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Flight Data Report No. 7

Contract AF 33(616)-7633

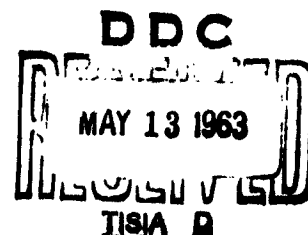
BALLOON FLIGHT OF JULY 14, 1962

David G. Murcray
James N. Brooks
Jay O. Green
Marie M. Working

Research Reported in This Document Has Been Supported by
Aeronautical Systems Division
Air Force Systems Command
United States Air Force

5 April 1963

- Submitted by -
Denver Research Institute
University of Denver
Denver 10, Colorado



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ABSTRACT

This report presents the results obtained on a balloon flight made with an automatic programmed radiometer system. The equipment was launched from Ft. Wainwright, Alaska, July 14, 1962. The radiometer was equipped with a liquid oxygen cooled InSb cell as a detector and measurements were made of the infrared background radiation in various wavelength intervals between 1.8μ to 5.0μ .

I. INTRODUCTION

This is one of a continuing series of flight data reports issued on Contract AF 33(616)-7633. These reports present infrared and ultraviolet background radiation data obtained by means of a balloon borne automatic programmed radiometer system. The results contained in this report were obtained during a balloon flight made from Ft. Wainwright, Alaska, July 14, 1962.

II. INSTRUMENTATION

The instrumentation has been described in detail in previous flight data reports and the description will not be repeated here. For this flight the plane mirror located at the front aperture of the radiometer was programmed so that the radiometer scanned through 180° in azimuth at a constant elevation angle. At the end of this scan the azimuth drive was reversed and at the same time the elevation mirror was rotated to a different position. Thus a series of scans were made in azimuth at different elevation angles. At the end of five azimuth scans the filter wheel was advanced and the sequence repeated. The filters used on this flight were the same as those used on previous flights. In order to keep this report self-contained the filter transmission curves are given in Figures 1 through 5.

The method of calibration of the radiometer system is described in detail in flight data report Number 4.

III. FLIGHT DETAILS

The balloon was launched from Ft. Wainwright, Alaska (at the edge of Fairbanks) at 2229 Alaska Standard Time. The balloon ascended at an average rate of 220 meters/min and reached a floating altitude of 31 kms. The winds were such that the balloon drifted north northeast during the early part of the ascent and then to the west during the latter part of the ascent. The winds at float were from the southeast and

when the flight was terminated at 0430 A.S.T. the equipment impacted about twenty-eight miles northeast of the town of Tanana, forty miles west of the town of Rampart, north of the Yukon River. The equipment was recovered by means of helicopter.

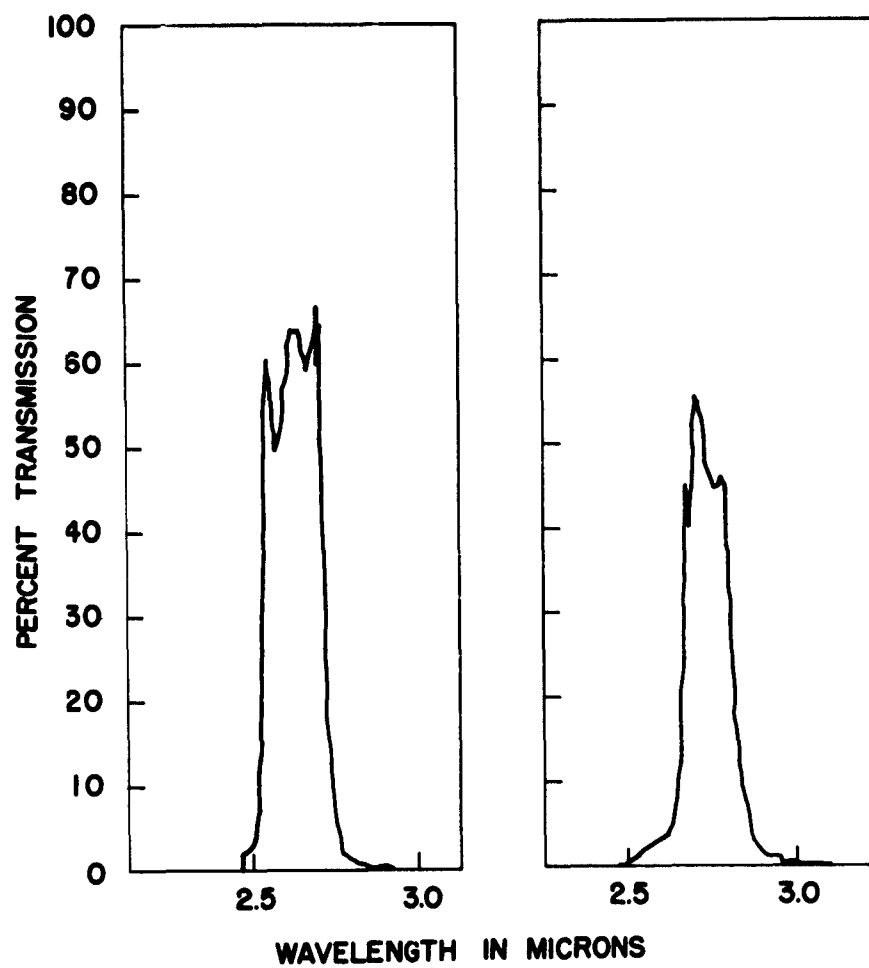
There was high thin cirrus present throughout the flight with some patches of stratus clouds at 10,000, 8,000 and 5,000 feet. There were also stratus clouds at 300 feet in the Yukon and Tanana River basins. No data are available on the height of the cirrus clouds.

IV. RESULTS

For this flight a method of data presentation, suggested by H. W. Wessely of the Aerospace Corporation, has been used. Rather than calculating the probability distribution functions for the radiance and the gradient of the radiance, the mean radiance and the r.m.s. radiance were calculated as a function of a number of parameters. The mean value of the radiance was calculated as a function of azimuth angle from the sun and viewing angle. The r.m.s. value of the radiance was also determined for the same parameters. The mean radiance and r.m.s. value of the radiance were also determined as a function of scattering angle and viewing angle. The number of observations on which these data are based are also given. In presenting the results as a function of sun azimuth the mean radiance and r.m.s. radiance were determined as a function of sun azimuth to the right of the sun and to the left of the sun separately and these results are presented along with a weighted average of the two values. These results are presented in Figures 6 through 227. For purposes of this report a viewing angle of 90° corresponds to the balloon horizon and a viewing angle of 0° corresponds to the nadir. All radiance values quoted are in microwatts cm^{-2} steradian $^{-1}$ and represent the radiance passed by the filter.

As on the July 5 flight the internal black body temperature ran about 10°C warmer than it had been running on the flights made from Holloman AFB. As a result of the increased temperature, the high gain used with filter 11, and the small amount of radiation reaching the radiometer in the wavelengths passed by this filter (4.3μ) the detector output was off scale in the negative direction when this filter was in front of the detector. Thus no data were obtained for filter 11. Filter 12 is an opaque plug and is used to check the instrument noise level. The noise level remained constant throughout the flight.

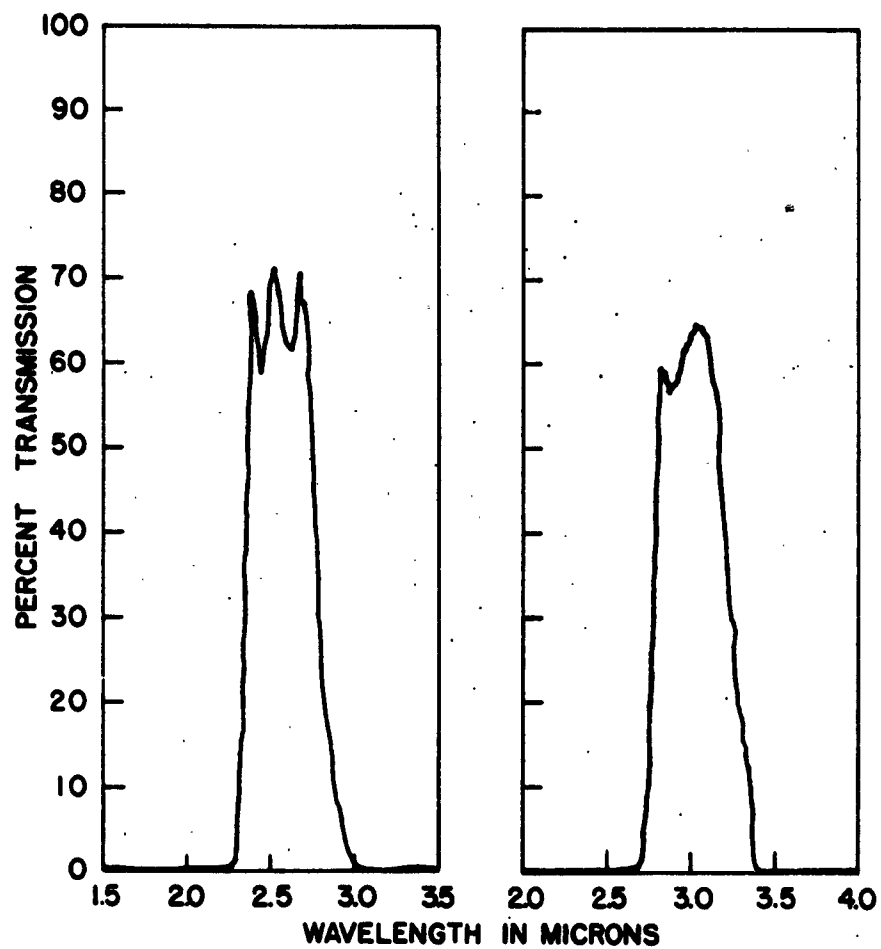
The equipment was launched so that most of the flight took place during the night. Although the balloon was in the sunlight after reaching about 10 kms there was no sunlight falling on the earth and the lower layers of the atmosphere. As a result of this lack of incoming solar radiation the intensity of radiation measured on the ultraviolet channel was only slightly above the noise level of the system most of the time. In view of this the ultraviolet data have not been included in this report.



IR Filter Nos. 1, 6

IR Filter Nos. 2, 7

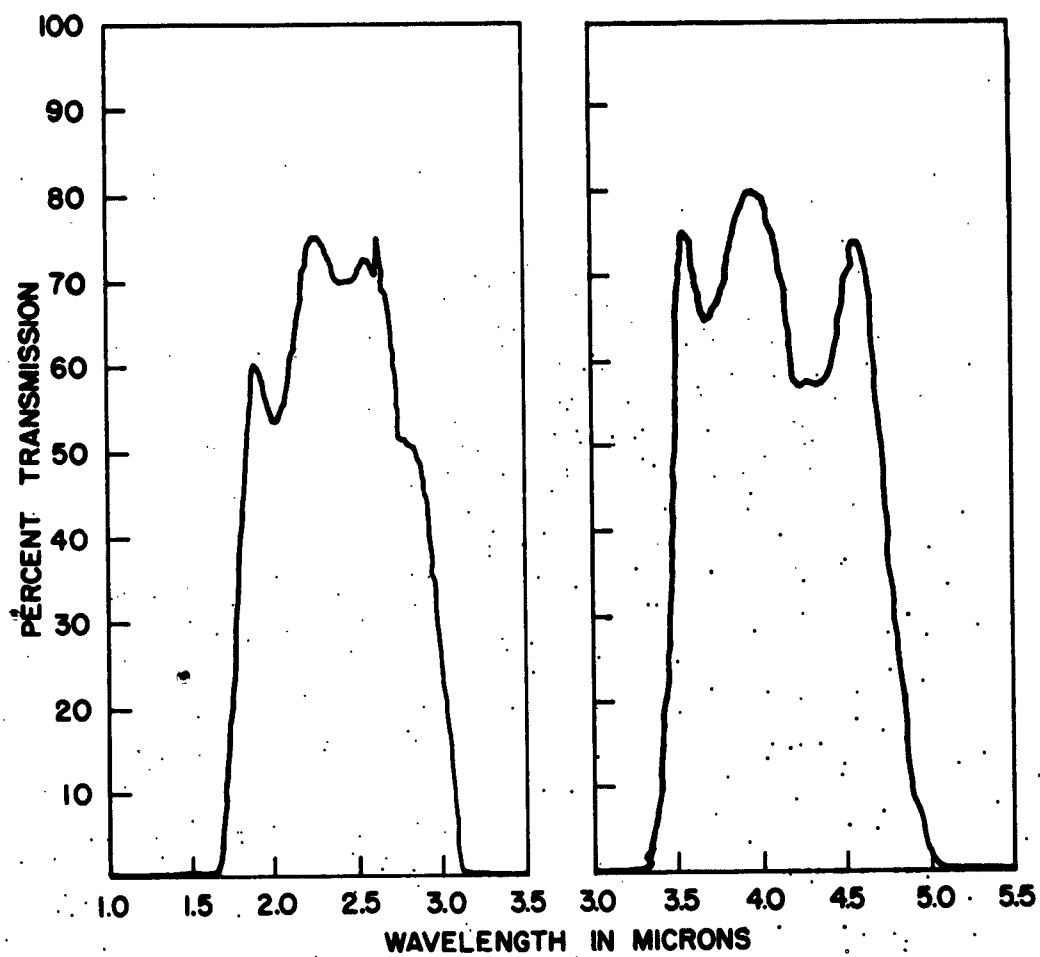
Figure 1



IR Filter No. 3

IR Filter No. 4

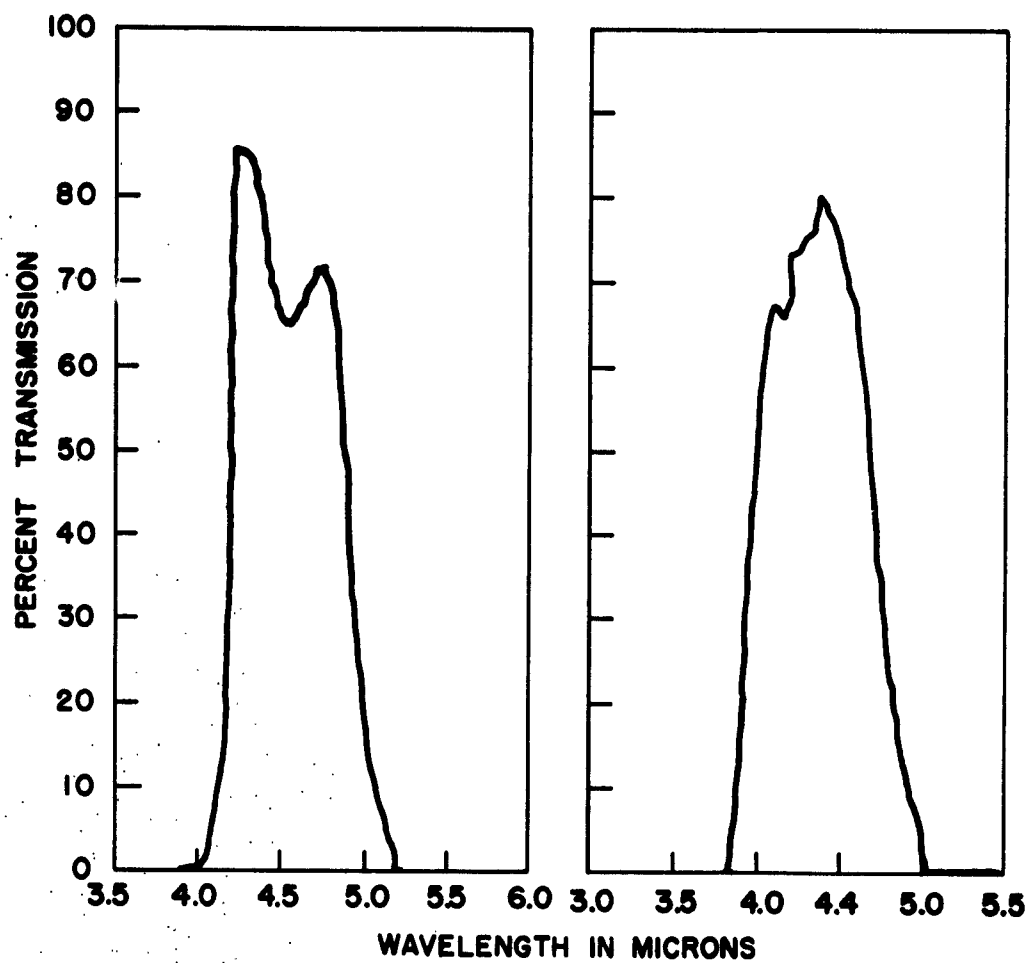
Figure 2



IR Filter No. 5

IR Filter No. 8

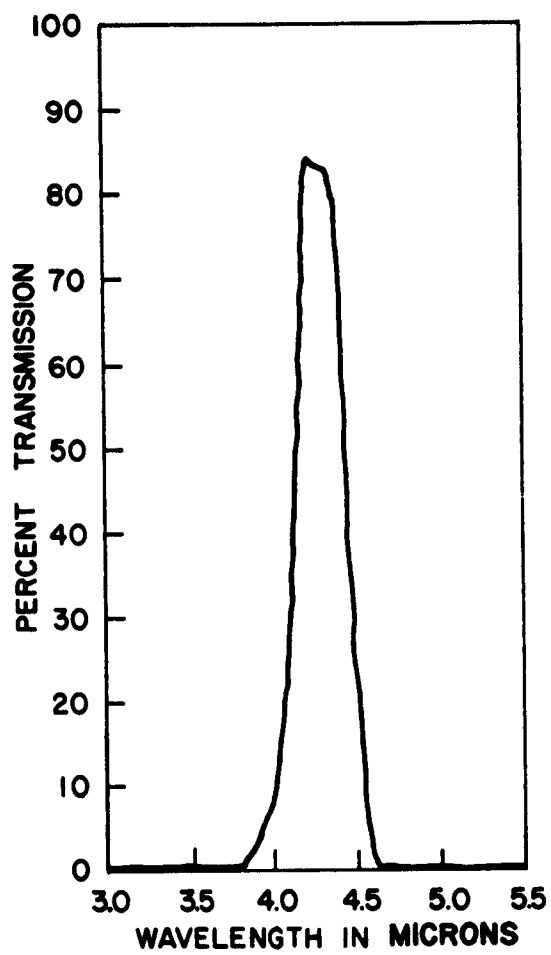
Figure 3



IR Filter No. 9

IR Filter No. 10

Figure 4



IR Filter No. 11

Figure 5

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	30.	0.	15.	0.	0.	0.	0.
0 A	0.	0.	0.	15.	0.	15.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	15.	0.	0.	0.	0.
R	0.	0.	0.	30.	0.	45.	0.	0.	0.	0.
10 A	0.	0.	0.	38.	0.	45.	0.	0.	0.	0.
L	0.	0.	0.	45.	0.	45.	0.	0.	0.	0.
R	0.	0.	0.	90.	0.	75.	0.	0.	0.	0.
20 A	0.	0.	0.	60.	0.	53.	0.	0.	0.	0.
L	0.	0.	0.	30.	0.	30.	0.	0.	0.	0.
R	0.	0.	0.	45.	0.	60.	0.	30.	0.	0.
30 A	0.	0.	0.	45.	0.	60.	0.	15.	0.	0.
L	0.	0.	0.	45.	0.	60.	0.	0.	0.	0.
R	0.	0.	30.	75.	0.	120.	0.	135.	15.	0.
40 A	0.	0.	15.	53.	0.	83.	0.	75.	8.	0.
L	0.	0.	0.	30.	0.	45.	0.	15.	0.	0.
R	0.	0.	0.	30.	0.	45.	0.	120.	0.	0.
50 A	0.	0.	0.	45.	0.	60.	0.	98.	60.	0.
L	0.	0.	0.	60.	0.	75.	0.	75.	120.	0.
R	0.	0.	0.	30.	0.	105.	0.	90.	30.	0.
60 A	0.	0.	0.	30.	0.	113.	0.	53.	38.	0.
L	0.	0.	0.	30.	0.	120.	0.	15.	45.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 1

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
	R	0.	0.	0.	135.	0.	75.	0.	105.	15.	0.
70	A	0.	0.	0.	90.	0.	98.	0.	83.	98.	0.
	L	0.	0.	0.	45.	0.	120.	0.	60.	180.	0.
	R	0.	0.	0.	225.	0.	75.	0.	90.	45.	0.
80	A	0.	0.	0.	128.	0.	90.	0.	68.	135.	0.
	L	0.	0.	0.	30.	0.	105.	0.	45.	225.	0.
	R	0.	0.	0.	690.	0.	75.	0.	135.	15.	0.
90	A	0.	0.	0.	360.	0.	90.	0.	113.	90.	0.
	L	0.	0.	0.	30.	0.	105.	0.	90.	165.	0.
	R	0.	0.	0.	45.	0.	60.	0.	120.	0.	0.
100	A	0.	0.	0.	38.	0.	68.	0.	113.	68.	0.
	L	0.	0.	0.	30.	0.	75.	0.	105.	135.	0.
	R	0.	0.	0.	45.	0.	0.	0.	60.	30.	0.
110	A	0.	0.	0.	53.	0.	45.	0.	98.	75.	0.
	L	0.	0.	0.	60.	0.	90.	0.	135.	120.	0.
	R	0.	0.	0.	15.	0.	30.	0.	60.	30.	0.
120	A	0.	0.	0.	60.	0.	75.	0.	98.	60.	0.
	L	0.	0.	0.	105.	0.	120.	0.	135.	90.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 1 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	45.	0.	75.	0.	30.	30.	0.
130 A	0.	0.	0.	60.	0.	105.	0.	60.	98.	0.
L	0.	0.	0.	75.	0.	135.	0.	90.	165.	0.
R	0.	0.	0.	45.	0.	90.	0.	15.	60.	0.
140 A	0.	0.	0.	53.	0.	105.	0.	45.	113.	0.
L	0.	0.	0.	60.	0.	120.	0.	75.	165.	0.
R	0.	0.	0.	0.	0.	75.	0.	15.	30.	0.
150 A	0.	0.	0.	45.	0.	98.	0.	45.	83.	0.
L	0.	0.	0.	90.	0.	120.	0.	75.	135.	0.
R	0.	0.	0.	60.	0.	120.	0.	45.	30.	0.
160 A	0.	0.	0.	53.	0.	83.	0.	90.	68.	0.
L	0.	0.	0.	45.	0.	45.	0.	135.	105.	0.
R	0.	0.	0.	45.	0.	90.	0.	195.	135.	0.
170 A	0.	0.	0.	30.	0.	75.	0.	165.	158.	0.
L	0.	0.	0.	15.	0.	60.	0.	135.	180.	0.
R	0.	0.	0.	0.	0.	30.	0.	75.	75.	0.
180 A	0.	0.	0.	15.	0.	30.	0.	75.	90.	0.
L	0.	0.	0.	30.	0.	30.	0.	75.	105.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 1 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	10.56	0.	11.08	0.	0.	0.	0.
0 A	0.	0.	0.	10.56	0.	11.09	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	11.10	0.	0.	0.	0.
R	0.	0.	0.	10.57	0.	10.67	0.	0.	0.	0.
10 A	0.	0.	0.	10.58	0.	10.70	0.	0.	0.	0.
L	0.	0.	0.	10.59	0.	10.74	0.	0.	0.	0.
R	0.	0.	0.	10.46	0.	10.80	0.	0.	0.	0.
20 A	0.	0.	0.	10.54	0.	10.78	0.	0.	0.	0.
L	0.	0.	0.	10.76	0.	10.74	0.	0.	0.	0.
R	0.	0.	0.	10.41	0.	10.58	0.	11.28	0.	0.
30 A	0.	0.	0.	10.54	0.	10.70	0.	11.28	0.	0.
L	0.	0.	0.	10.67	0.	10.82	0.	0.	0.	0.
R	0.	0.	9.83	10.71	0.	10.78	0.	11.25	11.08	0.
40 A	0.	0.	9.83	10.81	0.	10.78	0.	11.23	11.08	0.
L	0.	0.	0.	11.07	0.	10.78	0.	11.04	0.	0.
R	0.	0.	0.	10.64	0.	11.10	0.	10.97	0.	0.
50 A	0.	0.	0.	11.08	0.	11.06	0.	10.90	11.06	0.
L	0.	0.	0.	11.30	0.	11.04	0.	10.78	11.06	0.
R	0.	0.	0.	10.90	0.	10.90	0.	11.25	11.50	0.
60 A	0.	0.	0.	11.20	0.	11.04	0.	11.24	11.22	0.
L	0.	0.	0.	11.50	0.	11.16	0.	11.20	11.03	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 2

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	10.70	0.	10.70	0.	11.15	11.04	0.
70 A	0.	0.	0.	10.84	0.	11.04	0.	11.17	10.91	0.
L	0.	0.	0.	11.27	0.	11.26	0.	11.21	10.89	0.
R	0.	0.	0.	10.93	0.	10.82	0.	11.10	11.11	0.
80 A	0.	0.	0.	10.99	0.	10.87	0.	11.19	10.97	0.
L	0.	0.	0.	11.39	0.	10.90	0.	11.37	10.94	0.
R	0.	0.	0.	10.58	0.	10.90	0.	10.90	10.78	0.
90 A	0.	0.	0.	10.61	0.	10.97	0.	11.11	11.24	0.
L	0.	0.	0.	11.18	0.	11.03	0.	11.43	11.29	0.
R	0.	0.	0.	10.42	0.	10.60	0.	10.85	0.	0.
100 A	0.	0.	0.	10.58	0.	10.92	0.	11.22	11.61	0.
L	0.	0.	0.	10.83	0.	11.18	0.	11.65	11.61	0.
R	0.	0.	0.	10.53	0.	0.	0.	10.90	10.76	0.
110 A	0.	0.	0.	10.52	0.	11.58	0.	11.44	11.23	0.
L	0.	0.	0.	10.51	0.	11.58	0.	11.69	11.35	0.
R	0.	0.	0.	10.38	0.	10.89	0.	11.33	11.08	0.
120 A	0.	0.	0.	10.59	0.	10.98	0.	11.75	11.43	0.
L	0.	0.	0.	10.63	0.	11.01	0.	11.94	11.55	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 2 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
	R	0.	0.	0.	10.45	0.	10.69	0.	11.60	11.73	0.
130	A	0.	0.	0.	10.82	0.	10.78	0.	11.84	11.68	0.
	L	0.	0.	0.	11.04	0.	10.83	0.	11.91	11.67	0.
	R	0.	0.	0.	10.52	0.	10.59	0.	11.64	11.77	0.
140	A	0.	0.	0.	10.71	0.	10.94	0.	11.33	11.37	0.
	L	0.	0.	0.	10.85	0.	11.19	0.	11.26	11.22	0.
	R	0.	0.	0.	0.	0.	10.58	0.	11.48	11.45	0.
150	A	0.	0.	0.	10.61	0.	10.86	0.	11.45	11.35	0.
	L	0.	0.	0.	10.61	0.	11.03	0.	11.45	11.32	0.
	R	0.	0.	0.	10.63	0.	10.59	0.	11.27	11.29	0.
160	A	0.	0.	0.	10.67	0.	10.68	0.	11.66	11.52	0.
	L	0.	0.	0.	10.72	0.	10.94	0.	11.79	11.59	0.
	R	0.	0.	0.	10.77	0.	10.43	0.	11.21	11.30	0.
170	A	0.	0.	0.	10.78	0.	10.15	0.	11.38	11.44	0.
	L	0.	0.	0.	10.82	0.	9.74	0.	11.63	11.55	0.
	R	0.	0.	0.	0.	0.	10.28	0.	11.51	11.55	0.
180	A	0.	0.	0.	10.71	0.	10.33	0.	11.58	11.55	0.
	L	0.	0.	0.	10.71	0.	10.38	0.	11.64	11.55	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 2 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	1.17	0.	0.97	0.	0.	0.	0.
0 A	0.	0.	0.	1.17	0.	1.58	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	1.25	0.	0.	0.	0.
R	0.	0.	0.	0.98	0.	1.02	0.	0.	0.	0.
10 A	0.	0.	0.	1.46	0.	1.50	0.	0.	0.	0.
L	0.	0.	0.	1.09	0.	1.10	0.	0.	0.	0.
R	0.	0.	0.	1.06	0.	1.11	0.	0.	0.	0.
20 A	0.	0.	0.	1.49	0.	1.65	0.	0.	0.	0.
L	0.	0.	0.	1.05	0.	1.22	0.	0.	0.	0.
R	0.	0.	0.	1.07	0.	1.05	0.	1.07	0.	0.
30 A	0.	0.	0.	1.54	0.	1.51	0.	1.07	0.	0.
L	0.	0.	0.	1.11	0.	1.09	0.	0.	0.	0.
R	0.	0.	1.04	1.08	0.	1.15	0.	1.11	1.06	0.
40 A	0.	0.	1.04	1.54	0.	1.60	0.	1.75	1.06	0.
L	0.	0.	0.	1.10	0.	1.10	0.	1.35	0.	0.
R	0.	0.	0.	1.15	0.	1.03	0.	1.07	0.	0.
50 A	0.	0.	0.	1.60	0.	1.51	0.	1.73	1.06	0.
L	0.	0.	0.	1.11	0.	1.09	0.	1.35	1.06	0.
R	0.	0.	0.	1.16	0.	1.09	0.	1.08	1.07	0.
60 A	0.	0.	0.	1.46	0.	1.54	0.	1.52	1.49	0.
L	0.	0.	0.	0.89	0.	1.09	0.	1.07	1.04	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 3

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	1.04	0.	1.14	0.	1.04	1.07	0.
70 A	0.	0.	0.	1.47	0.	1.57	0.	1.50	1.54	0.
L	0.	0.	0.	1.03	0.	1.08	0.	1.08	1.11	0.
R	0.	0.	0.	1.14	0.	1.14	0.	1.11	1.03	0.
80 A	0.	0.	0.	1.68	0.	1.59	0.	1.54	1.49	0.
L	0.	0.	0.	1.24	0.	1.11	0.	1.07	1.08	0.
R	0.	0.	0.	1.09	0.	1.12	0.	1.06	1.13	0.
90 A	0.	0.	0.	1.47	0.	1.58	0.	1.52	1.56	0.
L	0.	0.	0.	0.99	0.	1.11	0.	1.09	1.08	0.
R	0.	0.	0.	1.09	0.	1.12	0.	1.07	0.	0.
100 A	0.	0.	0.	1.53	0.	1.55	0.	1.53	1.07	0.
L	0.	0.	0.	1.07	0.	1.07	0.	1.08	1.07	0.
R	0.	0.	0.	1.12	0.	0.	0.	1.14	1.06	0.
110 A	0.	0.	0.	1.54	0.	1.12	0.	1.58	1.55	0.
L	0.	0.	0.	1.06	0.	1.12	0.	1.09	1.13	0.
R	0.	0.	0.	1.24	0.	1.28	0.	1.09	1.01	0.
120 A	0.	0.	0.	1.67	0.	1.66	0.	1.55	1.47	0.
L	0.	0.	0.	1.12	0.	1.06	0.	1.10	1.06	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 3 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	1.08	0.	1.10	0.	1.06	1.02	0.
130 A	0.	0.	0.	1.58	0.	1.58	0.	1.56	1.45	0.
L	0.	0.	0.	1.15	0.	1.13	0.	1.15	1.02	0.
R	0.	0.	0.	1.07	0.	1.11	0.	1.15	1.11	0.
140 A	0.	0.	0.	1.52	0.	1.52	0.	1.55	1.56	0.
L	0.	0.	0.	1.09	0.	1.03	0.	1.04	1.10	0.
R	0.	0.	0.	0.	0.	1.08	0.	1.04	0.99	0.
150 A	0.	0.	0.	1.08	0.	1.54	0.	1.48	1.46	0.
L	0.	0.	0.	1.08	0.	1.10	0.	1.06	1.07	0.
R	0.	0.	0.	1.07	0.	1.14	0.	1.07	1.02	0.
160 A	0.	0.	0.	1.54	0.	1.60	0.	1.50	1.48	0.
L	0.	0.	0.	1.11	0.	1.12	0.	1.05	1.07	0.
R	0.	0.	0.	1.12	0.	1.12	0.	1.08	1.09	0.
170 A	0.	0.	0.	1.52	0.	1.84	0.	1.51	1.53	0.
L	0.	0.	0.	1.03	0.	1.47	0.	1.06	1.08	0.
R	0.	0.	0.	0.	0.	1.17	0.	1.03	0.99	0.
180 A	0.	0.	0.	1.11	0.	1.62	0.	1.47	1.46	0.
L	0.	0.	0.	1.11	0.	1.12	0.	1.05	1.07	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 3 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
0		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30		0.	0.	0.	0.	0.	0.	0.	15.	0.	0.
40		0.	0.	0.	0.	0.	255.	0.	150.	15.	0.
50		0.	0.	0.	0.	0.	270.	0.	195.	120.	0.
60		0.	0.	0.	315.	0.	225.	0.	120.	75.	0.
70		0.	0.	30.	225.	0.	255.	0.	165.	210.	0.
80		0.	0.	0.	480.	0.	225.	0.	135.	285.	0.
90		0.	0.	0.	810.	0.	255.	0.	240.	180.	0.
100		0.	0.	0.	270.	0.	135.	0.	225.	135.	0.
110		0.	0.	0.	390.	0.	240.	0.	225.	150.	0.
120		0.	0.	0.	45.	0.	315.	0.	150.	120.	0.
130		0.	0.	0.	0.	0.	375.	0.	120.	255.	0.
140		0.	0.	0.	0.	0.	225.	0.	105.	195.	0.
150		0.	0.	0.	0.	0.	0.	0.	225.	180.	0.
160		0.	0.	0.	0.	0.	0.	0.	510.	555.	0.
170		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 4

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 10 AT 2341 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.	11.26	0.	0.
40	0.	0.	0.	0.	0.	10.81	0.	11.25	11.08	0.	0.
50	0.	0.	0.	0.	0.	10.74	0.	10.91	11.06	0.	0.
60	0.	0.	0.	10.55	0.	11.03	0.	11.19	11.22	0.	0.
70	0.	0.	9.83	11.01	0.	11.08	0.	11.17	10.93	0.	0.
80	0.	0.	0.	10.92	0.	10.89	0.	11.19	10.97	0.	0.
90	0.	0.	0.	10.60	0.	10.95	0.	11.08	11.31	0.	0.
100	0.	0.	0.	10.63	0.	11.31	0.	11.27	11.66	0.	0.
110	0.	0.	0.	10.69	0.	10.93	0.	11.39	11.16	0.	0.
120	0.	0.	0.	10.75	0.	10.85	0.	11.92	11.58	0.	0.
130	0.	0.	0.	0.	0.	10.82	0.	11.83	11.54	0.	0.
140	0.	0.	0.	0.	0.	10.25	0.	11.36	11.36	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	11.58	11.40	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	11.46	11.49	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 5

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 10 AT 2341 ÅST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 15.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	1.23	0.	0.
40	0.	0.	0.	0.	0.	1.10	0.	1.11	1.06	0.
50	0.	0.	0.	0.	0.	1.14	0.	1.20	1.06	0.
60	0.	0.	0.	1.08	0.	1.08	0.	1.07	1.08	0.
70	0.	0.	1.04	1.13	0.	1.14	0.	1.06	1.11	0.
80	0.	0.	0.	1.12	0.	1.10	0.	1.10	1.08	0.
90	0.	0.	0.	1.10	0.	1.11	0.	1.10	1.08	0.
100	0.	0.	0.	1.13	0.	1.16	0.	1.16	1.05	0.
110	0.	0.	0.	1.10	0.	1.13	0.	1.16	1.13	0.
120	0.	0.	0.	1.10	0.	1.11	0.	1.10	1.06	0.
130	0.	0.	0.	0.	0.	1.13	0.	1.14	1.06	0.
140	0.	0.	0.	0.	0.	1.29	0.	1.08	1.11	0.
150	0.	0.	0.	0.	0.	0.	0.	1.05	1.06	0.
160	0.	0.	0.	0.	0.	0.	0.	1.09	1.08	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 6

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.	30.	0.	0.
0 A	0.	0.	0.	8.	0.	0.	0.	15.	15.	0.
L	0.	0.	0.	15.	0.	0.	0.	0.	30.	0.
R	0.	0.	0.	0.	0.	0.	0.	405.	45.	0.
10 A	0.	0.	0.	53.	0.	0.	0.	203.	30.	0.
L	0.	0.	0.	105.	0.	0.	0.	0.	15.	0.
R	0.	0.	0.	0.	0.	0.	0.	165.	15.	0.
20 A	0.	0.	0.	75.	0.	0.	0.	83.	15.	0.
L	0.	0.	0.	150.	0.	0.	0.	0.	15.	0.
R	0.	0.	0.	0.	0.	0.	0.	270.	0.	0.
30 A	0.	0.	0.	90.	0.	0.	0.	135.	23.	0.
L	0.	0.	0.	180.	0.	0.	0.	0.	45.	0.
R	0.	0.	0.	0.	0.	0.	0.	180.	15.	0.
40 A	0.	0.	0.	68.	0.	0.	0.	90.	68.	0.
L	0.	0.	0.	135.	0.	0.	0.	0.	120.	0.
R	0.	0.	0.	0.	0.	0.	0.	105.	75.	0.
50 A	0.	0.	0.	53.	0.	0.	8.	53.	68.	0.
L	0.	0.	0.	105.	0.	0.	15.	0.	60.	0.
R	0.	0.	0.	0.	105.	15.	0.	135.	45.	0.
60 A	0.	0.	0.	68.	53.	8.	180.	68.	75.	0.
L	0.	0.	0.	135.	0.	0.	360.	0.	105.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 7

