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SOUND-SPEED DISTRIBUTION IN THE WESTERN INDIAN OCEAN

by

J. G. Colborn

Undersea Surveillance Department

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ADMINISTRATIVE INFORMATION

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Undersea Surveillance Department

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A. G. DILORETO, Head
Analysis and Acoustic Modeling Group

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Initial results of a continuing study to analyze and summarize the acoustically significant characteristics of the vertical sound-speed structure in the Indian Ocean are presented for purposes of acoustic model inputs and future exercise planning in the region. Data displays cover the western Indian Ocean west of 75°E and north of 20°S.

Hydrocast data with computed sound speeds at standard depths provide the basic information to define areas of the Indian Ocean that are reasonably homogeneous with regard

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to sound-speed properties and can be summarized by a single profile for each season. Seasonal data presentations of bottom conjugate depth (the shallow conjugate of the bottom sound speed) and depth excess (water depth below the deep conjugate of the near-surface sound-speed maximum) indicate the primarily bottom-limited situation in the western Indian Ocean and identify the restricted areas of the Somali Basin with convergence-zone propagation potential.

The upper-layer characteristics of layer depth, in-layer gradient, and below-layer gradient are displayed seasonally in contour format based on sound-speed-converted BT and XBT temperature data. Emphasis is placed on the significant effects of the seasonal monsoons, and in particular the strong SW Monsoon, on the near-surface structure. Results based on the two data sources are presented separately and some comparisons are made.

SUMMARY

PROBLEM

Analyze and display acoustically significant features of the sound speed distribution for the western Indian Ocean utilizing available hydrocast data and temperature data from mechanical BTs and XBTs.

RESULTS

Hydrocast data with computed sound speeds at standard depths provide the basic information to define fourteen areas of the western Indian Ocean that are reasonably homogeneous with regard to sound-speed properties and can be summarized by a single profile for each monsoon-oriented season. The greatest variability in vertical sound speed is produced at mid-depths near the Gulf of Aden by advective and diffusive mixing of the highly saline Red Sea Water.

Seasonal data presentations of bottom conjugate depth (the shallow conjugate of the bottom sound speed) and depth excess (water depth below the deep conjugate of the near-surface sound-speed maximum) are presented for the region west of 75°E and north of 20°S. Results indicate a primarily bottom-limited situation and identify restricted areas of the Somali Basin with convergence-zone potential.

The upper-layer characteristics of layer depth, in-layer gradient, and below-layer gradient are displayed seasonally in contour format based on sound-speed-converted BT and XBT temperature data. Emphasis is placed on the significant effects of the seasonal monsoons, and in particular the strong SW Monsoon, on the near-surface structure. Results based on the two data sources are presented separately and some comparisons are made.

RECOMMENDATIONS

Extensions of the present analysis into the eastern waters and south to about 30°S latitude will complete the presentation of summary information for the strategically significant regions of the Indian Ocean. Additional study is required to determine the nature and extent of the perturbations created by the mid-depth intrusion of Red Sea water on the western Arabian basin. Additional hydrocast data and XBT data to supplement the current set are particularly needed for the southeastern Arabian basin and the south-central Indian Ocean region.

Interpretations of data presentations based on summarized historical information are restricted to general conclusions regarding the expected ranges of variables and gross distributions. Knowledge of synoptic spatial variations of sound-speed characteristics over ranges of the order of magnitude of expected acoustic propagation is important to the understanding of environmental influences. This information should be provided by at-sea exercises designed to answer specific propagation problems.

CONTENTS

INTRODUCTION

The strategic significance of the Indian Ocean has increased in the last decade; however, an understanding of the basic acoustic structure of this oceanic region has lagged that of other major oceans. The International Indian Ocean Expedition (IIOE, 1960–65) has provided for the first time an amount of temperature and salinity data that seems adequate to support investigation of the distribution and seasonal variability of sound speed in the upper layers. A seasonal analysis of the temperature in the upper 500 m and the structure of the underlying main oceanic thermocline has been completed (Ref. 1). A good general analysis of the sound-speed structure with data presented for 12 cross sections and 36 individual locations north of 10°S has been completed by NAVOCEANO (Ref. 2).

NUC is the lead laboratory for undersea surveillance for all ocean domains, including the Indian Ocean. Studies have been proposed to support the Naval research effort to establish operational capability in this region, and, specifically, NUC is responsible for providing environmental inputs for acoustic prediction to support undersea surveillance efforts. This report is an initial step to satisfy this responsibility.

The objective of this study is to provide a comprehensive summary of the spatial and temporal distribution of sound-speed structure for all regions of the Indian Ocean of interest to the Navy. The present report covers the region of the Indian Ocean north of 20°S and west of 75°E, concentrating on the main ocean basins. The Red Sea, Gulf of Aden, Persian Gulf, Gulf of Oman, and shallow continental margins are essentially excluded. It is desirable to define sound speed provinces and to present representative sound-speed profiles for each province and season to support acoustic modeling studies and exercise planning. The seasonal distribution of significant acoustic properties affecting long-range propagation is also important. Convergence-zone propagation requires that the near-surface sound speed maximum be exceeded at some depth above the bottom to allow the upward refraction of deeply penetrating sound energy from a shallow source. The western Indian Ocean is primarily bottom limited, with some regions of seasonal depth excess occurring in the deepest portions of the Somali Basin. The primary parameter analyzed and displayed is the bottom conjugate depth for bottom-limited regions, with the depth excess distribution displayed for those regions and seasons where it occurs. These two parameters are defined in Fig. 1. In addition, distribution of the surface-layer characteristics of sonic-layer depth, in-layer gradient, and below-layer gradient are displayed seasonally. All data displays are presented in Appendices A, B, C, and D.

The basic data to support this analysis are provided by the recent NODC hydrocast data set, updated through 1973, which contains some 491,000 observations world-wide. A total of 3322 complete deep casts were available to provide sound-speed profile information for the western Indian Ocean. Initially these data were divided into four basic seasons determined by the two periods of maximum monsoon influence on the upper layers and the two intervening transition periods. Table 1 indicates the seasons as defined for this study. These seasonal data sets were analyzed along with supporting oceanographic information for this region in order to define sound-speed provinces that contain sufficient

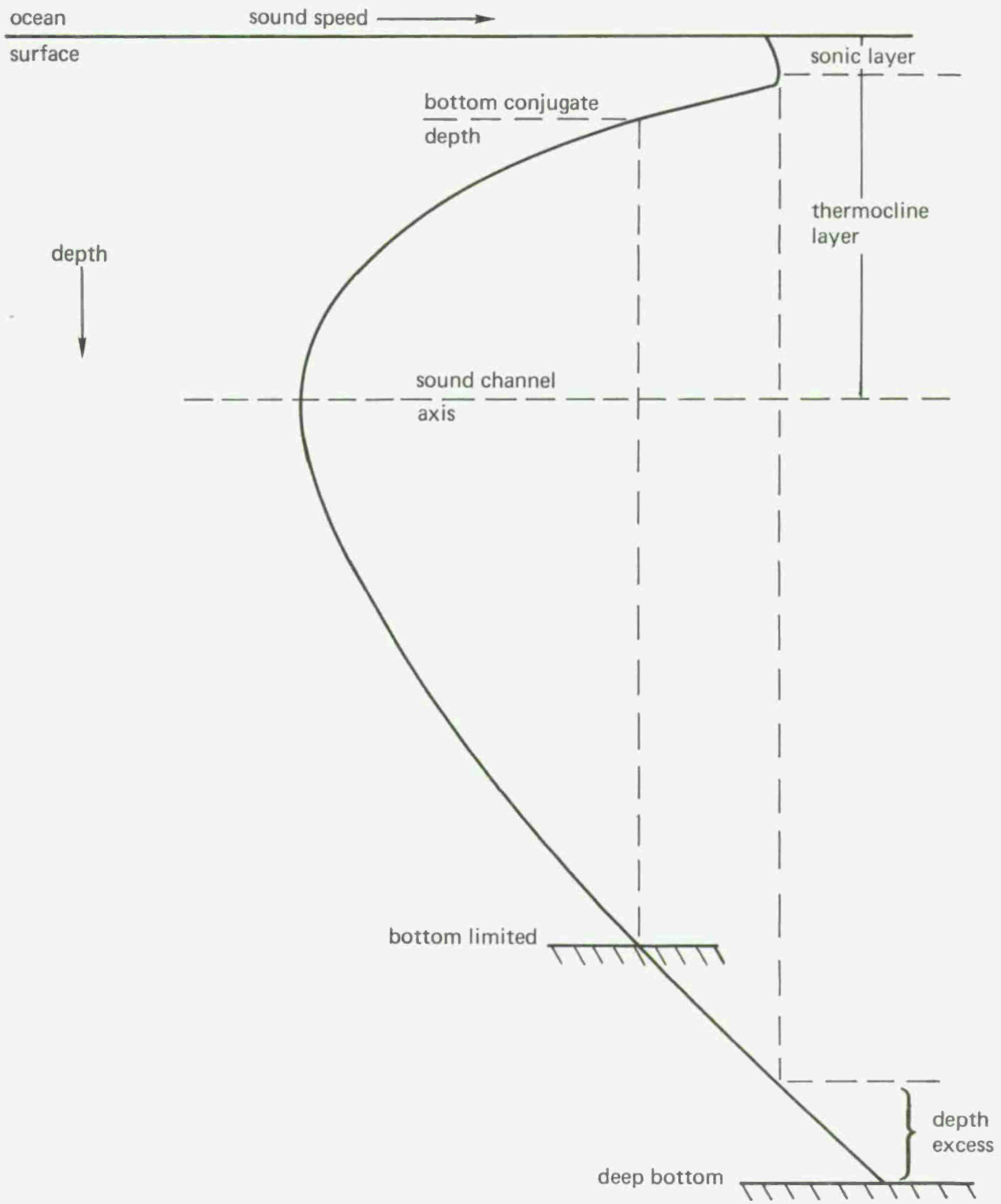

Figure 1. Example sound-speed profile indicating contrasting conditions for bottom limited situation and deep bottom situation. Bottom conjugate depth defines depth below which bottom limiting does not occur for horizontal rays emitted from source. Depth excess is water depth below conjugate of near-surface sound-speed maximum for deep bottom situation. A minimum depth excess is required for effective convergence-zone propagation.

TABLE 1. NORTHERN HEMISPHERE SEASONS FOR THE INDIAN OCEAN.

Season	Months	Monsoon Period
1	Dec–Feb	NE Monsoon
2	Mar–May	Transition
3	Jun–Sep	SW Monsoon
4	Oct–Nov	Transition

consistency in sound-speed characteristics to be represented by a single profile for each season. These province definitions are necessary compromises that are limited by the quality and quantity of the data and the practical necessity of providing a reasonable number of provinces for summary purposes. Individual sound-speed profiles were also processed to determine the bottom-limiting or depth-excess properties in order to provide the seasonal distributions of bottom conjugate depth and depth excess.

The analysis of the surface-layer characteristics is provided by the NODC mechanical BT data set for the western Indian Ocean, which contains 8017 observations. BT data were used to provide better coverage and because of the superior depth resolution provided by the 5-m-interval digitized format of temperature. Mean salinities were employed to produce equivalent sound-speed profiles from the temperature data, and the depth and gradient parameters were computed from these profiles. Although a reasonable number of observations were available, the distribution is not homogeneous and some voids occur in the displays. XBT data from the Fleet Numerical Weather Central (FNWC) were obtained in hopes of supplementing the mechanical BT data. However, XBT temperatures are digitized in a different format. Displays of the computed layer depth, in-layer gradient, and below-layer gradient have been maintained separately for BT data and XBT data until it can be established that computed values from these two sources can be combined.

The concept of spatially contouring a time-dependent variable can be defended only if the application respects the useful limits of this type of presentation. It should never be assumed that these presentations provide even an approximation of the synoptic situation. The contour charts are summary sources of information on the range, order of magnitude, and an approximation of the general relative distribution of the parameters. The bottom conjugate depth and depth excess displays can be used operationally, but as a general indicator only. The surface-layer-parameter displays should never be used to attempt to predict actual conditions for any particular time and location.

DATA AND PROCESSING

HYDROCAST DATA

The basic hydrocast data used in this analysis are a subset of the recent set from the National Oceanographic Data Center (NODC) updated through 1973 containing approximately 491,000 hydrocasts worldwide. After sorting out shallow (continental shelf) casts and incomplete casts, the set for the western Indian Ocean north of 20°S and west of 75°E contains 3322 stations.

Initially these data were grouped into the four monsoon and transition seasons selected for the northern Indian Ocean (Table 1). Based on a consideration of wind observations (Ref. 3) the NE Monsoon is established in November, persists through March, and is most intense in January. April is transition. The SW Monsoon is established in May in the Arabian Sea and persists through September, with maximum intensity in July. By October the SW Monsoon system is breaking down. The monsoons actually progress across the west Indian Ocean, and the effects on surface-layer sound speed will lag the occurrence of the winds. The seasons presented in Table 1 reflect compromises necessary to produce a single set of seasons for the entire north Indian Ocean. Data coverage is weakest during the short Oct–Nov transition season and the following NE Monsoon (Dec–Feb) season. The initial task to define preliminary sound speed provinces for data grouping was supported by available information on bathymetry (Refs. 4 and 5), currents, sea-surface temperature distribution (Ref. 6), surface heat exchange (Ref. 7), and a recently completed study of the thermal structure (Ref. 1). Initial province boundaries, based on the combined information from these sources, were used to group the sound speed profile data for each season.

A quick look at a sample of the sound-speed profiles (computed by NODC using Wilson's October 1960 equation) for each province/season resulted in initial adjustments to the boundaries to align with obvious natural transition zones between regions with different sound-speed structures. Final boundary selection was based on an individual evaluation of all profiles within each province/season. The procedure consisted of a detailed analysis of composite profile plots at several depth scales, individual profile location plots, and summary statistics for each province/season. Boundaries were shifted and new provinces created as necessary to combine similar profile types together. The final results displayed significant changes and alterations to the preliminary provinces based only on external support information. The data were processed statistically to select a single "typical" profile to represent each final province and season. The actual procedure, outlined in Ref. 8, involves converting each profile array, a vector, into an equivalent scalar quantity based on the profile "closeness" to the mean of the sample. The scalar quantities can be rank ordered, and an actual observed profile can be selected to represent the sample. Plots and listings for each selected profile are presented in Appendix A and a discussion of the results and application is contained in the next section.

The hydrocast-derived sound-speed data set was further processed to provide basic information to determine the distribution of bottom conjugate depth and depth excess in the deeper basins. These two parameters are mutually exclusive (see Fig. 1), and because of the bottom limiting condition existing over most of the western Indian Ocean, bottom conjugate depth is the primary parameter to be computed and displayed. Initially all

sound-speed profiles were grouped into four natural basins. The topographic boundaries of the Arabian Basin, the Somali Basin, the Comoro Basin, and the Mascarene Basin are apparent on up-to-date bathymetric maps (Refs. 4, 5 and 9). Fig. 2 presents significant features of Indian Ocean topography and geographic references. Deep data from each basin were checked to verify homogeneity. A minor variation in the deep profile data was observed in the western strip of the Mascarene Basin along the eastern coast of Madagascar and these data were omitted (see discussion of Provinces 16 and 17 in the next section). Mean sound speeds were computed at standard depths for each basin from 2000 m to 5000 m. In the Somali Basin the 6000-m sound speed was estimated on the basis of deep-water data provided in Ref. 2.

The sound-speed profiles for each basin were separated by season, and the portion of each profile above the main sound channel axis was searched to locate the upper-layer sound speed maximum. The observed bottom depth at the profile location (provided in NODC profile header information) was used with the mean deep profile for the basin to compute the sound speed at the bottom. The use of mean data for the deep portion of the profile allowed the computation of bottom conjugate depth or depth excess for any profile extending deep enough to include the upper-layer maximum and a portion of the underlying thermocline. This greatly increased the data coverage that would have resulted from the use of only individual deep profiles. The bottom sound speed at each profile location was computed from a quadratic fit to the mean sound speed profile for the basin. The fit was made to the set of three consecutive mean sound speeds with a mid-depth nearest to the observed bottom depth. This computed bottom sound speed was then compared to the upper-layer maximum sound speed to determine whether bottom limiting exists for this situation. If the bottom sound speed is less than the maximum, limiting does exist and the depth of the upper-layer conjugate of the bottom sound speed was determined by linear interpolation of standard depths. This bottom conjugate depth and the results of all such computations were plotted at the representative profile locations and contoured for each season.

The complementary situation, where the bottom sound speed exceeded the upper maximum, yielded a value of the critical depth. This parameter was computed by solving for the roots of the quadratic equation for the proper three-point interval of deep mean sound speeds created by inserting the upper maximum sound speed value. The only positive root was chosen as the critical depth. Depth excess was computed from the difference between critical depth and the observed bottom depth. Individual values of depth excess, indicated on the contour charts of bottom conjugate depth, are observed to cluster mainly in the northern Somali Basin region (see Appendix B).

BATHYTHERMOGRAPHIC DATA

A total of 8017 temperature observations contained in the NODC mechanical BT (bathythermograph) file, updated through 1970, were processed to provide information on the sound-speed structure in the upper layers of the western Indian Ocean. BT data were used for this part of the analysis because they were more numerous than hydrocast data and because the 5-m-interval depth spacing provides greater depth resolution than can be obtained from hydrocast data. The disadvantages of using BT data are less absolute

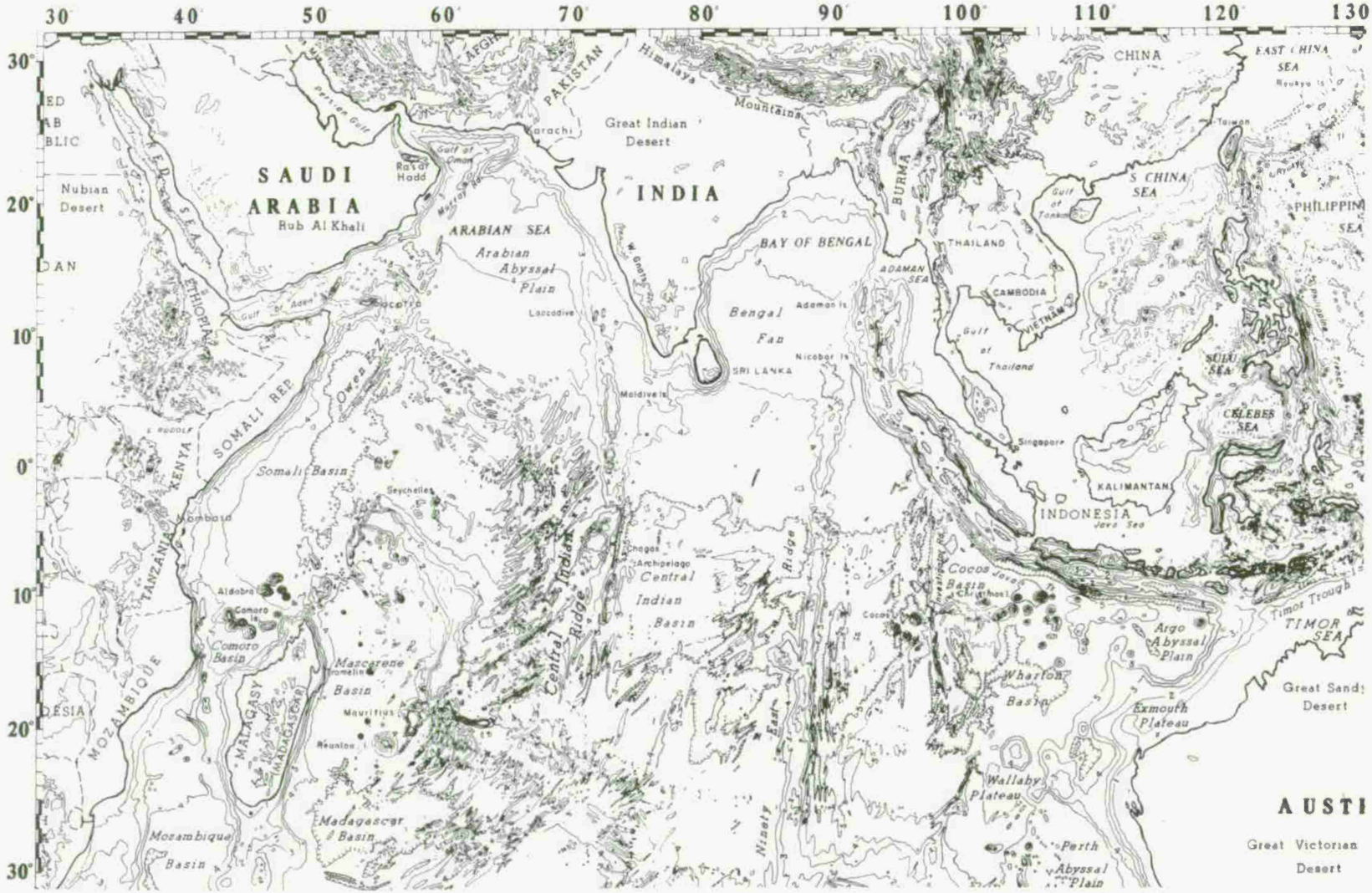

Figure 2. Topography of the Indian Ocean. (Contours in kilometers.) Reproduced from chart prepared by T. E. Chase, Scripps Institution of Oceanography, IMR Technical Report Series TR 57, 1975. Original data provided by R. L. Fisher and F. J. Emmel.

temperature accuracy and possible inaccuracies introduced through the necessary assumptions required to convert the temperature data to equivalent sound speeds.

Three near-surface sound speed parameters were computed using the basic BT data set, i.e., the depth of the sonic layer (surface channel), the positive gradient within this layer, and the negative gradient below the layer. These features of the vertical sound-speed distribution are not dependent on temperature alone. Thus it was necessary to convert each temperature profile to an equivalent sound-speed profile through consideration of the effects of salinity and pressure. Because the sound speed provinces described earlier are considered to contain reasonably homogeneous sound speed characteristics, it can be assumed that salinity variations at standard depths within a province are small for each season. Standard deviations of salinity at standard depths from the hydrocast data verify this assumption. Therefore, the BT data were grouped by province/season and the mean salinity profiles were interpolated at 5-m intervals. Pressure was computed from depth (Ref. 10) and used with the associated salinity and temperature from each BT to compute an equivalent sound-speed profile at 5-m depth intervals by means of Del Grosso's equation (Table VIII of Ref. 11).

The sound speed in the surface layer is taken to be the value at the 5-m depth. The profile is scanned to locate the absolute maximum sound speed and the associated depth, and the gradient is computed for the sonic layer using this value and the 5-m sound speed. The negative gradient is computed over the depth interval from the sonic layer to each succeeding deeper observation and the below-layer gradient is chosen as the maximum gradient in the set of values. Below-layer gradient values are ignored for BTs extending less than 15 m deeper than the sonic layer depth and in situations where the depth range of the maximum gradient includes the deepest observation. Sonic-layer depths and the sonic-layer and below-layer gradient values were separately plotted and contoured for each season.

XBT DATA

During the initial stages of BT data processing it became apparent that for certain seasons and locations data coverage was very weak or essentially non-existent. Hydrocast data cannot effectively be used to supplement the BT data because the computations of the near-surface parameters would be highly dependent on the relatively coarse standard depth spacing for hydrocasts. Attempts to contour the combined distribution of each parameter computed from the two separate data sources would produce artificial features in the display that depend on the relative distributions of the two sets of observations.

Fleet Numerical Weather Central (FNWC) maintains an XBT (expendable bathythermograph) data file that is equivalent to or more complete than any other single available data source. XBT data, though a measurement of temperature distribution basically similar to mechanical BT data, differ in digitization format in a manner that may cause the computation of gradients to vary systematically from the values obtained from BT data. Layer depth determination is not significantly affected by this difference in processing, and depths computed from these two sources should be consistent. Delays created by computer interface problems during the course of this study prevented an early access to the FNWC XBT data. A determination has not been made as to whether the gradient values derived from these two separate sources are members of the same statistical population and can be combined in single displays of gradient distributions. For purposes of this report the results derived from XBT data have been presented separately.

DISCUSSION OF RESULTS

This section presents results of the sound-speed data processing described in the previous section. Some recently acquired hydrocast data were not available to process for the sound-speed province definitions and typical profile selections, although these data were used in the bottom conjugate depth/depth excess computations and displays. Present plans call for an expansion of this analysis into the eastern Indian Ocean and possibly to 30°S. Current results will be modified as dictated by the new data and will be combined with the future analyses of the eastern waters to provide a single source of descriptive sound-speed information for the Indian Ocean.

The initial breakdown of the data sets into four monsoon-related seasons (Table 1) was made in an attempt to segregate the two monsoon periods and the two related periods of transition. The SW Monsoon is the dominant climatological feature of the western Indian Ocean. This period witnesses the greatest relative changes of sound-speed structure in the upper layers to depths of 200 m to 300 m. Unfortunately, for purposes of seasonal definition, the monsoon does not occur everywhere over the region simultaneously. The "burst" of the SW Monsoon occurs progressively later from the southwest to the northeast across the western Indian Ocean and is not continuous, but may change and vary, advance and withdraw. SW Monsoon beginning dates range from mid-April near Mombasa, Kenya, to early July at Karachi, Pakistan, in the northern Arabian Sea. The western sector may experience mean wind speeds of 30 knots and reports of 40–45 knots occur on daily charts. The Bay of Bengal experiences milder conditions than observed in the Arabian Sea, and the SW Monsoon period is shifted later in the year. The selected period of June through September for the SW Monsoon season is one compromise to provide a single set of four seasons for the entire Indian Ocean to 20°S. The southern extent of the effects of the two monsoons is limited to about 10°S. The December through February period for the NE Monsoon is a similar compromise. Parts of the NW Arabian Sea are still typically NE Monsoon during early March, although the month has been designated as transitional. The overall strength of this monsoon and its related effect on the surface layer (extending to less than 100 m) are much less than the SW Monsoon, and the choice of months is not as critical. The NE Monsoon is actually the normal tropical easterlies observed over much of the world at these latitudes. The SW Monsoon of the northwestern Indian Ocean, however, is unique on this scale and is a result of the effect produced by the surrounding continental land masses on the large-scale marine meteorological processes in this region.

The following sound-speed province data presentations (Appendix A), based on hydrocast data analysis, are ordered by geographic region roughly from north to south and are subdivided by season. The bottom conjugate depth/depth excess displays (Appendix B), also produced from hydrocast data, are presented by season for the entire western Indian Ocean. The surface parameter displays (Appendices C and D), based on BT data and XBT data, are also arranged by season.

SOUND SPEED PROVINCE SUMMARY

The provinces defined in this presentation (Fig. 3) have been selected to provide a comprehensive summary of vertical sound-speed characteristics for the western Indian Ocean

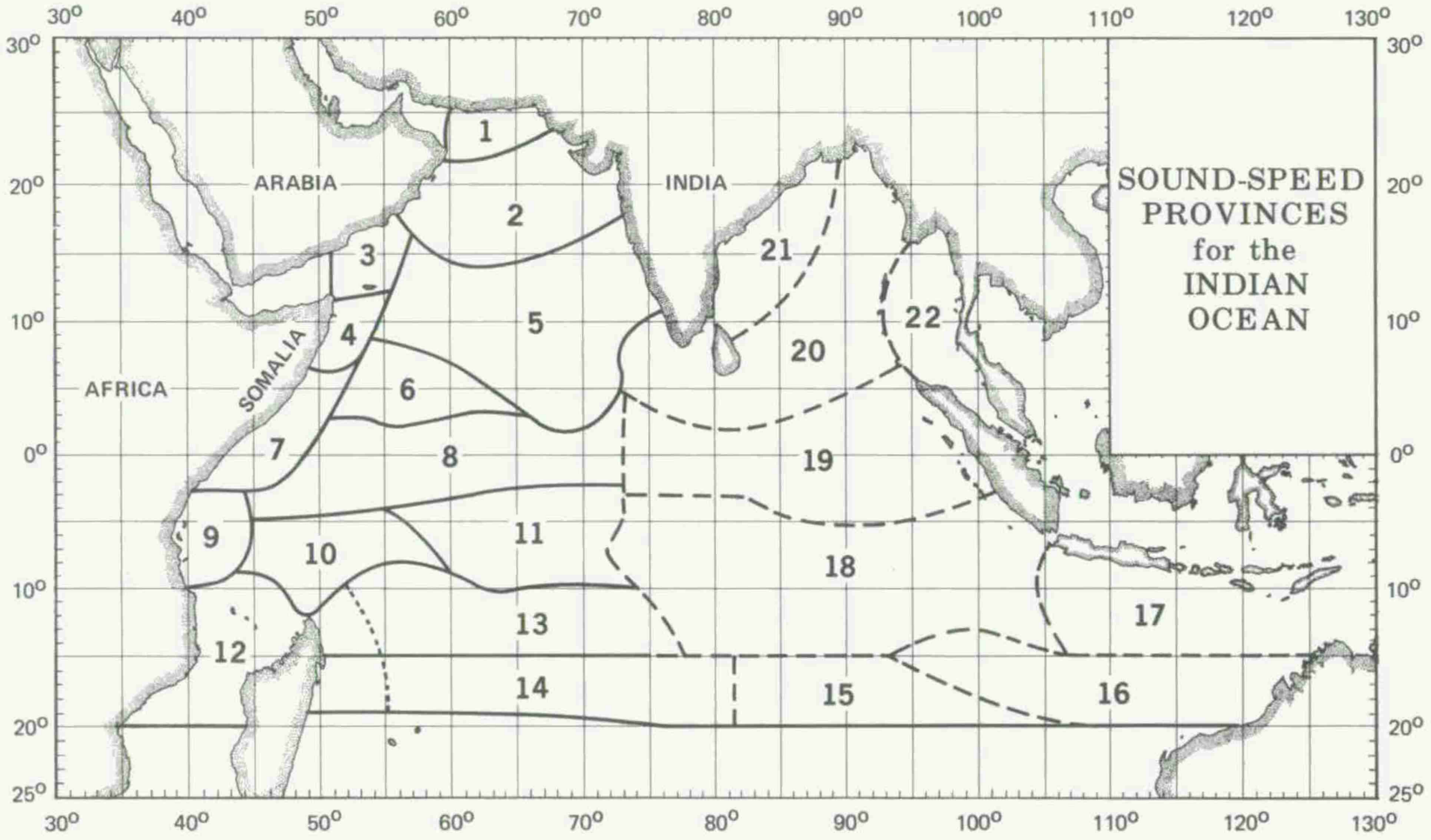

Figure 3. Sound speed provinces for the Indian Ocean. Analysis for western provinces (solid boundaries) presented in this report. Dotted boundary in western part of Provinces 13 and 14 indicates small variation in deep sound-speed structure. Preliminary province breakdown (dashed boundaries) for eastern Indian Ocean is subject to revision.

to 20°S for general application. These data, presented in atlas format, should serve only as a quick-look guide to general conditions for exercise planning or model studies. The province boundaries were chosen to provide a reasonable number of geographical areas that can each be realistically represented by a single sound-speed profile for each season. The procedure used to select representative typical profiles emphasized the acoustically significant characteristics of the subsurface vertical sound-speed distribution and placed less emphasis on the highly variable and complex structure in the near-surface layer above the thermocline. Conditions in the upper layer can be better displayed in contour format than by the use of representative vertical profiles. In most instances no clear water-mass boundary existed between profile types, and the data often indicated a gradual transition from one region to another. It was necessary to make subjective evaluations to place the final province boundaries. The choice of a particular profile to represent each province/season was most difficult to make in the more complicated regions of the western and southern Arabian Sea under influence of the Red Sea Water exiting from the Gulf of Aden.

Some variations of characteristics within the provinces and from month to month at a single location do exist. The summaries in this report should not be used when an accurate prediction for a specific location and short time frame is required. In this situation information should be obtained from a separate selection and processing of the proper raw data subset. A statistical summary for each province and season is presented in Appendix A to provide some measure of the variations in the data bases from which the typical profiles were selected.

The relationships between water mass distributions and sound-speed perturbations in the Indian Ocean north of 10°S have been comprehensively treated by Fenner and Bucca (Ref. 2). The vertical sound-speed structure below the surface layer is significantly influenced by the advective, diffusive, and mixing processes involving five identifiable water masses in the western Indian Ocean. Low-salinity cores from the south and east include the Subtropical Subsurface Water (400–750 m), the Antarctic Intermediate Water (700–800 m), and the Banda Intermediate Water (900–1100 m). Interaction of these low-salinity masses with the high-salinity Red Sea Water (500–1000 m) and the presence of the high-salinity Persian Gulf Water produce perturbations in the structure, particularly in the western and equatorial provinces (Provinces 3, 4, 6, 7, 8 and 9).

The Red Sea Water entering the Arabian Sea from the Gulf of Aden at depths near 700 m is the single most significant influence on the sound-speed structure in the western Indian Ocean. This high-salinity mass spreads through processes of lateral and vertical diffusion and slow lateral advection (Ref. 12) throughout much of the region between 20°N and 10°S. The primary effect of this water mass is to produce a mid-depth sound-speed maximum, thereby forcing the main sound channel axis to greater depths and creating a potential secondary channel above the high-salinity core. Diffusive mixing processes limit the extreme effect of this influence to the western provinces in the vicinity of the source where numerous minima and maxima result from Red Sea mixing. The vertical profiles in the region near the Gulf of Aden can be very complex in the upper 900 m. At locations more remote, the effects of the Red Sea Water is limited to creating a more broad and flattened channel structure. The southern extent of the Red Sea influence is generally limited to about 10°S in the western Indian Ocean. Waters south of this limit and east of Madagascar display a characteristic flattening of the profile that would seem to be related to the

low-salinity core of the Antarctic Intermediate Water. The region along the eastern slopes of Madagascar displays lower sound speeds at great depths than are observed at similar depths to the east, the result of a northward-flowing cold bottom layer of Antarctic origin.

Province 1 is strongly influenced by the high-salinity Persian Gulf Water in the upper layers, but lies north of the region of direct influence of Red Sea Water. The Persian Gulf Water entering from the Gulf of Oman creates a strong secondary channel in the 100–250 m layer in parts of Province 1 (see Appendix A). Too few data are available from Season 1 and Season 3 to adequately evaluate the distribution of this channel during the monsoon periods. However, the transition Season 2 data indicate the presence of a strong shallow channel located at depths between the warm surface layer and the Persian Gulf core. The channel is most evident in the Gulf of Oman and off Ra's al Hadd. Higher sound speeds in the thermocline from 200 m to 600 m are observed in Province 1 than in other provinces remote from the source of Persian Gulf water. Province 2 lies generally south of the region of direct influence of Persian Gulf Water and north of the region of strong Red Sea Water influence at greater depths. The northern zone of Province 2 does experience some minor inversions in the upper layers occurring in the northeast waters during the SW Monsoon and more to the northwest during the NE Monsoon as the current patterns tend to exert some influence on the spread of Persian Gulf Water away from the Gulf of Oman. A hint of the presence of the Red Sea core is indicated on the profiles in the 600 m to 900 m depth range by a layer of reduced sound-speed gradient.

Complex structures in the upper layers characterize Provinces 3 and 4 as evidenced by the relatively high standard deviations of sound speed at shallow depths. Red Sea Water dominates the structure creating one or more intermediate maxima from 400 m to 1000 m. Data samples for Seasons 3 and 4 (during and following the SW Monsoon) display the greatest variability for both provinces. The most complexity generally occurs near Socotra. The lowest surface sound speeds are observed during Season 3, the normal northern summer. This situation in Provinces 3 and 4 results primarily from the surface advection of cold upwelled water off Somalia and Arabia. A careful examination of individual data indicates that the first 10 days of March are still influenced by the NE Monsoon, and the placement of March in Season 2 for Provinces 3 and 4 is a compromise. The complex max-min structure caused by mixing of Red Sea Water is less apparent in Province 5 than in Provinces 3 and 4 to the west; however, the thick high-speed layer intersecting the thermocline forces the sound channel axis deeper than it would be in the absence of Red Sea Water. Season 3 seems to experience more small-scale complexities than other seasons and the effects can extend across the Arabian Sea to the west Indian coast.

