	-1.472E-08	-1.472E-08	1.472E-08
1.00624	2.0003	1.00625	7.653	1.056E-02	1.006E 00	-1.394E-08	-1.394E-08	1.394E-08
1.01249	2.0003	1.01250	8.022	1.223E-02	1.014E 00	-1.211E-08	-1.211E-08	1.211E-08
1.01874	2.0004	1.01875	8.587	1.352E-02	1.017E 00	-1.020E-08	-1.020E-08	1.020E-08
1.02499	2.0005	1.02500	9.314	1.446E-02	1.014E 00	-8.347E-09	-8.346E-09	8.347E-09
1.03749	2.0007	1.03750	11.119	1.563E-02	1.003E 00	-5.657E-09	-5.657E-09	5.657E-09
1.04999	2.0008	1.05000	13.227	1.622E-02	9.964E-01	-3.879E-09	-3.879E-09	3.879E-09
1.07499	2.0012	1.07500	17.918	1.669E-02	9.918E-01	-1.942E-09	-1.942E-09	1.942E-09
1.09999	2.0016	1.10000	22.913	1.684E-02	9.916E-01	-1.109E-09	-1.109E-09	1.109E-09
1.14999	2.0022	1.15000	33.264	1.693E-02	9.925E-01	-4.761E-10	-4.761E-10	4.761E-10
1.19999	2.0028	1.20000	43.811	1.696E-02	9.929E-01	-2.520E-10	-2.520E-10	2.520E-10
1.29999	2.0039	1.30000	65.113	1.698E-02	9.923E-01	-1.023E-10	-1.023E-10	1.023E-10
1.39999	2.0049	1.40000	86.521	1.698E-02	9.914E-01	-5.358E-11	-5.358E-11	5.358E-11
1.49999	2.0057	1.50000	107.972	1.698E-02	9.903E-01	-3.298E-11	-3.298E-11	3.298E-11
1.59999	2.0064	1.60000	129.444	1.699E-02	9.893E-01	-2.212E-11	-2.212E-11	2.212E-11
1.69999	2.0070	1.70000	150.929	1.699E-02	9.884E-01	-1.487E-11	-1.487E-11	1.487E-11
1.79999	2.0076	1.80000	172.422	1.699E-02	9.876E-01	-1.049E-11	-1.049E-11	1.049E-11
1.89999	2.0081	1.90000	193.920	1.699E-02	9.868E-01	-7.405E-12	-7.405E-12	7.405E-12
1.99999	2.0085	2.00000	215.421	1.699E-02	9.861E-01	-5.280E-12	-5.280E-12	5.280E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 2.000 θ_D=0. ρ_a=7.509

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.436E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.922E-10	-1.922E-10
0.20000	1.054E-11	99.802	-7.583E-10	-7.583E-10	7.583E-10	7.583E-10	-2.724E-10	-2.724E-10
0.30000	1.493E-11	149.703	-1.388E-09	-1.388E-09	1.388E-09	1.388E-09	-3.860E-10	-3.860E-10
0.40000	2.223E-11	199.605	-2.302E-09	-2.302E-09	2.302E-09	2.302E-09	-5.747E-10	-5.747E-10
0.50000	3.314E-11	249.506	-3.665E-09	-3.665E-09	3.665E-09	3.665E-09	-8.566E-10	-8.566E-10
0.60000	5.393E-11	299.407	-5.764E-09	-5.764E-09	5.764E-09	5.764E-09	-1.394E-09	-1.394E-09
0.70000	1.034E-10	349.308	-9.493E-09	-9.493E-09	9.494E-09	9.494E-09	-2.667E-09	-2.667E-09
0.80000	2.553E-10	399.209	-1.758E-08	-1.758E-08	1.759E-08	1.759E-08	-6.599E-09	-6.599E-09
0.85000	4.842E-10	424.160	-2.633E-08	-2.633E-08	2.638E-08	2.638E-08	-1.252E-08	-1.252E-08
0.90000	1.134E-09	449.110	-4.474E-08	-4.474E-08	4.531E-08	4.531E-08	-2.932E-08	-2.932E-08
0.92500	1.995E-09	461.585	-6.265E-08	-6.265E-08	6.546E-08	6.546E-08	-5.158E-08	-5.158E-08
0.95000	4.034E-09	474.060	-8.821E-08	-8.821E-08	1.101E-07	1.101E-07	-1.042E-07	-1.042E-07
0.96250	5.855E-09	480.298	-9.266E-08	-9.266E-08	1.668E-07	1.668E-07	-1.514E-07	-1.514E-07
0.97500	8.705E-09	486.535	-4.037E-08	-4.037E-08	3.075E-07	3.075E-07	-2.250E-07	-2.250E-07
0.98125	1.055E-08	489.653	5.311E-08	5.310E-08	4.610E-07	4.610E-07	-2.727E-07	-2.727E-07
0.98750	1.253E-08	492.772	2.432E-07	2.432E-07	7.226E-07	7.226E-07	-3.239E-07	-3.239E-07
0.99375	1.419E-08	495.891	5.793E-07	5.793E-07	1.143E-06	1.143E-06	-3.668E-07	-3.668E-07
0.99999	1.474E-08	499.009	1.098E-06	1.098E-06	1.752E-06	1.752E-06	-3.805E-07	-3.805E-07
1.00624	1.394E-08	502.128	1.759E-06	1.759E-06	2.503E-06	2.503E-06	-3.604E-07	-3.604E-07
1.01249	1.211E-08	505.246	2.465E-06	2.465E-06	3.291E-06	3.291E-06	-3.132E-07	-3.132E-07
1.01874	1.020E-08	508.365	3.091E-06	3.091E-06	3.986E-06	3.986E-06	-2.636E-07	-2.636E-07
1.02499	8.346E-09	511.483	3.598E-06	3.598E-06	4.551E-06	4.551E-06	-2.158E-07	-2.158E-07
1.03749	5.657E-09	517.721	4.298E-06	4.298E-06	5.337E-06	5.337E-06	-1.462E-07	-1.462E-07
1.04999	3.879E-09	523.958	4.698E-06	4.698E-06	5.795E-06	5.795E-06	-1.003E-07	-1.003E-07
1.07499	1.942E-09	536.433	5.105E-06	5.105E-06	6.270E-06	6.270E-06	-5.021E-08	-5.021E-08
1.09999	1.109E-09	548.908	5.325E-06	5.325E-06	6.527E-06	6.527E-06	-2.868E-08	-2.868E-08
1.14999	4.761E-10	573.859	5.644E-06	5.644E-06	6.883E-06	6.883E-06	-1.231E-08	-1.231E-08
1.19999	2.520E-10	598.809	5.930E-06	5.930E-06	7.186E-06	7.186E-06	-6.514E-09	-6.514E-09
1.29999	1.023E-10	648.710	6.483E-06	6.483E-06	7.755E-06	7.755E-06	-2.644E-09	-2.644E-09
1.39999	5.358E-11	698.611	7.033E-06	7.033E-06	8.312E-06	8.312E-06	-1.385E-09	-1.385E-09
1.49999	3.298E-11	748.512	7.577E-06	7.577E-06	8.861E-06	8.861E-06	-8.525E-10	-8.525E-10
1.59999	2.212E-11	798.414	8.129E-06	8.129E-06	9.415E-06	9.415E-06	-5.719E-10	-5.719E-10
1.69999	1.487E-11	848.315	8.678E-06	8.678E-06	9.966E-06	9.966E-06	-3.844E-10	-3.844E-10
1.79999	1.049E-11	898.216	9.230E-06	9.230E-06	1.052E-05	1.052E-05	-2.713E-10	-2.713E-10
1.89999	7.405E-12	948.117	9.774E-06	9.774E-06	1.106E-05	1.106E-05	-1.914E-10	-1.914E-10
1.99999	5.280E-12	998.018	1.033E-05	1.033E-05	1.162E-05	1.162E-05	-1.365E-10	-1.365E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 2.000 θ_D=0. ρ_a=7.509

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.164E-16
0.10000	1.110E-12	1.110E-12	-3.072E-23	-3.072E-23	-3.525E-13	-3.525E-13	-1.562E-16
0.20000	3.100E-12	3.100E-12	-5.350E-23	-5.350E-23	-9.668E-13	-9.668E-13	-2.233E-16
0.30000	6.569E-12	6.570E-12	-9.318E-23	-9.318E-23	-2.037E-12	-2.037E-12	-3.508E-16
0.40000	1.391E-11	1.391E-11	-1.698E-22	-1.698E-22	-3.946E-12	-3.946E-12	-5.931E-16
0.50000	2.755E-11	2.755E-11	-3.100E-22	-3.100E-22	-7.430E-12	-7.430E-12	-1.184E-15
0.60000	6.229E-11	6.229E-11	-6.357E-22	-6.357E-22	-1.408E-11	-1.408E-11	-2.759E-15
0.70000	1.762E-10	1.762E-10	-1.656E-21	-1.656E-21	-2.966E-11	-2.966E-11	-7.986E-15
0.80000	7.107E-10	7.107E-10	-6.470E-21	-6.470E-21	-8.003E-11	-8.003E-11	-3.518E-14
0.85000	1.842E-09	1.842E-09	-1.667E-20	-1.667E-20	-1.587E-10	-1.587E-10	-9.789E-14
0.90000	6.510E-09	6.510E-09	-6.429E-20	-6.429E-20	-4.124E-10	-4.124E-10	-3.988E-13
0.92500	1.491E-08	1.491E-08	-1.397E-19	-1.397E-19	-7.765E-10	-7.765E-10	-1.006E-12
0.95000	4.311E-08	4.311E-08	-3.762E-19	-3.762E-19	-1.614E-09	-1.614E-09	-3.133E-12
0.96250	7.903E-08	7.903E-08	-6.730E-19	-6.730E-19	-2.572E-09	-2.572E-09	-6.153E-12
0.97500	1.753E-07	1.753E-07	-1.252E-18	-1.252E-18	-4.280E-09	-4.280E-09	-1.191E-11
0.98125	2.777E-07	2.777E-07	-1.694E-18	-1.694E-18	-5.652E-09	-5.653E-09	-1.582E-11
0.98750	4.588E-07	4.588E-07	-2.225E-18	-2.225E-18	-7.460E-09	-7.460E-09	-1.963E-11
0.99375	7.598E-07	7.599E-07	-2.714E-18	-2.714E-18	-9.790E-09	-9.790E-09	-2.231E-11
0.99999	1.163E-06	1.163E-06	-2.878E-18	-2.878E-18	-1.244E-08	-1.244E-08	-2.322E-11
1.00624	1.545E-06	1.545E-06	-2.639E-18	-2.639E-18	-1.504E-08	-1.504E-08	-2.190E-11
1.01249	1.809E-06	1.809E-06	-2.108E-18	-2.108E-18	-1.728E-08	-1.728E-08	-1.900E-11
1.01874	1.965E-06	1.965E-06	-1.605E-18	-1.605E-18	-1.900E-08	-1.900E-08	-1.500E-11
1.02499	2.057E-06	2.057E-06	-1.172E-18	-1.172E-18	-2.029E-08	-2.029E-08	-1.126E-11
1.03749	2.144E-06	2.144E-06	-6.380E-19	-6.379E-19	-2.190E-08	-2.190E-08	-5.740E-12
1.04999	2.168E-06	2.168E-06	-3.543E-19	-3.543E-19	-2.281E-08	-2.281E-08	-2.953E-12
1.07499	2.155E-06	2.155E-06	-1.346E-19	-1.346E-19	-2.362E-08	-2.362E-08	-9.549E-13
1.09999	2.114E-06	2.114E-06	-6.204E-20	-6.204E-20	-2.397E-08	-2.397E-08	-3.824E-13
1.14999	2.025E-06	2.025E-06	-1.626E-20	-1.626E-20	-2.421E-08	-2.421E-08	-9.517E-14
1.19999	1.941E-06	1.941E-06	-6.347E-21	-6.347E-21	-2.429E-08	-2.429E-08	-3.445E-14
1.29999	1.793E-06	1.793E-06	-1.635E-21	-1.635E-21	-2.434E-08	-2.434E-08	-7.875E-15
1.39999	1.667E-06	1.667E-06	-6.297E-22	-6.297E-22	-2.435E-08	-2.435E-08	-2.731E-15
1.49999	1.557E-06	1.557E-06	-3.077E-22	-3.077E-22	-2.436E-08	-2.436E-08	-1.175E-15
1.59999	1.462E-06	1.462E-06	-1.686E-22	-1.686E-22	-2.436E-08	-2.436E-08	-5.899E-16
1.69999	1.377E-06	1.377E-06	-9.255E-23	-9.255E-23	-2.437E-08	-2.437E-08	-3.493E-16
1.79999	1.302E-06	1.302E-06	-5.314E-23	-5.314E-23	-2.437E-08	-2.437E-08	-2.227E-16
1.89999	1.234E-06	1.234E-06	-3.051E-23	-3.051E-23	-2.437E-08	-2.437E-08	-1.560E-16
1.99999	1.173E-06	1.173E-06	-1.750E-23	-1.750E-23	-2.437E-08	-2.437E-08	-1.164E-16

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	2.5000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	2.5000	0.10000	193.666	2.668E-07	9.999E-01	-7.435E-12	-7.435E-12	7.435E-12
0.20000	2.5000	0.20000	172.178	3.535E-07	9.998E-01	-1.054E-11	-1.054E-11	1.054E-11
0.30000	2.5000	0.30000	150.699	5.603E-07	9.997E-01	-1.493E-11	-1.493E-11	1.493E-11
0.40000	2.5000	0.40000	129.232	9.472E-07	9.996E-01	-2.221E-11	-2.221E-11	2.221E-11
0.50000	2.5000	0.50000	107.784	1.281E-06	9.994E-01	-3.309E-11	-3.309E-11	3.309E-11
0.60000	2.5000	0.60000	86.370	1.281E-06	9.990E-01	-5.378E-11	-5.378E-11	5.378E-11
0.70000	2.5000	0.70000	65.024	5.603E-06	9.983E-01	-1.026E-10	-1.026E-10	1.026E-10
0.80000	2.5000	0.80000	43.843	1.665E-05	9.963E-01	-2.516E-10	-2.516E-10	2.516E-10
0.85000	2.5000	0.85000	33.414	4.280E-05	9.943E-01	-4.714E-10	-4.714E-10	4.714E-10
0.90000	2.5000	0.90000	23.286	1.415E-04	9.920E-01	-1.073E-09	-1.073E-09	1.073E-09
0.92500	2.5000	0.92500	18.491	2.971E-04	9.928E-01	-1.820E-09	-1.820E-09	1.820E-09
0.95000	2.5000	0.95000	14.123	7.526E-04	1.001E 00	-3.305E-09	-3.305E-09	3.305E-09
0.96250	2.5000	0.96250	12.244	1.232E-03	1.009E 00	-4.625E-09	-4.625E-09	4.625E-09
0.97500	2.5001	0.97500	10.717	2.067E-03	1.017E 00	-6.078E-09	-6.078E-09	6.078E-09
0.98125	2.5001	0.98125	10.137	2.665E-03	1.017E 00	-6.744E-09	-6.744E-09	6.744E-09
0.98750	2.5001	0.98750	9.709	3.395E-03	1.011E 00	-7.487E-09	-7.487E-09	7.487E-09
0.99375	2.5001	0.99375	9.455	4.233E-03	1.003E 00	-8.030E-09	-8.030E-09	8.030E-09
1.00000	2.5001	1.00000	9.388	5.137E-03	9.999E-01	-8.179E-09	-8.179E-09	8.179E-09
1.00625	2.5002	1.00625	9.513	6.039E-03	1.005E 00	-7.903E-09	-7.903E-09	7.903E-09
1.01250	2.5002	1.01250	9.822	6.858E-03	1.014E 00	-7.258E-09	-7.258E-09	7.258E-09
1.01875	2.5003	1.01875	10.299	7.550E-03	1.019E 00	-6.551E-09	-6.551E-09	6.551E-09
1.02500	2.5003	1.02500	10.921	8.107E-03	1.019E 00	-5.861E-09	-5.861E-09	5.861E-09
1.03749	2.5004	1.03750	12.511	8.869E-03	1.011E 00	-4.409E-09	-4.409E-09	4.410E-09
1.04999	2.5005	1.05000	14.432	9.308E-03	1.003E 00	-3.128E-09	-3.128E-09	3.128E-09
1.07499	2.5007	1.07500	18.845	9.709E-03	9.935E-01	-1.748E-09	-1.748E-09	1.748E-09
1.09999	2.5009	1.10000	23.662	9.861E-03	9.915E-01	-1.038E-09	-1.038E-09	1.038E-09
1.14999	2.5013	1.15000	33.808	9.957E-03	9.923E-01	-4.593E-10	-4.593E-10	4.593E-10
1.19999	2.5017	1.20000	44.244	9.991E-03	9.934E-01	-2.465E-10	-2.465E-10	2.465E-10
1.29999	2.5023	1.30000	65.429	1.001E-02	9.943E-01	-1.012E-10	-1.012E-10	1.012E-10
1.39999	2.5029	1.40000	86.777	1.002E-02	9.943E-01	-5.323E-11	-5.323E-11	5.323E-11
1.49999	2.5033	1.50000	108.192	1.003E-02	9.941E-01	-3.284E-11	-3.284E-11	3.284E-11
1.59999	2.5038	1.60000	129.640	1.003E-02	9.937E-01	-2.204E-11	-2.204E-11	2.204E-11
1.69999	2.5041	1.70000	151.108	1.003E-02	9.933E-01	-1.483E-11	-1.483E-11	1.483E-11
1.79999	2.5045	1.80000	172.587	1.004E-02	9.929E-01	-1.047E-11	-1.047E-11	1.047E-11
1.89999	2.5048	1.90000	194.075	1.004E-02	9.926E-01	-7.386E-12	-7.386E-12	7.386E-12
1.99999	2.5050	2.00000	215.568	1.004E-02	9.922E-01	-5.268E-12	-5.268E-12	5.268E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.435E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.922E-10	-1.922E-10
0.20000	1.054E-11	99.802	-7.582E-10	-7.582E-10	7.582E-10	7.582E-10	-2.723E-10	-2.723E-10
0.30000	1.493E-11	149.703	-1.387E-09	-1.387E-09	1.387E-09	1.387E-09	-3.859E-10	-3.859E-10
0.40000	2.221E-11	199.605	-2.301E-09	-2.301E-09	2.301E-09	2.301E-09	-5.741E-10	-5.741E-10
0.50000	3.309E-11	249.506	-3.663E-09	-3.663E-09	3.663E-09	3.663E-09	-8.554E-10	-8.554E-10
0.60000	5.378E-11	299.407	-5.757E-09	-5.757E-09	5.757E-09	5.757E-09	-1.390E-09	-1.390E-09
0.70000	1.026E-10	349.308	-9.470E-09	-9.470E-09	9.471E-09	9.471E-09	-2.652E-09	-2.652E-09
0.80000	2.516E-10	399.209	-1.747E-08	-1.747E-08	1.748E-08	1.748E-08	-6.503E-09	-6.503E-09
0.85000	4.714E-10	424.160	-2.604E-08	-2.604E-08	2.609E-08	2.609E-08	-1.219E-08	-1.219E-08
0.90000	1.073E-09	449.110	-4.359E-08	-4.359E-08	4.428E-08	4.428E-08	-2.774E-08	-2.774E-08
0.92500	1.820E-09	461.585	-5.995E-08	-5.995E-08	6.305E-08	6.305E-08	-4.704E-08	-4.704E-08
0.95000	3.305E-09	474.060	-8.154E-08	-8.154E-08	1.020E-07	1.020E-07	-8.544E-08	-8.544E-08
0.96250	4.625E-09	480.298	-8.863E-08	-8.863E-08	1.441E-07	1.441E-07	-1.196E-07	-1.196E-07
0.97500	6.078E-09	486.535	-7.061E-08	-7.061E-08	2.289E-07	2.289E-07	-1.571E-07	-1.571E-07
0.98125	6.744E-09	489.654	-3.731E-08	-3.731E-08	3.022E-07	3.022E-07	-1.743E-07	-1.743E-07
0.98750	7.487E-09	492.773	2.429E-08	2.429E-08	4.081E-07	4.081E-07	-1.936E-07	-1.936E-07
0.99375	8.030E-09	495.891	1.221E-07	1.221E-07	5.546E-07	5.546E-07	-2.076E-07	-2.076E-07
1.00000	8.179E-09	499.010	2.598E-07	2.598E-07	7.431E-07	7.431E-07	-2.114E-07	-2.114E-07
1.00625	7.903E-09	502.128	4.304E-07	4.304E-07	9.640E-07	9.640E-07	-2.043E-07	-2.043E-07
1.01250	7.258E-09	505.247	6.144E-07	6.144E-07	1.195E-06	1.195E-06	-1.876E-07	-1.876E-07
1.01875	6.551E-09	508.366	7.914E-07	7.914E-07	1.415E-06	1.415E-06	-1.694E-07	-1.694E-07
1.02500	5.861E-09	511.484	9.488E-07	9.488E-07	1.612E-06	1.612E-06	-1.515E-07	-1.515E-07
1.03749	4.409E-09	517.722	1.187E-06	1.187E-06	1.914E-06	1.914E-06	-1.140E-07	-1.140E-07
1.04999	3.128E-09	523.959	1.342E-06	1.342E-06	2.115E-06	2.115E-06	-8.085E-08	-8.085E-08
1.07499	1.748E-09	536.434	1.510E-06	1.510E-06	2.341E-06	2.341E-06	-4.518E-08	-4.518E-08
1.09999	1.038E-09	548.910	1.600E-06	1.600E-06	2.465E-06	2.465E-06	-2.683E-08	-2.683E-08
1.14999	4.593E-10	573.860	1.716E-06	1.716E-06	2.616E-06	2.616E-06	-1.187E-08	-1.187E-08
1.19999	2.465E-10	598.811	1.818E-06	1.818E-06	2.734E-06	2.734E-06	-6.373E-09	-6.373E-09
1.29999	1.012E-10	648.712	2.010E-06	2.010E-06	2.942E-06	2.942E-06	-2.617E-09	-2.617E-09
1.39999	5.323E-11	698.613	2.201E-06	2.201E-06	3.140E-06	3.140E-06	-1.376E-09	-1.376E-09
1.49999	3.284E-11	748.514	2.393E-06	2.393E-06	3.336E-06	3.336E-06	-8.490E-10	-8.490E-10
1.59999	2.204E-11	798.415	2.584E-06	2.584E-06	3.531E-06	3.531E-06	-5.698E-10	-5.698E-10
1.69999	1.483E-11	848.316	2.776E-06	2.776E-06	3.724E-06	3.724E-06	-3.833E-10	-3.833E-10
1.79999	1.047E-11	898.217	2.972E-06	2.972E-06	3.921E-06	3.921E-06	-2.705E-10	-2.705E-10
1.89999	7.386E-12	948.118	3.161E-06	3.161E-06	4.111E-06	4.111E-06	-1.909E-10	-1.909E-10
1.99999	5.268E-12	998.020	3.352E-06	3.352E-06	4.302E-06	4.302E-06	-1.362E-10	-1.362E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.819E-16
0.10000	1.388E-12	1.387E-12	-3.071E-23	-3.071E-23	-3.525E-13	-3.525E-13	-2.439E-16
0.20000	3.873E-12	3.873E-12	-5.348E-23	-5.348E-23	-9.666E-13	-9.666E-13	-3.487E-16
0.30000	8.206E-12	8.206E-12	-9.310E-23	-9.310E-23	-2.036E-12	-2.036E-12	-5.475E-16
0.40000	1.737E-11	1.737E-11	-1.696E-22	-1.696E-22	-3.943E-12	-3.943E-12	-9.253E-16
0.50000	3.438E-11	3.438E-11	-3.093E-22	-3.093E-22	-7.421E-12	-7.421E-12	-1.845E-15
0.60000	7.761E-11	7.761E-11	-6.331E-22	-6.331E-22	-1.405E-11	-1.405E-11	-4.288E-15
0.70000	2.190E-10	2.190E-10	-1.642E-21	-1.642E-21	-2.953E-11	-2.953E-11	-1.235E-14
0.80000	8.688E-10	8.688E-10	-6.332E-21	-6.332E-21	-7.909E-11	-7.909E-11	-5.359E-14
0.85000	2.216E-09	2.216E-09	-1.602E-20	-1.602E-20	-1.553E-10	-1.553E-10	-1.460E-13
0.90000	7.508E-09	7.508E-09	-5.879E-20	-5.879E-20	-3.913E-10	-3.913E-10	-5.598E-13
0.92500	1.642E-08	1.642E-08	-1.231E-19	-1.231E-19	-7.170E-10	-7.170E-10	-1.317E-12
0.95000	4.252E-08	4.252E-08	-2.760E-19	-2.760E-19	-1.392E-09	-1.392E-09	-3.652E-12
0.96250	7.343E-08	7.344E-08	-4.661E-19	-4.661E-19	-2.075E-09	-2.075E-09	-6.145E-12
0.97500	1.431E-07	1.431E-07	-7.135E-19	-7.135E-19	-3.173E-09	-3.173E-09	-1.040E-11
0.98125	2.101E-07	2.101E-07	-8.389E-19	-8.389E-19	-3.899E-09	-3.899E-09	-1.309E-11
0.98750	3.133E-07	3.133E-07	-9.884E-19	-9.885E-19	-4.751E-09	-4.751E-09	-1.528E-11
0.99375	4.666E-07	4.666E-07	-1.103E-18	-1.103E-18	-5.734E-09	-5.734E-09	-1.670E-11
1.00000	6.564E-07	6.564E-07	-1.136E-18	-1.136E-18	-6.788E-09	-6.788E-09	-1.711E-11
1.00625	8.360E-07	8.360E-07	-1.076E-18	-1.076E-18	-7.829E-09	-7.829E-09	-1.636E-11
1.01250	9.684E-07	9.684E-07	-9.414E-19	-9.414E-19	-8.777E-09	-8.777E-09	-1.471E-11
1.01875	1.054E-06	1.054E-06	-8.019E-19	-8.019E-19	-9.586E-09	-9.586E-09	-1.226E-11
1.02500	1.111E-06	1.111E-06	-6.741E-19	-6.741E-19	-1.028E-08	-1.028E-08	-9.639E-12
1.03749	1.172E-06	1.172E-06	-4.326E-19	-4.326E-19	-1.130E-08	-1.130E-08	-5.667E-12
1.04999	1.198E-06	1.198E-06	-2.533E-19	-2.533E-19	-1.194E-08	-1.194E-08	-3.393E-12
1.07499	1.206E-06	1.206E-06	-1.165E-19	-1.165E-19	-1.257E-08	-1.257E-08	-1.224E-12
1.09999	1.189E-06	1.189E-06	-5.569E-20	-5.569E-20	-1.288E-08	-1.288E-08	-5.264E-13
1.14999	1.141E-06	1.141E-06	-1.542E-20	-1.542E-20	-1.310E-08	-1.310E-08	-1.398E-13
1.19999	1.094E-06	1.094E-06	-6.146E-21	-6.146E-21	-1.318E-08	-1.318E-08	-5.185E-14
1.29999	1.010E-06	1.010E-06	-1.611E-21	-1.611E-21	-1.322E-08	-1.322E-08	-1.207E-14
1.39999	9.376E-07	9.376E-07	-6.238E-22	-6.238E-22	-1.324E-08	-1.324E-08	-4.219E-15
1.49999	8.754E-07	8.754E-07	-3.058E-22	-3.058E-22	-1.325E-08	-1.325E-08	-1.821E-15
1.59999	8.210E-07	8.210E-07	-1.677E-22	-1.677E-22	-1.325E-08	-1.325E-08	-9.166E-16
1.69999	7.730E-07	7.730E-07	-9.212E-23	-9.212E-23	-1.325E-08	-1.325E-08	-5.434E-16
1.79999	7.304E-07	7.304E-07	-5.291E-23	-5.291E-23	-1.325E-08	-1.325E-08	-3.468E-16
1.89999	6.922E-07	6.922E-07	-3.039E-23	-3.039E-23	-1.325E-08	-1.325E-08	-2.431E-16
1.99999	6.578E-07	6.578E-07	-1.743E-23	-1.743E-23	-1.325E-08	-1.325E-08	-1.815E-16

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 3.000 θ_D= 0. ρ_a=11.261

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	3.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	3.0000	0.10000	193.676	2.868E-07	9.998E-01	-7.434E-12	-7.434E-12	7.434E-12
0.20000	3.0000	0.20000	172.201	3.669E-07	9.998E-01	-1.053E-11	-1.053E-11	1.053E-11
0.30000	3.0000	0.30000	150.738	6.403E-07	9.997E-01	-1.492E-11	-1.492E-11	1.492E-11
0.40000	3.0000	0.40000	129.292	1.121E-06	9.995E-01	-2.218E-11	-2.218E-11	2.218E-11
0.50000	3.0000	0.50000	107.874	1.467E-06	9.993E-01	-3.304E-11	-3.304E-11	3.304E-11
0.60000	3.0000	0.60000	86.505	1.494E-06	9.989E-01	-5.360E-11	-5.360E-11	5.360E-11
0.70000	3.0000	0.70000	65.232	6.457E-06	9.980E-01	-1.019E-10	-1.019E-10	1.019E-10
0.80000	3.0000	0.80000	44.196	2.156E-05	9.959E-01	-2.471E-10	-2.471E-10	2.471E-10
0.85000	3.0000	0.85000	33.904	4.845E-05	9.940E-01	-4.564E-10	-4.564E-10	4.564E-10
0.90000	3.0000	0.90000	24.024	1.571E-04	9.928E-01	-1.005E-09	-1.005E-09	1.005E-09
0.92500	3.0000	0.92500	19.437	3.185E-04	9.953E-01	-1.634E-09	-1.634E-09	1.634E-09
0.95000	3.0000	0.95000	15.372	7.325E-04	1.004E 00	-2.643E-09	-2.643E-09	2.643E-09
0.96250	3.0000	0.96250	13.683	1.120E-03	1.011E 00	-3.575E-09	-3.575E-09	3.575E-09
0.97500	3.0001	0.97500	12.355	1.721E-03	1.014E 00	-4.534E-09	-4.534E-09	4.534E-09
0.98125	3.0001	0.98125	11.866	2.117E-03	1.012E 00	-4.950E-09	-4.950E-09	4.950E-09
0.98750	3.0001	0.98750	11.513	2.571E-03	1.007E 00	-5.272E-09	-5.272E-09	5.272E-09
0.99375	3.0001	0.99375	11.310	3.073E-03	1.002E 00	-5.467E-09	-5.467E-09	5.467E-09
1.00000	3.0001	1.00000	11.265	3.598E-03	9.999E-01	-5.511E-09	-5.511E-09	5.511E-09
1.00625	3.0001	1.00625	11.380	4.117E-03	1.003E 00	-5.399E-09	-5.399E-09	5.399E-09
1.01250	3.0002	1.01250	11.650	4.602E-03	1.010E 00	-5.144E-09	-5.144E-09	5.144E-09
1.01875	3.0002	1.01875	12.064	5.033E-03	1.015E 00	-4.777E-09	-4.777E-09	4.777E-09
1.02500	3.0002	1.02500	12.610	5.398E-03	1.017E 00	-4.333E-09	-4.333E-09	4.333E-09
1.03750	3.0003	1.03750	14.027	5.944E-03	1.014E 00	-3.362E-09	-3.362E-09	3.362E-09
1.05000	3.0004	1.05000	15.779	6.299E-03	1.007E 00	-2.492E-09	-2.492E-09	2.492E-09
1.07500	3.0005	1.07500	19.920	6.654E-03	9.971E-01	-1.547E-09	-1.547E-09	1.547E-09
1.09999	3.0006	1.10000	24.546	6.810E-03	9.935E-01	-9.592E-10	-9.592E-10	9.592E-10
1.14999	3.0009	1.15000	34.461	6.914E-03	9.932E-01	-4.399E-10	-4.399E-10	4.399E-10
1.19999	3.0012	1.20000	44.766	6.950E-03	9.942E-01	-2.401E-10	-2.401E-10	2.401E-10
1.29999	3.0016	1.30000	65.813	6.969E-03	9.956E-01	-9.999E-11	-9.999E-11	9.999E-11
1.39999	3.0020	1.40000	87.090	6.977E-03	9.960E-01	-5.282E-11	-5.282E-11	5.282E-11
1.49999	3.0023	1.50000	108.461	6.984E-03	9.961E-01	-3.268E-11	-3.268E-11	3.268E-11
1.59999	3.0026	1.60000	129.879	6.984E-03	9.960E-01	-2.194E-11	-2.194E-11	2.194E-11
1.69999	3.0029	1.70000	151.326	6.989E-03	9.959E-01	-1.477E-11	-1.477E-11	1.477E-11
1.79999	3.0031	1.80000	172.789	6.992E-03	9.957E-01	-1.043E-11	-1.043E-11	1.043E-11
1.89999	3.0033	1.90000	194.265	6.994E-03	9.956E-01	-7.363E-12	-7.363E-12	7.363E-12
1.99999	3.0035	2.00000	215.748	6.994E-03	9.954E-01	-5.254E-12	-5.254E-12	5.254E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 3.000 θ_D= 0. ρ_a= 11.261

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.434E-12	49.901	-3.143E-10	-3.143E-10	3.143E-10	3.143E-10	-1.922E-10	-1.922E-10
0.20000	1.053E-11	99.802	-7.581E-10	-7.581E-10	7.581E-10	7.581E-10	-2.722E-10	-2.722E-10
0.30000	1.492E-11	149.703	-1.387E-09	-1.387E-09	1.387E-09	1.387E-09	-3.856E-10	-3.856E-10
0.40000	2.218E-11	199.605	-2.300E-09	-2.300E-09	2.300E-09	2.300E-09	-5.735E-10	-5.735E-10
0.50000	3.304E-11	249.506	-3.660E-09	-3.660E-09	3.660E-09	3.660E-09	-8.540E-10	-8.540E-10
0.60000	5.360E-11	299.407	-5.749E-09	-5.749E-09	5.749E-09	5.749E-09	-1.386E-09	-1.386E-09
0.70000	1.019E-10	349.308	-9.441E-09	-9.441E-09	9.443E-09	9.443E-09	-2.634E-09	-2.634E-09
0.80000	2.471E-10	399.209	-1.734E-08	-1.734E-08	1.736E-08	1.736E-08	-6.389E-09	-6.389E-09
0.85000	4.564E-10	424.160	-2.567E-08	-2.567E-08	2.575E-08	2.575E-08	-1.180E-08	-1.180E-08
0.90000	1.005E-09	449.110	-4.226E-08	-4.226E-08	4.310E-08	4.310E-08	-2.598E-08	-2.598E-08
0.92500	1.634E-09	461.585	-5.691E-08	-5.691E-08	6.047E-08	6.047E-08	-4.225E-08	-4.225E-08
0.95000	2.643E-09	474.060	-7.515E-08	-7.515E-08	9.452E-08	9.452E-08	-6.834E-08	-6.834E-08
0.96250	3.575E-09	480.298	-8.122E-08	-8.122E-08	1.271E-07	1.271E-07	-9.243E-08	-9.243E-08
0.97500	4.534E-09	486.535	-7.461E-08	-7.461E-08	1.844E-07	1.844E-07	-1.172E-07	-1.172E-07
0.98125	4.950E-09	489.654	-6.079E-08	-6.079E-08	2.278E-07	2.278E-07	-1.280E-07	-1.280E-07
0.98750	5.272E-09	492.773	-3.628E-08	-3.628E-08	2.843E-07	2.843E-07	-1.363E-07	-1.363E-07
0.99375	5.467E-09	495.891	1.221E-09	1.220E-09	3.553E-07	3.553E-07	-1.413E-07	-1.413E-07
1.00000	5.511E-09	499.010	5.173E-08	5.173E-08	4.402E-07	4.402E-07	-1.425E-07	-1.425E-07
1.00625	5.399E-09	502.129	1.128E-07	1.128E-07	5.353E-07	5.353E-07	-1.396E-07	-1.396E-07
1.01250	5.144E-09	505.248	1.797E-07	1.797E-07	6.352E-07	6.352E-07	-1.330E-07	-1.330E-07
1.01875	4.777E-09	508.366	2.471E-07	2.471E-07	7.336E-07	7.336E-07	-1.235E-07	-1.235E-07
1.02500	4.333E-09	511.485	3.099E-07	3.099E-07	8.249E-07	8.249E-07	-1.120E-07	-1.120E-07
1.03750	3.362E-09	517.722	4.150E-07	4.150E-07	9.780E-07	9.780E-07	-8.692E-08	-8.692E-08
1.05000	2.496E-09	523.960	4.921E-07	4.921E-07	1.091E-06	1.091E-06	-6.443E-08	-6.443E-08
1.07500	1.547E-09	536.435	5.801E-07	5.801E-07	1.229E-06	1.229E-06	-3.999E-08	-3.999E-08
1.09999	9.592E-10	548.910	6.297E-07	6.297E-07	1.309E-06	1.309E-06	-2.480E-08	-2.480E-08
1.14999	4.399E-10	573.861	6.887E-07	6.887E-07	1.400E-06	1.400E-06	-1.137E-08	-1.137E-08
1.19999	2.401E-10	598.811	7.374E-07	7.374E-07	1.465E-06	1.465E-06	-6.208E-09	-6.208E-09
1.29999	9.999E-11	648.712	8.279E-07	8.279E-07	1.571E-06	1.571E-06	-2.585E-09	-2.585E-09
1.39999	5.282E-11	698.613	9.197E-07	9.197E-07	1.670E-06	1.670E-06	-1.365E-09	-1.365E-09
1.49999	3.268E-11	748.514	1.013E-06	1.013E-06	1.767E-06	1.767E-06	-8.447E-10	-8.447E-10
1.59999	2.194E-11	798.416	1.104E-06	1.104E-06	1.861E-06	1.861E-06	-5.673E-10	-5.673E-10
1.69999	1.477E-11	848.317	1.198E-06	1.198E-06	1.957E-06	1.957E-06	-3.819E-10	-3.819E-10
1.79999	1.043E-11	898.218	1.292E-06	1.292E-06	2.052E-06	2.052E-06	-2.697E-10	-2.697E-10
1.89999	7.363E-12	948.119	1.385E-06	1.385E-06	2.147E-06	2.147E-06	-1.904E-10	-1.904E-10
1.99999	5.254E-12	998.020	1.478E-06	1.478E-06	2.240E-06	2.240E-06	-1.358E-10	-1.358E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 3.000 θ_D= 0. ρ_a=11.261

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-2.619E-16
0.10000	1.665E-12	1.664E-12	-3.070E-23	-3.070E-23	-3.525E-13	-3.525E-13	-3.511E-16
0.20000	4.646E-12	4.647E-12	-5.344E-23	-5.344E-23	-9.662E-13	-9.662E-13	-5.018E-16
0.30000	9.841E-12	9.841E-12	-9.301E-23	-9.301E-23	-2.035E-12	-2.035E-12	-7.875E-16
0.40000	2.082E-11	2.082E-11	-1.693E-22	-1.693E-22	-3.939E-12	-3.939E-12	-1.330E-15
0.50000	4.118E-11	4.118E-11	-3.085E-22	-3.085E-22	-7.410E-12	-7.410E-12	-2.647E-15
0.60000	9.281E-11	9.281E-11	-6.300E-22	-6.300E-22	-1.402E-11	-1.402E-11	-6.137E-15
0.70000	2.610E-10	2.610E-10	-1.626E-21	-1.626E-21	-2.937E-11	-2.937E-11	-1.756E-14
0.80000	1.019E-09	1.019E-09	-6.168E-21	-6.168E-21	-7.796E-11	-7.796E-11	-7.485E-14
0.85000	2.554E-09	2.554E-09	-1.527E-20	-1.527E-20	-1.512E-10	-1.512E-10	-1.989E-13
0.90000	8.316E-09	8.316E-09	-5.286E-20	-5.286E-20	-3.679E-10	-3.679E-10	-7.137E-13
0.92500	1.735E-08	1.735E-08	-1.062E-19	-1.062E-19	-6.537E-10	-6.537E-10	-1.565E-12
0.95000	4.091E-08	4.091E-08	-1.949E-19	-1.949E-19	-1.212E-09	-1.212E-09	-3.954E-12
0.96250	6.702E-08	6.702E-08	-3.120E-19	-3.120E-19	-1.680E-09	-1.680E-09	-5.876E-12
0.97500	1.160E-07	1.160E-07	-4.519E-19	-4.519E-19	-2.393E-09	-2.393E-09	-8.549E-12
0.98125	1.578E-07	1.578E-07	-5.180E-19	-5.180E-19	-2.847E-09	-2.847E-09	-9.984E-12
0.98750	2.151E-07	2.151E-07	-5.716E-19	-5.716E-19	-3.358E-09	-3.358E-09	-1.124E-11
0.99375	2.880E-07	2.880E-07	-6.049E-19	-6.049E-19	-3.910E-09	-3.910E-09	-1.206E-11
1.00000	3.712E-07	3.712E-07	-6.125E-19	-6.125E-19	-4.481E-09	-4.481E-09	-1.225E-11
1.00625	4.504E-07	4.504E-07	-5.932E-19	-5.932E-19	-5.046E-09	-5.046E-09	-1.177E-11
1.01250	5.143E-07	5.143E-07	-5.502E-19	-5.502E-19	-5.583E-09	-5.583E-09	-1.073E-11
1.01875	5.623E-07	5.623E-07	-4.901E-19	-4.901E-19	-6.070E-09	-6.070E-09	-9.367E-12
1.02500	5.966E-07	5.966E-07	-4.210E-19	-4.210E-19	-6.496E-09	-6.496E-09	-7.921E-12
1.03750	6.371E-07	6.371E-07	-2.835E-19	-2.835E-19	-7.152E-09	-7.152E-09	-5.388E-12
1.05000	6.588E-07	6.588E-07	-1.858E-19	-1.858E-19	-7.576E-09	-7.576E-09	-3.587E-12
1.07500	6.719E-07	6.719E-07	-9.853E-20	-9.853E-20	-8.099E-09	-8.099E-09	-1.428E-12
1.09999	6.674E-07	6.674E-07	-4.903E-20	-4.903E-20	-8.363E-09	-8.363E-09	-6.578E-13
1.14999	6.440E-07	6.440E-07	-1.447E-20	-1.447E-20	-8.565E-09	-8.565E-09	-1.873E-13
1.19999	6.180E-07	6.180E-07	-5.912E-21	-5.912E-21	-8.635E-09	-8.635E-09	-7.142E-14
1.29999	5.705E-07	5.705E-07	-1.581E-21	-1.581E-21	-8.682E-09	-8.682E-09	-1.699E-14
1.39999	5.297E-07	5.297E-07	-6.167E-22	-6.167E-22	-8.697E-09	-8.697E-09	-5.990E-15
1.49999	4.944E-07	4.944E-07	-3.035E-22	-3.035E-22	-8.703E-09	-8.703E-09	-2.595E-15
1.59999	4.635E-07	4.635E-07	-1.666E-22	-1.666E-22	-8.707E-09	-8.707E-09	-1.311E-15
1.69999	4.363E-07	4.363E-07	-9.161E-23	-9.161E-23	-8.708E-09	-8.708E-09	-7.783E-16
1.79999	4.122E-07	4.122E-07	-5.264E-23	-5.264E-23	-8.710E-09	-8.710E-09	-4.974E-16
1.89999	3.905E-07	3.905E-07	-3.024E-23	-3.024E-23	-8.710E-09	-8.710E-09	-3.490E-16
1.99999	3.711E-07	3.711E-07	-1.735E-23	-1.735E-23	-8.710E-09	-8.710E-09	-2.607E-16

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 4.000 θ_D= 0. ρ_a= 15.009

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	4.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	4.0000	0.10000	193.701	2.735E-07	9.997E-01	-7.431E-12	-7.431E-12	7.431E-12
0.20000	4.0000	0.20000	172.258	5.603E-07	9.996E-01	-1.052E-11	-1.052E-11	1.052E-11
0.30000	4.0000	0.30000	150.836	9.738E-07	9.995E-01	-1.489E-11	-1.489E-11	1.489E-11
0.40000	4.0000	0.40000	129.444	1.547E-06	9.992E-01	-2.212E-11	-2.212E-11	2.212E-11
0.50000	4.0000	0.50000	108.102	1.974E-06	9.988E-01	-3.290E-11	-3.290E-11	3.290E-11
0.60000	4.0000	0.60000	86.846	2.615E-06	9.981E-01	-5.314E-11	-5.314E-11	5.314E-11
0.70000	4.0000	0.70000	65.759	6.510E-06	9.967E-01	-1.002E-10	-1.002E-10	1.002E-10
0.80000	4.0000	0.80000	45.080	2.860E-05	9.942E-01	-2.364E-10	-2.364E-10	2.364E-10
0.85000	4.0000	0.85000	35.119	6.318E-05	9.928E-01	-4.212E-10	-4.212E-10	4.212E-10
0.90000	4.0000	0.90000	25.806	1.904E-04	9.951E-01	-8.575E-10	-8.575E-10	8.575E-10
0.92500	4.0000	0.92500	21.657	3.701E-04	1.001E 00	-1.270E-09	-1.270E-09	1.270E-09
0.95000	4.0000	0.95000	18.166	6.770E-04	1.010E 00	-1.888E-09	-1.888E-09	1.888E-09
0.96250	4.0000	0.96250	16.798	9.204E-04	1.013E 00	-2.206E-09	-2.206E-09	2.206E-09
0.97500	4.0001	0.97500	15.775	1.231E-03	1.011E 00	-2.494E-09	-2.494E-09	2.494E-09
0.98125	4.0001	0.98125	15.414	1.411E-03	1.008E 00	-2.625E-09	-2.625E-09	2.625E-09
0.98750	4.0001	0.98750	15.164	1.610E-03	1.004E 00	-2.743E-09	-2.743E-09	2.743E-09
0.99375	4.0001	0.99375	15.031	1.834E-03	1.001E 00	-2.809E-09	-2.809E-09	2.809E-09
1.00000	4.0001	1.00000	15.018	2.060E-03	9.999E-01	-2.816E-09	-2.816E-09	2.816E-09
1.00625	4.0001	1.00625	15.125	2.282E-03	1.002E 00	-2.763E-09	-2.763E-09	2.763E-09
1.01250	4.0001	1.01250	15.349	2.495E-03	1.007E 00	-2.654E-09	-2.654E-09	2.654E-09
1.01875	4.0001	1.01875	15.686	2.693E-03	1.011E 00	-2.525E-09	-2.525E-09	2.525E-09
1.02500	4.0002	1.02500	16.128	2.870E-03	1.015E 00	-2.380E-09	-2.380E-09	2.380E-09
1.03750	4.0002	1.03750	17.295	3.168E-03	1.017E 00	-2.085E-09	-2.085E-09	2.085E-09
1.05000	4.0002	1.05000	18.777	3.381E-03	1.014E 00	-1.762E-09	-1.762E-09	1.762E-09
1.07500	4.0003	1.07500	22.425	3.642E-03	1.004E 00	-1.164E-09	-1.164E-09	1.164E-09
1.10000	4.0004	1.10000	26.665	3.779E-03	9.979E-01	-7.944E-10	-7.944E-10	7.944E-10
1.15000	4.0005	1.15000	36.069	3.890E-03	9.938E-01	-3.956E-10	-3.956E-10	3.956E-10
1.20000	4.0007	1.20000	46.069	3.927E-03	9.940E-01	-2.249E-10	-2.249E-10	2.249E-10
1.30000	4.0009	1.30000	66.780	3.946E-03	9.955E-01	-9.689E-11	-9.689E-11	9.689E-11
1.40000	4.0011	1.40000	87.879	3.958E-03	9.966E-01	-5.179E-11	-5.179E-11	5.179E-11
1.50000	4.0013	1.50000	109.141	3.965E-03	9.971E-01	-3.227E-11	-3.227E-11	3.227E-11
1.60000	4.0015	1.60000	130.486	3.965E-03	9.975E-01	-2.170E-11	-2.170E-11	2.170E-11
1.70000	4.0016	1.70000	151.879	3.967E-03	9.976E-01	-1.464E-11	-1.464E-11	1.464E-11
1.80000	4.0018	1.80000	173.302	3.967E-03	9.977E-01	-1.034E-11	-1.034E-11	1.034E-11
1.90000	4.0019	1.90000	194.746	3.967E-03	9.978E-01	-7.306E-12	-7.306E-12	7.306E-12
2.00000	4.0020	2.00000	216.205	3.967E-03	9.978E-01	-5.217E-12	-5.217E-12	5.217E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 4.000 θ_D= 0. ρ_a= 15.009

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.431E-12	49.901	-3.142E-10	-3.142E-10	3.142E-10	3.142E-10	-1.921E-10	-1.921E-10
0.20000	1.052E-11	99.802	-7.577E-10	-7.577E-10	7.577E-10	7.577E-10	-2.720E-10	-2.720E-10
0.30000	1.489E-11	149.703	-1.386E-09	-1.386E-09	1.386E-09	1.386E-09	-3.850E-10	-3.850E-10
0.40000	2.212E-11	199.605	-2.296E-09	-2.296E-09	2.296E-09	2.296E-09	-5.719E-10	-5.719E-10
0.50000	3.290E-11	249.506	-3.651E-09	-3.651E-09	3.652E-09	3.652E-09	-8.504E-10	-8.504E-10
0.60000	5.314E-11	299.407	-5.727E-09	-5.727E-09	5.727E-09	5.727E-09	-1.374E-09	-1.374E-09
0.70000	1.002E-10	349.308	-9.370E-09	-9.370E-09	9.371E-09	9.371E-09	-2.589E-09	-2.589E-09
0.80000	2.364E-10	399.209	-1.702E-08	-1.702E-08	1.705E-08	1.705E-08	-6.111E-09	-6.111E-09
0.85000	4.212E-10	424.160	-2.481E-08	-2.481E-08	2.494E-08	2.494E-08	-1.089E-08	-1.089E-08
0.90000	8.575E-10	449.110	-3.926E-08	-3.926E-08	4.050E-08	4.050E-08	-2.217E-08	-2.217E-08
0.92500	1.270E-09	461.585	-5.049E-08	-5.049E-08	5.530E-08	5.530E-08	-3.282E-08	-3.282E-08
0.95000	1.888E-09	474.060	-6.423E-08	-6.423E-08	8.078E-08	8.078E-08	-4.881E-08	-4.881E-08
0.96250	2.206E-09	480.298	-6.979E-08	-6.979E-08	1.008E-07	1.008E-07	-5.702E-08	-5.702E-08
0.97500	2.494E-09	486.535	-7.186E-08	-7.186E-08	1.280E-07	1.280E-07	-6.447E-08	-6.447E-08
0.98125	2.625E-09	489.654	-7.080E-08	-7.080E-08	1.451E-07	1.451E-07	-6.785E-08	-6.785E-08
0.98750	2.743E-09	492.773	-6.765E-08	-6.765E-08	1.650E-07	1.650E-07	-7.092E-08	-7.092E-08
0.99375	2.809E-09	495.892	-6.147E-08	-6.147E-08	1.885E-07	1.885E-07	-7.262E-08	-7.262E-08
1.00000	2.816E-09	499.011	-5.312E-08	-5.312E-08	2.144E-07	2.144E-07	-7.280E-08	-7.280E-08
1.00625	2.763E-09	502.129	-4.290E-08	-4.290E-08	2.421E-07	2.421E-07	-7.142E-08	-7.142E-08
1.01250	2.654E-09	505.248	-3.121E-08	-3.121E-08	2.707E-07	2.707E-07	-6.861E-08	-6.861E-08
1.01875	2.525E-09	508.367	-1.866E-08	-1.866E-08	2.994E-07	2.994E-07	-6.529E-08	-6.529E-08
1.02500	2.380E-09	511.486	-6.205E-09	-6.205E-09	3.271E-07	3.271E-07	-6.154E-08	-6.154E-08
1.03750	2.085E-09	517.723	1.716E-08	1.716E-08	3.784E-07	3.784E-07	-5.389E-08	-5.389E-08
1.05000	1.762E-09	523.961	3.543E-08	3.543E-08	4.207E-07	4.207E-07	-4.554E-08	-4.554E-08
1.07500	1.164E-09	536.436	6.022E-08	6.022E-08	4.817E-07	4.817E-07	-3.008E-08	-3.008E-08
1.10000	7.944E-10	548.911	7.563E-08	7.563E-08	5.213E-07	5.213E-07	-2.054E-08	-2.054E-08
1.15000	3.956E-10	573.861	9.391E-08	9.391E-08	5.673E-07	5.673E-07	-1.023E-08	-1.023E-08
1.20000	2.249E-10	598.812	1.076E-07	1.076E-07	5.958E-07	5.958E-07	-5.814E-09	-5.814E-09
1.30000	9.689E-11	648.713	1.332E-07	1.332E-07	6.361E-07	6.361E-07	-2.505E-09	-2.505E-09
1.40000	5.179E-11	698.614	1.618E-07	1.618E-07	6.717E-07	6.717E-07	-1.339E-09	-1.339E-09
1.50000	3.227E-11	748.515	1.910E-07	1.910E-07	7.051E-07	7.051E-07	-8.341E-10	-8.341E-10
1.60000	2.170E-11	798.416	2.196E-07	2.196E-07	7.363E-07	7.363E-07	-5.609E-10	-5.609E-10
1.70000	1.464E-11	848.318	2.499E-07	2.499E-07	7.683E-07	7.683E-07	-3.785E-10	-3.785E-10
1.80000	1.034E-11	898.219	2.792E-07	2.792E-07	7.989E-07	7.989E-07	-2.674E-10	-2.674E-10
1.90000	7.306E-12	948.120	3.087E-07	3.087E-07	8.293E-07	8.293E-07	-1.889E-10	-1.889E-10
2.00000	5.217E-12	998.021	3.373E-07	3.373E-07	8.585E-07	8.585E-07	-1.349E-10	-1.349E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 4.000 θ_0= 0. ρ_a=15.009

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-4.652E-16
0.10000	2.218E-12	2.218E-12	-3.068E-23	-3.068E-23	-3.523E-13	-3.523E-13	-6.236E-16
0.20000	6.187E-12	6.187E-12	-5.337E-23	-5.337E-23	-9.655E-13	-9.655E-13	-8.905E-16
0.30000	1.309E-11	1.309E-11	-9.277E-23	-9.277E-23	-2.032E-12	-2.032E-12	-1.396E-15
0.40000	2.766E-11	2.766E-11	-1.686E-22	-1.686E-22	-3.929E-12	-3.929E-12	-2.353E-15
0.50000	5.462E-11	5.462E-11	-3.066E-22	-3.066E-22	-7.382E-12	-7.382E-12	-4.664E-15
0.60000	1.226E-10	1.226E-10	-6.222E-22	-6.222E-22	-1.392E-11	-1.392E-11	-1.074E-14
0.70000	3.399E-10	3.399E-10	-1.585E-21	-1.585E-21	-2.897E-11	-2.897E-11	-3.023E-14
0.80000	1.277E-09	1.277E-09	-5.775E-21	-5.775E-21	-7.526E-11	-7.526E-11	-1.234E-13
0.85000	3.055E-09	3.055E-09	-1.357E-20	-1.357E-20	-1.418E-10	-1.418E-10	-3.099E-13
0.90000	9.045E-09	9.045E-09	-4.090E-20	-4.090E-20	-3.192E-10	-3.192E-10	-9.672E-13
0.92500	1.733E-08	1.733E-08	-7.517E-20	-7.517E-20	-5.299E-10	-5.299E-10	-1.870E-12
0.95000	3.545E-08	3.545E-08	-1.295E-19	-1.295E-19	-9.077E-10	-9.077E-10	-3.610E-12
0.96250	5.340E-08	5.340E-08	-1.602E-19	-1.602E-19	-1.179E-09	-1.179E-09	-4.943E-12
0.97500	8.068E-08	8.068E-08	-1.858E-19	-1.858E-19	-1.504E-09	-1.504E-09	-6.376E-12
0.98125	9.954E-08	9.954E-08	-1.930E-19	-1.930E-19	-1.682E-09	-1.682E-09	-6.960E-12
0.98750	1.220E-07	1.221E-07	-2.065E-19	-2.065E-19	-1.867E-09	-1.867E-09	-7.345E-12
0.99375	1.482E-07	1.482E-07	-2.142E-19	-2.143E-19	-2.065E-09	-2.065E-09	-7.562E-12
1.00000	1.760E-07	1.760E-07	-2.150E-19	-2.150E-19	-2.266E-09	-2.266E-09	-7.584E-12
1.00625	2.026E-07	2.026E-07	-2.087E-19	-2.087E-19	-2.465E-09	-2.465E-09	-7.409E-12
1.01250	2.257E-07	2.257E-07	-1.961E-19	-1.961E-19	-2.654E-09	-2.654E-09	-7.061E-12
1.01875	2.445E-07	2.445E-07	-1.876E-19	-1.876E-19	-2.833E-09	-2.833E-09	-6.515E-12
1.02500	2.597E-07	2.597E-07	-1.779E-19	-1.779E-19	-3.005E-09	-3.005E-09	-5.850E-12
1.03750	2.813E-07	2.813E-07	-1.483E-19	-1.483E-19	-3.310E-09	-3.310E-09	-4.394E-12
1.05000	2.951E-07	2.951E-07	-1.177E-19	-1.177E-19	-3.559E-09	-3.559E-09	-3.175E-12
1.07500	3.077E-07	3.077E-07	-6.670E-20	-6.670E-20	-3.898E-09	-3.898E-09	-1.657E-12
1.10000	3.101E-07	3.101E-07	-3.613E-20	-3.613E-20	-4.085E-09	-4.085E-09	-8.586E-13
1.15000	3.033E-07	3.033E-07	-1.236E-20	-1.236E-20	-4.242E-09	-4.242E-09	-2.815E-13
1.20000	2.923E-07	2.923E-07	-5.366E-21	-5.366E-21	-4.303E-09	-4.303E-09	-1.141E-13
1.30000	2.703E-07	2.703E-07	-1.509E-21	-1.509E-21	-4.346E-09	-4.346E-09	-2.854E-14
1.40000	2.509E-07	2.509E-07	-5.992E-22	-5.992E-22	-4.360E-09	-4.360E-09	-1.028E-14
1.50000	2.341E-07	2.341E-07	-2.978E-22	-2.978E-22	-4.367E-09	-4.367E-09	-4.497E-15
1.60000	2.195E-07	2.195E-07	-1.638E-22	-1.638E-22	-4.370E-09	-4.370E-09	-2.290E-15
1.70000	2.065E-07	2.065E-07	-9.031E-23	-9.031E-23	-4.372E-09	-4.372E-09	-1.365E-15
1.80000	1.951E-07	1.951E-07	-5.195E-23	-5.195E-23	-4.373E-09	-4.373E-09	-8.753E-16
1.90000	1.848E-07	1.848E-07	-2.986E-23	-2.986E-23	-4.373E-09	-4.373E-09	-6.156E-16
2.00000	1.755E-07	1.755E-07	-1.715E-23	-1.715E-23	-4.374E-09	-4.374E-09	-4.606E-16

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 5.000 θ_0= 0. ρ_a= 18.752

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	5.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	5.0000	0.10000	193.734	5.403E-07	9.996E-01	-7.427E-12	-7.427E-12	7.427E-12
0.20000	5.0000	0.20000	172.332	8.138E-07	9.995E-01	-1.051E-11	-1.051E-11	1.051E-11
0.30000	5.0000	0.30000	150.962	1.147E-06	9.992E-01	-1.486E-11	-1.486E-11	1.486E-11
0.40000	5.0000	0.40000	129.640	1.841E-06	9.989E-01	-2.204E-11	-2.204E-11	2.204E-11
0.50000	5.0000	0.50000	108.395	2.241E-06	9.984E-01	-3.272E-11	-3.272E-11	3.272E-11
0.60000	5.0000	0.60000	87.283	2.241E-06	9.974E-01	-5.256E-11	-5.256E-11	5.256E-11
0.70000	5.0000	0.70000	66.431	9.498E-06	9.958E-01	-9.800E-11	-9.800E-11	9.800E-11
0.80000	5.0000	0.80000	46.191	3.586E-05	9.934E-01	-2.235E-10	-2.235E-10	2.235E-10
0.85000	5.0000	0.85000	36.621	7.620E-05	9.933E-01	-3.815E-10	-3.815E-10	3.815E-10
0.90000	5.0000	0.90000	27.929	2.186E-04	9.986E-01	-7.099E-10	-7.099E-10	7.099E-10
0.92500	5.0000	0.92500	24.214	3.458E-04	1.005E 00	-9.880E-10	-9.880E-10	9.880E-10
0.95000	5.0000	0.95000	21.224	5.661E-04	1.011E 00	-1.334E-09	-1.334E-09	1.334E-09
0.96250	5.0000	0.96250	20.105	7.206E-04	1.011E 00	-1.515E-09	-1.515E-09	1.515E-09
0.97500	5.0000	0.97500	19.299	9.067E-04	1.007E 00	-1.660E-09	-1.660E-09	1.660E-09
0.98125	5.0001	0.98125	19.026	1.010E-03	1.004E 00	-1.712E-09	-1.712E-09	1.712E-09
0.98750	5.0001	0.98750	18.846	1.121E-03	1.002E 00	-1.748E-09	-1.748E-09	1.748E-09
0.99375	5.0001	0.99375	18.760	1.236E-03	1.000E-00	-1.765E-09	-1.765E-09	1.765E-09
1.00000	5.0001	1.00000	18.770	1.354E-03	9.999E-01	-1.763E-09	-1.763E-09	1.763E-09
1.00625	5.0001	1.00625	18.877	1.475E-03	1.002E 00	-1.742E-09	-1.742E-09	1.742E-09
1.01250	5.0001	1.01250	19.078	1.589E-03	1.005E 00	-1.702E-09	-1.702E-09	1.702E-09
1.01875	5.0001	1.01875	19.370	1.697E-03	1.008E 00	-1.647E-09	-1.647E-09	1.647E-09
1.02500	5.0001	1.02500	19.750	1.795E-03	1.012E 00	-1.577E-09	-1.577E-09	1.577E-09
1.03750	5.0001	1.03750	20.752	1.964E-03	1.016E 00	-1.407E-09	-1.407E-09	1.407E-09
1.05000	5.0002	1.05000	22.038	2.099E-03	1.016E 00	-1.216E-09	-1.216E-09	1.216E-09
1.07500	5.0002	1.07500	25.282	2.199E-03	1.010E 00	-8.985E-10	-8.985E-10	8.985E-10
1.10000	5.0002	1.10000	29.163	2.329E-03	1.003E 00	-6.361E-10	-6.361E-10	6.361E-10
1.15000	5.0003	1.15000	38.037	2.430E-03	9.958E-01	-3.475E-10	-3.475E-10	3.475E-10
1.20000	5.0004	1.20000	47.692	2.551E-03	9.943E-01	-2.072E-10	-2.072E-10	2.072E-10
1.30000	5.0006	1.30000	68.003	2.563E-03	9.952E-01	-9.312E-11	-9.312E-11	9.312E-11
1.40000	5.0007	1.40000	88.883	2.575E-03	9.963E-01	-5.050E-11	-5.050E-11	5.050E-11
1.50000	5.0009	1.50000	110.008	2.580E-03	9.971E-01	-3.175E-11	-3.175E-11	3.175E-11
1.60000	5.0010	1.60000	131.261	2.582E-03	9.976E-01	-2.139E-11	-2.139E-11	2.139E-11
1.70000	5.0011	1.70000	152.587	2.585E-03	9.979E-01	-1.448E-11	-1.448E-11	1.448E-11
1.80000	5.0012	1.80000	173.960	2.585E-03	9.981E-01	-1.024E-11	-1.024E-11	1.024E-11
1.90000	5.0012	1.90000	195.364	2.585E-03	9.982E-01	-7.233E-12	-7.233E-12	7.233E-12
2.00000	5.0013	2.00000	216.790	2.585E-03	9.983E-01	-5.169E-12	-5.169E-12	5.169E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 5.000 θ_D= 0. ρ_a= 18.752

z	$_x\mu'-1.0$	T_o	$_oT_1-T_o$	$_xT_1-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.427E-12	49.901	-3.141E-10	-3.141E-10	3.141E-10	3.141E-10	-1.920E-10	-1.920E-10
0.20000	1.051E-11	99.802	-7.572E-10	-7.572E-10	7.572E-10	7.572E-10	-2.717E-10	-2.717E-10
0.30000	1.486E-11	149.703	-1.384E-09	-1.384E-09	1.384E-09	1.384E-09	-3.842E-10	-3.842E-10
0.40000	2.204E-11	199.605	-2.292E-09	-2.292E-09	2.292E-09	2.292E-09	-5.698E-10	-5.698E-10
0.50000	3.272E-11	249.506	-3.641E-09	-3.641E-09	3.641E-09	3.641E-09	-8.458E-10	-8.458E-10
0.60000	5.256E-11	299.407	-5.699E-09	-5.699E-09	5.699E-09	5.699E-09	-1.359E-09	-1.359E-09
0.70000	9.800E-11	349.308	-9.279E-09	-9.279E-09	9.282E-09	9.282E-09	-2.533E-09	-2.533E-09
0.80000	2.235E-10	399.209	-1.663E-08	-1.663E-08	1.667E-08	1.667E-08	-5.778E-09	-5.778E-09
0.85000	3.815E-10	424.160	-2.383E-08	-2.383E-08	2.401E-08	2.401E-08	-9.862E-09	-9.862E-09
0.90000	7.099E-10	449.110	-3.612E-08	-3.612E-08	3.775E-08	3.775E-08	-1.835E-08	-1.835E-08
0.92500	9.880E-10	461.585	-4.538E-08	-4.538E-08	4.958E-08	4.958E-08	-2.554E-08	-2.554E-08
0.95000	1.334E-09	474.060	-5.604E-08	-5.604E-08	6.761E-08	6.761E-08	-3.448E-08	-3.448E-08
0.96250	1.515E-09	480.298	-6.122E-08	-6.122E-08	8.022E-08	8.022E-08	-3.915E-08	-3.915E-08
0.97500	1.660E-09	486.536	-6.542E-08	-6.542E-08	9.588E-08	9.588E-08	-4.291E-08	-4.291E-08
0.98125	1.712E-09	489.654	-6.689E-08	-6.689E-08	1.049E-07	1.049E-07	-4.426E-08	-4.426E-08
0.98750	1.748E-09	492.773	-6.773E-08	-6.773E-08	1.149E-07	1.149E-07	-4.518E-08	-4.518E-08
0.99375	1.765E-09	495.892	-6.793E-08	-6.793E-08	1.256E-07	1.257E-07	-4.562E-08	-4.562E-08
1.00000	1.763E-09	499.011	-6.746E-08	-6.746E-08	1.371E-07	1.371E-07	-4.557E-08	-4.557E-08
1.00625	1.742E-09	502.130	-6.615E-08	-6.615E-08	1.494E-07	1.494E-07	-4.502E-08	-4.502E-08
1.01250	1.702E-09	505.248	-6.457E-08	-6.457E-08	1.617E-07	1.617E-07	-4.400E-08	-4.400E-08
1.01875	1.647E-09	508.367	-6.260E-08	-6.260E-08	1.741E-07	1.741E-07	-4.257E-08	-4.257E-08
1.02500	1.577E-09	511.486	-6.061E-08	-6.061E-08	1.862E-07	1.862E-07	-4.077E-08	-4.077E-08
1.03750	1.407E-09	517.723	-5.671E-08	-5.671E-08	2.087E-07	2.087E-07	-3.638E-08	-3.638E-08
1.05000	1.216E-09	523.961	-5.304E-08	-5.304E-08	2.288E-07	2.288E-07	-3.143E-08	-3.143E-08
1.07500	8.985E-10	536.436	-5.521E-08	-5.521E-08	2.528E-07	2.528E-07	-2.323E-08	-2.323E-08
1.10000	6.361E-10	548.911	-5.014E-08	-5.014E-08	2.769E-07	2.769E-07	-1.644E-08	-1.644E-08
1.15000	3.475E-10	573.862	-4.638E-08	-4.638E-08	3.044E-07	3.044E-07	-8.983E-09	-8.983E-09
1.20000	2.072E-10	598.812	-3.358E-08	-3.358E-08	3.304E-07	3.304E-07	-5.358E-09	-5.358E-09
1.30000	9.312E-11	648.713	-2.664E-08	-2.664E-08	3.512E-07	3.512E-07	-2.407E-09	-2.407E-09
1.40000	5.050E-11	698.615	-1.594E-08	-1.594E-08	3.687E-07	3.687E-07	-1.306E-09	-1.306E-09
1.50000	3.175E-11	748.516	-4.572E-09	-4.572E-09	3.840E-07	3.840E-07	-8.208E-10	-8.208E-10
1.60000	2.139E-11	798.417	7.036E-09	7.036E-09	3.983E-07	3.983E-07	-5.529E-10	-5.529E-10
1.70000	1.448E-11	848.318	2.025E-08	2.025E-08	4.132E-07	4.132E-07	-3.742E-10	-3.742E-10
1.80000	1.024E-11	898.219	3.239E-08	3.239E-08	4.266E-07	4.266E-07	-2.646E-10	-2.646E-10
1.90000	7.233E-12	948.120	4.438E-08	4.438E-08	4.395E-07	4.395E-07	-1.870E-10	-1.870E-10
2.00000	5.169E-12	998.021	5.614E-08	5.614E-08	4.518E-07	4.518E-07	-1.336E-10	-1.336E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 5.000 θ_D= 0. ρ_a=18.752

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-7.262E-16
0.10000	2.769E-12	2.770E-12	-3.066E-23	-3.066E-23	-3.522E-13	-3.522E-13	-9.730E-16
0.20000	7.721E-12	7.721E-12	-5.326E-23	-5.326E-23	-9.644E-13	-9.644E-13	-1.388E-15
0.30000	1.632E-11	1.632E-11	-9.247E-23	-9.247E-23	-2.028E-12	-2.028E-12	-2.172E-15
0.40000	3.443E-11	3.443E-11	-1.677E-22	-1.677E-22	-3.917E-12	-3.917E-12	-3.653E-15
0.50000	6.784E-11	6.784E-11	-3.041E-22	-3.041E-22	-7.346E-12	-7.346E-12	-7.202E-15
0.60000	1.515E-10	1.515E-10	-6.124E-22	-6.124E-22	-1.381E-11	-1.381E-11	-1.645E-14
0.70000	4.132E-10	4.132E-10	-1.535E-21	-1.535E-21	-2.846E-11	-2.846E-11	-4.538E-14
0.80000	1.482E-09	1.482E-09	-5.317E-21	-5.317E-21	-7.205E-11	-7.205E-11	-1.761E-13
0.85000	3.368E-09	3.368E-09	-1.172E-20	-1.172E-20	-1.313E-10	-1.313E-10	-4.155E-13
0.90000	9.098E-09	9.098E-09	-3.012E-20	-3.012E-20	-2.725E-10	-2.725E-10	-1.135E-12
0.92500	1.615E-08	1.615E-08	-5.144E-20	-5.144E-20	-4.226E-10	-4.226E-10	-1.920E-12
0.95000	2.978E-08	2.978E-08	-8.042E-20	-8.042E-20	-6.668E-10	-6.668E-10	-3.137E-12
0.96250	4.177E-08	4.177E-08	-9.573E-20	-9.573E-20	-8.317E-10	-8.317E-10	-3.823E-12
0.97500	5.801E-08	5.801E-08	-1.085E-19	-1.085E-19	-1.023E-09	-1.023E-09	-4.460E-12
0.98125	6.803E-08	6.803E-08	-1.133E-19	-1.133E-19	-1.127E-09	-1.127E-09	-4.709E-12
0.98750	7.910E-08	7.910E-08	-1.165E-19	-1.165E-19	-1.235E-09	-1.235E-09	-4.885E-12
0.99375	9.103E-08	9.103E-08	-1.180E-19	-1.180E-19	-1.344E-09	-1.344E-09	-4.972E-12
1.00000	1.032E-07	1.032E-07	-1.179E-19	-1.179E-19	-1.455E-09	-1.455E-09	-4.962E-12
1.00625	1.149E-07	1.149E-07	-1.159E-19	-1.159E-19	-1.564E-09	-1.564E-09	-4.855E-12
1.01250	1.256E-07	1.256E-07	-1.123E-19	-1.123E-19	-1.671E-09	-1.671E-09	-4.661E-12
1.01875	1.349E-07	1.349E-07	-1.073E-19	-1.073E-19	-1.774E-09	-1.774E-09	-4.399E-12
1.02500	1.430E-07	1.430E-07	-1.012E-19	-1.012E-19	-1.871E-09	-1.871E-09	-4.088E-12
1.03750	1.558E-07	1.558E-07	-8.655E-20	-8.655E-20	-2.047E-09	-2.047E-09	-3.405E-12
1.05000	1.645E-07	1.645E-07	-7.083E-20	-7.083E-20	-2.194E-09	-2.194E-09	-2.747E-12
1.07500	1.739E-07	1.739E-07	-4.410E-20	-4.410E-20	-2.407E-09	-2.407E-09	-1.631E-12
1.10000	1.773E-07	1.773E-07	-2.521E-20	-2.521E-20	-2.534E-09	-2.534E-09	-9.781E-13
1.15000	1.758E-07	1.758E-07	-1.021E-20	-1.021E-20	-2.657E-09	-2.657E-09	-3.637E-13
1.20000	1.704E-07	1.704E-07	-4.756E-21	-4.756E-21	-2.708E-09	-2.708E-09	-1.570E-13
1.30000	1.581E-07	1.581E-07	-1.423E-21	-1.423E-21	-2.748E-09	-2.748E-09	-4.157E-14
1.40000	1.469E-07	1.469E-07	-5.776E-22	-5.776E-22	-2.761E-09	-2.761E-09	-1.537E-14
1.50000	1.371E-07	1.371E-07	-2.906E-22	-2.906E-22	-2.768E-09	-2.768E-09	-6.804E-15
1.60000	1.285E-07	1.285E-07	-1.602E-22	-1.602E-22	-2.771E-09	-2.771E-09	-3.500E-15
1.70000	1.210E-07	1.210E-07	-8.867E-23	-8.867E-23	-2.773E-09	-2.773E-09	-2.096E-15
1.80000	1.142E-07	1.142E-07	-5.107E-23	-5.107E-23	-2.774E-09	-2.774E-09	-1.350E-15
1.90000	1.082E-07	1.082E-07	-2.939E-23	-2.939E-23	-2.774E-09	-2.774E-09	-9.524E-16
2.00000	1.028E-07	1.028E-07	-1.689E-23	-1.689E-23	-2.775E-09	-2.775E-09	-7.139E-16

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 6.000 θ_D= 0. ρ_a= 22.490

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	6.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	6.0000	0.10000	193.774	6.270E-07	9.994E-01	-7.422E-12	-7.422E-12	7.422E-12
0.20000	6.0000	0.20000	172.422	8.271E-07	9.992E-01	-1.049E-11	-1.049E-11	1.049E-11
0.30000	6.0000	0.30000	151.116	1.441E-06	9.988E-01	-1.483E-11	-1.483E-11	1.483E-11
0.40000	6.0000	0.40000	129.879	2.241E-06	9.983E-01	-2.194E-11	-2.194E-11	2.194E-11
0.50000	6.0000	0.50000	108.752	2.455E-06	9.975E-01	-3.250E-11	-3.250E-11	3.250E-11
0.60000	6.0000	0.60000	87.814	3.202E-06	9.962E-01	-5.187E-11	-5.187E-11	5.187E-11
0.70000	6.0000	0.70000	67.242	9.712E-06	9.942E-01	-9.545E-11	-9.545E-11	9.545E-11
0.80000	6.0000	0.80000	47.513	3.863E-05	9.924E-01	-2.091E-10	-2.091E-10	2.091E-10
0.85000	6.0000	0.85000	38.376	8.324E-05	9.943E-01	-3.398E-10	-3.398E-10	3.398E-10
0.90000	6.0000	0.90000	30.322	2.083E-04	1.003E 00	-5.780E-10	-5.780E-10	5.780E-10
0.92500	6.0000	0.92500	27.011	3.078E-04	1.009E 00	-7.703E-10	-7.703E-10	7.703E-10
0.95000	6.0000	0.95000	24.445	4.610E-04	1.012E 00	-9.679E-10	-9.679E-10	9.679E-10
0.96250	6.0000	0.96250	23.522	5.609E-04	1.010E 00	-1.051E-09	-1.051E-09	1.051E-09
0.97500	6.0000	0.97500	22.879	6.745E-04	1.005E 00	-1.113E-09	-1.113E-09	1.113E-09
0.98125	6.0000	0.98125	22.671	7.351E-04	1.003E 00	-1.133E-09	-1.133E-09	1.133E-09
0.98750	6.0001	0.98750	22.541	8.000E-04	1.001E 00	-1.148E-09	-1.148E-09	1.148E-09
0.99375	6.0001	0.99375	22.491	8.649E-04	9.996E-01	-1.155E-09	-1.155E-09	1.155E-09
1.00000	6.0001	1.00000	22.521	9.281E-04	9.999E-01	-1.151E-09	-1.151E-09	1.151E-09
1.00625	6.0001	1.00625	22.632	9.964E-04	1.001E 00	-1.137E-09	-1.137E-09	1.137E-09
1.01250	6.0001	1.01250	22.821	1.056E-03	1.004E 00	-1.118E-09	-1.118E-09	1.118E-09
1.01875	6.0001	1.01875	23.087	1.119E-03	1.007E 00	-1.092E-09	-1.092E-09	1.092E-09
1.02500	6.0001	1.02500	23.427	1.177E-03	1.011E 00	-1.060E-09	-1.060E-09	1.060E-09
1.03750	6.0001	1.03750	24.317	1.277E-03	1.016E 00	-9.790E-10	-9.790E-10	9.790E-10
1.05000	6.0001	1.05000	25.462	1.364E-03	1.018E 00	-8.842E-10	-8.842E-10	8.842E-10
1.07500	6.0001	1.07500	28.384	1.489E-03	1.015E 00	-6.817E-10	-6.817E-10	6.817E-10
1.10000	6.0002	1.10000	31.951	1.573E-03	1.008E 00	-5.191E-10	-5.191E-10	5.191E-10
1.15000	6.0002	1.15000	40.310	1.658E-03	9.988E-01	-3.005E-10	-3.005E-10	3.005E-10
1.20000	6.0003	1.20000	49.602	1.704E-03	9.951E-01	-1.882E-10	-1.882E-10	1.882E-10
1.30000	6.0004	1.30000	69.468	1.731E-03	9.945E-01	-8.879E-11	-8.879E-11	8.879E-11
1.40000	6.0005	1.40000	90.095	1.747E-03	9.955E-01	-4.900E-11	-4.900E-11	4.900E-11
1.50000	6.0006	1.50000	111.059	1.752E-03	9.964E-01	-3.114E-11	-3.114E-11	3.114E-11
1.60000	6.0007	1.60000	132.201	1.757E-03	9.970E-01	-2.102E-11	-2.102E-11	2.102E-11
1.70000	6.0007	1.70000	153.447	1.759E-03	9.975E-01	-1.428E-11	-1.428E-11	1.428E-11
1.80000	6.0008	1.80000	174.759	1.764E-03	9.978E-01	-1.010E-11	-1.010E-11	1.010E-11
1.90000	6.0008	1.90000	196.116	1.766E-03	9.981E-01	-7.146E-12	-7.146E-12	7.146E-12
2.00000	6.0009	2.00000	217.504	1.769E-03	9.983E-01	-5.112E-12	-5.112E-12	5.112E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 6.000 θ_D= 0. ρ_a= 22.490

z	$_x\mu'$-1.0	T_o	$_oT_i$-T_o	$_xT_i$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.422E-12	49.901	-3.140E-10	-3.140E-10	3.140E-10	3.140E-10	-1.919E-10	-1.919E-10
0.20000	1.049E-11	99.802	-7.567E-10	-7.567E-10	7.567E-10	7.567E-10	-2.713E-10	-2.713E-10
0.30000	1.483E-11	149.703	-1.382E-09	-1.382E-09	1.382E-09	1.382E-09	-3.833E-10	-3.833E-10
0.40000	2.194E-11	199.605	-2.287E-09	-2.287E-09	2.287E-09	2.287E-09	-5.673E-10	-5.673E-10
0.50000	3.250E-11	249.506	-3.629E-09	-3.629E-09	3.629E-09	3.629E-09	-8.402E-10	-8.402E-10
0.60000	5.187E-11	299.407	-5.665E-09	-5.665E-09	5.665E-09	5.665E-09	-1.341E-09	-1.341E-09
0.70000	9.545E-11	349.308	-9.174E-09	-9.174E-09	9.176E-09	9.176E-09	-2.468E-09	-2.468E-09
0.80000	2.091E-10	399.209	-1.619E-08	-1.619E-08	1.624E-08	1.624E-08	-5.406E-09	-5.406E-09
0.85000	3.398E-10	424.160	-2.277E-08	-2.277E-08	2.299E-08	2.299E-08	-8.784E-09	-8.784E-09
0.90000	5.780E-10	449.110	-3.342E-08	-3.342E-08	3.490E-08	3.490E-08	-1.494E-08	-1.494E-08
0.92500	7.704E-10	461.585	-4.086E-08	-4.086E-08	4.419E-08	4.419E-08	-1.991E-08	-1.991E-08
0.95000	9.679E-10	474.061	-4.956E-08	-4.956E-08	5.723E-08	5.723E-08	-2.502E-08	-2.502E-08
0.96250	1.051E-09	480.298	-5.394E-08	-5.394E-08	6.545E-08	6.545E-08	-2.716E-08	-2.716E-08
0.97500	1.113E-09	486.536	-5.803E-08	-5.803E-08	7.489E-08	7.489E-08	-2.876E-08	-2.876E-08
0.98125	1.133E-09	489.655	-5.989E-08	-5.989E-08	8.004E-08	8.004E-08	-2.930E-08	-2.93CE-08
0.98750	1.148E-09	492.773	-6.151E-08	-6.151E-08	8.553E-08	8.553E-08	-2.968E-08	-2.968E-08
0.99375	1.155E-09	495.892	-6.299E-08	-6.299E-08	9.124E-08	9.124E-08	-2.985E-08	-2.985E-08
1.00000	1.151E-09	499.011	-6.435E-08	-6.435E-08	9.708E-08	9.708E-08	-2.975E-08	-2.975E-08
1.00625	1.137E-09	502.130	-6.530E-08	-6.530E-08	1.033E-07	1.033E-07	-2.940E-08	-2.940E-08
1.01250	1.118E-09	505.249	-6.634E-08	-6.634E-08	1.093E-07	1.093E-07	-2.891E-08	-2.891E-08
1.01875	1.092E-09	508.367	-6.700E-08	-6.700E-08	1.155E-07	1.155E-07	-2.824E-08	-2.824E-08
1.02500	1.060E-09	511.486	-6.765E-08	-6.765E-08	1.216E-07	1.216E-07	-2.739E-08	-2.739E-08
1.03750	9.790E-10	517.724	-6.882E-08	-6.882E-08	1.331E-07	1.331E-07	-2.531E-08	-2.531E-08
1.05000	8.842E-10	523.961	-6.966E-08	-6.966E-08	1.439E-07	1.439E-07	-2.286E-08	-2.286E-08
1.07500	6.817E-10	536.436	-7.128E-08	-7.128E-08	1.618E-07	1.618E-07	-1.762E-08	-1.762E-08
1.10000	5.191E-10	548.912	-7.226E-08	-7.226E-08	1.756E-07	1.756E-07	-1.342E-08	-1.342E-08
1.15000	3.005E-10	573.862	-7.391E-08	-7.391E-08	1.941E-07	1.941E-07	-7.770E-09	-7.770E-09
1.20000	1.882E-10	598.813	-7.379E-08	-7.379E-08	2.062E-07	2.062E-07	-4.866E-09	-4.866E-09
1.30000	8.879E-11	648.714	-7.241E-08	-7.241E-08	2.205E-07	2.205E-07	-2.295E-09	-2.295E-09
1.40000	4.900E-11	698.615	-6.857E-08	-6.857E-08	2.309E-07	2.309E-07	-1.267E-09	-1.267E-09
1.50000	3.114E-11	748.516	-6.420E-08	-6.420E-08	2.392E-07	2.392E-07	-8.049E-10	-8.049E-10
1.60000	2.102E-11	798.417	-5.911E-08	-5.911E-08	2.468E-07	2.468E-07	-5.433E-10	-5.433E-10
1.70000	1.428E-11	848.318	-5.391E-08	-5.391E-08	2.537E-07	2.537E-07	-3.690E-10	-3.690E-10
1.80000	1.010E-11	898.219	-4.802E-08	-4.802E-08	2.608E-07	2.608E-07	-2.612E-10	-2.612E-10
1.90000	7.146E-12	948.121	-4.232E-08	-4.232E-08	2.674E-07	2.674E-07	-1.847E-10	-1.847E-10
2.00000	5.112E-12	998.022	-3.624E-08	-3.624E-08	2.741E-07	2.741E-07	-1.322E-10	-1.322E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 6.000 θ_D= 0. ρ_a=22.490

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.045E-15
0.10000	3.319E-12	3.319E-12	-3.062E-23	-3.062E-23	-3.520E-13	-3.520E-13	-1.399E-15
0.20000	9.245E-12	9.245E-12	-5.314E-23	-5.314E-23	-9.632E-13	-9.632E-13	-1.993E-15
0.30000	1.952E-11	1.952E-11	-9.210E-23	-9.210E-23	-2.023E-12	-2.023E-12	-3.114E-15
0.40000	4.108E-11	4.108E-11	-1.666E-22	-1.666E-22	-3.902E-12	-3.902E-12	-5.219E-15
0.50000	8.072E-11	8.072E-11	-3.010E-22	-3.010E-22	-7.302E-12	-7.302E-12	-1.023E-14
0.60000	1.784E-10	1.784E-10	-6.006E-22	-6.006E-22	-1.366E-11	-1.366E-11	-2.311E-14
0.70000	4.777E-10	4.777E-10	-1.476E-21	-1.476E-21	-2.788E-11	-2.788E-11	-6.232E-14
0.80000	1.627E-09	1.627E-09	-4.819E-21	-4.819E-21	-6.845E-11	-6.845E-11	-2.286E-13
0.85000	3.514E-09	3.514E-09	-9.873E-21	-9.873E-21	-1.205E-10	-1.205E-10	-5.067E-13
0.90000	8.711E-09	8.711E-09	-2.166E-20	-2.166E-20	-2.342E-10	-2.342E-10	-1.224E-12
0.92500	1.454E-08	1.454E-08	-3.438E-20	-3.438E-20	-3.373E-10	-3.373E-10	-1.839E-12
0.95000	2.494E-08	2.494E-08	-4.975E-20	-4.975E-20	-4.945E-10	-4.945E-10	-2.663E-12
0.96250	3.331E-08	3.331E-08	-5.683E-20	-5.683E-20	-5.943E-10	-5.943E-10	-3.091E-12
0.97500	4.351E-08	4.351E-08	-6.234E-20	-6.234E-20	-7.060E-10	-7.060E-10	-3.448E-12
0.98125	4.969E-08	4.969E-08	-6.424E-20	-6.424E-20	-7.652E-10	-7.652E-10	-3.575E-12
0.98750	5.632E-08	5.632E-08	-6.550E-20	-6.550E-20	-8.259E-10	-8.259E-10	-3.653E-12
0.99375	6.320E-08	6.320E-08	-6.601E-20	-6.601E-20	-8.875E-10	-8.875E-10	-3.681E-12
1.00000	7.009E-08	7.009E-08	-6.570E-20	-6.570E-20	-9.491E-10	-9.491E-10	-3.664E-12
1.00625	7.674E-08	7.674E-08	-6.460E-20	-6.460E-20	-1.010E-09	-1.010E-09	-3.601E-12
1.01250	8.294E-08	8.294E-08	-6.287E-20	-6.287E-20	-1.070E-09	-1.070E-09	-3.484E-12
1.01875	8.855E-08	8.855E-08	-6.050E-20	-6.050E-20	-1.127E-09	-1.127E-09	-3.328E-12
1.02500	9.352E-08	9.352E-08	-5.761E-20	-5.761E-20	-1.183E-09	-1.183E-09	-3.142E-12
1.03750	1.015E-07	1.015E-07	-5.068E-20	-5.068E-20	-1.284E-09	-1.284E-09	-2.719E-12
1.05000	1.072E-07	1.072E-07	-4.297E-20	-4.297E-20	-1.372E-09	-1.372E-09	-2.285E-12
1.07500	1.142E-07	1.142E-07	-2.821E-20	-2.821E-20	-1.504E-09	-1.504E-09	-1.544E-12
1.10000	1.174E-07	1.174E-07	-1.848E-20	-1.848E-20	-1.589E-09	-1.589E-09	-9.967E-13
1.15000	1.178E-07	1.178E-07	-8.234E-21	-8.234E-21	-1.684E-09	-1.684E-09	-4.270E-13
1.20000	1.149E-07	1.149E-07	-4.126E-21	-4.126E-21	-1.729E-09	-1.729E-09	-1.964E-13
1.30000	1.071E-07	1.071E-07	-1.326E-21	-1.326E-21	-1.765E-09	-1.765E-09	-5.518E-14
1.40000	9.966E-08	9.966E-08	-5.525E-22	-5.525E-22	-1.778E-09	-1.778E-09	-2.102E-14
1.50000	9.303E-08	9.303E-08	-2.822E-22	-2.822E-22	-1.784E-09	-1.784E-09	-9.426E-15
1.60000	8.721E-08	8.721E-08	-1.561E-22	-1.561E-22	-1.787E-09	-1.787E-09	-4.909E-15
1.70000	8.207E-08	8.207E-08	-8.672E-23	-8.672E-23	-1.788E-09	-1.788E-09	-2.956E-15
1.80000	7.750E-08	7.750E-08	-5.003E-23	-5.003E-23	-1.789E-09	-1.789E-09	-1.914E-15
1.90000	7.341E-08	7.341E-08	-2.883E-23	-2.883E-23	-1.790E-09	-1.790E-09	-1.355E-15
2.00000	6.973E-08	6.973E-08	-1.658E-23	-1.658E-23	-1.790E-09	-1.790E-09	-1.018E-15

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 7.000 θ_D= 0. ρ_a=26.221

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	7.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	7.0000	0.10000	193.821	7.137E-07	9.993E-01	-7.417E-12	-7.417E-12	7.417E-12
0.20000	7.0000	0.20000	172.528	9.472E-07	9.991E-01	-1.048E-11	-1.048E-11	1.048E-11
0.30000	7.0000	0.30000	151.297	1.281E-06	9.987E-01	-1.478E-11	-1.478E-11	1.478E-11
0.40000	7.0000	0.40000	130.160	1.281E-06	9.982E-01	-2.183E-11	-2.183E-11	2.183E-11
0.50000	7.0000	0.50000	109.171	3.468E-06	9.973E-01	-3.225E-11	-3.225E-11	3.225E-11
0.60000	7.0000	0.60000	88.437	5.229E-06	9.961E-01	-5.107E-11	-5.107E-11	5.107E-11
0.70000	7.0000	0.70000	68.187	1.110E-05	9.944E-01	-9.257E-11	-9.257E-11	9.257E-11
0.80000	7.0000	0.80000	49.029	4.034E-05	9.942E-01	-1.938E-10	-1.938E-10	1.938E-10
0.85000	7.0000	0.85000	40.351	8.410E-05	9.974E-01	-2.999E-10	-2.999E-10	2.999E-10
0.90000	7.0000	0.90000	32.925	1.861E-04	1.005E 00	-4.868E-10	-4.868E-10	4.868E-10
0.92500	7.0000	0.92500	29.980	2.638E-04	1.008E 00	-5.915E-10	-5.915E-10	5.915E-10
0.95000	7.0000	0.95000	27.773	3.407E-04	1.008E 00	-7.198E-10	-7.198E-10	7.198E-10
0.96250	7.0000	0.96250	27.007	3.740E-04	1.005E 00	-7.706E-10	-7.706E-10	7.706E-10
0.97500	7.0000	0.97500	26.492	4.525E-04	1.002E 00	-8.067E-10	-8.067E-10	8.067E-10
0.98125	7.0000	0.98125	26.334	4.943E-04	1.001E 00	-8.182E-10	-8.182E-10	8.182E-10
0.98750	7.0000	0.98750	26.244	5.328E-04	9.999E-01	-8.247E-10	-8.247E-10	8.247E-10
0.99375	7.0000	0.99375	26.223	5.695E-04	9.995E-01	-8.263E-10	-8.263E-10	8.263E-10
1.00000	7.0001	1.00000	26.270	6.104E-04	9.999E-01	-8.228E-10	-8.228E-10	8.228E-10
1.00625	7.0001	1.00625	26.387	6.506E-04	1.001E 00	-8.143E-10	-8.143E-10	8.143E-10
1.01250	7.0001	1.01250	26.571	6.890E-04	1.003E 00	-8.011E-10	-8.011E-10	8.011E-10
1.01875	7.0001	1.01875	26.821	7.257E-04	1.005E 00	-7.835E-10	-7.835E-10	7.835E-10
1.02500	7.0001	1.02500	27.135	7.616E-04	1.007E 00	-7.618E-10	-7.618E-10	7.618E-10
1.03750	7.0001	1.03750	27.948	8.256E-04	1.011E 00	-7.087E-10	-7.087E-10	7.087E-10
1.05000	7.0001	1.05000	28.989	8.811E-04	1.013E 00	-6.460E-10	-6.460E-10	6.460E-10
1.07500	7.0001	1.07500	31.659	9.699E-04	1.014E 00	-5.292E-10	-5.292E-10	5.292E-10
1.10000	7.0001	1.10000	34.958	1.033E-03	1.010E 00	-4.257E-10	-4.257E-10	4.257E-10
1.15000	7.0002	1.15000	42.840	1.108E-03	1.002E 00	-2.646E-10	-2.646E-10	2.646E-10
1.20000	7.0002	1.20000	51.768	1.147E-03	9.979E-01	-1.712E-10	-1.712E-10	1.712E-10
1.30000	7.0003	1.30000	71.159	1.178E-03	9.956E-01	-8.405E-11	-8.405E-11	8.405E-11
1.40000	7.0004	1.40000	91.505	1.192E-03	9.959E-01	-4.730E-11	-4.730E-11	4.730E-11
1.50000	7.0004	1.50000	112.288	1.195E-03	9.966E-01	-3.043E-11	-3.043E-11	3.043E-11
1.60000	7.0005	1.60000	133.304	1.199E-03	9.972E-01	-2.059E-11	-2.059E-11	2.059E-11
1.70000	7.0005	1.70000	154.457	1.200E-03	9.976E-01	-1.404E-11	-1.404E-11	1.404E-11
1.80000	7.0005	1.80000	175.699	1.202E-03	9.980E-01	-9.951E-12	-9.951E-12	9.951E-12
1.90000	7.0006	1.90000	197.000	1.206E-03	9.982E-01	-7.044E-12	-7.044E-12	7.044E-12
2.00000	7.0006	2.00000	218.343	1.206E-03	9.984E-01	-5.046E-12	-5.046E-12	5.046E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 7.000 θ_D= 0. ρ_a= 26.221

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.417E-12	49.901	-3.139E-10	-3.139E-10	3.139E-10	3.139E-10	-1.917E-10	-1.917E-10
0.20000	1.048E-11	99.802	-7.560E-10	-7.560E-10	7.560E-10	7.560E-10	-2.708E-10	-2.708E-10
0.30000	1.478E-11	149.703	-1.380E-09	-1.380E-09	1.380E-09	1.380E-09	-3.821E-10	-3.821E-10
0.40000	2.183E-11	199.605	-2.281E-09	-2.281E-09	2.281E-09	2.281E-09	-5.643E-10	-5.643E-10
0.50000	3.225E-11	249.506	-3.614E-09	-3.614E-09	3.614E-09	3.614E-09	-8.337E-10	-8.337E-10
0.60000	5.107E-11	299.407	-5.626E-09	-5.626E-09	5.627E-09	5.627E-09	-1.320E-09	-1.320E-09
0.70000	9.257E-11	349.308	-9.049E-09	-9.049E-09	9.053E-09	9.053E-09	-2.393E-09	-2.393E-09
0.80000	1.938E-10	399.209	-1.572E-08	-1.572E-08	1.577E-08	1.577E-08	-5.009E-09	-5.009E-09
0.85000	2.999E-10	424.160	-2.172E-08	-2.172E-08	2.195E-08	2.195E-08	-7.753E-09	-7.753E-09
0.90000	4.868E-10	449.110	-3.093E-08	-3.093E-08	3.212E-08	3.212E-08	-1.258E-08	-1.258E-08
0.92500	5.915E-10	461.585	-3.703E-08	-3.703E-08	3.947E-08	3.947E-08	-1.529E-08	-1.529E-08
0.95000	7.198E-10	474.061	-4.436E-08	-4.436E-08	4.855E-08	4.855E-08	-1.861E-08	-1.861E-08
0.96250	7.706E-10	480.298	-4.854E-08	-4.854E-08	5.366E-08	5.366E-08	-1.992E-08	-1.992E-08
0.97500	8.067E-10	486.536	-5.223E-08	-5.223E-08	5.982E-08	5.982E-08	-2.086E-08	-2.086E-08
0.98125	8.182E-10	489.655	-5.401E-08	-5.401E-08	6.312E-08	6.312E-08	-2.115E-08	-2.115E-08
0.98750	8.247E-10	492.774	-5.580E-08	-5.580E-08	6.645E-08	6.645E-08	-2.132E-08	-2.132E-08
0.99375	8.263E-10	495.892	-5.758E-08	-5.758E-08	6.983E-08	6.983E-08	-2.136E-08	-2.136E-08
1.00000	8.228E-10	499.011	-5.920E-08	-5.920E-08	7.336E-08	7.336E-08	-2.127E-08	-2.127E-08
1.00625	8.143E-10	502.130	-6.074E-08	-6.074E-08	7.692E-08	7.692E-08	-2.105E-08	-2.105E-08
1.01250	8.011E-10	505.249	-6.222E-08	-6.222E-08	8.048E-08	8.048E-08	-2.071E-08	-2.071E-08
1.01875	7.835E-10	508.368	-6.363E-08	-6.363E-08	8.402E-08	8.402E-08	-2.025E-08	-2.025E-08
1.02500	7.618E-10	511.486	-6.494E-08	-6.494E-08	8.753E-08	8.753E-08	-1.969E-08	-1.969E-08
1.03750	7.087E-10	517.724	-6.739E-08	-6.739E-08	9.426E-08	9.426E-08	-1.832E-08	-1.832E-08
1.05000	6.466E-10	523.962	-6.957E-08	-6.957E-08	1.005E-07	1.005E-07	-1.670E-08	-1.670E-08
1.07500	5.292E-10	536.437	-7.313E-08	-7.313E-08	1.116E-07	1.116E-07	-1.368E-08	-1.368E-08
1.10000	4.257E-10	548.912	-7.599E-08	-7.599E-08	1.206E-07	1.206E-07	-1.101E-08	-1.101E-08
1.15000	2.646E-10	573.862	-7.985E-08	-7.985E-08	1.335E-07	1.335E-07	-6.840E-09	-6.840E-09
1.20000	1.712E-10	598.813	-8.201E-08	-8.201E-08	1.421E-07	1.421E-07	-4.425E-09	-4.425E-09
1.30000	8.405E-11	648.714	-8.374E-08	-8.374E-08	1.523E-07	1.523E-07	-2.173E-09	-2.173E-09
1.40000	4.730E-11	698.615	-8.338E-08	-8.338E-08	1.590E-07	1.590E-07	-1.223E-09	-1.223E-09
1.50000	3.043E-11	748.516	-8.233E-08	-8.233E-08	1.638E-07	1.638E-07	-7.867E-10	-7.867E-10
1.60000	2.059E-11	798.417	-8.062E-08	-8.062E-08	1.680E-07	1.680E-07	-5.323E-10	-5.323E-10
1.70000	1.404E-11	848.319	-7.861E-08	-7.861E-08	1.717E-07	1.717E-07	-3.630E-10	-3.630E-10
1.80000	9.954E-12	898.220	-7.632E-08	-7.632E-08	1.752E-07	1.752E-07	-2.572E-10	-2.572E-10
1.90000	7.044E-12	948.121	-7.340E-08	-7.340E-08	1.789E-07	1.789E-07	-1.821E-10	-1.821E-10
2.00000	5.046E-12	998.022	-7.124E-08	-7.124E-08	1.817E-07	1.817E-07	-1.304E-10	-1.304E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 7.000 θ_D= 0. ρ_a=26.221

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.420E-15
0.10000	3.867E-12	3.867E-12	-3.059E-23	-3.059E-23	-3.518E-13	-3.518E-13	-1.900E-15
0.20000	1.076E-11	1.076E-11	-5.300E-23	-5.300E-23	-9.617E-13	-9.617E-13	-2.704E-15
0.30000	2.269E-11	2.269E-11	-9.167E-23	-9.167E-23	-2.018E-12	-2.018E-12	-4.214E-15
0.40000	4.765E-11	4.765E-11	-1.653E-22	-1.653E-22	-3.884E-12	-3.884E-12	-7.040E-15
0.50000	9.335E-11	9.335E-11	-2.975E-22	-2.975E-22	-7.251E-12	-7.251E-12	-1.369E-14
0.60000	2.041E-10	2.041E-10	-5.871E-22	-5.871E-22	-1.350E-11	-1.350E-11	-3.059E-14
0.70000	5.365E-10	5.365E-10	-1.410E-21	-1.410E-21	-2.721E-11	-2.721E-11	-8.033E-14
0.80000	1.741E-09	1.741E-09	-4.305E-21	-4.305E-21	-6.473E-11	-6.473E-11	-2.777E-13
0.85000	3.589E-09	3.589E-09	-8.209E-21	-8.209E-21	-1.102E-10	-1.102E-10	-5.774E-13
0.90000	8.222E-09	8.222E-09	-1.680E-20	-1.680E-20	-2.009E-10	-2.009E-10	-1.206E-12
0.92500	1.294E-08	1.294E-08	-2.242E-20	-2.242E-20	-2.741E-10	-2.741E-10	-1.741E-12
0.95000	2.063E-08	2.063E-08	-3.080E-20	-3.080E-20	-3.737E-10	-3.737E-10	-2.264E-12
0.96250	2.585E-08	2.585E-08	-3.440E-20	-3.440E-20	-4.346E-10	-4.346E-10	-2.501E-12
0.97500	3.192E-08	3.192E-08	-3.705E-20	-3.705E-20	-5.016E-10	-5.016E-10	-2.682E-12
0.98125	3.523E-08	3.523E-08	-3.790E-20	-3.790E-20	-5.367E-10	-5.367E-10	-2.741E-12
0.98750	3.867E-08	3.867E-08	-3.839E-20	-3.839E-20	-5.724E-10	-5.724E-10	-2.776E-12
0.99375	4.219E-08	4.219E-08	-3.851E-20	-3.851E-20	-6.083E-10	-6.083E-10	-2.784E-12
1.00000	4.569E-08	4.569E-08	-3.825E-20	-3.825E-20	-6.443E-10	-6.443E-10	-2.766E-12
1.00625	4.908E-08	4.908E-08	-3.761E-20	-3.761E-20	-6.798E-10	-6.798E-10	-2.721E-12
1.01250	5.228E-08	5.228E-08	-3.663E-20	-3.663E-20	-7.145E-10	-7.145E-10	-2.654E-12
1.01875	5.524E-08	5.524E-08	-3.533E-20	-3.533E-20	-7.482E-10	-7.482E-10	-2.565E-12
1.02500	5.794E-08	5.794E-08	-3.377E-20	-3.377E-20	-7.805E-10	-7.805E-10	-2.460E-12
1.03750	6.263E-08	6.263E-08	-3.004E-20	-3.004E-20	-8.402E-10	-8.402E-10	-2.215E-12
1.05000	6.639E-08	6.639E-08	-2.585E-20	-2.585E-20	-8.925E-10	-8.925E-10	-1.951E-12
1.07500	7.140E-08	7.140E-08	-1.901E-20	-1.901E-20	-9.752E-10	-9.752E-10	-1.404E-12
1.10000	7.400E-08	7.400E-08	-1.378E-20	-1.378E-20	-1.036E-09	-1.036E-09	-9.630E-13
1.15000	7.516E-08	7.516E-08	-6.822E-21	-6.822E-21	-1.110E-09	-1.110E-09	-4.575E-13
1.20000	7.388E-08	7.388E-08	-3.571E-21	-3.571E-21	-1.147E-09	-1.147E-09	-2.272E-13
1.30000	6.938E-08	6.938E-08	-1.223E-21	-1.223E-21	-1.179E-09	-1.179E-09	-6.860E-14
1.40000	6.471E-08	6.471E-08	-5.248E-22	-5.248E-22	-1.191E-09	-1.191E-09	-2.696E-14
1.50000	6.046E-08	6.046E-08	-2.727E-22	-2.727E-22	-1.196E-09	-1.196E-09	-1.227E-14
1.60000	5.670E-08	5.670E-08	-1.513E-22	-1.513E-22	-1.200E-09	-1.200E-09	-6.480E-15
1.70000	5.337E-08	5.337E-08	-8.449E-23	-8.449E-23	-1.201E-09	-1.201E-09	-3.926E-15
1.80000	5.041E-08	5.041E-08	-4.883E-23	-4.883E-23	-1.202E-09	-1.202E-09	-2.558E-15
1.90000	4.775E-08	4.775E-08	-2.818E-23	-2.818E-23	-1.203E-09	-1.203E-09	-1.819E-15
2.00000	4.536E-08	4.536E-08	-1.622E-23	-1.622E-23	-1.203E-09	-1.203E-09	-1.370E-15