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	75.	15.	0.	180.	30.	0.
70 A	0.	0.	0.	83.	38.	8.	90.	90.	68.	0.
L	0.	0.	0.	165.	0.	0.	180.	0.	105.	0.
R	0.	0.	0.	0.	60.	30.	0.	240.	45.	0.
80 A	0.	0.	0.	90.	30.	15.	143.	120.	60.	0.
L	0.	0.	0.	180.	0.	0.	285.	0.	75.	0.
R	0.	0.	0.	0.	75.	30.	0.	135.	60.	0.
90 A	0.	0.	0.	75.	38.	15.	113.	68.	90.	0.
L	0.	0.	0.	150.	0.	0.	225.	0.	120.	0.
R	0.	0.	0.	0.	120.	30.	0.	105.	15.	0.
100 A	0.	0.	0.	75.	60.	15.	113.	53.	60.	0.
L	0.	0.	0.	150.	0.	0.	225.	0.	105.	0.
R	0.	0.	0.	0.	60.	45.	0.	105.	45.	0.
110 A	0.	0.	0.	68.	30.	23.	173.	53.	120.	0.
L	0.	0.	0.	135.	0.	0.	345.	0.	195.	0.
R	0.	0.	0.	0.	135.	30.	0.	120.	45.	0.
120 A	0.	0.	0.	90.	68.	15.	75.	60.	113.	0.
L	0.	0.	0.	180.	0.	0.	150.	0.	180.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 7 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	30.	45.	0.	135.	30.	0.
130 A	0.	0.	0.	68.	23.	23.	135.	68.	90.	0.
L	0.	0.	0.	135.	15.	0.	270.	0.	150.	0.
R	0.	0.	0.	0.	45.	30.	0.	150.	15.	0.
140 A	0.	0.	0.	75.	23.	15.	150.	75.	75.	0.
L	0.	0.	0.	150.	0.	0.	300.	0.	135.	0.
R	0.	0.	0.	0.	75.	45.	0.	30.	60.	0.
150 A	0.	0.	0.	68.	180.	113.	105.	15.	113.	0.
L	0.	0.	0.	135.	285.	180.	210.	0.	165.	0.
R	0.	0.	0.	0.	180.	15.	0.	0.	105.	0.
160 A	0.	0.	0.	83.	225.	105.	113.	0.	143.	0.
L	0.	0.	0.	165.	270.	195.	225.	0.	180.	0.
R	0.	0.	0.	165.	105.	75.	0.	0.	135.	0.
170 A	0.	0.	0.	113.	113.	75.	30.	0.	180.	0.
L	0.	0.	0.	60.	120.	75.	60.	0.	225.	0.
R	0.	0.	0.	90.	45.	15.	0.	0.	105.	0.
180 A	0.	0.	0.	98.	30.	8.	0.	0.	83.	0.
L	0.	0.	0.	105.	15.	0.	0.	0.	60.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 7 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
	R	0.	0.	0.	0.	0.	0.	0.	26.07	0.	0.
	A	0.	0.	0.	26.14	0.	0.	0.	26.07	25.63	0.
	L	0.	0.	0.	26.14	0.	0.	0.	0.	25.63	0.
	R	0.	0.	0.	0.	0.	0.	0.	26.03	25.51	0.
10	A	0.	0.	0.	26.03	0.	0.	0.	26.03	25.56	0.
	L	0.	0.	0.	26.03	0.	0.	0.	0.	25.70	0.
	R	0.	0.	0.	0.	0.	0.	0.	26.01	24.60	0.
20	A	0.	0.	0.	25.97	0.	0.	0.	26.01	25.41	0.
	L	0.	0.	0.	25.97	0.	0.	0.	0.	26.22	0.
	R	0.	0.	0.	0.	0.	0.	0.	25.89	0.	0.
30	A	0.	0.	0.	25.73	0.	0.	0.	25.89	25.69	0.
	L	0.	0.	0.	25.73	0.	0.	0.	0.	25.69	0.
	R	0.	0.	0.	0.	0.	0.	0.	25.78	26.94	0.
40	A	0.	0.	0.	25.80	0.	0.	0.	25.78	26.19	0.
	L	0.	0.	0.	25.80	0.	0.	0.	0.	26.09	0.
	R	0.	0.	0.	0.	0.	0.	0.	25.78	27.30	0.
50	A	0.	0.	0.	25.68	0.	0.	26.86	25.78	26.84	0.
	L	0.	0.	0.	25.68	0.	0.	26.86	0.	26.26	0.
	R	0.	0.	0.	0.	25.30	25.44	0.	25.70	26.71	0.
60	A	0.	0.	0.	25.90	25.30	25.44	26.85	25.70	26.42	0.
	L	0.	0.	0.	25.90	0.	0.	26.85	0.	26.30	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 8

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	25.49	25.60	0.	27.03	26.77	0.
70 A	0.	0.	0.	25.87	25.49	25.60	26.84	27.03	26.93	0.
L	0.	0.	0.	25.87	0.	0.	26.84	0.	26.98	0.
R	0.	0.	0.	0.	25.55	25.72	0.	27.30	26.41	0.
80 A	0.	0.	0.	25.80	25.55	25.72	26.91	27.30	26.57	0.
L	0.	0.	0.	25.80	0.	0.	26.91	0.	26.67	0.
R	0.	0.	0.	0.	25.83	25.87	0.	27.18	26.48	0.
90 A	0.	0.	0.	25.96	25.83	25.87	26.63	27.18	26.36	0.
L	0.	0.	0.	25.96	0.	0.	26.63	0.	26.30	0.
R	0.	0.	0.	0.	25.72	25.80	0.	26.64	27.50	0.
100 A	0.	0.	0.	25.50	25.72	25.80	26.39	26.64	26.51	0.
L	0.	0.	0.	25.50	0.	0.	26.39	0.	26.37	0.
R	0.	0.	0.	0.	25.51	25.49	0.	26.85	26.61	0.
110 A	0.	0.	0.	25.38	25.51	25.49	26.38	26.85	26.67	0.
L	0.	0.	0.	25.38	0.	0.	26.38	0.	26.69	0.
R	0.	0.	0.	0.	25.65	25.83	0.	26.83	26.24	0.
120 A	0.	0.	0.	25.52	25.65	25.83	26.40	26.83	26.59	0.
L	0.	0.	0.	25.52	0.	0.	26.40	0.	26.68	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 8 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
	R	0.	0.	0.	0.	25.41	25.49	0.	27.25	26.48	0.
130	A	0.	0.	0.	25.62	25.63	25.49	26.39	27.25	26.96	0.
	L	0.	0.	0.	25.62	26.08	0.	26.39	0.	27.06	0.
	R	0.	0.	0.	0.	25.52	25.30	0.	26.72	26.22	0.
140	A	0.	0.	0.	25.76	25.52	25.60	26.45	26.72	27.31	0.
	L	0.	0.	0.	25.76	0.	0.	26.45	0.	27.43	0.
	R	0.	0.	0.	0.	25.57	25.62	0.	26.99	26.19	0.
150	A	0.	0.	0.	25.67	26.82	26.84	27.49	26.99	26.98	0.
	L	0.	0.	0.	25.67	27.15	27.14	27.49	0.	27.26	0.
	R	0.	0.	0.	0.	26.35	26.74	0.	0.	26.47	0.
160	A	0.	0.	0.	25.89	26.06	25.75	27.51	0.	26.66	0.
	L	0.	0.	0.	25.89	25.87	25.68	27.51	0.	26.77	0.
	R	0.	0.	0.	25.58	26.65	26.42	0.	0.	26.84	0.
170	A	0.	0.	0.	25.45	26.35	26.31	27.39	0.	26.95	0.
	L	0.	0.	0.	25.10	26.08	26.20	27.39	0.	27.02	0.
	R	0.	0.	0.	25.64	26.06	26.34	0.	0.	27.25	0.
180	A	0.	0.	0.	25.46	25.94	26.34	0.	0.	27.20	0.
	L	0.	0.	0.	25.31	25.60	0.	0.	0.	27.12	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 8 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.	1.03	0.	0.
10 A	0.	0.	0.	1.05	0.	0.	0.	1.03	1.06	0.
L	0.	0.	0.	1.05	0.	0.	0.	0.	1.06	0.
R	0.	0.	0.	0.	0.	0.	0.	1.07	1.27	0.
20 A	0.	0.	0.	1.07	0.	0.	0.	1.07	1.68	0.
L	0.	0.	0.	1.07	0.	0.	0.	0.	1.11	0.
R	0.	0.	0.	0.	0.	0.	0.	1.05	1.14	0.
30 A	0.	0.	0.	1.08	0.	0.	0.	1.05	1.51	0.
L	0.	0.	0.	1.08	0.	0.	0.	0.	0.99	0.
R	0.	0.	0.	0.	0.	0.	0.	1.16	0.	0.
40 A	0.	0.	0.	1.11	0.	0.	0.	1.16	1.26	0.
L	0.	0.	0.	1.11	0.	0.	0.	0.	1.26	0.
R	0.	0.	0.	0.	0.	0.	0.	1.10	0.98	0.
50 A	0.	0.	0.	1.08	0.	0.	0.	1.10	1.47	0.
L	0.	0.	0.	1.08	0.	0.	0.	0.	1.09	0.
R	0.	0.	0.	0.	0.	0.	0.	1.18	1.06	0.
60 A	0.	0.	0.	1.06	0.	0.	0.98	1.18	1.51	0.
L	0.	0.	0.	1.06	0.	0.	0.98	0.	1.07	0.
R	0.	0.	0.	0.	1.09	1.03	0.	1.13	0.99	0.
70 A	0.	0.	0.	1.04	1.09	1.03	1.02	1.13	1.47	0.
L	0.	0.	0.	1.04	0.	0.	1.02	0.	1.09	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 9

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	1.11	1.08	0.	1.10	1.06	0.
70 A	0.	0.	0.	1.06	1.11	1.08	1.07	1.10	1.60	0.
L	0.	0.	0.	1.06	0.	0.	1.07	0.	1.20	0.
R	0.	0.	0.	0.	1.08	1.03	0.	1.02	1.06	0.
80 A	0.	0.	0.	1.04	1.08	1.03	0.98	1.02	1.63	0.
L	0.	0.	0.	1.04	0.	0.	0.98	0.	1.24	0.
R	0.	0.	0.	0.	1.00	0.99	0.	1.03	1.09	0.
90 A	0.	0.	0.	1.04	1.00	0.99	1.05	1.03	1.57	0.
L	0.	0.	0.	1.04	0.	0.	1.05	0.	1.12	0.
R	0.	0.	0.	0.	1.06	1.12	0.	1.02	1.08	0.
100 A	0.	0.	0.	1.13	1.06	1.12	1.04	1.02	1.58	0.
L	0.	0.	0.	1.13	0.	0.	1.04	0.	1.15	0.
R	0.	0.	0.	0.	1.14	1.11	0.	1.02	1.08	0.
110 A	0.	0.	0.	1.12	1.14	1.11	1.07	1.02	1.64	0.
L	0.	0.	0.	1.12	0.	0.	1.07	0.	1.23	0.
R	0.	0.	0.	0.	1.11	1.11	0.	1.03	1.04	0.
120 A	0.	0.	0.	1.07	1.11	1.11	1.05	1.03	1.48	0.
L	0.	0.	0.	1.07	0.	0.	1.05	0.	1.06	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 9 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 2345 AST					INSOL ANGLE 93.4 DEG					
SPECTRAL BAND 4.18 TO 4.97 MICRONS					ELEVATION 16.1 KM					
VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.97	1.17	0.	0.99	0.94	0.
130 A	0.	0.	0.	1.07	1.55	1.17	1.00	0.99	1.45	0.
L	0.	0.	0.	1.07	1.21	0.	1.00	0.	1.11	0.
R	0.	0.	0.	0.	1.03	0.99	0.	1.04	1.23	0.
140 A	0.	0.	0.	1.10	1.03	0.99	1.06	1.04	1.64	0.
L	0.	0.	0.	1.10	0.	0.	1.06	0.	1.08	0.
R	0.	0.	0.	0.	1.02	1.03	0.	1.06	1.09	0.
150 A	0.	0.	0.	1.09	1.47	1.47	0.98	1.06	1.58	0.
L	0.	0.	0.	1.09	1.05	1.05	0.98	0.	1.14	0.
R	0.	0.	0.	0.	1.08	1.01	0.	0.	0.99	0.
160 A	0.	0.	0.	1.03	1.54	1.50	1.00	0.	1.47	0.
L	0.	0.	0.	1.03	1.10	1.10	1.00	0.	1.09	0.
R	0.	0.	0.	1.07	1.02	1.01	0.	0.	1.09	0.
170 A	0.	0.	0.	1.56	1.43	1.48	1.01	0.	1.56	0.
L	0.	0.	0.	1.14	1.00	1.08	1.01	0.	1.11	0.
R	0.	0.	0.	1.06	0.98	0.90	0.	0.	1.11	0.
180 A	0.	0.	0.	1.52	1.43	0.90	0.	0.	1.61	0.
L	0.	0.	0.	1.10	1.04	0.	0.	0.	1.16	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 9 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	225.	60.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	360.	60.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.	240.	30.	0.
40	0.	0.	0.	0.	0.	0.	0.	0.	225.	150.	0.
50	0.	0.	0.	60.	0.	0.	0.	0.	90.	120.	0.
60	0.	0.	0.	525.	0.	0.	0.	375.	150.	180.	0.
70	0.	0.	0.	270.	165.	30.	180.	195.	120.	0.	0.
80	0.	0.	0.	330.	105.	30.	330.	225.	135.	0.	0.
90	0.	0.	0.	285.	75.	30.	240.	135.	180.	0.	0.
100	0.	0.	0.	330.	165.	75.	300.	105.	150.	0.	0.
110	0.	0.	0.	390.	135.	45.	315.	135.	210.	0.	0.
120	0.	0.	0.	600.	240.	165.	240.	180.	240.	0.	0.
130	0.	0.	0.	0.	930.	495.	420.	120.	180.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	330.	105.	225.	0.
150	0.	0.	0.	0.	0.	0.	0.	120.	0.	285.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	645.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 10

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	26.05	25.37	0.
20	0.	0.	0.	0.	0.	0.	0.	26.02	25.71	0.
30	0.	0.	0.	0.	0.	0.	0.	25.89	25.73	0.
40	0.	0.	0.	0.	0.	0.	0.	25.81	26.13	0.
50	0.	0.	0.	26.01	0.	0.	0.	25.77	26.90	0.
60	0.	0.	0.	25.86	0.	0.	26.85	25.72	26.39	0.
70	0.	0.	0.	25.81	25.38	25.52	26.84	27.08	27.04	0.
80	0.	0.	0.	25.84	25.57	25.72	26.88	27.27	26.52	0.
90	0.	0.	0.	25.71	25.85	25.87	26.55	27.18	26.36	0.
100	0.	0.	0.	25.46	25.62	25.62	26.38	26.64	26.68	0.
110	0.	0.	0.	25.69	25.64	25.68	26.37	26.88	26.62	0.
120	0.	0.	0.	25.58	26.66	26.54	26.45	27.01	26.61	0.
130	0.	0.	0.	0.	26.23	26.15	26.51	26.94	26.97	0.
140	0.	0.	0.	0.	0.	0.	27.54	26.79	27.17	0.
150	0.	0.	0.	0.	0.	0.	27.41	0.	26.87	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	26.94	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 11

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 9 AT 2345 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 16.1 KM

VA	0	10	20	30	40	50	60	70	80	90
SA	.									
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	1.04	1.16	0.
20	0.	0.	0.	0.	0.	0.	0.	1.08	1.26	0.
30	0.	0.	0.	0.	0.	0.	0.	1.20	1.35	0.
40	0.	0.	0.	0.	0.	0.	0.	1.06	1.12	0.
50	0.	0.	0.	1.01	0.	0.	0.	1.19	1.18	0.
60	0.	0.	0.	1.10	0.	0.	1.02	1.13	1.08	0.
70	0.	0.	0.	1.04	1.11	1.06	1.07	1.11	1.15	0.
80	0.	0.	0.	1.06	1.06	1.03	1.00	1.01	1.16	0.
90	0.	0.	0.	1.11	0.98	0.99	1.06	1.03	1.13	0.
100	0.	0.	0.	1.10	1.10	1.12	1.06	1.02	1.22	0.
110	0.	0.	0.	1.07	1.12	1.11	1.06	1.02	1.18	0.
120	0.	0.	0.	1.11	1.33	1.37	0.99	1.04	1.07	0.
130	0.	0.	0.	0.	1.14	1.17	1.09	1.06	1.15	0.
140	0.	0.	0.	0.	0.	0.	0.99	1.06	1.14	0.
150	0.	0.	0.	0.	0.	0.	1.00	0.	1.18	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	1.12	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 12

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
0 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	15.	90.	0.
10 A	0.	0.	0.	0.	0.	0.	0.	8.	45.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	75.	75.	0.
20 A	0.	0.	0.	0.	0.	0.	0.	38.	38.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	90.	120.	0.
30 A	0.	0.	0.	0.	0.	0.	0.	45.	60.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	105.	15.	0.
40 A	0.	0.	0.	0.	0.	0.	0.	53.	8.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	75.	105.	0.
50 A	0.	0.	0.	0.	0.	0.	0.	38.	53.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	90.	45.	0.
60 A	0.	0.	0.	0.	0.	0.	0.	45.	23.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 13

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
110 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
120 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 13 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
130 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
140 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 13 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	14.52	14.34	0.
10	A	0.	0.	0.	0.	0.	0.	0.	14.52	14.34	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	16.19	16.58	0.
20	A	0.	0.	0.	0.	0.	0.	0.	16.19	16.58	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	21.61	22.80	0.
30	A	0.	0.	0.	0.	0.	0.	0.	21.61	22.80	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	15.29	16.30	0.
40	A	0.	0.	0.	0.	0.	0.	0.	15.29	16.30	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	14.72	14.58	0.
50	A	0.	0.	0.	0.	0.	0.	0.	14.72	14.58	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	14.48	14.29	0.
60	A	0.	0.	0.	0.	0.	0.	0.	14.48	14.29	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 14

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
110 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
120 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 14 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
130	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
140	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 14 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
0 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	1.06	1.18	0.
10 A	0.	0.	0.	0.	0.	0.	0.	1.06	1.18	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	1.56	1.53	0.
20 A	0.	0.	0.	0.	0.	0.	0.	1.56	1.53	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	2.44	2.26	0.
30 A	0.	0.	0.	0.	0.	0.	0.	2.44	2.26	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	1.85	0.85	0.
40 A	0.	0.	0.	0.	0.	0.	0.	1.85	0.85	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	1.08	1.08	0.
50 A	0.	0.	0.	0.	0.	0.	0.	1.08	1.08	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	1.08	1.00	0.
60 A	0.	0.	0.	0.	0.	0.	0.	1.08	1.00	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 15

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
70 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
110 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
120 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 15 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
130	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
140	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 15 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	30.	0.
20	0.	0.	0.	0.	0.	0.	0.	75.	120.	0.
30	0.	0.	0.	0.	0.	0.	0.	90.	120.	0.
40	0.	0.	0.	0.	0.	0.	0.	90.	30.	0.
50	0.	0.	0.	0.	0.	0.	0.	90.	105.	0.
60	0.	0.	0.	0.	0.	0.	0.	105.	45.	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
110	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
120	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
130	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 16

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	14.06	0.
20	0.	0.	0.	0.	0.	0.	0.	15.58	15.34	0.
30	0.	0.	0.	0.	0.	0.	0.	20.96	22.58	0.
40	0.	0.	0.	0.	0.	0.	0.	16.73	18.07	0.
50	0.	0.	0.	0.	0.	0.	0.	14.54	14.58	0.
60	0.	0.	0.	0.	0.	0.	0.	14.48	14.29	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
110	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
120	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
130	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 17

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 8 AT 2351 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 3.42 TO 4.81 MICRONS

ELEVATION 17.4 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	1.09	0.
20	0.	0.	0.	0.	0.	0.	0.	1.50	1.56	0.
30	0.	0.	0.	0.	0.	0.	0.	2.88	2.60	0.
40	0.	0.	0.	0.	0.	0.	0.	2.75	2.00	0.
50	0.	0.	0.	0.	0.	0.	0.	1.13	1.08	0.
60	0.	0.	0.	0.	0.	0.	0.	1.07	1.00	0.
70	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
80	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
100	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
110	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
120	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
130	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 18

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	90.	0.	0.	0.	0.	0.	0.
0 A	0.	0.	0.	90.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	90.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	120.	0.	0.	0.	0.	0.	0.
10 A	0.	0.	0.	113.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	105.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	165.	0.	0.	0.	0.	0.	0.
20 A	0.	0.	0.	90.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	165.	0.	0.	0.	75.	0.	0.
30 A	0.	0.	0.	83.	0.	0.	0.	38.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	180.	0.	0.	0.	210.	0.	0.
40 A	0.	0.	0.	90.	0.	0.	0.	105.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	165.	0.	0.	0.	225.	0.	0.
50 A	0.	0.	0.	83.	0.	0.	0.	113.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	150.	0.	0.	0.	255.	0.	0.
60 A	0.	0.	0.	75.	0.	0.	0.	128.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 19

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	150.	0.	0.	0.	225.	0.	0.
70 A	0.	0.	0.	75.	0.	8.	0.	113.	0.	0.
L	0.	0.	0.	0.	0.	15.	0.	0.	0.	0.
R	0.	0.	0.	180.	0.	0.	0.	240.	0.	0.
80 A	0.	0.	0.	90.	0.	30.	0.	120.	0.	0.
L	0.	0.	0.	0.	0.	59.	0.	0.	0.	0.
R	0.	0.	0.	180.	0.	0.	0.	270.	0.	0.
90 A	0.	0.	0.	90.	0.	65.	0.	135.	0.	0.
L	0.	0.	0.	0.	0.	130.	0.	0.	0.	0.
R	0.	0.	0.	105.	0.	0.	0.	240.	0.	0.
100 A	0.	0.	0.	53.	0.	80.	0.	120.	0.	0.
L	0.	0.	0.	0.	0.	160.	0.	0.	0.	0.
R	0.	0.	0.	120.	0.	0.	0.	195.	0.	0.
110 A	0.	0.	0.	60.	0.	82.	0.	98.	0.	0.
L	0.	0.	0.	0.	0.	164.	0.	0.	0.	0.
R	0.	0.	45.	90.	0.	0.	0.	225.	0.	0.
120 A	0.	0.	23.	45.	0.	80.	0.	113.	0.	0.
L	0.	0.	0.	0.	0.	159.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 19 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	165.	0.	82.	0.	240.	0.	0.
130 A	0.	0.	0.	83.	0.	131.	0.	120.	0.	0.
L	0.	0.	0.	0.	0.	179.	0.	0.	0.	0.
R	0.	0.	0.	150.	0.	150.	0.	75.	0.	0.
140 A	0.	0.	0.	75.	0.	184.	0.	38.	0.	0.
L	0.	0.	0.	0.	0.	218.	0.	0.	0.	0.
R	0.	0.	0.	120.	0.	283.	0.	0.	0.	0.
150 A	0.	0.	0.	60.	0.	220.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	156.	0.	0.	0.	0.
R	0.	0.	0.	148.	0.	163.	0.	0.	0.	0.
160 A	0.	0.	0.	74.	0.	154.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	145.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	151.	0.	0.	0.	0.
170 A	0.	0.	0.	0.	0.	168.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	184.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	103.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	128.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	153.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 19 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZINUTH

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.30	0.	0.	0.	0.	0.	0.
0 A	0.	0.	0.	0.26	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.23	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.33	0.	0.	0.	0.	0.	0.
10 A	0.	0.	0.	0.26	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.19	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.36	0.	0.	0.	0.	0.	0.
20 A	0.	0.	0.	0.35	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.24	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.39	0.	0.	0.	1.40	0.	0.
30 A	0.	0.	0.	0.39	0.	0.	0.	1.40	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.36	0.	0.	0.	1.02	0.	0.
40 A	0.	0.	0.	0.36	0.	0.	0.	1.02	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.30	0.	0.	0.	0.72	0.	0.
50 A	0.	0.	0.	0.30	0.	0.	0.	0.72	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.25	0.	0.	0.	0.66	0.	0.
60 A	0.	0.	0.	0.25	0.	0.	0.	0.66	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZINUTH ARE IN DEGREES.

TABLE 20

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.35	0.	0.	0.	0.57	0.	0.
70 A	0.	0.	0.	0.35	0.	0.19	0.	0.57	0.	0.
L	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.
R	0.	0.	0.	0.26	0.	0.	0.	0.25	0.	0.
80 A	0.	0.	0.	0.26	0.	0.32	0.	0.25	0.	0.
L	0.	0.	0.	0.	0.	0.32	0.	0.	0.	0.
R	0.	0.	0.	0.15	0.	0.	0.	0.26	0.	0.
90 A	0.	0.	0.	0.15	0.	0.43	0.	0.26	0.	0.
L	0.	0.	0.	0.	0.	0.43	0.	0.	0.	0.
R	0.	0.	0.	0.15	0.	0.	0.	0.27	0.	0.
100 A	0.	0.	0.	0.15	0.	0.28	0.	0.27	0.	0.
L	0.	0.	0.	0.	0.	0.28	0.	0.	0.	0.
R	0.	0.	0.	0.13	0.	0.	0.	0.23	0.	0.
110 A	0.	0.	0.	0.13	0.	0.19	0.	0.23	0.	0.
L	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.
R	0.	0.	0.21	0.15	0.	0.	0.	0.13	0.	0.
120 A	0.	0.	0.21	0.15	0.	0.21	0.	0.13	0.	0.
L	0.	0.	0.	0.	0.	0.21	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 20 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.17	0.	0.28	0.	0.15	0.	0.
130 A	0.	0.	0.	0.17	0.	0.27	0.	0.15	0.	0.
L	0.	0.	0.	0.	0.	0.26	0.	0.	0.	0.
R	0.	0.	0.	0.24	0.	0.25	0.	0.16	0.	0.
140 A	0.	0.	0.	0.24	0.	0.24	0.	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.23	0.	0.	0.	0.
R	0.	0.	0.	0.19	0.	0.17	0.	0.	0.	0.
150 A	0.	0.	0.	0.19	0.	0.21	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.27	0.	0.	0.	0.
R	0.	0.	0.	0.26	0.	0.22	0.	0.	0.	0.
160 A	0.	0.	0.	0.26	0.	0.23	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.24	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.29	0.	0.	0.	0.
170 A	0.	0.	0.	0.	0.	0.28	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.28	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.28	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.28	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.27	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 20 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.16	0.	0.	0.	0.	0.	0.
0 A	0.	0.	0.	0.23	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.	0.	0.	0.
10 A	0.	0.	0.	0.23	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.12	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.	0.	0.	0.
20 A	0.	0.	0.	0.21	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.12	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.	0.22	0.	0.
30 A	0.	0.	0.	0.17	0.	0.	0.	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.	0.23	0.	0.
40 A	0.	0.	0.	0.19	0.	0.	0.	0.23	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.	0.19	0.	0.
50 A	0.	0.	0.	0.16	0.	0.	0.	0.19	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.	0.18	0.	0.
60 A	0.	0.	0.	0.16	0.	0.	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 21

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.18	0.	0.	0.	0.22	0.	0.
70 A	0.	0.	0.	0.18	0.	0.20	0.	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.20	0.	0.	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.	0.16	0.	0.
80 A	0.	0.	0.	0.16	0.	0.16	0.	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.	0.	0.
R	0.	0.	0.	0.12	0.	0.	0.	0.16	0.	0.
90 A	0.	0.	0.	0.12	0.	0.15	0.	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.
R	0.	0.	0.	0.11	0.	0.	0.	0.16	0.	0.
100 A	0.	0.	0.	0.11	0.	0.18	0.	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.18	0.	0.	0.	0.
R	0.	0.	0.	0.10	0.	0.	0.	0.17	0.	0.
110 A	0.	0.	0.	0.10	0.	0.16	0.	0.17	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.	0.	0.
R	0.	0.	0.14	0.11	0.	0.	0.	0.10	0.	0.
120 A	0.	0.	0.14	0.11	0.	0.19	0.	0.10	0.	0.
L	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 21 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.14	0.	0.19	0.	0.10	0.	0.
130 A	0.	0.	0.	0.14	0.	0.26	0.	0.10	0.	0.
L	0.	0.	0.	0.	0.	0.18	0.	0.	0.	0.
R	0.	0.	0.	0.15	0.	0.19	0.	0.11	0.	0.
140 A	0.	0.	0.	0.15	0.	0.26	0.	0.11	0.	0.
L	0.	0.	0.	0.	0.	0.18	0.	0.	0.	0.
R	0.	0.	0.	0.15	0.	0.14	0.	0.	0.	0.
150 A	0.	0.	0.	0.15	0.	0.27	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.23	0.	0.	0.	0.
R	0.	0.	0.	0.17	0.	0.18	0.	0.	0.	0.
160 A	0.	0.	0.	0.17	0.	0.27	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.20	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.
170 A	0.	0.	0.	0.	0.	0.30	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.23	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.21	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.28	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 21 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	45.	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	210.	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	255.	0.	0.
60	0.	0.	0.	750.	0.	0.	0.	255.	0.	0.
70	0.	0.	0.	450.	0.	15.	0.	225.	0.	0.
80	0.	0.	0.	390.	0.	59.	0.	270.	0.	0.
90	0.	0.	0.	300.	0.	202.	0.	270.	0.	0.
100	0.	0.	45.	315.	0.	222.	0.	225.	0.	0.
110	0.	0.	0.	448.	0.	203.	0.	225.	0.	0.
120	0.	0.	0.	0.	0.	528.	0.	240.	0.	0.
130	0.	0.	0.	0.	0.	842.	0.	225.	0.	0.
140	0.	0.	0.	0.	0.	583.	0.	30.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 22

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	1.42	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	1.09	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	0.73	0.	0.
60	0.	0.	0.	0.31	0.	0.	0.	0.66	0.	0.
70	0.	0.	0.	0.31	0.	0.19	0.	0.57	0.	0.
80	0.	0.	0.	0.29	0.	0.32	0.	0.25	0.	0.
90	0.	0.	0.	0.15	0.	0.40	0.	0.26	0.	0.
100	0.	0.	0.21	0.15	0.	0.20	0.	0.27	0.	0.
110	0.	0.	0.	0.23	0.	0.22	0.	0.20	0.	0.
120	0.	0.	0.	0.	0.	0.25	0.	0.13	0.	0.
130	0.	0.	0.	0.	0.	0.22	0.	0.15	0.	0.
140	0.	0.	0.	0.	0.	0.28	0.	0.19	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 6 AT 0000 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 19.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.21	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	0.25	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	0.19	0.	0.
60	0.	0.	0.	0.18	0.	0.	0.	0.18	0.	0.
70	0.	0.	0.	0.17	0.	0.20	0.	0.22	0.	0.
80	0.	0.	0.	0.18	0.	0.16	0.	0.15	0.	0.
90	0.	0.	0.	0.12	0.	0.16	0.	0.16	0.	0.
100	0.	0.	0.14	0.12	0.	0.16	0.	0.16	0.	0.
110	0.	0.	0.	0.16	0.	0.19	0.	0.16	0.	0.
120	0.	0.	0.	0.	0.	0.18	0.	0.10	0.	0.
130	0.	0.	0.	0.	0.	0.19	0.	0.11	0.	0.
140	0.	0.	0.	0.	0.	0.20	0.	0.11	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 24

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	75.	0.	0.	0.	0.	0.	0.
0 A	0.	0.	0.	53.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	30.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	90.	0.	0.	0.	60.	0.	0.
10 A	0.	0.	0.	105.	0.	0.	0.	30.	0.	0.
L	0.	0.	0.	120.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	135.	0.	0.	0.	195.	0.	0.
20 A	0.	0.	0.	120.	0.	0.	0.	98.	0.	0.
L	0.	0.	0.	105.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	75.	0.	0.	0.	195.	0.	0.
30 A	0.	0.	0.	90.	0.	0.	0.	98.	0.	0.
L	0.	0.	0.	105.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	180.	0.	0.	0.	240.	0.	0.
40 A	0.	0.	0.	143.	0.	0.	15.	128.	15.	0.
L	0.	0.	0.	105.	0.	0.	30.	15.	30.	0.
R	0.	0.	0.	165.	0.	0.	0.	165.	0.	0.
50 A	0.	0.	0.	135.	0.	0.	128.	135.	60.	0.
L	0.	0.	0.	105.	0.	0.	255.	105.	120.	0.
R	0.	0.	0.	90.	0.	0.	0.	195.	0.	0.
60 A	0.	0.	0.	105.	0.	0.	113.	128.	53.	0.
L	0.	0.	0.	120.	0.	0.	225.	60.	105.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 25

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	45.	0.	0.	0.	180.	0.	0.
70 A	0.	0.	0.	75.	0.	0.	105.	98.	68.	0.
L	0.	0.	0.	105.	0.	0.	210.	15.	135.	0.
R	0.	0.	0.	0.	0.	0.	0.	210.	0.	0.
80 A	0.	0.	0.	45.	0.	0.	105.	143.	75.	0.
L	0.	0.	0.	90.	0.	0.	210.	75.	150.	0.
R	0.	0.	0.	0.	0.	0.	0.	150.	0.	0.
90 A	0.	0.	0.	53.	180.	0.	128.	120.	38.	0.
L	0.	0.	0.	105.	360.	0.	255.	90.	75.	0.
R	0.	0.	0.	0.	30.	0.	0.	195.	0.	0.
100 A	0.	0.	0.	60.	150.	0.	128.	135.	38.	0.
L	0.	0.	0.	120.	270.	0.	255.	75.	75.	0.
R	0.	0.	0.	0.	60.	0.	0.	180.	0.	0.
110 A	0.	0.	0.	38.	105.	0.	173.	98.	90.	0.
L	0.	0.	0.	75.	150.	0.	345.	15.	180.	0.
R	0.	0.	0.	0.	90.	0.	0.	165.	0.	0.
120 A	0.	0.	0.	68.	135.	0.	120.	90.	83.	0.
L	0.	0.	0.	135.	180.	0.	240.	15.	165.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 25 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	60.	0.	0.	165.	0.	0.
130 A	0.	0.	0.	60.	188.	0.	368.	90.	68.	0.
L	0.	0.	0.	120.	315.	0.	735.	15.	135.	0.
R	0.	0.	0.	0.	30.	0.	0.	165.	0.	0.
140 A	0.	0.	0.	68.	143.	0.	75.	83.	60.	0.
L	0.	0.	0.	135.	255.	0.	150.	0.	120.	0.
R	0.	0.	0.	0.	105.	0.	0.	210.	0.	0.
150 A	0.	0.	0.	53.	143.	0.	0.	105.	83.	0.
L	0.	0.	0.	105.	180.	0.	0.	0.	165.	0.
R	0.	0.	0.	0.	120.	0.	0.	195.	165.	0.
160 A	0.	0.	0.	60.	120.	0.	0.	105.	173.	0.
L	0.	0.	0.	120.	120.	0.	0.	15.	180.	0.
R	0.	0.	0.	0.	165.	0.	0.	15.	165.	0.
170 A	0.	0.	0.	68.	158.	0.	0.	30.	158.	0.
L	0.	0.	0.	135.	150.	0.	0.	45.	150.	0.
R	0.	0.	0.	0.	30.	0.	0.	60.	30.	0.
180 A	0.	0.	0.	8.	53.	0.	0.	38.	45.	0.
L	0.	0.	0.	15.	75.	0.	0.	15.	60.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 25 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
	R	0.	0.	0.	4.94	0.	0.	0.	0.	0.	0.
	A	0.	0.	0.	5.01	0.	0.	0.	0.	0.	0.
	L	0.	0.	0.	5.20	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	4.94	0.	0.	0.	47.01	0.	0.
10	A	0.	0.	0.	5.32	0.	0.	0.	47.01	0.	0.
	L	0.	0.	0.	5.61	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	4.81	0.	0.	0.	48.73	0.	0.
20	A	0.	0.	0.	5.54	0.	0.	0.	48.73	0.	0.
	L	0.	0.	0.	6.49	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	.	0.	0.	0.	39.17	0.	0.
30	A	0.	0.	0.	5.	0.	0.	0.	39.17	0.	0.
	L	0.	0.	0.	6.96	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	2.77	0.	0.	0.	21.00	0.	0.
40	A	0.	0.	0.	4.14	0.	0.	0.41	19.78	0.19	0.
	L	0.	0.	0.	6.50	0.	0.	0.41	0.24	0.19	0.
	R	0.	0.	0.	0.55	0.	0.	0.	13.27	0.	0.
50	A	0.	0.	0.	2.57	0.	0.	0.41	8.22	0.26	0.
	L	0.	0.	0.	5.74	0.	0.	0.41	0.28	0.26	0.
	R	0.	0.	0.	0.63	0.	0.	0.	6.28	0.	0.
60	A	0.	0.	0.	2.84	0.	0.	0.79	4.86	0.27	0.
	L	0.	0.	0.	4.50	0.	0.	0.79	0.27	0.27	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.33	0.	0.	0.	3.42	0.	0.
70 A	0.	0.	0.	2.20	0.	0.	2.51	3.18	0.27	0.
L	0.	0.	0.	3.01	0.	0.	2.51	0.36	0.27	0.
R	0.	0.	0.	0.	0.	0.	0.	4.57	0.	0.
80 A	0.	0.	0.	1.52	0.	0.	2.88	3.43	0.22	0.
L	0.	0.	0.	1.52	0.	0.	2.88	0.21	0.22	0.
R	0.	0.	0.	0.	0.	0.	0.	0.51	0.	0.
90 A	0.	0.	0.	0.46	0.40	0.	2.57	0.43	0.21	0.
L	0.	0.	0.	0.46	0.40	0.	2.57	0.29	0.21	0.
R	0.	0.	0.	0.	0.48	0.	0.	0.21	0.	0.
100 A	0.	0.	0.	0.60	0.28	0.	0.27	0.23	0.34	0.
L	0.	0.	0.	0.60	0.25	0.	0.27	0.27	0.34	0.
R	0.	0.	0.	0.	0.39	0.	0.	0.21	0.	0.
110 A	0.	0.	0.	0.74	0.28	0.	0.37	0.21	0.28	0.
L	0.	0.	0.	0.74	0.24	0.	0.37	0.25	0.28	0.
R	0.	0.	0.	0.	0.30	0.	0.	0.28	0.	0.
120 A	0.	0.	0.	0.56	0.25	0.	0.62	0.27	0.26	0.
L	0.	0.	0.	0.56	0.23	0.	0.62	0.19	0.26	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 26 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.29	0.	0.	0.28	0.	0.
130 A	0.	0.	0.	0.37	0.30	0.	0.38	0.27	0.31	0.
L	0.	0.	0.	0.37	0.30	0.	0.38	0.18	0.31	0.
R	0.	0.	0.	0.	0.37	0.	0.	0.29	0.	0.
140 A	0.	0.	0.	0.25	0.28	0.	0.69	0.29	0.50	0.
L	0.	0.	0.	0.25	0.27	0.	0.69	0.	0.50	0.
R	0.	0.	0.	0.	0.33	0.	0.	0.29	0.	0.
150 A	0.	0.	0.	0.24	0.25	0.	0.	0.29	0.58	0.
L	0.	0.	0.	0.24	0.21	0.	0.	0.	0.58	0.
R	0.	0.	0.	0.	0.46	0.	0.	0.27	0.49	0.
160 A	0.	0.	0.	0.26	0.35	0.	0.	0.29	0.44	0.
L	0.	0.	0.	0.26	0.23	0.	0.	0.45	0.40	0.
R	0.	0.	0.	0.	0.43	0.	0.	0.21	0.29	0.
170 A	0.	0.	0.	0.25	0.36	0.	0.	0.27	0.29	0.
L	0.	0.	0.	0.25	0.29	0.	0.	0.29	0.28	0.
R	0.	0.	0.	0.	0.45	0.	0.	0.31	0.27	0.
180 A	0.	0.	0.	0.31	0.39	0.	0.	0.32	0.25	0.
L	0.	0.	0.	0.31	0.37	0.	0.	0.36	0.24	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 26 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.35	0.	0.	0.	0.	0.	0.
0 A	0.	0.	0.	0.51	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.38	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.36	0.	0.	0.	1.21	0.	0.
10 A	0.	0.	0.	0.51	0.	0.	0.	1.21	0.	0.
L	0.	0.	0.	0.36	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.36	0.	0.	0.	1.13	0.	0.
20 A	0.	0.	0.	0.57	0.	0.	0.	1.13	0.	0.
L	0.	0.	0.	0.44	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	1.17	0.	0.	0.	5.35	0.	0.
30 A	0.	0.	0.	1.20	0.	0.	0.	5.35	0.	0.
L	0.	0.	0.	0.30	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.84	0.	0.	0.	4.76	0.	0.
40 A	0.	0.	0.	0.93	0.	0.	0.40	4.76	0.19	0.
L	0.	0.	0.	0.40	0.	0.	0.40	0.22	0.19	0.
R	0.	0.	0.	0.43	0.	0.	0.	0.78	0.	0.
50 A	0.	0.	0.	0.63	0.	0.	0.27	0.80	0.23	0.
L	0.	0.	0.	0.45	0.	0.	0.27	0.21	0.23	0.
R	0.	0.	0.	0.31	0.	0.	0.	3.50	0.	0.
60 A	0.	0.	0.	0.59	0.	0.	0.59	3.51	0.20	0.
L	0.	0.	0.	0.50	0.	0.	0.59	0.24	0.20	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.22	0.	0.	0.	0.31	0.	0.
70 A	0.	0.	0.	0.81	0.	0.	0.48	0.43	0.24	0.
L	0.	0.	0.	0.78	0.	0.	0.48	0.30	0.24	0.
R	0.	0.	0.	0.	0.	0.	0.	0.65	0.	0.
80 A	0.	0.	0.	0.40	0.	0.	0.51	0.67	0.19	0.
L	0.	0.	0.	0.40	0.	0.	0.51	0.17	0.19	0.
R	0.	0.	0.	0.	0.	0.	0.	0.50	0.	0.
90 A	0.	0.	0.	0.31	0.25	0.	1.26	0.54	0.15	0.
L	0.	0.	0.	0.31	0.25	0.	1.26	0.22	0.15	0.
R	0.	0.	0.	0.	0.24	0.	0.	0.16	0.	0.
100 A	0.	0.	0.	0.28	0.31	0.	0.22	0.28	0.26	0.
L	0.	0.	0.	0.28	0.21	0.	0.22	0.23	0.26	0.
R	0.	0.	0.	0.	0.22	0.	0.	0.19	0.	0.
110 A	0.	0.	0.	0.40	0.29	0.	0.27	0.25	0.26	0.
L	0.	0.	0.	0.40	0.19	0.	0.27	0.15	0.26	0.
R	0.	0.	0.	0.	0.21	0.	0.	0.20	0.	0.
120 A	0.	0.	0.	0.30	0.28	0.	0.29	0.26	0.21	0.
L	0.	0.	0.	0.30	0.19	0.	0.29	0.16	0.21	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 27 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.21	0.	0.	0.21	0.	0.
130 A	0.	0.	0.	0.27	0.30	0.	0.28	0.26	0.28	0.
L	0.	0.	0.	0.27	0.21	0.	0.28	0.15	0.28	0.
R	0.	0.	0.	0.	0.28	0.	0.	0.21	0.	0.
140 A	0.	0.	0.	0.20	0.34	0.	0.31	0.21	0.30	0.
L	0.	0.	0.	0.20	0.19	0.	0.31	0.	0.30	0.
R	0.	0.	0.	0.	0.26	0.	0.	0.21	0.	0.
150 A	0.	0.	0.	0.20	0.32	0.	0.	0.21	0.32	0.
L	0.	0.	0.	0.20	0.18	0.	0.	0.	0.32	0.
R	0.	0.	0.	0.	0.27	0.	0.	0.21	0.29	0.
160 A	0.	0.	0.	0.22	0.32	0.	0.	0.32	0.38	0.
L	0.	0.	0.	0.22	0.18	0.	0.	0.24	0.25	0.
R	0.	0.	0.	0.	0.23	0.	0.	0.16	0.23	0.
170 A	0.	0.	0.	0.19	0.32	0.	0.	0.24	0.31	0.
L	0.	0.	0.	0.19	0.22	0.	0.	0.17	0.21	0.
R	0.	0.	0.	0.	0.27	0.	0.	0.25	0.17	0.
180 A	0.	0.	0.	0.22	0.35	0.	0.	0.33	0.25	0.
L	0.	0.	0.	0.22	0.21	0.	0.	0.22	0.18	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 27 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	195.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	225.	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	255.	30.	0.
50	0.	0.	0.	210.	0.	0.	180.	285.	120.	0.
60	0.	0.	0.	840.	0.	0.	285.	270.	105.	0.
70	0.	0.	0.	510.	0.	0.	255.	195.	150.	0.
80	0.	0.	0.	195.	45.	0.	225.	300.	150.	0.
90	0.	0.	0.	225.	465.	0.	315.	285.	75.	0.
100	0.	0.	0.	210.	360.	0.	255.	225.	90.	0.
110	0.	0.	0.	345.	495.	0.	375.	225.	150.	0.
120	0.	0.	0.	285.	630.	0.	675.	210.	180.	0.
130	0.	0.	0.	0.	750.	0.	345.	195.	120.	0.
140	0.	0.	0.	0.	0.	0.	0.	195.	195.	0.
150	0.	0.	0.	0.	0.	0.	0.	270.	315.	0.
160	0.	0.	0.	0.	0.	0.	0.	165.	525.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 28