Province 6 lies in the path of Red Sea Water flow to the southeast at a core depth of 600–700 m. Strong secondary channel formation and a deep sound channel axis of 1500 m to 1750 m characterize this area. Seasonal variations in the upper layers are reduced in Province 6 because surface heat exchange is more constant at low latitudes. Coastal upwelling off Somalia and subsequent northeast advection of the cold surface waters do not exert a strong influence on this area during the SW Monsoon. Red Sea Water flowing south along the coast of Africa strongly influences the structure in the upper 1000 m of Province 7. Many secondary channels are observed above and occasionally below the core depth of 600 m. A deep sound channel axis near 1750 m is also characteristic. Greatest standard deviations of sound speed in the upper layers are observed during Season 4 and the following NE Monsoon season, when surface circulation is directed into this area from the north.

Province 8 experiences a general weakening of the sound-speed gradient above the axis as a result of the presence of a thicker and less concentrated layer of Red Sea Water at this distance from the Gulf of Aden. A strong secondary channel is less prominent than in Province 7 to the north, and the main sound channel axis is slightly more shallow. Although the presence of the Red Sea Water is still apparent on the profiles for Province 9, mixing has reduced the strength of the high-salinity layer and absolute sound speeds are lower. The effect of the high-salinity mass can be observed at depths below 1000 m as the core depth increases to the south along Africa.

The influence of the Red Sea Water is greatly reduced in Provinces 10 and 11 lying in a transition zone between 6°S and 15°S, where mixing with low-salinity Antarctic Intermediate Water occurs. Only a mild perturbation near 1200 m depth is suggested on the profiles for Province 10. The general effect is to create a very thick layer of nearly constant sound speed above the sound channel axis. Sound speeds at depths below 3000 m appear to be slightly higher in Province 11 than in Province 10 to the west. The profiles for Province 12 provide little indication of the presence of identifiable Red Sea Water. The thermocline is relatively smooth and is characteristically less steep with increasing latitude. The sound channel axis is more shallow and the speed is lower in the absence of the high-salinity Red Sea layer.

Provinces 13 and 14 lie south of the maximum extent of Red Sea influence; however, the characteristic flattening of the profile in the vicinity of the axis is observed. Comparisons with the profiles from Province 12 at similar latitudes suggest that the perturbation observed in Provinces 13 and 14 may be the result of a layer of low sound speed in the depth zone between 700 m and 1000 m. This causes a shallow channel axis with a relatively low-gradient sound-speed layer below. The core depth of the low-salinity Antarctic Intermediate Water lies near 800–900 m, and the presence of this water mass may contribute to the observed low-sound-speed layer. The western waters of Provinces 13 and 14 along the east slope of Madagascar (see Fig. 3) exhibit lower sound speeds at 4000 m by as much as 1 m/sec when compared to the waters to the east. A cold deep water originating in the Antarctic circumpolar current with a temperature of only 1.1°C at 4000 m flows northward along the eastern slope of Madagascar (Ref. 13), causing the anomalously low sound speeds. The shallower portions of each profile from this coastal zone resemble the conditions throughout the remainder of the province, and thus a new province was not defined.

BOTTOM CONJUGATE DEPTH AND CRITICAL DEPTH

The display of the distribution of critical depths for a particular ocean region can be very useful in an operational situation in which the user is able to determine his local bottom depth accurately and compute the depth excess. For planning purposes, the critical depth display must be used in conjunction with an accurate bathymetric map to determine depth excess and the reliability of convergence zone propagation. In the case of the western Indian Ocean, a comparison of critical depths and associated bathymetry reveals that most of the region is bottom limited throughout the year with the exception of the central Somali Basin, where bottom limiting occurs only during Season 2. Thus a critical depth chart is of little practical value for most of the western Indian Ocean. It becomes important in this situation to know the depth below which sound energy from a subsurface sound

source ceases to be bottom limited. This depth has been defined earlier as the bottom conjugate depth. This parameter, or the complementary depth excess in the restricted areas where it occurs, has been chosen to represent the significant features of the sound-speed structure produced by variations in the depth of the bottom. These parameters, contoured and displayed for the four seasons in the western Indian Ocean, are presented in Appendix B.

Because bottom conjugate depth and depth excess are functions of near-surface structure it is necessary to compute and display these parameters on a seasonal basis. The concept of spatially contouring a time-dependent variable can be defended only if the application recognizes the useful limits of this type of presentation. The charts should be used as a guide to the magnitudes of the bottom conjugate depth and as a relative measure of the difference from region to region. Reliable bathymetric contours are based on many more depth observations than the number of hydrocasts available for the bottom conjugate depth computations. Comparisons to bathymetry should be made and regions of conflict should be recognized as potential errors in the bottom conjugate depth display. Banks and ridges may locally produce much deeper bottom conjugate depths than indicated by the contours. Small and narrow trenches may have significant depth excess not identified on the charts.

The contours of bottom conjugate depth and depth excess presented in Appendix B correlate strongly with available bottom depth contours. The bottom depth is much more variable than the upper layer sound speed structure and, therefore, produces most of the complexity seen in the bottom conjugate contours. The greatest values of bottom conjugate depth occur along the continental slope margins of the major basins, where contouring has been carried to 1200 m to 1400 m in some cases. In open waters the greatest values are associated with the major ridges and banks. The Carlsberg Ridge/Sheba Ridge system extending across the southern Arabian Basin creates large regions of bottom conjugate depths below 200 m and smaller areas with much deeper values. In the southern hemisphere the Seychelles Bank, Mascarene Ridge, and associated banks to the south create a region of deep conjugate depths. The Chagos Bank in the east and its southward extension also create areas with large conjugate depth values. Essentially all depth excess is restricted to the Somali Basin region extending along the African coast from 10°N to 5°S. Greatest depth excess is observed in the northwestern portion of the basin. If, for example, an operationally useful requirement of 400 m depth excess is specified, proper conditions for convergence-zone propagation are limited to portions of the northern Somali Basin during Season 3.

Season 1, the NE Monsoon period, is moderately favorable to convergence zone propagation in the Somali Basin with depth excess values exceeding 300 m in the deeper waters between the Chain Ridge and Africa. Cool near-surface waters create low maximum sound speeds and provide more depth excess. The bottom conjugate depth can be dependent not only on the heating/cooling cycle in the upper layers, but on the shifting current dynamics resulting from the two diverse monsoon circulation patterns. Conjugate depths below 200 m relate to the deeper more stable sound speed structure of the lower thermocline and display less seasonal correlations. Apparent seasonal differences in the bottom conjugate depth patterns are caused in part by data coverage variations. Data coverage is weak throughout the central Arabian Basin and Carlsberg Ridge during Season 1, and the contours serve only as magnitude indicators. Season 2 has the greatest near-surface temperatures and related maximum sound speeds. Depth excess is replaced in the Somali Basin during this period by a very shallow bottom conjugate depth.

Season 3 is the normal summer period in the northern hemisphere and the time when depth excess would be least likely to occur. However, the direct and indirect cooling influence of the strong SW Monsoon completely reverses the situation by creating the coldest near-surface temperatures in the Somali Basin and over much of the Arabian Sea. Cold-water upwelling occurs off Somalia and circulates in a cold eddy that forms offshore. Near-surface sound speeds are reduced sufficiently to create depth excess of over 400 m where none existed during the prior season. The Carlsberg Ridge and Chain Ridge prevent depth excesses in the adjacent areas where some cold water is advected. Over the central Arabian Sea cold surface temperatures are caused by excessive evaporation and reduced insolation (Ref. 1), however, the effect is restricted to the surface layer and should not greatly influence the bottom conjugate depth values. Actually, the central Arabian Basin contours indicate somewhat greater values for the bottom conjugate depths. This may reflect the deepening of the central basin surface layer resulting from the large-scale anti-cyclonic circulation pattern of the Arabian Sea during the SW Monsoon. The increase in depth excess observed in the northern Somali Basin extends into the southern basin during Season 3 and exceeds 100 m.

Season 4 also experiences depth excess of over 100 m throughout the southern Somali Basin. In the northern basin, depth excess decreases significantly during Season 4, when the local cooling effect of the SW Monsoon is removed. A few individual observations of depth excess over 200 m occur in the Somali Basin west of the Seychelles during Season 4 and Season 1. It cannot be determined from the data whether this is a true seasonal feature or isolated observations resulting from a particular combination of bottom topography and hydrocast locations.

NEAR-SURFACE SOUND SPEED STRUCTURE

Sonic layer depth (Fig. 1), in-layer sound-speed gradient and below-layer gradient have been selected to provide information on near-surface structure. Each parameter is presented in contour format by season for the western Indian Ocean in Appendices C and D. The primary data for this analysis are contained in the NODC mechanical BT data file available at NUC. The data for the most part came from observations made during the late 1950's and early 1960's in the Indian Ocean. Temperature data were converted to equivalent sound speeds and the parameters computed as described earlier. The distribution and complexity of the displayed contours based on data from several years is highly dependent on the density and distribution of observations and their relation to the actual structure of the surface produced by prevailing wind mixing and circulation patterns. It is quite clear that small-scale features indicated on the contoured surfaces should not be accepted as true or permanent features of the distribution. The true surface is continuously changing and the actual complexity of the surface at any instant in time is probably greater than indicated by the contours.

The contour maps can be valuable if the information derived from these maps is limited to:

1. General range of values of the variable to be expected for the region and season, and as an

2. approximation of large-scale distribution patterns, i.e., areas where relative values are low and areas where they may be expected to be greater.

Another caution should be mentioned in connection with the below-layer gradient computation. This parameter in some instances may have been computed for a minimum depth interval of only 5 m. This small interval might not be meaningful for low-frequency application, and the effective below-layer gradient could be somewhat less in such cases. Large regions with essentially no BT data coverage are indicated on the maps for each season. The most serious data holidays occur in the south-central and southeastern Arabian Sea during Season 1, 3 and 4. Seasons 1 and 4 are also seriously deficient in the eastern part of the southern hemisphere section and in the southern Somali Basin.

The surface circulation strongly influences the surface-layer structure and is, in turn, under direct influence of the local wind system. The SW Monsoon during Season 3 (June–September) blows over the Arabian Sea with 20-knot winds and reaches 30 knots or more off Somalia and Arabia. The surface layer is strongly influenced during the SW Monsoon by the monsoon-produced circulation cells that migrate across the Arabian Sea (Ref. 14). These cells or eddies affect the layer depth dynamically and also influence the layer gradient and the below-layer gradient. The accumulation of surface water at the center of an anticyclonic eddy will tend to deepen the layer, lower the in-layer gradient, and increase the below-layer gradient. The NE Monsoon (Season 1, December–February), in contrast to the strong SW Monsoon, is weakly developed, with wind speeds rarely exceeding about 15 knots. Allowing for the greater density of observations during Season 3, the analysis suggests that fewer spatial complexities in the layer depth and gradient structure occur during Season 1, as would be expected from wind-strength comparisons. The SW Monsoon period also experiences greater fluctuations in surface-layer heat exchange that further contribute to the variations in near-surface sound-speed structure observed during Season 3.

During Season 1, the NE Monsoon, the layer depths range from 30 m to 120 m in the northern hemisphere. Greatest depths are observed in the central waters and off the coast of Iran in the Gulf of Oman. In the south the layer shallows to less than 20 m during the southern summer warming period. Data coverage is very weak during Season 1 in the southern hemisphere. Reasonable negative correlation between in-layer gradient and layer depth is indicated by lower gradient values in regions with deep layers. The thermocline weakens in high southern latitudes and produces smaller below-layer gradients with increasing latitude.

Layer depths decrease in the northern hemisphere with decreasing winds and increasing solar heating during Season 2 following the NE Monsoon. Greatest layer depths during this period are observed in the north-central and western Arabian Sea. Layer deepening occurs south of 10°S as the southern hemisphere winter season approaches. The in-layer gradient increases in the north-central region and decreases in the extreme northern waters of the Arabian Sea from Season 1 to Season 2.

The onset of the SW Monsoon during Season 3 increases the layer depth in the northern hemisphere through wind mixing and indirectly through processes of surface cooling by evaporation. The layer deepens significantly just off the coast in the region of Somali coastal upwelling, where depths to 120 m are observed. The layer shallows noticeably along the coast just north of the upwelling region, where the strong current breaks

away from the coast. A branch of the current returns to the southwest, and the presence of oppositely flowing currents enhances the large variations of layer depths in the western Somali Basin.

A large region with depths exceeding 80 m is formed in the western and central sections of the Arabian Sea. A deep layer is not observed in the area of Arabian coastal upwelling, but the data coverage is very weak and inconclusive. Recent studies (Ref. 14) indicate that the general west-to-east circulation across the Arabian Sea during the SW Monsoon actually consists of a series of cyclonic and anticyclonic eddies. These eddies, obscured by long-term averaging in the figures presented here, would produce a more complex structure in the layer depth and below-layer gradient contour at any instant in time. Deeper and warmer surface layers are associated with anticyclonic eddies (clockwise in the northern hemisphere), and cooler shallower layers are produced by cyclonic circulation. The layer also deepens in the southern hemisphere during Season 3. Near the equator the SW Monsoon probably influences the layer depth, while at higher southern latitudes the normal winter processes of cooling and mixing are effective in increasing the layer depth. The in-layer gradient is moderately uniform over much of the Arabian Sea during the SW Monsoon. Largest gradients are observed in the region of shallower layers along India and the southern Gulf of Oman. Increased gradients are also observed in the eastern equatorial waters and the southeastern region.

Significant increases in the below-layer gradient are observed in the southwest to northeast zone across the Arabian Sea under the strongest direct influence of the SW Monsoon. The below-layer gradient correlates positively with the increase in layer depth and is further enhanced in the regions of upwelling by upward movement in the thermocline layer. High gradient values below the layer are also a normal situation in south equatorial waters, where large-scale upward movement of the upper layers of the main oceanic thermocline crowds the shallower isotherms (Ref. 1). Gradients exceeding 7 m/sec/10 m are observed in the 5°S to 10°S zone during Season 3.

Season 4 is a relatively short period of transition following the SW Monsoon. BT data coverage is weak, with little or no information in the 10°N to 5°S zone and the far southeast waters. The deep layers of the north-central Arabian Sea have disappeared; however, some remnants of eddy-produced deep layers are still evident in the Somali Basin. Southern hemisphere spring warming is beginning to decrease the layer depths south of the equator during Season 4. The in-layer gradient is relatively weak in the north except for a few localized features. The southern waters exhibit gradients similar to Season 3. High values of below-layer gradient are observed off Arabia in a region of shallow surface layers. In the southern hemisphere the below-layer gradient is decreasing with the shallowing of the surface layer.

COMPARISON OF BT AND XBT RESULTS

XBT data, obtained only recently at NUC, have been processed to obtain surface-layer information and are displayed separately from the mechanical BT data in Appendix D. Because a different digitization procedure is used for XBT data and because a quality comparison of the two types of instruments has not been accomplished, the data sets have been

treated separately. A comparison of the displayed information for each data source by season indicates a large degree of compatibility within the limits of usage discussed earlier for the mechanical BT data displays.

During Season 1, a comparison of layer depth charts indicates reasonable similarities in the central deep waters. Differences are observed along Arabia and off Pakistan, where the XBT data display deeper layers, and in the Gulf of Oman, where shallower XBT layers are indicated. Large in-layer gradients correspond to somewhat shallower layer depths in the northern Somali Basin for the XBT data. The tongue of low below-layer gradient water indicated in the BT data for Season 1 extending east from the Gulf of Aden does not appear in the XBT counterpart. The XBT data density is far greater than the BT density in this zone and the patterns may be more reliable on the XBT chart. Large data voids in the central and eastern Arabian Basin occur in both data sets. Better XBT data coverage in the southern hemisphere provides much greater detail in the below-layer gradient distribution. A large area with strong gradients observed in the southern Somali Basin on the XBT chart is completely lacking on the BT chart, in which no data were available for this region.

Layer-depth magnitudes on the BT and XBT charts are similar for Season 2 although the contour patterns are quite different. In-layer gradient values range from less than 0.1 m/sec/10 m to greater than 0.2 m/sec/10 m for both data sets, with the exception of a small area off India, where gradients exceed 0.3 m/sec/10 m on the BT chart. High below-layer gradients are observed in the northern Arabian Sea in the XBT data that are not indicated on the BT chart. The differences are caused in part by the lack of BT data in the Gulf of Oman and off northern India. A similar strong gradient area is observed during Season 2 and Season 1 in the southern Somali Basin on the XBT charts. BT data coverage is too weak for comparison in both instances.

Eddy-produced deep layers extending along the Somali coastal region and following the strong Somali Current offshore are observed on the BT chart and the XBT chart for Season 3, the SW Monsoon period. The layer appears shallower in the Somali Basin and the north-central Arabian Sea on the XBT chart. The in-layer gradient magnitudes are similar on both charts, with little variation indicated over most of the region. A zone of higher gradient water extending eastward from northern Madagascar is indicated on both charts. Complex detail is exhibited on both below-layer gradient charts for the SW Monsoon period. More XBT data were available off Arabia and in the extreme northern waters of the Arabian Sea. High-gradient areas appear to be associated with deep offshore layers along the Somali coast and shallow layers off Arabia. Shallow layers also appear to correlate with large below-layer gradients in high northern latitudes. The area with large gradients in the southern Somali Basin observed on the XBT charts is also indicated on the BT chart for Season 3.

The very shallow layer in the northwestern Indian Ocean following the SW Monsoon is indicated on both charts for Season 4. Weak BT and XBT data coverage in the southern hemisphere during this period make comparisons difficult. The deepening of the layer south of 10°S and east of Madagascar is indicated on both charts. High below-layer gradients appear in the far northwest waters based on BT and XBT data. The zone with large gradients south of the equator, though less steep than other seasons, is indicated on the XBT chart and suggested on the BT-derived contours. Large areas with no data greatly limit the comparison of BT- and XBT-computed parameters for Season 4.

SUMMARY AND PROJECTIONS

This report presents results of the analysis of sound-speed information for the Indian Ocean west of 75°E longitude and north of 20°S latitude. The limits to the application of the data displays should be re-emphasized. General conclusions regarding the large-scale distribution of parameters, the expected ranges of values, and the nature of seasonal variations can be inferred. Historical summarized presentations cannot be used to predict actual parameter values for a specific location and time, and at best are restricted to providing a basis for estimating conditions with the highest probability of occurrence based on the data set.

It is recommended that future efforts produce similar data presentations for the eastern Indian Ocean, with a possible extension of coverage to 30°S latitude. Further study may result in the combining of the near-surface parameters computed from BT and XBT data into a single set of displays, thereby minimizing the areas of weak data coverage. The distribution of the secondary acoustic channel created above the Red Sea core in the vicinity of the Gulf of Aden requires further study. Depth excess in the western Indian Ocean is restricted to the deeper parts of the Somali Basin and is seasonally variable. A look-up table to determine bottom sound speed as a function of bottom depth for the basin would allow an operator with a knowledge of his local bottom depth and sensor or cruising depth sound speed to estimate the probability of convergence-zone propagation for his situation. The usefulness of this type of data presentation should be evaluated for the Somali Basin and potential depth excess areas in the eastern Indian Ocean.

Better data coverage is needed in all parts of the Indian Ocean, particularly in the areas of weak data coverage identified on the display maps. Most of the hydrocast and BT observations were made during the few years of the IIOE in the early 1960's. Little is known of the long-term trends or the effects on the sound-speed structure of year-to-year variations in the strength of the monsoons. XBT information is current and acquisition is continuing; however, very few recent hydrocast or deep STD data are available.

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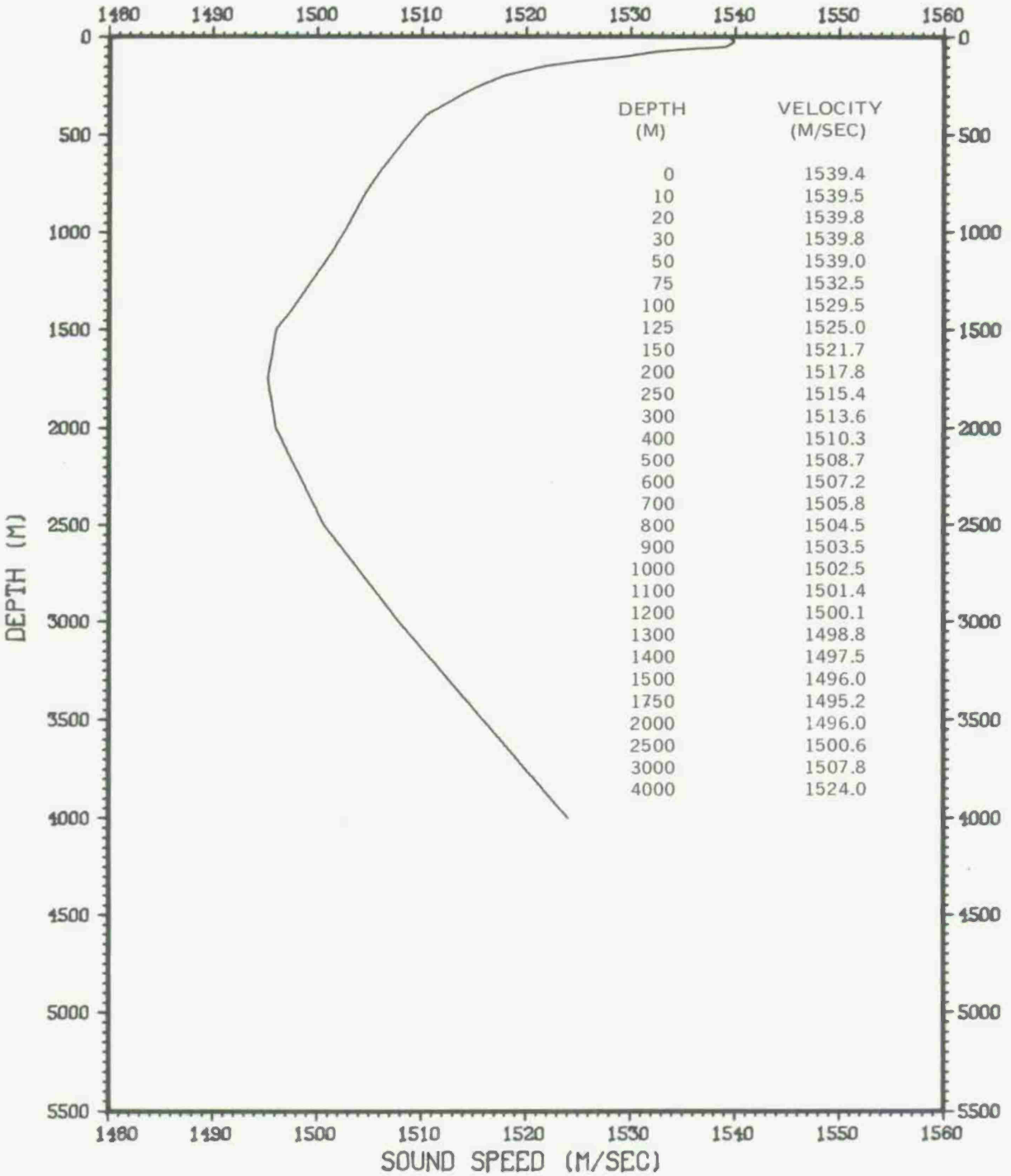
APPENDIX A: SOUND-SPEED PROVINCE PROFILES AND STATISTICAL SUMMARIES ARRANGED GEOGRAPHICALLY FROM NORTH TO SOUTH

PROVINCE 1 DEC – FEB

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	26.4	25.7	24.3	.8672	5 ••	36.9	36.4	36.2	.2702	5 ••	1540.1	1538.1	1534.5	2.2233	5
10 ••	26.3	25.7	24.3	.8444	5 ••	36.9	36.4	36.2	.2702	5 ••	1540.0	1538.1	1534.7	2.1385	5
20 ••	26.3	25.7	24.2	.8961	5 ••	36.9	36.5	36.3	.2510	5 ••	1540.2	1538.3	1534.7	2.2510	5
30 ••	26.3	25.6	23.9	1.0198	5 ••	36.9	36.4	36.2	.2702	5 ••	1540.4	1538.3	1534.2	2.5084	5
50 ••	26.1	24.8	23.4	1.2582	5 ••	36.5	36.3	36.1	.1483	5 ••	1539.8	1536.7	1533.3	2.9390	5
75 ••	23.9	22.7	20.0	1.5662	5 ••	36.4	36.2	36.0	.1517	5 ••	1534.7	1531.8	1524.5	4.1662	5
100 ••	23.0	21.6	18.8	1.6532	5 ••	36.4	36.1	36.0	.1643	5 ••	1533.3	1529.3	1521.7	4.4820	5
125 ••	21.7	20.3	18.4	1.2153	5 ••	36.3	35.9	35.7	.2387	5 ••	1529.9	1526.0	1521.2	3.1972	5
150 ••	19.5	19.0	17.9	.6693	5 ••	36.4	35.8	35.6	.3209	5 ••	1523.9	1522.7	1520.5	1.5297	5
200 ••	18.0	17.4	16.9	.4301	5 ••	36.4	35.9	35.6	.3033	5 ••	1521.0	1519.1	1517.8	1.2582	5
250 ••	16.1	15.9	15.4	.2775	5 ••	36.2	35.9	35.7	.1789	5 ••	1515.9	1515.4	1514.2	.6804	5
300 ••	15.7	15.0	14.1	.5891	5 ••	36.0	35.9	35.8	.0837	5 ••	1515.6	1513.3	1510.8	1.7487	5
400 ••	13.8	13.4	12.6	.4775	5 ••	35.9	35.8	35.7	.0894	5 ••	1511.3	1509.6	1507.0	1.6784	5
500 ••	12.7	12.4	11.7	.4761	4 ••	35.7	35.6	35.6	.0577	4 ••	1508.7	1507.8	1505.5	1.5449	4
600 ••	11.8	11.5	10.8	.4717	4 ••	35.6	35.5	35.5	.0577	4 ••	1507.4	1506.2	1504.0	1.5578	4
700 ••	11.1	10.6	10.0	.4796	4 ••	35.6	35.5	35.4	.0816	4 ••	1506.3	1504.9	1502.7	1.5924	4
800 ••	10.4	9.9	9.3	.4655	4 ••	35.5	35.4	35.4	.0577	4 ••	1505.4	1503.9	1501.4	1.7270	4
900 ••	9.7	9.2	8.5	.5196	4 ••	35.5	35.4	35.3	.0957	4 ••	1504.7	1503.0	1500.3	1.8786	4
1000 ••	9.1	8.6	7.8	.5500	4 ••	35.4	35.3	35.3	.0577	4 ••	1503.7	1502.0	1499.2	1.9442	4
1100 ••	8.4	7.9	7.2	.5033	4 ••	35.3	35.2	35.2	.0577	4 ••	1502.7	1501.0	1498.2	1.9476	4
1200 ••	7.6	7.2	6.5	.4717	4 ••	35.3	35.2	35.1	.0957	4 ••	1501.5	1499.8	1497.3	1.7877	4
1300 ••	6.9	6.5	6.0	.3742	4 ••	35.2	35.1	35.1	.0500	4 ••	1500.1	1498.6	1496.6	1.4660	4
1400 ••	6.1	5.8	5.4	.2944	4 ••	35.1	35.0	35.0	.0577	4 ••	1498.6	1497.5	1496.0	1.1117	4
1500 ••	5.3	5.1	4.9	.1915	4 ••	35.1	35.0	34.9	.0957	4 ••	1497.0	1496.3	1495.5	.7234	4
1750 ••	3.9	3.8	3.8	.0707	2 ••	35.0	34.9	34.9	.0707	2 ••	1495.5	1495.2	1495.0	.3536	2
2000 ••	2.9	2.9	2.9	.0000	1 ••	35.0	35.0	35.0	.0000	1 ••	1495.7	1495.7	1495.7	.0000	1
2500 ••	2.2	2.2	2.2	.0000	1 ••	34.8	34.8	34.8	.0000	1 ••	1500.7	1500.7	1500.7	.0000	1
3000 ••	1.9	1.9	1.9	.0000	1 ••	34.8	34.8	34.8	.0000	1 ••	1508.1	1508.1	1508.1	.0000	1

PROVINCE 1 DEC – FEB

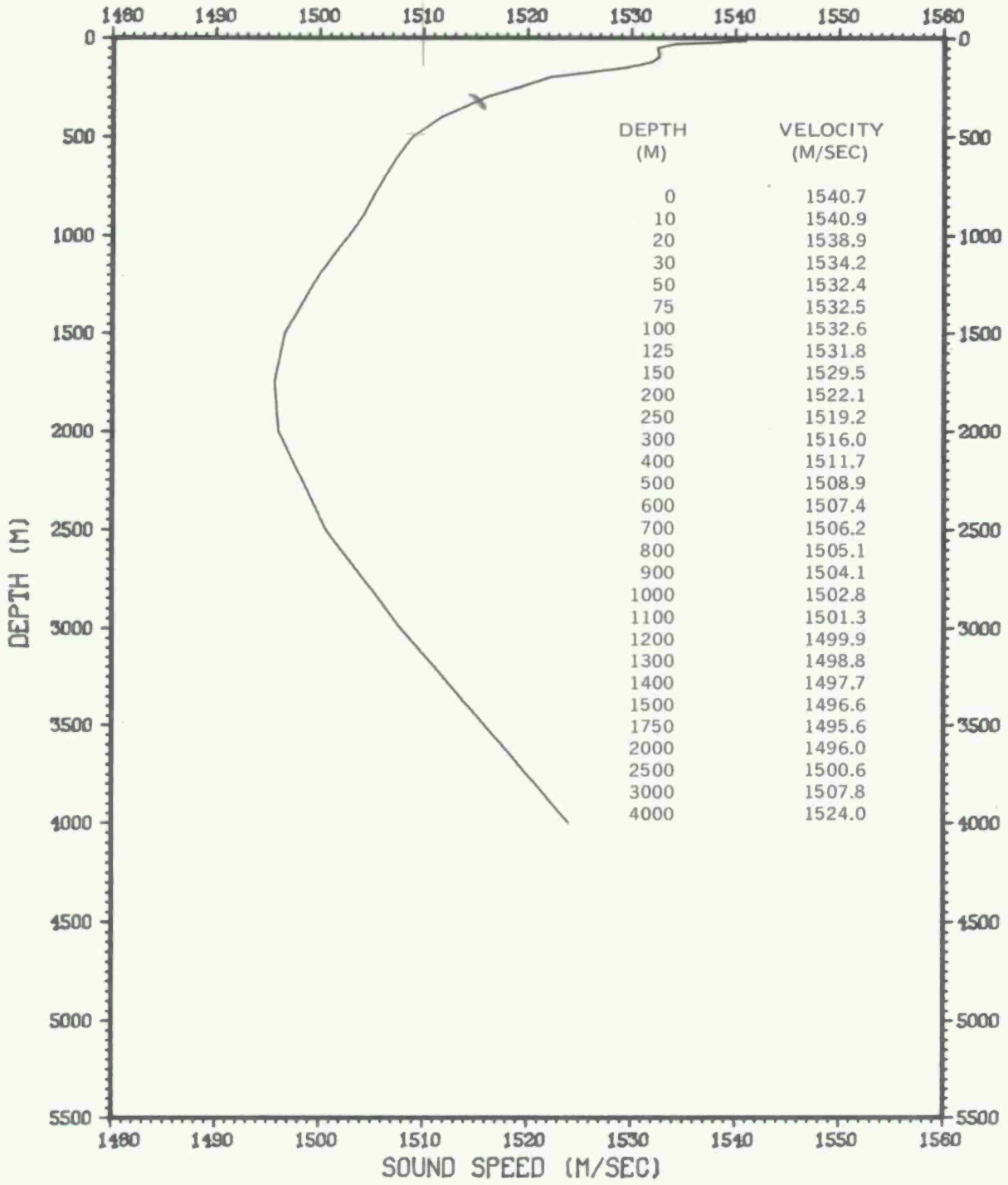


DEPTH (M)	VELOCITY (M/SEC)
0	1539.4
10	1539.5
20	1539.8
30	1539.8
50	1539.0
75	1532.5
100	1529.5
125	1525.0
150	1521.7
200	1517.8
250	1515.4
300	1513.6
400	1510.3
500	1508.7
600	1507.2
700	1505.8
800	1504.5
900	1503.5
1000	1502.5
1100	1501.4
1200	1500.1
1300	1498.8
1400	1497.5
1500	1496.0
1750	1495.2
2000	1496.0
2500	1500.6
3000	1507.8
4000	1524.0

PROVINCE 1 MAR – MAY

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	29.5	26.2	23.8	1.7002	49	36.7	36.5	36.2	.1204	49	1546.7	1539.2	1533.7	3.8747	49
10	29.1	26.0	23.8	1.5724	49	36.7	36.5	36.2	.1165	49	1546.0	1538.8	1533.7	3.5833	49
20	28.3	25.2	23.4	1.1523	49	36.7	36.4	36.1	.1099	49	1544.4	1537.3	1532.8	2.6948	49
30	27.8	24.4	22.8	1.0202	49	36.7	36.4	36.1	.1231	49	1543.5	1535.4	1531.5	2.4393	49
50	25.8	23.4	21.3	.8069	49	36.6	36.4	36.0	.1262	49	1539.1	1533.3	1527.9	2.0059	49
75	24.6	22.7	19.9	.9913	49	36.5	36.3	35.9	.1418	49	1536.7	1532.0	1524.2	2.6422	49
100	23.6	22.0	18.4	1.2522	49	36.5	36.3	35.8	.1688	49	1534.7	1530.5	1520.3	3.4124	49
125	23.5	21.2	18.5	1.3138	49	36.4	36.2	35.8	.1504	49	1534.7	1528.7	1521.1	3.6106	49
150	22.6	20.3	18.3	1.2389	49	36.5	36.1	35.7	.1574	49	1532.8	1526.7	1520.9	3.4480	49
200	20.5	18.5	17.5	.6549	49	36.7	36.1	35.8	.2041	49	1528.1	1522.5	1519.3	1.9061	49
250	18.3	17.1	15.8	.5555	48	36.7	36.2	35.9	.1543	48	1522.9	1519.4	1515.2	1.7047	48
300	17.6	15.8	14.9	.6403	47	36.4	36.1	35.9	.1078	47	1521.9	1516.4	1513.2	2.0861	47
400	15.1	13.9	13.0	.4160	37	36.1	35.9	35.8	.0727	37	1515.8	1511.5	1508.4	1.4499	37
500	13.4	12.6	12.0	.2858	36	35.9	35.8	35.7	.0560	36	1511.5	1508.7	1506.5	1.0021	36
600	12.3	11.7	11.1	.2395	36	35.8	35.7	35.6	.0558	36	1509.2	1507.1	1504.8	.8580	36
700	11.3	10.9	10.5	.2011	36	35.7	35.6	35.5	.0465	36	1507.2	1505.9	1504.3	.7610	36
800	10.6	10.2	9.7	.2059	35	35.6	35.5	35.4	.0404	35	1506.3	1504.9	1503.2	.7709	35
900	9.9	9.5	9.0	.2089	35	35.5	35.5	35.4	.0490	35	1505.4	1503.8	1502.2	.7931	35
1000	9.1	8.7	8.4	.2008	33	35.4	35.4	35.3	.0292	33	1504.1	1502.7	1501.4	.7677	33
1100	8.4	8.0	7.6	.2076	33	35.4	35.3	35.2	.0508	33	1503.1	1501.5	1500.0	.8445	33
1200	7.7	7.3	6.6	.2382	31	35.3	35.2	35.1	.0570	31	1501.8	1500.3	1497.6	.9545	31
1300	6.9	6.6	5.8	.2557	29	35.2	35.2	35.1	.0471	29	1500.5	1499.0	1495.7	1.0530	29
1400	6.3	5.9	5.0	.3000	27	35.2	35.1	35.0	.0517	27	1499.5	1497.9	1494.2	1.2588	27
1500	5.7	5.2	4.4	.3205	25	35.1	35.0	35.0	.0510	25	1498.8	1496.9	1493.3	1.3852	25
1750	4.2	4.0	3.4	.2462	21	35.0	34.9	34.9	.0402	21	1496.9	1495.6	1493.3	1.0457	21
2000	3.3	3.0	2.7	.1611	19	34.9	34.8	34.8	.0513	19	1497.1	1496.0	1494.6	.6654	19
2500	2.3	2.1	2.0	.0850	10	34.9	34.8	34.8	.0316	10	1501.2	1500.6	1500.1	.3213	10
3000	1.9	1.8	1.7	.0707	5	34.8	34.7	34.7	.0548	5	1508.1	1507.7	1507.4	.2967	5