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 8.000 θ_D= 0. ρ_a= 29.944

z	ϕ	z_r	ρ	θ	β	$_0\mu'$-1.0	$_x\mu'$-1.0	$_0\mu'$-1.0
0.	8.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	8.0000	0.10000	193.876	6.737E-07	9.994E-01	-7.410E-12	-7.410E-12	7.410E-12
0.20000	8.0000	0.20000	172.650	1.121E-06	9.992E-01	-1.046E-11	-1.046E-11	1.046E-11
0.30000	8.0000	0.30000	151.506	1.628E-06	9.989E-01	-1.473E-11	-1.473E-11	1.473E-11
0.40000	8.0000	0.40000	130.484	2.615E-06	9.985E-01	-2.170E-11	-2.170E-11	2.170E-11
0.50000	8.0000	0.50000	109.653	3.949E-06	9.979E-01	-3.196E-11	-3.196E-11	3.196E-11
0.60000	8.0000	0.60000	89.149	5.870E-06	9.969E-01	-5.017E-11	-5.017E-11	5.017E-11
0.70000	8.0000	0.70000	69.261	9.392E-06	9.958E-01	-8.939E-11	-8.939E-11	8.939E-11
0.80000	8.0000	0.80000	50.721	5.357E-05	9.963E-01	-1.790E-10	-1.790E-10	1.790E-10
0.85000	8.0000	0.85000	42.515	9.093E-05	9.992E-01	-2.690E-10	-2.690E-10	2.690E-10
0.90000	8.0000	0.90000	35.692	1.686E-04	1.004E 00	-4.056E-10	-4.056E-10	4.056E-10
0.92500	8.0000	0.92500	33.074	2.203E-04	1.005E 00	-4.821E-10	-4.821E-10	4.821E-10
0.95000	8.0000	0.95000	31.173	2.758E-04	1.004E 00	-5.465E-10	-5.465E-10	5.465E-10
0.96250	8.0000	0.96250	30.535	3.057E-04	1.002E 00	-5.700E-10	-5.700E-10	5.700E-10
0.97500	8.0000	0.97500	30.124	3.552E-04	1.001E 00	-5.856E-10	-5.856E-10	5.856E-10
0.98125	8.0000	0.98125	30.007	3.816E-04	1.000E 00	-5.901E-10	-5.901E-10	5.901E-10
0.98750	8.0000	0.98750	29.950	4.064E-04	9.996E-01	-5.930E-10	-5.930E-10	5.930E-10
0.99375	8.0000	0.99375	29.954	4.312E-04	9.996E-01	-5.929E-10	-5.929E-10	5.929E-10
1.00000	8.0000	1.00000	30.018	4.568E-04	9.999E-01	-5.897E-10	-5.897E-10	5.897E-10
1.00625	8.0000	1.00625	30.141	4.815E-04	1.001E 00	-5.849E-10	-5.849E-10	5.849E-10
1.01250	8.0000	1.01250	30.324	5.037E-04	1.001E 00	-5.779E-10	-5.779E-10	5.779E-10
1.01875	8.0001	1.01875	30.565	5.259E-04	1.003E 00	-5.688E-10	-5.688E-10	5.688E-10
1.02500	8.0001	1.02500	30.863	5.490E-04	1.004E 00	-5.578E-10	-5.578E-10	5.578E-10
1.03750	8.0001	1.03750	31.622	5.908E-04	1.006E 00	-5.305E-10	-5.305E-10	5.305E-10
1.05000	8.0001	1.05000	32.586	6.275E-04	1.008E 00	-4.978E-10	-4.978E-10	4.978E-10
1.07500	8.0001	1.07500	35.058	6.890E-04	1.010E 00	-4.229E-10	-4.229E-10	4.229E-10
1.10000	8.0001	1.10000	38.133	7.342E-04	1.008E 00	-3.453E-10	-3.453E-10	3.453E-10
1.15000	8.0001	1.15000	45.583	7.855E-04	1.003E 00	-2.305E-10	-2.305E-10	2.305E-10
1.20000	8.0002	1.20000	54.157	8.196E-04	9.996E-01	-1.547E-10	-1.547E-10	1.547E-10
1.30000	8.0002	1.30000	73.060	8.521E-04	9.971E-01	-7.902E-11	-7.902E-11	7.902E-11
1.40000	8.0003	1.40000	93.104	8.606E-04	9.971E-01	-4.544E-11	-4.544E-11	4.544E-11
1.50000	8.0003	1.50000	113.688	8.623E-04	9.975E-01	-2.965E-11	-2.965E-11	2.965E-11
1.60000	8.0003	1.60000	134.563	8.657E-04	9.979E-01	-2.011E-11	-2.011E-11	2.011E-11
1.70000	8.0004	1.70000	155.613	8.708E-04	9.982E-01	-1.378E-11	-1.378E-11	1.378E-11
1.80000	8.0004	1.80000	176.776	8.726E-04	9.985E-01	-9.778E-12	-9.778E-12	9.778E-12
1.90000	8.0004	1.90000	198.014	8.777E-04	9.987E-01	-6.929E-12	-6.929E-12	6.929E-12
2.00000	8.0004	2.00000	219.307	8.777E-04	9.988E-01	-4.971E-12	-4.971E-12	4.971E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 8.000 θ_D= 0. ρ_a= 29.944

z	$_x\mu'$-1.0	T_0	$_0T_t$-T_0	$_xT_t$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.410E-12	49.901	-3.138E-10	-3.138E-10	3.138E-10	3.138E-10	-1.916E-10	-1.916E-10
0.20000	1.046E-11	99.802	-7.552E-10	-7.552E-10	7.552E-10	7.552E-10	-2.703E-10	-2.703E-10
0.30000	1.473E-11	149.703	-1.378E-09	-1.378E-09	1.378E-09	1.378E-09	-3.808E-10	-3.808E-10
0.40000	2.170E-11	199.605	-2.274E-09	-2.274E-09	2.274E-09	2.274E-09	-5.609E-10	-5.609E-10
0.50000	3.196E-11	249.506	-3.597E-09	-3.597E-09	3.597E-09	3.597E-09	-8.262E-10	-8.262E-10
0.60000	5.017E-11	299.407	-5.581E-09	-5.581E-09	5.582E-09	5.582E-09	-1.297E-09	-1.297E-09
0.70000	8.939E-11	349.308	-8.915E-09	-8.915E-09	8.918E-09	8.918E-09	-2.311E-09	-2.311E-09
0.80000	1.790E-10	399.209	-1.521E-08	-1.521E-08	1.529E-08	1.529E-08	-4.626E-09	-4.626E-09
0.85000	2.690E-10	424.160	-2.064E-08	-2.064E-08	2.090E-08	2.090E-08	-6.953E-09	-6.953E-09
0.90000	4.056E-10	449.110	-2.856E-08	-2.856E-08	2.954E-08	2.954E-08	-1.049E-08	-1.049E-08
0.92500	4.821E-10	461.585	-3.374E-08	-3.374E-08	3.544E-08	3.544E-08	-1.246E-08	-1.246E-08
0.95000	5.465E-10	474.061	-3.965E-08	-3.965E-08	4.240E-08	4.240E-08	-1.413E-08	-1.413E-08
0.96250	5.700E-10	480.298	-4.280E-08	-4.280E-08	4.622E-08	4.622E-08	-1.473E-08	-1.473E-08
0.97500	5.856E-10	486.536	-4.578E-08	-4.578E-08	5.046E-08	5.046E-08	-1.514E-08	-1.514E-08
0.98125	5.901E-10	489.655	-4.724E-08	-4.724E-08	5.267E-08	5.267E-08	-1.526E-08	-1.526E-08
0.98750	5.930E-10	492.774	-4.870E-08	-4.870E-08	5.490E-08	5.490E-08	-1.533E-08	-1.533E-08
0.99375	5.929E-10	495.892	-5.014E-08	-5.014E-08	5.716E-08	5.716E-08	-1.533E-08	-1.533E-08
1.00000	5.897E-10	499.011	-5.153E-08	-5.153E-08	5.946E-08	5.946E-08	-1.525E-08	-1.525E-08
1.00625	5.849E-10	502.130	-5.289E-08	-5.289E-08	6.176E-08	6.176E-08	-1.512E-08	-1.512E-08
1.01250	5.779E-10	505.249	-5.426E-08	-5.426E-08	6.402E-08	6.402E-08	-1.494E-08	-1.494E-08
1.01875	5.688E-10	508.368	-5.558E-08	-5.558E-08	6.628E-08	6.628E-08	-1.470E-08	-1.470E-08
1.02500	5.578E-10	511.486	-5.682E-08	-5.682E-08	6.856E-08	6.856E-08	-1.442E-08	-1.442E-08
1.03750	5.305E-10	517.724	-5.920E-08	-5.920E-08	7.297E-08	7.297E-08	-1.371E-08	-1.371E-08
1.05000	4.978E-10	523.962	-6.144E-08	-6.144E-08	7.715E-08	7.715E-08	-1.287E-08	-1.287E-08
1.07500	4.229E-10	536.437	-6.535E-08	-6.535E-08	8.474E-08	8.474E-08	-1.093E-08	-1.093E-08
1.10000	3.453E-10	548.912	-6.857E-08	-6.857E-08	9.110E-08	9.110E-08	-8.926E-09	-8.926E-09
1.15000	2.305E-10	573.863	-7.340E-08	-7.340E-08	1.004E-07	1.004E-07	-5.958E-09	-5.958E-09
1.20000	1.547E-10	598.813	-7.629E-08	-7.629E-08	1.069E-07	1.069E-07	-3.999E-09	-3.999E-09
1.30000	7.902E-11	648.714	-7.919E-08	-7.919E-08	1.151E-07	1.151E-07	-2.043E-09	-2.043E-09
1.40000	4.544E-11	698.615	-8.040E-08	-8.040E-08	1.198E-07	1.198E-07	-1.175E-09	-1.175E-09
1.50000	2.965E-11	748.517	-8.073E-08	-8.073E-08	1.231E-07	1.231E-07	-7.665E-10	-7.665E-10
1.60000	2.011E-11	798.418	-8.036E-08	-8.036E-08	1.259E-07	1.259E-07	-5.200E-10	-5.200E-10
1.70000	1.378E-11	848.319	-7.949E-08	-7.949E-08	1.285E-07	1.285E-07	-3.563E-10	-3.563E-10
1.80000	9.778E-12	898.220	-7.852E-08	-7.852E-08	1.306E-07	1.306E-07	-2.528E-10	-2.528E-10
1.90000	6.929E-12	948.121	-7.706E-08	-7.706E-08	1.329E-07	1.329E-07	-1.791E-10	-1.791E-10
2.00000	4.971E-12	998.022	-7.600E-08	-7.600E-08	1.345E-07	1.345E-07	-1.285E-10	-1.285E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 8.000 θ_D= 0. ρ_a=29.944

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.852E-15
0.10000	4.413E-12	4.413E-12	-3.054E-23	-3.054E-23	-3.515E-13	-3.515E-13	-2.476E-15
0.20000	1.227E-11	1.227E-11	-5.283E-23	-5.283E-23	-9.601E-13	-9.601E-13	-3.519E-15
0.30000	2.584E-11	2.584E-11	-9.118E-23	-9.118E-23	-2.012E-12	-2.012E-12	-5.469E-15
0.40000	5.415E-11	5.415E-11	-1.638E-22	-1.638E-22	-3.864E-12	-3.864E-12	-9.100E-15
0.50000	1.058E-10	1.058E-10	-2.935E-22	-2.935E-22	-7.193E-12	-7.193E-12	-1.754E-14
0.60000	2.288E-10	2.288E-10	-5.720E-22	-5.720E-22	-1.331E-11	-1.331E-11	-3.870E-14
0.70000	5.914E-10	5.914E-10	-1.339E-21	-1.339E-21	-2.648E-11	-2.648E-11	-9.877E-14
0.80000	1.827E-09	1.827E-09	-3.822E-21	-3.822E-21	-6.090E-11	-6.090E-11	-3.199E-13
0.85000	3.596E-09	3.596E-09	-6.989E-21	-6.989E-21	-1.003E-10	-1.003E-10	-6.138E-13
0.90000	7.596E-09	7.596E-09	-1.283E-20	-1.283E-20	-1.719E-10	-1.719E-10	-1.163E-12
0.92500	1.128E-08	1.128E-08	-1.656E-20	-1.656E-20	-2.269E-10	-2.269E-10	-1.545E-12
0.95000	1.661E-08	1.661E-08	-1.993E-20	-1.993E-20	-2.954E-10	-2.954E-10	-1.945E-12
0.96250	1.999E-08	1.999E-08	-2.122E-20	-2.122E-20	-3.339E-10	-3.339E-10	-2.111E-12
0.97500	2.377E-08	2.377E-08	-2.208E-20	-2.208E-20	-3.745E-10	-3.745E-10	-2.229E-12
0.98125	2.576E-08	2.576E-08	-2.234E-20	-2.234E-20	-3.952E-10	-3.952E-10	-2.264E-12
0.98750	2.779E-08	2.779E-08	-2.251E-20	-2.251E-20	-4.162E-10	-4.162E-10	-2.279E-12
0.99375	2.982E-08	2.982E-08	-2.250E-20	-2.250E-20	-4.373E-10	-4.373E-10	-2.278E-12
1.00000	3.183E-08	3.183E-08	-2.231E-20	-2.231E-20	-4.582E-10	-4.582E-10	-2.261E-12
1.00625	3.379E-08	3.379E-08	-2.205E-20	-2.205E-20	-4.790E-10	-4.790E-10	-2.224E-12
1.01250	3.567E-08	3.567E-08	-2.166E-20	-2.166E-20	-4.994E-10	-4.994E-10	-2.171E-12
1.01875	3.745E-08	3.745E-08	-2.115E-20	-2.115E-20	-5.194E-10	-5.194E-10	-2.103E-12
1.02500	3.913E-08	3.913E-08	-2.055E-20	-2.055E-20	-5.389E-10	-5.389E-10	-2.024E-12
1.03750	4.209E-08	4.209E-08	-1.908E-20	-1.908E-20	-5.760E-10	-5.760E-10	-1.839E-12
1.05000	4.452E-08	4.452E-08	-1.737E-20	-1.737E-20	-6.101E-10	-6.101E-10	-1.637E-12
1.07500	4.796E-08	4.796E-08	-1.365E-20	-1.365E-20	-6.682E-10	-6.682E-10	-1.243E-12
1.10000	4.994E-08	4.994E-08	-1.011E-20	-1.011E-20	-7.125E-10	-7.125E-10	-9.192E-13
1.15000	5.123E-08	5.123E-08	-5.563E-21	-5.563E-21	-7.689E-10	-7.689E-10	-4.721E-13
1.20000	5.067E-08	5.067E-08	-3.057E-21	-3.057E-21	-8.001E-10	-8.001E-10	-2.501E-13
1.30000	4.790E-08	4.790E-08	-1.116E-21	-1.116E-21	-8.280E-10	-8.280E-10	-8.123E-14
1.40000	4.481E-08	4.481E-08	-4.950E-22	-4.950E-22	-8.391E-10	-8.391E-10	-3.298E-14
1.50000	4.192E-08	4.192E-08	-2.622E-22	-2.622E-22	-8.445E-10	-8.445E-10	-1.525E-14
1.60000	3.934E-08	3.934E-08	-1.461E-22	-1.461E-22	-8.475E-10	-8.475E-10	-8.176E-15
1.70000	3.705E-08	3.705E-08	-8.201E-23	-8.201E-23	-8.491E-10	-8.491E-10	-4.989E-15
1.80000	3.500E-08	3.500E-08	-4.749E-23	-4.749E-23	-8.501E-10	-8.501E-10	-3.272E-15
1.90000	3.316E-08	3.316E-08	-2.745E-23	-2.745E-23	-8.506E-10	-8.506E-10	-2.338E-15
2.00000	3.151E-08	3.151E-08	-1.582E-23	-1.582E-23	-8.509E-10	-8.509E-10	-1.766E-15

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0=10.000 θ_D= 0. ρ_a=37.362

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	10.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	10.0000	0.10000	194.006	1.041E-06	9.989E-01	-7.394E-12	-7.394E-12	7.394E-12
0.20000	10.0000	0.20000	172.942	1.441E-06	9.986E-01	-1.041E-11	-1.041E-11	1.041E-11
0.30000	10.0000	0.30000	152.006	3.468E-06	9.981E-01	-1.461E-11	-1.461E-11	1.461E-11
0.40000	10.0000	0.40000	131.256	4.055E-06	9.974E-01	-2.139E-11	-2.139E-11	2.139E-11
0.50000	10.0000	0.50000	110.800	5.443E-06	9.964E-01	-3.129E-11	-3.129E-11	3.129E-11
0.60000	10.0000	0.60000	90.834	9.285E-06	9.952E-01	-4.810E-11	-4.810E-11	4.810E-11
0.70000	10.0000	0.70000	71.771	2.156E-05	9.946E-01	-8.239E-11	-8.239E-11	8.239E-11
0.80000	10.0000	0.80000	54.562	6.916E-05	9.977E-01	-1.521E-10	-1.521E-10	1.521E-10
0.85000	10.0000	0.85000	47.299	1.037E-04	1.002E 00	-2.114E-10	-2.114E-10	2.114E-10
0.90000	10.0000	0.90000	41.580	1.609E-04	1.005E 00	-2.819E-10	-2.819E-10	2.819E-10
0.92500	10.0000	0.92500	39.516	1.981E-04	1.005E 00	-3.152E-10	-3.152E-10	3.152E-10
0.95000	10.0000	0.95000	38.105	2.408E-04	1.002E 00	-3.459E-10	-3.459E-10	3.459E-10
0.96250	10.0000	0.96250	37.669	2.672E-04	1.001E 00	-3.560E-10	-3.560E-10	3.560E-10
0.97500	10.0000	0.97500	37.422	2.946E-04	9.997E-01	-3.619E-10	-3.619E-10	3.619E-10
0.98125	10.0000	0.98125	37.370	3.091E-04	9.993E-01	-3.631E-10	-3.631E-10	3.631E-10
0.98750	10.0000	0.98750	37.367	3.236E-04	9.992E-01	-3.632E-10	-3.632E-10	3.632E-10
0.99375	10.0000	0.99375	37.412	3.389E-04	9.994E-01	-3.621E-10	-3.621E-10	3.621E-10
1.00000	10.0000	1.00000	37.505	3.526E-04	9.998E-01	-3.599E-10	-3.599E-10	3.599E-10
1.00625	10.0000	1.00625	37.646	3.697E-04	1.000E 00	-3.566E-10	-3.566E-10	3.566E-10
1.01250	10.0000	1.01250	37.834	3.825E-04	1.001E 00	-3.522E-10	-3.522E-10	3.522E-10
1.01875	10.0000	1.01875	38.069	3.970E-04	1.002E 00	-3.467E-10	-3.467E-10	3.467E-10
1.02500	10.0000	1.02500	38.350	4.132E-04	1.004E 00	-3.404E-10	-3.404E-10	3.404E-10
1.03750	10.0001	1.03750	39.044	4.380E-04	1.006E 00	-3.251E-10	-3.251E-10	3.251E-10
1.05000	10.0001	1.05000	39.908	4.610E-04	1.008E 00	-3.071E-10	-3.071E-10	3.071E-10
1.07500	10.0001	1.07500	42.101	4.943E-04	1.011E 00	-2.746E-10	-2.746E-10	2.746E-10
1.10000	10.0001	1.10000	44.83[illegible]	[illegible]9E-04	1.012E 00	-2.393E-10	-2.393E-10	2.393E-10
1.15000	10.0001	1.15000	51.56[illegible]	[illegible]4E-04	1.008E 00	-1.726E-10	-1.726E-10	1.726E-10
1.20000	10.0001	1.20000	59.495	5.857E-04	1.004E 00	-1.234E-10	-1.234E-10	1.234E-10
1.30000	10.0002	1.30000	77.427	6.147E-04	9.983E-01	-6.856E-11	-6.856E-11	6.856E-11
1.40000	10.0002	1.40000	96.831	6.318E-04	9.969E-01	-4.140E-11	-4.140E-11	4.140E-11
1.50000	10.0002	1.50000	116.975	6.369E-04	9.968E-01	-2.789E-11	-2.789E-11	2.789E-11
1.60000	10.0002	1.60000	137.536	6.420E-04	9.970E-01	-1.903E-11	-1.903E-11	1.903E-11
1.70000	10.0003	1.70000	158.351	6.437E-04	9.974E-01	-1.318E-11	-1.318E-11	1.318E-11
1.80000	10.0003	1.80000	179.331	6.455E-04	9.977E-01	-9.381E-12	-9.381E-12	9.381E-12
1.90000	10.0003	1.90000	200.425	6.506E-04	9.980E-01	-6.665E-12	-6.665E-12	6.665E-12
2.00000	10.0003	2.00000	221.600	6.506E-04	9.982E-01	-4.797E-12	-4.797E-12	4.797E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.394E-12	49.901	-3.134E-10	-3.134E-10	3.134E-10	3.134E-10	-1.912E-10	-1.912E-10
0.20000	1.041E-11	99.802	-7.534E-10	-7.534E-10	7.534E-10	7.534E-10	-2.690E-10	-2.690E-10
0.30000	1.461E-11	149.703	-1.372E-09	-1.372E-09	1.372E-09	1.372E-09	-3.778E-10	-3.778E-10
0.40000	2.139E-11	199.605	-2.258E-09	-2.258E-09	2.258E-09	2.258E-09	-5.529E-10	-5.529E-10
0.50000	3.129E-11	249.506	-3.557E-09	-3.557E-09	3.558E-09	3.558E-09	-8.088E-10	-8.088E-10
0.60000	4.816E-11	299.407	-5.479E-09	-5.479E-09	5.481E-09	5.481E-09	-1.243E-09	-1.243E-09
0.70000	8.239E-11	349.308	-8.607E-09	-8.607E-09	8.620E-09	8.620E-09	-2.130E-09	-2.130E-09
0.80000	1.521E-10	399.209	-1.415E-08	-1.415E-08	1.430E-08	1.430E-08	-3.931E-09	-3.931E-09
0.85000	2.114E-10	424.160	-1.854E-08	-1.854E-08	1.889E-08	1.889E-08	-5.465E-09	-5.465E-09
0.90000	2.819E-10	449.110	-2.443E-08	-2.443E-08	2.532E-08	2.532E-08	-7.288E-09	-7.288E-09
0.92500	3.152E-10	461.585	-2.790E-08	-2.790E-08	2.928E-08	2.928E-08	-8.148E-09	-8.148E-09
0.95000	3.459E-10	474.061	-3.168E-08	-3.168E-08	3.378E-08	3.378E-08	-8.942E-09	-8.942E-09
0.96250	3.560E-10	480.298	-3.361E-08	-3.361E-08	3.623E-08	3.623E-08	-9.203E-09	-9.203E-09
0.97500	3.619E-10	486.536	-3.555E-08	-3.555E-08	3.877E-08	3.877E-08	-9.355E-09	-9.355E-09
0.98125	3.631E-10	489.655	-3.651E-08	-3.651E-08	4.007E-08	4.007E-08	-9.387E-09	-9.387E-09
0.98750	3.636E-10	492.774	-3.746E-08	-3.746E-08	4.139E-08	4.139E-08	-9.389E-09	-9.389E-09
0.99375	3.621E-10	495.892	-3.839E-08	-3.839E-08	4.273E-08	4.273E-08	-9.361E-09	-9.361E-09
1.00000	3.599E-10	499.011	-3.932E-08	-3.932E-08	4.405E-08	4.405E-08	-9.304E-09	-9.304E-09
1.00625	3.566E-10	502.130	-4.019E-08	-4.019E-08	4.541E-08	4.541E-08	-9.217E-09	-9.217E-09
1.01250	3.522E-10	505.249	-4.109E-08	-4.109E-08	4.672E-08	4.672E-08	-9.104E-09	-9.104E-09
1.01875	3.467E-10	508.368	-4.195E-08	-4.195E-08	4.805E-08	4.805E-08	-8.964E-09	-8.964E-09
1.02500	3.404E-10	511.486	-4.274E-08	-4.274E-08	4.939E-08	4.939E-08	-8.799E-09	-8.799E-09
1.03750	3.251E-10	517.724	-4.436E-08	-4.436E-08	5.193E-08	5.193E-08	-8.405E-09	-8.405E-09
1.05000	3.071E-10	523.962	-4.588E-08	-4.588E-08	5.436E-08	5.436E-08	-7.940E-09	-7.940E-09
1.07500	2.746E-10	536.437	-4.876E-08	-4.876E-08	5.874E-08	5.874E-08	-7.099E-09	-7.099E-09
1.10000	2.393E-10	548.912	-5.131E-08	-5.131E-08	6.261E-08	6.261E-08	-6.186E-09	-6.186E-09
1.15000	1.726E-10	573.863	-5.524E-08	-5.524E-08	6.887E-08	6.887E-08	-4.463E-09	-4.463E-09
1.20000	1.234E-10	598.813	-5.791E-08	-5.791E-08	7.355E-08	7.355E-08	-3.190E-09	-3.190E-09
1.30000	6.856E-11	648.714	-6.106E-08	-6.106E-08	7.973E-08	7.973E-08	-1.772E-09	-1.772E-09
1.40000	4.140E-11	698.616	-6.244E-08	-6.244E-08	8.368E-08	8.368E-08	-1.070E-09	-1.070E-09
1.50000	2.789E-11	748.517	-6.319E-08	-6.319E-08	8.632E-08	8.632E-08	-7.211E-10	-7.211E-10
1.60000	1.903E-11	798.418	-6.338E-08	-6.338E-08	8.845E-08	8.845E-08	-4.920E-10	-4.920E-10
1.70000	1.316E-11	848.319	-6.332E-08	-6.332E-08	9.009E-08	9.009E-08	-3.408E-10	-3.408E-10
1.80000	9.381E-12	898.220	-6.301E-08	-6.301E-08	9.151E-08	9.151E-08	-2.425E-10	-2.425E-10
1.90000	6.665E-12	948.121	-6.238E-08	-6.238E-08	9.294E-08	9.294E-08	-1.723E-10	-1.723E-10
2.00000	4.797E-12	998.022	-6.186E-08	-6.186E-08	9.403E-08	9.403E-08	-1.240E-10	-1.240E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0=10.000 θ_D= 0. ρ_a=37.362

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-2.883E-15
0.10000	5.495E-12	5.495E-12	-3.044E-23	-3.044E-23	-3.509E-13	-3.509E-13	-3.847E-15
0.20000	1.523E-11	1.523E-11	-5.243E-23	-5.243E-23	-9.561E-13	-9.561E-13	-5.449E-15
0.30000	3.197E-11	3.197E-11	-9.001E-23	-9.001E-23	-1.997E-12	-1.997E-12	-8.416E-15
0.40000	6.654E-11	6.654E-11	-1.603E-22	-1.603E-22	-3.816E-12	-3.816E-12	-1.387E-14
0.50000	1.289E-10	1.289E-10	-2.843E-22	-2.843E-22	-7.056E-12	-7.056E-12	-2.621E-14
0.60000	2.696E-10	2.696E-10	-5.378E-22	-5.378E-22	-1.289E-11	-1.289E-11	-5.616E-14
0.70000	6.616E-10	6.616E-10	-1.187E-21	-1.187E-21	-2.489E-11	-2.489E-11	-1.348E-13
0.80000	1.851E-09	1.851E-09	-2.978E-21	-2.978E-21	-5.345E-11	-5.345E-11	-3.783E-13
0.85000	3.352E-09	3.352E-09	-4.897E-21	-4.897E-21	-8.228E-11	-8.228E-11	-6.413E-13
0.90000	6.315E-09	6.315E-09	-7.492E-21	-7.492E-21	-1.285E-10	-1.285E-10	-1.042E-12
0.92500	8.670E-09	8.670E-09	-8.834E-21	-8.834E-21	-1.589E-10	-1.589E-10	-1.265E-12
0.95000	1.180E-08	1.180E-08	-1.014E-20	-1.014E-20	-1.966E-10	-1.966E-10	-1.434E-12
0.96250	1.363E-08	1.363E-08	-1.058E-20	-1.058E-20	-2.139E-10	-2.139E-10	-1.493E-12
0.97500	1.558E-08	1.558E-08	-1.084E-20	-1.084E-20	-2.340E-10	-2.340E-10	-1.528E-12
0.98125	1.657E-08	1.657E-08	-1.089E-20	-1.089E-20	-2.442E-10	-2.442E-10	-1.536E-12
0.98750	1.757E-08	1.757E-08	-1.089E-20	-1.089E-20	-2.543E-10	-2.543E-10	-1.536E-12
0.99375	1.857E-08	1.857E-08	-1.085E-20	-1.085E-20	-2.645E-10	-2.645E-10	-1.530E-12
1.00000	1.954E-08	1.954E-08	-1.075E-20	-1.075E-20	-2.746E-10	-2.746E-10	-1.516E-12
1.00625	2.050E-08	2.050E-08	-1.060E-20	-1.060E-20	-2.846E-10	-2.846E-10	-1.496E-12
1.01250	2.141E-08	2.141E-08	-1.041E-20	-1.041E-20	-2.944E-10	-2.944E-10	-1.470E-12
1.01875	2.229E-08	2.229E-08	-1.017E-20	-1.017E-20	-3.040E-10	-3.040E-10	-1.439E-12
1.02500	2.313E-08	2.313E-08	-9.898E-21	-9.898E-21	-3.134E-10	-3.134E-10	-1.403E-12
1.03750	2.464E-08	2.464E-08	-9.250E-21	-9.250E-21	-3.314E-10	-3.314E-10	-1.319E-12
1.05000	2.594E-08	2.594E-08	-8.502E-21	-8.502E-21	-3.480E-10	-3.480E-10	-1.224E-12
1.07500	2.791E-08	2.791E-08	-7.207E-21	-7.207E-21	-3.774E-10	-3.774E-10	-9.933E-13
1.10000	2.917E-08	2.917E-08	-5.881E-21	-5.881E-21	-4.018E-10	-4.018E-10	-7.815E-13
1.15000	3.027E-08	3.027E-08	-3.618E-21	-3.618E-21	-4.368E-10	-4.368E-10	-4.680E-13
1.20000	3.029E-08	3.029E-08	-2.161E-21	-2.161E-21	-4.580E-10	-4.580E-10	-2.777E-13
1.30000	2.903E-08	2.903E-08	-9.044E-22	-9.044E-22	-4.797E-10	-4.797E-10	-1.029E-13
1.40000	2.731E-08	2.731E-08	-4.319E-22	-4.319E-22	-4.891E-10	-4.891E-10	-4.454E-14
1.50000	2.562E-08	2.562E-08	-2.391E-22	-2.391E-22	-4.939E-10	-4.939E-10	-2.127E-14
1.60000	2.408E-08	2.408E-08	-1.344E-22	-1.344E-22	-4.967E-10	-4.967E-10	-1.180E-14
1.70000	2.269E-08	2.269E-08	-7.641E-23	-7.641E-23	-4.982E-10	-4.982E-10	-7.313E-15
1.80000	2.144E-08	2.144E-08	-4.446E-23	-4.446E-23	-4.991E-10	-4.991E-10	-4.872E-15
1.90000	2.032E-08	2.032E-08	-2.579E-23	-2.579E-23	-4.996E-10	-4.996E-10	-3.519E-15
2.00000	1.931E-08	1.931E-08	-1.491E-23	-1.491E-23	-4.999E-10	-4.999E-10	-2.677E-15

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	12.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	12.0000	0.10000	194.165	9.205E-07	9.985E-01	-7.375E-12	-7.375E-12	7.375E-12
0.20000	12.0000	0.20000	173.299	2.508E-06	9.980E-01	-1.035E-11	-1.035E-11	1.035E-11
0.30000	12.0000	0.30000	152.613	2.508E-06	9.973E-01	-1.447E-11	-1.447E-11	1.447E-11
0.40000	12.0000	0.40000	132.193	4.696E-06	9.963E-01	-2.102E-11	-2.102E-11	2.102E-11
0.50000	12.0000	0.50000	112.183	6.830E-06	9.951E-01	-3.049E-11	-3.049E-11	3.049E-11
0.60000	12.0000	0.60000	92.849	1.323E-05	9.939E-01	-4.573E-11	-4.573E-11	4.573E-11
0.70000	12.0000	0.70000	74.717	2.946E-05	9.941E-01	-7.487E-11	-7.487E-11	7.487E-11
0.80000	12.0000	0.80000	58.910	7.471E-05	9.992E-01	-1.265E-10	-1.265E-10	1.265E-10
0.85000	12.0000	0.85000	52.549	1.029E-04	1.003E 00	-1.656E-10	-1.656E-10	1.656E-10
0.90000	12.0000	0.90000	47.790	1.443E-04	1.005E 00	-2.062E-10	-2.062E-10	2.062E-10
0.92500	12.0000	0.92500	46.173	1.708E-04	1.004E 00	-2.237E-10	-2.237E-10	2.237E-10
0.95000	12.0000	0.95000	45.142	1.989E-04	1.001E 00	-2.356E-10	-2.356E-10	2.356E-10
0.96250	12.0000	0.96250	44.861	2.160E-04	9.997E-01	-2.390E-10	-2.390E-10	2.390E-10
0.97500	12.0000	0.97500	44.739	2.331E-04	9.989E-01	-2.405E-10	-2.405E-10	2.405E-10
0.98125	12.0000	0.98125	44.739	2.408E-04	9.988E-01	-2.405E-10	-2.405E-10	2.405E-10
0.98750	12.0000	0.98750	44.779	2.519E-04	9.989E-01	-2.400E-10	-2.400E-10	2.400E-10
0.99375	12.0000	0.99375	44.860	2.613E-04	9.992E-01	-2.390E-10	-2.390E-10	2.390E-10
1.00000	12.0000	1.00000	44.981	2.698E-04	9.997E-01	-2.376E-10	-2.376E-10	2.376E-10
1.00625	12.0000	1.00625	45.141	2.783E-04	1.000E 00	-2.357E-10	-2.357E-10	2.357E-10
1.01250	12.0000	1.01250	45.341	2.877E-04	1.001E 00	-2.333E-10	-2.333E-10	2.333E-10
1.01875	12.0000	1.01875	45.579	2.946E-04	1.002E 00	-2.305E-10	-2.305E-10	2.305E-10
1.02500	12.0000	1.02500	45.856	3.048E-04	1.003E 00	-2.273E-10	-2.273E-10	2.273E-10
1.03750	12.0000	1.03750	46.521	3.210E-04	1.006E 00	-2.198E-10	-2.198E-10	2.198E-10
1.05000	12.0000	1.05000	47.330	3.321E-04	1.008E 00	-2.111E-10	-2.111E-10	2.111E-10
1.07500	12.0001	1.07500	49.350	3.569E-04	1.012E 00	-1.906E-10	-1.906E-10	1.906E-10
1.10000	12.0001	1.10000	51.851	3.740E-04	1.013E 00	-1.706E-10	-1.706E-10	1.706E-10
1.15000	12.0001	1.15000	58.037	4.013E-04	1.012E 00	-1.312E-10	-1.312E-10	1.312E-10
1.20000	12.0001	1.20000	65.419	4.218E-04	1.007E 00	-1.013E-10	-1.013E-10	1.013E-10
1.30000	12.0001	1.30000	82.442	4.440E-04	1.000E 00	-5.933E-11	-5.933E-11	5.933E-11
1.40000	12.0001	1.40000	101.190	4.610E-04	9.974E-01	-3.741E-11	-3.741E-11	3.741E-11
1.50000	12.0002	1.50000	120.864	4.679E-04	9.965E-01	-2.595E-11	-2.595E-11	2.595E-11
1.60000	12.0002	1.60000	141.077	4.730E-04	9.965E-01	-1.782E-11	-1.782E-11	1.782E-11
1.70000	12.0002	1.70000	161.627	4.747E-04	9.968E-01	-1.250E-11	-1.250E-11	1.250E-11
1.80000	12.0002	1.80000	182.406	4.764E-04	9.971E-01	-8.926E-12	-8.926E-12	8.926E-12
1.90000	12.0002	1.90000	203.327	4.832E-04	9.974E-01	-6.371E-12	-6.371E-12	6.371E-12
2.00000	12.0002	2.00000	224.365	4.849E-04	9.976E-01	-4.596E-12	-4.596E-12	4.596E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.375E-12	49.901	-3.130E-10	-3.130E-10	3.130E-10	3.130E-10	-1.907E-10	-1.907E-10
0.20000	1.035E-11	99.802	-7.511E-10	-7.511E-10	7.511E-10	7.511E-10	-2.674E-10	-2.674E-10
0.30000	1.447E-11	149.703	-1.365E-09	-1.365E-09	1.365E-09	1.365E-09	-3.741E-10	-3.741E-10
0.40000	2.102E-11	199.605	-2.238E-09	-2.238E-09	2.238E-09	2.238E-09	-5.434E-10	-5.434E-10
0.50000	3.049E-11	249.506	-3.510E-09	-3.510E-09	3.510E-09	3.510E-09	-7.883E-10	-7.883E-10
0.60000	4.573E-11	299.407	-5.360E-09	-5.360E-09	5.364E-09	5.364E-09	-1.182E-09	-1.182E-09
0.70000	7.487E-11	349.308	-8.267E-09	-8.267E-09	8.290E-09	8.290E-09	-1.936E-09	-1.936E-09
0.80000	1.265E-10	399.209	-1.312E-08	-1.312E-08	1.329E-08	1.329E-08	-3.270E-09	-3.270E-09
0.85000	1.656E-10	424.160	-1.668E-08	-1.668E-08	1.702E-08	1.702E-08	-4.281E-09	-4.281E-09
0.90000	2.062E-10	449.110	-2.112E-08	-2.112E-08	2.184E-08	2.184E-08	-5.331E-09	-5.331E-09
0.92500	2.237E-10	461.585	-2.365E-08	-2.365E-08	2.468E-08	2.468E-08	-5.783E-09	-5.783E-09
0.95000	2.356E-10	474.061	-2.632E-08	-2.632E-08	2.775E-08	2.775E-08	-6.091E-09	-6.091E-09
0.96250	2.390E-10	480.298	-2.767E-08	-2.767E-08	2.937E-08	2.937E-08	-6.178E-09	-6.178E-09
0.97500	2.405E-10	486.536	-2.901E-08	-2.901E-08	3.102E-08	3.102E-08	-6.216E-09	-6.216E-09
0.98125	2.405E-10	489.655	-2.969E-08	-2.969E-08	3.185E-08	3.185E-08	-6.216E-09	-6.216E-09
0.98750	2.400E-10	492.774	-3.033E-08	-3.033E-08	3.271E-08	3.271E-08	-6.204E-09	-6.204E-09
0.99375	2.390E-10	495.892	-3.097E-08	-3.097E-08	3.355E-08	3.355E-08	-6.179E-09	-6.179E-09
1.00000	2.376E-10	499.011	-3.162E-08	-3.162E-08	3.439E-08	3.439E-08	-6.141E-09	-6.141E-09
1.00625	2.357E-10	502.130	-3.226E-08	-3.226E-08	3.523E-08	3.523E-08	-6.092E-09	-6.092E-09
1.01250	2.333E-10	505.249	-3.288E-08	-3.288E-08	3.607E-08	3.607E-08	-6.031E-09	-6.031E-09
1.01875	2.305E-10	508.368	-3.352E-08	-3.352E-08	3.688E-08	3.688E-08	-5.959E-09	-5.959E-09
1.02500	2.273E-10	511.487	-3.410E-08	-3.410E-08	3.772E-08	3.772E-08	-5.876E-09	-5.876E-09
1.03750	2.198E-10	517.724	-3.528E-08	-3.528E-08	3.934E-08	3.934E-08	-5.683E-09	-5.683E-09
1.05000	2.111E-10	523.962	-3.645E-08	-3.645E-08	4.085E-08	4.085E-08	-5.456E-09	-5.456E-09
1.07500	1.906E-10	536.437	-3.856E-08	-3.856E-08	4.376E-08	4.376E-08	-4.928E-09	-4.928E-09
1.10000	1.706E-10	548.912	-4.049E-08	-4.049E-08	4.633E-08	4.633E-08	-4.410E-09	-4.410E-09
1.15000	1.312E-10	573.863	-4.366E-08	-4.366E-08	5.069E-08	5.069E-08	-3.393E-09	-3.393E-09
1.20000	1.013E-10	598.813	-4.599E-08	-4.599E-08	5.410E-08	5.410E-08	-2.618E-09	-2.618E-09
1.30000	5.933E-11	648.714	-4.909E-08	-4.909E-08	5.883E-08	5.883E-08	-1.534E-09	-1.534E-09
1.40000	3.741E-11	698.616	-5.066E-08	-5.066E-08	6.197E-08	6.197E-08	-9.670E-10	-9.670E-10
1.50000	2.595E-11	748.517	-5.164E-08	-5.164E-08	6.412E-08	6.412E-08	-6.708E-10	-6.708E-10
1.60000	1.782E-11	798.418	-5.216E-08	-5.216E-08	6.576E-08	6.576E-08	-4.607E-10	-4.607E-10
1.70000	1.250E-11	848.319	-5.242E-08	-5.242E-08	6.698E-08	6.698E-08	-3.232E-10	-3.232E-10
1.80000	8.926E-12	898.220	-5.247E-08	-5.247E-08	6.799E-08	6.799E-08	-2.307E-10	-2.307E-10
1.90000	6.371E-12	948.121	-5.218E-08	-5.218E-08	6.904E-08	6.904E-08	-1.647E-10	-1.647E-10
2.00000	4.596E-12	998.022	-5.194E-08	-5.194E-08	6.982E-08	6.982E-08	-1.188E-10	-1.188E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 12.000 θ_D= 0. ρ_a= 44.734

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-4.133E-15
0.10000	6.566E-12	6.566E-12	-3.032E-23	-3.032E-23	-3.501E-13	-3.501E-13	-5.502E-15
0.20000	1.814E-11	1.814E-11	-5.195E-23	-5.195E-23	-9.512E-13	-9.512E-13	-7.760E-15
0.30000	3.790E-11	3.790E-11	-8.861E-23	-8.861E-23	-1.979E-12	-1.979E-12	-1.190E-14
0.40000	7.811E-11	7.811E-11	-1.561E-22	-1.561E-22	-3.759E-12	-3.759E-12	-1.939E-14
0.50000	1.501E-10	1.501E-10	-2.735E-22	-2.735E-22	-6.895E-12	-6.895E-12	-3.579E-14
0.60000	3.008E-10	3.008E-10	-4.996E-22	-4.996E-22	-1.241E-11	-1.241E-11	-7.424E-14
0.70000	7.019E-10	7.019E-10	-1.030E-21	-1.030E-21	-2.319E-11	-2.319E-11	-1.670E-13
0.80000	1.801E-09	1.801E-09	-2.245E-21	-2.245E-21	-4.661E-11	-4.661E-11	-4.116E-13
0.85000	3.032E-09	3.032E-09	-3.394E-21	-3.394E-21	-6.756E-11	-6.756E-11	-6.240E-13
0.90000	5.199E-09	5.199E-09	-4.721E-21	-4.721E-21	-9.779E-11	-9.779E-11	-8.859E-13
0.92500	6.773E-09	6.773E-09	-5.325E-21	-5.325E-21	-1.166E-10	-1.166E-10	-1.004E-12
0.95000	8.701E-09	8.701E-09	-5.749E-21	-5.749E-21	-1.374E-10	-1.374E-10	-1.092E-12
0.96250	9.780E-09	9.780E-09	-5.870E-21	-5.870E-21	-1.483E-10	-1.483E-10	-1.117E-12
0.97500	1.091E-08	1.091E-08	-5.923E-21	-5.923E-21	-1.593E-10	-1.593E-10	-1.129E-12
0.98125	1.147E-08	1.147E-08	-5.924E-21	-5.924E-21	-1.648E-10	-1.648E-10	-1.129E-12
0.98750	1.204E-08	1.204E-08	-5.906E-21	-5.906E-21	-1.704E-10	-1.704E-10	-1.125E-12
0.99375	1.260E-08	1.260E-08	-5.871E-21	-5.871E-21	-1.759E-10	-1.759E-10	-1.118E-12
1.00000	1.315E-08	1.315E-08	-5.818E-21	-5.818E-21	-1.813E-10	-1.813E-10	-1.106E-12
1.00625	1.369E-08	1.369E-08	-5.749E-21	-5.749E-21	-1.868E-10	-1.868E-10	-1.092E-12
1.01250	1.421E-08	1.421E-08	-5.664E-21	-5.664E-21	-1.921E-10	-1.921E-10	-1.074E-12
1.01875	1.470E-08	1.470E-08	-5.565E-21	-5.565E-21	-1.973E-10	-1.973E-10	-1.053E-12
1.02500	1.518E-08	1.518E-08	-5.451E-21	-5.451E-21	-2.025E-10	-2.025E-10	-1.030E-12
1.03750	1.604E-08	1.604E-08	-5.188E-21	-5.188E-21	-2.125E-10	-2.125E-10	-9.771E-13
1.05000	1.680E-08	1.680E-08	-4.885E-21	-4.885E-21	-2.219E-10	-2.219E-10	-9.177E-13
1.07500	1.799E-08	1.799E-08	-4.204E-21	-4.204E-21	-2.389E-10	-2.389E-10	-7.907E-13
1.10000	1.882E-08	1.882E-08	-3.551E-21	-3.551E-21	-2.534E-10	-2.534E-10	-6.569E-13
1.15000	1.965E-08	1.965E-08	-2.376E-21	-2.376E-21	-2.754E-10	-2.754E-10	-4.342E-13
1.20000	1.982E-08	1.982E-08	-1.611E-21	-1.611E-21	-2.900E-10	-2.900E-10	-2.744E-13
1.30000	1.922E-08	1.922E-08	-7.309E-22	-7.309E-22	-3.066E-10	-3.066E-10	-1.169E-13
1.40000	1.819E-08	1.819E-08	-3.721E-22	-3.721E-22	-3.145E-10	-3.145E-10	-5.425E-14
1.50000	1.712E-08	1.712E-08	-2.144E-22	-2.144E-22	-3.188E-10	-3.188E-10	-2.693E-14
1.60000	1.612E-08	1.612E-08	-1.217E-22	-1.217E-22	-3.212E-10	-3.212E-10	-1.551E-14
1.70000	1.521E-08	1.521E-08	-7.022E-23	-7.022E-23	-3.226E-10	-3.226E-10	-9.778E-15
1.80000	1.439E-08	1.439E-08	-4.107E-23	-4.107E-23	-3.234E-10	-3.234E-10	-6.630E-15
1.90000	1.364E-08	1.364E-08	-2.393E-23	-2.393E-23	-3.239E-10	-3.239E-10	-4.842E-15
2.00000	1.296E-08	1.296E-08	-1.388E-23	-1.388E-23	-3.242E-10	-3.242E-10	-3.719E-15

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 15.000 θ_D= 0. ρ_a= 55.687

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	15.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	15.0000	0.10000	194.456	1.347E-06	9.968E-01	-7.341E-12	-7.341E-12	7.341E-12
0.20000	15.0000	0.20000	173.950	2.091E-06	9.959E-01	-1.024E-11	-1.024E-11	1.024E-11
0.30000	15.0000	0.30000	153.721	3.682E-06	9.947E-01	-1.421E-11	-1.421E-11	1.421E-11
0.40000	15.0000	0.40000	133.894	4.802E-06	9.932E-01	-2.037E-11	-2.037E-11	2.037E-11
0.50000	15.0000	0.50000	114.677	7.897E-06	9.918E-01	-2.911E-11	-2.911E-11	2.911E-11
0.60000	15.0000	0.60000	96.436	1.430E-05	9.914E-01	-4.181E-11	-4.181E-11	4.181E-11
0.70000	15.0000	0.70000	79.842	2.775E-05	9.942E-01	-6.339E-11	-6.339E-11	6.339E-11
0.80000	15.0000	0.80000	66.148	4.525E-05	1.002E 00	-9.890E-11	-9.890E-11	9.890E-11
0.85000	15.0000	0.85000	61.018	4.525E-05	1.005E 00	-1.168E-10	-1.168E-10	1.168E-10
0.90000	15.0000	0.90000	57.465	4.525E-05	1.004E 00	-1.345E-10	-1.345E-10	1.345E-10
0.92500	15.0000	0.92500	56.379	6.147E-05	1.001E 00	-1.408E-10	-1.408E-10	1.408E-10
0.95000	15.0000	0.95000	55.793	7.684E-05	9.987E-01	-1.443E-10	-1.443E-10	1.443E-10
0.96250	15.0000	0.96250	55.692	8.367E-05	9.979E-01	-1.450E-10	-1.450E-10	1.450E-10
0.97500	15.0000	0.97500	55.722	9.135E-05	9.977E-01	-1.448E-10	-1.448E-10	1.448E-10
0.98125	15.0000	0.98125	55.785	9.477E-05	9.978E-01	-1.444E-10	-1.444E-10	1.444E-10
0.98750	15.0000	0.98750	55.880	9.818E-05	9.982E-01	-1.438E-10	-1.438E-10	1.438E-10
0.99375	15.0000	0.99375	56.008	1.033E-04	9.987E-01	-1.430E-10	-1.430E-10	1.430E-10
1.00000	15.0000	1.00000	56.168	1.076E-04	9.994E-01	-1.421E-10	-1.421E-10	1.421E-10
1.00625	15.0000	1.00625	56.359	1.144E-04	1.000E 00	-1.409E-10	-1.409E-10	1.409E-10
1.01250	15.0000	1.01250	56.582	1.170E-04	1.001E 00	-1.396E-10	-1.396E-10	1.396E-10
1.01875	15.0000	1.01875	56.835	1.195E-04	1.002E 00	-1.381E-10	-1.381E-10	1.381E-10
1.02500	15.0000	1.02500	57.119	1.238E-04	1.004E 00	-1.364E-10	-1.364E-10	1.364E-10
1.03750	15.0000	1.03750	57.777	1.306E-04	1.006E 00	-1.327E-10	-1.327E-10	1.327E-10
1.05000	15.0000	1.05000	58.552	1.383E-04	1.009E 00	-1.284E-10	-1.284E-10	1.284E-10
1.07500	15.0000	1.07500	60.430	1.477E-04	1.014E 00	-1.191E-10	-1.191E-10	1.191E-10
1.10000	15.0000	1.10000	62.716	1.545E-04	1.017E 00	-1.106E-10	-1.106E-10	1.106E-10
1.15000	15.0000	1.15000	68.335	1.690E-04	1.018E 00	-9.212E-11	-9.212E-11	9.212E-11
1.20000	15.0000	1.20000	75.083	1.793E-04	1.015E 00	-7.399E-11	-7.399E-11	7.399E-11
1.30000	15.0001	1.30000	90.927	1.947E-04	1.006E 00	-4.799E-11	-4.799E-11	4.799E-11
1.40000	15.0001	1.40000	108.737	2.083E-04	1.000E 00	-3.251E-11	-3.251E-11	3.251E-11
1.50000	15.0001	1.50000	127.693	2.117E-04	9.976E-01	-2.285E-11	-2.285E-11	2.285E-11
1.60000	15.0001	1.60000	147.354	2.117E-04	9.964E-01	-1.586E-11	-1.586E-11	1.586E-11
1.70000	15.0001	1.70000	167.472	2.203E-04	9.960E-01	-1.137E-11	-1.137E-11	1.137E-11
1.80000	15.0001	1.80000	187.900	2.220E-04	9.960E-01	-8.164E-12	-8.164E-12	8.164E-12
1.90000	15.0001	1.90000	208.547	2.220E-04	9.962E-01	-5.875E-12	-5.875E-12	5.875E-12
2.00000	15.0001	2.00000	229.353	2.220E-04	9.964E-01	-4.253E-12	-4.253E-12	4.253E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 15.000 θ_D= 0. ρ_a= 55.687

z	$_x\mu'-1$	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	5.304E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.341E-12	49.901	-3.123E-10	-3.123E-10	3.123E-10	3.123E-10	-1.898E-10	-1.898E-10
0.20000	1.024E-11	99.802	-7.470E-10	-7.470E-10	7.470E-10	7.470E-10	-2.646E-10	-2.646E-10
0.30000	1.421E-11	149.703	-1.352E-09	-1.352E-09	1.352E-09	1.352E-09	-3.674E-10	-3.674E-10
0.40000	2.037E-11	199.605	-2.203E-09	-2.203E-09	2.203E-09	2.203E-09	-5.265E-10	-5.265E-10
0.50000	2.911E-11	249.506	-3.425E-09	-3.425E-09	3.427E-09	3.427E-09	-7.526E-10	-7.526E-10
0.60000	4.181E-11	299.407	-5.160E-09	-5.160E-09	5.165E-09	5.165E-09	-1.081E-09	-1.081E-09
0.70000	6.339E-11	349.308	-7.751E-09	-7.751E-09	7.771E-09	7.771E-09	-1.639E-09	-1.639E-09
0.80000	9.890E-11	399.209	-1.175E-08	-1.175E-08	1.182E-08	1.182E-08	-2.557E-09	-2.557E-09
0.85000	1.168E-10	424.160	-1.444E-08	-1.444E-08	1.452E-08	1.452E-08	-3.020E-09	-3.020E-09
0.90000	1.345E-10	449.110	-1.758E-08	-1.758E-08	1.765E-08	1.765E-08	-3.476E-09	-3.476E-09
0.92500	1.408E-10	461.586	-1.927E-08	-1.927E-08	1.940E-08	1.940E-08	-3.640E-09	-3.640E-09
0.95000	1.443E-10	474.061	-2.101E-08	-2.101E-08	2.123E-08	2.123E-08	-3.731E-09	-3.731E-09
0.96250	1.450E-10	480.299	-2.189E-08	-2.189E-08	2.215E-08	2.215E-08	-3.747E-09	-3.747E-09
0.97500	1.448E-10	486.536	-2.277E-08	-2.277E-08	2.308E-08	2.308E-08	-3.743E-09	-3.743E-09
0.98125	1.444E-10	489.655	-2.321E-08	-2.321E-08	2.354E-08	2.354E-08	-3.733E-09	-3.733E-09
0.98750	1.438E-10	492.774	-2.365E-08	-2.365E-08	2.401E-08	2.401E-08	-3.718E-09	-3.718E-09
0.99375	1.430E-10	495.893	-2.407E-08	-2.407E-08	2.448E-08	2.448E-08	-3.697E-09	-3.697E-09
1.00000	1.421E-10	499.011	-2.450E-08	-2.450E-08	2.494E-08	2.494E-08	-3.673E-09	-3.673E-09
1.00625	1.409E-10	502.130	-2.491E-08	-2.491E-08	2.541E-08	2.541E-08	-3.643E-09	-3.643E-09
1.01250	1.396E-10	505.249	-2.533E-08	-2.533E-08	2.586E-08	2.586E-08	-3.609E-09	-3.609E-09
1.01875	1.381E-10	508.368	-2.575E-08	-2.575E-08	2.631E-08	2.631E-08	-3.570E-09	-3.570E-09
1.02500	1.364E-10	511.487	-2.616E-08	-2.616E-08	2.676E-08	2.676E-08	-3.527E-09	-3.527E-09
1.03750	1.327E-10	517.724	-2.696E-08	-2.696E-08	2.763E-08	2.763E-08	-3.430E-09	-3.430E-09
1.05000	1.284E-10	523.962	-2.773E-08	-2.773E-08	2.849E-08	2.849E-08	-3.320E-09	-3.320E-09
1.07500	1.191E-10	536.437	-2.921E-08	-2.921E-08	3.010E-08	3.010E-08	-3.079E-09	-3.079E-09
1.10000	1.100E-10	548.913	-3.059E-08	-3.059E-08	3.159E-08	3.159E-08	-2.858E-09	-2.858E-09
1.15000	9.212E-11	573.863	-3.300E-08	-3.300E-08	3.424E-08	3.424E-08	-2.382E-09	-2.382E-09
1.20000	7.399E-11	598.814	-3.496E-08	-3.496E-08	3.642E-08	3.642E-08	-1.913E-09	-1.913E-09
1.30000	4.799E-11	648.715	-3.773E-08	-3.773E-08	3.960E-08	3.960E-08	-1.240E-09	-1.240E-09
1.40000	3.251E-11	698.616	-3.947E-08	-3.947E-08	4.178E-08	4.178E-08	-8.404E-10	-8.404E-10
1.50000	2.285E-11	748.517	-4.072E-08	-4.072E-08	4.327E-08	4.327E-08	-5.908E-10	-5.908E-10
1.60000	1.586E-11	798.418	-4.159E-08	-4.159E-08	4.431E-08	4.431E-08	-4.099E-10	-4.099E-10
1.70000	1.137E-11	848.319	-4.205E-08	-4.205E-08	4.519E-08	4.519E-08	-2.940E-10	-2.940E-10
1.80000	8.164E-12	898.221	-4.239E-08	-4.239E-08	4.582E-08	4.582E-08	-2.111E-10	-2.111E-10
1.90000	5.875E-12	948.122	-4.267E-08	-4.267E-08	4.623E-08	4.623E-08	-1.519E-10	-1.519E-10
2.00000	4.253E-12	998.023	-4.283E-08	-4.283E-08	4.658E-08	4.658E-08	-1.099E-10	-1.099E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0=15.000 θ_D= 0. ρ_a=55.687

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-6.405E-15
0.10000	8.092E-12	8.092E-12	-3.009E-23	-3.009E-23	-3.487E-13	-3.487E-13	-8.490E-15
0.20000	2.230E-11	2.230E-11	-5.108E-23	-5.108E-23	-9.424E-13	-9.424E-13	-1.188E-14
0.30000	4.622E-11	4.622E-11	-8.611E-23	-8.611E-23	-1.947E-12	-1.947E-12	-1.797E-14
0.40000	9.376E-11	9.376E-11	-1.488E-22	-1.488E-22	-3.658E-12	-3.658E-12	-2.872E-14
0.50000	1.766E-10	1.766E-10	-2.550E-22	-2.550E-22	-6.613E-12	-6.613E-12	-5.091E-14
0.60000	3.340E-10	3.340E-10	-4.382E-22	-4.382E-22	-1.162E-11	-1.162E-11	-1.002E-13
0.70000	7.165E-10	7.165E-10	-8.052E-22	-8.052E-22	-2.070E-11	-2.070E-11	-2.053E-13
0.80000	1.644E-09	1.644E-09	-1.556E-21	-1.556E-21	-3.800E-11	-3.800E-11	-4.070E-13
0.85000	2.552E-09	2.552E-09	-1.991E-21	-1.991E-21	-5.127E-11	-5.127E-11	-5.592E-13
0.90000	3.978E-09	3.978E-09	-2.466E-21	-2.466E-21	-6.794E-11	-6.794E-11	-6.965E-13
0.92500	4.937E-09	4.937E-09	-2.646E-21	-2.646E-21	-7.752E-11	-7.752E-11	-7.460E-13
0.95000	6.037E-09	6.037E-09	-2.749E-21	-2.749E-21	-8.763E-11	-8.763E-11	-7.748E-13
0.96250	6.621E-09	6.621E-09	-2.767E-21	-2.767E-21	-9.279E-11	-9.279E-11	-7.799E-13
0.97500	7.212E-09	7.212E-09	-2.761E-21	-2.761E-21	-9.796E-11	-9.796E-11	-7.785E-13
0.98125	7.506E-09	7.506E-09	-2.750E-21	-2.750E-21	-1.005E-10	-1.005E-10	-7.753E-13
0.98750	7.797E-09	7.797E-09	-2.733E-21	-2.733E-21	-1.031E-10	-1.031E-10	-7.705E-13
0.99375	8.084E-09	8.084E-09	-2.710E-21	-2.711E-21	-1.057E-10	-1.057E-10	-7.641E-13
1.00000	8.365E-09	8.365E-09	-2.683E-21	-2.683E-21	-1.082E-10	-1.082E-10	-7.563E-13
1.00625	8.637E-09	8.637E-09	-2.649E-21	-2.649E-21	-1.107E-10	-1.107E-10	-7.471E-13
1.01250	8.901E-09	8.901E-09	-2.611E-21	-2.611E-21	-1.131E-10	-1.131E-10	-7.366E-13
1.01875	9.156E-09	9.156E-09	-2.569E-21	-2.569E-21	-1.155E-10	-1.155E-10	-7.248E-13
1.02500	9.399E-09	9.399E-09	-2.522E-21	-2.522E-21	-1.179E-10	-1.179E-10	-7.120E-13
1.03750	9.852E-09	9.852E-09	-2.416E-21	-2.416E-21	-1.225E-10	-1.225E-10	-6.835E-13
1.05000	1.026E-08	1.026E-08	-2.297E-21	-2.297E-21	-1.270E-10	-1.270E-10	-6.521E-13
1.07500	1.092E-08	1.092E-08	-2.048E-21	-2.048E-21	-1.351E-10	-1.351E-10	-5.818E-13
1.10000	1.140E-08	1.140E-08	-1.835E-21	-1.835E-21	-1.423E-10	-1.423E-10	-5.016E-13
1.15000	1.194E-08	1.194E-08	-1.400E-21	-1.400E-21	-1.544E-10	-1.544E-10	-3.598E-13
1.20000	1.211E-08	1.211E-08	-1.012E-21	-1.012E-21	-1.634E-10	-1.634E-10	-2.546E-13
1.30000	1.190E-08	1.190E-08	-5.360E-22	-5.360E-22	-1.745E-10	-1.745E-10	-1.245E-13
1.40000	1.137E-08	1.137E-08	-3.012E-22	-3.012E-22	-1.805E-10	-1.805E-10	-6.283E-14
1.50000	1.077E-08	1.077E-08	-1.771E-22	-1.771E-22	-1.840E-10	-1.840E-10	-3.408E-14
1.60000	1.018E-08	1.018E-08	-1.021E-22	-1.021E-22	-1.860E-10	-1.860E-10	-2.080E-14
1.70000	9.625E-09	9.625E-09	-6.038E-23	-6.038E-23	-1.872E-10	-1.872E-10	-1.346E-14
1.80000	9.116E-09	9.116E-09	-3.564E-23	-3.564E-23	-1.879E-10	-1.879E-10	-9.399E-15
1.90000	8.651E-09	8.651E-09	-2.090E-23	-2.090E-23	-1.883E-10	-1.883E-10	-6.988E-15
2.00000	8.227E-09	8.227E-09	-1.220E-23	-1.220E-23	-1.886E-10	-1.886E-10	-5.457E-15

PROPAGATION FREQUENCY= 7.750CE 09 ϕ_0= 20.000 θ_D= 0. ρ_a= 73.589

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	20.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	20.0000	0.10000	195.079	2.268E-06	9.933E-01	-7.267E-12	-7.267E-12	7.267E-12
0.20000	20.0000	0.20000	175.341	2.615E-06	9.917E-01	-1.001E-11	-1.001E-11	1.001E-11
0.30000	20.0000	0.30000	156.073	3.415E-06	9.899E-01	-1.368E-11	-1.368E-11	1.368E-11
0.40000	20.0000	0.40000	137.474	5.976E-06	9.885E-01	-1.905E-11	-1.905E-11	1.905E-11
0.50000	20.0000	0.50000	119.855	9.605E-06	9.881E-01	-2.644E-11	-2.644E-11	2.644E-11
0.60000	20.0000	0.60000	103.717	1.537E-05	9.904E-01	-3.569E-11	-3.569E-11	3.569E-11
0.70000	20.0000	0.70000	89.861	2.476E-05	9.964E-01	-4.928E-11	-4.928E-11	4.928E-11
0.80000	20.0000	0.80000	79.490	3.330E-05	1.002E 00	-6.412E-11	-6.412E-11	6.412E-11
0.85000	20.0000	0.85000	76.077	3.543E-05	1.002E 00	-7.164E-11	-7.164E-11	7.164E-11
0.90000	20.0000	0.90000	74.083	4.013E-05	9.981E-01	-7.643E-11	-7.643E-11	7.643E-11
0.92500	20.0000	0.92500	73.657	4.610E-05	9.961E-01	-7.750E-11	-7.750E-11	7.750E-11
0.95000	20.0000	0.95000	73.622	5.550E-05	9.951E-01	-7.759E-11	-7.759E-11	7.759E-11
0.96250	20.0000	0.96250	73.752	5.635E-05	9.952E-01	-7.726E-11	-7.726E-11	7.726E-11
0.97500	20.0000	0.97500	73.980	6.147E-05	9.959E-01	-7.669E-11	-7.669E-11	7.669E-11
0.98125	20.0000	0.98125	74.130	6.233E-05	9.964E-01	-7.632E-11	-7.632E-11	7.632E-11
0.98750	20.0000	0.98750	74.304	6.318E-05	9.970E-01	-7.589E-11	-7.589E-11	7.589E-11
0.99375	20.0000	0.99375	74.502	6.830E-05	9.978E-01	-7.540E-11	-7.540E-11	7.540E-11
1.00000	20.0000	1.00000	74.724	7.001E-05	9.987E-01	-7.486E-11	-7.486E-11	7.486E-11
1.00625	20.0000	1.00625	74.969	7.172E-05	9.997E-01	-7.426E-11	-7.426E-11	7.426E-11
1.01250	20.0000	1.01250	75.238	7.513E-05	1.001E 00	-7.362E-11	-7.362E-11	7.362E-11
1.01875	20.0000	1.01875	75.529	7.599E-05	1.002E 00	-7.293E-11	-7.293E-11	7.293E-11
1.02500	20.0000	1.02500	75.843	7.769E-05	1.003E 00	-7.219E-11	-7.219E-11	7.219E-11
1.03750	20.0000	1.03750	76.539	8.196E-05	1.006E 00	-7.057E-11	-7.057E-11	7.057E-11
1.05000	20.0000	1.05000	77.321	8.452E-05	1.009E 00	-6.880E-11	-6.880E-11	6.880E-11
1.07500	20.0000	1.07500	79.138	8.452E-05	1.014E 00	-6.486E-11	-6.486E-11	6.486E-11
1.10000	20.0000	1.10000	81.271	8.452E-05	1.018E 00	-6.109E-11	-6.109E-11	6.109E-11
1.15000	20.0000	1.15000	86.388	8.452E-05	1.023E 00	-5.376E-11	-5.376E-11	5.376E-11
1.20000	20.0000	1.20000	92.478	8.452E-05	1.023E 00	-4.616E-11	-4.616E-11	4.616E-11
1.30000	20.0000	1.30000	106.889	9.050E-05	1.017E 00	-3.365E-11	-3.365E-11	3.365E-11
1.40000	20.0000	1.40000	123.386	9.562E-05	1.009E 00	-2.476E-11	-2.476E-11	2.476E-11
1.50000	20.0000	1.50000	141.240	1.025E-04	1.004E 00	-1.777E-11	-1.777E-11	1.777E-11
1.60000	20.0000	1.60000	159.998	1.076E-04	1.000E 00	-1.284E-11	-1.284E-11	1.284E-11
1.70000	20.0001	1.70000	179.377	1.144E-04	9.982E-01	-9.374E-12	-9.374E-12	9.374E-12
1.80000	20.0001	1.80000	199.194	1.178E-04	9.970E-01	-6.798E-12	-6.798E-12	6.798E-12
1.90000	20.0001	1.90000	219.332	1.212E-04	9.963E-01	-4.969E-12	-4.969E-12	4.969E-12

PROPAGATION FREQUENCY= 7.750CE 09 ϕ_0= 20.000 θ_D= 0. ρ_a= 73.589

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.267E-12	49.901	-3.107E-10	-3.107E-10	3.107E-10	3.107E-10	-1.879E-10	-1.879E-10
0.20000	1.001E-11	99.802	-7.383E-10	-7.383E-10	7.383E-10	7.383E-10	-2.587E-10	-2.587E-10
0.30000	1.368E-11	149.703	-1.325E-09	-1.325E-09	1.325E-09	1.325E-09	-3.536E-10	-3.536E-10
0.40000	1.905E-11	199.605	-2.132E-09	-2.132E-09	2.132E-09	2.132E-09	-4.926E-10	-4.926E-10
0.50000	2.644E-11	249.506	-3.259E-09	-3.259E-09	3.259E-09	3.259E-09	-6.835E-10	-6.835E-10
0.60000	3.569E-11	299.407	-4.799E-09	-4.799E-09	4.804E-09	4.804E-09	-9.226E-10	-9.226E-10
0.70000	4.928E-11	349.308	-6.888E-09	-6.888E-09	6.905E-09	6.905E-09	-1.274E-09	-1.274E-09
0.80000	6.412E-11	399.209	-9.713E-09	-9.713E-09	9.747E-09	9.747E-09	-1.658E-09	-1.658E-09
0.85000	7.164E-11	424.160	-1.141E-08	-1.141E-08	1.145E-08	1.145E-08	-1.852E-09	-1.852E-09
0.90000	7.643E-11	449.110	-1.325E-08	-1.325E-08	1.331E-08	1.331E-08	-1.976E-09	-1.976E-09
0.92500	7.750E-11	461.586	-1.421E-08	-1.421E-08	1.428E-08	1.428E-08	-2.003E-09	-2.003E-09
0.95000	7.759E-11	474.061	-1.516E-08	-1.516E-08	1.527E-08	1.527E-08	-2.006E-09	-2.006E-09
0.96250	7.726E-11	480.299	-1.564E-08	-1.564E-08	1.575E-08	1.575E-08	-1.997E-09	-1.997E-09
0.97500	7.669E-11	486.536	-1.610E-08	-1.610E-08	1.624E-08	1.624E-08	-1.983E-09	-1.983E-09
0.98125	7.632E-11	489.655	-1.634E-08	-1.634E-08	1.649E-08	1.649E-08	-1.973E-09	-1.973E-09
0.98750	7.589E-11	492.774	-1.658E-08	-1.658E-08	1.673E-08	1.673E-08	-1.962E-09	-1.962E-09
0.99375	7.540E-11	495.893	-1.680E-08	-1.680E-08	1.697E-08	1.697E-08	-1.949E-09	-1.949E-09
1.00000	7.486E-11	499.012	-1.703E-08	-1.703E-08	1.721E-08	1.721E-08	-1.935E-09	-1.935E-09
1.00625	7.426E-11	502.130	-1.726E-08	-1.726E-08	1.745E-08	1.745E-08	-1.920E-09	-1.920E-09
1.01250	7.362E-11	505.249	-1.748E-08	-1.748E-08	1.769E-08	1.769E-08	-1.903E-09	-1.903E-09
1.01875	7.293E-11	508.368	-1.770E-08	-1.770E-08	1.792E-08	1.792E-08	-1.885E-09	-1.885E-09
1.02500	7.219E-11	511.487	-1.792E-08	-1.792E-08	1.816E-08	1.816E-08	-1.866E-09	-1.866E-09
1.03750	7.057E-11	517.724	-1.835E-08	-1.835E-08	1.862E-08	1.862E-08	-1.824E-09	-1.824E-09
1.05000	6.880E-11	523.962	-1.877E-08	-1.877E-08	1.906E-08	1.906E-08	-1.779E-09	-1.779E-09
1.07500	6.486E-11	536.437	-1.960E-08	-1.960E-08	1.991E-08	1.991E-08	-1.677E-09	-1.677E-09
1.10000	6.109E-11	548.913	-2.038E-08	-2.038E-08	2.070E-08	2.070E-08	-1.579E-09	-1.579E-09
1.15000	5.376E-11	573.863	-2.181E-08	-2.181E-08	2.214E-08	2.214E-08	-1.390E-09	-1.390E-09
1.20000	4.616E-11	598.814	-2.306E-08	-2.306E-08	2.338E-08	2.338E-08	-1.193E-09	-1.193E-09
1.30000	3.365E-11	648.715	-2.498E-08	-2.498E-08	2.538E-08	2.538E-08	-8.698E-10	-8.698E-10
1.40000	2.476E-11	698.616	-2.639E-08	-2.639E-08	2.687E-08	2.687E-08	-6.401E-10	-6.401E-10
1.50000	1.777E-11	748.517	-2.738E-08	-2.738E-08	2.798E-08	2.798E-08	-4.593E-10	-4.593E-10
1.60000	1.284E-11	798.418	-2.808E-08	-2.808E-08	2.879E-08	2.879E-08	-3.318E-10	-3.318E-10
1.70000	9.374E-12	848.319	-2.856E-08	-2.856E-08	2.941E-08	2.941E-08	-2.423E-10	-2.423E-10
1.80000	6.798E-12	898.221	-2.891E-08	-2.891E-08	2.986E-08	2.986E-08	-1.757E-10	-1.757E-10
1.90000	4.969E-12	948.122	-2.915E-08	-2.915E-08	3.021E-08	3.021E-08	-1.285E-10	-1.285E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 20.000 θ_D= 0. ρ_a= 73.589

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.118E-14
0.10000	1.043E-11	1.043E-11	-2.961E-23	-2.961E-23	-3.458E-13	-3.458E-13	-1.469E-14
0.20000	2.868E-11	2.868E-11	-4.928E-23	-4.928E-23	-9.239E-13	-9.239E-13	-2.023E-14
0.30000	5.847E-11	5.847E-11	-8.104E-23	-8.104E-23	-1.880E-12	-1.880E-12	-2.977E-14
0.40000	1.134E-10	1.134E-10	-1.346E-22	-1.346E-22	-3.456E-12	-3.456E-12	-4.576E-14
0.50000	2.078E-10	2.078E-10	-2.206E-22	-2.206E-22	-6.067E-12	-6.067E-12	-7.511E-14
0.60000	3.656E-10	3.656E-10	-3.466E-22	-3.466E-22	-1.026E-11	-1.026E-11	-1.325E-13
0.70000	6.886E-10	6.886E-10	-5.573E-22	-5.573E-22	-1.687E-11	-1.687E-11	-2.269E-13
0.80000	1.355E-09	1.355E-09	-8.190E-22	-8.190E-22	-2.715E-11	-2.715E-11	-3.641E-13
0.85000	1.910E-09	1.910E-09	-9.651E-22	-9.651E-22	-3.384E-11	-3.384E-11	-4.241E-13
0.90000	2.668E-09	2.668E-09	-1.062E-21	-1.062E-21	-4.146E-11	-4.146E-11	-4.662E-13
0.92500	3.116E-09	3.116E-09	-1.084E-21	-1.084E-21	-4.548E-11	-4.548E-11	-4.760E-13
0.95000	3.598E-09	3.598E-09	-1.086E-21	-1.086E-21	-4.954E-11	-4.954E-11	-4.768E-13
0.96250	3.843E-09	3.843E-09	-1.079E-21	-1.079E-21	-5.157E-11	-5.157E-11	-4.738E-13
0.97500	4.087E-09	4.087E-09	-1.068E-21	-1.068E-21	-5.358E-11	-5.358E-11	-4.686E-13
0.98125	4.207E-09	4.207E-09	-1.060E-21	-1.060E-21	-5.457E-11	-5.457E-11	-4.652E-13
0.98750	4.325E-09	4.325E-09	-1.051E-21	-1.051E-21	-5.556E-11	-5.556E-11	-4.613E-13
0.99375	4.441E-09	4.441E-09	-1.041E-21	-1.041E-21	-5.654E-11	-5.654E-11	-4.569E-13
1.00000	4.553E-09	4.553E-09	-1.030E-21	-1.030E-21	-5.750E-11	-5.750E-11	-4.521E-13
1.00625	4.663E-09	4.663E-09	-1.018E-21	-1.018E-21	-5.846E-11	-5.846E-11	-4.469E-13
1.01250	4.768E-09	4.768E-09	-1.005E-21	-1.005E-21	-5.941E-11	-5.941E-11	-4.412E-13
1.01875	4.870E-09	4.870E-09	-9.909E-22	-9.909E-22	-6.034E-11	-6.034E-11	-4.352E-13
1.02500	4.968E-09	4.968E-09	-9.760E-22	-9.760E-22	-6.126E-11	-6.126E-11	-4.289E-13
1.03750	5.150E-09	5.150E-09	-9.439E-22	-9.439E-22	-6.306E-11	-6.306E-11	-4.153E-13
1.05000	5.314E-09	5.314E-09	-9.090E-22	-9.090E-22	-6.479E-11	-6.479E-11	-4.008E-13
1.07500	5.590E-09	5.590E-09	-8.330E-22	-8.330E-22	-6.805E-11	-6.805E-11	-3.699E-13
1.10000	5.804E-09	5.804E-09	-7.629E-22	-7.629E-22	-7.103E-11	-7.103E-11	-3.348E-13
1.15000	6.073E-09	6.073E-09	-6.327E-22	-6.327E-22	-7.625E-11	-7.625E-11	-2.638E-13
1.20000	6.187E-09	6.187E-09	-5.064E-22	-5.064E-22	-8.050E-11	-8.050E-11	-2.041E-13
1.30000	6.161E-09	6.161E-09	-3.172E-22	-3.172E-22	-8.651E-11	-8.651E-11	-1.175E-13
1.40000	5.962E-09	5.962E-09	-1.998E-22	-1.998E-22	-9.032E-11	-9.032E-11	-6.748E-14
1.50000	5.705E-09	5.705E-09	-1.212E-22	-1.212E-22	-9.268E-11	-9.268E-11	-4.180E-14
1.60000	5.433E-09	5.433E-09	-7.323E-23	-7.323E-23	-9.409E-11	-9.409E-11	-2.738E-14
1.70000	5.164E-09	5.164E-09	-4.441E-23	-4.441E-23	-9.496E-11	-9.496E-11	-1.888E-14
1.80000	4.909E-09	4.909E-09	-2.663E-23	-2.663E-23	-9.548E-11	-9.548E-11	-1.389E-14
1.90000	4.670E-09	4.670E-09	-1.581E-23	-1.581E-23	-9.579E-11	-9.579E-11	-1.066E-14

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 25.000 θ_D= 0. ρ_a= 90.930

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	25.0000	0.	215.259	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	25.0000	0.10000	195.870	1.628E-06	9.886E-01	-7.174E-12	-7.174E-12	7.174E-12
0.20000	25.0000	0.20000	177.095	2.721E-06	9.865E-01	-9.728E-12	-9.728E-12	9.728E-12
0.30000	25.0000	0.30000	159.016	4.802E-06	9.847E-01	-1.304E-11	-1.304E-11	1.304E-11
0.40000	25.0000	0.40000	141.900	1.153E-05	9.841E-01	-1.755E-11	-1.755E-11	1.755E-11
0.50000	25.0000	0.50000	126.137	2.006E-05	9.857E-01	-2.352E-11	-2.352E-11	2.352E-11
0.60000	25.0000	0.60000	112.302	2.433E-05	9.902E-01	-3.042E-11	-3.042E-11	3.042E-11
0.70000	25.0000	0.70000	101.186	2.946E-05	9.962E-01	-3.741E-11	-3.741E-11	3.741E-11
0.80000	25.0000	0.80000	93.763	3.458E-05	9.980E-01	-4.470E-11	-4.470E-11	4.470E-11
0.85000	25.0000	0.85000	91.734	3.842E-05	9.955E-01	-4.703E-11	-4.703E-11	4.703E-11
0.90000	25.0000	0.90000	90.940	4.354E-05	9.923E-01	-4.797E-11	-4.797E-11	4.797E-11
0.92500	25.0000	0.92500	91.019	4.440E-05	9.915E-01	-4.788E-11	-4.788E-11	4.788E-11
0.95000	25.0000	0.95000	91.415	4.867E-05	9.920E-01	-4.740E-11	-4.740E-11	4.740E-11
0.96250	25.0000	0.96250	91.730	5.123E-05	9.929E-01	-4.703E-11	-4.703E-11	4.703E-11
0.97500	25.0000	0.97500	92.123	5.293E-05	9.941E-01	-4.657E-11	-4.657E-11	4.657E-11
0.98125	25.0000	0.98125	92.349	5.550E-05	9.949E-01	-4.631E-11	-4.631E-11	4.631E-11
0.98750	25.0000	0.98750	92.593	5.550E-05	9.958E-01	-4.603E-11	-4.603E-11	4.603E-11
0.99375	25.0000	0.99375	92.856	5.891E-05	9.967E-01	-4.573E-11	-4.573E-11	4.573E-11
1.00000	25.0000	1.00000	93.138	5.976E-05	9.978E-01	-4.540E-11	-4.540E-11	4.540E-11
1.00625	25.0000	1.00625	93.438	5.976E-05	9.989E-01	-4.506E-11	-4.506E-11	4.506E-11
1.01250	25.0000	1.01250	93.757	6.318E-05	1.000E 00	-4.471E-11	-4.471E-11	4.471E-11
1.01875	25.0000	1.01875	94.093	6.318E-05	1.001E 00	-4.433E-11	-4.433E-11	4.433E-11
1.02500	25.0000	1.02500	94.448	6.574E-05	1.003E 00	-4.394E-11	-4.394E-11	4.394E-11
1.03750	25.0000	1.03750	95.211	6.745E-05	1.005E 00	-4.311E-11	-4.311E-11	4.311E-11
1.05000	25.0000	1.05000	96.042	7.001E-05	1.008E 00	-4.222E-11	-4.222E-11	4.222E-11
1.07500	25.0000	1.07500	97.906	7.001E-05	1.014E 00	-4.030E-11	-4.030E-11	4.030E-11
1.10000	25.0000	1.10000	100.025	7.086E-05	1.018E 00	-3.823E-11	-3.823E-11	3.823E-11
1.15000	25.0000	1.15000	104.964	7.086E-05	1.025E 00	-3.487E-11	-3.487E-11	3.487E-11
1.20000	25.0000	1.20000	110.731	7.172E-05	1.028E 00	-3.133E-11	-3.133E-11	3.133E-11
1.30000	25.0000	1.30000	124.272	7.428E-05	1.025E 00	-2.435E-11	-2.435E-11	2.435E-11
1.40000	25.0000	1.40000	139.827	7.769E-05	1.019E 00	-1.824E-11	-1.824E-11	1.824E-11
1.50000	25.0000	1.50000	156.797	8.367E-05	1.012E 00	-1.352E-11	-1.352E-11	1.352E-11
1.60000	25.0000	1.60000	174.771	8.879E-05	1.007E 00	-1.010E-11	-1.010E-11	1.010E-11
1.70000	25.0000	1.70000	193.470	9.050E-05	1.003E 00	-7.459E-12	-7.459E-12	7.459E-12
1.80000	25.0000	1.80000	212.702	9.221E-05	1.001E 00	-5.508E-12	-5.508E-12	5.508E-12
1.90000	25.0000	1.90000	232.335	9.392E-05	9.991E-01	-4.061E-12	-4.061E-12	4.061E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 25.000 θ_D= 0. ρ_a= 90.930

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.174E-12	49.901	-3.087E-10	-3.087E-10	3.087E-10	3.087E-10	-1.855E-10	-1.855E-10
0.20000	9.728E-12	99.802	-7.276E-10	-7.276E-10	7.276E-10	7.276E-10	-2.515E-10	-2.515E-10
0.30000	1.304E-11	149.703	-1.292E-09	-1.292E-09	1.292E-09	1.292E-09	-3.372E-10	-3.372E-10
0.40000	1.755E-11	199.605	-2.045E-09	-2.045E-09	2.047E-09	2.047E-09	-4.537E-10	-4.537E-10
0.50000	2.352E-11	249.506	-3.063E-09	-3.063E-09	3.071E-09	3.071E-09	-6.081E-10	-6.081E-10
0.60000	3.042E-11	299.407	-4.404E-09	-4.404E-09	4.417E-09	4.417E-09	-7.865E-10	-7.865E-10
0.70000	3.741E-11	349.308	-6.094E-09	-6.094E-09	6.117E-09	6.117E-09	-9.671E-10	-9.671E-10
0.80000	4.470E-11	399.209	-8.142E-09	-8.142E-09	8.178E-09	8.178E-09	-1.156E-09	-1.156E-09
0.85000	4.703E-11	424.160	-9.283E-09	-9.283E-09	9.331E-09	9.331E-09	-1.216E-09	-1.216E-09
0.90000	4.797E-11	449.110	-1.046E-08	-1.046E-08	1.053E-08	1.053E-08	-1.240E-09	-1.240E-09
0.92500	4.788E-11	461.586	-1.106E-08	-1.106E-08	1.113E-08	1.113E-08	-1.238E-09	-1.238E-09
0.95000	4.740E-11	474.061	-1.165E-08	-1.165E-08	1.173E-08	1.173E-08	-1.225E-09	-1.225E-09
0.96250	4.703E-11	480.299	-1.194E-08	-1.194E-08	1.203E-08	1.203E-08	-1.216E-09	-1.216E-09
0.97500	4.657E-11	486.536	-1.222E-08	-1.222E-08	1.233E-08	1.233E-08	-1.204E-09	-1.204E-09
0.98125	4.631E-11	489.655	-1.236E-08	-1.236E-08	1.248E-08	1.248E-08	-1.197E-09	-1.197E-09
0.98750	4.603E-11	492.774	-1.251E-08	-1.251E-08	1.262E-08	1.262E-08	-1.190E-09	-1.190E-09
0.99375	4.573E-11	495.893	-1.264E-08	-1.264E-08	1.277E-08	1.277E-08	-1.182E-09	-1.182E-09
1.00000	4.540E-11	499.011	-1.278E-08	-1.278E-08	1.292E-08	1.292E-08	-1.174E-09	-1.174E-09
1.00625	4.506E-11	502.130	-1.292E-08	-1.292E-08	1.306E-08	1.306E-08	-1.165E-09	-1.165E-09
1.01250	4.471E-11	505.249	-1.305E-08	-1.305E-08	1.321E-08	1.321E-08	-1.156E-09	-1.156E-09
1.01875	4.433E-11	508.368	-1.319E-08	-1.319E-08	1.335E-08	1.335E-08	-1.146E-09	-1.146E-09
1.02500	4.394E-11	511.487	-1.332E-08	-1.332E-08	1.349E-08	1.349E-08	-1.136E-09	-1.136E-09
1.03750	4.311E-11	517.724	-1.359E-08	-1.359E-08	1.377E-08	1.377E-08	-1.114E-09	-1.114E-09
1.05000	4.222E-11	523.962	-1.384E-08	-1.384E-08	1.404E-08	1.404E-08	-1.092E-09	-1.092E-09
1.07500	4.030E-11	536.437	-1.436E-08	-1.436E-08	1.456E-08	1.456E-08	-1.042E-09	-1.042E-09
1.10000	3.823E-11	548.913	-1.484E-08	-1.484E-08	1.506E-08	1.506E-08	-9.882E-10	-9.882E-10
1.15000	3.487E-11	573.863	-1.575E-08	-1.575E-08	1.597E-08	1.597E-08	-9.015E-10	-9.015E-10
1.20000	3.133E-11	598.814	-1.657E-08	-1.657E-08	1.680E-08	1.680E-08	-8.098E-10	-8.098E-10
1.30000	2.435E-11	648.715	-1.794E-08	-1.794E-08	1.821E-08	1.821E-08	-6.296E-10	-6.296E-10
1.40000	1.824E-11	698.616	-1.897E-08	-1.897E-08	1.929E-08	1.929E-08	-4.715E-10	-4.715E-10
1.50000	1.356E-11	748.517	-1.972E-08	-1.972E-08	2.012E-08	2.012E-08	-3.495E-10	-3.495E-10
1.60000	1.010E-11	798.418	-2.026E-08	-2.026E-08	2.074E-08	2.074E-08	-2.611E-10	-2.611E-10
1.70000	7.459E-12	848.319	-2.067E-08	-2.067E-08	2.120E-08	2.120E-08	-1.928E-10	-1.928E-10
1.80000	5.508E-12	898.221	-2.097E-08	-2.097E-08	2.155E-08	2.155E-08	-1.424E-10	-1.424E-10
1.90000	4.061E-12	948.122	-2.118E-08	-2.118E-08	2.181E-08	2.181E-08	-1.050E-10	-1.050E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0=25.000 θ_D= 0. ρ_a=90.930

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-1.708E-14
0.10000	1.267E-11	1.267E-11	-2.901E-23	-2.901E-23	-3.421E-13	-3.421E-13	-2.218E-14
0.20000	3.430E-11	3.430E-11	-4.710E-23	-4.710E-23	-9.012E-13	-9.012E-13	-2.994E-14
0.30000	6.843E-11	6.843E-11	-7.511E-23	-7.511E-23	-1.801E-12	-1.801E-12	-4.262E-14
0.40000	1.266E-10	1.266E-10	-1.189E-22	-1.189E-22	-3.222E-12	-3.222E-12	-6.273E-14
0.50000	2.233E-10	2.233E-10	-1.850E-22	-1.850E-22	-5.469E-12	-5.469E-12	-9.487E-14
0.60000	3.717E-10	3.717E-10	-2.725E-22	-2.725E-22	-8.867E-12	-8.867E-12	-1.473E-13
0.70000	6.368E-10	6.368E-10	-3.721E-22	-3.721E-22	-1.369E-11	-1.369E-11	-2.239E-13
0.80000	1.116E-09	1.116E-09	-4.832E-22	-4.832E-22	-2.010E-11	-2.010E-11	-2.961E-13
0.85000	1.469E-09	1.469E-09	-5.204E-22	-5.204E-22	-2.387E-11	-2.387E-11	-3.209E-13
0.90000	1.904E-09	1.904E-09	-5.357E-22	-5.357E-22	-2.783E-11	-2.783E-11	-3.315E-13
0.92500	2.146E-09	2.146E-09	-5.342E-22	-5.342E-22	-2.984E-11	-2.984E-11	-3.304E-13
0.95000	2.392E-09	2.392E-09	-5.265E-22	-5.265E-22	-3.182E-11	-3.182E-11	-3.252E-13
0.96250	2.513E-09	2.513E-09	-5.205E-22	-5.205E-22	-3.280E-11	-3.280E-11	-3.210E-13
0.97500	2.632E-09	2.632E-09	-5.130E-22	-5.130E-22	-3.377E-11	-3.377E-11	-3.160E-13
0.98125	2.690E-09	2.690E-09	-5.088E-22	-5.088E-22	-3.425E-11	-3.425E-11	-3.132E-13
0.98750	2.746E-09	2.746E-09	-5.043E-22	-5.043E-22	-3.472E-11	-3.472E-11	-3.101E-13
0.99375	2.802E-09	2.802E-09	-4.995E-22	-4.995E-22	-3.519E-11	-3.519E-11	-3.069E-13
1.00000	2.856E-09	2.856E-09	-4.944E-22	-4.944E-22	-3.565E-11	-3.565E-11	-3.035E-13
1.00625	2.908E-09	2.908E-09	-4.890E-22	-4.890E-22	-3.611E-11	-3.611E-11	-3.000E-13
1.01250	2.959E-09	2.959E-09	-4.833E-22	-4.833E-22	-3.657E-11	-3.657E-11	-2.963E-13
1.01875	3.007E-09	3.007E-09	-4.774E-22	-4.774E-22	-3.702E-11	-3.702E-11	-2.924E-13
1.02500	3.054E-09	3.054E-09	-4.712E-22	-4.712E-22	-3.746E-11	-3.746E-11	-2.884E-13
1.03750	3.143E-09	3.143E-09	-4.583E-22	-4.583E-22	-3.833E-11	-3.833E-11	-2.802E-13
1.05000	3.223E-09	3.223E-09	-4.446E-22	-4.446E-22	-3.917E-11	-3.917E-11	-2.715E-13
1.07500	3.361E-09	3.361E-09	-4.153E-22	-4.153E-22	-4.078E-11	-4.078E-11	-2.535E-13
1.10000	3.469E-09	3.469E-09	-3.844E-22	-3.844E-22	-4.228E-11	-4.228E-11	-2.350E-13
1.15000	3.614E-09	3.614E-09	-3.347E-22	-3.347E-22	-4.497E-11	-4.497E-11	-1.930E-13
1.20000	3.684E-09	3.684E-09	-2.848E-22	-2.848E-22	-4.728E-11	-4.728E-11	-1.558E-13
1.30000	3.691E-09	3.691E-09	-1.949E-22	-1.949E-22	-5.085E-11	-5.085E-11	-1.003E-13
1.40000	3.601E-09	3.601E-09	-1.261E-22	-1.261E-22	-5.322E-11	-5.322E-11	-6.603E-14
1.50000	3.474E-09	3.474E-09	-7.954E-23	-7.954E-23	-5.473E-11	-5.473E-11	-4.481E-14
1.60000	3.330E-09	3.330E-09	-5.001E-23	-5.001E-23	-5.568E-11	-5.568E-11	-3.127E-14
1.70000	3.182E-09	3.182E-09	-3.087E-23	-3.087E-23	-5.628E-11	-5.628E-11	-2.302E-14
1.80000	3.036E-09	3.036E-09	-1.877E-23	-1.877E-23	-5.664E-11	-5.664E-11	-1.766E-14
1.90000	2.896E-09	2.896E-09	-1.129E-23	-1.129E-23	-5.686E-11	-5.686E-11	-1.410E-14

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	30.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	30.0000	0.10000	196.820	7.204E-07	9.849E-01	-7.064E-12	-7.064E-12	7.064E-12
0.20000	30.0000	0.20000	179.189	2.615E-06	9.830E-01	-9.403E-12	-9.403E-12	9.403E-12
0.30000	30.0000	0.30000	162.496	5.229E-06	9.819E-01	-1.233E-11	-1.233E-11	1.233E-11
0.40000	30.0000	0.40000	147.062	1.110E-05	9.826E-01	-1.594E-11	-1.594E-11	1.594E-11
0.50000	30.0000	0.50000	133.325	1.302E-05	9.854E-01	-2.058E-11	-2.058E-11	2.058E-11
0.60000	30.0000	0.60000	121.859	1.494E-05	9.899E-01	-2.547E-11	-2.547E-11	2.547E-11
0.70000	30.0000	0.70000	113.355	1.708E-05	9.932E-01	-2.984E-11	-2.984E-11	2.984E-11
0.80000	30.0000	0.80000	108.513	1.836E-05	9.916E-01	-3.265E-11	-3.265E-11	3.265E-11
0.85000	30.0000	0.85000	107.635	1.964E-05	9.894E-01	-3.318E-11	-3.318E-11	3.318E-11
0.90000	30.0000	0.90000	107.828	2.134E-05	9.884E-01	-3.306E-11	-3.306E-11	3.306E-11
0.92500	30.0000	0.92500	108.325	2.391E-05	9.890E-01	-3.276E-11	-3.276E-11	3.276E-11
0.95000	30.0000	0.95000	109.086	2.391E-05	9.906E-01	-3.230E-11	-3.230E-11	3.230E-11
0.96250	30.0000	0.96250	109.564	2.391E-05	9.918E-01	-3.201E-11	-3.201E-11	3.201E-11
0.97500	30.0000	0.97500	110.105	2.647E-05	9.933E-01	-3.169E-11	-3.169E-11	3.169E-11
0.98125	30.0000	0.98125	110.399	2.647E-05	9.942E-01	-3.152E-11	-3.152E-11	3.152E-11
0.98750	30.0000	0.98750	110.709	2.817E-05	9.951E-01	-3.134E-11	-3.134E-11	3.134E-11
0.99375	30.0000	0.99375	111.034	3.159E-05	9.960E-01	-3.115E-11	-3.115E-11	3.115E-11
1.00000	30.0000	1.00000	111.374	3.159E-05	9.970E-01	-3.095E-11	-3.095E-11	3.095E-11
1.00625	30.0000	1.00625	111.730	3.330E-05	9.980E-01	-3.075E-11	-3.075E-11	3.075E-11
1.01250	30.0000	1.01250	112.101	3.500E-05	9.991E-01	-3.054E-11	-3.054E-11	3.054E-11
1.01875	30.0000	1.01875	112.486	3.586E-05	1.000E 00	-3.032E-11	-3.032E-11	3.032E-11
1.02500	30.0000	1.02500	112.886	3.842E-05	1.001E 00	-3.010E-11	-3.010E-11	3.010E-11
1.03750	30.0000	1.03750	113.730	3.927E-05	1.004E 00	-2.963E-11	-2.963E-11	2.963E-11
1.05000	30.0000	1.05000	114.631	4.183E-05	1.006E 00	-2.914E-11	-2.914E-11	2.914E-11
1.07500	30.0000	1.07500	116.598	4.183E-05	1.011E 00	-2.809E-11	-2.809E-11	2.809E-11
1.10000	30.0000	1.10000	118.776	4.183E-05	1.015E 00	-2.698E-11	-2.698E-11	2.698E-11
1.15000	30.0000	1.15000	123.719	4.183E-05	1.022E 00	-2.461E-11	-2.461E-11	2.461E-11
1.20000	30.0000	1.20000	129.371	4.183E-05	1.026E 00	-2.215E-11	-2.215E-11	2.215E-11
1.30000	30.0000	1.30000	142.450	4.183E-05	1.028E 00	-1.737E-11	-1.737E-11	1.737E-11
1.40000	30.0000	1.40000	157.394	4.525E-05	1.024E 00	-1.339E-11	-1.339E-11	1.339E-11
1.50000	30.0000	1.50000	173.723	4.525E-05	1.018E 00	-1.027E-11	-1.027E-11	1.027E-11
1.60000	30.0000	1.60000	191.082	4.610E-05	1.013E 00	-7.753E-12	-7.753E-12	7.753E-12
1.70000	30.0000	1.70000	209.215	5.293E-05	1.009E 00	-5.815E-12	-5.815E-12	5.815E-12
1.80000	30.0000	1.80000	227.937	5.293E-05	1.006E 00	-4.348E-12	-4.348E-12	4.348E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	7.064E-12	49.901	-3.065E-10	-3.065E-10	3.065E-10	3.065E-10	-1.826E-10	-1.826E-10
0.20000	9.403E-12	99.802	-7.150E-10	-7.150E-10	7.150E-10	7.150E-10	-2.431E-10	-2.431E-10
0.30000	1.233E-11	149.703	-1.255E-09	-1.255E-09	1.255E-09	1.255E-09	-3.187E-10	-3.187E-10
0.40000	1.594E-11	199.605	-1.955E-09	-1.955E-09	1.957E-09	1.957E-09	-4.122E-10	-4.122E-10
0.50000	2.058E-11	249.506	-2.863E-09	-2.863E-09	2.867E-09	2.867E-09	-5.321E-10	-5.321E-10
0.60000	2.547E-11	299.407	-4.012E-09	-4.012E-09	4.017E-09	4.017E-09	-6.585E-10	-6.585E-10
0.70000	2.984E-11	349.308	-5.395E-09	-5.395E-09	5.403E-09	5.403E-09	-7.713E-10	-7.713E-10
0.80000	3.265E-11	399.209	-6.961E-09	-6.961E-09	6.971E-09	6.971E-09	-8.439E-10	-8.439E-10
0.85000	3.318E-11	424.160	-7.782E-09	-7.782E-09	7.795E-09	7.795E-09	-8.578E-10	-8.578E-10
0.90000	3.306E-11	449.110	-8.609E-09	-8.609E-09	8.624E-09	8.624E-09	-8.547E-10	-8.547E-10
0.92500	3.276E-11	461.586	-9.017E-09	-9.017E-09	9.037E-09	9.037E-09	-8.469E-10	-8.469E-10
0.95000	3.230E-11	474.061	-9.423E-09	-9.423E-09	9.444E-09	9.444E-09	-8.350E-10	-8.350E-10
0.96250	3.201E-11	480.299	-9.623E-09	-9.623E-09	9.644E-09	9.644E-09	-8.276E-10	-8.276E-10
0.97500	3.169E-11	486.536	-9.820E-09	-9.820E-09	9.845E-09	9.845E-09	-8.193E-10	-8.193E-10
0.98125	3.152E-11	489.655	-9.918E-09	-9.918E-09	9.944E-09	9.944E-09	-8.148E-10	-8.148E-10
0.98750	3.134E-11	492.774	-1.001E-08	-1.001E-08	1.004E-08	1.004E-08	-8.102E-10	-8.102E-10
0.99375	3.115E-11	495.893	-1.011E-08	-1.011E-08	1.015E-08	1.015E-08	-8.053E-10	-8.053E-10
1.00000	3.095E-11	499.012	-1.020E-08	-1.020E-08	1.024E-08	1.024E-08	-8.002E-10	-8.002E-10
1.00625	3.075E-11	502.130	-1.030E-08	-1.030E-08	1.034E-08	1.034E-08	-7.949E-10	-7.949E-10
1.01250	3.054E-11	505.249	-1.039E-08	-1.039E-08	1.044E-08	1.044E-08	-7.895E-10	-7.895E-10
1.01875	3.032E-11	508.368	-1.049E-08	-1.049E-08	1.054E-08	1.054E-08	-7.838E-10	-7.838E-10
1.02500	3.010E-11	511.487	-1.058E-08	-1.058E-08	1.063E-08	1.063E-08	-7.780E-10	-7.780E-10
1.03750	2.963E-11	517.724	-1.076E-08	-1.076E-08	1.082E-08	1.082E-08	-7.659E-10	-7.659E-10
1.05000	2.914E-11	523.962	-1.094E-08	-1.094E-08	1.101E-08	1.101E-08	-7.532E-10	-7.532E-10
1.07500	2.809E-11	536.437	-1.129E-08	-1.129E-08	1.137E-08	1.137E-08	-7.262E-10	-7.262E-10
1.10000	2.698E-11	548.913	-1.164E-08	-1.164E-08	1.171E-08	1.171E-08	-6.973E-10	-6.973E-10
1.15000	2.461E-11	573.863	-1.228E-08	-1.228E-08	1.236E-08	1.236E-08	-6.361E-10	-6.361E-10
1.20000	2.215E-11	598.814	-1.286E-08	-1.286E-08	1.294E-08	1.294E-08	-5.727E-10	-5.727E-10
1.30000	1.737E-11	648.715	-1.384E-08	-1.384E-08	1.393E-08	1.393E-08	-4.491E-10	-4.491E-10
1.40000	1.339E-11	698.616	-1.459E-08	-1.459E-08	1.470E-08	1.470E-08	-3.461E-10	-3.461E-10
1.50000	1.027E-11	748.517	-1.518E-08	-1.518E-08	1.529E-08	1.529E-08	-2.656E-10	-2.656E-10
1.60000	7.753E-12	798.418	-1.562E-08	-1.562E-08	1.575E-08	1.575E-08	-2.004E-10	-2.004E-10
1.70000	5.815E-12	848.320	-1.593E-08	-1.593E-08	1.611E-08	1.611E-08	-1.503E-10	-1.503E-10
1.80000	4.348E-12	898.221	-1.618E-08	-1.618E-08	1.637E-08	1.637E-08	-1.124E-10	-1.124E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 30.000 θ_D= 0. ρ_0=107.579

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-2.391E-14
0.10000	1.473E-11	1.473E-11	-2.831E-23	-2.831E-23	-3.377E-13	-3.377E-13	-3.063E-14
0.20000	3.917E-11	3.917E-11	-4.462E-23	-4.462E-23	-8.749E-13	-8.749E-13	-4.041E-14
0.30000	7.637E-11	7.637E-11	-6.866E-23	-6.866E-23	-1.711E-12	-1.711E-12	-5.543E-14
0.40000	1.354E-10	1.354E-10	-1.029E-22	-1.029E-22	-2.979E-12	-2.979E-12	-7.801E-14
0.50000	2.295E-10	2.295E-10	-1.512E-22	-1.512E-22	-4.865E-12	-4.865E-12	-1.088E-13
0.60000	3.648E-10	3.648E-10	-2.085E-22	-2.085E-22	-7.550E-12	-7.550E-12	-1.509E-13
0.70000	5.795E-10	5.795E-10	-2.646E-22	-2.646E-22	-1.110E-11	-1.110E-11	-1.989E-13
0.80000	9.174E-10	9.174E-10	-3.031E-22	-3.031E-22	-1.538E-11	-1.538E-11	-2.362E-13
0.85000	1.138E-09	1.138E-09	-3.106E-22	-3.106E-22	-1.768E-11	-1.768E-11	-2.440E-13
0.90000	1.383E-09	1.383E-09	-3.089E-22	-3.089E-22	-2.000E-11	-2.000E-11	-2.423E-13
0.92500	1.510E-09	1.510E-09	-3.047E-22	-3.047E-22	-2.115E-11	-2.115E-11	-2.379E-13
0.95000	1.634E-09	1.634E-09	-2.982E-22	-2.982E-22	-2.228E-11	-2.228E-11	-2.314E-13
0.96250	1.694E-09	1.694E-09	-2.943E-22	-2.943E-22	-2.283E-11	-2.283E-11	-2.274E-13
0.97500	1.752E-09	1.752E-09	-2.898E-22	-2.898E-22	-2.338E-11	-2.338E-11	-2.230E-13
0.98125	1.780E-09	1.780E-09	-2.875E-22	-2.875E-22	-2.365E-11	-2.365E-11	-2.207E-13
0.98750	1.808E-09	1.808E-09	-2.850E-22	-2.850E-22	-2.392E-11	-2.392E-11	-2.182E-13
0.99375	1.835E-09	1.835E-09	-2.824E-22	-2.824E-22	-2.418E-11	-2.418E-11	-2.157E-13
1.00000	1.861E-09	1.861E-09	-2.797E-22	-2.797E-22	-2.444E-11	-2.444E-11	-2.132E-13
1.00625	1.886E-09	1.886E-09	-2.769E-22	-2.769E-22	-2.471E-11	-2.471E-11	-2.105E-13
1.01250	1.910E-09	1.910E-09	-2.741E-22	-2.741E-22	-2.496E-11	-2.496E-11	-2.078E-13
1.01875	1.934E-09	1.934E-09	-2.711E-22	-2.711E-22	-2.522E-11	-2.522E-11	-2.050E-13
1.02500	1.957E-09	1.957E-09	-2.681E-22	-2.681E-22	-2.547E-11	-2.547E-11	-2.022E-13
1.03750	2.000E-09	2.000E-09	-2.619E-22	-2.619E-22	-2.597E-11	-2.597E-11	-1.964E-13
1.05000	2.039E-09	2.039E-09	-2.553E-22	-2.553E-22	-2.645E-11	-2.645E-11	-1.905E-13
1.07500	2.108E-09	2.108E-09	-2.416E-22	-2.416E-22	-2.738E-11	-2.738E-11	-1.784E-13
1.10000	2.163E-09	2.163E-09	-2.273E-22	-2.273E-22	-2.826E-11	-2.826E-11	-1.663E-13
1.15000	2.243E-09	2.243E-09	-1.979E-22	-1.979E-22	-2.985E-11	-2.985E-11	-1.427E-13
1.20000	2.287E-09	2.287E-09	-1.690E-22	-1.690E-22	-3.122E-11	-3.122E-11	-1.213E-13
1.30000	2.300E-09	2.300E-09	-1.171E-22	-1.171E-22	-3.334E-11	-3.334E-11	-8.680E-14
1.40000	2.260E-09	2.260E-09	-7.832E-23	-7.832E-23	-3.479E-11	-3.479E-11	-6.189E-14
1.50000	2.194E-09	2.194E-09	-5.139E-23	-5.139E-23	-3.574E-11	-3.574E-11	-4.462E-14
1.60000	2.114E-09	2.114E-09	-3.283E-23	-3.283E-23	-3.637E-11	-3.637E-11	-3.339E-14
1.70000	2.028E-09	2.028E-09	-2.054E-23	-2.054E-23	-3.676E-11	-3.676E-11	-2.585E-14
1.80000	1.942E-09	1.942E-09	-1.266E-23	-1.266E-23	-3.700E-11	-3.700E-11	-2.068E-14