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	48.31	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	42.76	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	21.60	0.19	0.
50	0.	0.	0.	5.14	0.	0.	0.43	9.36	0.26	0.
60	0.	0.	0.	5.04	0.	0.	0.51	4.61	0.27	0.
70	0.	0.	0.	2.49	0.	0.	2.34	3.18	0.27	0.
80	0.	0.	0.	2.01	0.29	0.	2.92	3.27	0.22	0.
90	0.	0.	0.	0.54	0.37	0.	1.98	0.39	0.21	0.
100	0.	0.	0.	0.63	0.28	0.	0.28	0.23	0.37	0.
110	0.	0.	0.	0.29	0.27	0.	0.45	0.23	0.26	0.
120	0.	0.	0.	0.26	0.27	0.	0.42	0.28	0.27	0.
130	0.	0.	0.	0.	0.35	0.	0.54	0.28	0.32	0.
140	0.	0.	0.	0.	0.	0.	0.	0.30	0.53	0.
150	0.	0.	0.	0.	0.	0.	0.	0.29	0.52	0.
160	0.	0.	0.	0.	0.	0.	0.	0.28	0.30	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 29

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 5 AT 0004 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 20.2 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	1.39	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	4.96	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	7.29	0.19	0.
50	0.	0.	0.	0.42	0.	0.	0.29	6.22	0.23	0.
60	0.	0.	0.	1.68	0.	0.	0.43	4.01	0.20	0.
70	0.	0.	0.	2.26	0.	0.	0.59	0.87	0.23	0.
80	0.	0.	0.	0.91	0.20	0.	0.52	2.07	0.19	0.
90	0.	0.	0.	0.30	0.25	0.	1.47	0.41	0.18	0.
100	0.	0.	0.	0.35	0.22	0.	0.23	0.19	0.28	0.
110	0.	0.	0.	0.23	0.21	0.	0.30	0.19	0.24	0.
120	0.	0.	0.	0.20	0.21	0.	0.28	0.20	0.21	0.
130	0.	0.	0.	0.	0.25	0.	0.35	0.21	0.29	0.
140	0.	0.	0.	0.	0.	0.	0.	0.22	0.31	0.
150	0.	0.	0.	0.	0.	0.	0.	0.21	0.27	0.
160	0.	0.	0.	0.	0.	0.	0.	0.21	0.23	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 30

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	60.	0.	0.	0.	0.	0.
0 A	0.	0.	0.	0.	60.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	60.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	105.	0.	0.	0.	0.	0.
10 A	0.	0.	0.	0.	98.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	90.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	75.	0.	0.	75.	0.	0.
20 A	0.	0.	0.	0.	75.	0.	0.	38.	0.	0.
L	0.	0.	0.	0.	75.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	105.	0.	0.	270.	0.	0.
30 A	0.	0.	0.	0.	105.	0.	0.	135.	0.	0.
L	0.	0.	0.	0.	105.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	135.	0.	0.	225.	0.	0.
40 A	0.	0.	0.	0.	135.	0.	0.	113.	0.	0.
L	0.	0.	0.	0.	135.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	60.	0.	0.	255.	0.	0.
50 A	0.	0.	0.	0.	68.	0.	0.	128.	0.	0.
L	0.	0.	0.	0.	75.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	60.	0.	0.	210.	0.	0.
60 A	0.	0.	0.	0.	60.	0.	0.	113.	53.	0.
L	0.	0.	0.	0.	60.	0.	0.	15.	105.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 31

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	60.	0.	0.	240.	0.	0.
70 A	0.	0.	0.	0.	45.	0.	0.	135.	68.	0.
L	0.	0.	0.	0.	30.	0.	0.	30.	135.	0.
R	0.	0.	0.	0.	75.	0.	0.	225.	0.	0.
80 A	0.	0.	0.	45.	98.	0.	0.	113.	90.	0.
L	0.	0.	0.	90.	120.	0.	0.	0.	180.	0.
R	0.	0.	0.	0.	75.	0.	0.	225.	0.	0.
90 A	0.	0.	0.	150.	90.	0.	0.	158.	83.	0.
L	0.	0.	0.	299.	105.	0.	0.	90.	165.	0.
R	0.	0.	0.	0.	90.	0.	0.	195.	0.	0.
100 A	0.	0.	0.	180.	83.	0.	0.	113.	90.	0.
L	0.	0.	0.	360.	75.	0.	0.	30.	180.	0.
R	0.	0.	0.	0.	30.	0.	0.	240.	0.	0.
110 A	0.	0.	0.	142.	60.	0.	0.	165.	75.	0.
L	0.	0.	0.	284.	90.	0.	0.	90.	149.	0.
R	0.	0.	0.	0.	0.	0.	0.	210.	0.	0.
120 A	0.	0.	0.	150.	30.	0.	0.	143.	90.	0.
L	0.	0.	0.	299.	60.	0.	0.	75.	180.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 31 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	45.	0.	0.	135.	0.	0.
130 A	0.	0.	0.	113.	75.	0.	0.	98.	97.	0.
L	0.	0.	0.	225.	105.	0.	0.	60.	194.	0.
R	0.	0.	0.	0.	75.	0.	0.	195.	0.	0.
140 A	0.	0.	0.	120.	75.	0.	0.	105.	119.	0.
L	0.	0.	0.	240.	75.	0.	0.	15.	237.	0.
R	0.	0.	0.	0.	90.	0.	0.	195.	0.	0.
150 A	0.	0.	0.	143.	83.	0.	0.	113.	143.	0.
L	0.	0.	0.	285.	75.	0.	0.	30.	285.	0.
R	0.	0.	0.	0.	30.	0.	0.	75.	0.	0.
160 A	0.	0.	0.	135.	38.	0.	0.	60.	278.	0.
L	0.	0.	0.	270.	45.	0.	0.	45.	555.	0.
R	0.	0.	0.	0.	90.	0.	0.	0.	0.	0.
170 A	0.	0.	0.	111.	90.	0.	0.	0.	0.	0.
L	0.	0.	0.	222.	90.	0.	0.	0.	0.	0.
R	0.	0.	0.	135.	15.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	120.	30.	0.	0.	0.	0.	0.
L	0.	0.	0.	104.	45.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 31 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.12	0.	0.	0.	0.	0.
0 A	0.	0.	0.	0.	0.15	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.18	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.13	0.	0.	0.	0.	0.
10 A	0.	0.	0.	0.	0.17	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.22	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.16	0.	0.	0.84	0.	0.
20 A	0.	0.	0.	0.	0.15	0.	0.	0.84	0.	0.
L	0.	0.	0.	0.	0.14	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.14	0.	0.	0.68	0.	0.
30 A	0.	0.	0.	0.	0.14	0.	0.	0.68	0.	0.
L	0.	0.	0.	0.	0.14	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.14	0.	0.	0.60	0.	0.
40 A	0.	0.	0.	0.	0.34	0.	0.	0.60	0.	0.
L	0.	0.	0.	0.	0.54	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.17	0.	0.	0.54	0.	0.
50 A	0.	0.	0.	0.	0.44	0.	0.	0.54	0.	0.
L	0.	0.	0.	0.	0.66	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.13	0.	0.	0.36	0.	0.
60 A	0.	0.	0.	0.	0.39	0.	0.	0.37	0.58	0.
L	0.	0.	0.	0.	0.65	0.	0.	0.56	0.58	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.18	0.	0.	0.42	0.	0.
70 A	0.	0.	0.	0.	0.31	0.	0.	0.44	0.60	0.
L	0.	0.	0.	0.	0.58	0.	0.	0.55	0.60	0.
R	0.	0.	0.	0.	0.14	0.	0.	0.53	0.	0.
80 A	0.	0.	0.	1.47	0.41	0.	0.	0.53	0.44	0.
L	0.	0.	0.	1.47	0.58	0.	0.	0.	0.44	0.
R	0.	0.	0.	0.	0.23	0.	0.	0.50	0.	0.
90 A	0.	0.	0.	1.64	0.44	0.	0.	0.49	0.48	0.
L	0.	0.	0.	1.64	0.58	0.	0.	0.47	0.48	0.
R	0.	0.	0.	0.	0.28	0.	0.	0.53	0.	0.
100 A	0.	0.	0.	0.62	0.44	0.	0.	0.54	0.57	0.
L	0.	0.	0.	0.62	0.62	0.	0.	0.62	0.57	0.
R	0.	0.	0.	0.	0.40	0.	0.	0.60	0.	0.
110 A	0.	0.	0.	1.17	0.52	0.	0.	0.54	0.41	0.
L	0.	0.	0.	1.17	0.56	0.	0.	0.37	0.41	0.
R	0.	0.	0.	0.	0.	0.	0.	0.64	0.	0.
120 A	0.	0.	0.	0.60	0.56	0.	0.	0.63	0.61	0.
L	0.	0.	0.	0.60	0.56	0.	0.	0.62	0.61	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 32 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.26	0.	0.	0.64	0.	0.
130 A	0.	0.	0.	0.56	0.46	0.	0.	0.66	0.69	0.
L	0.	0.	0.	0.56	0.55	0.	0.	0.72	0.69	0.
R	0.	0.	0.	0.	0.29	0.	0.	0.59	0.	0.
140 A	0.	0.	0.	0.59	0.43	0.	0.	0.60	0.85	0.
L	0.	0.	0.	0.59	0.57	0.	0.	0.71	0.85	0.
R	0.	0.	0.	0.	0.35	0.	0.	0.64	0.	0.
150 A	0.	0.	0.	0.72	0.52	0.	0.	0.67	0.82	0.
L	0.	0.	0.	0.72	0.73	0.	0.	0.83	0.82	0.
R	0.	0.	0.	0.	0.40	0.	0.	0.62	0.	0.
160 A	0.	0.	0.	0.64	0.62	0.	0.	0.68	0.81	0.
L	0.	0.	0.	0.64	0.77	0.	0.	0.78	0.81	0.
R	0.	0.	0.	0.	0.45	0.	0.	0.	0.	0.
170 A	0.	0.	0.	0.43	0.60	0.	0.	0.	0.	0.
L	0.	0.	0.	0.43	0.74	0.	0.	0.	0.	0.
R	0.	0.	0.	0.54	0.54	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.51	0.57	0.	0.	0.	0.	0.
L	0.	0.	0.	0.46	0.58	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 32 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.10	0.	0.	0.	0.	0.
0 A	0.	0.	0.	0.	0.16	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.13	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.09	0.	0.	0.	0.	0.
10 A	0.	0.	0.	0.	0.17	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.14	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.10	0.	0.	0.18	0.	0.
20 A	0.	0.	0.	0.	0.15	0.	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.11	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.10	0.	0.	0.16	0.	0.
30 A	0.	0.	0.	0.	0.16	0.	0.	0.16	0.	0.
L	0.	0.	0.	0.	0.13	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.10	0.	0.	0.17	0.	0.
40 A	0.	0.	0.	0.	0.21	0.	0.	0.17	0.	0.
L	0.	0.	0.	0.	0.18	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.11	0.	0.	0.18	0.	0.
50 A	0.	0.	0.	0.	0.22	0.	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.18	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.09	0.	0.	0.14	0.	0.
60 A	0.	0.	0.	0.	0.18	0.	0.	0.17	0.16	0.
L	0.	0.	0.	0.	0.15	0.	0.	0.10	0.16	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.13	0.	0.	0.19	0.	0.
70 A	0.	0.	0.	0.	0.19	0.	0.	0.27	0.17	0.
L	0.	0.	0.	0.	0.14	0.	0.	0.19	0.17	0.
R	0.	0.	0.	0.	0.10	0.	0.	0.15	0.	0.
80 A	0.	0.	0.	0.22	0.22	0.	0.	0.15	0.17	0.
L	0.	0.	0.	0.22	0.19	0.	0.	0.	0.17	0.
R	0.	0.	0.	0.	0.14	0.	0.	0.16	0.	0.
90 A	0.	0.	0.	0.36	0.21	0.	0.	0.24	0.17	0.
L	0.	0.	0.	0.36	0.16	0.	0.	0.19	0.17	0.
R	0.	0.	0.	0.	0.14	0.	0.	0.15	0.	0.
100 A	0.	0.	0.	0.24	0.20	0.	0.	0.27	0.17	0.
L	0.	0.	0.	0.24	0.14	0.	0.	0.22	0.17	0.
R	0.	0.	0.	0.	0.09	0.	0.	0.16	0.	0.
110 A	0.	0.	0.	0.23	0.17	0.	0.	0.25	0.17	0.
L	0.	0.	0.	0.23	0.14	0.	0.	0.19	0.17	0.
R	0.	0.	0.	0.	0.	0.	0.	0.17	0.	0.
120 A	0.	0.	0.	0.19	0.14	0.	0.	0.25	0.16	0.
L	0.	0.	0.	0.19	0.14	0.	0.	0.18	0.16	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 33 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0010 AST						INSOL ANGLE 93.5 DEG				
SPECTRAL BAND 2.76 TO 3.25 MICRONS						ELEVATION 21.5 KM				
VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.13	0.	0.	0.15	0.	0.
130 A	0.	0.	0.	0.16	0.20	0.	0.	0.23	0.20	0.
L	0.	0.	0.	0.16	0.16	0.	0.	0.17	0.20	0.
R	0.	0.	0.	0.	0.14	0.	0.	0.16	0.	0.
140 A	0.	0.	0.	0.16	0.22	0.	0.	0.25	0.20	0.
L	0.	0.	0.	0.16	0.17	0.	0.	0.20	0.20	0.
R	0.	0.	0.	0.	0.15	0.	0.	0.14	0.	0.
150 A	0.	0.	0.	0.16	0.22	0.	0.	0.18	0.18	0.
L	0.	0.	0.	0.16	0.16	0.	0.	0.11	0.18	0.
R	0.	0.	0.	0.	0.14	0.	0.	0.15	0.	0.
160 A	0.	0.	0.	0.18	0.22	0.	0.	0.22	0.19	0.
L	0.	0.	0.	0.18	0.17	0.	0.	0.16	0.19	0.
R	0.	0.	0.	0.	0.15	0.	0.	0.	0.	0.
170 A	0.	0.	0.	0.18	0.23	0.	0.	0.	0.	0.
L	0.	0.	0.	0.18	0.17	0.	0.	0.	0.	0.
R	0.	0.	0.	0.16	0.18	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.22	0.27	0.	0.	0.	0.	0.
L	0.	0.	0.	0.15	0.20	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 33 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
0		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20		0.	0.	0.	0.	0.	0.	0.	15.	0.	0.
30		0.	0.	0.	0.	0.	0.	0.	285.	0.	0.
40		0.	0.	0.	0.	390.	0.	0.	255.	0.	0.
50		0.	0.	0.	0.	480.	0.	0.	240.	0.	0.
60		0.	0.	0.	0.	225.	0.	0.	255.	105.	0.
70		0.	0.	0.	0.	135.	0.	0.	285.	150.	0.
80		0.	0.	0.	149.	270.	0.	0.	240.	195.	0.
90		0.	0.	0.	600.	225.	0.	0.	300.	165.	0.
100		0.	0.	0.	598.	225.	0.	0.	240.	165.	0.
110		0.	0.	0.	750.	150.	0.	0.	345.	164.	0.
120		0.	0.	0.	716.	330.	0.	0.	285.	165.	0.
130		0.	0.	0.	0.	360.	0.	0.	255.	209.	0.
140		0.	0.	0.	0.	0.	0.	0.	225.	342.	0.
150		0.	0.	0.	0.	0.	0.	0.	225.	690.	0.
160		0.	0.	0.	0.	0.	0.	0.	0.	15.	0.
170		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 34

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.75	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.73	0.	0.
40	0.	0.	0.	0.	0.16	0.	0.	0.60	0.	0.
50	0.	0.	0.	0.	0.21	0.	0.	0.56	0.	0.
60	0.	0.	0.	0.	0.44	0.	0.	0.38	0.58	0.
70	0.	0.	0.	0.	0.32	0.	0.	0.44	0.59	0.
80	0.	0.	0.	1.62	0.41	0.	0.	0.53	0.42	0.
90	0.	0.	0.	1.01	0.40	0.	0.	0.49	0.53	0.
100	0.	0.	0.	0.87	0.50	0.	0.	0.53	0.54	0.
110	0.	0.	0.	0.63	0.49	0.	0.	0.55	0.43	0.
120	0.	0.	0.	0.53	0.48	0.	0.	0.66	0.64	0.
130	0.	0.	0.	0.	0.59	0.	0.	0.63	0.70	0.
140	0.	0.	0.	0.	0.	0.	0.	0.63	0.87	0.
150	0.	0.	0.	0.	0.	0.	0.	0.68	0.80	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.96	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 35

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 4 AT 0010 AST

INSOL ANGLE 93.5 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 21.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.18	0.	0.
40	0.	0.	0.	0.	0.12	0.	0.	0.16	0.	0.
50	0.	0.	0.	0.	0.19	0.	0.	0.18	0.	0.
60	0.	0.	0.	0.	0.28	0.	0.	0.15	0.16	0.
70	0.	0.	0.	0.	0.28	0.	0.	0.20	0.17	0.
80	0.	0.	0.	0.28	0.26	0.	0.	0.16	0.16	0.
90	0.	0.	0.	0.57	0.22	0.	0.	0.16	0.18	0.
100	0.	0.	0.	0.35	0.18	0.	0.	0.18	0.16	0.
110	0.	0.	0.	0.17	0.19	0.	0.	0.19	0.17	0.
120	0.	0.	0.	0.20	0.23	0.	0.	0.18	0.16	0.
130	0.	0.	0.	0.	0.22	0.	0.	0.16	0.19	0.
140	0.	0.	0.	0.	0.	0.	0.	0.15	0.19	0.
150	0.	0.	0.	0.	0.	0.	0.	0.17	0.19	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.16	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 36

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	15.	0.	0.	0.	0.
0 A	0.	0.	0.	0.	0.	30.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	45.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10 A	0.	0.	0.	0.	0.	171.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	342.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	30.	0.	0.
20 A	0.	0.	0.	0.	0.	150.	0.	15.	0.	0.
L	0.	0.	0.	0.	0.	300.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	135.	135.	0.	0.
30 A	0.	0.	0.	8.	0.	203.	68.	68.	0.	0.
L	0.	0.	0.	15.	0.	405.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	165.	180.	0.	0.
40 A	0.	0.	0.	113.	0.	143.	83.	179.	0.	0.
L	0.	0.	0.	225.	0.	285.	0.	177.	0.	0.
R	0.	0.	0.	0.	0.	0.	195.	119.	0.	0.
50 A	0.	0.	0.	83.	0.	208.	98.	150.	0.	0.
L	0.	0.	0.	165.	0.	415.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	0.	165.	210.	0.	0.
60 A	0.	0.	0.	90.	0.	149.	83.	158.	0.	0.
L	0.	0.	0.	180.	0.	298.	0.	105.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 37

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	0.	195.	165.	0.	0.
70 A	0.	0.	0.	83.	0.	232.	98.	143.	0.	0.
L	0.	0.	0.	165.	0.	464.	0.	120.	0.	0.
R	0.	0.	0.	0.	0.	0.	165.	195.	0.	0.
80 A	0.	0.	0.	113.	0.	15.	83.	180.	0.	0.
L	0.	0.	0.	225.	0.	30.	0.	165.	0.	0.
R	0.	0.	0.	0.	0.	0.	180.	165.	0.	0.
90 A	0.	0.	0.	98.	0.	0.	90.	165.	0.	0.
L	0.	0.	0.	195.	0.	0.	0.	165.	0.	0.
R	0.	0.	0.	0.	0.	0.	165.	225.	0.	0.
100 A	0.	0.	0.	60.	0.	0.	83.	173.	0.	0.
L	0.	0.	0.	120.	0.	0.	0.	120.	0.	0.
R	0.	0.	0.	0.	0.	0.	150.	150.	0.	0.
110 A	0.	0.	0.	83.	0.	0.	75.	165.	0.	0.
L	0.	0.	0.	165.	0.	0.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	0.	180.	210.	0.	0.
120 A	0.	0.	0.	23.	0.	0.	90.	180.	0.	0.
L	0.	0.	0.	45.	0.	0.	0.	150.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 37 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	135.	165.	0.	0.
130 A	0.	0.	23.	98.	0.	0.	68.	173.	0.	0.
L	0.	0.	45.	195.	0.	0.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	0.	195.	195.	0.	0.
140 A	0.	0.	0.	68.	0.	0.	98.	195.	0.	0.
L	0.	0.	0.	135.	0.	0.	0.	195.	0.	0.
R	0.	0.	0.	90.	0.	0.	150.	150.	0.	0.
150 A	0.	0.	0.	113.	0.	0.	75.	143.	0.	0.
L	0.	0.	0.	135.	0.	0.	0.	135.	0.	0.
R	0.	0.	0.	150.	0.	0.	120.	195.	0.	0.
160 A	0.	0.	0.	158.	0.	0.	105.	173.	0.	0.
L	0.	0.	0.	165.	0.	0.	90.	150.	0.	0.
R	0.	0.	0.	105.	0.	0.	105.	255.	28.	0.
170 A	0.	0.	0.	150.	0.	0.	128.	254.	14.	0.
L	0.	0.	0.	195.	0.	0.	150.	253.	0.	0.
R	0.	0.	0.	135.	0.	0.	105.	105.	15.	0.
180 A	0.	0.	0.	83.	0.	0.	98.	150.	8.	0.
L	0.	0.	0.	30.	0.	0.	90.	195.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 37 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.46	0.	0.	0.	0.
0 A	0.	0.	0.	0.	0.	0.67	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.74	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10 A	0.	0.	0.	0.	0.	0.49	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.49	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	37.71	0.	0.
20 A	0.	0.	0.	0.	0.	1.15	0.	37.71	0.	0.
L	0.	0.	0.	0.	0.	1.15	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	1.81	37.31	0.	0.
30 A	0.	0.	0.	0.76	0.	0.76	1.81	37.31	0.	0.
L	0.	0.	0.	0.76	0.	0.76	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	2.04	38.40	0.	0.
40 A	0.	0.	0.	0.91	0.	0.39	2.04	28.14	0.	0.
L	0.	0.	0.	0.91	0.	0.39	0.	17.71	0.	0.
R	0.	0.	0.	0.	0.	0.	2.40	38.19	0.	0.
50 A	0.	0.	0.	0.90	0.	0.63	2.40	17.73	0.	0.
L	0.	0.	0.	0.90	0.	0.63	0.	4.21	0.	0.
R	0.	0.	0.	0.	0.	0.	2.27	38.01	0.	0.
60 A	0.	0.	0.	1.58	0.	1.09	2.27	25.86	0.	0.
L	0.	0.	0.	1.58	0.	1.09	0.	1.56	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 38

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0014 AST						INSOL ANGLE 93.4 DEG				
SPECTRAL BAND 2.37 TO 2.80 MICRONS						ELEVATION 22.3 KM				
VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	1.99	38.39	0.	0.
70 A	0.	0.	0.	1.91	0.	1.72	1.99	22.59	0.	0.
L	0.	0.	0.	1.91	0.	1.72	0.	0.87	0.	0.
R	0.	0.	0.	0.	0.	0.	1.84	38.57	0.	0.
80 A	0.	0.	0.	1.79	0.	1.97	1.84	21.40	0.	0.
L	0.	0.	0.	1.79	0.	1.97	0.	1.12	0.	0.
R	0.	0.	0.	0.	0.	0.	1.82	38.51	0.	0.
90 A	0.	0.	0.	1.83	0.	0.	1.82	19.68	0.	0.
L	0.	0.	0.	1.83	0.	0.	0.	0.86	0.	0.
R	0.	0.	0.	0.	0.	0.	1.88	38.36	0.	0.
100 A	0.	0.	0.	1.87	0.	0.	1.88	25.42	0.	0.
L	0.	0.	0.	1.87	0.	0.	0.	1.15	0.	0.
R	0.	0.	0.	0.	0.	0.	2.02	37.91	0.	0.
110 A	0.	0.	0.	1.61	0.	0.	2.02	18.39	0.	0.
L	0.	0.	0.	1.61	0.	0.	0.	2.13	0.	0.
R	0.	0.	0.	0.	0.	0.	2.08	37.74	0.	0.
120 A	0.	0.	0.	1.71	0.	0.	2.08	22.94	0.	0.
L	0.	0.	0.	1.71	0.	0.	0.	2.22	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 38 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	2.19	37.32	0.	0.
130 A	0.	0.	1.62	1.79	0.	0.	2.19	19.10	0.	0.
L	0.	0.	1.62	1.79	0.	0.	0.	2.40	0.	0.
R	0.	0.	0.	0.	0.	0.	2.31	37.07	0.	0.
140 A	0.	0.	0.	1.82	0.	0.	2.31	19.80	0.	0.
L	0.	0.	0.	1.82	0.	0.	0.	2.53	0.	0.
R	0.	0.	0.	1.73	0.	0.	2.49	37.14	0.	0.
150 A	0.	0.	0.	1.83	0.	0.	2.49	20.73	0.	0.
L	0.	0.	0.	1.89	0.	0.	0.	2.49	0.	0.
R	0.	0.	0.	1.73	0.	0.	2.55	37.55	0.	0.
160 A	0.	0.	0.	1.86	0.	0.	2.37	22.45	0.	0.
L	0.	0.	0.	1.98	0.	0.	2.13	2.81	0.	0.
R	0.	0.	0.	1.79	0.	0.	2.13	33.09	2.99	0.
170 A	0.	0.	0.	1.77	0.	0.	2.15	24.00	2.99	0.
L	0.	0.	0.	1.76	0.	0.	2.16	14.85	0.	0.
R	0.	0.	0.	1.80	0.	0.	2.26	27.13	2.96	0.
180 A	0.	0.	0.	1.78	0.	0.	2.31	21.63	2.96	0.
L	0.	0.	0.	1.66	0.	0.	2.36	18.67	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 38 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	0.24	0.	0.	0.	0.
0 A	0.	0.	0.	0.	0.	0.32	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.20	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10 A	0.	0.	0.	0.	0.	0.34	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.34	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.77	0.	0.
20 A	0.	0.	0.	0.	0.	0.27	0.	0.77	0.	0.
L	0.	0.	0.	0.	0.	0.27	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.24	0.70	0.	0.
30 A	0.	0.	0.	0.13	0.	0.24	0.24	0.70	0.	0.
L	0.	0.	0.	0.13	0.	0.24	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.26	0.74	0.	0.
40 A	0.	0.	0.	0.22	0.	0.24	0.26	7.48	0.	0.
L	0.	0.	0.	0.22	0.	0.24	0.	7.45	0.	0.
R	0.	0.	0.	0.	0.	0.	0.24	1.01	0.	0.
50 A	0.	0.	0.	0.23	0.	0.50	0.24	1.84	0.	0.
L	0.	0.	0.	0.23	0.	0.50	0.	1.54	0.	0.
R	0.	0.	0.	0.	0.	0.	0.22	0.67	0.	0.
60 A	0.	0.	0.	0.33	0.	0.26	0.22	0.77	0.	0.
L	0.	0.	0.	0.33	0.	0.26	0.	0.37	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.24	0.64	0.	0.
70 A	0.	0.	0.	0.22	0.	0.37	0.24	0.71	0.	0.
L	0.	0.	0.	0.22	0.	0.37	0.	0.31	0.	0.
R	0.	0.	0.	0.	0.	0.	0.22	0.68	0.	0.
80 A	0.	0.	0.	0.20	0.	0.21	0.22	0.72	0.	0.
L	0.	0.	0.	0.20	0.	0.21	0.	0.23	0.	0.
R	0.	0.	0.	0.	0.	0.	0.21	0.62	0.	0.
90 A	0.	0.	0.	0.22	0.	0.	0.21	0.65	0.	0.
L	0.	0.	0.	0.22	0.	0.	0.	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.	0.20	0.66	0.	0.
100 A	0.	0.	0.	0.21	0.	0.	0.20	0.79	0.	0.
L	0.	0.	0.	0.21	0.	0.	0.	0.43	0.	0.
R	0.	0.	0.	0.	0.	0.	0.24	0.68	0.	0.
110 A	0.	0.	0.	0.24	0.	0.	0.24	0.72	0.	0.
L	0.	0.	0.	0.24	0.	0.	0.	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.	0.22	0.69	0.	0.
120 A	0.	0.	0.	0.19	0.	0.	0.22	0.73	0.	0.
L	0.	0.	0.	0.19	0.	0.	0.	0.23	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 39 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.26	0.67	0.	0.
130 A	0.	0.	0.18	0.21	0.	0.	0.26	0.71	0.	0.
L	0.	0.	0.18	0.21	0.	0.	0.	0.24	0.	0.
R	0.	0.	0.	0.	0.	0.	0.23	0.72	0.	0.
140 A	0.	0.	0.	0.23	0.	0.	0.23	0.76	0.	0.
L	0.	0.	0.	0.23	0.	0.	0.	0.24	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.25	0.66	0.	0.
150 A	0.	0.	0.	0.28	0.	0.	0.25	0.70	0.	0.
L	0.	0.	0.	0.23	0.	0.	0.	0.22	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.21	0.73	0.	0.
160 A	0.	0.	0.	0.32	0.	0.	0.30	0.76	0.	0.
L	0.	0.	0.	0.25	0.	0.	0.21	0.23	0.	0.
R	0.	0.	0.	0.23	0.	0.	0.29	11.09	0.24	0.
170 A	0.	0.	0.	0.32	0.	0.	0.35	19.63	0.24	0.
L	0.	0.	0.	0.22	0.	0.	0.21	16.20	0.	0.
R	0.	0.	0.	0.22	0.	0.	0.27	15.34	0.30	0.
180 A	0.	0.	0.	0.31	0.	0.	0.35	22.96	0.30	0.
L	0.	0.	0.	0.22	0.	0.	0.22	17.08	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 39 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	135.	0.	0.
40	0.	0.	0.	0.	0.	792.	180.	342.	0.	0.
50	0.	0.	0.	0.	0.	585.	195.	314.	0.	0.
60	0.	0.	0.	0.	0.	578.	240.	345.	0.	0.
70	0.	0.	0.	555.	0.	524.	225.	285.	0.	0.
80	0.	0.	0.	435.	0.	120.	210.	375.	0.	0.
90	0.	0.	0.	345.	0.	0.	210.	360.	0.	0.
100	0.	0.	45.	315.	0.	0.	225.	345.	0.	0.
110	0.	0.	0.	1185.	0.	0.	180.	345.	0.	0.
120	0.	0.	0.	0.	0.	0.	165.	405.	0.	0.
130	0.	0.	0.	0.	0.	0.	225.	360.	0.	0.
140	0.	0.	0.	0.	0.	0.	660.	435.	0.	0.
150	0.	0.	0.	0.	0.	0.	120.	375.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	898.	43.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 40

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	37.33	0.	0.
40	0.	0.	0.	0.	0.	0.79	1.83	31.46	0.	0.
50	0.	0.	0.	0.	0.	0.58	2.20	17.98	0.	0.
60	0.	0.	0.	0.	0.	0.74	2.35	23.81	0.	0.
70	0.	0.	0.	1.07	0.	1.49	2.05	22.59	0.	0.
80	0.	0.	0.	1.84	0.	1.99	1.85	20.58	0.	0.
90	0.	0.	0.	1.83	0.	0.	1.82	21.24	0.	0.
100	0.	0.	1.62	1.70	0.	0.	1.95	22.32	0.	0.
110	0.	0.	0.	1.81	0.	0.	2.11	22.32	0.	0.
120	0.	0.	0.	0.	0.	0.	2.15	20.64	0.	0.
130	0.	0.	0.	0.	0.	0.	2.31	19.83	0.	0.
140	0.	0.	0.	0.	0.	0.	2.31	20.42	0.	0.
150	0.	0.	0.	0.	0.	0.	2.29	22.12	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	22.84	2.98	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 41

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 3 AT 0014 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 22.3 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.75	0.	0.
40	0.	0.	0.	0.	0.	0.42	0.24	9.49	0.	0.
50	0.	0.	0.	0.	0.	0.28	0.28	15.90	0.	0.
60	0.	0.	0.	0.	0.	0.49	0.24	17.71	0.	0.
70	0.	0.	0.	0.38	0.	0.43	0.26	18.53	0.	0.
80	0.	0.	0.	0.21	0.	0.22	0.23	18.73	0.	0.
90	0.	0.	0.	0.22	0.	0.	0.20	18.75	0.	0.
100	0.	0.	0.18	0.24	0.	0.	0.21	18.30	0.	0.
110	0.	0.	0.	0.24	0.	0.	0.22	17.72	0.	0.
120	0.	0.	0.	0.	0.	0.	0.26	17.71	0.	0.
130	0.	0.	0.	0.	0.	0.	0.23	17.34	0.	0.
140	0.	0.	0.	0.	0.	0.	0.30	17.32	0.	0.
150	0.	0.	0.	0.	0.	0.	0.24	17.23	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	16.87	0.26	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 42

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	135.	0.	0.	0.	90.	0.	0.
0 A	0.	0.	0.	158.	0.	0.	0.	75.	0.	0.
L	0.	0.	0.	180.	0.	0.	0.	60.	0.	0.
R	0.	0.	0.	240.	0.	0.	0.	90.	0.	0.
10 A	0.	0.	0.	225.	0.	0.	0.	120.	0.	0.
L	0.	0.	0.	210.	0.	0.	0.	150.	0.	0.
R	0.	0.	0.	240.	0.	0.	0.	127.	0.	0.
20 A	0.	0.	0.	240.	0.	0.	0.	124.	0.	0.
L	0.	0.	0.	239.	0.	0.	0.	120.	0.	0.
R	0.	0.	0.	270.	0.	0.	0.	73.	0.	0.
30 A	0.	0.	0.	180.	0.	0.	0.	119.	0.	0.
L	0.	0.	0.	90.	0.	0.	0.	164.	0.	0.
R	0.	0.	0.	180.	0.	0.	0.	150.	0.	0.
40 A	0.	0.	0.	90.	0.	0.	0.	135.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	120.	0.	0.
R	0.	0.	0.	224.	0.	0.	0.	164.	0.	0.
50 A	0.	0.	0.	112.	0.	39.	0.	155.	0.	0.
L	0.	0.	0.	0.	0.	78.	0.	146.	0.	0.
R	0.	0.	0.	193.	0.	0.	0.	150.	0.	0.
60 A	0.	0.	0.	97.	0.	54.	0.	90.	0.	0.
L	0.	0.	0.	0.	0.	108.	0.	29.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 43