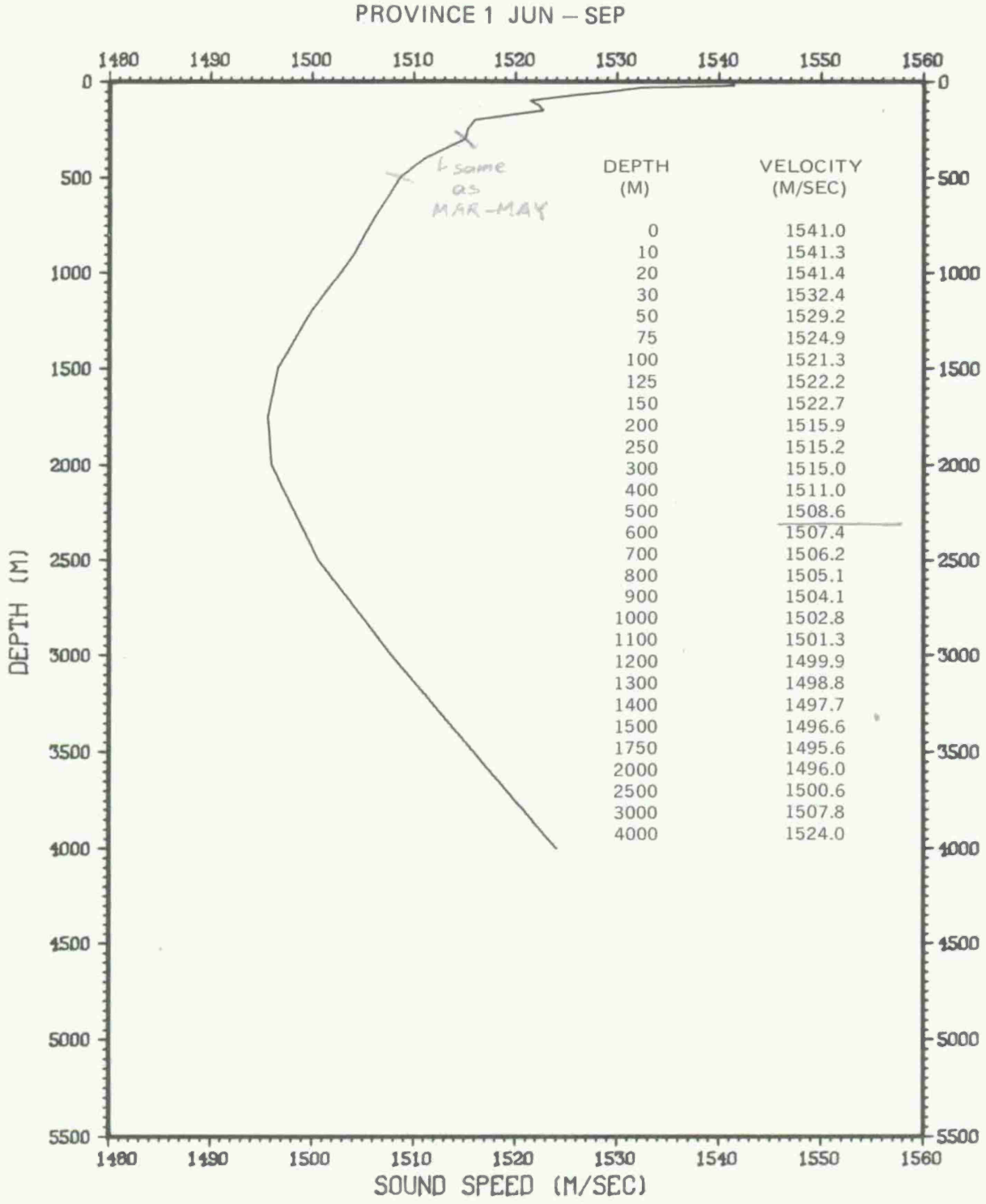
PROVINCE 1 MAR – MAY



DEPTH (M)	VELOCITY (M/SEC)
0	1540.7
10	1540.9
20	1538.9
30	1534.2
50	1532.4
75	1532.5
100	1532.6
125	1531.8
150	1529.5
200	1522.1
250	1519.2
300	1516.0
400	1511.7
500	1508.9
600	1507.4
700	1506.2
800	1505.1
900	1504.1
1000	1502.8
1100	1501.3
1200	1499.9
1300	1498.8
1400	1497.7
1500	1496.6
1750	1495.6
2000	1496.0
2500	1500.6
3000	1507.8
4000	1524.0

PROVINCE 1 JUN – SEP

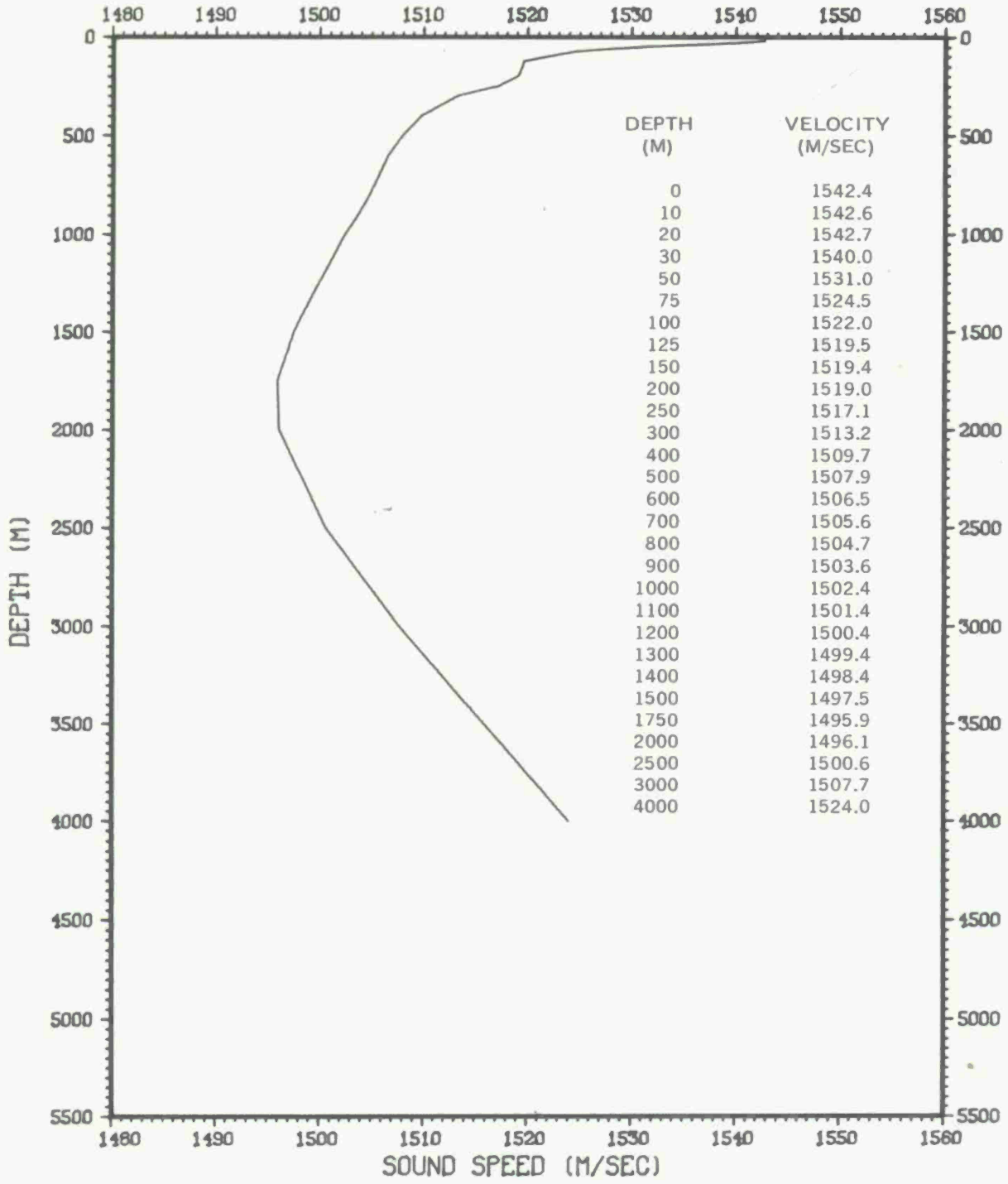
DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	28.1	27.2	25.1	1.0991	6 ••	36.8	36.2	35.0	.6282	6 ••	1543.7	1541.1	1536.5	2.6190	6
10 ••	28.5	27.5	25.7	.9893	6 ••	36.8	36.5	36.2	.2317	6 ••	1544.7	1542.2	1538.3	2.2784	6
20 ••	28.3	27.2	25.0	1.1409	6 ••	36.6	36.4	36.1	.1722	6 ••	1544.3	1541.7	1536.8	2.5905	6
30 ••	27.3	24.8	23.3	1.6391	6 ••	36.6	36.2	35.7	.3445	6 ••	1542.4	1536.2	1532.4	4.2447	6
50 ••	23.5	22.1	21.6	.6969	6 ••	36.4	35.9	35.5	.2944	6 ••	1533.6	1529.6	1528.3	1.9793	6
75 ••	22.3	20.8	19.7	1.1250	6 ••	36.2	35.8	35.6	.2251	6 ••	1530.9	1526.5	1523.5	3.2102	6
100 ••	20.7	19.5	19.0	.7441	6 ••	35.9	35.6	35.3	.2345	6 ••	1526.3	1523.1	1521.3	2.0508	6
125 ••	19.7	18.9	18.6	.4167	6 ••	36.1	35.9	35.5	.2137	6 ••	1523.8	1522.1	1521.1	.9239	6
150 ••	18.8	18.3	17.4	.5468	6 ••	36.3	36.0	35.4	.3386	6 ••	1522.7	1521.2	1518.4	1.6162	6
200 ••	17.8	16.9	16.3	.5441	6 ••	36.2	36.0	35.7	.1751	6 ••	1520.1	1517.8	1515.9	1.5362	6
250 ••	16.5	15.9	15.6	.3975	5 ••	36.3	36.1	35.9	.1517	5 ••	1517.4	1515.8	1514.6	1.2814	5
300 ••	15.8	15.1	14.2	.8185	3 ••	36.4	36.2	35.9	.2887	3 ••	1516.7	1514.2	1510.9	2.9816	3


PROVINCE 1 JUN – SEP
same as MAR-MAY
DEPTH (M)
VELOCITY (M/SEC)
0 1541.0
10 1541.3
20 1541.4
30 1532.4
50 1529.2
75 1524.9
100 1521.3
125 1522.2
150 1522.7
200 1515.9
250 1515.2
300 1515.0
400 1511.0
500 1508.6
600 1507.4
700 1506.2
800 1505.1
900 1504.1
1000 1502.8
1100 1501.3
1200 1499.9
1300 1498.8
1400 1497.7
1500 1496.6
1750 1495.6
2000 1496.0
2500 1500.6
3000 1507.8
4000 1524.0
DEPTH (M)
SOUND SPEED (M/SEC)
1480 1490 1500 1510 1520 1530 1540 1550 1560
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500

PROVINCE 1 OCT – NOV

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	28.8	27.4	26.1	.7322	21 ••	37.0	36.5	36.1	.2481	21 ••	1545.5	1541.8	1538.7	1.6334	21
10 ••	28.2	27.0	25.7	.7261	21 ••	37.0	36.4	35.9	.2594	21 ••	1544.1	1541.1	1537.8	1.7043	21
20 ••	28.2	26.5	23.7	1.2338	21 ••	37.0	36.4	35.8	.2851	21 ••	1544.3	1540.1	1533.0	2.9613	21
30 ••	27.8	25.6	21.5	1.6483	21 ••	37.0	36.3	35.6	.3145	21 ••	1543.2	1538.1	1527.4	4.1034	21
50 ••	26.9	23.0	20.1	1.5411	21 ••	36.6	36.1	35.6	.2556	21 ••	1541.8	1532.1	1524.2	3.9968	21
75 ••	23.7	21.4	19.6	1.1367	21 ••	36.5	36.1	35.8	.1640	21 ••	1534.4	1528.3	1523.3	3.0839	21
100 ••	22.8	20.3	18.9	1.0994	21 ••	36.5	36.0	35.8	.1814	21 ••	1532.8	1525.7	1521.6	3.0698	21
125 ••	22.0	19.3	18.0	1.0893	21 ••	36.3	36.0	35.7	.2098	21 ••	1531.1	1523.5	1519.5	3.1004	21
150 ••	21.1	18.6	17.2	.9483	21 ••	36.5	36.0	35.7	.2071	21 ••	1528.9	1521.9	1517.4	2.7360	21
200 ••	19.8	17.4	15.5	1.0390	21 ••	37.0	36.1	35.6	.3188	21 ••	1527.1	1519.4	1513.8	3.2827	21
250 ••	18.4	16.4	14.3	1.0561	19 ••	36.7	36.1	35.5	.3114	19 ••	1523.6	1517.2	1510.4	3.4590	19
300 ••	17.1	15.4	13.2	1.0141	19 ••	36.5	36.0	35.5	.2849	19 ••	1520.2	1514.7	1507.4	3.4477	19
400 ••	15.0	13.7	11.8	.7294	19 ••	36.2	35.8	35.5	.1895	19 ••	1515.3	1510.7	1504.1	2.5054	19
500 ••	13.5	12.6	11.0	.5547	19 ••	36.0	35.7	35.5	.1302	19 ••	1512.1	1508.6	1502.8	2.0002	19
600 ••	12.5	11.7	10.3	.4922	18 ••	35.8	35.6	35.3	.1278	18 ••	1509.8	1507.0	1502.2	1.7142	18
700 ••	11.6	11.0	9.8	.4091	18 ••	35.7	35.5	35.2	.1338	18 ••	1508.3	1506.0	1501.7	1.5155	18
800 ••	10.8	10.2	9.1	.3899	18 ••	35.6	35.5	35.2	.1150	18 ••	1507.3	1505.0	1500.9	1.4573	18
900 ••	10.1	9.5	8.4	.3919	17 ••	35.5	35.4	35.2	.0996	17 ••	1506.1	1503.9	1499.9	1.4231	17
1000 ••	9.3	8.8	7.8	.3387	17 ••	35.5	35.4	35.1	.0931	17 ••	1504.8	1502.8	1499.0	1.3081	17
1100 ••	8.6	8.1	7.2	.3098	17 ••	35.4	35.3	35.1	.0809	17 ••	1503.8	1501.7	1498.2	1.2352	17
1200 ••	7.9	7.4	6.6	.3087	16 ••	35.4	35.2	35.0	.0957	16 ••	1502.6	1500.7	1497.4	1.2475	16
1300 ••	7.2	6.7	6.0	.2892	16 ••	35.3	35.2	35.0	.0856	16 ••	1501.6	1499.6	1496.7	1.1892	16
1400 ••	6.5	6.0	5.4	.2705	16 ••	35.2	35.1	34.9	.0730	16 ••	1500.5	1498.5	1495.8	1.1004	16
1500 ••	5.8	5.4	4.8	.2477	16 ••	35.1	35.0	34.8	.0885	16 ••	1499.2	1497.5	1495.2	.9569	16
1750 ••	4.3	4.1	3.7	.1633	15 ••	35.0	34.9	34.7	.0775	15 ••	1497.3	1496.2	1494.8	.6632	15
2000 ••	3.3	3.1	2.9	.1051	14 ••	34.9	34.8	34.6	.1027	14 ••	1496.9	1496.2	1495.5	.4178	14
2500 ••	2.3	2.2	2.1	.0667	9 ••	34.8	34.8	34.8	.0000	9 ••	1501.0	1500.6	1500.2	.2291	9
3000 ••	1.9	1.8	1.8	.0378	7 ••	34.9	34.8	34.7	.0690	7 ••	1508.2	1507.8	1507.5	.2268	7

PROVINCE 1 OCT – NOV

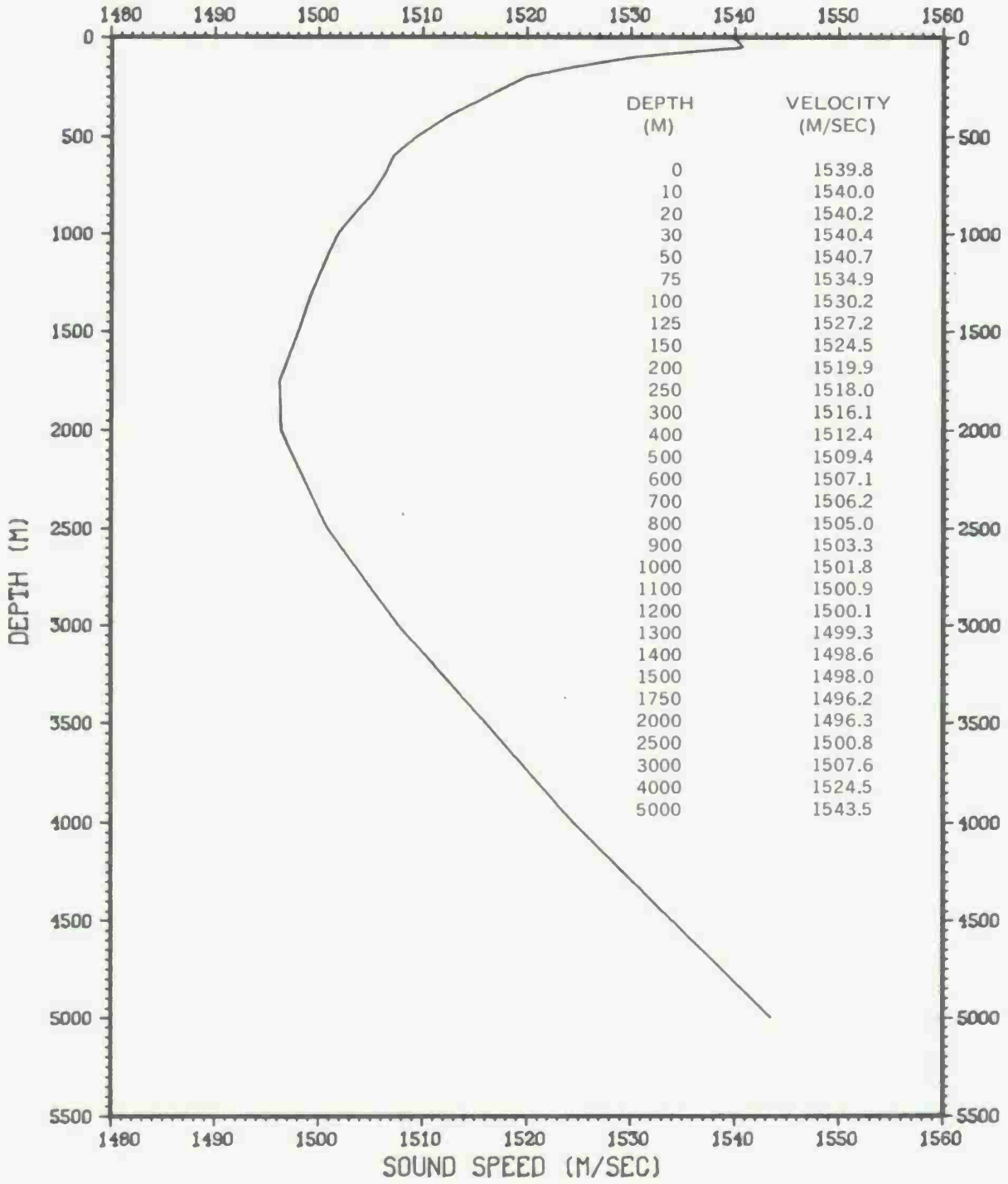


DEPTH (M)	VELOCITY (M/SEC)
0	1542.4
10	1542.6
20	1542.7
30	1540.0
50	1531.0
75	1524.5
100	1522.0
125	1519.5
150	1519.4
200	1519.0
250	1517.1
300	1513.2
400	1509.7
500	1507.9
600	1506.5
700	1505.6
800	1504.7
900	1503.6
1000	1502.4
1100	1501.4
1200	1500.4
1300	1499.4
1400	1498.4
1500	1497.5
1750	1495.9
2000	1496.1
2500	1500.6
3000	1507.7
4000	1524.0

PROVINCE 2 DEC – FEB

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	27.4	26.3	25.1	.7384	14	36.6	36.0	35.3	.3897	14	1540.6	1539.0	1536.1	1.5948	14
10	27.4	26.4	25.1	.7703	14	36.6	36.1	35.3	.3673	14	1540.8	1539.3	1536.3	1.6340	14
20	27.3	26.4	25.0	.7899	14	36.6	36.1	35.3	.3430	14	1541.3	1539.5	1536.3	1.6939	14
30	27.3	26.2	24.4	.9534	14	36.6	36.1	35.2	.3595	14	1541.5	1539.3	1535.0	2.1449	14
50	27.9	25.8	20.5	1.8853	14	36.6	36.2	35.7	.2568	14	1543.6	1538.7	1525.2	4.7187	14
75	26.7	23.9	19.4	1.8144	14	36.4	36.0	35.6	.2400	14	1541.1	1534.4	1522.6	4.6851	14
100	25.2	22.3	18.8	1.7788	14	36.3	35.9	35.6	.2455	14	1538.4	1530.9	1521.5	4.6600	14
125	22.0	20.4	18.2	1.0661	14	36.1	35.8	35.5	.1968	14	1530.8	1526.2	1520.2	2.9698	14
150	20.1	18.9	17.6	.7367	14	36.0	35.7	35.3	.2155	14	1526.2	1522.4	1518.9	2.1749	14
200	18.7	17.3	15.9	.7378	14	36.2	35.7	35.2	.2731	14	1523.2	1518.6	1514.1	2.3509	14
250	17.4	16.1	14.7	.7143	14	36.1	35.8	35.5	.1900	14	1520.0	1516.0	1511.3	2.3266	14
300	16.2	15.1	13.7	.7343	14	36.0	35.8	35.5	.1490	14	1517.0	1513.6	1508.8	2.4900	14
400	14.2	13.4	12.4	.5711	14	35.9	35.7	35.4	.1399	14	1512.4	1509.6	1505.8	2.0323	14
500	13.4	12.5	11.7	.4420	12	35.8	35.7	35.4	.0996	12	1511.5	1508.0	1505.0	1.6632	12
600	12.8	11.7	11.1	.4202	12	35.7	35.6	35.3	.0996	12	1510.7	1506.9	1504.6	1.4538	12
700	11.3	10.9	10.5	.2335	12	35.6	35.5	35.3	.0888	12	1507.2	1505.8	1503.9	.9185	12
800	10.5	10.2	9.8	.1969	12	35.6	35.5	35.4	.0622	12	1505.9	1504.8	1503.4	.6921	12
900	9.7	9.4	9.0	.1954	12	35.5	35.4	35.3	.0622	12	1504.5	1503.5	1502.1	.7158	12
1000	8.9	8.6	8.3	.1782	12	35.4	35.3	35.2	.0669	12	1503.1	1502.2	1501.0	.6523	12
1100	8.1	7.9	7.6	.1676	12	35.3	35.3	35.2	.0515	12	1501.9	1500.8	1499.9	.6544	12
1200	7.4	7.1	6.5	.2539	12	35.3	35.2	35.1	.0515	12	1500.6	1499.5	1497.3	.9403	12
1300	6.7	6.5	6.2	.1662	11	35.2	35.1	35.0	.0647	11	1499.4	1498.7	1497.5	.6592	11
1400	6.1	5.8	5.6	.1748	11	35.1	35.0	34.9	.0674	11	1498.6	1497.6	1496.6	.6816	11
1500	5.5	5.2	5.0	.1758	11	35.1	35.0	34.9	.0632	11	1498.0	1496.7	1495.5	.8166	11
1750	4.1	3.8	3.1	.3314	8	35.0	34.9	34.8	.0641	8	1496.5	1495.1	1491.7	1.5334	8
2000	3.1	3.0	2.8	.1304	5	34.9	34.8	34.8	.0548	5	1496.3	1495.7	1494.8	.6731	5
2500	2.3	2.2	2.1	.0957	4	34.8	34.8	34.8	.0000	4	1501.4	1500.6	1500.1	.5802	4
3000	1.9	1.8	1.8	.0707	2	34.7	34.7	34.7	.0000	2	1507.9	1507.7	1507.6	.2121	2

PROVINCE 2 DEC – FEB

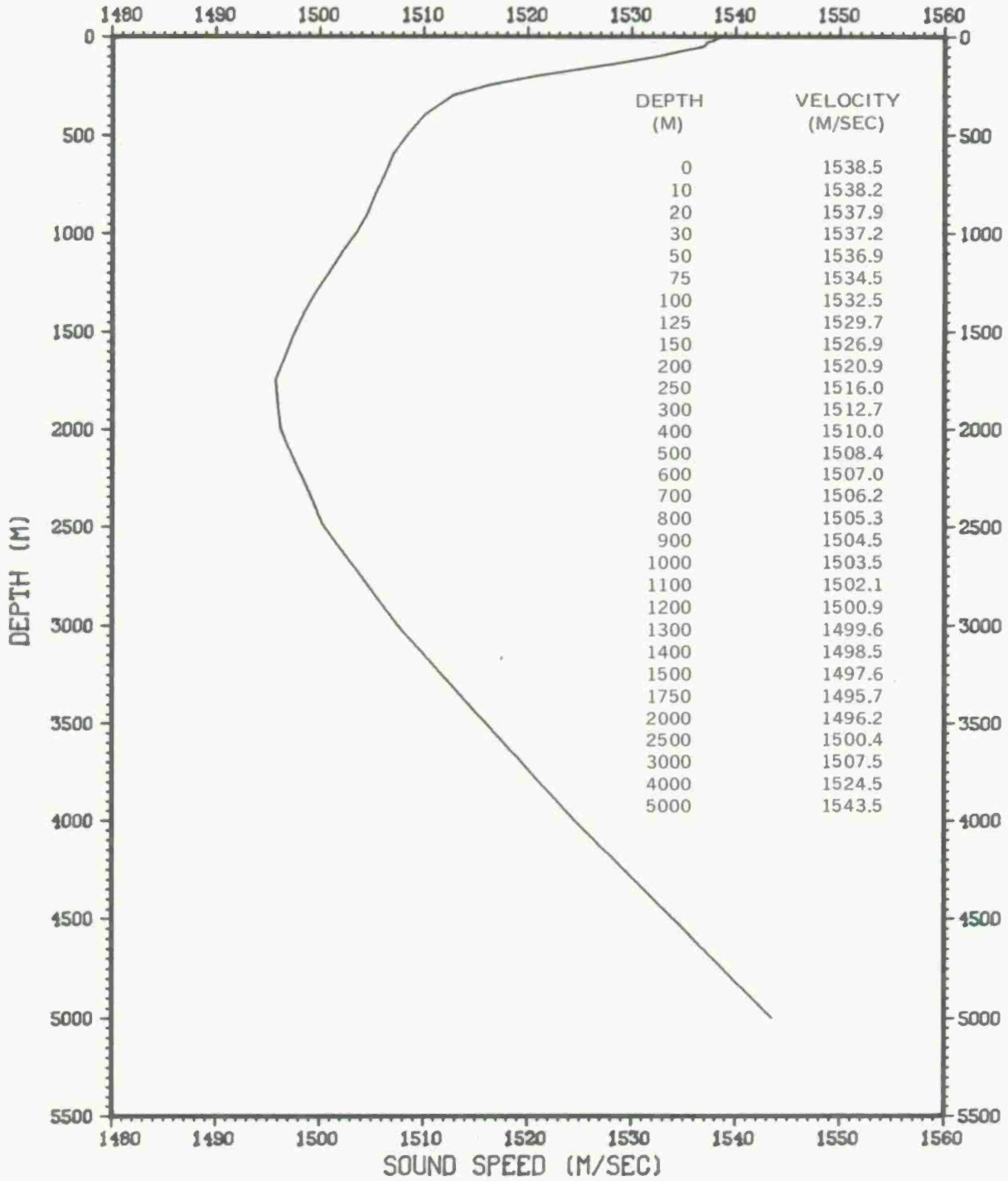


DEPTH (M)	VELOCITY (M/SEC)
0	1539.8
10	1540.0
20	1540.2
30	1540.4
50	1540.7
75	1534.9
100	1530.2
125	1527.2
150	1524.5
200	1519.9
250	1518.0
300	1516.1
400	1512.4
500	1509.4
600	1507.1
700	1506.2
800	1505.0
900	1503.3
1000	1501.8
1100	1500.9
1200	1500.1
1300	1499.3
1400	1498.6
1500	1498.0
1750	1496.2
2000	1496.3
2500	1500.8
3000	1507.6
4000	1524.5
5000	1543.5

PROVINCE 2 MAR – MAY

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	29.9	26.8	24.5	1.3050	76	36.7	36.3	35.2	.2896	76	1547.1	1540.3	1535.3	2.8776	76
10	29.9	26.6	24.4	1.3415	76	36.7	36.3	35.2	.2818	76	1547.2	1540.1	1535.3	2.9531	76
20	29.6	26.3	24.1	1.4115	76	36.7	36.3	35.3	.2658	76	1546.8	1539.6	1534.4	3.1346	76
30	29.0	25.9	22.9	1.4257	76	36.6	36.3	35.5	.2133	76	1545.8	1538.7	1531.5	3.2105	76
50	27.9	24.9	21.3	1.3576	76	36.6	36.3	35.8	.1645	76	1543.6	1536.9	1527.9	3.1606	76
75	26.9	23.9	19.9	1.2847	76	36.6	36.3	35.6	.1832	76	1541.7	1534.8	1524.2	3.1549	76
100	26.1	22.8	18.4	1.2554	76	36.5	36.2	35.5	.2094	76	1540.4	1532.3	1520.3	3.2761	76
125	24.2	21.4	18.3	1.2384	76	36.4	36.0	35.6	.2210	76	1536.3	1528.9	1520.1	3.4202	76
150	22.7	20.0	17.4	1.2423	76	36.4	35.9	35.5	.2263	76	1533.3	1525.7	1518.1	3.5406	76
200	20.1	17.7	15.6	.9430	76	36.3	35.8	35.5	.1843	76	1527.0	1520.0	1513.6	2.8572	76
250	19.6	16.4	14.5	.9240	76	36.4	35.9	35.5	.2030	76	1526.4	1516.9	1510.6	2.9555	76
300	17.5	15.3	13.3	.8305	76	36.5	35.9	35.4	.1962	76	1521.3	1514.3	1507.4	2.7978	76
400	15.2	13.6	12.7	.5242	69	36.0	35.8	35.6	.1231	69	1515.6	1510.3	1507.2	1.8261	69
500	13.7	12.5	11.9	.3290	62	35.9	35.7	35.6	.0718	62	1512.6	1508.2	1506.1	1.1730	62
600	12.8	11.7	11.2	.2758	61	35.8	35.6	35.5	.0537	61	1510.9	1507.0	1505.2	.9755	61
700	11.9	11.0	10.4	.2621	60	35.7	35.6	35.5	.0480	60	1509.4	1506.1	1504.1	.9396	60
800	11.0	10.2	9.8	.2428	60	35.6	35.5	35.4	.0490	60	1507.8	1505.1	1503.3	.8997	60
900	10.2	9.5	9.0	.2339	60	35.5	35.5	35.4	.0481	60	1506.5	1504.0	1502.0	.8865	60
1000	9.5	8.8	8.3	.2374	58	35.5	35.4	35.3	.0397	58	1505.5	1503.0	1501.1	.9106	58
1100	8.8	8.1	7.7	.2255	57	35.4	35.3	35.3	.0434	57	1504.4	1501.9	1500.4	.8527	57
1200	8.0	7.4	7.0	.2136	54	35.3	35.3	35.2	.0502	54	1503.2	1500.7	1499.2	.8475	54
1300	7.3	6.7	6.3	.2237	52	35.2	35.2	35.1	.0398	52	1502.0	1499.6	1497.9	.9011	52
1400	6.6	6.0	5.5	.2239	42	35.2	35.1	35.1	.0377	42	1500.7	1498.5	1496.3	.9211	42
1500	5.9	5.4	4.7	.2406	41	35.1	35.1	35.0	.0506	41	1499.5	1497.4	1494.6	.9925	41
1750	4.4	4.0	3.7	.1711	34	35.0	34.9	34.9	.0448	34	1497.4	1496.0	1494.6	.7367	34
2000	3.4	3.1	2.7	.1483	32	34.9	34.8	34.8	.0507	32	1497.4	1496.3	1494.4	.6380	32
2500	2.3	2.2	2.1	.0740	21	34.8	34.8	34.8	.0000	21	1501.2	1500.6	1500.2	.2744	21
3000	1.8	1.8	1.7	.0376	13	34.8	34.7	34.7	.0480	13	1507.7	1507.5	1507.3	.1214	13

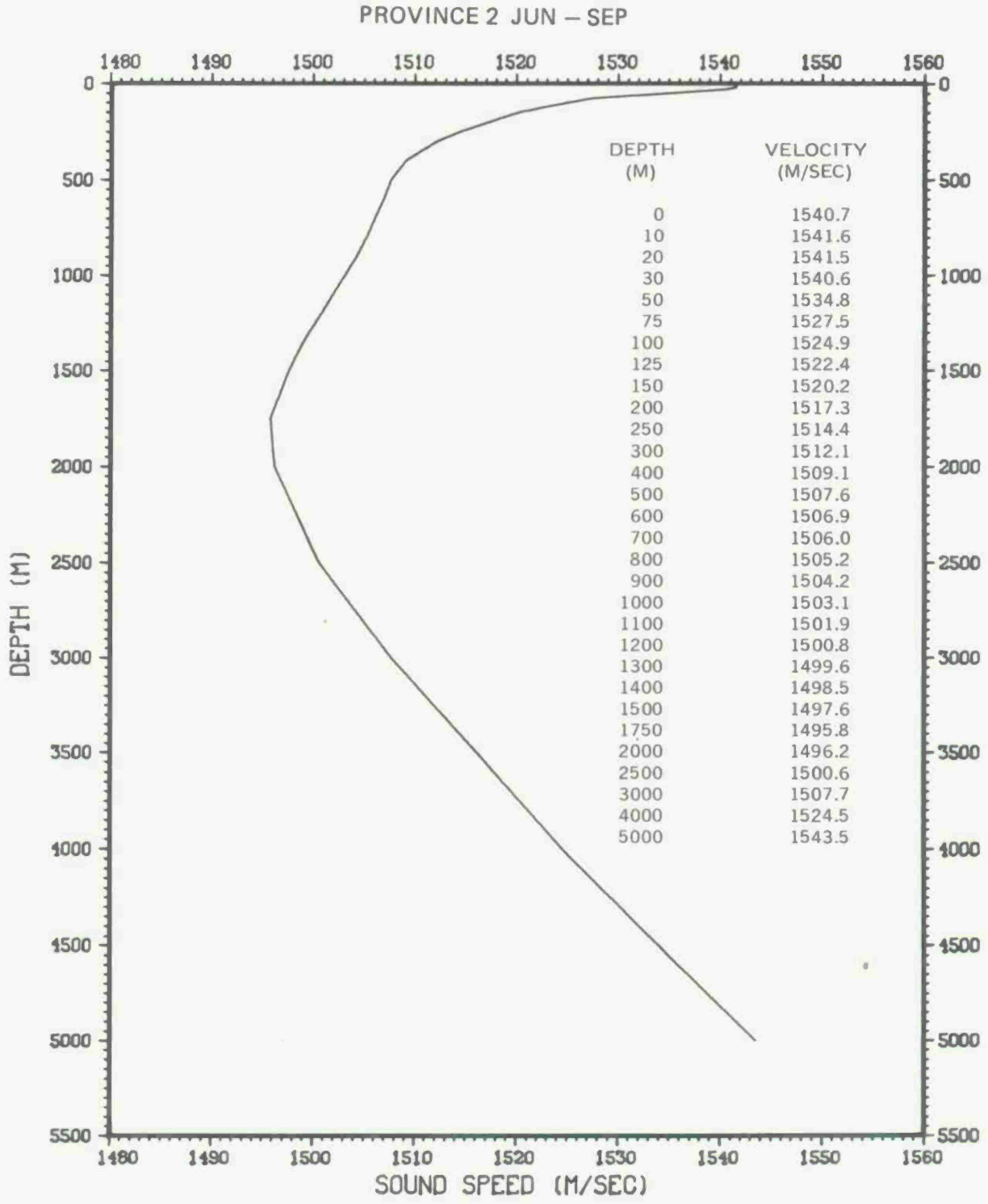
PROVINCE 2 MAR – MAY



DEPTH (M)	VELOCITY (M/SEC)
0	1538.5
10	1538.2
20	1537.9
30	1537.2
50	1536.9
75	1534.5
100	1532.5
125	1529.7
150	1526.9
200	1520.9
250	1516.0
300	1512.7
400	1510.0
500	1508.4
600	1507.0
700	1506.2
800	1505.3
900	1504.5
1000	1503.5
1100	1502.1
1200	1500.9
1300	1499.6
1400	1498.5
1500	1497.6
1750	1495.7
2000	1496.2
2500	1500.4
3000	1507.5
4000	1524.5
5000	1543.5