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 35.000 θ_D= 0. ρ_0=123.410

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	35.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	35.0000	0.10000	197.919	0.	9.864E-01	-6.940E-12	-6.940E-12	6.940E-12
0.20000	35.0000	0.20000	181.595	0.	9.852E-01	-9.043E-12	-9.043E-12	9.043E-12
0.30000	35.0000	0.30000	166.454	0.	9.850E-01	-1.156E-11	-1.156E-11	1.156E-11
0.40000	35.0000	0.40000	152.850	0.	9.860E-01	-1.441E-11	-1.441E-11	1.441E-11
0.50000	35.0000	0.50000	141.228	0.	9.883E-01	-1.777E-11	-1.777E-11	1.777E-11
0.60000	35.0000	0.60000	132.111	0.	9.906E-01	-2.105E-11	-2.105E-11	2.105E-11
0.70000	35.0000	0.70000	126.045	0.	9.910E-01	-2.357E-11	-2.357E-11	2.357E-11
0.80000	35.0000	0.80000	123.479	2.561E-06	9.892E-01	-2.472E-11	-2.472E-11	2.472E-11
0.85000	35.0000	0.85000	123.588	2.561E-06	9.887E-01	-2.467E-11	-2.467E-11	2.467E-11
0.90000	35.0000	0.90000	124.630	4.269E-06	9.897E-01	-2.419E-11	-2.419E-11	2.419E-11
0.92500	35.0000	0.92500	125.494	4.269E-06	9.909E-01	-2.381E-11	-2.381E-11	2.381E-11
0.95000	35.0000	0.95000	126.581	5.976E-06	9.926E-01	-2.333E-11	-2.333E-11	2.333E-11
0.96250	35.0000	0.96250	127.206	6.830E-06	9.936E-01	-2.306E-11	-2.306E-11	2.306E-11
0.97500	35.0000	0.97500	127.885	7.684E-06	9.948E-01	-2.277E-11	-2.277E-11	2.277E-11
0.98125	35.0000	0.98125	128.244	8.538E-06	9.954E-01	-2.262E-11	-2.262E-11	2.262E-11
0.98750	35.0000	0.98750	128.616	8.538E-06	9.960E-01	-2.247E-11	-2.247E-11	2.247E-11
0.99375	35.0000	0.99375	129.001	1.110E-05	9.966E-01	-2.231E-11	-2.231E-11	2.231E-11
1.00000	35.0000	1.00000	129.399	1.110E-05	9.973E-01	-2.214E-11	-2.214E-11	2.214E-11
1.00625	35.0000	1.00625	129.810	1.451E-05	9.980E-01	-2.197E-11	-2.197E-11	2.197E-11
1.01250	35.0000	1.01250	130.233	1.622E-05	9.987E-01	-2.180E-11	-2.180E-11	2.180E-11
1.01875	35.0000	1.01875	130.669	1.622E-05	9.994E-01	-2.162E-11	-2.162E-11	2.162E-11
1.02500	35.0000	1.02500	131.117	1.622E-05	1.000E 00	-2.144E-11	-2.144E-11	2.144E-11
1.03750	35.0000	1.03750	132.050	1.622E-05	1.002E 00	-2.108E-11	-2.108E-11	2.108E-11
1.05000	35.0000	1.05000	133.030	1.622E-05	1.003E 00	-2.070E-11	-2.070E-11	2.070E-11
1.07500	35.0000	1.07500	135.131	1.622E-05	1.006E 00	-1.990E-11	-1.990E-11	1.990E-11
1.10000	35.0000	1.10000	137.410	1.622E-05	1.009E 00	-1.908E-11	-1.908E-11	1.908E-11
1.15000	35.0000	1.15000	142.469	1.622E-05	1.013E 00	-1.736E-11	-1.736E-11	1.736E-11
1.20000	35.0000	1.20000	148.137	1.622E-05	1.017E 00	-1.563E-11	-1.563E-11	1.563E-11
1.30000	35.0000	1.30000	161.040	1.622E-05	1.020E 00	-1.262E-11	-1.262E-11	1.262E-11
1.40000	35.0000	1.40000	175.638	1.622E-05	1.019E 00	-9.960E-12	-9.960E-12	9.960E-12
1.50000	35.0000	1.50000	191.545	2.049E-05	1.016E 00	-7.695E-12	-7.695E-12	7.695E-12
1.60000	35.0000	1.60000	208.462	2.391E-05	1.013E 00	-5.883E-12	-5.883E-12	5.883E-12
1.70000	35.0000	1.70000	226.161	2.732E-05	1.010E 00	-4.469E-12	-4.469E-12	4.469E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 35.000 θ_D= 0. ρ_a= 123.410

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	6.940E-12	49.901	-3.038E-10	-3.038E-10	3.038E-10	3.038E-10	-1.794E-10	-1.794E-10
0.20000	9.043E-12	99.802	-7.008E-10	-7.008E-10	7.008E-10	7.008E-10	-2.338E-10	-2.338E-10
0.30000	1.156E-11	149.703	-1.213E-09	-1.213E-09	1.213E-09	1.213E-09	-2.988E-10	-2.988E-10
0.40000	1.441E-11	199.605	-1.860E-09	-1.860E-09	1.860E-09	1.860E-09	-3.726E-10	-3.726E-10
0.50000	1.777E-11	249.506	-2.661E-09	-2.661E-09	2.661E-09	2.661E-09	-4.594E-10	-4.594E-10
0.60000	2.105E-11	299.407	-3.632E-09	-3.632E-09	3.632E-09	3.632E-09	-5.442E-10	-5.442E-10
0.70000	2.357E-11	349.308	-4.749E-09	-4.749E-09	4.749E-09	4.749E-09	-6.092E-10	-6.092E-10
0.80000	2.472E-11	399.209	-5.961E-09	-5.961E-09	5.961E-09	5.961E-09	-6.390E-10	-6.390E-10
0.85000	2.467E-11	424.160	-6.578E-09	-6.578E-09	6.578E-09	6.578E-09	-6.377E-10	-6.377E-10
0.90000	2.419E-11	449.110	-7.188E-09	-7.188E-09	7.188E-09	7.188E-09	-6.254E-10	-6.254E-10
0.92500	2.381E-11	461.586	-7.488E-09	-7.488E-09	7.488E-09	7.488E-09	-6.155E-10	-6.155E-10
0.95000	2.333E-11	474.061	-7.782E-09	-7.782E-09	7.782E-09	7.782E-09	-6.032E-10	-6.032E-10
0.96250	2.306E-11	480.299	-7.926E-09	-7.926E-09	7.927E-09	7.927E-09	-5.962E-10	-5.962E-10
0.97500	2.277E-11	486.536	-8.068E-09	-8.068E-09	8.070E-09	8.070E-09	-5.887E-10	-5.887E-10
0.98125	2.262E-11	489.655	-8.139E-09	-8.139E-09	8.142E-09	8.142E-09	-5.848E-10	-5.848E-10
0.98750	2.247E-11	492.774	-8.209E-09	-8.209E-09	8.212E-09	8.212E-09	-5.808E-10	-5.808E-10
0.99375	2.231E-11	495.893	-8.278E-09	-8.278E-09	8.283E-09	8.283E-09	-5.766E-10	-5.766E-10
1.00000	2.214E-11	499.012	-8.347E-09	-8.347E-09	8.352E-09	8.352E-09	-5.724E-10	-5.724E-10
1.00625	2.197E-11	502.130	-8.414E-09	-8.414E-09	8.422E-09	8.422E-09	-5.680E-10	-5.680E-10
1.01250	2.180E-11	505.249	-8.482E-09	-8.482E-09	8.492E-09	8.492E-09	-5.636E-10	-5.636E-10
1.01875	2.162E-11	508.368	-8.549E-09	-8.549E-09	8.560E-09	8.560E-09	-5.590E-10	-5.590E-10
1.02500	2.144E-11	511.487	-8.615E-09	-8.615E-09	8.628E-09	8.628E-09	-5.544E-10	-5.544E-10
1.03750	2.108E-11	517.724	-8.747E-09	-8.747E-09	8.761E-09	8.761E-09	-5.448E-10	-5.448E-10
1.05000	2.070E-11	523.962	-8.877E-09	-8.877E-09	8.891E-09	8.891E-09	-5.350E-10	-5.350E-10
1.07500	1.990E-11	536.437	-9.131E-09	-9.131E-09	9.145E-09	9.145E-09	-5.145E-10	-5.145E-10
1.10000	1.908E-11	548.913	-9.374E-09	-9.374E-09	9.388E-09	9.388E-09	-4.932E-10	-4.932E-10
1.15000	1.736E-11	573.863	-9.829E-09	-9.829E-09	9.843E-09	9.843E-09	-4.489E-10	-4.489E-10
1.20000	1.563E-11	598.814	-1.024E-08	-1.024E-08	1.025E-08	1.025E-08	-4.040E-10	-4.040E-10
1.30000	1.262E-11	648.715	-1.094E-08	-1.094E-08	1.096E-08	1.096E-08	-3.263E-10	-3.263E-10
1.40000	9.960E-12	698.616	-1.151E-08	-1.151E-08	1.152E-08	1.152E-08	-2.575E-10	-2.575E-10
1.50000	7.695E-12	748.517	-1.194E-08	-1.194E-08	1.196E-08	1.196E-08	-1.989E-10	-1.989E-10
1.60000	5.883E-12	798.418	-1.227E-08	-1.227E-08	1.231E-08	1.231E-08	-1.521E-10	-1.521E-10
1.70000	4.469E-12	848.320	-1.252E-08	-1.252E-08	1.257E-08	1.257E-08	-1.155E-10	-1.155E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_o= 35.000 θ_D= 0. ρ_a=123.410

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-3.146E-14
0.10000	1.664E-11	1.664E-11	-2.752E-23	-2.752E-23	-3.327E-13	-3.327E-13	-3.968E-14
0.20000	4.349E-11	4.349E-11	-4.194E-23	-4.194E-23	-8.458E-13	-8.458E-13	-5.105E-14
0.30000	8.298E-11	8.298E-11	-6.199E-23	-6.199E-23	-1.616E-12	-1.616E-12	-6.733E-14
0.40000	1.414E-10	1.414E-10	-8.807E-23	-8.807E-23	-2.731E-12	-2.731E-12	-9.008E-14
0.50000	2.304E-10	2.304E-10	-1.212E-22	-1.212E-22	-4.288E-12	-4.288E-12	-1.174E-13
0.60000	3.518E-10	3.518E-10	-1.565E-22	-1.565E-22	-6.367E-12	-6.367E-12	-1.480E-13
0.70000	5.171E-10	5.171E-10	-1.855E-22	-1.855E-22	-8.938E-12	-8.938E-12	-1.753E-13
0.80000	7.328E-10	7.328E-10	-1.993E-22	-1.993E-22	-1.184E-11	-1.184E-11	-1.891E-13
0.85000	8.552E-10	8.552E-10	-1.987E-22	-1.987E-22	-1.333E-11	-1.333E-11	-1.885E-13
0.90000	9.801E-10	9.801E-10	-1.930E-22	-1.930E-22	-1.480E-11	-1.480E-11	-1.828E-13
0.92500	1.041E-09	1.041E-09	-1.883E-22	-1.883E-22	-1.551E-11	-1.551E-11	-1.782E-13
0.95000	1.098E-09	1.098E-09	-1.827E-22	-1.827E-22	-1.621E-11	-1.621E-11	-1.727E-13
0.96250	1.125E-09	1.125E-09	-1.795E-22	-1.795E-22	-1.654E-11	-1.654E-11	-1.696E-13
0.97500	1.152E-09	1.152E-09	-1.761E-22	-1.761E-22	-1.688E-11	-1.688E-11	-1.664E-13
0.98125	1.164E-09	1.164E-09	-1.744E-22	-1.744E-22	-1.704E-11	-1.704E-11	-1.647E-13
0.98750	1.177E-09	1.177E-09	-1.726E-22	-1.726E-22	-1.720E-11	-1.720E-11	-1.630E-13
0.99375	1.189E-09	1.189E-09	-1.707E-22	-1.707E-22	-1.736E-11	-1.736E-11	-1.612E-13
1.00000	1.200E-09	1.200E-09	-1.688E-22	-1.688E-22	-1.752E-11	-1.752E-11	-1.594E-13
1.00625	1.212E-09	1.212E-09	-1.669E-22	-1.669E-22	-1.768E-11	-1.768E-11	-1.576E-13
1.01250	1.223E-09	1.223E-09	-1.649E-22	-1.649E-22	-1.783E-11	-1.783E-11	-1.558E-13
1.01875	1.233E-09	1.233E-09	-1.629E-22	-1.629E-22	-1.799E-11	-1.799E-11	-1.540E-13
1.02500	1.244E-09	1.244E-09	-1.609E-22	-1.609E-22	-1.814E-11	-1.814E-11	-1.521E-13
1.03750	1.263E-09	1.263E-09	-1.567E-22	-1.567E-22	-1.844E-11	-1.844E-11	-1.483E-13
1.05000	1.281E-09	1.281E-09	-1.525E-22	-1.525E-22	-1.873E-11	-1.873E-11	-1.445E-13
1.07500	1.313E-09	1.313E-09	-1.438E-22	-1.438E-22	-1.928E-11	-1.928E-11	-1.368E-13
1.10000	1.340E-09	1.340E-09	-1.349E-22	-1.349E-22	-1.980E-11	-1.980E-11	-1.291E-13
1.15000	1.380E-09	1.380E-09	-1.171E-22	-1.171E-22	-2.074E-11	-2.074E-11	-1.142E-13
1.20000	1.404E-09	1.404E-09	-9.987E-23	-9.987E-23	-2.155E-11	-2.155E-11	-1.004E-13
1.30000	1.418E-09	1.418E-09	-7.129E-23	-7.129E-23	-2.283E-11	-2.283E-11	-7.531E-14
1.40000	1.402E-09	1.402E-09	-4.891E-23	-4.891E-23	-2.372E-11	-2.372E-11	-5.671E-14
1.50000	1.369E-09	1.369E-09	-3.244E-23	-3.244E-23	-2.432E-11	-2.432E-11	-4.363E-14
1.60000	1.324E-09	1.324E-09	-2.095E-23	-2.095E-23	-2.471E-11	-2.471E-11	-3.435E-14
1.70000	1.276E-09	1.276E-09	-1.325E-23	-1.325E-23	-2.497E-11	-2.497E-11	-2.774E-14

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 45.000 θ_D= 0. ρ_a= 152.140

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	45.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	45.0000	0.10000	200.523	0.	9.780E-01	-6.655E-12	-6.655E-12	6.655E-12
0.20000	45.0000	0.20000	187.220	0.	9.776E-01	-8.255E-12	-8.255E-12	8.255E-12
0.30000	45.0000	0.30000	175.554	0.	9.785E-01	-9.974E-12	-9.974E-12	9.974E-12
0.40000	45.0000	0.40000	165.870	0.	9.801E-01	-1.167E-11	-1.167E-11	1.167E-11
0.50000	45.0000	0.50000	158.532	0.	9.815E-01	-1.315E-11	-1.315E-11	1.315E-11
0.60000	45.0000	0.60000	153.876	0.	9.817E-01	-1.418E-11	-1.418E-11	1.418E-11
0.70000	45.0000	0.70000	152.148	2.561E-06	9.808E-01	-1.458E-11	-1.458E-11	1.458E-11
0.80000	45.0000	0.80000	153.448	8.538E-06	9.811E-01	-1.428E-11	-1.428E-11	1.428E-11
0.85000	45.0000	0.85000	155.216	1.323E-05	9.828E-01	-1.387E-11	-1.387E-11	1.387E-11
0.90000	45.0000	0.90000	157.700	1.878E-05	9.859E-01	-1.332E-11	-1.332E-11	1.332E-11
0.92500	45.0000	0.92500	159.200	1.878E-05	9.879E-01	-1.300E-11	-1.300E-11	1.300E-11
0.95000	45.0000	0.95000	160.866	2.049E-05	9.903E-01	-1.266E-11	-1.266E-11	1.266E-11
0.96250	45.0000	0.96250	161.760	2.134E-05	9.915E-01	-1.247E-11	-1.247E-11	1.247E-11
0.97500	45.0000	0.97500	162.693	2.134E-05	9.929E-01	-1.229E-11	-1.229E-11	1.229E-11
0.98125	45.0000	0.98125	163.174	2.391E-05	9.935E-01	-1.219E-11	-1.219E-11	1.219E-11
0.98750	45.0000	0.98750	163.665	2.476E-05	9.942E-01	-1.210E-11	-1.210E-11	1.210E-11
0.99375	45.0000	0.99375	164.166	2.476E-05	9.949E-01	-1.200E-11	-1.200E-11	1.200E-11
1.00000	45.0000	1.00000	164.676	2.647E-05	9.956E-01	-1.190E-11	-1.190E-11	1.190E-11
1.00625	45.0000	1.00625	165.195	2.817E-05	9.963E-01	-1.180E-11	-1.180E-11	1.180E-11
1.01250	45.0000	1.01250	165.723	2.817E-05	9.970E-01	-1.170E-11	-1.170E-11	1.170E-11
1.01875	45.0000	1.01875	166.261	3.074E-05	9.977E-01	-1.160E-11	-1.160E-11	1.160E-11
1.02500	45.0000	1.02500	166.808	3.159E-05	9.984E-01	-1.149E-11	-1.149E-11	1.149E-11
1.03750	45.0000	1.03750	167.929	3.159E-05	9.999E-01	-1.129E-11	-1.129E-11	1.129E-11
1.05000	45.0000	1.05000	169.085	3.159E-05	1.001E 00	-1.108E-11	-1.108E-11	1.108E-11
1.07500	45.0000	1.07500	171.500	3.159E-05	1.004E 00	-1.065E-11	-1.065E-11	1.065E-11
1.10000	45.0000	1.10000	174.048	3.159E-05	1.007E 00	-1.022E-11	-1.022E-11	1.022E-11
1.15000	45.0000	1.15000	179.320	3.159E-05	1.012E 00	-9.353E-12	-9.353E-12	9.353E-12
1.20000	45.0000	1.20000	185.454	3.159E-05	1.015E 00	-8.494E-12	-8.494E-12	8.494E-12
1.30000	45.0000	1.30000	198.544	3.159E-05	1.020E 00	-6.870E-12	-6.870E-12	6.870E-12
1.40000	45.0000	1.40000	213.007	3.159E-05	1.022E 00	-5.482E-12	-5.482E-12	5.482E-12
1.50000	45.0000	1.50000	228.583	3.159E-05	1.021E 00	-4.304E-12	-4.304E-12	4.304E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 45.000 θ_D= 0. ρ_a= 152.140

z	$_x\mu'$-1.0	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	6.655E-12	49.901	-2.975E-10	-2.975E-10	2.975E-10	2.975E-10	-1.720E-10	-1.720E-10
0.20000	8.255E-12	99.802	-6.688E-10	-6.688E-10	6.688E-10	6.688E-10	-2.134E-10	-2.134E-10
0.30000	9.974E-12	149.703	-1.123E-09	-1.123E-09	1.123E-09	1.123E-09	-2.578E-10	-2.578E-10
0.40000	1.167E-11	199.605	-1.664E-09	-1.664E-09	1.664E-09	1.664E-09	-3.017E-10	-3.017E-10
0.50000	1.315E-11	249.506	-2.284E-09	-2.284E-09	2.284E-09	2.284E-09	-3.398E-10	-3.398E-10
0.60000	1.418E-11	299.407	-2.968E-09	-2.968E-09	2.968E-09	2.968E-09	-3.665E-10	-3.665E-10
0.70000	1.458E-11	349.308	-3.689E-09	-3.689E-09	3.689E-09	3.689E-09	-3.769E-10	-3.769E-10
0.80000	1.428E-11	399.209	-4.410E-09	-4.410E-09	4.413E-09	4.413E-09	-3.690E-10	-3.690E-10
0.85000	1.387E-11	424.160	-4.760E-09	-4.760E-09	4.766E-09	4.766E-09	-3.586E-10	-3.586E-10
0.90000	1.332E-11	449.110	-5.097E-09	-5.097E-09	5.109E-09	5.109E-09	-3.444E-10	-3.444E-10
0.92500	1.300E-11	461.586	-5.261E-09	-5.261E-09	5.273E-09	5.273E-09	-3.362E-10	-3.362E-10
0.95000	1.266E-11	474.061	-5.419E-09	-5.419E-09	5.434E-09	5.434E-09	-3.272E-10	-3.272E-10
0.96250	1.247E-11	480.299	-5.497E-09	-5.497E-09	5.514E-09	5.514E-09	-3.225E-10	-3.225E-10
0.97500	1.229E-11	486.536	-5.574E-09	-5.574E-09	5.591E-09	5.591E-09	-3.176E-10	-3.176E-10
0.98125	1.219E-11	489.655	-5.610E-09	-5.610E-09	5.631E-09	5.631E-09	-3.152E-10	-3.152E-10
0.98750	1.210E-11	492.774	-5.647E-09	-5.647E-09	5.670E-09	5.670E-09	-3.127E-10	-3.127E-10
0.99375	1.200E-11	495.893	-5.685E-09	-5.685E-09	5.708E-09	5.708E-09	-3.101E-10	-3.101E-10
1.00000	1.190E-11	499.011	-5.720E-09	-5.720E-09	5.747E-09	5.747E-09	-3.076E-10	-3.076E-10
1.00625	1.180E-11	502.130	-5.755E-09	-5.755E-09	5.786E-09	5.786E-09	-3.050E-10	-3.050E-10
1.01250	1.170E-11	505.249	-5.792E-09	-5.792E-09	5.822E-09	5.822E-09	-3.024E-10	-3.024E-10
1.01875	1.160E-11	508.368	-5.825E-09	-5.825E-09	5.862E-09	5.862E-09	-2.998E-10	-2.998E-10
1.02500	1.149E-11	511.487	-5.860E-09	-5.860E-09	5.899E-09	5.899E-09	-2.971E-10	-2.971E-10
1.03750	1.129E-11	517.724	-5.931E-09	-5.931E-09	5.970E-09	5.970E-09	-2.918E-10	-2.918E-10
1.05000	1.108E-11	523.962	-5.996E-09	-5.996E-09	6.045E-09	6.045E-09	-2.864E-10	-2.864E-10
1.07500	1.065E-11	536.437	-6.131E-09	-6.131E-09	6.181E-09	6.181E-09	-2.754E-10	-2.754E-10
1.10000	1.022E-11	548.913	-6.259E-09	-6.259E-09	6.312E-09	6.312E-09	-2.642E-10	-2.642E-10
1.15000	9.353E-12	573.863	-6.503E-09	-6.503E-09	6.557E-09	6.557E-09	-2.418E-10	-2.418E-10
1.20000	8.494E-12	598.814	-6.726E-09	-6.726E-09	6.779E-09	6.779E-09	-2.196E-10	-2.196E-10
1.30000	6.870E-12	648.715	-7.109E-09	-7.109E-09	7.162E-09	7.162E-09	-1.776E-10	-1.776E-10
1.40000	5.482E-12	698.616	-7.416E-09	-7.416E-09	7.469E-09	7.469E-09	-1.417E-10	-1.417E-10
1.50000	4.304E-12	748.517	-7.657E-09	-7.657E-09	7.714E-09	7.714E-09	-1.113E-10	-1.113E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-4.782E-14
0.10000	1.970E-11	1.970E-11	-2.573E-23	-2.573E-23	-3.212E-13	-3.212E-13	-5.815E-14
0.20000	4.885E-11	4.885E-11	-3.627E-23	-3.627E-23	-7.819E-13	-7.819E-13	-7.079E-14
0.30000	8.871E-11	8.871E-11	-4.901E-23	-4.901E-23	-1.417E-12	-1.417E-12	-8.619E-14
0.40000	1.414E-10	1.414E-10	-6.293E-23	-6.293E-23	-2.254E-12	-2.254E-12	-1.036E-13
0.50000	2.124E-10	2.124E-10	-7.606E-23	-7.606E-23	-3.297E-12	-3.297E-12	-1.206E-13
0.60000	3.024E-10	3.024E-10	-8.577E-23	-8.577E-23	-4.513E-12	-4.513E-12	-1.338E-13
0.70000	4.075E-10	4.075E-10	-8.968E-23	-8.968E-23	-5.834E-12	-5.834E-12	-1.392E-13
0.80000	5.213E-10	5.213E-10	-8.672E-23	-8.672E-23	-7.162E-12	-7.162E-12	-1.351E-13
0.85000	5.775E-10	5.775E-10	-8.285E-23	-8.285E-23	-7.797E-12	-7.797E-12	-1.298E-13
0.90000	6.299E-10	6.299E-10	-7.771E-23	-7.771E-23	-8.398E-12	-8.398E-12	-1.229E-13
0.92500	6.540E-10	6.540E-10	-7.476E-23	-7.476E-23	-8.683E-12	-8.683E-12	-1.190E-13
0.95000	6.763E-10	6.763E-10	-7.161E-23	-7.161E-23	-8.957E-12	-8.957E-12	-1.148E-13
0.96250	6.867E-10	6.867E-10	-6.998E-23	-6.998E-23	-9.089E-12	-9.089E-12	-1.127E-13
0.97500	6.966E-10	6.966E-10	-6.831E-23	-6.831E-23	-9.219E-12	-9.219E-12	-1.105E-13
0.98125	7.014E-10	7.014E-10	-6.747E-23	-6.747E-23	-9.282E-12	-9.282E-12	-1.095E-13
0.98750	7.061E-10	7.061E-10	-6.662E-23	-6.662E-23	-9.345E-12	-9.345E-12	-1.084E-13
0.99375	7.106E-10	7.106E-10	-6.576E-23	-6.576E-23	-9.407E-12	-9.407E-12	-1.073E-13
1.00000	7.150E-10	7.150E-10	-6.490E-23	-6.490E-23	-9.468E-12	-9.468E-12	-1.062E-13
1.00625	7.192E-10	7.192E-10	-6.404E-23	-6.404E-23	-9.528E-12	-9.528E-12	-1.051E-13
1.01250	7.233E-10	7.233E-10	-6.317E-23	-6.317E-23	-9.587E-12	-9.587E-12	-1.039E-13
1.01875	7.273E-10	7.273E-10	-6.230E-23	-6.230E-23	-9.646E-12	-9.646E-12	-1.028E-13
1.02500	7.312E-10	7.312E-10	-6.143E-23	-6.143E-23	-9.704E-12	-9.704E-12	-1.017E-13
1.03750	7.385E-10	7.385E-10	-5.968E-23	-5.968E-23	-9.817E-12	-9.817E-12	-9.952E-14
1.05000	7.453E-10	7.453E-10	-5.792E-23	-5.792E-23	-9.927E-12	-9.927E-12	-9.732E-14
1.07500	7.574E-10	7.574E-10	-5.442E-23	-5.442E-23	-1.014E-11	-1.014E-11	-9.295E-14
1.10000	7.674E-10	7.674E-10	-5.096E-23	-5.096E-23	-1.033E-11	-1.033E-11	-8.867E-14
1.15000	7.825E-10	7.825E-10	-4.424E-23	-4.424E-23	-1.069E-11	-1.069E-11	-8.048E-14
1.20000	7.919E-10	7.919E-10	-3.796E-23	-3.796E-23	-1.100E-11	-1.100E-11	-7.291E-14
1.30000	7.967E-10	7.967E-10	-2.708E-23	-2.708E-23	-1.148E-11	-1.148E-11	-5.989E-14
1.40000	7.876E-10	7.876E-10	-1.862E-23	-1.862E-23	-1.182E-11	-1.182E-11	-4.922E-14
1.50000	7.695E-10	7.695E-10	-1.245E-23	-1.245E-23	-1.205E-11	-1.205E-11	-4.106E-14

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 55.000 θ_D= 0. ρ_a=176.248

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	55.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	55.0000	0.10000	203.582	0.	9.740E-01	-6.346E-12	-6.346E-12	6.346E-12
0.20000	55.0000	0.20000	193.711	0.	9.741E-01	-7.430E-12	-7.430E-12	7.430E-12
0.30000	55.0000	0.30000	185.817	0.	9.747E-01	-8.445E-12	-8.445E-12	8.445E-12
0.40000	55.0000	0.40000	180.161	0.	9.752E-01	-9.256E-12	-9.256E-12	9.256E-12
0.50000	55.0000	0.50000	176.957	0.	9.752E-01	-9.750E-12	-9.750E-12	9.750E-12
0.60000	55.0000	0.60000	176.340	1.281E-06	9.748E-01	-9.848E-12	-9.848E-12	9.848E-12
0.70000	55.0000	0.70000	178.335	4.696E-06	9.753E-01	-9.534E-12	-9.534E-12	9.534E-12
0.80000	55.0000	0.80000	182.857	5.976E-06	9.786E-01	-8.860E-12	-8.860E-12	8.860E-12
0.85000	55.0000	0.85000	186.012	5.976E-06	9.816E-01	-8.418E-12	-8.418E-12	8.418E-12
0.90000	55.0000	0.90000	189.726	5.976E-06	9.856E-01	-7.926E-12	-7.926E-12	7.926E-12
0.92500	55.0000	0.92500	191.782	9.392E-06	9.878E-01	-7.666E-12	-7.666E-12	7.666E-12
0.95000	55.0000	0.95000	193.966	1.195E-05	9.901E-01	-7.399E-12	-7.399E-12	7.399E-12
0.96250	55.0000	0.96250	195.104	1.281E-05	9.913E-01	-7.264E-12	-7.264E-12	7.264E-12
0.97500	55.0000	0.97500	196.273	1.451E-05	9.926E-01	-7.127E-12	-7.127E-12	7.127E-12
0.98125	55.0000	0.98125	196.868	1.451E-05	9.932E-01	-7.059E-12	-7.059E-12	7.059E-12
0.98750	55.0000	0.98750	197.471	1.451E-05	9.938E-01	-6.990E-12	-6.990E-12	6.990E-12
0.99375	55.0000	0.99375	198.081	1.793E-05	9.944E-01	-6.921E-12	-6.921E-12	6.921E-12
1.00000	55.0000	1.00000	198.699	1.878E-05	9.950E-01	-6.852E-12	-6.852E-12	6.852E-12
1.00625	55.0000	1.00625	199.323	2.049E-05	9.957E-01	-6.783E-12	-6.783E-12	6.783E-12
1.01250	55.0000	1.01250	199.955	2.049E-05	9.963E-01	-6.714E-12	-6.714E-12	6.714E-12
1.01875	55.0000	1.01875	200.593	2.049E-05	9.969E-01	-6.648E-12	-6.648E-12	6.648E-12
1.02500	55.0000	1.02500	201.239	2.305E-05	9.975E-01	-6.581E-12	-6.581E-12	6.581E-12
1.03750	55.0000	1.03750	202.551	2.476E-05	9.987E-01	-6.449E-12	-6.449E-12	6.449E-12
1.05000	55.0000	1.05000	203.890	2.476E-05	9.999E-01	-6.316E-12	-6.316E-12	6.316E-12
1.07500	55.0000	1.07500	206.646	2.561E-05	1.002E 00	-6.051E-12	-6.051E-12	6.051E-12
1.10000	55.0000	1.10000	209.505	2.732E-05	1.005E 00	-5.789E-12	-5.789E-12	5.789E-12
1.15000	55.0000	1.15000	215.511	2.817E-05	1.009E 00	-5.273E-12	-5.273E-12	5.273E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 55.000 θ_D= 0. ρ_a=176.248

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	6.340E-12	49.901	-2.904E-10	-2.904E-10	2.904E-10	2.904E-10	-1.641E-10	-1.641E-10
0.20000	7.430E-12	99.802	-6.340E-10	-6.340E-10	6.340E-10	6.340E-10	-1.921E-10	-1.921E-10
0.30000	8.445E-12	149.703	-1.031E-09	-1.031E-09	1.031E-09	1.031E-09	-2.183E-10	-2.183E-10
0.40000	9.256E-12	199.605	-1.473E-09	-1.473E-09	1.473E-09	1.473E-09	-2.393E-10	-2.393E-10
0.50000	9.750E-12	249.506	-1.949E-09	-1.949E-09	1.949E-09	1.949E-09	-2.520E-10	-2.520E-10
0.60000	9.848E-12	299.407	-2.440E-09	-2.440E-09	2.440E-09	2.440E-09	-2.546E-10	-2.546E-10
0.70000	9.534E-12	349.308	-2.925E-09	-2.925E-09	2.925E-09	2.925E-09	-2.465E-10	-2.465E-10
0.80000	8.860E-12	399.209	-3.385E-09	-3.385E-09	3.386E-09	3.386E-09	-2.290E-10	-2.290E-10
0.85000	8.418E-12	424.160	-3.600E-09	-3.600E-09	3.602E-09	3.602E-09	-2.176E-10	-2.176E-10
0.90000	7.926E-12	449.110	-3.804E-09	-3.804E-09	3.806E-09	3.806E-09	-2.049E-10	-2.049E-10
0.92500	7.666E-12	461.586	-3.901E-09	-3.901E-09	3.904E-09	3.904E-09	-1.982E-10	-1.982E-10
0.95000	7.399E-12	474.061	-3.994E-09	-3.994E-09	3.999E-09	3.999E-09	-1.913E-10	-1.913E-10
0.96250	7.264E-12	480.299	-4.039E-09	-4.039E-09	4.045E-09	4.045E-09	-1.878E-10	-1.878E-10
0.97500	7.127E-12	486.536	-4.083E-09	-4.083E-09	4.091E-09	4.091E-09	-1.843E-10	-1.843E-10
0.98125	7.059E-12	489.655	-4.105E-09	-4.105E-09	4.113E-09	4.113E-09	-1.825E-10	-1.825E-10
0.98750	6.990E-12	492.774	-4.127E-09	-4.127E-09	4.135E-09	4.135E-09	-1.807E-10	-1.807E-10
0.99375	6.921E-12	495.893	-4.147E-09	-4.147E-09	4.159E-09	4.159E-09	-1.789E-10	-1.789E-10
1.00000	6.852E-12	499.011	-4.167E-09	-4.167E-09	4.181E-09	4.181E-09	-1.771E-10	-1.771E-10
1.00625	6.783E-12	502.130	-4.187E-09	-4.187E-09	4.203E-09	4.203E-09	-1.754E-10	-1.754E-10
1.01250	6.714E-12	505.249	-4.208E-09	-4.208E-09	4.224E-09	4.224E-09	-1.736E-10	-1.736E-10
1.01875	6.648E-12	508.368	-4.229E-09	-4.229E-09	4.245E-09	4.245E-09	-1.719E-10	-1.719E-10
1.02500	6.581E-12	511.487	-4.247E-09	-4.247E-09	4.268E-09	4.268E-09	-1.701E-10	-1.701E-10
1.03750	6.449E-12	517.724	-4.286E-09	-4.286E-09	4.311E-09	4.311E-09	-1.667E-10	-1.667E-10
1.05000	6.316E-12	523.962	-4.326E-09	-4.326E-09	4.351E-09	4.351E-09	-1.633E-10	-1.633E-10
1.07500	6.051E-12	536.437	-4.402E-09	-4.402E-09	4.429E-09	4.429E-09	-1.564E-10	-1.564E-10
1.10000	5.789E-12	548.913	-4.474E-09	-4.474E-09	4.505E-09	4.505E-09	-1.496E-10	-1.496E-10
1.15000	5.273E-12	573.863	-4.610E-09	-4.610E-09	4.645E-09	4.645E-09	-1.363E-10	-1.363E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 55.000 θ_D= 0. ρ_a=176.248

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-6.419E-14
0.10000	2.187E-11	2.187E-11	-2.377E-23	-2.377E-23	-3.083E-13	-3.083E-13	-7.474E-14
0.20000	5.130E-11	5.130E-11	-3.067E-23	-3.067E-23	-7.150E-13	-7.150E-13	-8.604E-14
0.30000	8.857E-11	8.857E-11	-3.761E-23	-3.761E-23	-1.226E-12	-1.226E-12	-9.718E-14
0.40000	1.335E-10	1.335E-10	-4.352E-23	-4.352E-23	-1.835E-12	-1.835E-12	-1.067E-13
0.50000	1.869E-10	1.869E-10	-4.727E-23	-4.727E-23	-2.517E-12	-2.517E-12	-1.129E-13
0.60000	2.484E-10	2.484E-10	-4.803E-23	-4.803E-23	-3.234E-12	-3.234E-12	-1.141E-13
0.70000	3.115E-10	3.115E-10	-4.562E-23	-4.562E-23	-3.939E-12	-3.939E-12	-1.102E-13
0.80000	3.723E-10	3.723E-10	-4.059E-23	-4.059E-23	-4.586E-12	-4.586E-12	-1.021E-13
0.85000	3.991E-10	3.991E-10	-3.742E-23	-3.742E-23	-4.878E-12	-4.878E-12	-9.694E-14
0.90000	4.226E-10	4.226E-10	-3.400E-23	-3.400E-23	-5.145E-12	-5.145E-12	-9.145E-14
0.92500	4.331E-10	4.331E-10	-3.224E-23	-3.224E-23	-5.269E-12	-5.269E-12	-8.864E-14
0.95000	4.426E-10	4.426E-10	-3.047E-23	-3.047E-23	-5.386E-12	-5.386E-12	-8.580E-14
0.96250	4.469E-10	4.469E-10	-2.959E-23	-2.959E-23	-5.443E-12	-5.443E-12	-8.439E-14
0.97500	4.511E-10	4.511E-10	-2.871E-23	-2.871E-23	-5.497E-12	-5.497E-12	-8.298E-14
0.98125	4.531E-10	4.531E-10	-2.827E-23	-2.827E-23	-5.524E-12	-5.524E-12	-8.227E-14
0.98750	4.550E-10	4.550E-10	-2.784E-23	-2.784E-23	-5.550E-12	-5.550E-12	-8.157E-14
0.99375	4.569E-10	4.569E-10	-2.740E-23	-2.740E-23	-5.576E-12	-5.576E-12	-8.087E-14
1.00000	4.587E-10	4.587E-10	-2.697E-23	-2.697E-23	-5.601E-12	-5.601E-12	-8.018E-14
1.00625	4.604E-10	4.604E-10	-2.654E-23	-2.654E-23	-5.626E-12	-5.626E-12	-7.948E-14
1.01250	4.621E-10	4.621E-10	-2.611E-23	-2.611E-23	-5.651E-12	-5.651E-12	-7.879E-14
1.01875	4.637E-10	4.637E-10	-2.568E-23	-2.568E-23	-5.675E-12	-5.675E-12	-7.807E-14
1.02500	4.653E-10	4.653E-10	-2.525E-23	-2.525E-23	-5.699E-12	-5.699E-12	-7.735E-14
1.03750	4.683E-10	4.683E-10	-2.441E-23	-2.441E-23	-5.745E-12	-5.745E-12	-7.593E-14
1.05000	4.710E-10	4.710E-10	-2.358E-23	-2.358E-23	-5.790E-12	-5.790E-12	-7.452E-14
1.07500	4.759E-10	4.759E-10	-2.196E-23	-2.196E-23	-5.875E-12	-5.875E-12	-7.176E-14
1.10000	4.799E-10	4.799E-10	-2.039E-23	-2.039E-23	-5.954E-12	-5.954E-12	-6.909E-14
1.15000	4.854E-10	4.854E-10	-1.746E-23	-1.746E-23	-6.096E-12	-6.096E-12	-6.402E-14

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 65.000 θ_D= 0. ρ_a=195.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	65.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	65.0000	0.10000	206.986	0.	9.790E-01	-6.019E-12	-6.019E-12	6.019E-12
0.20000	65.0000	0.20000	200.797	0.	9.789E-01	-6.627E-12	-6.627E-12	6.627E-12
0.30000	65.0000	0.30000	196.777	0.	9.789E-01	-7.069E-12	-7.069E-12	7.069E-12
0.40000	65.0000	0.40000	195.061	0.	9.786E-01	-7.269E-12	-7.269E-12	7.269E-12
0.50000	65.0000	0.50000	195.710	0.	9.784E-01	-7.193E-12	-7.193E-12	7.193E-12
0.60000	65.0000	0.60000	198.700	0.	9.788E-01	-6.852E-12	-6.852E-12	6.852E-12
0.70000	65.0000	0.70000	203.929	0.	9.808E-01	-6.312E-12	-6.312E-12	6.312E-12
0.80000	65.0000	0.80000	211.230	0.	9.847E-01	-5.636E-12	-5.636E-12	5.636E-12
0.85000	65.0000	0.85000	215.594	1.708E-06	9.873E-01	-5.266E-12	-5.266E-12	5.266E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 65.000 θ_D= 0. ρ_a=195.000

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	6.019E-12	49.901	-2.828E-10	-2.828E-10	2.828E-10	2.828E-10	-1.556E-10	-1.556E-10
0.20000	6.627E-12	99.802	-5.989E-10	-5.989E-10	5.989E-10	5.989E-10	-1.713E-10	-1.713E-10
0.30000	7.069E-12	149.703	-9.415E-10	-9.415E-10	9.415E-10	9.415E-10	-1.828E-10	-1.828E-10
0.40000	7.269E-12	199.605	-1.300E-09	-1.300E-09	1.300E-09	1.300E-09	-1.879E-10	-1.879E-10
0.50000	7.193E-12	249.506	-1.662E-09	-1.662E-09	1.662E-09	1.662E-09	-1.859E-10	-1.859E-10
0.60000	6.852E-12	299.407	-2.014E-09	-2.014E-09	2.014E-09	2.014E-09	-1.771E-10	-1.771E-10
0.70000	6.312E-12	349.308	-2.343E-09	-2.343E-09	2.343E-09	2.343E-09	-1.632E-10	-1.632E-10
0.80000	5.636E-12	399.209	-2.641E-09	-2.641E-09	2.641E-09	2.641E-09	-1.457E-10	-1.457E-10
0.85000	5.266E-12	424.160	-2.777E-09	-2.777E-09	2.778E-09	2.778E-09	-1.361E-10	-1.361E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 65.000 θ_D= 0. ρ_a=195.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-7.859E-14
0.10000	2.315E-11	2.315E-11	-2.176E-23	-2.176E-23	-2.947E-13	-2.947E-13	-8.734E-14
0.20000	5.138E-11	5.138E-11	-2.555E-23	-2.555E-23	-6.494E-13	-6.494E-13	-9.520E-14
0.30000	8.416E-11	8.416E-11	-2.834E-23	-2.834E-23	-1.054E-12	-1.054E-12	-1.008E-13
0.40000	1.200E-10	1.200E-10	-2.962E-23	-2.962E-23	-1.490E-12	-1.490E-12	-1.033E-13
0.50000	1.575E-10	1.575E-10	-2.913E-23	-2.913E-23	-1.931E-12	-1.931E-12	-1.024E-13
0.60000	1.949E-10	1.949E-10	-2.697E-23	-2.697E-23	-2.353E-12	-2.353E-12	-9.811E-14
0.70000	2.278E-10	2.278E-10	-2.356E-23	-2.356E-23	-2.732E-12	-2.732E-12	-9.115E-14
0.80000	2.557E-10	2.557E-10	-1.950E-23	-1.950E-23	-3.055E-12	-3.055E-12	-8.268E-14
0.85000	2.671E-10	2.671E-10	-1.742E-23	-1.742E-23	-3.193E-12	-3.193E-12	-7.827E-14

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	75.0000	0.	215.159	0.	1.000E 00	-5.302E-12	-5.302E-12	5.302E-12
0.10000	75.0000	0.10000	210.618	0.	9.993E-01	-5.689E-12	-5.689E-12	5.689E-12
0.20000	75.0000	0.20000	208.213	0.	9.996E-01	-5.906E-12	-5.906E-12	5.906E-12
0.30000	75.0000	0.30000	208.016	0.	9.999E-01	-5.924E-12	-5.924E-12	5.924E-12
0.40000	75.0000	0.40000	210.036	0.	1.000E 00	-5.741E-12	-5.741E-12	5.741E-12
0.50000	75.0000	0.50000	214.208	0.	1.001E 00	-5.381E-12	-5.381E-12	5.381E-12
0.60000	75.0000	0.60000	220.411	0.	1.001E 00	-4.887E-12	-4.887E-12	4.887E-12

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 75.000 θ_D= 0. ρ_a= 207.828

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	5.302E-12	0.	0.	0.	0.	0.	-1.371E-10	-1.371E-10
0.10000	5.689E-12	49.901	-2.749E-10	-2.749E-10	2.749E-10	2.749E-10	-1.471E-10	-1.471E-10
0.20000	5.906E-12	99.802	-5.650E-10	-5.650E-10	5.650E-10	5.650E-10	-1.527E-10	-1.527E-10
0.30000	5.924E-12	149.703	-8.610E-10	-8.610E-10	8.610E-10	8.610E-10	-1.531E-10	-1.531E-10
0.40000	5.741E-12	199.605	-1.153E-09	-1.153E-09	1.153E-09	1.153E-09	-1.484E-10	-1.484E-10
0.50000	5.381E-12	249.506	-1.431E-09	-1.431E-09	1.431E-09	1.431E-09	-1.391E-10	-1.391E-10
0.60000	4.887E-12	299.407	-1.688E-09	-1.688E-09	1.688E-09	1.688E-09	-1.263E-10	-1.263E-10

PROPAGATION FREQUENCY= 7.7500E 09 ϕ_0= 75.000 θ_D= 0. ρ_a=207.828

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-1.762E-23	-1.762E-23	0.	0.	-8.929E-14
0.10000	2.361E-11	2.361E-11	-1.981E-23	-1.981E-23	-2.809E-13	-2.809E-13	-9.459E-14
0.20000	4.934E-11	4.934E-11	-2.108E-23	-2.108E-23	-5.881E-13	-5.881E-13	-9.764E-14
0.30000	7.552E-11	7.552E-11	-2.119E-23	-2.119E-23	-9.059E-13	-9.059E-13	-9.790E-14
0.40000	1.016E-10	1.016E-10	-2.011E-23	-2.011E-23	-1.216E-12	-1.216E-12	-9.535E-14
0.50000	1.250E-10	1.250E-10	-1.805E-23	-1.805E-23	-1.503E-12	-1.503E-12	-9.042E-14
0.60000	1.418E-10	1.418E-10	-1.538E-23	-1.538E-23	-1.753E-12	-1.753E-12	-8.390E-14

PROPAGATION FREQUENCY= 1.550DE 10 ϕ_0= 0.012 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0120	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0120	0.10000	193.643	1.381E-09	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0120	0.20000	172.127	2.189E-09	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0120	0.30000	150.611	2.970E-09	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0120	0.40000	129.095	4.898E-09	1.000E 00	-5.567E-12	-5.567E-12	5.567E-12
0.50000	0.0120	0.50000	107.579	6.462E-09	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0120	0.60000	86.064	6.879E-09	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0120	0.70000	64.548	2.918E-08	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0120	0.80000	43.032	9.630E-08	1.000E 00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0120	0.85000	32.274	2.510E-07	1.000E 00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0120	0.90000	21.516	8.796E-07	1.000E 00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0120	0.92500	16.137	2.154E-06	1.000E 00	-5.945E-10	-5.945E-10	5.945E-10
0.95000	0.0120	0.95000	10.758	7.347E-06	1.000E 00	-1.508E-09	-1.508E-09	1.508E-09
0.96250	0.0120	0.96250	8.069	1.756E-05	1.000E 00	-2.974E-09	-2.974E-09	2.974E-09
0.97500	0.0120	0.97500	5.380	5.948E-05	1.000E 00	-9.023E-09	-9.023E-09	9.023E-09
0.98124	0.0120	0.98125	4.036	1.413E-04	1.000E 00	-2.099E-08	-2.099E-08	2.099E-08
0.98749	0.0120	0.98750	2.692	4.769E-04	1.001E 00	-8.864E-08	-8.864E-08	8.863E-08
0.99373	0.0120	0.99375	1.349	3.809E-03	1.003E 00	-3.132E-06	-3.133E-06	3.131E-06
0.99076	0.0361	1.00000	1.992	1.748E 02	2.977E 00	-3.425E-07	-3.424E-07	3.425E-07
0.98454	0.0690	1.00625	3.337	1.748E 02	5.620E 00	-4.118E-08	-4.118E-08	4.118E-08
0.97831	0.1024	1.01250	4.681	1.748E 02	8.233E 00	-1.395E-08	-1.395E-08	1.395E-08
0.97209	0.1362	1.01875	6.026	1.748E 02	1.081E 01	-6.477E-09	-6.477E-09	6.477E-09
0.96587	0.1704	1.02500	7.371	1.748E 02	1.336E 01	-3.881E-09	-3.881E-09	3.881E-09
0.95342	0.2402	1.03750	10.060	1.748E 02	1.837E 01	-1.709E-09	-1.709E-09	1.709E-09
0.94098	0.3119	1.05000	12.750	1.748E 02	2.326E 01	-1.056E-09	-1.056E-09	1.056E-09
0.91610	0.4610	1.07500	18.129	1.748E 02	3.269E 01	-4.741E-10	-4.741E-10	4.741E-10
0.89122	0.6165	1.10000	23.508	1.748E 02	4.170E 01	-2.630E-10	-2.630E-10	2.630E-10
0.84149	0.9613	1.15000	34.266	1.748E 02	5.853E 01	-1.114E-10	-1.114E-10	1.114E-10
0.79179	1.3472	1.20000	45.023	1.748E 02	7.397E 01	-5.926E-11	-5.926E-11	5.926E-11
0.69253	2.2851	1.30000	66.539	1.748E 02	1.013E 02	-2.441E-11	-2.441E-11	2.441E-11
0.59351	3.5362	1.40000	88.055	1.748E 02	1.247E 02	-1.289E-11	-1.289E-11	1.289E-11
0.49490	5.2872	1.50000	109.571	1.748E 02	1.450E 02	-8.002E-12	-8.002E-12	8.002E-12
0.39697	7.9.56	1.60000	131.087	1.748E 02	1.627E 02	-5.364E-12	-5.364E-12	5.364E-12
0.30041	12.22.8	1.70000	152.603	1.748E 02	1.784E 02	-3.618E-12	-3.618E-12	3.618E-12
0.20714	20.5145	1.80000	174.119	1.748E 02	1.923E 02	-2.552E-12	-2.552E-12	2.552E-12
0.12478	40.8327	1.90000	195.635	1.748E 02	2.048E 02	-1.800E-12	-1.800E-12	1.800E-12
0.09073	86.7250	2.00000	217.151	1.748E 02	2.160E 02	-1.285E-12	-1.285E-12	1.285E-12

PROPAGATION FREQUENCY= 1.550DE 10 ϕ_0= 0.012 θ_D=0. ρ_a=1.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.567E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.605E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.337E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.727E-09	-6.727E-09	6.727E-09	6.727E-09	-6.569E-09	-6.569E-09
0.90000	3.225E-10	449.110	-1.180E-08	-1.180E-08	1.180E-08	1.180E-08	-1.668E-08	-1.668E-08
0.92500	5.945E-10	461.585	-1.735E-08	-1.735E-08	1.735E-08	1.735E-08	-3.074E-08	-3.074E-08
0.95000	1.508E-09	474.060	-2.944E-08	-2.944E-08	2.945E-08	2.945E-08	-7.799E-08	-7.799E-08
0.96250	2.974E-09	480.297	-4.250E-08	-4.250E-08	4.251E-08	4.251E-08	-1.538E-07	-1.538E-07
0.97500	9.024E-09	486.534	-7.526E-08	-7.526E-08	7.539E-08	7.540E-08	-4.665E-07	-4.665E-07
0.98124	2.099E-08	489.652	-1.190E-07	-1.190E-07	1.198E-07	1.198E-07	-1.085E-06	-1.085E-06
0.98749	8.865E-08	492.769	-2.532E-07	-2.532E-07	2.617E-07	2.618E-07	-4.583E-06	-4.583E-06
0.99373	3.133E-06	495.884	-1.891E-06	-1.892E-06	2.439E-06	2.440E-06	-1.619E-04	-1.620E-04
0.99076	3.424E-07	494.422	4.609E 00	4.609E 00	4.610E 00	4.610E 00	-1.771E-05	-1.770E-05
0.98454	4.116E-08	491.296	1.083E 01	1.083E 01	1.083E 01	1.083E 01	-2.129E-06	-2.129E-06
0.97831	1.395E-08	488.190	1.706E 01	1.706E 01	1.706E 01	1.706E 01	-7.211E-07	-7.211E-07
0.97209	6.477E-09	485.085	2.328E 01	2.328E 01	2.328E 01	2.328E 01	-3.349E-07	-3.349E-07
0.96587	3.881E-09	481.979	2.951E 01	2.951E 01	2.951E 01	2.951E 01	-2.007E-07	-2.007E-07
0.95342	1.709E-09	475.769	4.196E 01	4.196E 01	4.196E 01	4.196E 01	-8.837E-08	-8.837E-08
0.94098	1.056E-09	469.559	5.440E 01	5.440E 01	5.440E 01	5.440E 01	-5.462E-08	-5.462E-08
0.91610	4.741E-10	457.142	7.929E 01	7.929E 01	7.930E 01	7.930E 01	-2.451E-08	-2.451E-08
0.89122	2.630E-10	444.729	1.042E 02	1.042E 02	1.042E 02	1.042E 02	-1.360E-08	-1.360E-08
0.84149	1.114E-10	419.913	1.540E 02	1.540E 02	1.540E 02	1.540E 02	-5.760E-09	-5.760E-09
0.79179	5.926E-11	395.113	2.037E 02	2.037E 02	2.037E 02	2.037E 02	-3.064E-09	-3.064E-09
0.69253	2.441E-11	345.580	3.031E 02	3.031E 02	3.031E 02	3.031E 02	-1.262E-09	-1.262E-09
0.59351	1.289E-11	296.170	4.024E 02	4.024E 02	4.024E 02	4.024E 02	-6.664E-10	-6.664E-10
0.49490	8.002E-12	246.958	5.016E 02	5.016E 02	5.016E 02	5.016E 02	-4.137E-10	-4.137E-10
0.39697	5.364E-12	198.091	6.003E 02	6.003E 02	6.003E 02	6.003E 02	-2.773E-10	-2.773E-10
0.30041	3.618E-12	149.908	6.984E 02	6.984E 02	6.984E 02	6.984E 02	-1.871E-10	-1.871E-10
0.20714	2.552E-12	103.366	7.949E 02	7.949E 02	7.949E 02	7.949E 02	-1.320E-10	-1.320E-10
0.12478	1.800E-12	62.267	8.859E 02	8.859E 02	8.859E 02	8.859E 02	-9.308E-11	-9.308E-11
0.09073	1.285E-12	45.276	9.527E 02	9.527E 02	9.527E 02	9.527E 02	-6.644E-11	-6.644E-11

PROPAGATION FREQUENCY= 1.5503E 10 ϕ_0=0.012 θ_D=0. ρ_a=1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-2.097E-21
0.10000	-4.049E-14	-8.447E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-2.813E-21
0.20000	-3.896E-15	8.447E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-4.023E-21
0.30000	-2.625E-13	-2.304E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-6.325E-21
0.40000	-3.642E-13	-1.442E-13	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-1.071E-20
0.50000	2.121E-15	-1.590E-13	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-2.143E-20
0.60000	-3.603E-13	-1.455E-13	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-5.011E-20
0.70000	2.527E-13	-2.433E-13	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-1.465E-19
0.80000	8.017E-13	1.509E-12	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-6.633E-19
0.85000	3.521E-12	2.586E-12	-4.476E-21	-4.476E-21	-4.130E-11	-4.130E-11	-1.922E-18
0.90000	1.534E-11	1.569E-11	-1.921E-20	-1.921E-20	-1.139E-10	-1.139E-10	-8.624E-18
0.92500	3.510E-11	3.788E-11	-4.441E-20	-4.441E-20	-2.264E-10	-2.264E-10	-2.629E-17
0.95000	1.600E-10	1.582E-10	-1.763E-19	-1.763E-19	-5.693E-10	-5.693E-10	-1.180E-16
0.96250	4.256E-10	4.241E-10	-5.121E-19	-5.121E-19	-1.131E-09	-1.131E-09	-3.362E-16
0.97500	2.058E-09	2.058E-09	-2.971E-18	-2.971E-18	-3.616E-09	-3.616E-09	-1.261E-15
0.98124	6.491E-09	6.497E-09	-1.168E-17	-1.168E-17	-9.531E-09	-9.531E-09	-3.044E-15
0.98749	4.580E-08	4.580E-08	-1.270E-16	-1.270E-16	-5.032E-08	-5.032E-08	-8.187E-15
0.99373	3.658E-06	3.659E-06	-1.163E-13	-1.164E-13	-9.632E-06	-9.638E-06	-1.460E-14
0.99076	5.791E-03	5.790E-03	-1.537E-15	-1.537E-15	-9.820E 03	-9.818E 03	-1.290E-14
0.98454	3.048E-03	3.047E-03	-3.518E-17	-3.518E-17	-9.820E 03	-9.818E 03	-4.860E-15
0.97831	2.068E-03	2.067E-03	-6.013E-18	-6.013E-18	-9.820E 03	-9.818E 03	-1.882E-15
0.97209	1.565E-03	1.564E-03	-1.776E-18	-1.776E-18	-9.820E 03	-9.818E 03	-8.906E-16
0.96587	1.258E-03	1.258E-03	-7.834E-19	-7.834E-19	-9.820E 03	-9.818E 03	-4.439E-16
0.95342	9.044E-04	9.043E-04	-2.143E-19	-2.143E-19	-9.820E 03	-9.818E 03	-1.559E-16
0.94098	7.058E-04	7.057E-04	-1.012E-19	-1.012E-19	-9.820E 03	-9.818E 03	-6.089E-17
0.91610	4.904E-04	4.904E-04	-3.256E-20	-3.256E-20	-9.820E 03	-9.818E 03	-1.642E-17
0.89122	3.758E-04	3.757E-04	-1.424E-20	-1.424E-20	-9.820E 03	-9.818E 03	-6.225E-18
0.84149	2.560E-04	2.560E-04	-3.686E-21	-3.686E-21	-9.820E 03	-9.818E 03	-1.532E-18
0.79179	1.942E-04	1.941E-04	-1.450E-21	-1.450E-21	-9.820E 03	-9.818E 03	-5.598E-19
0.69253	1.309E-04	1.309E-04	-3.817E-22	-3.817E-22	-9.820E 03	-9.818E 03	-1.304E-19
0.59351	9.874E-05	9.873E-05	-1.488E-22	-1.488E-22	-9.820E 03	-9.818E 03	-4.599E-20
0.49490	7.926E-05	7.925E-05	-7.355E-23	-7.355E-23	-9.820E 03	-9.818E 03	-1.996E-20
0.39697	6.620E-05	6.619E-05	-4.026E-23	-4.026E-23	-9.820E 03	-9.818E 03	-1.015E-20
0.30041	5.684E-05	5.683E-05	-2.216E-23	-2.216E-23	-9.820E 03	-9.818E 03	-6.049E-21
0.20714	4.979E-05	4.979E-05	-1.272E-23	-1.272E-23	-9.820E 03	-9.818E 03	-3.887E-21
0.12478	4.430E-05	4.430E-05	-7.297E-24	-7.297E-24	-9.820E 03	-9.818E 03	-2.739E-21
0.09073	3.990E-05	3.990E-05	-4.183E-24	-4.183E-24	-9.820E 03	-9.818E 03	-2.052E-21

PROPAGATION FREQUENCY= 1.5503E 10 ϕ_0= 0.015 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	0.0150	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0150	0.10000	193.643	1.641E-09	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0150	0.20000	172.127	2.345E-09	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0150	0.30000	150.611	3.804E-09	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0150	0.40000	129.095	5.836E-09	1.000E 00	-5.567E-12	-5.567E-12	5.567E-12
0.50000	0.0150	0.50000	107.579	8.546E-09	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0150	0.60000	86.064	9.171E-09	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0150	0.70000	64.548	3.752E-08	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0150	0.80000	43.032	1.201E-07	1.000E 00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0150	0.85000	32.274	3.177E-07	1.000E 00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0150	0.90000	21.516	1.097E-06	1.000E 00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0150	0.92500	16.137	2.678E-06	1.000E 00	-5.945E-10	-5.945E-10	5.945E-10
0.95000	0.0150	0.95000	10.759	9.155E-06	1.000E 00	-1.508E-09	-1.508E-09	1.508E-09
0.96250	0.0150	0.96250	8.069	2.187E-05	1.000E 00	-2.974E-09	-2.974E-09	2.974E-09
0.97500	0.0150	0.97500	5.380	7.408E-05	1.000E 00	-9.023E-09	-9.023E-09	9.023E-09
0.98124	0.0150	0.98125	4.036	1.760E-04	1.000E 00	-2.099E-08	-2.099E-08	2.099E-08
0.98749	0.0150	0.98750	2.692	5.940E-04	1.001E 00	-8.861E-08	-8.862E-08	8.861E-08
0.99373	0.0150	0.99375	1.350	4.742E-03	1.002E 00	-3.126E-06	-3.127E-06	3.125E-06
0.99078	0.0451	1.00000	1.991	1.735E 02	2.978E 00	-3.435E-07	-3.434E-07	3.435E-07
0.98457	0.0863	1.00625	3.335	1.735E 02	5.627E 00	-4.124E-08	-4.124E-08	4.124E-08
0.97836	0.1279	1.01250	4.680	1.735E 02	8.244E 00	-1.396E-08	-1.396E-08	1.396E-08
0.97215	0.1702	1.01875	6.025	1.735E 02	1.083E 01	-6.481E-09	-6.481E-09	6.481E-09
0.96594	0.2129	1.02500	7.369	1.735E 02	1.338E 01	-3.883E-09	-3.883E-09	3.883E-09
0.95353	0.3001	1.03750	10.059	1.735E 02	1.840E 01	-1.710E-09	-1.710E-09	1.710E-09
0.94112	0.3896	1.05000	12.748	1.735E 02	2.329E 01	-1.057E-09	-1.057E-09	1.057E-09
0.91630	0.5759	1.07500	18.127	1.735E 02	3.274E 01	-4.741E-10	-4.741E-10	4.741E-10
0.89149	0.7726	1.10000	23.506	1.735E 02	4.176E 01	-2.631E-10	-2.631E-10	2.631E-10
0.84192	1.2006	1.15000	34.264	1.735E 02	5.863E 01	-1.114E-10	-1.114E-10	1.114E-10
0.79239	1.6822	1.20000	45.022	1.735E 02	7.409E 01	-5.927E-11	-5.927E-11	5.927E-11
0.69354	2.8515	1.30000	66.538	1.735E 02	1.014E 02	-2.442E-11	-2.442E-11	2.442E-11
0.59508	4.4087	1.40000	88.054	1.735E 02	1.249E 02	-1.289E-11	-1.289E-11	1.289E-11
0.49723	6.5808	1.50000	109.570	1.735E 02	1.452E 02	-8.003E-12	-8.003E-12	8.003E-12
0.40044	9.8097	1.60000	131.085	1.735E 02	1.630E 02	-5.364E-12	-5.364E-12	5.364E-12
0.30572	15.0658	1.70000	152.601	1.735E 02	1.787E 02	-3.618E-12	-3.618E-12	3.618E-12
0.21584	24.8510	1.80000	174.117	1.735E 02	1.926E 02	-2.552E-12	-2.552E-12	2.552E-12
0.14037	46.5773	1.90000	195.633	1.735E 02	2.051E 02	-1.800E-12	-1.800E-12	1.800E-12
0.11323	88.5402	2.00000	217.149	1.735E 02	2.163E 02	-1.285E-12	-1.285E-12	1.285E-12

PROPAGATION FREQUENCY= 1.550[illegible]E 10 ϕ_o= 0.015 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.931	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.630E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.567E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.605E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.727E-09	-6.727E-09	6.727E-09	6.727E-09	-6.569E-09	-6.569E-09
0.90000	3.225E-10	449.110	-1.180E-08	-1.180E-08	1.180E-08	1.180E-08	-1.668E-08	-1.668E-08
0.92500	5.945E-10	461.585	-1.735E-08	-1.735E-08	1.735E-08	1.735E-08	-3.074E-08	-3.074E-08
0.95000	1.509E-09	474.060	-2.944E-08	-2.944E-08	2.945E-08	2.945E-08	-7.799E-08	-7.799E-08
0.96250	4.974E-09	480.297	-4.250E-08	-4.250E-08	4.252E-08	4.252E-08	-1.538E-07	-1.538E-07
0.97500	9.023E-09	486.534	-7.523E-08	-7.523E-08	7.543E-08	7.543E-08	-4.665E-07	-4.665E-07
0.98124	2.099E-08	489.652	-1.188E-07	-1.188E-07	1.200E-07	1.200E-07	-1.085E-06	-1.085E-06
0.98749	8.864E-08	492.769	-2.508E-07	-2.508E-07	2.641E-07	2.641E-07	-4.582E-06	-4.582E-06
0.99373	3.127E-06	495.884	-1.738E-06	-1.739E-06	2.587E-06	2.588E-06	-1.616E-04	-1.617E-04
0.99078	3.434E-07	494.411	4.600E 00	4.600E 00	4.601E 00	4.601E 00	-1.776E-05	-1.776E-05
0.98457	4.124E-08	491.312	1.082E 01	1.082E 01	1.082E 01	1.082E 01	-2.132E-06	-2.132E-06
0.97836	1.396E-08	488.214	1.703E 01	1.703E 01	1.704E 01	1.704E 01	-7.218E-07	-7.218E-07
0.97215	6.481E-09	485.116	2.325E 01	2.325E 01	2.325E 01	2.325E 01	-3.351E-07	-3.351E-07
0.96594	3.883E-09	482.018	2.947E 01	2.947E 01	2.947E 01	2.947E 01	-2.008E-07	-2.008E-07
0.95353	1.716E-09	475.823	4.190E 01	4.190E 01	4.190E 01	4.190E 01	-8.839E-08	-8.839E-08
0.94112	1.057E-09	469.629	5.433E 01	5.433E 01	5.433E 01	5.433E 01	-5.463E-08	-5.463E-08
0.91630	4.741E-10	457.245	7.919E 01	7.919E 01	7.919E 01	7.919E 01	-2.451E-08	-2.451E-08
0.89149	2.631E-10	444.865	1.040E 02	1.040E 02	1.040E 02	1.040E 02	-1.360E-08	-1.360E-08
0.84192	1.114E-10	420.126	1.537E 02	1.537E 02	1.537E 02	1.537E 02	-5.761E-09	-5.761E-09
0.79239	5.927E-11	395.411	2.034E 02	2.034E 02	2.034E 02	2.034E 02	-3.064E-09	-3.064E-09
0.69354	2.442E-11	346.085	3.026E 02	3.026E 02	3.026E 02	3.026E 02	-1.262E-09	-1.262E-09
0.59508	1.289E-11	296.950	4.017E 02	4.017E 02	4.017E 02	4.017E 02	-6.665E-10	-6.665E-10
0.49723	8.008E-12	248.121	5.004E 02	5.004E 02	5.004E 02	5.004E 02	-4.138E-10	-4.138E-10
0.40044	5.364E-12	199.823	5.986E 02	5.986E 02	5.986E 02	5.986E 02	-2.773E-10	-2.773E-10
0.30572	3.618E-12	152.560	6.958E 02	6.958E 02	6.958E 02	6.958E 02	-1.871E-10	-1.871E-10
0.21584	2.552E-12	107.705	7.905E 02	7.905E 02	7.905E 02	7.905E 02	-1.320E-10	-1.320E-10
0.14037	1.800E-12	70.044	8.781E 02	8.781E 02	8.781E 02	8.781E 02	-9.309E-11	-9.309E-11
0.11323	1.285E-12	56.521	9.415E 02	9.415E 02	9.415E 02	9.415E 02	-6.645E-11	-6.645E-11

PROPAGATION FREQUENCY= 1.550[illegible]E 10 ϕ_o= [illegible] θ_D=0. μ_a=1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-3.276E-21
0.10000	-3.547E-14	-7.259E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-4.395E-21
0.20000	-1.637E-15	7.259E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-6.787E-21
0.30000	-2.216E-13	-1.957E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-9.882E-21
0.40000	-3.002E-13	-1.162E-13	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-1.673E-20
0.50000	3.056E-14	-1.113E-13	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-3.349E-20
0.60000	-2.503E-13	-6.113E-14	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-7.830E-20
0.70000	4.029E-13	-1.747E-14	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-2.289E-19
0.80000	1.524E-12	2.118E-12	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-1.036E-18
0.85000	5.180E-12	4.438E-12	-4.476E-21	-4.476E-21	-4.139E-11	-4.139E-11	-3.603E-18
0.90000	2.188E-11	2.215E-11	-1.921E-20	-1.921E-20	-1.139E-10	-1.139E-10	-1.347E-17
0.92500	5.170E-11	5.416E-11	-4.441E-20	-4.441E-20	-2.264E-10	-2.264E-10	-4.107E-17
0.95000	2.209E-10	2.194E-10	-1.763E-19	-1.763E-19	-5.693E-10	-5.693E-10	-1.844E-16
0.96250	5.902E-10	5.891E-10	-5.121E-19	-5.121E-19	-1.131E-09	-1.131E-09	-5.252E-16
0.97500	2.835E-09	2.835E-09	-2.971E-18	-2.971E-18	-3.616E-09	-3.616E-09	-1.971E-15
0.98124	8.924E-09	8.929E-09	-1.168E-17	-1.168E-17	-9.530E-09	-9.530E-09	-4.756E-15
0.98749	6.180E-08	6.181E-08	-1.270E-16	-1.270E-16	-5.030E-08	-5.030E-08	-1.279E-14
0.99373	4.840E-06	4.842E-06	-1.159E-13	-1.159E-13	-9.603E-06	-9.603E-06	-2.281E-14
0.99078	5.105E-03	5.104E-03	-1.546E-15	-1.545E-15	-9.107E 03	-9.106E 03	-2.218E-14
0.98457	2.685E-03	2.684E-03	-3.527E-17	-3.527E-17	-9.107E 03	-9.106E 03	-7.601E-15
0.97836	1.821E-03	1.821E-03	-6.022E-18	-6.022E-18	-9.107E 03	-9.106E 03	-2.943E-15
0.97215	1.378E-03	1.378E-03	-1.778E-18	-1.778E-18	-9.107E 03	-9.106E 03	-1.393E-15
0.96594	1.108E-03	1.108E-03	-7.841E-19	-7.841E-19	-9.107E 03	-9.106E 03	-6.940E-16
0.95353	7.964E-04	7.963E-04	-2.143E-19	-2.143E-19	-9.107E 03	-9.106E 03	-2.438E-16
0.94112	6.215E-04	6.214E-04	-1.013E-19	-1.012E-19	-9.107E 03	-9.106E 03	-9.518E-17
0.91630	4.319E-04	4.318E-04	-3.257E-20	-3.257E-20	-9.107E 03	-9.106E 03	-2.566E-17
0.89149	3.309E-04	3.308E-04	-1.424E-20	-1.424E-20	-9.107E 03	-9.106E 03	-9.729E-18
0.84192	2.255E-04	2.254E-04	-3.686E-21	-3.686E-21	-9.107E 03	-9.106E 03	-2.395E-18
0.79239	1.710E-04	1.710E-04	-1.450E-21	-1.450E-21	-9.107E 03	-9.106E 03	-8.748E-19
0.69354	1.153E-04	1.153E-04	-3.817E-22	-3.817E-22	-9.107E 03	-9.106E 03	-2.038E-19
0.59508	8.694E-05	8.693E-05	-1.488E-22	-1.488E-22	-9.107E 03	-9.106E 03	-7.187E-20
0.49723	6.979E-05	6.978E-05	-7.356E-23	-7.356E-23	-9.107E 03	-9.106E 03	-3.119E-20
0.40044	5.829E-05	5.828E-05	-4.026E-23	-4.026E-23	-9.107E 03	-9.106E 03	-1.587E-20
0.30572	5.005E-05	5.004E-05	-2.216E-23	-2.216E-23	-9.107E 03	-9.106E 03	-9.452E-21
0.21584	4.385E-05	4.384E-05	-1.272E-23	-1.272E-23	-9.107E 03	-9.106E 03	-6.073E-21
0.14037	3.901E-05	3.900E-05	-7.297E-24	-7.297E-24	-9.107E 03	-9.106E 03	-4.280E-21
0.11323	3.514E-05	3.513E-05	-4.183E-24	-4.183E-24	-9.107E 03	-9.106E 03	-3.207E-21

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.020 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0200	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0200	0.10000	193.643	2.658E-09	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0200	0.20000	172.127	4.012E-09	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0200	0.30000	150.611	5.836E-09	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0200	0.40000	129.095	9.588E-09	1.000E 00	-5.567E-12	-5.567E-12	5.567E-12
0.50000	0.0200	0.50000	107.579	1.292E-08	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0200	0.60000	86.064	1.668E-08	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0200	0.70000	64.548	5.670E-08	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0200	0.80000	43.032	1.918E-07	1.000E 00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0200	0.85000	32.274	4.919E-07	1.000E 00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0200	0.90000	21.516	1.721E-06	1.000E 00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0200	0.92500	16.137	4.195E-06	1.000E 00	-5.945E-10	-5.945E-10	5.945E-10
0.95000	0.0200	0.95000	10.759	1.431E-05	1.000E 00	-1.508E-09	-1.508E-09	1.508E-09
0.96250	0.0200	0.96250	8.070	3.416E-05	1.000E 00	-2.974E-09	-2.974E-09	2.974E-09
0.97499	0.0200	0.97500	5.381	1.156E-04	1.000E 00	-9.021E-09	-9.021E-09	9.021E-09
0.98124	0.0200	0.98125	4.036	2.744E-04	1.000E 00	-2.098E-08	-2.098E-08	2.098E-08
0.98749	0.0200	0.98750	2.693	9.261E-04	1.000E 00	-8.852E-08	-8.853E-08	8.852E-08
0.99373	0.0200	0.99375	1.351	7.378E-03	1.002E 00	-3.103E-06	-3.104E-06	3.102E-06
0.99082	0.0200	1.00000	1.988	1.714E 02	2.980E 00	-3.454E-07	-3.454E-07	3.454E-07
0.98464	0.1148	1.00625	3.333	1.714E 02	5.637E 00	-4.136E-08	-4.136E-08	4.136E-08
0.97846	0.1703	1.01250	4.677	1.714E 02	8.261E 00	-1.399E-08	-1.399E-08	1.399E-08
0.97229	0.2265	1.01875	6.022	1.714E 02	1.085E 01	-6.488E-09	-6.488E-09	6.488E-09
0.96611	0.2835	1.02500	7.366	1.714E 02	1.341E 01	-3.887E-09	-3.887E-09	3.888E-09
0.95376	0.3995	1.03750	10.056	1.714E 02	1.844E 01	-1.711E-09	-1.711E-09	1.711E-09
0.94142	0.5187	1.05000	12.745	1.714E 02	2.335E 01	-1.057E-09	-1.057E-09	1.057E-09
0.91674	0.7665	1.07500	18.124	1.714E 02	3.283E 01	-4.743E-10	-4.743E-10	4.743E-10
0.89209	1.0281	1.10000	23.503	1.714E 02	4.187E 01	-2.631E-10	-2.631E-10	2.631E-10
0.84283	1.5972	1.15000	34.261	1.714E 02	5.878E 01	-1.114E-10	-1.114E-10	1.114E-10
0.79368	2.2369	1.20000	45.019	1.714E 02	7.429E 01	-5.928E-11	-5.928E-11	5.928E-11
0.69572	3.7867	1.30000	66.535	1.714E 02	1.017E 02	-2.442E-11	-2.442E-11	2.442E-11
0.59843	5.8424	1.40000	88.051	1.714E 02	1.252E 02	-1.289E-11	-1.289E-11	1.289E-11
0.50222	8.6908	1.50000	109.566	1.714E 02	1.456E 02	-8.003E-12	-8.003E-12	8.003E-12
0.40783	12.8723	1.60000	131.082	1.714E 02	1.634E 02	-5.365E-12	-5.365E-12	5.365E-12
0.31690	19.5082	1.70000	152.598	1.714E 02	1.792E 02	-3.618E-12	-3.618E-12	3.618E-12
0.23350	31.1523	1.80000	174.114	1.714E 02	1.931E 02	-2.552E-12	-2.552E-12	2.552E-12
0.16919	53.3645	1.90000	195.630	1.714E 02	2.056E 02	-1.801E-12	-1.801E-12	1.801E-12
0.15075	89.2153	2.00000	217.146	1.714E 02	2.169E 02	-1.285E-12	-1.285E-12	1.285E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.020 θ_D=0. ρ_a=1.000

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.931	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.862	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.793	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.567E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.605E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.727E-09	-6.727E-09	6.727E-09	6.727E-09	-6.569E-09	-6.569E-09
0.90000	3.225E-10	449.110	-1.180E-08	-1.180E-08	1.180E-08	1.180E-08	-1.668E-08	-1.668E-08
0.92500	5.945E-10	461.585	-1.735E-08	-1.735E-08	1.735E-08	1.735E-08	-3.074E-08	-3.074E-08
0.95000	1.508E-09	474.060	-2.944E-08	-2.944E-08	2.945E-08	2.945E-08	-7.799E-08	-7.799E-08
0.96250	2.974E-09	480.297	-4.249E-08	-4.249E-08	4.253E-08	4.253E-08	-1.538E-07	-1.538E-07
0.97499	9.021E-09	486.534	-7.507E-08	-7.508E-08	7.557E-08	7.557E-08	-4.664E-07	-4.664E-07
0.98124	2.098E-08	489.652	-1.180E-07	-1.180E-07	1.208E-07	1.208E-07	-1.085E-06	-1.085E-06
0.98749	8.853E-08	492.769	-2.412E-07	-2.412E-07	2.734E-07	2.734E-07	-4.577E-06	-4.577E-06
0.99373	3.104E-06	495.832	-1.125E-06	-1.126E-06	3.181E-06	3.182E-06	-1.604E-04	-1.605E-04
0.99082	3.453E-07	494.429	4.582E 00	4.582E 00	4.583E 00	4.583E 00	-1.786E-05	-1.786E-05
0.98464	4.136E-08	491.346	1.078E 01	1.078E 01	1.078E 01	1.078E 01	-2.138E-06	-2.138E-06
0.97846	1.399E-08	488.264	1.698E 01	1.698E 01	1.699E 01	1.699E 01	-7.231E-07	-7.231E-07
0.97229	6.486E-09	485.182	2.319E 01	2.319E 01	2.319E 01	2.319E 01	-3.354E-07	-3.354E-07
0.96611	3.887E-09	482.100	2.939E 01	2.939E 01	2.939E 01	2.939E 01	-2.010E-07	-2.010E-07
0.95376	1.711E-09	475.939	4.179E 01	4.179E 01	4.179E 01	4.179E 01	-8.844E-08	-8.844E-08
0.94142	1.057E-09	469.779	5.418E 01	5.418E 01	5.418E 01	5.418E 01	-5.466E-08	-5.466E-08
0.91674	4.743E-10	457.466	7.897E 01	7.897E 01	7.897E 01	7.897E 01	-2.452E-08	-2.452E-08
0.89209	2.631E-10	445.162	1.038E 02	1.038E 02	1.038E 02	1.038E 02	-1.360E-08	-1.360E-08
0.84283	1.114E-10	420.584	1.533E 02	1.533E 02	1.533E 02	1.533E 02	-5.762E-09	-5.762E-09
0.79368	5.928E-11	396.053	2.028E 02	2.028E 02	2.028E 02	2.028E 02	-3.065E-09	-3.065E-09
0.69572	2.442E-11	347.171	3.015E 02	3.015E 02	3.015E 02	3.015E 02	-1.262E-09	-1.262E-09
0.59843	1.289E-11	298.625	4.000E 02	4.000E 02	4.000E 02	4.000E 02	-6.665E-10	-6.665E-10
0.50222	8.003E-12	250.612	4.979E 02	4.979E 02	4.979E 02	4.979E 02	-4.138E-10	-4.138E-10
0.40783	5.365E-12	203.510	5.949E 02	5.949E 02	5.949E 02	5.949E 02	-2.774E-10	-2.774E-10
0.31690	3.618E-12	158.135	6.902E 02	6.902E 02	6.902E 02	6.902E 02	-1.871E-10	-1.871E-10
0.23350	2.552E-12	116.521	7.817E 02	7.817E 02	7.817E 02	7.817E 02	-1.320E-10	-1.320E-10
0.16919	1.801E-12	84.427	8.637E 02	8.637E 02	8.637E 02	8.637E 02	-9.309E-11	-9.309E-11
0.15075	1.285E-12	75.225	9.228E 02	9.228E 02	9.228E 02	9.228E 02	-6.645E-11	-6.645E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 0.020 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-5.825E-21
0.10000	-2.746E-14	-5.278E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-7.814E-21
0.20000	2.127E-15	5.278E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-1.118E-20
0.30000	-1.534E-13	-5.379E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-1.757E-20
0.40000	-1.984E-13	-6.961E-14	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-2.974E-20
0.50000	7.796E-14	-3.186E-14	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-5.953E-20
0.60000	-6.702E-14	7.941E-14	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-1.392E-19
0.70000	6.522E-13	3.589E-13	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-4.069E-19
0.80000	2.727E-12	3.132E-12	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-1.843E-18
0.85000	7.945E-12	7.524E-12	-4.476E-21	-4.476E-21	-4.130E-11	-4.130E-11	-5.339E-18
0.90000	3.277E-11	3.293E-11	-1.921E-20	-1.921E-20	-1.139E-10	-1.139E-10	-2.395E-17
0.92500	7.957E-11	8.127E-11	-4.441E-20	-4.441E-20	-2.264E-10	-2.264E-10	-7.302E-17
0.95000	3.264E-10	3.214E-10	-1.763E-19	-1.763E-19	-5.692E-10	-5.693E-10	-3.277E-16
0.96250	8.645E-10	8.640E-10	-5.120E-19	-5.120E-19	-1.131E-09	-1.131E-09	-9.337E-16
0.97499	4.129E-09	4.129E-09	-2.970E-18	-2.970E-18	-3.615E-09	-3.615E-09	-3.503E-15
0.98124	1.298E-08	1.298E-08	-1.167E-17	-1.167E-17	-9.527E-09	-9.527E-09	-8.451E-15
0.98749	8.847E-08	8.848E-08	-1.267E-16	-1.268E-16	-5.024E-08	-5.025E-08	-2.272E-14
0.99373	6.813E-06	6.813E-06	-1.142E-13	-1.142E-13	-9.489E-06	-9.494E-06	-4.057E-14
0.99382	3.964E-03	3.963E-03	-1.562E-15	-1.562E-15	-1.000E 04	-1.000E 04	-3.594E-14
0.98464	2.082E-03	2.082E-03	-3.544E-17	-3.543E-17	-1.000E 04	-1.000E 04	-1.354E-14
0.97846	1.412E-03	1.412E-03	-6.040E-18	-6.039E-18	-1.000E 04	-1.000E 04	-5.241E-15
0.97229	1.068E-03	1.068E-03	-1.781E-18	-1.781E-18	-1.000E 04	-1.000E 04	-2.481E-15
0.96611	8.589E-04	8.588E-04	-7.856E-19	-7.855E-19	-1.000E 04	-1.000E 04	-1.235E-15
0.95376	6.172E-04	6.171E-04	-2.145E-19	-2.145E-19	-1.000E 04	-1.000E 04	-4.339E-16
0.94142	4.817E-04	4.816E-04	-1.013E-19	-1.013E-19	-1.000E 04	-1.000E 04	-2.493E-16
0.91674	3.347E-04	3.346E-04	-3.259E-20	-3.259E-20	-1.000E 04	-1.000E 04	-4.565E-17
0.89209	2.564E-04	2.564E-04	-1.425E-20	-1.425E-20	-1.000E 04	-1.000E 04	-1.730E-17
0.84283	1.747E-04	1.747E-04	-3.687E-21	-3.687E-21	-1.000E 04	-1.000E 04	-4.259E-18
0.79368	1.325E-04	1.325E-04	-1.450E-21	-1.450E-21	-1.000E 04	-1.000E 04	-1.556E-18
0.69572	8.932E-05	8.930E-05	-3.818E-22	-3.818E-22	-1.000E 04	-1.000E 04	-3.624E-19
0.59843	6.737E-05	6.736E-05	-1.489E-22	-1.489E-22	-1.000E 04	-1.000E 04	-1.278E-19
0.50222	5.408E-05	5.407E-05	-7.356E-23	-7.356E-23	-1.000E 04	-1.000E 04	-5.545E-20
0.40783	4.517E-05	4.516E-05	-4.026E-23	-4.026E-23	-1.000E 04	-1.000E 04	-2.821E-20
0.31690	3.878E-05	3.877E-05	-2.216E-23	-2.216E-23	-1.000E 04	-1.000E 04	-1.681E-20
0.23350	3.397E-05	3.397E-05	-1.272E-23	-1.272E-23	-1.000E 04	-1.000E 04	-1.080E-20
0.16919	3.023E-05	3.022E-05	-7.298E-24	-7.298E-24	-1.000E 04	-1.000E 04	-7.609E-21
0.15075	2.722E-05	2.722E-05	-4.183E-24	-4.183E-24	-1.000E 04	-1.000E 04	-5.701E-21

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 0.025 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	0.0250	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0250	0.10000	193.643	3.804E-09	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0250	0.20000	172.127	4.742E-09	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0250	0.30000	150.611	7.087E-09	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0250	0.40000	129.095	1.167E-08	1.000E 00	-5.567E-12	-5.567E-12	5.567E-12
0.50000	0.0250	0.50000	107.579	1.542E-08	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0250	0.60000	86.064	1.542E-08	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0250	0.70000	64.548	6.420E-08	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0250	0.80000	43.032	2.051E-07	1.000E 00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0250	0.85000	32.274	5.336E-07	1.000E 00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0250	0.90000	21.516	1.861E-06	1.000E 00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0250	0.92500	16.137	4.549E-06	1.000E 00	-5.945E-10	-5.945E-10	5.945E-10
0.95000	0.0250	0.95000	10.759	1.555E-05	1.000E 00	-1.508E-09	-1.508E-09	1.508E-09
0.96250	0.0250	0.96250	8.070	3.714E-05	1.000E 00	-2.974E-09	-2.974E-09	2.974E-09
0.97500	0.0250	0.97500	5.381	1.258E-04	1.000E 00	-9.020E-09	-9.020E-09	9.020E-09
0.98124	0.0250	0.98125	4.037	2.987E-04	1.000E 00	-2.098E-08	-2.098E-08	2.098E-08
0.98749	0.0250	0.98750	2.693	1.008E-03	1.000E 00	-8.849E-08	-8.849E-08	8.848E-08
0.99373	0.0250	0.99375	1.352	8.022E-03	1.001E 00	-3.096E-06	-3.096E-06	3.094E-06
0.99385	0.0748	1.00000	1.988	1.692E 02	2.985E 00	-3.458E-07	-3.458E-07	3.459E-07
0.98472	0.1432	1.00625	3.332	1.692E 02	5.651E 00	-4.140E-08	-4.140E-08	4.140E-08
0.97858	0.2124	1.01250	4.676	1.692E 02	8.282E 00	-1.399E-08	-1.399E-08	1.399E-08
0.97244	0.2825	1.01875	6.021	1.692E 02	1.088E 01	-6.491E-09	-6.490E-09	6.491E-09
0.96631	0.3535	1.02500	7.365	1.692E 02	1.345E 01	-3.889E-09	-3.889E-09	3.889E-09
0.95435	0.4982	1.03750	10.055	1.692E 02	1.849E 01	-1.711E-09	-1.711E-09	1.711E-09
0.94179	0.6467	1.05000	12.744	1.692E 02	2.342E 01	-1.057E-09	-1.057E-09	1.057E-09
0.91730	0.9555	1.07500	18.123	1.692E 02	3.292E 01	-4.744E-10	-4.744E-10	4.744E-10
0.89283	1.2813	1.10000	23.502	1.692E 02	4.199E 01	-2.632E-10	-2.632E-10	2.632E-10
0.84400	1.9894	1.15000	34.260	1.692E 02	5.894E 01	-1.114E-10	-1.114E-10	1.114E-10
0.79531	2.7844	1.20000	45.018	1.692E 02	7.449E 01	-5.928E-11	-5.928E-11	5.928E-11
0.69848	4.7059	1.30000	66.533	1.692E 02	1.020E 02	-2.442E-11	-2.442E-11	2.442E-11
0.60269	7.2418	1.40000	88.049	1.692E 02	1.256E 02	-1.289E-11	-1.289E-11	1.289E-11
0.50853	10.7260	1.50000	109.565	1.692E 02	1.460E 02	-8.003E-12	-8.003E-12	8.003E-12
0.41709	15.7041	1.60000	131.081	1.692E 02	1.639E 02	-5.365E-12	-5.365E-12	5.365E-12
0.33064	23.5263	1.70000	152.597	1.692E 02	1.796E 02	-3.618E-12	-3.618E-12	3.618E-12
0.25434	36.3229	1.80000	174.113	1.692E 02	1.937E 02	-2.552E-12	-2.552E-12	2.552E-12
0.20013	57.7883	1.90000	195.629	1.692E 02	2.062E 02	-1.801E-12	-1.801E-12	1.801E-12
0.18818	87.4505	2.00000	217.145	1.692E 02	2.175E 02	-1.285E-12	-1.285E-12	1.285E-12

PROPAGATION FREQUENCY= 1.550E 10 ϕ_o= 0.025 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.567E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.605E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.727E-09	-6.727E-09	6.727E-09	6.727E-09	-6.569E-09	-6.569E-09
0.90000	3.225E-10	449.110	-1.180E-08	-1.180E-08	1.180E-08	1.180E-08	-1.668E-08	-1.668E-08
0.92500	5.945E-10	461.585	-1.735E-08	-1.735E-08	1.735E-08	1.735E-08	-3.074E-08	-3.074E-08
0.95000	1.508E-09	474.060	-2.944E-08	-2.944E-08	2.945E-08	2.945E-08	-7.799E-08	-7.799E-08
0.96250	2.974E-09	480.297	-4.248E-08	-4.248E-08	4.253E-08	4.253E-08	-1.538E-07	-1.538E-07
0.97500	9.021E-09	486.534	-7.503E-08	-7.503E-08	7.561E-08	7.561E-08	-4.664E-07	-4.664E-07
0.98124	2.098E-08	489.652	-1.177E-07	-1.177E-07	1.210E-07	1.210E-07	-1.085E-06	-1.085E-06
0.98749	8.850E-08	492.769	-2.382E-07	-2.382E-07	2.763E-07	2.764E-07	-4.575E-06	-4.575E-06
0.99373	3.096E-06	495.884	-9.346E-07	-9.350E-07	3.365E-06	3.366E-06	-1.600E-04	-1.601E-04
0.99085	3.458E-07	494.447	4.564E 00	4.564E 00	4.565E 00	4.565E 00	-1.788E-05	-1.788E-05
0.98472	4.139E-08	491.384	1.075E 01	1.075E 01	1.075E 01	1.075E 01	-2.140E-06	-2.140E-06
0.97858	1.399E-08	488.322	1.693E 01	1.693E 01	1.693E 01	1.693E 01	-7.236E-07	-7.235E-07
0.97244	6.490E-09	485.261	2.311E 01	2.311E 01	2.311E 01	2.311E 01	-3.356E-07	-3.356E-07
0.96631	3.889E-09	482.200	2.929E 01	2.929E 01	2.929E 01	2.929E 01	-2.011E-07	-2.011E-07
0.95405	1.711E-09	476.081	4.164E 01	4.164E 01	4.164E 01	4.164E 01	-8.846E-08	-8.846E-08
0.94179	1.057E-09	469.965	5.400E 01	5.400E 01	5.400E 01	5.400E 01	-5.467E-08	-5.467E-08
0.91730	4.744E-10	457.743	7.869E 01	7.869E 01	7.870E 01	7.870E 01	-2.453E-08	-2.453E-08
0.89283	2.632E-10	445.534	1.034E 02	1.034E 02	1.034E 02	1.034E 02	-1.361E-08	-1.361E-08
0.84400	1.114E-10	421.165	1.527E 02	1.527E 02	1.527E 02	1.527E 02	-5.762E-09	-5.762E-09
0.79531	5.928E-11	396.868	2.019E 02	2.019E 02	2.019E 02	2.019E 02	-3.065E-09	-3.065E-09
0.69848	2.442E-11	348.550	3.002E 02	3.002E 02	3.002E 02	3.002E 02	-1.263E-09	-1.263E-09
0.60269	1.289E-11	300.751	3.979E 02	3.979E 02	3.979E 02	3.979E 02	-6.665E-10	-6.665E-10
0.50853	8.003E-12	253.762	4.948E 02	4.948E 02	4.948E 02	4.948E 02	-4.138E-10	-4.138E-10
0.41709	5.365E-12	208.132	5.903E 02	5.903E 02	5.903E 02	5.903E 02	-2.774E-10	-2.774E-10
0.33064	3.616E-12	164.995	6.833E 02	6.833E 02	6.833E 02	6.833E 02	-1.871E-10	-1.871E-10
0.25434	2.552E-12	126.918	7.713E 02	7.713E 02	7.713E 02	7.713E 02	-1.320E-10	-1.320E-10
0.20013	1.801E-12	99.865	8.483E 02	8.483E 02	8.483E 02	8.483E 02	-9.309E-11	-9.309E-11
0.18818	1.285E-12	93.905	9.041E 02	9.041E 02	9.041E 02	9.041E 02	-6.645E-11	-6.645E-11

PROPAGATION FREQUENCY= 1.550E 10 ϕ_o= 0.025 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-9.101E-21
0.10000	-1.944E-14	-3.298E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-1.221E-20
0.20000	5.891E-15	3.298E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-1.746E-20
0.30000	-8.520E-14	-8.010E-14	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-2.745E-20
0.40000	-9.658E-14	-2.296E-14	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-4.647E-20
0.50000	1.254E-13	4.761E-14	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-9.302E-20
0.60000	1.163E-13	2.199E-13	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-2.175E-19
0.70000	9.035E-13	7.352E-13	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-6.357E-19
0.80000	3.930E-12	4.147E-12	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-2.879E-18
0.85000	1.071E-11	1.061E-11	-4.476E-21	-4.476E-21	-4.130E-11	-4.130E-11	-8.342E-18
0.90000	4.363E-11	4.371E-11	-1.921E-20	-1.921E-20	-1.139E-10	-1.139E-10	-3.743E-17
0.92500	1.070E-10	1.084E-10	-4.441E-20	-4.441E-20	-2.264E-10	-2.264E-10	-1.141E-16
0.95000	4.240E-10	4.233E-10	-1.763E-19	-1.763E-19	-5.692E-10	-5.692E-10	-5.121E-16
0.96250	1.139E-09	1.139E-09	-5.120E-19	-5.120E-19	-1.131E-09	-1.131E-09	-1.459E-15
0.97500	5.424E-09	5.424E-09	-2.969E-18	-2.970E-18	-3.615E-09	-3.615E-09	-5.473E-15
0.98124	1.703E-08	1.704E-08	-1.167E-17	-1.167E-17	-9.525E-09	-9.526E-09	-1.320E-14
0.98749	1.152E-07	1.152E-07	-1.267E-16	-1.267E-16	-5.022E-08	-5.023E-08	-3.550E-14
0.99373	8.787E-06	8.790E-06	-1.136E-13	-1.137E-13	-9.448E-06	-9.453E-06	-6.340E-14
0.99085	2.821E-03	2.821E-03	-1.566E-15	-1.566E-15	-6.255E 03	-6.255E 03	-5.617E-14
0.98472	1.481E-03	1.481E-03	-3.549E-17	-3.549E-17	-6.255E 03	-6.255E 03	-2.117E-14
0.97858	1.004E-03	1.004E-03	-6.046E-18	-6.046E-18	-6.255E 03	-6.255E 03	-8.194E-15
0.97244	7.594E-04	7.593E-04	-1.782E-18	-1.782E-18	-6.255E 03	-6.255E 03	-3.879E-15
0.96631	6.107E-04	6.106E-04	-7.861E-19	-7.861E-19	-6.255E 03	-6.255E 03	-1.931E-15
0.95405	4.388E-04	4.388E-04	-2.146E-19	-2.146E-19	-6.255E 03	-6.255E 03	-6.783E-16
0.94179	3.424E-04	3.424E-04	-1.014E-19	-1.014E-19	-6.255E 03	-6.255E 03	-2.647E-16
0.91730	2.379E-04	2.379E-04	-3.259E-20	-3.259E-20	-6.255E 03	-6.255E 03	-7.135E-17
0.89283	1.823E-04	1.823E-04	-1.425E-20	-1.425E-20	-6.255E 03	-6.255E 03	-2.704E-17
0.84400	1.242E-04	1.242E-04	-3.688E-21	-3.688E-21	-6.255E 03	-6.255E 03	-6.655E-18
0.79531	9.419E-05	9.418E-05	-1.451E-21	-1.451E-21	-6.255E 03	-6.255E 03	-2.431E-18
0.69848	6.350E-05	6.349E-05	-3.818E-22	-3.818E-22	-6.255E 03	-6.255E 03	-5.663E-19
0.60269	4.789E-05	4.789E-05	-1.489E-22	-1.489E-22	-6.255E 03	-6.255E 03	-1.997E-19
0.50853	3.845E-05	3.844E-05	-7.357E-23	-7.357E-23	-6.255E 03	-6.255E 03	-8.664E-20
0.41709	3.211E-05	3.211E-05	-4.026E-23	-4.026E-23	-6.255E 03	-6.255E 03	-4.408E-20
0.33064	2.757E-05	2.757E-05	-2.216E-23	-2.216E-23	-6.255E 03	-6.255E 03	-2.626E-20
0.25434	2.415E-05	2.415E-05	-1.272E-23	-1.272E-23	-6.255E 03	-6.255E 03	-1.687E-20
0.20013	2.149E-05	2.149E-05	-7.298E-24	-7.298E-24	-6.255E 03	-6.255E 03	-1.189E-20
0.18818	1.936E-05	1.935E-05	-4.183E-24	-4.183E-24	-6.255E 03	-6.255E 03	-8.908E-21

PROPAGATION FREQUENCY= 1.550OE 10 ϕ_0= 0.030 θ_0= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0300	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0300	0.10000	193.343	5.029E-09	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0300	0.20000	172.127	6.149E-09	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0300	0.30000	150.911	9.367E-09	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0300	0.40000	129.695	1.313E-08	1.000E 00	-5.567E-12	-5.567E-12	5.567E-12
0.50000	0.0300	0.50000	107.479	1.793E-08	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0300	0.60000	86.064	1.793E-06	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0300	0.70000	64.648	7.170E-08	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0300	0.80000	43.232	2.285E-07	1.000E 00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0300	0.85000	32.274	5.936E-07	1.000E 00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0300	0.90000	21.516	2.061E-06	1.000E 00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0300	0.92500	16.138	5.056E-06	1.000E 00	-5.945E-10	-5.945E-10	5.945E-10
0.95000	0.0300	0.95000	10.759	1.725E-05	1.000E 00	-1.508E-09	-1.508E-09	1.508E-09
0.96250	0.0300	0.96250	8.070	4.125E-05	1.000E 00	-2.974E-09	-2.974E-09	2.974E-09
0.97500	0.0300	0.97500	5.381	1.397E-04	1.000E 00	-9.019E-09	-9.019E-09	9.019E-09
0.98124	0.0300	0.98125	4.037	3.318E-04	1.000E 00	-2.097E-08	-2.097E-08	2.097E-08
0.98749	0.0300	0.98750	2.694	1.119E-03	1.000E 00	-8.842E-08	-8.843E-08	8.842E-08
0.99373	0.0300	0.99375	1.353	8.895E-03	1.000E 00	-3.079E-06	-3.079E-06	3.078E-06
0.99091	0.0896	1.00000	1.985	1.670E 02	2.987E 00	-3.481E-07	-3.481E-07	3.482E-07
0.98482	0.1725	1.00625	3.528	1.670E 02	5.659E 00	-4.154E-08	-4.154E-08	4.155E-08
0.97873	0.2544	1.01250	4.673	1.670E 02	8.297E 00	-1.403E-08	-1.403E-08	1.403E-08
0.97265	0.3383	1.01875	6.017	1.670E 02	1.090E 01	-6.499E-09	-6.499E-09	6.500E-09
0.96657	0.4133	1.02500	7.362	1.670E 02	1.348E 01	-3.895E-09	-3.895E-09	3.895E-09
0.95441	0.5965	1.03750	10.051	1.670E 02	1.853E 01	-1.712E-09	-1.712E-09	1.712E-09
0.94226	0.7742	1.05000	12.740	1.670E 02	2.347E 01	-1.058E-09	-1.058E-09	1.058E-09
0.91799	1.1437	1.07500	18.119	1.670E 02	3.299E 01	-4.746E-10	-4.746E-10	4.746E-10
0.89376	1.5332	1.10000	23.498	1.670E 02	4.209E 01	-2.633E-10	-2.633E-10	2.633E-10
0.84543	2.3791	1.15000	34.256	1.670E 02	5.909E 01	-1.115E-10	-1.115E-10	1.115E-10
0.79732	3.3674	1.20000	45.014	1.670E 02	7.467E 01	-5.929E-11	-5.929E-11	5.929E-11
0.70187	5.6.23	1.30000	66.529	1.670E 02	1.022E 02	-2.442E-11	-2.442E-11	2.442E-11
0.60789	8.6099	1.40000	88.045	1.670E 02	1.259E 02	-1.289E-11	-1.289E-11	1.289E-11
0.51617	12.6874	1.50000	109.561	1.670E 02	1.463E 02	-8.004E-12	-8.004E-12	8.004E-12
0.42818	18.4612	1.60000	131.077	1.670E 02	1.643E 02	-5.365E-12	-5.365E-12	5.365E-12
0.34677	27.1234	1.70000	152.593	1.670E 02	1.801E 02	-3.619E-12	-3.619E-12	3.619E-12
0.27777	40.5165	1.80000	174.109	1.670E 02	1.941E 02	-2.553E-12	-2.553E-12	2.553E-12
0.23252	60.7254	1.90000	195.625	1.670E 02	2.067E 02	-1.801E-12	-1.801E-12	1.801E-12
0.22577	85.8765	2.00000	217.141	1.670E 02	2.180E 02	-1.285E-12	-1.285E-12	1.285E-12

PROPAGATION FREQUENCY= 1.550OE 10 ϕ_0= 0.030 θ_0=0. ρ_a=1.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.567E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.605E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.727E-09	-6.727E-09	6.727E-09	6.727E-09	-6.568E-09	-6.568E-09
0.90000	3.225E-10	449.110	-1.180E-08	-1.180E-08	1.180E-08	1.180E-08	-1.668E-08	-1.668E-08
0.92500	5.945E-10	461.585	-1.735E-08	-1.735E-08	1.735E-08	1.735E-08	-3.074E-08	-3.074E-08
0.95000	1.508E-09	474.060	-2.944E-08	-2.944E-08	2.945E-08	2.945E-08	-7.798E-08	-7.798E-08
0.96250	2.974E-09	480.297	-4.247E-08	-4.247E-08	4.254E-08	4.254E-08	-1.537E-07	-1.537E-07
0.97500	9.019E-09	486.534	-7.495E-08	-7.496E-08	7.568E-08	7.568E-08	-4.663E-07	-4.663E-07
0.98124	2.097E-08	489.652	-1.173E-07	-1.173E-07	1.214E-07	1.214E-07	-1.084E-06	-1.084E-06
0.98749	8.843E-08	492.770	-2.337E-07	-2.337E-07	2.807E-07	2.807E-07	-4.572E-06	-4.572E-06
0.99373	3.080E-06	495.884	-6.490E-07	-6.495E-07	3.637E-06	3.638E-06	-1.592E-04	-1.592E-04
0.99091	3.481E-07	494.474	-4.537E 00	4.537E 00	4.538E 00	4.538E 00	-1.800E-05	-1.800E-05
0.98482	4.154E-08	491.436	1.069E 01	1.069E 01	1.070E 01	1.070E 01	-2.148E-06	-2.148E-06
0.97873	1.403E-08	488.399	1.685E 01	1.685E 01	1.685E 01	1.685E 01	-7.252E-07	-7.251E-07
0.97265	6.499E-09	485.362	2.301E 01	2.301E 01	2.301E 01	2.301E 01	-3.360E-07	-3.360E-07
0.96657	3.895E-09	482.327	2.916E 01	2.916E 01	2.916E 01	2.916E 01	-2.014E-07	-2.014E-07
0.95441	1.712E-09	476.260	4.146E 01	4.146E 01	4.146E 01	4.146E 01	-8.852E-08	-8.852E-08
0.94226	1.058E-09	470.198	5.376E 01	5.376E 01	5.376E 01	5.376E 01	-5.471E-08	-5.471E-08
0.91799	4.746E-10	458.087	7.835E 01	7.835E 01	7.835E 01	7.835E 01	-2.454E-08	-2.454E-08
0.89376	2.633E-10	445.996	1.029E 02	1.029E 02	1.029E 02	1.029E 02	-1.361E-08	-1.361E-08
0.84543	1.115E-10	421.881	1.520E 02	1.520E 02	1.520E 02	1.520E 02	-5.764E-09	-5.764E-09
0.79732	5.929E-11	397.870	2.009E 02	2.009E 02	2.009E 02	2.009E 02	-3.066E-09	-3.066E-09
0.70187	2.442E-11	350.241	2.985E 02	2.985E 02	2.985E 02	2.985E 02	-1.263E-09	-1.263E-09
0.60789	1.289E-11	303.343	3.953E 02	3.953E 02	3.953E 02	3.953E 02	-6.666E-10	-6.666E-10
0.51617	8.004E-12	257.576	4.909E 02	4.909E 02	4.909E 02	4.909E 02	-4.138E-10	-4.138E-10
0.42818	5.365E-12	213.669	5.847E 02	5.847E 02	5.847E 02	5.847E 02	-2.774E-10	-2.774E-10
0.34677	3.619E-12	173.043	6.753E 02	6.753E 02	6.753E 02	6.753E 02	-1.871E-10	-1.871E-10
0.27777	2.553E-12	139.612	7.596E 02	7.596E 02	7.596E 02	7.596E 02	-1.320E-10	-1.320E-10
0.23252	1.801E-12	116.030	8.321E 02	8.321E 02	8.321E 02	8.321E 02	-9.310E-11	-9.310E-11
0.22577	1.285E-12	110.663	8.854E 02	8.854E 02	8.854E 02	8.854E 02	-6.645E-11	-6.645E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.030 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-1.311E-20
0.10000	-2.826E-14	0.	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-1.758E-20
0.20000	1.756E-14	-1.811E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-2.515E-20
0.30000	-2.167E-15	-1.823E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-3.953E-20
0.40000	-6.056E-15	5.050E-14	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-6.692E-20
0.50000	1.976E-13	5.283E-13	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-1.339E-19
0.60000	3.198E-13	5.696E-13	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-3.132E-19
0.70000	1.259E-12	1.197E-12	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-9.154E-19
0.80000	5.098E-12	5.172E-12	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-4.146E-18
0.85000	1.368E-11	1.396E-11	-4.476E-21	-4.476E-21	-4.130E-11	-4.130E-11	-1.201E-17
0.90000	5.553E-11	5.499E-11	-1.921E-20	-1.921E-20	-1.139E-10	-1.139E-10	-5.390E-17
0.92500	1.363E-10	1.368E-10	-4.441E-20	-4.441E-20	-2.264E-10	-2.264E-10	-1.643E-16
0.95000	5.205E-10	5.280E-10	-1.763E-19	-1.763E-19	-5.692E-10	-5.692E-10	-7.373E-16
0.96250	1.423E-09	1.423E-09	-5.119E-19	-5.119E-19	-1.131E-09	-1.131E-09	-2.401E-15
0.97500	6.756E-09	6.754E-09	-2.969E-18	-2.969E-18	-3.615E-09	-3.615E-09	-7.880E-15
0.98124	2.120E-08	2.120E-08	-1.166E-17	-1.166E-17	-9.523E-09	-9.523E-09	-1.901E-14
0.98749	1.426E-07	1.426E-07	-1.265E-16	-1.265E-16	-5.018E-08	-5.019E-08	-5.139E-14
0.99373	1.081E-05	1.081E-05	-1.124E-13	-1.125E-13	-9.368E-06	-9.373E-06	-9.131E-14
0.99061	1.958E-03	1.957E-03	-1.586E-15	-1.586E-15	-7.508E 03	-7.508E 03	-8.107E-14
0.98432	1.026E-03	1.026E-03	-3.570E-17	-3.570E-17	-7.508E 03	-7.508E 03	-3.056E-14
0.97873	6.956E-04	6.955E-04	-6.068E-18	-6.068E-18	-7.508E 03	-7.508E 03	-1.183E-14
0.97265	5.261E-04	5.260E-04	-1.786E-18	-1.786E-18	-7.508E 03	-7.508E 03	-5.598E-15
0.96657	4.230E-04	4.229E-04	-7.878E-19	-7.878E-19	-7.508E 03	-7.508E 03	-2.785E-15
0.95441	3.039E-04	3.039E-04	-2.148E-19	-2.148E-19	-7.508E 03	-7.508E 03	-9.783E-16
0.94226	2.371E-04	2.371E-04	-1.015E-19	-1.015E-19	-7.508E 03	-7.508E 03	-3.816E-16
0.91799	1.648E-04	1.647E-04	-3.261E-20	-3.261E-20	-7.508E 03	-7.508E 03	-1.328E-16
0.89376	1.262E-04	1.262E-04	-1.426E-20	-1.426E-20	-7.508E 03	-7.508E 03	-3.897E-17
0.84543	8.600E-05	8.599E-05	-3.689E-21	-3.689E-21	-7.508E 03	-7.508E 03	-9.587E-18
0.79732	6.522E-05	6.521E-05	-1.451E-21	-1.451E-21	-7.508E 03	-7.508E 03	-3.501E-18
0.70187	4.397E-05	4.396E-05	-3.819E-22	-3.819E-22	-7.508E 03	-7.508E 03	-8.156E-19
0.60789	3.316E-05	3.316E-05	-1.489E-22	-1.489E-22	-7.508E 03	-7.508E 03	-2.876E-19
0.51617	2.662E-05	2.662E-05	-7.357E-23	-7.357E-23	-7.508E 03	-7.508E 03	-1.248E-19
0.42818	2.223E-05	2.223E-05	-4.027E-23	-4.027E-23	-7.508E 03	-7.508E 03	-6.348E-20
0.34677	1.909E-05	1.909E-05	-2.216E-23	-2.216E-23	-7.508E 03	-7.508E 03	-3.782E-20
0.27777	1.672E-05	1.672E-05	-1.272E-23	-1.272E-23	-7.508E 03	-7.508E 03	-2.430E-20
0.23252	1.488E-05	1.488E-05	-7.299E-24	-7.299E-24	-7.508E 03	-7.508E 03	-1.712E-20
0.22577	1.340E-05	1.340E-05	-4.184E-24	-4.184E-24	-7.508E 03	-7.508E 03	-1.283E-20