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	202.	0.	0.	0.	135.	30.	0.
70 A	0.	0.	0.	101.	0.	68.	0.	68.	15.	0.
L	0.	0.	0.	0.	0.	135.	0.	0.	0.	0.
R	0.	0.	0.	75.	0.	0.	0.	150.	0.	0.
80 A	0.	0.	0.	38.	0.	75.	0.	75.	0.	0.
L	0.	0.	0.	0.	0.	150.	0.	0.	0.	0.
R	0.	0.	0.	192.	0.	0.	0.	165.	0.	0.
90 A	0.	0.	0.	96.	0.	73.	0.	83.	0.	0.
L	0.	0.	0.	0.	0.	145.	0.	0.	0.	0.
R	0.	0.	0.	131.	0.	0.	0.	238.	0.	0.
100 A	0.	0.	0.	66.	0.	59.	0.	119.	0.	0.
L	0.	0.	0.	0.	0.	117.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	207.	0.	0.
110 A	0.	0.	0.	0.	0.	83.	0.	104.	0.	0.
L	0.	0.	0.	0.	0.	165.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	13.	0.	165.	0.	0.
120 A	0.	0.	0.	0.	0.	82.	0.	83.	0.	0.
L	0.	0.	0.	0.	0.	150.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 43 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	49.	0.	0.	0.	0.
130 A	0.	0.	0.	0.	0.	98.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	147.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	156.	0.	0.	0.	0.
140 A	0.	0.	0.	0.	0.	153.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	150.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	320.	0.	0.
150 A	0.	0.	0.	0.	0.	135.	0.	160.	0.	0.
L	0.	0.	0.	0.	0.	120.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	148.	0.	1832.	0.	0.
160 A	0.	0.	0.	0.	0.	148.	0.	916.	0.	0.
L	0.	0.	0.	0.	0.	147.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	164.	0.	432.	0.	0.
170 A	0.	0.	0.	0.	0.	139.	0.	216.	0.	0.
L	0.	0.	0.	0.	0.	113.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	59.	0.	149.	0.	0.
180 A	0.	0.	0.	0.	0.	66.	0.	90.	0.	0.
L	0.	0.	0.	0.	0.	72.	0.	30.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 43 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.16	0.	0.	0.	0.55	0.	0.
0 A	0.	0.	0.	0.16	0.	0.	0.	0.45	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.	0.30	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.	1.71	0.	0.
10 A	0.	0.	0.	0.16	0.	0.	0.	0.75	0.	0.
L	0.	0.	0.	0.15	0.	0.	0.	0.17	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.	11.44	0.	0.
20 A	0.	0.	0.	0.16	0.	0.	0.	5.95	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.	8.39	0.	0.
30 A	0.	0.	0.	0.19	0.	0.	0.	2.71	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.	0.18	0.	0.
R	0.	0.	0.	0.20	0.	0.	0.	1.34	0.	0.
40 A	0.	0.	0.	0.20	0.	0.	0.	0.84	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.20	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.	0.34	0.	0.
50 A	0.	0.	0.	0.17	0.	0.51	0.	0.32	0.	0.
L	0.	0.	0.	0.	0.	0.51	0.	0.29	0.	0.
R	0.	0.	0.	0.24	0.	0.	0.	0.28	0.	0.
60 A	0.	0.	0.	0.24	0.	0.40	0.	0.29	0.	0.
L	0.	0.	0.	0.	0.	0.40	0.	0.34	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.29	0.	0.	0.	0.22	0.23	0.
70 A	0.	0.	0.	0.29	0.	0.21	0.	0.22	0.23	0.
L	0.	0.	0.	0.	0.	0.21	0.	0.	0.	0.
R	0.	0.	0.	0.18	0.	0.	0.	0.15	0.	0.
80 A	0.	0.	0.	0.18	0.	0.18	0.	0.15	0.	0.
L	0.	0.	0.	0.	0.	0.18	0.	0.	0.	0.
R	0.	0.	0.	0.21	0.	0.	0.	0.29	0.	0.
90 A	0.	0.	0.	0.21	0.	0.29	0.	0.29	0.	0.
L	0.	0.	0.	0.	0.	0.29	0.	0.	0.	0.
R	0.	0.	0.	0.29	0.	0.	0.	0.20	0.	0.
100 A	0.	0.	0.	0.29	0.	0.31	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.31	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.29	0.	0.
110 A	0.	0.	0.	0.	0.	0.19	0.	0.29	0.	0.
L	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.42	0.	0.20	0.	0.
120 A	0.	0.	0.	0.	0.	0.16	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.14	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 44 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

95

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.45	0.	0.	0.	0.
130 A	0.	0.	0.	0.	0.	0.25	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.30	0.	0.	0.	0.
140 A	0.	0.	0.	0.	0.	0.26	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.21	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.20	0.	0.25	0.	0.
150 A	0.	0.	0.	0.	0.	0.19	0.	0.25	0.	0.
L	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.22	0.	0.20	0.	0.
160 A	0.	0.	0.	0.	0.	0.23	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.24	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.27	0.	0.18	0.	0.
170 A	0.	0.	0.	0.	0.	0.30	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.	0.35	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.31	0.	0.21	0.	0.
180 A	0.	0.	0.	0.	0.	0.34	0.	0.21	0.	0.
L	0.	0.	0.	0.	0.	0.36	0.	0.21	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 44 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.12	0.	0.	0.	0.25	0.	0.
0 A	0.	0.	0.	0.16	0.	0.	0.	0.30	0.	0.
L	0.	0.	0.	0.11	0.	0.	0.	0.16	0.	0.
R	0.	0.	0.	0.12	0.	0.	0.	0.71	0.	0.
10 A	0.	0.	0.	0.17	0.	0.	0.	0.72	0.	0.
L	0.	0.	0.	0.12	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.12	0.	0.	0.	6.69	0.	0.
20 A	0.	0.	0.	0.17	0.	0.	0.	6.69	0.	0.
L	0.	0.	0.	0.11	0.	0.	0.	0.11	0.	0.
R	0.	0.	0.	0.15	0.	0.	0.	6.92	0.	0.
30 A	0.	0.	0.	0.20	0.	0.	0.	6.92	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.	0.13	0.	0.
R	0.	0.	0.	0.13	0.	0.	0.	0.58	0.	0.
40 A	0.	0.	0.	0.13	0.	0.	0.	0.60	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.13	0.	0.	0.	0.21	0.	0.
50 A	0.	0.	0.	0.13	0.	0.13	0.	0.26	0.	0.
L	0.	0.	0.	0.	0.	0.13	0.	0.16	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.	0.18	0.	0.
60 A	0.	0.	0.	0.16	0.	0.16	0.	0.23	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.15	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.18	0.	0.	0.	0.16	0.17	0.
70 A	0.	0.	0.	0.18	0.	0.16	0.	0.16	0.17	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.	0.	0.
R	0.	0.	0.	0.14	0.	0.	0.	0.11	0.	0.
80 A	0.	0.	0.	0.14	0.	0.13	0.	0.11	0.	0.
L	0.	0.	0.	0.	0.	0.13	0.	0.	0.	0.
R	0.	0.	0.	0.15	0.	0.	0.	0.20	0.	0.
90 A	0.	0.	0.	0.15	0.	0.16	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.	0.15	0.	0.
100 A	0.	0.	0.	0.17	0.	0.16	0.	0.15	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.
110 A	0.	0.	0.	0.	0.	0.15	0.	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.09	0.	0.14	0.	0.
120 A	0.	0.	0.	0.	0.	0.15	0.	0.14	0.	0.
L	0.	0.	0.	0.	0.	0.12	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 45 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.22	0.	0.	0.	0.
130 A	0.	0.	0.	0.	0.	0.26	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.18	0.	0.	0.	0.
140 A	0.	0.	0.	0.	0.	0.23	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.	0.16	0.	0.
150 A	0.	0.	0.	0.	0.	0.20	0.	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.14	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.15	0.	0.
160 A	0.	0.	0.	0.	0.	0.21	0.	0.15	0.	0.
L	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.14	0.	0.
170 A	0.	0.	0.	0.	0.	0.22	0.	0.14	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.16	0.	0.
180 A	0.	0.	0.	0.	0.	0.22	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.13	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 45 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	240.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	313.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	277.	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	269.	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	310.	0.	0.
60	0.	0.	0.	1649.	0.	111.	0.	224.	0.	0.
70	0.	0.	0.	552.	0.	180.	0.	135.	30.	0.
80	0.	0.	0.	277.	0.	195.	0.	165.	0.	0.
90	0.	0.	0.	323.	0.	188.	0.	194.	0.	0.
100	0.	0.	0.	0.	0.	194.	0.	254.	0.	0.
110	0.	0.	0.	0.	0.	250.	0.	192.	0.	0.
120	0.	0.	0.	0.	0.	430.	0.	120.	0.	0.
130	0.	0.	0.	0.	0.	802.	0.	0.	0.	0.
140	0.	0.	0.	0.	0.	186.	0.	25.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	1858.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	880.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 46

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.45	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	1.94	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	5.76	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	0.96	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	0.33	0.	0.
60	0.	0.	0.	0.17	0.	0.50	0.	0.29	0.	0.
70	0.	0.	0.	0.20	0.	0.28	0.	0.22	0.23	0.
80	0.	0.	0.	0.26	0.	0.18	0.	0.17	0.	0.
90	0.	0.	0.	0.24	0.	0.31	0.	0.26	0.	0.
100	0.	0.	0.	0.	0.	0.23	0.	0.23	0.	0.
110	0.	0.	0.	0.	0.	0.18	0.	0.28	0.	0.
120	0.	0.	0.	0.	0.	0.25	0.	0.18	0.	0.
130	0.	0.	0.	0.	0.	0.24	0.	0.	0.	0.
140	0.	0.	0.	0.	0.	0.33	0.	0.42	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.21	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.19	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 47

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 2 AT 0020 AST

INSOL ANGLE 93.4 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 23.6 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.	0.33	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	0.	2.97	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	0.	8.06	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	0.	0.89	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	0.	0.20	0.	0.
60	0.	0.	0.	0.12	0.	0.13	0.	0.18	0.	0.	0.
70	0.	0.	0.	0.14	0.	0.18	0.	0.16	0.17	0.	0.
80	0.	0.	0.	0.17	0.	0.14	0.	0.12	0.	0.	0.
90	0.	0.	0.	0.16	0.	0.16	0.	0.20	0.	0.	0.
100	0.	0.	0.	0.	0.	0.16	0.	0.16	0.	0.	0.
110	0.	0.	0.	0.	0.	0.17	0.	0.15	0.	0.	0.
120	0.	0.	0.	0.	0.	0.18	0.	0.13	0.	0.	0.
130	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.	0.
140	0.	0.	0.	0.	0.	0.16	0.	0.14	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.15	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 48

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	104.	0.	0.	30.	58.	0.	0.
0 A	0.	0.	0.	104.	0.	0.	15.	97.	0.	0.
L	0.	0.	0.	104.	0.	0.	0.	135.	0.	0.
R	0.	0.	0.	134.	0.	0.	75.	281.	0.	0.
10 A	0.	0.	0.	149.	0.	0.	38.	261.	0.	0.
L	0.	0.	0.	164.	0.	0.	0.	240.	0.	0.
R	0.	0.	0.	163.	0.	0.	90.	210.	0.	0.
20 A	0.	0.	0.	149.	0.	0.	45.	195.	0.	0.
L	0.	0.	0.	135.	0.	0.	0.	180.	0.	0.
R	0.	0.	0.	89.	0.	0.	105.	283.	0.	0.
30 A	0.	0.	0.	149.	0.	0.	53.	202.	0.	0.
L	0.	0.	0.	209.	0.	0.	0.	120.	0.	0.
R	0.	0.	0.	165.	0.	0.	135.	210.	0.	0.
40 A	0.	0.	0.	120.	0.	0.	68.	105.	0.	0.
L	0.	0.	0.	75.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	163.	0.	0.	135.	225.	0.	0.
50 A	0.	0.	0.	187.	0.	0.	68.	113.	0.	0.
L	0.	0.	0.	210.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	58.	0.	0.	119.	300.	0.	0.
60 A	0.	0.	0.	74.	0.	0.	60.	150.	0.	0.
L	0.	0.	0.	89.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 49

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	25.	0.	0.	75.	270.	0.	0.
70 A	0.	0.	0.	13.	0.	0.	38.	135.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	105.	345.	0.	0.
80 A	0.	0.	0.	0.	23.	30.	53.	173.	0.	0.
L	0.	0.	0.	0.	45.	60.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	105.	15.	0.	0.
90 A	0.	0.	0.	0.	83.	75.	53.	8.	0.	0.
L	0.	0.	0.	0.	165.	150.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	135.	0.	0.	0.
100 A	0.	0.	0.	0.	75.	53.	68.	0.	0.	0.
L	0.	0.	0.	0.	149.	105.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	150.	13.	0.	0.
110 A	0.	0.	0.	0.	83.	89.	75.	81.	0.	0.
L	0.	0.	0.	0.	165.	178.	0.	148.	0.	0.
R	0.	0.	0.	0.	0.	0.	105.	134.	0.	0.
120 A	0.	0.	0.	0.	75.	75.	53.	153.	0.	0.
L	0.	0.	0.	0.	149.	149.	0.	172.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 49 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	135.	176.	0.	0.
130 A	0.	0.	0.	0.	82.	105.	68.	186.	0.	0.
L	0.	0.	0.	0.	163.	209.	0.	195.	0.	0.
R	0.	0.	0.	0.	0.	0.	105.	175.	0.	0.
140 A	0.	0.	0.	0.	97.	105.	53.	192.	0.	0.
L	0.	0.	0.	0.	194.	210.	0.	209.	0.	0.
R	0.	0.	0.	0.	0.	0.	147.	194.	0.	0.
150 A	0.	0.	0.	0.	90.	90.	140.	185.	0.	0.
L	0.	0.	0.	0.	179.	179.	132.	175.	0.	0.
R	0.	0.	0.	0.	0.	0.	116.	87.	29.	0.
160 A	0.	0.	0.	0.	104.	83.	121.	125.	15.	0.
L	0.	0.	0.	0.	208.	165.	126.	163.	0.	0.
R	0.	0.	0.	0.	0.	0.	60.	222.	0.	0.
170 A	0.	0.	0.	0.	0.	0.	97.	239.	0.	0.
L	0.	0.	0.	0.	0.	0.	134.	255.	0.	0.
R	0.	0.	0.	0.	0.	0.	75.	150.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	67.	113.	0.	0.
L	0.	0.	0.	0.	0.	0.	59.	75.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 49 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.33	0.	0.	0.60	3.23	0.	0.
0 A	0.	0.	0.	0.35	0.	0.	0.60	2.34	0.	0.
L	0.	0.	0.	0.37	0.	0.	0.	1.95	0.	0.
R	0.	0.	0.	0.36	0.	0.	0.96	9.46	0.	0.
10 A	0.	0.	0.	0.33	0.	0.	0.96	5.58	0.	0.
L	0.	0.	0.	0.31	0.	0.	0.	1.05	0.	0.
R	0.	0.	0.	0.34	0.	0.	1.77	26.73	0.	0.
20 A	0.	0.	0.	0.29	0.	0.	1.77	14.76	0.	0.
L	0.	0.	0.	0.22	0.	0.	0.	0.81	0.	0.
R	0.	0.	0.	0.21	0.	0.	3.49	18.21	0.	0.
30 A	0.	0.	0.	0.21	0.	0.	3.49	12.98	0.	0.
L	0.	0.	0.	0.21	0.	0.	0.	0.64	0.	0.
R	0.	0.	0.	0.20	0.	0.	3.83	4.91	0.	0.
40 A	0.	0.	0.	0.21	0.	0.	3.83	4.91	0.	0.
L	0.	0.	0.	0.21	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.23	0.	0.	1.83	1.92	0.	0.
50 A	0.	0.	0.	0.20	0.	0.	1.83	1.92	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.40	0.	0.	0.81	0.96	0.	0.
60 A	0.	0.	0.	0.26	0.	0.	0.81	0.96	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 50

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0024 AST						INSOL ANGLE 93.3 DEG				
SPECTRAL BAND 2.50 TO 2.80 MICRONS						ELEVATION 24.4 KM				
VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.33	0.	0.	0.47	0.59	0.	0.
70 A	0.	0.	0.	0.33	0.	0.	0.47	0.59	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.42	0.19	0.	0.
80 A	0.	0.	0.	0.	0.15	0.16	0.42	0.19	0.	0.
L	0.	0.	0.	0.	0.15	0.16	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.59	0.13	0.	0.
90 A	0.	0.	0.	0.	0.16	0.17	0.59	0.13	0.	0.
L	0.	0.	0.	0.	0.16	0.17	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.67	0.	0.	0.
100 A	0.	0.	0.	0.	0.27	0.23	0.67	0.	0.	0.
L	0.	0.	0.	0.	0.27	0.23	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.20	0.40	0.	0.
110 A	0.	0.	0.	0.	0.22	0.23	0.20	0.23	0.	0.
L	0.	0.	0.	0.	0.22	0.23	0.	0.22	0.	0.
R	0.	0.	0.	0.	0.	0.	0.16	0.35	0.	0.
120 A	0.	0.	0.	0.	0.25	0.23	0.16	0.32	0.	0.
L	0.	0.	0.	0.	0.25	0.23	0.	0.30	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 50 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.16	0.27	0.	0.
130 A	0.	0.	0.	0.	0.23	0.22	0.16	0.24	0.	0.
L	0.	0.	0.	0.	0.23	0.22	0.	0.22	0.	0.
R	0.	0.	0.	0.	0.	0.	0.16	0.25	0.	0.
140 A	0.	0.	0.	0.	0.20	0.20	0.16	0.23	0.	0.
L	0.	0.	0.	0.	0.20	0.20	0.	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.	0.23	0.26	0.	0.
150 A	0.	0.	0.	0.	0.27	0.25	0.28	0.25	0.	0.
L	0.	0.	0.	0.	0.27	0.25	0.33	0.24	0.	0.
R	0.	0.	0.	0.	0.	0.	0.25	0.28	0.34	0.
160 A	0.	0.	0.	0.	0.20	0.21	0.29	0.19	0.34	0.
L	0.	0.	0.	0.	0.20	0.21	0.32	0.15	0.	0.
R	0.	0.	0.	0.	0.	0.	0.20	0.24	0.	0.
170 A	0.	0.	0.	0.	0.	0.	0.24	0.23	0.	0.
L	0.	0.	0.	0.	0.	0.	0.26	0.22	0.	0.
R	0.	0.	0.	0.	0.	0.	0.19	0.20	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.19	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.	0.20	0.21	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 50 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.17	0.	0.	0.18	0.40	0.	0.
0 A	0.	0.	0.	0.26	0.	0.	0.18	0.59	0.	0.
L	0.	0.	0.	0.20	0.	0.	0.	0.44	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.29	4.47	0.	0.
10 A	0.	0.	0.	0.28	0.	0.	0.29	4.47	0.	0.
L	0.	0.	0.	0.21	0.	0.	0.	0.24	0.	0.
R	0.	0.	0.	0.21	0.	0.	0.38	2.56	0.	0.
20 A	0.	0.	0.	0.26	0.	0.	0.38	2.57	0.	0.
L	0.	0.	0.	0.15	0.	0.	0.	0.20	0.	0.
R	0.	0.	0.	0.20	0.	0.	0.75	7.26	0.	0.
30 A	0.	0.	0.	0.26	0.	0.	0.75	7.27	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.	0.19	0.	0.
R	0.	0.	0.	0.15	0.	0.	0.61	2.17	0.	0.
40 A	0.	0.	0.	0.22	0.	0.	0.61	2.17	0.	0.
L	0.	0.	0.	0.15	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.49	0.46	0.	0.
50 A	0.	0.	0.	0.21	0.	0.	0.49	0.46	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.20	0.	0.	0.26	0.29	0.	0.
60 A	0.	0.	0.	0.23	0.	0.	0.26	0.29	0.	0.
L	0.	0.	0.	0.12	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 51

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.13	0.	0.	0.19	0.23	0.	0.
70 A	0.	0.	0.	0.13	0.	0.	0.19	0.23	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.19	0.14	0.	0.
80 A	0.	0.	0.	0.	0.12	0.11	0.19	0.14	0.	0.
L	0.	0.	0.	0.	0.12	0.11	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.22	0.08	0.	0.
90 A	0.	0.	0.	0.	0.13	0.11	0.22	0.08	0.	0.
L	0.	0.	0.	0.	0.13	0.11	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.58	0.	0.	0.
100 A	0.	0.	0.	0.	0.16	0.16	0.58	0.	0.	0.
L	0.	0.	0.	0.	0.16	0.16	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.15	0.16	0.	0.
110 A	0.	0.	0.	0.	0.15	0.15	0.15	0.22	0.	0.
L	0.	0.	0.	0.	0.15	0.15	0.	0.15	0.	0.
R	0.	0.	0.	0.	0.	0.	0.12	0.16	0.	0.
120 A	0.	0.	0.	0.	0.15	0.15	0.12	0.23	0.	0.
L	0.	0.	0.	0.	0.15	0.15	0.	0.17	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 51 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG .

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.13	0.17	0.	0.
130 A	0.	0.	0.	0.	0.15	0.15	0.13	0.24	0.	0.
L	0.	0.	0.	0.	0.15	0.15	0.	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.	0.13	0.16	0.	0.
140 A	0.	0.	0.	0.	0.15	0.15	0.13	0.22	0.	0.
L	0.	0.	0.	0.	0.15	0.15	0.	0.14	0.	0.
R	0.	0.	0.	0.	0.	0.	0.16	0.16	0.	0.
150 A	0.	0.	0.	0.	0.17	0.16	0.22	0.23	0.	0.
L	0.	0.	0.	0.	0.17	0.16	0.15	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.	0.15	0.17	0.19	0.
160 A	0.	0.	0.	0.	0.14	0.15	0.22	0.21	0.19	0.
L	0.	0.	0.	0.	0.14	0.15	0.17	0.13	0.	0.
R	0.	0.	0.	0.	0.	0.	0.16	0.15	0.	0.
170 A	0.	0.	0.	0.	0.	0.	0.21	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.	0.15	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.	0.13	0.14	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.19	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.	0.14	0.13	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 51 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	358.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	611.	0.	0.
30	0.	0.	0.	0.	0.	0.	180.	463.	0.	0.
40	0.	0.	0.	0.	0.	0.	165.	255.	0.	0.
50	0.	0.	0.	0.	0.	0.	180.	255.	0.	0.
60	0.	0.	0.	1237.	0.	0.	104.	300.	0.	0.
70	0.	0.	0.	625.	0.	0.	135.	270.	0.	0.
80	0.	0.	0.	25.	60.	60.	120.	360.	0.	0.
90	0.	0.	0.	0.	194.	240.	150.	0.	0.	0.
100	0.	0.	0.	0.	270.	163.	135.	0.	0.	0.
110	0.	0.	0.	0.	267.	269.	135.	217.	0.	0.
120	0.	0.	0.	0.	329.	388.	195.	340.	0.	0.
130	0.	0.	0.	0.	297.	285.	179.	458.	0.	0.
140	0.	0.	0.	0.	0.	0.	506.	367.	0.	0.
150	0.	0.	0.	0.	0.	0.	269.	387.	29.	0.
160	0.	0.	0.	0.	0.	0.	0.	774.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 52

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	2.82	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	9.76	0.	0.
30	0.	0.	0.	0.	0.	0.	1.19	14.30	0.	0.
40	0.	0.	0.	0.	0.	0.	3.64	6.69	0.	0.
50	0.	0.	0.	0.	0.	0.	2.80	2.01	0.	0.
60	0.	0.	0.	0.28	0.	0.	1.12	0.96	0.	0.
70	0.	0.	0.	0.22	0.	0.	0.56	0.59	0.	0.
80	0.	0.	0.	0.33	0.14	0.16	0.43	0.19	0.	0.
90	0.	0.	0.	0.	0.19	0.19	0.51	0.	0.	0.
100	0.	0.	0.	0.	0.24	0.23	0.58	0.	0.	0.
110	0.	0.	0.	0.	0.24	0.23	0.19	0.26	0.	0.
120	0.	0.	0.	0.	0.22	0.21	0.17	0.30	0.	0.
130	0.	0.	0.	0.	0.22	0.23	0.20	0.23	0.	0.
140	0.	0.	0.	0.	0.	0.	0.29	0.25	0.	0.
150	0.	0.	0.	0.	0.	0.	0.21	0.21	0.34	0.
160	0.	0.	0.	0.	0.	0.	0.	0.22	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 53

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 1 AT 0024 AST

INSOL ANGLE 93.3 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 24.4 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	1.65	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	10.14	0.	0.
30	0.	0.	0.	0.	0.	0.	0.50	11.87	0.	0.
40	0.	0.	0.	0.	0.	0.	0.84	3.00	0.	0.
50	0.	0.	0.	0.	0.	0.	0.86	0.51	0.	0.
60	0.	0.	0.	0.20	0.	0.	0.31	0.29	0.	0.
70	0.	0.	0.	0.16	0.	0.	0.23	0.23	0.	0.
80	0.	0.	0.	0.13	0.11	0.11	0.19	0.14	0.	0.
90	0.	0.	0.	0.	0.14	0.13	0.24	0.	0.	0.
100	0.	0.	0.	0.	0.16	0.16	0.62	0.	0.	0.
110	0.	0.	0.	0.	0.16	0.15	0.14	0.17	0.	0.
120	0.	0.	0.	0.	0.15	0.15	0.13	0.17	0.	0.
130	0.	0.	0.	0.	0.15	0.15	0.16	0.16	0.	0.
140	0.	0.	0.	0.	0.	0.	0.16	0.16	0.	0.
150	0.	0.	0.	0.	0.	0.	0.14	0.16	0.19	0.
160	0.	0.	0.	0.	0.	0.	0.	0.15	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 54

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	75.	0.	0.	90.	75.	0.	0.
0 A	0.	0.	0.	82.	0.	0.	90.	75.	0.	0.
L	0.	0.	0.	88.	0.	0.	90.	75.	0.	0.
R	0.	0.	0.	45.	0.	0.	210.	150.	0.	0.
10 A	0.	0.	0.	120.	0.	0.	216.	173.	0.	0.
L	0.	0.	0.	195.	0.	0.	222.	195.	0.	0.
R	0.	0.	0.	0.	0.	0.	195.	160.	0.	0.
20 A	0.	0.	0.	118.	0.	0.	218.	170.	0.	0.
L	0.	0.	0.	235.	0.	0.	240.	180.	0.	0.
R	0.	0.	0.	0.	0.	0.	210.	135.	0.	0.
30 A	0.	0.	0.	116.	0.	0.	195.	150.	0.	0.
L	0.	0.	0.	231.	0.	0.	180.	165.	0.	0.
R	0.	0.	0.	0.	0.	0.	180.	150.	0.	0.
40 A	0.	0.	0.	135.	0.	0.	173.	165.	0.	0.
L	0.	0.	0.	269.	0.	0.	165.	180.	0.	0.
R	0.	0.	0.	0.	0.	45.	195.	165.	0.	0.
50 A	0.	0.	0.	90.	0.	23.	98.	165.	0.	0.
L	0.	0.	0.	179.	0.	0.	0.	165.	0.	0.
R	0.	0.	0.	0.	0.	135.	180.	120.	0.	0.
60 A	0.	0.	0.	135.	0.	68.	90.	134.	0.	0.
L	0.	0.	0.	270.	0.	0.	0.	148.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	135.	180.	0.	0.	0.
70 A	0.	0.	0.	142.	0.	68.	90.	112.	0.	0.
L	0.	0.	0.	284.	0.	0.	0.	223.	0.	0.
R	0.	0.	0.	0.	0.	120.	105.	0.	0.	0.
80 A	0.	0.	0.	90.	0.	60.	53.	30.	0.	0.
L	0.	0.	0.	180.	0.	0.	0.	60.	0.	0.
R	0.	0.	0.	0.	0.	180.	135.	0.	0.	0.
90 A	0.	0.	0.	128.	0.	90.	68.	0.	0.	0.
L	0.	0.	0.	255.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	60.	0.	105.	0.	0.
100 A	0.	0.	0.	173.	0.	30.	0.	53.	0.	0.
L	0.	0.	0.	345.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	129.	0.	130.	0.	0.
110 A	0.	0.	0.	30.	0.	65.	0.	65.	0.	0.
L	0.	0.	0.	60.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	127.	0.	149.	0.	0.
120 A	0.	0.	0.	0.	0.	64.	0.	75.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 55 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.	0.	102.	0.	240.	0.	0.
130	A	0.	0.	0.	0.	0.	71.	0.	120.	0.	0.
	L	0.	0.	0.	0.	0.	39.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	150.	0.	251.	0.	0.
140	A	0.	0.	0.	0.	0.	124.	0.	126.	0.	0.
	L	0.	0.	0.	0.	0.	98.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	165.	0.	207.	0.	0.
150	A	0.	0.	0.	0.	0.	180.	0.	200.	0.	0.
	L	0.	0.	0.	0.	0.	195.	0.	192.	0.	0.
	R	0.	0.	0.	0.	0.	120.	0.	270.	0.	0.
160	A	0.	0.	0.	0.	0.	120.	0.	300.	15.	0.
	L	0.	0.	0.	0.	0.	120.	0.	330.	29.	0.
	R	0.	0.	0.	0.	0.	118.	0.	224.	0.	0.
170	A	0.	0.	0.	0.	0.	154.	0.	234.	0.	0.
	L	0.	0.	0.	0.	0.	189.	0.	244.	0.	0.
	R	0.	0.	0.	0.	0.	88.	0.	165.	0.	0.
180	A	0.	0.	0.	0.	0.	85.	0.	135.	0.	0.
	L	0.	0.	0.	0.	0.	82.	0.	105.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 55 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.20	0.	0.	0.28	1.18	0.	0.
0 A	0.	0.	0.	0.19	0.	0.	0.24	0.85	0.	0.
L	0.	0.	0.	0.19	0.	0.	0.20	0.52	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.41	4.65	0.	0.
10 A	0.	0.	0.	0.17	0.	0.	0.29	2.18	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.17	0.28	0.	0.
R	0.	0.	0.	0.	0.	0.	0.51	17.29	0.	0.
20 A	0.	0.	0.	0.26	0.	0.	0.32	8.28	0.	0.
L	0.	0.	0.	0.26	0.	0.	0.17	0.27	0.	0.
R	0.	0.	0.	0.	0.	0.	0.30	5.63	0.	0.
30 A	0.	0.	0.	0.27	0.	0.	0.27	2.71	0.	0.
L	0.	0.	0.	0.27	0.	0.	0.24	0.32	0.	0.
R	0.	0.	0.	0.	0.	0.	0.27	1.37	0.	0.
40 A	0.	0.	0.	0.19	0.	0.	0.26	0.77	0.	0.
L	0.	0.	0.	0.19	0.	0.	0.24	0.26	0.	0.
R	0.	0.	0.	0.	0.	0.19	0.18	0.39	0.	0.
50 A	0.	0.	0.	0.20	0.	0.19	0.18	0.34	0.	0.
L	0.	0.	0.	0.20	0.	0.	0.	0.28	0.	0.
R	0.	0.	0.	0.	0.	0.18	0.16	0.24	0.	0.
60 A	0.	0.	0.	0.16	0.	0.18	0.16	0.23	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.	0.22	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.16	0.17	0.	0.	0.
70 A	0.	0.	0.	0.18	0.	0.16	0.17	0.24	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.	0.24	0.	0.
R	0.	0.	0.	0.	0.	0.17	0.17	0.	0.	0.
80 A	0.	0.	0.	0.21	0.	0.17	0.17	0.16	0.	0.
L	0.	0.	0.	0.21	0.	0.	0.	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.20	0.17	0.	0.	0.
90 A	0.	0.	0.	0.17	0.	0.20	0.17	0.	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.21	0.	0.26	0.	0.
100 A	0.	0.	0.	0.16	0.	0.21	0.	0.26	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.30	0.	0.24	0.	0.
110 A	0.	0.	0.	0.18	0.	0.30	0.	0.24	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.29	0.	0.20	0.	0.
120 A	0.	0.	0.	0.	0.	0.29	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 56 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.19	0.	0.22	0.	0.
130 A	0.	0.	0.	0.	0.	0.29	0.	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.52	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.20	0.	0.25	0.	0.
140 A	0.	0.	0.	0.	0.	0.28	0.	0.25	0.	0.
L	0.	0.	0.	0.	0.	0.41	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.19	0.	0.23	0.	0.
150 A	0.	0.	0.	0.	0.	0.19	0.	0.24	0.	0.
L	0.	0.	0.	0.	0.	0.19	0.	0.24	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.	0.20	0.	0.
160 A	0.	0.	0.	0.	0.	0.15	0.	0.21	0.33	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.21	0.33	0.
R	0.	0.	0.	0.	0.	0.18	0.	0.19	0.	0.
170 A	0.	0.	0.	0.	0.	0.24	0.	0.21	0.	0.
L	0.	0.	0.	0.	0.	0.28	0.	0.23	0.	0.
R	0.	0.	0.	0.	0.	0.32	0.	0.15	0.	0.
180 A	0.	0.	0.	0.	0.	0.34	0.	0.17	0.	0.
L	0.	0.	0.	0.	0.	0.37	0.	0.20	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 56 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.13	0.	0.	0.18	0.50	0.	0.
0 A	0.	0.	0.	0.20	0.	0.	0.24	0.53	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.16	0.17	0.	0.
R	0.	0.	0.	0.14	0.	0.	0.22	2.28	0.	0.
10 A	0.	0.	0.	0.20	0.	0.	0.26	2.28	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.13	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.	0.21	2.99	0.	0.
20 A	0.	0.	0.	0.16	0.	0.	0.24	2.99	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.12	0.17	0.	0.
R	0.	0.	0.	0.	0.	0.	0.17	2.73	0.	0.
30 A	0.	0.	0.	0.17	0.	0.	0.24	2.73	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.17	0.18	0.	0.
R	0.	0.	0.	0.	0.	0.	0.18	0.64	0.	0.
40 A	0.	0.	0.	0.14	0.	0.	0.25	0.67	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.17	0.20	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.14	0.23	0.	0.
50 A	0.	0.	0.	0.14	0.	0.14	0.14	0.32	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.	0.22	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.11	0.16	0.	0.
60 A	0.	0.	0.	0.13	0.	0.14	0.11	0.21	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.	0.14	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 57

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.13	0.13	0.	0.	0.
70 A	0.	0.	0.	0.13	0.	0.13	0.13	0.16	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.13	0.13	0.	0.	0.
80 A	0.	0.	0.	0.14	0.	0.13	0.13	0.11	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.	0.11	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.13	0.	0.	0.
90 A	0.	0.	0.	0.12	0.	0.14	0.13	0.	0.	0.
L	0.	0.	0.	0.12	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.	0.17	0.	0.
100 A	0.	0.	0.	0.12	0.	0.14	0.	0.17	0.	0.
L	0.	0.	0.	0.12	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.18	0.	0.15	0.	0.
110 A	0.	0.	0.	0.11	0.	0.18	0.	0.15	0.	0.
L	0.	0.	0.	0.11	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.17	0.	0.15	0.	0.
120 A	0.	0.	0.	0.	0.	0.17	0.	0.15	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 57 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.15	0.	0.15	0.	0.
130 A	0.	0.	0.	0.	0.	0.19	0.	0.15	0.	0.
L	0.	0.	0.	0.	0.	0.11	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.13	0.	0.16	0.	0.
140 A	0.	0.	0.	0.	0.	0.22	0.	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.17	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.16	0.	0.
150 A	0.	0.	0.	0.	0.	0.20	0.	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.14	0.	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.10	0.	0.14	0.	0.
160 A	0.	0.	0.	0.	0.	0.15	0.	0.21	0.15	0.
L	0.	0.	0.	0.	0.	0.11	0.	0.15	0.15	0.
R	0.	0.	0.	0.	0.	0.14	0.	0.13	0.	0.
170 A	0.	0.	0.	0.	0.	0.21	0.	0.21	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.18	0.	0.12	0.	0.
180 A	0.	0.	0.	0.	0.	0.25	0.	0.19	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.15	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 57 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	165.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	538.	0.	0.
30	0.	0.	0.	0.	0.	0.	897.	387.	0.	0.
40	0.	0.	0.	0.	0.	0.	585.	345.	0.	0.
50	0.	0.	0.	0.	0.	0.	405.	330.	0.	0.
60	0.	0.	0.	884.	0.	120.	210.	298.	0.	0.
70	0.	0.	0.	628.	0.	180.	240.	223.	0.	0.
80	0.	0.	0.	539.	0.	165.	150.	60.	0.	0.
90	0.	0.	0.	630.	0.	195.	90.	0.	0.	0.
100	0.	0.	0.	30.	0.	115.	0.	120.	0.	0.
110	0.	0.	0.	0.	0.	162.	0.	130.	0.	0.
120	0.	0.	0.	0.	0.	354.	0.	179.	0.	0.
130	0.	0.	0.	0.	0.	748.	0.	313.	0.	0.
140	0.	0.	0.	0.	0.	358.	0.	310.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	687.	29.	0.
160	0.	0.	0.	0.	0.	0.	0.	873.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 58

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.80	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	4.30	0.	0.
30	0.	0.	0.	0.	0.	0.	0.30	5.21	0.	0.
40	0.	0.	0.	0.	0.	0.	0.27	0.83	0.	0.
50	0.	0.	0.	0.	0.	0.	0.24	0.37	0.	0.
60	0.	0.	0.	0.22	0.	0.19	0.16	0.23	0.	0.
70	0.	0.	0.	0.19	0.	0.17	0.16	0.24	0.	0.
80	0.	0.	0.	0.19	0.	0.17	0.17	0.16	0.	0.
90	0.	0.	0.	0.17	0.	0.20	0.16	0.	0.	0.
100	0.	0.	0.	0.18	0.	0.29	0.	0.26	0.	0.
110	0.	0.	0.	0.	0.	0.31	0.	0.23	0.	0.
120	0.	0.	0.	0.	0.	0.27	0.	0.20	0.	0.
130	0.	0.	0.	0.	0.	0.19	0.	0.22	0.	0.
140	0.	0.	0.	0.	0.	0.29	0.	0.26	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.22	0.33	0.
160	0.	0.	0.	0.	0.	0.	0.	0.19	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 59

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 7 AT 0034 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 26.6 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.50	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	6.35	0.	0.
30	0.	0.	0.	0.	0.	0.	0.22	6.51	0.	0.
40	0.	0.	0.	0.	0.	0.	0.18	0.83	0.	0.
50	0.	0.	0.	0.	0.	0.	0.17	0.24	0.	0.
60	0.	0.	0.	0.16	0.	0.14	0.12	0.15	0.	0.
70	0.	0.	0.	0.14	0.	0.14	0.12	0.16	0.	0.
80	0.	0.	0.	0.13	0.	0.13	0.13	0.11	0.	0.
90	0.	0.	0.	0.12	0.	0.13	0.12	0.	0.	0.
100	0.	0.	0.	0.11	0.	0.18	0.	0.17	0.	0.
110	0.	0.	0.	0.	0.	0.18	0.	0.15	0.	0.
120	0.	0.	0.	0.	0.	0.19	0.	0.15	0.	0.
130	0.	0.	0.	0.	0.	0.14	0.	0.15	0.	0.
140	0.	0.	0.	0.	0.	0.17	0.	0.17	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.15	0.15	0.
160	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 60