Pprovince 2 JUN – SEP

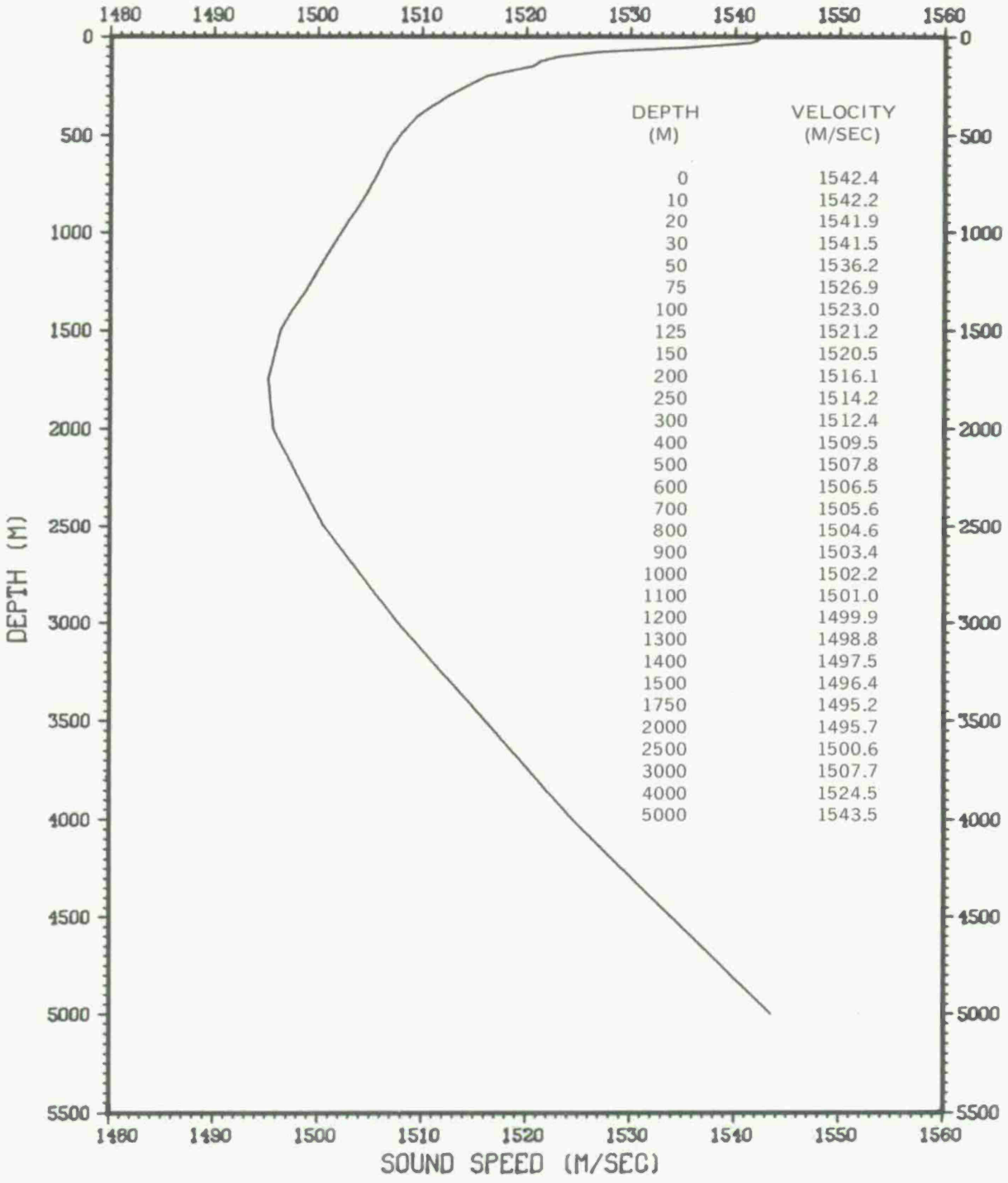
DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	29.2	26.5	21.0	2.0685	59	36.9	36.2	35.5	.3723	59	1546.3	1539.5	1525.6	5.1242	59
10	29.0	26.4	21.0	2.0445	59	36.9	36.2	35.7	.3564	59	1545.9	1539.5	1525.8	5.0717	59
20	28.9	26.2	20.8	2.2081	59	36.9	36.2	35.7	.3712	59	1545.7	1539.2	1525.6	5.4777	59
30	28.7	25.9	20.6	2.2911	59	37.0	36.2	35.7	.3689	59	1545.6	1538.6	1525.0	5.7537	59
50	28.2	24.7	19.5	2.4210	59	36.8	36.2	35.6	.3410	59	1544.5	1535.9	1522.6	6.1564	59
75	27.4	23.0	18.2	2.2225	59	36.8	36.1	35.0	.3445	59	1543.2	1532.3	1519.3	5.9235	59
100	26.5	21.5	17.1	2.1488	59	36.9	36.0	35.4	.3342	59	1541.4	1528.9	1516.4	5.9845	59
125	24.3	20.1	16.8	1.8948	59	37.0	35.9	35.4	.2999	59	1536.8	1525.4	1515.7	5.4246	59
150	23.7	18.9	16.1	1.7498	59	37.1	35.9	35.4	.2885	59	1535.8	1522.3	1514.1	5.1289	59
200	22.7	17.1	14.4	1.4388	59	36.7	35.8	35.4	.2261	59	1534.4	1518.1	1509.4	4.3595	59
250	18.8	15.9	14.1	1.1134	58	36.7	35.8	35.5	.2218	58	1524.3	1515.2	1509.2	3.5876	58
300	17.8	14.9	13.4	.9915	58	36.6	35.9	35.5	.2137	58	1522.4	1513.0	1507.7	3.3448	58
400	15.3	13.4	12.2	.6539	58	36.3	35.8	35.4	.1679	58	1516.7	1509.8	1505.3	2.3136	58
500	13.7	12.5	11.1	.4465	55	36.0	35.7	35.4	.1079	55	1512.5	1508.2	1503.4	1.5767	55
600	13.6	11.8	11.2	.3704	54	36.0	35.6	35.3	.1069	54	1513.6	1507.3	1505.2	1.3142	54
700	12.0	11.1	10.6	.2559	51	35.9	35.6	35.1	.1028	51	1510.1	1506.4	1504.3	.9555	51
800	11.2	10.4	9.8	.2767	50	35.8	35.5	35.0	.1088	50	1508.8	1505.5	1503.3	1.0579	50
900	10.1	9.6	9.1	.2576	49	35.7	35.5	35.1	.0874	49	1506.3	1504.4	1502.3	1.0088	49
1000	9.5	8.9	8.4	.2874	44	35.6	35.4	35.2	.0765	44	1505.7	1503.3	1501.4	1.0833	44
1100	8.9	8.1	7.6	.2983	43	35.5	35.3	35.2	.0666	43	1504.9	1502.0	1499.7	1.1762	43
1200	8.2	7.4	6.8	.3084	41	35.5	35.3	35.1	.0830	41	1503.8	1500.8	1498.7	1.1955	41
1300	7.3	6.7	6.3	.2720	39	35.4	35.2	35.1	.0562	39	1502.2	1499.7	1497.8	1.0933	39
1400	6.6	6.1	5.6	.2604	38	35.2	35.1	35.0	.0547	38	1500.8	1498.6	1496.7	1.0819	38
1500	5.9	5.4	5.0	.2347	38	35.1	35.0	34.9	.0603	38	1499.6	1497.6	1495.9	.9889	38
1750	4.4	4.0	3.7	.1918	32	35.0	34.9	34.8	.0466	32	1497.5	1495.9	1494.6	.8198	32
2000	3.4	3.1	2.8	.1589	29	34.9	34.8	34.8	.0506	29	1497.4	1496.2	1495.0	.6390	29
2500	2.3	2.2	2.0	.0928	28	34.8	34.8	34.7	.0262	28	1501.4	1500.6	1499.8	.3766	28
3000	1.9	1.8	1.7	.0707	21	35.0	34.8	34.7	.0956	21	1508.2	1507.7	1507.3	.2330	21
4000	1.7	1.7	1.7	.0000	1	34.7	34.7	34.7	.0000	1	1524.5	1524.5	1524.5	.0000	1


PROVINCE 2 JUN – SEP
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1540.7
10 1541.6
20 1541.5
30 1540.6
50 1534.8
75 1527.5
100 1524.9
125 1522.4
150 1520.2
200 1517.3
250 1514.4
300 1512.1
400 1509.1
500 1507.6
600 1506.9
700 1506.0
800 1505.2
900 1504.2
1000 1503.1
1100 1501.9
1200 1500.8
1300 1499.6
1400 1498.5
1500 1497.6
1750 1495.8
2000 1496.2
2500 1500.6
3000 1507.7
4000 1524.5
5000 1543.5

PROVINCE 2 OCT – NOV

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	29.0	27.6	26.1	.5573	50	37.0	36.3	35.4	.3273	50	1544.5	1542.1	1539.2	1.2709	50
10	29.0	27.6	26.1	.5739	50	37.0	36.3	35.4	.3104	50	1544.7	1542.3	1538.5	1.3074	50
20	28.9	27.4	24.7	.8037	50	37.0	36.3	35.4	.3409	50	1544.6	1542.0	1535.5	1.9179	50
30	28.9	26.8	22.4	1.2562	50	37.0	36.2	35.5	.3669	50	1544.8	1540.9	1529.8	3.0117	50
50	28.7	24.8	20.1	2.0178	50	37.0	36.1	35.4	.4086	50	1544.6	1536.3	1524.1	5.1029	50
75	28.6	22.6	18.9	2.0138	50	37.6	36.0	35.2	.3905	50	1544.7	1531.3	1521.1	5.1951	50
100	27.4	20.9	17.9	1.8517	50	37.1	35.9	35.3	.3301	50	1542.6	1527.1	1518.7	4.9313	50
125	24.1	19.5	16.8	1.4953	50	36.8	35.9	35.2	.2627	50	1535.5	1523.8	1515.8	4.1350	50
150	21.4	18.4	16.2	1.1501	50	36.5	35.9	35.4	.2358	50	1529.7	1521.1	1514.8	3.2443	50
200	18.0	16.6	14.6	.7126	50	36.5	35.8	35.2	.2517	50	1521.0	1516.6	1510.1	2.2317	50
250	16.9	15.4	13.8	.7283	50	36.5	35.9	35.3	.2467	50	1518.6	1513.8	1508.4	2.3261	50
300	15.8	14.5	13.0	.6054	45	36.5	35.8	35.2	.2455	45	1515.9	1511.6	1506.5	2.0162	45
400	14.0	13.1	12.0	.4364	42	36.5	35.8	35.1	.2574	42	1512.0	1508.7	1504.8	1.5429	42
500	13.0	12.2	11.7	.2859	30	36.4	35.7	35.6	.1993	30	1509.9	1507.4	1505.5	.9622	30
600	11.9	11.4	10.9	.2399	28	36.4	35.7	35.5	.1815	28	1507.9	1506.1	1504.3	.8602	28
700	11.3	10.8	10.2	.2644	28	36.5	35.6	35.5	.2052	28	1507.7	1505.4	1503.2	.9895	28
800	10.8	10.1	9.5	.3061	28	36.5	35.6	35.4	.2154	28	1507.2	1504.6	1502.5	1.1609	28
900	9.9	9.4	8.9	.2903	24	36.5	35.5	35.4	.2278	24	1506.6	1503.5	1501.6	1.1563	24
1000	9.4	8.7	8.1	.3333	23	36.5	35.5	35.3	.2536	23	1505.5	1502.5	1500.3	1.3448	23
1100	8.8	7.9	7.4	.3307	23	36.4	35.4	35.2	.2504	23	1504.5	1501.2	1499.0	1.3876	23
1200	8.0	7.2	6.7	.3281	21	35.8	35.3	35.1	.1365	21	1503.0	1499.8	1497.8	1.3278	21
1300	6.9	6.4	6.0	.2644	21	35.7	35.2	35.0	.1315	21	1500.6	1498.5	1496.5	1.1248	21
1400	6.2	5.7	5.3	.2334	21	35.6	35.1	34.9	.1276	21	1499.2	1497.3	1495.3	1.0283	21
1500	5.6	5.1	4.7	.2061	21	35.6	35.0	34.9	.1363	21	1498.3	1496.3	1494.4	.9498	21
1750	4.0	3.8	3.6	.1302	20	35.5	34.9	34.8	.1436	20	1496.5	1495.2	1494.3	.6164	20
2000	3.2	3.0	2.8	.1091	17	35.3	34.8	34.8	.1231	17	1496.8	1495.7	1494.7	.5231	17
2500	2.4	2.1	2.1	.0877	13	34.9	34.8	34.7	.0408	13	1501.8	1500.6	1500.2	.4231	13
3000	2.0	1.8	1.8	.0647	11	34.8	34.7	34.7	.0522	11	1508.7	1507.7	1507.4	.3545	11

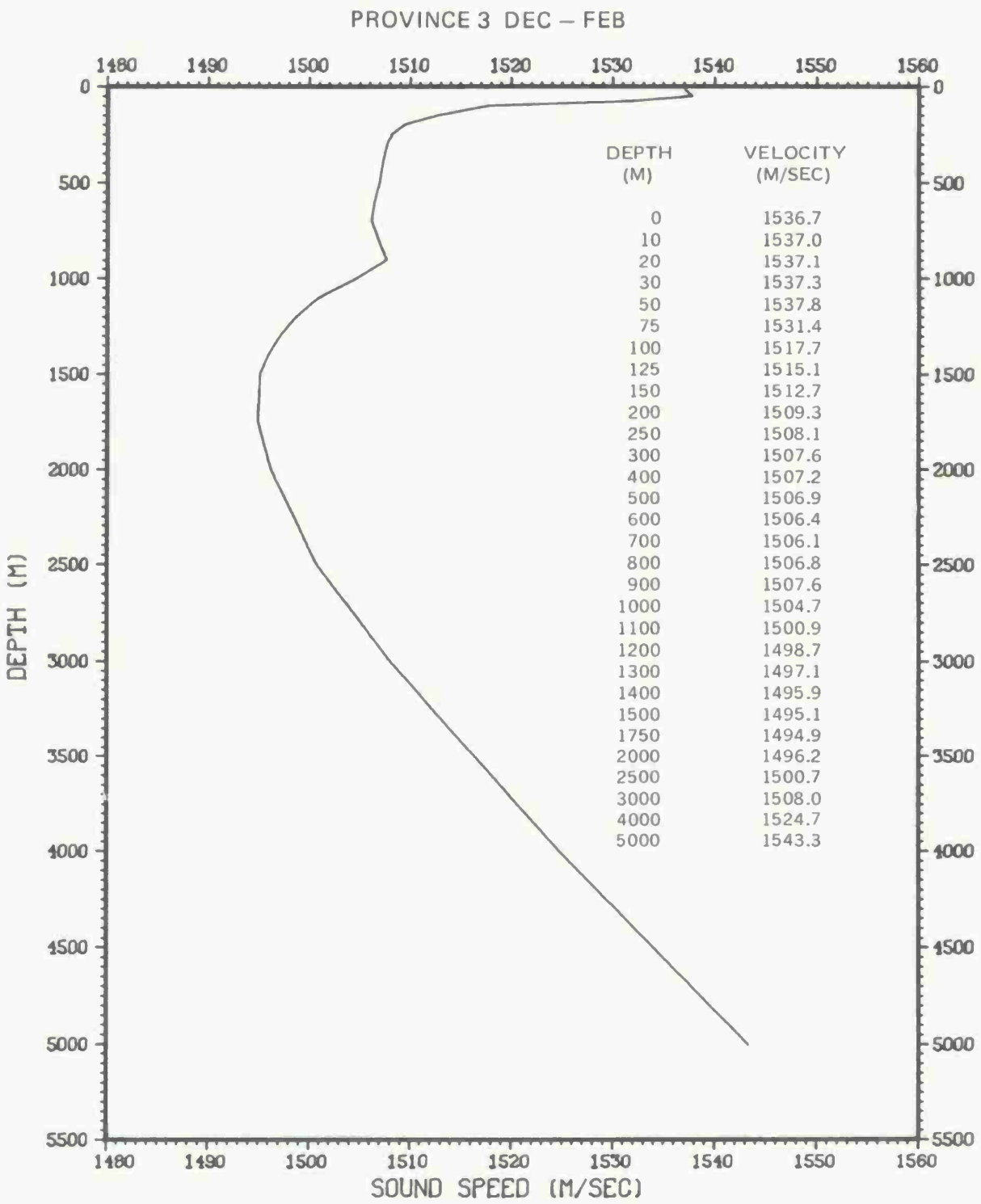
PROVINCE 2 OCT – NOV



DEPTH (M)	VELOCITY (M/SEC)
0	1542.4
10	1542.2
20	1541.9
30	1541.5
50	1536.2
75	1526.9
100	1523.0
125	1521.2
150	1520.5
200	1516.1
250	1514.2
300	1512.4
400	1509.5
500	1507.8
600	1506.5
700	1505.6
800	1504.6
900	1503.4
1000	1502.2
1100	1501.0
1200	1499.9
1300	1498.8
1400	1497.5
1500	1496.4
1750	1495.2
2000	1495.7
2500	1500.6
3000	1507.7
4000	1524.5
5000	1543.5

PROVINCE 3 DEC – FEB

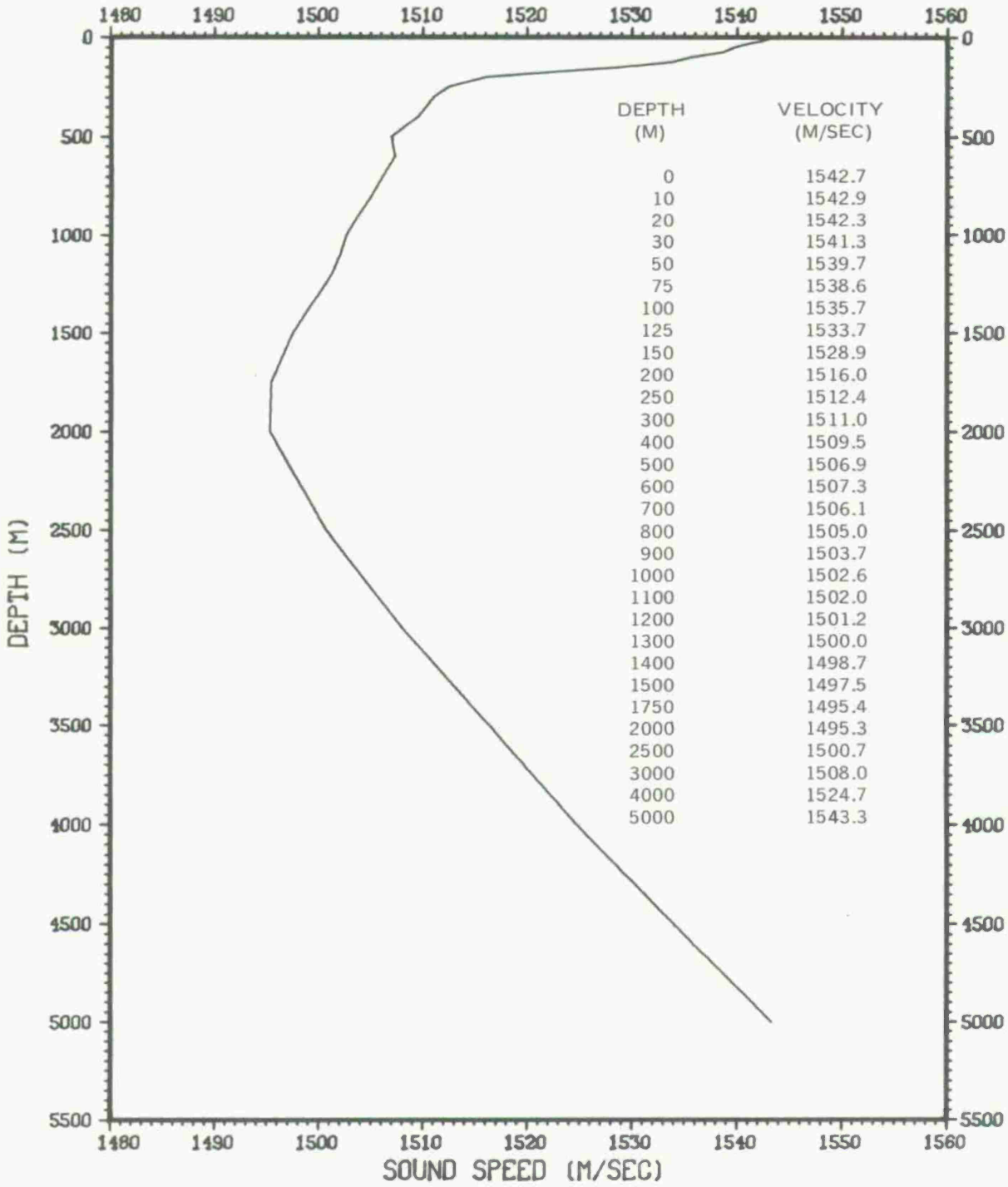
DEPTH (M)		TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM		SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM		VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	••	26.1	25.2	23.5	.5989	29	••	36.2	35.9	35.6	.1285	29	••	1538.5	1536.3	1532.3	1.4535	29
10	••	26.0	25.1	23.6	.6218	29	••	36.1	35.9	35.6	.1264	29	••	1538.4	1536.4	1532.7	1.4982	29
20	••	26.0	25.1	23.0	.7078	29	••	36.1	35.9	35.6	.1292	29	••	1538.5	1536.4	1531.0	1.7404	29
30	••	26.0	24.8	21.2	1.0556	29	••	36.1	35.9	35.5	.1481	29	••	1538.5	1535.8	1526.6	2.6419	29
50	••	25.9	23.9	18.0	2.1187	29	••	36.1	35.9	35.4	.2116	29	••	1538.8	1533.8	1517.8	5.5643	29
75	••	25.2	21.0	16.6	2.8240	29	••	36.1	35.7	35.3	.2132	29	••	1537.4	1526.6	1514.2	7.7425	29
100	••	23.9	18.5	15.4	2.3536	29	••	36.1	35.6	35.3	.1542	29	••	1534.9	1520.0	1510.8	6.7476	29
125	••	22.2	17.0	14.8	1.6950	29	••	36.0	35.5	35.4	.1173	29	••	1530.7	1516.2	1509.5	4.9932	29
150	••	20.0	15.9	14.4	1.3446	29	••	36.0	35.5	35.3	.1208	29	••	1525.2	1513.3	1508.3	4.0932	29
200	••	18.1	14.8	13.3	1.0514	29	••	36.0	35.5	35.3	.1208	29	••	1521.2	1510.6	1505.7	3.3569	29
250	••	15.9	13.9	12.6	.6858	28	••	35.8	35.5	35.3	.1133	28	••	1515.0	1508.5	1504.1	2.2823	28
300	••	14.5	13.3	11.9	.5814	28	••	35.7	35.5	35.2	.1171	28	••	1511.5	1507.3	1502.5	2.0252	28
400	••	13.6	12.5	11.6	.5018	27	••	35.8	35.6	35.2	.1255	27	••	1510.4	1506.6	1503.1	1.8153	27
500	••	13.1	12.0	11.2	.4755	23	••	35.9	35.6	35.2	.1579	23	••	1510.7	1506.6	1503.6	1.7809	23
600	••	12.7	11.7	10.9	.4077	22	••	36.0	35.7	35.5	.1232	22	••	1510.9	1507.2	1504.5	1.4912	22
700	••	11.8	11.3	10.4	.3801	20	••	35.9	35.7	35.6	.1021	20	••	1509.6	1507.3	1504.3	1.3887	20
800	••	11.2	10.7	9.8	.3563	19	••	35.9	35.7	35.6	.0872	19	••	1508.6	1506.8	1503.7	1.3049	19
900	••	10.7	10.0	9.2	.4660	19	••	35.8	35.6	35.5	.0970	19	••	1508.8	1506.0	1502.9	1.7338	19
1000	••	10.0	9.1	8.5	.4494	16	••	35.7	35.5	35.4	.0929	16	••	1507.9	1504.2	1501.8	1.7418	16
1100	••	9.1	8.2	7.7	.4405	15	••	35.5	35.4	35.3	.0884	15	••	1505.6	1502.2	1500.3	1.6968	15
1200	••	8.3	7.3	6.9	.4786	14	••	35.4	35.3	35.2	.0770	14	••	1504.3	1500.4	1498.7	1.9324	14
1300	••	7.5	6.5	6.0	.5030	14	••	35.3	35.2	35.1	.0679	14	••	1502.9	1498.7	1496.6	2.1180	14
1400	••	6.6	5.6	5.2	.4070	11	••	35.2	35.1	35.0	.0539	11	••	1501.0	1496.7	1495.0	1.7046	11
1500	••	5.9	4.9	4.6	.3849	11	••	35.1	35.0	35.0	.0302	11	••	1499.5	1495.6	1494.1	1.5753	11
1750	••	4.4	3.8	3.4	.3512	7	••	35.0	34.9	34.9	.0378	7	••	1497.6	1495.0	1493.5	1.4572	7
2000	••	3.5	3.1	2.9	.3464	3	••	34.9	34.9	34.8	.0577	3	••	1498.0	1496.2	1495.3	1.5308	3
2500	••	2.2	2.2	2.2	.0000	1	••	34.8	34.8	34.8	.0000	1	••	1500.6	1500.6	1500.6	.0000	1
3000	••	1.9	1.9	1.9	.0000	1	••	34.7	34.7	34.7	.0000	1	••	1507.9	1507.9	1507.9	.0000	1


PROVINCE 3 DEC – FEB
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M) VELOCITY (M/SEC)
0 1536.7
10 1537.0
20 1537.1
30 1537.3
50 1537.8
75 1531.4
100 1517.7
125 1515.1
150 1512.7
200 1509.3
250 1508.1
300 1507.6
400 1507.2
500 1506.9
600 1506.4
700 1506.1
800 1506.8
900 1507.6
1000 1504.7
1100 1500.9
1200 1498.7
1300 1497.1
1400 1495.9
1500 1495.1
1750 1494.9
2000 1496.2
2500 1500.7
3000 1508.0
4000 1524.7
5000 1543.3

PROVINCE 3 MAR – MAY

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	29.8	28.7	25.1	1.0467	34 ••	36.3	36.0	35.4	.2855	34 ••	1546.7	1544.2	1536.3	2.2550	34
10 ••	29.7	28.5	25.1	1.0171	34 ••	36.3	36.0	35.5	.2352	34 ••	1546.8	1543.8	1536.5	2.1653	34
20 ••	29.6	28.1	25.1	1.0779	34 ••	36.3	36.0	35.5	.2027	34 ••	1546.7	1543.1	1536.7	2.3158	34
30 ••	29.4	27.4	25.1	1.1680	34 ••	36.3	36.0	35.6	.1684	34 ••	1546.2	1541.8	1536.9	2.5450	34
50 ••	29.4	26.0	22.4	1.4684	34 ••	36.3	36.0	35.7	.1512	34 ••	1546.6	1539.1	1530.4	3.3782	34
75 ••	27.1	24.3	20.8	1.6835	34 ••	36.3	36.0	35.7	.1535	34 ••	1541.7	1535.4	1526.5	4.1889	34
100 ••	25.9	22.7	19.1	2.1216	34 ••	36.2	35.9	35.6	.1708	34 ••	1539.6	1531.7	1522.1	5.5695	34
125 ••	24.8	20.9	17.5	2.2791	34 ••	36.4	35.8	35.5	.1915	34 ••	1537.7	1527.2	1517.9	6.1909	34
150 ••	23.7	19.3	16.5	2.1302	34 ••	36.7	35.7	35.4	.2117	34 ••	1535.9	1523.3	1515.0	6.0055	34
200 ••	19.9	16.6	15.1	1.1538	34 ••	35.7	35.6	35.3	.1138	34 ••	1526.0	1516.3	1511.7	3.4917	34
250 ••	16.7	15.1	14.1	.6445	32 ••	35.9	35.6	35.4	.1268	32 ••	1517.5	1512.6	1509.2	2.0830	32
300 ••	15.2	14.2	13.2	.5179	31 ••	35.8	35.6	35.3	.1211	31 ••	1513.6	1510.4	1506.9	1.7448	31
400 ••	14.0	13.0	12.0	.3848	28 ••	35.7	35.6	35.3	.0979	28 ••	1511.5	1508.1	1504.6	1.3269	28
500 ••	13.0	12.3	11.8	.2885	28 ••	35.9	35.6	35.4	.1031	28 ••	1510.0	1507.4	1505.4	1.0828	28
600 ••	12.8	11.8	11.3	.3985	27 ••	36.0	35.7	35.4	.1251	27 ••	1511.2	1507.5	1505.6	1.5139	27
700 ••	12.3	11.3	10.7	.4083	27 ••	36.0	35.7	35.4	.1251	27 ••	1511.2	1507.3	1505.0	1.5849	27
800 ••	11.5	10.7	10.1	.4191	26 ••	36.0	35.6	35.4	.1379	26 ••	1510.1	1506.8	1504.6	1.6709	26
900 ••	11.0	10.0	9.4	.4396	25 ••	35.8	35.6	35.4	.1180	25 ••	1509.7	1506.0	1503.7	1.6676	25
1000 ••	10.3	9.2	8.6	.3937	23 ••	35.7	35.5	35.4	.0810	23 ••	1508.8	1504.5	1502.1	1.5221	23
1100 ••	9.3	8.4	7.8	.3472	22 ••	35.6	35.4	35.3	.0733	22 ••	1506.9	1502.9	1500.6	1.4036	22
1200 ••	8.6	7.6	7.2	.3582	19 ••	35.5	35.3	35.2	.0809	19 ••	1505.4	1501.6	1499.8	1.4327	19
1300 ••	8.0	6.8	6.4	.3691	19 ••	35.3	35.2	35.1	.0567	19 ••	1504.7	1500.1	1498.3	1.4761	19
1400 ••	7.3	6.1	5.7	.3632	18 ••	35.2	35.1	35.1	.0461	18 ••	1503.7	1498.7	1497.2	1.4585	18
1500 ••	6.6	5.3	4.9	.3552	18 ••	35.2	35.0	35.0	.0786	18 ••	1502.6	1497.3	1495.4	1.4972	18
1750 ••	4.1	3.9	3.7	.1348	17 ••	35.0	34.9	34.9	.0437	17 ••	1496.6	1495.5	1494.5	.6060	17
2000 ••	3.6	3.1	2.8	.1977	13 ••	34.9	34.8	34.8	.0376	13 ••	1498.3	1496.1	1495.1	.7996	13
2500 ••	2.2	2.1	2.0	.0837	6 ••	34.9	34.8	34.8	.0408	6 ••	1501.0	1500.6	1499.8	.4274	6
3000 ••	1.8	1.8	1.8	.0000	1 ••	34.7	34.7	34.7	.0000	1 ••	1507.7	1507.7	1507.7	.0000	1

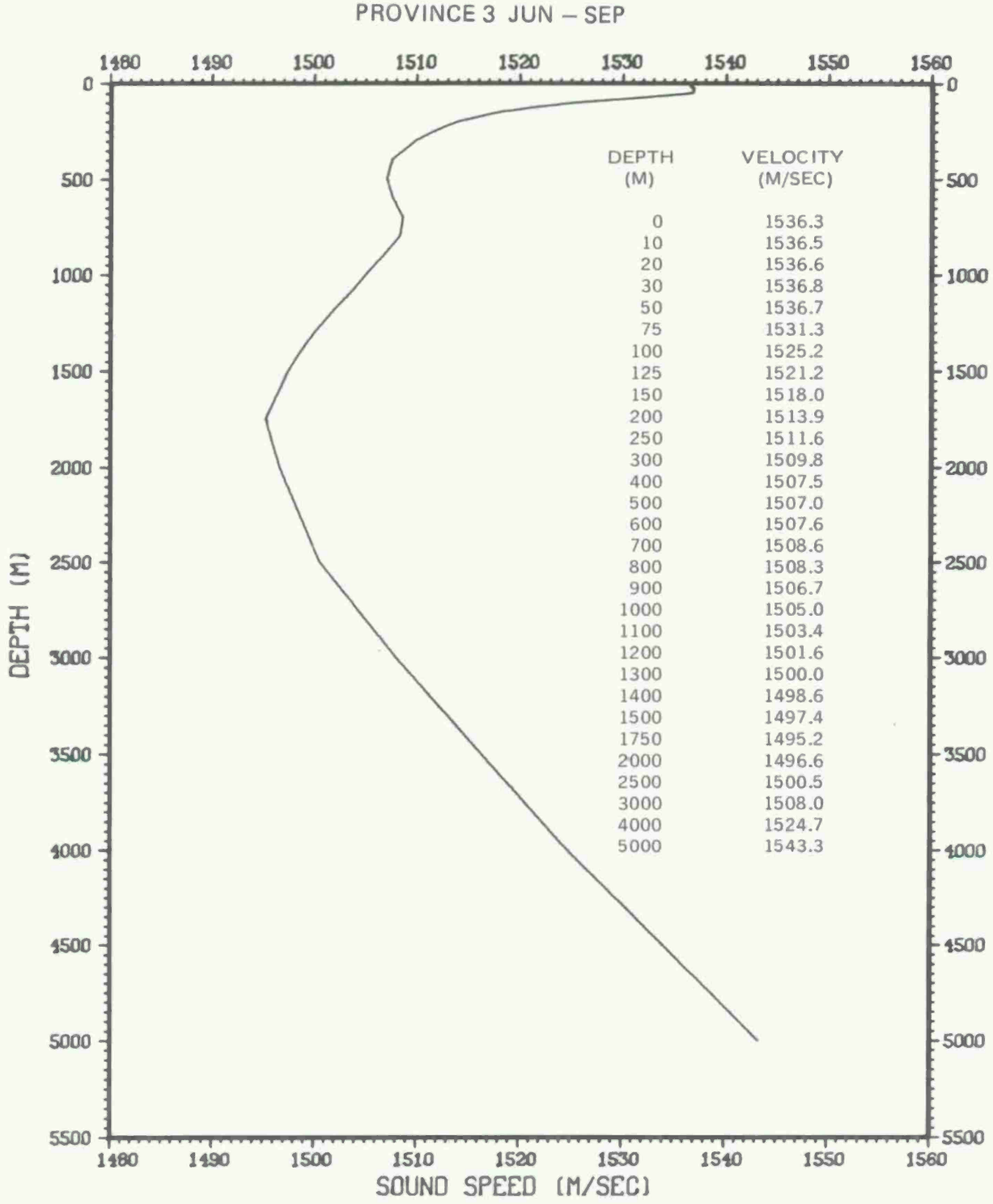
PROVINCE 3 MAR – MAY



DEPTH (M)	VELOCITY (M/SEC)
0	1542.7
10	1542.9
20	1542.3
30	1541.3
50	1539.7
75	1538.6
100	1535.7
125	1533.7
150	1528.9
200	1516.0
250	1512.4
300	1511.0
400	1509.5
500	1506.9
600	1507.3
700	1506.1
800	1505.0
900	1503.7
1000	1502.6
1100	1502.0
1200	1501.2
1300	1500.0
1400	1498.7
1500	1497.5
1750	1495.4
2000	1495.3
2500	1500.7
3000	1508.0
4000	1524.7
5000	1543.3