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.040 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	0.0400	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0400	0.10000	193.643	7.921E-09	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0400	0.20000	172.127	1.011E-08	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0400	0.30000	150.611	1.271E-08	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0400	0.40000	129.095	1.793E-08	1.000E 00	-5.567E-12	-5.567E-12	5.567E-12
0.50000	0.0400	0.50000	107.580	2.585E-08	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0400	0.60000	86.064	2.918E-08	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0400	0.70000	64.548	1.042E-07	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0400	0.80000	43.032	3.335E-07	1.000E 00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0400	0.85000	32.274	8.671E-07	1.000E 00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0400	0.90000	21.517	3.032E-06	1.000E 00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0400	0.92500	16.138	7.404E-06	1.000E 00	-5.945E-10	-5.945E-10	5.944E-10
0.95000	0.0400	0.95000	10.759	2.529E-05	1.000E 00	-1.508E-09	-1.508E-09	1.508E-09
0.96250	0.0400	0.96250	8.070	6.042E-05	1.000E 00	-2.973E-09	-2.973E-09	2.973E-09
0.97500	0.0400	0.97500	5.382	2.045E-04	1.000E 00	-9.014E-09	-9.015E-09	9.014E-09
0.98124	0.0400	0.98125	4.038	4.853E-04	1.000E 00	-2.096E-08	-2.096E-08	2.095E-08
0.98749	0.0400	0.98750	2.696	1.636E-03	1.000E 00	-8.818E-08	-8.819E-08	8.818E-08
0.99373	0.0400	0.99375	1.357	1.293E-02	1.000E 00	-3.022E-06	-3.023E-06	3.021E-06
0.99205	0.1.86	1.00000	1.976	1.627E 02	2.986E 00	-3.548E-07	-3.548E-07	3.549E-07
0.98509	0.2.72	1.00625	3.319	1.627E 02	5.674E 00	-4.196E-08	-4.196E-08	4.196E-08
0.97913	0.3372	1.01250	4.663	1.627E 02	8.327E 00	-1.411E-08	-1.411E-08	1.411E-08
0.97317	0.4464	1.01875	6.007	1.627E 02	1.095E 01	-6.525E-09	-6.524E-09	6.525E-09
0.96722	0.5511	1.02500	7.351	1.627E 02	1.354E 01	-3.910E-09	-3.910E-09	3.910E-09
0.95533	0.7906	1.03750	10.040	1.627E 02	1.862E 01	-1.715E-09	-1.715E-09	1.715E-09
0.94345	1.0259	1.05000	12.730	1.627E 02	2.358E 01	-1.060E-09	-1.060E-09	1.060E-09
0.91975	1.5146	1.07500	18.108	1.627E 02	3.316E 01	-4.751E-10	-4.751E-10	4.752E-10
0.89611	2.0292	1.10000	23.487	1.627E 02	4.231E 01	-2.635E-10	-2.635E-10	2.635E-10
0.84908	3.1441	1.15000	34.245	1.627E 02	5.943E 01	-1.116E-10	-1.116E-10	1.116E-10
0.80241	4.3892	1.20000	45.003	1.627E 02	7.507E 01	-5.932E-11	-5.932E-11	5.932E-11
0.71043	7.3665	1.30000	66.519	1.627E 02	1.028E 02	-2.443E-11	-2.443E-11	2.443E-11
0.62093	11.2152	1.40000	88.034	1.627E 02	1.266E 02	-1.290E-11	-1.290E-11	1.290E-11
0.53516	16.3274	1.50000	109.550	1.627E 02	1.472E 02	-8.005E-12	-8.005E-12	8.005E-12
0.45523	23.3082	1.60000	131.066	1.627E 02	1.652E 02	-5.366E-12	-5.366E-12	5.366E-12
0.38481	33.0392	1.70000	152.582	1.627E 02	1.811E 02	-3.619E-12	-3.619E-12	3.619E-12
0.33063	46.5213	1.80000	174.098	1.627E 02	1.952E 02	-2.553E-12	-2.553E-12	2.553E-12
0.29961	63.9453	1.90000	195.614	1.627E 02	2.079E 02	-1.821E-12	-1.821E-12	1.801E-12
0.30101	83.1114	2.00000	217.130	1.627E 02	2.192E 02	-1.286E-12	-1.286E-12	1.286E-12

PROPAGATION FREQUENCY= 1.550OE 10 ϕ_o= 0.040 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.323E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.567E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.605E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.727E-09	-6.727E-09	6.727E-09	6.727E-09	-6.568E-09	-6.568E-09
0.90000	3.225E-10	449.110	-1.180E-08	-1.180E-08	1.180E-08	1.180E-08	-1.668E-08	-1.668E-08
0.92500	5.945E-10	461.585	-1.734E-08	-1.734E-08	1.735E-08	1.735E-08	-3.073E-08	-3.073E-08
0.95000	1.508E-09	474.060	-2.943E-08	-2.943E-08	2.945E-08	2.945E-08	-7.798E-08	-7.798E-08
0.96250	2.973E-09	480.297	-4.244E-08	-4.244E-08	4.257E-08	4.257E-08	-1.537E-07	-1.537E-07
0.97500	9.015E-09	486.534	-7.453E-08	-7.453E-08	7.608E-08	7.608E-08	-4.661E-07	-4.661E-07
0.98124	2.096E-08	489.652	-1.149E-07	-1.149E-07	1.237E-07	1.237E-07	-1.083E-06	-1.083E-06
0.98749	8.820E-08	492.769	-2.067E-07	-2.067E-07	3.071E-07	3.071E-07	-4.559E-06	-4.560E-06
0.99373	3.023E-06	495.883	1.038E-06	1.037E-06	5.276E-06	5.277E-06	-1.562E-04	-1.563E-04
0.99105	3.548E-07	494.544	4.467E 00	4.467E 00	4.468E 00	4.468E 00	-1.835E-05	-1.834E-05
0.98509	4.196E-08	491.569	1.056E 01	1.056E 01	1.056E 01	1.056E 01	-2.169E-06	-2.169E-06
0.97913	1.411E-08	488.595	1.665E 01	1.665E 01	1.665E 01	1.665E 01	-7.297E-07	-7.297E-07
0.97317	6.524E-09	485.623	2.274E 01	2.274E 01	2.275E 01	2.275E 01	-3.373E-07	-3.373E-07
0.96722	3.910E-09	482.653	2.883E 01	2.883E 01	2.883E 01	2.883E 01	-2.021E-07	-2.021E-07
0.95533	1.715E-09	476.719	4.101E 01	4.101E 01	4.101E 01	4.101E 01	-8.868E-08	-8.868E-08
0.94345	1.061E-09	470.792	5.317E 01	5.317E 01	5.317E 01	5.317E 01	-5.481E-08	-5.481E-08
0.91975	4.751E-10	458.964	7.747E 01	7.747E 01	7.747E 01	7.747E 01	-2.457E-08	-2.457E-08
0.89611	2.635E-10	447.171	1.017E 02	1.017E 02	1.017E 02	1.017E 02	-1.362E-08	-1.362E-08
0.84908	1.116E-10	423.702	1.502E 02	1.502E 02	1.502E 02	1.502E 02	-5.768E-09	-5.768E-09
0.80241	5.932E-11	400.412	1.984E 02	1.984E 02	1.984E 02	1.984E 02	-3.067E-09	-3.067E-09
0.71043	2.443E-11	354.511	2.942E 02	2.942E 02	2.942E 02	2.942E 02	-1.263E-09	-1.263E-09
0.62093	1.290E-11	309.849	3.888E 02	3.888E 02	3.888E 02	3.888E 02	-6.668E-10	-6.668E-10
0.53516	8.003E-12	267.049	4.815E 02	4.815E 02	4.815E 02	4.815E 02	-4.139E-10	-4.139E-10
0.45523	5.366E-12	227.166	5.713E 02	5.713E 02	5.713E 02	5.713E 02	-2.774E-10	-2.774E-10
0.38481	3.619E-12	192.025	6.563E 02	6.563E 02	6.563E 02	6.563E 02	-1.871E-10	-1.871E-10
0.33003	2.559E-12	164.691	7.335E 02	7.335E 02	7.335E 02	7.335E 02	-1.320E-10	-1.320E-10
0.29961	1.801E-12	149.509	7.986E 02	7.986E 02	7.986E 02	7.986E 02	-9.312E-11	-9.312E-11
0.30101	1.286E-12	150.209	8.478E 02	8.478E 02	8.478E 02	8.478E 02	-6.647E-11	-6.647E-11

PROPAGATION FREQUENCY= 1.550OE 10 ϕ_o= 0.040 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-2.330E-20
0.10000	-1.358E-14	-2.309E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-3.126E-20
0.20000	1.043E-14	-8.934E-16	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-4.470E-20
0.30000	-1.787E-15	3.866E-14	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-7.027E-20
0.40000	1.060E-13	9.062E-14	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-1.190E-19
0.50000	2.348E-13	2.225E-13	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-2.381E-19
0.60000	5.883E-13	5.279E-13	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-5.568E-19
0.70000	1.630E-12	1.638E-12	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-1.627E-18
0.80000	7.020E-12	7.125E-12	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-7.370E-18
0.85000	1.875E-11	1.884E-11	-4.476E-21	-4.476E-21	-4.130E-11	-4.130E-11	-2.136E-17
0.90000	7.482E-11	7.455E-11	-1.921E-20	-1.921E-20	-1.139E-10	-1.139E-10	-9.581E-17
0.92500	1.854E-10	1.858E-10	-4.440E-20	-4.440E-20	-2.263E-10	-2.263E-10	-2.920E-16
0.95000	7.191E-10	7.184E-10	-1.763E-19	-1.763E-19	-5.692E-10	-5.692E-10	-1.311E-15
0.96250	1.934E-09	1.934E-09	-5.117E-19	-5.117E-19	-1.130E-09	-1.130E-09	-3.733E-15
0.97500	9.182E-09	9.183E-09	-2.966E-18	-2.967E-18	-3.613E-09	-3.613E-09	-1.400E-14
0.98124	2.881E-08	2.881E-08	-1.165E-17	-1.165E-17	-9.514E-09	-9.515E-09	-3.375E-14
0.98749	1.924E-07	1.924E-07	-1.259E-16	-1.259E-16	-5.003E-08	-5.004E-08	-9.066E-14
0.99373	1.440E-05	1.440E-05	-1.083E-13	-1.084E-13	-9.090E-06	-9.095E-06	-1.625E-13
0.99105	-2.309E-04	-2.308E-04	-1.644E-15	-1.644E-15	-9.852E 03	-9.850E 03	-1.450E-13
0.98509	-1.215E-04	-1.214E-04	-3.629E-17	-3.629E-17	-9.852E 03	-9.850E 03	-5.472E-14
0.97913	-8.228E-05	-8.227E-05	-6.130E-18	-6.129E-18	-9.852E 03	-9.850E 03	-2.116E-14
0.97317	-6.221E-05	-6.220E-05	-1.797E-18	-1.797E-18	-9.852E 03	-9.850E 03	-1.001E-14
0.96722	-5.001E-05	-5.000E-05	-7.928E-19	-7.928E-19	-9.852E 03	-9.850E 03	-4.974E-15
0.95533	-3.592E-05	-3.591E-05	-2.154E-19	-2.154E-19	-9.852E 03	-9.850E 03	-1.747E-15
0.94345	-2.802E-05	-2.802E-05	-1.018E-19	-1.018E-19	-9.852E 03	-9.850E 03	-6.805E-16
0.91975	-1.947E-05	-1.946E-05	-3.267E-20	-3.267E-20	-9.852E 03	-9.850E 03	-1.832E-16
0.89611	-1.491E-05	-1.491E-05	-1.428E-20	-1.428E-20	-9.852E 03	-9.850E 03	-6.940E-17
0.84908	-1.016E-05	-1.016E-05	-3.693E-21	-3.693E-21	-9.852E 03	-9.850E 03	-1.706E-17
0.80241	-7.703E-06	-7.702E-06	-1.452E-21	-1.452E-21	-9.852E 03	-9.850E 03	-6.230E-18
0.71043	-5.193E-06	-5.192E-06	-3.821E-22	-3.821E-22	-9.852E 03	-9.850E 03	-1.451E-18
0.62093	-3.917E-06	-3.916E-06	-1.489E-22	-1.489E-22	-9.852E 03	-9.850E 03	-5.115E-19
0.53516	-3.144E-06	-3.143E-06	-7.360E-23	-7.360E-23	-9.852E 03	-9.850E 03	-2.219E-19
0.45523	-2.626E-06	-2.625E-06	-4.028E-23	-4.028E-23	-9.852E 03	-9.850E 03	-1.129E-19
0.38481	-2.254E-06	-2.254E-06	-2.217E-23	-2.217E-23	-9.852E 03	-9.850E 03	-6.725E-20
0.33003	-1.975E-06	-1.975E-06	-1.272E-23	-1.272E-23	-9.852E 03	-9.850E 03	-4.320E-20
0.29961	-1.757E-06	-1.757E-06	-7.301E-24	-7.301E-24	-9.852E 03	-9.850E 03	-3.044E-20
0.30101	-1.583E-06	-1.582E-06	-4.185E-24	-4.185E-24	-9.852E 03	-9.850E 03	-2.281E-20

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_0= 0.050 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0500	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0500	0.10000	193.643	1.235E-08	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0500	0.20000	172.127	1.511E-08	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0500	0.30000	150.611	1.959E-08	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0500	0.40000	129.095	2.626E-08	1.000E 00	-5.567E-12	-5.567E-12	5.567E-12
0.50000	0.0500	0.50000	107.580	3.335E-08	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0500	0.60000	86.064	3.335E-08	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0500	0.70000	64.548	1.267E-07	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0500	0.80000	43.032	4.019E-07	1.000E 00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0500	0.85000	32.274	1.047E-06	1.000E 00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0500	0.90000	21.517	3.629E-06	1.000E-00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0500	0.92500	16.138	8.885E-06	1.000E-00	-5.944E-10	-5.944E-10	5.944E-10
0.95000	0.0500	0.95000	10.760	3.028E-05	1.000E-00	-1.508E-09	-1.508E-09	1.508E-09
0.96250	0.0500	0.96250	8.071	7.240E-05	1.000E-00	-2.972E-09	-2.972E-09	2.972E-09
0.97500	0.0500	0.97500	5.383	2.449E-04	1.000E-00	-9.009E-09	-9.009E-09	9.009E-09
0.98124	0.0500	0.98125	4.040	5.812E-04	1.000E-00	-2.094E-08	-2.094E-08	2.094E-08
0.98749	0.0500	0.98750	2.698	1.956E-03	9.999E-01	-8.792E-08	-8.793E-08	8.792E-08
0.99373	0.0500	0.99375	1.362	1.537E-02	9.997E-01	-2.959E-06	-2.960E-06	2.959E-06
0.99122	0.1470	1.00000	1.968	1.583E 02	2.987E 00	-3.619E-07	-3.619E-07	3.619E-07
0.98542	0.2818	1.00625	3.309	1.583E 02	5.693E 00	-4.240E-08	-4.240E-08	4.241E-08
0.97962	0.4181	1.01250	4.652	1.583E 02	8.365E 00	-1.421E-08	-1.421E-08	1.421E-08
0.97383	0.5561	1.01875	5.996	1.583E 02	1.100E 01	-6.555E-09	-6.555E-09	6.555E-09
0.96804	0.6957	1.02500	7.340	1.583E 02	1.361E 01	-3.926E-09	-3.926E-09	3.926E-09
0.95649	0.9800	1.03750	10.029	1.583E 02	1.873E 01	-1.719E-09	-1.719E-09	1.719E-09
0.94496	1.2713	1.05000	12.718	1.583E 02	2.373E 01	-1.062E-09	-1.062E-09	1.062E-09
0.92198	1.8756	1.07500	18.097	1.583E 02	3.337E 01	-4.758E-10	-4.758E-10	4.758E-10
0.89911	2.5407	1.10000	23.475	1.583E 02	4.258E 01	-2.638E-10	-2.638E-10	2.638E-10
0.85373	3.8827	1.15000	34.233	1.583E 02	5.979E 01	-1.116E-10	-1.116E-10	1.116E-10
0.80888	5.4077	1.20000	44.991	1.583E 02	7.556E 01	-5.936E-11	-5.936E-11	5.936E-11
0.72124	9.0200	1.30000	66.507	1.583E 02	1.035E 02	-2.444E-11	-2.444E-11	2.444E-11
0.63724	13.6071	1.40000	88.023	1.583E 02	1.274E 02	-1.290E-11	-1.290E-11	1.290E-11
0.55854	19.5347	1.50000	109.538	1.583E 02	1.481E 02	-8.007E-12	-8.007E-12	8.007E-12
0.48771	27.2896	1.60000	131.054	1.583E 02	1.663E 02	-5.367E-12	-5.367E-12	5.367E-12
0.42866	37.4460	1.70000	152.570	1.583E 02	1.823E 02	-3.620E-12	-3.620E-12	3.620E-12
0.38683	50.2231	1.80000	174.086	1.583E 02	1.965E 02	-2.554E-12	-2.554E-12	2.554E-12
0.36814	65.1810	1.90000	195.602	1.583E 02	2.092E 02	-1.801E-12	-1.801E-12	1.801E-12
0.37606	80.5778	2.00000	217.118	1.583E 02	2.207E 02	-1.286E-12	-1.286E-12	1.286E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.050 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.567E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.605E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.726E-09	-6.726E-09	6.727E-09	6.727E-09	-6.568E-09	-6.568E-09
0.90000	3.225E-10	449.110	-1.180E-08	-1.180E-08	1.180E-08	1.180E-08	-1.667E-08	-1.667E-08
0.92500	5.944E-10	461.585	-1.734E-08	-1.734E-08	1.735E-08	1.735E-08	-3.073E-08	-3.073E-08
0.95000	1.508E-09	474.060	-2.942E-08	-2.943E-08	2.946E-08	2.946E-08	-7.797E-08	-7.797E-08
0.96250	2.972E-09	480.297	-4.240E-08	-4.240E-08	4.260E-08	4.260E-08	-1.537E-07	-1.537E-07
0.97500	9.009E-09	486.534	-7.417E-08	-7.417E-08	7.640E-08	7.640E-08	-4.658E-07	-4.658E-07
0.98124	2.094E-08	489.652	-1.130E-07	-1.130E-07	1.255E-07	1.256E-07	-1.082E-06	-1.082E-06
0.98749	8.793E-08	492.770	-1.847E-07	-1.848E-07	3.283E-07	3.283E-07	-4.546E-06	-4.546E-06
0.99373	2.961E-06	495.884	2.368E-06	2.367E-06	6.554E-06	6.554E-06	-1.530E-04	-1.531E-04
0.99122	3.618E-07	494.629	4.382E 00	4.382E 00	4.383E 00	4.383E 00	-1.871E-05	-1.871E-05
0.98542	4.240E-08	491.734	1.040E 01	1.040E 01	1.040E 01	1.040E 01	-2.192E-06	-2.192E-06
0.97962	1.421E-08	488.842	1.641E 01	1.641E 01	1.641E 01	1.641E 01	-7.346E-07	-7.346E-07
0.97383	6.555E-09	485.952	2.242E 01	2.242E 01	2.242E 01	2.242E 01	-3.389E-07	-3.389E-07
0.96804	3.926E-09	483.066	2.842E 01	2.842E 01	2.842E 01	2.842E 01	-2.030E-07	-2.030E-07
0.95649	1.719E-09	477.301	4.042E 01	4.042E 01	4.042E 01	4.042E 01	-8.886E-08	-8.886E-08
0.94496	1.062E-09	471.548	5.241E 01	5.241E 01	5.241E 01	5.241E 01	-5.493E-08	-5.493E-08
0.92198	4.758E-10	460.081	7.636E 01	7.636E 01	7.636E 01	7.636E 01	-2.460E-08	-2.460E-08
0.89911	2.638E-10	448.668	1.002E 02	1.002E 02	1.002E 02	1.002E 02	-1.364E-08	-1.364E-08
0.85373	1.116E-10	426.020	1.478E 02	1.478E 02	1.478E 02	1.478E 02	-5.772E-09	-5.772E-09
0.80888	5.936E-11	403.643	1.952E 02	1.952E 02	1.952E 02	1.952E 02	-3.069E-09	-3.069E-09
0.72124	2.444E-11	359.906	2.888E 02	2.888E 02	2.888E 02	2.888E 02	-1.264E-09	-1.264E-09
0.63724	1.290E-11	317.990	3.806E 02	3.806E 02	3.806E 02	3.806E 02	-6.670E-10	-6.670E-10
0.55854	8.007E-12	278.718	4.698E 02	4.698E 02	4.698E 02	4.698E 02	-4.140E-10	-4.140E-10
0.48771	5.367E-12	243.371	5.550E 02	5.550E 02	5.550E 02	5.550E 02	-2.775E-10	-2.775E-10
0.42866	3.620E-12	213.905	6.344E 02	6.344E 02	6.344E 02	6.344E 02	-1.872E-10	-1.872E-10
0.38683	2.554E-12	193.033	7.052E 02	7.052E 02	7.052E 02	7.052E 02	-1.320E-10	-1.320E-10
0.36814	1.801E-12	183.707	7.644E 02	7.644E 02	7.644E 02	7.644E 02	-9.313E-11	-9.313E-11
0.37606	1.286E-12	187.657	8.104E 02	8.104E 02	8.104E 02	8.104E 02	-6.648E-11	-6.648E-11

PROPAGATION FREQUENCY= 1.550[illegible]E 10 ϕ_0= 0.000 θ_0= 0. ρ_a= 1.000

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-3.640E-20
0.10000	4.699E-15	4.872E-16	-7.682E-24	-7.682E-24	-8.845E-14	-8.815E-14	-4.884E-20
0.20000	3.529E-14	3.628E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-8.985E-20
0.30000	6.508E-14	7.372E-14	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-1.098E-19
0.40000	1.662E-13	1.632E-13	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-1.859E-19
0.50000	3.37E-13	3.317E-13	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-3.721E-19
0.60000	7.647E-13	7.301E-13	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-8.700E-19
0.70000	2.193E-12	2.229E-12	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-2.543E-18
0.80000	9.048E-12	9.076E-12	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-1.152E-17
0.85000	2.449E-11	2.452E-11	-4.476E-21	-4.476E-21	-4.130E-11	-4.130E-11	-3.337E-17
0.90000	9.468E-11	9.470E-11	-1.921E-20	-1.921E-20	-1.139E-10	-1.139E-10	-1.497E-16
0.92500	2.335E-10	2.353E-10	-4.440E-20	-4.440E-20	-2.263E-10	-2.263E-10	-4.563E-16
0.9500	9.100E-10	9.097E-10	-1.763E-19	-1.763E-19	-5.691E-10	-5.691E-10	-2.047E-15
0.96250	2.448E-09	2.448E-09	-5.115E-19	-5.115E-19	-1.130E-09	-1.130E-09	-5.832E-15
0.97500	7.133E-09	7.161E-09	-2.964E-18	-2.964E-18	-3.611E-09	-3.611E-09	-2.186E-14
0.98124	3.65E-08	3.615E-08	-1.163E-17	-1.163E-17	-9.505E-09	-9.505E-09	-5.267E-14
0.98749	2.402E-07	2.403E-07	-1.253E-16	-1.253E-16	-4.987E-08	-4.987E-08	-1.414E-13
0.99373	1.771E-05	1.771E-05	-1.040E-13	-1.040E-13	-8.789E-06	-8.793E-06	-2.542E-13
0.99122	-1.506E-03	-1.505E-03	-1.707E-15	-1.706E-15	-6.925E 03	-6.925E 03	-2.282E-13
0.98542	-7.863E-04	-7.862E-04	-3.693E-17	-3.693E-17	-6.925E 03	-6.925E 03	-8.615E-14
0.97962	-5.317E-04	-5.318E-04	-6.197E-18	-6.196E-18	-6.925E 03	-6.925E 03	-3.329E-14
0.97383	-4.019E-04	-4.018E-04	-1.811E-18	-1.810E-18	-6.925E 03	-6.925E 03	-1.574E-14
0.96804	-3.229E-04	-3.229E-04	-7.981E-19	-7.981E-19	-6.925E 03	-6.925E 03	-7.810E-15
0.95049	-2.318E-04	-2.318E-04	-2.161E-19	-2.161E-19	-6.925E 03	-6.925E 03	-2.743E-15
0.94496	-2.808E-04	-2.808E-04	-1.021E-19	-1.021E-19	-6.925E 03	-6.925E 03	-1.067E-15
0.92198	-1.256E-04	-1.256E-04	-3.272E-20	-3.272E-20	-6.925E 03	-6.925E 03	-2.870E-16
0.89911	-9.619E-05	-9.618E-05	-1.430E-20	-1.430E-20	-6.925E 03	-6.925E 03	-1.086E-16
0.85373	-6.552E-05	-6.552E-05	-3.697E-21	-3.697E-21	-6.925E 03	-6.925E 03	-2.670E-17
0.80888	-4.968E-05	-4.968E-05	-1.453E-21	-1.453E-21	-6.925E 03	-6.925E 03	-9.744E-18
0.72124	-3.349E-05	-3.349E-05	-3.823E-22	-3.823E-22	-6.925E 03	-6.925E 03	-2.268E-18
0.63724	-2.526E-05	-2.526E-05	-1.490E-22	-1.490E-22	-6.925E 03	-6.925E 03	-7.996E-19
0.55854	-2.027E-05	-2.027E-05	-7.362E-23	-7.362E-23	-6.925E 03	-6.925E 03	-3.469E-19
0.48771	-1.693E-05	-1.693E-05	-4.029E-23	-4.029E-23	-6.925E 03	-6.925E 03	-1.764E-19
0.42866	-1.454E-05	-1.454E-05	-2.218E-23	-2.218E-23	-6.925E 03	-6.925E 03	-1.051E-19
0.38683	-1.274E-05	-1.273E-05	-1.273E-23	-1.273E-23	-6.925E 03	-6.925E 03	-6.752E-20
0.36814	-1.133E-05	-1.133E-05	-7.303E-24	-7.303E-24	-6.925E 03	-6.925E 03	-4.758E-20
0.37606	-1.021E-05	-1.020E-05	-4.186E-24	-4.186E-24	-6.925E 03	-6.925E 03	-3.564E-20

PROPAGATION FREQUENCY= 1.550[illegible]E 10 ϕ_0= 0.000 θ_0= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	0.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0000	0.10 00	193.643	1.704E-08	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0000	0.20 00	172.127	2.022E-08	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0000	0.30000	150.611	2.689E-08	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0000	0.40000	129.095	3.293E-08	1.000E 00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.0000	0.50000	107.580	4.302E-08	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0000	0.60000	86.064	4.302E-08	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0000	0.70000	64.548	1.451E-07	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0000	0.80000	43.032	4.536E-07	1.000E-00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0000	0.85000	32.275	1.177E-06	1.000E-00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0000	0.90000	21.517	4.082E-06	1.000E-00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0000	0.92500	16.139	9.992E-06	1.000E-00	-5.944E-10	-5.944E-10	5.944E-10
0.95000	0.0000	0.95000	10.761	3.409E-05	1.000E-00	-1.508E-09	-1.508E-09	1.508E-09
0.96250	0.0000	0.96250	8.072	8.151E-05	1.000E-00	-2.971E-09	-2.971E-09	2.971E-09
0.97500	0.0000	0.97500	5.384	2.758E-04	9.999E-01	-9.003E-09	-9.003E-09	9.003E-09
0.98124	0.0000	0.98125	4.042	6.541E-04	9.999E-01	-2.091E-08	-2.091E-08	2.091E-08
0.98749	0.0000	0.98750	2.701	2.199E-03	9.996E-01	-8.760E-08	-8.761E-08	8.760E-08
0.99373	0.0001	0.99375	1.367	1.716E-02	9.988E-01	-2.685E-06	-2.846E-06	2.885E-06
0.99143	0.1745	1.000000	1.956	1.539E 02	2.989E 00	-3.721E-07	-3.720E-07	3.721E-07
0.98583	0.3549	1.00625	3.295	1.539E 02	5.722E 00	-4.303E-08	-4.303E-08	4.303E-08
0.98023	0.4971	1.01250	4.638	1.539E 02	8.420E 00	-1.434E-08	-1.434E-08	1.434E-08
0.97464	0.6911	1.01875	5.981	1.539E 02	1.108E 01	-6.606E-09	-6.606E-09	6.606E-09
0.96906	0.8170	1.02500	7.325	1.539E 02	1.372E 01	-3.949E-09	-3.949E-09	3.949E-09
0.95793	1.1047	1.03750	10.014	1.539E 02	1.889E 01	-1.723E-09	-1.723E-09	1.723E-09
0.94682	1.5403	1.05000	12.702	1.539E 02	2.393E 01	-1.065E-09	-1.065E-09	1.065E-09
0.92473	2.2263	1.07500	18.081	1.539E 02	3.366E 01	-4.766E-10	-4.766E-10	4.766E-10
0.90278	2.9773	1.10000	23.460	1.539E 02	4.296E 01	-2.642E-10	-2.642E-10	2.642E-10
0.85939	4.5935	1.15000	34.217	1.539E 02	6.033E 01	-1.118E-10	-1.118E-10	1.118E-10
0.81676	6.3801	1.20000	44.975	1.539E 02	7.626E 01	-5.941E-11	-5.941E-11	5.941E-11
0.73429	10.0650	1.30000	66.491	1.539E 02	1.044E 02	-2.445E-11	-2.445E-11	2.445E-11
0.65670	13.7725	1.40000	88.006	1.539E 02	1.286E 02	-1.291E-11	-1.291E-11	1.291E-11
0.58595	17.3034	1.50000	109.522	1.539E 02	1.495E 02	-8.010E-12	-8.010E-12	8.010E-12
0.52480	20.4858	1.60000	131.038	1.539E 02	1.678E 02	-5.369E-12	-5.369E-12	5.369E-12
0.47696	23.0955	1.70000	152.554	1.539E 02	1.840E 02	-3.621E-12	-3.621E-12	3.621E-12
0.44074	24.9084	1.80000	174.070	1.539E 02	1.984E 02	-2.554E-12	-2.554E-12	2.554E-12
0.43778	25.3396	1.90000	195.586	1.539E 02	2.112E 02	-1.802E-12	-1.802E-12	1.802E-12
0.45137	24.1359	2.00000	217.102	1.539E 02	2.228E 02	-1.286E-12	-1.286E-12	1.286E-12

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_o= 0.000 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1_0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.630E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.600E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.554E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.276E-11	424.160	-6.726E-09	-6.726E-09	6.726E-09	6.726E-09	-6.568E-09	-6.568E-09
0.90000	3.220E-11	449.110	-1.180E-08	-1.180E-08	1.180E-08	1.180E-08	-1.667E-08	-1.667E-08
0.92500	5.944E-11	461.585	-1.734E-08	-1.734E-08	1.735E-08	1.735E-08	-3.073E-08	-3.073E-08
0.95000	1.508E-09	474.060	-2.942E-08	-2.942E-08	2.946E-08	2.946E-08	-7.796E-08	-7.796E-08
0.96250	2.971E-09	480.297	-4.237E-08	-4.237E-08	4.262E-08	4.262E-08	-1.536E-07	-1.536E-07
0.97500	9.008E-09	486.534	-7.386E-08	-7.386E-08	7.667E-08	7.667E-08	-4.655E-07	-4.655E-07
0.98124	2.091E-08	489.652	-1.112E-07	-1.112E-07	1.272E-07	1.272E-07	-1.081E-06	-1.081E-06
0.98749	8.761E-08	492.770	-1.654E-07	-1.654E-07	3.468E-07	3.469E-07	-4.529E-06	-4.530E-06
0.99373	2.887E-06	495.884	3.496E-06	3.495E-06	7.619E-06	7.620E-06	-1.492E-04	-1.492E-04
0.99143	3.722E-07	494.736	4.275E 00	4.275E 00	4.276E 00	4.276E 00	-1.924E-05	-1.923E-05
0.98583	4.303E-06	491.940	1.019E 01	1.019E 01	1.019E 01	1.019E 01	-2.225E-06	-2.225E-06
0.98023	1.434E-06	489.147	1.610E 01	1.610E 01	1.610E 01	1.610E 01	-7.414E-07	-7.414E-07
0.97464	6.606E-09	486.358	2.201E 01	2.201E 01	2.201E 01	2.201E 01	-3.416E-07	-3.416E-07
0.96906	3.949E-09	483.574	2.791E 01	2.791E 01	2.791E 01	2.791E 01	-2.042E-07	-2.042E-07
0.95793	1.723E-09	478.017	3.971E 01	3.971E 01	3.971E 01	3.971E 01	-8.911E-08	-8.911E-08
0.94682	1.065E-09	472.477	5.149E 01	5.149E 01	5.149E 01	5.149E 01	-5.508E-08	-5.508E-08
0.92473	4.766E-10	461.450	7.499E 01	7.499E 01	7.499E 01	7.499E 01	-2.464E-08	-2.464E-08
0.90278	2.642E-10	450.499	9.841E 01	9.841E 01	9.841E 01	9.841E 01	-1.366E-08	-1.366E-08
0.85939	1.118E-10	428.847	1.450E 02	1.450E 02	1.450E 02	1.450E 02	-5.778E-09	-5.778E-09
0.81676	5.944E-11	407.573	1.912E 02	1.912E 02	1.912E 02	1.912E 02	-3.072E-09	-3.072E-09
0.73429	2.445E-11	366.417	2.823E 02	2.823E 02	2.823E 02	2.823E 02	-1.264E-09	-1.264E-09
0.65670	1.291E-11	327.701	3.709E 02	3.709E 02	3.709E 02	3.709E 02	-6.672E-10	-6.672E-10
0.58595	8.010E-12	292.395	4.561E 02	4.561E 02	4.561E 02	4.561E 02	-4.141E-10	-4.141E-10
0.52480	5.369E-12	261.882	5.365E 02	5.365E 02	5.365E 02	5.365E 02	-2.776E-10	-2.776E-10
0.47696	3.621E-12	238.011	6.103E 02	6.103E 02	6.103E 02	6.103E 02	-1.872E-10	-1.872E-10
0.44674	2.554E-12	222.928	6.753E 02	6.753E 02	6.753E 02	6.753E 02	-1.321E-10	-1.321E-10
0.43778	1.802E-12	218.459	7.297E 02	7.297E 02	7.297E 02	7.297E 02	-9.316E-11	-9.316E-11
0.45137	1.286E-12	225.239	7.729E 02	7.728E 02	7.728E 02	7.728E 02	-6.649E-11	-6.649E-11

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_o= 0.000 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-5.242E-20
0.10000	1.302E-14	1.777E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-7.033E-20
0.20000	3.969E-14	4.969E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-1.006E-19
0.30000	8.925E-14	8.925E-14	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-1.581E-19
0.40000	2.109E-13	1.955E-13	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-2.677E-19
0.50000	4.101E-13	3.905E-13	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-5.358E-19
0.60000	8.908E-13	9.083E-13	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-1.253E-18
0.70000	2.661E-12	2.697E-12	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-3.662E-18
0.80000	1.097E-11	1.104E-11	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-1.658E-17
0.85000	2.948E-11	2.956E-11	-4.476E-21	-4.476E-21	-4.130E-11	-4.130E-11	-4.805E-17
0.90000	1.142E-10	1.144E-10	-1.921E-20	-1.921E-20	-1.139E-10	-1.139E-10	-2.156E-16
0.92500	2.803E-10	2.836E-10	-4.440E-20	-4.440E-20	-2.263E-10	-2.263E-10	-6.570E-16
0.95000	1.097E-09	1.097E-09	-1.762E-19	-1.762E-19	-5.691E-10	-5.691E-10	-2.948E-15
0.96250	2.949E-09	2.949E-09	-5.112E-19	-5.112E-19	-1.130E-09	-1.130E-09	-8.395E-15
0.97500	1.385E-08	1.398E-08	-2.961E-18	-2.961E-18	-3.609E-09	-3.609E-09	-3.145E-14
0.98124	4.361E-08	4.362E-08	-1.161E-17	-1.161E-17	-9.493E-09	-9.493E-09	-7.572E-14
0.98749	2.886E-07	2.886E-07	-1.245E-16	-1.245E-16	-4.967E-08	-4.967E-08	-2.031E-13
0.99373	2.072E-05	2.072E-05	-9.889E-14	-9.895E-14	-8.437E-06	-8.442E-06	-3.666E-13
0.99143	-1.502E-03	-1.502E-03	-1.799E-15	-1.798E-15	-8.101E 03	-8.100E 03	-3.318E-13
0.98583	-7.805E-04	-7.805E-04	-3.783E-17	-3.783E-17	-8.101E 03	-8.100E 03	-1.254E-13
0.98023	-5.272E-04	-5.272E-04	-6.290E-18	-6.290E-18	-8.101E 03	-8.100E 03	-4.841E-14
0.97464	-3.981E-04	-3.980E-04	-1.832E-18	-1.832E-18	-8.101E 03	-8.100E 03	-2.283E-14
0.96906	-3.197E-04	-3.197E-04	-8.056E-19	-8.056E-19	-8.101E 03	-8.100E 03	-1.132E-14
0.95793	-2.294E-04	-2.294E-04	-2.171E-19	-2.171E-19	-8.101E 03	-8.100E 03	-3.975E-15
0.94682	-1.789E-04	-1.789E-04	-1.025E-19	-1.025E-19	-8.101E 03	-8.100E 03	-1.543E-15
0.92473	-1.242E-04	-1.242E-04	-3.281E-20	-3.281E-20	-8.101E 03	-8.100E 03	-4.148E-16
0.90278	-9.512E-05	-9.511E-05	-1.434E-20	-1.434E-20	-8.101E 03	-8.100E 03	-1.569E-16
0.85939	-6.478E-05	-6.478E-05	-3.703E-21	-3.703E-21	-8.101E 03	-8.100E 03	-3.851E-17
0.81676	-4.912E-05	-4.911E-05	-1.455E-21	-1.455E-21	-8.101E 03	-8.100E 03	-1.405E-17
0.73429	-3.311E-05	-3.310E-05	-3.826E-22	-3.826E-22	-8.101E 03	-8.100E 03	-3.270E-18
0.65670	-2.497E-05	-2.497E-05	-1.491E-22	-1.491E-22	-8.101E 03	-8.100E 03	-1.152E-18
0.58595	-2.004E-05	-2.004E-05	-7.365E-23	-7.365E-23	-8.101E 03	-8.100E 03	-4.998E-19
0.52480	-1.674E-05	-1.674E-05	-4.031E-23	-4.031E-23	-8.101E 03	-8.100E 03	-2.542E-19
0.47696	-1.437E-05	-1.437E-05	-2.219E-23	-2.219E-23	-8.101E 03	-8.100E 03	-1.514E-19
0.44674	-1.259E-05	-1.259E-05	-1.273E-23	-1.273E-23	-8.101E 03	-8.100E 03	-9.726E-20
0.43778	-1.120E-05	-1.120E-05	-7.306E-24	-7.306E-24	-8.101E 03	-8.100E 03	-6.853E-20
0.45137	-1.009E-05	-1.009E-05	-4.188E-24	-4.188E-24	-8.101E 03	-8.100E 03	-5.134E-20

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.070 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.0700	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0700	0.10000	193.643	2.678E-08	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0700	0.20000	172.127	2.918E-08	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0700	0.30000	150.611	3.919E-08	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0700	0.40000	129.095	4.461E-08	1.000E 00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.0700	0.50000	107.580	6.003E-08	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0700	0.60000	86.064	6.086E-08	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0700	0.70000	64.548	1.884E-07	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0700	0.80000	43.033	5.936E-07	1.000E-00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0700	0.85000	32.275	1.507E-06	1.000E-00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0700	0.90000	21.518	5.243E-06	1.000E-00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0700	0.92500	16.139	1.275E-05	1.000E-00	-5.944E-10	-5.944E-10	5.944E-10
0.95000	0.0700	0.95000	10.761	4.361E-05	1.000E-00	-1.508E-09	-1.508E-09	1.508E-09
0.96250	0.0700	0.96250	8.073	1.041E-04	1.000E-00	-2.970E-09	-2.970E-09	2.970E-09
0.97500	0.0700	0.97500	5.386	3.522E-04	9.999E-01	-8.995E-09	-8.995E-09	8.995E-09
0.98124	0.0700	0.98125	4.044	8.347E-04	9.999E-01	-2.088E-08	-2.088E-08	2.088E-08
0.98749	0.0700	0.98750	2.704	2.801E-03	9.996E-01	-8.719E-08	-8.720E-08	8.719E-08
0.99373	0.0701	0.99375	1.374	2.165E-02	9.989E-01	-2.793E-06	-2.794E-06	2.792E-06
0.99168	0.2309	1.00000	1.941	1.495E 02	2.988E 00	-3.847E-07	-3.847E-07	3.848E-07
0.98631	0.3861	1.00625	3.278	1.495E 02	5.750E 00	-4.380E-08	-4.379E-08	4.380E-08
0.98095	0.5733	1.01250	4.620	1.495E 02	8.476E 00	-1.450E-08	-1.450E-08	1.450E-08
0.97560	0.7625	1.01875	5.963	1.495E 02	1.117E 01	-6.669E-09	-6.669E-09	6.669E-09
0.97026	0.9539	1.02500	7.307	1.495E 02	1.383E 01	-3.977E-09	-3.977E-09	3.977E-09
0.95962	1.3429	1.03750	9.995	1.495E 02	1.905E 01	-1.730E-09	-1.730E-09	1.730E-09
0.94902	1.7406	1.05000	12.684	1.495E 02	2.415E 01	-1.069E-09	-1.069E-09	1.069E-09
0.92796	2.5633	1.07500	18.062	1.495E 02	3.398E 01	-4.777E-10	-4.777E-10	4.777E-10
0.90710	3.4239	1.10000	23.440	1.495E 02	4.337E 01	-2.646E-10	-2.646E-10	2.646E-10
0.86604	5.2685	1.15000	34.198	1.495E 02	6.093E 01	-1.119E-10	-1.119E-10	1.119E-10
0.82597	7.2944	1.20000	44.955	1.495E 02	7.702E 01	-5.947E-11	-5.947E-11	5.947E-11
0.74941	11.9610	1.30000	66.471	1.495E 02	1.055E 02	-2.447E-11	-2.447E-11	2.447E-11
0.67898	17.6652	1.40000	87.987	1.495E 02	1.299E 02	-1.291E-11	-1.291E-11	1.291E-11
0.61677	24.6216	1.50000	109.503	1.495E 02	1.511E 02	-8.013E-12	-8.013E-12	8.013E-12
0.56551	32.9589	1.60000	131.019	1.495E 02	1.696E 02	-5.371E-12	-5.371E-12	5.371E-12
0.52839	42.7033	1.70000	152.534	1.495E 02	1.859E 02	-3.622E-12	-3.622E-12	3.622E-12
0.50852	53.5523	1.80000	174.050	1.495E 02	2.004E 02	-2.555E-12	-2.555E-12	2.555E-12
0.50792	64.8441	1.90000	195.566	1.495E 02	2.134E 02	-1.802E-12	-1.802E-12	1.802E-12
0.52667	75.7420	2.00000	217.082	1.495E 02	2.251E 02	-1.286E-12	-1.286E-12	1.286E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.070 θ_D=0. ρ_a=1.000

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.605E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.726E-09	-6.726E-09	6.726E-09	6.726E-09	-6.568E-09	-6.568E-09
0.90000	3.225E-10	449.110	-1.179E-08	-1.179E-08	1.180E-08	1.180E-08	-1.667E-08	-1.667E-08
0.92500	5.944E-10	461.585	-1.734E-08	-1.734E-08	1.735E-08	1.735E-08	-3.073E-08	-3.073E-08
0.95000	1.508E-09	474.060	-2.940E-08	-2.940E-08	2.947E-08	2.947E-08	-7.795E-08	-7.795E-08
0.96250	2.970E-09	480.297	-4.229E-08	-4.229E-08	4.269E-08	4.269E-08	-1.535E-07	-1.535E-07
0.97500	8.995E-09	486.534	-7.294E-08	-7.294E-08	7.754E-08	7.754E-08	-4.651E-07	-4.651E-07
0.98124	2.088E-08	489.652	-1.061E-07	-1.061E-07	1.321E-07	1.321E-07	-1.080E-06	-1.080E-06
0.98749	8.720E-08	492.769	-1.084E-07	-1.084E-07	4.028E-07	4.028E-07	-4.508E-06	-4.508E-06
0.99373	2.794E-06	495.884	6.832E-06	6.832E-06	1.088E-05	1.088E-05	-1.444E-04	-1.444E-04
0.99168	3.846E-07	494.861	4.150E 00	4.150E 00	4.151E 00	4.151E 00	-1.989E-05	-1.989E-05
0.98631	4.379E-08	492.181	9.949E 00	9.949E 00	9.950E 00	9.950E 00	-2.264E-06	-2.264E-06
0.98095	1.450E-08	489.506	1.574E 01	1.574E 01	1.574E 01	1.574E 01	-7.497E-07	-7.497E-07
0.97560	6.668E-09	486.837	2.153E 01	2.153E 01	2.153E 01	2.153E 01	-3.448E-07	-3.448E-07
0.97026	3.977E-09	484.172	2.731E 01	2.731E 01	2.732E 01	2.732E 01	-2.056E-07	-2.056E-07
0.95962	1.730E-09	478.860	3.886E 01	3.886E 01	3.887E 01	3.887E 01	-8.945E-08	-8.945E-08
0.94902	1.069E-09	473.570	5.039E 01	5.039E 01	5.039E 01	5.039E 01	-5.527E-08	-5.527E-08
0.92796	4.777E-10	463.062	7.337E 01	7.337E 01	7.338E 01	7.338E 01	-2.470E-08	-2.470E-08
0.90710	2.646E-10	452.653	9.626E 01	9.626E 01	9.626E 01	9.626E 01	-1.368E-08	-1.368E-08
0.86604	1.119E-10	432.165	1.417E 02	1.417E 02	1.417E 02	1.417E 02	-5.786E-09	-5.786E-09
0.82597	5.947E-11	412.168	1.866E 02	1.866E 02	1.866E 02	1.866E 02	-3.075E-09	-3.075E-09
0.74941	2.447E-11	373.966	2.747E 02	2.747E 02	2.747E 02	2.747E 02	-1.265E-09	-1.265E-09
0.67898	1.291E-11	338.819	3.598E 02	3.598E 02	3.598E 02	3.598E 02	-6.676E-10	-6.676E-10
0.61677	8.013E-12	307.777	4.407E 02	4.407E 02	4.407E 02	4.407E 02	-4.143E-10	-4.143E-10
0.56551	5.371E-12	282.197	5.162E 02	5.162E 02	5.162E 02	5.162E 02	-2.777E-10	-2.777E-10
0.52839	3.622E-12	263.674	5.846E 02	5.846E 02	5.846E 02	5.846E 02	-1.873E-10	-1.873E-10
0.50852	2.555E-12	253.757	6.445E 02	6.445E 02	6.445E 02	6.445E 02	-1.321E-10	-1.321E-10
0.50792	1.802E-12	253.460	6.947E 02	6.947E 02	6.947E 02	6.947E 02	-9.319E-11	-9.319E-11
0.52667	1.286E-12	262.815	7.352E 02	7.352E 02	7.352E 02	7.352E 02	-6.651E-11	-6.651E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0=0.070 θ_D=0. ρ_a=1.000

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-7.135E-20
0.10000	1.154E-14	2.217E-15	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-9.572E-20
0.20000	3.626E-14	2.693E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-1.369E-19
0.30000	9.886E-14	9.242E-14	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-2.152E-19
0.40000	2.054E-13	2.241E-13	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-3.643E-19
0.50000	4.365E-13	4.520E-13	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-7.293E-19
0.60000	1.042E-12	1.054E-12	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-1.705E-18
0.70000	3.133E-12	3.070E-12	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-4.984E-18
0.80000	1.280E-11	1.287E-11	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-2.257E-17
0.85000	3.456E-11	3.446E-11	-4.476E-21	-4.476E-21	-4.130E-11	-4.130E-11	-6.539E-17
0.90000	1.334E-10	1.333E-10	-1.920E-20	-1.920E-20	-1.139E-10	-1.139E-10	-2.934E-16
0.92500	3.270E-10	3.305E-10	-4.439E-20	-4.439E-20	-2.263E-10	-2.263E-10	-8.941E-16
0.95000	1.280E-09	1.280E-09	-1.762E-19	-1.762E-19	-5.690E-10	-5.690E-10	-4.011E-15
0.96250	3.441E-09	3.442E-09	-5.108E-19	-5.108E-19	-1.130E-09	-1.130E-09	-1.142E-14
0.97500	1.627E-08	1.631E-08	-2.956E-18	-2.957E-18	-3.606E-09	-3.606E-09	-4.277E-14
0.98124	5.089E-08	5.089E-08	-1.158E-17	-1.158E-17	-9.478E-09	-9.478E-09	-1.029E-13
0.98749	3.355E-07	3.355E-07	-1.235E-16	-1.236E-16	-4.941E-08	-4.941E-08	-2.756E-13
0.99373	2.343E-05	2.344E-05	-9.271E-14	-9.276E-14	-8.005E-06	-8.009E-06	-5.000E-13
0.99168	-9.311E-04	-9.311E-04	-1.917E-15	-1.916E-15	-1.020E 04	-1.020E 04	-4.570E-13
0.98631	-4.818E-04	-4.818E-04	-3.896E-17	-3.895E-17	-1.020E 04	-1.020E 04	-1.729E-13
0.98095	-3.249E-04	-3.249E-04	-6.405E-18	-6.405E-18	-1.020E 04	-1.020E 04	-6.666E-14
0.97560	-2.451E-04	-2.451E-04	-1.859E-18	-1.859E-18	-1.020E 04	-1.020E 04	-3.135E-14
0.97026	-1.968E-04	-1.968E-04	-8.146E-19	-8.146E-19	-1.020E 04	-1.020E 04	-1.553E-14
0.95962	-1.411E-04	-1.411E-04	-2.184E-19	-2.184E-19	-1.020E 04	-1.020E 04	-5.450E-15
0.94902	-1.100E-04	-1.100E-04	-1.031E-19	-1.031E-19	-1.020E 04	-1.020E 04	-2.112E-15
0.92796	-7.634E-05	-7.633E-05	-3.290E-20	-3.290E-20	-1.020E 04	-1.020E 04	-5.669E-16
0.90710	-5.845E-05	-5.845E-05	-1.437E-20	-1.437E-20	-1.020E 04	-1.020E 04	-2.142E-16
0.86604	-3.980E-05	-3.980E-05	-3.710E-21	-3.710E-21	-1.020E 04	-1.020E 04	-5.253E-17
0.82597	-3.017E-05	-3.017E-05	-1.457E-21	-1.457E-21	-1.020E 04	-1.020E 04	-1.916E-17
0.74941	-2.033E-05	-2.033E-05	-3.830E-22	-3.830E-22	-1.020E 04	-1.020E 04	-4.455E-18
0.67898	-1.533E-05	-1.533E-05	-1.492E-22	-1.492E-22	-1.020E 04	-1.020E 04	-1.570E-18
0.61677	-1.231E-05	-1.231E-05	-7.369E-23	-7.369E-23	-1.020E 04	-1.020E 04	-6.808E-19
0.56551	-1.028E-05	-1.028E-05	-4.033E-23	-4.033E-23	-1.020E 04	-1.020E 04	-3.462E-19
0.52839	-8.825E-06	-8.825E-06	-2.220E-23	-2.220E-23	-1.020E 04	-1.020E 04	-2.062E-19
0.50852	-7.731E-06	-7.731E-06	-1.274E-23	-1.274E-23	-1.020E 04	-1.020E 04	-1.324E-19
0.50792	-6.878E-06	-6.878E-06	-7.310E-24	-7.310E-24	-1.020E 04	-1.020E 04	-9.330E-20
0.52667	-6.195E-06	-6.195E-06	-4.190E-24	-4.190E-24	-1.020E 04	-1.020E 04	-6.989E-20

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.080 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.0800	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.0800	0.10000	193.643	3.575E-08	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.0800	0.20000	172.127	4.002E-08	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.0800	0.30000	150.611	4.461E-08	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.0800	0.40000	129.095	5.545E-08	1.000E 00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.0800	0.50000	107.580	7.254E-08	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.0800	0.60000	86.064	7.504E-08	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.0800	0.70000	64.548	2.201E-07	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.0800	0.80000	43.033	6.670E-07	1.000E-00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.0800	0.85000	32.275	1.688E-06	1.000E-00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.0800	0.90000	21.518	5.843E-06	1.000E-00	-3.225E-10	-3.225E-10	3.225E-10
0.92500	0.0800	0.92500	16.140	1.422E-05	1.000E-00	-5.943E-10	-5.943E-10	5.943E-10
0.95000	0.0800	0.95000	10.762	4.856E-05	1.000E-00	-1.507E-09	-1.507E-09	1.507E-09
0.96250	0.0800	0.96250	8.074	1.161E-04	1.000E-00	-2.968E-09	-2.968E-09	2.968E-09
0.97500	0.0800	0.97500	5.388	3.922E-04	9.999E-01	-8.986E-09	-8.986E-09	8.986E-09
0.98124	0.0800	0.98125	4.046	9.289E-04	9.999E-01	-2.085E-08	-2.085E-08	2.085E-08
0.98749	0.0800	0.98750	2.708	3.111E-03	9.998E-01	-8.675E-08	-8.675E-08	8.674E-08
0.99373	0.0801	0.99375	1.382	2.382E-02	9.992E-01	-2.696E-06	-2.697E-06	2.696E-06
0.99197	0.2262	1.00000	1.924	1.450E 02	2.987E 00	-3.993E-07	-3.992E-07	3.993E-07
0.98686	0.4352	1.00625	3.259	1.450E 02	5.780E 00	-4.467E-08	-4.467E-08	4.467E-08
0.98177	0.6464	1.01250	4.600	1.450E 02	8.537E 00	-1.468E-08	-1.468E-08	1.468E-08
0.97670	0.8598	1.01875	5.943	1.450E 02	1.126E 01	-6.739E-09	-6.739E-09	6.739E-09
0.97164	1.0754	1.02500	7.286	1.450E 02	1.395E 01	-4.008E-09	-4.008E-09	4.008E-09
0.96156	1.5135	1.03750	9.974	1.450E 02	1.923E 01	-1.740E-09	-1.740E-09	1.740E-09
0.95153	1.9608	1.05000	12.662	1.450E 02	2.438E 01	-1.073E-09	-1.073E-09	1.073E-09
0.93166	2.8841	1.07500	18.040	1.450E 02	3.433E 01	-4.788E-10	-4.788E-10	4.788E-10
0.91205	3.8474	1.10000	23.419	1.450E 02	4.383E 01	-2.651E-10	-2.651E-10	2.651E-10
0.87364	5.9023	1.15000	34.176	1.450E 02	6.158E 01	-1.121E-10	-1.121E-10	1.121E-10
0.83645	8.1430	1.20000	44.934	1.450E 02	7.786E 01	-5.953E-11	-5.953E-11	5.953E-11
0.76648	13.2564	1.30000	66.449	1.450E 02	1.066E 02	-2.449E-11	-2.449E-11	2.449E-11
0.70379	19.3371	1.40000	87.965	1.450E 02	1.313E 02	-1.292E-11	-1.292E-11	1.292E-11
0.65050	26.5072	1.50000	109.481	1.450E 02	1.527E 02	-8.016E-12	-8.016E-12	8.016E-12
0.60908	34.7995	1.60000	130.997	1.450E 02	1.714E 02	-5.373E-12	-5.373E-12	5.373E-12
0.58207	44.0747	1.70000	152.512	1.450E 02	1.879E 02	-3.623E-12	-3.623E-12	3.623E-12
0.57152	53.9654	1.80000	174.028	1.450E 02	2.026E 02	-2.556E-12	-2.556E-12	2.556E-12
0.57833	63.9208	1.90000	195.544	1.450E 02	2.158E 02	-1.803E-12	-1.803E-12	1.803E-12
0.60191	73.3087	2.00000	217.060	1.450E 02	2.276E 02	-1.287E-12	-1.287E-12	1.287E-12

PROPAGATION FREQUENCY= 1.550E 10 ϕ_o= 0.000 θ_o= 0. ρ_o= 1.000

z	$_x\mu-1$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.638E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.268E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.505	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.603E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.27?E-10	424.160	-6.726E-09	-6.726E-09	6.726E-09	6.726E-09	-6.568E-09	-6.568E-09
0.90000	3.225E-10	449.110	-1.179E-08	-1.179E-08	1.180E-08	1.180E-08	-1.667E-08	-1.667E-08
0.92500	5.945E-10	461.585	-1.734E-08	-1.734E-08	1.735E-08	1.735E-08	-3.073E-08	-3.073E-08
0.95000	1.507E-09	474.060	-2.939E-08	-2.939E-08	2.948E-08	2.948E-08	-7.794E-08	-7.794E-08
0.96250	2.986E-09	480.297	-4.224E-08	-4.224E-08	4.273E-08	4.273E-08	-1.535E-07	-1.535E-07
0.97500	8.980E-09	486.534	-7.236E-08	-7.236E-08	7.806E-08	7.806E-08	-4.646E-07	-4.646E-07
0.98124	2.085E-08	489.652	-1.029E-07	-1.029E-07	1.351E-07	1.351E-07	-1.078E-06	-1.078E-06
0.98749	8.176E-08	492.770	-7.333E-08	-7.334E-08	4.366E-07	4.366E-07	-4.485E-06	-4.485E-06
0.99373	2.697E-06	495.884	8.732E-06	8.731E-06	1.269E-05	1.269E-05	-1.394E-04	-1.394E-04
0.99197	3.992E-07	495.003	4.008E 00	4.008E 00	4.009E 00	4.009E 00	-2.064E-05	-2.064E-05
0.98686	4.467E-08	492.457	9.673E 00	9.673E 00	9.674E 00	9.674E 00	-2.310E-06	-2.309E-06
0.98177	1.468E-08	489.917	1.533E 01	1.533E 01	1.533E 01	1.533E 01	-7.592E-07	-7.591E-07
0.97670	6.739E-09	487.384	2.098E 01	2.098E 01	2.098E 01	2.098E 01	-3.484E-07	-3.484E-07
0.97164	4.009E-09	484.854	2.663E 01	2.663E 01	2.663E 01	2.663E 01	-2.072E-07	-2.072E-07
0.96156	1.742E-09	479.828	3.790E 01	3.790E 01	3.790E 01	3.790E 01	-8.997E-08	-8.997E-08
0.95153	1.075E-09	474.825	4.914E 01	4.914E 01	4.914E 01	4.914E 01	-5.548E-08	-5.548E-08
0.93166	4.784E-10	464.910	7.153E 01	7.153E 01	7.153E 01	7.153E 01	-2.476E-08	-2.476E-08
0.91205	2.651E-10	455.121	9.379E 01	9.379E 01	9.379E 01	9.379E 01	-1.371E-08	-1.371E-08
0.87364	1.12?E-10	435.955	1.379E 02	1.379E 02	1.379E 02	1.379E 02	-5.794E-09	-5.794E-09
0.83645	5.953E-11	417.401	1.814E 02	1.814E 02	1.814E 02	1.814E 02	-3.078E-09	-3.078E-09
0.76648	2.449E-11	382.441	2.662E 02	2.662E 02	2.662E 02	2.662E 02	-1.266E-09	-1.266E-09
0.70379	1.29?E-11	351.194	3.474E 02	3.474E 02	3.474E 02	3.474E 02	-6.679E-10	-6.679E-10
0.65050	8.01?E-12	324.606	4.239E 02	4.239E 02	4.239E 02	4.239E 02	-4.144E-10	-4.144E-10
0.60908	5.373E-12	303.937	4.945E 02	4.945E 02	4.945E 02	4.945E 02	-2.778E-10	-2.778E-10
0.58207	3.623E-12	290.460	5.579E 02	5.579E 02	5.579E 02	5.579E 02	-1.873E-10	-1.873E-10
0.57152	2.555E-12	285.196	6.130E 02	6.130E 02	6.130E 02	6.130E 02	-1.321E-10	-1.321E-10
0.57833	1.803E-12	288.594	6.595E 02	6.595E 02	6.595E 02	6.595E 02	-9.322E-11	-9.322E-11
0.60191	1.287E-12	300.360	6.977E 02	6.977E 02	6.977E 02	6.977E 02	-6.654E-11	-6.654E-11

PROPAGATION FREQUENCY= 1.550E 10 ϕ_o= 0.080 θ_o= 0. ρ_o= 1.000

z	$_oD_y$	$_xD_y$	$o\kappa$	$x\kappa$	$o\kappa_1$	$x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-9.319E-20
0.10000	2.663E-14	2.722E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-1.250E-19
0.20000	5.252E-14	4.340E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-1.788E-19
0.30000	1.378E-13	1.378E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-2.811E-19
0.40000	2.758E-13	2.518E-13	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-4.759E-19
0.50000	5.764E-13	5.618E-13	-7.777E-23	-7.777E-23	-1.852E-12	-1.862E-12	-9.525E-19
0.60000	1.293E-12	1.224E-12	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-2.227E-18
0.70000	3.636E-12	3.612E-12	-4.201E-22	-4.201E-22	-7.475E-12	-7.475E-12	-6.510E-18
0.80000	1.473E-11	1.483E-11	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-2.348E-17
0.85000	3.955E-11	3.953E-11	-4.476E-21	-4.476E-21	-4.130E-11	-4.130E-11	-8.541E-17
0.90000	1.527E-10	1.527E-10	-1.920E-20	-1.920E-20	-1.139E-10	-1.139E-10	-3.832E-16
0.92500	3.742E-10	3.786E-10	-4.439E-20	-4.439E-20	-2.263E-10	-2.263E-10	-1.168E-15
0.95000	1.464E-09	1.464E-09	-1.762E-19	-1.762E-19	-5.689E-10	-5.689E-10	-5.237E-15
0.96250	3.935E-09	3.936E-09	-5.104E-19	-5.105E-19	-1.129E-09	-1.129E-09	-1.491E-14
0.97500	1.851E-08	1.863E-08	-2.952E-18	-2.952E-18	-3.603E-09	-3.603E-09	-5.580E-14
0.98124	5.823E-08	5.823E-08	-1.155E-17	-1.155E-17	-9.461E-09	-9.462E-09	-1.341E-13
0.98749	3.827E-07	3.828E-07	-1.225E-16	-1.225E-16	-4.913E-08	-4.914E-08	-3.587E-13
0.99373	2.602E-05	2.603E-05	-8.648E-14	-8.653E-14	-7.564E-06	-7.568E-06	-6.546E-13
0.99197	-1.287E-03	-1.287E-03	-2.056E-15	-2.055E-15	-9.310E 03	-9.309E 03	-6.052E-13
0.98686	-6.621E-04	-6.621E-04	-4.025E-17	-4.024E-17	-9.310E 03	-9.309E 03	-2.291E-13
0.98177	-4.456E-04	-4.456E-04	-6.537E-18	-6.536E-18	-9.310E 03	-9.309E 03	-8.822E-14
0.97670	-3.358E-04	-3.358E-04	-1.890E-18	-1.890E-18	-9.310E 03	-9.309E 03	-4.136E-14
0.97164	-2.694E-04	-2.694E-04	-8.249E-19	-8.249E-19	-9.310E 03	-9.309E 03	-2.047E-14
0.96156	-1.931E-04	-1.931E-04	-2.204E-19	-2.204E-19	-9.310E 03	-9.309E 03	-7.168E-15
0.95153	-1.505E-04	-1.505E-04	-1.037E-19	-1.037E-19	-9.310E 03	-9.309E 03	-2.776E-15
0.93166	-1.044E-04	-1.044E-04	-3.301E-20	-3.301E-20	-9.310E 03	-9.309E 03	-7.439E-16
0.91205	-7.991E-05	-7.991E-05	-1.442E-20	-1.442E-20	-9.310E 03	-9.309E 03	-2.808E-16
0.87364	-5.443E-05	-5.440E-05	-3.718E-21	-3.718E-21	-9.310E 03	-9.309E 03	-6.877E-17
0.83645	-4.123E-05	-4.123E-05	-1.460E-21	-1.460E-21	-9.310E 03	-9.309E 03	-2.506E-17
0.76648	-2.779E-05	-2.779E-05	-3.834E-22	-3.834E-22	-9.310E 03	-9.309E 03	-5.827E-18
0.70379	-2.095E-05	-2.095E-05	-1.493E-22	-1.493E-22	-9.310E 03	-9.309E 03	-2.052E-18
0.65050	-1.682E-05	-1.682E-05	-7.374E-23	-7.374E-23	-9.310E 03	-9.309E 03	-8.899E-19
0.60908	-1.404E-05	-1.404E-05	-4.036E-23	-4.036E-23	-9.310E 03	-9.309E 03	-4.524E-19
0.58207	-1.206E-05	-1.206E-05	-2.221E-23	-2.221E-23	-9.310E 03	-9.309E 03	-2.694E-19
0.57152	-1.056E-05	-1.056E-05	-1.275E-23	-1.275E-23	-9.310E 03	-9.309E 03	-1.730E-19
0.57833	-9.397E-06	-9.397E-06	-7.314E-24	-7.314E-24	-9.310E 03	-9.309E 03	-1.219E-19
0.60191	-8.464E-06	-8.464E-06	-4.192E-24	-4.192E-24	-9.310E 03	-9.309E 03	-9.131E-20

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.100 θ_D= 0. ρ_a= 1.000

z	ϕ	z_f	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu$-1.0
0.	0.1000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.1000	0.10000	193.043	6.212E-08	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.1000	0.20000	172.427	8.608E-08	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.1000	0.30000	150.511	7.754E-08	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.1000	0.40000	129.396	9.171E-08	1.000E 00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.1000	0.50000	107.580	1.067E-07	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.1000	0.60000	86.364	1.184E-07	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.1000	0.70000	64.248	3.068E-07	1.000E 00	-2.605E-11	-2.605E-11	2.605E-11
0.80000	0.1000	0.80000	43.133	8.905E-07	1.000E-00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.1000	0.85000	32.276	2.234E-06	1.000E-00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.1000	0.90000	21.919	7.671E-06	1.000E-00	-3.224E-10	-3.224E-10	3.224E-10
0.92500	0.1000	0.92500	16.141	1.373E-05	1.000E-00	-5.942E-10	-5.942E-10	5.942E-10
0.95000	0.1000	0.95000	10.765	6.377E-05	1.000E-00	-1.507E-09	-1.507E-09	1.507E-09
0.96250	0.1000	0.96250	8.078	1.521E-04	9.999E-01	-2.965E-09	-2.965E-09	2.965E-09
0.97500	0.1000	0.97500	5.393	5.131E-04	9.998E-01	-8.964E-09	-8.965E-09	8.964E-09
0.98124	0.1000	0.98125	4.053	1.213E-03	9.997E-01	-2.077E-08	-2.077E-08	2.076E-08
0.98749	0.1000	0.98750	2.717	4.044E-03	9.994E-01	-8.567E-08	-8.568E-08	8.567E-08
0.99373	0.1001	0.99375	1.400	3.024E-02	9.983E-01	-2.475E-06	-2.476E-06	2.475E-06
0.99263	0.2723	1.00000	1.884	1.358E 02	2.492E 00	-4.374E-07	-4.373E-07	4.375E-07
0.98818	0.5258	1.00625	3.213	1.358E 02	5.434E 00	-4.690E-08	-4.690E-08	4.691E-08
0.98374	0.7815	1.01250	4.551	1.358E 02	8.736E 00	-1.514E-08	-1.514E-08	1.514E-08
0.97932	1.0345	1.01875	5.893	1.358E 02	1.155E 01	-6.917E-09	-6.916E-09	6.917E-09
0.97492	1.2998	1.02500	7.235	1.358E 02	1.433E 01	-4.087E-09	-4.087E-09	4.087E-09
0.96618	1.8276	1.03750	9.922	1.358E 02	1.979E 01	-1.765E-09	-1.765E-09	1.765E-09
0.95753	2.3650	1.05000	12.610	1.358E 02	2.512E 01	-1.083E-09	-1.083E-09	1.083E-09
0.94049	3.4092	1.07500	17.987	1.358E 02	3.540E 01	-4.817E-10	-4.817E-10	4.817E-10
0.92380	4.6137	1.10000	23.365	1.358E 02	4.522E 01	-2.664E-10	-2.664E-10	2.664E-10
0.89160	7.0197	1.15000	34.122	1.358E 02	6.357E 01	-1.125E-10	-1.125E-10	1.125E-10
0.86110	9.6297	1.20000	44.880	1.358E 02	8.039E 01	-5.969E-11	-5.969E-11	5.969E-11
0.80597	15.3999	1.30000	66.395	1.358E 02	1.102E 02	-2.453E-11	-2.453E-11	2.453E-11
0.76005	21.8665	1.40000	87.911	1.358E 02	1.357E 02	-1.294E-11	-1.294E-11	1.294E-11
0.72509	29.1124	1.50000	109.426	1.358E 02	1.578E 02	-8.024E-12	-8.024E-12	8.024E-12
0.70274	36.9920	1.60000	130.942	1.358E 02	1.771E 02	-5.379E-12	-5.379E-12	5.379E-12
0.69421	45.1.22	1.70000	152.458	1.358E 02	1.942E 02	-3.627E-12	-3.627E-12	3.627E-12
0.70001	53.3245	1.80000	173.974	1.358E 02	2.094E 02	-2.558E-12	-2.558E-12	2.558E-12
0.71979	61.2430	1.90000	195.490	1.358E 02	2.229E 02	-1.805E-12	-1.805E-12	1.805E-12
0.75246	68.6064	2.00000	217.006	1.358E 02	2.352E 02	-1.288E-12	-1.288E-12	1.288E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.100 θ_D= 0. ρ_a= 1.000

z	$_x\mu$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.605E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.726E-09	-6.726E-09	6.726E-09	6.726E-09	-6.568E-09	-6.568E-09
0.90000	3.224E-10	449.110	-1.179E-08	-1.179E-08	1.180E-08	1.180E-08	-1.667E-08	-1.667E-08
0.92500	5.942E-10	461.585	-1.734E-08	-1.734E-08	1.735E-08	1.735E-08	-3.072E-08	-3.072E-08
0.95000	1.507E-09	474.060	-2.936E-08	-2.936E-08	2.950E-08	2.950E-08	-7.790E-08	-7.790E-08
0.96250	2.965E-09	480.297	-4.205E-08	-4.205E-08	4.289E-08	4.289E-08	-1.533E-07	-1.533E-07
0.97500	8.964E-09	486.534	-7.026E-08	-7.026E-08	8.002E-08	8.002E-08	-4.635E-07	-4.635E-07
0.98124	2.077E-08	489.652	-9.136E-08	-9.136E-08	1.462E-07	1.462E-07	-1.074E-06	-1.074E-06
0.98749	8.568E-08	492.769	5.338E-08	5.337E-08	5.605E-07	5.605E-07	-4.429E-06	-4.430E-06
0.99373	2.476E-06	495.883	1.538E-05	1.538E-05	1.915E-05	1.915E-05	-1.280E-04	-1.280E-04
0.99263	4.373E-07	495.336	3.675E 00	3.675E 00	3.676E 00	3.676E 00	-2.262E-05	-2.261E-05
0.98818	4.690E-08	493.111	9.019E 00	9.019E 00	9.020E 00	9.020E 00	-2.425E-06	-2.425E-06
0.98374	1.514E-08	490.896	1.435E 01	1.435E 01	1.435E 01	1.435E 01	-7.830E-07	-7.830E-07
0.97932	6.916E-09	488.691	1.968E 01	1.968E 01	1.968E 01	1.968E 01	-3.576E-07	-3.576E-07
0.97492	4.087E-09	486.496	2.499E 01	2.499E 01	2.499E 01	2.499E 01	-2.113E-07	-2.113E-07
0.96618	1.765E-09	482.137	3.559E 01	3.559E 01	3.559E 01	3.559E 01	-9.126E-08	-9.126E-08
0.95753	1.083E-09	477.819	4.614E 01	4.614E 01	4.614E 01	4.614E 01	-5.600E-08	-5.600E-08
0.94049	4.817E-10	469.313	6.712E 01	6.712E 01	6.713E 01	6.713E 01	-2.491E-08	-2.491E-08
0.92380	2.664E-10	460.988	8.792E 01	8.792E 01	8.793E 01	8.793E 01	-1.377E-08	-1.377E-08
0.89160	1.125E-10	444.919	1.289E 02	1.289E 02	1.289E 02	1.289E 02	-5.815E-09	-5.815E-09
0.86110	5.969E-11	429.700	1.691E 02	1.691E 02	1.691E 02	1.691E 02	-3.086E-09	-3.086E-09
0.80597	2.453E-11	402.187	2.465E 02	2.465E 02	2.465E 02	2.465E 02	-1.268E-09	-1.268E-09
0.76005	1.294E-11	379.272	3.193E 02	3.193E 02	3.193E 02	3.193E 02	-6.688E-10	-6.688E-10
0.72509	8.024E-12	361.829	3.867E 02	3.867E 02	3.867E 02	3.867E 02	-4.149E-10	-4.149E-10
0.70274	5.379E-12	350.675	4.477E 02	4.477E 02	4.477E 02	4.477E 02	-2.781E-10	-2.781E-10
0.69421	3.627E-12	346.420	5.019E 02	5.019E 02	5.019E 02	5.019E 02	-1.875E-10	-1.875E-10
0.70001	2.558E-12	349.314	5.489E 02	5.489E 02	5.489E 02	5.489E 02	-1.323E-10	-1.323E-10
0.71979	1.805E-12	359.186	5.889E 02	5.889E 02	5.889E 02	5.889E 02	-9.330E-11	-9.330E-11
0.75246	1.288E-12	375.485	6.225E 02	6.225E 02	6.225E 02	6.225E 02	-6.659E-11	-6.659E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0=0.100 θ_D=0. ρ_a=1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-1.456E-19
0.10000	2.531E-14	2.951E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-1.953E-19
0.20000	6.734E-14	6.446E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-2.794E-19
0.30000	1.615E-13	1.499E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-4.392E-19
0.40000	3.377E-13	3.465E-13	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-7.435E-19
0.50000	7.034E-13	6.849E-13	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-1.488E-18
0.60000	1.577E-12	1.547E-12	-1.601E-22	-1.601E-22	-3.535E-12	-3.535E-12	-3.480E-18
0.70000	4.442E-12	4.468E-12	-4.200E-22	-4.200E-22	-7.475E-12	-7.475E-12	-1.017E-17
0.80000	1.833E-11	1.834E-11	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-4.606E-17
0.85000	4.896E-11	4.896E-11	-4.475E-21	-4.475E-21	-4.130E-11	-4.130E-11	-1.334E-16
0.90000	1.894E-10	1.894E-10	-1.920E-20	-1.920E-20	-1.139E-10	-1.139E-10	-5.986E-16
0.92500	4.681E-10	4.696E-10	-4.438E-20	-4.438E-20	-2.263E-10	-2.263E-10	-1.824E-15
0.95000	1.815E-09	1.815E-09	-1.760E-19	-1.760E-19	-5.687E-10	-5.687E-10	-8.175E-15
0.96250	4.877E-09	4.877E-09	-5.095E-19	-5.095E-19	-1.128E-09	-1.128E-09	-2.327E-14
0.97500	2.312E-08	2.314E-08	-2.941E-18	-2.941E-18	-3.595E-09	-3.595E-09	-8.694E-14
0.98124	7.188E-08	7.189E-08	-1.148E-17	-1.148E-17	-9.421E-09	-9.421E-09	-2.084E-13
0.98749	4.699E-07	4.699E-07	-1.199E-16	-1.199E-16	-4.846E-08	-4.847E-08	-5.560E-13
0.99373	2.946E-05	2.947E-05	-7.301E-14	-7.305E-14	-6.603E-06	-6.606E-06	-1.029E-12
0.99263	-1.591E-03	-1.591E-03	-2.444E-15	-2.443E-15	-1.110E 04	-1.110E 04	-9.799E-13
0.98818	-8.060E-04	-8.060E-04	-4.363E-17	-4.363E-17	-1.110E 04	-1.110E 04	-3.716E-13
0.98374	-5.397E-04	-5.397E-04	-6.873E-18	-6.873E-18	-1.110E 04	-1.110E 04	-1.425E-13
0.97932	-4.057E-04	-4.057E-04	-1.968E-18	-1.967E-18	-1.110E 04	-1.110E 04	-6.625E-14
0.97492	-3.250E-04	-3.250E-04	-8.509E-19	-8.509E-19	-1.110E 04	-1.110E 04	-3.273E-14
0.96618	-2.325E-04	-2.325E-04	-2.254E-19	-2.254E-19	-1.110E 04	-1.110E 04	-1.139E-14
0.95753	-1.810E-04	-1.810E-04	-1.052E-19	-1.052E-19	-1.110E 04	-1.110E 04	-4.406E-15
0.94049	-1.254E-04	-1.254E-04	-3.329E-20	-3.329E-20	-1.110E 04	-1.110E 04	-1.176E-15
0.92380	-9.598E-05	-9.598E-05	-1.453E-20	-1.453E-20	-1.110E 04	-1.110E 04	-4.427E-16
0.89160	-6.530E-05	-6.530E-05	-3.738E-21	-3.738E-21	-1.110E 04	-1.110E 04	-1.081E-16
0.86110	-4.948E-05	-4.949E-05	-1.465E-21	-1.465E-21	-1.110E 04	-1.110E 04	-3.934E-17
0.80597	-3.334E-05	-3.334E-05	-3.844E-22	-3.844E-22	-1.110E 04	-1.110E 04	-9.133E-18
0.76005	-2.513E-05	-2.514E-05	-1.496E-22	-1.496E-22	-1.110E 04	-1.110E 04	-3.214E-18
0.72509	-2.017E-05	-2.017E-05	-7.385E-23	-7.385E-23	-1.110E 04	-1.110E 04	-1.393E-18
0.70274	-1.684E-05	-1.685E-05	-4.042E-23	-4.042E-23	-1.110E 04	-1.110E 04	-7.079E-19
0.69421	-1.446E-05	-1.446E-05	-2.224E-23	-2.224E-23	-1.110E 04	-1.110E 04	-4.215E-19
0.70001	-1.267E-05	-1.267E-05	-1.276E-23	-1.276E-23	-1.110E 04	-1.110E 04	-2.706E-19
0.71979	-1.127E-05	-1.127E-05	-7.324E-24	-7.324E-24	-1.110E 04	-1.110E 04	-1.906E-19
0.75246	-1.015E-05	-1.015E-05	-4.198E-24	-4.198E-24	-1.110E 04	-1.110E 04	-1.428E-19

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.120 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1200	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.1200	0.10000	193.643	9.995E-08	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.1200	0.20000	172.127	1.101E-07	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.1200	0.30000	150.611	1.230E-07	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.1200	0.40000	129.096	1.376E-07	1.000E 00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.1200	0.50000	107.580	1.584E-07	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.1200	0.60000	86.064	1.651E-07	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.1200	0.70000	64.549	3.869E-07	1.000E 00	-2.604E-11	-2.604E-11	2.604E-11
0.80000	0.1200	0.80000	43.034	1.094E-06	1.000E-00	-6.551E-11	-6.551E-11	6.551E-11
0.85000	0.1200	0.85000	32.277	2.708E-06	1.000E-00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.1200	0.90000	21.520	9.191E-06	1.000E-00	-3.224E-10	-3.224E-10	3.224E-10
0.92500	0.1200	0.92500	16.143	2.229E-05	1.000E-00	-5.941E-10	-5.941E-10	5.941E-10
0.95000	0.1200	0.95000	10.767	7.583E-05	9.999E-01	-1.506E-09	-1.506E-09	1.506E-09
0.96250	0.1200	0.96250	8.081	1.809E-04	9.999E-01	-2.961E-09	-2.961E-09	2.961E-09
0.97500	0.1200	0.97500	5.398	6.098E-04	9.997E-01	-8.938E-09	-8.939E-09	8.938E-09
0.98124	0.1200	0.98125	4.060	1.439E-03	9.995E-01	-2.067E-08	-2.067E-08	2.067E-08
0.98749	0.1200	0.98750	2.729	4.770E-03	9.990E-01	-8.439E-08	-8.440E-08	8.439E-08
0.99373	0.1201	0.99375	1.422	3.479E-02	9.973E-01	-2.235E-06	-2.236E-06	2.235E-06
0.99342	0.3117	1.00000	1.834	1.263E 02	3.050E 00	-4.897E-07	-4.896E-07	4.897E-07
0.98975	0.6039	1.00625	3.155	1.263E 02	5.979E 00	-4.985E-08	-4.985E-08	4.985E-08
0.98610	0.8982	1.01250	4.490	1.263E 02	8.925E 00	-1.574E-08	-1.574E-08	1.574E-08
0.98248	1.1948	1.01875	5.830	1.263E 02	1.184E 01	-7.146E-09	-7.145E-09	7.146E-09
0.97889	1.4935	1.02500	7.171	1.263E 02	1.471E 01	-4.187E-09	-4.187E-09	4.187E-09
0.97178	2.0976	1.03750	9.857	1.263E 02	2.036E 01	-1.797E-09	-1.797E-09	1.797E-09
0.96478	2.7105	1.05000	12.544	1.263E 02	2.588E 01	-1.096E-09	-1.096E-09	1.096E-09
0.95112	3.9630	1.07500	17.921	1.263E 02	3.652E 01	-4.854E-10	-4.854E-10	4.854E-10
0.93793	5.2513	1.10000	23.298	1.263E 02	4.668E 01	-2.680E-10	-2.680E-10	2.680E-10
0.91304	7.9363	1.15000	34.055	1.263E 02	6.567E 01	-1.130E-10	-1.130E-10	1.130E-10
0.89026	10.7651	1.20000	44.812	1.263E 02	8.308E 01	-5.990E-11	-5.990E-11	5.990E-11
0.85170	16.8391	1.30000	66.327	1.263E 02	1.139E 02	-2.458E-11	-2.458E-11	2.458E-11
0.82355	23.4073	1.40000	87.843	1.263E 02	1.403E 02	-1.296E-11	-1.296E-11	1.296E-11
0.80689	30.3419	1.50000	109.359	1.263E 02	1.632E 02	-8.034E-12	-8.034E-12	8.034E-12
0.80244	37.4599	1.60000	130.874	1.263E 02	1.832E 02	-5.385E-12	-5.385E-12	5.385E-12
0.81040	44.5479	1.70000	152.390	1.263E 02	2.009E 02	-3.631E-12	-3.631E-12	3.631E-12
0.83041	51.3941	1.80000	173.906	1.263E 02	2.166E 02	-2.561E-12	-2.561E-12	2.561E-12
0.86164	57.8323	1.90000	195.422	1.263E 02	2.306E 02	-1.807E-12	-1.807E-12	1.807E-12
0.90291	63.7516	2.00000	216.938	1.263E 02	2.433E 02	-1.289E-12	-1.289E-12	1.289E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 0.120 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.353E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.604E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.551E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.27CE-10	424.160	-6.726E-09	-6.726E-09	6.726E-09	6.726E-09	-6.567E-09	-6.567E-09
0.90000	3.224E-10	449.110	-1.179E-08	-1.179E-08	1.180E-08	1.180E-08	-1.067E-08	-1.667E-08
0.92500	5.944E-10	461.585	-1.733E-08	-1.733E-08	1.735E-08	1.735E-08	-3.072E-08	-3.072E-08
0.95000	1.506E-09	474.060	-2.932E-08	-2.932E-08	2.953E-08	2.953E-08	-7.787E-08	-7.787E-08
0.96250	2.961E-09	480.297	-4.185E-08	-4.185E-08	4.305E-08	4.305E-08	-1.531E-07	-1.531E-07
0.97500	8.934E-09	486.534	-6.817E-08	-6.817E-08	8.195E-08	8.195E-08	-4.621E-07	-4.621E-07
0.98124	2.067E-08	489.652	-7.995E-08	-7.995E-08	1.571E-07	1.571E-07	-1.069E-06	-1.069E-06
0.98749	8.441E-08	492.769	1.752E-07	1.752E-07	6.788E-07	6.788E-07	-4.363E-06	-4.364E-06
0.99373	2.236E-06	495.884	2.095E-05	2.095E-05	2.451E-05	2.451E-05	-1.156E-04	-1.156E-04
0.99342	4.896E-07	495.728	3.283E 00	3.283E 00	3.284E 00	3.284E 00	-2.532E-05	-2.531E-05
0.98975	4.985E-08	493.896	8.234E 00	8.234E 00	8.235E 00	8.235E 00	-2.578E-06	-2.577E-06
0.98610	1.574E-08	492.076	1.317E 01	1.317E 01	1.317E 01	1.317E 01	-8.138E-07	-8.138E-07
0.98248	7.143E-09	490.269	1.810E 01	1.810E 01	1.810E 01	1.810E 01	-3.694E-07	-3.694E-07
0.97889	4.187E-09	488.476	2.301E 01	2.301E 01	2.301E 01	2.301E 01	-2.165E-07	-2.165E-07
0.97178	2.797E-09	484.929	3.280E 01	3.280E 01	3.280E 01	3.280E 01	-9.291E-08	-9.291E-08
0.96478	2.096E-09	481.437	4.252E 01	4.252E 01	4.253E 01	4.253E 01	-5.666E-08	-5.666E-08
0.95112	4.854E-10	474.622	6.181E 01	6.181E 01	6.182E 01	6.182E 01	-2.510E-08	-2.510E-08
0.93793	2.68CE-10	468.040	8.087E 01	8.087E 01	8.087E 01	8.087E 01	-1.385E-08	-1.385E-08
0.91304	1.130E-10	455.617	1.182E 02	1.182E 02	1.182E 02	1.182E 02	-5.840E-09	-5.840E-09
0.89026	5.990E-11	444.249	1.546E 02	1.546E 02	1.546E 02	1.546E 02	-3.097E-09	-3.097E-09
0.85170	2.458E-11	425.009	2.237E 02	2.237E 02	2.237E 02	2.237E 02	-1.271E-09	-1.271E-09
0.82355	1.290E-11	410.960	2.877E 02	2.877E 02	2.877E 02	2.877E 02	-6.700E-10	-6.700E-10
0.80689	8.034E-12	402.647	3.459E 02	3.459E 02	3.459E 02	3.459E 02	-4.154E-10	-4.154E-10
0.80244	6.385E-12	400.426	3.980E 02	3.980E 02	3.980E 02	3.980E 02	-2.784E-10	-2.784E-10
0.81040	3.631E-12	404.398	4.439E 02	4.439E 02	4.439E 02	4.439E 02	-1.877E-10	-1.877E-10
0.83041	2.561E-12	414.384	4.838E 02	4.838E 02	4.838E 02	4.838E 02	-1.324E-10	-1.324E-10
0.86164	1.807E-12	429.967	5.182E 02	5.182E 02	5.182E 02	5.182E 02	-9.341E-11	-9.341E-11
0.90291	1.289E-12	450.565	5.475E 02	5.475E 02	5.475E 02	5.475E 02	-6.666E-11	-6.666E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 0.120 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-2.097E-19
0.10000	2.857E-14	2.857E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-2.813E-19
0.20000	8.447E-14	8.447E-14	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-4.023E-19
0.30000	1.882E-13	1.917E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-6.325E-19
0.40000	4.118E-13	4.014E-13	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-1.071E-18
0.50000	8.312E-13	8.216E-13	-7.777E-23	-7.777E-23	-1.852E-12	-1.862E-12	-2.143E-18
0.60000	1.872E-12	1.865E-12	-1.601E-22	-1.601E-22	-3.534E-12	-3.534E-12	-5.011E-18
0.70000	5.310E-12	5.294E-12	-4.200E-22	-4.200E-22	-7.475E-12	-7.475E-12	-1.465E-17
0.80000	2.194E-11	2.190E-11	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-6.632E-17
0.85000	5.860E-11	5.855E-11	-4.475E-21	-4.475E-21	-4.130E-11	-4.130E-11	-1.921E-16
0.90000	2.265E-10	2.266E-10	-1.920E-20	-1.920E-20	-1.138E-10	-1.138E-10	-8.618E-16
0.92500	5.623E-10	5.616E-10	-4.437E-20	-4.437E-20	-2.262E-10	-2.262E-10	-2.625E-15
0.95000	2.170E-09	2.171E-09	-1.759E-19	-1.759E-19	-5.685E-10	-5.685E-10	-1.176E-14
0.96250	5.830E-09	5.830E-09	-5.084E-19	-5.084E-19	-1.127E-09	-1.127E-09	-3.347E-14
0.97500	2.762E-08	2.758E-08	-2.928E-18	-2.928E-18	-3.586E-09	-3.586E-09	-1.248E-13
0.98124	8.572E-08	8.573E-08	-1.139E-17	-1.139E-17	-9.373E-09	-9.373E-09	-2.982E-13
0.98749	5.551E-07	5.551E-07	-1.169E-16	-1.169E-16	-4.767E-08	-4.767E-08	-7.928E-13
0.99373	3.158E-05	3.159E-05	-5.968E-14	-5.971E-14	-5.632E-06	-5.635E-06	-1.496E-12
0.99342	-3.491E-03	-3.492E-03	-3.027E-15	-3.026E-15	-1.104E 04	-1.103E 04	-1.480E-12
0.98975	-1.769E-03	-1.769E-03	-4.826E-17	-4.825E-17	-1.104E 04	-1.103E 04	-5.615E-13
0.98610	-1.178E-03	-1.178E-03	-7.318E-18	-7.318E-18	-1.104E 04	-1.103E 04	-2.141E-13
0.98248	-8.829E-04	-8.829E-04	-2.069E-18	-2.069E-18	-1.104E 04	-1.103E 04	-9.847E-14
0.97889	-7.059E-04	-7.059E-04	-8.846E-19	-8.846E-19	-1.104E 04	-1.103E 04	-4.850E-14
0.97178	-5.040E-04	-5.040E-04	-2.318E-19	-2.318E-19	-1.104E 04	-1.103E 04	-1.676E-14
0.96478	-3.918E-04	-3.919E-04	-1.072E-19	-1.072E-19	-1.104E 04	-1.103E 04	-6.470E-15
0.95112	-2.712E-04	-2.712E-04	-3.363E-20	-3.363E-20	-1.104E 04	-1.103E 04	-1.718E-15
0.93793	-2.073E-04	-2.073E-04	-1.467E-20	-1.467E-20	-1.104E 04	-1.103E 04	-6.447E-16
0.91304	-1.410E-04	-1.410E-04	-3.762E-21	-3.762E-21	-1.104E 04	-1.103E 04	-1.568E-16
0.89026	-1.068E-04	-1.068E-04	-1.473E-21	-1.473E-21	-1.104E 04	-1.103E 04	-5.697E-17
0.85170	-7.191E-05	-7.191E-05	-3.856E-22	-3.856E-22	-1.104E 04	-1.103E 04	-1.320E-17
0.82355	-5.421E-05	-5.421E-05	-1.500E-22	-1.500E-22	-1.104E 04	-1.103E 04	-4.642E-18
0.80689	-4.350E-05	-4.350E-05	-7.399E-23	-7.399E-23	-1.104E 04	-1.103E 04	-2.011E-18
0.80244	-3.632E-05	-3.632E-05	-4.050E-23	-4.050E-23	-1.104E 04	-1.103E 04	-1.021E-18
0.81040	-3.118E-05	-3.118E-05	-2.228E-23	-2.228E-23	-1.104E 04	-1.103E 04	-6.079E-19
0.83041	-2.731E-05	-2.731E-05	-1.279E-23	-1.279E-23	-1.104E 04	-1.103E 04	-3.902E-19
0.86164	-2.430E-05	-2.430E-05	-7.337E-24	-7.337E-24	-1.104E 04	-1.103E 04	-2.748E-19
0.90291	-2.188E-05	-2.188E-05	-4.206E-24	-4.206E-24	-1.104E 04	-1.103E 04	-2.057E-19

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.150 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.1500	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.1500	0.10000	193.643	1.857E-07	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.1500	0.20000	172.127	1.955E-07	1.000E 00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.1500	0.30000	150.612	2.084E-07	1.000E 00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.1500	0.40000	129.096	2.259E-07	1.000E 00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.1500	0.50000	107.580	2.501E-07	1.000E 00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.1500	0.60000	86.065	2.568E-07	1.000E 00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.1500	0.70000	64.549	5.269E-07	1.000E-00	-2.604E-11	-2.604E-11	2.604E-11
0.80000	0.1500	0.80000	43.035	1.334E-06	1.000E-00	-6.550E-11	-6.550E-11	6.550E-11
0.85000	0.1500	0.85000	32.278	3.208E-06	1.000E-00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.1500	0.90000	21.523	1.086E-05	1.000E-00	-3.223E-10	-3.223E-10	3.223E-10
0.92500	0.1500	0.92500	16.146	2.625E-05	9.999E-01	-5.939E-10	-5.939E-10	5.939E-10
0.95000	0.1500	0.95000	10.772	8.917E-05	9.998E-01	-1.505E-09	-1.505E-09	1.505E-09
0.96250	0.1500	0.96250	8.088	2.124E-04	9.997E-01	-2.953E-09	-2.953E-09	2.953E-09
0.97500	0.1500	0.97500	5.409	7.142E-04	9.993E-01	-8.891E-09	-8.891E-09	8.891E-09
0.98124	0.1500	0.98125	4.074	1.678E-03	9.988E-01	-2.049E-08	-2.049E-08	2.049E-08
0.98749	0.1500	0.98750	2.749	5.512E-03	9.977E-01	-8.212E-08	-8.212E-08	8.211E-08
0.99373	0.1501	0.99375	1.461	3.822E-02	9.952E-01	-1.886E-06	-1.887E-06	1.886E-06
0.99478	0.3349	1.00000	1.740	1.113E 02	2.872E 00	-6.060E-07	-6.059E-07	6.060E-07
0.99254	0.6915	1.00625	3.044	1.113E 02	6.792E 00	-5.605E-08	-5.605E-08	5.605E-08
0.99034	1.0695	1.01250	4.373	1.113E 02	1.034E 01	-1.696E-08	-1.696E-08	1.696E-08
0.98817	1.3690	1.01875	5.709	1.113E 02	1.381E 01	-7.609E-09	-7.609E-09	7.609E-09
0.98604	1.7.00	1.02500	7.048	1.113E 02	1.723E 01	-4.388E-09	-4.388E-09	4.388E-09
0.98.88	2.3964	1.03750	9.731	1.113E 02	2.394E 01	-1.860E-09	-1.860E-09	1.860E-09
0.97787	3.0886	1.05000	12.417	1.113E 02	3.048E 01	-1.121E-09	-1.121E-09	1.121E-09
0.97027	4.4895	1.07500	17.792	1.113E 02	4.309E 01	-4.925E-10	-4.925E-10	4.925E-10
0.96325	5.9118	1.10000	23.169	1.113E 02	5.513E 01	-2.711E-10	-2.711E-10	2.711E-10
0.95105	8.8.46	1.15000	33.925	1.113E 02	7.764E 01	-1.139E-10	-1.139E-10	1.139E-10
0.94134	11.7851	1.20000	44.682	1.113E 02	9.826E 01	-6.029E-11	-6.029E-11	6.029E-11
0.92973	17.8710	1.30000	66.197	1.113E 02	1.348E 02	-2.469E-11	-2.469E-11	2.469E-11
0.92880	24.0394	1.40000	87.712	1.113E 02	1.660E 02	-1.300E-11	-1.300E-11	1.300E-11
0.93858	30.1495	1.50000	109.228	1.113E 02	1.932E 02	-8.054E-12	-8.054E-12	8.054E-12
0.95875	36.0679	1.60000	130.743	1.113E 02	2.169E 02	-5.399E-12	-5.399E-12	5.399E-12
0.98867	41.6855	1.70000	152.259	1.113E 02	2.378E 02	-3.638E-12	-3.638E-12	3.638E-12
1.02750	46.9461	1.80000	173.775	1.113E 02	2.564E 02	-2.566E-12	-2.566E-12	2.566E-12
1.07425	51.7483	1.90000	195.290	1.113E 02	2.731E 02	-1.810E-12	-1.810E-12	1.810E-12
1.12796	56.1400	2.00000	216.806	1.113E 02	2.880E 02	-1.292E-12	-1.292E-12	1.292E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.150 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.005E-10	-7.005E-10
0.70000	2.604E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.347E-09	-1.347E-09
0.80000	6.550E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.387E-09	-3.387E-09
0.85000	1.270E-10	424.160	-6.726E-09	-6.726E-09	6.726E-09	6.726E-09	-6.567E-09	-6.567E-09
0.90000	3.223E-10	449.110	-1.179E-08	-1.179E-08	1.179E-08	1.179E-08	-1.666E-08	-1.666E-08
0.92500	5.939E-10	461.585	-1.733E-08	-1.733E-08	1.735E-08	1.735E-08	-3.071E-08	-3.071E-08
0.95000	1.505E-09	474.060	-2.927E-08	-2.927E-08	2.956E-08	2.956E-08	-7.780E-08	-7.780E-08
0.96250	2.953E-09	480.297	-4.160E-08	-4.160E-08	4.325E-08	4.325E-08	-1.527E-07	-1.527E-07
0.97500	8.891E-09	486.534	-6.546E-08	-6.546E-08	8.436E-08	8.436E-08	-4.597E-07	-4.597E-07
0.98124	2.049E-08	489.652	-6.556E-08	-6.556E-08	1.706E-07	1.706E-07	-1.059E-06	-1.059E-06
0.98749	8.212E-08	492.770	3.214E-07	3.214E-07	8.189E-07	8.189E-07	-4.246E-06	-4.246E-06
0.99373	1.887E-06	495.884	2.598E-05	2.598E-05	2.920E-05	2.920E-05	-9.751E-05	-9.754E-05
0.99478	6.058E-07	496.407	2.604E 00	2.604E 00	2.606E 00	2.606E 00	-3.133E-05	-3.133E-05
0.99254	5.605E-08	495.291	6.839E 00	6.839E 00	6.840E 00	6.840E 00	-2.898E-06	-2.898E-06
0.99034	1.696E-08	494.192	1.106E 01	1.106E 01	1.106E 01	1.106E 01	-8.768E-07	-8.768E-07
0.98817	7.609E-09	493.111	1.526E 01	1.526E 01	1.526E 01	1.526E 01	-3.934E-07	-3.934E-07
0.98604	4.388E-09	492.047	1.944E 01	1.944E 01	1.944E 01	1.944E 01	-2.269E-07	-2.269E-07
0.98188	1.860E-09	489.971	2.775E 01	2.775E 01	2.775E 01	2.775E 01	-9.618E-08	-9.618E-08
0.97787	1.121E-09	487.966	3.600E 01	3.600E 01	3.600E 01	3.600E 01	-5.796E-08	-5.796E-08
0.97027	4.925E-10	484.174	5.226E 01	5.226E 01	5.226E 01	5.226E 01	-2.546E-08	-2.546E-08
0.96325	2.711E-10	480.675	6.824E 01	6.824E 01	6.824E 01	6.824E 01	-1.401E-08	-1.401E-08
0.95105	1.139E-10	474.584	9.928E 01	9.928E 01	9.928E 01	9.928E 01	-5.891E-09	-5.891E-09
0.94134	6.029E-11	469.741	1.291E 02	1.291E 02	1.291E 02	1.291E 02	-3.117E-09	-3.117E-09
0.92973	2.469E-11	463.946	1.848E 02	1.848E 02	1.848E 02	1.848E 02	-1.276E-09	-1.276E-09
0.92880	1.300E-11	463.481	2.351E 02	2.351E 02	2.351E 02	2.351E 02	-6.722E-10	-6.722E-10
0.93858	8.054E-12	468.364	2.802E 02	2.802E 02	2.802E 02	2.802E 02	-4.164E-10	-4.164E-10
0.95875	5.399E-12	478.429	3.200E 02	3.200E 02	3.200E 02	3.200E 02	-2.791E-10	-2.791E-10
0.98867	3.638E-12	493.360	3.550E 02	3.550E 02	3.550E 02	3.550E 02	-1.881E-10	-1.881E-10
1.02750	2.566E-12	512.733	3.855E 02	3.855E 02	3.855E 02	3.855E 02	-1.327E-10	-1.327E-10
1.07425	1.810E-12	536.065	4.121E 02	4.121E 02	4.121E 02	4.121E 02	-9.361E-11	-9.361E-11
1.12796	1.292E-12	562.864	4.352E 02	4.352E 02	4.352E 02	4.352E 02	-6.680E-11	-6.680E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.150 θ_D= 0. ρ_0= 1.000

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-3.276E-19
0.10000	4.038E-14	3.657E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-4.395E-19
0.20000	1.081E-13	1.043E-13	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-6.287E-19
0.30000	2.299E-13	2.426E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-9.882E-19
0.40000	5.166E-13	5.166E-13	-4.257E-23	-4.257E-23	-9.878E-13	-9.878E-13	-1.673E-18
0.50000	1.027E-12	1.027E-12	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-3.349E-18
0.60000	2.335E-12	2.337E-12	-1.601E-22	-1.601E-22	-3.534E-12	-3.534E-12	-7.830E-18
0.70000	6.631E-12	6.649E-12	-4.200E-22	-4.200E-22	-7.474E-12	-7.474E-12	-2.288E-17
0.80000	2.740E-11	2.743E-11	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-1.036E-16
0.85000	7.323E-11	7.325E-11	-4.474E-21	-4.474E-21	-4.130E-11	-4.130E-11	-3.002E-16
0.90000	2.832E-10	2.833E-10	-1.919E-20	-1.919E-20	-1.138E-10	-1.138E-10	-1.346E-15
0.92500	7.039E-10	7.020E-10	-4.435E-20	-4.435E-20	-2.262E-10	-2.262E-10	-4.098E-15
0.95000	2.712E-09	2.712E-09	-1.757E-19	-1.757E-19	-5.680E-10	-5.680E-10	-1.834E-14
0.96250	7.262E-09	7.262E-09	-5.063E-19	-5.063E-19	-1.126E-09	-1.126E-09	-5.217E-14
0.97500	3.431E-08	3.423E-08	-2.904E-18	-2.904E-18	-3.570E-09	-3.570E-09	-1.938E-13
0.98124	1.063E-07	1.063E-07	-1.123E-17	-1.123E-17	-9.286E-09	-9.286E-09	-4.605E-13
0.98749	6.734E-07	6.734E-07	-1.116E-16	-1.116E-16	-4.626E-08	-4.626E-08	-1.217E-12
0.99373	3.214E-05	3.215E-05	-4.265E-14	-4.267E-14	-4.272E-06	-4.273E-06	-2.354E-12
0.99478	-1.163E-03	-1.163E-03	-4.533E-15	-4.531E-15	-7.636E 03	-7.636E 03	-2.563E-12
0.99254	-5.090E-04	-5.090E-04	-5.858E-17	-5.857E-17	-7.636E 03	-7.636E 03	-9.678E-13
0.99034	-3.329E-04	-3.329E-04	-8.260E-18	-8.260E-18	-7.636E 03	-7.636E 03	-3.641E-13
0.98817	-2.478E-04	-2.478E-04	-2.281E-18	-2.281E-18	-7.636E 03	-7.636E 03	-1.639E-13
0.98604	-1.974E-04	-1.974E-04	-9.534E-19	-9.534E-19	-7.636E 03	-7.636E 03	-8.023E-14
0.98188	-1.404E-04	-1.404E-04	-2.447E-19	-2.447E-19	-7.636E 03	-7.636E 03	-2.732E-14
0.97787	-1.090E-04	-1.090E-04	-1.110E-19	-1.110E-19	-7.636E 03	-7.636E 03	-1.050E-14
0.97027	-7.528E-05	-7.528E-05	-3.431E-20	-3.431E-20	-7.636E 03	-7.636E 03	-2.763E-15
0.96325	-5.750E-05	-5.750E-05	-1.495E-20	-1.495E-20	-7.636E 03	-7.636E 03	-1.030E-15
0.95105	-3.906E-05	-3.906E-05	-3.810E-21	-3.810E-21	-7.636E 03	-7.636E 03	-2.486E-16
0.94134	-2.957E-05	-2.957E-05	-1.487E-21	-1.487E-21	-7.636E 03	-7.636E 03	-8.999E-17
0.92973	-1.991E-05	-1.991E-05	-3.880E-22	-3.880E-22	-7.636E 03	-7.636E 03	-2.079E-17
0.92880	-1.502E-05	-1.502E-05	-1.507E-22	-1.507E-22	-7.636E 03	-7.636E 03	-7.294E-18
0.93858	-1.204E-05	-1.204E-05	-7.426E-23	-7.426E-23	-7.636E 03	-7.636E 03	-3.157E-18
0.95875	-1.005E-05	-1.005E-05	-4.065E-23	-4.065E-23	-7.636E 03	-7.636E 03	-1.602E-18
0.98867	-8.626E-06	-8.626E-06	-2.236E-23	-2.236E-23	-7.636E 03	-7.636E 03	-9.528E-19
1.02750	-7.556E-06	-7.556E-06	-1.283E-23	-1.283E-23	-7.636E 03	-7.636E 03	-6.112E-19
1.07425	-6.722E-06	-6.722E-06	-7.362E-24	-7.362E-24	-7.636E 03	-7.636E 03	-4.301E-19
1.12796	-6.053E-06	-6.054E-06	-4.220E-24	-4.220E-24	-7.636E 03	-7.636E 03	-3.220E-19