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	60.	0.	90.	0.	120.	0.	0.
0 A	0.	0.	0.	60.	0.	68.	0.	105.	0.	0.
L	0.	0.	0.	60.	0.	45.	0.	90.	0.	0.
R	0.	0.	0.	0.	0.	135.	0.	225.	0.	0.
10 A	0.	0.	0.	53.	0.	68.	0.	240.	0.	0.
L	0.	0.	0.	105.	0.	0.	0.	255.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	300.	0.	0.
20 A	0.	0.	8.	68.	0.	75.	0.	270.	0.	0.
L	0.	0.	15.	135.	0.	0.	0.	240.	0.	0.
R	0.	0.	0.	0.	0.	120.	0.	240.	0.	0.
30 A	0.	0.	0.	68.	0.	60.	0.	233.	0.	0.
L	0.	0.	0.	135.	0.	0.	0.	225.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	120.	0.	0.
40 A	0.	0.	0.	83.	0.	90.	0.	173.	0.	0.
L	0.	0.	0.	165.	0.	0.	0.	225.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	75.	0.	0.
50 A	0.	0.	0.	75.	0.	75.	0.	127.	0.	0.
L	0.	0.	0.	150.	0.	0.	0.	179.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	240.	0.	0.
60 A	0.	0.	0.	68.	0.	90.	0.	218.	0.	0.
L	0.	0.	0.	135.	0.	0.	0.	195.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 61

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	165.	0.	210.	0.	0.
70 A	0.	0.	0.	75.	0.	83.	0.	210.	0.	0.
L	0.	0.	0.	150.	0.	0.	0.	210.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	240.	0.	0.
80 A	0.	0.	0.	105.	0.	75.	0.	195.	0.	0.
L	0.	0.	0.	210.	0.	0.	0.	150.	0.	0.
R	0.	0.	0.	0.	0.	165.	0.	300.	0.	0.
90 A	0.	0.	0.	90.	0.	83.	0.	203.	0.	0.
L	0.	0.	0.	180.	0.	0.	0.	105.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	240.	0.	0.
100 A	0.	0.	0.	83.	0.	75.	0.	120.	0.	0.
L	0.	0.	0.	165.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	210.	0.	0.
110 A	0.	0.	0.	68.	0.	90.	0.	105.	0.	0.
L	0.	0.	0.	135.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	225.	0.	0.
120 A	0.	0.	0.	113.	0.	75.	0.	113.	0.	0.
L	0.	0.	0.	225.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 61 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	120.	0.	345.	0.	0.
130 A	0.	0.	0.	105.	0.	60.	0.	173.	0.	0.
L	0.	0.	0.	210.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	225.	0.	0.
140 A	0.	0.	0.	120.	0.	90.	0.	113.	0.	0.
L	0.	0.	0.	240.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	285.	0.	0.
150 A	0.	0.	0.	83.	0.	75.	0.	143.	0.	0.
L	0.	0.	0.	165.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	135.	0.	135.	0.	0.
160 A	0.	0.	0.	15.	0.	68.	0.	68.	0.	0.
L	0.	0.	0.	30.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	120.	0.	0.	0.	0.
170 A	0.	0.	0.	0.	0.	60.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	75.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	38.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 61 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS ELEVATION 27.9 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	7.25	0.	13.60	0.	49.30	0.	0.
0 A	0.	0.	0.	6.89	0.	13.27	0.	48.93	0.	0.
L	0.	0.	0.	6.53	0.	12.62	0.	48.42	0.	0.
R	0.	0.	0.	0.	0.	15.91	0.	45.00	0.	0.
10 A	0.	0.	0.	5.50	0.	15.91	0.	39.14	0.	0.
L	0.	0.	0.	5.50	0.	0.	0.	33.96	0.	0.
R	0.	0.	0.	0.	0.	20.35	0.	42.27	0.	0.
20 A	0.	0.	5.74	4.83	0.	20.35	0.	34.85	0.	0.
L	0.	0.	5.74	4.83	0.	0.	0.	25.57	0.	0.
R	0.	0.	0.	0.	0.	22.83	0.	45.98	0.	0.
30 A	0.	0.	0.	3.40	0.	22.83	0.	33.32	0.	0.
L	0.	0.	0.	3.40	0.	0.	0.	19.82	0.	0.
R	0.	0.	0.	0.	0.	23.86	0.	45.11	0.	0.
40 A	0.	0.	0.	1.86	0.	23.86	0.	30.05	0.	0.
L	0.	0.	0.	1.86	0.	0.	0.	22.02	0.	0.
R	0.	0.	0.	0.	0.	18.96	0.	46.85	0.	0.
50 A	0.	0.	0.	1.00	0.	18.96	0.	20.55	0.	0.
L	0.	0.	0.	1.00	0.	0.	0.	9.53	0.	0.
R	0.	0.	0.	0.	0.	16.80	0.	39.77	0.	0.
60 A	0.	0.	0.	0.57	0.	16.80	0.	22.07	0.	0.
L	0.	0.	0.	0.57	0.	0.	0.	0.29	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 62

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	13.50	0.	29.84	0.	0.
70 A	0.	0.	0.	0.36	0.	13.50	0.	15.07	0.	0.
L	0.	0.	0.	0.36	0.	0.	0.	0.31	0.	0.
R	0.	0.	0.	0.	0.	11.41	0.	24.19	0.	0.
80 A	0.	0.	0.	0.43	0.	11.41	0.	15.00	0.	0.
L	0.	0.	0.	0.43	0.	0.	0.	0.30	0.	0.
R	0.	0.	0.	0.	0.	10.99	0.	19.61	0.	0.
90 A	0.	0.	0.	0.48	0.	10.99	0.	14.66	0.	0.
L	0.	0.	0.	0.48	0.	0.	0.	0.49	0.	0.
R	0.	0.	0.	0.	0.	3.53	0.	19.34	0.	0.
100 A	0.	0.	0.	0.28	0.	3.53	0.	19.34	0.	0.
L	0.	0.	0.	0.28	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.96	0.	1.67	0.	0.
110 A	0.	0.	0.	0.31	0.	0.96	0.	1.67	0.	0.
L	0.	0.	0.	0.31	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.35	0.	0.73	0.	0.
120 A	0.	0.	0.	0.31	0.	0.35	0.	0.73	0.	0.
L	0.	0.	0.	0.31	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 62 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.	0.	0.43	0.	0.31	0.	0.
130	A	0.	0.	0.	0.33	0.	0.43	0.	0.31	0.	0.
	L	0.	0.	0.	0.33	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.42	0.	0.34	0.	0.
140	A	0.	0.	0.	0.35	0.	0.42	0.	0.34	0.	0.
	L	0.	0.	0.	0.35	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.28	0.	0.44	0.	0.
150	A	0.	0.	0.	0.41	0.	0.28	0.	0.44	0.	0.
	L	0.	0.	0.	0.41	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.38	0.	0.36	0.	0.
160	A	0.	0.	0.	0.31	0.	0.38	0.	0.36	0.	0.
	L	0.	0.	0.	0.31	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.97	0.	0.	0.	0.
170	A	0.	0.	0.	0.	0.	0.97	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	1.18	0.	0.	0.	0.
180	A	0.	0.	0.	0.	0.	1.18	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 62 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.53	0.	0.80	0.	1.46	0.	0.
0 A	0.	0.	0.	0.71	0.	0.93	0.	2.79	0.	0.
L	0.	0.	0.	0.47	0.	0.47	0.	2.38	0.	0.
R	0.	0.	0.	0.	0.	1.06	0.	1.13	0.	0.
10 A	0.	0.	0.	0.42	0.	1.06	0.	4.69	0.	0.
L	0.	0.	0.	0.42	0.	0.	0.	4.55	0.	0.
R	0.	0.	0.	0.	0.	1.42	0.	2.00	0.	0.
20 A	0.	0.	0.93	0.51	0.	1.42	0.	3.22	0.	0.
L	0.	0.	0.93	0.51	0.	0.	0.	2.52	0.	0.
R	0.	0.	0.	0.	0.	0.68	0.	1.13	0.	0.
30 A	0.	0.	0.	0.65	0.	0.68	0.	1.89	0.	0.
L	0.	0.	0.	0.65	0.	0.	0.	1.51	0.	0.
R	0.	0.	0.	0.	0.	1.45	0.	0.95	0.	0.
40 A	0.	0.	0.	0.53	0.	1.45	0.	15.65	0.	0.
L	0.	0.	0.	0.53	0.	0.	0.	15.62	0.	0.
R	0.	0.	0.	0.	0.	1.94	0.	1.49	0.	0.
50 A	0.	0.	0.	0.35	0.	1.94	0.	15.04	0.	0.
L	0.	0.	0.	0.35	0.	0.	0.	14.97	0.	0.
R	0.	0.	0.	0.	0.	2.06	0.	4.86	0.	0.
60 A	0.	0.	0.	0.32	0.	2.06	0.	4.87	0.	0.
L	0.	0.	0.	0.32	0.	0.	0.	0.23	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.90	0.	1.09	0.	0.
70 A	0.	0.	0.	0.27	0.	0.90	0.	1.11	0.	0.
L	0.	0.	0.	0.27	0.	0.	0.	0.22	0.	0.
R	0.	0.	0.	0.	0.	0.62	0.	1.66	0.	0.
80 A	0.	0.	0.	0.31	0.	0.62	0.	1.67	0.	0.
L	0.	0.	0.	0.31	0.	0.	0.	0.24	0.	0.
R	0.	0.	0.	0.	0.	1.31	0.	6.91	0.	0.
90 A	0.	0.	0.	0.31	0.	1.31	0.	6.92	0.	0.
L	0.	0.	0.	0.31	0.	0.	0.	0.40	0.	0.
R	0.	0.	0.	0.	0.	2.16	0.	18.46	0.	0.
100 A	0.	0.	0.	0.22	0.	2.16	0.	18.46	0.	0.
L	0.	0.	0.	0.22	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.40	0.	0.63	0.	0.
110 A	0.	0.	0.	0.22	0.	0.40	0.	0.63	0.	0.
L	0.	0.	0.	0.22	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.26	0.	0.39	0.	0.
120 A	0.	0.	0.	0.24	0.	0.26	0.	0.39	0.	0.
L	0.	0.	0.	0.24	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 63 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.29	0.	0.23	0.	0.
130 A	0.	0.	0.	0.23	0.	0.29	0.	0.23	0.	0.
L	0.	0.	0.	0.23	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.27	0.	0.26	0.	0.
140 A	0.	0.	0.	0.24	0.	0.27	0.	0.26	0.	0.
L	0.	0.	0.	0.24	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.20	0.	0.25	0.	0.
150 A	0.	0.	0.	0.29	0.	0.20	0.	0.25	0.	0.
L	0.	0.	0.	0.29	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.28	0.	0.26	0.	0.
160 A	0.	0.	0.	0.20	0.	0.28	0.	0.26	0.	0.
L	0.	0.	0.	0.20	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.38	0.	0.	0.	0.
170 A	0.	0.	0.	0.	0.	0.38	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.33	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.33	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 63 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
0		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10		0.	0.	0.	0.	0.	0.	0.	375.	0.	0.
20		0.	0.	0.	0.	0.	0.	0.	630.	0.	0.
30		0.	0.	0.	0.	0.	0.	0.	600.	0.	0.
40		0.	0.	0.	0.	0.	435.	0.	390.	0.	0.
50		0.	0.	0.	0.	0.	285.	0.	254.	0.	0.
60		0.	0.	15.	525.	0.	210.	0.	480.	0.	0.
70		0.	0.	0.	390.	0.	240.	0.	435.	0.	0.
80		0.	0.	0.	405.	0.	210.	0.	405.	0.	0.
90		0.	0.	0.	375.	0.	225.	0.	375.	0.	0.
100		0.	0.	0.	465.	0.	225.	0.	270.	0.	0.
110		0.	0.	0.	495.	0.	195.	0.	180.	0.	0.
120		0.	0.	0.	0.	0.	270.	0.	300.	0.	0.
130		0.	0.	0.	0.	0.	360.	0.	345.	0.	0.
140		0.	0.	0.	0.	0.	135.	0.	315.	0.	0.
150		0.	0.	0.	0.	0.	0.	0.	240.	0.	0.
160		0.	0.	0.	0.	0.	0.	0.	15.	0.	0.
170		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 64

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	45.51	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	36.77	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	33.86	0.	0.
40	0.	0.	0.	0.	0.	16.84	0.	29.08	0.	0.
50	0.	0.	0.	0.	0.	23.50	0.	22.17	0.	0.
60	0.	0.	5.74	4.93	0.	19.02	0.	23.01	0.	0.
70	0.	0.	0.	1.14	0.	14.73	0.	14.56	0.	0.
80	0.	0.	0.	0.42	0.	11.72	0.	14.46	0.	0.
90	0.	0.	0.	0.37	0.	8.88	0.	15.80	0.	0.
100	0.	0.	0.	0.31	0.	1.41	0.	17.46	0.	0.
110	0.	0.	0.	0.36	0.	0.39	0.	1.53	0.	0.
120	0.	0.	0.	0.	0.	0.44	0.	0.64	0.	0.
130	0.	0.	0.	0.	0.	0.42	0.	0.30	0.	0.
140	0.	0.	0.	0.	0.	1.13	0.	0.37	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.44	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.34	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 65

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 5 AT 0040 AST

INSOL ANGLE 93.2 DEG

SPECTRAL BAND 1.57 TO 2.98 MICRONS

ELEVATION 27.9 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	4.92	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	7.74	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	11.69	0.	0.
40	0.	0.	0.	0.	0.	3.28	0.	16.13	0.	0.
50	0.	0.	0.	0.	0.	1.30	0.	20.95	0.	0.
60	0.	0.	0.93	1.49	0.	1.67	.	20.36	0.	0.
70	0.	0.	0.	0.60	0.	1.43	0.	14.78	0.	0.
80	0.	0.	0.	0.30	0.	0.78	0.	11.81	0.	0.
90	0.	0.	0.	0.27	0.	3.27	0.	9.81	0.	0.
100	0.	0.	0.	0.24	0.	0.81	0.	18.19	0.	0.
110	0.	0.	0.	0.25	0.	0.28	0.	0.56	0.	0.
120	0.	0.	0.	0.	0.	0.28	0.	0.40	0.	0.
130	0.	0.	0.	0.	0.	0.35	0.	0.22	0.	0.
140	0.	0.	0.	0.	0.	0.34	0.	0.25	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.26	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.35	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 66

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	75.	0.	75.	133.	0.	0.
0 A	0.	0.	0.	0.	83.	0.	83.	164.	0.	0.
L	0.	0.	0.	0.	90.	0.	90.	195.	0.	0.
R	0.	0.	0.	0.	120.	15.	240.	102.	0.	0.
10 A	0.	0.	0.	0.	143.	23.	240.	194.	0.	0.
L	0.	0.	0.	0.	165.	30.	240.	285.	0.	0.
R	0.	0.	0.	0.	15.	0.	210.	0.	0.	0.
20 A	0.	0.	0.	0.	60.	15.	128.	158.	0.	0.
L	0.	0.	0.	0.	105.	30.	45.	315.	0.	0.
R	0.	0.	0.	75.	0.	0.	135.	0.	0.	0.
30 A	0.	0.	0.	38.	83.	0.	68.	90.	0.	0.
L	0.	0.	0.	0.	165.	0.	0.	180.	0.	0.
R	0.	0.	0.	180.	0.	0.	210.	43.	0.	0.
40 A	0.	0.	0.	90.	75.	0.	105.	164.	0.	0.
L	0.	0.	0.	0.	150.	0.	0.	285.	0.	0.
R	0.	0.	0.	180.	0.	0.	150.	150.	0.	0.
50 A	0.	0.	0.	90.	105.	0.	75.	195.	0.	0.
L	0.	0.	0.	0.	210.	0.	0.	240.	0.	0.
R	0.	0.	0.	195.	0.	0.	225.	210.	0.	0.
60 A	0.	0.	0.	98.	75.	0.	113.	233.	0.	0.
L	0.	0.	0.	0.	150.	0.	0.	255.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 67

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	210.	0.	0.	90.	222.	0.	0.
70 A	0.	0.	0.	105.	68.	8.	45.	239.	0.	0.
L	0.	0.	0.	0.	135.	15.	0.	255.	0.	0.
R	0.	0.	0.	195.	0.	0.	210.	180.	0.	0.
80 A	0.	0.	0.	98.	90.	0.	105.	210.	0.	0.
L	0.	0.	0.	0.	180.	0.	0.	240.	0.	0.
R	0.	0.	0.	180.	0.	0.	135.	255.	0.	0.
90 A	0.	0.	0.	90.	60.	0.	68.	248.	0.	0.
L	0.	0.	0.	0.	120.	0.	0.	240.	0.	0.
R	0.	0.	0.	225.	0.	0.	195.	255.	0.	0.
100 A	0.	0.	0.	113.	90.	0.	98.	203.	0.	0.
L	0.	0.	0.	0.	180.	0.	0.	150.	0.	0.
R	0.	0.	0.	180.	0.	0.	164.	315.	0.	0.
110 A	0.	0.	0.	90.	60.	0.	82.	158.	0.	0.
L	0.	0.	0.	0.	120.	0.	0.	0.	0.	0.
R	0.	0.	0.	210.	0.	0.	179.	224.	0.	0.
120 A	0.	0.	0.	105.	75.	15.	90.	112.	0.	0.
L	0.	0.	0.	0.	150.	30.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 67 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	210.	0.	0.	165.	240.	0.	0.
130 A	0.	0.	0.	105.	60.	0.	83.	120.	0.	0.
L	0.	0.	0.	0.	120.	0.	0.	0.	0.	0.
R	0.	0.	0.	180.	0.	0.	60.	345.	0.	0.
140 A	0.	0.	0.	90.	75.	8.	30.	173.	0.	0.
L	0.	0.	0.	0.	150.	15.	0.	0.	0.	0.
R	0.	0.	0.	240.	0.	0.	0.	255.	0.	0.
150 A	0.	0.	0.	120.	68.	0.	0.	128.	0.	0.
L	0.	0.	0.	0.	135.	0.	0.	0.	0.	0.
R	0.	0.	0.	210.	0.	0.	0.	238.	0.	0.
160 A	0.	0.	0.	105.	68.	0.	0.	119.	0.	0.
L	0.	0.	0.	0.	135.	0.	0.	0.	0.	0.
R	0.	0.	0.	120.	0.	0.	0.	15.	0.	0.
170 A	0.	0.	0.	60.	0.	0.	0.	8.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 67 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.41	0.	0.81	7.60	0.	0.
0 A	0.	0.	0.	0.	0.31	0.	0.66	4.71	0.	0.
L	0.	0.	0.	0.	0.23	0.	0.55	2.74	0.	0.
R	0.	0.	0.	0.	0.52	0.57	1.42	12.90	0.	0.
10 A	0.	0.	0.	0.	0.30	0.29	0.86	4.09	0.	0.
L	0.	0.	0.	0.	0.14	0.15	0.29	0.93	0.	0.
R	0.	0.	0.	0.	0.62	0.	2.97	0.	0.	0.
20 A	0.	0.	0.	0.	0.21	0.16	2.47	0.56	0.	0.
L	0.	0.	0.	0.	0.15	0.16	0.13	0.56	0.	0.
R	0.	0.	0.	0.14	0.	0.	3.63	0.	0.	0.
30 A	0.	0.	0.	0.14	0.23	0.	3.63	0.71	0.	0.
L	0.	0.	0.	0.	0.23	0.	0.	0.71	0.	0.
R	0.	0.	0.	0.14	0.	0.	2.02	12.82	0.	0.
40 A	0.	0.	0.	0.14	0.21	0.	2.02	2.56	0.	0.
L	0.	0.	0.	0.	0.21	0.	0.	1.01	0.	0.
R	0.	0.	0.	0.13	0.	0.	0.75	6.24	0.	0.
50 A	0.	0.	0.	0.13	0.26	0.	0.75	2.79	0.	0.
L	0.	0.	0.	0.	0.26	0.	0.	0.63	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.18	1.21	0.	0.
60 A	0.	0.	0.	0.16	0.38	0.	0.18	0.83	0.	0.
L	0.	0.	0.	0.	0.38	0.	0.	0.52	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 68

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.31	0.	0.	0.16	0.53	0.	0.
70 A	0.	0.	0.	0.31	0.38	0.44	0.16	0.58	0.	0.
L	0.	0.	0.	0.	0.38	0.44	0.	0.63	0.	0.
R	0.	0.	0.	0.31	0.	0.	0.48	0.55	0.	0.
80 A	0.	0.	0.	0.31	0.39	0.	0.48	0.62	0.	0.
L	0.	0.	0.	0.	0.39	0.	0.	0.67	0.	0.
R	0.	0.	0.	0.29	0.	0.	0.27	0.37	0.	0.
90 A	0.	0.	0.	0.29	0.38	0.	0.27	0.48	0.	0.
L	0.	0.	0.	0.	0.38	0.	0.	0.59	0.	0.
R	0.	0.	0.	0.36	0.	0.	0.43	1.03	0.	0.
100 A	0.	0.	0.	0.36	0.43	0.	0.43	0.92	0.	0.
L	0.	0.	0.	0.	0.43	0.	0.	0.75	0.	0.
R	0.	0.	0.	0.51	0.	0.	0.43	0.57	0.	0.
110 A	0.	0.	0.	0.51	0.51	0.	0.43	0.57	0.	0.
L	0.	0.	0.	0.	0.51	0.	0.	0.	0.	0.
R	0.	0.	0.	0.52	0.	0.	0.50	0.49	0.	0.
120 A	0.	0.	0.	0.52	0.66	0.59	0.50	0.49	0.	0.
L	0.	0.	0.	0.	0.66	0.59	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 68 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.80	0.	0.	0.55	0.63	0.	0.
130 A	0.	0.	0.	0.80	0.78	0.	0.55	0.63	0.	0.
L	0.	0.	0.	0.	0.78	0.	0.	0.	0.	0.
R	0.	0.	0.	0.60	0.	0.	0.69	0.58	0.	0.
140 A	0.	0.	0.	0.60	0.69	0.60	0.69	0.58	0.	0.
L	0.	0.	0.	0.	0.69	0.60	0.	0.	0.	0.
R	0.	0.	0.	0.53	0.	0.	0.	0.71	0.	0.
150 A	0.	0.	0.	0.53	0.49	0.	0.	0.71	0.	0.
L	0.	0.	0.	0.	0.49	0.	0.	0.	0.	0.
R	0.	0.	0.	1.26	0.	0.	0.	0.71	0.	0.
160 A	0.	0.	0.	1.26	0.40	0.	0.	0.71	0.	0.
L	0.	0.	0.	0.	0.40	0.	0.	0.	0.	0.
R	0.	0.	0.	1.16	0.	0.	0.	0.48	0.	0.
170 A	0.	0.	0.	1.16	0.	0.	0.	0.48	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 68 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.18	0.	0.18	2.42	0.	0.
0 A	0.	0.	0.	0.	0.23	0.	0.26	2.65	0.	0.
L	0.	0.	0.	0.	0.14	0.	0.19	1.08	0.	0.
R	0.	0.	0.	0.	0.19	0.16	0.42	3.01	0.	0.
10 A	0.	0.	0.	0.	0.23	0.20	0.46	3.04	0.	0.
L	0.	0.	0.	0.	0.11	0.12	0.20	0.38	0.	0.
R	0.	0.	0.	0.	0.19	0.	0.85	0.	0.	0.
20 A	0.	0.	0.	0.	0.22	0.12	0.86	0.20	0.	0.
L	0.	0.	0.	0.	0.11	0.12	0.11	0.20	0.	0.
R	0.	0.	0.	0.11	0.	0.	0.47	0.	0.	0.
30 A	0.	0.	0.	0.11	0.16	0.	0.47	0.19	0.	0.
L	0.	0.	0.	0.	0.16	0.	0.	0.19	0.	0.
R	0.	0.	0.	0.11	0.	0.	0.49	1.31	0.	0.
40 A	0.	0.	0.	0.11	0.15	0.	0.49	1.70	0.	0.
L	0.	0.	0.	0.	0.15	0.	0.	1.08	0.	0.
R	0.	0.	0.	0.10	0.	0.	0.30	2.33	0.	0.
50 A	0.	0.	0.	0.10	0.16	0.	0.30	2.39	0.	0.
L	0.	0.	0.	0.	0.16	0.	0.	0.53	0.	0.
R	0.	0.	0.	0.11	0.	0.	0.14	0.63	0.	0.
60 A	0.	0.	0.	0.11	0.18	0.	0.14	0.65	0.	0.
L	0.	0.	0.	0.	0.18	0.	0.	0.18	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 69

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

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FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.16	0.	0.	0.12	0.22	0.	0.
70 A	0.	0.	0.	0.16	0.17	0.20	0.12	0.29	0.	0.
L	0.	0.	0.	0.	0.17	0.20	0.	0.19	0.	0.
R	0.	0.	0.	0.18	0.	0.	0.21	0.20	0.	0.
80 A	0.	0.	0.	0.18	0.15	0.	0.21	0.28	0.	0.
L	0.	0.	0.	0.	0.15	0.	0.	0.19	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.23	0.25	0.	0.
90 A	0.	0.	0.	0.16	0.17	0.	0.23	0.31	0.	0.
L	0.	0.	0.	0.	0.17	0.	0.	0.18	0.	0.
R	0.	0.	0.	0.18	0.	0.	0.21	0.76	0.	0.
100 A	0.	0.	0.	0.18	0.16	0.	0.21	0.79	0.	0.
L	0.	0.	0.	0.	0.16	0.	0.	0.20	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.15	0.21	0.	0.
110 A	0.	0.	0.	0.16	0.20	0.	0.15	0.21	0.	0.
L	0.	0.	0.	0.	0.20	0.	0.	0.	0.	0.
R	0.	0.	0.	0.20	0.	0.	0.17	0.20	0.	0.
120 A	0.	0.	0.	0.20	0.20	0.17	0.17	0.20	0.	0.
L	0.	0.	0.	0.	0.20	0.17	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 69 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.18	0.	0.	0.18	0.20	0.	0.
130 A	0.	0.	0.	0.18	0.21	0.	0.18	0.20	0.	0.
L	0.	0.	0.	0.	0.21	0.	0.	0.	0.	0.
R	0.	0.	0.	0.21	0.	0.	0.19	0.19	0.	0.
140 A	0.	0.	0.	0.21	0.21	0.18	0.19	0.19	0.	0.
L	0.	0.	0.	0.	0.21	0.18	0.	0.	0.	0.
R	0.	0.	0.	0.27	0.	0.	0.	0.21	0.	0.
150 A	0.	0.	0.	0.27	0.18	0.	0.	0.21	0.	0.
L	0.	0.	0.	0.	0.18	0.	0.	0.	0.	0.
R	0.	0.	0.	0.31	0.	0.	0.	0.26	0.	0.
160 A	0.	0.	0.	0.31	0.16	0.	0.	0.26	0.	0.
L	0.	0.	0.	0.	0.16	0.	0.	0.	0.	0.
R	0.	0.	0.	0.29	0.	0.	0.	0.12	0.	0.
170 A	0.	0.	0.	0.29	0.	0.	0.	0.12	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 69 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	492.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	418.	0.	0.
30	0.	0.	0.	0.	0.	0.	855.	255.	0.	0.
40	0.	0.	0.	0.	480.	60.	255.	300.	0.	0.
50	0.	0.	0.	0.	360.	15.	240.	448.	0.	0.
60	0.	0.	0.	195.	285.	0.	240.	450.	0.	0.
70	0.	0.	0.	435.	225.	0.	120.	507.	0.	0.
80	0.	0.	0.	405.	210.	15.	210.	450.	0.	0.
90	0.	0.	0.	405.	225.	0.	195.	510.	0.	0.
100	0.	0.	0.	465.	195.	0.	180.	390.	0.	0.
110	0.	0.	0.	570.	210.	30.	223.	345.	0.	0.
120	0.	0.	0.	315.	285.	15.	210.	239.	0.	0.
130	0.	0.	0.	0.	195.	0.	90.	285.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	375.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	343.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	15.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 70

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	4.71	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	2.21	0.	0.
30	0.	0.	0.	0.	0.	0.	1.13	0.64	0.	0.
40	0.	0.	0.	0.	0.31	0.25	3.36	1.34	0.	0.
50	0.	0.	0.	0.	0.21	0.19	1.37	3.45	0.	0.
60	0.	0.	0.	0.14	0.26	0.	0.23	0.84	0.	0.
70	0.	0.	0.	0.14	0.37	0.	0.16	0.58	0.	0.
80	0.	0.	0.	0.31	0.39	0.44	0.48	0.62	0.	0.
90	0.	0.	0.	0.33	0.40	0.	0.31	0.51	0.	0.
100	0.	0.	0.	0.55	0.48	0.	0.44	0.90	0.	0.
110	0.	0.	0.	0.64	0.69	0.59	0.47	0.55	0.	0.
120	0.	0.	0.	1.22	0.66	0.60	0.53	0.53	0.	0.
130	0.	0.	0.	0.	0.42	0.	0.66	0.62	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.61	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.73	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.48	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 71

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 4 AT 0044 AST

INSOL ANGLE 93.1 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 28.7 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	3.64	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	4.63	0.	0.
30	0.	0.	0.	0.	0.	0.	0.98	0.22	0.	0.
40	0.	0.	0.	0.	0.23	0.22	0.70	3.06	0.	0.
50	0.	0.	0.	0.	0.15	0.14	0.57	3.64	0.	0.
60	0.	0.	0.	0.11	0.17	0.	0.19	0.57	0.	0.
70	0.	0.	0.	0.11	0.18	0.	0.12	0.21	0.	0.
80	0.	0.	0.	0.17	0.16	0.20	0.21	0.20	0.	0.
90	0.	0.	0.	0.18	0.17	0.	0.23	0.31	0.	0.
100	0.	0.	0.	0.20	0.19	0.	0.20	0.63	0.	0.
110	0.	0.	0.	0.29	0.21	0.17	0.16	0.22	0.	0.
120	0.	0.	0.	0.30	0.23	0.18	0.19	0.20	0.	0.
130	0.	0.	0.	0.	0.17	0.	0.19	0.19	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.19	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.25	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.12	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 72

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	30.	45.	0.	75.	0.	0.
0 A	0.	0.	0.	0.	38.	45.	0.	75.	0.	0.
L	0.	0.	0.	0.	45.	45.	0.	75.	0.	0.
R	0.	0.	0.	0.	75.	45.	0.	130.	15.	0.
10 A	0.	0.	0.	0.	98.	45.	0.	155.	8.	0.
L	0.	0.	0.	0.	120.	45.	0.	180.	0.	0.
R	0.	0.	0.	0.	90.	30.	0.	149.	0.	0.
20 A	0.	0.	0.	0.	83.	45.	0.	120.	0.	0.
L	0.	0.	0.	0.	75.	60.	0.	90.	0.	0.
R	0.	0.	0.	15.	0.	0.	0.	165.	0.	0.
30 A	0.	0.	0.	8.	45.	38.	0.	225.	0.	0.
L	0.	0.	0.	0.	90.	75.	0.	285.	0.	0.
R	0.	0.	0.	150.	0.	0.	0.	210.	0.	0.
40 A	0.	0.	0.	75.	45.	23.	0.	263.	0.	0.
L	0.	0.	0.	0.	90.	45.	0.	315.	0.	0.
R	0.	0.	0.	180.	0.	0.	0.	144.	0.	0.
50 A	0.	0.	0.	90.	60.	23.	0.	237.	0.	0.
L	0.	0.	0.	0.	120.	45.	0.	329.	0.	0.
R	0.	0.	0.	195.	0.	0.	0.	210.	0.	0.
60 A	0.	0.	0.	98.	30.	45.	0.	240.	0.	0.
L	0.	0.	0.	0.	60.	90.	0.	270.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 73

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	150.	0.	0.	0.	149.	0.	0.
70 A	0.	0.	0.	75.	45.	38.	0.	240.	0.	0.
L	0.	0.	0.	0.	90.	75.	0.	330.	0.	0.
R	0.	0.	0.	150.	0.	0.	0.	117.	0.	0.
80 A	0.	0.	0.	75.	23.	75.	0.	209.	0.	0.
L	0.	0.	0.	0.	45.	150.	0.	300.	0.	0.
R	0.	0.	0.	210.	0.	0.	0.	195.	0.	0.
90 A	0.	0.	0.	105.	45.	38.	0.	240.	0.	0.
L	0.	0.	0.	0.	90.	75.	0.	285.	0.	0.
R	0.	0.	0.	210.	0.	0.	0.	225.	0.	0.
100 A	0.	0.	0.	105.	38.	38.	0.	263.	0.	0.
L	0.	0.	0.	0.	75.	75.	0.	300.	0.	0.
R	0.	0.	0.	165.	0.	0.	0.	165.	0.	0.
110 A	0.	0.	0.	83.	15.	38.	0.	195.	0.	0.
L	0.	0.	0.	0.	30.	75.	0.	225.	0.	0.
R	0.	0.	0.	165.	0.	0.	0.	135.	0.	0.
120 A	0.	0.	0.	83.	30.	83.	0.	165.	0.	0.
L	0.	0.	0.	0.	60.	165.	0.	194.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 73 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZINUTH

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	195.	0.	0.	0.	0.	0.	0.
130 A	0.	0.	0.	98.	45.	38.	0.	0.	0.	0.
L	0.	0.	0.	0.	90.	75.	0.	0.	0.	0.
R	0.	0.	0.	195.	0.	0.	0.	0.	0.	0.
140 A	0.	0.	0.	98.	23.	38.	0.	0.	0.	0.
L	0.	0.	0.	0.	45.	75.	0.	0.	0.	0.
K	0.	0.	0.	210.	0.	0.	0.	0.	0.	0.
150 A	0.	0.	0.	105.	23.	45.	0.	0.	0.	0.
L	0.	0.	0.	0.	45.	90.	0.	0.	0.	0.
R	0.	0.	0.	180.	0.	0.	0.	0.	0.	0.
160 A	0.	0.	0.	90.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	225.	0.	0.	0.	0.	0.	0.
170 A	0.	0.	0.	113.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	30.	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	15.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 73 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	1.86	1.91	0.	6.94	0.	0.
0 A	0.	0.	0.	0.	1.52	1.56	0.	5.66	0.	0.
L	0.	0.	0.	0.	1.29	1.22	0.	4.38	0.	0.
R	0.	0.	0.	0.	2.50	2.66	0.	21.25	26.95	0.
10 A	0.	0.	0.	0.	1.39	1.66	0.	10.78	26.95	0.
L	0.	0.	0.	0.	0.69	0.66	0.	3.23	0.	0.
R	0.	0.	0.	0.	3.08	3.11	0.	36.67	0.	0.
20 A	0.	0.	0.	0.	1.95	1.45	0.	24.18	0.	0.
L	0.	0.	0.	0.	0.59	0.62	0.	3.51	0.	0.
R	0.	0.	0.	0.93	0.	0.	0.	36.49	0.	0.
30 A	0.	0.	0.	0.93	0.81	0.83	0.	15.11	0.	0.
L	0.	0.	0.	0.	0.81	0.83	0.	2.74	0.	0.
R	0.	0.	0.	0.91	0.	0.	0.	38.02	0.	0.
40 A	0.	0.	0.	0.91	0.58	0.66	0.	16.21	0.	0.
L	0.	0.	0.	0.	0.58	0.66	0.	1.66	0.	0.
R	0.	0.	0.	0.54	0.	0.	0.	14.25	0.	0.
50 A	0.	0.	0.	0.54	1.17	1.12	0.	6.89	0.	0.
L	0.	0.	0.	0.	1.17	1.12	0.	3.67	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.	4.10	0.	0.
60 A	0.	0.	0.	0.19	1.32	1.35	0.	2.91	0.	0.
L	0.	0.	0.	0.	1.32	1.35	0.	1.99	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.28	0.	0.	0.	2.69	0.	0.
70 A	0.	0.	0.	0.28	1.32	1.40	0.	2.14	0.	0.
L	0.	0.	0.	0.	1.32	1.40	0.	1.88	0.	0.
R	0.	0.	0.	0.61	0.	0.	0.	1.75	0.	0.
80 A	0.	0.	0.	0.61	1.37	1.39	0.	1.94	0.	0.
L	0.	0.	0.	0.	1.37	1.39	0.	2.02	0.	0.
R	0.	0.	0.	0.91	0.	0.	0.	4.19	0.	0.
90 A	0.	0.	0.	0.91	1.48	1.35	0.	2.97	0.	0.
L	0.	0.	0.	0.	1.48	1.35	0.	2.14	0.	0.
R	0.	0.	0.	1.19	0.	0.	0.	1.86	0.	0.
100 A	0.	0.	0.	1.19	1.44	1.46	0.	2.00	0.	0.
L	0.	0.	0.	0.	1.44	1.46	0.	2.11	0.	0.
R	0.	0.	0.	1.45	0.	0.	0.	2.16	0.	0.
110 A	0.	0.	0.	1.45	1.61	1.55	0.	2.23	0.	0.
L	0.	0.	0.	0.	1.61	1.55	0.	2.29	0.	0.
R	0.	0.	0.	1.41	0.	0.	0.	2.09	0.	0.
120 A	0.	0.	0.	1.41	1.95	1.98	0.	2.47	0.	0.
L	0.	0.	0.	0.	1.95	1.98	0.	2.73	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 74 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	1.81	0.	0.	0.	0.	0.	0.
130 A	0.	0.	0.	1.81	2.07	1.97	0.	0.	0.	0.
L	0.	0.	0.	0.	2.07	1.97	0.	0.	0.	0.
R	0.	0.	0.	2.05	0.	0.	0.	0.	0.	0.
140 A	0.	0.	0.	2.05	1.98	2.01	0.	0.	0.	0.
L	0.	0.	0.	0.	1.98	2.01	0.	0.	0.	0.
R	0.	0.	0.	1.56	0.	0.	0.	0.	0.	0.
150 A	0.	0.	0.	1.56	1.68	1.73	0.	0.	0.	0.
L	0.	0.	0.	0.	1.68	1.73	0.	0.	0.	0.
R	0.	0.	0.	2.04	0.	0.	0.	0.	0.	0.
160 A	0.	0.	0.	2.04	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	2.81	0.	0.	0.	0.	0.	0.
170 A	0.	0.	0.	2.81	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	2.22	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	2.22	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 74 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.40	0.21	0.	0.92	0.	0.
0 A	0.	0.	0.	0.	0.51	0.50	0.	1.12	0.	0.
L	0.	0.	0.	0.	0.31	0.45	0.	0.64	0.	0.
R	0.	0.	0.	0.	0.28	0.27	0.	9.52	1.03	0.
10 A	0.	0.	0.	0.	0.36	0.35	0.	9.55	1.03	0.
L	0.	0.	0.	0.	0.23	0.22	0.	0.71	0.	0.
R	0.	0.	0.	0.	0.24	0.22	0.	1.94	0.	0.
20 A	0.	0.	0.	0.	0.33	0.32	0.	2.02	0.	0.
L	0.	0.	0.	0.	0.23	0.23	0.	0.54	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.	1.32	0.	0.
30 A	0.	0.	0.	0.17	0.27	0.24	0.	1.43	0.	0.
L	0.	0.	0.	0.	0.27	0.24	0.	0.54	0.	0.
R	0.	0.	0.	0.22	0.	0.	0.	4.05	0.	0.
40 A	0.	0.	0.	0.22	0.31	0.32	0.	4.12	0.	0.
L	0.	0.	0.	0.	0.31	0.32	0.	0.76	0.	0.
R	0.	0.	0.	0.25	0.	0.	0.	9.57	0.	0.
50 A	0.	0.	0.	0.25	0.27	0.27	0.	10.26	0.	0.
L	0.	0.	0.	0.	0.27	0.27	0.	3.71	0.	0.
R	0.	0.	0.	0.14	0.	0.	0.	0.76	0.	0.
60 A	0.	0.	0.	0.14	0.24	0.22	0.	0.81	0.	0.
L	0.	0.	0.	0.	0.24	0.22	0.	0.28	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.19	0.	0.	0.	0.34	0.	0.
70 A	0.	0.	0.	0.19	0.23	0.22	0.	0.43	0.	0.
L	0.	0.	0.	0.	0.23	0.22	0.	0.26	0.	0.
R	0.	0.	0.	0.21	0.	0.	0.	0.68	0.	0.
80 A	0.	0.	0.	0.21	0.24	0.22	0.	0.72	0.	0.
L	0.	0.	0.	0.	0.24	0.22	0.	0.24	0.	0.
R	0.	0.	0.	0.24	0.	0.	0.	3.80	0.	0.
90 A	0.	0.	0.	0.24	0.24	0.25	0.	3.80	0.	0.
L	0.	0.	0.	0.	0.24	0.25	0.	0.24	0.	0.
R	0.	0.	0.	0.25	0.	0.	0.	0.28	0.	0.
100 A	0.	0.	0.	0.25	0.26	0.23	0.	0.36	0.	0.
L	0.	0.	0.	0.	0.26	0.23	0.	0.23	0.	0.
R	0.	0.	0.	0.24	0.	0.	0.	0.24	0.	0.
110 A	0.	0.	0.	0.24	0.21	0.23	0.	0.34	0.	0.
L	0.	0.	0.	0.	0.21	0.23	0.	0.25	0.	0.
R	0.	0.	0.	0.23	0.	0.	0.	0.24	0.	0.
120 A	0.	0.	0.	0.23	0.26	0.26	0.	0.41	0.	0.
L	0.	0.	0.	0.	0.26	0.26	0.	0.33	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 75 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.30	0.	0.	0.	0.	0.	0.
130 A	0.	0.	0.	0.30	0.24	0.26	0.	0.	0.	0.
L	0.	0.	0.	0.	0.24	0.26	0.	0.	0.	0.
R	0.	0.	0.	0.27	0.	0.	0.	0.	0.	0.
140 A	0.	0.	0.	0.27	0.28	0.24	0.	0.	0.	0.
L	0.	0.	0.	0.	0.28	0.24	0.	0.	0.	0.
R	0.	0.	0.	0.24	0.	0.	0.	0.	0.	0.
150 A	0.	0.	0.	0.24	0.25	0.28	0.	0.	0.	0.
L	0.	0.	0.	0.	0.25	0.28	0.	0.	0.	0.
R	0.	0.	0.	0.37	0.	0.	0.	0.	0.	0.
160 A	0.	0.	0.	0.37	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.33	0.	0.	0.	0.	0.	0.
170 A	0.	0.	0.	0.33	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.24	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.24	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 75 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	310.	15.	0.
20	0.	0.	0.	0.	0.	0.	0.	299.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	435.	0.	0.
40	0.	0.	0.	0.	315.	255.	0.	585.	0.	0.
50	0.	0.	0.	0.	240.	120.	0.	458.	0.	0.
60	0.	0.	0.	105.	180.	75.	0.	540.	0.	0.
70	0.	0.	0.	420.	120.	135.	0.	494.	0.	0.
80	0.	0.	0.	315.	75.	180.	0.	402.	0.	0.
90	0.	0.	0.	420.	120.	90.	0.	540.	0.	0.
100	0.	0.	0.	375.	75.	120.	0.	525.	0.	0.
110	0.	0.	0.	660.	90.	225.	0.	435.	0.	0.
120	0.	0.	0.	330.	150.	165.	0.	224.	0.	0.
130	0.	0.	0.	0.	0.	15.	0.	0.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 76