PROVINCE 3 JUN – SEP

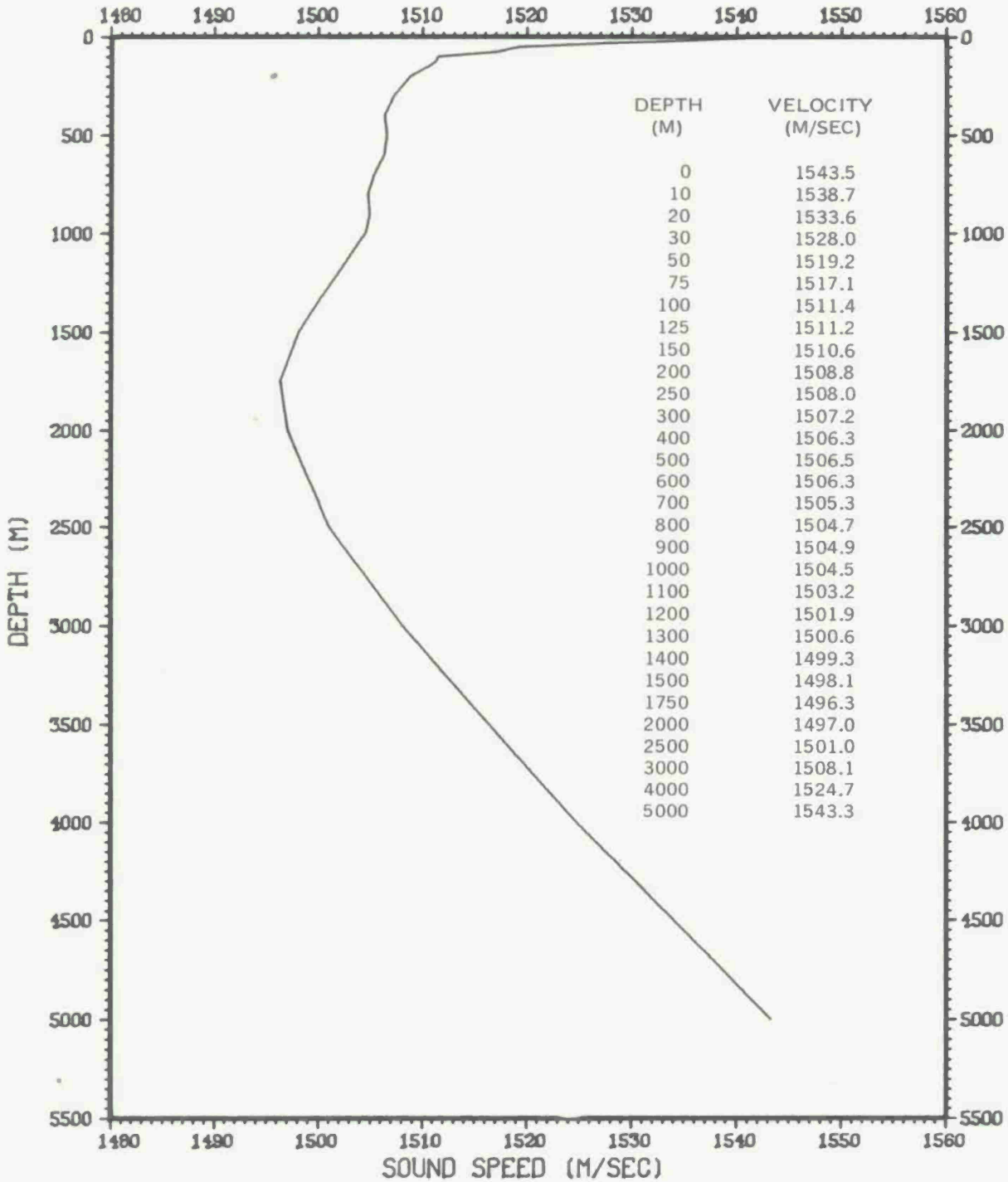
DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	30.6	26.5	20.2	2.9811	37	36.3	35.9	35.4	.2135	37	1548.3	1538.9	1523.6	7.1166	37
10	30.5	26.3	20.1	3.0229	37	36.2	35.9	35.4	.2146	37	1548.4	1538.7	1523.6	7.2465	37
20	30.2	25.1	19.9	3.1659	37	36.2	35.9	35.4	.1916	37	1547.8	1536.1	1523.1	7.7119	37
30	29.5	23.8	19.0	2.8192	37	36.1	35.8	35.4	.1653	37	1546.4	1532.9	1520.6	7.0126	37
50	28.4	22.3	17.9	2.9068	37	36.0	35.7	35.3	.1507	37	1544.0	1529.5	1517.7	7.4814	37
75	27.3	20.7	16.8	3.0260	37	36.0	35.7	35.3	.1417	37	1542.1	1525.8	1514.6	7.9955	37
100	26.8	19.4	15.6	2.9970	37	36.0	35.7	35.2	.1386	37	1541.7	1522.6	1511.6	8.0880	37
125	25.9	18.3	15.3	2.7069	37	36.0	35.6	35.2	.1415	37	1540.1	1519.9	1511.1	7.4959	37
150	23.5	17.2	14.4	2.1790	37	35.9	35.6	35.2	.1316	37	1534.7	1517.1	1508.3	6.2741	37
200	19.0	15.5	13.5	1.2459	37	35.7	35.6	35.3	.0970	37	1523.4	1512.8	1506.3	3.8253	37
250	17.0	14.5	12.6	.9397	37	35.8	35.6	35.3	.0948	37	1518.3	1510.6	1503.9	3.0316	37
300	15.3	13.7	11.8	.6725	36	35.8	35.6	35.3	.0971	36	1514.3	1508.9	1501.9	2.3178	36
400	13.6	12.8	11.0	.5256	34	35.8	35.6	35.2	.1083	34	1510.3	1507.4	1500.8	1.8746	34
500	13.0	12.2	11.4	.4003	30	35.8	35.6	35.4	.0935	30	1509.9	1507.3	1504.2	1.4804	30
600	13.2	11.9	11.0	.4620	30	36.0	35.7	35.5	.1137	30	1512.7	1507.7	1504.4	1.7240	30
700	12.5	11.4	10.4	.4169	30	36.0	35.7	35.4	.1189	30	1511.9	1507.7	1503.7	1.6160	30
800	11.8	10.8	9.6	.4571	30	35.9	35.7	35.4	.1135	30	1510.9	1507.3	1502.6	1.7604	30
900	10.9	10.1	8.8	.4997	28	35.8	35.6	35.3	.1261	28	1509.6	1506.2	1501.0	1.9790	28
1000	10.1	9.2	8.0	.4639	25	35.7	35.5	35.2	.1077	25	1508.1	1504.6	1499.7	1.7877	25
1100	9.1	8.3	7.4	.3908	25	35.6	35.4	35.2	.0935	25	1505.9	1502.8	1498.9	1.6251	25
1200	8.1	7.5	6.7	.3547	25	35.5	35.3	35.1	.0898	25	1503.9	1501.1	1498.0	1.4635	25
1300	7.3	6.7	6.2	.2691	25	35.4	35.2	35.1	.0676	25	1502.2	1499.6	1497.5	1.1138	25
1400	6.5	6.0	5.5	.2408	24	35.3	35.1	35.0	.0637	24	1500.5	1498.3	1496.2	.9798	24
1500	5.7	5.3	4.8	.2120	24	35.1	35.0	35.0	.0495	24	1498.8	1497.1	1494.9	.8851	24
1750	4.3	3.9	3.6	.1941	22	35.0	34.9	34.9	.0294	22	1497.1	1495.6	1494.1	.8381	22
2000	3.3	3.1	2.9	.1166	17	34.9	34.8	34.8	.0514	17	1497.2	1496.2	1495.4	.5522	17
2500	2.2	2.2	2.1	.0500	4	34.8	34.8	34.8	.0000	4	1500.9	1500.7	1500.3	.2872	4
3000	2.0	2.0	1.9	.0707	2	34.8	34.7	34.7	.0707	2	1508.5	1508.2	1507.9	.4243	2


PROVINCE 3 JUN – SEP
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1536.3
10 1536.5
20 1536.6
30 1536.8
50 1536.7
75 1531.3
100 1525.2
125 1521.2
150 1518.0
200 1513.9
250 1511.6
300 1509.8
400 1507.5
500 1507.0
600 1507.6
700 1508.6
800 1508.3
900 1506.7
1000 1505.0
1100 1503.4
1200 1501.6
1300 1500.0
1400 1498.6
1500 1497.4
1750 1495.2
2000 1496.6
2500 1500.5
3000 1508.0
4000 1524.7
5000 1543.3

PROVINCE 3 OCT – NOV

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	28.4	26.8	23.2	1.3314	14	36.4	35.8	35.4	.2674	14	1543.5	1539.7	1530.9	3.2642	14
10	27.6	25.9	21.8	1.6288	14	36.2	35.7	35.4	.2499	14	1541.8	1537.9	1527.5	4.0555	14
20	27.6	24.3	19.1	2.4406	14	35.9	35.6	35.3	.1664	14	1541.9	1534.1	1520.7	6.1147	14
30	26.9	22.6	16.9	2.9296	14	35.9	35.5	35.3	.1834	14	1540.5	1529.6	1514.4	7.6191	14
50	26.3	20.8	16.3	2.9991	14	35.7	35.5	35.3	.1477	14	1539.5	1525.3	1512.9	8.0206	14
75	25.0	19.0	15.4	3.0561	14	35.6	35.5	35.3	.1051	14	1536.8	1520.9	1510.7	8.3668	14
100	23.8	17.8	14.9	3.0841	14	35.6	35.5	35.3	.1151	14	1534.3	1517.9	1509.6	8.6560	14
125	23.1	16.9	14.5	2.9291	14	35.6	35.5	35.3	.1139	14	1533.0	1515.5	1508.2	8.4823	14
150	21.5	16.1	13.5	2.6334	14	35.6	35.5	35.2	.1151	14	1529.4	1513.5	1505.4	7.8417	14
200	18.3	14.7	12.7	1.5323	14	35.7	35.5	35.2	.1406	14	1521.4	1510.1	1503.8	4.8465	14
250	16.5	14.0	12.7	1.0222	14	35.8	35.5	35.2	.1657	14	1516.8	1508.8	1504.5	3.3341	14
300	14.6	13.3	12.3	.7065	14	36.0	35.5	35.2	.2056	14	1511.9	1507.3	1503.8	2.4923	14
400	12.8	12.1	11.1	.4660	12	35.6	35.4	35.2	.1371	12	1507.5	1505.0	1501.3	1.6903	12
500	12.1	11.6	10.8	.4967	11	35.6	35.5	35.2	.1206	11	1506.8	1505.0	1501.7	1.8625	11
600	11.9	11.3	10.3	.5221	11	35.7	35.5	35.3	.1095	11	1507.8	1505.4	1501.6	2.0277	11
700	12.3	11.1	10.2	.5973	11	35.9	35.6	35.3	.1629	11	1511.1	1506.4	1502.9	2.2882	11
800	11.8	10.5	9.8	.6569	10	15.9	35.5	35.3	.1897	10	1511.1	1506.2	1503.1	2.5373	10
900	11.3	10.2	9.5	.5239	9	35.9	35.6	35.4	.1424	9	1511.1	1506.6	1503.9	2.0887	9
1000	10.7	9.7	9.1	.6388	7	35.9	35.6	35.4	.1676	7	1510.6	1506.5	1504.0	2.5337	7
1100	9.9	8.9	8.3	.6733	7	35.9	35.5	35.3	.2116	7	1509.0	1505.1	1502.8	2.7495	7
1200	9.3	8.1	7.4	.7198	7	35.8	35.4	35.2	.2215	7	1508.3	1503.6	1500.8	2.8956	7
1300	8.5	7.3	6.6	.6817	7	35.8	35.3	35.1	.2646	7	1506.5	1502.0	1499.2	2.6956	7
1400	7.3	6.4	5.9	.4880	7	35.7	35.2	35.1	.2299	7	1503.6	1500.2	1497.9	2.0062	7
1500	5.9	5.6	5.3	.2138	7	35.6	35.2	35.0	.2360	7	1499.4	1498.3	1496.9	.9361	7
1750	4.4	4.2	4.1	.1304	5	35.3	35.0	34.9	.1789	5	1497.6	1496.7	1496.1	.5805	5
2000	3.6	3.3	3.1	.2082	4	34.9	34.8	34.8	.0500	4	1498.3	1497.3	1496.3	.8347	4
2500	2.3	2.3	2.3	.0000	1	35.0	35.0	35.0	.0000	1	1501.5	1501.5	1501.5	.0000	1

PROVINCE 3 OCT – NOV

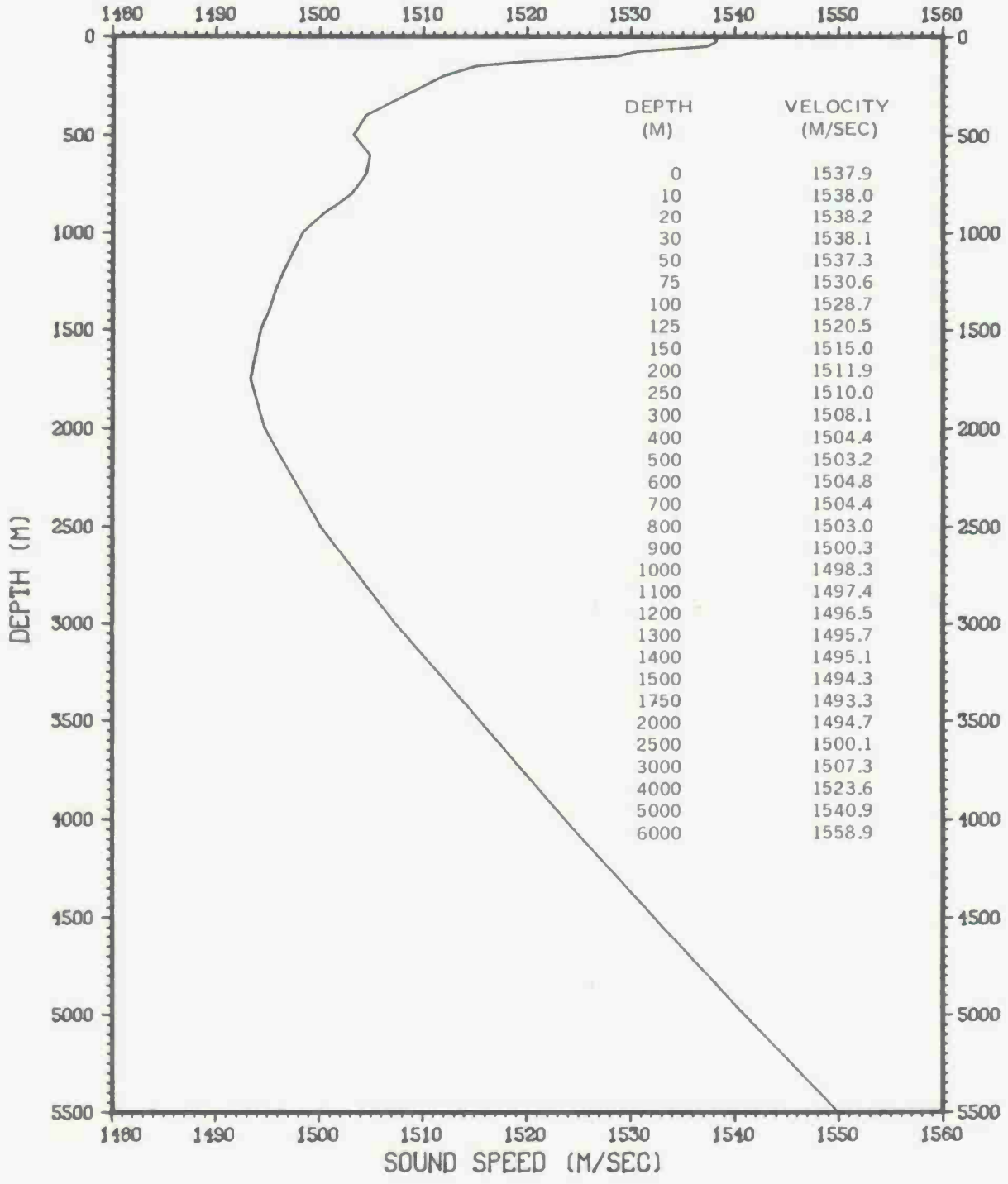


DEPTH (M)	VELOCITY (M/SEC)
0	1543.5
10	1538.7
20	1533.6
30	1528.0
50	1519.2
75	1517.1
100	1511.4
125	1511.2
150	1510.6
200	1508.8
250	1508.0
300	1507.2
400	1506.3
500	1506.5
600	1506.3
700	1505.3
800	1504.7
900	1504.9
1000	1504.5
1100	1503.2
1200	1501.9
1300	1500.6
1400	1499.3
1500	1498.1
1750	1496.3
2000	1497.0
2500	1501.0
3000	1508.1
4000	1524.7
5000	1543.3

PROVINCE 4 DEC – FEB

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	26.2	25.7	25.3	.3222	18	36.0	35.8	35.6	.1335	18	1538.3	1537.4	1536.5	.6572	18
10	26.2	25.7	25.3	.3142	18	35.9	35.8	35.6	.1195	18	1538.5	1537.5	1536.6	.6443	18
20	26.2	25.7	25.3	.3208	18	36.0	35.8	35.6	.1274	18	1538.6	1537.6	1536.7	.6662	18
30	26.2	25.7	25.3	.3053	18	35.9	35.8	35.6	.1188	18	1538.8	1537.7	1536.9	.6243	18
50	26.0	25.4	23.6	.5458	18	36.0	35.8	35.4	.1577	18	1538.7	1537.5	1532.8	1.3436	18
75	25.8	23.8	21.4	1.4589	18	36.1	35.7	35.3	.2227	18	1538.9	1534.0	1527.6	3.7566	18
100	24.6	21.6	19.2	1.3426	18	35.7	35.5	35.3	.1420	18	1536.3	1528.5	1521.8	3.6343	18
125	21.1	19.1	18.0	.9841	18	35.6	35.5	35.3	.0970	18	1527.7	1522.3	1519.0	2.7910	18
150	19.0	17.3	16.5	.7639	18	35.5	35.4	35.3	.0808	18	1522.4	1517.4	1514.9	2.2612	18
200	16.0	15.1	14.4	.4764	18	35.5	35.4	35.3	.0802	18	1514.3	1511.4	1509.2	1.5496	18
250	14.5	13.8	13.2	.4203	18	35.6	35.4	35.3	.0832	18	1510.6	1508.3	1506.1	1.4210	18
300	13.8	13.0	12.3	.4733	17	35.7	35.4	35.3	.1147	17	1509.2	1506.3	1503.9	1.6857	17
400	12.7	12.0	11.3	.4116	17	35.5	35.4	35.2	.0899	17	1507.2	1504.9	1502.0	1.5649	17
500	12.0	11.3	10.6	.3999	17	35.6	35.4	35.3	.0827	17	1506.4	1503.6	1501.0	1.5023	17
600	11.5	10.8	9.9	.4380	16	35.6	35.4	35.3	.0892	16	1506.5	1503.6	1500.4	1.6325	16
700	11.0	10.1	9.3	.5045	16	35.6	35.4	35.2	.1065	16	1506.4	1502.9	1499.6	2.0194	16
800	10.6	9.5	8.4	.5816	16	35.6	35.4	35.2	.1167	16	1506.3	1502.1	1498.2	2.2192	16
900	10.1	8.8	7.7	.6537	16	35.6	35.3	35.2	.1031	16	1506.1	1501.2	1497.0	2.5428	16
1000	9.0	8.0	6.8	.6239	15	35.5	35.3	35.1	.1033	15	1503.9	1499.7	1495.0	2.5017	15
1100	8.0	7.1	6.3	.5017	13	35.3	35.2	35.1	.0768	13	1501.3	1497.8	1494.3	2.0794	13
1200	7.2	6.4	5.7	.4462	13	35.2	35.1	35.0	.0760	13	1499.8	1496.6	1493.7	1.8274	13
1300	6.3	5.7	5.2	.3453	13	35.1	35.0	35.0	.0439	13	1498.1	1495.5	1493.4	1.4689	13
1400	5.6	5.1	4.7	.3040	13	35.0	35.0	34.9	.0376	13	1496.8	1494.7	1492.8	1.2705	13
1500	5.1	4.5	4.1	.3297	11	35.0	34.9	34.9	.0467	11	1496.1	1494.0	1492.1	1.4052	11
1750	3.9	3.4	2.8	.3734	9	34.9	34.8	34.8	.0527	9	1495.4	1493.4	1490.7	1.6055	9
2000	3.2	2.8	2.4	.2507	8	34.8	34.8	34.8	.0000	8	1496.6	1494.8	1493.1	1.0836	8
2500	2.2	2.1	2.0	.0835	8	34.8	34.8	34.7	.0354	8	1500.8	1500.3	1499.8	.3891	8
3000	1.9	1.8	1.7	.0900	7	34.8	34.7	34.7	.0488	7	1508.2	1507.7	1507.3	.3599	7
4000	1.5	1.5	1.4	.0516	6	34.7	34.7	34.7	.0000	6	1523.9	1523.6	1523.2	.2483	6

PROVINCE 4 DEC – FEB

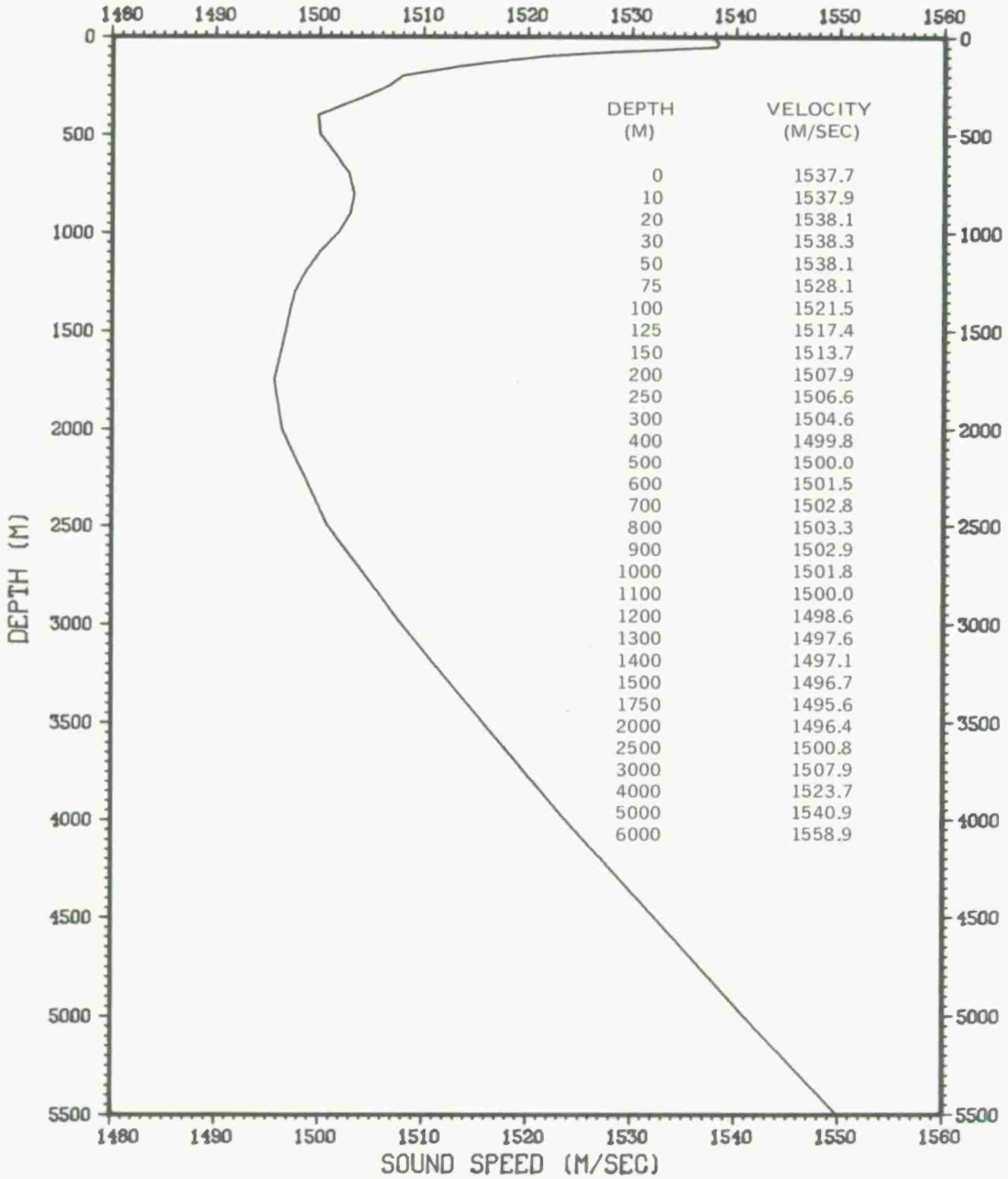


DEPTH (M)	VELOCITY (M/SEC)
0	1537.9
10	1538.0
20	1538.2
30	1538.1
50	1537.3
75	1530.6
100	1528.7
125	1520.5
150	1515.0
200	1511.9
250	1510.0
300	1508.1
400	1504.4
500	1503.2
600	1504.8
700	1504.4
800	1503.0
900	1500.3
1000	1498.3
1100	1497.4
1200	1496.5
1300	1495.7
1400	1495.1
1500	1494.3
1750	1493.3
2000	1494.7
2500	1500.1
3000	1507.3
4000	1523.6
5000	1540.9
6000	1558.9

PROVINCE 4 MAR – MAY

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	29.5	27.1	25.8	1.6851	11	35.9	35.7	35.3	.2256	11	1545.5	1540.4	1537.6	3.5189	11
10	29.4	27.1	25.8	1.6250	11	35.9	35.7	35.3	.2256	11	1545.7	1540.4	1537.8	3.3833	11
20	29.3	27.0	25.8	1.5280	11	36.0	35.7	35.3	.2212	11	1545.6	1540.4	1537.9	3.2561	11
30	28.9	26.8	25.8	1.3194	11	36.1	35.7	35.3	.2359	11	1545.2	1540.3	1538.1	2.8161	11
50	28.0	26.2	24.9	.9850	11	36.1	35.7	35.4	.1864	11	1543.6	1539.2	1536.2	2.1892	11
75	26.2	23.0	21.2	1.4892	11	35.9	35.7	35.5	.1602	11	1539.9	1532.0	1527.3	3.7776	11
100	24.6	20.8	18.8	2.0305	11	36.1	35.6	35.4	.2054	11	1536.8	1526.6	1521.1	5.5378	11
125	22.0	18.5	16.5	1.8918	11	35.8	35.5	35.4	.1342	11	1530.5	1520.4	1514.5	5.4843	11
150	19.6	16.7	14.9	1.6854	11	35.6	35.4	35.3	.0944	11	1524.3	1515.4	1509.9	5.1372	11
200	16.2	14.4	13.0	1.1048	11	35.4	35.3	35.2	.0982	11	1514.8	1509.0	1504.3	3.6005	11
250	14.7	13.3	12.2	.7866	11	35.4	35.3	35.1	.0894	11	1510.9	1506.2	1502.4	2.6593	11
300	13.7	12.4	11.6	.6362	11	35.4	35.3	35.1	.1044	11	1508.3	1503.9	1501.0	2.1868	11
400	12.9	11.3	10.7	.8055	11	35.5	35.2	35.1	.1328	11	1507.8	1501.9	1499.6	2.9200	11
500	12.5	10.9	10.2	.8274	11	35.6	35.2	35.1	.1502	11	1507.6	1502.0	1499.4	3.0097	11
600	12.2	10.5	9.9	.7561	11	35.6	35.3	35.2	.1221	11	1508.5	1502.5	1500.1	2.7973	11
700	12.0	10.2	9.5	.7363	11	35.5	35.3	35.2	.1044	11	1509.5	1503.1	1500.2	2.7357	11
800	11.8	9.9	9.0	.7580	11	35.5	35.3	35.2	.1027	11	1510.5	1503.5	1500.2	2.8401	11
900	11.7	9.4	8.7	.8400	11	35.4	35.3	35.2	.0775	11	1511.5	1503.4	1500.5	3.0390	11
1000	11.5	8.9	8.1	.9590	11	35.4	35.3	35.2	.0786	11	1512.6	1503.1	1500.2	3.5317	11
1100	8.6	7.9	7.2	.4577	10	35.3	35.2	35.1	.0568	10	1503.7	1501.1	1498.3	1.7641	10
1200	7.7	7.2	6.4	.4149	10	35.2	35.1	35.1	.0527	10	1501.9	1499.8	1496.7	1.6867	10
1300	7.0	6.4	5.7	.3853	10	35.1	35.1	35.0	.0422	10	1500.7	1498.4	1495.3	1.5619	10
1400	6.3	5.7	5.0	.4050	10	35.1	35.0	34.9	.0568	10	1499.7	1497.0	1494.2	1.6814	10
1500	5.7	5.0	4.2	.4692	10	35.0	34.9	34.9	.0527	10	1498.8	1495.7	1492.5	1.9795	10
1750	4.4	3.8	3.0	.4211	10	34.9	34.9	34.8	.0483	10	1497.6	1494.9	1491.7	1.7666	10
2000	3.5	3.1	2.6	.3120	10	34.9	34.8	34.8	.0422	10	1497.8	1496.1	1494.2	1.2888	10
2500	2.7	2.3	2.1	.1912	10	34.9	34.8	34.8	.0316	10	1502.9	1501.2	1500.3	.7531	10
3000	2.0	1.9	1.8	.0568	10	34.9	34.8	34.7	.0699	10	1508.5	1508.0	1507.6	.2424	10
4000	1.6	1.5	1.5	.0463	8	34.7	34.7	34.7	.0000	8	1524.2	1523.8	1523.6	.2295	8
5000	1.3	1.3	1.3	.0000	1	34.7	34.7	34.7	.0000	1	1540.7	1540.7	1540.7	.0000	1

PROVINCE 4 MAR – MAY

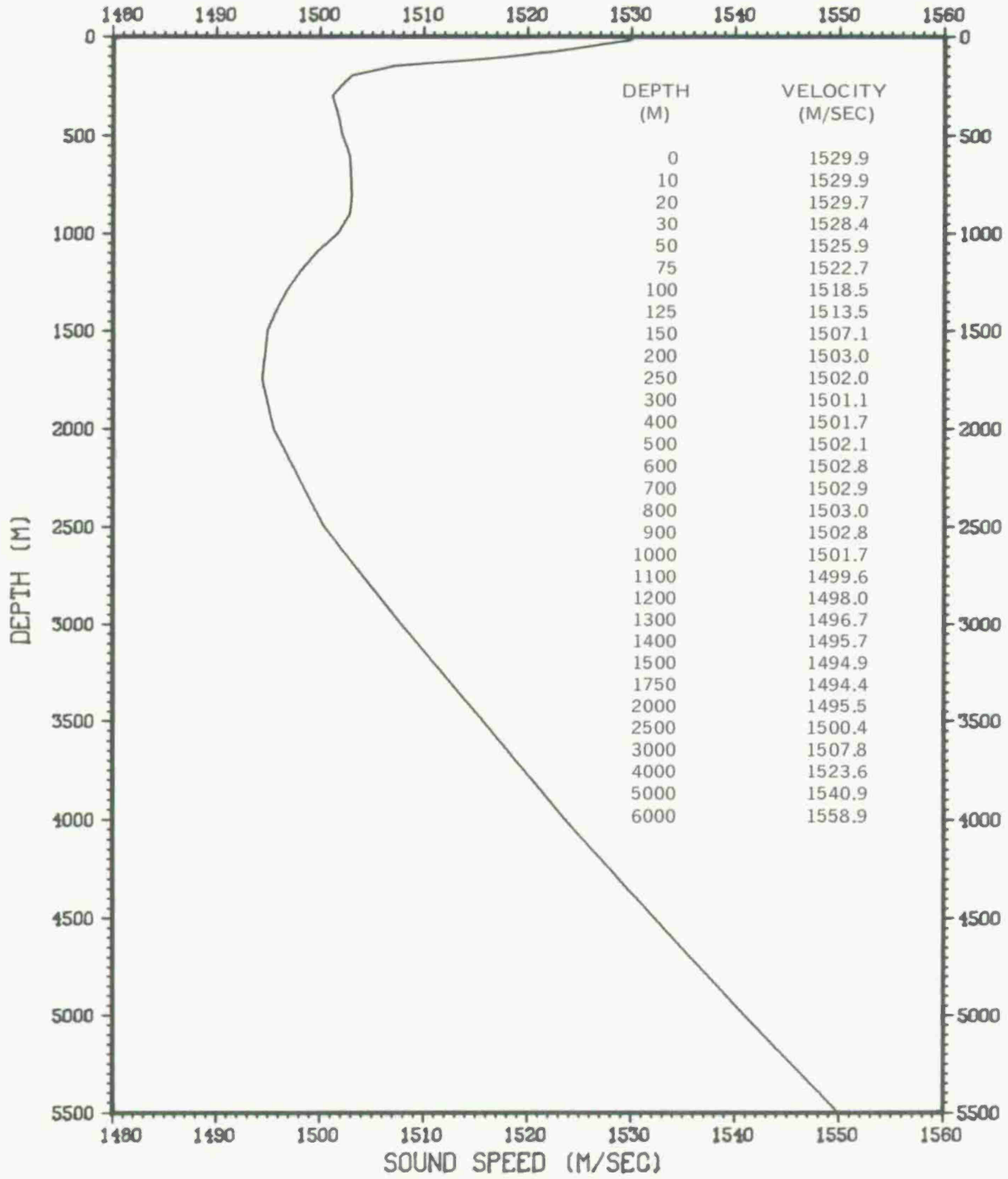


DEPTH (M)	VELOCITY (M/SEC)
0	1537.7
10	1537.9
20	1538.1
30	1538.3
50	1538.1
75	1528.1
100	1521.5
125	1517.4
150	1513.7
200	1507.9
250	1506.6
300	1504.6
400	1499.8
500	1500.0
600	1501.5
700	1502.8
800	1503.3
900	1502.9
1000	1501.8
1100	1500.0
1200	1498.6
1300	1497.6
1400	1497.1
1500	1496.7
1750	1495.6
2000	1496.4
2500	1500.8
3000	1507.9
4000	1523.7
5000	1540.9
6000	1558.9

PROVINCE 4 JUN – SEP

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	27.2	21.9	14.4	2.9298	50	36.1	35.3	35.1	.1810	50	1540.3	1527.1	1505.7	7.8390	50
10	27.2	21.8	14.4	2.9714	50	36.1	35.3	35.1	.1730	50	1540.5	1527.0	1505.8	7.9756	50
20	27.2	21.5	14.1	3.1654	50	36.1	35.3	35.1	.1694	50	1540.7	1526.5	1505.0	8.5784	50
30	27.2	21.1	13.5	3.4830	50	35.9	35.3	35.1	.1439	50	1540.8	1525.4	1503.1	9.5728	50
50	27.2	20.2	12.0	4.0578	50	35.6	35.3	35.1	.1143	50	1541.1	1523.1	1498.3	11.4121	50
75	27.2	19.2	11.6	4.4250	50	35.6	35.2	35.1	.1182	50	1541.6	1520.6	1497.4	12.6014	50
100	26.2	18.1	11.3	4.3810	50	35.5	35.2	35.1	.1035	50	1539.8	1517.9	1496.9	12.6722	50
125	26.1	16.9	11.3	4.2571	50	35.5	35.3	35.1	.1143	50	1539.9	1515.0	1497.2	12.4497	50
150	25.9	16.0	11.1	4.0376	50	35.5	35.2	35.0	.1147	50	1540.0	1512.5	1496.7	11.9651	50
200	22.6	14.2	10.7	3.0166	50	35.5	35.2	35.0	.1230	50	1532.9	1508.1	1496.2	9.2986	50
250	17.7	13.0	10.8	1.6770	46	35.5	35.2	35.0	.1210	46	1520.1	1505.3	1497.6	5.5687	46
300	14.7	12.2	10.1	1.1139	46	35.5	35.2	35.0	.1314	46	1511.6	1503.3	1495.6	3.8869	46
400	12.9	11.4	9.9	.7456	44	35.5	35.2	35.0	.1248	44	1507.5	1502.0	1496.8	2.6770	44
500	12.0	10.8	9.7	.5802	42	35.5	35.3	35.0	.1203	42	1506.2	1501.9	1497.5	2.1592	42
600	11.4	10.4	9.2	.5094	41	35.5	35.3	35.0	.1034	41	1505.9	1502.2	1497.5	1.9080	41
700	10.8	9.9	8.7	.5107	39	35.5	35.3	35.1	.0894	39	1505.3	1501.9	1497.3	1.9661	39
800	10.4	9.4	8.4	.4623	38	35.5	35.3	35.2	.0784	38	1505.6	1501.7	1498.0	1.7676	38
900	10.1	8.9	8.1	.4141	38	35.5	35.3	35.2	.0695	38	1506.4	1501.5	1498.2	1.6605	38
1000	9.4	8.3	7.3	.4384	35	35.5	35.3	35.1	.0684	35	1505.3	1500.8	1497.2	1.7243	35
1100	8.4	7.6	6.5	.4044	34	35.3	35.2	35.0	.0674	34	1503.0	1499.6	1495.3	1.6075	34
1200	7.4	6.7	5.7	.3730	28	35.2	35.1	35.0	.0568	28	1500.5	1498.0	1493.9	1.4830	28
1300	6.4	6.0	5.2	.3300	27	35.1	35.1	34.9	.0572	27	1498.4	1496.7	1493.2	1.3717	27
1400	5.8	5.4	4.7	.3014	26	35.1	35.0	34.9	.0392	26	1497.4	1495.7	1492.8	1.2751	26
1500	5.3	4.8	4.2	.2980	23	35.1	35.0	34.9	.0593	23	1497.0	1494.9	1492.4	1.2641	23
1750	4.1	3.7	3.2	.2355	21	34.9	34.9	34.8	.0483	21	1496.4	1494.4	1492.2	1.0351	21
2000	3.3	2.9	2.6	.2149	18	34.8	34.8	34.8	.0000	18	1497.2	1495.5	1494.1	.9139	18
2500	2.3	2.1	2.0	.0834	15	34.8	34.8	34.7	.0414	15	1501.1	1500.4	1500.0	.3342	15
3000	1.9	1.8	1.8	.0480	13	34.8	34.7	34.7	.0277	13	1508.2	1507.7	1507.4	.2304	13
4000	1.5	1.4	1.4	.0422	10	34.7	34.7	34.7	.0000	10	1523.7	1523.4	1523.1	.1947	10
5000	1.4	1.4	1.4	.0000	3	34.7	34.7	34.7	.0000	3	1541.0	1541.0	1541.0	.0000	3