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.200 θ_D= 0. ρ_0= 1.000

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.2000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.2000	0.10000	193.643	4.313E-07	1.000E 00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.2000	0.20000	172.127	4.411E-07	1.000E-00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.2000	0.30000	150.612	4.561E-07	1.000E-00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.2000	0.40000	129.096	4.853E-07	1.000E-00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.2000	0.50000	107.581	5.253E-07	1.000E-00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.2000	0.60000	86.066	5.336E-07	1.000E-00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.2000	0.70000	64.551	9.205E-07	1.000E-00	-2.604E-11	-2.604E-11	2.604E-11
0.80000	0.2000	0.80000	43.037	2.074E-06	1.000E-00	-6.550E-11	-6.550E-11	6.550E-11
0.85000	0.2000	0.85000	32.281	4.776E-06	1.000E-00	-1.270E-10	-1.270E-10	1.270E-10
0.90000	0.2000	0.90000	21.528	1.553E-05	9.999E-01	-3.221E-10	-3.221E-10	3.221E-10
0.92500	0.2000	0.92500	16.153	3.727E-05	9.998E-01	-5.934E-10	-5.934E-10	5.934E-10
0.95000	0.2000	0.95000	10.783	1.258E-04	9.996E-01	-1.502E-09	-1.502E-09	1.502E-09
0.96250	0.2000	0.96250	8.103	2.989E-04	9.993E-01	-2.937E-09	-2.937E-09	2.937E-09
0.97500	0.2000	0.97500	5.431	9.982E-04	9.984E-01	-8.789E-09	-8.789E-09	8.789E-09
0.98124	0.2000	0.98125	4.104	2.328E-03	9.974E-01	-2.011E-08	-2.011E-08	2.011E-08
0.98749	0.2001	0.98750	2.793	7.485E-03	9.954E-01	-7.742E-08	-7.742E-08	7.741E-08
0.99373	0.2002	0.99375	1.543	4.721E-02	9.946E-01	-1.335E-06	-1.336E-06	1.335E-06
0.99735	0.3731	1.00000	1.511	8.238E 01	2.217E 00	-1.525E-06	-1.524E-06	1.525E-06
0.99821	0.7286	1.00625	2.760	8.238E 01	5.684E 00	-8.088E-08	-8.088E-08	8.089E-08
0.99912	1.0834	1.01250	4.071	8.238E 01	9.198E 00	-2.053E-08	-2.053E-08	2.053E-08
1.00006	1.4375	1.01875	5.398	8.238E 01	1.263E 01	-8.939E-09	-8.939E-09	8.939E-09
1.00105	1.7910	1.02500	6.732	8.238E 01	1.600E 01	-4.949E-09	-4.949E-09	4.949E-09
1.00312	2.4957	1.03750	9.410	8.238E 01	2.260E 01	-2.032E-09	-2.032E-09	2.032E-09
1.00535	3.1975	1.05000	12.093	8.238E 01	2.902E 01	-1.188E-09	-1.188E-09	1.188E-09
1.01026	4.5912	1.07500	17.465	8.238E 01	4.142E 01	-5.112E-10	-5.112E-10	5.112E-10
1.01576	5.9706	1.10000	22.840	8.238E 01	5.324E 01	-2.791E-10	-2.791E-10	2.791E-10
1.02849	8.6813	1.15000	33.594	8.238E 01	7.534E 01	-1.165E-10	-1.165E-10	1.165E-10
1.04347	11.3199	1.20000	44.350	8.238E 01	9.560E 01	-6.131E-11	-6.131E-11	6.131E-11
1.07976	16.3513	1.30000	65.863	8.238E 01	1.314E 02	-2.496E-11	-2.496E-11	2.496E-11
1.12381	21.0422	1.40000	87.378	8.238E 01	1.622E 02	-1.311E-11	-1.311E-11	1.311E-11
1.17474	25.3146	1.50000	108.893	8.238E 01	1.888E 02	-8.104E-12	-8.104E-12	8.104E-12
1.23169	29.2305	1.60000	130.409	8.238E 01	2.121E 02	-5.432E-12	-5.432E-12	5.432E-12
1.29388	32.7854	1.70000	151.925	8.238E 01	2.326E 02	-3.658E-12	-3.658E-12	3.658E-12
1.36058	36.0031	1.80000	173.440	8.238E 01	2.509E 02	-2.580E-12	-2.580E-12	2.580E-12
1.43117	38.9118	1.90000	194.956	8.238E 01	2.673E 02	-1.820E-12	-1.820E-12	1.820E-12
1.50509	41.5411	2.00000	216.472	8.238E 01	2.820E 02	-1.299E-12	-1.299E-12	1.299E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.200 θ_D= 0. ρ_a= 1.000

z	$_x\mu'-1$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.004E-10	-7.004E-10
0.70000	2.604E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.346E-09	-1.346E-09
0.80000	6.550E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.386E-09	-3.386E-09
0.85000	1.270E-10	424.160	-6.725E-09	-6.725E-09	6.726E-09	6.726E-09	-6.565E-09	-6.565E-09
0.90000	3.221E-10	449.110	-1.179E-08	-1.179E-08	1.179E-08	1.179E-08	-1.665E-08	-1.665E-08
0.92500	5.934E-10	461.585	-1.731E-08	-1.731E-08	1.736E-08	1.736E-08	-3.068E-08	-3.068E-08
0.95000	1.502E-09	474.060	-2.910E-08	-2.910E-08	2.967E-08	2.967E-08	-7.764E-08	-7.764E-08
0.96250	2.937E-09	480.297	-4.072E-08	-4.072E-08	4.398E-08	4.399E-08	-1.518E-07	-1.518E-07
0.97500	8.789E-09	486.534	-5.612E-08	-5.612E-08	9.304E-08	9.304E-08	-4.544E-07	-4.544E-07
0.98124	2.011E-08	489.652	-1.602E-08	-1.602E-08	2.181E-07	2.181E-07	-1.040E-06	-1.040E-06
0.98749	7.742E-08	492.769	8.088E-07	8.088E-07	1.293E-06	1.293E-06	-4.003E-06	-4.003E-06
0.99373	1.336E-06	495.884	4.076E-05	4.076E-05	4.342E-05	4.342E-05	-6.904E-05	-6.905E-05
0.99735	1.524E-06	497.688	1.323E 00	1.323E 00	1.324E 00	1.324E 00	-7.883E-05	-7.882E-05
0.99821	8.086E-08	498.121	4.009E 00	4.009E 00	4.011E 00	4.011E 00	-4.182E-06	-4.182E-06
0.99912	2.053E-08	498.572	6.676E 00	6.676E 00	6.678E 00	6.678E 00	-1.061E-06	-1.061E-06
1.00006	8.939E-09	499.043	9.324E 00	9.324E 00	9.326E 00	9.326E 00	-4.622E-07	-4.622E-07
1.00105	4.949E-09	499.533	1.195E 01	1.195E 01	1.195E 01	1.195E 01	-2.559E-07	-2.559E-07
1.00312	2.032E-09	500.570	1.715E 01	1.715E 01	1.716E 01	1.716E 01	-1.051E-07	-1.051E-07
1.00535	1.188E-09	501.682	2.228E 01	2.228E 01	2.228E 01	2.228E 01	-6.143E-08	-6.143E-08
1.01026	5.112E-10	504.131	3.231E 01	3.231E 01	3.231E 01	3.231E 01	-2.643E-08	-2.643E-08
1.01576	2.791E-10	506.875	4.204E 01	4.204E 01	4.204E 01	4.204E 01	-1.443E-08	-1.443E-08
1.02849	1.165E-10	513.229	6.063E 01	6.063E 01	6.064E 01	6.064E 01	-6.021E-09	-6.021E-09
1.04347	6.131E-11	520.702	7.811E 01	7.811E 01	7.811E 01	7.811E 01	-3.170E-09	-3.170E-09
1.07976	2.496E-11	538.813	1.099E 02	1.099E 02	1.099E 02	1.099E 02	-1.290E-09	-1.290E-09
1.12381	1.311E-11	560.793	1.378E 02	1.378E 02	1.378E 02	1.378E 02	-6.778E-10	-6.778E-10
1.17474	8.104E-12	586.207	1.623E 02	1.623E 02	1.623E 02	1.623E 02	-4.190E-10	-4.190E-10
1.23169	5.432E-12	614.628	1.838E 02	1.838E 02	1.838E 02	1.838E 02	-2.809E-10	-2.809E-10
1.29388	3.658E-12	645.661	2.027E 02	2.027E 02	2.027E 02	2.027E 02	-1.891E-10	-1.891E-10
1.36058	2.586E-12	678.947	2.193E 02	2.193E 02	2.193E 02	2.193E 02	-1.334E-10	-1.334E-10
1.43117	1.820E-12	714.170	2.340E 02	2.340E 02	2.340E 02	2.340E 02	-9.411E-11	-9.411E-11
1.50509	1.299E-12	751.059	2.470E 02	2.470E 02	2.470E 02	2.470E 02	-6.715E-11	-6.715E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.200 θ_D= 0. ρ_a= 1.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-5.825E-19
0.10000	5.268E-14	5.268E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-7.814E-19
0.20000	1.528E-13	1.512E-13	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-1.118E-18
0.30000	3.236E-13	3.236E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-1.757E-18
0.40000	6.883E-13	6.883E-13	-4.256E-23	-4.256E-23	-9.878E-13	-9.878E-13	-2.974E-18
0.50000	1.374E-12	1.369E-12	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-5.953E-18
0.60000	3.122E-12	3.127E-12	-1.601E-22	-1.601E-22	-3.534E-12	-3.534E-12	-1.392E-17
0.70000	8.891E-12	8.891E-12	-4.200E-22	-4.200E-22	-7.474E-12	-7.474E-12	-4.068E-17
0.80000	3.659E-11	3.661E-11	-1.681E-21	-1.681E-21	-2.044E-11	-2.044E-11	-1.842E-16
0.85000	9.786E-11	9.783E-11	-4.473E-21	-4.473E-21	-4.129E-11	-4.129E-11	-5.334E-16
0.90000	3.780E-10	3.781E-10	-1.917E-20	-1.917E-20	-1.138E-10	-1.138E-10	-2.391E-15
0.92500	9.382E-10	9.370E-10	-4.430E-20	-4.430E-20	-2.260E-10	-2.260E-10	-7.272E-15
0.95000	3.613E-09	3.613E-09	-1.751E-19	-1.751E-19	-5.670E-10	-5.670E-10	-3.247E-14
0.96250	9.760E-09	9.760E-09	-5.018E-19	-5.018E-19	-1.122E-09	-1.122E-09	-9.225E-14
0.97500	4.524E-08	4.520E-08	-2.852E-18	-2.852E-18	-3.534E-09	-3.534E-09	-3.400E-13
0.98124	1.387E-07	1.387E-07	-1.089E-17	-1.089E-17	-9.098E-09	-9.098E-09	-7.987E-13
0.98749	8.263E-07	8.264E-07	-1.010E-16	-1.010E-16	-4.338E-08	-4.339E-08	-2.087E-12
0.99373	2.951E-05	2.952E-05	-2.154E-14	-2.155E-14	-2.495E-06	-2.496E-06	-4.261E-12
0.99735	4.741E-03	4.741E-03	-2.801E-14	-2.800E-14	-1.341E 04	-1.341E 04	-4.223E-12
0.99821	1.778E-03	1.778E-03	-1.088E-16	-1.088E-16	-1.341E 04	-1.341E 04	-2.144E-12
0.99912	1.090E-03	1.090E-03	-1.127E-17	-1.126E-17	-1.341E 04	-1.341E 04	-8.212E-13
1.00006	7.890E-04	7.890E-04	-2.928E-18	-2.928E-18	-1.341E 04	-1.341E 04	-3.469E-13
1.00105	6.189E-04	6.189E-04	-1.155E-18	-1.155E-18	-1.341E 04	-1.341E 04	-1.665E-13
1.00312	4.330E-04	4.330E-04	-2.812E-19	-2.812E-19	-1.341E 04	-1.341E 04	-5.439E-14
1.00535	3.331E-04	3.331E-04	-1.216E-19	-1.216E-19	-1.341E 04	-1.341E 04	-2.065E-14
1.01026	2.280E-04	2.280E-04	-3.611E-20	-3.611E-20	-1.341E 04	-1.341E 04	-5.290E-15
1.01576	1.733E-04	1.733E-04	-1.567E-20	-1.567E-20	-1.341E 04	-1.341E 04	-1.937E-15
1.02849	1.171E-04	1.171E-04	-3.935E-21	-3.935E-21	-1.341E 04	-1.341E 04	-4.586E-16
1.04347	8.848E-05	8.848E-05	-1.524E-21	-1.524E-21	-1.341E 04	-1.341E 04	-1.645E-16
1.07976	5.940E-05	5.940E-05	-3.943E-22	-3.943E-22	-1.341E 04	-1.341E 04	-3.768E-17
1.12381	4.471E-05	4.471E-05	-1.526E-22	-1.526E-22	-1.341E 04	-1.341E 04	-1.316E-17
1.17474	3.584E-05	3.584E-05	-7.496E-23	-7.496E-23	-1.341E 04	-1.341E 04	-5.682E-18
1.23169	2.991E-05	2.991E-05	-4.103E-23	-4.103E-23	-1.341E 04	-1.341E 04	-2.873E-18
1.29388	2.566E-05	2.566E-05	-2.255E-23	-2.255E-23	-1.341E 04	-1.341E 04	-1.707E-18
1.36058	2.247E-05	2.247E-05	-1.294E-23	-1.294E-23	-1.341E 04	-1.341E 04	-1.093E-18
1.43117	1.999E-05	1.999E-05	-7.426E-24	-7.426E-24	-1.341E 04	-1.341E 04	-7.684E-19
1.50509	1.800E-05	1.800E-05	-4.257E-24	-4.257E-24	-1.341E 04	-1.341E 04	-5.748E-19

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.250 θ_D= 0. ρ_a= 1.000

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.2500	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.2500	0.10000	193.643	2.835E-08	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.2500	0.20000	172.128	4.336E-08	1.000E-00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.2500	0.30000	150.612	6.170E-08	1.000E-00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.2500	0.40000	129.097	1.051E-07	1.000E-00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.2500	0.50000	107.582	1.534E-07	1.000E-00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.2500	0.60000	86.067	1.701E-07	1.000E-00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.2500	0.70000	64.552	6.737E-07	1.000E-00	-2.604E-11	-2.604E-11	2.604E-11
0.80000	0.2500	0.80000	43.040	2.214E-06	1.000E-00	-6.549E-11	-6.549E-11	6.549E-11
0.85000	0.2500	0.85000	32.286	5.723E-06	9.999E-01	-1.269E-10	-1.269E-10	1.269E-10
0.90000	0.2500	0.90000	21.535	1.996E-05	9.998E-01	-3.219E-10	-3.219E-10	3.219E-10
0.92500	0.2500	0.92500	16.162	4.861E-05	9.997E-01	-5.928E-10	-5.928E-10	5.928E-10
0.95000	0.2500	0.95000	10.797	1.651E-04	9.993E-01	-1.498E-09	-1.498E-09	1.498E-09
0.96250	0.2500	0.96250	8.122	3.916E-04	9.987E-01	-2.916E-09	-2.916E-09	2.916E-09
0.97500	0.2500	0.97500	5.459	1.301E-03	9.974E-01	-8.660E-09	-8.660E-09	8.660E-09
0.98124	0.2500	0.98125	4.141	3.004E-03	9.959E-01	-1.963E-08	-1.963E-08	1.963E-08
0.98749	0.2501	0.98750	2.849	9.418E-03	9.934E-01	-7.187E-08	-7.187E-08	7.186E-08
0.99373	0.2502	0.99375	1.642	5.348E-02	9.970E-01	-8.787E-07	-8.788E-07	8.786E-07
0.99962	0.3062	1.00000	1.153	3.941E 01	1.253E 00	-1.104E-05	-1.104E-05	1.104E-05
1.00446	0.5323	1.00625	2.222	3.941E 01	3.725E 00	-2.037E-07	-2.036E-07	2.037E-07
1.00932	0.7562	1.01250	3.487	3.941E 01	6.590E 00	-3.515E-08	-3.515E-08	3.516E-08
1.01419	0.9779	1.01875	4.796	3.941E 01	9.489E 00	-1.297E-08	-1.297E-08	1.297E-08
1.01908	1.1975	1.02500	6.120	3.941E 01	1.237E 01	-6.249E-09	-6.249E-09	6.249E-09
1.02889	1.6305	1.03750	8.787	3.941E 01	1.804E 01	-2.412E-09	-2.412E-09	2.412E-09
1.03877	2.0552	1.05000	11.465	3.941E 01	2.359E 01	-1.329E-09	-1.329E-09	1.329E-09
1.05869	2.8808	1.07500	16.832	3.941E 01	3.431E 01	-5.494E-10	-5.494E-10	5.494E-10
1.07881	3.6758	1.10000	22.204	3.941E 01	4.454E 01	-2.983E-10	-2.983E-10	2.983E-10
1.11966	5.1793	1.15000	32.956	3.941E 01	6.367E 01	-1.215E-10	-1.215E-10	1.215E-10
1.16122	6.5760	1.20000	43.711	3.941E 01	8.121E 01	-6.331E-11	-6.331E-11	6.331E-11
1.24620	9.0864	1.30000	65.223	3.941E 01	1.123E 02	-2.548E-11	-2.548E-11	2.548E-11
1.33327	11.2727	1.40000	86.737	3.941E 01	1.389E 02	-1.332E-11	-1.332E-11	1.332E-11
1.42205	13.1886	1.50000	108.252	3.941E 01	1.619E 02	-8.201E-12	-8.201E-12	8.201E-12
1.51222	14.8776	1.60000	129.767	3.941E 01	1.821E 02	-5.497E-12	-5.497E-12	5.497E-12
1.60356	16.3754	1.70000	151.283	3.941E 01	1.999E 02	-3.696E-12	-3.696E-12	3.696E-12
1.69588	17.7110	1.80000	172.798	3.941E 01	2.157E 02	-2.607E-12	-2.607E-12	2.607E-12
1.78902	18.9081	1.90000	194.314	3.941E 01	2.299E 02	-1.839E-12	-1.839E-12	1.839E-12
1.88286	19.9663	2.00000	215.830	3.941E 01	2.426E 02	-1.312E-12	-1.312E-12	1.312E-12

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_0= 0.250 θ_D= 0. ρ_a= 1.000

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.004E-10	-7.004E-10
0.70000	2.604E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.346E-09	-1.346E-09
0.80000	6.549E-11	399.209	-4.445E-09	-4.445E-09	4.445E-09	4.445E-09	-3.386E-09	-3.386E-09
0.85000	1.269E-10	424.160	-6.724E-09	-6.724E-09	6.725E-09	6.725E-09	-6.564E-09	-6.564E-09
0.90000	3.219E-10	449.110	-1.178E-08	-1.178E-08	1.179E-08	1.179E-08	-1.664E-08	-1.664E-08
0.92500	5.928E-10	461.585	-1.728E-08	-1.728E-08	1.736E-08	1.736E-08	-3.065E-08	-3.065E-08
0.95000	1.498E-09	474.060	-2.886E-08	-2.886E-08	2.985E-08	2.985E-08	-7.745E-08	-7.745E-08
0.96250	2.916E-09	480.297	-3.946E-08	-3.946E-08	4.507E-08	4.507E-08	-1.507E-07	-1.507E-07
0.97500	8.660E-09	486.534	-4.283E-08	-4.283E-08	1.055E-07	1.055E-07	-4.477E-07	-4.478E-07
0.98124	1.963E-08	489.652	5.248E-08	5.248E-08	2.840E-07	2.840E-07	-1.015E-06	-1.015E-06
0.98749	7.187E-08	492.769	1.430E-06	1.430E-06	1.899E-06	1.899E-06	-3.716E-06	-3.716E-06
0.99373	8.789E-07	495.884	5.291E-05	5.291E-05	5.510E-05	5.510E-05	-4.543E-05	-4.544E-05
0.99962	1.103E-05	498.823	1.872E-01	1.872E-01	1.900E-01	1.900E-01	-5.707E-04	-5.706E-04
1.00446	2.036E-07	501.239	8.904E-01	8.904E-01	8.932E-01	8.932E-01	-1.053E-05	-1.053E-05
1.00932	3.515E-08	503.662	1.586E 00	1.586E 00	1.589E 00	1.589E 00	-1.818E-06	-1.818E-06
1.01419	1.297E-08	506.093	2.274E 00	2.274E 00	2.277E 00	2.277E 00	-6.708E-07	-6.708E-07
1.01908	6.249E-09	508.531	2.954E 00	2.954E 00	2.957E 00	2.957E 00	-3.231E-07	-3.231E-07
1.02889	2.412E-09	513.430	4.293E 00	4.293E 00	4.296E 00	4.296E 00	-1.247E-07	-1.247E-07
1.03877	1.329E-09	518.358	5.603E 00	5.603E 00	5.606E 00	5.606E 00	-6.873E-08	-6.873E-08
1.05869	5.494E-10	528.296	8.140E 00	8.140E 00	8.143E 00	8.143E 00	-2.840E-08	-2.840E-08
1.07881	2.983E-10	538.340	1.057E 01	1.057E 01	1.057E 01	1.057E 01	-1.542E-08	-1.542E-08
1.11966	1.215E-10	558.723	1.514E 01	1.514E 01	1.514E 01	1.514E 01	-6.280E-09	-6.280E-09
1.16122	6.331E-11	579.462	1.935E 01	1.935E 01	1.935E 01	1.935E 01	-3.273E-09	-3.273E-09
1.24620	2.548E-11	621.870	2.684E 01	2.684E 01	2.685E 01	2.685E 01	-1.317E-09	-1.317E-09
1.33327	1.332E-11	665.319	3.330E 01	3.330E 01	3.330E 01	3.330E 01	-6.888E-10	-6.888E-10
1.42205	8.201E-12	709.617	3.890E 01	3.890E 01	3.890E 01	3.890E 01	-4.240E-10	-4.240E-10
1.51222	5.497E-12	754.615	4.380E 01	4.380E 01	4.381E 01	4.381E 01	-2.842E-10	-2.842E-10
1.60356	3.696E-12	800.194	4.812E 01	4.812E 01	4.813E 01	4.813E 01	-1.911E-10	-1.911E-10
1.69588	2.607E-12	846.261	5.196E 01	5.196E 01	5.196E 01	5.196E 01	-1.348E-10	-1.348E-10
1.78902	1.839E-12	892.741	5.538E 01	5.538E 01	5.538E 01	5.538E 01	-9.510E-11	-9.510E-11
1.88286	1.312E-12	939.571	5.844E 01	5.844E 01	5.844E 01	5.844E 01	-6.782E-11	-6.782E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.250 θ_0= 0. ρ_a= 1.000

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-9.101E-19
0.10000	6.684E-14	6.870E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-1.221E-18
0.20000	1.900E-13	1.880E-13	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-1.746E-18
0.30000	4.090E-13	4.116E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-2.745E-18
0.40000	8.650E-13	8.673E-13	-4.256E-23	-4.256E-23	-9.878E-13	-9.878E-13	-4.647E-18
0.50000	1.720E-12	1.720E-12	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-9.301E-18
0.60000	3.917E-12	3.907E-12	-1.601E-22	-1.601E-22	-3.534E-12	-3.534E-12	-2.175E-17
0.70000	1.113E-11	1.112E-11	-4.200E-22	-4.200E-22	-7.474E-12	-7.474E-12	-6.355E-17
0.80000	4.580E-11	4.578E-11	-1.680E-21	-1.680E-21	-2.043E-11	-2.043E-11	-2.877E-16
0.85000	1.224E-10	1.224E-10	-4.471E-21	-4.471E-21	-4.128E-11	-4.128E-11	-8.330E-16
0.90000	4.727E-10	4.727E-10	-1.915E-20	-1.915E-20	-1.137E-10	-1.137E-10	-3.732E-15
0.92500	1.171E-09	1.171E-09	-4.423E-20	-4.423E-20	-2.258E-10	-2.258E-10	-1.134E-14
0.95000	4.505E-09	4.505E-09	-1.744E-19	-1.744E-19	-5.657E-10	-5.657E-10	-5.047E-14
0.96250	1.205E-08	1.205E-08	-4.960E-19	-4.960E-19	-1.116E-09	-1.116E-09	-1.432E-13
0.97500	5.548E-08	5.547E-08	-2.788E-18	-2.788E-18	-3.488E-09	-3.488E-09	-5.226E-13
0.98124	1.684E-07	1.684E-07	-1.048E-17	-1.048E-17	-8.865E-09	-8.865E-09	-1.210E-12
0.98749	9.359E-07	9.359E-07	-8.905E-17	-8.907E-17	-4.008E-08	-4.008E-08	-3.120E-12
0.99373	2.552E-05	2.552E-05	-9.418E-15	-9.418E-15	-1.450E-06	-1.450E-06	-6.961E-12
0.99962	1.135E-02	1.135E-02	-1.682E-12	-1.681E-12	-2.104E 04	-2.104E 04	-4.632E-12
1.00446	3.733E-03	3.733E-03	-5.741E-16	-5.740E-16	-2.104E 04	-2.104E 04	-4.897E-12
1.00932	2.095E-03	2.095E-03	-2.709E-17	-2.708E-17	-2.104E 04	-2.104E 04	-1.897E-12
1.01419	1.446E-03	1.446E-03	-5.346E-18	-5.346E-18	-2.104E 04	-2.104E 04	-7.596E-13
1.01908	1.103E-03	1.103E-03	-1.678E-18	-1.677E-18	-2.104E 04	-2.104E 04	-3.651E-13
1.02889	7.467E-04	7.467E-04	-3.681E-19	-3.681E-19	-2.104E 04	-2.104E 04	-1.079E-13
1.03877	5.643E-04	5.643E-04	-1.448E-19	-1.448E-19	-2.104E 04	-2.104E 04	-3.971E-14
1.05869	3.790E-04	3.790E-04	-3.985E-20	-3.985E-20	-2.104E 04	-2.104E 04	-9.599E-15
1.07881	2.853E-04	2.853E-04	-1.726E-20	-1.726E-20	-2.104E 04	-2.104E 04	-3.355E-15
1.11966	1.909E-04	1.909E-04	-4.188E-21	-4.188E-21	-2.104E 04	-2.104E 04	-7.707E-16
1.16122	1.434E-04	1.434E-04	-1.599E-21	-1.599E-21	-2.104E 04	-2.104E 04	-2.716E-16
1.24620	9.579E-05	9.579E-05	-4.066E-22	-4.066E-22	-2.104E 04	-2.104E 04	-6.114E-17
1.33327	7.190E-05	7.190E-05	-1.562E-22	-1.562E-22	-2.104E 04	-2.104E 04	-2.114E-17
1.42205	5.755E-05	5.755E-05	-7.632E-23	-7.632E-23	-2.104E 04	-2.104E 04	-9.089E-18
1.51222	4.798E-05	4.798E-05	-4.177E-23	-4.177E-23	-2.104E 04	-2.104E 04	-4.570E-18
1.60356	4.113E-05	4.113E-05	-2.293E-23	-2.293E-23	-2.104E 04	-2.104E 04	-2.707E-18
1.69588	3.600E-05	3.600E-05	-1.316E-23	-1.316E-23	-2.104E 04	-2.104E 04	-1.728E-18
1.78902	3.200E-05	3.200E-05	-7.550E-24	-7.550E-24	-2.104E 04	-2.104E 04	-1.212E-18
1.88286	2.881E-05	2.881E-05	-4.328E-24	-4.328E-24	-2.104E 04	-2.104E 04	-9.051E-19

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.300 θ_0= 0. ρ_a= 1.127

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	0.3000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.3000	0.10000	193.643	3.502E-08	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.3000	0.20000	172.128	5.253E-08	1.000E-00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.3000	0.30000	150.613	8.171E-08	1.000E-00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.3000	0.40000	129.097	1.251E-07	1.000E-00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.3000	0.50000	107.582	1.801E-07	1.000E-00	-8.304E-12	-8.304E-12	8.304E-12
0.60000	0.3000	0.60000	86.068	2.068E-07	1.000E-00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.3000	0.70000	64.555	8.204E-07	1.000E-00	-2.604E-11	-2.604E-11	2.604E-11
0.80000	0.3000	0.80000	43.044	2.708E-06	9.999E-01	-6.547E-11	-6.547E-11	6.547E-11
0.85000	0.3000	0.85000	32.291	6.937E-06	9.999E-01	-1.269E-10	-1.269E-10	1.269E-10
0.90000	0.3000	0.90000	21.543	2.420E-05	9.998E-01	-3.216E-10	-3.216E-10	3.216E-10
0.92500	0.3000	0.92500	16.174	5.886E-05	9.996E-01	-5.920E-10	-5.920E-10	5.920E-10
0.95000	0.3000	0.95000	10.814	1.995E-04	9.991E-01	-1.493E-09	-1.493E-09	1.493E-09
0.96250	0.3000	0.96250	8.144	4.703E-04	9.985E-01	-2.890E-09	-2.890E-09	2.890E-09
0.97500	0.3000	0.97500	5.494	1.551E-03	9.970E-01	-8.506E-09	-8.506E-09	8.506E-09
0.98124	0.3000	0.98125	4.187	3.543E-03	9.955E-01	-1.907E-08	-1.907E-08	1.907E-08
0.98749	0.3001	0.98750	2.915	1.080E-02	9.937E-01	-6.576E-08	-6.576E-08	6.575E-08
0.99373	0.3002	0.99375	1.755	5.498E-02	1.001E 00	-5.856E-07	-5.857E-07	5.856E-07
0.99996	0.3014	1.00000	1.132	4.218E-01	7.314E-01	-1.355E-05	-1.355E-05	1.355E-05
1.00619	0.3054	1.00625	1.760	7.861E-01	2.147E 00	-5.795E-07	-5.794E-07	5.795E-07
1.01243	0.3104	1.01250	2.921	8.298E-01	4.166E 00	-6.526E-08	-6.526E-08	6.527E-08
1.01868	0.3155	1.01875	4.193	8.370E-01	6.352E 00	-1.900E-08	-1.900E-08	1.900E-08
1.02493	0.3205	1.02500	5.500	8.390E-01	8.580E 00	-8.480E-09	-8.480E-09	8.480E-09
1.03742	0.3304	1.03750	8.151	8.401E-01	1.303E 01	-2.884E-09	-2.884E-09	2.884E-09
1.04992	0.3400	1.05000	10.820	8.404E-01	1.741E 01	-1.492E-09	-1.492E-09	1.492E-09
1.07492	0.3586	1.07500	16.180	8.405E-01	2.589E 01	-5.916E-10	-5.916E-10	5.916E-10
1.09992	0.3764	1.10000	21.549	8.406E-01	3.400E 01	-3.213E-10	-3.213E-10	3.213E-10
1.14991	0.4096	1.15000	32.297	8.406E-01	4.919E 01	-1.269E-10	-1.269E-10	1.269E-10
1.19991	0.4401	1.20000	43.050	8.406E-01	6.311E 01	-6.545E-11	-6.545E-11	6.545E-11
1.29990	0.4940	1.30000	64.561	8.406E-01	8.775E 01	-2.603E-11	-2.603E-11	2.603E-11
1.39989	0.5402	1.40000	86.074	8.406E-01	1.089E 02	-1.354E-11	-1.354E-11	1.354E-11
1.49989	0.5802	1.50000	107.589	8.406E-01	1.272E 02	-8.303E-12	-8.303E-12	8.303E-12
1.59988	0.6152	1.60000	129.103	8.406E-01	1.432E 02	-5.566E-12	-5.566E-12	5.566E-12
1.69988	0.6461	1.70000	150.619	8.406E-01	1.573E 02	-3.736E-12	-3.736E-12	3.736E-12
1.79988	0.6736	1.80000	172.134	8.406E-01	1.699E 02	-2.636E-12	-2.636E-12	2.636E-12
1.89987	0.6982	1.90000	193.649	8.406E-01	1.811E 02	-1.859E-12	-1.859E-12	1.859E-12
1.99987	0.7203	2.00000	215.165	8.406E-01	1.913E 02	-1.325E-12	-1.325E-12	1.325E-12

PROPAGATION FREQUENCY= 1.550DE 10 ϕ_o= 0.300 θ_D= 0. ρ_a= 1.127

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.304E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.004E-10	-7.004E-10
0.70000	2.604E-11	349.308	-2.384E-09	-2.384E-09	2.384E-09	2.384E-09	-1.346E-09	-1.346E-09
0.80000	6.547E-11	399.209	-4.444E-09	-4.444E-09	4.444E-09	4.444E-09	-3.385E-09	-3.385E-09
0.85000	1.269E-10	424.160	-6.723E-09	-6.723E-09	6.724E-09	6.724E-09	-6.561E-09	-6.561E-09
0.90000	3.216E-10	449.110	-1.177E-08	-1.177E-08	1.179E-08	1.179E-08	-1.663E-08	-1.663E-08
0.92500	5.920E-10	461.585	-1.725E-08	-1.725E-08	1.737E-08	1.737E-08	-3.061E-08	-3.061E-08
0.95000	1.493E-09	474.060	-2.860E-08	-2.860E-08	3.003E-08	3.003E-08	-7.721E-08	-7.721E-08
0.96250	2.890E-09	480.297	-3.810E-08	-3.810E-08	4.619E-08	4.620E-08	-1.494E-07	-1.494E-07
0.97500	8.507E-09	486.534	-2.909E-08	-2.909E-08	1.182E-07	1.182E-07	-4.398E-07	-4.398E-07
0.98124	1.907E-08	489.652	1.198E-07	1.198E-07	3.482E-07	3.482E-07	-9.860E-07	-9.861E-07
0.98749	6.576E-08	492.769	1.961E-06	1.961E-06	2.413E-06	2.413E-06	-3.400E-06	-3.400E-06
0.99373	5.857E-07	495.884	5.617E-05	5.617E-05	5.800E-05	5.800E-05	-3.028E-05	-3.028E-05
0.99996	1.355E-05	498.993	3.363E-03	3.363E-03	3.398E-03	3.398E-03	-7.007E-04	-7.007E-04
1.00619	5.794E-07	502.101	1.178E-02	1.178E-02	1.185E-02	1.185E-02	-2.996E-05	-2.996E-05
1.01243	6.526E-08	505.216	1.321E-02	1.321E-02	1.328E-02	1.328E-02	-3.374E-06	-3.374E-06
1.01868	1.900E-08	508.333	1.353E-02	1.353E-02	1.360E-02	1.360E-02	-9.824E-07	-9.824E-07
1.02493	8.480E-09	511.450	1.368E-02	1.368E-02	1.374E-02	1.374E-02	-4.384E-07	-4.384E-07
1.03742	2.884E-09	517.686	1.388E-02	1.388E-02	1.395E-02	1.395E-02	-1.491E-07	-1.491E-07
1.04992	1.492E-09	523.923	1.406E-02	1.406E-02	1.412E-02	1.412E-02	-7.713E-08	-7.713E-08
1.07492	5.916E-10	536.397	1.440E-02	1.440E-02	1.447E-02	1.447E-02	-3.059E-08	-3.059E-08
1.09992	3.213E-10	548.871	1.473E-02	1.473E-02	1.480E-02	1.480E-02	-1.661E-08	-1.661E-08
1.14991	1.269E-10	573.819	1.540E-02	1.540E-02	1.547E-02	1.547E-02	-6.559E-09	-6.559E-09
1.19991	6.545E-11	598.767	1.608E-02	1.608E-02	1.615E-02	1.615E-02	-3.384E-09	-3.384E-09
1.29990	2.603E-11	648.665	1.742E-02	1.742E-02	1.749E-02	1.749E-02	-1.346E-09	-1.346E-09
1.39989	1.354E-11	698.563	1.876E-02	1.876E-02	1.883E-02	1.883E-02	-7.003E-10	-7.003E-10
1.49989	8.303E-12	748.462	2.010E-02	2.010E-02	2.017E-02	2.017E-02	-4.293E-10	-4.293E-10
1.59988	5.566E-12	798.361	2.145E-02	2.145E-02	2.152E-02	2.152E-02	-2.878E-10	-2.878E-10
1.69988	3.736E-12	848.260	2.279E-02	2.279E-02	2.286E-02	2.286E-02	-1.932E-10	-1.932E-10
1.79988	2.636E-12	898.159	2.413E-02	2.413E-02	2.420E-02	2.420E-02	-1.363E-10	-1.363E-10
1.89987	1.859E-12	948.059	2.547E-02	2.547E-02	2.554E-02	2.554E-02	-9.613E-11	-9.613E-11
1.99987	1.325E-12	997.959	2.682E-02	2.682E-02	2.689E-02	2.689E-02	-6.852E-11	-6.852E-11

PROPAGATION FREQUENCY= 1.550DE 10 ϕ_o= 0.300 θ_D= 0. ρ_a= 1.127

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-1.311E-18
0.10000	7.938E-14	8.421E-14	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-1.758E-18
0.20000	2.309E-13	2.321E-13	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-2.515E-18
0.30000	4.943E-13	4.919E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-3.953E-18
0.40000	1.047E-12	1.047E-12	-4.256E-23	-4.256E-23	-9.878E-13	-9.878E-13	-6.691E-18
0.50000	2.075E-12	2.074E-12	-7.777E-23	-7.777E-23	-1.862E-12	-1.862E-12	-1.339E-17
0.60000	4.698E-12	4.695E-12	-1.600E-22	-1.600E-22	-3.534E-12	-3.534E-12	-3.131E-17
0.70000	1.336E-11	1.336E-11	-4.199E-22	-4.199E-22	-7.473E-12	-7.473E-12	-9.150E-17
0.80000	5.498E-11	5.496E-11	-1.680E-21	-1.680E-21	-2.043E-11	-2.043E-11	-4.141E-16
0.85000	1.469E-10	1.469E-10	-4.469E-21	-4.469E-21	-4.127E-11	-4.127E-11	-1.199E-15
0.90000	5.668E-10	5.668E-10	-1.913E-20	-1.913E-20	-1.136E-10	-1.136E-10	-5.366E-15
0.92500	1.403E-09	1.403E-09	-4.416E-20	-4.416E-20	-2.255E-10	-2.255E-10	-1.628E-14
0.95000	5.389E-09	5.389E-09	-1.736E-19	-1.736E-19	-5.642E-10	-5.642E-10	-7.221E-14
0.96250	1.426E-08	1.426E-08	-4.891E-19	-4.892E-19	-1.110E-09	-1.110E-09	-2.045E-13
0.97500	6.525E-08	6.524E-08	-2.711E-18	-2.711E-18	-3.434E-09	-3.434E-09	-7.377E-13
0.98124	1.958E-07	1.958E-07	-9.995E-18	-9.996E-18	-8.594E-09	-8.595E-09	-1.679E-12
0.98749	1.020E-06	1.022E-06	-7.662E-17	-7.663E-17	-3.675E-08	-3.675E-08	-4.276E-12
0.99373	2.132E-05	2.134E-05	-4.249E-15	-4.250E-15	-8.930E-07	-8.932E-07	-1.007E-11
0.99996	2.105E-02	2.105E-02	-2.888E-12	-2.888E-12	-6.159E-04	-6.160E-04	-6.057E-12
1.00619	7.081E-03	7.081E-03	-4.165E-15	-4.164E-15	-1.216E-03	-1.216E-03	-1.002E-11
1.01243	3.625E-03	3.625E-03	-7.565E-17	-7.564E-17	-1.216E-03	-1.216E-03	-4.260E-12
1.01868	2.362E-03	2.362E-03	-9.935E-18	-9.935E-18	-1.216E-03	-1.216E-03	-1.672E-12
1.02493	1.738E-03	1.738E-03	-2.698E-18	-2.698E-18	-1.216E-03	-1.216E-03	-7.356E-13
1.03742	1.131E-03	1.131E-03	-4.873E-19	-4.873E-19	-1.216E-03	-1.216E-03	-2.042E-13
1.04992	8.365E-04	8.365E-04	-1.733E-19	-1.733E-19	-1.216E-03	-1.216E-03	-7.211E-14
1.07492	5.493E-04	5.493E-04	-4.412E-20	-4.412E-20	-1.216E-03	-1.216E-03	-1.627E-14
1.09992	4.087E-04	4.087E-04	-1.911E-20	-1.911E-20	-1.216E-03	-1.216E-03	-5.367E-15
1.14991	2.703E-04	2.703E-04	-4.466E-21	-4.466E-21	-1.216E-03	-1.216E-03	-1.200E-15
1.19991	2.019E-04	2.019E-04	-1.679E-21	-1.679E-21	-1.216E-03	-1.216E-03	-4.145E-16
1.29990	1.340E-04	1.340E-04	-4.198E-22	-4.198E-22	-1.216E-03	-1.216E-03	-9.162E-17
1.39989	1.003E-04	1.003E-04	-1.600E-22	-1.600E-22	-1.216E-03	-1.216E-03	-3.136E-17
1.49989	8.013E-05	8.013E-05	-7.775E-23	-7.775E-23	-1.216E-03	-1.216E-03	-1.341E-17
1.59988	6.672E-05	6.672E-05	-4.256E-23	-4.256E-23	-1.216E-03	-1.216E-03	-6.703E-18
1.69988	5.715E-05	5.715E-05	-2.332E-23	-2.332E-23	-1.216E-03	-1.216E-03	-3.960E-18
1.79988	4.998E-05	4.998E-05	-1.338E-23	-1.338E-23	-1.216E-03	-1.216E-03	-2.520E-18
1.89987	4.441E-05	4.441E-05	-7.681E-24	-7.681E-24	-1.216E-03	-1.216E-03	-1.762E-18
1.99987	3.996E-05	3.996E-05	-4.403E-24	-4.403E-24	-1.216E-03	-1.216E-03	-1.314E-18

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.400 θ_D= 0. ρ_a= 1.502

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.4000	0.	215.169	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.4000	0.10000	193.644	4.419E-08	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.4000	0.20000	172.128	6.837E-08	1.000E-00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.4000	0.30000	150.613	9.505E-08	1.000E-00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.4000	0.40000	129.099	1.501E-07	1.000E-00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.4000	0.50000	107.585	1.868E-07	1.000E-00	-8.303E-12	-8.303E-12	8.303E-12
0.60000	0.4000	0.60000	86.071	1.868E-07	1.000E-00	-1.355E-11	-1.355E-11	1.355E-11
0.70000	0.4000	0.70000	64.560	8.805E-07	1.000E-00	-2.604E-11	-2.604E-11	2.604E-11
0.80000	0.4000	0.80000	43.053	2.948E-06	9.999E-01	-6.544E-11	-6.544E-11	6.544E-11
0.85000	0.4000	0.85000	32.304	7.871E-06	9.998E-01	-1.268E-10	-1.268E-10	1.268E-10
0.90000	0.4000	0.90000	21.563	2.743E-05	9.996E-01	-3.208E-10	-3.208E-10	3.208E-10
0.92500	0.4000	0.92500	16.202	6.702E-05	9.993E-01	-5.901E-10	-5.902E-10	5.901E-10
0.95000	0.4000	0.95000	10.858	2.264E-04	9.985E-01	-1.482E-09	-1.482E-09	1.482E-09
0.96250	0.4000	0.96250	8.203	5.304E-04	9.970E-01	-2.834E-09	-2.834E-09	2.834E-09
0.97500	0.4000	0.97500	5.581	1.715E-03	9.955E-01	-8.132E-09	-8.132E-09	8.132E-09
0.98124	0.4000	0.98125	4.301	3.811E-03	9.941E-01	-1.774E-08	-1.774E-08	1.774E-08
0.98749	0.4001	0.98750	3.078	1.087E-02	9.942E-01	-5.410E-08	-5.410E-08	5.410E-08
0.99374	0.4002	0.99375	2.015	4.475E-02	1.007E 00	-3.251E-07	-3.251E-07	3.251E-07
0.99998	0.4009	1.00000	1.505	2.040E-01	6.838E-01	-1.562E-06	-1.562E-06	1.562E-06
1.00621	0.4027	1.00625	2.022	3.620E-01	7.846E-01	-3.200E-07	-3.199E-07	3.200E-07
1.01246	0.4051	1.01250	3.087	3.954E-01	1.735E 00	-5.358E-08	-5.358E-08	5.358E-08
1.01871	0.4075	1.01875	4.311	4.024E-01	2.811E 00	-1.763E-08	-1.763E-08	1.763E-08
1.02495	0.4099	1.02500	5.591	4.045E-01	3.921E 00	-8.089E-09	-8.089E-09	8.089E-09
1.03745	0.4147	1.03750	8.213	4.057E-01	6.156E 00	-2.826E-09	-2.826E-09	2.826E-09
1.04995	0.4194	1.05000	10.868	4.060E-01	8.366E 00	-1.479E-09	-1.479E-09	1.479E-09
1.07495	0.4283	1.07500	16.212	4.062E-01	1.266E 01	-5.894E-10	-5.894E-10	5.894E-10
1.09995	0.4369	1.10000	21.574	4.062E-01	1.677E 01	-3.204E-10	-3.204E-10	3.204E-10
1.14995	0.4530	1.15000	32.314	4.062E-01	2.446E 01	-1.267E-10	-1.267E-10	1.267E-10
1.19995	0.4677	1.20000	43.063	4.062E-01	3.152E 01	-6.541E-11	-6.541E-11	6.541E-11
1.29995	0.4938	1.30000	64.571	4.062E-01	4.402E 01	-2.603E-11	-2.603E-11	2.603E-11
1.39994	0.5161	1.40000	86.082	4.062E-01	5.473E 01	-1.354E-11	-1.354E-11	1.354E-11
1.49994	0.5354	1.50000	107.595	4.063E-01	6.402E 01	-8.302E-12	-8.302E-12	8.302E-12
1.59994	0.5524	1.60000	129.109	4.063E-01	7.214E 01	-5.565E-12	-5.565E-12	5.565E-12
1.69994	0.5673	1.70000	150.624	4.063E-01	7.931E 01	-3.736E-12	-3.736E-12	3.736E-12
1.79994	0.5806	1.80000	172.139	4.063E-01	8.569E 01	-2.635E-12	-2.635E-12	2.635E-12
1.89994	0.5924	1.90000	193.654	4.063E-01	9.139E 01	-1.859E-12	-1.859E-12	1.859E-12
1.99994	0.6031	2.00000	215.169	4.063E-01	9.652E 01	-1.325E-12	-1.325E-12	1.325E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.400 θ_D= 0. ρ_a= 1.502

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.760E-10	-5.760E-10	5.760E-10	5.760E-10	-2.878E-10	-2.878E-10
0.50000	8.303E-12	249.506	-9.175E-10	-9.175E-10	9.175E-10	9.175E-10	-4.293E-10	-4.293E-10
0.60000	1.355E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.003E-10	-7.003E-10
0.70000	2.604E-11	349.308	-2.383E-09	-2.383E-09	2.383E-09	2.383E-09	-1.346E-09	-1.346E-09
0.80000	6.544E-11	399.209	-4.443E-09	-4.443E-09	4.444E-09	4.444E-09	-3.384E-09	-3.384E-09
0.85000	1.268E-10	424.160	-6.720E-09	-6.720E-09	6.722E-09	6.722E-09	-6.556E-09	-6.556E-09
0.90000	3.208E-10	449.110	-1.176E-08	-1.176E-08	1.179E-08	1.179E-08	-1.659E-08	-1.659E-08
0.92500	5.902E-10	461.585	-1.721E-08	-1.721E-08	1.737E-08	1.737E-08	-3.051E-08	-3.051E-08
0.95000	1.482E-09	474.060	-2.829E-08	-2.829E-08	3.014E-08	3.014E-08	-7.662E-08	-7.662E-08
0.96250	2.834E-09	480.297	-3.674E-08	-3.674E-08	4.703E-08	4.703E-08	-1.465E-07	-1.465E-07
0.97500	8.132E-09	486.534	-1.794E-08	-1.794E-08	1.269E-07	1.269E-07	-4.204E-07	-4.204E-07
0.98124	1.774E-08	489.652	1.603E-07	1.603E-07	3.813E-07	3.813E-07	-9.174E-07	-9.175E-07
0.98749	5.411E-08	492.770	2.008E-06	2.008E-06	2.424E-06	2.424E-06	-2.797E-06	-2.797E-06
0.99374	3.251E-07	495.886	3.718E-05	3.718E-05	3.846E-05	3.846E-05	-1.681E-05	-1.681E-05
0.99998	1.562E-06	498.999	7.872E-04	7.872E-04	7.943E-04	7.943E-04	-8.078E-05	-8.078E-05
1.00621	3.199E-07	502.112	2.499E-03	2.499E-03	2.512E-03	2.512E-03	-1.654E-05	-1.654E-05
1.01246	5.357E-08	505.229	3.001E-03	3.001E-03	3.015E-03	3.015E-03	-2.770E-06	-2.770E-06
1.01871	1.763E-08	508.346	3.128E-03	3.128E-03	3.142E-03	3.142E-03	-9.117E-07	-9.117E-07
1.02495	8.089E-09	511.464	3.180E-03	3.180E-03	3.194E-03	3.194E-03	-4.182E-07	-4.182E-07
1.03745	2.826E-09	517.701	3.238E-03	3.238E-03	3.251E-03	3.251E-03	-1.461E-07	-1.461E-07
1.04995	1.479E-09	523.938	3.282E-03	3.282E-03	3.296E-03	3.296E-03	-7.648E-08	-7.648E-08
1.07495	5.894E-10	536.413	3.363E-03	3.363E-03	3.377E-03	3.377E-03	-3.048E-08	-3.048E-08
1.09995	3.204E-10	548.888	3.442E-03	3.442E-03	3.456E-03	3.456E-03	-1.657E-08	-1.657E-08
1.14995	1.267E-10	573.838	3.599E-03	3.599E-03	3.613E-03	3.613E-03	-6.551E-09	-6.551E-09
1.19995	6.541E-11	598.788	3.756E-03	3.756E-03	3.770E-03	3.770E-03	-3.382E-09	-3.382E-09
1.29995	2.603E-11	648.688	4.070E-03	4.070E-03	4.084E-03	4.084E-03	-1.346E-09	-1.346E-09
1.39994	1.354E-11	698.588	4.383E-03	4.383E-03	4.397E-03	4.397E-03	-7.001E-10	-7.001E-10
1.49994	8.302E-12	748.489	4.697E-03	4.697E-03	4.711E-03	4.711E-03	-4.292E-10	-4.292E-10
1.59994	5.565E-12	798.389	5.011E-03	5.011E-03	5.025E-03	5.025E-03	-2.877E-10	-2.877E-10
1.69994	3.736E-12	848.290	5.324E-03	5.324E-03	5.338E-03	5.338E-03	-1.932E-10	-1.932E-10
1.79994	2.635E-12	898.191	5.638E-03	5.638E-03	5.652E-03	5.652E-03	-1.363E-10	-1.363E-10
1.89994	1.859E-12	948.092	5.952E-03	5.952E-03	5.965E-03	5.965E-03	-9.612E-11	-9.612E-11
1.99994	1.325E-12	997.992	6.265E-03	6.265E-03	6.279E-03	6.279E-03	-6.852E-11	-6.852E-11

PROPAGATION FREQUENCY= 1.550OE 10 ϕ_o= 0.400 θ_D= 0. ρ_a= 1.502

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-2.330E-18
0.10000	1.092E-13	1.103E-13	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-3.125E-18
0.20000	3.116E-13	3.116E-13	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-4.470E-18
0.30000	6.578E-13	6.578E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-7.027E-18
0.40000	1.391E-12	1.393E-12	-4.256E-23	-4.256E-23	-9.878E-13	-9.878E-13	-1.190E-17
0.50000	2.762E-12	2.764E-12	-7.776E-23	-7.776E-23	-1.861E-12	-1.861E-12	-2.381E-17
0.60000	6.265E-12	6.263E-12	-1.600E-22	-1.600E-22	-3.534E-12	-3.534E-12	-5.566E-17
0.70000	1.781E-11	1.781E-11	-4.198E-22	-4.198E-22	-7.472E-12	-7.472E-12	-1.626E-16
0.80000	7.322E-11	7.321E-11	-1.679E-21	-1.679E-21	-2.042E-11	-2.042E-11	-7.357E-16
0.85000	1.955E-10	1.955E-10	-4.463E-21	-4.463E-21	-4.124E-11	-4.124E-11	-2.128E-15
0.90000	7.538E-10	7.538E-10	-1.907E-20	-1.907E-20	-1.134E-10	-1.134E-10	-9.508E-15
0.92500	1.863E-09	1.863E-09	-4.396E-20	-4.396E-20	-2.249E-10	-2.249E-10	-2.873E-14
0.95000	7.117E-09	7.117E-09	-1.715E-19	-1.715E-19	-5.603E-10	-5.603E-10	-1.263E-13
0.96250	1.841E-08	1.841E-08	-4.740E-19	-4.741E-19	-1.095E-09	-1.095E-09	-3.553E-13
0.97500	8.128E-08	8.129E-08	-2.529E-18	-2.529E-18	-3.303E-09	-3.303E-09	-1.249E-12
0.98124	2.375E-07	2.375E-07	-8.890E-18	-8.891E-18	-7.954E-09	-7.955E-09	-2.731E-12
0.98749	1.084E-06	1.084E-06	-5.524E-17	-5.525E-17	-3.003E-08	-3.003E-08	-6.673E-12
0.99374	1.441E-05	1.441E-05	-1.393E-15	-1.393E-15	-3.592E-07	-3.592E-07	-1.409E-11
0.99998	1.433E-02	1.433E-02	-2.939E-14	-2.939E-14	-1.204E-05	-1.204E-05	-1.687E-11
1.00621	1.251E-02	1.251E-02	-1.351E-15	-1.351E-15	-2.343E-05	-2.343E-05	-1.403E-11
1.01246	5.622E-03	5.622E-03	-5.436E-17	-5.436E-17	-2.375E-05	-2.375E-05	-6.620E-12
1.01871	3.450E-03	3.450E-03	-8.801E-18	-8.800E-18	-2.377E-05	-2.377E-05	-2.711E-12
1.02495	2.458E-03	2.458E-03	-2.508E-18	-2.508E-18	-2.377E-05	-2.377E-05	-1.242E-12
1.03745	1.547E-03	1.547E-03	-4.719E-19	-4.719E-19	-2.377E-05	-2.377E-05	-3.539E-13
1.04995	1.124E-03	1.124E-03	-1.710E-19	-1.710E-19	-2.377E-05	-2.377E-05	-1.259E-13
1.07495	7.259E-04	7.259E-04	-4.389E-20	-4.389E-20	-2.377E-05	-2.377E-05	-2.868E-14
1.09995	5.355E-04	5.355E-04	-1.904E-20	-1.904E-20	-2.377E-05	-2.377E-05	-9.502E-15
1.14995	3.511E-04	3.511E-04	-4.459E-21	-4.459E-21	-2.377E-05	-2.377E-05	-2.128E-15
1.19995	2.611E-04	2.611E-04	-1.677E-21	-1.677E-21	-2.377E-05	-2.377E-05	-7.360E-16
1.29995	1.726E-04	1.726E-04	-4.196E-22	-4.196E-22	-2.377E-05	-2.377E-05	-1.628E-16
1.39994	1.289E-04	1.289E-04	-1.600E-22	-1.600E-22	-2.377E-05	-2.377E-05	-5.573E-17
1.49994	1.029E-04	1.029E-04	-7.774E-23	-7.774E-23	-2.377E-05	-2.377E-05	-2.384E-17
1.59994	8.557E-05	8.557E-05	-4.255E-23	-4.255E-23	-2.377E-05	-2.377E-05	-1.191E-17
1.69994	7.326E-05	7.326E-05	-2.332E-23	-2.332E-23	-2.377E-05	-2.377E-05	-7.039E-18
1.79994	6.404E-05	6.404E-05	-1.338E-23	-1.338E-23	-2.377E-05	-2.377E-05	-4.479E-18
1.89994	5.688E-05	5.688E-05	-7.680E-24	-7.680E-24	-2.377E-05	-2.377E-05	-3.133E-18
1.99994	5.117E-05	5.117E-05	-4.403E-24	-4.403E-24	-2.377E-05	-2.377E-05	-2.336E-18

PROPAGATION FREQUENCY= 1.550OE 10 ϕ_o= 0.500 θ_D= 0. ρ_a= 1.878

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.5000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.5000	0.10000	193.644	4.752E-08	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.5000	0.20000	172.129	8.171E-08	1.000E-00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.5000	0.30000	150.615	1.251E-07	1.000E-00	-3.737E-12	-3.737E-12	3.737E-12
0.40000	0.5000	0.40000	129.101	1.901E-07	1.000E-00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.5000	0.50000	107.588	2.801E-07	1.000E-00	-8.303E-12	-8.303E-12	8.303E-12
0.60000	0.5000	0.60000	86.076	2.868E-07	1.000E-00	-1.354E-11	-1.354E-11	1.354E-11
0.70000	0.5000	0.70000	64.567	1.227E-06	9.999E-01	-2.603E-11	-2.603E-11	2.603E-11
0.80000	0.5000	0.80000	43.065	4.029E-06	9.999E-01	-6.541E-11	-6.541E-11	6.541E-11
0.85000	0.5000	0.85000	32.320	1.046E-05	9.998E-01	-1.267E-10	-1.267E-10	1.267E-10
0.90000	0.5000	0.90000	21.590	3.661E-05	9.995E-01	-3.199E-10	-3.199E-10	3.199E-10
0.92500	0.5000	0.92500	16.238	8.885E-05	9.991E-01	-5.877E-10	-5.877E-10	5.877E-10
0.95000	0.5000	0.95000	10.913	2.975E-04	9.980E-01	-1.467E-09	-1.467E-09	1.467E-09
0.96250	0.5000	0.96250	8.277	6.898E-04	9.968E-01	-2.777E-09	-2.777E-09	2.777E-09
0.97500	0.5000	0.97500	5.690	2.174E-03	9.947E-01	-7.681E-09	-7.682E-09	7.681E-09
0.98124	0.5001	0.98125	4.444	4.682E-03	9.939E-01	-1.621E-08	-1.621E-08	1.621E-08
0.98749	0.5001	0.98750	3.275	1.241E-02	9.966E-01	-4.395E-08	-4.395E-08	4.394E-08
0.99374	0.5002	0.99375	2.307	4.221E-02	1.011E 00	-1.678E-07	-1.678E-07	1.678E-07
0.99998	0.5008	1.00000	1.880	1.388E-01	9.368E-01	-4.410E-07	-4.410E-07	4.410E-07
1.00622	0.5020	1.00625	2.317	2.345E-01	4.969E-01	-1.642E-07	-1.642E-07	1.642E-07
1.01247	0.5035	1.01250	3.288	2.638E-01	3.172E-01	-4.333E-08	-4.332E-08	4.333E-08
1.01871	0.5051	1.01875	4.458	2.714E-01	5.621E-01	-1.606E-08	-1.606E-08	1.606E-08
1.02496	0.5068	1.02500	5.706	2.738E-01	9.481E-01	-7.620E-09	-7.620E-09	7.620E-09
1.03746	0.5100	1.03750	8.293	2.753E-01	1.780E 00	-2.764E-09	-2.764E-09	2.764E-09
1.04996	0.5132	1.05000	10.929	2.757E-01	2.619E 00	-1.463E-09	-1.463E-09	1.463E-09
1.07496	0.5193	1.07500	16.254	2.759E-01	4.258E 00	-5.866E-10	-5.866E-10	5.866E-10
1.09996	0.5251	1.10000	21.606	2.760E-01	5.833E 00	-3.193E-10	-3.193E-10	3.193E-10
1.14996	0.5360	1.15000	32.337	2.760E-01	8.784E 00	-1.265E-10	-1.265E-10	1.265E-10
1.19996	0.5460	1.20000	43.081	2.760E-01	1.149E 01	-6.535E-11	-6.535E-11	6.535E-11
1.29996	0.5637	1.30000	64.583	2.760E-01	1.629E 01	-2.602E-11	-2.602E-11	2.602E-11
1.39996	0.5789	1.40000	86.092	2.760E-01	2.040E 01	-1.354E-11	-1.354E-11	1.354E-11
1.49995	0.5920	1.50000	107.604	2.760E-01	2.397E 01	-8.300E-12	-8.300E-12	8.300E-12
1.59995	0.6035	1.60000	129.117	2.760E-01	2.709E 01	-5.564E-12	-5.564E-12	5.564E-12
1.69995	0.6137	1.70000	150.631	2.761E-01	2.984E 01	-3.736E-12	-3.736E-12	3.736E-12
1.79995	0.6227	1.80000	172.146	2.761E-01	3.229E 01	-2.635E-12	-2.635E-12	2.635E-12
1.89995	0.6308	1.90000	193.660	2.761E-01	3.448E 01	-1.859E-12	-1.859E-12	1.859E-12
1.99995	0.6380	2.00000	215.175	2.761E-01	3.645E 01	-1.325E-12	-1.325E-12	1.325E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.500 θ_D= 0. ρ_a= 1.878

z	$_x\mu'-1.0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.737E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.759E-10	-5.759E-10	5.759E-10	5.759E-10	-2.878E-10	-2.878E-10
0.50000	8.303E-12	249.506	-9.174E-10	-9.174E-10	9.174E-10	9.174E-10	-4.293E-10	-4.293E-10
0.60000	1.354E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.003E-10	-7.003E-10
0.70000	2.603E-11	349.308	-2.383E-09	-2.383E-09	2.383E-09	2.383E-09	-1.346E-09	-1.346E-09
0.80000	6.541E-11	399.209	-4.442E-09	-4.442E-09	4.443E-09	4.443E-09	-3.382E-09	-3.382E-09
0.85000	1.267E-10	424.160	-6.716E-09	-6.716E-09	6.720E-09	6.720E-09	-6.548E-09	-6.548E-09
0.90000	3.199E-10	449.110	-1.174E-08	-1.174E-08	1.178E-08	1.178E-08	-1.654E-08	-1.654E-08
0.92500	5.877E-10	461.585	-1.712E-08	-1.712E-08	1.739E-08	1.739E-08	-3.039E-08	-3.039E-08
0.95000	1.467E-09	474.060	-2.749E-08	-2.749E-08	3.068E-08	3.068E-08	-7.586E-08	-7.586E-08
0.96250	2.777E-09	480.297	-3.285E-08	-3.285E-08	5.026E-08	5.026E-08	-1.436E-07	-1.436E-07
0.97500	7.682E-09	486.534	1.663E-08	1.663E-08	1.585E-07	1.585E-07	-3.971E-07	-3.972E-07
0.98124	1.621E-08	489.652	3.025E-07	3.025E-07	5.148E-07	5.148E-07	-8.383E-07	-8.383E-07
0.98749	4.395E-08	492.770	2.700E-06	2.700E-06	3.077E-06	3.077E-06	-2.272E-06	-2.272E-06
0.99374	1.678E-07	495.887	3.318E-05	3.318E-05	3.410E-05	3.410E-05	-8.674E-06	-8.674E-06
0.99998	4.413E-07	499.001	3.643E-04	3.643E-04	3.673E-04	3.673E-04	-2.280E-05	-2.280E-05
1.00622	1.641E-07	502.116	1.049E-03	1.049E-03	1.054E-03	1.054E-03	-8.488E-06	-8.487E-06
1.01247	4.334E-08	505.232	1.336E-03	1.336E-03	1.341E-03	1.341E-03	-2.240E-06	-2.240E-06
1.01871	1.606E-08	508.350	1.423E-03	1.423E-03	1.428E-03	1.428E-03	-8.304E-07	-8.304E-07
1.02496	7.620E-09	511.468	1.458E-03	1.458E-03	1.463E-03	1.463E-03	-3.940E-07	-3.940E-07
1.03746	2.764E-09	517.705	1.491E-03	1.491E-03	1.497E-03	1.497E-03	-1.429E-07	-1.429E-07
1.04996	1.463E-09	523.942	1.514E-03	1.514E-03	1.520E-03	1.520E-03	-7.564E-08	-7.564E-08
1.07496	5.866E-10	536.417	1.552E-03	1.552E-03	1.558E-03	1.558E-03	-3.033E-08	-3.033E-08
1.09996	3.193E-10	548.892	1.589E-03	1.589E-03	1.595E-03	1.595E-03	-1.651E-08	-1.651E-08
1.14996	1.265E-10	573.842	1.662E-03	1.662E-03	1.668E-03	1.668E-03	-6.541E-09	-6.541E-09
1.19996	6.535E-11	598.792	1.734E-03	1.734E-03	1.740E-03	1.740E-03	-3.379E-09	-3.379E-09
1.29996	2.602E-11	648.693	1.879E-03	1.879E-03	1.885E-03	1.885E-03	-1.345E-09	-1.345E-09
1.39996	1.354E-11	698.594	2.024E-03	2.024E-03	2.030E-03	2.030E-03	-7.000E-10	-7.000E-10
1.49995	8.300E-12	748.495	2.169E-03	2.169E-03	2.175E-03	2.175E-03	-4.292E-10	-4.292E-10
1.59995	5.564E-12	798.396	2.314E-03	2.314E-03	2.320E-03	2.320E-03	-2.877E-10	-2.877E-10
1.69995	3.736E-12	848.297	2.459E-03	2.459E-03	2.464E-03	2.464E-03	-1.931E-10	-1.931E-10
1.79995	2.635E-12	898.198	2.603E-03	2.603E-03	2.609E-03	2.609E-03	-1.362E-10	-1.362E-10
1.89995	1.859E-12	948.099	2.748E-03	2.748E-03	2.754E-03	2.754E-03	-9.611E-11	-9.611E-11
1.99995	1.325E-12	998.000	2.893E-03	2.893E-03	2.899E-03	2.899E-03	-6.851E-11	-6.851E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.500 θ_D=0. ρ_a= 1.878

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-3.640E-18
0.10000	1.374E-13	1.381E-13	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-4.884E-18
0.20000	3.878E-13	3.881E-13	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-6.985E-18
0.30000	8.210E-13	8.225E-13	-2.333E-23	-2.333E-23	-5.096E-13	-5.096E-13	-1.098E-17
0.40000	1.742E-12	1.740E-12	-4.256E-23	-4.256E-23	-9.877E-13	-9.877E-13	-1.859E-17
0.50000	3.453E-12	3.452E-12	-7.776E-23	-7.776E-23	-1.861E-12	-1.861E-12	-3.719E-17
0.60000	7.826E-12	7.826E-12	-1.600E-22	-1.600E-22	-3.534E-12	-3.534E-12	-8.695E-17
0.70000	2.225E-11	2.225E-11	-4.197E-22	-4.197E-22	-7.471E-12	-7.471E-12	-2.540E-16
0.80000	9.145E-11	9.144E-11	-1.677E-21	-1.677E-21	-2.041E-11	-2.041E-11	-1.148E-15
0.85000	2.441E-10	2.441E-10	-4.456E-21	-4.456E-21	-4.120E-11	-4.120E-11	-3.318E-15
0.90000	9.395E-10	9.395E-10	-1.899E-20	-1.899E-20	-1.132E-10	-1.132E-10	-1.479E-14
0.92500	2.315E-09	2.315E-09	-4.372E-20	-4.372E-20	-2.241E-10	-2.241E-10	-4.447E-14
0.95000	8.794E-09	8.794E-09	-1.689E-19	-1.689E-19	-5.553E-10	-5.553E-10	-1.933E-13
0.96250	2.234E-08	2.234E-08	-4.591E-19	-4.591E-19	-1.076E-09	-1.076E-09	-5.368E-13
0.97500	9.411E-08	9.411E-09	-2.315E-18	-2.315E-18	-3.147E-09	-3.147E-09	-1.837E-12
0.98124	2.659E-07	2.659E-07	-7.679E-18	-7.679E-18	-7.241E-09	-7.241E-09	-3.840E-12
0.98749	1.059E-06	1.059E-06	-3.917E-17	-3.918E-17	-2.389E-08	-2.389E-08	-8.840E-12
0.99374	9.703E-06	9.703E-06	-3.976E-16	-3.976E-16	-1.526E-07	-1.526E-07	-1.895E-11
0.99998	2.573E-03	2.573E-03	-2.483E-15	-2.483E-15	-1.565E-06	-1.565E-06	-2.458E-11
1.00622	5.119E-03	5.119E-03	-3.816E-16	-3.815E-16	-2.953E-06	-2.953E-06	-1.889E-11
1.01247	7.988E-03	7.988E-03	-3.827E-17	-3.826E-17	-3.078E-06	-3.078E-06	-8.751E-12
1.01871	4.481E-03	4.481E-03	-7.562E-18	-7.562E-18	-3.095E-06	-3.095E-06	-3.801E-12
1.02496	2.640E-03	2.640E-03	-2.286E-18	-2.286E-18	-3.099E-06	-3.099E-06	-1.823E-12
1.03746	1.389E-03	1.389E-03	-4.559E-19	-4.559E-19	-3.101E-06	-3.101E-06	-5.334E-13
1.04996	9.332E-04	9.332E-04	-1.681E-19	-1.681E-19	-3.101E-06	-3.101E-06	-1.924E-13
1.07496	5.605E-04	5.605E-04	-4.361E-20	-4.361E-20	-3.101E-06	-3.101E-06	-4.433E-14
1.09996	3.999E-04	3.999E-04	-1.894E-20	-1.894E-20	-3.102E-06	-3.102E-06	-1.477E-14
1.14996	2.540E-04	2.540E-04	-4.449E-21	-4.449E-21	-3.102E-06	-3.102E-06	-3.316E-15
1.19996	1.860E-04	1.860E-04	-1.675E-21	-1.675E-21	-3.102E-06	-3.102E-06	-1.148E-15
1.29996	1.212E-04	1.212E-04	-4.193E-22	-4.193E-22	-3.102E-06	-3.102E-06	-2.541E-16
1.39996	8.983E-05	8.983E-05	-1.599E-22	-1.599E-22	-3.102E-06	-3.102E-06	-8.703E-17
1.49995	7.137E-05	7.137E-05	-7.772E-23	-7.772E-23	-3.102E-06	-3.102E-06	-3.724E-17
1.59995	5.920E-05	5.920E-05	-4.254E-23	-4.254E-23	-3.102E-06	-3.102E-06	-1.861E-17
1.69995	5.058E-05	5.058E-05	-2.332E-23	-2.332E-23	-3.102E-06	-3.102E-06	-1.100E-17
1.79995	4.415E-05	4.415E-05	-1.338E-23	-1.338E-23	-3.102E-06	-3.102E-06	-6.998E-18
1.89995	3.917E-05	3.917E-05	-7.678E-24	-7.678E-24	-3.102E-06	-3.102E-06	-4.894E-18
1.99995	3.520E-05	3.520E-05	-4.402E-24	-4.402E-24	-3.102E-06	-3.102E-06	-3.650E-18

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.600 θ_D= 0. ρ_a= 2.253

z	ϕ	z_r	ρ	t	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	0.6000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.6000	0.10000	193.644	7.087E-08	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.6000	0.20000	172.130	9.838E-08	1.000E-00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.6000	0.30000	150.616	1.501E-07	1.000E-00	-3.736E-12	-3.736E-12	3.736E-12
0.40000	0.6000	0.40000	129.103	2.535E-07	1.000E-00	-5.566E-12	-5.566E-12	5.566E-12
0.50000	0.6000	0.50000	107.591	3.602E-07	1.000E-00	-8.302E-12	-8.302E-12	8.302E-12
0.60000	0.6000	0.60000	86.081	3.869E-07	1.000E-00	-1.354E-11	-1.354E-11	1.354E-11
0.70000	0.6000	0.70000	64.575	1.507E-06	9.999E-01	-2.602E-11	-2.602E-11	2.602E-11
0.80000	0.6000	0.80000	43.079	5.149E-06	9.998E-01	-6.536E-11	-6.536E-11	6.536E-11
0.85000	0.6000	0.85000	32.341	1.326E-05	9.996E-01	-1.265E-10	-1.265E-10	1.265E-10
0.90000	0.6000	0.90000	21.622	4.621E-05	9.992E-01	-3.187E-10	-3.187E-10	3.187E-10
0.92500	0.6000	0.92500	16.282	1.117E-04	9.986E-01	-5.848E-10	-5.848E-10	5.848E-10
0.95000	0.6000	0.95000	10.980	3.712E-04	9.971E-01	-1.450E-09	-1.450E-09	1.450E-09
0.96250	0.6000	0.96250	8.366	8.521E-04	9.956E-01	-2.709E-09	-2.709E-09	2.709E-09
0.97500	0.6000	0.97500	5.822	2.607E-03	9.937E-01	-7.175E-09	-7.175E-09	7.175E-09
0.98124	0.6001	0.98125	4.612	5.424E-03	9.941E-01	-1.458E-08	-1.458E-08	1.458E-08
0.98749	0.6001	0.98750	3.501	1.335E-02	1.000E 00	-3.463E-08	-3.463E-08	3.463E-08
0.99374	0.6003	0.99375	2.620	3.857E-02	1.014E 00	-9.757E-08	-9.757E-08	9.757E-08
0.99998	0.6007	1.00000	2.256	1.018E-01	9.986E-01	-1.885E-07	-1.885E-07	1.885E-07
1.00623	0.6015	1.00625	2.632	1.645E-01	7.256E-01	-9.600E-08	-9.600E-08	9.601E-08
1.01247	0.6026	1.01250	3.519	1.892E-01	5.237E-01	-3.398E-08	-3.398E-08	3.398E-08
1.01872	0.6038	1.01875	4.632	1.970E-01	3.447E-01	-1.439E-08	-1.439E-08	1.439E-08
1.02497	0.6050	1.02500	5.844	1.998E-01	2.285E-01	-7.094E-09	-7.094E-09	7.094E-09
1.03747	0.6073	1.03750	8.389	2.015E-01	4.259E-01	-2.692E-09	-2.692E-09	2.692E-09
1.04997	0.6097	1.05000	11.003	2.020E-01	8.087E-01	-1.444E-09	-1.444E-09	1.444E-09
1.07496	0.6141	1.07500	16.306	2.023E-01	1.600E 00	-5.832E-10	-5.832E-10	5.832E-10
1.09996	0.6184	1.10000	21.646	2.023E-01	2.370E 00	-3.178E-10	-3.178E-10	3.178E-10
1.14996	0.6264	1.15000	32.364	2.024E-01	3.818E 00	-1.263E-10	-1.263E-10	1.263E-10
1.19996	0.6337	1.20000	43.103	2.024E-01	5.149E 00	-6.528E-11	-6.528E-11	6.528E-11
1.29996	0.6467	1.30000	64.599	2.024E-01	7.506E 00	-2.600E-11	-2.600E-11	2.600E-11
1.39996	0.6578	1.40000	86.105	2.024E-01	9.528E 00	-1.353E-11	-1.353E-11	1.353E-11
1.49996	0.6675	1.50000	107.615	2.024E-01	1.128E 01	-8.299E-12	-8.299E-12	8.299E-12
1.59996	0.6759	1.60000	129.127	2.024E-01	1.282E 01	-5.563E-12	-5.563E-12	5.563E-12
1.69996	0.6833	1.70000	150.640	2.024E-01	1.417E 01	-3.735E-12	-3.735E-12	3.735E-12
1.79996	0.6900	1.80000	172.154	2.024E-01	1.537E 01	-2.635E-12	-2.635E-12	2.635E-12
1.89996	0.6959	1.90000	193.668	2.024E-01	1.645E 01	-1.859E-12	-1.859E-12	1.859E-12
1.99996	0.7012	2.00000	215.183	2.024E-01	1.742E 01	-1.325E-12	-1.325E-12	1.325E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.600 θ_D=0. ρ_a=2.253

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.736E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.566E-12	199.605	-5.759E-10	-5.759E-10	5.759E-10	5.759E-10	-2.878E-10	-2.878E-10
0.50000	8.302E-12	249.506	-9.174E-10	-9.174E-10	9.174E-10	9.174E-10	-4.293E-10	-4.293E-10
0.60000	1.354E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.002E-10	-7.002E-10
0.70000	2.602E-11	349.308	-2.383E-09	-2.383E-09	2.383E-09	2.383E-09	-1.345E-09	-1.345E-09
0.80000	6.536E-11	399.209	-4.441E-09	-4.441E-09	4.441E-09	4.441E-09	-3.379E-09	-3.379E-09
0.85000	1.265E-10	424.160	-6.711E-09	-6.711E-09	6.717E-09	6.717E-09	-6.540E-09	-6.540E-09
0.90000	3.187E-10	449.110	-1.171E-08	-1.171E-08	1.178E-08	1.178E-08	-1.648E-08	-1.648E-08
0.92500	5.848E-10	461.585	-1.700E-08	-1.700E-08	1.743E-08	1.744E-08	-3.023E-08	-3.023E-08
0.95000	1.450E-09	474.060	-2.645E-08	-2.645E-08	3.142E-08	3.142E-08	-7.496E-08	-7.496E-08
0.96250	2.709E-09	480.297	-2.788E-08	-2.788E-08	5.444E-08	5.444E-08	-1.401E-07	-1.401E-07
0.97500	7.175E-09	486.534	5.665E-08	5.665E-08	1.952E-07	1.952E-07	-3.710E-07	-3.710E-07
0.98124	1.458E-08	489.652	4.471E-07	4.471E-07	6.500E-07	6.500E-07	-7.536E-07	-7.537E-07
0.98749	3.463E-08	492.770	3.174E-06	3.174E-06	3.515E-06	3.515E-06	-1.791E-06	-1.791E-06
0.99374	9.758E-08	495.887	2.773E-05	2.773E-05	2.845E-05	2.845E-05	-5.045E-06	-5.045E-06
0.99998	1.885E-07	499.002	1.963E-04	1.963E-04	1.979E-04	1.979E-04	-9.745E-06	-9.745E-06
1.00623	9.600E-08	502.118	5.162E-04	5.162E-04	5.188E-04	5.188E-04	-4.964E-06	-4.963E-06
1.01247	3.398E-08	505.235	6.874E-04	6.874E-04	6.904E-04	6.904E-04	-1.757E-06	-1.757E-06
1.01872	1.439E-08	508.353	7.496E-04	7.496E-04	7.527E-04	7.527E-04	-7.439E-07	-7.438E-07
1.02497	7.094E-09	511.471	7.757E-04	7.757E-04	7.788E-04	7.788E-04	-3.668E-07	-3.668E-07
1.03747	2.692E-09	517.708	7.988E-04	7.988E-04	8.020E-04	8.020E-04	-1.392E-07	-1.392E-07
1.04997	1.444E-09	523.945	8.124E-04	8.124E-04	8.156E-04	8.156E-04	-7.465E-08	-7.465E-08
1.07496	5.832E-10	536.420	8.340E-04	8.340E-04	8.372E-04	8.372E-04	-3.015E-08	-3.015E-08
1.09996	3.178E-10	548.895	8.539E-04	8.539E-04	8.572E-04	8.572E-04	-1.643E-08	-1.643E-08
1.14996	1.263E-10	573.845	8.931E-04	8.931E-04	8.964E-04	8.964E-04	-6.530E-09	-6.529E-09
1.19996	6.528E-11	598.795	9.321E-04	9.321E-04	9.354E-04	9.354E-04	-3.375E-09	-3.375E-09
1.29996	2.600E-11	648.696	1.010E-03	1.010E-03	1.013E-03	1.013E-03	-1.344E-09	-1.344E-09
1.39996	1.353E-11	698.597	1.088E-03	1.088E-03	1.091E-03	1.091E-03	-6.997E-10	-6.997E-10
1.49996	8.299E-12	748.498	1.166E-03	1.166E-03	1.169E-03	1.169E-03	-4.291E-10	-4.291E-10
1.59996	5.563E-12	798.399	1.243E-03	1.243E-03	1.247E-03	1.247E-03	-2.876E-10	-2.876E-10
1.69996	3.735E-12	848.300	1.321E-03	1.321E-03	1.325E-03	1.325E-03	-1.931E-10	-1.931E-10
1.79996	2.635E-12	898.201	1.399E-03	1.399E-03	1.402E-03	1.402E-03	-1.362E-10	-1.362E-10
1.89996	1.859E-12	948.102	1.477E-03	1.477E-03	1.480E-03	1.480E-03	-9.610E-11	-9.610E-11
1.99996	1.325E-12	998.003	1.555E-03	1.555E-03	1.558E-03	1.558E-03	-6.851E-11	-6.851E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0=0.600 θ_0=0. ρ_a=2.253

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-5.242E-18
0.10000	1.660E-13	1.658E-13	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-7.032E-18
0.20000	4.657E-13	4.657E-13	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-1.006E-17
0.30000	9.868E-13	9.873E-13	-2.332E-23	-2.332E-23	-5.096E-13	-5.096E-13	-1.581E-17
0.40000	2.090E-12	2.091E-12	-4.256E-23	-4.256E-23	-9.877E-13	-9.877E-13	-2.670E-17
0.50000	4.147E-12	4.144E-12	-7.775E-23	-7.775E-23	-1.861E-12	-1.861E-12	-5.355E-17
0.60000	9.393E-12	9.393E-12	-1.600E-22	-1.600E-22	-3.533E-12	-3.533E-12	-1.252E-16
0.70000	2.673E-11	2.673E-11	-4.195E-22	-4.195E-22	-7.469E-12	-7.469E-12	-3.656E-16
0.80000	1.097E-10	1.097E-10	-1.675E-21	-1.675E-21	-2.040E-11	-2.040E-11	-1.651E-15
0.85000	2.925E-10	2.925E-10	-4.447E-21	-4.447E-21	-4.115E-11	-4.115E-11	-4.767E-15
0.90000	1.123E-09	1.123E-09	-1.889E-20	-1.889E-20	-1.128E-10	-1.128E-10	-2.119E-14
0.92500	2.759E-09	2.759E-09	-4.342E-20	-4.342E-20	-2.231E-10	-2.231E-10	-6.332E-14
0.95000	1.040E-08	1.040E-08	-1.658E-19	-1.658E-19	-5.493E-10	-5.493E-10	-2.716E-13
0.96250	2.588E-08	2.588E-08	-4.416E-19	-4.416E-19	-1.054E-09	-1.054E-09	-7.427E-13
0.97500	1.038E-07	1.038E-07	-2.083E-18	-2.083E-18	-2.984E-09	-2.984E-09	-2.470E-12
0.98124	2.784E-07	2.784E-07	-6.460E-18	-6.460E-18	-6.511E-09	-6.511E-09	-4.922E-12
0.98749	9.853E-07	9.854E-07	-2.642E-17	-2.642E-17	-1.880E-08	-1.880E-08	-1.082E-11
0.99374	6.850E-06	6.850E-06	-1.494E-16	-1.495E-16	-8.532E-08	-8.532E-08	-2.187E-11
0.99998	1.437E-04	1.437E-04	-4.958E-16	-4.958E-16	-3.936E-07	-3.936E-07	-2.781E-11
1.00623	3.811E-04	3.811E-04	-1.454E-16	-1.454E-16	-6.963E-07	-6.963E-07	-2.162E-11
1.01247	5.358E-04	5.358E-04	-2.560E-17	-2.560E-17	-7.607E-07	-7.607E-07	-1.070E-11
1.01872	8.111E-04	8.111E-04	-6.324E-18	-6.324E-18	-7.727E-07	-7.727E-07	-4.857E-12
1.02497	1.217E-03	1.217E-03	-2.046E-18	-2.046E-18	-7.762E-07	-7.762E-07	-2.444E-12
1.03747	6.452E-04	6.452E-04	-4.373E-19	-4.373E-19	-7.781E-07	-7.781E-07	-7.359E-13
1.04997	3.357E-04	3.357E-04	-1.647E-19	-1.647E-19	-7.786E-07	-7.786E-07	-2.695E-13
1.07496	1.657E-04	1.657E-04	-4.326E-20	-4.326E-20	-7.789E-07	-7.789E-07	-6.301E-14
1.09996	1.094E-04	1.094E-04	-1.883E-20	-1.883E-20	-7.790E-07	-7.790E-07	-2.113E-14
1.14996	6.493E-05	6.493E-05	-4.437E-21	-4.437E-21	-7.791E-07	-7.791E-07	-4.759E-15
1.19996	4.614E-05	4.614E-05	-1.673E-21	-1.673E-21	-7.791E-07	-7.791E-07	-1.650E-15
1.29996	2.922E-05	2.922E-05	-4.190E-22	-4.190E-22	-7.791E-07	-7.791E-07	-3.656E-16
1.39996	2.137E-05	2.137E-05	-1.598E-22	-1.598E-22	-7.791E-07	-7.791E-07	-1.253E-16
1.49996	1.685E-05	1.685E-05	-7.770E-23	-7.770E-23	-7.791E-07	-7.791E-07	-5.360E-17
1.59996	1.390E-05	1.390E-05	-4.253E-23	-4.253E-23	-7.791E-07	-7.791E-07	-2.679E-17
1.69996	1.184E-05	1.184E-05	-2.331E-23	-2.331E-23	-7.791E-07	-7.791E-07	-1.583E-17
1.79996	1.030E-05	1.030E-05	-1.338E-23	-1.338E-23	-7.791E-07	-7.791E-07	-1.008E-17
1.89996	9.122E-06	9.122E-06	-7.677E-24	-7.677E-24	-7.791E-07	-7.791E-07	-7.047E-18
1.99996	8.184E-06	8.184E-06	-4.401E-24	-4.401E-24	-7.791E-07	-7.791E-07	-5.255E-18

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.700 θ_0= 0. ρ_a= 2.629

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	0.7000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.7000	0.10000	193.645	6.253E-08	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.7000	0.20000	172.131	9.005E-08	1.000E-00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.7000	0.30000	150.618	1.668E-07	1.000E-00	-3.736E-12	-3.736E-12	3.736E-12
0.40000	0.7000	0.40000	129.106	2.535E-07	1.000E-00	-5.565E-12	-5.565E-12	5.565E-12
0.50000	0.7000	0.50000	107.596	3.335E-07	1.000E-00	-8.302E-12	-8.302E-12	8.302E-12
0.60000	0.7000	0.60000	86.088	3.869E-07	9.999E-01	-1.354E-11	-1.354E-11	1.354E-11
0.70000	0.7000	0.70000	64.585	1.561E-06	9.999E-01	-2.601E-11	-2.601E-11	2.601E-11
0.80000	0.7000	0.80000	43.096	5.123E-06	9.998E-01	-6.530E-11	-6.530E-11	6.530E-11
0.85000	0.7000	0.85000	32.365	1.350E-05	9.996E-01	-1.263E-10	-1.263E-10	1.263E-10
0.90000	0.7000	0.90000	21.660	4.717E-05	9.991E-01	-3.173E-10	-3.173E-10	3.173E-10
0.92500	0.7000	0.92500	16.334	1.133E-04	9.984E-01	-5.813E-10	-5.813E-10	5.813E-10
0.95000	0.7000	0.95000	11.059	3.746E-04	9.970E-01	-1.429E-09	-1.429E-09	1.429E-09
0.96250	0.7000	0.96250	8.471	8.459E-04	9.957E-01	-2.632E-09	-2.632E-09	2.632E-09
0.97500	0.7000	0.97500	5.973	2.512E-03	9.948E-01	-6.633E-09	-6.633E-09	6.633E-09
0.98125	0.7001	0.98125	4.803	5.039E-03	9.966E-01	-1.292E-08	-1.292E-08	1.292E-08
0.98749	0.7001	0.98750	3.751	1.155E-02	1.003E 00	-2.663E-08	-2.663E-08	2.663E-08
0.99374	0.7002	0.99375	2.947	2.915E-02	1.012E 00	-6.302E-08	-6.302E-08	6.302E-08
0.99999	0.7005	1.00000	2.631	6.586E-02	9.990E-01	-9.621E-08	-9.621E-08	9.621E-08
1.00623	0.7010	1.00625	2.962	1.022E-01	1.008E 00	-6.179E-08	-6.179E-08	6.180E-08
1.01248	0.7017	1.01250	3.774	1.194E-01	9.967E-01	-2.599E-08	-2.599E-08	2.599E-08
1.01873	0.7025	1.01875	4.830	1.258E-01	9.864E-01	-1.270E-08	-1.270E-08	1.270E-08
1.02498	0.7032	1.02500	6.002	1.282E-01	9.811E-01	-6.536E-09	-6.536E-09	6.536E-09
1.03748	0.7047	1.03750	8.502	1.299E-01	9.750E-01	-2.610E-09	-2.610E-09	2.610E-09
1.04997	0.7062	1.05000	11.091	1.303E-01	9.697E-01	-1.421E-09	-1.421E-09	1.421E-09
1.07497	0.7091	1.07500	16.366	1.306E-01	9.584E-01	-5.792E-10	-5.792E-10	5.792E-10
1.09997	0.7119	1.10000	21.692	1.307E-01	9.470E-01	-3.162E-10	-3.162E-10	3.162E-10
1.14997	0.7171	1.15000	32.397	1.307E-01	9.249E-01	-1.260E-10	-1.260E-10	1.260E-10
1.19997	0.7218	1.20000	43.128	1.307E-01	9.044E-01	-6.520E-11	-6.520E-11	6.520E-11
1.29997	0.7302	1.30000	64.617	1.307E-01	8.679E-01	-2.599E-11	-2.599E-11	2.599E-11
1.39997	0.7374	1.40000	86.120	1.307E-01	8.365E-01	-1.353E-11	-1.353E-11	1.353E-11
1.49997	0.7436	1.50000	107.628	1.308E-01	8.093E-01	-8.297E-12	-8.297E-12	8.297E-12
1.59997	0.7490	1.60000	129.138	1.308E-01	7.855E-01	-5.562E-12	-5.562E-12	5.562E-12
1.69997	0.7538	1.70000	150.650	1.308E-01	7.645E-01	-3.734E-12	-3.734E-12	3.734E-12
1.79997	0.7581	1.80000	172.163	1.308E-01	7.458E-01	-2.634E-12	-2.634E-12	2.634E-12
1.89997	0.7619	1.90000	193.677	1.308E-01	7.291E-01	-1.858E-12	-1.858E-12	1.858E-12
1.99997	0.7654	2.00000	215.191	1.308E-01	7.140E-01	-1.325E-12	-1.325E-12	1.325E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 0.700 θ_o= 0. ρ_o= 2.629

z	$_x\mu-1$ 0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.736E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.565E-12	199.605	-5.759E-10	-5.759E-10	5.759E-10	5.759E-10	-2.877E-10	-2.877E-10
0.50000	8.302E-12	249.506	-9.174E-10	-9.174E-10	9.174E-10	9.174E-10	-4.292E-10	-4.292E-10
0.60000	1.354E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-7.001E-10	-7.001E-10
0.70000	2.601E-11	349.308	-2.383E-09	-2.383E-09	2.383E-09	2.383E-09	-1.345E-09	-1.345E-09
0.80000	6.530E-11	399.209	-4.439E-09	-4.439E-09	4.440E-09	4.440E-09	-3.376E-09	-3.376E-09
0.85000	1.263E-10	424.160	-6.706E-09	-6.706E-09	6.712E-09	6.712E-09	-6.529E-09	-6.529E-09
0.90000	3.173E-10	449.110	-1.169E-08	-1.169E-08	1.176E-08	1.176E-08	-1.641E-08	-1.641E-08
0.92500	5.813E-10	461.585	-1.694E-08	-1.694E-08	1.739E-08	1.739E-08	-3.006E-08	-3.006E-08
0.95000	2.429E-09	474.060	-2.622E-08	-2.622E-08	3.128E-08	3.128E-08	-7.390E-08	-7.390E-08
0.96250	2.632E-09	480.297	-2.761E-08	-2.761E-08	5.378E-08	5.378E-08	-1.361E-07	-1.361E-07
0.97500	6.635E-09	486.534	4.948E-08	4.948E-08	1.844E-07	1.844E-07	-3.429E-07	-3.429E-07
0.98125	1.292E-08	489.653	3.770E-07	3.770E-07	5.700E-07	5.700E-07	-6.678E-07	-6.679E-07
0.98749	2.665E-08	492.771	2.347E-06	2.347E-06	2.656E-06	2.656E-06	-1.377E-06	-1.377E-06
0.99374	6.302E-08	495.888	1.576E-05	1.576E-05	1.634E-05	1.634E-05	-3.258E-06	-3.258E-06
0.99999	9.621E-08	499.005	8.187E-05	8.187E-05	8.297E-05	8.297E-05	-4.974E-06	-4.974E-06
1.00623	6.179E-08	502.121	1.989E-04	1.989E-04	2.005E-04	2.005E-04	-3.195E-06	-3.195E-06
1.01248	2.599E-08	505.239	2.734E-04	2.734E-04	2.753E-04	2.753E-04	-1.344E-06	-1.344E-06
1.01873	1.276E-08	508.357	3.051E-04	3.051E-04	3.071E-04	3.071E-04	-6.565E-07	-6.565E-07
1.02498	6.536E-09	511.475	3.192E-04	3.192E-04	3.213E-04	3.213E-04	-3.379E-07	-3.379E-07
1.03748	2.610E-09	517.712	3.314E-04	3.314E-04	3.336E-04	3.336E-04	-1.349E-07	-1.349E-07
1.04997	1.421E-09	573.949	3.379E-04	3.379E-04	3.400E-04	3.400E-04	-7.349E-08	-7.349E-08
1.07497	5.792E-10	536.424	3.474E-04	3.474E-04	3.495E-04	3.495E-04	-2.995E-08	-2.995E-08
1.09997	3.161E-10	548.899	3.559E-04	3.559E-04	3.581E-04	3.581E-04	-1.635E-08	-1.635E-08
1.14997	1.260E-10	573.850	3.723E-04	3.723E-04	3.745E-04	3.745E-04	-6.516E-09	-6.516E-09
1.19997	6.526E-11	598.800	3.887E-04	3.887E-04	3.908E-04	3.908E-04	-3.371E-09	-3.371E-09
1.29997	2.599E-11	648.701	4.212E-04	4.212E-04	4.234E-04	4.234E-04	-1.344E-09	-1.344E-09
1.39997	1.353E-11	698.602	4.536E-04	4.536E-04	4.558E-04	4.558E-04	-6.995E-10	-6.995E-10
1.49997	8.297E-12	748.503	4.862E-04	4.862E-04	4.883E-04	4.883E-04	-4.290E-10	-4.290E-10
1.59997	5.562E-12	798.404	5.187E-04	5.187E-04	5.209E-04	5.209E-04	-2.876E-10	-2.876E-10
1.69997	3.734E-12	848.306	5.512E-04	5.512E-04	5.534E-04	5.534E-04	-1.931E-10	-1.931E-10
1.79997	2.634E-12	898.207	5.837E-04	5.837E-04	5.858E-04	5.858E-04	-1.362E-10	-1.362E-10
1.89997	1.858E-12	948.108	6.162E-04	6.162E-04	6.183E-04	6.183E-04	-9.609E-11	-9.609E-11
1.99997	1.325E-12	998.009	6.487E-04	6.487E-04	6.509E-04	6.509E-04	-6.850E-11	-6.850E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o=0.700 θ_o=0. ρ_o=2.629

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-7.135E-18
0.10000	1.938E-13	1.945E-13	-7.682E-24	-7.682E-24	-8.815E-14	-8.815E-14	-9.571E-18
0.20000	5.419E-13	5.417E-13	-1.339E-23	-1.339E-23	-2.418E-13	-2.418E-13	-1.369E-17
0.30000	1.150E-12	1.151E-12	-2.332E-23	-2.332E-23	-5.095E-13	-5.095E-13	-2.152E-17
0.40000	2.439E-12	2.439E-12	-4.255E-23	-4.255E-23	-9.876E-13	-9.876E-13	-3.642E-17
0.50000	4.834E-12	4.833E-12	-7.774E-23	-7.774E-23	-1.861E-12	-1.861E-12	-7.288E-17
0.60000	1.095E-11	1.096E-11	-1.599E-22	-1.599E-22	-3.533E-12	-3.533E-12	-1.703E-16
0.70000	3.114E-11	3.113E-11	-4.193E-22	-4.193E-22	-7.467E-12	-7.467E-12	-4.973E-16
0.80000	1.278E-10	1.278E-10	-1.673E-21	-1.673E-21	-2.039E-11	-2.039E-11	-2.244E-15
0.85000	3.407E-10	3.407E-10	-4.437E-21	-4.437E-21	-4.110E-11	-4.110E-11	-6.469E-15
0.90000	1.306E-09	1.306E-09	-1.878E-20	-1.878E-20	-1.125E-10	-1.125E-10	-2.866E-14
0.92500	3.197E-09	3.197E-09	-4.307E-20	-4.307E-20	-2.220E-10	-2.220E-10	-8.505E-14
0.95000	1.194E-08	1.194E-08	-1.622E-19	-1.622E-19	-5.424E-10	-5.424E-10	-3.591E-13
0.96250	2.920E-08	2.923E-08	-4.221E-19	-4.221E-19	-1.029E-09	-1.029E-09	-9.657E-13
0.97500	1.118E-07	1.118E-07	-1.844E-18	-1.844E-18	-2.807E-09	-2.807E-09	-3.117E-12
0.98125	2.845E-07	2.845E-07	-5.308E-18	-5.308E-18	-5.791E-09	-5.791E-09	-5.927E-12
0.98749	9.025E-07	9.026E-07	-1.711E-17	-1.711E-17	-1.498E-08	-1.498E-08	-1.267E-11
0.99374	4.568E-06	4.568E-06	-7.129E-17	-7.130E-17	-5.175E-08	-5.176E-08	-2.276E-11
0.99999	3.079E-05	3.079E-05	-1.459E-16	-1.459E-16	-1.614E-07	-1.614E-07	-2.947E-11
1.00623	5.569E-05	5.569E-05	-6.897E-17	-6.896E-17	-2.693E-07	-2.693E-07	-2.253E-11
1.01248	5.958E-05	5.958E-05	-1.644E-17	-1.644E-17	-3.049E-07	-3.049E-07	-1.252E-11
1.01873	6.044E-05	6.044E-05	-5.163E-18	-5.163E-18	-3.138E-07	-3.138E-07	-5.832E-12
1.02498	6.057E-05	6.057E-05	-1.802E-18	-1.802E-18	-3.167E-07	-3.167E-07	-3.075E-12
1.03748	6.029E-05	6.029E-05	-4.165E-19	-4.165E-19	-3.184E-07	-3.184E-07	-9.538E-13
1.04997	5.992E-05	5.992E-05	-1.638E-19	-1.607E-19	-3.189E-07	-3.189E-07	-3.554E-13
1.07497	5.922E-05	5.922E-05	-4.285E-20	-4.285E-20	-3.192E-07	-3.192E-07	-8.446E-14
1.09997	5.858E-05	5.858E-05	-1.869E-20	-1.869E-20	-3.193E-07	-3.193E-07	-2.854E-14
1.14997	5.737E-05	5.737E-05	-4.423E-21	-4.423E-21	-3.194E-07	-3.194E-07	-6.453E-15
1.19997	5.623E-05	5.623E-05	-1.669E-21	-1.669E-21	-3.194E-07	-3.194E-07	-2.241E-15
1.29997	5.409E-05	5.409E-05	-4.187E-22	-4.187E-22	-3.194E-07	-3.194E-07	-4.971E-16
1.39997	5.211E-05	5.211E-05	-1.597E-22	-1.597E-22	-3.194E-07	-3.194E-07	-1.704E-16
1.49997	5.027E-05	5.027E-05	-7.767E-23	-7.767E-23	-3.194E-07	-3.194E-07	-7.292E-17
1.59997	4.855E-05	4.855E-05	-4.251E-23	-4.251E-23	-3.194E-07	-3.194E-07	-3.646E-17
1.69997	4.695E-05	4.695E-05	-2.330E-23	-2.330E-23	-3.194E-07	-3.194E-07	-2.154E-17
1.79997	4.546E-05	4.546E-05	-1.337E-23	-1.337E-23	-3.194E-07	-3.194E-07	-1.371E-17
1.89997	4.405E-05	4.405E-05	-7.675E-24	-7.675E-24	-3.194E-07	-3.194E-07	-9.590E-18
1.99997	4.273E-05	4.273E-05	-4.400E-24	-4.400E-24	-3.194E-07	-3.194E-07	-7.152E-18

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.800 θ_D= 0. ρ_a= 3.004

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	0.8000	..	215.459	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	0.8000	0.10000	193.545	8.921E-08	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	0.8000	0.20000	172.132	1.517E-07	1.000E-00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	0.8000	0.30000	150.620	2.201E-07	1.000E-00	-3.736E-12	-3.736E-12	3.736E-12
0.40000	0.8000	0.40000	129.109	3.335E-07	1.000E-00	-5.565E-12	-5.565E-12	5.565E-12
0.50000	0.8000	0.50000	107.600	4.736E-07	1.000E-00	-8.301E-12	-8.301E-12	8.301E-12
0.60000	0.8000	0.60000	86.095	5.069E-07	1.000E-00	-1.354E-11	-1.354E-11	1.354E-11
0.70000	0.8000	0.70000	64.597	2.054E-06	9.999E-01	-2.600E-11	-2.600E-11	2.600E-11
0.80000	0.8000	0.80000	43.116	6.777E-06	9.998E-01	-6.524E-11	-6.524E-11	6.524E-11
0.85000	0.8000	0.85000	32.393	1.761E-05	9.997E-01	-1.261E-10	-1.261E-10	1.261E-10
0.90000	0.8000	0.90000	21.704	6.035E-05	9.993E-01	-3.157E-10	-3.157E-10	3.157E-10
0.92500	0.8000	0.92500	16.394	1.432E-04	9.988E-01	-5.774E-10	-5.774E-10	5.774E-10
0.95000	0.8000	0.95000	11.150	4.704E-04	9.977E-01	-1.406E-09	-1.406E-09	1.406E-09
0.96250	0.8000	0.96250	8.591	1.047E-03	9.968E-01	-2.547E-09	-2.547E-09	2.547E-09
0.97500	0.8000	0.97500	6.144	3.010E-03	9.966E-01	-6.193E-09	-6.194E-09	6.193E-09
0.98124	0.8001	0.98125	5.014	5.818E-03	9.986E-01	-1.130E-08	-1.130E-08	1.130E-08
0.98749	0.8001	0.98750	4.020	1.246E-02	1.004E 00	-2.121E-08	-2.121E-08	2.121E-08
0.99374	0.8002	0.99375	3.285	2.815E-02	1.007E 00	-4.351E-08	-4.351E-08	4.350E-08
0.99999	0.8005	1.00000	3.006	5.668E-02	9.994E-01	-5.833E-08	-5.833E-08	5.833E-08
1.00623	0.8009	1.00625	3.302	8.490E-02	1.005E 00	-4.273E-08	-4.273E-08	4.273E-08
1.01248	0.8015	1.01250	4.048	1.002E-01	1.000E-00	-2.083E-08	-2.083E-08	2.083E-08
1.01873	0.8021	1.01875	5.248	1.067E-01	9.928E-01	-1.106E-08	-1.106E-08	1.106E-08
1.02498	0.8028	1.02500	6.780	1.094E-01	9.888E-01	-6.108E-09	-6.107E-09	6.108E-09
1.03748	0.8041	1.03750	8.630	1.114E-01	9.849E-01	-2.519E-09	-2.519E-09	2.519E-09
1.04998	0.8054	1.05000	11.490	1.119E-01	9.819E-01	-1.396E-09	-1.396E-09	1.396E-09
1.07497	0.8079	1.07500	16.435	1.122E-01	9.757E-01	-5.747E-10	-5.747E-10	5.747E-10
1.09997	0.8102	1.10000	21.746	1.123E-01	9.693E-01	-3.142E-10	-3.142E-10	3.142E-10
1.14997	0.8147	1.15000	32.434	1.124E-01	9.567E-01	-1.257E-10	-1.257E-10	1.257E-10
1.19997	0.8187	1.20000	43.158	1.124E-01	9.449E-01	-6.510E-11	-6.510E-11	6.510E-11
1.29997	0.8259	1.30000	64.639	1.124E-01	9.239E-01	-2.597E-11	-2.597E-11	2.597E-11
1.39997	0.8321	1.40000	86.137	1.124E-01	9.059E-01	-1.352E-11	-1.352E-11	1.352E-11
1.49997	0.8375	1.50000	107.642	1.124E-01	8.902E-01	-8.294E-12	-8.294E-12	8.294E-12
1.59997	0.8422	1.60000	129.151	1.124E-01	8.765E-01	-5.561E-12	-5.561E-12	5.561E-12
1.69997	0.8463	1.70000	150.662	1.124E-01	8.644E-01	-3.734E-12	-3.734E-12	3.734E-12
1.79997	0.8500	1.80000	172.174	1.124E-01	8.537E-01	-2.634E-12	-2.634E-12	2.634E-12
1.89997	0.8533	1.90000	193.687	1.124E-01	8.441E-01	-1.858E-12	-1.858E-12	1.858E-12
1.99997	0.8562	2.00000	215.201	1.124E-01	8.354E-01	-1.325E-12	-1.325E-12	1.325E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 0.800 θ_D=0. ρ_a= 3.004

z	$_x\mu'$-10	T_0	$_0T_f$-T_0	$_xT_f$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.614E-11	-9.614E-11
0.20000	2.636E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.736E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.565E-12	199.605	-5.759E-10	-5.759E-10	5.759E-10	5.759E-10	-2.877E-10	-2.877E-10
0.50000	8.301E-12	249.506	-9.173E-10	-9.173E-10	9.173E-10	9.173E-10	-4.292E-10	-4.292E-10
0.60000	1.354E-11	299.407	-1.444E-09	-1.444E-09	1.444E-09	1.444E-09	-6.999E-10	-6.999E-10
0.70000	2.600E-11	349.308	-2.382E-09	-2.382E-09	2.382E-09	2.382E-09	-1.344E-09	-1.344E-09
0.80000	6.524E-11	399.209	-4.437E-09	-4.437E-09	4.438E-09	4.438E-09	-3.373E-09	-3.373E-09
0.85000	1.261E-10	424.160	-6.699E-09	-6.699E-09	6.709E-09	6.709E-09	-6.517E-09	-6.517E-09
0.90000	3.157E-10	449.110	-1.164E-08	-1.164E-08	1.177E-08	1.177E-08	-1.632E-08	-1.632E-08
0.92500	5.774E-10	461.585	-1.676E-08	-1.676E-08	1.748E-08	1.748E-08	-2.985E-08	-2.985E-08
0.95000	1.406E-09	474.060	-2.455E-08	-2.455E-08	3.254E-08	3.254E-08	-7.272E-08	-7.272E-08
0.96250	2.547E-09	480.297	-2.815E-08	-2.815E-08	6.024E-08	6.024E-08	-1.317E-07	-1.317E-07
0.97500	6.194E-09	486.534	-1.023E-07	1.023E-07	2.334E-07	2.334E-07	-3.202E-07	-3.202E-07
0.98124	1.130E-08	489.652	5.396E-07	5.396E-07	7.227E-07	7.227E-07	-5.841E-07	-5.841E-07
0.98749	2.121E-08	492.770	2.771E-06	2.771E-06	3.053E-06	3.053E-06	-1.096E-06	-1.096E-06
0.99374	4.351E-08	495.888	1.473E-05	1.473E-05	1.520E-05	1.520E-05	-2.249E-06	-2.249E-06
0.99999	5.833E-08	499.005	6.064E-05	6.064E-05	6.145E-05	6.145E-05	-3.016E-06	-3.016E-06
1.00623	4.273E-08	502.122	1.373E-04	1.373E-04	1.384E-04	1.384E-04	-2.209E-06	-2.209E-06
1.01248	2.083E-08	505.239	1.925E-04	1.925E-04	1.939E-04	1.939E-04	-1.077E-06	-1.077E-06
1.01873	1.106E-08	508.357	2.195E-04	2.195E-04	2.209E-04	2.209E-04	-5.718E-07	-5.718E-07
1.02498	6.107E-09	511.476	2.324E-04	2.324E-04	2.338E-04	2.338E-04	-3.158E-07	-3.158E-07
1.03748	2.519E-09	517.713	2.437E-04	2.437E-04	2.452E-04	2.452E-04	-1.303E-07	-1.303E-07
1.04998	1.396E-09	523.950	2.491E-04	2.491E-04	2.506E-04	2.506E-04	-7.219E-08	-7.219E-08
1.07497	5.747E-10	536.425	2.565E-04	2.565E-04	2.581E-04	2.581E-04	-2.971E-08	-2.971E-08
1.09997	3.142E-10	548.900	2.629E-04	2.629E-04	2.645E-04	2.645E-04	-1.625E-08	-1.625E-08
1.14997	1.257E-10	573.850	2.752E-04	2.752E-04	2.768E-04	2.768E-04	-6.499E-09	-6.499E-09
1.19997	6.510E-11	598.861	2.872E-04	2.872E-04	2.888E-04	2.888E-04	-3.366E-09	-3.366E-09
1.29997	2.597E-11	648.702	3.113E-04	3.113E-04	3.129E-04	3.129E-04	-1.343E-09	-1.343E-09
1.39997	1.352E-11	698.603	3.353E-04	3.353E-04	3.369E-04	3.369E-04	-6.992E-10	-6.992E-10
1.49997	8.294E-12	748.504	3.594E-04	3.594E-04	3.610E-04	3.610E-04	-4.288E-10	-4.288E-10
1.59997	5.561E-12	798.405	3.834E-04	3.834E-04	3.850E-04	3.850E-04	-2.875E-10	-2.875E-10
1.69997	3.734E-12	849.306	4.074E-04	4.074E-04	4.090E-04	4.090E-04	-1.930E-10	-1.930E-10
1.79997	2.634E-12	898.207	4.314E-04	4.314E-04	4.330E-04	4.330E-04	-1.362E-10	-1.362E-10
1.89997	1.858E-12	948.108	4.555E-04	4.555E-04	4.571E-04	4.571E-04	-9.607E-11	-9.607E-11
1.99997	1.325E-12	998.009	4.795E-04	4.795E-04	4.811E-04	4.811E-04	-6.849E-11	-6.849E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0=0.800 θ_0=0. ρ_0=3.004

z	$_0D_y$	$_xD_y$	σ^κ	x^κ	$\sigma^\kappa{}_t$	$x^\kappa{}_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-9.319E-18
0.10000	2.216E-13	2.216E-13	-7.681E-24	-7.681E-24	-8.815E-14	-8.815E-14	-1.250E-17
0.20000	6.206E-13	6.206E-13	-1.338E-23	-1.338E-23	-2.418E-13	-2.418E-13	-1.788E-17
0.30000	1.314E-12	1.314E-12	-2.332E-23	-2.332E-23	-5.095E-13	-5.095E-13	-2.810E-17
0.40000	2.787E-12	2.787E-12	-4.255E-23	-4.255E-23	-9.876E-13	-9.876E-13	-4.756E-17
0.50000	5.522E-12	5.520E-12	-7.773E-23	-7.773E-23	-1.861E-12	-1.861E-12	-9.517E-17
0.60000	1.251E-11	1.252E-11	-1.599E-22	-1.599E-22	-3.532E-12	-3.532E-12	-2.224E-16
0.70000	3.557E-11	3.557E-11	-4.191E-22	-4.191E-22	-7.465E-12	-7.465E-12	-6.490E-16
0.80000	1.460E-10	1.460E-10	-1.671E-21	-1.671E-21	-2.037E-11	-2.037E-11	-2.926E-15
0.85000	3.888E-10	3.888E-10	-4.425E-21	-4.425E-21	-4.104E-11	-4.104E-11	-8.421E-15
0.90000	1.487E-09	1.487E-09	-1.865E-20	-1.865E-20	-1.120E-10	-1.120E-10	-3.716E-14
0.92500	3.630E-09	3.630E-09	-4.267E-20	-4.267E-20	-2.206E-10	-2.206E-10	-1.094E-13
0.95000	1.345E-08	1.345E-08	-1.581E-19	-1.581E-19	-5.346E-10	-5.346E-10	-4.539E-13
0.96250	3.234E-08	3.234E-08	-4.008E-19	-4.008E-19	-1.002E-09	-1.002E-09	-1.198E-12
0.97500	1.183E-07	1.183E-07	-1.654E-18	-1.654E-18	-2.628E-09	-2.628E-09	-3.684E-12
0.98124	2.835E-07	2.835E-07	-4.270E-18	-4.271E-18	-5.126E-09	-5.126E-09	-6.833E-12
0.98749	8.022E-07	8.023E-07	-1.188E-17	-1.188E-17	-1.219E-08	-1.219E-08	-1.372E-11
0.99374	3.015E-06	3.015E-06	-3.853E-17	-3.853E-17	-3.368E-08	-3.368E-08	-2.246E-11
0.99999	1.188E-05	1.188E-05	-6.257E-17	-6.257E-17	-8.396E-08	-8.396E-08	-2.851E-11
1.00623	2.039E-05	2.039E-05	-3.739E-17	-3.739E-17	-1.335E-07	-1.335E-07	-2.217E-11
1.01248	2.254E-05	2.254E-05	-1.154E-17	-1.154E-17	-1.542E-07	-1.542E-07	-1.340E-11
1.01873	2.308E-05	2.308E-05	-4.125E-18	-4.125E-18	-1.611E-07	-1.611E-07	-6.709E-12
1.02498	2.319E-05	2.319E-05	-1.617E-18	-1.617E-18	-1.635E-07	-1.635E-07	-3.607E-12
1.03748	2.309E-05	2.309E-05	-3.940E-19	-3.940E-19	-1.650E-07	-1.650E-07	-1.18DE-12
1.04998	2.290E-05	2.290E-05	-1.563E-19	-1.563E-19	-1.655E-07	-1.655E-07	-4.478E-13
1.07497	2.252E-05	2.252E-05	-4.239E-20	-4.239E-20	-1.658E-07	-1.658E-07	-1.084E-13
1.09997	2.216E-05	2.216E-05	-1.853E-20	-1.853E-20	-1.659E-07	-1.659E-07	-3.695E-14
1.14997	2.147E-05	2.147E-05	-4.407E-21	-4.407E-21	-1.660E-07	-1.660E-07	-8.390E-15
1.19997	2.084E-05	2.084E-05	-1.666E-21	-1.666E-21	-1.660E-07	-1.660E-07	-2.919E-15
1.29997	1.967E-05	1.967E-05	-4.182E-22	-4.182E-22	-1.660E-07	-1.660E-07	-6.484E-16
1.39997	1.863E-05	1.863E-05	-1.596E-22	-1.596E-22	-1.660E-07	-1.660E-07	-2.224E-16
1.49997	1.769E-05	1.769E-05	-7.764E-23	-7.764E-23	-1.660E-07	-1.660E-07	-9.519E-17
1.59997	1.685E-05	1.685E-05	-4.250E-23	-4.250E-23	-1.660E-07	-1.660E-07	-4.760E-17
1.69997	1.608E-05	1.608E-05	-2.330E-23	-2.330E-23	-1.660E-07	-1.660E-07	-2.813E-17
1.79997	1.538E-05	1.538E-05	-1.337E-23	-1.337E-23	-1.660E-07	-1.660E-07	-1.790E-17
1.89997	1.473E-05	1.473E-05	-7.673E-24	-7.673E-24	-1.660E-07	-1.660E-07	-1.252E-17
1.99997	1.414E-05	1.414E-05	-4.399E-24	-4.399E-24	-1.660E-07	-1.660E-07	-9.340E-18