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	8.84	26.95	0.
20	0.	0.	0.	0.	0.	0.	0.	16.78	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	15.23	0.	0.
40	0.	0.	0.	0.	1.53	1.47	0.	18.59	0.	0.
50	0.	0.	0.	0.	1.30	1.04	0.	6.96	0.	0.
60	0.	0.	0.	0.93	0.98	1.14	0.	2.76	0.	0.
70	0.	0.	0.	0.44	1.33	1.36	0.	2.13	0.	0.
80	0.	0.	0.	0.44	1.33	1.39	0.	1.94	0.	0.
90	0.	0.	0.	1.05	1.48	1.40	0.	2.85	0.	0.
100	0.	0.	0.	1.44	1.48	1.51	0.	2.02	0.	0.
110	0.	0.	0.	1.84	1.97	1.97	0.	2.24	0.	0.
120	0.	0.	0.	2.62	1.94	1.90	0.	2.60	0.	0.
130	0.	0.	0.	0.	0.	1.65	0.	0.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 77

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 3 AT 0050 AST

INSOL ANGLE 93.0 DEG

SPECTRAL BAND 2.37 TO 2.80 MICRONS

ELEVATION 30.0 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	6.07	1.03	0.
20	0.	0.	0.	0.	0.	0.	0.	16.92	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	15.80	0.	0.
40	0.	0.	0.	0.	0.90	0.91	0.	18.16	0.	0.
50	0.	0.	0.	0.	1.10	0.82	0.	7.96	0.	0.
60	0.	0.	0.	0.20	0.40	0.29	0.	1.20	0.	0.
70	0.	0.	0.	0.32	0.23	0.21	0.	0.46	0.	0.
80	0.	0.	0.	0.26	0.25	0.23	0.	0.44	0.	0.
90	0.	0.	0.	0.28	0.24	0.24	0.	2.50	0.	0.
100	0.	0.	0.	0.23	0.27	0.24	0.	0.27	0.	0.
110	0.	0.	0.	0.34	0.26	0.25	0.	0.27	0.	0.
120	0.	0.	0.	0.41	0.31	0.31	0.	0.42	0.	0.
130	0.	0.	0.	0.	0.	0.23	0.	0.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 78

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	90.	120.	0.	0.
0 A	0.	0.	0.	0.	0.	0.	90.	75.	0.	0.
L	0.	0.	0.	0.	0.	0.	90.	30.	0.	0.
R	0.	0.	0.	0.	0.	0.	180.	240.	0.	0.
10 A	0.	0.	0.	0.	0.	0.	158.	158.	0.	0.
L	0.	0.	0.	0.	0.	0.	135.	75.	0.	0.
R	0.	0.	0.	0.	0.	0.	120.	240.	0.	0.
20 A	0.	0.	0.	0.	0.	0.	150.	233.	0.	0.
L	0.	0.	0.	0.	0.	0.	180.	225.	0.	0.
R	0.	0.	0.	0.	0.	0.	194.	251.	0.	0.
30 A	0.	0.	0.	97.	0.	0.	187.	261.	0.	0.
L	0.	0.	0.	193.	0.	0.	180.	270.	0.	0.
R	0.	0.	0.	0.	0.	75.	15.	220.	0.	0.
40 A	0.	0.	0.	127.	0.	38.	68.	237.	0.	0.
L	0.	0.	0.	254.	0.	0.	120.	254.	0.	0.
R	0.	0.	0.	0.	0.	120.	0.	240.	0.	0.
50 A	0.	0.	0.	135.	0.	60.	104.	255.	0.	0.
L	0.	0.	0.	270.	0.	0.	208.	269.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	210.	0.	0.
60 A	0.	0.	0.	156.	0.	90.	52.	270.	0.	0.
L	0.	0.	0.	312.	0.	0.	104.	329.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 79

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZINUTH

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	75.	0.	180.	0.	0.
70 A	0.	0.	0.	158.	0.	38.	83.	203.	0.	0.
L	0.	0.	0.	315.	0.	0.	165.	225.	0.	0.
R	0.	0.	0.	0.	0.	179.	0.	180.	0.	0.
80 A	0.	0.	0.	188.	0.	90.	90.	180.	0.	0.
L	0.	0.	0.	375.	0.	0.	180.	179.	0.	0.
R	0.	0.	0.	0.	0.	195.	0.	195.	0.	0.
90 A	0.	0.	0.	180.	0.	98.	52.	240.	0.	0.
L	0.	0.	0.	359.	0.	0.	104.	284.	0.	0.
R	0.	0.	0.	0.	0.	177.	0.	179.	15.	0.
100 A	0.	0.	0.	142.	0.	89.	59.	195.	8.	0.
L	0.	0.	0.	284.	0.	0.	117.	210.	0.	0.
R	0.	0.	0.	0.	0.	195.	0.	120.	0.	0.
110 A	0.	0.	0.	120.	0.	98.	94.	170.	0.	0.
L	0.	0.	0.	240.	0.	0.	188.	220.	0.	0.
R	0.	0.	0.	0.	0.	162.	0.	176.	0.	0.
120 A	0.	0.	0.	68.	0.	81.	74.	166.	0.	0.
L	0.	0.	0.	135.	0.	0.	147.	155.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 79 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	207.	0.	74.	0.	0.
130 A	0.	0.	0.	0.	0.	104.	75.	37.	0.	0.
L	0.	0.	0.	0.	0.	0.	150.	0.	0.	0.
R	0.	0.	0.	0.	0.	195.	0.	0.	0.	0.
140 A	0.	0.	0.	0.	0.	98.	30.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	60.	0.	0.	0.
R	0.	0.	0.	0.	0.	209.	0.	0.	0.	0.
150 A	0.	0.	0.	0.	0.	105.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	203.	0.	0.	0.	0.
160 A	0.	0.	0.	0.	0.	102.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	252.	0.	0.	0.	0.
170 A	0.	0.	0.	0.	0.	179.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	105.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	90.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	87.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	83.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 79 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.	0.29	0.22	0.	0.
0 A	0.	0.	0.	0.	0.	0.	0.25	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.	0.22	0.15	0.	0.
R	0.	0.	0.	0.	0.	0.	0.48	0.84	0.	0.
10 A	0.	0.	0.	0.	0.	0.	0.35	0.69	0.	0.
L	0.	0.	0.	0.	0.	0.	0.17	0.23	0.	0.
R	0.	0.	0.	0.	0.	0.	0.62	4.17	0.	0.
20 A	0.	0.	0.	0.	0.	0.	0.34	2.26	0.	0.
L	0.	0.	0.	0.	0.	0.	0.15	0.22	0.	0.
R	0.	0.	0.	0.	0.	0.	0.46	21.15	0.	0.
30 A	0.	0.	0.	0.23	0.	0.	0.31	10.29	0.	0.
L	0.	0.	0.	0.23	0.	0.	0.15	0.20	0.	0.
R	0.	0.	0.	0.	0.	0.20	0.25	4.82	0.	0.
40 A	0.	0.	0.	0.17	0.	0.20	0.20	2.35	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.20	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.19	0.	0.77	0.	0.
50 A	0.	0.	0.	0.32	0.	0.19	0.21	0.53	0.	0.
L	0.	0.	0.	0.32	0.	0.	0.21	0.30	0.	0.
R	0.	0.	0.	0.	0.	0.18	0.	0.25	0.	0.
60 A	0.	0.	0.	0.23	0.	0.18	0.20	0.22	0.	0.
L	0.	0.	0.	0.23	0.	0.	0.20	0.19	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.14	0.	0.26	0.	0.
70 A	0.	0.	0.	0.17	0.	0.14	0.18	0.21	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.18	0.18	0.	0.
R	0.	0.	0.	0.	0.	0.17	0.	0.23	0.	0.
80° A	0.	0.	0.	0.19	0.	0.17	0.21	0.23	0.	0.
L	0.	0.	0.	0.19	0.	0.	0.21	0.22	0.	0.
R	0.	0.	0.	0.	0.	0.17	0.	0.32	0.	0.
90 A	0.	0.	0.	0.22	0.	0.17	0.20	0.25	0.	0.
L	0.	0.	0.	0.22	0.	0.	0.20	0.20	0.	0.
R	0.	0.	0.	0.	0.	0.26	0.	0.16	0.18	0.
100 A	0.	0.	0.	0.17	0.	0.26	0.29	0.19	0.18	0.
L	0.	0.	0.	0.17	0.	0.	0.29	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.22	0.	0.24	0.	0.
110 A	0.	0.	0.	0.16	0.	0.22	0.27	0.23	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.27	0.23	0.	0.
R	0.	0.	0.	0.	0.	0.22	0.	0.29	0.	0.
120 A	0.	0.	0.	0.18	0.	0.22	0.22	0.32	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.22	0.34	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 80 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.	0.	0.21	0.	0.23	0.	0.
130	A	0.	0.	0.	0.	0.	0.21	0.15	0.23	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.15	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.17	0.	0.	0.	0.
140	A	0.	0.	0.	0.	0.	0.17	0.18	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.18	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.25	0.	0.	0.	0.
150	A	0.	0.	0.	0.	0.	0.25	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.29	0.	0.	0.	0.
160	A	0.	0.	0.	0.	0.	0.29	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.18	0.	0.	0.	0.
170	A	0.	0.	0.	0.	0.	0.27	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.50	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.22	0.	0.	0.	0.
180	A	0.	0.	0.	0.	0.	0.30	0.	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.38	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 80 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	0.	0.18	0.16	0.	0.
0 A	0.	0.	0.	0.	0.	0.	0.24	0.21	0.	0.
L	0.	0.	0.	0.	0.	0.	0.15	0.13	0.	0.
R	0.	0.	0.	0.	0.	0.	0.23	0.45	0.	0.
10 A	0.	0.	0.	0.	0.	0.	0.27	0.49	0.	0.
L	0.	0.	0.	0.	0.	0.	0.15	0.17	0.	0.
R	0.	0.	0.	0.	0.	0.	0.20	2.60	0.	0.
20 A	0.	0.	0.	0.	0.	0.	0.23	2.60	0.	0.
L	0.	0.	0.	0.	0.	0.	0.12	0.15	0.	0.
R	0.	0.	0.	0.	0.	0.	0.21	5.32	0.	0.
30 A	0.	0.	0.	0.16	0.	0.	0.24	5.32	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.11	0.15	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.16	3.03	0.	0.
40 A	0.	0.	0.	0.13	0.	0.14	0.22	3.03	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.15	0.20	0.	0.
R	0.	0.	0.	0.	0.	0.13	0.	0.47	0.	0.
50 A	0.	0.	0.	0.18	0.	0.13	0.15	0.53	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.15	0.25	0.	0.
R	0.	0.	0.	0.	0.	0.12	0.	0.17	0.	0.
60 A	0.	0.	0.	0.16	0.	0.12	0.15	0.22	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.15	0.14	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.12	0.	0.16	0.	0.
70 A	0.	0.	0.	0.13	0.	0.12	0.14	0.21	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.14	0.13	0.	0.
R	0.	0.	0.	0.	0.	0.12	0.	0.16	0.	0.
80 A	0.	0.	0.	0.15	0.	0.12	0.14	0.23	0.	0.
L	0.	0.	0.	0.15	0.	0.	0.14	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.12	0.	0.26	0.	0.
90 A	0.	0.	0.	0.15	0.	0.12	0.15	0.30	0.	0.
L	0.	0.	0.	0.15	0.	0.	0.15	0.15	0.	0.
R	0.	0.	0.	0.	0.	0.16	0.	0.11	0.10	0.
100 A	0.	0.	0.	0.13	0.	0.16	0.17	0.19	0.10	0.
L	0.	0.	0.	0.13	0.	0.	0.17	0.15	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.16	0.	0.
110 A	0.	0.	0.	0.12	0.	0.15	0.16	0.22	0.	0.
L	0.	0.	0.	0.12	0.	0.	0.16	0.15	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.16	0.	0.
120 A	0.	0.	0.	0.13	0.	0.15	0.15	0.23	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.15	0.17	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 81 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.15	0.	0.15	0.	0.
130 A	0.	0.	0.	0.	0.	0.15	0.12	0.15	0.	0.
L	0.	0.	0.	0.	0.	0.	0.12	0.	0.	0.
R	0.	0.	0.	0.	0.	0.12	0.	0.	0.	0.
140 A	0.	0.	0.	0.	0.	0.12	0.14	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.14	0.	0.	0.
R	0.	0.	0.	0.	0.	0.17	0.	0.	0.	0.
150 A	0.	0.	0.	0.	0.	0.17	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.
160 A	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.13	0.	0.	0.	0.
170 A	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.13	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.22	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.16	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 81 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	210.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	600.	0.	0.
30	0.	0.	0.	0.	0.	0.	690.	596.	0.	0.
40	0.	0.	0.	0.	0.	0.	494.	429.	0.	0.
50	0.	0.	0.	0.	0.	60.	224.	599.	0.	0.
60	0.	0.	0.	223.	0.	195.	178.	524.	0.	0.
70	0.	0.	0.	641.	0.	195.	195.	420.	0.	0.
80	0.	0.	0.	840.	0.	179.	180.	374.	0.	0.
90	0.	0.	0.	673.	0.	252.	149.	524.	0.	0.
100	0.	0.	0.	360.	0.	255.	174.	374.	15.	0.
110	0.	0.	0.	0.	0.	267.	174.	365.	0.	0.
120	0.	0.	0.	0.	0.	327.	209.	290.	0.	0.
130	0.	0.	0.	0.	0.	577.	60.	45.	0.	0.
140	0.	0.	0.	0.	0.	395.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 82

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.26	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	1.27	0.	0.
30	0.	0.	0.	0.	0.	0.	0.32	9.50	0.	0.
40	0.	0.	0.	0.	0.	0.	0.31	2.84	0.	0.
50	0.	0.	0.	0.	0.	0.19	0.21	0.58	0.	0.
60	0.	0.	0.	0.22	0.	0.19	0.20	0.22	0.	0.
70	0.	0.	0.	0.26	0.	0.16	0.19	0.21	0.	0.
80	0.	0.	0.	0.19	0.	0.17	0.21	0.23	0.	0.
90	0.	0.	0.	0.20	0.	0.20	0.23	0.24	0.	0.
100	0.	0.	0.	0.17	0.	0.23	0.28	0.19	0.18	0.
110	0.	0.	0.	0.	0.	0.22	0.25	0.24	0.	0.
120	0.	0.	0.	0.	0.	0.19	0.16	0.32	0.	0.
130	0.	0.	0.	0.	0.	0.27	0.18	0.21	0.	0.
140	0.	0.	0.	0.	0.	0.28	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 83

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 2 AT 0054 AST

INSOL ANGLE 92.9 DEG

SPECTRAL BAND 2.63 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	0.20	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	1.26	0.	0.
30	0.	0.	0.	0.	0.	0.	0.25	10.65	0.	0.
40	0.	0.	0.	0.	0.	0.	0.24	3.64	0.	0.
50	0.	0.	0.	0.	0.	0.13	0.15	0.53	0.	0.
60	0.	0.	0.	0.16	0.	0.13	0.15	0.15	0.	0.
70	0.	0.	0.	0.18	0.	0.12	0.14	0.15	0.	0.
80	0.	0.	0.	0.14	0.	0.12	0.14	0.16	0.	0.
90	0.	0.	0.	0.14	0.	0.15	0.16	0.21	0.	0.
100	0.	0.	0.	0.13	0.	0.15	0.17	0.14	0.10	0.
110	0.	0.	0.	0.	0.	0.14	0.16	0.16	0.	0.
120	0.	0.	0.	0.	0.	0.14	0.13	0.16	0.	0.
130	0.	0.	0.	0.	0.	0.17	0.14	0.16	0.	0.
140	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 84

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	45.	0.	45.	0.	0.
0 A	0.	0.	0.	0.	0.	60.	0.	83.	0.	0.
L	0.	0.	0.	0.	0.	75.	0.	120.	0.	0.
R	0.	0.	0.	0.	0.	165.	0.	369.	0.	0.
10 A	0.	0.	0.	0.	0.	83.	0.	275.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	105.	0.	478.	0.	0.
20 A	0.	0.	0.	0.	0.	53.	0.	329.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	135.	0.	478.	0.	0.
30 A	0.	0.	0.	0.	0.	68.	0.	329.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	324.	0.	0.
40 A	0.	0.	0.	0.	0.	75.	0.	245.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	165.	0.	0.
R	0.	0.	0.	0.	0.	135.	0.	330.	0.	0.
50 A	0.	0.	0.	0.	0.	68.	0.	263.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	195.	0.	0.
R	0.	0.	0.	0.	0.	135.	0.	150.	0.	0.
60 A	0.	0.	0.	0.	0.	68.	0.	165.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	180.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	135.	0.	270.	0.	0.
70 A	0.	0.	0.	0.	0.	68.	0.	188.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	105.	0.	0.
R	0.	0.	0.	0.	0.	135.	0.	210.	0.	0.
80 A	0.	0.	0.	0.	0.	68.	0.	180.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	149.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	300.	0.	0.
90 A	0.	0.	0.	0.	0.	90.	0.	224.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	148.	0.	0.
R	0.	0.	0.	0.	0.	165.	0.	195.	0.	0.
100 A	0.	0.	0.	0.	0.	83.	0.	203.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	210.	0.	0.
R	0.	0.	0.	0.	0.	193.	0.	191.	0.	0.
110 A	0.	0.	0.	0.	0.	97.	0.	163.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	135.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	193.	0.	0.
120 A	0.	0.	0.	0.	0.	75.	0.	185.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	177.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 85 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	163.	0.	15.	0.	0.
130 A	0.	0.	0.	29.	0.	82.	0.	22.	0.	0.
L	0.	0.	0.	58.	0.	0.	0.	29.	0.	0.
R	0.	0.	0.	0.	0.	193.	0.	0.	0.	0.
140 A	0.	0.	0.	491.	0.	97.	0.	0.	0.	0.
L	0.	0.	0.	981.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	0.	0.	0.
150 A	0.	0.	0.	358.	0.	90.	0.	0.	0.	0.
L	0.	0.	0.	715.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	134.	0.	0.	0.	0.
160 A	0.	0.	0.	275.	0.	67.	0.	0.	0.	0.
L	0.	0.	0.	549.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	60.	0.	0.	0.	0.
170 A	0.	0.	0.	233.	0.	30.	0.	0.	0.	0.
L	0.	0.	0.	465.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 85 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	0.48	0.	6.25	0.	0.
A	0.	0.	0.	0.	0.	0.42	0.	4.26	0.	0.
L	0.	0.	0.	0.	0.	0.38	0.	3.52	0.	0.
R	0.	0.	0.	0.	0.	0.72	0.	11.48	0.	0.
10 A	0.	0.	0.	0.	0.	0.72	0.	8.30	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	1.80	0.	0.
R	0.	0.	0.	0.	0.	1.04	0.	18.99	0.	0.
20 A	0.	0.	0.	0.	0.	1.04	0.	14.15	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	1.30	0.	0.
R	0.	0.	0.	0.	0.	1.21	0.	24.59	0.	0.
30 A	0.	0.	0.	0.	0.	1.21	0.	18.17	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	1.10	0.	0.
R	0.	0.	0.	0.	0.	1.11	0.	18.02	0.	0.
40 A	0.	0.	0.	0.	0.	1.11	0.	12.25	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.93	0.	0.
R	0.	0.	0.	0.	0.	0.76	0.	5.45	0.	0.
50 A	0.	0.	0.	0.	0.	0.76	0.	3.89	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	1.25	0.	0.
R	0.	0.	0.	0.	0.	0.52	0.	1.50	0.	0.
60 A	0.	0.	0.	0.	0.	0.52	0.	0.76	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 86

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.47	0.	1.26	0.	0.
70 A	0.	0.	0.	0.	0.	0.47	0.	0.96	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.20	0.	0.
R	0.	0.	0.	0.	0.	0.49	0.	1.03	0.	0.
80 A	0.	0.	0.	0.	0.	0.49	0.	0.69	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.62	0.	1.24	0.	0.
90 A	0.	0.	0.	0.	0.	0.62	0.	0.90	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.25	0.	0.17	0.	0.
100 A	0.	0.	0.	0.	0.	0.25	0.	0.19	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.18	0.	0.24	0.	0.
110 A	0.	0.	0.	0.	0.	0.18	0.	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.20	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.18	0.	0.
120 A	0.	0.	0.	0.	0.	0.15	0.	0.21	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.24	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 86 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.23	0.	0.25	0.	0.
130 A	0.	0.	0.	0.25	0.	0.23	0.	0.34	0.	0.
L	0.	0.	0.	0.25	0.	0.	0.	0.38	0.	0.
R	0.	0.	0.	0.	0.	0.29	0.	0.	0.	0.
140 A	0.	0.	0.	0.24	0.	0.29	0.	0.	0.	0.
L	0.	0.	0.	0.24	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.19	0.	0.	0.	0.
150 A	0.	0.	0.	0.18	0.	0.19	0.	0.	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.17	0.	0.	0.	0.
160 A	0.	0.	0.	0.21	0.	0.17	0.	0.	0.	0.
L	0.	0.	0.	0.21	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.24	0.	0.	0.	0.
170 A	0.	0.	0.	0.16	0.	0.24	0.	0.	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 86 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.21	0.	0.85	0.	0.
0 A	0.	0.	0.	0.	0.	0.28	0.	1.15	0.	0.
L	0.	0.	0.	0.	0.	0.18	0.	0.78	0.	0.
R	0.	0.	0.	0.	0.	0.24	0.	8.41	0.	0.
10 A	0.	0.	0.	0.	0.	0.24	0.	8.42	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.36	0.	0.
R	0.	0.	0.	0.	0.	0.24	0.	8.64	0.	0.
20 A	0.	0.	0.	0.	0.	0.24	0.	8.65	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.24	0.	0.
R	0.	0.	0.	0.	0.	0.22	0.	4.88	0.	0.
30 A	0.	0.	0.	0.	0.	0.22	0.	4.88	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.23	0.	0.
R	0.	0.	0.	0.	0.	0.21	0.	7.15	0.	0.
40 A	0.	0.	0.	0.	0.	0.21	0.	7.19	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.69	0.	0.
R	0.	0.	0.	0.	0.	0.22	0.	2.78	0.	0.
50 A	0.	0.	0.	0.	0.	0.22	0.	3.18	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	1.54	0.	0.
R	0.	0.	0.	0.	0.	0.22	0.	0.42	0.	0.
60 A	0.	0.	0.	0.	0.	0.22	0.	0.44	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.12	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.20	0.	0.22	0.	0.
70 A	0.	0.	0.	0.	0.	0.20	0.	0.26	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.	0.	0.21	0.	0.22	0.	0.
80 A	0.	0.	0.	0.	0.	0.21	0.	0.27	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.	0.	0.22	0.	1.18	0.	0.
90 A	0.	0.	0.	0.	0.	0.22	0.	1.19	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.	0.	0.19	0.	0.14	0.	0.
100 A	0.	0.	0.	0.	0.	0.19	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.16	0.	0.
110 A	0.	0.	0.	0.	0.	0.15	0.	0.21	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.	0.	0.11	0.	0.13	0.	0.
120 A	0.	0.	0.	0.	0.	0.11	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.15	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 87 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0100 AST						INSOL ANGLE 92.8 DEG				
SPECTRAL BAND 2.50 TO 2.80 MICRONS						ELEVATION 30.5 KM				
VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.16	0.	0.12	0.	0.
130 A	0.	0.	0.	0.17	0.	0.16	0.	0.23	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.	0.20	0.	0.
R	0.	0.	0.	0.	0.	0.17	0.	0.	0.	0.
140 A	0.	0.	0.	0.17	0.	0.17	0.	0.	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.	0.	0.	0.
150 A	0.	0.	0.	0.14	0.	0.14	0.	0.	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.12	0.	0.	0.	0.
160 A	0.	0.	0.	0.15	0.	0.12	0.	0.	0.	0.
L	0.	0.	0.	0.15	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.	0.	0.
170 A	0.	0.	0.	0.12	0.	0.15	0.	0.	0.	0.
L	0.	0.	0.	0.12	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 87 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 1 AT 0100 AST

INSOL. ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	270.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	864.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	716.	0.	0.
40	0.	0.	0.	0.	0.	405.	0.	594.	0.	0.
50	0.	0.	0.	0.	0.	255.	0.	570.	0.	0.
60	0.	0.	0.	0.	0.	210.	0.	360.	0.	0.
70	0.	0.	0.	0.	0.	165.	0.	390.	0.	0.
80	0.	0.	0.	0.	0.	195.	0.	359.	0.	0.
90	0.	0.	0.	0.	0.	240.	0.	478.	0.	0.
100	0.	0.	0.	0.	0.	224.	0.	375.	0.	0.
110	0.	0.	0.	2708.	0.	254.	0.	385.	0.	0.
120	0.	0.	0.	60.	0.	281.	0.	325.	0.	0.
130	0.	0.	0.	0.	0.	404.	0.	15.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 88

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	4.83	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	10.74	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	17.34	0.	0.
40	0.	0.	0.	0.	0.	0.73	0.	14.99	0.	0.
50	0.	0.	0.	0.	0.	1.17	0.	4.59	0.	0.
60	0.	0.	0.	0.	0.	0.73	0.	0.80	0.	0.
70	0.	0.	0.	0.	0.	0.46	0.	0.97	0.	0.
80	0.	0.	0.	0.	0.	0.50	0.	0.65	0.	0.
90	0.	0.	0.	0.	0.	0.53	0.	0.86	0.	0.
100	0.	0.	0.	0.	0.	0.19	0.	0.19	0.	0.
110	0.	0.	0.	0.20	0.	0.16	0.	0.21	0.	0.
120	0.	0.	0.	0.16	0.	0.27	0.	0.22	0.	0.
130	0.	0.	0.	0.	0.	0.20	0.	0.45	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 89

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 1 AT 0100 AST

INSOL ANGLE 92.8 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	2.38	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	9.95	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	10.99	0.	0.
40	0.	0.	0.	0.	0.	0.33	0.	11.20	0.	0.
50	0.	0.	0.	0.	0.	0.22	0.	3.71	0.	0.
60	0.	0.	0.	0.	0.	0.23	0.	0.78	0.	0.
70	0.	0.	0.	0.	0.	0.21	0.	0.51	0.	0.
80	0.	0.	0.	0.	0.	0.20	0.	0.44	0.	0.
90	0.	0.	0.	0.	0.	0.26	0.	1.06	0.	0.
100	0.	0.	0.	0.	0.	0.16	0.	0.14	0.	0.
110	0.	0.	0.	0.15	0.	0.12	0.	0.15	0.	0.
120	0.	0.	0.	0.12	0.	0.17	0.	0.15	0.	0.
130	0.	0.	0.	0.	0.	0.14	0.	0.18	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 90

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	120.	0.	0.	135.	120.	0.	0.
0 A	0.	0.	0.	105.	0.	0.	113.	105.	0.	0.
L	0.	0.	0.	90.	0.	0.	90.	90.	0.	0.
R	0.	0.	0.	210.	0.	0.	225.	179.	0.	0.
10 A	0.	0.	0.	188.	0.	0.	233.	187.	0.	0.
L	0.	0.	0.	165.	0.	0.	240.	195.	0.	0.
R	0.	0.	0.	150.	0.	0.	195.	135.	0.	0.
20 A	0.	0.	0.	158.	0.	0.	203.	165.	0.	0.
L	0.	0.	0.	165.	0.	0.	210.	195.	0.	0.
R	0.	0.	0.	195.	0.	0.	240.	180.	0.	0.
30 A	0.	0.	0.	195.	0.	0.	225.	180.	0.	0.
L	0.	0.	0.	195.	0.	0.	210.	180.	0.	0.
R	0.	0.	0.	150.	0.	0.	225.	180.	0.	0.
40 A	0.	0.	0.	158.	0.	0.	113.	165.	0.	0.
L	0.	0.	0.	165.	0.	0.	0.	150.	0.	0.
R	0.	0.	0.	225.	0.	0.	180.	180.	0.	0.
50 A	0.	0.	0.	135.	0.	0.	90.	90.	0.	0.
L	0.	0.	0.	45.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	90.	0.	0.	225.	180.	0.	0.
60 A	0.	0.	0.	45.	0.	0.	113.	90.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	195.	0.	0.	195.	180.	0.	0.
70 A	0.	0.	0.	98.	0.	0.	98.	90.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	165.	0.	0.	195.	165.	0.	0.
80 A	0.	0.	0.	83.	0.	0.	98.	83.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	195.	0.	0.	135.	180.	0.	0.
90 A	0.	0.	0.	98.	0.	0.	68.	90.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	45.	0.	15.	0.	240.	0.	0.
100 A	0.	0.	0.	23.	0.	8.	0.	143.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	45.	0.	0.
R	0.	0.	0.	0.	0.	255.	0.	330.	0.	0.
110 A	0.	0.	0.	0.	0.	128.	0.	240.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	150.	0.	0.
R	0.	0.	0.	0.	0.	105.	0.	210.	0.	0.
120 A	0.	0.	0.	0.	0.	90.	0.	210.	0.	0.
L	0.	0.	0.	0.	0.	75.	0.	210.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 91 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	0.	195.	0.	180.	0.	0.
130 A	0.	0.	0.	0.	0.	195.	0.	173.	0.	0.
L	0.	0.	0.	0.	0.	195.	0.	165.	0.	0.
R	0.	0.	0.	0.	0.	210.	0.	210.	0.	0.
140 A	0.	0.	0.	0.	0.	188.	0.	158.	23.	0.
L	0.	0.	0.	0.	0.	165.	0.	105.	45.	0.
R	0.	0.	0.	0.	0.	210.	0.	180.	0.	0.
150 A	0.	0.	0.	0.	0.	203.	0.	188.	0.	0.
L	0.	0.	0.	0.	0.	195.	0.	195.	0.	0.
R	0.	0.	0.	0.	0.	210.	0.	225.	0.	0.
160 A	0.	0.	0.	0.	0.	203.	0.	225.	0.	0.
L	0.	0.	0.	0.	0.	195.	0.	225.	0.	0.
R	0.	0.	0.	0.	0.	209.	0.	180.	0.	0.
170 A	0.	0.	0.	0.	0.	202.	0.	180.	0.	0.
L	0.	0.	0.	0.	0.	195.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	60.	0.	90.	0.	0.
180 A	0.	0.	0.	0.	0.	83.	0.	98.	0.	0.
L	0.	0.	0.	0.	0.	105.	0.	105.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 91 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	17.24	0.	0.	13.82	13.04	0.	0.
0 A	0.	0.	0.	15.96	0.	0.	13.70	11.16	0.	0.
L	0.	0.	0.	14.26	0.	0.	13.52	8.64	0.	0.
R	0.	0.	0.	17.87	0.	0.	13.64	31.53	0.	0.
10 A	0.	0.	0.	16.77	0.	0.	13.31	19.20	0.	0.
L	0.	0.	0.	15.38	0.	0.	13.00	7.87	0.	0.
R	0.	0.	0.	16.86	0.	0.	13.60	31.00	0.	0.
20 A	0.	0.	0.	16.57	0.	0.	13.70	17.41	0.	0.
L	0.	0.	0.	16.31	0.	0.	13.80	8.00	0.	0.
R	0.	0.	0.	18.30	0.	0.	12.47	15.59	0.	0.
30 A	0.	0.	0.	17.11	0.	0.	13.01	11.67	0.	0.
L	0.	0.	0.	15.92	0.	0.	13.62	7.76	0.	0.
R	0.	0.	0.	17.64	0.	0.	11.68	7.51	0.	0.
40 A	0.	0.	0.	18.36	0.	0.	11.68	8.02	0.	0.
L	0.	0.	0.	19.02	0.	0.	0.	8.64	0.	0.
R	0.	0.	0.	17.78	0.	0.	8.77	7.35	0.	0.
50 A	0.	0.	0.	19.09	0.	0.	8.77	7.35	0.	0.
L	0.	0.	0.	25.67	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	16.21	0.	0.	9.90	7.08	0.	0.
60 A	0.	0.	0.	16.21	0.	0.	9.90	7.08	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	15.76	0.	0.	7.33	7.19	0.	0.
70 A	0.	0.	0.	15.76	0.	0.	7.33	7.19	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	14.80	0.	0.	7.36	7.43	0.	0.
80 A	0.	0.	0.	14.80	0.	0.	7.36	7.43	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	14.10	0.	0.	10.18	7.94	0.	0.
90 A	0.	0.	0.	14.10	0.	0.	10.18	7.94	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	15.25	0.	6.96	0.	7.96	0.	0.
100 A	0.	0.	0.	15.25	0.	6.96	0.	7.81	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	7.00	0.	0.
R	0.	0.	0.	0.	0.	7.05	0.	7.98	0.	0.
110 A	0.	0.	0.	0.	0.	7.05	0.	7.71	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	7.11	0.	0.
R	0.	0.	0.	0.	0.	7.14	0.	7.66	0.	0.
120 A	0.	0.	0.	0.	0.	10.47	0.	7.36	0.	0.
L	0.	0.	0.	0.	0.	15.12	0.	7.06	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 92 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.	0.	7.16	0.	8.08	0.	0.
130	A	0.	0.	0.	0.	0.	11.03	0.	7.62	0.	0.
	L	0.	0.	0.	0.	0.	14.90	0.	7.11	0.	0.
	R	0.	0.	0.	0.	0.	7.44	0.	8.48	0.	0.
140	A	0.	0.	0.	0.	0.	10.57	0.	8.14	7.28	0.
	L	0.	0.	0.	0.	0.	14.56	0.	7.47	7.28	0.
	R	0.	0.	0.	0.	0.	7.49	0.	8.22	0.	0.
150	A	0.	0.	0.	0.	0.	9.80	0.	7.96	0.	0.
	L	0.	0.	0.	0.	0.	12.29	0.	7.73	0.	0.
	R	0.	0.	0.	0.	0.	7.13	0.	8.12	0.	0.
160	A	0.	0.	0.	0.	0.	9.30	0.	8.31	0.	0.
	L	0.	0.	0.	0.	0.	11.64	0.	8.50	0.	0.
	R	0.	0.	0.	0.	0.	7.15	0.	8.18	0.	0.
170	A	0.	0.	0.	0.	0.	9.66	0.	8.40	0.	0.
	L	0.	0.	0.	0.	0.	12.35	0.	8.61	0.	0.
	R	0.	0.	0.	0.	0.	7.41	0.	8.03	0.	0.
180	A	0.	0.	0.	0.	0.	7.51	0.	8.04	0.	0.
	L	0.	0.	0.	0.	0.	7.56	0.	8.04	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 92 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	1.23	0.	0.	0.96	2.46	0.	0.
0 A	0.	0.	0.	1.56	0.	0.	1.34	2.64	0.	0.
L	0.	0.	0.	0.95	0.	0.	0.93	0.95	0.	0.
R	0.	0.	0.	0.99	0.	0.	0.87	6.07	0.	0.
10 A	0.	0.	0.	1.93	0.	0.	1.26	6.20	0.	0.
L	0.	0.	0.	1.66	0.	0.	0.92	1.25	0.	0.
R	0.	0.	0.	1.12	0.	0.	0.94	5.42	0.	0.
20 A	0.	0.	0.	1.97	0.	0.	1.29	5.51	0.	0.
L	0.	0.	0.	1.62	0.	0.	0.89	1.02	0.	0.
R	0.	0.	0.	1.84	0.	0.	1.22	5.06	0.	0.
30 A	0.	0.	0.	2.10	0.	0.	1.65	5.18	0.	0.
L	0.	0.	0.	1.00	0.	0.	1.11	1.10	0.	0.
R	0.	0.	0.	1.03	0.	0.	1.02	1.01	0.	0.
40 A	0.	0.	0.	3.59	0.	0.	1.02	1.45	0.	0.
L	0.	0.	0.	3.44	0.	0.	0.	1.03	0.	0.
R	0.	0.	0.	1.23	0.	0.	1.51	0.98	0.	0.
50 A	0.	0.	0.	1.25	0.	0.	1.51	0.98	0.	0.
L	0.	0.	0.	0.23	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.93	0.	0.	1.10	0.94	0.	0.
60 A	0.	0.	0.	0.93	0.	0.	1.10	0.94	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	1.07	0.	0.	0.91	0.95	0.	0.
70 A	0.	0.	0.	1.07	0.	0.	0.91	0.95	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.92	0.	0.	1.13	0.94	0.	0.
80 A	0.	0.	0.	0.92	0.	0.	1.13	0.94	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.85	0.	0.	1.00	0.97	0.	0.
90 A	0.	0.	0.	0.85	0.	0.	1.00	0.97	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.94	0.	0.86	0.	0.95	0.	0.
100 A	0.	0.	0.	0.94	0.	0.86	0.	1.34	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.94	0.	0.
R	0.	0.	0.	0.	0.	0.92	0.	0.99	0.	0.
110 A	0.	0.	0.	0.	0.	0.92	0.	1.44	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	1.05	0.	0.
R	0.	0.	0.	0.	0.	0.91	0.	1.01	0.	0.
120 A	0.	0.	0.	0.	0.	1.37	0.	1.42	0.	0.
L	0.	0.	0.	0.	0.	1.03	0.	1.00	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 93 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.	0.	0.93	0.	0.98	0.	0.
130	A	0.	0.	0.	0.	0.	1.61	0.	1.37	0.	0.
	L	0.	0.	0.	0.	0.	1.31	0.	0.96	0.	0.
	R	0.	0.	0.	0.	0.	0.94	0.	0.94	0.	0.
140	A	0.	0.	0.	0.	0.	1.43	0.	1.72	1.12	0.
	L	0.	0.	0.	0.	0.	1.07	0.	1.44	1.12	0.
	R	0.	0.	0.	0.	0.	0.92	0.	0.95	0.	0.
150	A	0.	0.	0.	0.	0.	2.04	0.	1.42	0.	0.
	L	0.	0.	0.	0.	0.	1.82	0.	1.06	0.	0.
	R	0.	0.	0.	0.	0.	0.95	0.	0.93	0.	0.
160	A	0.	0.	0.	0.	0.	1.46	0.	1.31	0.	0.
	L	0.	0.	0.	0.	0.	1.11	0.	0.93	0.	0.
	R	0.	0.	0.	0.	0.	0.95	0.	0.97	0.	0.
170	A	0.	0.	0.	0.	0.	2.71	0.	1.34	0.	0.
	L	0.	0.	0.	0.	0.	2.54	0.	0.93	0.	0.
	R	0.	0.	0.	0.	0.	0.92	0.	0.96	0.	0.
180	A	0.	0.	0.	0.	0.	1.32	0.	1.38	0.	0.
	L	0.	0.	0.	0.	0.	0.94	0.	0.99	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 95 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	255.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	584.	0.	0.
30	0.	0.	0.	0.	0.	0.	945.	375.	0.	0.
40	0.	0.	0.	0.	0.	0.	645.	375.	0.	0.
50	0.	0.	0.	0.	0.	0.	270.	180.	0.	0.
60	0.	0.	0.	1365.	0.	0.	255.	195.	0.	0.
70	0.	0.	0.	555.	0.	0.	255.	180.	0.	0.
80	0.	0.	0.	390.	0.	0.	195.	180.	0.	0.
90	0.	0.	0.	255.	0.	0.	135.	165.	0.	0.
100	0.	0.	0.	0.	0.	180.	0.	315.	0.	0.
110	0.	0.	0.	0.	0.	375.	0.	540.	0.	0.
120	0.	0.	0.	0.	0.	600.	0.	405.	0.	0.
130	0.	0.	0.	0.	0.	930.	0.	390.	0.	0.
140	0.	0.	0.	0.	0.	509.	0.	390.	45.	0.
150	0.	0.	0.	0.	0.	0.	0.	465.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	720.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 94