PROVINCE 4 JUN – SEP

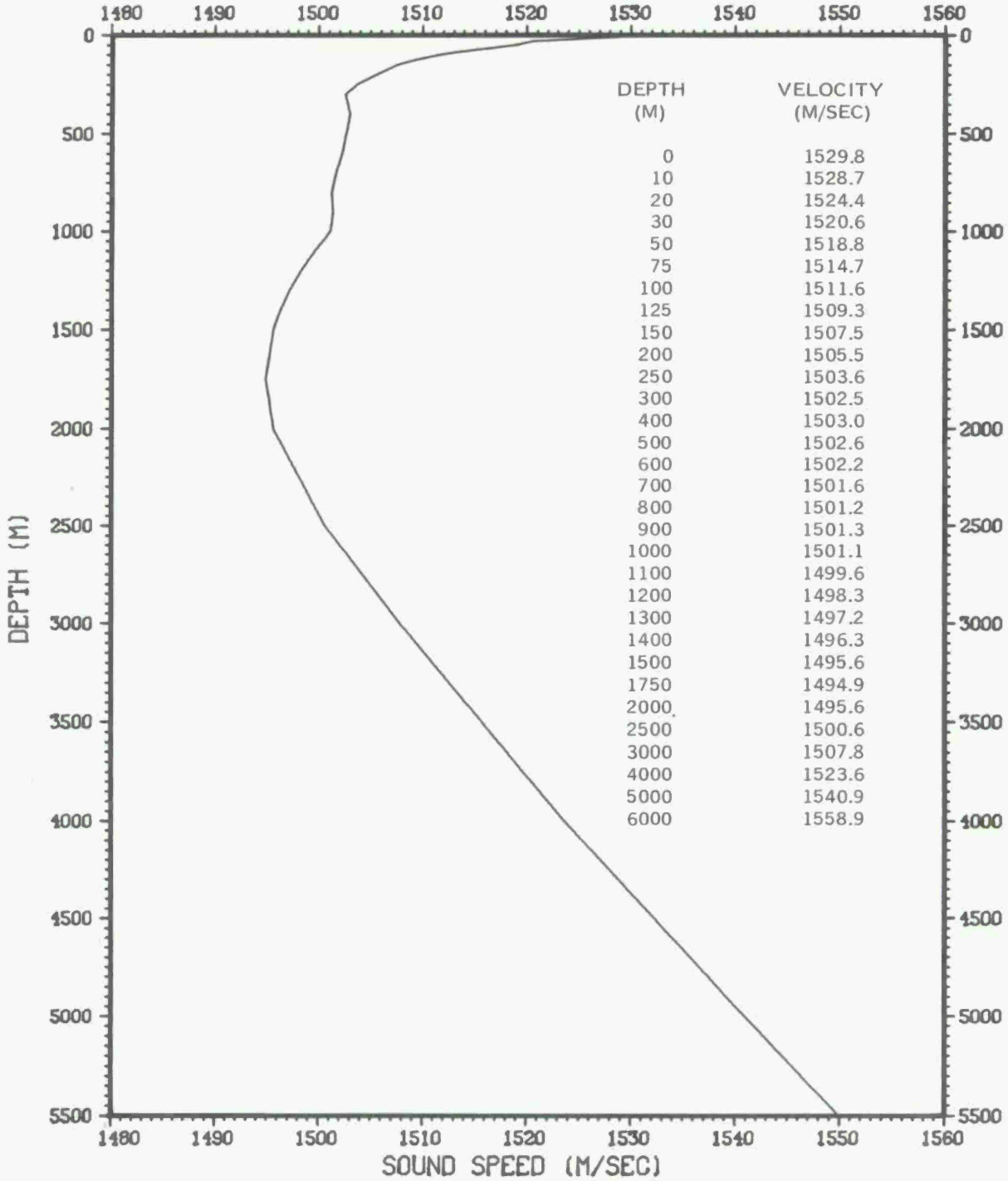


DEPTH (M)	VELOCITY (M/SEC)
0	1529.9
10	1529.9
20	1529.7
30	1528.4
50	1525.9
75	1522.7
100	1518.5
125	1513.5
150	1507.1
200	1503.0
250	1502.0
300	1501.1
400	1501.7
500	1502.1
600	1502.8
700	1502.9
800	1503.0
900	1502.8
1000	1501.7
1100	1499.6
1200	1498.0
1300	1496.7
1400	1495.7
1500	1494.9
1750	1494.4
2000	1495.5
2500	1500.4
3000	1507.8
4000	1523.6
5000	1540.9
6000	1558.9

PROVINCE 4 OCT – NOV

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	27.5	26.2	22.8	1.9499	5	35.7	35.5	35.3	.1483	5	1541.1	1538.2	1529.8	4.7681	5
10	27.4	26.1	22.3	2.1256	5	35.7	35.5	35.2	.1871	5	1541.2	1537.9	1528.7	5.2122	5
20	27.4	24.4	20.6	3.1413	5	35.7	35.5	35.2	.2074	5	1541.3	1534.1	1524.4	7.8139	5
30	27.3	23.5	19.1	4.0540	5	35.7	35.4	35.2	.1949	5	1541.4	1531.7	1520.6	10.3628	5
50	26.7	22.3	16.5	4.6824	5	35.8	35.5	35.3	.2121	5	1540.5	1528.9	1513.3	12.3832	5
75	26.4	19.9	14.7	4.5440	5	35.7	35.5	35.3	.1483	5	1540.2	1522.9	1508.3	12.3711	5
100	26.2	18.5	14.0	4.7864	5	35.7	35.4	35.3	.1673	5	1540.1	1519.3	1506.2	13.1717	5
125	23.1	16.8	13.4	3.7727	5	35.4	35.3	35.3	.0548	5	1532.7	1515.1	1504.7	10.7942	5
150	21.1	15.7	13.2	3.1249	5	35.4	35.3	35.3	.0447	5	1528.0	1512.1	1504.4	9.2411	5
200	18.4	14.2	12.8	2.3732	5	35.3	35.3	35.2	.0548	5	1521.3	1508.3	1503.7	7.3812	5
250	16.1	13.2	12.0	1.6456	5	35.4	35.3	35.1	.1140	5	1515.4	1506.0	1501.8	5.4048	5
300	14.2	12.5	11.6	1.0262	5	35.4	35.3	35.2	.0894	5	1510.2	1504.3	1501.3	3.4658	5
400	11.6	11.3	10.9	.2702	5	35.4	35.3	35.2	.0707	5	1503.0	1502.1	1500.2	1.0986	5
500	11.1	10.7	10.0	.4992	4	35.4	35.3	35.1	.1258	4	1502.9	1501.5	1498.6	1.9782	4
600	10.5	10.3	10.1	.1708	4	35.4	35.3	35.3	.0500	4	1502.4	1501.8	1500.8	.7118	4
700	10.5	10.0	9.8	.3317	4	35.4	35.3	35.3	.0500	4	1504.2	1502.5	1501.6	1.2038	4
800	10.0	9.5	9.3	.3304	4	35.4	35.3	35.2	.0816	4	1504.0	1502.2	1501.2	1.2764	4
900	9.2	8.9	8.8	.1732	4	35.4	35.3	35.2	.0816	4	1502.9	1501.8	1501.3	.7572	4
1000	8.4	8.3	8.1	.1500	4	35.3	35.2	35.2	.0577	4	1501.4	1500.9	1499.9	.6652	4
1100	7.9	7.5	7.1	.3304	4	35.3	35.2	35.1	.0816	4	1501.1	1499.5	1497.9	1.3074	4
1200	7.6	6.9	6.4	.5123	4	35.2	35.1	35.1	.0500	4	1501.5	1498.6	1496.5	2.1030	4
1300	7.0	6.2	5.8	.5315	4	35.2	35.1	35.0	.0816	4	1500.9	1497.7	1495.9	2.2015	4
1400	6.3	5.6	5.4	.4359	4	35.1	35.0	35.0	.0500	4	1499.7	1496.8	1495.7	1.9209	4
1500	5.8	5.1	4.8	.4509	4	35.1	35.0	35.0	.0500	4	1499.1	1496.4	1494.9	1.8500	4
1750	4.3	3.9	3.6	.2986	4	34.9	34.9	34.9	.0000	4	1497.1	1495.5	1494.2	1.2715	4
2000	3.3	3.2	3.0	.1528	3	34.9	34.8	34.7	.1000	3	1497.1	1496.4	1495.6	.7506	3
2500	2.3	2.3	2.3	.0000	2	34.8	34.7	34.7	.0707	2	1501.3	1501.2	1501.1	.1414	2
3000	1.9	1.9	1.9	.0000	1	34.7	34.7	34.7	.0000	1	1508.2	1508.2	1508.2	.0000	1

PROVINCE 4 OCT – NOV

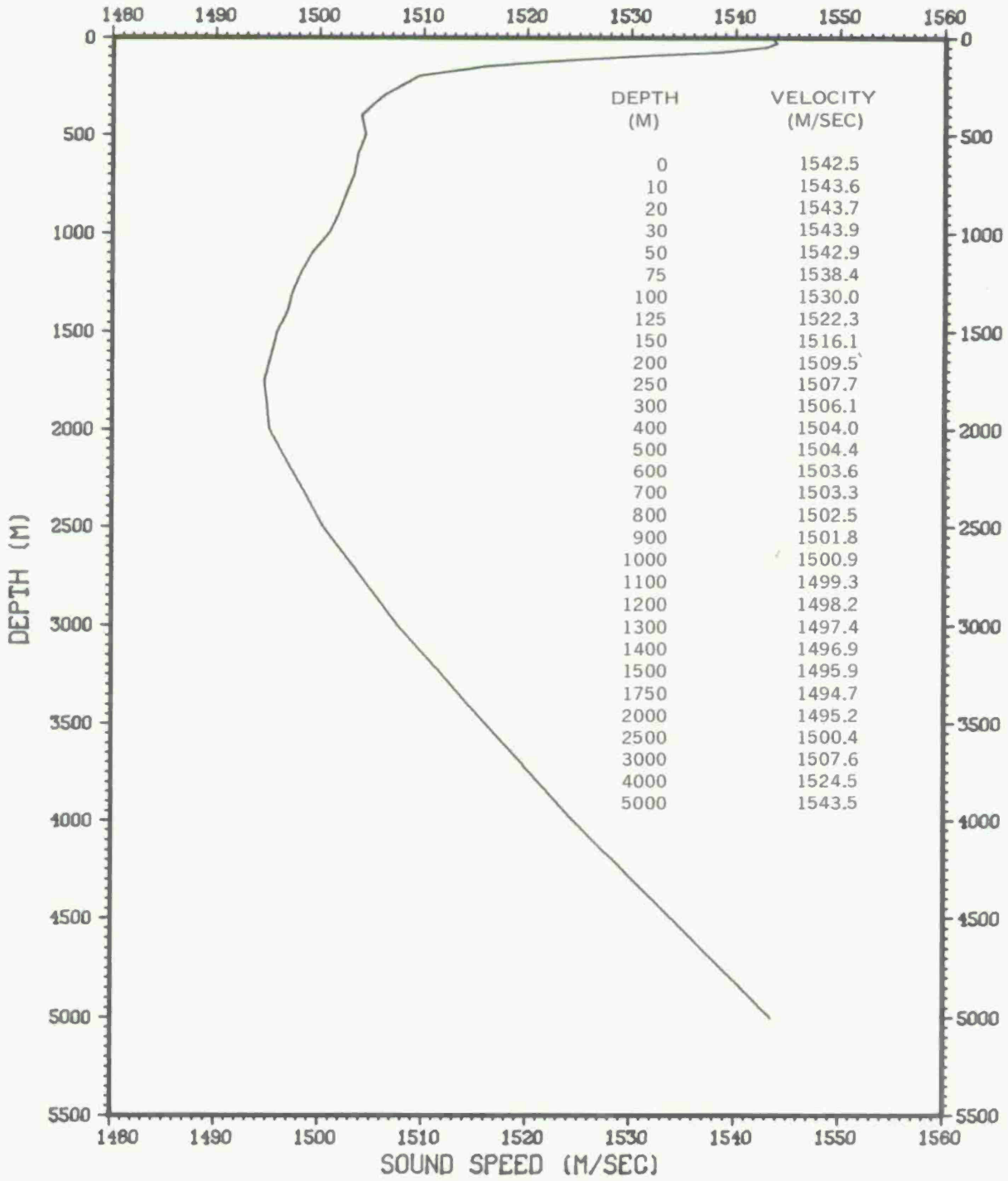


DEPTH (M)	VELOCITY (M/SEC)
0	1529.8
10	1528.7
20	1524.4
30	1520.6
50	1518.8
75	1514.7
100	1511.6
125	1509.3
150	1507.5
200	1505.5
250	1503.6
300	1502.5
400	1503.0
500	1502.6
600	1502.2
700	1501.6
800	1501.2
900	1501.3
1000	1501.1
1100	1499.6
1200	1498.3
1300	1497.2
1400	1496.3
1500	1495.6
1750	1494.9
2000	1495.6
2500	1500.6
3000	1507.8
4000	1523.6
5000	1540.9
6000	1558.9

PROVINCE 5 DEC – FEB

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	29.3	27.9	23.9	.7739	68 ••	36.6	35.4	32.2	.8111	68 ••	1544.5	1541.8	1533.4	1.7219	68
10 ••	28.8	27.9	23.9	.7646	68 ••	36.6	35.5	32.3	.7799	68 ••	1544.5	1542.0	1533.5	1.7539	68
20 ••	29.3	27.9	23.9	.7722	68 ••	36.6	35.5	32.7	.7296	68 ••	1545.5	1542.2	1533.7	1.8107	68
30 ••	28.9	27.8	23.9	.7911	68 ••	36.6	35.7	33.6	.6367	68 ••	1545.0	1542.3	1533.8	1.8049	68
50 ••	28.6	27.3	23.9	1.1855	68 ••	36.5	35.8	34.7	.4585	68 ••	1545.0	1541.7	1534.0	2.6982	68
75 ••	28.3	25.1	19.4	2.0407	68 ••	36.5	35.7	34.9	.3651	68 ••	1544.7	1537.0	1522.6	4.9518	68
100 ••	28.0	22.6	18.5	2.3123	68 ••	36.4	35.6	35.0	.3201	68 ••	1544.2	1531.0	1520.6	5.8988	68
125 ••	26.1	20.0	16.6	2.0837	68 ••	35.9	35.4	35.1	.2187	68 ••	1540.1	1524.6	1515.0	5.6202	68
150 ••	24.8	17.9	14.8	1.8999	68 ••	35.9	35.3	35.0	.1949	68 ••	1537.4	1519.0	1509.5	5.4114	68
200 ••	18.0	15.1	13.0	1.0929	68 ••	35.8	35.3	35.0	.1638	68 ••	1520.5	1511.4	1504.4	3.4636	68
250 ••	16.4	13.7	12.3	.8953	67 ••	35.7	35.3	35.0	.1404	67 ••	1516.2	1507.7	1502.9	3.0072	67
300 ••	15.2	12.8	11.2	.8293	67 ••	35.6	35.3	35.0	.1423	67 ••	1513.4	1505.3	1500.1	2.8823	67
400 ••	13.6	11.8	10.5	.7670	62 ••	35.7	35.3	34.9	.1705	62 ••	1509.6	1503.5	1498.8	2.7766	62
500 ••	12.7	11.2	9.9	.6765	54 ••	35.6	35.3	35.0	.1472	54 ••	1508.7	1503.4	1498.5	2.5490	54
600 ••	11.7	10.6	9.3	.6595	53 ••	35.6	35.3	35.0	.1515	53 ••	1507.0	1502.8	1497.8	2.5319	53
700 ••	11.0	9.9	8.7	.6368	52 ••	35.6	35.3	35.0	.1445	52 ••	1506.0	1501.9	1497.3	2.4720	52
800 ••	10.5	9.2	8.1	.6332	50 ••	35.6	35.3	35.0	.1373	50 ••	1506.0	1501.1	1496.6	2.4720	50
900 ••	9.7	8.6	7.3	.5997	48 ••	35.5	35.2	35.0	.1414	48 ••	1504.9	1500.1	1495.1	2.4141	48
1000 ••	8.9	7.9	6.9	.5536	48 ••	35.4	35.2	35.0	.1280	48 ••	1503.5	1499.3	1495.1	2.2759	48
1100 ••	8.3	7.3	6.3	.5068	48 ••	35.4	35.1	34.9	.1129	48 ••	1502.6	1498.4	1494.6	2.0757	48
1200 ••	7.5	6.6	5.7	.4615	48 ••	35.3	35.1	34.9	.0962	48 ••	1501.3	1497.5	1493.7	1.9038	48
1300 ••	6.7	6.0	5.2	.4104	47 ••	35.2	35.0	34.9	.0865	47 ••	1499.6	1496.7	1493.3	1.6993	47
1400 ••	6.1	5.5	4.8	.3549	46 ••	35.2	35.0	34.8	.0785	46 ••	1498.4	1496.0	1493.1	1.4920	46
1500 ••	5.5	4.9	4.3	.3257	46 ••	35.1	34.9	34.8	.0774	46 ••	1497.5	1495.4	1492.8	1.3419	46
1750 ••	4.3	3.7	3.3	.2867	32 ••	35.0	34.9	34.8	.0567	32 ••	1497.2	1494.6	1492.8	1.2207	32
2000 ••	3.4	2.9	2.0	.2750	26 ••	35.4	34.8	34.8	.1501	26 ••	1497.5	1495.2	1491.4	1.1804	26
2500 ••	2.3	2.1	2.0	.0870	13 ••	34.8	34.8	34.6	.0660	13 ••	1501.3	1500.5	1500.0	.3602	13
3000 ••	1.9	1.8	1.7	.0641	8 ••	34.8	34.7	34.6	.0744	8 ••	1507.9	1507.6	1507.4	.1727	8
4000 ••	1.7	1.7	1.7	.0000	2 ••	34.8	34.7	34.7	.0707	2 ••	1524.7	1524.6	1524.6	.0707	2

PROVINCE 5 DEC – FEB

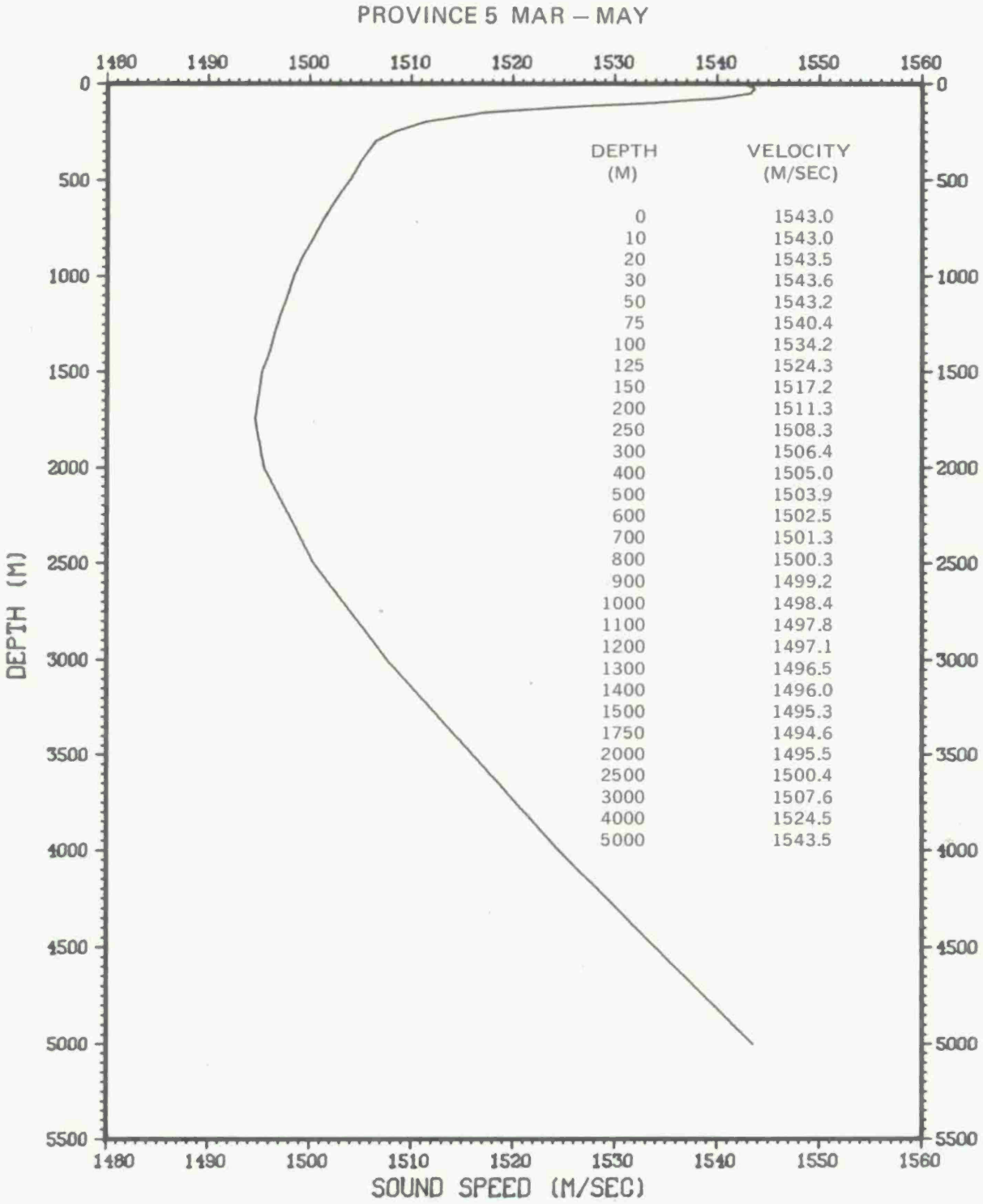


DEPTH (M)	VELOCITY (M/SEC)
0	1542.5
10	1543.6
20	1543.7
30	1543.9
50	1542.9
75	1538.4
100	1530.0
125	1522.3
150	1516.1
200	1509.5
250	1507.7
300	1506.1
400	1504.0
500	1504.4
600	1503.6
700	1503.3
800	1502.5
900	1501.8
1000	1500.9
1100	1499.3
1200	1498.2
1300	1497.4
1400	1496.9
1500	1495.9
1750	1494.7
2000	1495.2
2500	1500.4
3000	1507.6
4000	1524.5
5000	1543.5

PROVINCE 5 MAR – MAY

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	30.5	28.9	25.8	1.2510	75 ••	36.5	35.3	33.8	.6341	75 ••	1548.1	1543.9	1537.9	2.5742	75
10 ••	30.4	28.8	25.6	1.2222	75 ••	36.5	35.3	33.8	.6333	75 ••	1547.7	1543.9	1537.8	2.5333	75
20 ••	30.2	28.7	25.2	1.2495	75 ••	36.4	35.4	34.1	.6129	75 ••	1547.8	1543.8	1536.9	2.5484	75
30 ••	29.9	28.4	25.1	1.2243	75 ••	36.4	35.5	34.3	.5893	75 ••	1547.3	1543.6	1536.9	2.4862	75
50 ••	29.4	27.4	24.2	1.1528	75 ••	36.5	35.7	34.5	.5032	75 ••	1545.9	1541.9	1534.2	2.3860	75
75 ••	28.2	26.0	22.9	1.2930	75 ••	36.4	35.9	35.2	.3476	75 ••	1543.8	1539.2	1531.3	2.9626	75
100 ••	27.1	23.5	20.1	1.6988	75 ••	36.4	35.8	35.0	.3455	75 ••	1542.5	1533.8	1524.7	4.4092	75
125 ••	24.4	20.5	17.4	1.6507	75 ••	36.2	35.6	35.1	.2701	75 ••	1536.9	1526.2	1517.2	4.6574	75
150 ••	22.3	18.0	15.1	1.5553	75 ••	36.0	35.4	35.1	.2232	75 ••	1531.8	1519.5	1510.3	4.6824	75
200 ••	18.4	15.2	13.1	1.2443	75 ••	35.9	35.3	35.1	.1947	75 ••	1521.8	1511.8	1504.6	4.0515	75
250 ••	16.2	13.8	12.2	1.0206	75 ••	35.9	35.3	35.1	.1979	75 ••	1516.3	1507.9	1502.2	3.5250	75
300 ••	15.2	12.8	11.5	.9048	75 ••	35.8	35.3	35.1	.1966	75 ••	1513.7	1505.4	1500.7	3.2190	75
400 ••	13.8	11.6	10.5	.7487	75 ••	35.8	35.3	35.0	.1804	75 ••	1511.1	1503.2	1498.8	2.8012	75
500 ••	12.4	11.0	9.8	.6535	75 ••	35.6	35.3	35.1	.1636	75 ••	1507.9	1502.5	1498.0	2.4873	75
600 ••	11.7	10.4	9.3	.6554	75 ••	35.6	35.3	35.1	.1543	75 ••	1507.2	1502.1	1497.7	2.5331	75
700 ••	11.1	9.8	8.7	.6631	75 ••	35.6	35.3	35.1	.1590	75 ••	1506.5	1501.4	1497.2	2.5881	75
800 ••	10.4	9.1	8.0	.6734	75 ••	35.6	35.3	35.1	.1489	75 ••	1505.6	1500.6	1496.3	2.6984	75
900 ••	9.8	8.5	7.4	.6623	75 ••	35.5	35.2	35.0	.1435	75 ••	1505.1	1499.8	1495.5	2.6679	75
1000 ••	9.0	7.8	6.8	.6258	73 ••	35.5	35.2	35.0	.1302	73 ••	1503.9	1498.8	1494.9	2.6534	73
1100 ••	8.6	7.2	6.3	.5639	73 ••	35.5	35.1	35.0	.1158	73 ••	1504.1	1498.0	1494.3	2.3366	73
1200 ••	7.5	6.5	5.8	.4485	61 ••	35.3	35.1	34.9	.0878	61 ••	1501.0	1497.2	1494.2	1.8844	61
1300 ••	6.8	6.0	5.3	.3936	61 ••	35.2	35.0	34.9	.0811	61 ••	1499.9	1496.5	1493.9	1.6370	61
1400 ••	6.1	5.4	5.0	.3403	46 ••	35.1	35.0	34.9	.0755	46 ••	1498.6	1496.0	1493.9	1.4383	46
1500 ••	5.4	4.9	4.4	.2832	46 ••	35.0	34.9	34.9	.0506	46 ••	1497.5	1495.2	1493.2	1.2176	46
1750 ••	4.2	3.7	3.4	.2168	41 ••	35.0	34.9	34.8	.0617	41 ••	1496.9	1494.6	1493.1	.9750	41
2000 ••	3.4	2.9	2.6	.1666	32 ••	35.0	34.8	34.8	.0492	32 ••	1497.6	1495.5	1494.2	.6965	32
2500 ••	2.4	2.1	2.0	.1014	27 ••	34.9	34.8	34.8	.0267	27 ••	1501.8	1500.5	1499.8	.4351	27
3000 ••	2.0	1.8	1.7	.0588	26 ••	34.9	34.7	34.7	.0491	26 ••	1508.5	1507.7	1507.4	.2573	26
4000 ••	1.8	1.7	1.6	.0599	13 ••	34.9	34.7	34.7	.0768	13 ••	1525.2	1524.6	1524.2	.2577	13

DATA IGNORED - IN CONTROL MODE



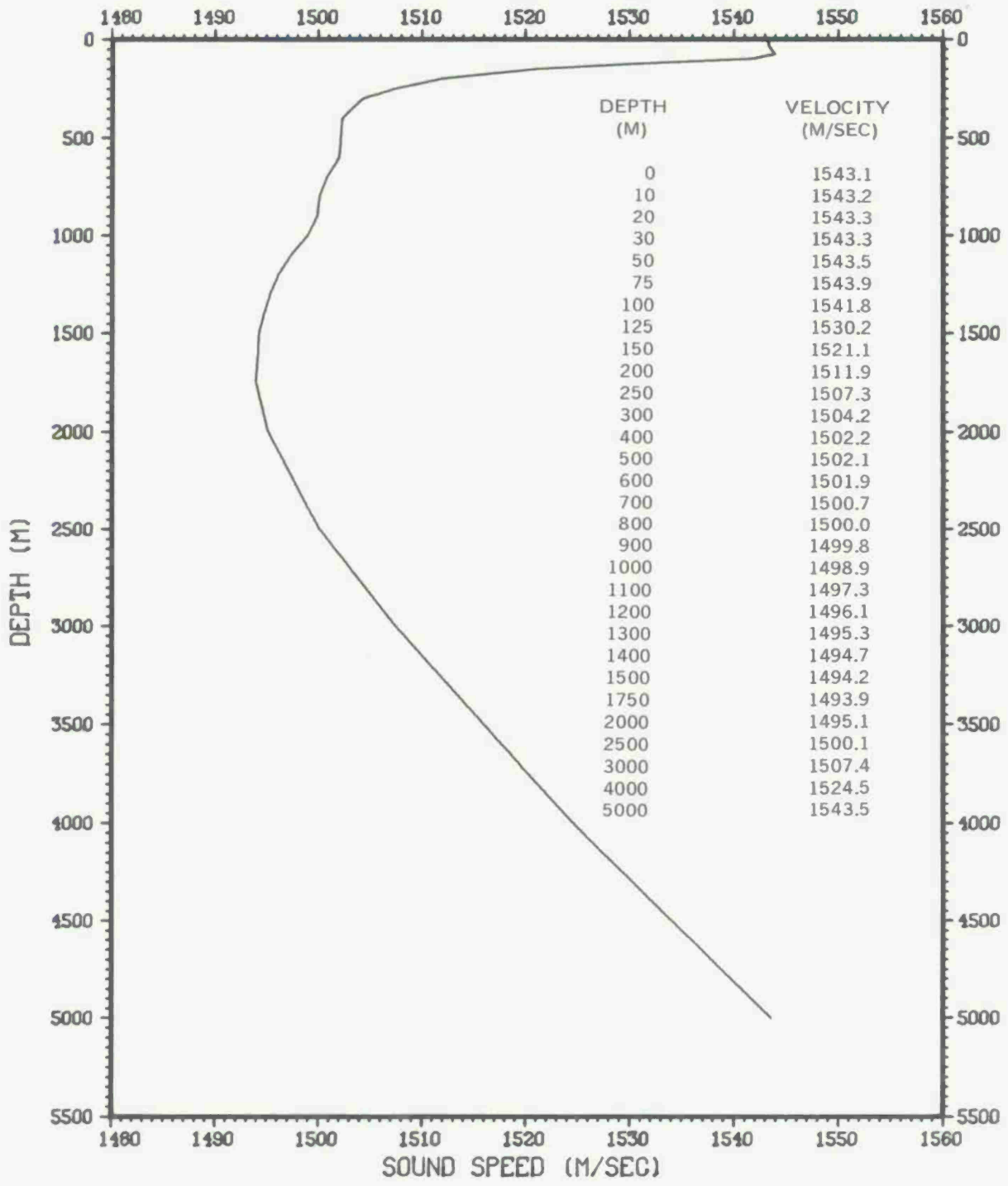
DEPTH (M)	VELOCITY (M/SEC)
0	1543.0
10	1543.0
20	1543.5
30	1543.6
50	1543.2
75	1540.4
100	1534.2
125	1524.3
150	1517.2
200	1511.3
250	1508.3
300	1506.4
400	1505.0
500	1503.9
600	1502.5
700	1501.3
800	1500.3
900	1499.2
1000	1498.4
1100	1497.8
1200	1497.1
1300	1496.5
1400	1496.0
1500	1495.3
1750	1494.6
2000	1495.5
2500	1500.4
3000	1507.6
4000	1524.5
5000	1543.5

PROVINCE 5 JUN – SEP

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0 ••	30.0	28.3	23.5	1.0633	66 ••	36.6	35.8	33.6	.5350	66 ••	1546.3	1543.1	1532.0	2.2825	66
10 ••	29.5	28.2	23.5	.9898	66 ••	36.6	35.8	34.5	.4862	66 ••	1546.0	1543.0	1532.1	2.1648	66
20 ••	29.2	28.1	23.4	.9833	66 ••	36.7	35.9	34.8	.4640	66 ••	1545.7	1543.2	1532.2	2.1277	66
30 ••	29.1	28.1	23.3	.9676	66 ••	36.8	35.9	34.9	.4653	66 ••	1545.5	1543.2	1532.1	2.0822	66
50 ••	29.0	27.5	21.3	1.2153	66 ••	36.7	36.0	35.0	.4215	66 ••	1544.9	1542.5	1527.4	2.7529	66
75 ••	28.4	25.9	18.9	2.2570	66 ••	36.7	36.0	35.1	.3682	66 ••	1544.8	1539.0	1521.0	5.6193	66
100 ••	27.0	23.1	17.4	2.7227	66 ••	36.5	35.8	35.1	.3760	66 ••	1542.5	1532.4	1516.7	7.2363	66
125 ••	26.5	20.2	15.6	2.5644	66 ••	36.5	35.6	35.0	.3200	66 ••	1541.6	1525.1	1511.3	7.1737	66
150 ••	24.6	18.0	14.5	2.3667	66 ••	36.1	35.5	35.0	.2675	66 ••	1537.6	1519.2	1508.2	6.9454	66
200 ••	20.9	15.2	13.2	1.5331	66 ••	35.7	35.4	35.1	.1816	66 ••	1528.8	1511.7	1505.0	4.8854	66
250 ••	17.1	13.7	12.2	1.0635	66 ••	35.7	35.3	35.1	.1638	66 ••	1518.7	1507.8	1502.4	3.5971	66
300 ••	14.8	12.7	11.5	.8260	65 ••	35.7	35.3	35.1	.1570	65 ••	1511.9	1505.2	1500.7	2.9023	65
400 ••	12.8	11.6	10.5	.5931	59 ••	35.6	35.3	34.9	.1569	59 ••	1507.6	1502.9	1498.8	2.2511	59
500 ••	12.2	10.9	10.1	.5603	49 ••	35.7	35.3	35.1	.1573	49 ••	1507.2	1502.2	1499.0	2.1635	49
600 ••	11.7	10.3	9.4	.5809	49 ••	35.7	35.3	35.0	.1567	49 ••	1507.2	1501.6	1498.2	2.2830	49
700 ••	11.2	9.6	8.6	.5928	49 ••	35.6	35.3	35.0	.1480	49 ••	1507.0	1500.7	1496.7	2.3763	49
800 ••	10.6	8.9	7.7	.6157	48 ••	35.6	35.2	35.0	.1417	48 ••	1506.5	1499.7	1495.2	2.4330	48
900 ••	9.9	8.2	7.0	.6234	47 ••	35.5	35.2	35.0	.1339	47 ••	1505.5	1498.7	1493.9	2.5047	47
1000 ••	8.7	7.5	6.5	.5329	45 ••	35.4	35.1	35.0	.1097	45 ••	1502.6	1497.6	1493.6	2.1668	45
1100 ••	8.2	6.9	6.0	.4740	45 ••	35.3	35.1	34.9	.0968	45 ••	1502.1	1497.0	1493.4	1.9345	45
1200 ••	7.6	6.3	5.5	.4219	43 ••	35.3	35.0	34.9	.0856	43 ••	1501.4	1496.2	1493.0	1.7437	43
1300 ••	6.9	5.7	5.0	.3916	41 ••	35.2	35.0	34.9	.0775	41 ••	1500.4	1495.5	1492.7	1.6479	41
1400 ••	6.3	5.2	4.7	.3736	38 ••	35.1	35.0	34.8	.0683	38 ••	1499.6	1495.0	1492.8	1.5484	38
1500 ••	5.9	4.7	4.2	.3747	33 ••	35.1	34.9	34.8	.0584	33 ••	1499.7	1494.4	1492.5	1.5722	33
1750 ••	4.6	3.6	3.3	.2914	29 ••	34.9	34.8	34.8	.0501	29 ••	1498.1	1493.9	1492.6	1.2543	29
2000 ••	3.3	2.8	2.6	.1441	25 ••	34.9	34.8	34.7	.0289	25 ••	1496.9	1494.9	1493.9	.5992	25
2500 ••	2.3	2.1	2.0	.0899	22 ••	34.8	34.8	34.7	.0213	22 ••	1501.3	1500.3	1499.8	.3672	22
3000 ••	1.9	1.8	1.7	.0384	21 ••	34.7	34.7	34.7	.0000	21 ••	1507.9	1507.5	1507.1	.1700	21
4000 ••	1.7	1.7	1.6	.0483	10 ••	34.7	34.7	34.7	.0000	10 ••	1524.6	1524.4	1524.3	.0972	10