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 1.000 θ_0= 0. ρ_0= 3.755

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	1.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	1.0000	0.10000	193.647	9.088E-08	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	1.0000	0.20000	172.135	1.367E-07	1.000E-00	-2.636E-12	-2.636E-12	2.636E-12
0.30000	1.0000	0.30000	150.625	2.568E-07	1.000E-00	-3.736E-12	-3.736E-12	3.736E-12
0.40000	1.0000	0.40000	129.117	4.069E-07	1.000E-00	-5.564E-12	-5.564E-12	5.564E-12
0.50000	1.0000	0.50000	107.612	5.603E-07	1.000E-00	-8.299E-12	-8.299E-12	8.299E-12
0.60000	1.0000	0.60000	86.113	6.403E-07	9.999E-01	-1.353E-11	-1.353E-11	1.353E-11
0.70000	1.0000	0.70000	64.624	2.561E-06	9.999E-01	-2.598E-11	-2.598E-11	2.598E-11
0.80000	1.0000	0.80000	43.163	8.591E-06	9.997E-01	-6.508E-11	-6.508E-11	6.508E-11
0.85000	1.0000	0.85000	32.459	2.220E-05	9.994E-01	-1.255E-10	-1.255E-10	1.255E-10
0.90000	1.0000	0.90000	21.809	7.577E-05	9.987E-01	-3.120E-10	-3.120E-10	3.120E-10
0.92500	1.0000	0.92500	16.536	1.769E-04	9.979E-01	-5.681E-10	-5.681E-10	5.681E-10
0.95000	1.0000	0.95000	11.364	5.682E-04	9.964E-01	-1.354E-09	-1.354E-09	1.354E-09
0.96250	1.0000	0.96250	8.870	1.227E-03	9.958E-01	-2.358E-09	-2.358E-09	2.358E-09
0.97500	1.0001	0.97500	6.534	3.278E-03	9.977E-01	-5.338E-09	-5.338E-09	5.338E-09
0.98124	1.0001	0.98125	5.488	5.905E-03	1.002E 00	-8.530E-09	-8.530E-09	8.530E-09
0.98749	1.0001	0.98750	4.601	1.119E-02	1.007E 00	-1.467E-08	-1.468E-08	1.467E-08
0.99374	1.0002	0.99375	3.979	2.133E-02	1.007E 00	-2.178E-08	-2.178E-08	2.178E-08
0.99999	1.0004	1.00000	3.757	3.664E-02	9.996E-01	-2.646E-08	-2.646E-08	2.646E-08
1.00624	1.0007	1.00625	4.001	5.185E-02	1.006E 00	-2.145E-08	-2.145E-08	2.145E-08
1.01248	1.0010	1.01250	4.639	6.168E-02	1.006E 00	-1.432E-08	-1.432E-08	1.432E-08
1.01873	1.0014	1.01875	5.536	6.678E-02	9.991E-01	-8.320E-09	-8.320E-09	8.320E-09
1.02498	1.0018	1.02500	6.588	6.930E-02	9.941E-01	-5.229E-09	-5.229E-09	5.229E-09
1.03748	1.0027	1.03750	8.930	7.130E-02	9.900E-01	-2.320E-09	-2.320E-09	2.320E-09
1.04998	1.0035	1.05000	11.426	7.195E-02	9.885E-01	-1.339E-09	-1.339E-09	1.339E-09
1.07498	1.0051	1.07500	16.600	7.234E-02	9.862E-01	-5.640E-10	-5.640E-10	5.640E-10
1.09998	1.0066	1.10000	21.874	7.244E-02	9.835E-01	-3.097E-10	-3.097E-10	3.097E-10
1.14998	1.0095	1.15000	32.524	7.251E-02	9.776E-01	-1.250E-10	-1.250E-10	1.250E-10
1.19998	1.0121	1.20000	43.228	7.252E-02	9.719E-01	-6.487E-11	-6.487E-11	6.487E-11
1.29998	1.0167	1.30000	64.690	7.253E-02	9.614E-01	-2.593E-11	-2.593E-11	2.593E-11
1.39998	1.0207	1.40000	86.178	7.253E-02	9.524E-01	-1.351E-11	-1.351E-11	1.351E-11
1.49998	1.0242	1.50000	107.678	7.253E-02	9.445E-01	-8.289E-12	-8.289E-12	8.289E-12
1.59998	1.0272	1.60000	129.183	7.253E-02	9.376E-01	-5.557E-12	-5.557E-12	5.557E-12
1.69998	1.0299	1.70000	150.691	7.254E-02	9.315E-01	-3.732E-12	-3.732E-12	3.732E-12
1.79998	1.0322	1.80000	172.201	7.254E-02	9.261E-01	-2.633E-12	-2.633E-12	2.633E-12
1.89998	1.0344	1.90000	193.712	7.254E-02	9.212E-01	-1.857E-12	-1.857E-12	1.857E-12
1.99998	1.0363	2.00000	215.225	7.254E-02	9.168E-01	-1.324E-12	-1.324E-12	1.324E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 1.000 θ_D= 0. ρ_a= 3.755

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.854E-12	49.901	-7.859E-11	-7.859E-11	7.859E-11	7.859E-11	-9.613E-11	-9.613E-11
0.20000	2.638E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.736E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.932E-10	-1.932E-10
0.40000	5.564E-12	199.605	-5.759E-10	-5.759E-10	5.759E-10	5.759E-10	-2.877E-10	-2.877E-10
0.50000	8.299E-12	249.506	-9.172E-10	-9.172E-10	9.172E-10	9.172E-10	-4.291E-10	-4.291E-10
0.60000	1.353E-11	299.407	-1.443E-09	-1.443E-09	1.443E-09	1.443E-09	-6.996E-10	-6.996E-10
0.70000	2.598E-11	349.308	-2.381E-09	-2.381E-09	2.381E-09	2.381E-09	-1.343E-09	-1.343E-09
0.80000	6.508E-11	399.209	-4.432E-09	-4.432E-09	4.434E-09	4.434E-09	-3.365E-09	-3.365E-09
0.85000	1.255E-10	424.160	-6.684E-09	-6.684E-09	6.700E-09	6.700E-09	-6.489E-09	-6.489E-09
0.90000	3.120E-10	449.110	-1.156E-08	-1.156E-08	1.175E-08	1.175E-08	-1.613E-08	-1.613E-08
0.92500	5.681E-10	461.585	-1.644E-08	-1.644E-08	1.754E-08	1.754E-08	-2.937E-08	-2.937E-08
0.95000	1.354E-09	474.060	-2.224E-08	-2.224E-08	3.390E-08	3.390E-08	-6.998E-08	-6.998E-08
0.96250	2.358E-09	480.297	-1.153E-08	-1.153E-08	6.657E-08	6.657E-08	-1.219E-07	-1.219E-07
0.97500	5.338E-09	486.534	1.376E-07	1.376E-07	2.604E-07	2.604E-07	-2.760E-07	-2.760E-07
0.98124	8.530E-09	489.653	5.677E-07	5.677E-07	7.324E-07	7.324E-07	-4.410E-07	-4.410E-07
0.98749	1.468E-08	492.771	2.233E-06	2.233E-06	2.469E-06	2.469E-06	-7.587E-07	-7.587E-07
0.99374	2.178E-08	495.889	8.413E-06	8.413E-06	8.763E-06	8.763E-06	-1.126E-06	-1.126E-06
0.99999	2.646E-08	499.006	2.526E-05	2.526E-05	2.576E-05	2.576E-05	-1.368E-06	-1.368E-06
1.00624	2.145E-08	502.124	5.108E-05	5.108E-05	5.173E-05	5.173E-05	-1.109E-06	-1.109E-06
1.01248	1.432E-08	505.242	7.281E-05	7.281E-05	7.358E-05	7.358E-05	-7.406E-07	-7.406E-07
1.01873	8.325E-09	508.360	8.591E-05	8.591E-05	8.674E-05	8.674E-05	-4.302E-07	-4.302E-07
1.02498	5.229E-09	511.478	9.310E-05	9.310E-05	9.397E-05	9.397E-05	-2.704E-07	-2.704E-07
1.03748	2.320E-09	517.715	9.975E-05	9.975E-05	1.007E-04	1.007E-04	-1.199E-07	-1.199E-07
1.04998	1.339E-09	523.952	1.028E-04	1.029E-04	1.038E-04	1.038E-04	-6.921E-08	-6.921E-08
1.07498	5.640E-10	536.427	1.064E-04	1.064E-04	1.074E-04	1.074E-04	-2.916E-08	-2.916E-08
1.09998	3.097E-10	548.902	1.092E-04	1.092E-04	1.102E-04	1.102E-04	-1.601E-08	-1.601E-08
1.14998	1.250E-1	573.853	1.144E-04	1.144E-04	1.154E-04	1.154E-04	-6.461E-09	-6.461E-09
1.19998	6.487E-11	598.803	1.194E-04	1.194E-04	1.204E-04	1.204E-04	-3.354E-09	-3.354E-09
1.29998	2.593E-11	648.704	1.294E-04	1.294E-04	1.304E-04	1.304E-04	-1.340E-09	-1.340E-09
1.39998	1.351E-11	698.605	1.394E-04	1.394E-04	1.404E-04	1.404E-04	-6.985E-10	-6.985E-10
1.49998	8.289E-12	748.507	1.494E-04	1.494E-04	1.504E-04	1.504E-04	-4.286E-10	-4.286E-10
1.59998	5.557E-12	798.408	1.595E-04	1.595E-04	1.605E-04	1.605E-04	-2.873E-10	-2.873E-10
1.69998	3.736E-12	848.309	1.695E-04	1.695E-04	1.705E-04	1.705E-04	-1.930E-10	-1.930E-10
1.79998	2.633E-12	898.210	1.795E-04	1.795E-04	1.805E-04	1.805E-04	-1.361E-10	-1.361E-10
1.89998	1.857E-12	948.111	1.895E-04	1.895E-04	1.905E-04	1.905E-04	-9.603E-11	-9.603E-11
1.99998	1.324E-12	998.012	1.995E-04	1.995E-04	2.005E-04	2.005E-04	-6.846E-11	-6.846E-11

PROPAGATION FREQUENCY= 1.550 E 10 ϕ_0= 1.000 θ_D= 0. ρ_a= 3.755

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-1.456E-17
0.10000	2.767E-13	2.774E-13	-7.681E-24	-7.681E-24	-8.815E-14	-8.815E-14	-1.953E-17
0.20000	7.755E-13	7.755E-13	-1.338E-23	-1.338E-23	-2.418E-13	-2.418E-13	-2.793E-17
0.30000	1.644E-12	1.644E-12	-2.332E-23	-2.332E-23	-5.095E-13	-5.095E-13	-4.390E-17
0.40000	3.482E-12	3.482E-12	-4.254E-23	-4.254E-23	-9.875E-13	-9.875E-13	-7.430E-17
0.50000	6.905E-12	6.904E-12	-7.770E-23	-7.770E-23	-1.861E-12	-1.861E-12	-1.486E-16
0.60000	1.564E-11	1.564E-11	-1.598E-22	-1.598E-22	-3.531E-12	-3.531E-12	-3.472E-16
0.70000	4.442E-11	4.442E-11	-4.185E-22	-4.185E-22	-7.460E-12	-7.460E-12	-1.012E-15
0.80000	1.820E-10	1.820E-10	-1.665E-21	-1.665E-21	-2.033E-11	-2.033E-11	-4.553E-15
0.85000	4.836E-10	4.836E-10	-4.396E-21	-4.396E-21	-4.089E-11	-4.089E-11	-1.305E-14
0.90000	1.836E-09	1.836E-09	-1.835E-20	-1.835E-20	-1.110E-10	-1.110E-10	-5.708E-14
0.92500	4.455E-09	4.455E-09	-4.173E-20	-4.173E-20	-2.175E-10	-2.175E-10	-1.650E-13
0.95000	1.600E-08	1.600E-08	-1.489E-19	-1.489E-19	-5.167E-10	-5.167E-10	-6.574E-13
0.96250	3.641E-08	3.641E-08	-3.551E-19	-3.551E-19	-9.415E-10	-9.415E-10	-1.669E-12
0.97500	1.224E-07	1.224E-07	-1.304E-18	-1.304E-18	-2.269E-09	-2.269E-09	-4.615E-12
0.98124	2.599E-07	2.599E-07	-2.723E-18	-2.723E-18	-4.038E-09	-4.038E-09	-8.221E-12
0.98749	6.295E-07	6.295E-07	-6.531E-18	-6.531E-18	-8.121E-09	-8.121E-09	-1.377E-11
0.99374	1.809E-06	1.809E-06	-1.239E-17	-1.239E-17	-1.692E-08	-1.692E-08	-2.218E-11
0.99999	4.789E-06	4.789E-06	-1.693E-17	-1.693E-17	-3.107E-08	-3.107E-08	-2.578E-11
1.00624	7.635E-06	7.635E-06	-1.210E-17	-1.210E-17	-4.502E-08	-4.502E-08	-2.178E-11
1.01248	8.734E-06	8.734E-06	-6.279E-18	-6.279E-18	-5.356E-08	-5.356E-08	-1.343E-11
1.01873	9.103E-06	9.103E-06	-2.620E-18	-2.620E-18	-5.746E-08	-5.747E-08	-8.003E-12
1.02498	9.223E-06	9.223E-06	-1.262E-18	-1.262E-18	-5.917E-08	-5.917E-08	-4.487E-12
1.03748	9.234E-06	9.234E-06	-3.461E-19	-3.461E-19	-6.046E-08	-6.046E-08	-1.631E-12
1.04998	9.157E-06	9.157E-06	-1.464E-19	-1.464E-19	-6.087E-08	-6.087E-08	-6.440E-13
1.07498	8.977E-06	8.977E-06	-4.132E-20	-4.132E-20	-6.117E-08	-6.117E-08	-1.625E-13
1.09998	8.800E-06	8.800E-06	-1.617E-20	-1.617E-20	-6.127E-08	-6.127E-08	-5.656E-14
1.14998	8.469E-06	8.469E-06	-4.368E-21	-4.368E-21	-6.134E-08	-6.134E-08	-1.297E-14
1.19998	8.165E-06	8.165E-06	-1.657E-21	-1.657E-21	-6.136E-08	-6.136E-08	-4.533E-15
1.29998	7.618E-06	7.618E-06	-4.172E-22	-4.172E-22	-6.138E-08	-6.138E-08	-1.010E-15
1.39998	7.142E-06	7.142E-06	-1.594E-22	-1.594E-22	-6.138E-08	-6.138E-08	-3.468E-16
1.49998	6.721E-06	6.721E-06	-7.756E-23	-7.756E-23	-6.138E-08	-6.138E-08	-1.485E-16
1.59998	6.347E-06	6.347E-06	-4.246E-23	-4.246E-23	-6.138E-08	-6.138E-08	-7.430E-17
1.69998	6.013E-06	6.013E-06	-2.328E-23	-2.328E-23	-6.138E-08	-6.138E-08	-4.392E-17
1.79998	5.712E-06	5.712E-06	-1.336E-23	-1.336E-23	-6.138E-08	-6.138E-08	-2.796E-17
1.89998	5.440E-06	5.440E-06	-7.668E-24	-7.668E-24	-6.138E-08	-6.138E-08	-1.956E-17
1.99998	5.193E-06	5.193E-06	-4.396E-24	-4.396E-24	-6.138E-08	-6.138E-08	-1.459E-17

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.506

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	1.2000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	1.2000	0.10000	193.648	1.034E-07	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	1.2000	0.20000	172.139	1.934E-07	1.000E-00	-2.635E-12	-2.635E-12	2.635E-12
0.30000	1.2000	0.30000	150.631	2.868E-07	1.000E-00	-3.736E-12	-3.736E-12	3.736E-12
0.40000	1.2000	0.40000	129.127	4.269E-07	1.000E-00	-5.563E-12	-5.563E-12	5.563E-12
0.50000	1.2000	0.50000	107.627	5.870E-07	9.999E-01	-8.297E-12	-8.297E-12	8.297E-12
0.60000	1.2000	0.60000	86.134	6.136E-07	9.999E-01	-1.352E-11	-1.352E-11	1.352E-11
0.70000	1.2000	0.70000	64.658	2.535E-06	9.998E-01	-2.595E-11	-2.595E-11	2.595E-11
0.80000	1.2000	0.80000	43.220	8.751E-06	9.995E-01	-6.490E-11	-6.490E-11	6.490E-11
0.85000	1.2000	0.85000	32.540	2.236E-05	9.991E-01	-1.248E-10	-1.248E-10	1.248E-10
0.90000	1.2000	0.90000	21.937	7.652E-05	9.981E-01	-3.075E-10	-3.075E-10	3.075E-10
0.92500	1.2000	0.92500	16.709	1.784E-04	9.971E-01	-5.571E-10	-5.571E-10	5.571E-10
0.95000	1.2000	0.95000	11.620	5.562E-04	9.955E-01	-1.293E-09	-1.293E-09	1.293E-09
0.96250	1.2000	0.96250	9.201	1.162E-03	9.955E-01	-2.153E-09	-2.153E-09	2.153E-09
0.97500	1.2000	0.97500	6.981	2.889E-03	9.994E-01	-4.501E-09	-4.501E-09	4.501E-09
0.98125	1.2001	0.98125	6.017	4.837E-03	1.004E 00	-6.498E-09	-6.498E-09	6.498E-09
0.98749	1.2001	0.98750	5.224	8.332E-03	1.009E 00	-9.890E-09	-9.890E-09	9.890E-09
0.99374	1.2002	0.99375	4.690	1.411E-02	1.006E 00	-1.387E-08	-1.387E-08	1.387E-08
0.99999	1.2003	1.00000	4.507	2.191E-02	9.997E-01	-1.557E-08	-1.557E-08	1.557E-08
1.00624	1.2005	1.00625	4.717	2.965E-02	1.006E 00	-1.364E-08	-1.364E-08	1.364E-08
1.01249	1.2007	1.01250	5.273	3.525E-02	1.009E 00	-9.591E-09	-9.591E-09	9.591E-09
1.01874	1.2009	1.01875	6.080	3.860E-02	1.003E 00	-6.344E-09	-6.344E-09	6.344E-09
1.02499	1.2011	1.02500	7.054	4.047E-02	9.979E-01	-4.379E-09	-4.379E-09	4.379E-09
1.03749	1.2016	1.03750	9.283	4.212E-02	9.925E-01	-2.105E-09	-2.105E-09	2.105E-09
1.04999	1.2021	1.05000	11.707	4.271E-02	9.912E-01	-1.273E-09	-1.273E-09	1.273E-09
1.07499	1.2030	1.07500	16.800	4.308E-02	9.906E-01	-5.513E-10	-5.513E-10	5.513E-10
1.09999	1.2039	1.10000	22.029	4.319E-02	9.896E-01	-3.043E-10	-3.043E-10	3.043E-10
1.14999	1.2057	1.15000	32.634	4.325E-02	9.870E-01	-1.241E-10	-1.241E-10	1.241E-10
1.19998	1.2072	1.20000	43.314	4.327E-02	9.840E-01	-6.459E-11	-6.459E-11	6.459E-11
1.29998	1.2100	1.30000	64.752	4.327E-02	9.784E-01	-2.587E-11	-2.587E-11	2.587E-11
1.39998	1.2124	1.40000	86.229	4.328E-02	9.735E-01	-1.349E-11	-1.349E-11	1.349E-11
1.49998	1.2144	1.50000	107.721	4.328E-02	9.691E-01	-8.282E-12	-8.282E-12	8.282E-12
1.59998	1.2162	1.60000	129.221	4.328E-02	9.653E-01	-5.553E-12	-5.553E-12	5.553E-12
1.69998	1.2178	1.70000	150.726	4.328E-02	9.620E-01	-3.730E-12	-3.730E-12	3.730E-12
1.79998	1.2192	1.80000	172.233	4.328E-02	9.590E-01	-2.631E-12	-2.631E-12	2.631E-12
1.89998	1.2205	1.90000	193.743	4.328E-02	9.563E-01	-1.856E-12	-1.856E-12	1.856E-12
1.99998	1.2216	2.00000	215.253	4.328E-02	9.539E-01	-1.324E-12	-1.324E-12	1.324E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 1.200 θ_D= 0. ρ_a= 4.506

z	$_x\mu'$-1.0	T_0	$_0T_1$-T_0	$_xT_1$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.858E-11	-7.858E-11	7.858E-11	7.858E-11	-9.613E-11	-9.613E-11
0.20000	2.635E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.363E-10	-1.363E-10
0.30000	3.736E-12	149.703	-3.470E-10	-3.470E-10	3.470E-10	3.470E-10	-1.931E-10	-1.931E-10
0.40000	5.563E-12	199.605	-5.758E-10	-5.758E-10	5.758E-10	5.758E-10	-2.876E-10	-2.876E-10
0.50000	8.297E-12	249.506	-9.171E-10	-9.171E-10	9.171E-10	9.171E-10	-4.290E-10	-4.290E-10
0.60000	1.352E-11	299.407	-1.443E-09	-1.443E-09	1.443E-09	1.443E-09	-6.992E-10	-6.992E-10
0.70000	2.595E-11	349.308	-2.380E-09	-2.380E-09	2.380E-09	2.380E-09	-1.342E-09	-1.342E-09
0.80000	6.490E-11	399.209	-4.426E-09	-4.426E-09	4.429E-09	4.429E-09	-3.355E-09	-3.355E-09
0.85000	1.248E-10	424.160	-6.668E-09	-6.668E-09	6.685E-09	6.685E-09	-6.454E-09	-6.454E-09
0.90000	3.075E-10	449.110	-1.149E-08	-1.149E-08	1.169E-08	1.169E-08	-1.590E-08	-1.590E-08
0.92500	5.571E-10	461.585	-1.628E-08	-1.628E-08	1.740E-08	1.740E-08	-2.880E-08	-2.880E-08
0.95000	1.293E-09	474.060	-2.193E-08	-2.193E-08	3.310E-08	3.310E-08	-6.685E-08	-6.685E-08
0.96250	2.153E-09	480.298	-2.310E-08	-2.310E-08	6.246E-08	6.246E-08	-1.113E-07	-1.113E-07
0.97500	4.501E-09	486.535	9.733E-08	9.733E-08	2.119E-07	2.119E-07	-2.327E-07	-2.327E-07
0.98125	6.498E-09	489.653	3.619E-07	3.619E-07	5.104E-07	5.104E-07	-3.360E-07	-3.360E-07
0.98749	9.890E-09	492.771	1.203E-06	1.203E-06	1.402E-06	1.402E-06	-5.113E-07	-5.113E-07
0.99374	1.387E-08	495.890	3.621E-06	3.621E-06	3.895E-06	3.895E-06	-7.171E-07	-7.172E-07
0.99999	1.557E-08	499.008	8.937E-06	8.937E-06	9.304E-06	9.304E-06	-8.051E-07	-8.051E-07
1.00624	1.364E-08	502.126	1.657E-05	1.657E-05	1.703E-05	1.703E-05	-7.050E-07	-7.050E-07
1.01249	9.591E-09	505.244	2.363E-05	2.363E-05	2.417E-05	2.417E-05	-4.959E-07	-4.959E-07
1.01874	6.344E-09	508.362	2.855E-05	2.855E-05	2.914E-05	2.914E-05	-3.280E-07	-3.280E-07
1.02499	4.379E-09	511.481	3.160E-05	3.160E-05	3.221E-05	3.221E-05	-2.264E-07	-2.264E-07
1.03749	2.105E-09	517.718	3.465E-05	3.465E-05	3.530E-05	3.530E-05	-1.088E-07	-1.088E-07
1.04999	1.273E-09	523.955	3.606E-05	3.606E-05	3.673E-05	3.673E-05	-6.581E-08	-6.581E-08
1.07499	5.513E-10	536.430	3.756E-05	3.756E-05	3.826E-05	3.826E-05	-2.851E-08	-2.851E-08
1.09999	3.043E-10	548.906	3.864E-05	3.864E-05	3.935E-05	3.935E-05	-1.573E-08	-1.573E-08
1.14999	1.241E-10	573.856	4.052E-05	4.052E-05	4.124E-05	4.124E-05	-6.414E-09	-6.414E-09
1.19998	6.459E-11	598.806	4.233E-05	4.233E-05	4.305E-05	4.305E-05	-3.339E-09	-3.339E-09
1.29998	2.587E-11	648.707	4.590E-05	4.590E-05	4.662E-05	4.662E-05	-1.338E-09	-1.338E-09
1.39998	1.349E-11	698.609	4.946E-05	4.946E-05	5.019E-05	5.019E-05	-6.976E-10	-6.976E-10
1.49998	8.282E-12	748.510	5.303E-05	5.303E-05	5.375E-05	5.375E-05	-4.282E-10	-4.282E-10
1.59998	5.553E-12	798.411	5.660E-05	5.660E-05	5.733E-05	5.733E-05	-2.871E-10	-2.871E-10
1.69998	3.730E-12	848.312	6.016E-05	6.016E-05	6.089E-05	6.089E-05	-1.928E-10	-1.928E-10
1.79998	2.631E-12	898.213	6.372E-05	6.372E-05	6.444E-05	6.444E-05	-1.361E-10	-1.361E-10
1.89998	1.856E-12	948.114	6.727E-05	6.727E-05	6.800E-05	6.800E-05	-9.599E-11	-9.599E-11
1.99998	1.324E-12	998.015	7.083E-05	7.083E-05	7.156E-05	7.156E-05	-6.843E-11	-6.843E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 1.200 θ_0= 0. ρ_0= 4.506

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-2.097E-17
0.10000	3.327E-13	3.322E-13	-7.681E-24	-7.681E-24	-8.815E-14	-9.815E-14	-2.812E-17
0.20000	9.307E-13	9.302E-13	-1.338E-23	-1.338E-23	-2.418E-13	-2.418E-13	-4.022E-17
0.30000	1.971E-12	1.971E-12	-2.332E-23	-2.332E-23	-5.094E-13	-5.094E-13	-6.321E-17
0.40000	4.178E-12	4.179E-12	-4.253E-23	-4.253E-23	-9.873E-13	-9.873E-13	-1.070E-16
0.50000	8.281E-12	8.282E-12	-7.767E-23	-7.767E-23	-1.860E-12	-1.860E-12	-2.139E-16
0.60000	1.876E-11	1.876E-11	-1.597E-22	-1.597E-22	-3.530E-12	-3.530E-12	-4.995E-16
0.70000	5.325E-11	5.325E-11	-4.178E-22	-4.178E-22	-7.453E-12	-7.453E-12	-1.455E-15
0.80000	2.178E-10	2.178E-10	-1.658E-21	-1.658E-21	-2.028E-11	-2.028E-11	-6.522E-15
0.85000	5.769E-10	5.769E-10	-4.361E-21	-4.361E-21	-4.070E-11	-4.070E-11	-1.862E-14
0.90000	2.167E-09	2.167E-09	-1.799E-20	-1.799E-20	-1.098E-10	-1.098E-10	-8.053E-14
0.92500	5.227E-09	5.227E-09	-4.062E-20	-4.062E-20	-2.138E-10	-2.138E-10	-2.276E-13
0.95000	1.812E-08	1.812E-08	-1.387E-19	-1.387E-19	-4.961E-10	-4.961E-10	-8.669E-13
0.96250	3.882E-08	3.882E-08	-3.079E-19	-3.079E-19	-8.776E-10	-8.777E-10	-2.113E-12
0.97500	1.190E-07	1.190E-07	-9.929E-19	-9.929E-19	-1.937E-09	-1.937E-09	-5.296E-12
0.98125	2.309E-07	2.309E-07	-1.786E-18	-1.786E-18	-3.209E-09	-3.209E-09	-8.947E-12
0.98749	4.984E-07	4.984E-07	-3.440E-18	-3.440E-18	-5.574E-09	-5.574E-09	-1.373E-11
0.99374	1.180E-06	1.180E-06	-5.959E-18	-5.959E-18	-9.976E-09	-9.976E-09	-1.870E-11
0.99999	2.543E-06	2.543E-06	-7.192E-18	-7.192E-18	-1.631E-08	-1.631E-08	-2.114E-11
1.00624	3.844E-06	3.844E-06	-5.796E-18	-5.796E-18	-2.256E-08	-2.257E-08	-1.838E-11
1.01249	4.467E-06	4.467E-06	-3.273E-18	-3.273E-18	-2.680E-08	-2.680E-08	-1.340E-11
1.01874	4.722E-06	4.722E-06	-1.718E-18	-1.718E-18	-2.906E-08	-2.906E-08	-8.613E-12
1.02499	4.828E-06	4.828E-06	-9.501E-19	-9.501E-19	-3.028E-08	-3.028E-08	-5.120E-12
1.03749	4.872E-06	4.872E-06	-2.971E-19	-2.971E-19	-3.130E-08	-3.130E-08	-2.051E-12
1.04999	4.841E-06	4.841E-06	-1.353E-19	-1.353E-19	-3.167E-08	-3.167E-08	-8.427E-13
1.07499	4.744E-06	4.744E-06	-4.005E-20	-4.005E-20	-3.194E-08	-3.194E-08	-2.228E-13
1.09999	4.644E-06	4.644E-06	-1.773E-20	-1.773E-20	-3.205E-08	-3.205E-08	-7.944E-14
1.14999	4.455E-06	4.455E-06	-4.322E-21	-4.322E-21	-3.211E-08	-3.211E-08	-1.844E-14
1.19998	4.283E-06	4.283E-06	-1.646E-21	-1.646E-21	-3.213E-08	-3.213E-08	-6.478E-15
1.29998	3.976E-06	3.976E-06	-4.160E-22	-4.160E-22	-3.215E-08	-3.215E-08	-1.449E-15
1.39998	3.711E-06	3.711E-06	-1.591E-22	-1.591E-22	-3.215E-08	-3.215E-08	-4.982E-16
1.49998	3.479E-06	3.479E-06	-7.747E-23	-7.747E-23	-3.215E-08	-3.215E-08	-2.135E-16
1.59998	3.275E-06	3.275E-06	-4.242E-23	-4.242E-23	-3.215E-08	-3.215E-08	-1.069E-16
1.69998	3.093E-06	3.093E-06	-2.326E-23	-2.326E-23	-3.215E-08	-3.215E-08	-6.319E-17
1.79998	2.930E-06	2.930E-06	-1.335E-23	-1.335E-23	-3.215E-08	-3.215E-08	-4.024E-17
1.89998	2.784E-06	2.784E-06	-7.662E-24	-7.662E-24	-3.215E-08	-3.215E-08	-2.815E-17
1.99998	2.651E-06	2.651E-06	-4.393E-24	-4.393E-24	-3.215E-08	-3.215E-08	-2.100E-17

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 1.500 θ_0= 0. ρ_0= 5.632

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	1.5000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	1.5000	0.10000	193.651	1.701E-07	1.000E-00	-1.859E-12	-1.859E-12	1.859E-12
0.20000	1.5000	0.20000	172.146	2.401E-07	1.000E-00	-2.635E-12	-2.635E-12	2.635E-12
0.30000	1.5000	0.30000	150.643	3.669E-07	9.999E-01	-3.735E-12	-3.735E-12	3.735E-12
0.40000	1.5000	0.40000	129.145	5.870E-07	9.999E-01	-5.561E-12	-5.561E-12	5.561E-12
0.50000	1.5000	0.50000	107.653	9.338E-07	9.999E-01	-8.293E-12	-8.293E-12	8.293E-12
0.60000	1.5000	0.60000	86.174	9.872E-07	9.998E-01	-1.351E-11	-1.351E-11	1.351E-11
0.70000	1.5000	0.70000	64.720	3.895E-06	9.996E-01	-2.590E-11	-2.590E-11	2.590E-11
0.80000	1.5000	0.80000	43.326	1.270E-05	9.990E-01	-6.455E-11	-6.455E-11	6.455E-11
0.85000	1.5000	0.85000	32.689	3.287E-05	9.982E-01	-1.236E-10	-1.236E-10	1.236E-10
0.90000	1.5000	0.90000	22.170	1.102E-04	9.965E-01	-2.994E-10	-2.994E-10	2.994E-10
0.92500	1.5000	0.92500	17.022	2.484E-04	9.951E-01	-5.376E-10	-5.376E-10	5.376E-10
0.95000	1.5000	0.95000	12.078	7.362E-04	9.942E-01	-1.191E-09	-1.191E-09	1.191E-09
0.96250	1.5000	0.96250	9.780	1.459E-03	9.964E-01	-1.836E-09	-1.836E-09	1.836E-09
0.97500	1.5001	0.97500	7.738	3.254E-03	1.004E 00	-3.374E-09	-3.374E-09	3.374E-09
0.98125	1.5001	0.98125	6.886	5.007E-03	1.010E 00	-4.668E-09	-4.668E-09	4.668E-09
0.98749	1.5001	0.98750	6.211	7.735E-03	1.012E 00	-6.037E-09	-6.037E-09	6.037E-09
0.99374	1.5002	0.99375	5.775	1.162E-02	1.006E 00	-7.352E-09	-7.352E-09	7.352E-09
0.99999	1.5003	1.00000	5.634	1.636E-02	9.998E-01	-7.911E-09	-7.911E-09	7.911E-09
1.00624	1.5004	1.00625	5.809	2.104E-02	1.007E 00	-7.223E-09	-7.223E-09	7.223E-09
1.01249	1.5005	1.01250	6.274	2.481E-02	1.013E 00	-5.892E-09	-5.892E-09	5.892E-09
1.01874	1.5007	1.01875	6.972	2.741E-02	1.010E 00	-4.517E-09	-4.517E-09	4.518E-09
1.02499	1.5009	1.02500	7.840	2.908E-02	1.004E 00	-3.246E-09	-3.246E-09	3.246E-09
1.03749	1.5012	1.03750	9.901	3.077E-02	9.953E-01	-1.775E-09	-1.775E-09	1.775E-09
1.04999	1.5016	1.05000	12.209	3.146E-02	9.920E-01	-1.164E-09	-1.164E-09	1.164E-09
1.07499	1.5023	1.07500	17.162	3.194E-02	9.911E-01	-5.291E-10	-5.291E-10	5.291E-10
1.09999	1.5029	1.10000	22.312	3.209E-02	9.912E-01	-2.946E-10	-2.946E-10	2.946E-10
1.14999	1.5042	1.15000	32.634	3.217E-02	9.905E-01	-1.224E-10	-1.224E-10	1.224E-10
1.19999	1.5054	1.20000	43.472	3.220E-02	9.891E-01	-6.408E-11	-6.408E-11	6.408E-11
1.29999	1.5074	1.30000	64.867	3.221E-02	9.860E-01	-2.578E-11	-2.578E-11	2.578E-11
1.39999	1.5092	1.40000	86.321	3.221E-02	9.831E-01	-1.346E-11	-1.346E-11	1.346E-11
1.49999	1.5107	1.50000	107.801	3.221E-02	9.805E-01	-8.270E-12	-8.270E-12	8.270E-12
1.59999	1.5121	1.60000	129.292	3.222E-02	9.781E-01	-5.546E-12	-5.546E-12	5.546E-12
1.69999	1.5133	1.70000	150.790	3.222E-02	9.760E-01	-3.726E-12	-3.726E-12	3.726E-12
1.79999	1.5143	1.80000	172.293	3.223E-02	9.742E-01	-2.629E-12	-2.629E-12	2.629E-12
1.89999	1.5153	1.90000	193.799	3.223E-02	9.725E-01	-1.855E-12	-1.855E-12	1.855E-12
1.99999	1.5161	2.00000	215.306	3.223E-02	9.710E-01	-1.322E-12	-1.322E-12	1.322E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 1.500 θ_D= 0. ρ_a= 5.632

z	$_x\mu'-1_0$	T_0	$_oT_f-T_0$	$_xT_f-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.323E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.854E-12	99.901	-7.858E-11	-7.858E-11	7.858E-11	7.858E-11	-9.613E-11	-9.613E-11
0.20000	2.635E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.362E-10	-1.362E-10
0.30000	3.735E-12	149.703	-3.469E-10	-3.469E-10	3.470E-10	3.470E-10	-1.931E-10	-1.931E-10
0.40000	5.261E-12	199.605	-5.757E-10	-5.757E-10	5.757E-10	5.757E-10	-2.875E-10	-2.875E-10
0.50000	8.293E-12	249.506	-9.168E-10	-9.168E-10	9.169E-10	9.169E-10	-4.288E-10	-4.288E-10
0.60000	1.351E-11	299.407	-1.442E-09	-1.442E-09	1.442E-09	1.442E-09	-6.985E-10	-6.985E-10
0.70000	2.590E-11	349.308	-2.378E-09	-2.378E-09	2.378E-09	2.378E-09	-1.339E-09	-1.339E-09
0.80000	6.455E-11	399.209	-4.415E-09	-4.415E-09	4.420E-09	4.420E-09	-3.337E-09	-3.337E-09
0.85000	1.238E-10	424.160	-6.631E-09	-6.631E-09	6.666E-09	6.666E-09	-6.391E-09	-6.391E-09
0.90000	2.994E-10	449.110	-1.128E-08	-1.128E-08	1.169E-08	1.169E-08	-1.548E-08	-1.548E-08
0.92500	5.378E-10	461.585	-1.548E-08	-1.548E-08	1.765E-08	1.765E-08	-2.779E-08	-2.779E-08
0.95000	1.191E-09	474.060	-1.678E-08	-1.678E-08	3.635E-08	3.635E-08	-6.159E-08	-6.159E-08
0.96250	1.830E-09	480.297	3.138E-09	3.137E-09	7.473E-08	7.473E-08	-9.490E-08	-9.490E-08
0.97500	3.374E-09	486.535	1.448E-07	1.448E-07	2.475E-07	2.475E-07	-1.745E-07	-1.745E-07
0.98125	4.668E-09	489.653	4.035E-07	4.035E-07	5.312E-07	5.312E-07	-2.413E-07	-2.413E-07
0.98749	6.037E-09	492.771	1.042E-06	1.042E-06	1.203E-06	1.203E-06	-3.121E-07	-3.121E-07
0.99374	7.354E-09	495.890	2.449E-06	2.449E-06	2.652E-06	2.652E-06	-3.801E-07	-3.801E-07
0.99999	7.911E-09	499.008	4.960E-06	4.960E-06	5.211E-06	5.211E-06	-4.090E-07	-4.090E-07
1.00624	7.223E-09	502.126	8.315E-06	8.315E-06	8.614E-06	8.614E-06	-3.734E-07	-3.734E-07
1.01249	5.894E-09	505.245	1.167E-05	1.167E-05	1.201E-05	1.201E-05	-3.046E-07	-3.046E-07
1.01874	4.517E-09	508.363	1.436E-05	1.436E-05	1.473E-05	1.473E-05	-2.336E-07	-2.336E-07
1.02499	3.246E-09	511.482	1.627E-05	1.627E-05	1.666E-05	1.666E-05	-1.678E-07	-1.678E-07
1.03749	1.772E-09	517.719	1.845E-05	1.845E-05	1.888E-05	1.888E-05	-9.179E-08	-9.179E-08
1.04999	1.164E-09	523.956	1.953E-05	1.953E-05	1.997E-05	1.997E-05	-6.016E-08	-6.016E-08
1.07499	5.291E-10	536.431	2.061E-05	2.061E-05	2.107E-05	2.107E-05	-2.736E-08	-2.736E-08
1.09999	2.946E-10	548.906	2.129E-05	2.129E-05	2.176E-05	2.176E-05	-1.523E-08	-1.523E-08
1.14999	1.224E-10	573.857	2.237E-05	2.237E-05	2.286E-05	2.286E-05	-6.330E-09	-6.330E-09
1.19999	6.408E-11	598.807	2.339E-05	2.339E-05	2.388E-05	2.388E-05	-3.313E-09	-3.313E-09
1.29999	2.578E-11	648.708	2.538E-05	2.538E-05	2.588E-05	2.588E-05	-1.333E-09	-1.333E-09
1.39999	1.346E-11	698.609	2.736E-05	2.736E-05	2.785E-05	2.785E-05	-6.960E-10	-6.960E-10
1.49999	8.270E-12	748.510	2.933E-05	2.933E-05	2.983E-05	2.983E-05	-4.276E-10	-4.276E-10
1.59999	5.546E-12	798.411	3.131E-05	3.131E-05	3.180E-05	3.180E-05	-2.868E-10	-2.868E-10
1.69999	3.726E-12	848.313	3.330E-05	3.330E-05	3.379E-05	3.379E-05	-1.926E-10	-1.926E-10
1.79999	2.624E-12	898.214	3.527E-05	3.527E-05	3.577E-05	3.577E-05	-1.359E-10	-1.359E-10
1.89999	1.855E-12	948.115	3.725E-05	3.725E-05	3.774E-05	3.774E-05	-9.590E-11	-9.590E-11
1.99999	1.324E-12	998.016	3.922E-05	3.922E-05	3.972E-05	3.972E-05	-6.837E-11	-6.837E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0=1.500 θ_D=0. ρ_a=5.632

z	$_oD_y$	$_xD_y$	σ^κ	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-3.276E-17
0.10000	4.162E-13	4.164E-13	-7.680E-24	-7.680E-24	-8.814E-14	-8.814E-14	-4.394E-17
0.20000	1.162E-12	1.162E-12	-1.338E-23	-1.338E-23	-2.418E-13	-2.418E-13	-6.283E-17
0.30000	2.464E-12	2.464E-12	-2.331E-23	-2.331E-23	-5.094E-13	-5.094E-13	-9.873E-17
0.40000	5.220E-12	5.221E-12	-4.251E-23	-4.251E-23	-9.870E-13	-9.870E-13	-1.670E-16
0.50000	1.035E-11	1.035E-11	-7.761E-23	-7.761E-23	-1.859E-12	-1.859E-12	-3.339E-16
0.60000	2.342E-11	2.342E-11	-1.594E-22	-1.594E-22	-3.527E-12	-3.527E-12	-7.790E-16
0.70000	6.640E-11	6.640E-11	-4.166E-22	-4.166E-22	-7.441E-12	-7.441E-12	-2.264E-15
0.80000	2.705E-10	2.705E-10	-1.645E-21	-1.645E-21	-2.020E-11	-2.020E-11	-1.010E-14
0.85000	7.104E-10	7.104E-10	-4.298E-21	-4.298E-21	-4.037E-11	-4.037E-11	-2.858E-14
0.90000	2.615E-09	2.615E-09	-1.735E-20	-1.735E-20	-1.075E-10	-1.075E-10	-1.213E-13
0.92500	6.214E-09	6.214E-09	-3.869E-20	-3.869E-20	-2.072E-10	-2.072E-10	-3.496E-13
0.95000	2.024E-08	2.024E-08	-1.220E-19	-1.220E-19	-4.626E-10	-4.626E-10	-1.166E-12
0.96250	4.049E-08	4.049E-08	-2.596E-19	-2.396E-19	-7.850E-10	-7.850E-10	-2.685E-12
0.97500	1.073E-07	1.073E-07	-6.264E-19	-6.264E-19	-1.521E-09	-1.521E-09	-5.953E-12
0.98125	1.899E-07	1.899E-07	-1.052E-18	-1.052E-18	-2.295E-09	-2.295E-09	-8.665E-12
0.98749	3.647E-07	3.647E-07	-1.587E-18	-1.587E-18	-3.525E-09	-3.525E-09	-1.245E-11
0.99374	7.267E-07	7.267E-07	-2.163E-18	-2.163E-18	-5.275E-09	-5.275E-09	-1.582E-11
0.99999	1.337E-06	1.337E-06	-2.423E-18	-2.423E-18	-7.462E-09	-7.462E-09	-1.705E-11
1.00624	1.917E-06	1.917E-06	-2.104E-18	-2.104E-18	-9.619E-09	-9.619E-09	-1.554E-11
1.01249	2.239E-06	2.239E-06	-1.527E-18	-1.527E-18	-1.131E-08	-1.131E-08	-1.200E-11
1.01874	2.400E-06	2.400E-06	-9.987E-19	-9.987E-19	-1.248E-08	-1.248E-08	-8.316E-12
1.02499	2.479E-06	2.479E-06	-5.888E-19	-5.888E-19	-1.322E-08	-1.322E-08	-5.725E-12
1.03749	2.534E-06	2.534E-06	-2.274E-19	-2.274E-19	-1.392E-08	-1.392E-08	-2.580E-12
1.04999	2.532E-06	2.532E-06	-1.177E-19	-1.177E-19	-1.423E-08	-1.423E-08	-1.120E-12
1.07499	2.489E-06	2.489E-06	-3.786E-20	-3.786E-20	-1.448E-08	-1.448E-08	-3.193E-13
1.09999	2.436E-06	2.436E-06	-1.697E-20	-1.697E-20	-1.457E-08	-1.457E-08	-1.187E-13
1.14999	2.333E-06	2.333E-06	-4.238E-21	-4.238E-21	-1.464E-08	-1.464E-08	-2.813E-14
1.19999	2.239E-06	2.239E-06	-1.627E-21	-1.627E-21	-1.466E-08	-1.466E-08	-9.981E-15
1.29999	2.074E-06	2.074E-06	-4.137E-22	-4.137E-22	-1.467E-08	-1.467E-08	-2.248E-15
1.39999	1.932E-06	1.932E-06	-1.586E-22	-1.586E-22	-1.468E-08	-1.468E-08	-7.752E-16
1.49999	1.808E-06	1.808E-06	-7.729E-23	-7.729E-23	-1.468E-08	-1.468E-08	-3.326E-16
1.59999	1.699E-06	1.699E-06	-4.233E-23	-4.233E-23	-1.468E-08	-1.468E-08	-1.667E-16
1.69999	1.602E-06	1.602E-06	-2.322E-23	-2.322E-23	-1.468E-08	-1.468E-08	-9.858E-17
1.79999	1.516E-06	1.516E-06	-1.333E-23	-1.333E-23	-1.468E-08	-1.468E-08	-6.279E-17
1.89999	1.439E-06	1.439E-06	-7.651E-24	-7.651E-24	-1.468E-08	-1.468E-08	-4.395E-17
1.99999	1.369E-06	1.369E-06	-4.387E-24	-4.387E-24	-1.468E-08	-1.468E-08	-3.279E-17

PROPAGATION FREQUENCY= 1.550CE 1C ϕ_0 = 2.000 θ_D = 0. ρ_a = 7.509

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	2.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	2.0000	0.10000	193.658	1.651E-07	9.999E-01	-1.859E-12	-1.859E-12	1.859E-12
0.20000	2.0000	0.20000	172.160	3.402E-07	9.999E-01	-2.635E-12	-2.635E-12	2.635E-12
0.30000	2.0000	0.30000	150.667	4.869E-07	9.998E-01	-3.733E-12	-3.733E-12	3.733E-12
0.40000	2.0000	0.40000	129.183	8.138E-07	9.998E-01	-5.557E-12	-5.557E-12	5.557E-12
0.50000	2.0000	0.50000	107.710	1.041E-06	9.997E-01	-8.284E-12	-8.284E-12	8.284E-12
0.60000	2.0000	0.60000	86.260	1.174E-06	9.994E-01	-1.348E-11	-1.348E-11	1.348E-11
0.70000	2.0000	0.70000	64.853	4.749E-06	9.990E-01	-2.579E-11	-2.579E-11	2.579E-11
0.80000	2.0000	0.80000	43.553	1.590E-05	9.978E-01	-6.382E-11	-6.382E-11	6.382E-11
0.85000	2.0000	0.85000	33.008	3.917E-05	9.963E-01	-1.210E-10	-1.210E-10	1.210E-10
0.90000	2.0000	0.90000	22.665	1.298E-04	9.939E-01	-2.835E-10	-2.835E-10	2.835E-10
0.92500	2.0000	0.92500	17.680	2.828E-04	9.929E-01	-4.989E-10	-4.989E-10	4.989E-10
0.95000	2.0000	0.95000	13.012	7.782E-04	9.961E-01	-1.008E-09	-1.008E-09	1.008E-09
0.96250	2.0000	0.96250	10.927	1.423E-03	1.002E 00	-1.464E-09	-1.464E-09	1.464E-09
0.97500	2.0001	0.97500	9.162	2.684E-03	1.012E 00	-2.176E-09	-2.176E-09	2.176E-09
0.98125	2.0001	0.98125	8.463	3.712E-03	1.015E 00	-2.637E-09	-2.637E-09	2.637E-09
0.98750	2.0001	0.98750	7.933	5.073E-03	1.013E 00	-3.132E-09	-3.132E-09	3.132E-09
0.99375	2.0001	0.99375	7.607	6.752E-03	1.005E 00	-3.547E-09	-3.547E-09	3.547E-09
0.99999	2.0002	1.00000	7.511	8.660E-03	9.999E-01	-3.679E-09	-3.679E-09	3.679E-09
1.00624	2.0003	1.00625	7.653	1.055E-02	1.006E 00	-3.485E-09	-3.485E-09	3.485E-09
1.01249	2.0003	1.01250	8.022	1.223E-02	1.014E 00	-3.028E-09	-3.028E-09	3.028E-09
1.01874	2.0004	1.01875	8.587	1.352E-02	1.017E 00	-2.549E-09	-2.549E-09	2.549E-09
1.02499	2.0005	1.02500	9.314	1.446E-02	1.014E 00	-2.087E-09	-2.087E-09	2.087E-09
1.03749	2.0007	1.03750	11.119	1.563E-02	1.003E 00	-1.414E-09	-1.414E-09	1.414E-09
1.04999	2.0008	1.05000	13.227	1.621E-02	9.964E-01	-9.698E-10	-9.698E-10	9.698E-10
1.07499	2.0012	1.07500	17.918	1.668E-02	9.918E-01	-4.856E-10	-4.856E-10	4.856E-10
1.09999	2.0016	1.10000	22.913	1.683E-02	9.916E-01	-2.773E-10	-2.773E-10	2.773E-10
1.14999	2.0022	1.15000	33.264	1.692E-02	9.925E-01	-1.190E-10	-1.190E-10	1.190E-10
1.19999	2.0028	1.20000	43.811	1.695E-02	9.929E-01	-6.299E-11	-6.299E-11	6.299E-11
1.29999	2.0039	1.30000	65.113	1.697E-02	9.923E-01	-2.557E-11	-2.557E-11	2.557E-11
1.39999	2.0049	1.40000	86.521	1.698E-02	9.914E-01	-1.339E-11	-1.339E-11	1.339E-11
1.49999	2.0057	1.50000	107.972	1.698E-02	9.903E-01	-8.244E-12	-8.244E-12	8.244E-12
1.59999	2.0064	1.60000	129.444	1.698E-02	9.893E-01	-5.530E-12	-5.530E-12	5.530E-12
1.69999	2.0070	1.70000	150.929	1.698E-02	9.884E-01	-3.718E-12	-3.718E-12	3.718E-12
1.79999	2.0076	1.80000	172.422	1.698E-02	9.876E-01	-2.623E-12	-2.623E-12	2.623E-12
1.89999	2.0081	1.90000	193.920	1.698E-02	9.868E-01	-1.851E-12	-1.851E-12	1.851E-12
1.99999	2.0085	2.00000	215.421	1.699E-02	9.861E-01	-1.320E-12	-1.320E-12	1.320E-12

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_0 = 2.000 θ_D = 0. ρ_a = 7.509

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.858E-11	-7.858E-11	7.858E-11	7.858E-11	-9.612E-11	-9.612E-11
0.20000	2.635E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.362E-10	-1.362E-10
0.30000	3.733E-12	149.703	-3.469E-10	-3.469E-10	3.469E-10	3.469E-10	-1.930E-10	-1.930E-10
0.40000	5.557E-12	199.605	-5.755E-10	-5.755E-10	5.755E-10	5.755E-10	-2.873E-10	-2.873E-10
0.50000	8.284E-12	249.506	-9.163E-10	-9.163E-10	9.164E-10	9.164E-10	-4.283E-10	-4.283E-10
0.60000	1.348E-11	299.407	-1.441E-09	-1.441E-09	1.441E-09	1.441E-09	-6.970E-10	-6.970E-10
0.70000	2.579E-11	349.308	-2.373E-09	-2.373E-09	2.374E-09	2.374E-09	-1.333E-09	-1.333E-09
0.80000	6.382E-11	399.209	-4.393E-09	-4.393E-09	4.400E-09	4.400E-09	-3.299E-09	-3.299E-09
0.85000	1.210E-10	424.160	-6.565E-09	-6.565E-09	6.615E-09	6.615E-09	-6.258E-09	-6.258E-09
0.90000	2.835E-10	449.110	-1.097E-08	-1.097E-08	1.154E-08	1.154E-08	-1.466E-08	-1.466E-08
0.92500	4.989E-10	461.585	-1.461E-08	-1.461E-08	1.742E-08	1.742E-08	-2.579E-08	-2.579E-08
0.95000	1.008E-09	474.060	-1.385E-08	-1.385E-08	3.572E-08	3.572E-08	-5.211E-08	-5.211E-08
0.96250	1.464E-09	480.298	4.618E-09	4.618E-09	6.947E-08	6.947E-08	-7.568E-08	-7.568E-08
0.97500	2.176E-09	486.535	9.000E-08	9.000E-08	1.770E-07	1.770E-07	-1.125E-07	-1.125E-07
0.98125	2.637E-09	489.653	2.059E-07	2.059E-07	3.079E-07	3.079E-07	-1.364E-07	-1.364E-07
0.98750	3.132E-09	492.772	4.230E-07	4.230E-07	5.428E-07	5.428E-07	-1.619E-07	-1.619E-07
0.99375	3.547E-09	495.891	7.903E-07	7.903E-07	9.311E-07	9.311E-07	-1.834E-07	-1.834E-07
0.99999	3.679E-09	499.009	1.343E-06	1.343E-06	1.507E-06	1.507E-06	-1.902E-07	-1.902E-07
1.00624	3.485E-09	502.128	2.036E-06	2.036E-06	2.222E-06	2.222E-06	-1.802E-07	-1.802E-07
1.01249	3.028E-09	505.246	2.773E-06	2.773E-06	2.979E-06	2.979E-06	-1.566E-07	-1.566E-07
1.01874	2.549E-09	508.365	3.426E-06	3.426E-06	3.649E-06	3.649E-06	-1.318E-07	-1.318E-07
1.02499	2.087E-09	511.483	3.953E-06	3.953E-06	4.191E-06	4.191E-06	-1.079E-07	-1.079E-07
1.03749	1.414E-09	517.721	4.687E-06	4.687E-06	4.946E-06	4.946E-06	-7.312E-08	-7.312E-08
1.04999	9.698E-10	523.958	5.108E-06	5.108E-06	5.383E-06	5.383E-06	-5.014E-08	-5.014E-08
1.07499	4.856E-10	536.433	5.540E-06	5.540E-06	5.832E-06	5.832E-06	-2.510E-08	-2.510E-08
1.09999	2.773E-10	548.908	5.773E-06	5.773E-06	6.074E-06	6.074E-06	-1.434E-08	-1.434E-08
1.14999	1.190E-10	573.859	6.102E-06	6.102E-06	6.412E-06	6.412E-06	-6.153E-09	-6.153E-09
1.19999	6.299E-11	598.809	6.397E-06	6.397E-06	6.711E-06	6.711E-06	-3.257E-09	-3.257E-09
1.29999	2.557E-11	648.710	6.956E-06	6.956E-06	7.274E-06	7.274E-06	-1.322E-09	-1.322E-09
1.39999	1.339E-11	698.611	7.508E-06	7.508E-06	7.828E-06	7.828E-06	-6.925E-10	-6.925E-10
1.49999	8.244E-12	748.512	8.054E-06	8.054E-06	8.375E-06	8.375E-06	-4.262E-10	-4.262E-10
1.59999	5.530E-12	798.414	8.606E-06	8.606E-06	8.928E-06	8.928E-06	-2.859E-10	-2.859E-10
1.69999	3.718E-12	848.315	9.156E-06	9.156E-06	9.478E-06	9.478E-06	-1.922E-10	-1.922E-10
1.79999	2.623E-12	898.216	9.708E-06	9.708E-06	1.003E-05	1.003E-05	-1.356E-10	-1.356E-10
1.89999	1.851E-12	948.117	1.025E-05	1.025E-05	1.057E-05	1.057E-05	-9.571E-11	-9.571E-11
1.99999	1.320E-12	998.018	1.080E-05	1.080E-05	1.113E-05	1.113E-05	-6.825E-11	-6.825E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0=2.000 θ_D=0. ρ_a=7.509

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-5.822E-17
0.10000	5.552E-13	5.552E-13	-7.679E-24	-7.679E-24	-8.814E-14	-8.814E-14	-7.809E-17
0.20000	1.550E-12	1.550E-12	-1.338E-23	-1.338E-23	-2.417E-13	-2.417E-13	-1.116E-16
0.30000	3.285E-12	3.285E-12	-2.329E-23	-2.329E-23	-5.092E-13	-5.092E-13	-1.754E-16
0.40000	6.956E-12	6.955E-12	-4.246E-23	-4.246E-23	-9.864E-13	-9.864E-13	-2.966E-16
0.50000	1.378E-11	1.378E-11	-7.749E-23	-7.749E-23	-1.858E-12	-1.858E-12	-5.922E-16
0.60000	3.115E-11	3.115E-11	-1.589E-22	-1.589E-22	-3.521E-12	-3.521E-12	-1.379E-15
0.70000	8.809E-11	8.809E-11	-4.139E-22	-4.139E-22	-7.415E-12	-7.415E-12	-3.993E-15
0.80000	3.553E-10	3.553E-10	-1.617E-21	-1.617E-21	-2.001E-11	-2.001E-11	-1.759E-14
0.85000	9.210E-10	9.210E-10	-4.167E-21	-4.167E-21	-3.968E-11	-3.968E-11	-4.894E-14
0.90000	3.255E-09	3.255E-09	-1.607E-20	-1.607E-20	-1.031E-10	-1.031E-10	-1.994E-13
0.92500	7.453E-09	7.453E-09	-3.492E-20	-3.492E-20	-1.941E-10	-1.941E-10	-5.030E-13
0.95000	2.155E-08	2.155E-08	-9.406E-20	-9.406E-20	-4.035E-10	-4.035E-10	-1.566E-12
0.96250	3.952E-08	3.952E-08	-1.683E-19	-1.683E-19	-6.430E-10	-6.430E-10	-3.077E-12
0.97500	8.764E-08	8.764E-08	-3.131E-19	-3.131E-19	-1.070E-09	-1.070E-09	-5.956E-12
0.98125	1.388E-07	1.388E-07	-4.235E-19	-4.235E-19	-1.413E-09	-1.413E-09	-7.908E-12
0.98750	2.294E-07	2.294E-07	-5.562E-19	-5.562E-19	-1.865E-09	-1.865E-09	-9.816E-12
0.99375	3.799E-07	3.799E-07	-6.785E-19	-6.785E-19	-2.447E-09	-2.448E-09	-1.115E-11
0.99999	5.817E-07	5.817E-07	-7.194E-19	-7.194E-19	-3.109E-09	-3.109E-09	-1.161E-11
1.00624	7.725E-07	7.725E-07	-6.596E-19	-6.596E-19	-3.761E-09	-3.761E-09	-1.095E-11
1.01249	9.043E-07	9.043E-07	-5.271E-19	-5.271E-19	-4.319E-09	-4.319E-09	-9.502E-12
1.01874	9.825E-07	9.825E-07	-4.013E-19	-4.013E-19	-4.750E-09	-4.750E-09	-7.502E-12
1.02499	1.028E-06	1.028E-06	-2.931E-19	-2.931E-19	-5.073E-09	-5.073E-09	-5.629E-12
1.03749	1.072E-06	1.072E-06	-1.595E-19	-1.595E-19	-5.476E-09	-5.476E-09	-2.870E-12
1.04999	1.084E-06	1.084E-06	-8.858E-20	-8.858E-20	-5.702E-09	-5.702E-09	-1.477E-12
1.07499	1.077E-06	1.077E-06	-3.365E-20	-3.365E-20	-5.905E-09	-5.905E-09	-4.774E-13
1.09999	1.057E-06	1.057E-06	-1.551E-20	-1.551E-20	-5.992E-09	-5.992E-09	-1.912E-13
1.14999	1.012E-06	1.012E-06	-4.064E-21	-4.064E-21	-6.053E-09	-6.053E-09	-4.759E-14
1.19999	9.705E-07	9.705E-07	-1.587E-21	-1.587E-21	-6.072E-09	-6.072E-09	-1.722E-14
1.29999	8.966E-07	8.966E-07	-4.088E-22	-4.088E-22	-6.085E-09	-6.085E-09	-3.937E-15
1.39999	8.335E-07	8.335E-07	-1.574E-22	-1.574E-22	-6.089E-09	-6.089E-09	-1.366E-15
1.49999	7.787E-07	7.787E-07	-7.692E-23	-7.692E-23	-6.090E-09	-6.090E-09	-5.875E-16
1.59999	7.308E-07	7.308E-07	-4.215E-23	-4.215E-23	-6.091E-09	-6.091E-09	-2.950E-16
1.69999	6.885E-07	6.885E-07	-2.314E-23	-2.314E-23	-6.092E-09	-6.092E-09	-1.747E-16
1.79999	6.508E-07	6.508E-07	-1.329E-23	-1.329E-23	-6.092E-09	-6.092E-09	-1.113E-16
1.89999	6.170E-07	6.170E-07	-7.627E-24	-7.627E-24	-6.092E-09	-6.092E-09	-7.798E-17
1.99999	5.865E-07	5.865E-07	-4.374E-24	-4.374E-24	-6.092E-09	-6.092E-09	-5.820E-17

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	2.5000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	2.5000	0.10000	193.666	2.668E-07	9.999E-01	-1.859E-12	-1.859E-12	1.859E-12
0.20000	2.5000	0.20000	172.178	3.535E-07	9.998E-01	-2.634E-12	-2.634E-12	2.634E-12
0.30000	2.5000	0.30000	150.699	5.603E-07	9.997E-01	-3.731E-12	-3.731E-12	3.731E-12
0.40000	2.5000	0.40000	129.232	9.472E-07	9.996E-01	-5.552E-12	-5.552E-12	5.552E-12
0.50000	2.5000	0.50000	107.784	1.281E-06	9.994E-01	-8.273E-12	-8.273E-12	8.273E-12
0.60000	2.5000	0.60000	86.370	1.281E-06	9.990E-01	-1.344E-11	-1.344E-11	1.344E-11
0.70000	2.5000	0.70000	65.024	5.603E-06	9.983E-01	-2.565E-11	-2.565E-11	2.565E-11
0.80000	2.5000	0.80000	43.843	1.665E-05	9.963E-01	-6.289E-11	-6.289E-11	6.289E-11
0.85000	2.5000	0.85000	33.414	4.280E-05	9.943E-01	-1.178E-10	-1.178E-10	1.178E-10
0.90000	2.5000	0.90000	23.286	1.415E-04	9.920E-01	-2.683E-10	-2.683E-10	2.683E-10
0.92500	2.5000	0.92500	18.491	2.971E-04	9.928E-01	-4.549E-10	-4.549E-10	4.549E-10
0.95000	2.5000	0.95000	14.123	7.526E-04	1.001E 00	-8.263E-10	-8.263E-10	8.263E-10
0.96250	2.5000	0.96250	12.244	1.232E-03	1.009E 00	-1.156E-09	-1.156E-09	1.156E-09
0.97500	2.5001	0.97500	10.717	2.067E-03	1.017E 00	-1.520E-09	-1.520E-09	1.520E-09
0.98125	2.5001	0.98125	10.137	2.665E-03	1.017E 00	-1.686E-09	-1.686E-09	1.686E-09
0.98750	2.5001	0.98750	9.709	3.394E-03	1.011E 00	-1.872E-09	-1.872E-09	1.872E-09
0.99375	2.5001	0.99375	9.455	4.233E-03	1.003E 00	-2.008E-09	-2.008E-09	2.008E-09
1.00000	2.5001	1.00000	9.388	5.137E-03	9.999E-01	-2.045E-09	-2.045E-09	2.045E-09
1.00625	2.5002	1.00625	9.513	6.039E-03	1.005E 00	-1.976E-09	-1.976E-09	1.976E-09
1.01250	2.5002	1.01250	9.822	6.859E-03	1.014E 00	-1.815E-09	-1.815E-09	1.815E-09
1.01875	2.5003	1.01875	10.299	7.550E-03	1.019E 00	-1.638E-09	-1.638E-09	1.638E-09
1.02500	2.5003	1.02500	10.921	8.107E-03	1.019E 00	-1.465E-09	-1.465E-09	1.465E-09
1.03749	2.5004	1.03750	12.511	8.869E-03	1.011E 00	-1.102E-09	-1.102E-09	1.102E-09
1.04999	2.5005	1.05000	14.432	9.308E-03	1.003E 00	-7.819E-10	-7.819E-10	7.819E-10
1.07499	2.5007	1.07500	18.845	9.709E-03	9.935E-01	-4.370E-10	-4.370E-10	4.370E-10
1.09999	2.5009	1.10000	23.662	9.861E-03	9.915E-01	-2.594E-10	-2.594E-10	2.594E-10
1.14999	2.5013	1.15000	33.808	9.957E-03	9.923E-01	-1.148E-10	-1.148E-10	1.148E-10
1.19999	2.5017	1.20000	44.244	9.991E-03	9.934E-01	-6.164E-11	-6.164E-11	6.164E-11
1.29999	2.5023	1.30000	65.429	1.001E-02	9.943E-01	-2.531E-11	-2.531E-11	2.531E-11
1.39999	2.5029	1.40000	86.777	1.002E-02	9.943E-01	-1.331E-11	-1.331E-11	1.331E-11
1.49999	2.5033	1.50000	108.192	1.003E-02	9.941E-01	-8.210E-12	-8.210E-12	8.210E-12
1.59999	2.5038	1.60000	129.646	1.003E-02	9.937E-01	-5.510E-12	-5.510E-12	5.510E-12
1.69999	2.5041	1.70000	151.108	1.003E-02	9.933E-01	-3.707E-12	-3.707E-12	3.707E-12
1.79999	2.5045	1.80000	172.587	1.004E-02	9.929E-01	-2.616E-12	-2.616E-12	2.616E-12
1.89999	2.5048	1.90000	194.075	1.004E-02	9.926E-01	-1.847E-12	-1.847E-12	1.847E-12
1.99999	2.5050	2.00000	215.568	1.004E-02	9.922E-01	-1.317E-12	-1.317E-12	1.317E-12

PROPAGATION FREQUENCY= 1.5503E 10 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	$_x\mu'$-1.0	T_0	$_oT_f$-T_0	$_xT_f$-T_0	$_oT_g$-T_0	$_xT_g$-T_0	$_oD_z$-D_0	$_xD_z$-D_0
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	4.859E-12	49.901	-7.857E-11	-7.857E-11	7.857E-11	7.857E-11	-9.611E-11	-9.611E-11
0.20000	2.634E-12	99.802	-1.896E-10	-1.896E-10	1.896E-10	1.896E-10	-1.362E-10	-1.362E-10
0.30000	3.731E-12	149.703	-3.468E-10	-3.468E-10	3.468E-10	3.468E-10	-1.929E-10	-1.929E-10
0.40000	5.552E-12	199.605	-5.752E-10	-5.752E-10	5.752E-10	5.752E-10	-2.871E-10	-2.871E-10
0.50000	8.273E-12	249.506	-9.157E-10	-9.157E-10	9.157E-10	9.157E-10	-4.277E-10	-4.277E-10
0.60000	1.344E-11	299.407	-1.439E-09	-1.439E-09	1.439E-09	1.439E-09	-6.951E-10	-6.951E-10
0.70000	2.565E-11	349.308	-2.367E-09	-2.367E-09	2.368E-09	2.368E-09	-1.326E-09	-1.326E-09
0.80000	6.284E-11	399.209	-4.365E-09	-4.365E-09	4.374E-09	4.374E-09	-3.252E-09	-3.252E-09
0.85000	1.178E-10	424.160	-6.487E-09	-6.487E-09	6.546E-09	6.546E-09	-6.093E-09	-6.093E-09
0.90000	2.683E-10	449.110	-1.064E-08	-1.064E-08	1.133E-08	1.133E-08	-1.387E-08	-1.387E-08
0.92500	4.549E-10	461.585	-1.382E-08	-1.382E-08	1.693E-08	1.693E-08	-2.352E-08	-2.352E-08
0.95000	8.263E-10	474.060	-1.272E-08	-1.272E-08	3.316E-08	3.316E-08	-4.272E-08	-4.272E-08
0.96250	1.155E-09	480.298	-1.353E-09	-1.353E-09	5.683E-08	5.683E-08	-5.978E-08	-5.978E-08
0.97500	1.526E-09	486.535	4.171E-08	4.171E-08	1.166E-07	1.166E-07	-7.857E-08	-7.857E-08
0.98125	1.686E-09	489.654	9.002E-08	9.002E-08	1.749E-07	1.749E-07	-8.716E-08	-8.716E-08
0.98750	1.872E-09	492.773	1.681E-07	1.681E-07	2.641E-07	2.641E-07	-9.678E-08	-9.678E-08
0.99375	2.008E-09	495.891	2.843E-07	2.843E-07	3.924E-07	3.924E-07	-1.038E-07	-1.038E-07
1.00000	2.043E-09	499.010	4.410E-07	4.410E-07	5.618E-07	5.618E-07	-1.057E-07	-1.057E-07
1.00625	1.976E-09	502.128	6.305E-07	6.305E-07	7.639E-07	7.639E-07	-1.021E-07	-1.021E-07
1.01250	1.815E-09	505.247	8.325E-07	8.325E-07	9.778E-07	9.778E-07	-9.382E-08	-9.382E-08
1.01875	1.638E-09	508.366	1.025E-06	1.025E-06	1.181E-06	1.181E-06	-8.468E-08	-8.468E-08
1.02500	1.465E-09	511.484	1.197E-06	1.197E-06	1.363E-06	1.363E-06	-7.575E-08	-7.575E-08
1.03749	1.104E-09	517.722	1.460E-06	1.460E-06	1.641E-06	1.641E-06	-5.700E-08	-5.700E-08
1.04999	7.819E-10	523.959	1.632E-06	1.632E-06	1.825E-06	1.825E-06	-4.043E-08	-4.043E-08
1.07499	4.375E-10	536.434	1.822E-06	1.822E-06	2.029E-06	2.029E-06	-2.259E-08	-2.259E-08
1.09999	2.594E-10	548.910	1.924E-06	1.924E-06	2.141E-06	2.141E-06	-1.341E-08	-1.341E-08
1.14999	1.148E-10	573.860	2.054E-06	2.054E-06	2.279E-06	2.279E-06	-5.937E-09	-5.937E-09
1.19999	6.164E-11	598.811	2.161E-06	2.161E-06	2.390E-06	2.390E-06	-3.187E-09	-3.187E-09
1.29999	2.531E-11	648.712	2.359E-06	2.359E-06	2.592E-06	2.592E-06	-1.309E-09	-1.309E-09
1.39999	1.331E-11	698.613	2.553E-06	2.553E-06	2.788E-06	2.788E-06	-6.881E-10	-6.881E-10
1.49999	8.210E-12	748.514	2.746E-06	2.746E-06	2.982E-06	2.982E-06	-4.245E-10	-4.245E-10
1.59999	5.510E-12	798.415	2.939E-06	2.939E-06	3.176E-06	3.176E-06	-2.849E-10	-2.849E-10
1.69999	3.707E-12	848.316	3.131E-06	3.131E-06	3.368E-06	3.368E-06	-1.917E-10	-1.917E-10
1.79999	2.610E-12	898.217	3.328E-06	3.328E-06	3.565E-06	3.565E-06	-1.353E-10	-1.353E-10
1.89999	1.847E-12	948.118	3.517E-06	3.517E-06	3.754E-06	3.754E-06	-9.547E-11	-9.547E-11
1.99999	1.317E-12	998.020	3.708E-06	3.708E-06	3.946E-06	3.946E-06	-6.810E-11	-6.810E-11

PROPAGATION FREQUENCY= 1.5503E 10 ϕ_0= 2.500 θ_D= 0. ρ_a= 9.385

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-9.095E-17
0.10000	6.937E-13	6.939E-13	-7.677E-24	-7.677E-24	-8.813E-14	-8.813E-14	-1.220E-16
0.20000	1.937E-12	1.937E-12	-1.337E-23	-1.337E-23	-2.416E-13	-2.416E-13	-1.744E-16
0.30000	4.103E-12	4.103E-12	-2.327E-23	-2.327E-23	-5.089E-13	-5.089E-13	-2.738E-16
0.40000	8.684E-12	8.684E-12	-4.240E-23	-4.240E-23	-9.856E-13	-9.856E-13	-4.627E-16
0.50000	1.719E-11	1.719E-11	-7.733E-23	-7.733E-23	-1.855E-12	-1.855E-12	-9.226E-16
0.60000	3.881E-11	3.880E-11	-1.583E-22	-1.583E-22	-3.513E-12	-3.513E-12	-2.144E-15
0.70000	1.095E-10	1.095E-10	-4.106E-22	-4.106E-22	-7.382E-12	-7.382E-12	-6.174E-15
0.80000	4.344E-10	4.344E-10	-1.583E-21	-1.583E-21	-1.977E-11	-1.977E-11	-2.679E-14
0.85000	1.108E-09	1.108E-09	-4.005E-21	-4.005E-21	-3.882E-11	-3.882E-11	-7.298E-14
0.90000	3.754E-09	3.754E-09	-1.470E-20	-1.470E-20	-9.782E-11	-9.782E-11	-2.799E-13
0.92500	8.208E-09	8.208E-09	-3.077E-20	-3.077E-20	-1.792E-10	-1.792E-10	-6.583E-13
0.95000	2.126E-08	2.126E-08	-6.901E-20	-6.901E-20	-3.480E-10	-3.480E-10	-1.826E-12
0.96250	3.672E-08	3.672E-08	-1.165E-19	-1.165E-19	-5.189E-10	-5.189E-10	-3.073E-12
0.97500	7.155E-08	7.155E-08	-1.784E-19	-1.784E-19	-7.932E-10	-7.932E-10	-5.206E-12
0.98125	1.050E-07	1.050E-07	-2.097E-19	-2.097E-19	-9.749E-10	-9.749E-10	-6.547E-12
0.98750	1.567E-07	1.567E-07	-2.471E-19	-2.471E-19	-1.188E-09	-1.188E-09	-7.639E-12
0.99375	2.333E-07	2.333E-07	-2.758E-19	-2.758E-19	-1.434E-09	-1.434E-09	-8.352E-12
1.00000	3.282E-07	3.282E-07	-2.839E-19	-2.839E-19	-1.697E-09	-1.697E-09	-8.557E-12
1.00625	4.180E-07	4.180E-07	-2.690E-19	-2.690E-19	-1.957E-09	-1.957E-09	-8.182E-12
1.01250	4.842E-07	4.842E-07	-2.353E-19	-2.353E-19	-2.194E-09	-2.194E-09	-7.354E-12
1.01875	5.272E-07	5.272E-07	-2.005E-19	-2.005E-19	-2.396E-09	-2.396E-09	-6.131E-12
1.02500	5.555E-07	5.555E-07	-1.685E-19	-1.685E-19	-2.569E-09	-2.569E-09	-4.819E-12
1.03749	5.859E-07	5.859E-07	-1.082E-19	-1.082E-19	-2.826E-09	-2.826E-09	-2.833E-12
1.04999	5.991E-07	5.991E-07	-6.331E-20	-6.331E-20	-2.984E-09	-2.984E-09	-1.696E-12
1.07499	6.028E-07	6.028E-07	-2.912E-20	-2.912E-20	-3.143E-09	-3.143E-09	-6.122E-13
1.09999	5.945E-07	5.945E-07	-1.392E-20	-1.392E-20	-3.220E-09	-3.220E-09	-2.632E-13
1.14999	5.707E-07	5.707E-07	-3.854E-21	-3.854E-21	-3.276E-09	-3.276E-09	-6.991E-14
1.19999	5.470E-07	5.470E-07	-1.536E-21	-1.536E-21	-3.294E-09	-3.294E-09	-2.593E-14
1.29999	5.048E-07	5.048E-07	-4.026E-22	-4.026E-22	-3.306E-09	-3.306E-09	-6.036E-15
1.39999	4.688E-07	4.688E-07	-1.559E-22	-1.559E-22	-3.310E-09	-3.310E-09	-2.109E-15
1.49999	4.377E-07	4.377E-07	-7.645E-23	-7.645E-23	-3.312E-09	-3.312E-09	-9.104E-16
1.59999	4.105E-07	4.105E-07	-4.192E-23	-4.192E-23	-3.312E-09	-3.312E-09	-4.583E-16
1.69999	3.865E-07	3.865E-07	-2.303E-23	-2.303E-23	-3.313E-09	-3.313E-09	-2.717E-16
1.79999	3.652E-07	3.652E-07	-1.323E-23	-1.323E-23	-3.313E-09	-3.313E-09	-1.734E-16
1.89999	3.461E-07	3.461E-07	-7.597E-24	-7.597E-24	-3.313E-09	-3.313E-09	-1.215E-16
1.99999	3.289E-07	3.289E-07	-4.357E-24	-4.357E-24	-3.313E-09	-3.313E-09	-9.075E-17

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_0= 3.000 θ_D= 0. ρ_a=11.261

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	3.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	3.0000	0.10000	193.676	2.868E-07	9.998E-01	-1.859E-12	-1.859E-12	1.859E-12
0.20000	3.0000	0.20000	172.201	3.669E-07	9.998E-01	-2.633E-12	-2.633E-12	2.633E-12
0.30000	3.0000	0.30000	150.738	6.403E-07	9.997E-01	-3.729E-12	-3.729E-12	3.729E-12
0.40000	3.0000	0.40000	129.292	1.121E-06	9.995E-01	-5.546E-12	-5.546E-12	5.546E-12
0.50000	3.0000	0.50000	107.874	1.467E-06	9.993E-01	-8.259E-12	-8.259E-12	8.259E-12
0.60000	3.0000	0.60000	86.505	1.494E-06	9.989E-01	-1.340E-11	-1.340E-11	1.340E-11
0.70000	3.0000	0.70000	65.232	6.457E-06	9.980E-01	-2.547E-11	-2.547E-11	2.547E-11
0.80000	3.0000	0.80000	44.196	2.156E-05	9.959E-01	-6.178E-11	-6.178E-11	6.178E-11
0.85000	3.0000	0.85000	33.904	4.845E-05	9.940E-01	-1.141E-10	-1.141E-10	1.141E-10
0.90000	3.0000	0.90000	24.024	1.571E-04	9.928E-01	-2.512E-10	-2.512E-10	2.512E-10
0.92500	3.0000	0.92500	19.437	3.185E-04	9.953E-01	-4.086E-10	-4.086E-10	4.086E-10
0.95000	3.0000	0.95000	15.372	7.325E-04	1.004E 00	-6.609E-10	-6.609E-10	6.609E-10
0.96250	3.0000	0.96250	13.683	1.12CE-03	1.011E 00	-8.939E-10	-8.939E-10	8.939E-10
0.97500	3.0001	0.97500	12.355	1.721E-03	1.014E 00	-1.134E-09	-1.134E-09	1.134E-09
0.98125	3.0001	0.98125	11.866	2.117E-03	1.012E 00	-1.237E-09	-1.237E-09	1.237E-09
0.98750	3.0001	0.98750	11.513	2.571E-03	1.007E 00	-1.318E-09	-1.318E-09	1.318E-09
0.99375	3.0001	0.99375	11.310	3.073E-03	1.002E 00	-1.367E-09	-1.367E-09	1.367E-09
1.00000	3.0001	1.00000	11.265	3.598E-03	9.999E-01	-1.378E-09	-1.378E-09	1.378E-09
1.00625	3.0001	1.00625	11.380	4.117E-03	1.003E 00	-1.350E-09	-1.350E-09	1.350E-09
1.01250	3.0002	1.01250	11.650	4.602E-03	1.010E 00	-1.286E-09	-1.286E-09	1.286E-09
1.01875	3.0002	1.01875	12.064	5.033E-03	1.015E 00	-1.194E-09	-1.194E-09	1.194E-09
1.02500	3.0002	1.02500	12.610	5.398E-03	1.017E 00	-1.083E-09	-1.083E-09	1.083E-09
1.03750	3.0003	1.03750	14.027	5.944E-03	1.014E 00	-8.406E-10	-8.406E-10	8.406E-10
1.05000	3.0004	1.05000	15.779	6.299E-03	1.007E 00	-6.231E-10	-6.231E-10	6.231E-10
1.07500	3.0005	1.07500	19.920	6.654E-03	9.971E-01	-3.867E-10	-3.867E-10	3.867E-10
1.09999	3.0006	1.10000	24.546	6.810E-03	9.935E-01	-2.398E-10	-2.398E-10	2.398E-10
1.14999	3.0009	1.15000	34.461	6.914E-03	9.932E-01	-1.100E-10	-1.100E-10	1.100E-10
1.19999	3.0012	1.20000	44.766	6.950E-03	9.942E-01	-6.003E-11	-6.003E-11	6.003E-11
1.29999	3.0016	1.30000	65.813	6.969E-03	9.956E-01	-2.500E-11	-2.500E-11	2.500E-11
1.39999	3.0020	1.40000	87.090	6.977E-03	9.960E-01	-1.320E-11	-1.320E-11	1.320E-11
1.49999	3.0023	1.50000	108.461	6.984E-03	9.961E-01	-8.169E-12	-8.169E-12	8.169E-12
1.59999	3.0026	1.60000	129.879	6.984E-03	9.960E-01	-5.486E-12	-5.486E-12	5.486E-12
1.69999	3.0029	1.70000	151.326	6.989E-03	9.959E-01	-3.694E-12	-3.694E-12	3.694E-12
1.79999	3.0031	1.80000	172.789	6.992E-03	9.957E-01	-2.608E-12	-2.608E-12	2.608E-12
1.89999	3.0033	1.90000	194.265	6.994E-03	9.956E-01	-1.841E-12	-1.841E-12	1.841E-12
1.99999	3.0035	2.00000	215.748	6.994E-03	9.954E-01	-1.313E-12	-1.313E-12	1.313E-12

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_0= 3.000 θ_D= 0. ρ_a= 11.261

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.859E-12	49.901	-7.857E-11	-7.857E-11	7.857E-11	7.857E-11	-9.609E-11	-9.609E-11
0.20000	2.633E-12	99.802	-1.895E-10	-1.895E-10	1.895E-10	1.895E-10	-1.361E-10	-1.361E-10
0.30000	3.729E-12	149.703	-3.467E-10	-3.467E-10	3.467E-10	3.467E-10	-1.928E-10	-1.928E-10
0.40000	5.546E-12	199.605	-5.749E-10	-5.749E-10	5.749E-10	5.749E-10	-2.868E-10	-2.868E-10
0.50000	8.259E-12	249.506	-9.149E-10	-9.149E-10	9.149E-10	9.149E-10	-4.270E-10	-4.270E-10
0.60000	1.340E-11	299.407	-1.437E-09	-1.437E-09	1.437E-09	1.437E-09	-6.928E-10	-6.928E-10
0.70000	2.547E-11	349.308	-2.360E-09	-2.360E-09	2.361E-09	2.361E-09	-1.317E-09	-1.317E-09
0.80000	6.178E-11	399.209	-4.330E-09	-4.330E-09	4.344E-09	4.344E-09	-3.194E-09	-3.194E-09
0.85000	1.141E-10	424.160	-6.390E-09	-6.390E-09	6.466E-09	6.466E-09	-5.899E-09	-5.899E-09
0.90000	2.512E-10	449.110	-1.025E-08	-1.025E-08	1.109E-08	1.109E-08	-1.299E-08	-1.299E-08
0.92500	4.086E-10	461.585	-1.289E-08	-1.289E-08	1.645E-08	1.645E-08	-2.112E-08	-2.112E-08
0.95000	6.609E-10	474.060	-1.152E-08	-1.152E-08	3.089E-08	3.089E-08	-3.417E-08	-3.417E-08
0.96250	8.939E-10	480.298	-3.094E-09	-3.094E-09	4.899E-08	4.899E-08	-4.621E-08	-4.621E-08
0.97500	1.134E-09	486.535	2.251E-08	2.251E-08	8.726E-08	8.726E-08	-5.861E-08	-5.861E-08
0.98125	1.237E-09	489.654	4.744E-08	4.744E-08	1.196E-07	1.196E-07	-6.398E-08	-6.398E-08
0.98750	1.318E-09	492.773	8.393E-08	8.393E-08	1.641E-07	1.641E-07	-6.814E-08	-6.815E-08
0.99375	1.367E-09	495.891	1.340E-07	1.340E-07	2.225E-07	2.225E-07	-7.066E-08	-7.066E-08
1.00000	1.378E-09	499.010	1.974E-07	1.974E-07	2.945E-07	2.945E-07	-7.124E-08	-7.124E-08
1.00625	1.350E-09	502.129	2.712E-07	2.712E-07	3.769E-07	3.769E-07	-6.979E-08	-6.979E-08
1.01250	1.286E-09	505.248	3.505E-07	3.505E-07	4.643E-07	4.643E-07	-6.650E-08	-6.650E-08
1.01875	1.194E-09	508.365	4.295E-07	4.295E-07	5.511E-07	5.511E-07	-6.174E-08	-6.174E-08
1.02500	1.083E-09	511.485	5.030E-07	5.030E-07	6.318E-07	6.318E-07	-5.600E-08	-5.600E-08
1.03750	8.406E-10	517.722	6.261E-07	6.261E-07	7.669E-07	7.669E-07	-4.346E-08	-4.346E-08
1.05000	6.231E-10	523.960	7.167E-07	7.167E-07	8.665E-07	8.665E-07	-3.221E-08	-3.221E-08
1.07500	3.867E-10	536.435	8.234E-07	8.234E-07	9.856E-07	9.856E-07	-1.999E-08	-1.999E-08
1.09999	2.398E-10	548.910	8.843E-07	8.843E-07	1.054E-06	1.054E-06	-1.240E-08	-1.240E-08
1.14999	1.100E-10	573.861	9.556E-07	9.555E-07	1.133E-06	1.133E-06	-5.686E-09	-5.686E-09
1.19999	6.003E-11	598.811	1.010E-06	1.010E-06	1.192E-06	1.192E-06	-3.104E-09	-3.104E-09
1.29999	2.500E-11	648.712	1.107E-06	1.107E-06	1.292E-06	1.292E-06	-1.292E-09	-1.292E-09
1.39999	1.320E-11	698.613	1.201E-06	1.201E-06	1.389E-06	1.389E-06	-6.827E-10	-6.827E-10
1.49999	8.169E-12	748.514	1.296E-06	1.296E-06	1.484E-06	1.484E-06	-4.224E-10	-4.224E-10
1.59999	5.486E-12	798.416	1.388E-06	1.388E-06	1.577E-06	1.577E-06	-2.836E-10	-2.836E-10
1.69999	3.694E-12	848.317	1.483E-06	1.483E-06	1.673E-06	1.673E-06	-1.910E-10	-1.910E-10
1.79999	2.608E-12	898.218	1.577E-06	1.577E-06	1.767E-06	1.767E-06	-1.348E-10	-1.348E-10
1.89999	1.841E-12	948.119	1.671E-06	1.671E-06	1.861E-06	1.861E-06	-9.518E-11	-9.518E-11
1.99999	1.313E-12	998.020	1.764E-06	1.764E-06	1.954E-06	1.954E-06	-6.791E-11	-6.791E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 3.000 θ_D= 0. ρ_o=11.261

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-1.309E-16
0.10000	8.318E-13	8.325E-13	-7.675E-24	-7.675E-24	-8.811E-14	-8.811E-14	-1.756E-16
0.20000	2.323E-12	2.323E-12	-1.336E-23	-1.336E-23	-2.416E-13	-2.416E-13	-2.509E-16
0.30000	4.920E-12	4.920E-12	-2.325E-23	-2.325E-23	-5.086E-13	-5.086E-13	-3.938E-16
0.40000	1.041E-11	1.041E-11	-4.233E-23	-4.233E-23	-9.847E-13	-9.847E-13	-6.649E-16
0.50000	2.059E-11	2.059E-11	-7.713E-23	-7.713E-23	-1.853E-12	-1.853E-12	-1.324E-15
0.60000	4.641E-11	4.641E-11	-1.575E-22	-1.575E-22	-3.504E-12	-3.504E-12	-3.068E-15
0.70000	1.305E-10	1.305E-10	-4.065E-22	-4.065E-22	-7.342E-12	-7.342E-12	-8.778E-15
0.80000	5.093E-10	5.093E-10	-1.542E-21	-1.542E-21	-1.949E-11	-1.949E-11	-3.742E-14
0.85000	1.277E-09	1.277E-09	-3.818E-21	-3.818E-21	-3.779E-11	-3.779E-11	-9.944E-14
0.90000	4.158E-09	4.158E-09	-1.322E-20	-1.322E-20	-9.199E-11	-9.199E-11	-3.568E-13
0.92500	8.674E-09	8.674E-09	-2.656E-20	-2.656E-20	-1.634E-10	-1.634E-10	-7.824E-13
0.95000	2.046E-08	2.046E-08	-4.872E-20	-4.872E-20	-3.029E-10	-3.029E-10	-1.917E-12
0.96250	3.351E-08	3.351E-08	-7.800E-20	-7.800E-20	-4.200E-10	-4.200E-10	-2.93[illegible]
0.97500	5.802E-08	5.802E-08	-1.130E-19	-1.130E-19	-5.982E-10	-5.982E-10	-4.275E-12
0.98125	7.889E-08	7.889E-08	-1.295E-19	-1.295E-19	-7.118E-10	-7.118E-10	-4.992E-12
0.98750	1.076E-07	1.076E-07	-1.429E-19	-1.429E-19	-8.394E-10	-8.394E-10	-5.618E-12
0.99375	1.440E-07	1.440E-07	-1.512E-19	-1.512E-19	-9.774E-10	-9.774E-10	-6.028E-12
1.00000	1.856E-07	1.856E-07	-1.531E-19	-1.531E-19	-1.120E-09	-1.120E-09	-6.124E-12
1.00625	2.252E-07	2.252E-07	-1.483E-19	-1.483E-19	-1.262E-09	-1.262E-09	-5.883E-12
1.01250	2.572E-07	2.572E-07	-1.375E-19	-1.375E-19	-1.396E-09	-1.396E-09	-5.364E-12
1.01875	2.812E-07	2.812E-07	-1.225E-19	-1.225E-19	-1.517E-09	-1.517E-09	-4.683E-12
1.02500	2.983E-07	2.983E-07	-1.052E-19	-1.052E-19	-1.624E-09	-1.624E-09	-3.961E-12
1.03750	3.185E-07	3.185E-07	-7.088E-20	-7.088E-20	-1.788E-09	-1.788E-09	-2.694E-12
1.05000	3.294E-07	3.294E-07	-4.644E-20	-4.644E-20	-1.894E-09	-1.894E-09	-1.796E-12
1.07500	3.359E-07	3.359E-07	-2.463E-20	-2.463E-20	-2.025E-09	-2.025E-09	-7.139E-13
1.09999	3.337E-07	3.337E-07	-1.226E-20	-1.226E-20	-2.091E-09	-2.091E-09	-3.289E-13
1.14999	3.220E-07	3.220E-07	-3.616E-21	-3.616E-21	-2.141E-09	-2.141E-09	-9.367E-14
1.19999	3.090E-07	3.090E-07	-1.478E-21	-1.478E-21	-2.159E-09	-2.159E-09	-3.571E-14
1.29999	2.852E-07	2.852E-07	-3.953E-22	-3.953E-22	-2.170E-09	-2.170E-09	-8.495E-15
1.39999	2.648E-07	2.648E-07	-1.542E-22	-1.542E-22	-2.174E-09	-2.174E-09	-2.995E-15
1.49999	2.472E-07	2.472E-07	-7.588E-23	-7.588E-23	-2.176E-09	-2.176E-09	-1.298E-15
1.59999	2.318E-07	2.318E-07	-4.164E-23	-4.164E-23	-2.177E-09	-2.177E-09	-6.554E-16
1.69999	2.182E-07	2.182E-07	-2.290E-23	-2.290E-23	-2.177E-09	-2.177E-09	-3.891E-16
1.79999	2.061E-07	2.061E-07	-1.316E-23	-1.316E-23	-2.177E-09	-2.177E-09	-2.487E-16
1.89999	1.953E-07	1.953E-07	-7.560E-24	-7.560E-24	-2.178E-09	-2.178E-09	-1.745E-16
1.99999	1.855E-07	1.855E-07	-4.337E-24	-4.337E-24	-2.178E-09	-2.178E-09	-1.304E-16

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 4.000 θ_D= 0. ρ_o= 15.009

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	4.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	4.0000	0.10000	193.701	2.735E-07	9.997E-01	-1.858E-12	-1.858E-12	1.858E-12
0.20000	4.0000	0.20000	172.258	5.603E-07	9.996E-01	-2.630E-12	-2.630E-12	2.630E-12
0.30000	4.0000	0.30000	150.836	9.738E-07	9.995E-01	-3.723E-12	-3.723E-12	3.723E-12
0.40000	4.0000	0.40000	129.444	1.547E-06	9.992E-01	-5.531E-12	-5.531E-12	5.531E-12
0.50000	4.0000	0.50000	108.102	1.974E-06	9.988E-01	-8.224E-12	-8.224E-12	8.224E-12
0.60000	4.0000	0.60000	86.846	2.615E-06	9.981E-01	-1.329E-11	-1.329E-11	1.329E-11
0.70000	4.0000	0.70000	65.759	6.510E-06	9.967E-01	-2.504E-11	-2.504E-11	2.504E-11
0.80000	4.0000	0.80000	45.080	2.860E-05	9.942E-01	-5.909E-11	-5.910E-11	5.909E-11
0.85000	4.0000	0.85000	35.119	6.318E-05	9.928E-01	-1.053E-10	-1.053E-10	1.053E-10
0.90000	4.0000	0.90000	25.806	1.904E-04	9.951E-01	-2.144E-10	-2.144E-10	2.144E-10
0.92500	4.0000	0.92500	21.657	3.701E-04	1.001E 00	-3.174E-10	-3.174E-10	3.174E-10
0.95000	4.0000	0.95000	18.166	6.770E-04	1.010E 00	-4.720E-10	-4.720E-10	4.720E-10
0.96250	4.0000	0.96250	16.798	9.204E-04	1.013E 00	-5.514E-10	-5.514E-10	5.514E-10
0.97500	4.0001	0.97500	15.775	1.231E-03	1.011E 00	-6.235E-10	-6.235E-10	6.235E-10
0.98125	4.0001	0.98125	15.414	1.411E-03	1.008E 00	-6.562E-10	-6.562E-10	6.562E-10
0.98750	4.0001	0.98750	15.164	1.610E-03	1.004E 00	-6.858E-10	-6.858E-10	6.858E-10
0.99375	4.0001	0.99375	15.031	1.834E-03	1.001E 00	-7.023E-10	-7.023E-10	7.023E-10
1.00000	4.0001	1.00000	15.018	2.060E-03	9.999E-01	-7.040E-10	-7.040E-10	7.040E-10
1.00625	4.0001	1.00625	15.125	2.282E-03	1.002E 00	-6.907E-10	-6.907E-10	6.907E-10
1.01250	4.0001	1.01250	15.349	2.495E-03	1.007E 00	-6.635E-10	-6.635E-10	6.635E-10
1.01875	4.0001	1.01875	15.686	2.693E-03	1.011E 00	-6.314E-10	-6.314E-10	6.314E-10
1.02500	4.0002	1.02500	16.128	2.870E-03	1.015E 00	-5.951E-10	-5.951E-10	5.951E-10
1.03750	4.0002	1.03750	17.295	3.168E-03	1.017E 00	-5.212E-10	-5.212E-10	5.212E-10
1.05000	4.0002	1.05000	18.777	3.381E-03	1.014E 00	-4.404E-10	-4.404E-10	4.404E-10
1.07500	4.0003	1.07500	22.425	3.642E-03	1.004E 00	-2.909E-10	-2.909E-10	2.909E-10
1.10000	4.0004	1.10000	26.665	3.779E-03	9.979E-01	-1.986E-10	-1.986E-10	1.986E-10
1.15000	4.0005	1.15000	36.069	3.890E-03	9.938E-01	-9.891E-11	-9.891E-11	9.891E-11
1.20000	4.0007	1.20000	46.069	3.927E-03	9.940E-01	-5.622E-11	-5.622E-11	5.622E-11
1.30000	4.0009	1.30000	66.780	3.946E-03	9.955E-01	-2.422E-11	-2.422E-11	2.422E-11
1.40000	4.0011	1.40000	87.879	3.958E-03	9.966E-01	-1.295E-11	-1.295E-11	1.295E-11
1.50000	4.0013	1.50000	109.141	3.965E-03	9.971E-01	-8.067E-12	-8.067E-12	8.067E-12
1.60000	4.0015	1.60000	130.486	3.965E-03	9.975E-01	-5.424E-12	-5.424E-12	5.424E-12
1.70000	4.0016	1.70000	151.879	3.967E-03	9.976E-01	-3.661E-12	-3.661E-12	3.661E-12
1.80000	4.0018	1.80000	173.302	3.967E-03	9.977E-01	-2.586E-12	-2.586E-12	2.586E-12
1.90000	4.0019	1.90000	194.746	3.967E-03	9.978E-01	-1.827E-12	-1.827E-12	1.827E-12
2.00000	4.0020	2.00000	216.205	3.967E-03	9.978E-01	-1.304E-12	-1.304E-12	1.304E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 4.000 θ_D= 0. ρ_a= 15.009

z	$_x\mu'-1$	T_0	$_oT_1-T_0$	$_xT_1-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.858E-12	99.901	-7.855E-11	-7.855E-11	7.855E-11	7.855E-11	-9.605E-11	-9.605E-11
0.20000	2.630E-12	99.802	-1.894E-10	-1.894E-10	1.894E-10	1.894E-10	-1.360E-10	-1.360E-10
0.30000	3.723E-12	149.703	-3.464E-10	-3.464E-10	3.464E-10	3.464E-10	-1.925E-10	-1.925E-10
0.40000	5.531E-12	199.605	-5.741E-10	-5.741E-10	5.741E-10	5.741E-10	-2.859E-10	-2.859E-10
0.50000	8.224E-12	249.506	-9.128E-10	-9.128E-10	9.129E-10	9.129E-10	-4.252E-10	-4.252E-10
0.60000	1.329E-11	299.407	-1.432E-09	-1.432E-09	1.432E-09	1.432E-09	-6.869E-10	-6.869E-10
0.70000	2.504E-11	349.308	-2.342E-09	-2.342E-09	2.343E-09	2.343E-09	-1.295E-09	-1.295E-09
0.80000	5.910E-11	399.209	-4.246E-09	-4.246E-09	4.271E-09	4.271E-09	-3.055E-09	-3.055E-09
0.85000	1.053E-10	424.160	-6.155E-09	-6.155E-09	6.284E-09	6.284E-09	-5.445E-09	-5.445E-09
0.90000	2.144E-10	449.110	-9.351E-09	-9.351E-09	1.059E-08	1.059E-08	-1.108E-08	-1.108E-08
0.92500	3.174E-10	461.585	-1.082E-08	-1.082E-08	1.563E-08	1.563E-08	-1.641E-08	-1.641E-08
0.95000	4.720E-10	474.060	-9.851E-09	-9.851E-09	2.640E-08	2.640E-08	-2.441E-08	-2.441E-08
0.96250	5.514E-10	480.298	-5.829E-09	-5.829E-09	3.681E-08	3.681E-08	-2.851E-08	-2.851E-08
0.97500	6.235E-10	486.535	3.095E-09	3.094E-09	5.307E-08	5.307E-08	-3.223E-08	-3.223E-08
0.98125	6.562E-10	489.654	1.015E-08	1.015E-08	6.412E-08	6.412E-08	-3.393E-08	-3.393E-08
0.98750	6.858E-10	492.773	1.957E-08	1.957E-08	7.773E-08	7.773E-08	-3.546E-08	-3.546E-08
0.99375	7.023E-10	495.892	3.226E-08	3.226E-08	9.475E-08	9.475E-08	-3.631E-08	-3.631E-08
1.00000	7.040E-10	499.011	4.720E-08	4.720E-08	1.141E-07	1.141E-07	-3.640E-08	-3.640E-08
1.00625	6.907E-10	502.129	6.396E-08	6.396E-08	1.352E-07	1.352E-07	-3.571E-08	-3.571E-08
1.01250	6.635E-10	505.248	8.200E-08	8.200E-08	1.575E-07	1.575E-07	-3.431E-08	-3.431E-08
1.01875	6.314E-10	508.367	1.006E-07	1.006E-07	1.801E-07	1.801E-07	-3.264E-08	-3.264E-08
1.02500	5.951E-10	511.486	1.188E-07	1.188E-07	2.021E-07	2.021E-07	-3.077E-08	-3.077E-08
1.03750	5.212E-10	517.723	1.526E-07	1.526E-07	2.429E-07	2.429E-07	-2.695E-08	-2.695E-08
1.05000	4.404E-10	523.961	1.799E-07	1.799E-07	2.762E-07	2.762E-07	-2.277E-08	-2.277E-08
1.07500	2.909E-10	536.436	2.183E-07	2.183E-07	3.236E-07	3.236E-07	-1.504E-08	-1.504E-08
1.10000	1.986E-10	548.911	2.427E-07	2.427E-07	3.542E-07	3.542E-07	-1.027E-08	-1.027E-08
1.15000	9.891E-11	573.861	2.714E-07	2.714E-07	3.898E-07	3.898E-07	-5.114E-09	-5.114E-09
1.20000	5.622E-11	598.812	2.907E-07	2.907E-07	4.127E-07	4.127E-07	-2.907E-09	-2.907E-09
1.30000	2.422E-11	648.713	3.218E-07	3.218E-07	4.475E-07	4.475E-07	-1.252E-09	-1.252E-09
1.40000	1.295E-11	698.614	3.530E-07	3.530E-07	4.805E-07	4.805E-07	-6.694E-10	-6.694E-10
1.50000	8.067E-12	748.515	3.838E-07	3.838E-07	5.123E-07	5.123E-07	-4.171E-10	-4.171E-10
1.60000	5.424E-12	798.416	4.133E-07	4.133E-07	5.425E-07	5.425E-07	-2.805E-10	-2.805E-10
1.70000	3.864E-12	848.318	4.443E-07	4.443E-07	5.739E-07	5.739E-07	-1.893E-10	-1.893E-10
1.80000	2.586E-12	898.219	4.741E-07	4.741E-07	6.040E-07	6.040E-07	-1.337E-10	-1.337E-10
1.90000	1.827E-12	948.120	5.039E-07	5.039E-07	6.341E-07	6.341E-07	-9.444E-11	-9.444E-11
2.00000	1.304E-12	998.021	5.328E-07	5.328E-07	6.631E-07	6.631E-07	-6.743E-11	-6.743E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 4.000 θ_D= 0. ρ_a= 15.009