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	11.45	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	19.75	0.	0.
30	0.	0.	0.	0.	0.	0.	13.51	12.05	0.	0.
40	0.	0.	0.	0.	0.	0.	13.09	8.08	0.	0.
50	0.	0.	0.	0.	0.	0.	10.87	7.41	0.	0.
60	0.	0.	0.	16.71	0.	0.	9.47	7.09	0.	0.
70	0.	0.	0.	18.73	0.	0.	7.77	7.19	0.	0.
80	0.	0.	0.	15.44	0.	0.	7.36	7.48	0.	0.
90	0.	0.	0.	14.31	0.	0.	10.18	7.93	0.	0.
100	0.	0.	0.	0.	0.	7.06	0.	7.81	0.	0.
110	0.	0.	0.	0.	0.	9.81	0.	7.66	0.	0.
120	0.	0.	0.	0.	0.	10.77	0.	7.37	0.	0.
130	0.	0.	0.	0.	0.	9.57	0.	7.71	0.	0.
140	0.	0.	0.	0.	0.	9.08	0.	8.05	7.28	0.
150	0.	0.	0.	0.	0.	0.	0.	8.24	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	8.28	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 10 AT 0114 AST

INSOL ANGLE 92.4 DEG

SPECTRAL BAND 3.95 TO 4.80 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	3.45	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	12.75	0.	0.
30	0.	0.	0.	0.	0.	0.	0.96	5.87	0.	0.
40	0.	0.	0.	0.	0.	0.	1.29	1.19	0.	0.
50	0.	0.	0.	0.	0.	0.	1.63	0.97	0.	0.
60	0.	0.	0.	1.77	0.	0.	1.44	0.95	0.	0.
70	0.	0.	0.	3.01	0.	0.	1.26	0.95	0.	0.
80	0.	0.	0.	1.09	0.	0.	1.13	0.96	0.	0.
90	0.	0.	0.	0.97	0.	0.	1.00	0.96	0.	0.
100	0.	0.	0.	0.	0.	0.90	0.	1.01	0.	0.
110	0.	0.	0.	0.	0.	4.09	0.	1.08	0.	0.
120	0.	0.	0.	0.	0.	3.75	0.	1.06	0.	0.
130	0.	0.	0.	0.	0.	2.74	0.	1.12	0.	0.
140	0.	0.	0.	0.	0.	2.94	0.	1.19	1.12	0.
150	0.	0.	0.	0.	0.	0.	0.	0.95	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.99	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	105.	0.	0.	0.	30.	0.	0.
0 A	0.	0.	0.	105.	0.	0.	0.	75.	0.	0.
L	0.	0.	0.	105.	0.	0.	0.	120.	0.	0.
R	0.	0.	0.	210.	0.	0.	0.	195.	0.	0.
10 A	0.	0.	0.	210.	0.	0.	0.	195.	0.	0.
L	0.	0.	0.	210.	0.	0.	0.	195.	0.	0.
R	0.	0.	0.	210.	0.	0.	0.	180.	0.	0.
20 A	0.	0.	0.	218.	0.	0.	0.	210.	0.	0.
L	0.	0.	0.	225.	0.	0.	0.	240.	0.	0.
R	0.	0.	0.	255.	0.	0.	0.	195.	0.	0.
30 A	0.	0.	0.	240.	0.	0.	0.	195.	0.	0.
L	0.	0.	0.	225.	0.	0.	0.	195.	0.	0.
R	0.	0.	0.	210.	0.	0.	0.	165.	0.	0.
40 A	0.	0.	0.	210.	0.	0.	0.	195.	0.	0.
L	0.	0.	0.	210.	0.	0.	0.	225.	0.	0.
R	0.	0.	0.	210.	0.	0.	0.	195.	0.	0.
50 A	0.	0.	0.	173.	0.	0.	0.	203.	8.	0.
L	0.	0.	0.	135.	0.	0.	0.	210.	15.	0.
R	0.	0.	0.	195.	0.	0.	0.	195.	0.	0.
60 A	0.	0.	0.	180.	0.	0.	0.	98.	0.	0.
L	0.	0.	0.	165.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	135.	0.	0.	0.	180.	0.	0.
70 A	0.	0.	0.	68.	0.	0.	0.	90.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	150.	0.	0.
80 A	0.	0.	0.	0.	0.	0.	0.	75.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	75.	0.	155.	0.	0.
90 A	0.	0.	0.	0.	0.	38.	0.	83.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	210.	0.	195.	0.	0.
100 A	0.	0.	0.	0.	0.	105.	0.	98.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	150.	0.	180.	0.	0.
110 A	0.	0.	0.	0.	0.	75.	0.	105.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	30.	0.	0.
R	0.	0.	0.	0.	0.	240.	0.	195.	0.	0.
120 A	0.	0.	0.	0.	0.	120.	0.	180.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	165.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 97 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	165.	0.	210.	0.	0.
130 A	0.	0.	0.	0.	0.	143.	0.	195.	0.	0.
L	0.	0.	0.	0.	0.	120.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	180.	0.	0.
140 A	0.	0.	0.	0.	0.	203.	0.	195.	0.	0.
L	0.	0.	0.	0.	0.	225.	0.	209.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	225.	0.	0.
150 A	0.	0.	0.	0.	0.	165.	0.	210.	0.	0.
L	0.	0.	0.	0.	0.	150.	0.	195.	0.	0.
R	0.	0.	0.	0.	0.	195.	0.	150.	0.	0.
160 A	0.	0.	0.	0.	0.	173.	0.	188.	0.	0.
L	0.	0.	0.	0.	0.	150.	0.	225.	0.	0.
R	0.	0.	0.	0.	0.	165.	0.	195.	0.	0.
170 A	0.	0.	0.	0.	0.	195.	0.	188.	0.	0.
L	0.	0.	0.	0.	0.	225.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	105.	0.	60.	0.	0.
180 A	0.	0.	0.	0.	0.	98.	0.	90.	0.	0.
L	0.	0.	0.	0.	0.	90.	0.	120.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 97 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	28.43	0.	0.	0.	22.03	0.	0.
0 A	0.	0.	0.	28.45	0.	0.	0.	22.26	0.	0.
L	0.	0.	0.	28.47	0.	0.	0.	22.31	0.	0.
R	0.	0.	0.	30.48	0.	0.	0.	22.67	0.	0.
10 A	0.	0.	0.	30.30	0.	0.	0.	22.24	0.	0.
L	0.	0.	0.	30.12	0.	0.	0.	21.81	0.	0.
R	0.	0.	0.	31.72	0.	0.	0.	50.62	0.	0.
20 A	0.	0.	0.	32.07	0.	0.	0.	34.27	0.	0.
L	0.	0.	0.	32.39	0.	0.	0.	22.01	0.	0.
R	0.	0.	0.	30.47	0.	0.	0.	39.45	0.	0.
30 A	0.	0.	0.	30.48	0.	0.	0.	30.53	0.	0.
L	0.	0.	0.	30.51	0.	0.	0.	21.61	0.	0.
R	0.	0.	0.	30.75	0.	0.	0.	23.64	0.	0.
40 A	0.	0.	0.	31.05	0.	0.	0.	22.49	0.	0.
L	0.	0.	0.	31.34	0.	0.	0.	21.65	0.	0.
R	0.	0.	0.	32.76	0.	0.	0.	24.31	0.	0.
50 A	0.	0.	0.	31.60	0.	0.	0.	23.16	24.10	0.
L	0.	0.	0.	29.80	0.	0.	0.	22.08	24.10	0.
R	0.	0.	0.	31.54	0.	0.	0.	22.96	0.	0.
60 A	0.	0.	0.	31.07	0.	0.	0.	22.96	0.	0.
L	0.	0.	0.	30.50	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 98

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	30.92	0.	0.	0.	22.91	0.	0.
70 A	0.	0.	0.	30.92	0.	0.	0.	22.91	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	23.51	0.	0.
80 A	0.	0.	0.	0.	0.	0.	0.	23.51	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	22.95	0.	23.71	0.	0.
90 A	0.	0.	0.	0.	0.	22.95	0.	23.71	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	21.92	0.	23.56	0.	0.
100 A	0.	0.	0.	0.	0.	21.92	0.	23.56	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	21.46	0.	23.72	0.	0.
110 A	0.	0.	0.	0.	0.	21.46	0.	23.65	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	23.24	0.	0.
R	0.	0.	0.	0.	0.	21.43	0.	23.22	0.	0.
120 A	0.	0.	0.	0.	0.	21.43	0.	22.89	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	22.51	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 98 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.	0.	21.80	0.	23.81	0.	0.
130	A	0.	0.	0.	0.	0.	24.47	0.	23.19	0.	0.
	L	0.	0.	0.	0.	0.	28.14	0.	22.46	0.	0.
	R	0.	0.	0.	0.	0.	21.85	0.	24.16	0.	0.
140	A	0.	0.	0.	0.	0.	25.20	0.	23.51	0.	0.
	L	0.	0.	0.	0.	0.	27.87	0.	22.94	0.	0.
	R	0.	0.	0.	0.	0.	22.24	0.	23.66	0.	0.
150	A	0.	0.	0.	0.	0.	24.75	0.	23.71	0.	0.
	L	0.	0.	0.	0.	0.	27.76	0.	23.77	0.	0.
	R	0.	0.	0.	0.	0.	21.80	0.	24.06	0.	0.
160	A	0.	0.	0.	0.	0.	22.62	0.	24.24	0.	0.
	L	0.	0.	0.	0.	0.	23.69	0.	24.36	0.	0.
	R	0.	0.	0.	0.	0.	21.47	0.	23.81	0.	0.
170	A	0.	0.	0.	0.	0.	24.76	0.	24.03	0.	0.
	L	0.	0.	0.	0.	0.	27.17	0.	24.27	0.	0.
	R	0.	0.	0.	0.	0.	21.38	0.	23.79	0.	0.
180	A	0.	0.	0.	0.	0.	21.63	0.	23.81	0.	0.
	L	0.	0.	0.	0.	0.	21.92	0.	23.82	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 98 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 0120 AST						INSOL ANGLE 92.2 DEG				
SPECTRAL BAND 4.18 TO 4.97 MICRONS						ELEVATION 30.5 KM				
VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.89	0.	0.	0.	1.15	0.	0.
0 A	0.	0.	0.	1.23	0.	0.	0.	1.55	0.	0.
L	0.	0.	0.	0.85	0.	0.	0.	1.04	0.	0.
R	0.	0.	0.	1.23	0.	0.	0.	2.10	0.	0.
10 A	0.	0.	0.	2.00	0.	0.	0.	2.33	0.	0.
L	0.	0.	0.	1.58	0.	0.	0.	1.03	0.	0.
R	0.	0.	0.	1.22	0.	0.	0.	9.90	0.	0.
20 A	0.	0.	0.	1.56	0.	0.	0.	9.95	0.	0.
L	0.	0.	0.	0.96	0.	0.	0.	1.00	0.	0.
R	0.	0.	0.	1.77	0.	0.	0.	10.59	0.	0.
30 A	0.	0.	0.	1.98	0.	0.	0.	10.63	0.	0.
L	0.	0.	0.	0.88	0.	0.	0.	0.98	0.	0.
R	0.	0.	0.	1.62	0.	0.	0.	1.39	0.	0.
40 A	0.	0.	0.	2.60	0.	0.	0.	1.70	0.	0.
L	0.	0.	0.	2.04	0.	0.	0.	0.97	0.	0.
R	0.	0.	0.	1.14	0.	0.	0.	0.98	0.	0.
50 A	0.	0.	0.	2.03	0.	0.	0.	1.46	1.64	0.
L	0.	0.	0.	1.69	0.	0.	0.	1.08	1.64	0.
R	0.	0.	0.	1.48	0.	0.	0.	1.05	0.	0.
60 A	0.	0.	0.	1.78	0.	0.	0.	1.05	0.	0.
L	0.	0.	0.	0.98	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	1.28	0.	0.	0.	1.05	0.	0.
70 A	0.	0.	0.	1.28	0.	0.	0.	1.05	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	1.07	0.	0.
80 A	0.	0.	0.	0.	0.	0.	0.	1.07	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	1.25	0.	1.01	0.	0.
90 A	0.	0.	0.	0.	0.	1.25	0.	1.01	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	1.22	0.	1.00	0.	0.
100 A	0.	0.	0.	0.	0.	1.22	0.	1.00	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.99	0.	1.01	0.	0.
110 A	0.	0.	0.	0.	0.	0.99	0.	1.48	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	1.08	0.	0.
R	0.	0.	0.	0.	0.	0.99	0.	1.04	0.	0.
120 A	0.	0.	0.	0.	0.	0.99	0.	1.49	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	1.07	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 99 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.	0.	1.01	0.	1.00	0.	0.
130	A	0.	0.	0.	0.	0.	1.60	0.	1.49	0.	0.
	L	0.	0.	0.	0.	0.	1.24	0.	1.10	0.	0.
	R	0.	0.	0.	0.	0.	1.05	0.	0.98	0.	0.
140	A	0.	0.	0.	0.	0.	1.61	0.	1.48	0.	0.
	L	0.	0.	0.	0.	0.	1.23	0.	1.11	0.	0.
	R	0.	0.	0.	0.	0.	1.05	0.	1.01	0.	0.
150	A	0.	0.	0.	0.	0.	1.73	0.	1.53	0.	0.
	L	0.	0.	0.	0.	0.	1.37	0.	1.14	0.	0.
	R	0.	0.	0.	0.	0.	1.03	0.	1.04	0.	0.
160	A	0.	0.	0.	0.	0.	2.23	0.	1.40	0.	0.
	L	0.	0.	0.	0.	0.	1.98	0.	0.93	0.	0.
	R	0.	0.	0.	0.	0.	1.04	0.	1.00	0.	0.
170	A	0.	0.	0.	0.	0.	2.31	0.	1.41	0.	0.
	L	0.	0.	0.	0.	0.	2.06	0.	0.99	0.	0.
	R	0.	0.	0.	0.	0.	0.95	0.	1.03	0.	0.
180	A	0.	0.	0.	0.	0.	1.62	0.	1.44	0.	0.
	L	0.	0.	0.	0.	0.	1.32	0.	1.01	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 99 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	270.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	540.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	480.	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	435.	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	390.	15.	0.
60	0.	0.	0.	1620.	0.	0.	0.	225.	0.	0.
70	0.	0.	0.	975.	0.	0.	0.	180.	0.	0.
80	0.	0.	0.	210.	0.	0.	0.	150.	0.	0.
90	0.	0.	0.	0.	0.	165.	0.	180.	0.	0.
100	0.	0.	0.	0.	0.	225.	0.	195.	0.	0.
110	0.	0.	0.	0.	0.	300.	0.	255.	0.	0.
120	0.	0.	0.	0.	0.	600.	0.	435.	0.	0.
130	0.	0.	0.	0.	0.	765.	0.	375.	0.	0.
140	0.	0.	0.	0.	0.	570.	0.	479.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	480.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	660.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 100

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	21.98	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	27.60	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	33.17	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	22.90	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	23.19	24.10	0.
60	0.	0.	0.	30.57	0.	0.	0.	22.99	0.	0.
70	0.	0.	0.	31.37	0.	0.	0.	22.91	0.	0.
80	0.	0.	0.	30.79	0.	0.	0.	23.51	0.	0.
90	0.	0.	0.	0.	0.	22.38	0.	23.69	0.	0.
100	0.	0.	0.	0.	0.	21.69	0.	23.56	0.	0.
110	0.	0.	0.	0.	0.	21.46	0.	23.61	0.	0.
120	0.	0.	0.	0.	0.	24.94	0.	22.90	0.	0.
130	0.	0.	0.	0.	0.	23.71	0.	23.17	0.	0.
140	0.	0.	0.	0.	0.	23.87	0.	23.64	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	24.06	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	24.00	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 101

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 9 AT 0120 AST

INSOL ANGLE 92.2 DEG

SPECTRAL BAND 4.18 TO 4.97 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	1.10	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	10.86	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	14.85	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	2.11	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	1.54	1.64	0.
60	0.	0.	0.	1.68	0.	0.	0.	1.06	0.	0.
70	0.	0.	0.	1.81	0.	0.	0.	1.05	0.	0.
80	0.	0.	0.	1.37	0.	0.	0.	1.07	0.	0.
90	0.	0.	0.	0.	0.	1.32	0.	1.02	0.	0.
100	0.	0.	0.	0.	0.	1.16	0.	1.01	0.	0.
110	0.	0.	0.	0.	0.	0.99	0.	1.03	0.	0.
120	0.	0.	0.	0.	0.	3.34	0.	1.14	0.	0.
130	0.	0.	0.	0.	0.	2.73	0.	1.30	0.	0.
140	0.	0.	0.	0.	0.	3.13	0.	1.08	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	1.05	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	1.02	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	15.	105.	0.	105.	0.	0.
0 A	0.	0.	0.	0.	38.	98.	0.	105.	0.	0.
L	0.	0.	0.	0.	60.	90.	0.	105.	0.	0.
R	0.	0.	0.	0.	165.	30.	0.	276.	0.	0.
10 A	0.	0.	0.	0.	90.	98.	0.	251.	0.	0.
L	0.	0.	0.	0.	15.	165.	0.	225.	0.	0.
R	0.	0.	0.	0.	60.	150.	0.	133.	0.	0.
20 A	0.	0.	0.	0.	83.	143.	0.	179.	0.	0.
L	0.	0.	0.	0.	105.	135.	0.	225.	0.	0.
R	0.	0.	0.	0.	150.	60.	0.	150.	0.	0.
30 A	0.	0.	0.	0.	143.	45.	0.	195.	0.	0.
L	0.	0.	0.	0.	135.	30.	0.	240.	0.	0.
R	0.	0.	0.	0.	135.	30.	0.	195.	0.	0.
40 A	0.	0.	0.	0.	135.	90.	0.	240.	0.	0.
L	0.	0.	0.	0.	134.	150.	0.	285.	0.	0.
R	0.	0.	0.	60.	15.	15.	0.	135.	0.	0.
50 A	0.	0.	0.	30.	52.	45.	0.	179.	0.	0.
L	0.	0.	0.	0.	89.	74.	0.	223.	0.	0.
R	0.	0.	0.	180.	0.	0.	44.	0.	0.	0.
60 A	0.	0.	0.	90.	37.	60.	22.	118.	0.	0.
L	0.	0.	0.	0.	74.	119.	0.	236.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 103

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	225.	0.	0.	210.	105.	0.	0.
70 A	0.	0.	0.	113.	45.	67.	105.	163.	0.	0.
L	0.	0.	0.	0.	90.	133.	0.	221.	0.	0.
R	0.	0.	0.	180.	0.	0.	165.	60.	45.	0.
80 A	0.	0.	0.	90.	38.	83.	83.	66.	23.	0.
L	0.	0.	0.	0.	75.	165.	0.	71.	0.	0.
R	0.	0.	0.	180.	0.	0.	210.	75.	0.	0.
90 A	0.	0.	0.	90.	0.	15.	105.	38.	0.	0.
L	0.	0.	0.	0.	0.	30.	0.	0.	0.	0.
R	0.	0.	0.	195.	0.	0.	224.	0.	0.	0.
100 A	0.	0.	0.	98.	0.	0.	112.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	180.	0.	0.	207.	0.	0.	0.
110 A	0.	0.	0.	90.	0.	0.	104.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	195.	0.	0.	119.	0.	0.	0.
120 A	0.	0.	0.	98.	0.	0.	60.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 103 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	194.	0.	0.	194.	0.	0.	0.
130 A	0.	0.	0.	97.	0.	0.	97.	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	181.	0.	0.	224.	0.	0.	0.
140 A	0.	0.	0.	91.	0.	0.	112.	8.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	15.	0.	0.
R	0.	0.	0.	145.	0.	0.	208.	0.	0.	0.
150 A	0.	0.	0.	73.	0.	0.	104.	82.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	164.	0.	0.
R	0.	0.	0.	179.	0.	0.	177.	178.	0.	0.
160 A	0.	0.	0.	90.	0.	0.	103.	170.	0.	0.
L	0.	0.	0.	0.	0.	0.	29.	161.	0.	0.
R	0.	0.	0.	175.	0.	0.	164.	177.	0.	0.
170 A	0.	0.	0.	110.	0.	0.	178.	186.	0.	0.
L	0.	0.	0.	45.	0.	0.	191.	195.	0.	0.
R	0.	0.	0.	92.	0.	0.	120.	60.	0.	0.
180 A	0.	0.	0.	53.	0.	0.	105.	75.	0.	0.
L	0.	0.	0.	14.	0.	0.	89.	90.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 103 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.28	0.23	0.	2.03	0.	0.
0 A	0.	0.	0.	0.	0.22	0.23	0.	1.50	0.	0.
L	0.	0.	0.	0.	0.20	0.23	0.	0.97	0.	0.
R	0.	0.	0.	0.	0.25	0.26	0.	10.36	0.	0.
10 A	0.	0.	0.	0.	0.25	0.19	0.	5.98	0.	0.
L	0.	0.	0.	0.	0.23	0.17	0.	0.59	0.	0.
R	0.	0.	0.	0.	0.31	0.28	0.	23.46	0.	0.
20 A	0.	0.	0.	0.	0.21	0.24	0.	9.02	0.	0.
L	0.	0.	0.	0.	0.15	0.19	0.	0.48	0.	0.
R	0.	0.	0.	0.	0.31	0.35	0.	8.42	0.	0.
30 A	0.	0.	0.	0.	0.26	0.31	0.	3.54	0.	0.
L	0.	0.	0.	0.	0.22	0.22	0.	0.48	0.	0.
R	0.	0.	0.	0.	0.31	0.38	0.	2.25	0.	0.
40 A	0.	0.	0.	0.	0.26	0.22	0.	1.16	0.	0.
L	0.	0.	0.	0.	0.21	0.18	0.	0.42	0.	0.
R	0.	0.	0.	0.16	0.37	0.30	0.	0.76	0.	0.
50 A	0.	0.	0.	0.16	0.21	0.21	0.	0.42	0.	0.
L	0.	0.	0.	0.	0.18	0.19	0.	0.22	0.	0.
R	0.	0.	0.	0.15	0.	0.	0.21	0.	0.	0.
60 A	0.	0.	0.	0.15	0.23	0.20	0.21	0.23	0.	0.
L	0.	0.	0.	0.	0.23	0.20	0.	0.23	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.17	0.	0.	0.23	0.29	0.	0.
70 A	0.	0.	0.	0.17	0.21	0.21	0.23	0.24	0.	0.
L	0.	0.	0.	0.	0.21	0.21	0.	0.21	0.	0.
R	0.	0.	0.	0.15	0.	0.	0.27	0.44	0.33	0.
80 A	0.	0.	0.	0.15	0.17	0.18	0.27	0.37	0.33	0.
L	0.	0.	0.	0.	0.17	0.18	0.	0.32	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.33	0.52	0.	0.
90 A	0.	0.	0.	0.17	0.	0.18	0.33	0.52	0.	0.
L	0.	0.	0.	0.	0.	0.18	0.	0.	0.	0.
R	0.	0.	0.	0.18	0.	0.	0.20	0.	0.	0.
100 A	0.	0.	0.	0.18	0.	0.	0.20	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.18	0.	0.	0.24	0.	0.	0.
110 A	0.	0.	0.	0.18	0.	0.	0.24	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.20	0.	0.	0.
120 A	0.	0.	0.	0.19	0.	0.	0.20	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 104 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
	R	0.	0.	0.	0.18	0.	0.	0.21	0.	0.	0.
130	A	0.	0.	0.	0.18	0.	0.	0.21	0.	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.31	0.	0.	0.18	0.	0.	0.
140	A	0.	0.	0.	0.31	0.	0.	0.18	0.24	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.24	0.	0.
	R	0.	0.	0.	0.41	0.	0.	0.19	0.	0.	0.
150	A	0.	0.	0.	0.41	0.	0.	0.19	0.25	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.25	0.	0.
	R	0.	0.	0.	0.19	0.	0.	0.23	0.19	0.	0.
160	A	0.	0.	0.	0.19	0.	0.	0.24	0.22	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.31	0.24	0.	0.
	R	0.	0.	0.	0.25	0.	0.	0.22	0.22	0.	0.
170	A	0.	0.	0.	0.29	0.	0.	0.24	0.22	0.	0.
	L	0.	0.	0.	0.47	0.	0.	0.25	0.21	0.	0.
	R	0.	0.	0.	0.40	0.	0.	0.18	0.23	0.	0.
180	A	0.	0.	0.	0.42	0.	0.	0.19	0.21	0.	0.
	L	0.	0.	0.	0.54	0.	0.	0.20	0.20	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 104 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA							.			
R	0.	0.	0.	0.	0.16	0.18	0.	0.64	0.	0.
0 A	0.	0.	0.	0.	0.23	0.25	0.	0.70	0.	0.
L	0.	0.	0.	0.	0.16	0.17	0.	0.27	0.	0.
R	0.	0.	0.	0.	0.17	0.19	0.	7.96	0.	0.
10 A	0.	0.	0.	0.	0.21	0.22	0.	7.96	0.	0.
L	0.	0.	0.	0.	0.13	0.12	0.	0.21	0.	0.
R	0.	0.	0.	0.	0.20	0.18	0.	4.21	0.	0.
20 A	0.	0.	0.	0.	0.23	0.22	0.	4.22	0.	0.
L	0.	0.	0.	0.	0.12	0.13	0.	0.22	0.	0.
R	0.	0.	0.	0.	0.17	0.19	0.	4.22	0.	0.
30 A	0.	0.	0.	0.	0.24	0.24	0.	4.23	0.	0.
L	0.	0.	0.	0.	0.17	0.15	0.	0.22	0.	0.
R	0.	0.	0.	0.	0.19	0.17	0.	1.09	0.	0.
40 A	0.	0.	0.	0.	0.25	0.22	0.	1.14	0.	0.
L	0.	0.	0.	0.	0.16	0.14	0.	0.32	0.	0.
R	0.	0.	0.	0.12	0.23	0.20	0.	0.31	0.	0.
50 A	0.	0.	0.	0.12	0.26	0.25	0.	0.34	0.	0.
L	0.	0.	0.	0.	0.13	0.14	0.	0.15	0.	0.
R	0.	0.	0.	0.12	0.	0.	0.21	0.	0.	0.
60 A	0.	0.	0.	0.12	0.14	0.15	0.21	0.15	0.	0.
L	0.	0.	0.	0.	0.14	0.15	0.	0.15	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.13	0.	0.	0.16	0.17	0.	0.
70 A	0.	0.	0.	0.13	0.15	0.16	0.16	0.22	0.	0.
L	0.	0.	0.	0.	0.15	0.16	0.	0.15	0.	0.
R	0.	0.	0.	0.13	0.	0.	0.18	0.24	0.20	0.
80 A	0.	0.	0.	0.13	0.15	0.14	0.18	0.29	0.20	0.
L	0.	0.	0.	0.	0.15	0.14	0.	0.17	0.	0.
R	0.	0.	0.	0.12	0.	0.	0.19	0.22	0.	0.
90 A	0.	0.	0.	0.12	0.	0.14	0.19	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.14	0.	0.	0.	0.
R	0.	0.	0.	0.13	0.	0.	0.15	0.	0.	0.
100 A	0.	0.	0.	0.13	0.	0.	0.15	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.13	0.	0.	0.16	0.	0.	0.
110 A	0.	0.	0.	0.13	0.	0.	0.16	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.14	0.	0.	0.16	0.	0.	0.
120 A	0.	0.	0.	0.14	0.	0.	0.16	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 105 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 7 AT 0124 AST						INSOL ANGLE 92.0 DEG				
SPECTRAL BAND 2.54 TO 2.89 MICRONS						ELEVATION 30.5 KM				
VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.14	0.	0.	0.14	0.	0.	0.
130 A	0.	0.	0.	0.14	0.	0.	0.14	0.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.15	0.	0.	0.
140 A	0.	0.	0.	0.19	0.	0.	0.15	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.14	0.	0.	0.
150 A	0.	0.	0.	0.16	0.	0.	0.14	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.
R	0.	0.	0.	0.14	0.	0.	0.15	0.14	0.	0.
160 A	0.	0.	0.	0.14	0.	0.	0.21	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.	0.14	0.17	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.15	0.16	0.	0.
170 A	0.	0.	0.	0.23	0.	0.	0.22	0.22	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.16	0.15	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.12	0.17	0.	0.
180 A	0.	0.	0.	0.19	0.	0.	0.18	0.21	0.	0.
L	0.	0.	0.	0.09	0.	0.	0.13	0.14	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 105 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
0		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10		0.	0.	0.	0.	0.	0.	0.	345.	0.	0.
20		0.	0.	0.	0.	0.	0.	0.	576.	0.	0.
30		0.	0.	0.	0.	0.	0.	0.	463.	0.	0.
40		0.	0.	0.	0.	255.	525.	0.	465.	0.	0.
50		0.	0.	0.	0.	599.	345.	0.	433.	0.	0.
60		0.	0.	0.	0.	224.	164.	0.	236.	0.	0.
70		0.	0.	0.	225.	134.	178.	239.	341.	0.	0.
80		0.	0.	0.	360.	90.	239.	180.	131.	45.	0.
90		0.	0.	0.	390.	15.	30.	240.	75.	0.	0.
100		0.	0.	0.	435.	0.	0.	253.	0.	0.	0.
110		0.	0.	0.	461.	0.	0.	163.	0.	0.	0.
120		0.	0.	0.	549.	0.	0.	268.	0.	0.	0.
130		0.	0.	0.	0.	0.	0.	284.	0.	0.	0.
140		0.	0.	0.	0.	0.	0.	354.	104.	0.	0.
150		0.	0.	0.	0.	0.	0.	594.	310.	0.	0.
160		0.	0.	0.	0.	0.	0.	0.	626.	0.	0.
170		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 106

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	1.86	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	6.85	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	6.85	0.	0.
40	0.	0.	0.	0.	0.24	0.21	0.	1.39	0.	0.
50	0.	0.	0.	0.	0.25	0.25	0.	0.51	0.	0.
60	0.	0.	0.	0.	0.23	0.21	0.	0.25	0.	0.
70	0.	0.	0.	0.15	0.23	0.21	0.23	0.24	0.	0.
80	0.	0.	0.	0.16	0.16	0.19	0.27	0.37	0.33	0.
90	0.	0.	0.	0.17	0.21	0.18	0.32	0.52	0.	0.
100	0.	0.	0.	0.19	0.	0.	0.20	0.	0.	0.
110	0.	0.	0.	0.29	0.	0.	0.23	0.	0.	0.
120	0.	0.	0.	0.29	0.	0.	0.21	0.	0.	0.
130	0.	0.	0.	0.	0.	0.	0.19	0.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.21	0.22	0.	0.
150	0.	0.	0.	0.	0.	0.	0.22	0.23	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.22	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 107

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 7 AT 0124 AST

INSOL ANGLE 92.0 DEG

SPECTRAL BAND 2.54 TO 2.89 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	1.28	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	9.39	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	8.67	0.	0.
40	0.	0.	0.	0.	0.16	0.16	0.	1.50	0.	0.
50	0.	0.	0.	0.	0.18	0.17	0.	0.40	0.	0.
60	0.	0.	0.	0.	0.17	0.16	0.	0.17	0.	0.
70	0.	0.	0.	0.12	0.14	0.15	0.17	0.16	0.	0.
80	0.	0.	0.	0.13	0.14	0.15	0.18	0.21	0.20	0.
90	0.	0.	0.	0.13	0.17	0.14	0.19	0.22	0.	0.
100	0.	0.	0.	0.14	0.	0.	0.15	0.	0.	0.
110	0.	0.	0.	0.19	0.	0.	0.16	0.	0.	0.
120	0.	0.	0.	0.19	0.	0.	0.15	0.	0.	0.
130	0.	0.	0.	0.	0.	0.	0.14	0.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.15	0.15	0.	0.
150	0.	0.	0.	0.	0.	0.	0.15	0.16	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.15	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 108

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	0.	73.	45.	0.	135.	0.	0.
0 A	0.	0.	0.	0.	67.	45.	0.	105.	0.	0.
L	0.	0.	0.	0.	60.	45.	0.	75.	0.	0.
R	0.	0.	0.	0.	105.	60.	0.	143.	0.	0.
10 A	0.	0.	0.	0.	135.	68.	0.	162.	0.	0.
L	0.	0.	0.	0.	165.	75.	0.	180.	0.	0.
R	0.	0.	0.	0.	75.	120.	0.	195.	0.	0.
20 A	0.	0.	0.	0.	83.	128.	0.	188.	0.	0.
L	0.	0.	0.	0.	90.	135.	0.	180.	0.	0.
R	0.	0.	0.	0.	75.	75.	0.	129.	0.	0.
30 A	0.	0.	0.	0.	105.	75.	0.	162.	0.	0.
L	0.	0.	0.	0.	135.	75.	0.	195.	0.	0.
R	0.	0.	0.	60.	0.	0.	0.	150.	0.	0.
40 A	0.	0.	0.	30.	68.	30.	0.	180.	0.	0.
L	0.	0.	0.	0.	135.	60.	0.	210.	0.	0.
R	0.	0.	0.	180.	0.	0.	0.	30.	0.	0.
50 A	0.	0.	0.	90.	38.	68.	0.	98.	0.	0.
L	0.	0.	0.	0.	75.	135.	0.	165.	0.	0.
R	0.	0.	0.	195.	0.	0.	.	45.	60.	0.
60 A	0.	0.	0.	98.	68.	53.	.	135.	30.	0.
L	0.	0.	0.	0.	135.	105.	0.	225.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 109

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	195.	0.	0.	0.	135.	0.	0.
70 A	0.	0.	0.	98.	52.	67.	0.	157.	0.	0.
L	0.	0.	0.	0.	103.	134.	0.	179.	0.	0.
R	0.	0.	0.	195.	0.	0.	0.	270.	0.	0.
80 A	0.	0.	0.	98.	45.	60.	0.	203.	0.	0.
L	0.	0.	0.	0.	89.	120.	0.	135.	0.	0.
R	0.	0.	0.	270.	0.	0.	0.	180.	0.	0.
90 A	0.	0.	0.	135.	30.	45.	0.	216.	0.	0.
L	0.	0.	0.	0.	59.	90.	0.	251.	0.	0.
R	0.	0.	0.	150.	0.	0.	0.	150.	0.	0.
100 A	0.	0.	0.	75.	0.	0.	0.	135.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	119.	0.	0.
R	0.	0.	0.	119.	0.	0.	0.	210.	0.	0.
110 A	0.	0.	0.	60.	0.	0.	0.	105.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	206.	0.	0.	0.	210.	0.	0.
120 A	0.	0.	0.	103.	0.	0.	0.	105.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 109 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	216.	0.	0.	0.	209.	0.	0.
130 A	0.	0.	0.	108.	0.	0.	0.	105.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	181.	0.	0.	0.	149.	0.	0.
140 A	0.	0.	0.	91.	0.	0.	0.	75.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	207.	0.	0.	0.	239.	0.	0.
150 A	0.	0.	0.	104.	0.	0.	0.	120.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	157.	0.	0.	0.	224.	0.	0.
160 A	0.	0.	0.	79.	0.	0.	0.	112.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	47.	0.	0.	0.	240.	0.	0.
170 A	0.	0.	0.	24.	0.	0.	0.	165.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	90.	0.	0.
R	0.	0.	0.	67.	0.	0.	0.	103.	0.	0.
180 A	0.	0.	0.	34.	0.	0.	0.	96.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	89.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 109 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
	R	0.	0.	0.	0.	0.99	0.95	0.	7.30	0.	0.
	O A	0.	0.	0.	0.	0.94	0.92	0.	6.02	0.	0.
	L	0.	0.	0.	0.	0.89	0.89	0.	3.72	0.	0.
	R	0.	0.	0.	0.	1.17	1.23	0.	19.48	0.	0.
10	A	0.	0.	0.	0.	0.89	0.92	0.	9.92	0.	0.
	L	0.	0.	0.	0.	0.70	0.66	0.	2.33	0.	0.
	R	0.	0.	0.	0.	1.47	1.42	0.	27.82	0.	0.
20	A	0.	0.	0.	0.	0.97	0.97	0.	15.28	0.	0.
	L	0.	0.	0.	0.	0.54	0.57	0.	1.69	0.	0.
	R	0.	0.	0.	0.	1.34	1.35	0.	18.67	0.	0.
30	A	0.	0.	0.	0.	0.83	0.93	0.	8.25	0.	0.
	L	0.	0.	0.	0.	0.55	0.50	0.	1.36	0.	0.
	R	0.	0.	0.	0.47	0.	0.	0.	7.65	0.	0.
40	A	0.	0.	0.	0.47	0.35	0.35	0.	4.00	0.	0.
	L	0.	0.	0.	0.	0.35	0.35	0.	1.39	0.	0.
	R	0.	0.	0.	0.47	0.	0.	0.	3.58	0.	0.
50	A	0.	0.	0.	0.47	0.18	0.18	0.	1.31	0.	0.
	L	0.	0.	0.	0.	0.18	0.18	0.	0.89	0.	0.
	R	0.	0.	0.	0.38	0.	0.	0.	3.82	2.26	0.
60	A	0.	0.	0.	0.38	0.18	0.19	0.	0.78	2.26	0.
	L	0.	0.	0.	0.	0.18	0.19	0.	0.17	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 110