DATA IGNORED - IN CONTROL MODE

PROVINCE 5 JUN – SEP



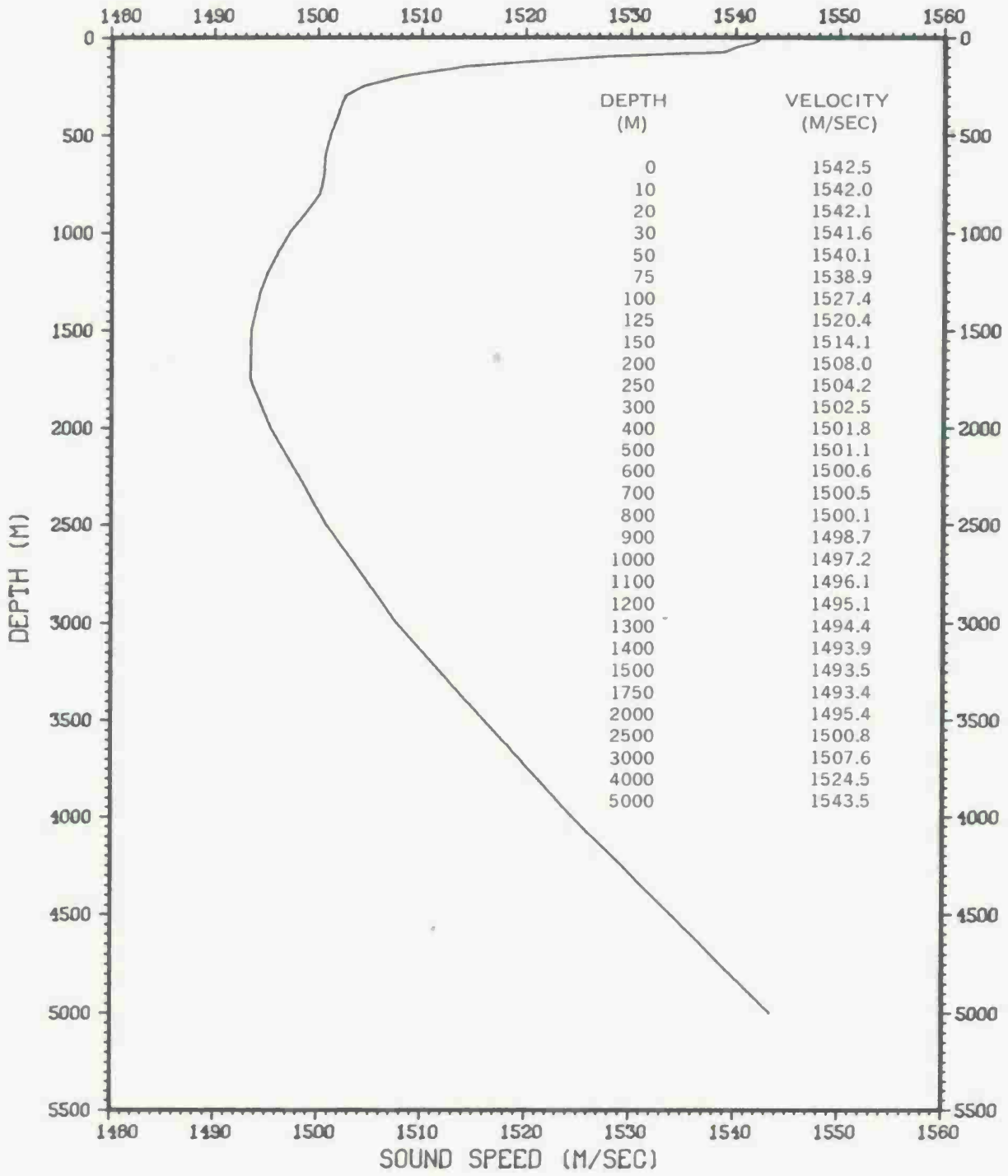
DEPTH (M)	VELOCITY (M/SEC)
0	1543.1
10	1543.2
20	1543.3
30	1543.3
50	1543.5
75	1543.9
100	1541.8
125	1530.2
150	1521.1
200	1511.9
250	1507.3
300	1504.2
400	1502.2
500	1502.1
600	1501.9
700	1500.7
800	1500.0
900	1499.8
1000	1498.9
1100	1497.3
1200	1496.1
1300	1495.3
1400	1494.7
1500	1494.2
1750	1493.9
2000	1495.1
2500	1500.1
3000	1507.4
4000	1524.5
5000	1543.5

PROVINCE 5 OCT – NOV

DEPTH (M)		TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM		SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM		VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	••	29.1	28.1	26.8	.4683	78	••	36.6	36.0	34.9	.3783	78	••	1545.3	1542.9	1539.6	1.0768	78
10	••	29.2	28.1	26.9	.5108	78	••	37.2	36.1	35.1	.3581	78	••	1545.6	1543.1	1540.5	1.1610	78
20	••	29.1	28.0	24.1	.6653	78	••	37.1	36.1	35.2	.3367	78	••	1545.8	1543.1	1533.7	1.5835	78
30	••	29.0	27.9	20.3	1.0078	78	••	36.9	36.1	35.3	.3068	78	••	1545.8	1543.0	1524.2	2.4722	78
50	••	28.9	27.0	16.8	1.5618	78	••	36.7	36.1	35.3	.3256	78	••	1545.9	1541.5	1514.5	3.9820	78
75	••	27.7	24.4	15.8	2.0231	78	••	36.5	35.9	35.3	.2995	78	••	1543.7	1535.6	1511.8	5.2328	78
100	••	25.3	21.2	15.1	2.1406	78	••	36.3	35.6	35.1	.2697	78	••	1538.6	1527.6	1510.0	5.8880	78
125	••	24.0	18.7	14.4	1.7861	78	••	35.9	35.4	35.0	.2085	78	••	1535.2	1521.1	1508.3	5.1374	78
150	••	22.7	16.9	13.9	1.6107	78	••	35.8	35.4	34.9	.1966	78	••	1532.5	1516.0	1507.0	4.8072	78
200	••	19.3	14.5	11.8	1.2015	78	••	36.2	35.3	34.9	.2184	78	••	1524.1	1509.5	1500.3	3.8759	78
250	••	16.1	13.3	11.2	.8601	72	••	36.2	35.3	35.1	.1818	72	••	1515.5	1506.2	1499.1	2.9590	72
300	••	14.2	12.3	10.8	.6642	72	••	36.3	35.3	35.1	.1758	72	••	1511.5	1503.8	1498.5	2.4167	72
400	••	12.7	11.3	10.5	.4713	67	••	35.8	35.2	35.1	.1374	67	••	1507.0	1502.0	1499.0	1.7731	67
500	••	11.6	10.6	10.0	.3908	50	••	35.5	35.2	35.1	.1075	50	••	1504.9	1501.2	1498.7	1.4808	50
600	••	11.1	10.0	8.6	.4765	49	••	35.5	35.2	35.0	.1144	49	••	1504.7	1500.7	1495.0	1.8116	49
700	••	10.5	9.4	7.9	.5292	49	••	35.5	35.2	35.0	.1124	49	••	1504.2	1499.7	1494.3	2.0319	49
800	••	9.8	8.7	7.5	.5216	49	••	35.5	35.1	35.0	.1191	49	••	1503.4	1499.0	1494.3	2.0619	49
900	••	9.1	8.1	6.9	.5322	48	••	35.4	35.1	35.0	.1099	48	••	1502.3	1498.1	1493.6	2.1032	48
1000	••	8.5	7.5	6.4	.5218	48	••	35.3	35.1	34.9	.1026	48	••	1501.5	1497.4	1493.1	2.1151	48
1100	••	7.8	6.9	5.7	.4829	46	••	35.3	35.0	34.9	.0920	46	••	1500.3	1496.7	1491.8	1.9955	46
1200	••	7.2	6.3	5.3	.4430	46	••	35.2	35.0	34.8	.0954	46	••	1499.5	1496.1	1492.0	1.8210	46
1300	••	6.3	5.8	5.0	.3603	45	••	35.1	35.0	34.8	.0843	45	••	1497.9	1495.6	1492.6	1.5105	45
1400	••	6.1	5.3	4.6	.3319	45	••	35.1	34.9	34.8	.0684	45	••	1498.4	1495.2	1492.5	1.3918	45
1500	••	5.9	4.8	4.2	.3377	45	••	35.0	34.9	34.7	.0757	45	••	1499.5	1494.8	1492.5	1.3950	45
1750	••	4.0	3.6	3.3	.1835	39	••	35.0	34.8	34.7	.0614	39	••	1495.8	1494.1	1492.8	.7905	39
2000	••	3.0	2.8	2.6	.1095	35	••	34.9	34.8	34.7	.0550	35	••	1495.9	1495.0	1493.9	.4753	35
2500	••	2.6	2.1	1.9	.1540	27	••	34.9	34.8	34.7	.0580	27	••	1502.3	1500.4	1499.3	.6402	27
3000	••	2.1	1.8	1.7	.0928	21	••	34.8	34.7	34.6	.0561	21	••	1509.0	1507.6	1507.1	.4516	21
4000	••	1.7	1.6	1.6	.0577	3	••	34.7	34.7	34.7	.0000	3	••	1524.5	1524.3	1524.1	.2082	3

DATA IGNORED - IN CONTROL MODE

PROVINCE 5 OCT – NOV

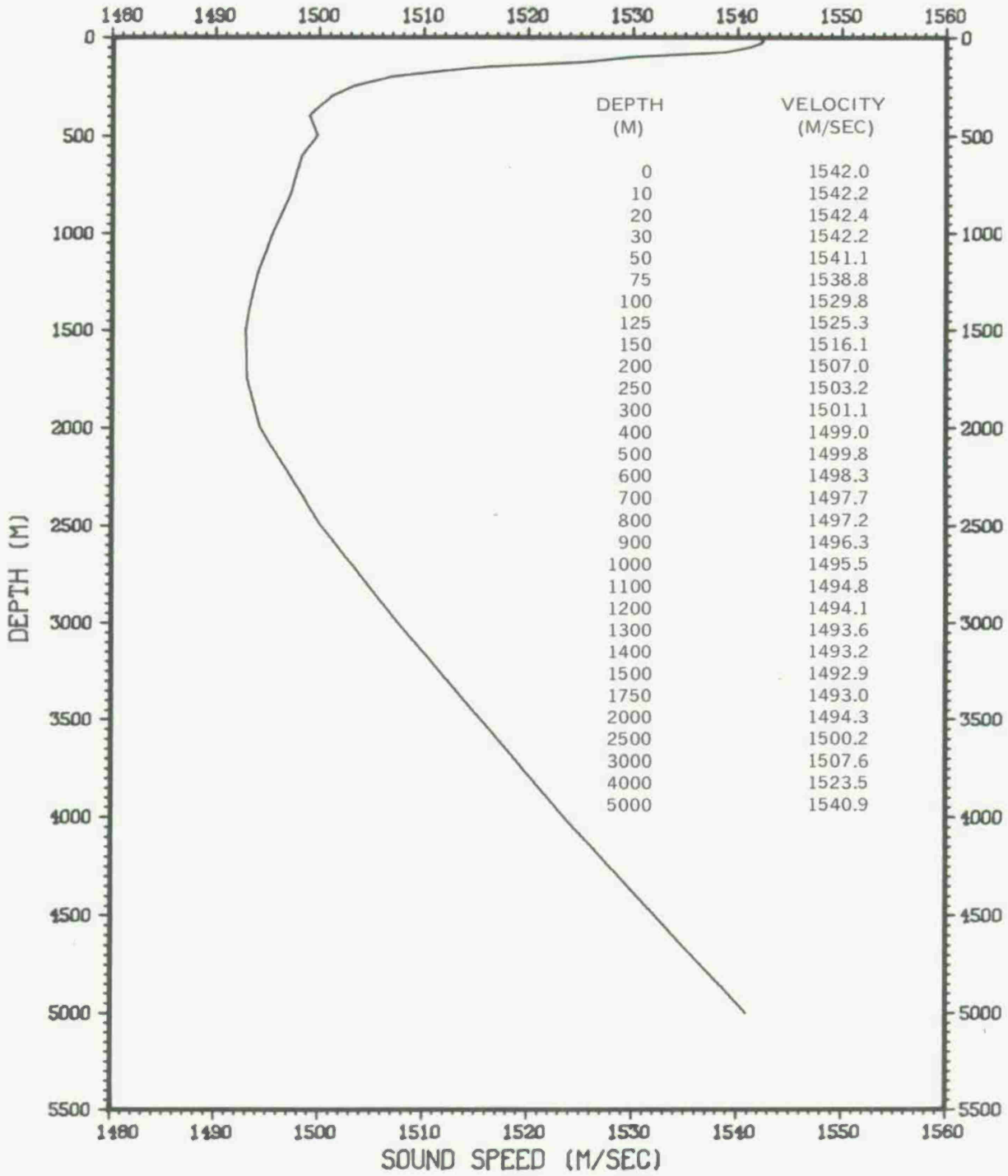


DEPTH (M)	VELOCITY (M/SEC)
0	1542.5
10	1542.0
20	1542.1
30	1541.6
50	1540.1
75	1538.9
100	1527.4
125	1520.4
150	1514.1
200	1508.0
250	1504.2
300	1502.5
400	1501.8
500	1501.1
600	1500.6
700	1500.5
800	1500.1
900	1498.7
1000	1497.2
1100	1496.1
1200	1495.1
1300	1494.4
1400	1493.9
1500	1493.5
1750	1493.4
2000	1495.4
2500	1500.8
3000	1507.6
4000	1524.5
5000	1543.5

PROVINCE 6 DEC – FEB

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	28.6	28.1	27.6	.3552	7	35.3	35.0	34.6	.2795	7	1543.1	1541.8	1540.3	.9144	7
10	28.5	28.0	27.5	.3457	7	35.3	35.0	34.6	.2795	7	1543.2	1541.7	1540.3	.8655	7
20	28.5	27.8	26.4	.7020	7	35.3	35.0	34.7	.2637	7	1543.3	1541.4	1538.6	1.5438	7
30	28.4	27.3	24.7	1.2130	7	35.4	35.1	34.8	.2478	7	1543.4	1540.7	1534.9	2.7409	7
50	28.2	26.2	21.5	2.1718	7	35.5	35.2	35.0	.1718	7	1543.3	1538.6	1527.1	5.2595	7
75	27.0	24.1	18.5	2.9585	7	35.4	35.3	35.2	.0900	7	1540.9	1534.1	1519.4	7.4837	7
100	23.3	20.2	15.5	2.6642	7	35.4	35.3	35.1	.1113	7	1532.8	1524.4	1510.7	7.5167	7
125	20.3	17.8	14.6	2.1569	7	35.3	35.2	35.1	.0787	7	1525.3	1518.1	1508.2	6.4940	7
150	17.1	15.9	13.8	1.4829	7	35.3	35.2	35.1	.0577	7	1516.5	1512.8	1505.9	4.7246	7
200	15.4	14.3	12.4	1.1238	7	35.3	35.2	35.0	.0976	7	1512.1	1508.5	1502.0	3.7660	7
250	13.9	12.8	11.7	.8602	7	35.2	35.1	35.0	.0816	7	1508.2	1504.4	1500.4	2.9391	7
300	12.3	11.8	11.0	.5014	7	35.1	35.1	35.0	.0488	7	1503.6	1501.7	1498.8	1.8493	7
400	11.3	10.6	9.7	.5345	7	35.1	35.0	34.9	.0900	7	1501.6	1499.2	1495.5	2.0684	7
500	10.4	10.0	8.9	.5640	7	35.1	35.0	34.8	.1155	7	1500.2	1498.6	1494.3	2.1900	7
600	9.9	9.4	7.9	.7081	7	35.2	35.1	34.8	.1380	7	1500.0	1498.1	1492.0	2.8676	7
700	9.6	8.9	7.6	.6499	7	35.3	35.1	34.8	.1676	7	1500.7	1497.9	1492.7	2.6285	7
800	8.7	8.2	7.2	.5178	7	35.2	35.1	34.9	.1155	7	1498.8	1496.9	1493.0	2.0313	7
900	8.1	7.6	6.7	.4756	7	35.2	35.1	34.9	.0976	7	1498.1	1496.1	1492.6	1.9313	7
1000	7.3	6.9	6.3	.3764	6	35.1	35.0	34.9	.0816	6	1496.7	1495.1	1492.5	1.5769	6
1100	6.8	6.4	6.0	.2858	6	35.1	35.0	34.9	.0753	6	1496.5	1494.9	1492.9	1.3064	6
1200	6.3	5.9	5.6	.2828	6	35.0	35.0	34.9	.0516	6	1495.9	1494.5	1493.3	1.0982	6
1300	5.6	5.3	5.2	.1643	6	35.0	34.9	34.9	.0516	6	1494.7	1493.9	1493.1	.6282	6
1400	5.0	4.9	4.8	.0894	5	34.9	34.9	34.9	.0000	5	1494.2	1493.4	1493.0	.4712	5
1500	4.6	4.4	4.3	.1304	5	34.9	34.9	34.8	.0447	5	1493.9	1493.2	1492.6	.5225	5
1750	3.6	3.4	3.3	.1291	4	34.8	34.8	34.8	.0000	4	1494.1	1493.4	1492.9	.5500	4
2000	2.8	2.7	2.6	.1000	3	34.8	34.8	34.8	.0000	3	1494.7	1494.4	1493.9	.4359	3
2500	2.0	2.0	2.0	.0000	2	34.7	34.7	34.7	.0000	2	1500.0	1499.9	1499.8	.1414	2
3000	1.8	1.7	1.7	.0707	2	34.7	34.7	34.7	.0000	2	1507.5	1507.4	1507.3	.1414	2
4000	1.5	1.5	1.5	.0000	1	34.7	34.7	34.7	.0000	1	1523.5	1523.5	1523.5	.0000	1

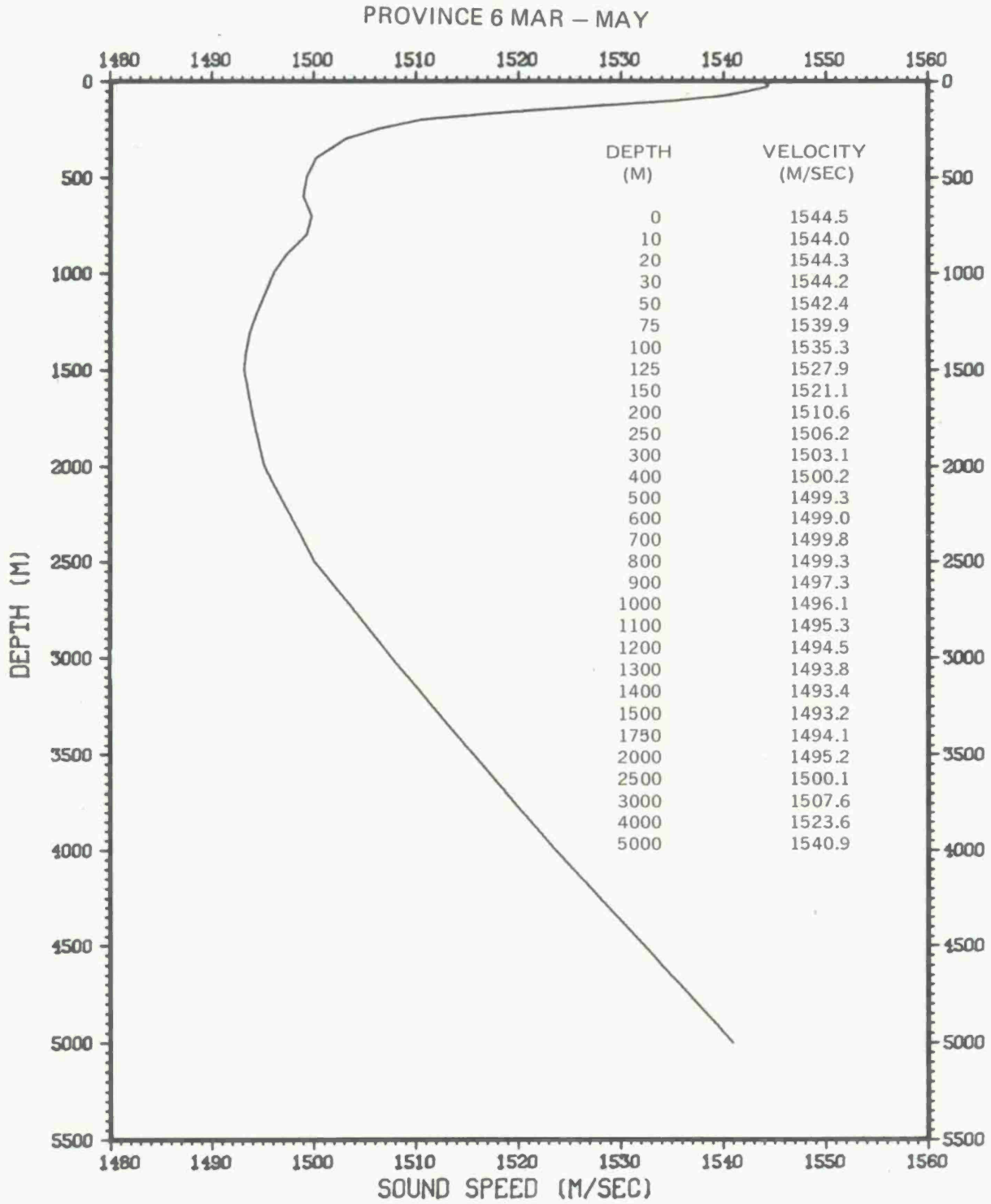
PROVINCE 6 DEC – FEB



DEPTH (M)	VELOCITY (M/SEC)
0	1542.0
10	1542.2
20	1542.4
30	1542.2
50	1541.1
75	1538.8
100	1529.8
125	1525.3
150	1516.1
200	1507.0
250	1503.2
300	1501.1
400	1499.0
500	1499.8
600	1498.3
700	1497.7
800	1497.2
900	1496.3
1000	1495.5
1100	1494.8
1200	1494.1
1300	1493.6
1400	1493.2
1500	1492.9
1750	1493.0
2000	1494.3
2500	1500.2
3000	1507.6
4000	1523.5
5000	1540.9

PROVINCE 6 MAR – MAY

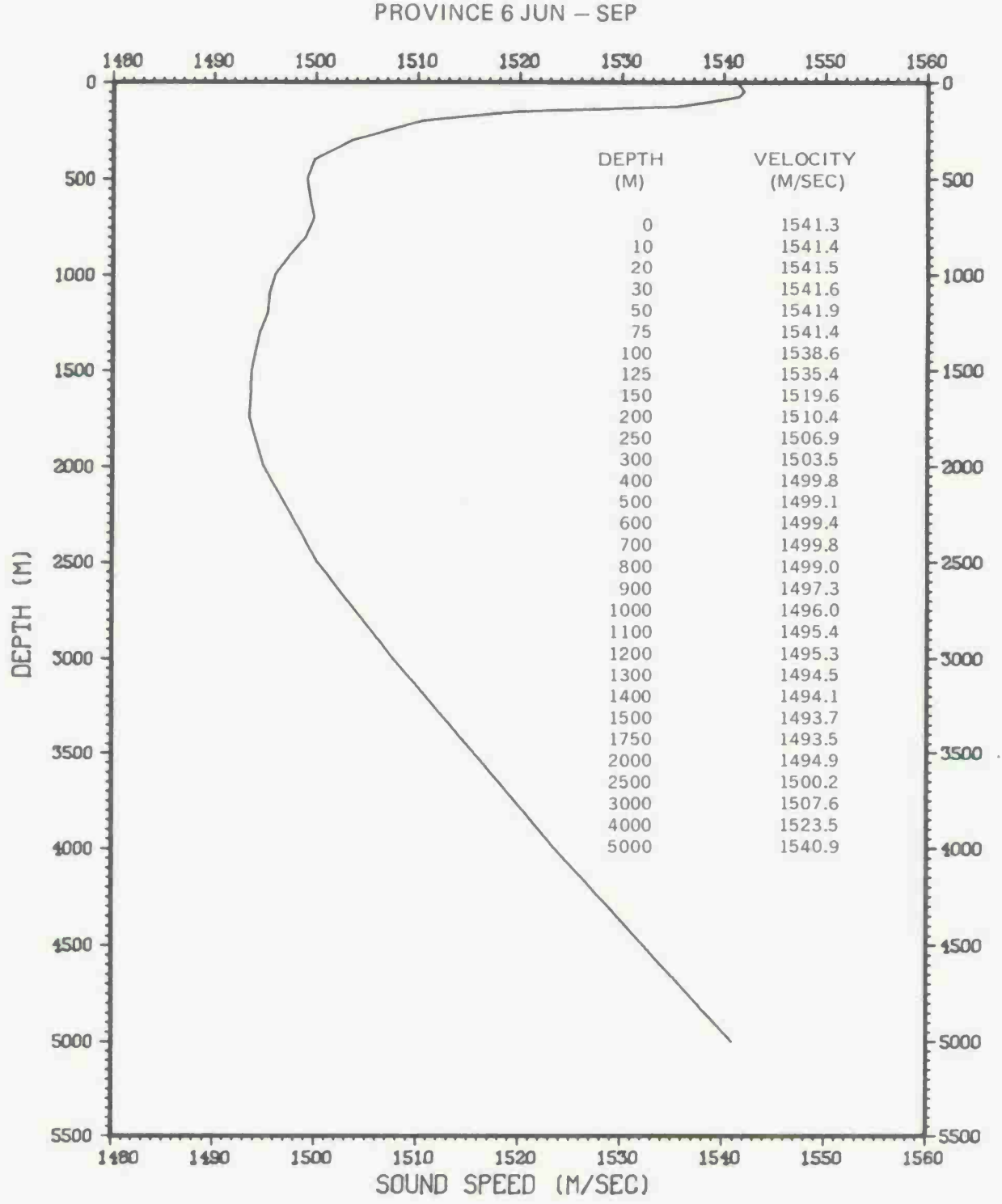
DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	30.9	29.1	27.7	.5292	34	35.5	35.0	34.2	.2511	34	1547.A	1544.0	1541.2	1.1378	34
10	29.7	29.0	27.7	.4351	34	35.5	35.0	34.3	.2428	34	1545.5	1543.9	1541.5	.9273	34
20	29.7	28.9	27.5	.4292	34	35.5	35.1	34.4	.2453	34	1545.3	1543.9	1541.2	.9159	34
30	29.8	28.7	27.0	.5214	34	35.6	35.1	34.5	.2478	34	1545.3	1543.7	1540.3	1.0594	34
50	28.9	27.9	26.3	.7288	34	35.7	35.3	34.9	.2379	34	1544.6	1542.5	1539.3	1.4644	34
75	28.2	26.3	23.2	1.2822	34	36.3	35.5	35.1	.2437	34	1543.8	1539.5	1532.1	3.0228	34
100	26.6	23.4	18.0	1.8982	34	35.9	35.5	35.1	.1793	34	1541.2	1532.9	1518.6	4.8950	34
125	23.3	20.1	16.1	1.7242	34	35.7	35.4	35.2	.1268	34	1533.2	1524.6	1513.0	4.8439	34
150	20.3	17.6	13.6	1.3803	34	35.5	35.3	35.2	.0793	34	1526.1	1518.0	1505.6	4.1794	34
200	16.2	14.6	12.9	.7696	34	35.4	35.2	35.1	.0576	34	1514.7	1509.6	1504.0	2.4762	34
250	14.1	13.0	11.8	.5320	34	35.3	35.2	35.0	.0666	34	1509.0	1505.1	1500.8	1.8549	34
300	12.9	11.9	10.9	.4233	34	35.2	35.1	35.0	.0606	34	1505.8	1502.1	1498.6	1.5130	34
400	11.4	10.8	10.1	.2900	34	35.2	35.1	35.0	.0591	34	1502.0	1500.0	1497.4	1.0609	34
500	10.7	10.2	9.5	.2870	34	35.2	35.1	35.0	.0626	34	1501.3	1499.5	1496.8	1.0983	34
600	10.4	9.8	8.9	.3358	34	35.3	35.1	35.0	.0743	34	1502.1	1499.5	1496.1	1.2839	34
700	9.8	9.2	8.3	.2904	34	35.3	35.2	35.0	.0719	34	1501.6	1499.3	1495.4	1.1776	34
800	9.0	8.6	7.7	.2985	34	35.3	35.1	35.0	.0748	34	1500.2	1498.4	1495.1	1.1623	34
900	8.6	7.9	7.3	.2743	34	35.2	35.1	35.0	.0570	34	1500.4	1497.5	1495.2	1.1239	34
1000	7.9	7.2	6.6	.2908	34	35.2	35.1	34.9	.0592	34	1499.3	1496.4	1493.8	1.1877	34
1100	7.3	6.6	6.0	.3212	33	35.2	35.0	34.9	.0684	33	1498.6	1495.6	1493.3	1.3373	33
1200	6.6	6.1	5.5	.2777	20	35.1	35.0	34.9	.0447	20	1497.5	1495.1	1492.9	1.1712	20
1300	6.0	5.5	5.1	.2434	20	35.0	35.0	34.9	.0503	20	1496.5	1494.6	1492.9	.9819	20
1400	5.5	5.0	4.7	.2274	15	35.0	34.9	34.8	.0458	15	1496.0	1494.0	1492.8	.9022	15
1500	4.8	4.5	4.3	.1656	15	34.9	34.9	34.8	.0352	15	1495.1	1493.5	1492.7	.7424	15
1750	3.7	3.5	3.2	.1589	15	34.9	34.8	34.8	.0414	15	1494.5	1493.5	1492.2	.6700	15
2000	3.0	2.8	2.6	.1027	14	34.8	34.8	34.8	.0000	14	1495.9	1494.8	1494.0	.4995	14
2500	2.2	2.1	2.0	.0535	14	34.8	34.8	34.7	.0469	14	1500.6	1500.2	1499.8	.2392	14
3000	2.0	1.8	1.8	.0622	12	34.8	34.7	34.7	.0389	12	1508.5	1507.7	1507.4	.2843	12
4000	1.5	1.5	1.4	.0516	6	34.7	34.7	34.7	.0000	6	1523.8	1523.6	1523.5	.1095	6



DEPTH (M)	VELOCITY (M/SEC)
0	1544.5
10	1544.0
20	1544.3
30	1544.2
50	1542.4
75	1539.9
100	1535.3
125	1527.9
150	1521.1
200	1510.6
250	1506.2
300	1503.1
400	1500.2
500	1499.3
600	1499.0
700	1499.8
800	1499.3
900	1497.3
1000	1496.1
1100	1495.3
1200	1494.5
1300	1493.8
1400	1493.4
1500	1493.2
1750	1494.1
2000	1495.2
2500	1500.1
3000	1507.6
4000	1523.6
5000	1540.9