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-2.326E-16
0.10000	1.109E-12	1.109E-12	-7.670E-24	-7.670E-24	-8.808E-14	-8.808E-14	-3.118E-16
0.20000	3.093E-12	3.093E-12	-1.334E-23	-1.334E-23	-2.414E-13	-2.414E-13	-4.452E-16
0.30000	6.547E-12	6.547E-12	-2.319E-23	-2.319E-23	-5.079E-13	-5.079E-13	-6.979E-16
0.40000	1.383E-11	1.383E-11	-4.215E-23	-4.215E-23	-9.823E-13	-9.823E-13	-1.176E-15
0.50000	2.731E-11	2.731E-11	-7.664E-23	-7.664E-23	-1.845E-12	-1.845E-12	-2.332E-15
0.60000	6.129E-11	6.129E-11	-1.556E-22	-1.556E-22	-3.481E-12	-3.481E-12	-5.369E-15
0.70000	1.699E-10	1.699E-10	-3.963E-22	-3.963E-22	-7.241E-12	-7.241E-12	-1.512E-14
0.80000	6.386E-10	6.386E-10	-1.444E-21	-1.444E-21	-1.881E-11	-1.881E-11	-6.172E-14
0.85000	1.528E-09	1.528E-09	-3.391E-21	-3.391E-21	-3.544E-11	-3.544E-11	-1.550E-13
0.90000	4.523E-09	4.523E-09	-1.022E-20	-1.022E-20	-7.981E-11	-7.981E-11	-4.836E-13
0.92500	8.667E-09	8.667E-09	-1.879E-20	-1.879E-20	-1.325E-10	-1.325E-10	-9.349E-13
0.95000	1.773E-08	1.773E-08	-3.237E-20	-3.237E-20	-2.269E-10	-2.269E-10	-1.805E-12
0.96250	2.670E-08	2.670E-08	-4.006E-20	-4.006E-20	-2.947E-10	-2.947E-10	-2.471E-12
0.97500	4.034E-08	4.034E-08	-4.646E-20	-4.646E-20	-3.761E-10	-3.761E-10	-3.188E-12
0.98125	4.977E-08	4.977E-08	-4.826E-20	-4.826E-20	-4.204E-10	-4.204E-10	-3.480E-12
0.98750	6.103E-08	6.103E-08	-5.161E-20	-5.161E-20	-4.668E-10	-4.668E-10	-3.673E-12
0.99375	7.412E-08	7.412E-08	-5.356E-20	-5.356E-20	-5.161E-10	-5.161E-10	-3.781E-12
1.00000	8.800E-08	8.800E-08	-5.376E-20	-5.376E-20	-5.665E-10	-5.665E-10	-3.792E-12
1.00625	1.013E-07	1.013E-07	-5.218E-20	-5.218E-20	-6.161E-10	-6.161E-10	-3.705E-12
1.01250	1.129E-07	1.129E-07	-4.902E-20	-4.902E-20	-6.636E-10	-6.636E-10	-3.531E-12
1.01875	1.222E-07	1.222E-07	-4.690E-20	-4.690E-20	-7.083E-10	-7.083E-10	-3.257E-12
1.02500	1.298E-07	1.298E-07	-4.447E-20	-4.447E-20	-7.511E-10	-7.511E-10	-2.925E-12
1.03750	1.406E-07	1.406E-07	-3.708E-20	-3.708E-20	-8.275E-10	-8.275E-10	-2.197E-12
1.05000	1.476E-07	1.476E-07	-2.944E-20	-2.944E-20	-8.897E-10	-8.897E-10	-1.588E-12
1.07500	1.538E-07	1.538E-07	-1.667E-20	-1.667E-20	-9.745E-10	-9.745E-10	-8.285E-13
1.10000	1.551E-07	1.551E-07	-9.033E-21	-9.033E-21	-1.021E-09	-1.021E-09	-4.293E-13
1.15000	1.517E-07	1.517E-07	-3.091E-21	-3.091E-21	-1.060E-09	-1.060E-09	-1.407E-13
1.20000	1.461E-07	1.461E-07	-1.341E-21	-1.341E-21	-1.076E-09	-1.076E-09	-5.703E-14
1.30000	1.351E-07	1.351E-07	-3.773E-22	-3.773E-22	-1.086E-09	-1.086E-09	-1.427E-14
1.40000	1.255E-07	1.255E-07	-1.498E-22	-1.498E-22	-1.090E-09	-1.090E-09	-5.141E-15
1.50000	1.171E-07	1.171E-07	-7.445E-23	-7.445E-23	-1.092E-09	-1.092E-09	-2.249E-15
1.60000	1.097E-07	1.097E-07	-4.094E-23	-4.094E-23	-1.092E-09	-1.092E-09	-1.145E-15
1.70000	1.033E-07	1.033E-07	-2.258E-23	-2.258E-23	-1.093E-09	-1.093E-09	-6.824E-16
1.80000	9.753E-08	9.753E-08	-1.299E-23	-1.299E-23	-1.093E-09	-1.093E-09	-4.377E-16
1.90000	9.239E-08	9.239E-08	-7.466E-24	-7.466E-24	-1.093E-09	-1.093E-09	-3.078E-16
2.00000	8.777E-08	8.777E-08	-4.286E-24	-4.286E-24	-1.093E-09	-1.093E-09	-2.303E-16

PROPAGATION FREQUENCY= 1.550[illegible]E 10 ϕ_0= 5.000 θ_D= 0. ρ_a=18.752

z	ϕ	z_f	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	5.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	5.0000	0.10000	193.734	5.433E-07	9.996E-01	-1.857E-12	-1.857E-12	1.857E-12
0.20000	5.0000	0.20000	172.332	8.138E-07	9.995E-01	-2.627E-12	-2.627E-12	2.627E-12
0.30000	5.0000	0.30000	150.962	1.147E-06	9.992E-01	-3.716E-12	-3.716E-12	3.716E-12
0.40000	5.0000	0.40000	129.640	1.841E-06	9.989E-01	-5.510E-12	-5.510E-12	5.510E-12
0.50000	5.0000	0.50000	108.395	2.241E-06	9.984E-01	-8.179E-12	-8.179E-12	8.179E-12
0.60000	5.0000	0.60000	87.283	2.241E-06	9.974E-01	-1.314E-11	-1.314E-11	1.314E-11
0.70000	5.0000	0.70000	66.431	4.498E-06	9.958E-01	-2.450E-11	-2.450E-11	2.450E-11
0.80000	5.0000	0.80000	46.191	3.586E-05	9.934E-01	-5.588E-11	-5.588E-11	5.588E-11
0.85000	5.0000	0.85000	36.621	7.620E-05	9.933E-01	-9.538E-11	-9.538E-11	9.538E-11
0.90000	5.0000	0.90000	27.929	2.186E-04	9.986E-01	-1.775E-10	-1.775E-10	1.775E-10
0.92500	5.0000	0.92500	24.214	3.458E-04	1.005E 00	-2.470E-10	-2.470E-10	2.470E-10
0.95000	5.0000	0.95000	21.224	5.661E-04	1.011E 00	-3.334E-10	-3.334E-10	3.334E-10
0.96250	5.0000	0.96250	20.105	7.206E-04	1.011E 00	-3.787E-10	-3.787E-10	3.787E-10
0.97500	5.0000	0.97500	19.299	9.067E-04	1.007E 00	-4.150E-10	-4.150E-10	4.150E-10
0.98125	5.0001	0.98125	19.026	1.010E-03	1.004E 00	-4.281E-10	-4.281E-10	4.281E-10
0.98750	5.0001	0.98750	18.846	1.121E-03	1.002E 00	-4.369E-10	-4.369E-10	4.369E-10
0.99375	5.0001	0.99375	18.760	1.236E-03	1.000E-00	-4.412E-10	-4.412E-10	4.412E-10
1.00000	5.0001	1.00000	18.770	1.354E-03	9.999E-01	-4.407E-10	-4.407E-10	4.407E-10
1.00625	5.0001	1.00625	18.877	1.475E-03	1.002E 00	-4.354E-10	-4.354E-10	4.354E-10
1.01250	5.0001	1.01250	19.078	1.589E-03	1.005E 00	-4.256E-10	-4.256E-10	4.256E-10
1.01875	5.0001	1.01875	19.370	1.697E-03	1.008E 00	-4.116E-10	-4.116E-10	4.116E-10
1.02500	5.0001	1.02500	19.750	1.795E-03	1.012E 00	-3.942E-10	-3.942E-10	3.942E-10
1.03750	5.0001	1.03750	20.752	1.964E-03	1.016E 00	-3.518E-10	-3.518E-10	3.518E-10
1.05000	5.0002	1.05000	22.038	2.099E-03	1.016E 00	-3.040E-10	-3.040E-10	3.040E-10
1.07500	5.0002	1.07500	25.282	2.199E-03	1.010E 00	-2.246E-10	-2.246E-10	2.246E-10
1.10000	5.0002	1.10000	29.163	2.329E-03	1.003E 00	-1.590E-10	-1.590E-10	1.590E-10
1.15000	5.0003	1.15000	38.037	2.430E-03	9.958E-01	-8.687E-11	-8.687E-11	8.687E-11
1.20000	5.0004	1.20000	47.692	2.551E-03	9.943E-01	-5.181E-11	-5.181E-11	5.181E-11
1.30000	5.0006	1.30000	68.003	2.563E-03	9.952E-01	-2.328E-11	-2.328E-11	2.328E-11
1.40000	5.0007	1.40000	88.883	2.575E-03	9.963E-01	-1.263E-11	-1.263E-11	1.263E-11
1.50000	5.0009	1.50000	110.208	2.580E-03	9.971E-01	-7.938E-12	-7.938E-12	7.938E-12
1.60000	5.0010	1.60000	131.261	2.582E-03	9.976E-01	-5.347E-12	-5.347E-12	5.347E-12
1.70000	5.0011	1.70000	152.587	2.585E-03	9.979E-01	-3.619E-12	-3.619E-12	3.619E-12
1.80000	5.0012	1.80000	173.960	2.585E-03	9.981E-01	-2.559E-12	-2.559E-12	2.559E-12
1.90000	5.0012	1.90000	195.364	2.585E-03	9.982E-01	-1.808E-12	-1.808E-12	1.808E-12
2.00000	5.0013	2.00000	216.790	2.585E-03	9.983E-01	-1.292E-12	-1.292E-12	1.292E-12

PROPAGATION FREQUENCY= 1.550[illegible]E 10 ϕ_0= 5.000 θ_D= 0. ρ_a= 18.752

z	$_x\mu'$-1.0	T_0	$_0T_1$-T_0	$_xT_1$-T_0	$_0T_g$-T_0	$_xT_g$-T_0	$_0D_z$-D_0	$_xD_z$-D_0
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.857E-12	49.901	-7.853E-11	-7.853E-11	7.853E-11	7.853E-11	-9.600E-11	-9.600E-11
0.20000	2.627E-12	99.802	-1.893E-10	-1.893E-10	1.893E-10	1.893E-10	-1.358E-10	-1.358E-10
0.30000	3.716E-12	149.703	-3.460E-10	-3.460E-10	3.460E-10	3.460E-10	-1.921E-10	-1.921E-10
0.40000	5.510E-12	199.605	-5.731E-10	-5.731E-10	5.731E-10	5.731E-10	-2.849E-10	-2.849E-10
0.50000	8.179E-12	249.506	-9.102E-10	-9.102E-10	9.104E-10	9.104E-10	-4.229E-10	-4.229E-10
0.60000	1.314E-11	299.407	-1.425E-09	-1.425E-09	1.425E-09	1.425E-09	-6.794E-10	-6.794E-10
0.70000	2.450E-11	349.308	-2.319E-09	-2.319E-09	2.321E-09	2.321E-09	-1.267E-09	-1.267E-09
0.80000	5.588E-11	399.209	-4.144E-09	-4.144E-09	4.183E-09	4.183E-09	-2.889E-09	-2.889E-09
0.85000	9.538E-11	424.160	-5.886E-09	-5.886E-09	6.074E-09	6.074E-09	-4.931E-09	-4.931E-09
0.90000	1.775E-10	449.110	-8.417E-09	-8.417E-09	1.005E-08	1.005E-08	-9.176E-09	-9.176E-09
0.92500	2.470E-10	461.585	-9.768E-09	-9.768E-09	1.397E-08	1.397E-08	-1.277E-08	-1.277E-08
0.95000	3.334E-10	474.060	-9.673E-09	-9.673E-09	2.124E-08	2.124E-08	-1.724E-08	-1.724E-08
0.96250	3.787E-10	480.298	-8.184E-09	-8.184E-09	2.718E-08	2.718E-08	-1.958E-08	-1.958E-08
0.97500	4.150E-10	486.536	-4.931E-09	-4.931E-09	3.539E-08	3.539E-08	-2.146E-08	-2.146E-08
0.98125	4.281E-10	489.654	-2.457E-09	-2.457E-09	4.050E-08	4.050E-08	-2.213E-08	-2.213E-08
0.98750	4.369E-10	492.773	7.519E-10	7.519E-10	4.641E-08	4.641E-08	-2.259E-08	-2.259E-08
0.99375	4.412E-10	495.892	4.661E-09	4.661E-09	5.306E-08	5.306E-08	-2.281E-08	-2.281E-08
1.00000	4.407E-10	499.011	9.265E-09	9.265E-09	6.041E-08	6.041E-08	-2.279E-08	-2.279E-08
1.00625	4.354E-10	502.130	1.467E-08	1.467E-08	6.856E-08	6.856E-08	-2.251E-08	-2.251E-08
1.01250	4.256E-10	505.248	2.028E-08	2.028E-08	7.685E-08	7.685E-08	-2.200E-08	-2.200E-08
1.01875	4.116E-10	508.367	2.617E-08	2.617E-08	8.536E-08	8.536E-08	-2.128E-08	-2.128E-08
1.02500	3.942E-10	511.486	3.194E-08	3.194E-08	9.364E-08	9.364E-08	-2.038E-08	-2.038E-08
1.03750	3.518E-10	517.723	4.284E-08	4.284E-08	1.092E-07	1.092E-07	-1.819E-08	-1.819E-08
1.05000	3.040E-10	523.961	5.264E-08	5.264E-08	1.231E-07	1.231E-07	-1.572E-08	-1.572E-08
1.07500	2.246E-10	536.436	6.030E-08	6.030E-08	1.373E-07	1.373E-07	-1.161E-08	-1.161E-08
1.10000	1.590E-10	548.911	7.250E-08	7.250E-08	1.543E-07	1.543E-07	-8.221E-09	-8.221E-09
1.15000	8.687E-11	573.862	8.516E-08	8.516E-08	1.729E-07	1.729E-07	-4.491E-09	-4.491E-09
1.20000	5.181E-11	598.812	1.029E-07	1.029E-07	1.939E-07	1.939E-07	-2.679E-09	-2.679E-09
1.30000	2.328E-11	648.713	1.150E-07	1.150E-07	2.095E-07	2.095E-07	-1.204E-09	-1.204E-09
1.40000	1.263E-11	698.615	1.283E-07	1.283E-07	2.245E-07	2.245E-07	-6.528E-10	-6.528E-10
1.50000	7.938E-12	748.516	1.412E-07	1.412E-07	2.383E-07	2.383E-07	-4.104E-10	-4.104E-10
1.60000	5.347E-12	798.417	1.537E-07	1.537E-07	2.516E-07	2.516E-07	-2.764E-10	-2.764E-10
1.70000	3.619E-12	848.318	1.676E-07	1.676E-07	2.659E-07	2.659E-07	-1.871E-10	-1.871E-10
1.80000	2.559E-12	898.219	1.802E-07	1.802E-07	2.788E-07	2.788E-07	-1.323E-10	-1.323E-10
1.90000	1.808E-12	948.120	1.925E-07	1.925E-07	2.913E-07	2.913E-07	-9.349E-11	-9.349E-11
2.00000	1.292E-12	998.021	2.045E-07	2.045E-07	3.034E-07	3.034E-07	-6.682E-11	-6.682E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 5.000 θ_0= 0. ρ_a=18.752

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-3.631E-16
0.10000	1.385E-12	1.385E-12	-7.664E-24	-7.664E-24	-8.804E-14	-8.804E-14	-4.865E-16
0.20000	3.860E-12	3.860E-12	-1.332E-23	-1.332E-23	-2.411E-13	-2.411E-13	-6.941E-16
0.30000	8.162E-12	8.162E-12	-2.312E-23	-2.312E-23	-5.069E-13	-5.069E-13	-1.086E-15
0.40000	1.721E-11	1.721E-11	-4.192E-23	-4.192E-23	-9.792E-13	-9.792E-13	-1.826E-15
0.50000	3.392E-11	3.392E-11	-7.602E-23	-7.602E-23	-1.836E-12	-1.836E-12	-3.601E-15
0.60000	7.573E-11	7.573E-11	-1.531E-22	-1.531E-22	-3.451E-12	-3.451E-12	-8.223E-15
0.70000	2.066E-10	2.066E-10	-3.837E-22	-3.837E-22	-7.116E-12	-7.116E-12	-2.269E-14
0.80000	7.412E-10	7.412E-10	-1.329E-21	-1.329E-21	-1.801E-11	-1.801E-11	-8.805E-14
0.85000	1.684E-09	1.684E-09	-2.929E-21	-2.929E-21	-3.283E-11	-3.283E-11	-2.077E-13
0.90000	4.549E-09	4.549E-09	-7.530E-21	-7.530E-21	-6.813E-11	-6.813E-11	-5.674E-13
0.92500	8.076E-09	8.076E-09	-1.286E-20	-1.286E-20	-1.057E-10	-1.057E-10	-9.602E-13
0.95000	1.489E-08	1.489E-08	-2.010E-20	-2.010E-20	-1.667E-10	-1.667E-10	-1.569E-12
0.96250	2.089E-08	2.089E-08	-2.393E-20	-2.393E-20	-2.079E-10	-2.079E-10	-1.912E-12
0.97500	2.900E-08	2.900E-08	-2.713E-20	-2.713E-20	-2.558E-10	-2.558E-10	-2.230E-12
0.98125	3.402E-08	3.402E-08	-2.831E-20	-2.831E-20	-2.818E-10	-2.818E-10	-2.355E-12
0.98750	3.955E-08	3.955E-08	-2.912E-20	-2.912E-20	-3.086E-10	-3.086E-10	-2.443E-12
0.99375	4.551E-08	4.551E-08	-2.951E-20	-2.951E-20	-3.361E-10	-3.361E-10	-2.486E-12
1.00000	5.160E-08	5.160E-08	-2.946E-20	-2.946E-20	-3.637E-10	-3.637E-10	-2.481E-12
1.00625	5.745E-08	5.745E-08	-2.898E-20	-2.898E-20	-3.910E-10	-3.910E-10	-2.427E-12
1.01250	6.279E-08	6.279E-08	-2.809E-20	-2.809E-20	-4.177E-10	-4.177E-10	-2.331E-12
1.01875	6.745E-08	6.745E-08	-2.683E-20	-2.683E-20	-4.434E-10	-4.434E-10	-2.199E-12
1.02500	7.152E-08	7.152E-08	-2.529E-20	-2.529E-20	-4.678E-10	-4.678E-10	-2.044E-12
1.03750	7.791E-08	7.791E-08	-2.164E-20	-2.164E-20	-5.118E-10	-5.118E-10	-1.702E-12
1.05000	8.224E-08	8.224E-08	-1.771E-20	-1.771E-20	-5.486E-10	-5.486E-10	-1.374E-12
1.07500	8.694E-08	8.694E-08	-1.103E-20	-1.103E-20	-6.017E-10	-6.017E-10	-8.156E-13
1.10000	8.867E-08	8.867E-08	-6.303E-21	-6.303E-21	-6.335E-10	-6.335E-10	-4.890E-13
1.15000	8.791E-08	8.791E-08	-2.551E-21	-2.551E-21	-6.642E-10	-6.642E-10	-1.819E-13
1.20000	8.521E-08	8.521E-08	-1.189E-21	-1.189E-21	-6.770E-10	-6.770E-10	-7.848E-14
1.30000	7.907E-08	7.907E-08	-3.557E-22	-3.557E-22	-6.869E-10	-6.869E-10	-2.079E-14
1.40000	7.347E-08	7.347E-08	-1.444E-22	-1.444E-22	-6.903E-10	-6.903E-10	-7.687E-15
1.50000	6.857E-08	6.857E-08	-7.266E-23	-7.266E-23	-6.919E-10	-6.919E-10	-3.402E-15
1.60000	6.427E-08	6.427E-08	-4.006E-23	-4.006E-23	-6.927E-10	-6.927E-10	1.750E-15
1.70000	6.048E-08	6.048E-08	-2.217E-23	-2.217E-23	-6.931E-10	-6.931E-10	-1.048E-15
1.80000	5.712E-08	5.712E-08	-1.277E-23	-1.277E-23	-6.934E-10	-6.934E-10	-6.750E-16
1.90000	5.411E-08	5.411E-08	-7.348E-24	-7.348E-24	-6.936E-10	-6.936E-10	-4.762E-16
2.00000	5.140E-08	5.140E-08	-4.222E-24	-4.222E-24	-6.936E-10	-6.936E-10	-3.569E-16

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 6.000 θ_0= 0. ρ_a= 22.490

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	6.0000	0.	215.259	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	6.0000	0.10000	193.774	6.270E-07	9.994E-01	-1.856E-12	-1.856E-12	1.856E-12
0.20000	6.0000	0.20000	172.422	8.271E-07	9.992E-01	-2.623E-12	-2.623E-12	2.623E-12
0.30000	6.0000	0.30000	151.116	1.441E-06	9.988E-01	-3.706E-12	-3.706E-12	3.706E-12
0.40000	6.0000	0.40000	129.879	2.241E-06	9.983E-01	-5.486E-12	-5.486E-12	5.486E-12
0.50000	6.0000	0.50000	108.752	2.455E-06	9.975E-01	-8.125E-12	-8.125E-12	8.125E-12
0.60000	6.0000	0.60000	87.814	3.202E-06	9.962E-01	-1.297E-11	-1.297E-11	1.297E-11
0.70000	6.0000	0.70000	67.242	9.712E-06	9.942E-01	-2.386E-11	-2.386E-11	2.386E-11
0.80000	6.0000	0.80000	47.513	3.863E-05	9.924E-01	-5.228E-11	-5.228E-11	5.228E-11
0.85000	6.0000	0.85000	38.376	8.324E-05	9.943E-01	-8.495E-11	-8.495E-11	8.495E-11
0.90000	6.0000	0.90000	30.322	2.083E-04	1.003E 00	-1.445E-10	-1.445E-10	1.445E-10
0.92500	6.0000	0.92500	27.011	3.078E-04	1.009E 00	-1.926E-10	-1.926E-10	1.926E-10
0.95000	6.0000	0.95000	24.445	4.610E-04	1.012E 00	-2.420E-10	-2.420E-10	2.420E-10
0.96250	6.0000	0.96250	23.522	5.609E-04	1.010E 00	-2.627E-10	-2.627E-10	2.627E-10
0.97500	6.0000	0.97500	22.879	6.745E-04	1.005E 00	-2.781E-10	-2.781E-10	2.781E-10
0.98125	6.0000	0.98125	22.671	7.351E-04	1.003E 00	-2.834E-10	-2.834E-10	2.834E-10
0.98750	6.0001	0.98750	22.541	8.000E-04	1.001E 00	-2.871E-10	-2.871E-10	2.871E-10
0.99375	6.0001	0.99375	22.491	8.649E-04	9.996E-01	-2.887E-10	-2.887E-10	2.887E-10
1.00000	6.0001	1.00000	22.521	9.281E-04	9.999E-01	-2.877E-10	-2.877E-10	2.877E-10
1.00625	6.0001	1.00625	22.632	9.964E-04	1.001E 00	-2.843E-10	-2.843E-10	2.843E-10
1.01250	6.0001	1.01250	22.821	1.056E-03	1.004E 00	-2.796E-10	-2.796E-10	2.796E-10
1.01875	6.0001	1.01875	23.087	1.119E-03	1.007E 00	-2.731E-10	-2.731E-10	2.731E-10
1.02500	6.0001	1.02500	23.427	1.177E-03	1.011E 00	-2.649E-10	-2.649E-10	2.649E-10
1.03750	6.0001	1.03750	24.317	1.277E-03	1.016E 00	-2.447E-10	-2.447E-10	2.447E-10
1.05000	6.0001	1.05000	25.462	1.364E-03	1.018E 00	-2.210E-10	-2.210E-10	2.210E-10
1.07500	6.0001	1.07500	28.384	1.489E-03	1.015E 00	-1.704E-10	-1.704E-10	1.704E-10
1.10000	6.0002	1.10000	31.951	1.573E-03	1.008E 00	-1.298E-10	-1.298E-10	1.298E-10
1.15000	6.0002	1.15000	40.310	1.658E-03	9.988E-01	-7.514E-11	-7.514E-11	7.514E-11
1.20000	6.0003	1.20000	49.602	1.704E-03	9.951E-01	-4.706E-11	-4.706E-11	4.706E-11
1.30000	6.0004	1.30000	69.468	1.731E-03	9.945E-01	-2.220E-11	-2.220E-11	2.220E-11
1.40000	6.0005	1.40000	90.095	1.747E-03	9.955E-01	-1.225E-11	-1.225E-11	1.225E-11
1.50000	6.0006	1.50000	111.059	1.752E-03	9.964E-01	-7.784E-12	-7.784E-12	7.784E-12
1.60000	6.0007	1.60000	132.201	1.757E-03	9.973E-01	-5.254E-12	-5.254E-12	5.254E-12
1.70000	6.0007	1.70000	153.447	1.759E-03	9.975E-01	-3.569E-12	-3.569E-12	3.569E-12
1.80000	6.0008	1.80000	174.759	1.764E-03	9.978E-01	-2.526E-12	-2.526E-12	2.526E-12
1.90000	6.0008	1.90000	196.116	1.766E-03	9.981E-01	-1.786E-12	-1.786E-12	1.786E-12
2.00000	6.0009	2.00000	217.504	1.769E-03	9.983E-01	-1.278E-12	-1.278E-12	1.278E-12

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_0= 6.000 θ_D= 0. ρ_0= 22.490

z	$_x\mu'-1.0$	T_0	$_oT_t-T_0$	$_xT_t-T_0$	$_oT_g-T_0$	$_xT_g-T_0$	$_oD_z-D_0$	$_xD_z-D_0$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.85cE-12	49.901	-7.850E-11	-7.850E-11	7.850E-11	7.850E-11	-9.594E-11	-9.594E-11
0.20000	2.623E-12	99.802	-1.892E-10	-1.892E-10	1.892E-10	1.892E-10	-1.356E-10	-1.356E-10
0.30000	3.706E-12	149.703	-3.456E-10	-3.456E-10	3.456E-10	3.456E-10	-1.916E-10	-1.916E-10
0.40000	5.486E-12	199.605	-5.718E-10	-5.718E-10	5.718E-10	5.718E-10	-2.836E-10	-2.836E-10
0.50000	9.125E-12	249.506	-9.071E-10	-9.071E-10	9.072E-10	9.072E-10	-4.201E-10	-4.201E-10
0.60000	1.297E-11	299.407	-1.416E-09	-1.416E-09	1.416E-09	1.416E-09	-6.705E-10	-6.705E-10
0.70000	2.386E-11	349.308	-2.292E-09	-2.292E-09	2.295E-09	2.295E-09	-1.234E-09	-1.234E-09
0.80000	5.22cE-11	399.209	-4.031E-09	-4.031E-09	4.076E-09	4.076E-09	-2.703E-09	-2.703E-09
0.85000	8.495E-11	424.160	-5.608E-09	-5.608E-09	5.832E-09	5.832E-09	-4.392E-09	-4.392E-09
0.90000	1.445E-10	449.110	-7.798E-09	-7.798E-09	9.283E-09	9.283E-09	-7.471E-09	-7.471E-09
0.92500	1.926E-10	461.585	-8.967E-09	-8.967E-09	1.230E-08	1.230E-08	-9.957E-09	-9.957E-09
0.95000	2.426E-10	474.061	-9.512E-09	-9.512E-09	1.719E-08	1.719E-08	-1.251E-08	-1.251E-08
0.96250	2.627E-10	480.298	-9.170E-09	-9.170E-09	2.068E-08	2.068E-08	-1.358E-08	-1.358E-08
0.97500	2.78cE-10	486.536	-8.187E-09	-8.187E-09	2.504E-08	2.504E-08	-1.438E-08	-1.438E-08
0.98125	2.834E-10	489.655	-7.416E-09	-7.416E-09	2.757E-08	2.757E-08	-1.465E-08	-1.465E-08
0.98750	2.87cE-10	492.773	-6.372E-09	-6.372E-09	3.039E-08	3.039E-08	-1.484E-08	-1.484E-08
0.99375	2.887E-10	495.892	-5.155E-09	-5.155E-09	3.340E-08	3.340E-08	-1.493E-08	-1.493E-08
1.00000	2.877E-10	499.011	-3.813E-09	-3.813E-09	3.654E-08	3.654E-08	-1.488E-08	-1.488E-08
1.00625	2.843E-10	502.130	-2.091E-09	-2.091E-09	4.005E-08	4.005E-08	-1.470E-08	-1.470E-08
1.01250	2.796E-10	505.249	-4.924E-10	-4.924E-10	4.341E-08	4.341E-08	-1.446E-08	-1.446E-08
1.01875	2.73cE-10	508.367	1.438E-09	1.438E-09	4.706E-08	4.706E-08	-1.412E-08	-1.412E-08
1.02500	2.649E-10	511.486	3.305E-09	3.305E-09	5.061E-08	5.061E-08	-1.370E-08	-1.370E-08
1.03750	2.447E-10	517.724	6.915E-09	6.915E-09	5.740E-08	5.740E-08	-1.265E-08	-1.265E-08
1.05000	2.21cE-10	523.961	1.044E-08	1.044E-08	6.384E-08	6.384E-08	-1.143E-08	-1.143E-08
1.07500	1.704E-10	536.436	1.615E-08	1.615E-08	7.443E-08	7.443E-08	-8.812E-09	-8.812E-09
1.10000	1.293E-10	548.912	2.070E-08	2.070E-08	8.268E-08	8.268E-08	-6.710E-09	-6.710E-09
1.15000	7.514E-11	573.862	2.657E-08	2.657E-08	9.357E-08	9.357E-08	-3.885E-09	-3.885E-09
1.20000	4.70cE-11	598.813	3.122E-08	3.122E-08	1.012E-07	1.012E-07	-2.433E-09	-2.433E-09
1.30000	2.220E-11	648.714	3.744E-08	3.744E-08	1.107E-07	1.107E-07	-1.148E-09	-1.148E-09
1.40000	1.223E-11	698.615	4.373E-08	4.373E-08	1.186E-07	1.186E-07	-6.333E-10	-6.333E-10
1.50000	7.784E-12	748.516	4.956E-08	4.956E-08	1.254E-07	1.254E-07	-4.025E-10	-4.025E-10
1.60000	5.254E-12	798.417	5.562E-08	5.562E-08	1.321E-07	1.321E-07	-2.717E-10	-2.717E-10
1.70000	3.569E-12	848.318	6.146E-08	6.146E-08	1.384E-07	1.384E-07	-1.845E-10	-1.845E-10
1.80000	2.52cE-12	898.219	6.780E-08	6.780E-08	1.450E-07	1.450E-07	-1.306E-10	-1.306E-10
1.90000	1.786E-12	948.121	7.383E-08	7.383E-08	1.513E-07	1.513E-07	-9.236E-11	-9.236E-11
2.00000	1.27cE-12	998.022	8.013E-08	8.013E-08	1.577E-07	1.577E-07	-6.608E-11	-6.608E-11

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_0= 6.000 θ_D= 0. ρ_0= 22.490

z	$_oD_y$	$_xD_y$	σ^κ	$_x\kappa$	σ^{κ_t}	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-5.223E-16
0.10000	1.66cE-12	1.663E-12	-7.656E-24	-7.656E-24	-8.800E-14	-8.800E-14	-6.993E-16
0.20000	4.622E-12	4.623E-12	-1.329E-23	-1.329E-23	-2.408E-13	-2.408E-13	-9.967E-16
0.30000	9.762E-12	9.761E-12	-2.303E-23	-2.303E-23	-5.058E-13	-5.058E-13	-1.557E-15
0.40000	2.054E-11	2.054E-11	-4.164E-23	-4.164E-23	-9.754E-13	-9.754E-13	-2.610E-15
0.50000	4.036E-11	4.036E-11	-7.526E-23	-7.526E-23	-1.825E-12	-1.825E-12	-5.113E-15
0.60000	8.921E-11	8.921E-11	-1.501E-22	-1.501E-22	-3.416E-12	-3.416E-12	-1.156E-14
0.70000	2.388E-10	2.388E-10	-3.690E-22	-3.690E-22	-6.971E-12	-6.971E-12	-3.116E-14
0.80000	8.134E-10	8.134E-10	-1.205E-21	-1.205E-21	-1.711E-11	-1.711E-11	-1.143E-13
0.85000	1.757E-09	1.757E-09	-2.468E-21	-2.468E-21	-3.014E-11	-3.014E-11	-2.533E-13
0.90000	4.355E-09	4.355E-09	-5.415E-21	-5.415E-21	-5.854E-11	-5.854E-11	-6.121E-13
0.92500	7.272E-09	7.272E-09	-8.595E-21	-8.595E-21	-8.432E-11	-8.432E-11	-9.194E-13
0.95000	1.247E-08	1.247E-08	-1.244E-20	-1.244E-20	-1.236E-10	-1.236E-10	-1.332E-12
0.96250	1.666E-08	1.666E-08	-1.421E-20	-1.421E-20	-1.486E-10	-1.486E-10	-1.546E-12
0.97500	2.175E-08	2.175E-08	-1.558E-20	-1.558E-20	-1.765E-10	-1.765E-10	-1.724E-12
0.98125	2.484E-08	2.484E-08	-1.606E-20	-1.606E-20	-1.913E-10	-1.913E-10	-1.788E-12
0.98750	2.816E-08	2.816E-08	-1.637E-20	-1.637E-20	-2.065E-10	-2.065E-10	-1.826E-12
0.99375	3.160E-08	3.160E-08	-1.650E-20	-1.650E-20	-2.219E-10	-2.219E-10	-1.841E-12
1.00000	3.505E-08	3.505E-08	-1.642E-20	-1.642E-20	-2.373E-10	-2.373E-10	-1.832E-12
1.00625	3.837E-08	3.837E-08	-1.615E-20	-1.615E-20	-2.525E-10	-2.525E-10	-1.800E-12
1.01250	4.147E-08	4.147E-08	-1.572E-20	-1.572E-20	-2.674E-10	-2.674E-10	-1.742E-12
1.01875	4.428E-08	4.428E-08	-1.513E-20	-1.513E-20	-2.819E-10	-2.819E-10	-1.664E-12
1.02500	4.676E-08	4.676E-08	-1.440E-20	-1.440E-20	-2.957E-10	-2.957E-10	-1.571E-12
1.03750	5.076E-08	5.076E-08	-1.267E-20	-1.267E-20	-3.210E-10	-3.210E-10	-1.359E-12
1.05000	5.360E-08	5.360E-08	-1.074E-20	-1.074E-20	-3.429E-10	-3.429E-10	-1.142E-12
1.07500	5.709E-08	5.709E-08	-7.052E-21	-7.052E-21	-3.760E-10	-3.760E-10	-7.720E-13
1.10000	5.868E-08	5.868E-08	-4.619E-21	-4.619E-21	-3.972E-10	-3.972E-10	-4.984E-13
1.15000	5.898E-08	5.888E-08	-2.059E-21	-2.059E-21	-4.211E-10	-4.211E-10	-2.135E-13
1.20000	5.744E-08	5.744E-08	-1.031E-21	-1.031E-21	-4.323E-10	-4.323E-10	-9.820E-14
1.30000	5.356E-08	5.356E-08	-3.316E-22	-3.316E-22	-4.412E-10	-4.412E-10	-2.759E-14
1.40000	4.983E-08	4.983E-08	-1.381E-22	-1.381E-22	-4.444E-10	-4.444E-10	-1.051E-14
1.50000	4.652E-08	4.652E-08	-7.055E-23	-7.055E-23	-4.459E-10	-4.459E-10	-4.713E-15
1.60000	4.360E-08	4.360E-08	-3.902E-23	-3.902E-23	-4.467E-10	-4.467E-10	-2.454E-15
1.70000	4.103E-08	4.103E-08	-2.168E-23	-2.168E-23	-4.471E-10	-4.471E-10	-1.478E-15
1.80000	3.875E-08	3.875E-08	-1.251E-23	-1.251E-23	-4.474E-10	-4.474E-10	-9.570E-16
1.90000	3.672E-08	3.672E-08	-7.207E-24	-7.207E-24	-4.475E-10	-4.475E-10	-6.776E-16
2.00000	3.487E-08	3.487E-08	-4.145E-24	-4.145E-24	-4.476E-10	-4.476E-10	-5.090E-16

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 7.000 θ_D= 0. ρ_a= 26.221

z	ϕ	z_f	ρ	θ	β	$_o\mu'$-1.0	$_x\mu'$-1.0	$_o\mu'$-1.0
0.	7.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	7.0000	0.10000	193.821	7.137E-07	9.993E-01	-1.854E-12	-1.854E-12	1.854E-12
0.20000	7.0000	0.20000	172.528	9.472E-07	9.991E-01	-2.619E-12	-2.619E-12	2.619E-12
0.30000	7.0000	0.30000	151.297	1.281E-06	9.987E-01	-3.695E-12	-3.695E-12	3.695E-12
0.40000	7.0000	0.40000	130.160	1.281E-06	9.982E-01	-5.457E-12	-5.457E-12	5.457E-12
0.50000	7.0000	0.50000	109.171	3.468E-06	9.973E-01	-8.062E-12	-8.062E-12	8.062E-12
0.60000	7.0000	0.60000	88.437	5.229E-06	9.961E-01	-1.277E-11	-1.277E-11	1.277E-11
0.70000	7.0000	0.70000	68.187	1.116E-05	9.944E-01	-2.314E-11	-2.314E-11	2.314E-11
0.80000	7.0000	0.80000	49.029	4.034E-05	9.942E-01	-4.844E-11	-4.844E-11	4.844E-11
0.85000	7.0000	0.85000	40.351	8.410E-05	9.974E-01	-7.498E-11	-7.498E-11	7.498E-11
0.90000	7.0000	0.90000	32.925	1.861E-04	1.005E 00	-1.217E-10	-1.217E-10	1.217E-10
0.92500	7.0000	0.92500	29.980	2.638E-04	1.008E 00	-1.479E-10	-1.479E-10	1.479E-10
0.95000	7.0000	0.95000	27.773	3.407E-04	1.008E 00	-1.799E-10	-1.799E-10	1.799E-10
0.96250	7.0000	0.96250	27.007	3.740E-04	1.005E 00	-1.927E-10	-1.927E-10	1.927E-10
0.97500	7.0000	0.97500	26.492	4.525E-04	1.002E 00	-2.017E-10	-2.017E-10	2.017E-10
0.98125	7.0000	0.98125	26.334	4.943E-04	1.001E 00	-2.045E-10	-2.045E-10	2.045E-10
0.98750	7.0000	0.98750	26.244	5.328E-04	9.999E-01	-2.062E-10	-2.062E-10	2.062E-10
0.99375	7.0000	0.99375	26.223	5.695E-04	9.995E-01	-2.066E-10	-2.066E-10	2.066E-10
1.00000	7.0001	1.00000	26.270	6.104E-04	9.999E-01	-2.057E-10	-2.057E-10	2.057E-10
1.00625	7.0001	1.00625	26.387	6.506E-04	1.001E 00	-2.036E-10	-2.036E-10	2.036E-10
1.01250	7.0001	1.01250	26.571	6.890E-04	1.003E 00	-2.003E-10	-2.003E-10	2.003E-10
1.01875	7.0001	1.01875	26.821	7.257E-04	1.005E 00	-1.959E-10	-1.959E-10	1.959E-10
1.02500	7.0001	1.02500	27.135	7.616E-04	1.007E 00	-1.905E-10	-1.905E-10	1.905E-10
1.03750	7.0001	1.03750	27.948	8.256E-04	1.011E 00	-1.772E-10	-1.772E-10	1.772E-10
1.05000	7.0001	1.05000	28.989	8.811E-04	1.013E 00	-1.615E-10	-1.615E-10	1.615E-10
1.07500	7.0001	1.07500	31.659	9.699E-04	1.014E 00	-1.323E-10	-1.323E-10	1.323E-10
1.10000	7.0001	1.10000	34.958	1.033E-03	1.010E 00	-1.064E-10	-1.064E-10	1.064E-10
1.15000	7.0002	1.15000	42.840	1.108E-03	1.002E 00	-6.615E-11	-6.615E-11	6.615E-11
1.20000	7.0002	1.20000	51.768	1.147E-03	9.979E-01	-4.280E-11	-4.280E-11	4.280E-11
1.30000	7.0003	1.30000	71.159	1.178E-03	9.956E-01	-2.101E-11	-2.101E-11	2.101E-11
1.40000	7.0004	1.40000	91.505	1.192E-03	9.959E-01	-1.182E-11	-1.182E-11	1.182E-11
1.50000	7.0004	1.50000	112.288	1.195E-03	9.966E-01	-7.608E-12	-7.608E-12	7.608E-12
1.60000	7.0005	1.60000	133.304	1.199E-03	9.972E-01	-5.148E-12	-5.148E-12	5.148E-12
1.70000	7.0005	1.70000	154.457	1.200E-03	9.976E-01	-3.511E-12	-3.511E-12	3.511E-12
1.80000	7.0005	1.80000	175.699	1.202E-03	9.980E-01	-2.488E-12	-2.488E-12	2.488E-12
1.90000	7.0006	1.90000	197.000	1.206E-03	9.982E-01	-1.761E-12	-1.761E-12	1.761E-12
2.00000	7.0006	2.00000	218.343	1.206E-03	9.984E-01	-1.262E-12	-1.262E-12	1.262E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 7.000 θ_D= 0. ρ_a= 26.221

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.854E-12	49.901	-7.847E-11	-7.847E-11	7.847E-11	7.847E-11	-9.586E-11	-9.586E-11
0.20000	2.619E-12	99.802	-1.890E-10	-1.890E-10	1.890E-10	1.890E-10	-1.354E-10	-1.354E-10
0.30000	3.695E-12	149.703	-3.450E-10	-3.450E-10	3.450E-10	3.450E-10	-1.911E-10	-1.911E-10
0.40000	5.457E-12	199.605	-5.703E-10	-5.703E-10	5.703E-10	5.703E-10	-2.822E-10	-2.822E-10
0.50000	8.062E-12	249.506	-9.034E-10	-9.034E-10	9.036E-10	9.036E-10	-4.168E-10	-4.168E-10
0.60000	1.277E-11	299.407	-1.406E-09	-1.406E-09	1.407E-09	1.407E-09	-6.601E-10	-6.601E-10
0.70000	2.314E-11	349.308	-2.261E-09	-2.261E-09	2.264E-09	2.264E-09	-1.196E-09	-1.196E-09
0.80000	4.844E-11	399.209	-3.912E-09	-3.912E-09	3.961E-09	3.961E-09	-2.504E-09	-2.504E-09
0.85000	7.498E-11	424.160	-5.344E-09	-5.344E-09	5.572E-09	5.572E-09	-3.877E-09	-3.877E-09
0.90000	1.217E-10	449.110	-7.288E-09	-7.288E-09	8.473E-09	8.473E-09	-6.292E-09	-6.292E-09
0.92500	1.479E-10	461.585	-8.339E-09	-8.339E-09	1.079E-08	1.079E-08	-7.645E-09	-7.645E-09
0.95000	1.799E-10	474.061	-9.518E-09	-9.518E-09	1.371E-08	1.371E-08	-9.304E-09	-9.304E-09
0.96250	1.927E-10	480.298	-1.022E-08	-1.022E-08	1.533E-08	1.533E-08	-9.961E-09	-9.961E-09
0.97500	2.017E-10	486.536	-1.021E-08	-1.021E-08	1.780E-08	1.780E-08	-1.043E-08	-1.043E-08
0.98125	2.045E-10	489.655	-1.008E-08	-1.008E-08	1.920E-08	1.920E-08	-1.058E-08	-1.058E-08
0.98750	2.062E-10	492.774	-9.956E-09	-9.956E-09	2.061E-08	2.061E-08	-1.066E-08	-1.066E-08
0.99375	2.066E-10	495.892	-9.802E-09	-9.802E-09	2.205E-08	2.205E-08	-1.068E-08	-1.068E-08
1.00000	2.057E-10	499.011	-9.488E-09	-9.488E-09	2.365E-08	2.365E-08	-1.064E-08	-1.064E-08
1.00625	2.036E-10	502.130	-9.115E-09	-9.115E-09	2.530E-08	2.530E-08	-1.053E-08	-1.053E-08
1.01250	2.003E-10	505.249	-8.705E-09	-8.705E-09	2.697E-08	2.697E-08	-1.035E-08	-1.035E-08
1.01875	1.959E-10	508.368	-8.261E-09	-8.261E-09	2.865E-08	2.865E-08	-1.013E-08	-1.013E-08
1.02500	1.905E-10	511.486	-7.763E-09	-7.763E-09	3.035E-08	3.035E-08	-9.847E-09	-9.847E-09
1.03750	1.772E-10	517.724	-6.769E-09	-6.769E-09	3.364E-08	3.364E-08	-9.160E-09	-9.160E-09
1.05000	1.615E-10	523.962	-5.775E-09	-5.775E-09	3.675E-08	3.675E-08	-8.350E-09	-8.350E-09
1.07500	1.323E-10	536.437	-3.871E-09	-3.871E-09	4.230E-08	4.230E-08	-6.840E-09	-6.840E-09
1.10000	1.064E-10	548.912	-2.267E-09	-2.267E-09	4.688E-08	4.688E-08	-5.503E-09	-5.503E-09
1.15000	6.615E-11	573.862	1.630E-10	1.630E-10	5.351E-08	5.351E-08	-3.420E-09	-3.420E-09
1.20000	4.280E-11	598.813	2.014E-09	2.014E-09	5.803E-08	5.803E-08	-2.213E-09	-2.213E-09
1.30000	2.101E-11	648.714	4.782E-09	4.782E-09	6.380E-08	6.380E-08	-1.086E-09	-1.086E-09
1.40000	1.182E-11	698.615	7.497E-09	7.497E-09	6.808E-08	6.808E-08	-6.113E-10	-6.113E-10
1.50000	7.608E-12	748.516	9.959E-09	9.959E-09	7.148E-08	7.148E-08	-3.934E-10	-3.934E-10
1.60000	5.148E-12	798.417	1.261E-08	1.261E-08	7.476E-08	7.476E-08	-2.661E-10	-2.661E-10
1.70000	3.511E-12	848.319	1.526E-08	1.526E-08	7.783E-08	7.783E-08	-1.815E-10	-1.815E-10
1.80000	2.488E-12	898.220	1.799E-08	1.799E-08	8.086E-08	8.086E-08	-1.286E-10	-1.286E-10
1.90000	1.761E-12	948.121	2.122E-08	2.122E-08	8.431E-08	8.431E-08	-9.105E-11	-9.105E-11
2.00000	1.262E-12	998.022	2.361E-08	2.361E-08	8.684E-08	8.684E-08	-6.522E-11	-6.522E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 7.000 θ_D= 0. ρ_0= 26.221

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-7.100E-16
0.10000	1.933E-12	1.933E-12	-7.647E-24	-7.647E-24	-8.794E-14	-8.794E-14	-9.500E-16
0.20000	5.380E-12	5.380E-12	-1.325E-23	-1.325E-23	-2.404E-13	-2.404E-13	-1.352E-15
0.30000	1.135E-11	1.135E-11	-2.292E-23	-2.292E-23	-5.044E-13	-5.044E-13	-2.107E-15
0.40000	2.383E-11	2.383E-11	-4.131E-23	-4.131E-23	-9.710E-13	-9.710E-13	-3.520E-15
0.50000	4.667E-11	4.667E-11	-7.438E-23	-7.438E-23	-1.813E-12	-1.813E-12	-6.844E-15
0.60000	1.021E-10	1.021E-10	-1.468E-22	-1.468E-22	-3.375E-12	-3.375E-12	-1.529E-14
0.70000	2.683E-10	2.683E-10	-3.526E-22	-3.526E-22	-6.801E-12	-6.801E-12	-4.017E-14
0.80000	8.705E-10	8.705E-10	-1.076E-21	-1.076E-21	-1.618E-11	-1.618E-11	-1.389E-13
0.85000	1.795E-09	1.795E-09	-2.052E-21	-2.052E-21	-2.756E-11	-2.756E-11	-2.887E-13
0.90000	4.111E-09	4.111E-09	-4.201E-21	-4.201E-21	-5.022E-11	-5.022E-11	-6.028E-13
0.92500	6.470E-09	6.470E-09	-5.604E-21	-5.604E-21	-6.851E-11	-6.851E-11	-8.706E-13
0.95000	1.031E-08	1.031E-08	-7.701E-21	-7.701E-21	-9.342E-11	-9.342E-11	-1.132E-12
0.96250	1.293E-08	1.293E-08	-8.600E-21	-8.600E-21	-1.086E-10	-1.086E-10	-1.251E-12
0.97500	1.596E-08	1.596E-08	-9.262E-21	-9.262E-21	-1.254E-10	-1.254E-10	-1.341E-12
0.98125	1.762E-08	1.762E-08	-9.475E-21	-9.475E-21	-1.342E-10	-1.342E-10	-1.371E-12
0.98750	1.934E-08	1.934E-08	-9.599E-21	-9.599E-21	-1.431E-10	-1.431E-10	-1.388E-12
0.99375	2.110E-08	2.110E-08	-9.628E-21	-9.628E-21	-1.521E-10	-1.521E-10	-1.392E-12
1.00000	2.285E-08	2.285E-08	-9.562E-21	-9.562E-21	-1.611E-10	-1.611E-10	-1.383E-12
1.00625	2.454E-08	2.454E-08	-9.403E-21	-9.403E-21	-1.699E-10	-1.699E-10	-1.361E-12
1.01250	2.614E-08	2.614E-08	-9.157E-21	-9.157E-21	-1.786E-10	-1.786E-10	-1.327E-12
1.01875	2.762E-08	2.762E-08	-8.833E-21	-8.833E-21	-1.870E-10	-1.870E-10	-1.282E-12
1.02500	2.897E-08	2.897E-08	-8.442E-21	-8.442E-21	-1.951E-10	-1.951E-10	-1.230E-12
1.03750	3.132E-08	3.132E-08	-7.509E-21	-7.509E-21	-2.101E-10	-2.101E-10	-1.108E-12
1.05000	3.319E-08	3.319E-08	-6.463E-21	-6.463E-21	-2.231E-10	-2.231E-10	-9.757E-13
1.07500	3.570E-08	3.570E-08	-4.753E-21	-4.753E-21	-2.438E-10	-2.438E-10	-7.021E-13
1.10000	3.700E-08	3.700E-08	-3.445E-21	-3.445E-21	-2.591E-10	-2.591E-10	-4.815E-13
1.15000	3.758E-08	3.758E-08	-1.706E-21	-1.706E-21	-2.774E-10	-2.774E-10	-2.288E-13
1.20000	3.694E-08	3.694E-08	-8.927E-22	-8.927E-22	-2.868E-10	-2.868E-10	-1.136E-13
1.30000	3.469E-08	3.469E-08	-3.057E-22	-3.057E-22	-2.947E-10	-2.947E-10	-3.430E-14
1.40000	3.235E-08	3.235E-08	-1.312E-22	-1.312E-22	-2.977E-10	-2.977E-10	-1.348E-14
1.50000	3.023E-08	3.023E-08	-6.816E-23	-6.816E-23	-2.991E-10	-2.991E-10	-6.136E-15
1.60000	2.835E-08	2.835E-08	-3.783E-23	-3.783E-23	-2.999E-10	-2.999E-10	-3.240E-15
1.70000	2.669E-08	2.669E-08	-2.112E-23	-2.112E-23	-3.003E-10	-3.003E-10	-1.963E-15
1.80000	2.520E-08	2.520E-08	-1.221E-23	-1.221E-23	-3.006E-10	-3.006E-10	-1.279E-15
1.90000	2.388E-08	2.388E-08	-7.044E-24	-7.044E-24	-3.007E-10	-3.007E-10	-9.094E-16
2.00000	2.268E-08	2.268E-08	-4.056E-24	-4.056E-24	-3.008E-10	-3.008E-10	-6.850E-16

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 8.000 θ_D= 0. ρ_0= 29.944

z	ϕ	z_r	ρ	θ	β	$_0\mu$-10	$_x\mu$-10	$_0\mu'$-10
0.	8.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	8.0000	0.10000	193.676	6.737E-07	9.994E-01	-1.852E-12	-1.852E-12	1.852E-12
0.20000	8.0000	0.20000	172.650	1.121E-06	9.992E-01	-2.614E-12	-2.614E-12	2.614E-12
0.30000	8.0000	0.30000	151.506	1.628E-06	9.989E-01	-3.683E-12	-3.683E-12	3.683E-12
0.40000	8.0000	0.40000	130.484	2.615E-06	9.985E-01	-5.425E-12	-5.425E-12	5.425E-12
0.50000	8.0000	0.50000	109.653	3.949E-06	9.979E-01	-7.990E-12	-7.990E-12	7.990E-12
0.60000	8.0000	0.60000	89.149	5.870E-06	9.969E-01	-1.254E-11	-1.254E-11	1.254E-11
0.70000	8.0000	0.70000	69.261	9.392E-06	9.958E-01	-2.235E-11	-2.235E-11	2.235E-11
0.80000	8.0000	0.80000	50.721	5.357E-05	9.963E-01	-4.474E-11	-4.474E-11	4.474E-11
0.85000	8.0000	0.85000	42.515	9.093E-05	9.992E-01	-6.724E-11	-6.724E-11	6.724E-11
0.90000	8.0000	0.90000	35.692	1.686E-04	1.004E 00	-1.014E-10	-1.014E-10	1.014E-10
0.92500	8.0000	0.92500	33.074	2.203E-04	1.005E 00	-1.205E-10	-1.205E-10	1.205E-10
0.95000	8.0000	0.95000	31.173	2.758E-04	1.004E 00	-1.366E-10	-1.366E-10	1.366E-10
0.96250	8.0000	0.96250	30.535	3.057E-04	1.002E 00	-1.425E-10	-1.425E-10	1.425E-10
0.97500	8.0000	0.97500	30.124	3.552E-04	1.001E 00	-1.464E-10	-1.464E-10	1.464E-10
0.98125	8.0000	0.98125	30.007	3.816E-04	1.000E 00	-1.475E-10	-1.475E-10	1.475E-10
0.98750	8.0000	0.98750	29.950	4.064E-04	9.996E-01	-1.483E-10	-1.483E-10	1.483E-10
0.99375	8.0000	0.99375	29.954	4.312E-04	9.996E-01	-1.482E-10	-1.482E-10	1.482E-10
1.00000	8.0000	1.00000	30.018	4.568E-04	9.999E-01	-1.474E-10	-1.474E-10	1.474E-10
1.00625	8.0000	1.00625	30.141	4.815E-04	1.001E 00	-1.462E-10	-1.462E-10	1.462E-10
1.01250	8.0000	1.01250	30.324	5.037E-04	1.001E 00	-1.445E-10	-1.445E-10	1.445E-10
1.01875	8.0001	1.01875	30.565	5.259E-04	1.003E 00	-1.422E-10	-1.422E-10	1.422E-10
1.02500	8.0001	1.02500	30.863	5.490E-04	1.004E 00	-1.394E-10	-1.394E-10	1.394E-10
1.03750	8.0001	1.03750	31.622	5.908E-04	1.006E 00	-1.326E-10	-1.326E-10	1.326E-10
1.05000	8.0001	1.05000	32.586	6.275E-04	1.008E 00	-1.245E-10	-1.245E-10	1.245E-10
1.07500	8.0001	1.07500	35.058	6.890E-04	1.010E 00	-1.057E-10	-1.057E-10	1.057E-10
1.10000	8.0001	1.10000	38.133	7.342E-04	1.008E 00	-8.632E-11	-8.632E-11	8.632E-11
1.15000	8.0001	1.15000	45.583	7.855E-04	1.003E 00	-5.762E-11	-5.762E-11	5.762E-11
1.20000	8.0002	1.20000	54.157	8.196E-04	9.996E-01	-3.868E-11	-3.868E-11	3.868E-11
1.30000	8.0002	1.30000	73.060	8.521E-04	9.971E-01	-1.975E-11	-1.975E-11	1.975E-11
1.40000	8.0003	1.40000	93.104	8.606E-04	9.971E-01	-1.136E-11	-1.136E-11	1.136E-11
1.50000	8.0003	1.50000	113.088	8.623E-04	9.975E-01	-7.413E-12	-7.413E-12	7.413E-12
1.60000	8.0003	1.60000	134.563	8.657E-04	9.979E-01	-5.028E-12	-5.028E-12	5.028E-12
1.70000	8.0004	1.70000	155.613	8.708E-04	9.982E-01	-3.446E-12	-3.446E-12	3.446E-12
1.80000	8.0004	1.80000	176.776	8.726E-04	9.985E-01	-2.445E-12	-2.445E-12	2.445E-12
1.90000	8.0004	1.90000	198.014	8.777E-04	9.987E-01	-1.732E-12	-1.732E-12	1.732E-12
2.00000	8.0004	2.00000	219.307	8.777E-04	9.988E-01	-1.243E-12	-1.243E-12	1.243E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 8.000 θ_D= 0. ρ_a= 29.944

z	$_x\mu'-1$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.852E-12	49.901	-7.844E-11	-7.844E-11	7.844E-11	7.844E-11	-9.578E-11	-9.578E-11
0.20000	2.614E-12	99.802	-1.888E-10	-1.888E-10	1.888E-10	1.888E-10	-1.351E-10	-1.351E-10
0.30000	3.683E-12	149.703	-3.444E-10	-3.444E-10	3.444E-10	3.444E-10	-1.904E-10	-1.904E-10
0.40000	5.425E-12	199.605	-5.686E-10	-5.686E-10	5.686E-10	5.686E-10	-2.805E-10	-2.805E-10
0.50000	7.990E-12	249.506	-8.991E-10	-8.991E-10	8.994E-10	8.994E-10	-4.131E-10	-4.131E-10
0.60000	1.254E-11	299.407	-1.395E-09	-1.395E-09	1.396E-09	1.396E-09	-6.484E-10	-6.484E-10
0.70000	2.235E-11	349.308	-2.228E-09	-2.228E-09	2.230E-09	2.230E-09	-1.155E-09	-1.155E-09
0.80000	4.474E-11	399.209	-3.769E-09	-3.769E-09	3.856E-09	3.856E-09	-2.313E-09	-2.313E-09
0.85000	6.724E-11	424.160	-5.059E-09	-5.059E-09	5.326E-09	5.326E-09	-3.477E-09	-3.477E-09
0.90000	1.014E-10	449.110	-6.776E-09	-6.776E-09	7.748E-09	7.748E-09	-5.243E-09	-5.243E-09
0.92500	1.205E-10	461.585	-7.795E-09	-7.795E-09	9.501E-09	9.501E-09	-6.231E-09	-6.231E-09
0.95000	1.366E-10	474.061	-8.884E-09	-8.884E-09	1.163E-08	1.163E-08	-7.063E-09	-7.063E-09
0.96250	1.425E-10	480.298	-9.419E-09	-9.419E-09	1.284E-08	1.284E-08	-7.367E-09	-7.367E-09
0.97500	1.464E-10	486.536	-9.693E-09	-9.693E-09	1.437E-08	1.437E-08	-7.569E-09	-7.569E-09
0.98125	1.475E-10	489.655	-9.773E-09	-9.773E-09	1.520E-08	1.520E-08	-7.628E-09	-7.628E-09
0.98750	1.483E-10	492.774	-9.851E-09	-9.851E-09	1.605E-08	1.605E-08	-7.665E-09	-7.665E-09
0.99375	1.484E-10	495.892	-9.902E-09	-9.902E-09	1.692E-08	1.692E-08	-7.663E-09	-7.663E-09
1.00000	1.474E-10	499.011	-9.909E-09	-9.909E-09	1.784E-08	1.784E-08	-7.623E-09	-7.623E-09
1.00625	1.462E-10	502.130	-9.898E-09	-9.898E-09	1.877E-08	1.877E-08	-7.561E-09	-7.561E-09
1.01250	1.445E-10	505.249	-9.904E-09	-9.904E-09	1.967E-08	1.967E-08	-7.470E-09	-7.470E-09
1.01875	1.422E-10	508.368	-9.878E-09	-9.878E-09	2.059E-08	2.059E-08	-7.352E-09	-7.352E-09
1.02500	1.394E-10	511.486	-9.802E-09	-9.802E-09	2.154E-08	2.154E-08	-7.209E-09	-7.209E-09
1.03750	1.326E-10	517.724	-9.640E-09	-9.640E-09	2.340E-08	2.340E-08	-6.857E-09	-6.857E-09
1.05000	1.245E-10	523.962	-9.467E-09	-9.467E-09	2.518E-08	2.518E-08	-6.435E-09	-6.435E-09
1.07500	1.057E-10	536.437	-9.065E-09	-9.065E-09	2.846E-08	2.846E-08	-5.467E-09	-5.467E-09
1.10000	8.632E-11	548.912	-8.691E-09	-8.691E-09	3.123E-08	3.123E-08	-4.463E-09	-4.463E-09
1.15000	5.762E-11	573.863	-8.240E-09	-8.240E-09	3.520E-08	3.520E-08	-2.979E-09	-2.979E-09
1.20000	3.86[illegible]E-11	598.813	-7.584E-09	-7.584E-09	3.822E-08	3.822E-08	-2.000E-09	-2.000E-09
1.30000	1.97[illegible]E-11	648.714	-6.347E-09	-6.347E-09	4.221E-08	4.221E-08	-1.021E-09	-1.021E-09
1.40000	1.136E-11	698.615	-5.324E-09	-5.324E-09	4.473E-08	4.473E-08	-5.874E-10	-5.874E-10
1.50000	7.413E-12	748.517	-4.288E-09	-4.288E-09	4.667E-08	4.667E-08	-3.833E-10	-3.833E-10
1.60000	5.028E-12	798.418	-3.002E-09	-3.002E-09	4.857E-08	4.857E-08	-2.600E-10	-2.600E-10
1.70000	3.446E-12	848.319	-1.499E-09	-1.499E-09	5.049E-08	5.049E-08	-1.781E-10	-1.781E-10
1.80000	2.445E-12	898.220	-1.014E-10	-1.014E-10	5.218E-08	5.218E-08	-1.264E-10	-1.264E-10
1.90000	1.736E-12	948.121	1.674E-09	1.674E-09	5.416E-08	5.416E-08	-8.956E-11	-8.956E-11
2.00000	1.243E-12	998.022	2.956E-09	2.956E-09	5.559E-08	5.559E-08	-6.426E-11	-6.426E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 8.000 θ_D= 0. ρ_a=29.944

z	$_oD_y$	$_xD_y$	σ^κ	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-9.259E-16
0.10000	2.207E-12	2.207E-12	-7.636E-24	-7.636E-24	-8.787E-14	-8.787E-14	-1.238E-15
0.20000	6.134E-12	6.134E-12	-1.321E-23	-1.321E-23	-2.400E-13	-2.400E-13	-1.759E-15
0.30000	1.292E-11	1.292E-11	-2.279E-23	-2.279E-23	-5.029E-13	-5.029E-13	-2.735E-15
0.40000	2.707E-11	2.707E-11	-4.094E-23	-4.094E-23	-9.660E-13	-9.660E-13	-4.550E-15
0.50000	5.288E-11	5.288E-11	-7.338E-23	-7.338E-23	-1.798E-12	-1.798E-12	-8.771E-15
0.60000	1.144E-10	1.144E-10	-1.430E-22	-1.430E-22	-3.328E-12	-3.328E-12	-1.935E-14
0.70000	2.957E-10	2.957E-10	-3.349E-22	-3.349E-22	-6.621E-12	-6.621E-12	-4.939E-14
0.80000	9.133E-10	9.133E-10	-9.556E-22	-9.556E-22	-1.523E-11	-1.523E-11	-1.600E-13
0.85000	1.798E-09	1.798E-09	-1.747E-21	-1.747E-21	-2.507E-11	-2.507E-11	-3.069E-13
0.90000	3.798E-09	3.798E-09	-3.207E-21	-3.207E-21	-4.298E-11	-4.298E-11	-5.814E-13
0.92500	5.638E-09	5.638E-09	-4.140E-21	-4.140E-21	-5.672E-11	-5.672E-11	-7.727E-13
0.95000	8.303E-09	8.303E-09	-4.984E-21	-4.984E-21	-7.384E-11	-7.384E-11	-9.725E-13
0.96250	9.994E-09	9.994E-09	-5.304E-21	-5.304E-21	-8.348E-11	-8.348E-11	-1.056E-12
0.97500	1.189E-08	1.189E-08	-5.520E-21	-5.520E-21	-9.361E-11	-9.361E-11	-1.114E-12
0.98125	1.288E-08	1.288E-08	-5.584E-21	-5.584E-21	-9.881E-11	-9.881E-11	-1.132E-12
0.98750	1.390E-08	1.390E-08	-5.628E-21	-5.628E-21	-1.040E-10	-1.040E-10	-1.139E-12
0.99375	1.491E-08	1.491E-08	-5.625E-21	-5.625E-21	-1.093E-10	-1.093E-10	-1.139E-12
1.00000	1.592E-08	1.592E-08	-5.578E-21	-5.578E-21	-1.146E-10	-1.146E-10	-1.131E-12
1.00625	1.690E-08	1.690E-08	-5.511E-21	-5.511E-21	-1.197E-10	-1.197E-10	-1.112E-12
1.01250	1.784E-08	1.784E-08	-5.414E-21	-5.414E-21	-1.249E-10	-1.249E-10	-1.085E-12
1.01875	1.873E-08	1.873E-08	-5.288E-21	-5.288E-21	-1.299E-10	-1.299E-10	-1.052E-12
1.02500	1.956E-08	1.956E-08	-5.137E-21	-5.137E-21	-1.347E-10	-1.347E-10	-1.012E-12
1.03750	2.104E-08	2.104E-08	-4.770E-21	-4.770E-21	-1.440E-10	-1.440E-10	-9.197E-13
1.05000	2.226E-08	2.226E-08	-4.342E-21	-4.342E-21	-1.525E-10	-1.525E-10	-8.185E-13
1.07500	2.398E-08	2.398E-08	-3.412E-21	-3.412E-21	-1.670E-10	-1.670E-10	-6.214E-13
1.10000	2.497E-08	2.497E-08	-2.528E-21	-2.528E-21	-1.781E-10	-1.781E-10	-4.596E-13
1.15000	2.561E-08	2.561E-08	-1.391E-21	-1.391E-21	-1.922E-10	-1.922E-10	-2.360E-13
1.20000	2.533E-08	2.533E-08	-7.643E-22	-7.643E-22	-2.000E-10	-2.000E-10	-1.250E-13
1.30000	2.395E-08	2.395E-08	-2.789E-22	-2.789E-22	-2.070E-10	-2.070E-10	-4.062E-14
1.40000	2.240E-08	2.240E-08	-1.237E-22	-1.237E-22	-2.098E-10	-2.098E-10	-1.649E-14
1.50000	2.096E-08	2.096E-08	-6.554E-23	-6.554E-23	-2.111E-10	-2.111E-10	-7.625E-15
1.60000	1.967E-08	1.967E-08	-3.652E-23	-3.652E-23	-2.119E-10	-2.119E-10	-4.088E-15
1.70000	1.853E-08	1.853E-08	-2.050E-23	-2.050E-23	-2.123E-10	-2.123E-10	-2.495E-15
1.80000	1.750E-08	1.750E-08	-1.187E-23	-1.187E-23	-2.125E-10	-2.125E-10	-1.636E-15
1.90000	1.658E-08	1.658E-08	-6.862E-24	-6.862E-24	-2.127E-10	-2.127E-10	-1.169E-15
2.00000	1.575E-08	1.575E-08	-3.956E-24	-3.956E-24	-2.127E-10	-2.127E-10	-8.831E-16

PROPAGATION FREQUENCY= 1.5503E 10 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	10.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	10.0000	0.10000	194.006	1.041E-06	9.989E-01	-1.849E-12	-1.849E-12	1.849E-12
0.20000	10.0000	0.20000	172.942	1.441E-06	9.986E-01	-2.601E-12	-2.601E-12	2.601E-12
0.30000	10.0000	0.30000	152.006	3.468E-06	9.981E-01	-3.653E-12	-3.653E-12	3.653E-12
0.40000	10.0000	0.40000	131.256	4.055E-06	9.974E-01	-5.347E-12	-5.347E-12	5.347E-12
0.50000	10.0000	0.50000	110.800	5.443E-06	9.964E-01	-7.822E-12	-7.822E-12	7.822E-12
0.60000	10.0000	0.60000	90.834	9.285E-06	9.952E-01	-1.202E-11	-1.202E-11	1.202E-11
0.70000	10.0000	0.70000	71.771	2.156E-05	9.946E-01	-2.060E-11	-2.060E-11	2.060E-11
0.80000	10.0000	0.80000	54.562	6.916E-05	9.977E-01	-3.802E-11	-3.802E-11	3.802E-11
0.85000	10.0000	0.85000	47.299	1.037E-04	1.002E 00	-5.285E-11	-5.285E-11	5.285E-11
0.90000	10.0000	0.90000	41.580	1.609E-04	1.005E 00	-7.048E-11	-7.048E-11	7.048E-11
0.92500	10.0000	0.92500	39.516	1.981E-04	1.005E 00	-7.879E-11	-7.879E-11	7.879E-11
0.95000	10.0000	0.95000	38.105	2.408E-04	1.002E 00	-8.648E-11	-8.648E-11	8.648E-11
0.96250	10.0000	0.96250	37.669	2.672E-04	1.001E 00	-8.900E-11	-8.900E-11	8.900E-11
0.97500	10.0000	0.97500	37.422	2.946E-04	9.997E-01	-9.047E-11	-9.047E-11	9.047E-11
0.98125	10.0000	0.98125	37.370	3.091E-04	9.993E-01	-9.078E-11	-9.078E-11	9.078E-11
0.98750	10.0000	0.98750	37.367	3.236E-04	9.992E-01	-9.080E-11	-9.080E-11	9.080E-11
0.99375	10.0000	0.99375	37.412	3.389E-04	9.994E-01	-9.053E-11	-9.053E-11	9.053E-11
1.00000	10.0000	1.00000	37.505	3.526E-04	9.998E-01	-8.997E-11	-8.997E-11	8.997E-11
1.00625	10.0000	1.00625	37.646	3.697E-04	1.000E 00	-8.914E-11	-8.914E-11	8.914E-11
1.01250	10.0000	1.01250	37.834	3.825E-04	1.001E 00	-8.804E-11	-8.804E-11	8.804E-11
1.01875	10.0000	1.01875	38.069	3.970E-04	1.002E 00	-8.669E-11	-8.669E-11	8.669E-11
1.02500	10.0000	1.02500	38.350	4.132E-04	1.004E 00	-8.509E-11	-8.509E-11	8.509E-11
1.03750	10.0001	1.03750	39.044	4.380E-04	1.006E 00	-8.128E-11	-8.128E-11	8.128E-11
1.05000	10.0001	1.05000	39.908	4.610E-04	1.008E 00	-7.678E-11	-7.678E-11	7.678E-11
1.07500	10.0001	1.07500	42.101	4.943E-04	1.011E 00	-6.866E-11	-6.866E-11	6.866E-11
1.10000	10.0001	1.10000	44.835	5.199E-04	1.012E 00	-5.983E-11	-5.983E-11	5.983E-11
1.15000	10.0001	1.15000	51.567	5.584E-04	1.008E 00	-4.316E-11	-4.316E-11	4.316E-11
1.20000	10.0001	1.20000	59.495	5.857E-04	1.004E 00	-3.085E-11	-3.085E-11	3.085E-11
1.30000	10.0002	1.30000	77.427	6.147E-04	9.983E-01	-1.714E-11	-1.714E-11	1.714E-11
1.40000	10.0002	1.40000	96.831	6.318E-04	9.969E-01	-1.035E-11	-1.035E-11	1.035E-11
1.50000	10.0002	1.50000	116.975	6.369E-04	9.968E-01	-6.973E-12	-6.973E-12	6.973E-12
1.60000	10.0002	1.60000	137.536	6.420E-04	9.970E-01	-4.758E-12	-4.758E-12	4.758E-12
1.70000	10.0003	1.70000	158.351	6.437E-04	9.974E-01	-3.296E-12	-3.296E-12	3.296E-12
1.80000	10.0003	1.80000	179.331	6.455E-04	9.977E-01	-2.345E-12	-2.345E-12	2.345E-12
1.90000	10.0003	1.90000	200.425	6.506E-04	9.980E-01	-1.666E-12	-1.666E-12	1.666E-12
2.00000	10.0003	2.00000	221.600	6.506E-04	9.982E-01	-1.199E-12	-1.199E-12	1.199E-12

PROPAGATION FREQUENCY= 1.550?E 10 ϕ_0= 10.000 θ_D= 0. ρ_a= 37.362

z	$_x\mu'$-1.0	T_o	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.849E-12	49.901	-7.835E-11	-7.835E-11	7.835E-11	7.835E-11	-9.558E-11	-9.558E-11
0.20000	2.601E-12	99.802	-1.883E-10	-1.883E-10	1.883E-10	1.883E-10	-1.345E-10	-1.345E-10
0.30000	3.653E-12	149.703	-3.429E-10	-3.429E-10	3.429E-10	3.429E-10	-1.889E-10	-1.889E-10
0.40000	5.347E-12	199.605	-5.645E-10	-5.645E-10	5.645E-10	5.645E-10	-2.765E-10	-2.765E-10
0.50000	7.822E-12	249.506	-8.891E-10	-8.891E-10	8.896E-10	8.896E-10	-4.044E-10	-4.044E-10
0.60000	1.202E-11	299.407	-1.369E-09	-1.369E-09	1.371E-09	1.371E-09	-6.217E-10	-6.217E-10
0.70000	2.060E-11	349.308	-2.147E-09	-2.147E-09	2.160E-09	2.160E-09	-1.065E-09	-1.065E-09
0.80000	3.802E-11	399.209	-3.484E-09	-3.484E-09	3.630E-09	3.630E-09	-1.966E-09	-1.966E-09
0.85000	5.285E-11	424.160	-4.504E-09	-4.504E-09	4.852E-09	4.852E-09	-2.732E-09	-2.732E-09
0.90000	7.048E-11	449.110	-5.775E-09	-5.775E-09	6.661E-09	6.661E-09	-3.644E-09	-3.644E-09
0.92500	7.879E-11	461.585	-6.459E-09	-6.459E-09	7.838E-09	7.838E-09	-4.074E-09	-4.074E-09
0.95000	8.648E-11	474.061	-7.136E-09	-7.136E-09	9.229E-09	9.229E-09	-4.471E-09	-4.471E-09
0.96250	8.900E-11	480.298	-7.424E-09	-7.424E-09	1.004E-08	1.004E-08	-4.602E-09	-4.602E-09
0.97500	9.047E-11	486.536	-7.683E-09	-7.683E-09	1.090E-08	1.090E-08	-4.677E-09	-4.677E-09
0.98125	9.078E-11	489.655	-7.792E-09	-7.792E-09	1.135E-08	1.135E-08	-4.693E-09	-4.693E-09
0.98750	9.080E-11	492.774	-7.892E-09	-7.892E-09	1.182E-08	1.182E-08	-4.694E-09	-4.694E-09
0.99375	9.053E-11	495.892	-7.970E-09	-7.970E-09	1.231E-08	1.231E-08	-4.680E-09	-4.680E-09
1.00000	8.997E-11	499.011	-8.058E-09	-8.058E-09	1.278E-08	1.278E-08	-4.652E-09	-4.652E-09
1.00625	8.914E-11	502.130	-8.087E-09	-8.087E-09	1.331E-08	1.331E-08	-4.609E-09	-4.609E-09
1.01250	8.804E-11	505.249	-8.162E-09	-8.162E-09	1.379E-08	1.379E-08	-4.552E-09	-4.552E-09
1.01875	8.669E-11	508.368	-8.198E-09	-8.198E-09	1.430E-08	1.430E-08	-4.482E-09	-4.482E-09
1.02500	8.509E-11	511.486	-8.191E-09	-8.191E-09	1.484E-08	1.484E-08	-4.400E-09	-4.400E-09
1.03750	8.128E-11	517.724	-8.255E-09	-8.255E-09	1.582E-08	1.582E-08	-4.203E-09	-4.203E-09
1.05000	7.678E-11	523.962	-8.289E-09	-8.289E-09	1.677E-08	1.677E-08	-3.970E-09	-3.970E-09
1.07500	6.866E-11	536.437	-8.446E-09	-8.446E-09	1.843E-08	1.843E-08	-3.550E-09	-3.550E-09
1.10000	5.983E-11	548.912	-8.589E-09	-8.589E-09	1.989E-08	1.989E-08	-3.093E-09	-3.093E-09
1.15000	4.316E-11	573.863	-8.701E-09	-8.701E-09	2.233E-08	2.233E-08	-2.232E-09	-2.232E-09
1.20000	3.085E-11	596.813	-8.611E-09	-8.611E-09	2.425E-08	2.425E-08	-1.595E-09	-1.595E-09
1.30000	1.714E-11	648.714	-8.266E-09	-8.266E-09	2.693E-08	2.693E-08	-8.862E-10	-8.862E-10
1.40000	1.035E-11	698.616	-7.647E-09	-7.647E-09	2.888E-08	2.888E-08	-5.351E-10	-5.351E-10
1.50000	6.973E-12	748.517	-7.127E-09	-7.127E-09	3.025E-08	3.025E-08	-3.605E-10	-3.605E-10
1.60000	4.758E-12	798.418	-6.447E-09	-6.447E-09	3.151E-08	3.151E-08	-2.460E-10	-2.460E-10
1.70000	3.296E-12	848.319	-5.790E-09	-5.790E-09	3.256E-08	3.256E-08	-1.704E-10	-1.704E-10
1.80000	2.345E-12	898.220	-5.067E-09	-5.067E-09	3.356E-08	3.356E-08	-1.213E-10	-1.213E-10
1.90000	1.666E-12	948.121	-4.135E-09	-4.135E-09	3.469E-08	3.469E-08	-8.615E-11	-8.615E-11
2.00000	1.199E-12	998.022	-3.401E-09	-3.401E-09	3.557E-08	3.557E-08	-6.201E-11	-6.201E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0=10.000 θ_0= 0. ρ_a=37.362

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-1.441E-15
0.10000	2.747E-12	2.747E-12	-7.610E-24	-7.610E-24	-8.772E-14	-8.772E-14	-1.923E-15
0.20000	7.617E-12	7.617E-12	-1.311E-23	-1.311E-23	-2.390E-13	-2.390E-13	-2.724E-15
0.30000	1.598E-11	1.598E-11	-2.250E-23	-2.250E-23	-4.992E-13	-4.992E-13	-4.208E-15
0.40000	3.327E-11	3.327E-11	-4.007E-23	-4.007E-23	-9.541E-13	-9.541E-13	-6.936E-15
0.50000	6.443E-11	6.443E-11	-7.106E-23	-7.106E-23	-1.764E-12	-1.764E-12	-1.310E-14
0.60000	1.348E-10	1.348E-10	-1.345E-22	-1.345E-22	-3.223E-12	-3.223E-12	-2.806E-14
0.70000	3.308E-10	3.308E-10	-2.968E-22	-2.968E-22	-6.222E-12	-6.222E-12	-6.738E-14
0.80000	9.253E-10	9.253E-10	-7.444E-22	-7.444E-22	-1.336E-11	-1.336E-11	-1.891E-13
0.85000	1.676E-09	.676E-09	-1.224E-21	-1.224E-21	-2.057E-11	-2.057E-11	-3.206E-13
0.90000	3.157E-09	3.157E-09	-1.873E-21	-1.873E-21	-3.212E-11	-3.212E-11	-5.210E-13
0.92500	4.335E-09	4.335E-09	-2.208E-21	-2.208E-21	-3.973E-11	-3.973E-11	-6.326E-13
0.95000	5.902E-09	5.902E-09	-2.534E-21	-2.534E-21	-4.864E-11	-4.864E-11	-7.169E-13
0.96250	6.815E-09	6.815E-09	-2.644E-21	-2.644E-21	-5.348E-11	-5.348E-11	-7.464E-13
0.97500	7.788E-09	7.788E-09	-2.709E-21	-2.709E-21	-5.850E-11	-5.850E-11	-7.640E-13
0.98125	8.286E-09	8.286E-09	-2.723E-21	-2.723E-21	-6.104E-11	-6.104E-11	-7.678E-13
0.98750	8.785E-09	8.785E-09	-2.724E-21	-2.724E-21	-6.359E-11	-6.359E-11	-7.680E-13
0.99375	9.283E-09	9.283E-09	-2.712E-21	-2.712E-21	-6.613E-11	-6.613E-11	-7.648E-13
1.00000	9.772E-09	9.772E-09	-2.687E-21	-2.687E-21	-6.865E-11	-6.865E-11	-7.581E-13
1.00625	1.025E-08	1.025E-08	-2.650E-21	-2.650E-21	-7.115E-11	-7.115E-11	-7.482E-13
1.01250	1.071E-08	1.071E-08	-2.602E-21	-2.602E-21	-7.361E-11	-7.361E-11	-7.352E-13
1.01875	1.115E-08	1.115E-08	-2.543E-21	-2.543E-21	-7.601E-11	-7.601E-11	-7.195E-13
1.02500	1.156E-08	1.156E-08	-2.475E-21	-2.475E-21	-7.836E-11	-7.836E-11	-7.013E-13
1.03750	1.232E-08	1.232E-08	-2.312E-21	-2.312E-21	-8.284E-11	-8.284E-11	-6.593E-13
1.05000	1.297E-08	1.297E-08	-2.126E-21	-2.126E-21	-8.699E-11	-8.699E-11	-6.121E-13
1.07500	1.396E-08	1.396E-08	-1.802E-21	-1.802E-21	-9.434E-11	-9.434E-11	-4.966E-13
1.10000	1.458E-08	1.458E-08	-1.470E-21	-1.470E-21	-1.005E-10	-1.005E-10	-3.907E-13
1.15000	1.514E-08	1.514E-08	-9.044E-22	-9.044E-22	-1.092E-10	-1.092E-10	-2.340E-13
1.20000	1.515E-08	1.515E-08	-5.402E-22	-5.402E-22	-1.145E-10	-1.145E-10	-1.388E-13
1.30000	1.451E-08	1.451E-08	-2.261E-22	-2.261E-22	-1.199E-10	-1.199E-10	-5.143E-14
1.40000	1.366E-08	1.366E-08	-1.080E-22	-1.080E-22	-1.223E-10	-1.223E-10	-2.227E-14
1.50000	1.281E-08	1.281E-08	-5.977E-23	-5.977E-23	-1.235E-10	-1.235E-10	-1.063E-14
1.60000	1.204E-08	1.204E-08	-3.360E-23	-3.360E-23	-1.242E-10	-1.242E-10	-5.899E-15
1.70000	1.135E-08	1.135E-08	-1.910E-23	-1.910E-23	-1.245E-10	-1.245E-10	-3.657E-15
1.80000	1.072E-08	1.072E-08	-1.112E-23	-1.112E-23	-1.248E-10	-1.248E-10	-2.436E-15
1.90000	1.016E-08	1.016E-08	-6.448E-24	-6.448E-24	-1.249E-10	-1.249E-10	-1.760E-15
2.00000	9.656E-09	9.656E-09	-3.728E-24	-3.728E-24	-1.250E-10	-1.250E-10	-1.338E-15

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 12.000 θ_0= 0. ρ_a= 44.734

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	12.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	12.0000	0.10000	194.165	9.205E-07	9.985E-01	-1.844E-12	-1.844E-12	1.844E-12
0.20000	12.0000	0.20000	173.299	2.508E-06	9.980E-01	-2.586E-12	-2.586E-12	2.586E-12
0.30000	12.0000	0.30000	152.613	2.508E-06	9.973E-01	-3.617E-12	-3.617E-12	3.617E-12
0.40000	12.0000	0.40000	132.193	4.696E-06	9.963E-01	-5.255E-12	-5.255E-12	5.255E-12
0.50000	12.0000	0.50000	112.183	6.830E-06	9.951E-01	-7.623E-12	-7.623E-12	7.623E-12
0.60000	12.0000	0.60000	92.849	1.323E-05	9.939E-01	-1.143E-11	-1.143E-11	1.143E-11
0.70000	12.0000	0.70000	74.717	2.946E-05	9.941E-01	-1.872E-11	-1.872E-11	1.872E-11
0.80000	12.0000	0.80000	58.910	7.471E-05	9.992E-01	-3.162E-11	-3.162E-11	3.162E-11
0.85000	12.0000	0.85000	52.549	1.029E-04	1.003E 00	-4.140E-11	-4.140E-11	4.140E-11
0.90000	12.0000	0.90000	47.790	1.443E-04	1.005E 00	-5.156E-11	-5.156E-11	5.156E-11
0.92500	12.0000	0.92500	46.173	1.708E-04	1.004E 00	-5.593E-11	-5.593E-11	5.593E-11
0.95000	12.0000	0.95000	45.142	1.989E-04	1.001E 00	-5.891E-11	-5.891E-11	5.891E-11
0.96250	12.0000	0.96250	44.861	2.160E-04	9.997E-01	-5.975E-11	-5.975E-11	5.975E-11
0.97500	12.0000	0.97500	44.739	2.331E-04	9.989E-01	-6.012E-11	-6.012E-11	6.012E-11
0.98125	12.0000	0.98125	44.739	2.408E-04	9.988E-01	-6.012E-11	-6.012E-11	6.012E-11
0.98750	12.0000	0.98750	44.779	2.519E-04	9.989E-01	-6.000E-11	-6.000E-11	6.000E-11
0.99375	12.0000	0.99375	44.860	2.613E-04	9.992E-01	-5.975E-11	-5.975E-11	5.975E-11
1.00000	12.0000	1.00000	44.981	2.698E-04	9.997E-01	-5.939E-11	-5.939E-11	5.939E-11
1.00625	12.0000	1.00625	45.141	2.783E-04	1.000E 00	-5.891E-11	-5.891E-11	5.891E-11
1.01250	12.0000	1.01250	45.341	2.877E-04	1.001E 00	-5.832E-11	-5.832E-11	5.832E-11
1.01875	12.0000	1.01875	45.579	2.946E-04	1.002E 00	-5.763E-11	-5.763E-11	5.763E-11
1.02500	12.0000	1.02500	45.856	3.048E-04	1.003E 00	-5.683E-11	-5.683E-11	5.683E-11
1.03750	12.0000	1.03750	46.521	3.210E-04	1.006E 00	-5.496E-11	-5.496E-11	5.496E-11
1.05000	12.0000	1.05000	47.330	3.321E-04	1.008E 00	-5.276E-11	-5.276E-11	5.276E-11
1.07500	12.0001	1.07500	49.350	3.569E-04	1.012E 00	-4.766E-11	-4.766E-11	4.766E-11
1.10000	12.0001	1.10000	51.851	3.740E-04	1.013E 00	-4.265E-11	-4.265E-11	4.265E-11
1.15000	12.0001	1.15000	58.037	4.013E-04	1.012E 00	-3.281E-11	-3.281E-11	3.281E-11
1.20000	12.0001	1.20000	65.419	4.218E-04	1.007E 00	-2.532E-11	-2.532E-11	2.532E-11
1.30000	12.0001	1.30000	82.442	4.440E-04	1.000E 00	-1.483E-11	-1.483E-11	1.483E-11
1.40000	12.0001	1.40000	101.190	4.610E-04	9.974E-01	-9.352E-12	-9.352E-12	9.352E-12
1.50000	12.0002	1.50000	120.864	4.679E-04	9.965E-01	-6.487E-12	-6.487E-12	6.487E-12
1.60000	12.0002	1.60000	141.077	4.730E-04	9.965E-01	-4.455E-12	-4.455E-12	4.455E-12
1.70000	12.0002	1.70000	161.627	4.747E-04	9.968E-01	-3.125E-12	-3.125E-12	3.125E-12
1.80000	12.0002	1.80000	182.400	4.764E-04	9.971E-01	-2.231E-12	-2.231E-12	2.231E-12
1.90000	12.0002	1.90000	203.327	4.832E-04	9.974E-01	-1.593E-12	-1.593E-12	1.593E-12
2.00000	12.0002	2.00000	224.365	4.849E-04	9.976E-01	-1.149E-12	-1.149E-12	1.149E-12

PROPAGATION FREQUENCY= 1.550DE 10 ϕ_0= 12.000 θ_D= 0. ρ_a=44.734

z	$_x\mu'-1_0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.844E-12	49.901	-7.825E-11	-7.825E-11	7.825E-11	7.825E-11	-9.533E-11	-9.533E-11
0.20000	2.586E-12	99.802	-1.878E-10	-1.878E-10	1.878E-10	1.878E-10	-1.337E-10	-1.337E-10
0.30000	3.617E-12	149.703	-3.412E-10	-3.412E-10	3.412E-10	3.412E-10	-1.870E-10	-1.870E-10
0.40000	5.255E-12	199.605	-5.594E-10	-5.594E-10	5.597E-10	5.597E-10	-2.717E-10	-2.717E-10
0.50000	7.623E-12	249.506	-8.770E-10	-8.770E-10	8.779E-10	8.779E-10	-3.941E-10	-3.941E-10
0.60000	1.143E-11	299.407	-1.339E-09	-1.339E-09	1.343E-09	1.343E-09	-5.911E-10	-5.911E-10
0.70000	1.872E-11	349.308	-2.058E-09	-2.058E-09	2.081E-09	2.081E-09	-9.678E-10	-9.678E-10
0.80000	3.162E-11	399.209	-3.217E-09	-3.217E-09	3.387E-09	3.387E-09	-1.635E-09	-1.635E-09
0.85000	4.140E-11	424.160	-4.041E-09	-4.041E-09	4.383E-09	4.383E-09	-2.141E-09	-2.141E-09
0.90000	5.156E-11	449.110	-5.014E-09	-5.014E-09	5.726E-09	5.726E-09	-2.666E-09	-2.666E-09
0.92500	5.593E-11	461.585	-5.529E-09	-5.529E-09	6.554E-09	6.554E-09	-2.892E-09	-2.892E-09
0.95000	5.891E-11	474.061	-6.045E-09	-6.045E-09	7.474E-09	7.474E-09	-3.046E-09	-3.046E-09
0.96250	5.975E-11	480.298	-6.277E-09	-6.277E-09	7.983E-09	7.983E-09	-3.089E-09	-3.089E-09
0.97500	6.012E-11	486.536	-6.498E-09	-6.498E-09	8.511E-09	8.511E-09	-3.108E-09	-3.108E-09
0.98125	6.014E-11	489.655	-6.611E-09	-6.611E-09	8.772E-09	8.772E-09	-3.108E-09	-3.108E-09
0.98750	6.000E-11	492.774	-6.689E-09	-6.689E-09	9.069E-09	9.069E-09	-3.102E-09	-3.102E-09
0.99375	5.975E-11	495.892	-6.777E-09	-6.777E-09	9.354E-09	9.354E-09	-3.089E-09	-3.089E-09
1.00000	5.939E-11	499.011	-6.868E-09	-6.868E-09	9.635E-09	9.635E-09	-3.071E-09	-3.071E-09
1.00625	5.891E-11	502.130	-6.955E-09	-6.955E-09	9.917E-09	9.917E-09	-3.046E-09	-3.046E-09
1.01250	5.832E-11	505.249	-7.026E-09	-7.026E-09	1.021E-08	1.021E-08	-3.015E-09	-3.015E-09
1.01875	5.763E-11	508.368	-7.120E-09	-7.120E-09	1.048E-08	1.048E-08	-2.979E-09	-2.979E-09
1.02500	5.683E-11	511.487	-7.169E-09	-7.169E-09	1.079E-08	1.079E-08	-2.938E-09	-2.938E-09
1.03750	5.496E-11	517.724	-7.296E-09	-7.296E-09	1.136E-08	1.136E-08	-2.841E-09	-2.841E-09
1.05000	5.276E-11	523.962	-7.463E-09	-7.463E-09	1.186E-08	1.186E-08	-2.728E-09	-2.728E-09
1.07500	4.760E-11	536.437	-7.689E-09	-7.689E-09	1.289E-08	1.289E-08	-2.464E-09	-2.464E-09
1.10000	4.265E-11	548.912	-7.930E-09	-7.930E-09	1.378E-08	1.378E-08	-2.205E-09	-2.205E-09
1.15000	3.281E-11	573.863	-8.275E-09	-8.275E-09	1.531E-08	1.531E-08	-1.696E-09	-1.696E-09
1.20000	2.532E-11	598.813	-8.456E-09	-8.456E-09	1.657E-08	1.657E-08	-1.309E-09	-1.309E-09
1.30000	1.483E-11	648.714	-8.620E-09	-8.620E-09	1.836E-08	1.836E-08	-7.669E-10	-7.669E-10
1.40000	9.352E-12	698.616	-8.424E-09	-8.424E-09	1.973E-08	1.973E-08	-4.835E-10	-4.835E-10
1.50000	6.487E-12	748.517	-8.230E-09	-8.230E-09	2.071E-08	2.071E-08	-3.354E-10	-3.354E-10
1.60000	4.455E-12	798.418	-7.938E-09	-7.938E-09	2.154E-08	2.154E-08	-2.303E-10	-2.303E-10
1.70000	3.125E-12	849.319	-7.647E-09	-7.647E-09	2.220E-08	2.220E-08	-1.616E-10	-1.616E-10
1.80000	2.231E-12	898.220	-7.295E-09	-7.295E-09	2.282E-08	2.282E-08	-1.154E-10	-1.154E-10
1.90000	1.593E-12	948.121	-6.722E-09	-6.722E-09	2.358E-08	2.358E-08	-8.236E-11	-8.236E-11
2.00000	1.149E-12	998.022	-6.283E-09	-6.283E-09	2.416E-08	2.416E-08	-5.940E-11	-5.940E-11

PROPAGATION FREQUENCY= 1.550DE 10 ϕ_0= 12.000 θ_D= 0. ρ_a=44.734

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-2.066E-15
0.10000	3.283E-12	3.283E-12	-7.579E-24	-7.579E-24	-8.753E-14	-8.753E-14	-2.751E-15
0.20000	9.069E-12	9.069E-12	-1.299E-23	-1.299E-23	-2.378E-13	-2.378E-13	-3.880E-15
0.30000	1.895E-11	1.895E-11	-2.215E-23	-2.215E-23	-4.947E-13	-4.947E-13	-5.948E-15
0.40000	3.905E-11	3.905E-11	-3.903E-23	-3.903E-23	-9.398E-13	-9.398E-13	-9.695E-15
0.50000	7.503E-11	7.503E-11	-6.836E-23	-6.836E-23	-1.724E-12	-1.724E-12	-1.789E-14
0.60000	1.504E-10	1.504E-10	-1.249E-22	-1.249E-22	-3.103E-12	-3.103E-12	-3.712E-14
0.70000	3.510E-10	3.510E-10	-2.576E-22	-2.576E-22	-5.797E-12	-5.797E-12	-8.350E-14
0.80000	9.004E-10	9.004E-10	-5.612E-22	-5.612E-22	-1.165E-11	-1.165E-11	-2.058E-13
0.85000	1.516E-09	1.516E-09	-8.485E-22	-8.485E-22	-1.689E-11	-1.689E-11	-3.120E-13
0.90000	2.599E-09	2.599E-09	-1.180E-21	-1.180E-21	-2.445E-11	-2.445E-11	-4.429E-13
0.92500	3.386E-09	3.386E-09	-1.331E-21	-1.331E-21	-2.915E-11	-2.915E-11	-5.020E-13
0.95000	4.351E-09	4.351E-09	-1.437E-21	-1.437E-21	-3.435E-11	-3.435E-11	-5.458E-13
0.96250	4.890E-09	4.890E-09	-1.468E-21	-1.468E-21	-3.707E-11	-3.707E-11	-5.587E-13
0.97500	5.453E-09	5.453E-09	-1.481E-21	-1.481E-21	-3.983E-11	-3.983E-11	-5.644E-13
0.98125	5.737E-09	5.737E-09	-1.481E-21	-1.481E-21	-4.121E-11	-4.121E-11	-5.645E-13
0.98750	6.021E-09	6.021E-09	-1.476E-21	-1.476E-21	-4.259E-11	-4.259E-11	-5.626E-13
0.99375	6.301E-09	6.301E-09	-1.468E-21	-1.468E-21	-4.397E-11	-4.397E-11	-5.588E-13
1.00000	6.576E-09	6.576E-09	-1.455E-21	-1.455E-21	-4.534E-11	-4.534E-11	-5.532E-13
1.00625	6.844E-09	6.844E-09	-1.437E-21	-1.437E-21	-4.669E-11	-4.669E-11	-5.460E-13
1.01250	7.103E-09	7.103E-09	-1.416E-21	-1.416E-21	-4.802E-11	-4.802E-11	-5.371E-13
1.01875	7.351E-09	7.351E-09	-1.391E-21	-1.391E-21	-4.934E-11	-4.934E-11	-5.267E-13
1.02500	7.588E-09	7.588E-09	-1.363E-21	-1.363E-21	-5.062E-11	-5.062E-11	-5.151E-13
1.03750	8.022E-09	8.022E-09	-1.297E-21	-1.297E-21	-5.311E-11	-5.311E-11	-4.885E-13
1.05000	8.400E-09	8.400E-09	-1.221E-21	-1.221E-21	-5.547E-11	-5.547E-11	-4.589E-13
1.07500	8.994E-09	8.994E-09	-1.051E-21	-1.051E-21	-5.972E-11	-5.972E-11	-3.954E-13
1.10000	9.411E-09	9.411E-09	-8.879E-22	-8.879E-22	-6.334E-11	-6.334E-11	-3.285E-13
1.15000	9.827E-09	9.827E-09	-5.939E-22	-5.939E-22	-6.885E-11	-6.885E-11	-2.171E-13
1.20000	9.909E-09	9.909E-09	-4.028E-22	-4.028E-22	-7.250E-11	-7.250E-11	-1.372E-13
1.30000	9.608E-09	9.608E-09	-1.827E-22	-1.827E-22	-7.666E-11	-7.666E-11	-5.847E-14
1.40000	9.097E-09	9.097E-09	-9.302E-23	-9.302E-23	-7.863E-11	-7.863E-11	-2.713E-14
1.50000	8.561E-09	8.561E-09	-5.360E-23	-5.360E-23	-7.970E-11	-7.970E-11	-1.347E-14
1.60000	8.062E-09	8.062E-09	-3.043E-23	-3.043E-23	-8.031E-11	-8.031E-11	-7.755E-15
1.70000	7.606E-09	7.606E-09	-1.755E-23	-1.755E-23	-8.066E-11	-8.066E-11	-4.889E-15
1.80000	7.193E-09	7.193E-09	-1.027E-23	-1.027E-23	-8.086E-11	-8.086E-11	-3.315E-15
1.90000	6.820E-09	6.820E-09	-5.982E-24	-5.982E-24	-8.098E-11	-8.098E-11	-2.421E-15
2.00000	6.482E-09	6.482E-09	-3.470E-24	-3.470E-24	-8.105E-11	-8.105E-11	-1.859E-15

PROPAGATION FREQUENCY= 1.550E 10 ϕ_0= 15.000 θ_D= 0. ρ_a=55.687

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	15.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	15.0000	0.10000	194.456	1.347E-06	9.968E-01	-1.835E-12	-1.835E-12	1.835E-12
0.20000	15.0000	0.20000	173.950	2.081E-06	9.959E-01	-2.559E-12	-2.559E-12	2.559E-12
0.30000	15.0000	0.30000	153.721	3.682E-06	9.947E-01	-3.553E-12	-3.553E-12	3.553E-12
0.40000	15.0000	0.40000	133.894	4.802E-06	9.932E-01	-5.091E-12	-5.091E-12	5.091E-12
0.50000	15.0000	0.50000	114.677	7.897E-06	9.918E-01	-7.278E-12	-7.278E-12	7.278E-12
0.60000	15.0000	0.60000	96.436	1.430E-05	9.914E-01	-1.045E-11	-1.045E-11	1.045E-11
0.70000	15.0000	0.70000	79.842	2.775E-05	9.942E-01	-1.585E-11	-1.585E-11	1.585E-11
0.80000	15.0000	0.80000	66.148	4.525E-05	1.002E 00	-2.473E-11	-2.473E-11	2.473E-11
0.85000	15.0000	0.85000	61.018	4.525E-05	1.005E 00	-2.921E-11	-2.921E-11	2.921E-11
0.90000	15.0000	0.90000	57.465	4.525E-05	1.004E 00	-3.362E-11	-3.362E-11	3.362E-11
0.92500	15.0000	0.92500	56.379	6.147E-05	1.001E 00	-3.520E-11	-3.520E-11	3.520E-11
0.95000	15.0000	0.95000	55.793	7.684E-05	9.987E-01	-3.609E-11	-3.609E-11	3.609E-11
0.96250	15.0000	0.96250	55.692	8.367E-05	9.979E-01	-3.624E-11	-3.624E-11	3.624E-11
0.97500	15.0000	0.97500	55.722	9.135E-05	9.977E-01	-3.619E-11	-3.619E-11	3.619E-11
0.98125	15.0000	0.98125	55.785	9.477E-05	9.978E-01	-3.610E-11	-3.610E-11	3.610E-11
0.98750	15.0000	0.98750	55.880	9.818E-05	9.982E-01	-3.595E-11	-3.595E-11	3.595E-11
0.99375	15.0000	0.99375	56.008	1.033E-04	9.987E-01	-3.576E-11	-3.576E-11	3.576E-11
1.00000	15.0000	1.00000	56.168	1.076E-04	9.994E-01	-3.552E-11	-3.552E-11	3.552E-11
1.00625	15.0000	1.00625	56.359	1.144E-04	1.000E 00	-3.523E-11	-3.523E-11	3.523E-11
1.01250	15.0000	1.01250	56.582	1.170E-04	1.001E 00	-3.490E-11	-3.490E-11	3.490E-11
1.01875	15.0000	1.01875	56.835	1.195E-04	1.002E 00	-3.453E-11	-3.453E-11	3.453E-11
1.02500	15.0000	1.02500	57.119	1.238E-04	1.004E 00	-3.411E-11	-3.411E-11	3.411E-11
1.03750	15.0000	1.03750	57.777	1.306E-04	1.006E 00	-3.317E-11	-3.317E-11	3.317E-11
1.05000	15.0000	1.05000	58.552	1.383E-04	1.009E 00	-3.210E-11	-3.210E-11	3.210E-11
1.07500	15.0000	1.07500	60.430	1.477E-04	1.014E 00	-2.977E-11	-2.977E-11	2.977E-11
1.10000	15.0000	1.10000	62.716	1.545E-04	1.017E 00	-2.764E-11	-2.764E-11	2.764E-11
1.15000	15.0000	1.15000	68.335	1.690E-04	1.018E 00	-2.303E-11	-2.303E-11	2.303E-11
1.20000	15.0000	1.20000	75.083	1.793E-04	1.015E 00	-1.850E-11	-1.850E-11	1.850E-11
1.30000	15.0001	1.30000	90.927	1.947E-04	1.006E 00	-1.200E-11	-1.200E-11	1.200E-11
1.40000	15.0001	1.40000	108.737	2.083E-04	1.000E 00	-8.127E-12	-8.127E-12	8.127E-12
1.50000	15.0001	1.50000	127.093	2.117E-04	9.976E-01	-5.714E-12	-5.714E-12	5.714E-12
1.60000	15.0001	1.60000	147.354	2.117E-04	9.964E-01	-3.964E-12	-3.964E-12	3.964E-12
1.70000	15.0001	1.70000	167.472	2.203E-04	9.960E-01	-2.843E-12	-2.843E-12	2.843E-12
1.80000	15.0001	1.80000	187.900	2.220E-04	9.960E-01	-2.041E-12	-2.041E-12	2.041E-12
1.90000	15.0001	1.90000	208.547	2.220E-04	9.962E-01	-1.469E-12	-1.469E-12	1.469E-12
2.00000	15.0001	2.00000	229.353	2.220E-04	9.964E-01	-1.063E-12	-1.063E-12	1.063E-12