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.25	0.	0.	0.	1.88	0.	0.
70 A	0.	0.	0.	0.25	0.19	0.19	0.	0.91	0.	0.
L	0.	0.	0.	0.	0.19	0.19	0.	0.18	0.	0.
R	0.	0.	0.	0.20	0.	0.	0.	1.75	0.	0.
80 A	0.	0.	0.	0.20	0.19	0.20	0.	1.24	0.	0.
L	0.	0.	0.	0.	0.19	0.20	0.	0.23	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.	1.27	0.	0.
90 A	0.	0.	0.	0.17	0.20	0.21	0.	0.64	0.	0.
L	0.	0.	0.	0.	0.20	0.21	0.	0.19	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.	1.81	0.	0.
100 A	0.	0.	0.	0.17	0.	0.	0.	1.11	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.22	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.	0.17	0.	0.
110 A	0.	0.	0.	0.19	0.	0.	0.	0.17	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.20	0.	0.	0.	0.18	0.	0.
120 A	0.	0.	0.	0.20	0.	0.	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 110 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

	VA	0	10	20	30	40	50	60	70	80	90
SA											
	R	0.	0.	0.	0.29	0.	0.	0.	0.20	0.	0.
130	A	0.	0.	0.	0.29	0.	0.	0.	0.20	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.34	0.	0.	0.	0.19	0.	0.
140	A	0.	0.	0.	0.34	0.	0.	0.	0.19	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.21	0.	0.	0.	0.22	0.	0.
150	A	0.	0.	0.	0.21	0.	0.	0.	0.22	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.34	0.	0.	0.	0.20	0.	0.
160	A	0.	0.	0.	0.34	0.	0.	0.	0.20	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.53	0.	0.	0.	0.20	0.	0.
170	A	0.	0.	0.	0.53	0.	0.	0.	0.21	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.23	0.	0.
	R	0.	0.	0.	0.48	0.	0.	0.	0.25	0.	0.
180	A	0.	0.	0.	0.48	0.	0.	0.	0.25	0.	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.25	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 110 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.23	0.20	0.	1.81	0.	0.
0 A	0.	0.	0.	0.	0.32	0.29	0.	1.87	0.	0.
L	0.	0.	0.	0.	0.22	0.21	0.	0.48	0.	0.
R	0.	0.	0.	0.	0.23	0.24	0.	5.55	0.	0.
10 A	0.	0.	0.	0.	0.33	0.32	0.	5.56	0.	0.
L	0.	0.	0.	0.	0.24	0.22	0.	0.41	0.	0.
R	0.	0.	0.	0.	0.23	0.20	0.	0.32	0.	0.
20 A	0.	0.	0.	0.	0.31	0.31	0.	0.43	0.	0.
L	0.	0.	0.	0.	0.21	0.23	0.	0.29	0.	0.
R	0.	0.	0.	0.	0.22	0.25	0.	4.57	0.	0.
30 A	0.	0.	0.	0.	0.30	0.31	0.	4.58	0.	0.
L	0.	0.	0.	0.	0.21	0.19	0.	0.22	0.	0.
R	0.	0.	0.	0.20	0.	0.	0.	2.87	0.	0.
40 A	0.	0.	0.	0.20	0.24	0.21	0.	3.01	0.	0.
L	0.	0.	0.	0.	0.24	0.21	0.	0.94	0.	0.
R	0.	0.	0.	0.21	0.	0.	0.	0.32	0.	0.
50 A	0.	0.	0.	0.21	0.14	0.15	0.	1.32	0.	0.
L	0.	0.	0.	0.	0.14	0.15	0.	1.28	0.	0.
R	0.	0.	0.	0.19	0.	0.	0.	0.48	0.35	0.
60 A	0.	0.	0.	0.19	0.13	0.12	0.	0.50	0.35	0.
L	0.	0.	0.	0.	0.13	0.12	0.	0.13	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.16	0.	0.	0.	0.21	0.	0.
70 A	0.	0.	0.	0.16	0.14	0.15	0.	0.25	0.	0.
L	0.	0.	0.	0.	0.14	0.15	0.	0.13	0.	0.
R	0.	0.	0.	0.16	0.	0.	0.	0.26	0.	0.
80 A	0.	0.	0.	0.16	0.15	0.15	0.	0.30	0.	0.
L	0.	0.	0.	0.	0.15	0.15	0.	0.16	0.	0.
R	0.	0.	0.	0.14	0.	0.	0.	0.39	0.	0.
90 A	0.	0.	0.	0.14	0.16	0.14	0.	0.42	0.	0.
L	0.	0.	0.	0.	0.16	0.14	0.	0.14	0.	0.
R	0.	0.	0.	0.12	0.	0.	0.	1.42	0.	0.
100 A	0.	0.	0.	0.12	0.	0.	0.	1.43	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.
R	0.	0.	0.	0.14	0.	0.	0.	0.12	0.	0.
110 A	0.	0.	0.	0.14	0.	0.	0.	0.12	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.15	0.	0.	0.	0.13	0.	0.
120 A	0.	0.	0.	0.15	0.	0.	0.	0.13	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 111 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.17	0.	0.	0.	0.14	0.	0.
130 A	0.	0.	0.	0.17	0.	0.	0.	0.14	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.	0.13	0.	0.
140 A	0.	0.	0.	0.17	0.	0.	0.	0.13	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.14	0.	0.	0.	0.15	0.	0.
150 A	0.	0.	0.	0.14	0.	0.	0.	0.15	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.18	0.	0.	0.	0.14	0.	0.
160 A	0.	0.	0.	0.18	0.	0.	0.	0.14	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.12	0.	0.	0.	0.15	0.	0.
170 A	0.	0.	0.	0.12	0.	0.	0.	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.
R	0.	0.	0.	0.15	0.	0.	0.	0.16	0.	0.
180 A	0.	0.	0.	0.15	0.	0.	0.	0.23	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 111 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	210.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	533.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	405.	0.	0.
40	0.	0.	0.	0.	403.	330.	0.	399.	0.	0.
50	0.	0.	0.	0.	420.	330.	0.	240.	0.	0.
60	0.	0.	0.	0.	165.	180.	0.	255.	60.	0.
70	0.	0.	0.	375.	195.	180.	0.	314.	0.	0.
80	0.	0.	0.	420.	132.	164.	0.	435.	0.	0.
90	0.	0.	0.	405.	59.	90.	0.	431.	0.	0.
100	0.	0.	0.	399.	0.	0.	0.	284.	0.	0.
110	0.	0.	0.	574.	0.	0.	0.	210.	0.	0.
120	0.	0.	0.	272.	0.	0.	0.	225.	0.	0.
130	0.	0.	0.	0.	0.	0.	0.	179.	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	284.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	253.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	582.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 112

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	6.02	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	11.85	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	11.60	0.	0.
40	0.	0.	0.	0.	0.90	0.93	0.	4.68	0.	0.
50	0.	0.	0.	0.	0.85	0.92	0.	1.75	0.	0.
60	0.	0.	0.	0.	0.23	0.19	0.	0.82	2.26	0.
70	0.	0.	0.	0.44	0.18	0.20	0.	0.91	0.	0.
80	0.	0.	0.	0.24	0.20	0.19	0.	1.22	0.	0.
90	0.	0.	0.	0.18	0.20	0.21	0.	0.60	0.	0.
100	0.	0.	0.	0.19	0.	0.	0.	1.06	0.	0.
110	0.	0.	0.	0.28	0.	0.	0.	0.16	0.	0.
120	0.	0.	0.	0.41	0.	0.	0.	0.18	0.	0.
130	0.	0.	0.	0.	0.	0.	0.	0.20	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.20	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.21	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.22	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 113

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 6 AT 0130 AST

INSOL ANGLE 91.9 DEG

SPECTRAL BAND 2.50 TO 2.78 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	2.27	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	11.16	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	11.77	0.	0.
40	0.	0.	0.	0.	0.30	0.35	0.	4.65	0.	0.
50	0.	0.	0.	0.	0.47	0.49	0.	1.69	0.	0.
60	0.	0.	0.	0.	0.20	0.14	0.	1.41	0.35	0.
70	0.	0.	0.	0.20	0.14	0.14	0.	0.86	0.	0.
80	0.	0.	0.	0.17	0.15	0.15	0.	0.76	0.	0.
90	0.	0.	0.	0.14	0.16	0.14	0.	0.57	0.	0.
100	0.	0.	0.	0.14	0.	0.	0.	1.31	0.	0.
110	0.	0.	0.	0.17	0.	0.	0.	0.12	0.	0.
120	0.	0.	0.	0.18	0.	0.	0.	0.13	0.	0.
130	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
140	0.	0.	0.	0.	0.	0.	0.	0.14	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.15	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 114

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
R	0.	0.	0.	90.	0.	0.	105.	84.	0.	0.
0 A	0.	0.	0.	105.	0.	0.	98.	95.	0.	0.
L	0.	0.	0.	120.	0.	0.	90.	105.	0.	0.
R	0.	0.	0.	165.	0.	0.	180.	163.	0.	0.
10 A	0.	0.	0.	173.	0.	0.	173.	157.	0.	0.
L	0.	0.	0.	180.	0.	0.	165.	150.	0.	0.
R	0.	0.	0.	150.	0.	0.	195.	150.	0.	0.
20 A	0.	0.	0.	180.	0.	0.	195.	158.	0.	0.
L	0.	0.	0.	210.	0.	0.	195.	165.	0.	0.
R	0.	0.	0.	120.	0.	0.	45.	178.	0.	0.
30 A	0.	0.	0.	150.	0.	0.	135.	164.	0.	0.
L	0.	0.	0.	180.	0.	0.	225.	150.	0.	0.
R	0.	0.	0.	165.	0.	0.	0.	135.	0.	0.
40 A	0.	0.	0.	188.	0.	0.	105.	165.	0.	0.
L	0.	0.	0.	210.	0.	0.	210.	195.	0.	0.
R	0.	0.	0.	165.	0.	90.	0.	120.	0.	0.
50 A	0.	0.	0.	173.	0.	45.	113.	135.	0.	0.
L	0.	0.	0.	180.	0.	0.	225.	150.	0.	0.
R	0.	0.	0.	0.	0.	210.	0.	180.	0.	0.
60 A	0.	0.	0.	90.	0.	105.	98.	195.	0.	0.
L	0.	0.	0.	180.	0.	0.	195.	210.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 115

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	225.	0.	150.	0.	0.
70 A	0.	0.	0.	98.	0.	113.	105.	165.	0.	0.
L	0.	0.	0.	195.	0.	0.	210.	180.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	195.	0.	0.
80 A	0.	0.	0.	90.	0.	90.	53.	180.	0.	0.
L	0.	0.	0.	180.	0.	0.	105.	165.	0.	0.
R	0.	0.	0.	0.	0.	270.	0.	195.	0.	0.
90 A	0.	0.	0.	83.	0.	135.	128.	203.	0.	0.
L	0.	0.	0.	165.	0.	0.	255.	210.	0.	0.
R	0.	0.	0.	0.	0.	195.	0.	210.	0.	0.
100 A	0.	0.	0.	68.	0.	98.	15.	189.	0.	0.
L	0.	0.	0.	135.	0.	0.	30.	165.	0.	0.
R	0.	0.	0.	0.	0.	255.	0.	210.	0.	0.
110 A	0.	0.	0.	0.	0.	128.	0.	105.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	150.	0.	0.
120 A	0.	0.	0.	0.	0.	90.	0.	83.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	15.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 115 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	225.	0.	195.	0.	0.
130 A	0.	0.	0.	0.	0.	113.	0.	98.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	195.	0.	240.	0.	0.
140 A	0.	0.	0.	0.	0.	98.	0.	120.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	210.	0.	105.	30.	0.
150 A	0.	0.	0.	0.	0.	105.	0.	53.	15.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	180.	0.	180.	0.	0.
160 A	0.	0.	0.	0.	0.	90.	0.	90.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	135.	0.	255.	0.	0.
170 A	0.	0.	0.	0.	0.	68.	0.	203.	8.	0.
L	0.	0.	0.	0.	0.	0.	0.	150.	15.	0.
R	0.	0.	0.	0.	0.	0.	0.	105.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	120.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	135.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 115 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.14	0.	0.	1.36	8.39	0.	0.
0 A	0.	0.	0.	0.14	0.	0.	1.14	5.69	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.90	3.52	0.	0.
R	0.	0.	0.	0.13	0.	0.	2.13	29.14	0.	0.
10 A	0.	0.	0.	0.14	0.	0.	1.35	15.95	0.	0.
L	0.	0.	0.	0.15	0.	0.	0.50	1.61	0.	0.
R	0.	0.	0.	0.13	0.	0.	3.03	39.45	0.	0.
20 A	0.	0.	0.	0.14	0.	0.	1.72	19.29	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.41	0.96	0.	0.
R	0.	0.	0.	0.22	0.	0.	2.79	24.37	0.	0.
30 A	0.	0.	0.	0.20	0.	0.	1.07	13.73	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.73	1.09	0.	0.
R	0.	0.	0.	0.28	0.	0.	0.	5.47	0.	0.
40 A	0.	0.	0.	0.27	0.	0.	0.38	2.76	0.	0.
L	0.	0.	0.	0.26	0.	0.	0.38	0.89	0.	0.
R	0.	0.	0.	0.13	0.	0.37	0.	4.11	0.	0.
50 A	0.	0.	0.	0.21	0.	0.37	0.26	2.37	0.	0.
L	0.	0.	0.	0.28	0.	0.	0.26	0.98	0.	0.
R	0.	0.	0.	0.	0.	0.24	0.	2.24	0.	0.
60 A	0.	0.	0.	0.25	0.	0.24	0.31	1.27	0.	0.
L	0.	0.	0.	0.25	0.	0.	0.31	0.43	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.18	0.	1.08	0.	0.
70 A	0.	0.	0.	0.21	0.	0.18	0.35	0.76	0.	0.
L	0.	0.	0.	0.21	0.	0.	0.35	0.50	0.	0.
R	0.	0.	0.	0.	0.	0.25	0.	1.07	0.	0.
80 A	0.	0.	0.	0.19	0.	0.25	0.41	0.82	0.	0.
L	0.	0.	0.	0.19	0.	0.	0.41	0.53	0.	0.
R	0.	0.	0.	0.	0.	0.31	0.	0.92	0.	0.
90 A	0.	0.	0.	0.21	0.	0.31	0.28	0.65	0.	0.
L	0.	0.	0.	0.21	0.	0.	0.28	0.40	0.	0.
R	0.	0.	0.	0.	0.	0.22	0.	0.89	0.	0.
100 A	0.	0.	0.	0.27	0.	0.22	0.30	0.70	0.	0.
L	0.	0.	0.	0.27	0.	0.	0.30	0.46	0.	0.
R	0.	0.	0.	0.	0.	0.30	0.	0.46	0.	0.
110 A	0.	0.	0.	0.	0.	0.30	0.	0.46	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.30	0.	0.53	0.	0.
120 A	0.	0.	0.	0.	0.	0.30	0.	0.54	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.54	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 116 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.47	0.	0.54	0.	0.
130 A	0.	0.	0.	0.	0.	0.47	0.	0.54	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.36	0.	0.55	0.	0.
140 A	0.	0.	0.	0.	0.	0.36	0.	0.55	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.31	0.	0.59	0.57	0.
150 A	0.	0.	0.	0.	0.	0.31	0.	0.59	0.57	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.49	0.	0.62	0.	0.
160 A	0.	0.	0.	0.	0.	0.49	0.	0.62	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.65	0.	0.56	0.	0.
170 A	0.	0.	0.	0.	0.	0.65	0.	0.59	0.64	0.
L	0.	0.	0.	0.	0.	0.	0.	0.66	0.64	0.
R	0.	0.	0.	0.	0.	0.	0.	0.62	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.64	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.66	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 116 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.09	0.	0.	0.24	1.83	0.	0.
0 A	0.	0.	0.	0.14	0.	0.	0.30	2.03	0.	0.
L	0.	0.	0.	0.11	0.	0.	0.18	0.88	0.	0.
R	0.	0.	0.	0.10	0.	0.	0.35	11.21	0.	0.
10 A	0.	0.	0.	0.14	0.	0.	0.40	11.22	0.	0.
L	0.	0.	0.	0.10	0.	0.	0.19	0.42	0.	0.
R	0.	0.	0.	0.10	0.	0.	0.23	1.98	0.	0.
20 A	0.	0.	0.	0.15	0.	0.	0.29	1.99	0.	0.
L	0.	0.	0.	0.11	0.	0.	0.17	0.23	0.	0.
R	0.	0.	0.	0.13	0.	0.	0.27	12.20	0.	0.
30 A	0.	0.	0.	0.19	0.	0.	0.34	12.20	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.22	0.22	0.	0.
R	0.	0.	0.	0.17	0.	0.	0.	2.00	0.	0.
40 A	0.	0.	0.	0.23	0.	0.	0.22	2.08	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.22	0.55	0.	0.
R	0.	0.	0.	0.10	0.	0.15	0.	2.05	0.	0.
50 A	0.	0.	0.	0.19	0.	0.15	0.17	2.24	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.17	0.90	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.68	0.	0.
60 A	0.	0.	0.	0.16	0.	0.15	0.16	0.71	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.16	0.18	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.13	0.	0.21	0.	0.
70 A	0.	0.	0.	0.13	0.	0.13	0.17	0.27	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.17	0.16	0.	0.
R	0.	0.	0.	0.	0.	0.17	0.	0.23	0.	0.
80 A	0.	0.	0.	0.14	0.	0.17	0.16	0.30	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.16	0.20	0.	0.
R	0.	0.	0.	0.	0.	0.18	0.	0.37	0.	0.
90 A	0.	0.	0.	0.13	0.	0.18	0.16	0.41	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.16	0.17	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.76	0.	0.
100 A	0.	0.	0.	0.15	0.	0.15	0.17	0.78	0.	0.
L	0.	0.	0.	0.15	0.	0.	0.17	0.19	0.	0.
R	0.	0.	0.	0.	0.	0.16	0.	0.18	0.	0.
110 A	0.	0.	0.	0.	0.	0.16	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.16	0.	0.
120 A	0.	0.	0.	0.	0.	0.15	0.	0.23	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 117 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.17	0.	0.16	0.	0.
130 A	0.	0.	0.	0.	0.	0.17	0.	0.16	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.18	0.	0.18	0.	0.
140 A	0.	0.	0.	0.	0.	0.18	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.15	0.	0.19	0.20	0.
150 A	0.	0.	0.	0.	0.	0.15	0.	0.19	0.20	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.20	0.	0.18	0.	0.
160 A	0.	0.	0.	0.	0.	0.20	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.18	0.	0.17	0.	0.
170 A	0.	0.	0.	0.	0.	0.18	0.	0.25	0.18	0.
L	0.	0.	0.	0.	0.	0.	0.	0.18	0.18	0.
R	0.	0.	0.	0.	0.	0.	0.	0.16	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.26	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.20	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 117 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	165.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	562.	0.	0.
30	0.	0.	0.	0.	0.	0.	750.	360.	0.	0.
40	0.	0.	0.	0.	0.	0.	465.	358.	0.	0.
50	0.	0.	0.	0.	0.	0.	315.	300.	0.	0.
60	0.	0.	0.	1125.	0.	120.	240.	375.	0.	0.
70	0.	0.	0.	900.	0.	315.	225.	345.	0.	0.
80	0.	0.	0.	420.	0.	255.	165.	375.	0.	0.
90	0.	0.	0.	330.	0.	330.	270.	420.	0.	0.
100	0.	0.	0.	15.	0.	330.	0.	375.	0.	0.
110	0.	0.	0.	0.	0.	285.	0.	195.	0.	0.
120	0.	0.	0.	0.	0.	315.	0.	180.	0.	0.
130	0.	0.	0.	0.	0.	450.	0.	225.	0.	0.
140	0.	0.	0.	0.	0.	150.	0.	225.	15.	0.
150	0.	0.	0.	0.	0.	0.	0.	210.	15.	0.
160	0.	0.	0.	0.	0.	0.	0.	675.	15.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 118

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	4.91	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	15.72	0.	0.
30	0.	0.	0.	0.	0.	0.	1.39	17.39	0.	0.
40	0.	0.	0.	0.	0.	0.	1.32	4.47	0.	0.
50	0.	0.	0.	0.	0.	0.	0.33	2.30	0.	0.
60	0.	0.	0.	0.15	0.	0.35	0.28	1.26	0.	0.
70	0.	0.	0.	0.24	0.	0.21	0.35	0.79	0.	0.
80	0.	0.	0.	0.22	0.	0.20	0.39	0.84	0.	0.
90	0.	0.	0.	0.23	0.	0.30	0.28	0.60	0.	0.
100	0.	0.	0.	0.26	0.	0.27	0.	0.71	0.	0.
110	0.	0.	0.	0.	0.	0.32	0.	0.48	0.	0.
120	0.	0.	0.	0.	0.	0.45	0.	0.53	0.	0.
130	0.	0.	0.	0.	0.	0.37	0.	0.55	0.	0.
140	0.	0.	0.	0.	0.	0.66	0.	0.53	0.53	0.
150	0.	0.	0.	0.	0.	0.	0.	0.62	0.60	0.
160	0.	0.	0.	0.	0.	0.	0.	0.61	0.64	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 119

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 4 AT 0134 AST

INSOL ANGLE 91.7 DEG

SPECTRAL BAND 2.76 TO 3.25 MICRONS

ELEVATION 30.5 KM

VA SA	0	10	20	30	40	50	60	70	80	90
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	2.19	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	16.62	0.	0.
30	0.	0.	0.	0.	0.	0.	0.94	17.96	0.	0.
40	0.	0.	0.	0.	0.	0.	1.11	4.46	0.	0.
50	0.	0.	0.	0.	0.	0.	0.22	2.08	0.	0.
60	0.	0.	0.	0.11	0.	0.15	0.16	1.04	0.	0.
70	0.	0.	0.	0.16	0.	0.15	0.17	0.37	0.	0.
80	0.	0.	0.	0.14	0.	0.15	0.16	0.35	0.	0.
90	0.	0.	0.	0.14	0.	0.18	0.16	0.37	0.	0.
100	0.	0.	0.	0.15	0.	0.16	0.	0.62	0.	0.
110	0.	0.	0.	0.	0.	0.16	0.	0.18	0.	0.
120	0.	0.	0.	0.	0.	0.17	0.	0.17	0.	0.
130	0.	0.	0.	0.	0.	0.19	0.	0.17	0.	0.
140	0.	0.	0.	0.	0.	0.18	0.	0.18	0.18	0.
150	0.	0.	0.	0.	0.	0.	0.	0.18	0.21	0.
160	0.	0.	0.	0.	0.	0.	0.	0.19	0.18	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 245

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	75.	0.	0.	0.	90.	0.	0.
0 A	0.	0.	0.	105.	0.	0.	0.	90.	0.	0.
L	0.	0.	0.	135.	0.	0.	0.	90.	0.	0.
R	0.	0.	0.	255.	0.	0.	0.	160.	0.	0.
10 A	0.	0.	0.	233.	0.	0.	0.	170.	0.	0.
L	0.	0.	0.	210.	0.	0.	0.	180.	0.	0.
R	0.	0.	0.	209.	0.	0.	0.	178.	0.	0.
20 A	0.	0.	0.	202.	0.	0.	0.	194.	0.	0.
L	0.	0.	0.	195.	0.	0.	0.	210.	0.	0.
R	0.	0.	0.	195.	0.	0.	0.	0.	0.	0.
30 A	0.	0.	0.	195.	0.	0.	0.	120.	0.	0.
L	0.	0.	0.	195.	0.	0.	0.	240.	0.	0.
R	0.	0.	0.	195.	0.	0.	0.	0.	0.	0.
40 A	0.	0.	0.	195.	0.	0.	0.	83.	0.	0.
L	0.	0.	0.	195.	0.	0.	0.	165.	0.	0.
R	0.	0.	0.	30.	0.	149.	0.	135.	0.	0.
50 A	0.	0.	0.	105.	0.	75.	0.	135.	0.	0.
L	0.	0.	0.	180.	0.	0.	0.	135.	0.	0.
R	0.	0.	0.	0.	0.	255.	0.	150.	0.	0.
60 A	0.	0.	0.	90.	0.	128.	0.	194.	0.	0.
L	0.	0.	0.	179.	0.	0.	0.	238.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 121

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	300.	0.	135.	0.	0.
70 A	0.	0.	0.	90.	0.	150.	0.	186.	0.	0.
L	0.	0.	0.	180.	0.	0.	0.	236.	0.	0.
R	0.	0.	0.	0.	0.	210.	0.	180.	0.	0.
80 A	0.	0.	0.	75.	0.	105.	0.	180.	0.	0.
L	0.	0.	0.	150.	0.	0.	0.	180.	0.	0.
R	0.	0.	0.	0.	0.	270.	0.	165.	0.	0.
90 A	0.	0.	0.	97.	0.	135.	0.	188.	0.	0.
L	0.	0.	0.	194.	0.	0.	0.	210.	0.	0.
R	0.	0.	0.	0.	0.	240.	0.	210.	15.	0.
100 A	0.	0.	0.	37.	0.	120.	0.	203.	8.	0.
L	0.	0.	0.	74.	0.	0.	0.	195.	0.	0.
R	0.	0.	0.	0.	0.	209.	0.	90.	0.	0.
110 A	0.	0.	0.	0.	0.	105.	0.	45.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	266.	0.	224.	0.	0.
120 A	0.	0.	0.	0.	0.	133.	0.	112.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 121 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	210.	0.	165.	0.	0.
130 A	0.	0.	0.	0.	0.	105.	0.	83.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	209.	0.	195.	0.	0.
140 A	0.	0.	0.	0.	0.	105.	0.	98.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	195.	0.	150.	0.	0.
150 A	0.	0.	0.	0.	0.	98.	0.	75.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	192.	0.	174.	0.	0.
160 A	0.	0.	0.	0.	0.	96.	0.	124.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	74.	0.	0.
R	0.	0.	0.	0.	0.	55.	0.	195.	0.	0.
170 A	0.	0.	0.	0.	0.	28.	0.	179.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	162.	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	105.	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	90.	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	74.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 121 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0140 AST						INSOL ANGLE 91.5 DEG				
SPECTRAL BAND 2.50 TO 2.80 MICRONS						ELEVATION 30.5 KM				
VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.33	0.	0.	0.	6.67	0.	0.
0 A	0.	0.	0.	0.33	0.	0.	0.	5.27	0.	0.
L	0.	0.	0.	0.33	0.	0.	0.	3.87	0.	0.
R	0.	0.	0.	0.34	0.	0.	0.	15.99	0.	0.
10 A	0.	0.	0.	0.29	0.	0.	0.	8.73	0.	0.
L	0.	0.	0.	0.24	0.	0.	0.	2.28	0.	0.
R	0.	0.	0.	0.53	0.	0.	0.	27.92	0.	0.
20 A	0.	0.	0.	0.39	0.	0.	0.	13.74	0.	0.
L	0.	0.	0.	0.25	0.	0.	0.	1.72	0.	0.
R	0.	0.	0.	0.72	0.	0.	0.	0.	0.	0.
30 A	0.	0.	0.	0.45	0.	0.	0.	1.38	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.	1.38	0.	0.
R	0.	0.	0.	0.42	0.	0.	0.	0.	0.	0.
40 A	0.	0.	0.	0.31	0.	0.	0.	0.93	0.	0.
L	0.	0.	0.	0.19	0.	0.	0.	0.93	0.	0.
R	0.	0.	0.	0.34	0.	0.83	0.	7.96	0.	0.
50 A	0.	0.	0.	0.20	0.	0.83	0.	4.07	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.	0.18	0.	0.
R	0.	0.	0.	0.	0.	0.69	0.	2.81	0.	0.
60 A	0.	0.	0.	0.18	0.	0.69	0.	1.19	0.	0.
L	0.	0.	0.	0.18	0.	0.	0.	0.18	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.58	0.	1.83	0.	0.
70 A	0.	0.	0.	0.17	0.	0.58	0.	0.79	0.	0.
L	0.	0.	0.	0.17	0.	0.	0.	0.20	0.	0.
R	0.	0.	0.	0.	0.	0.59	0.	1.54	0.	0.
80 A	0.	0.	0.	0.14	0.	0.59	0.	0.87	0.	0.
L	0.	0.	0.	0.14	0.	0.	0.	0.19	0.	0.
R	0.	0.	0.	0.	0.	0.47	0.	1.33	0.	0.
90 A	0.	0.	0.	0.16	0.	0.47	0.	0.69	0.	0.
L	0.	0.	0.	0.16	0.	0.	0.	0.19	0.	0.
R	0.	0.	0.	0.	0.	0.17	0.	1.39	0.17	0.
100 A	0.	0.	0.	0.20	0.	0.17	0.	0.82	0.17	0.
L	0.	0.	0.	0.20	0.	0.	0.	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.19	0.	0.20	0.	0.
110 A	0.	0.	0.	0.	0.	0.19	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.16	0.	0.18	0.	0.
120 A	0.	0.	0.	0.	0.	0.16	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 122 CONT.

IR MEAN RADIANCE AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.21	0.	0.20	0.	0.
130 A	0.	0.	0.	0.	0.	0.21	0.	0.20	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.21	0.	0.18	0.	0.
140 A	0.	0.	0.	0.	0.	0.21	0.	0.18	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.16	0.	0.19	0.	0.
150 A	0.	0.	0.	0.	0.	0.16	0.	0.19	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.29	0.	0.22	0.	0.
160 A	0.	0.	0.	0.	0.	0.29	0.	0.22	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.21	0.	0.
R	0.	0.	0.	0.	0.	0.38	0.	0.20	0.	0.
170 A	0.	0.	0.	0.	0.	0.38	0.	0.21	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.24	0.	0.
R	0.	0.	0.	0.	0.	0.	0.	0.19	0.	0.
180 A	0.	0.	0.	0.	0.	0.	0.	0.19	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.18	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 122 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

SA	VA	0	10	20	30	40	50	60	70	80	90
	R	0.	0.	0.	0.17	0.	0.	0.	1.35	0.	0.
	O A	0.	0.	0.	0.25	0.	0.	0.	1.56	0.	0.
	L	0.	0.	0.	0.18	0.	0.	0.	0.78	0.	0.
	R	0.	0.	0.	0.18	0.	0.	0.	4.93	0.	0.
10	A	0.	0.	0.	0.25	0.	0.	0.	4.95	0.	0.
	L	0.	0.	0.	0.17	0.	0.	0.	0.38	0.	0.
	R	0.	0.	0.	0.25	0.	0.	0.	0.48	0.	0.
20	A	0.	0.	0.	0.29	0.	0.	0.	0.55	0.	0.
	L	0.	0.	0.	0.16	0.	0.	0.	0.28	0.	0.
	R	0.	0.	0.	0.22	0.	0.	0.	0.	0.	0.
30	A	0.	0.	0.	0.26	0.	0.	0.	0.23	0.	0.
	L	0.	0.	0.	0.14	0.	0.	0.	0.23	0.	0.
	R	0.	0.	0.	0.21	0.	0.	0.	0.	0.	0.
40	A	0.	0.	0.	0.25	0.	0.	0.	0.31	0.	0.
	L	0.	0.	0.	0.14	0.	0.	0.	0.31	0.	0.
	R	0.	0.	0.	0.17	0.	0.20	0.	2.66	0.	0.
50	A	0.	0.	0.	0.21	0.	0.20	0.	2.66	0.	0.
	L	0.	0.	0.	0.13	0.	0.	0.	0.17	0.	0.
	R	0.	0.	0.	0.	0.	0.22	0.	0.77	0.	0.
60	A	0.	0.	0.	0.14	0.	0.22	0.	0.78	0.	0.
	L	0.	0.	0.	0.14	0.	0.	0.	0.13	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

FILTER 1 AT 0140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
R	0.	0.	0.	0.	0.	0.22	0.	0.23	0.	0.
70 A	0.	0.	0.	0.13	0.	0.22	0.	0.27	0.	0.
L	0.	0.	0.	0.13	0.	0.	0.	0.15	0.	0.
R	0.	0.	0.	0.	0.	0.20	0.	0.25	0.	0.
80 A	0.	0.	0.	0.11	0.	0.20	0.	0.29	0.	0.
L	0.	0.	0.	0.11	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.	0.	0.24	0.	0.35	0.	0.
90 A	0.	0.	0.	0.12	0.	0.24	0.	0.37	0.	0.
L	0.	0.	0.	0.12	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.	0.	0.12	0.	1.26	0.10	0.
100 A	0.	0.	0.	0.17	0.	0.12	0.	1.27	0.10	0.
L	0.	0.	0.	0.17	0.	0.	0.	0.14	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.	0.14	0.	0.
110 A	0.	0.	0.	0.	0.	0.14	0.	0.14	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
R	0.	0.	0.	0.	0.	0.14	0.	0.13	0.	0.
120 A	0.	0.	0.	0.	0.	0.14	0.	0.13	0.	0.
L	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 123 CONT.

IR RMS FLUCTUATION AS A FUNCTION OF SUN AZIMUTH

FILTER 1 AT 0140 AST						INSOL ANGLE 91.5 DEG				
SPECTRAL BAND 2.50 TO 2.80 MICRONS						ELEVATION 30.5 KM				
VA	0	10	20	30	40	50	60	70	80	90
SA										
	R	0.	0.	0.	0.	0.	0.15	0.	0.14	0.
130	A	0.	0.	0.	0.	0.	0.15	0.	0.14	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.14	0.	0.13	0.
140	A	0.	0.	0.	0.	0.	0.14	0.	0.13	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.13	0.	0.13	0.
150	A	0.	0.	0.	0.	0.	0.13	0.	0.13	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.	0.
	R	0.	0.	0.	0.	0.	0.19	0.	0.16	0.
160	A	0.	0.	0.	0.	0.	0.19	0.	0.22	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.15	0.
	R	0.	0.	0.	0.	0.	0.17	0.	0.14	0.
170	A	0.	0.	0.	0.	0.	0.17	0.	0.21	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.16	0.
	R	0.	0.	0.	0.	0.	0.	0.	0.14	0.
180	A	0.	0.	0.	0.	0.	0.	0.	0.20	0.
	L	0.	0.	0.	0.	0.	0.	0.	0.14	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SUN AZIMUTH ARE IN DEGREES.

TABLE 123 CONT.

IR NUMBER OF OBSERVATIONS AS A FUNCTION OF SCATTERING ANGLE

FILTER 1 AT 0140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	225.	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	503.	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	315.	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	255.	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	240.	0.	0.
60	0.	0.	0.	1349.	0.	194.	0.	433.	0.	0.
70	0.	0.	0.	824.	0.	375.	0.	371.	0.	0.
80	0.	0.	0.	375.	0.	345.	0.	375.	0.	0.
90	0.	0.	0.	298.	0.	330.	0.	375.	0.	0.
100	0.	0.	0.	0.	0.	300.	0.	390.	15.	0.
110	0.	0.	0.	0.	0.	370.	0.	135.	0.	0.
120	0.	0.	0.	0.	0.	330.	0.	209.	0.	0.
130	0.	0.	0.	0.	0.	417.	0.	195.	0.	0.
140	0.	0.	0.	0.	0.	99.	0.	180.	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	251.	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	638.	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

TABLE 124

IR MEAN RADIANCE AS A FUNCTION OF SCATTERING ANGLE

FILTER 1 AT 0140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 TO 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	5.72	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	11.33	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	7.80	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	1.06	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	4.35	0.	0.
60	0.	0.	0.	0.37	0.	0.81	0.	1.25	0.	0.
70	0.	0.	0.	0.28	0.	0.65	0.	0.79	0.	0.
80	0.	0.	0.	0.16	0.	0.57	0.	0.89	0.	0.
90	0.	0.	0.	0.17	0.	0.42	0.	0.67	0.	0.
100	0.	0.	0.	0.	0.	0.17	0.	0.81	0.17	0.
110	0.	0.	0.	0.	0.	0.17	0.	0.19	0.	0.
120	0.	0.	0.	0.	0.	0.22	0.	0.19	0.	0.
130	0.	0.	0.	0.	0.	0.20	0.	0.19	0.	0.
140	0.	0.	0.	0.	0.	0.39	0.	0.18	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.21	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.20	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 125

IR RMS FLUCTUATION AS A FUNCTION OF SCATTERING ANGLE

FILTER 1 AT 140 AST

INSOL ANGLE 91.5 DEG

SPECTRAL BAND 2.50 to 2.80 MICRONS

ELEVATION 30.5 KM

VA	0	10	20	30	40	50	60	70	80	90
SA										
0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10	0.	0.	0.	0.	0.	0.	0.	2.60	0.	0.
20	0.	0.	0.	0.	0.	0.	0.	10.77	0.	0.
30	0.	0.	0.	0.	0.	0.	0.	11.29	0.	0.
40	0.	0.	0.	0.	0.	0.	0.	0.32	0.	0.
50	0.	0.	0.	0.	0.	0.	0.	4.40	0.	0.
60	0.	0.	0.	0.25	0.	0.21	0.	1.49	0.	0.
70	0.	0.	0.	0.21	0.	0.22	0.	0.81	0.	0.
80	0.	0.	0.	0.12	0.	0.20	0.	0.71	0.	0.
90	0.	0.	0.	0.13	0.	0.25	0.	0.60	0.	0.
100	0.	0.	0.	0.	0.	0.12	0.	1.10	0.10	0.
110	0.	0.	0.	0.	0.	0.14	0.	0.14	0.	0.
120	0.	0.	0.	0.	0.	0.15	0.	0.13	0.	0.
130	0.	0.	0.	0.	0.	0.16	0.	0.14	0.	0.
140	0.	0.	0.	0.	0.	0.16	0.	0.13	0.	0.
150	0.	0.	0.	0.	0.	0.	0.	0.15	0.	0.
160	0.	0.	0.	0.	0.	0.	0.	0.15	0.	0.
170	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
180	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

RADIANCE VALUES ARE IN MICROWATTS PER SQ. CM. PER STERADIAN.

VIEWING ANGLE AND SCATTERING ANGLE ARE IN DEGREES.

TABLE 126

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