PROPAGATION FREQUENCY= 1.550E 10 ϕ_0= 15.000 θ_D= 0. ρ_a=55.687

z	$_x\mu'$-1.0	T_o	$_oT_1$-T_o	$_xT_1$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.835E-12	49.901	-7.807E-11	-7.807E-11	7.807E-11	7.807E-11	-9.488E-11	-9.488E-11
0.20000	2.559E-12	99.802	-1.867E-10	-1.867E-10	1.867E-10	1.867E-10	-1.323E-10	-1.323E-10
0.30000	3.553E-12	149.703	-3.380E-10	-3.380E-10	3.380E-10	3.380E-10	-1.837E-10	-1.837E-10
0.40000	5.091E-12	199.605	-5.508E-10	-5.508E-10	5.508E-10	5.508E-10	-2.632E-10	-2.632E-10
0.50000	7.278E-12	249.506	-8.559E-10	-8.559E-10	8.571E-10	8.571E-10	-3.763E-10	-3.763E-10
0.60000	1.045E-11	299.407	-1.288E-09	-1.288E-09	1.293E-09	1.293E-09	-5.404E-10	-5.404E-10
0.70000	1.585E-11	349.308	-1.930E-09	-1.930E-09	1.951E-09	1.951E-09	-8.194E-10	-8.194E-10
0.80000	2.473E-11	399.209	-2.911E-09	-2.911E-09	2.981E-09	2.981E-09	-1.278E-09	-1.278E-09
0.85000	2.921E-11	424.160	-3.585E-09	-3.585E-09	3.655E-09	3.655E-09	-1.510E-09	-1.510E-09
0.90000	3.362E-11	449.110	-4.370E-09	-4.370E-09	4.440E-09	4.440E-09	-1.738E-09	-1.738E-09
0.92500	3.520E-11	461.586	-4.768E-09	-4.768E-09	4.901E-09	4.901E-09	-1.820E-09	-1.820E-09
0.95000	3.609E-11	474.061	-5.173E-09	-5.173E-09	5.386E-09	5.386E-09	-1.866E-09	-1.866E-09
0.96250	3.624E-11	480.299	-5.378E-09	-5.378E-09	5.634E-09	5.634E-09	-1.874E-09	-1.874E-09
0.97500	3.619E-11	486.536	-5.577E-09	-5.577E-09	5.886E-09	5.886E-09	-1.871E-09	-1.871E-09
0.98125	3.610E-11	489.655	-5.677E-09	-5.677E-09	6.012E-09	6.012E-09	-1.866E-09	-1.866E-09
0.98750	3.595E-11	492.774	-5.776E-09	-5.776E-09	6.138E-09	6.138E-09	-1.859E-09	-1.859E-09
0.99375	3.576E-11	495.893	-5.867E-09	-5.867E-09	6.270E-09	6.270E-09	-1.849E-09	-1.849E-09
1.00000	3.552E-11	499.011	-5.960E-09	-5.960E-09	6.400E-09	6.400E-09	-1.836E-09	-1.836E-09
1.00625	3.523E-11	502.130	-6.040E-09	-6.040E-09	6.540E-09	6.540E-09	-1.821E-09	-1.821E-09
1.01250	3.490E-11	505.249	-6.136E-09	-6.136E-09	6.663E-09	6.663E-09	-1.804E-09	-1.804E-09
1.01875	3.453E-11	508.368	-6.231E-09	-6.231E-09	6.784E-09	6.784E-09	-1.785E-09	-1.785E-09
1.02500	3.411E-11	511.487	-6.316E-09	-6.316E-09	6.913E-09	6.913E-09	-1.764E-09	-1.764E-09
1.03750	3.317E-11	517.724	-6.488E-09	-6.488E-09	7.161E-09	7.161E-09	-1.715E-09	-1.715E-09
1.05000	3.210E-11	523.962	-6.647E-09	-6.647E-09	7.410E-09	7.410E-09	-1.660E-09	-1.660E-09
1.07500	2.977E-11	536.437	-6.968E-09	-6.968E-09	7.860E-09	7.860E-09	-1.539E-09	-1.539E-09
1.10000	2.764E-11	548.913	-7.273E-09	-7.273E-09	8.272E-09	8.272E-09	-1.429E-09	-1.429E-09
1.15000	2.303E-11	573.863	-7.781E-09	-7.781E-09	9.029E-09	9.029E-09	-1.191E-09	-1.191E-09
1.20000	1.850E-11	598.814	-8.189E-09	-8.189E-09	9.655E-09	9.655E-09	-9.564E-10	-9.564E-10
1.30000	1.200E-11	648.715	-8.730E-09	-8.730E-09	1.060E-08	1.060E-08	-6.202E-10	-6.202E-10
1.40000	8.127E-12	698.616	-9.002E-09	-9.002E-09	1.131E-08	1.131E-08	-4.202E-10	-4.202E-10
1.50000	5.714E-12	748.517	-9.221E-09	-9.221E-09	1.178E-08	1.178E-08	-2.954E-10	-2.954E-10
1.60000	3.964E-12	798.418	-9.375E-09	-9.375E-09	1.210E-08	1.210E-08	-2.050E-10	-2.050E-10
1.70000	2.843E-12	848.319	-9.338E-09	-9.338E-09	1.247E-08	1.247E-08	-1.470E-10	-1.470E-10
1.80000	2.041E-12	898.221	-9.315E-09	-9.315E-09	1.274E-08	1.274E-08	-1.055E-10	-1.055E-10
1.90000	1.469E-12	948.122	-9.334E-09	-9.334E-09	1.289E-08	1.289E-08	-7.594E-11	-7.594E-11
2.00000	1.063E-12	998.023	-9.303E-09	-9.303E-09	1.305E-08	1.305E-08	-5.497E-11	-5.497E-11

PROPAGATION FREQUENCY= 1.550OE 10 ϕ_0=15.000 θ_D= 0. ρ_a=55.687

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-3.202E-15
0.10000	4.046E-12	4.046E-12	-7.522E-24	-7.522E-24	-8.718E-14	-8.718E-14	-4.245E-15
0.20000	1.115E-11	1.115E-11	-1.277E-23	-1.277E-23	-2.356E-13	-2.356E-13	-5.941E-15
0.30000	2.311E-11	2.311E-11	-2.153E-23	-2.153E-23	-4.867E-13	-4.867E-13	-8.986E-15
0.40000	4.688E-11	4.688E-11	-3.721E-23	-3.721E-23	-9.145E-13	-9.145E-13	-1.436E-14
0.50000	8.831E-11	8.831E-11	-6.375E-23	-6.375E-23	-1.653E-12	-1.653E-12	-2.546E-14
0.60000	1.670E-10	1.670E-10	-1.096E-22	-1.096E-22	-2.906E-12	-2.906E-12	-5.012E-14
0.70000	3.583E-10	3.583E-10	-2.013E-22	-2.013E-22	-5.175E-12	-5.175E-12	-1.026E-13
0.80000	8.220E-10	8.220E-10	-3.889E-22	-3.889E-22	-9.500E-12	-9.500E-12	-2.035E-13
0.85000	1.276E-09	1.276E-09	-4.978E-22	-4.978E-22	-1.282E-11	-1.282E-11	-2.796E-13
0.90000	1.989E-09	1.989E-09	-6.164E-22	-6.164E-22	-1.698E-11	-1.698E-11	-3.483E-13
0.92500	2.468E-09	2.468E-09	-6.615E-22	-6.615E-22	-1.938E-11	-1.938E-11	-3.730E-13
0.95000	3.018E-09	3.018E-09	-6.872E-22	-6.872E-22	-2.191E-11	-2.191E-11	-3.874E-13
0.96250	3.310E-09	3.310E-09	-6.917E-22	-6.917E-22	-2.320E-11	-2.320E-11	-3.900E-13
0.97500	3.606E-09	3.606E-09	-6.904E-22	-6.904E-22	-2.449E-11	-2.449E-11	-3.892E-13
0.98125	3.753E-09	3.753E-09	-6.875E-22	-6.875E-22	-2.514E-11	-2.514E-11	-3.876E-13
0.98750	3.899E-09	3.899E-09	-6.833E-22	-6.833E-22	-2.578E-11	-2.578E-11	-3.852E-13
0.99375	4.042E-09	4.042E-09	-6.776E-22	-6.776E-22	-2.641E-11	-2.641E-11	-3.821E-13
1.00000	4.182E-09	4.182E-09	-6.706E-22	-6.706E-22	-2.704E-11	-2.704E-11	-3.782E-13
1.00625	4.319E-09	4.319E-09	-6.623E-22	-6.623E-22	-2.767E-11	-2.767E-11	-3.735E-13
1.01250	4.451E-09	4.451E-09	-6.528E-22	-6.528E-22	-2.828E-11	-2.828E-11	-3.683E-13
1.01875	4.578E-09	4.578E-09	-6.422E-22	-6.422E-22	-2.889E-11	-2.889E-11	-3.624E-13
1.02500	4.700E-09	4.700E-09	-6.304E-22	-6.304E-22	-2.948E-11	-2.948E-11	-3.560E-13
1.03750	4.926E-09	4.926E-09	-6.040E-22	-6.040E-22	-3.064E-11	-3.064E-11	-3.418E-13
1.05000	5.128E-09	5.128E-09	-5.744E-22	-5.744E-22	-3.174E-11	-3.174E-11	-3.261E-13
1.07500	5.460E-09	5.460E-09	-5.120E-22	-5.120E-22	-3.377E-11	-3.377E-11	-2.909E-13
1.10000	5.701E-09	5.701E-09	-4.588E-22	-4.588E-22	-3.558E-11	-3.558E-11	-2.508E-13
1.15000	5.970E-09	5.970E-09	-3.501E-22	-3.501E-22	-3.861E-11	-3.861E-11	-1.799E-13
1.20000	6.056E-09	6.056E-09	-2.531E-22	-2.531E-22	-4.085E-11	-4.085E-11	-1.273E-13
1.30000	5.949E-09	5.949E-09	-1.340E-22	-1.340E-22	-4.362E-11	-4.362E-11	-6.224E-14
1.40000	5.685E-09	5.685E-09	-7.529E-23	-7.529E-23	-4.512E-11	-4.512E-11	-3.141E-14
1.50000	5.383E-09	5.383E-09	-4.427E-23	-4.427E-23	-4.600E-11	-4.600E-11	-1.704E-14
1.60000	5.089E-09	5.089E-09	-2.552E-23	-2.552E-23	-4.651E-11	-4.651E-11	-1.040E-14
1.70000	4.813E-09	4.813E-09	-1.510E-23	-1.510E-23	-4.680E-11	-4.680E-11	-6.730E-15
1.80000	4.558E-09	4.558E-09	-8.909E-24	-8.909E-24	-4.698E-11	-4.698E-11	-4.700E-15
1.90000	4.326E-09	4.326E-09	-5.226E-24	-5.226E-24	-4.708E-11	-4.708E-11	-3.494E-15
2.00000	4.114E-09	4.114E-09	-3.050E-24	-3.050E-24	-4.714E-11	-4.714E-11	-2.729E-15

PROPAGATION FREQUENCY= 1.550OE 10 ϕ_0= 20.000 θ_D= 0. ρ_a= 73.589

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu$-1.0
0.	20.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	20.0000	0.10000	195.279	2.268E-06	9.933E-01	-1.817E-12	-1.817E-12	1.817E-12
0.20000	20.0000	0.20000	175.341	2.615E-06	9.917E-01	-2.502E-12	-2.502E-12	2.502E-12
0.30000	20.0000	0.30000	156.073	3.415E-06	9.899E-01	-3.420E-12	-3.420E-12	3.420E-12
0.40000	20.0000	0.40000	137.474	5.976E-06	9.885E-01	-4.764E-12	-4.764E-12	4.764E-12
0.50000	20.0000	0.50000	119.855	9.605E-06	9.881E-01	-6.610E-12	-6.610E-12	6.610E-12
0.60000	20.0000	0.60000	103.717	1.537E-05	9.904E-01	-8.923E-12	-8.923E-12	8.923E-12
0.70000	20.0000	0.70000	89.861	2.476E-05	9.964E-01	-1.232E-11	-1.232E-11	1.232E-11
0.80000	20.0000	0.80000	79.490	3.330E-05	1.002E 00	-1.603E-11	-1.603E-11	1.603E-11
0.85000	20.0000	0.85000	76.077	3.543E-05	1.002E 00	-1.791E-11	-1.791E-11	1.791E-11
0.90000	20.0000	0.90000	74.083	4.013E-05	9.981E-01	-1.911E-11	-1.911E-11	1.911E-11
0.92500	20.0000	0.92500	73.657	4.610E-05	9.961E-01	-1.937E-11	-1.937E-11	1.937E-11
0.95000	20.0000	0.95000	73.622	5.550E-05	9.951E-01	-1.940E-11	-1.940E-11	1.940E-11
0.96250	20.0000	0.96250	73.752	5.635E-05	9.952E-01	-1.931E-11	-1.931E-11	1.931E-11
0.97500	20.0000	0.97500	73.980	6.147E-05	9.959E-01	-1.917E-11	-1.917E-11	1.917E-11
0.98125	20.0000	0.98125	74.130	6.233E-05	9.964E-01	-1.908E-11	-1.908E-11	1.908E-11
0.98750	20.0000	0.98750	74.304	6.318E-05	9.970E-01	-1.897E-11	-1.897E-11	1.897E-11
0.99375	20.0000	0.99375	74.502	6.830E-05	9.978E-01	-1.885E-11	-1.885E-11	1.885E-11
1.00000	20.0000	1.00000	74.724	7.001E-05	9.987E-01	-1.871E-11	-1.871E-11	1.871E-11
1.00625	20.0000	1.00625	74.969	7.172E-05	9.997E-01	-1.857E-11	-1.857E-11	1.857E-11
1.01250	20.0000	1.01250	75.238	7.513E-05	1.001E 00	-1.840E-11	-1.840E-11	1.840E-11
1.01875	20.0000	1.01875	75.529	7.599E-05	1.002E 00	-1.823E-11	-1.823E-11	1.823E-11
1.02500	20.0000	1.02500	75.843	7.769E-05	1.003E 00	-1.805E-11	-1.805E-11	1.805E-11
1.03750	20.0000	1.03750	76.539	8.196E-05	1.006E 00	-1.764E-11	-1.764E-11	1.764E-11
1.05000	20.0000	1.05000	77.321	8.452E-05	1.009E 00	-1.720E-11	-1.720E-11	1.720E-11
1.07500	20.0000	1.07500	79.138	8.452E-05	1.014E 00	-1.621E-11	-1.621E-11	1.621E-11
1.10000	20.0000	1.10000	81.271	8.452E-05	1.018E 00	-1.527E-11	-1.527E-11	1.527E-11
1.15000	20.0000	1.15000	86.388	8.452E-05	1.023E 00	-1.344E-11	-1.344E-11	1.344E-11
1.20000	20.0000	1.20000	92.478	8.452E-05	1.023E 00	-1.154E-11	-1.154E-11	1.154E-11
1.30000	20.0000	1.30000	106.889	9.050E-05	1.017E 00	-8.412E-12	-8.412E-12	8.412E-12
1.40000	20.0000	1.40000	123.386	9.562E-05	1.009E 00	-6.190E-12	-6.190E-12	6.190E-12
1.50000	20.0000	1.50000	141.240	1.025E-04	1.004E 00	-4.441E-12	-4.441E-12	4.441E-12
1.60000	20.0000	1.60000	159.998	1.076E-04	1.000E 00	-3.209E-12	-3.209E-12	3.209E-12
1.70000	20.0001	1.70000	179.377	1.144E-04	9.982E-01	-2.344E-12	-2.344E-12	2.344E-12
1.80000	20.0001	1.80000	199.194	1.178E-04	9.970E-01	-1.699E-12	-1.699E-12	1.699E-12
1.90000	20.0001	1.90000	219.332	1.212E-04	9.963E-01	-1.242E-12	-1.242E-12	1.242E-12

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_o= 20.000 θ_D= 0. ρ_a=73.589

z	$_x\mu'-1$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.817E-12	49.901	-7.767E-11	-7.767E-11	7.767E-11	7.767E-11	-9.393E-11	-9.393E-11
0.20000	2.504E-12	99.802	-1.846E-10	-1.846E-10	1.846E-10	1.846E-10	-1.294E-10	-1.294E-10
0.30000	3.426E-12	149.703	-3.313E-10	-3.313E-10	3.313E-10	3.313E-10	-1.768E-10	-1.768E-10
0.40000	4.764E-12	199.605	-5.329E-10	-5.329E-10	5.329E-10	5.329E-10	-2.463E-10	-2.463E-10
0.50000	6.612E-12	249.506	-8.147E-10	-8.147E-10	8.147E-10	8.147E-10	-3.417E-10	-3.417E-10
0.60000	8.923E-12	299.407	-1.198E-09	-1.198E-09	1.203E-09	1.203E-09	-4.613E-10	-4.613E-10
0.70000	1.234E-11	349.308	-1.716E-09	-1.716E-09	1.732E-09	1.732E-09	-6.370E-10	-6.370E-10
0.80000	1.603E-11	399.209	-2.416E-09	-2.416E-09	2.449E-09	2.449E-09	-8.288E-10	-8.288E-10
0.85000	1.791E-11	424.160	-2.837E-09	-2.837E-09	2.877E-09	2.877E-09	-9.260E-10	-9.260E-10
0.90000	1.911E-11	449.110	-3.293E-09	-3.293E-09	3.348E-09	3.348E-09	-9.880E-10	-9.880E-10
0.92500	1.937E-11	461.586	-3.523E-09	-3.523E-09	3.598E-09	3.598E-09	-1.002E-09	-1.002E-09
0.95000	1.943E-11	474.061	-3.747E-09	-3.747E-09	3.858E-09	3.858E-09	-1.003E-09	-1.003E-09
0.96250	1.931E-11	480.299	-3.866E-09	-3.866E-09	3.982E-09	3.982E-09	-9.986E-10	-9.986E-10
0.97500	1.917E-11	486.536	-3.974E-09	-3.974E-09	4.114E-09	4.114E-09	-9.913E-10	-9.913E-10
0.98125	1.908E-11	489.655	-4.031E-09	-4.031E-09	4.176E-09	4.176E-09	-9.864E-10	-9.864E-10
0.98750	1.897E-11	492.774	-4.088E-09	-4.088E-09	4.238E-09	4.238E-09	-9.809E-10	-9.809E-10
0.99375	1.885E-11	495.893	-4.134E-09	-4.134E-09	4.310E-09	4.310E-09	-9.746E-10	-9.746E-10
1.00000	1.871E-11	499.012	-4.187E-09	-4.187E-09	4.373E-09	4.373E-09	-9.676E-10	-9.676E-10
1.00625	1.857E-11	502.130	-4.240E-09	-4.240E-09	4.437E-09	4.437E-09	-9.599E-10	-9.599E-10
1.01250	1.842E-11	505.249	-4.287E-09	-4.287E-09	4.505E-09	4.505E-09	-9.516E-10	-9.516E-10
1.01875	1.823E-11	508.368	-4.341E-09	-4.341E-09	4.565E-09	4.565E-09	-9.426E-10	-9.426E-10
1.02500	1.805E-11	511.487	-4.392E-09	-4.392E-09	4.627E-09	4.627E-09	-9.330E-10	-9.330E-10
1.03750	1.764E-11	517.724	-4.489E-09	-4.489E-09	4.753E-09	4.753E-09	-9.122E-10	-9.122E-10
1.05000	1.720E-11	523.962	-4.584E-09	-4.584E-09	4.875E-09	4.875E-09	-8.893E-10	-8.893E-10
1.07500	1.621E-11	536.437	-4.786E-09	-4.786E-09	5.090E-09	5.090E-09	-8.383E-10	-8.383E-10
1.10000	1.527E-11	548.913	-4.976E-09	-4.976E-09	5.293E-09	5.293E-09	-7.897E-10	-7.897E-10
1.15000	1.344E-11	573.863	-5.330E-09	-5.330E-09	5.656E-09	5.656E-09	-6.968E-10	-6.968E-10
1.20000	1.154E-11	598.814	-5.642E-09	-5.642E-09	5.968E-09	5.968E-09	-5.966E-10	-5.966E-10
1.30000	8.412E-12	648.715	-6.093E-09	-6.093E-09	6.497E-09	6.497E-09	-4.349E-10	-4.349E-10
1.40000	6.196E-12	698.616	-6.414E-09	-6.414E-09	6.901E-09	6.901E-09	-3.200E-10	-3.200E-10
1.50000	4.441E-12	748.517	-6.622E-09	-6.622E-09	7.220E-09	7.220E-09	-2.296E-10	-2.296E-10
1.60000	3.209E-12	798.418	-6.757E-09	-6.757E-09	7.461E-09	7.461E-09	-1.659E-10	-1.659E-10
1.70000	2.344E-12	848.319	-6.824E-09	-6.824E-09	7.669E-09	7.669E-09	-1.212E-10	-1.212E-10
1.80000	1.699E-12	898.221	-6.872E-09	-6.872E-09	7.821E-09	7.821E-09	-8.786E-11	-8.786E-11
1.90000	1.242E-12	948.122	-6.889E-09	-6.889E-09	7.950E-09	7.950E-09	-6.423E-11	-6.423E-11

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_o= 20.000 θ_D= 0. ρ_a=73.589

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-5.592E-15
0.10000	5.215E-12	5.215E-12	-7.402E-24	-7.402E-24	-8.644E-14	-8.644E-14	-7.346E-15
0.20000	1.434E-11	1.434E-11	-1.232E-23	-1.232E-23	-2.310E-13	-2.310E-13	-1.012E-14
0.30000	2.923E-11	2.923E-11	-2.026E-23	-2.026E-23	-4.701E-13	-4.701E-13	-1.488E-14
0.40000	5.672E-11	5.672E-11	-3.366E-23	-3.366E-23	-8.640E-13	-8.640E-13	-2.288E-14
0.50000	1.039E-10	1.039E-10	-5.514E-23	-5.514E-23	-1.517E-12	-1.517E-12	-3.755E-14
0.60000	1.828E-10	1.828E-10	-8.666E-23	-8.666E-23	-2.564E-12	-2.564E-12	-6.626E-14
0.70000	3.443E-10	3.443E-10	-1.393E-22	-1.393E-22	-4.218E-12	-4.218E-12	-1.135E-13
0.80000	6.774E-10	6.774E-10	-2.047E-22	-2.047E-22	-6.787E-12	-6.787E-12	-1.820E-13
0.85000	9.548E-10	9.548E-10	-2.413E-22	-2.413E-22	-8.460E-12	-8.460E-12	-2.120E-13
0.90000	1.334E-09	1.334E-09	-2.656E-22	-2.656E-22	-1.036E-11	-1.036E-11	-2.331E-13
0.92500	1.558E-09	1.558E-09	-2.711E-22	-2.711E-22	-1.137E-11	-1.137E-11	-2.380E-13
0.95000	1.799E-09	1.799E-09	-2.715E-22	-2.715E-22	-1.239E-11	-1.239E-11	-2.384E-13
0.96250	1.922E-09	1.922E-09	-2.698E-22	-2.698E-22	-1.289E-11	-1.289E-11	-2.369E-13
0.97500	2.044E-09	2.044E-09	-2.669E-22	-2.669E-22	-1.339E-11	-1.339E-11	-2.343E-13
0.98125	2.104E-09	2.104E-09	-2.650E-22	-2.650E-22	-1.364E-11	-1.364E-11	-2.326E-13
0.98750	2.163E-09	2.163E-09	-2.627E-22	-2.627E-22	-1.389E-11	-1.389E-11	-2.307E-13
0.99375	2.220E-09	2.220E-09	-2.603E-22	-2.603E-22	-1.413E-11	-1.413E-11	-2.285E-13
1.00000	2.277E-09	2.277E-09	-2.575E-22	-2.575E-22	-1.438E-11	-1.438E-11	-2.261E-13
1.00625	2.331E-09	2.331E-09	-2.545E-22	-2.545E-22	-1.462E-11	-1.462E-11	-2.234E-13
1.01250	2.384E-09	2.384E-09	-2.512E-22	-2.512E-22	-1.485E-11	-1.485E-11	-2.206E-13
1.01875	2.435E-09	2.435E-09	-2.477E-22	-2.477E-22	-1.509E-11	-1.509E-11	-2.176E-13
1.02500	2.484E-09	2.484E-09	-2.440E-22	-2.440E-22	-1.532E-11	-1.532E-11	-2.144E-13
1.03750	2.575E-09	2.575E-09	-2.360E-22	-2.360E-22	-1.576E-11	-1.576E-11	-2.077E-13
1.05000	2.657E-09	2.657E-09	-2.273E-22	-2.273E-22	-1.620E-11	-1.620E-11	-2.004E-13
1.07500	2.795E-09	2.795E-09	-2.082E-22	-2.082E-22	-1.701E-11	-1.701E-11	-1.849E-13
1.10000	2.902E-09	2.902E-09	-1.907E-22	-1.907E-22	-1.776E-11	-1.776E-11	-1.674E-13
1.15000	3.036E-09	3.036E-09	-1.582E-22	-1.582E-22	-1.906E-11	-1.906E-11	-1.319E-13
1.20000	3.094E-09	3.094E-09	-1.266E-22	-1.266E-22	-2.013E-11	-2.013E-11	-1.021E-13
1.30000	3.080E-09	3.080E-09	-7.929E-23	-7.929E-23	-2.163E-11	-2.163E-11	-5.874E-14
1.40000	2.981E-09	2.981E-09	-4.995E-23	-4.995E-23	-2.258E-11	-2.258E-11	-3.374E-14
1.50000	2.852E-09	2.852E-09	-3.029E-23	-3.029E-23	-2.317E-11	-2.317E-11	-2.090E-14
1.60000	2.717E-09	2.717E-09	-1.831E-23	-1.831E-23	-2.352E-11	-2.352E-11	-1.369E-14
1.70000	2.582E-09	2.582E-09	-1.110E-23	-1.110E-23	-2.374E-11	-2.374E-11	-9.442E-15
1.80000	2.454E-09	2.454E-09	-6.656E-24	-6.656E-24	-2.387E-11	-2.387E-11	-6.945E-15
1.90000	2.335E-09	2.335E-09	-3.953E-24	-3.953E-24	-2.395E-11	-2.395E-11	-5.331E-15

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 25.000 θ_0= 0. ρ_a= 90.930

z	ϕ	z_r	ρ	θ	β	$_o\mu$-10	$_x\mu$-10	$_o\mu'$-10
0.	25.0000	0.	215.159	0.	1.0000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	25.0000	0.10000	195.870	1.628E-06	9.886E-01	-1.794E-12	-1.794E-12	1.794E-12
0.20000	25.0000	0.20000	177.095	2.721E-06	9.865E-01	-2.432E-12	-2.432E-12	2.432E-12
0.30000	25.0000	0.30000	159.016	4.802E-06	9.847E-01	-3.251E-12	-3.251E-12	3.251E-12
0.40000	25.0000	0.40000	141.900	1.153E-05	9.841E-01	-4.387E-12	-4.387E-12	4.387E-12
0.50000	25.0000	0.50000	126.137	2.006E-05	9.857E-01	-5.881E-12	-5.881E-12	5.881E-12
0.60000	25.0000	0.60000	112.392	2.433E-05	9.902E-01	-7.606E-12	-7.606E-12	7.606E-12
0.70000	25.0000	0.70000	101.186	2.946E-05	9.962E-01	-9.352E-12	-9.352E-12	9.352E-12
0.80000	25.0000	0.80000	93.763	3.458E-05	9.980E-01	-1.117E-11	-1.117E-11	1.117E-11
0.85000	25.0000	0.85000	91.734	3.842E-05	9.955E-01	-1.176E-11	-1.176E-11	1.176E-11
0.90000	25.0000	0.90000	90.940	4.354E-05	9.923E-01	-1.199E-11	-1.199E-11	1.199E-11
0.92500	25.0000	0.92500	91.019	4.440E-05	9.915E-01	-1.197E-11	-1.197E-11	1.197E-11
0.95000	25.0000	0.95000	91.415	4.867E-05	9.920E-01	-1.185E-11	-1.185E-11	1.185E-11
0.96250	25.0000	0.96250	91.730	5.123E-05	9.929E-01	-1.176E-11	-1.176E-11	1.176E-11
0.97500	25.0000	0.97500	92.123	5.293E-05	9.941E-01	-1.164E-11	-1.164E-11	1.164E-11
0.98125	25.0000	0.98125	92.349	5.550E-05	9.949E-01	-1.158E-11	-1.158E-11	1.158E-11
0.98750	25.0000	0.98750	92.593	5.550E-05	9.958E-01	-1.151E-11	-1.151E-11	1.151E-11
0.99375	25.0000	0.99375	92.856	5.891E-05	9.967E-01	-1.143E-11	-1.143E-11	1.143E-11
1.00000	25.0000	1.00000	93.138	5.976E-05	9.978E-01	-1.135E-11	-1.135E-11	1.135E-11
1.00625	25.0000	1.00625	93.438	5.976E-05	9.989E-01	-1.127E-11	-1.127E-11	1.127E-11
1.01250	25.0000	1.01250	93.757	6.318E-05	1.000E 00	-1.118E-11	-1.118E-11	1.118E-11
1.01875	25.0000	1.01875	94.093	6.318E-05	1.001E 00	-1.108E-11	-1.108E-11	1.108E-11
1.02500	25.0000	1.02500	94.448	6.574E-05	1.003E 00	-1.099E-11	-1.099E-11	1.099E-11
1.03750	25.0000	1.03750	95.211	6.745E-05	1.005E 00	-1.078E-11	-1.078E-11	1.078E-11
1.05000	25.0000	1.05000	96.042	7.001E-05	1.008E 00	-1.056E-11	-1.056E-11	1.056E-11
1.07500	25.0000	1.07500	97.906	7.001E-05	1.014E 00	-1.007E-11	-1.007E-11	1.007E-11
1.10000	25.0000	1.10000	100.025	7.086E-05	1.018E 00	-9.556E-12	-9.556E-12	9.556E-12
1.15000	25.0000	1.15000	104.964	7.086E-05	1.025E 00	-8.718E-12	-8.718E-12	8.718E-12
1.20000	25.0000	1.20000	110.731	7.172E-05	1.028E 00	-7.832E-12	-7.832E-12	7.832E-12
1.30000	25.0000	1.30000	124.272	7.428E-05	1.025E 00	-6.089E-12	-6.089E-12	6.089E-12
1.40000	25.0000	1.40000	139.527	7.769E-05	1.019E 00	-4.560E-12	-4.560E-12	4.560E-12
1.50000	25.0000	1.50000	156.797	8.367E-05	1.012E 00	-3.380E-12	-3.380E-12	3.380E-12
1.60000	25.0000	1.60000	174.771	8.879E-05	1.007E 00	-2.525E-12	-2.525E-12	2.525E-12
1.70000	25.0000	1.70000	193.470	9.050E-05	1.003E 00	-1.865E-12	-1.865E-12	1.865E-12
1.80000	25.0000	1.80000	212.702	9.221E-05	1.001E 00	-1.377E-12	-1.377E-12	1.377E-12
1.90000	25.0000	1.90000	232.335	9.392E-05	9.991E-01	-1.015E-12	-1.015E-12	1.015E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 25.000 θ_0= 0. ρ_a= 90.930

z	$_x\mu'$-10	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.794E-12	49.901	-7.718E-11	-7.718E-11	7.718E-11	7.718E-11	-9.273E-11	-9.273E-11
0.20000	2.432E-12	99.802	-1.819E-10	-1.819E-10	1.819E-10	1.819E-10	-1.257E-10	-1.257E-10
0.30000	3.261E-12	149.703	-3.231E-10	-3.231E-10	3.231E-10	3.231E-10	-1.686E-10	-1.686E-10
0.40000	4.387E-12	199.605	-5.106E-10	-5.106E-10	5.126E-10	5.126E-10	-2.268E-10	-2.268E-10
0.50000	5.881E-12	249.506	-7.630E-10	-7.630E-10	7.706E-10	7.706E-10	-3.041E-10	-3.041E-10
0.60000	7.606E-12	299.407	-1.096E-09	-1.096E-09	1.109E-09	1.109E-09	-3.933E-10	-3.933E-10
0.70000	9.352E-12	349.308	-1.515E-09	-1.515E-09	1.538E-09	1.538E-09	-4.835E-10	-4.835E-10
0.80000	1.117E-11	399.209	-2.022E-09	-2.022E-09	2.058E-09	2.058E-09	-5.778E-10	-5.778E-10
0.85000	1.176E-11	424.160	-2.303E-09	-2.303E-09	2.351E-09	2.351E-09	-6.079E-10	-6.079E-10
0.90000	1.199E-11	449.110	-2.591E-09	-2.591E-09	2.656E-09	2.656E-09	-6.200E-10	-6.200E-10
0.92500	1.197E-11	461.586	-2.739E-09	-2.739E-09	2.808E-09	2.808E-09	-6.188E-10	-6.188E-10
0.95000	1.185E-11	474.061	-2.879E-09	-2.879E-09	2.965E-09	2.965E-09	-6.127E-10	-6.127E-10
0.96250	1.176E-11	480.299	-2.948E-09	-2.948E-09	3.044E-09	3.044E-09	-6.079E-10	-6.079E-10
0.97500	1.164E-11	486.536	-3.017E-09	-3.017E-09	3.121E-09	3.121E-09	-6.020E-10	-6.020E-10
0.98125	1.158E-11	489.655	-3.048E-09	-3.048E-09	3.162E-09	3.162E-09	-5.986E-10	-5.986E-10
0.98750	1.151E-11	492.774	-3.083E-09	-3.083E-09	3.199E-09	3.199E-09	-5.949E-10	-5.949E-10
0.99375	1.143E-11	495.893	-3.111E-09	-3.111E-09	3.242E-09	3.242E-09	-5.910E-10	-5.910E-10
1.00000	1.135E-11	499.011	-3.144E-09	-3.144E-09	3.281E-09	3.281E-09	-5.869E-10	-5.869E-10
1.00625	1.127E-11	502.130	-3.179E-09	-3.179E-09	3.316E-09	3.316E-09	-5.825E-10	-5.825E-10
1.01250	1.118E-11	505.249	-3.206E-09	-3.206E-09	3.359E-09	3.359E-09	-5.779E-10	-5.779E-10
1.01875	1.108E-11	508.368	-3.240E-09	-3.240E-09	3.395E-09	3.395E-09	-5.730E-10	-5.730E-10
1.02500	1.099E-11	511.487	-3.267E-09	-3.267E-09	3.436E-09	3.436E-09	-5.680E-10	-5.680E-10
1.03750	1.078E-11	517.724	-3.330E-09	-3.330E-09	3.509E-09	3.509E-09	-5.572E-10	-5.572E-10
1.05000	1.056E-11	523.962	-3.386E-09	-3.386E-09	3.586E-09	3.586E-09	-5.458E-10	-5.458E-10
1.07500	1.007E-11	536.437	-3.515E-09	-3.515E-09	3.715E-09	3.715E-09	-5.209E-10	-5.209E-10
1.10000	9.556E-12	548.913	-3.630E-09	-3.630E-09	3.845E-09	3.845E-09	-4.941E-10	-4.941E-10
1.15000	8.718E-12	573.863	-3.856E-09	-3.856E-09	4.075E-09	4.075E-09	-4.507E-10	-4.507E-10
1.20000	7.832E-12	598.814	-4.055E-09	-4.055E-09	4.289E-09	4.289E-09	-4.049E-10	-4.049E-10
1.30000	6.089E-12	648.715	-4.382E-09	-4.382E-09	4.655E-09	4.655E-09	-3.148E-10	-3.148E-10
1.40000	4.560E-12	698.616	-4.623E-09	-4.623E-09	4.944E-09	4.944E-09	-2.357E-10	-2.357E-10
1.50000	3.380E-12	748.517	-4.780E-09	-4.780E-09	5.179E-09	5.179E-09	-1.748E-10	-1.748E-10
1.60000	2.525E-12	798.418	-4.886E-09	-4.886E-09	5.365E-09	5.365E-09	-1.306E-10	-1.306E-10
1.70000	1.865E-12	848.319	-4.970E-09	-4.970E-09	5.499E-09	5.499E-09	-9.641E-11	-9.641E-11
1.80000	1.377E-12	898.221	-5.024E-09	-5.024E-09	5.605E-09	5.605E-09	-7.120E-11	-7.120E-11
1.90000	1.015E-12	948.122	-5.055E-09	-5.055E-09	5.692E-09	5.692E-09	-5.249E-11	-5.249E-11

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_0=25.000 θ_0= 0. ρ_0=90.930

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-8.539E-15
0.10000	6.333E-12	6.333E-12	-7.253E-24	-7.253E-24	-8.552E-14	-8.552E-14	-1.109E-14
0.20000	1.715E-11	1.715E-11	-1.178E-23	-1.178E-23	-2.253E-13	-2.253E-13	-1.497E-14
0.30000	3.422E-11	3.422E-11	-1.878E-23	-1.878E-23	-4.502E-13	-4.502E-13	-2.131E-14
0.40000	6.330E-11	6.330E-11	-2.974E-23	-2.974E-23	-8.056E-13	-8.056E-13	-3.137E-14
0.50000	1.117E-10	1.117E-10	-4.624E-23	-4.624E-23	-1.3o7E-12	-1.367E-12	-4.743E-14
0.60000	1.858E-10	1.858E-10	-6.814E-23	-6.814E-23	-2.217E-12	-2.217E-12	-7.365E-14
0.70000	3.184E-10	3.184E-10	-9.303E-23	-9.303E-23	-3.422E-12	-3.422E-12	-1.120E-13
0.80000	5.579E-10	5.579E-10	-1.208E-22	-1.208E-22	-5.026E-12	-5.026E-12	-1.480E-13
0.85000	7.347E-10	7.347E-10	-1.301E-22	-1.301E-22	-5.967E-12	-5.967E-12	-1.605E-13
0.90000	9.521E-10	9.521E-10	-1.339E-22	-1.339E-22	-6.958E-12	-6.958E-12	-1.657E-13
0.92500	1.073E-09	1.073E-09	-1.335E-22	-1.335E-22	-7.459E-12	-7.459E-12	-1.652E-13
0.95000	1.196E-09	1.196E-09	-1.316E-22	-1.316E-22	-7.955E-12	-7.955E-12	-1.626E-13
0.96250	1.257E-09	1.257E-09	-1.301E-22	-1.301E-22	-8.200E-12	-8.200E-12	-1.605E-13
0.97500	1.316E-09	1.316E-09	-1.283E-22	-1.283E-22	-8.442E-12	-8.442E-12	-1.580E-13
0.98125	1.345E-09	1.345E-09	-1.272E-22	-1.272E-22	-8.561E-12	-8.561E-12	-1.566E-13
0.98750	1.373E-09	1.373E-09	-1.261E-22	-1.261E-22	-8.680E-12	-8.680E-12	-1.551E-13
0.99375	1.401E-09	1.401E-09	-1.249E-22	-1.249E-22	-8.797E-12	-8.797E-12	-1.535E-13
1.00000	1.428E-09	1.428E-09	-1.236E-22	-1.236E-22	-8.913E-12	-8.913E-12	-1.518E-13
1.00625	1.454E-09	1.454E-09	-1.222E-22	-1.222E-22	-9.028E-12	-9.028E-12	-1.500E-13
1.01250	1.479E-09	1.479E-09	-1.208E-22	-1.208E-22	-9.142E-12	-9.142E-12	-1.481E-13
1.01875	1.504E-09	1.504E-09	-1.193E-22	-1.193E-22	-9.254E-12	-9.254E-12	-1.462E-13
1.02500	1.527E-09	1.527E-09	-1.178E-22	-1.178E-22	-9.365E-12	-9.365E-12	-1.442E-13
1.03750	1.571E-09	1.571E-09	-1.146E-22	-1.146E-22	-9.582E-12	-9.582E-12	-1.401E-13
1.05000	1.612E-09	1.612E-09	-1.111E-22	-1.111E-22	-9.793E-12	-9.793E-12	-1.358E-13
1.07500	1.680E-09	1.680E-09	-1.038E-22	-1.038E-22	-1.020E-11	-1.020E-11	-1.267E-13
1.10000	1.734E-09	1.734E-09	-9.610E-23	-9.610E-23	-1.057E-11	-1.057E-11	-1.175E-13
1.15000	1.807E-09	1.807E-09	-8.369E-23	-8.369E-23	-1.124E-11	-1.124E-11	-9.648E-14
1.20000	1.842E-09	1.842E-09	-7.120E-23	-7.120E-23	-1.182E-11	-1.182E-11	-7.792E-14
1.30000	1.845E-09	1.845E-09	-4.872E-23	-4.872E-23	-1.271E-11	-1.271E-11	-5.016E-14
1.40000	1.801E-09	1.801E-09	-3.151E-23	-3.151E-23	-1.331E-11	-1.331E-11	-3.302E-14
1.50000	1.737E-09	1.737E-09	-1.988E-23	-1.988E-23	-1.368E-11	-1.368E-11	-2.240E-14
1.60000	1.665E-09	1.665E-09	-1.250E-23	-1.250E-23	-1.392E-11	-1.392E-11	-1.564E-14
1.70000	1.591E-09	1.591E-09	-7.716E-24	-7.716E-24	-1.407E-11	-1.407E-11	-1.151E-14
1.80000	1.518E-09	1.518E-09	-4.693E-24	-4.693E-24	-1.416E-11	-1.416E-11	-8.828E-15
1.90000	1.448E-09	1.448E-09	-2.824E-24	-2.824E-24	-1.422E-11	-1.422E-11	-7.052E-15

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 30.000 θ_0= 0. ρ_0=107.579

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	30.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	30.0000	0.10000	196.820	7.204E-07	9.849E-01	-1.766E-12	-1.766E-12	1.766E-12
0.20000	30.0000	0.20000	179.189	2.615E-06	9.830E-01	-2.351E-12	-2.351E-12	2.351E-12
0.30000	30.0000	0.30000	162.496	5.229E-06	9.819E-01	-3.082E-12	-3.082E-12	3.082E-12
0.40000	30.0000	0.40000	147.062	1.110E-05	9.826E-01	-3.986E-12	-3.986E-12	3.986E-12
0.50000	30.0000	0.50000	133.325	1.302E-05	9.854E-01	-5.146E-12	-5.146E-12	5.146E-12
0.60000	30.0000	0.60000	121.859	1.494E-05	9.899E-01	-6.368E-12	-6.368E-12	6.368E-12
0.70000	30.0000	0.70000	113.355	1.708E-05	9.932E-01	-7.459E-12	-7.459E-12	7.459E-12
0.80000	30.0000	0.80000	108.513	1.836E-05	9.916E-01	-8.161E-12	-8.161E-12	8.161E-12
0.85000	30.0000	0.85000	107.635	1.964E-05	9.894E-01	-8.296E-12	-8.296E-12	8.296E-12
0.90000	30.0000	0.90000	107.828	2.134E-05	9.884E-01	-8.266E-12	-8.266E-12	8.266E-12
0.92500	30.0000	0.92500	108.325	2.391E-05	9.890E-01	-8.190E-12	-8.190E-12	8.190E-12
0.95000	30.0000	0.95000	109.086	2.391E-05	9.906E-01	-8.075E-12	-8.075E-12	8.075E-12
0.96250	30.0000	0.96250	109.564	2.391E-05	9.918E-01	-8.003E-12	-8.003E-12	8.003E-12
0.97500	30.0000	0.97500	110.105	2.647E-05	9.933E-01	-7.923E-12	-7.923E-12	7.923E-12
0.98125	30.0000	0.98125	110.399	2.647E-05	9.942E-01	-7.880E-12	-7.880E-12	7.880E-12
0.98750	30.0000	0.98750	110.709	2.817E-05	9.951E-01	-7.835E-12	-7.835E-12	7.835E-12
0.99375	30.0000	0.99375	111.034	3.159E-05	9.960E-01	-7.788E-12	-7.788E-12	7.788E-12
1.00000	30.0000	1.00000	111.374	3.159E-05	9.970E-01	-7.739E-12	-7.739E-12	7.739E-12
1.00625	30.0000	1.00625	111.730	3.330E-05	9.980E-01	-7.688E-12	-7.688E-12	7.688E-12
1.01250	30.0000	1.01250	112.101	3.502E-05	9.991E-01	-7.635E-12	-7.635E-12	7.635E-12
1.01875	30.0000	1.01875	112.486	3.586E-05	1.000E 00	-7.580E-12	-7.580E-12	7.580E-12
1.02500	30.0000	1.02500	112.886	3.842E-05	1.001E 00	-7.524E-12	-7.524E-12	7.524E-12
1.03750	30.0000	1.03750	113.730	3.927E-05	1.004E 00	-7.407E-12	-7.407E-12	7.407E-12
1.05000	30.0000	1.05000	114.631	4.183E-05	1.006E 00	-7.284E-12	-7.284E-12	7.284E-12
1.07500	30.0000	1.07500	116.598	4.183E-05	1.011E 00	-7.022E-12	-7.022E-12	7.022E-12
1.10000	30.0000	1.10000	118.776	4.183E-05	1.015E 00	-6.744E-12	-6.744E-12	6.744E-12
1.15000	30.0000	1.15000	123.719	4.183E-05	1.022E 00	-6.152E-12	-6.152E-12	6.152E-12
1.20000	30.0000	1.20000	129.371	4.183E-05	1.026E 00	-5.538E-12	-5.538E-12	5.538E-12
1.30000	30.0000	1.30000	142.450	4.183E-05	1.028E 00	-4.343E-12	-4.343E-12	4.343E-12
1.40000	30.0000	1.40000	157.394	4.525E-05	1.024E 00	-3.347E-12	-3.347E-12	3.347E-12
1.50000	30.0000	1.50000	173.723	4.525E-05	1.018E 00	-2.569E-12	-2.569E-12	2.569E-12
1.60000	30.0000	1.60000	191.082	4.610E-05	1.013E 00	-1.938E-12	-1.938E-12	1.938E-12
1.70000	30.0000	1.70000	209.215	5.293E-05	1.009E 00	-1.454E-12	-1.454E-12	1.454E-12
1.80000	30.0000	1.80000	227.937	5.293E-05	1.006E 00	-1.087E-12	-1.087E-12	1.087E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	$_x\mu'-1_0$	T_o	$_oT_t-T_o$	$_xT_t-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.760E-12	49.931	-7.662E-11	-7.662E-11	7.662E-11	7.662E-11	-9.131E-11	-9.131E-11
0.20000	2.351E-12	99.802	-1.788E-10	-1.788E-10	1.788E-10	1.788E-10	-1.215E-10	-1.215E-10
0.30000	3.084E-12	149.703	-3.137E-10	-3.137E-10	3.137E-10	3.137E-10	-1.593E-10	-1.593E-10
0.40000	3.986E-12	199.605	-4.880E-10	-4.880E-10	4.899E-10	4.899E-10	-2.061E-10	-2.061E-10
0.50000	5.146E-12	249.506	-7.146E-10	-7.146E-10	7.179E-10	7.179E-10	-2.660E-10	-2.660E-10
0.60000	6.368E-12	299.407	-1.001E-09	-1.001E-09	1.006E-09	1.006E-09	-3.292E-10	-3.292E-10
0.70000	7.459E-12	349.308	-1.346E-09	-1.346E-09	1.354E-09	1.354E-09	-3.856E-10	-3.856E-10
0.80000	8.161E-12	399.209	-1.736E-09	-1.736E-09	1.747E-09	1.747E-09	-4.220E-10	-4.220E-10
0.85000	8.296E-12	424.160	-1.941E-09	-1.941E-09	1.953E-09	1.953E-09	-4.289E-10	-4.289E-10
0.90000	8.266E-12	449.110	-2.146E-09	-2.146E-09	2.162E-09	2.162E-09	-4.274E-10	-4.274E-10
0.92500	8.190E-12	461.586	-2.247E-09	-2.247E-09	2.267E-09	2.267E-09	-4.234E-10	-4.234E-10
0.95000	8.075E-12	474.061	-2.348E-09	-2.348E-09	2.369E-09	2.369E-09	-4.175E-10	-4.175E-10
0.96250	8.003E-12	480.299	-2.398E-09	-2.398E-09	2.419E-09	2.419E-09	-4.138E-10	-4.138E-10
0.97500	7.923E-12	486.536	-2.445E-09	-2.445E-09	2.471E-09	2.471E-09	-4.097E-10	-4.097E-10
0.98125	7.886E-12	489.655	-2.470E-09	-2.470E-09	2.496E-09	2.496E-09	-4.074E-10	-4.074E-10
0.98750	7.839E-12	492.774	-2.492E-09	-2.492E-09	2.522E-09	2.522E-09	-4.051E-10	-4.051E-10
0.99375	7.788E-12	495.893	-2.513E-09	-2.513E-09	2.550E-09	2.550E-09	-4.026E-10	-4.026E-10
1.00000	7.739E-12	499.012	-2.537E-09	-2.537E-09	2.575E-09	2.575E-09	-4.001E-10	-4.001E-10
1.00625	7.688E-12	502.130	-2.559E-09	-2.559E-09	2.601E-09	2.601E-09	-3.975E-10	-3.975E-10
1.01250	7.635E-12	505.249	-2.580E-09	-2.580E-09	2.627E-09	2.627E-09	-3.947E-10	-3.947E-10
1.01875	7.586E-12	508.368	-2.603E-09	-2.603E-09	2.652E-09	2.652E-09	-3.919E-10	-3.919E-10
1.02500	7.524E-12	511.487	-2.622E-09	-2.622E-09	2.680E-09	2.680E-09	-3.890E-10	-3.890E-10
1.03750	7.407E-12	517.724	-2.667E-09	-2.667E-09	2.728E-09	2.728E-09	-3.830E-10	-3.830E-10
1.05000	7.284E-12	523.962	-2.709E-09	-2.709E-09	2.778E-09	2.778E-09	-3.766E-10	-3.766E-10
1.07500	7.021E-12	536.437	-2.796E-09	-2.796E-09	2.870E-09	2.870E-09	-3.631E-10	-3.631E-10
1.10000	6.744E-12	548.913	-2.881E-09	-2.881E-09	2.957E-09	2.957E-09	-3.487E-10	-3.487E-10
1.15000	6.152E-12	573.863	-3.041E-09	-3.041E-09	3.118E-09	3.118E-09	-3.181E-10	-3.181E-10
1.20000	5.536E-12	598.814	-3.184E-09	-3.184E-09	3.267E-09	3.267E-09	-2.863E-10	-2.863E-10
1.30000	4.343E-12	648.715	-3.428E-09	-3.428E-09	3.515E-09	3.515E-09	-2.245E-10	-2.245E-10
1.40000	3.347E-12	698.616	-3.605E-09	-3.605E-09	3.719E-09	3.719E-09	-1.731E-10	-1.731E-10
1.50000	2.569E-12	748.517	-3.751E-09	-3.751E-09	3.867E-09	3.867E-09	-1.328E-10	-1.328E-10
1.60000	1.936E-12	798.418	-3.856E-09	-3.856E-09	3.985E-09	3.985E-09	-1.002E-10	-1.002E-10
1.70000	1.454E-12	848.320	-3.914E-09	-3.914E-09	4.095E-09	4.095E-09	-7.516E-11	-7.516E-11
1.80000	1.087E-12	898.221	-3.972E-09	-3.972E-09	4.164E-09	4.164E-09	-5.620E-11	-5.620E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 30.000 θ_D= 0. ρ_a=107.579

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-1.195E-14
0.10000	7.304E-12	7.364E-12	-7.077E-24	-7.077E-24	-8.442E-14	-8.442E-14	-1.531E-14
0.20000	1.959E-11	1.959E-11	-1.116E-23	-1.116E-23	-2.187E-13	-2.187E-13	-2.021E-14
0.30000	3.818E-11	3.818E-11	-1.716E-23	-1.716E-23	-4.278E-13	-4.278E-13	-2.772E-14
0.40000	6.769E-11	6.769E-11	-2.573E-23	-2.573E-23	-7.447E-13	-7.447E-13	-3.900E-14
0.50000	1.147E-10	1.147E-10	-3.781E-23	-3.781E-23	-1.216E-12	-1.216E-12	-5.442E-14
0.60000	1.824E-10	1.824E-10	-5.213E-23	-5.213E-23	-1.887E-12	-1.887E-12	-7.544E-14
0.70000	2.898E-10	2.898E-10	-6.615E-23	-6.615E-23	-2.775E-12	-2.775E-12	-9.943E-14
0.80000	4.587E-10	4.587E-10	-7.577E-23	-7.577E-23	-3.845E-12	-3.845E-12	-1.181E-13
0.85000	5.691E-10	5.691E-10	-7.765E-23	-7.765E-23	-4.420E-12	-4.420E-12	-1.220E-13
0.90000	6.915E-10	6.915E-10	-7.724E-23	-7.724E-23	-5.001E-12	-5.001E-12	-1.211E-13
0.92500	7.548E-10	7.548E-10	-7.617E-23	-7.617E-23	-5.288E-12	-5.288E-12	-1.189E-13
0.95000	8.170E-10	8.170E-10	-7.456E-23	-7.456E-23	-5.570E-12	-5.570E-12	-1.157E-13
0.96250	8.470E-10	8.470E-10	-7.357E-23	-7.357E-23	-5.708E-12	-5.708E-12	-1.137E-13
0.97500	8.761E-10	8.761E-10	-7.246E-23	-7.246E-23	-5.845E-12	-5.845E-12	-1.115E-13
0.98125	8.901E-10	8.901E-10	-7.187E-23	-7.187E-23	-5.912E-12	-5.912E-12	-1.103E-13
0.98750	9.039E-10	9.039E-10	-7.125E-23	-7.125E-23	-5.979E-12	-5.979E-12	-1.091E-13
0.99375	9.173E-10	9.173E-10	-7.060E-23	-7.060E-23	-6.045E-12	-6.045E-12	-1.079E-13
1.00000	9.303E-10	9.303E-10	-6.993E-23	-6.993E-23	-6.111E-12	-6.111E-12	-1.066E-13
1.00625	9.429E-10	9.429E-10	-6.924E-23	-6.924E-23	-6.176E-12	-6.176E-12	-1.053E-13
1.01250	9.552E-10	9.552E-10	-6.852E-23	-6.852E-23	-6.241E-12	-6.241E-12	-1.039E-13
1.01875	9.670E-10	9.670E-10	-6.779E-23	-6.779E-23	-6.304E-12	-6.304E-12	-1.025E-13
1.02500	9.784E-10	9.784E-10	-6.703E-23	-6.703E-23	-6.367E-12	-6.367E-12	-1.011E-13
1.03750	9.999E-10	9.999E-10	-6.546E-23	-6.546E-23	-6.491E-12	-6.491E-12	-9.821E-14
1.05000	1.020E-09	1.020E-09	-6.383E-23	-6.383E-23	-6.612E-12	-6.612E-12	-9.526E-14
1.07500	1.054E-09	1.054E-09	-6.041E-23	-6.041E-23	-6.845E-12	-6.845E-12	-8.922E-14
1.10000	1.082E-09	1.082E-09	-5.683E-23	-5.683E-23	-7.064E-12	-7.064E-12	-8.314E-14
1.15000	1.122E-09	1.122E-09	-4.948E-23	-4.948E-23	-7.462E-12	-7.462E-12	-7.137E-14
1.20000	1.144E-09	1.144E-09	-4.224E-23	-4.224E-23	-7.804E-12	-7.804E-12	-6.064E-14
1.30000	1.150E-09	1.150E-09	-2.928E-23	-2.928E-23	-8.336E-12	-8.336E-12	-4.340E-14
1.40000	1.130E-09	1.130E-09	-1.958E-23	-1.958E-23	-8.697E-12	-8.697E-12	-3.095E-14
1.50000	1.097E-09	1.097E-09	-1.285E-23	-1.285E-23	-8.936E-12	-8.936E-12	-2.231E-14
1.60000	1.057E-09	1.057E-09	-8.207E-24	-8.207E-24	-9.091E-12	-9.091E-12	-1.670E-14
1.70000	1.014E-09	1.014E-09	-5.136E-24	-5.136E-24	-9.190E-12	-9.190E-12	-1.292E-14
1.80000	9.711E-10	9.711E-10	-3.164E-24	-3.164E-24	-9.251E-12	-9.251E-12	-1.034E-14

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 35.000 θ_0= 0. ρ_0=123.410

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	35.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	35.0000	0.10000	197.919	0.	9.864E-01	-1.735E-12	-1.735E-12	1.735E-12
0.20000	35.0000	0.20000	181.595	0.	9.852E-01	-2.261E-12	-2.261E-12	2.261E-12
0.30000	35.0000	0.30000	166.454	0.	9.850E-01	-2.890E-12	-2.890E-12	2.890E-12
0.40000	35.0000	0.40000	152.850	0.	9.860E-01	-3.603E-12	-3.603E-12	3.603E-12
0.50000	35.0000	0.50000	141.228	0.	9.883E-01	-4.442E-12	-4.442E-12	4.442E-12
0.60000	35.0000	0.60000	132.111	0.	9.906E-01	-5.263E-12	-5.263E-12	5.263E-12
0.70000	35.0000	0.70000	126.045	0.	9.910E-01	-5.891E-12	-5.891E-12	5.891E-12
0.80000	35.0000	0.80000	123.479	2.561E-06	9.892E-01	-6.179E-12	-6.179E-12	6.179E-12
0.85000	35.0000	0.85000	123.588	2.561E-06	9.887E-01	-6.167E-12	-6.167E-12	6.167E-12
0.90000	35.0000	0.90000	124.630	4.269E-06	9.897E-01	-6.048E-12	-6.048E-12	6.048E-12
0.92500	35.0000	0.92500	125.494	4.269E-06	9.909E-01	-5.952E-12	-5.952E-12	5.952E-12
0.95000	35.0000	0.95000	126.581	5.976E-06	9.926E-01	-5.833E-12	-5.833E-12	5.833E-12
0.96250	35.0000	0.96250	127.206	6.830E-06	9.936E-01	-5.766E-12	-5.766E-12	5.766E-12
0.97500	35.0000	0.97500	127.885	7.684E-06	9.948E-01	-5.693E-12	-5.693E-12	5.693E-12
0.98125	35.0000	0.98125	128.244	8.538E-06	9.954E-01	-5.655E-12	-5.655E-12	5.655E-12
0.98750	35.0000	0.98750	128.616	8.538E-06	9.960E-01	-5.616E-12	-5.616E-12	5.616E-12
0.99375	35.0000	0.99375	129.001	1.110E-05	9.966E-01	-5.576E-12	-5.576E-12	5.576E-12
1.00000	35.0000	1.00000	129.399	1.110E-05	9.973E-01	-5.535E-12	-5.535E-12	5.535E-12
1.00625	35.0000	1.00625	129.810	1.451E-05	9.980E-01	-5.493E-12	-5.493E-12	5.493E-12
1.01250	35.0000	1.01250	130.233	1.622E-05	9.987E-01	-5.450E-12	-5.450E-12	5.450E-12
1.01875	35.0000	1.01875	130.669	1.622E-05	9.994E-01	-5.406E-12	-5.406E-12	5.406E-12
1.02500	35.0000	1.02500	131.117	1.622E-05	1.000E 00	-5.361E-12	-5.361E-12	5.361E-12
1.03750	35.0000	1.03750	132.050	1.622E-05	1.002E 00	-5.269E-12	-5.269E-12	5.269E-12
1.05000	35.0000	1.05000	133.030	1.622E-05	1.003E 00	-5.174E-12	-5.174E-12	5.174E-12
1.07500	35.0000	1.07500	135.131	1.622E-05	1.006E 00	-4.976E-12	-4.976E-12	4.976E-12
1.10000	35.0000	1.10000	137.410	1.622E-05	1.009E 00	-4.769E-12	-4.769E-12	4.769E-12
1.15000	35.0000	1.15000	142.469	1.622E-05	1.013E 00	-4.341E-12	-4.341E-12	4.341E-12
1.20000	35.0000	1.20000	148.137	1.622E-05	1.017E 00	-3.907E-12	-3.907E-12	3.907E-12
1.30000	35.0000	1.30000	161.040	1.622E-05	1.020E 00	-3.155E-12	-3.155E-12	3.155E-12
1.40000	35.0000	1.40000	175.638	1.622E-05	1.019E 00	-2.490E-12	-2.490E-12	2.490E-12
1.50000	35.0000	1.50000	191.545	2.049E-05	1.016E 00	-1.924E-12	-1.924E-12	1.924E-12
1.60000	35.0000	1.60000	208.462	2.391E-05	1.013E 00	-1.471E-12	-1.471E-12	1.471E-12
1.70000	35.0000	1.70000	226.161	2.732E-05	1.010E 00	-1.117E-12	-1.117E-12	1.117E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 35.000 θ_0= 0. ρ_0= 123.410

z	$_x\mu'$-1.0	$\bar{T}_o$	$_oT_f$-T_o	$_xT_f$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.735E-12	49.901	-7.594E-11	-7.594E-11	7.594E-11	7.594E-11	-8.970E-11	-8.970E-11
0.20000	2.261E-12	99.802	-1.752E-10	-1.752E-10	1.752E-10	1.752E-10	-1.169E-10	-1.169E-10
0.30000	2.890E-12	149.703	-3.033E-10	-3.033E-10	3.033E-10	3.033E-10	-1.494E-10	-1.494E-10
0.40000	3.603E-12	199.605	-4.650E-10	-4.650E-10	4.650E-10	4.650E-10	-1.863E-10	-1.863E-10
0.50000	4.442E-12	249.506	-6.653E-10	-6.653E-10	6.653E-10	6.653E-10	-2.297E-10	-2.297E-10
0.60000	5.263E-12	299.407	-9.079E-10	-9.079E-10	9.079E-10	9.079E-10	-2.721E-10	-2.721E-10
0.70000	5.891E-12	349.308	-1.187E-09	-1.187E-09	1.187E-09	1.187E-09	-3.046E-10	-3.046E-10
0.80000	6.179E-12	399.209	-1.490E-09	-1.490E-09	1.490E-09	1.490E-09	-3.195E-10	-3.195E-10
0.85000	6.167E-12	424.160	-1.644E-09	-1.644E-09	1.644E-09	1.644E-09	-3.188E-10	-3.188E-10
0.90000	6.048E-12	449.110	-1.797E-09	-1.797E-09	1.797E-09	1.797E-09	-3.127E-10	-3.127E-10
0.92500	5.952E-12	461.586	-1.872E-09	-1.872E-09	1.872E-09	1.872E-09	-3.077E-10	-3.077E-10
0.95000	5.833E-12	474.061	-1.945E-09	-1.945E-09	1.945E-09	1.945E-09	-3.016E-10	-3.016E-10
0.96250	5.766E-12	480.299	-1.981E-09	-1.981E-09	1.982E-09	1.982E-09	-2.981E-10	-2.981E-10
0.97500	5.693E-12	486.536	-2.016E-09	-2.016E-09	2.018E-09	2.018E-09	-2.944E-10	-2.944E-10
0.98125	5.655E-12	489.655	-2.034E-09	-2.034E-09	2.036E-09	2.036E-09	-2.924E-10	-2.924E-10
0.98750	5.616E-12	492.774	-2.051E-09	-2.051E-09	2.054E-09	2.054E-09	-2.904E-10	-2.904E-10
0.99375	5.576E-12	495.893	-2.068E-09	-2.068E-09	2.072E-09	2.072E-09	-2.883E-10	-2.883E-10
1.00000	5.535E-12	499.012	-2.085E-09	-2.085E-09	2.090E-09	2.090E-09	-2.862E-10	-2.862E-10
1.00625	5.493E-12	502.130	-2.101E-09	-2.101E-09	2.109E-09	2.109E-09	-2.840E-10	-2.840E-10
1.01250	5.450E-12	505.249	-2.117E-09	-2.117E-09	2.127E-09	2.127E-09	-2.818E-10	-2.818E-10
1.01875	5.406E-12	508.368	-2.133E-09	-2.133E-09	2.144E-09	2.144E-09	-2.795E-10	-2.795E-10
1.02500	5.361E-12	511.487	-2.149E-09	-2.149E-09	2.162E-09	2.162E-09	-2.772E-10	-2.772E-10
1.03750	5.269E-12	517.724	-2.182E-09	-2.182E-09	2.195E-09	2.195E-09	-2.724E-10	-2.724E-10
1.05000	5.174E-12	523.962	-2.214E-09	-2.214E-09	2.228E-09	2.228E-09	-2.675E-10	-2.675E-10
1.07500	4.976E-12	536.437	-2.277E-09	-2.277E-09	2.291E-09	2.291E-09	-2.573E-10	-2.573E-10
1.10000	4.769E-12	548.913	-2.338E-09	-2.338E-09	2.352E-09	2.352E-09	-2.466E-10	-2.466E-10
1.15000	4.341E-12	573.863	-2.452E-09	-2.452E-09	2.466E-09	2.466E-09	-2.244E-10	-2.244E-10
1.20000	3.907E-12	598.814	-2.555E-09	-2.555E-09	2.569E-09	2.569E-09	-2.020E-10	-2.020E-10
1.30000	3.155E-12	648.715	-2.731E-09	-2.731E-09	2.745E-09	2.745E-09	-1.631E-10	-1.631E-10
1.40000	2.490E-12	698.616	-2.871E-09	-2.871E-09	2.885E-09	2.885E-09	-1.287E-10	-1.287E-10
1.50000	1.924E-12	748.517	-2.976E-09	-2.976E-09	3.000E-09	3.000E-09	-9.947E-11	-9.947E-11
1.60000	1.471E-12	798.418	-3.055E-09	-3.055E-09	3.089E-09	3.089E-09	-7.604E-11	-7.604E-11
1.70000	1.117E-12	848.320	-3.112E-09	-3.112E-09	3.160E-09	3.160E-09	-5.777E-11	-5.777E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 35.000 θ_0= 0. ρ_a=123.410

z	$_0D_y$	$_xD_y$	$_0\kappa$	$_x\kappa$	$_0\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-1.573E-14
0.10000	8.322E-12	8.322E-12	-6.879E-24	-6.879E-24	-8.317E-14	-8.317E-14	-1.984E-14
0.20000	2.174E-11	2.174E-11	-1.048E-23	-1.048E-23	-2.114E-13	-2.114E-13	-2.552E-14
0.30000	4.149E-11	4.149E-11	-1.550E-23	-1.550E-23	-4.039E-13	-4.039E-13	-3.367E-14
0.40000	7.071E-11	7.071E-11	-2.202E-23	-2.202E-23	-6.827E-13	-6.827E-13	-4.504E-14
0.50000	1.152E-10	1.152E-10	-3.030E-23	-3.030E-23	-1.072E-12	-1.072E-12	-5.872E-14
0.60000	1.759E-10	1.759E-10	-3.912E-23	-3.912E-23	-1.592E-12	-1.592E-12	-7.399E-14
0.70000	2.586E-10	2.586E-10	-4.636E-23	-4.636E-23	-2.235E-12	-2.235E-12	-8.765E-14
0.80000	3.664E-10	3.664E-10	-4.982E-23	-4.982E-23	-2.960E-12	-2.960E-12	-9.455E-14
0.85000	4.276E-10	4.276E-10	-4.967E-23	-4.967E-23	-3.333E-12	-3.333E-12	-9.425E-14
0.90000	4.901E-10	4.901E-10	-4.824E-23	-4.824E-23	-3.700E-12	-3.700E-12	-9.138E-14
0.92500	5.203E-10	5.203E-10	-4.708E-23	-4.708E-23	-3.878E-12	-3.878E-12	-8.909E-14
0.95000	5.490E-10	5.490E-10	-4.567E-23	-4.567E-23	-4.052E-12	-4.052E-12	-8.633E-14
0.96250	5.627E-10	5.627E-10	-4.488E-23	-4.488E-23	-4.136E-12	-4.136E-12	-8.480E-14
0.97500	5.758E-10	5.758E-10	-4.403E-23	-4.403E-23	-4.219E-12	-4.219E-12	-8.318E-14
0.98125	5.821E-10	5.821E-10	-4.359E-23	-4.359E-23	-4.260E-12	-4.260E-12	-8.234E-14
0.98750	5.883E-10	5.883E-10	-4.314E-23	-4.314E-23	-4.301E-12	-4.301E-12	-8.148E-14
0.99375	5.943E-10	5.943E-10	-4.268E-23	-4.268E-23	-4.341E-12	-4.341E-12	-8.061E-14
1.00000	6.001E-10	6.001E-10	-4.220E-23	-4.220E-23	-4.381E-12	-4.381E-12	-7.972E-14
1.00625	6.058E-10	6.058E-10	-4.172E-23	-4.172E-23	-4.420E-12	-4.420E-12	-7.882E-14
1.01250	6.113E-10	6.113E-10	-4.123E-23	-4.123E-23	-4.459E-12	-4.459E-12	-7.791E-14
1.01875	6.167E-10	6.167E-10	-4.073E-23	-4.073E-23	-4.497E-12	-4.497E-12	-7.698E-14
1.02500	6.218E-10	6.218E-10	-4.022E-23	-4.022E-23	-4.535E-12	-4.535E-12	-7.605E-14
1.03750	6.317E-10	6.317E-10	-3.918E-23	-3.918E-23	-4.609E-12	-4.609E-12	-7.416E-14
1.05000	6.407E-10	6.407E-10	-3.812E-23	-3.812E-23	-4.681E-12	-4.681E-12	-7.225E-14
1.07500	6.567E-10	6.567E-10	-3.594E-23	-3.594E-23	-4.820E-12	-4.820E-12	-6.839E-14
1.10000	6.700E-10	6.700E-10	-3.372E-23	-3.372E-23	-4.950E-12	-4.950E-12	-6.454E-14
1.15000	6.900E-10	6.900E-10	-2.927E-23	-2.927E-23	-5.186E-12	-5.186E-12	-5.708E-14
1.20000	7.022E-10	7.022E-10	-2.497E-23	-2.497E-23	-5.388E-12	-5.388E-12	-5.019E-14
1.30000	7.089E-10	7.089E-10	-1.782E-23	-1.782E-23	-5.707E-12	-5.707E-12	-3.766E-14
1.40000	7.011E-10	7.011E-10	-1.223E-23	-1.223E-23	-5.929E-12	-5.929E-12	-2.835E-14
1.50000	6.843E-10	6.843E-10	-8.109E-24	-8.109E-24	-6.080E-12	-6.080E-12	-2.182E-14
1.60000	6.621E-10	6.621E-10	-5.237E-24	-5.237E-24	-6.178E-12	-6.178E-12	-1.718E-14
1.70000	6.378E-10	6.378E-10	-3.313E-24	-3.313E-24	-6.241E-12	-6.241E-12	-1.387E-14

PROPAGATION FREQUENCY= 1.550,E 10 ϕ_0= 45.000 θ_0= 0. ρ_a=152.140

z	ϕ	z_r	ρ	θ	β	$_0\mu$-1.0	$_x\mu$-1.0	$_0\mu'$-1.0
0.	45.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	45.0000	0.10000	200.523	0.	9.780E-01	-1.664E-12	-1.664E-12	1.664E-12
0.20000	45.0000	0.20000	187.220	0.	9.776E-01	-2.064E-12	-2.064E-12	2.064E-12
0.30000	45.0000	0.30000	175.554	0.	9.785E-01	-2.494E-12	-2.494E-12	2.494E-12
0.40000	45.0000	0.40000	165.870	0.	9.801E-01	-2.918E-12	-2.918E-12	2.918E-12
0.50000	45.0000	0.50000	158.532	0.	9.815E-01	-3.286E-12	-3.286E-12	3.286E-12
0.60000	45.0000	0.60000	153.876	0.	9.817E-01	-3.544E-12	-3.544E-12	3.544E-12
0.70000	45.0000	0.70000	152.148	2.561E-06	9.808E-01	-3.645E-12	-3.645E-12	3.645E-12
0.80000	45.0000	0.80000	153.448	8.538E-06	9.811E-01	-3.569E-12	-3.569E-12	3.569E-12
0.85000	45.0000	0.85000	155.216	1.323E-05	9.828E-01	-3.468E-12	-3.468E-12	3.468E-12
0.90000	45.0000	0.90000	157.700	1.878E-05	9.859E-01	-3.331E-12	-3.331E-12	3.331E-12
0.92500	45.0000	0.92500	159.200	1.878E-05	9.879E-01	-3.251E-12	-3.251E-12	3.251E-12
0.95000	45.0000	0.95000	160.866	2.049E-05	9.903E-01	-3.164E-12	-3.164E-12	3.164E-12
0.96250	45.0000	0.96250	161.760	2.134E-05	9.915E-01	-3.119E-12	-3.119E-12	3.119E-12
0.97500	45.0000	0.97500	162.693	2.134E-05	9.929E-01	-3.072E-12	-3.072E-12	3.072E-12
0.98125	45.0000	0.98125	163.174	2.391E-05	9.935E-01	-3.048E-12	-3.048E-12	3.048E-12
0.98750	45.0000	0.98750	163.665	2.476E-05	9.942E-01	-3.024E-12	-3.024E-12	3.024E-12
0.99375	45.0000	0.99375	164.166	2.476E-05	9.949E-01	-2.999E-12	-2.999E-12	2.999E-12
1.00000	45.0000	1.00000	164.676	2.647E-05	9.956E-01	-2.975E-12	-2.975E-12	2.975E-12
1.00625	45.0000	1.00625	165.195	2.817E-05	9.963E-01	-2.950E-12	-2.950E-12	2.950E-12
1.01250	45.0000	1.01250	165.723	2.817E-05	9.970E-01	-2.925E-12	-2.925E-12	2.925E-12
1.01875	45.0000	1.01875	166.261	3.074E-05	9.977E-01	-2.899E-12	-2.899E-12	2.899E-12
1.02500	45.0000	1.02500	166.808	3.159E-05	9.984E-01	-2.874E-12	-2.874E-12	2.874E-12
1.03750	45.0000	1.03750	167.929	3.159E-05	9.999E-01	-2.822E-12	-2.822E-12	2.822E-12
1.05000	45.0000	1.05000	169.085	3.159E-05	1.001E 00	-2.769E-12	-2.769E-12	2.769E-12
1.07500	45.0000	1.07500	171.500	3.159E-05	1.004E 00	-2.663E-12	-2.663E-12	2.663E-12
1.10000	45.0000	1.10000	174.048	3.159E-05	1.007E 00	-2.555E-12	-2.555E-12	2.555E-12
1.15000	45.0000	1.15000	179.520	3.159E-05	1.012E 00	-2.338E-12	-2.338E-12	2.338E-12
1.20000	45.0000	1.20000	185.454	3.159E-05	1.015E 00	-2.124E-12	-2.124E-12	2.124E-12
1.30000	45.0000	1.30000	198.544	3.159E-05	1.020E 00	-1.717E-12	-1.717E-12	1.717E-12
1.40000	45.0000	1.40000	213.107	3.159E-05	1.022E 00	-1.371E-12	-1.371E-12	1.371E-12
1.50000	45.0000	1.50000	228.583	3.159E-05	1.021E 00	-1.076E-12	-1.076E-12	1.076E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_x\mu'-1.0$	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.664E-12	49.901	-7.438E-11	-7.438E-11	7.438E-11	7.438E-11	-8.602E-11	-8.602E-11
0.20000	2.664E-12	99.802	-1.672E-10	-1.672E-10	1.672E-10	1.672E-10	-1.067E-10	-1.067E-10
0.30000	2.494E-12	149.703	-2.808E-10	-2.808E-10	2.808E-10	2.808E-10	-1.289E-10	-1.289E-10
0.40000	2.918E-12	199.605	-4.160E-10	-4.160E-10	4.160E-10	4.160E-10	-1.508E-10	-1.508E-10
0.50000	3.280E-12	249.506	-5.711E-10	-5.711E-10	5.711E-10	5.711E-10	-1.699E-10	-1.699E-10
0.60000	3.544E-12	299.407	-7.421E-10	-7.421E-10	7.421E-10	7.421E-10	-1.832E-10	-1.832E-10
0.70000	3.645E-12	349.308	-9.222E-10	-9.222E-10	9.222E-10	9.222E-10	-1.884E-10	-1.884E-10
0.80000	3.569E-12	399.209	-1.102E-09	-1.102E-09	1.104E-09	1.104E-09	-1.845E-10	-1.845E-10
0.85000	3.468E-12	424.160	-1.188E-09	-1.188E-09	1.194E-09	1.194E-09	-1.793E-10	-1.793E-10
0.90000	3.331E-12	449.110	-1.270E-09	-1.270E-09	1.282E-09	1.282E-09	-1.722E-10	-1.722E-10
0.92500	3.251E-12	461.586	-1.311E-09	-1.311E-09	1.323E-09	1.323E-09	-1.681E-10	-1.681E-10
0.95000	3.164E-12	474.061	-1.349E-09	-1.349E-09	1.364E-09	1.364E-09	-1.636E-10	-1.636E-10
0.96250	3.119E-12	480.299	-1.368E-09	-1.368E-09	1.385E-09	1.385E-09	-1.612E-10	-1.612E-10
0.97500	3.072E-12	486.536	-1.387E-09	-1.387E-09	1.404E-09	1.404E-09	-1.588E-10	-1.588E-10
0.98125	3.048E-12	489.655	-1.395E-09	-1.395E-09	1.416E-09	1.416E-09	-1.576E-10	-1.576E-10
0.98750	3.024E-12	492.774	-1.403E-09	-1.403E-09	1.426E-09	1.426E-09	-1.563E-10	-1.563E-10
0.99375	2.999E-12	495.893	-1.412E-09	-1.412E-09	1.436E-09	1.436E-09	-1.551E-10	-1.551E-10
1.00000	2.975E-12	499.011	-1.420E-09	-1.420E-09	1.447E-09	1.447E-09	-1.538E-10	-1.538E-10
1.00625	2.950E-12	502.130	-1.427E-09	-1.427E-09	1.458E-09	1.458E-09	-1.525E-10	-1.525E-10
1.01250	2.925E-12	505.249	-1.436E-09	-1.436E-09	1.467E-09	1.467E-09	-1.512E-10	-1.512E-10
1.01875	2.899E-12	508.368	-1.443E-09	-1.443E-09	1.479E-09	1.479E-09	-1.499E-10	-1.499E-10
1.02500	2.874E-12	511.487	-1.450E-09	-1.450E-09	1.490E-09	1.490E-09	-1.486E-10	-1.486E-10
1.03750	2.824E-12	517.724	-1.468E-09	-1.468E-09	1.507E-09	1.507E-09	-1.459E-10	-1.459E-10
1.05000	2.769E-12	523.962	-1.481E-09	-1.481E-09	1.529E-09	1.529E-09	-1.432E-10	-1.432E-10
1.07500	2.663E-12	536.437	-1.514E-09	-1.514E-09	1.564E-09	1.564E-09	-1.377E-10	-1.377E-10
1.10000	2.555E-12	548.913	-1.545E-09	-1.545E-09	1.598E-09	1.598E-09	-1.321E-10	-1.321E-10
1.15000	2.338E-12	573.863	-1.606E-09	-1.606E-09	1.659E-09	1.659E-09	-1.209E-10	-1.209E-10
1.20000	2.124E-12	598.814	-1.662E-09	-1.662E-09	1.715E-09	1.715E-09	-1.098E-10	-1.098E-10
1.30000	1.717E-12	648.715	-1.757E-09	-1.757E-09	1.810E-09	1.810E-09	-8.879E-11	-8.879E-11
1.40000	1.371E-12	698.616	-1.834E-09	-1.834E-09	1.887E-09	1.887E-09	-7.086E-11	-7.086E-11
1.50000	1.076E-12	748.517	-1.893E-09	-1.893E-09	1.950E-09	1.950E-09	-5.563E-11	-5.563E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 45.000 θ_D= 0. ρ_a=152.140

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_f$	$_x\kappa_f$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-2.391E-14
0.10000	9.852E-12	9.852E-12	-6.432E-24	-6.432E-24	-8.030E-14	-8.030E-14	-2.908E-14
0.20000	2.443E-11	2.443E-11	-9.067E-24	-9.067E-24	-1.955E-13	-1.955E-13	-3.539E-14
0.30000	4.436E-11	4.436E-11	-1.225E-23	-1.225E-23	-3.544E-13	-3.544E-13	-4.310E-14
0.40000	7.068E-11	7.068E-11	-1.573E-23	-1.573E-23	-5.636E-13	-5.636E-13	-5.178E-14
0.50000	1.062E-10	1.062E-10	-1.901E-23	-1.901E-23	-8.241E-13	-8.241E-13	-6.032E-14
0.60000	1.512E-10	1.512E-10	-2.144E-23	-2.144E-23	-1.128E-12	-1.128E-12	-6.689E-14
0.70000	2.037E-10	2.037E-10	-2.242E-23	-2.242E-23	-1.458E-12	-1.458E-12	-6.961E-14
0.80000	2.606E-10	2.606E-10	-2.168E-23	-2.168E-23	-1.790E-12	-1.790E-12	-6.757E-14
0.85000	2.887E-10	2.887E-10	-2.071E-23	-2.071E-23	-1.949E-12	-1.949E-12	-6.492E-14
0.90000	3.150E-10	3.150E-10	-1.943E-23	-1.943E-23	-2.099E-12	-2.099E-12	-6.145E-14
0.92500	3.270E-10	3.270E-10	-1.869E-23	-1.869E-23	-2.171E-12	-2.171E-12	-5.949E-14
0.95000	3.381E-10	3.381E-10	-1.790E-23	-1.790E-23	-2.239E-12	-2.239E-12	-5.742E-14
0.96250	3.433E-10	3.433E-10	-1.749E-23	-1.749E-23	-2.272E-12	-2.272E-12	-5.635E-14
0.97500	3.483E-10	3.483E-10	-1.708E-23	-1.708E-23	-2.305E-12	-2.305E-12	-5.527E-14
0.98125	3.507E-10	3.507E-10	-1.687E-23	-1.687E-23	-2.321E-12	-2.321E-12	-5.473E-14
0.98750	3.530E-10	3.530E-10	-1.665E-23	-1.665E-23	-2.336E-12	-2.336E-12	-5.418E-14
0.99375	3.553E-10	3.553E-10	-1.644E-23	-1.644E-23	-2.352E-12	-2.352E-12	-5.363E-14
1.00000	3.575E-10	3.575E-10	-1.623E-23	-1.623E-23	-2.367E-12	-2.367E-12	-5.308E-14
1.00625	3.596E-10	3.596E-10	-1.601E-23	-1.601E-23	-2.382E-12	-2.382E-12	-5.253E-14
1.01250	3.617E-10	3.617E-10	-1.579E-23	-1.579E-23	-2.397E-12	-2.397E-12	-5.197E-14
1.01875	3.637E-10	3.637E-10	-1.558E-23	-1.558E-23	-2.412E-12	-2.412E-12	-5.142E-14
1.02500	3.656E-10	3.656E-10	-1.536E-23	-1.536E-23	-2.426E-12	-2.426E-12	-5.087E-14
1.03750	3.693E-10	3.693E-10	-1.492E-23	-1.492E-23	-2.454E-12	-2.454E-12	-4.976E-14
1.05000	3.727E-10	3.727E-10	-1.448E-23	-1.448E-23	-2.482E-12	-2.482E-12	-4.866E-14
1.07500	3.787E-10	3.787E-10	-1.361E-23	-1.361E-23	-2.534E-12	-2.534E-12	-4.648E-14
1.10000	3.837E-10	3.837E-10	-1.274E-23	-1.274E-23	-2.584E-12	-2.584E-12	-4.434E-14
1.15000	3.912E-10	3.912E-10	-1.106E-23	-1.106E-23	-2.673E-12	-2.673E-12	-4.024E-14
1.20000	3.959E-10	3.959E-10	-9.490E-24	-9.490E-24	-2.749E-12	-2.749E-12	-3.646E-14
1.30000	3.983E-10	3.983E-10	-6.769E-24	-6.769E-24	-2.870E-12	-2.870E-12	-2.994E-14
1.40000	3.938E-10	3.938E-10	-4.656E-24	-4.656E-24	-2.955E-12	-2.955E-12	-2.461E-14
1.50000	3.848E-10	3.848E-10	-3.111E-24	-3.111E-24	-3.012E-12	-3.012E-12	-2.053E-14

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_o= 55.000 θ_D= 0. ρ_a=176.248

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	55.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	55.0000	0.10000	203.582	0.	9.740E-01	-1.587E-12	-1.587E-12	1.587E-12
0.20000	55.0000	0.20000	193.711	0.	9.741E-01	-1.857E-12	-1.857E-12	1.857E-12
0.30000	55.0000	0.30000	185.817	0.	9.747E-01	-2.111E-12	-2.111E-12	2.111E-12
0.40000	55.0000	0.40000	180.161	0.	9.752E-01	-2.314E-12	-2.314E-12	2.314E-12
0.50000	55.0000	0.50000	176.957	0.	9.752E-01	-2.437E-12	-2.437E-12	2.437E-12
0.60000	55.0000	0.60000	176.340	1.281E-06	9.748E-01	-2.462E-12	-2.462E-12	2.462E-12
0.70000	55.0000	0.70000	178.335	4.696E-06	9.753E-01	-2.384E-12	-2.384E-12	2.384E-12
0.80000	55.0000	0.80000	182.857	5.976E-06	9.786E-01	-2.215E-12	-2.215E-12	2.215E-12
0.85000	55.0000	0.85000	186.012	5.976E-06	9.816E-01	-2.104E-12	-2.104E-12	2.104E-12
0.90000	55.0000	0.90000	189.726	5.976E-06	9.856E-01	-1.981E-12	-1.981E-12	1.981E-12
0.92500	55.0000	0.92500	191.782	9.392E-06	9.878E-01	-1.916E-12	-1.916E-12	1.916E-12
0.95000	55.0000	0.95000	193.966	1.195E-05	9.901E-01	-1.850E-12	-1.850E-12	1.850E-12
0.96250	55.0000	0.96250	195.104	1.281E-05	9.913E-01	-1.816E-12	-1.816E-12	1.816E-12
0.97500	55.0000	0.97500	196.273	1.451E-05	9.926E-01	-1.782E-12	-1.782E-12	1.782E-12
0.98125	55.0000	0.98125	196.868	1.451E-05	9.932E-01	-1.765E-12	-1.765E-12	1.765E-12
0.98750	55.0000	0.98750	197.471	1.451E-05	9.938E-01	-1.748E-12	-1.748E-12	1.748E-12
0.99375	55.0000	0.99375	198.081	1.793E-05	9.944E-01	-1.730E-12	-1.730E-12	1.730E-12
1.00000	55.0000	1.00000	198.699	1.878E-05	9.950E-01	-1.713E-12	-1.713E-12	1.713E-12
1.00625	55.0000	1.00625	199.323	2.049E-05	9.957E-01	-1.696E-12	-1.696E-12	1.696E-12
1.01250	55.0000	1.01250	199.955	2.049E-05	9.963E-01	-1.679E-12	-1.679E-12	1.679E-12
1.01875	55.0000	1.01875	200.593	2.049E-05	9.969E-01	-1.662E-12	-1.662E-12	1.662E-12
1.02500	55.0000	1.02500	201.239	2.305E-05	9.975E-01	-1.645E-12	-1.645E-12	1.645E-12
1.03750	55.0000	1.03750	202.551	2.476E-05	9.987E-01	-1.612E-12	-1.612E-12	1.612E-12
1.05000	55.0000	1.05000	203.890	2.476E-05	9.999E-01	-1.579E-12	-1.579E-12	1.579E-12
1.07500	55.0000	1.07500	206.646	2.561E-05	1.002E 00	-1.513E-12	-1.513E-12	1.513E-12
1.10000	55.0000	1.10000	209.505	2.732E-05	1.005E 00	-1.447E-12	-1.447E-12	1.447E-12
1.15000	55.0000	1.15000	215.511	2.817E-05	1.009E 00	-1.318E-12	-1.318E-12	1.318E-12

PROPAGATION FREQUENCY= 1.550CE 10 ϕ_o= 55.000 θ_D= 0. ρ_a=176.248

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.587E-12	49.901	-7.261E-11	-7.261E-11	7.261E-11	7.261E-11	-8.203E-11	-8.203E-11
0.20000	1.857E-12	99.802	-1.585E-10	-1.585E-10	1.585E-10	1.585E-10	-9.603E-11	-9.603E-11
0.30000	2.111E-12	149.703	-2.577E-10	-2.577E-10	2.577E-10	2.577E-10	-1.092E-10	-1.092E-10
0.40000	2.314E-12	199.605	-3.684E-10	-3.684E-10	3.684E-10	3.684E-10	-1.196E-10	-1.196E-10
0.50000	2.437E-12	249.506	-4.873E-10	-4.873E-10	4.873E-10	4.873E-10	-1.260E-10	-1.260E-10
0.60000	2.462E-12	299.407	-6.099E-10	-6.099E-10	6.100E-10	6.100E-10	-1.273E-10	-1.273E-10
0.70000	2.384E-12	349.308	-7.310E-10	-7.310E-10	7.316E-10	7.316E-10	-1.232E-10	-1.232E-10
0.80000	2.215E-12	399.209	-8.458E-10	-8.458E-10	8.469E-10	8.469E-10	-1.145E-10	-1.145E-10
0.85000	2.104E-12	424.160	-8.997E-10	-8.997E-10	9.008E-10	9.008E-10	-1.088E-10	-1.088E-10
0.90000	1.981E-12	449.110	-9.506E-10	-9.506E-10	9.519E-10	9.519E-10	-1.024E-10	-1.024E-10
0.92500	1.916E-12	461.586	-9.740E-10	-9.740E-10	9.771E-10	9.771E-10	-9.909E-11	-9.909E-11
0.95000	1.850E-12	474.061	-9.965E-10	-9.965E-10	1.002E-09	1.002E-09	-9.564E-11	-9.564E-11
0.96250	1.816E-12	480.299	-1.007E-09	-1.007E-09	1.013E-09	1.013E-09	-9.389E-11	-9.389E-11
0.97500	1.782E-12	486.536	-1.018E-09	-1.018E-09	1.026E-09	1.026E-09	-9.213E-11	-9.213E-11
0.98125	1.765E-12	489.655	-1.023E-09	-1.023E-09	1.031E-09	1.031E-09	-9.124E-11	-9.124E-11
0.98750	1.748E-12	492.774	-1.029E-09	-1.029E-09	1.037E-09	1.037E-09	-9.035E-11	-9.035E-11
0.99375	1.730E-12	495.893	-1.032E-09	-1.032E-09	1.044E-09	1.044E-09	-8.946E-11	-8.946E-11
1.00000	1.713E-12	499.011	-1.037E-09	-1.037E-09	1.050E-09	1.050E-09	-8.857E-11	-8.857E-11
1.00625	1.696E-12	502.130	-1.041E-09	-1.041E-09	1.057E-09	1.057E-09	-8.768E-11	-8.768E-11
1.01250	1.679E-12	505.249	-1.046E-09	-1.046E-09	1.062E-09	1.062E-09	-8.679E-11	-8.679E-11
1.01875	1.662E-12	508.368	-1.051E-09	-1.051E-09	1.067E-09	1.067E-09	-8.593E-11	-8.593E-11
1.02500	1.645E-12	511.487	-1.054E-09	-1.054E-09	1.075E-09	1.075E-09	-8.507E-11	-8.507E-11
1.03750	1.612E-12	517.724	-1.063E-09	-1.063E-09	1.087E-09	1.087E-09	-8.335E-11	-8.335E-11
1.05000	1.579E-12	523.962	-1.072E-09	-1.072E-09	1.097E-09	1.097E-09	-8.164E-11	-8.164E-11
1.07500	1.513E-12	536.437	-1.090E-09	-1.090E-09	1.117E-09	1.117E-09	-7.822E-11	-7.822E-11
1.10000	1.447E-12	548.913	-1.107E-09	-1.107E-09	1.138E-09	1.138E-09	-7.482E-11	-7.482E-11
1.15000	1.318E-12	573.863	-1.139E-09	-1.139E-09	1.174E-09	1.174E-09	-6.816E-11	-6.816E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 55.000 θ_D= 0. ρ_a=176.248

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-3.210E-14
0.10000	1.094E-11	1.094E-11	-5.942E-24	-5.942E-24	-7.708E-14	-7.708E-14	-3.737E-14
0.20000	2.565E-11	2.565E-11	-7.668E-24	-7.668E-24	-1.787E-13	-1.787E-13	-4.302E-14
0.30000	4.429E-11	4.429E-11	-9.401E-24	-9.401E-24	-3.066E-13	-3.066E-13	-4.859E-14
0.40000	6.677E-11	6.677E-11	-1.088E-23	-1.088E-23	-4.588E-13	-4.588E-13	-5.337E-14
0.50000	9.346E-11	9.346E-11	-1.182E-23	-1.182E-23	-6.294E-13	-6.294E-13	-5.643E-14
0.60000	1.242E-10	1.242E-10	-1.201E-23	-1.201E-23	-8.086E-13	-8.086E-13	-5.706E-14
0.70000	1.558E-10	1.558E-10	-1.140E-23	-1.140E-23	-9.846E-13	-9.846E-13	-5.510E-14
0.80000	1.861E-10	1.861E-10	-1.015E-23	-1.015E-23	-1.147E-12	-1.147E-12	-5.103E-14
0.85000	1.995E-10	1.995E-10	-9.354E-24	-9.354E-24	-1.220E-12	-1.220E-12	-4.847E-14
0.90000	2.113E-10	2.113E-10	-8.499E-24	-8.499E-24	-1.286E-12	-1.286E-12	-4.573E-14
0.92500	2.165E-10	2.165E-10	-8.060E-24	-8.060E-24	-1.317E-12	-1.317E-12	-4.432E-14
0.95000	2.213E-10	2.213E-10	-7.618E-24	-7.618E-24	-1.347E-12	-1.347E-12	-4.290E-14
0.96250	2.235E-10	2.235E-10	-7.398E-24	-7.398E-24	-1.361E-12	-1.361E-12	-4.219E-14
0.97500	2.255E-10	2.255E-10	-7.178E-24	-7.178E-24	-1.374E-12	-1.374E-12	-4.149E-14
0.98125	2.265E-10	2.265E-10	-7.068E-24	-7.068E-24	-1.381E-12	-1.381E-12	-4.114E-14
0.98750	2.275E-10	2.275E-10	-6.959E-24	-6.959E-24	-1.387E-12	-1.387E-12	-4.079E-14
0.99375	2.284E-10	2.284E-10	-6.850E-24	-6.850E-24	-1.394E-12	-1.394E-12	-4.044E-14
1.00000	2.293E-10	2.293E-10	-6.742E-24	-6.742E-24	-1.400E-12	-1.400E-12	-4.009E-14
1.00625	2.302E-10	2.302E-10	-6.634E-24	-6.634E-24	-1.407E-12	-1.407E-12	-3.974E-14
1.01250	2.311E-10	2.311E-10	-6.527E-24	-6.527E-24	-1.413E-12	-1.413E-12	-3.940E-14
1.01875	2.319E-10	2.319E-10	-6.420E-24	-6.420E-24	-1.419E-12	-1.419E-12	-3.904E-14
1.02500	2.327E-10	2.327E-10	-6.314E-24	-6.314E-24	-1.425E-12	-1.425E-12	-3.868E-14
1.03750	2.341E-10	2.341E-10	-6.103E-24	-6.103E-24	-1.436E-12	-1.436E-12	-3.796E-14
1.05000	2.355E-10	2.355E-10	-5.895E-24	-5.895E-24	-1.448E-12	-1.448E-12	-3.726E-14
1.07500	2.379E-10	2.379E-10	-5.489E-24	-5.489E-24	-1.469E-12	-1.469E-12	-3.588E-14
1.10000	2.399E-10	2.399E-10	-5.098E-24	-5.098E-24	-1.489E-12	-1.489E-12	-3.454E-14
1.15000	2.427E-10	2.427E-10	-4.364E-24	-4.364E-24	-1.524E-12	-1.524E-12	-3.201E-14

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 65.000 θ_D= 0. ρ_a=195.000

z	ϕ	z_r	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	65.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	65.0000	0.10000	206.986	0.	9.790E-01	-1.505E-12	-1.505E-12	1.505E-12
0.20000	65.0000	0.20000	200.797	0.	9.789E-01	-1.657E-12	-1.657E-12	1.657E-12
0.30000	65.0000	0.30000	196.777	0.	9.789E-01	-1.767E-12	-1.767E-12	1.767E-12
0.40000	65.0000	0.40000	195.061	0.	9.786E-01	-1.817E-12	-1.817E-12	1.817E-12
0.50000	65.0000	0.50000	195.710	0.	9.784E-01	-1.798E-12	-1.798E-12	1.798E-12
0.60000	65.0000	0.60000	198.700	0.	9.788E-01	-1.713E-12	-1.713E-12	1.713E-12
0.70000	65.0000	0.70000	203.929	0.	9.808E-01	-1.578E-12	-1.578E-12	1.578E-12
0.80000	65.0000	0.80000	211.230	0.	9.847E-01	-1.409E-12	-1.409E-12	1.409E-12
0.85000	65.0000	0.85000	215.594	1.708E-06	9.873E-01	-1.317E-12	-1.317E-12	1.317E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 65.000 θ_D= 0. ρ_a= 195.000

z	$_x\mu'$-1.0	T_o	$_oT_t$-T_o	$_xT_t$-T_o	$_oT_g$-T_o	$_xT_g$-T_o	$_oD_z$-D_o	$_xD_z$-D_o
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.505E-12	49.901	-7.070E-11	-7.070E-11	7.070E-11	7.070E-11	-7.780E-11	-7.780E-11
0.20000	1.657E-12	99.802	-1.497E-10	-1.497E-10	1.497E-10	1.497E-10	-8.566E-11	-8.566E-11
0.30000	1.767E-12	149.703	-2.354E-10	-2.354E-10	2.354E-10	2.354E-10	-9.138E-11	-9.138E-11
0.40000	1.817E-12	199.605	-3.251E-10	-3.251E-10	3.251E-10	3.251E-10	-9.395E-11	-9.395E-11
0.50000	1.798E-12	249.506	-4.156E-10	-4.156E-10	4.156E-10	4.156E-10	-9.297E-11	-9.297E-11
0.60000	1.713E-12	299.407	-5.035E-10	-5.035E-10	5.035E-10	5.035E-10	-8.857E-11	-8.857E-11
0.70000	1.578E-12	349.308	-5.857E-10	-5.857E-10	5.857E-10	5.857E-10	-8.159E-11	-8.159E-11
0.80000	1.409E-12	399.209	-6.604E-10	-6.604E-10	6.604E-10	6.604E-10	-7.284E-11	-7.284E-11
0.85000	1.317E-12	424.160	-6.943E-10	-6.943E-10	6.944E-10	6.944E-10	-6.807E-11	-6.807E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_0= 65.000 θ_D= 0. ρ_a= 195.000

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_t$	$_x\kappa_t$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-3.930E-14
0.10000	1.157E-11	1.157E-11	-5.441E-24	-5.441E-24	-7.366E-14	-7.366E-14	-4.367E-14
0.20000	2.569E-11	2.569E-11	-6.386E-24	-6.386E-24	-1.623E-13	-1.623E-13	-4.760E-14
0.30000	4.208E-11	4.208E-11	-7.085E-24	-7.085E-24	-2.635E-13	-2.635E-13	-5.039E-14
0.40000	6.001E-11	6.001E-11	-7.406E-24	-7.406E-24	-3.724E-13	-3.724E-13	-5.165E-14
0.50000	7.874E-11	7.874E-11	-7.283E-24	-7.283E-24	-4.829E-13	-4.829E-13	-5.118E-14
0.60000	9.744E-11	9.744E-11	-6.742E-24	-6.742E-24	-5.882E-13	-5.882E-13	-4.906E-14
0.70000	1.139E-10	1.139E-10	-5.889E-24	-5.889E-24	-6.830E-13	-6.830E-13	-4.557E-14
0.80000	1.279E-10	1.279E-10	-4.875E-24	-4.875E-24	-7.636E-13	-7.636E-13	-4.134E-14
0.85000	1.335E-10	1.335E-10	-4.355E-24	-4.355E-24	-7.982E-13	-7.982E-13	-3.913E-14

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 75.000 θ_D= 0. ρ_a= 207.828

z	ϕ	z_f	ρ	θ	β	$_o\mu$-1.0	$_x\mu$-1.0	$_o\mu'$-1.0
0.	75.0000	0.	215.159	0.	1.000E 00	-1.325E-12	-1.325E-12	1.325E-12
0.10000	75.0000	0.10000	210.618	0.	9.993E-01	-1.422E-12	-1.422E-12	1.422E-12
0.20000	75.0000	0.20000	208.213	0.	9.996E-01	-1.476E-12	-1.476E-12	1.476E-12
0.30000	75.0000	0.30000	208.016	0.	9.999E-01	-1.481E-12	-1.481E-12	1.481E-12
0.40000	75.0000	0.40000	210.036	0.	1.000E 00	-1.435E-12	-1.435E-12	1.435E-12
0.50000	75.0000	0.50000	214.208	0.	1.001E 00	-1.345E-12	-1.345E-12	1.345E-12
0.60000	75.0000	0.60000	220.411	0.	1.001E 00	-1.222E-12	-1.222E-12	1.222E-12

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 75.000 θ_D= 0. ρ_a= 207.828

z	$_x\mu'$-1.0	T_o	$_oT_f-T_o$	$_xT_f-T_o$	$_oT_g-T_o$	$_xT_g-T_o$	$_oD_z-D_o$	$_xD_z-D_o$
0.	1.325E-12	0.	0.	0.	0.	0.	-6.853E-11	-6.853E-11
0.10000	1.422E-12	49.901	-6.872E-11	-6.872E-11	6.872E-11	6.872E-11	-7.354E-11	-7.354E-11
0.20000	1.476E-12	99.802	-1.412E-10	-1.412E-10	1.412E-10	1.412E-10	-7.634E-11	-7.634E-11
0.30000	1.481E-12	149.703	-2.152E-10	-2.152E-10	2.152E-10	2.152E-10	-7.657E-11	-7.657E-11
0.40000	1.435E-12	199.605	-2.882E-10	-2.882E-10	2.882E-10	2.882E-10	-7.421E-11	-7.421E-11
0.50000	1.345E-12	249.506	-3.577E-10	-3.577E-10	3.577E-10	3.577E-10	-6.955E-11	-6.955E-11
0.60000	1.222E-12	299.407	-4.219E-10	-4.219E-10	4.219E-10	4.219E-10	-6.316E-11	-6.316E-11

PROPAGATION FREQUENCY= 1.5500E 10 ϕ_o= 75.000 θ_D= 0. ρ_a= 207.828

z	$_oD_y$	$_xD_y$	$_o\kappa$	$_x\kappa$	$_o\kappa_1$	$_x\kappa_1$	α
0.	0.	0.	-4.404E-24	-4.404E-24	0.	0.	-4.465E-14
0.10000	1.181E-11	1.181E-11	-4.953E-24	-4.953E-24	-7.022E-14	-7.022E-14	-4.729E-14
0.20000	2.467E-11	2.467E-11	-5.271E-24	-5.271E-24	-1.470E-13	-1.470E-13	-4.882E-14
0.30000	3.776E-11	3.776E-11	-5.298E-24	-5.298E-24	-2.265E-13	-2.265E-13	-4.895E-14
0.40000	5.080E-11	5.080E-11	-5.028E-24	-5.028E-24	-3.041E-13	-3.041E-13	-4.767E-14
0.50000	6.252E-11	6.252E-11	-4.514E-24	-4.514E-24	-3.757E-13	-3.757E-13	-4.521E-14
0.60000	7.090E-11	7.090E-11	-3.844E-24	-3.844E-24	-4.383E-13	-4.383E-13	-4.195E-14

REFERENCES

1. Ratcliffe, J. A.: The Magneto-Ionic Theory and Its Applications to the Ionosphere. Cambridge Univ. Press, 1959, pp. 1-80, 103-107.

2. Smith, E. J.: Interplanetary Magnetic Fields. Space Physics, D. P. Le Galley and A. Rosen, eds., John Wiley & Sons, Inc., 1964, pp. 354, 369-373.

3. Bernstein, W.: The Solar Plasma - Its Detection, Measurement and Significance. Space Physics, D. P. Le Galley and A. Rosen, eds., John Wiley & Sons, Inc., 1964, p. 421.

4. Van de Hulst, H. C.: The Chromosphere and the Corona. The Sun, G. P. Kuiper, ed., Univ. Chicago, 1953, pp. 259-267, 272-278.

5. Pawsey, J. L.; and Smerd, S. F.: Solar Radio Emission. The Sun, G. P. Kuiper, ed., Univ. Chicago, 1953, p. 470.

6. Blackwell, D. E.: A Study of the Outer Solar Corona From a High Altitude Aircraft at the Eclipse of 1954 June 30. II. Electron Densities in the Outer Corona and Zodiacal Light Regions. Monthly Notices, Roy. Astronom. Soc., vol. 116, no. 1, 1956, pp. 56-68.

7. Blackwell, D. E.; and Ingham, M. F.: Observations of the Zodiacal Light From a Very High Altitude Station. II. Electron Densities in Interplanetary Space. Monthly Notices, Roy. Astronom. Soc., vol. 122, no. 2, 1961, pp. 129-141.

8. Biermann, L.: The Solar Wind and the Interplanetary Media. Space Astrophysics, W. Liller, ed., McGraw-Hill Book Co., Inc., 1961.

9. Biermann, L.: Observed Dynamical Processes in Interplanetary Space. Symposium of Plasma Dynamics, F. H. Clauser, ed., Addison Wesley, Reading, Mass., 1960.

10. Biermann, L.: Physical Processes in Comet Tails and Their Relation to Solar Activity. La Physique des Cometes, Mem. Soc. Roy. Sci., Liege, 13, Serie B, Fase I-II, 1953, pp. 291-302.

11. Harwit, M.; and Hoyle, F.: Plasma Dynamics in Comets. II. Influence of Magnetic Fields. Astrophys. J., vol. 135, no. 3, 1962, pp. 875-882.

12. Staff of the Center for Radar Astronomy, Stanford University and Stanford Research Institute: The Interplanetary Electron Number Density From Preliminary Analysis of the Pioneer 6 Radio Propagation Experiment. J. Geophys. Res., vol. 71, no. 13, July 1, 1966, pp. 3325-3327.

13. Ness, Norman F.; and Wilcox, John M.: Solar Origin of the Interplanetary Magnetic Field. Phys. Rev. Letters, vol. 13, no. 15, Oct. 1964, pp. 461-464.

14. Scarf, F. L.: The Solar Wind and Its Interaction With Magnetic Fields. Space Physics, D. P. Le Galley and A. Rosen, eds., John Wiley & Sons, Inc., 1964, pp. 440, 450-457.

15. Pottasch, S. R.: Use of the Equation of Hydrostatic Equilibrium in Determining the Temperature Distribution in the Outer Solar Atmosphere. Astrophys. J., vol. 131, no. 1, Jan. 1960, pp. 68-74.

16. Babcock, H. W.: The Topology of the Sun's Magnetic Field and the 22-Year Cycle. Astrophys. J., vol. 133, no. 3, March 1961, pp. 572-587.

17. Parker, E. N.: Dynamics of the Interplanetary Gas and Magnetic Fields. Astrophys. J., vol. 128, no. 3, Nov. 1958, pp. 664-676.

18. Ness, N. F.; Scearce, C. S.; and Cantarano, S.: Preliminary Results From the Pioneer 6 Magnetic Field Experiment. J. Geophys. Res., vol. 71, no. 13, July 1966, pp. 3305-3313.

19. McCracken, K. G.: The Cosmic-Ray Flare Effect. J. Geophys. Res., vol. 67, no. 2, Feb. 1962, pp. 423-446.

20. Bracewell, Ronald N.; and Preston, George W.: Radio Reflection and Refraction Phenomena in the High Solar Corona. Astrophys. J., vol. 123, no. 1, Jan. 1956, pp. 14-29.

21. Brillouin, L.: Wave Propagation and Group Velocity. Academic Press, 1960.

22. Bauer, S. J.; and Jackson, J. E.: Rocket Measurements of the Upper Ionosphere by a Radio Propagation Technique. NASA TN D-1123, 1962.

23. Lusignan, B. B.: Detection of Solar Particle Streams Using High-Frequency Radio Waves. Tech. Rep. 1403-3; SEL-63-041, Electronics Lab., Stanford Univ., 1963.

24. Kiepenheuer, K. O.: Solar Activity. The Sun, G. P. Kuiper, ed., Univ. Chicago, 1953, pp. 361-365.

25. Shapiro, Irwin I.: Fourth Test of General Relativity. Phys. Rev. Letters, vol. 13, no. 26, Dec. 1964, pp. 789-791.