PROVINCE 6 JUN – SEP

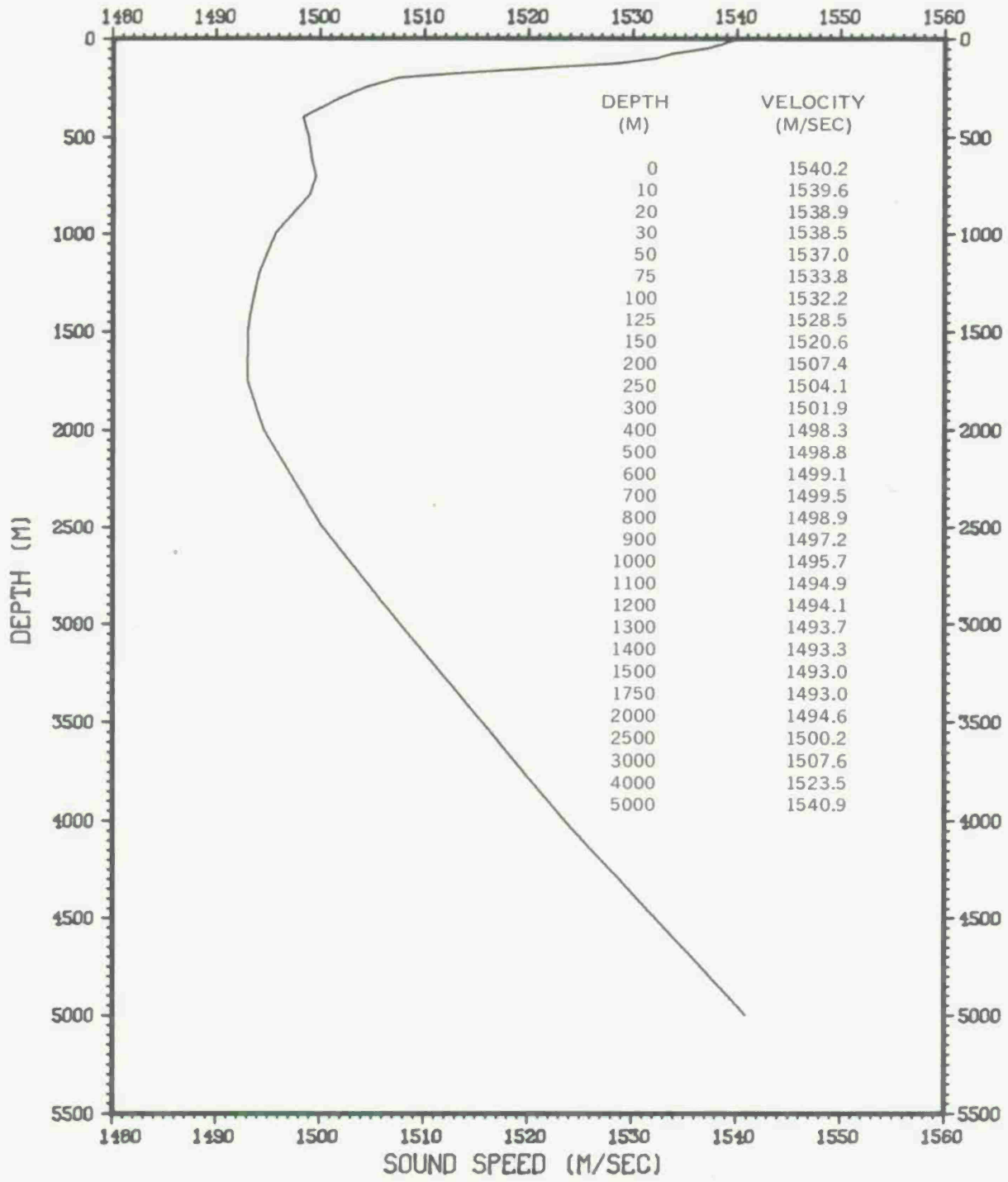
DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	29.5	27.0	25.0	1.1860	34	35.9	35.4	34.8	.2339	34	1544.8	1539.8	1535.5	2.5562	34
10	29.4	27.0	25.0	1.1732	34	35.9	35.3	34.9	.2178	34	1544.9	1539.8	1535.7	2.5122	34
20	29.3	26.9	24.9	1.1586	34	36.0	35.4	34.9	.2281	34	1545.0	1539.9	1535.3	2.5122	34
30	29.2	26.8	24.4	1.1949	34	36.0	35.4	34.9	.2270	34	1544.9	1539.8	1534.3	2.5876	34
50	28.9	26.4	21.8	1.4837	34	36.0	35.4	34.9	.2185	34	1544.6	1539.3	1528.2	3.4260	34
75	27.8	25.4	18.6	1.9420	34	36.0	35.4	35.1	.1800	34	1543.1	1537.4	1519.9	4.8094	34
100	27.1	23.5	17.5	2.7094	34	35.9	35.5	35.2	.1875	34	1542.3	1533.1	1517.2	7.0291	34
125	25.4	20.9	15.4	3.1311	34	35.9	35.4	35.2	.1633	34	1538.7	1526.8	1511.2	8.5629	34
150	24.0	18.7	13.8	3.0836	34	35.8	35.3	35.1	.1513	34	1535.6	1520.9	1506.6	8.7845	34
200	19.3	15.2	13.0	1.8066	34	35.4	35.2	35.1	.0710	34	1523.7	1511.6	1504.6	5.5986	34
250	15.3	13.3	11.7	.9685	34	35.4	35.2	35.1	.0729	34	1512.7	1506.3	1500.8	3.2149	34
300	13.6	12.2	11.2	.6634	34	35.4	35.1	35.0	.0843	34	1508.0	1503.1	1499.7	2.2968	34
400	11.8	10.9	10.2	.4179	34	35.4	35.1	35.0	.0914	34	1503.4	1500.1	1497.6	1.5205	34
500	10.5	10.1	9.6	.2657	34	35.3	35.1	34.9	.0925	34	1500.6	1499.0	1497.0	.9943	34
600	10.2	9.6	8.8	.3418	34	35.3	35.1	34.9	.0969	34	1501.4	1498.9	1495.6	1.3641	34
700	9.8	9.1	8.2	.3998	34	35.3	35.1	34.9	.0954	34	1501.2	1498.9	1495.2	1.5441	34
800	9.1	8.5	7.7	.3652	34	35.3	35.1	34.9	.0922	34	1500.5	1498.0	1494.7	1.4673	34
900	8.4	7.8	6.8	.3896	34	35.2	35.1	34.9	.0830	34	1499.5	1497.0	1493.0	1.6123	34
1000	8.0	7.2	6.1	.3801	32	35.2	35.1	34.8	.0759	32	1499.7	1496.2	1491.8	1.5628	32
1100	7.2	6.6	5.4	.3782	30	35.1	35.0	34.8	.0817	30	1498.1	1495.6	1490.5	1.6162	30
1200	6.7	6.1	5.5	.2774	24	35.1	35.0	34.9	.0590	24	1497.9	1495.3	1492.9	1.1688	24
1300	6.0	5.5	5.0	.2810	22	35.1	35.0	34.9	.0581	22	1496.5	1494.5	1492.4	1.1865	22
1400	5.4	5.0	4.4	.2689	22	35.0	34.9	34.8	.0588	22	1495.8	1494.1	1491.6	1.1596	22
1500	4.9	4.5	4.0	.2256	21	35.0	34.9	34.8	.0498	21	1495.5	1493.7	1491.5	1.0062	21
1750	3.8	3.5	3.1	.1895	21	34.9	34.8	34.8	.0436	21	1494.7	1493.5	1491.9	.8261	21
2000	3.0	2.8	2.6	.1284	21	34.8	34.8	34.8	.0000	21	1495.7	1494.9	1493.8	.5912	21
2500	2.3	2.1	2.0	.0775	21	34.8	34.8	34.7	.0436	21	1501.2	1500.3	1499.7	.3554	21
3000	1.8	1.8	1.7	.0410	20	34.8	34.7	34.7	.0366	20	1507.8	1507.5	1507.3	.1504	20
4000	1.5	1.4	1.4	.0493	17	34.7	34.7	34.7	.0000	17	1523.8	1523.5	1523.2	.1458	17
5000	1.3	1.3	1.3	.0000	2	34.7	34.7	34.7	.0000	2	1540.9	1540.8	1540.8	.0707	2


PROVINCE 6 JUN – SEP
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1541.3
10 1541.4
20 1541.5
30 1541.6
50 1541.9
75 1541.4
100 1538.6
125 1535.4
150 1519.6
200 1510.4
250 1506.9
300 1503.5
400 1499.8
500 1499.1
600 1499.4
700 1499.8
800 1499.0
900 1497.3
1000 1496.0
1100 1495.4
1200 1495.3
1300 1494.5
1400 1494.1
1500 1493.7
1750 1493.5
2000 1494.9
2500 1500.2
3000 1507.6
4000 1523.5
5000 1540.9

PROVINCE 6 OCT – NOV

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0 ••	27.5	27.1	26.8	.4950	2 ••	35.6	35.5	35.4	.1414	2 ••	1541.1	1540.2	1539.4	1.2021	2
10 ••	27.0	26.8	26.6	.2828	2 ••	35.4	35.4	35.4	.0000	2 ••	1540.0	1539.6	1539.2	.5657	2
20 ••	26.5	26.5	26.4	.0707	2 ••	35.4	35.4	35.4	.0000	2 ••	1539.0	1538.9	1538.8	.1414	2
30 ••	26.3	26.1	26.0	.2121	2 ••	35.5	35.4	35.4	.0707	2 ••	1538.8	1538.5	1538.2	.4243	2
50 ••	25.9	25.4	24.9	.7071	2 ••	35.4	35.4	35.4	.0000	2 ••	1538.1	1537.0	1535.9	1.5556	2
75 ••	24.2	23.9	23.6	.4243	2 ••	35.4	35.3	35.3	.0707	2 ••	1534.5	1533.8	1533.1	.9899	2
100 ••	23.7	23.1	22.5	.8485	2 ••	35.4	35.3	35.3	.0707	2 ••	1533.6	1532.2	1530.8	1.9799	2
125 ••	22.8	21.5	20.2	1.8385	2 ••	35.4	35.3	35.3	.0707	2 ••	1531.7	1528.5	1525.3	4.5255	2
150 ••	20.6	18.5	16.5	2.8991	2 ••	35.4	35.3	35.2	.1414	2 ••	1526.6	1520.6	1514.7	8.4146	2
200 ••	14.6	13.9	13.3	.9192	2 ••	35.2	35.2	35.2	.0000	2 ••	1509.6	1507.4	1505.3	3.0406	2
250 ••	13.0	12.7	12.4	.4243	2 ••	35.1	35.1	35.1	.0000	2 ••	1505.0	1504.1	1503.3	1.2021	2
300 ••	12.0	11.8	11.6	.2828	2 ••	35.1	35.1	35.1	.0000	2 ••	1502.5	1501.9	1501.3	.8485	2
400 ••	10.8	10.3	9.9	.6364	2 ••	35.0	35.0	35.0	.0000	2 ••	1499.9	1498.3	1496.7	2.2627	2
500 ••	10.2	10.0	9.9	.2121	2 ••	35.1	35.0	35.0	.0707	2 ••	1499.4	1498.8	1498.3	.7778	2
600 ••	9.8	9.6	9.5	.2121	2 ••	35.1	35.1	35.1	.0000	2 ••	1499.5	1499.1	1498.7	.5657	2
700 ••	9.5	9.3	9.1	.2828	2 ••	35.2	35.1	35.1	.0707	2 ••	1500.4	1499.5	1498.7	1.2021	2
800 ••	8.9	8.7	8.5	.2828	2 ••	35.2	35.1	35.1	.0707	2 ••	1499.8	1498.9	1498.1	1.2021	2
900 ••	8.0	7.8	7.6	.2828	2 ••	35.1	35.1	35.1	.0000	2 ••	1498.0	1497.2	1496.5	1.0607	2
1000 ••	7.4	7.0	6.7	.4950	2 ••	35.1	35.0	35.0	.0707	2 ••	1497.2	1495.7	1494.2	2.1213	2
1100 ••	6.7	6.4	6.2	.3536	2 ••	35.0	35.0	35.0	.0000	2 ••	1495.8	1494.9	1494.0	1.2728	2
1200 ••	5.9	5.8	5.7	.1414	2 ••	35.0	34.9	34.9	.0707	2 ••	1494.5	1494.1	1493.8	.4950	2
1300 ••	5.4	5.3	5.3	.0707	2 ••	34.9	34.9	34.9	.0000	2 ••	1493.9	1493.7	1493.5	.2828	2
1400 ••	4.9	4.8	4.8	.0707	2 ••	34.9	34.9	34.9	.0000	2 ••	1493.4	1493.3	1493.2	.1414	2
1500 ••	4.4	4.3	4.3	.0707	2 ••	34.9	34.9	34.9	.0000	2 ••	1493.2	1493.0	1492.9	.2121	2
1750 ••	3.4	3.4	3.4	.0000	1 ••	34.8	34.8	34.8	.0000	1 ••	1493.0	1493.0	1493.0	.0000	1

PROVINCE 6 OCT – NOV



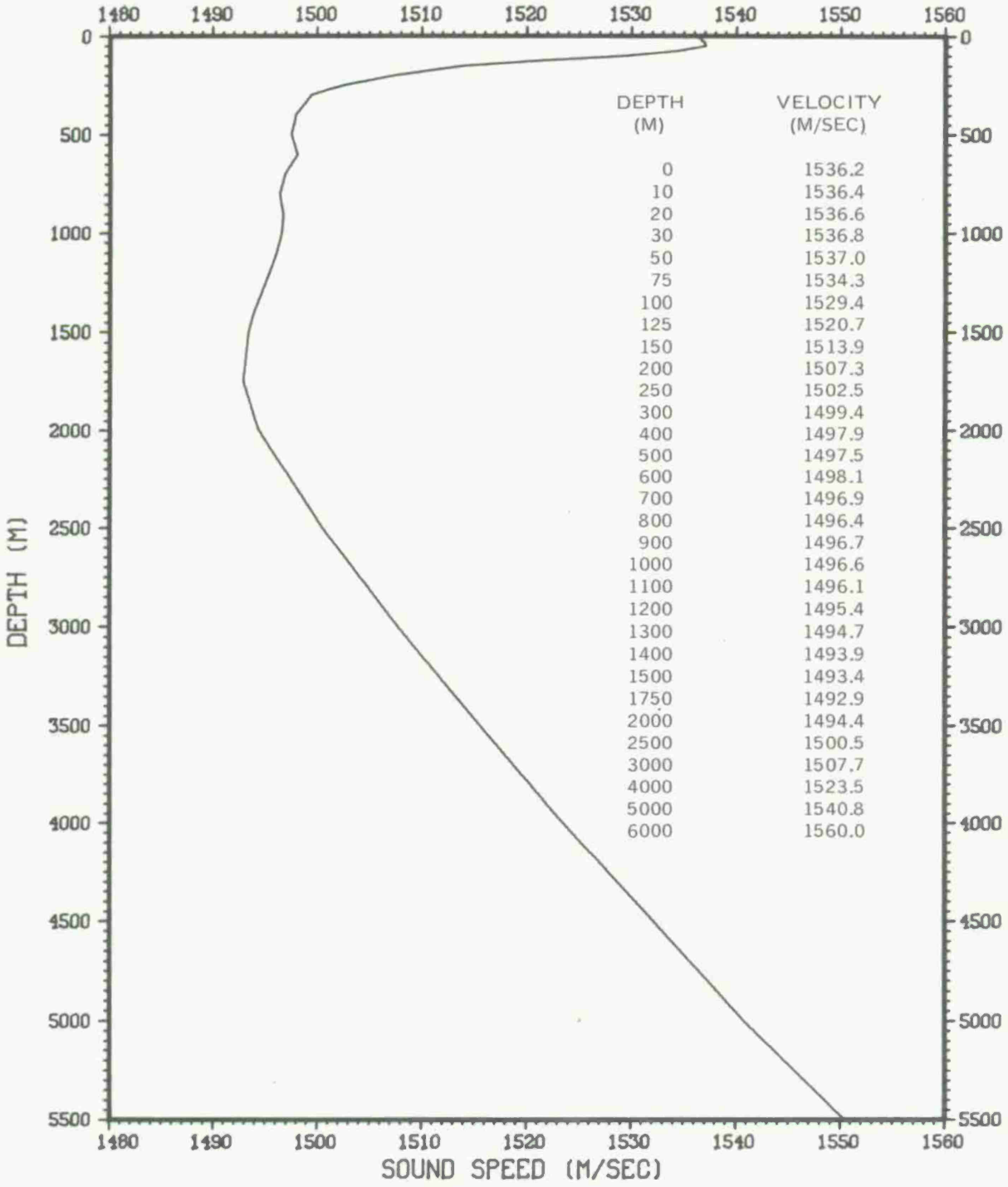
DEPTH (M)	VELOCITY (M/SEC)
0	1540.2
10	1539.6
20	1538.9
30	1538.5
50	1537.0
75	1533.8
100	1532.2
125	1528.5
150	1520.6
200	1507.4
250	1504.1
300	1501.9
400	1498.3
500	1498.8
600	1499.1
700	1499.5
800	1498.9
900	1497.2
1000	1495.7
1100	1494.9
1200	1494.1
1300	1493.7
1400	1493.3
1500	1493.0
1750	1493.0
2000	1494.6
2500	1500.2
3000	1507.6
4000	1523.5
5000	1540.9

PROVINCE 7 DEC – FEB

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0 ••	27.2	25.5	24.7	.4351	26 ••	35.6	35.4	35.0	.1366	26 ••	1540.1	1536.4	1534.6	.9415	26
10 ••	27.5	25.4	24.7	.4891	26 ••	35.6	35.4	35.0	.1377	26 ••	1540.8	1536.5	1534.8	1.0407	26
20 ••	27.1	25.4	24.6	.4623	26 ••	35.6	35.4	35.1	.1266	26 ••	1540.2	1536.5	1534.7	1.0334	26
30 ••	27.0	25.2	24.2	.5069	26 ••	35.6	35.4	35.2	.1123	26 ••	1540.2	1536.4	1533.9	1.1753	26
50 ••	27.0	24.8	23.3	.8954	26 ••	35.6	35.4	35.2	.1164	26 ••	1540.6	1535.8	1532.0	2.1247	26
75 ••	27.1	23.2	19.0	1.9995	26 ••	35.6	35.4	35.3	.1158	26 ••	1541.3	1532.0	1520.9	5.1593	26
100 ••	25.7	20.9	14.4	2.7726	26 ••	35.6	35.4	35.2	.1104	26 ••	1538.7	1526.2	1507.4	7.6791	26
125 ••	23.8	17.9	13.9	2.2522	26 ••	35.5	35.3	35.2	.0834	26 ••	1534.6	1518.4	1506.1	6.4565	26
150 ••	21.2	15.8	13.4	1.9964	26 ••	35.5	35.2	35.2	.0679	26 ••	1528.5	1512.3	1504.7	6.0127	26
200 ••	15.0	13.2	12.3	.5907	26 ••	35.2	35.2	35.1	.0504	26 ••	1511.0	1505.1	1501.9	2.0039	26
250 ••	13.0	12.0	11.1	.4910	26 ••	35.2	35.1	35.0	.0549	26 ••	1505.2	1501.6	1498.2	1.7274	26
300 ••	12.1	11.2	10.3	.4425	26 ••	35.2	35.0	34.9	.0588	26 ••	1502.9	1499.5	1496.4	1.5896	26
400 ••	11.5	10.4	9.2	.4112	26 ••	35.2	35.0	34.8	.0744	26 ••	1502.3	1498.3	1493.7	1.5294	26
500 ••	10.8	9.7	9.0	.4253	24 ••	35.2	35.0	34.9	.0776	24 ••	1501.4	1497.6	1494.6	1.6144	24
600 ••	10.5	9.1	8.7	.3933	24 ••	35.4	35.0	34.9	.1062	24 ••	1502.5	1497.1	1495.2	1.5223	24
700 ••	9.2	8.6	8.3	.2105	24 ••	35.2	35.0	34.9	.0608	24 ••	1499.1	1496.8	1495.7	.8063	24
800 ••	8.6	8.1	7.8	.1903	24 ••	35.1	35.0	34.9	.0532	24 ••	1498.4	1496.5	1495.6	.7086	24
900 ••	8.1	7.6	7.4	.1414	24 ••	35.1	35.0	34.9	.0509	24 ••	1498.2	1496.4	1495.3	.5771	24
1000 ••	7.7	7.2	6.6	.2066	23 ••	35.1	35.0	34.9	.0302	23 ••	1498.1	1496.2	1494.0	.7815	23
1100 ••	7.2	6.7	6.1	.2662	23 ••	35.0	35.0	34.9	.0209	23 ••	1498.1	1495.9	1493.6	1.0834	23
1200 ••	6.7	6.2	5.6	.3011	23 ••	35.0	35.0	34.8	.0573	23 ••	1497.5	1495.5	1493.2	1.2049	23
1300 ••	6.0	5.6	5.1	.2334	23 ••	35.0	34.9	34.8	.0458	23 ••	1496.6	1494.8	1492.7	.9968	23
1400 ••	5.6	5.0	4.6	.2052	23 ••	34.9	34.9	34.8	.0288	23 ••	1496.4	1494.1	1492.2	.8622	23
1500 ••	4.8	4.4	4.1	.1289	21 ••	34.9	34.9	34.8	.0512	21 ••	1494.7	1493.3	1492.0	.5237	21
1750 ••	3.5	3.3	3.1	.1281	13 ••	34.8	34.8	34.7	.0277	13 ••	1493.5	1492.9	1492.0	.5142	13
2000 ••	2.9	2.8	2.6	.1165	12 ••	34.8	34.8	34.7	.0289	12 ••	1495.2	1494.7	1494.0	.4196	12
2500 ••	2.2	2.1	2.0	.0775	11 ••	34.8	34.7	34.7	.0505	11 ••	1500.8	1500.3	1499.8	.3267	11
3000 ••	1.9	1.8	1.7	.0789	10 ••	34.8	34.7	34.7	.0316	10 ••	1508.2	1507.5	1507.2	.3225	10
4000 ••	1.5	1.5	1.4	.0500	4 ••	34.7	34.7	34.7	.0000	4 ••	1523.7	1523.6	1523.4	.1258	4

DATA IGNORED - IN CONTROL MODE

PROVINCE 7 DEC – FEB



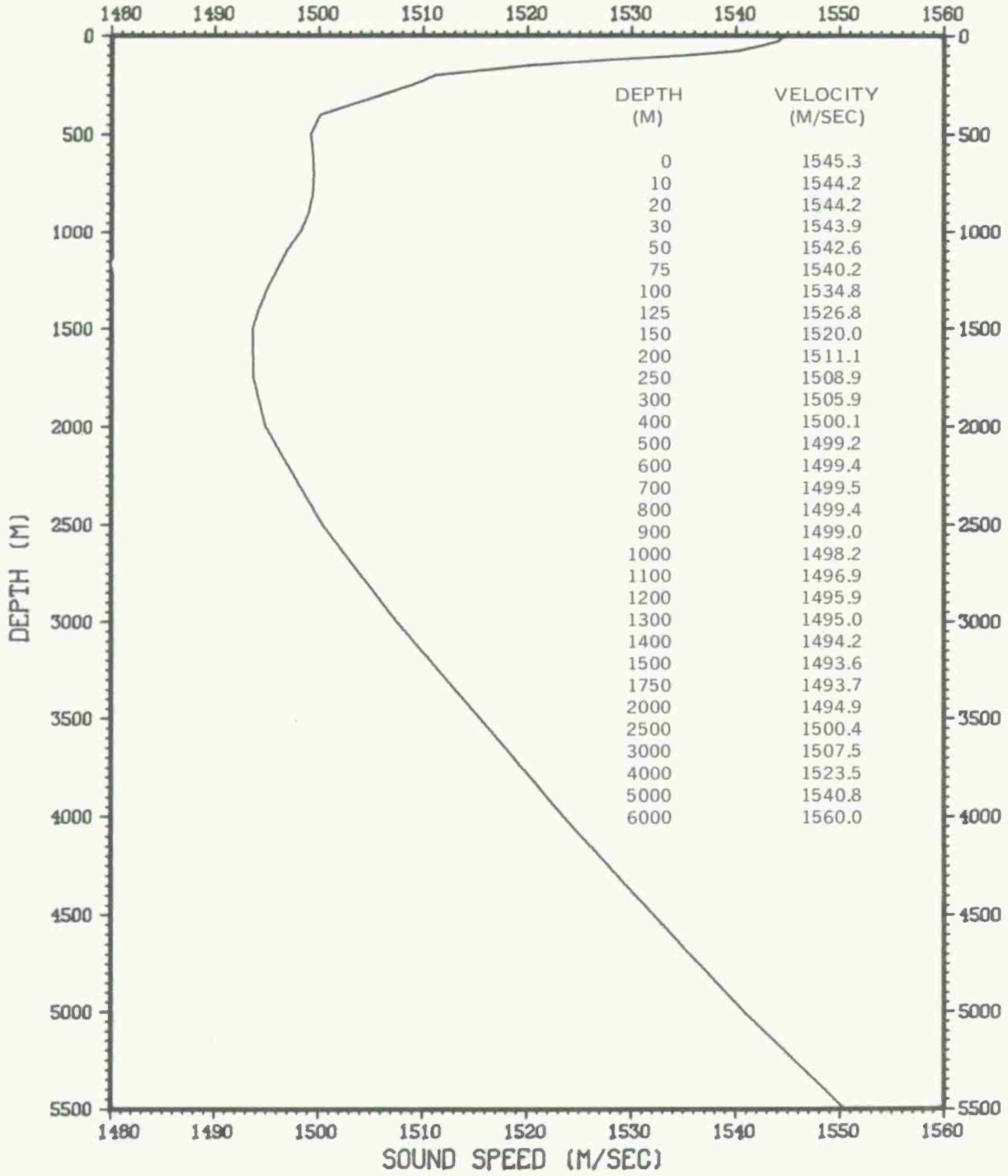
DEPTH (M)	VELOCITY (M/SEC)
0	1536.2
10	1536.4
20	1536.6
30	1536.8
50	1537.0
75	1534.3
100	1529.4
125	1520.7
150	1513.9
200	1507.3
250	1502.5
300	1499.4
400	1497.9
500	1497.5
600	1498.1
700	1496.9
800	1496.4
900	1496.7
1000	1496.6
1100	1496.1
1200	1495.4
1300	1494.7
1400	1493.9
1500	1493.4
1750	1492.9
2000	1494.4
2500	1500.5
3000	1507.7
4000	1523.5
5000	1540.8
6000	1560.0

PROVINCE 7 MAR – MAY

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0 ••	30.9	29.1	27.7	.9639	12 ••	35.5	35.3	35.1	.1128	12 ••	1547.8	1544.2	1541.5	1.9242	12
10 ••	30.0	28.9	27.6	.7025	12 ••	35.5	35.3	35.1	.1193	12 ••	1546.3	1543.9	1541.3	1.4613	12
20 ••	29.9	28.7	27.4	.7550	12 ••	35.4	35.3	35.1	.0953	12 ••	1546.3	1543.6	1541.1	1.5506	12
30 ••	29.8	28.6	27.2	.7692	12 ••	35.4	35.3	35.1	.0996	12 ••	1546.3	1543.7	1540.8	1.6054	12
50 ••	29.2	28.0	27.0	.7141	12 ••	35.5	35.4	35.2	.0996	12 ••	1545.3	1542.9	1540.8	1.4740	12
75 ••	27.8	26.4	24.9	.8158	12 ••	35.6	35.4	35.3	.0937	12 ••	1542.7	1539.8	1536.3	1.7956	12
100 ••	25.6	24.1	22.7	.8937	12 ••	35.6	35.4	35.3	.1168	12 ••	1538.2	1534.9	1531.2	2.1500	12
125 ••	22.4	21.0	19.0	.9728	12 ••	35.5	35.4	35.3	.0900	12 ••	1531.1	1527.2	1521.7	2.6507	12
150 ••	19.2	17.7	16.5	.8732	12 ••	35.4	35.3	35.2	.0577	12 ••	1522.7	1518.5	1514.8	2.5465	12
200 ••	15.8	14.8	13.6	.6137	12 ••	35.3	35.2	35.2	.0452	12 ••	1513.6	1510.2	1506.3	2.0263	12
250 ••	14.3	13.5	12.4	.5702	12 ••	35.3	35.2	35.1	.0622	12 ••	1509.6	1507.0	1503.3	1.8730	12
300 ••	13.2	12.4	11.6	.5078	12 ••	35.4	35.2	35.1	.1115	12 ••	1507.0	1504.1	1501.3	1.7868	12
400 ••	11.9	10.9	9.9	.4745	12 ••	35.4	35.1	35.0	.1115	12 ••	1504.2	1500.4	1496.6	1.7681	12
500 ••	10.8	10.1	9.4	.3801	12 ••	35.3	35.1	35.0	.0996	12 ••	1501.9	1499.2	1496.3	1.5064	12
600 ••	10.1	9.6	8.9	.3473	12 ••	35.2	35.1	35.0	.0835	12 ••	1500.8	1499.1	1496.4	1.3670	12
700 ••	9.6	9.1	8.5	.3888	12 ••	35.3	35.1	35.0	.1073	12 ••	1500.7	1498.8	1496.3	1.5090	12
800 ••	9.3	8.6	8.1	.4070	12 ••	35.3	35.1	35.0	.1087	12 ••	1501.1	1498.6	1496.5	1.6376	12
900 ••	8.7	8.0	7.5	.4033	12 ••	35.2	35.1	35.0	.0866	12 ••	1500.6	1497.9	1495.8	1.5980	12
1000 ••	7.9	7.4	6.9	.3393	12 ••	35.2	35.1	35.0	.0793	12 ••	1499.2	1497.0	1495.2	1.3514	12
1100 ••	7.1	6.7	6.3	.2539	12 ••	35.1	35.0	35.0	.0515	12 ••	1497.6	1496.1	1494.5	1.0183	12
1200 ••	6.5	6.2	5.7	.2279	9 ••	35.0	35.0	35.0	.0000	9 ••	1497.0	1495.7	1493.8	.9103	9
1300 ••	6.0	5.6	5.2	.2911	7 ••	35.0	35.0	34.9	.0378	7 ••	1496.7	1494.9	1493.2	1.2662	7
1400 ••	5.6	5.1	4.7	.3271	5 ••	35.0	34.9	34.9	.0447	5 ••	1496.7	1494.5	1492.8	1.4206	5
1500 ••	5.1	4.6	4.2	.3271	5 ••	34.9	34.9	34.9	.0000	5 ••	1496.4	1494.1	1492.6	1.4276	5
1750 ••	3.7	3.5	3.4	.1258	4 ••	34.9	34.8	34.8	.0500	4 ••	1494.4	1493.7	1493.0	.5737	4
2000 ••	2.8	2.7	2.7	.0577	4 ••	34.8	34.8	34.8	.0000	4 ••	1494.9	1494.7	1494.4	.2217	4
2500 ••	2.1	2.1	2.0	.0500	4 ••	34.8	34.8	34.8	.0000	4 ••	1500.4	1500.2	1500.0	.2062	4
3000 ••	1.8	1.8	1.8	.0000	4 ••	34.8	34.7	34.7	.0500	4 ••	1507.7	1507.5	1507.4	.1500	4
4000 ••	1.5	1.5	1.4	.0707	2 ••	34.7	34.7	34.7	.0000	2 ••	1523.6	1523.5	1523.4	.1414	2

DATA IGNORED - IN CONTROL MODE

PROVINCE 7 MAR – MAY



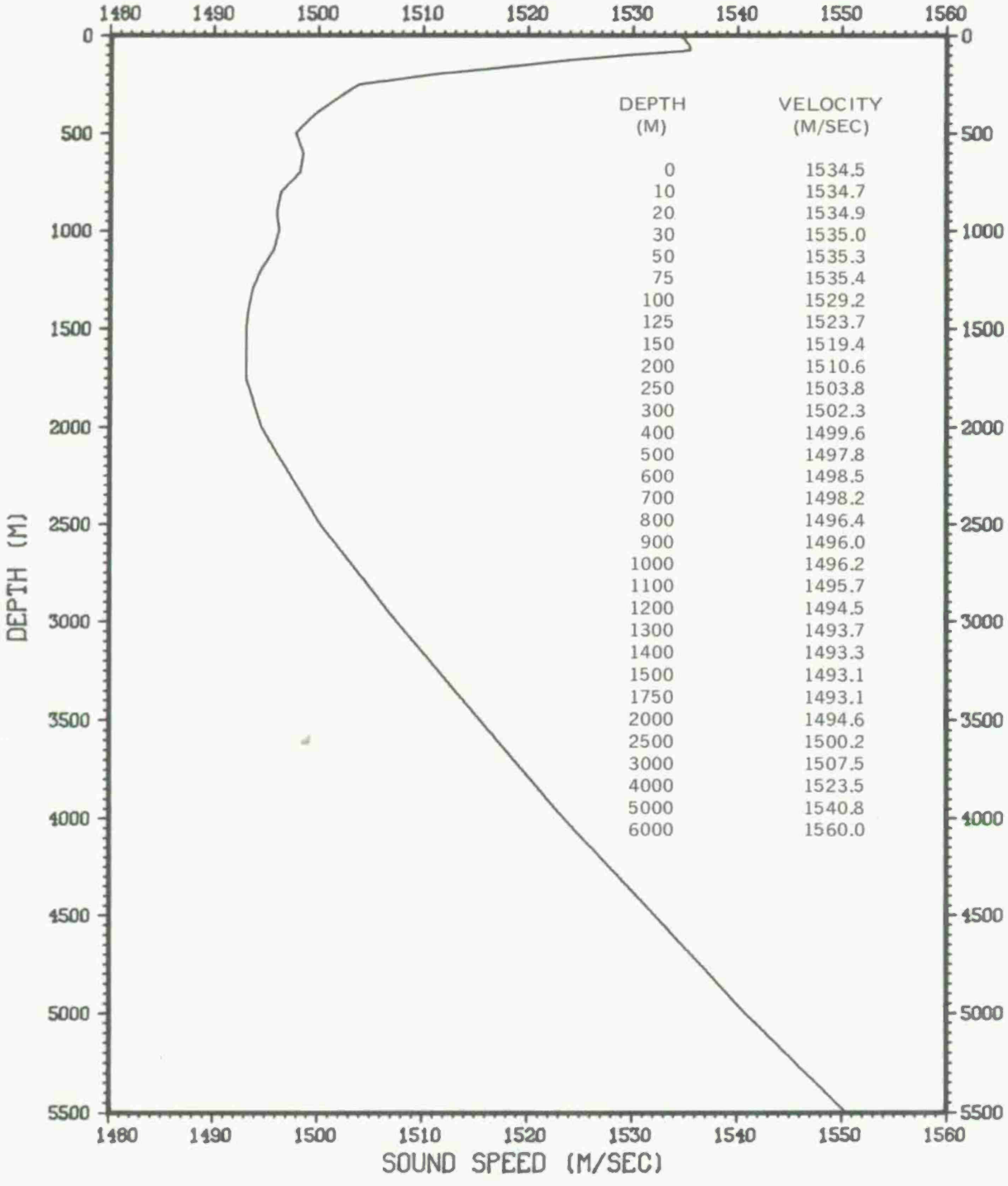
DEPTH (M)	VELOCITY (M/SEC)
0	1545.3
10	1544.2
20	1544.2
30	1543.9
50	1542.6
75	1540.2
100	1534.8
125	1526.8
150	1520.0
200	1511.1
250	1508.9
300	1505.9
400	1500.1
500	1499.2
600	1499.4
700	1499.5
800	1499.4
900	1499.0
1000	1498.2
1100	1496.9
1200	1495.9
1300	1495.0
1400	1494.2
1500	1493.6
1750	1493.7
2000	1494.9
2500	1500.4
3000	1507.5
4000	1523.5
5000	1540.8
6000	1560.0

PROVINCE 7 JUN – SEP

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	26.9	24.9	23.7	.7638	88	35.7	35.3	35.0	.1349	88	1539.8	1535.0	1531.8	1.9066	88
10	26.9	24.9	23.7	.7577	88	35.7	35.3	35.0	.1362	88	1539.8	1535.1	1532.0	1.8843	88
20	26.8	24.9	23.4	.7480	88	35.7	35.3	34.9	.1416	88	1539.8	1535.1	1531.3	1.8927	88
30	26.8	24.8	22.9	.7668	88	35.7	35.3	35.0	.1378	88	1539.8	1535.2	1530.3	1.9323	88
50	26.7	24.7	22.0	.8321	88	35.6	35.3	35.0	.1293	88	1540.0	1535.3	1528.5	2.0811	88
75	26.2	24.3	19.9	1.0635	88	35.6	35.3	35.0	.1263	88	1539.3	1534.6	1523.4	2.6787	88
100	25.9	22.9	16.4	1.6782	88	35.6	35.3	35.1	.0983	88	1539.0	1531.7	1513.6	4.3774	88
125	24.5	20.6	14.4	2.1221	88	35.5	35.3	35.1	.0758	88	1536.0	1525.9	1507.7	5.8342	88
150	23.7	18.4	13.5	2.1107	88	35.4	35.2	35.1	.0655	88	1534.5	1520.2	1505.1	6.0163	88
200	21.7	14.7	12.0	1.6051	88	35.4	35.2	35.0	.0686	88	1530.4	1509.9	1500.7	4.9982	88
250	17.2	13.0	11.3	1.0149	87	35.4	35.1	35.0	.0701	87	1518.9	1505.0	1499.0	3.3989	87
300	14.3	12.0	10.0	.7076	86	35.4	35.1	34.9	.0828	86	1510.4	1502.4	1495.1	2.4847	86
400	12.2	10.8	9.5	.5004	85	35.4	35.0	34.9	.0738	85	1505.4	1499.8	1495.0	1.8258	85
500	11.1	10.1	9.0	.3819	84	35.3	35.0	34.8	.0736	84	1502.6	1498.8	1494.9	1.4142	84
600	10.5	9.5	8.3	.3674	83	35.3	35.0	34.9	.0818	83	1502.4	1498.4	1493.7	1.4120	83
700	10.0	8.9	7.9	.4172	81	35.3	35.1	34.9	.0963	81	1502.2	1497.9	1494.1	1.6515	81
800	9.0	8.3	7.4	.3785	79	35.3	35.1	34.8	.0916	79	1500.3	1497.3	1493.9	1.5237	79
900	8.4	7.7	7.1	.3235	76	35.2	35.1	34.9	.0790	76	1499.5	1496.6	1494.1	1.3196	76
1000	7.9	7.1	6.4	.2963	70	35.2	35.0	34.9	.0685	70	1499.2	1496.1	1493.1	1.2263	70
1100	7.4	6.5	5.8	.2934	65	35.1	35.0	34.9	.0573	65	1498.8	1495.3	1492.2	1.2102	65
1200	6.7	5.9	5.2	.2981	57	35.1	35.0	34.8	.0651	57	1497.9	1494.5	1491.3	1.2464	57
1300	5.9	5.3	4.6	.2833	50	35.0	34.9	34.8	.0452	50	1496.3	1493.7	1490.7	1.1867	50
1400	5.5	4.8	4.2	.2805	47	35.0	34.9	34.8	.0511	47	1496.1	1493.3	1490.7	1.1723	47
1500	4.8	4.4	3.8	.2243	47	34.9	34.9	34.8	.0491	47	1495.0	1493.1	1490.8	.9636	47
1750	3.8	3.4	2.9	.1815	44	34.9	34.8	34.8	.0211	44	1494.9	1493.1	1491.0	.7626	44
2000	3.1	2.7	2.5	.1368	44	34.8	34.8	34.7	.0211	44	1496.3	1494.6	1493.5	.5799	44
2500	2.4	2.1	2.0	.0854	36	34.8	34.8	34.7	.0500	36	1501.4	1500.2	1499.7	.3393	36
3000	1.9	1.8	1.7	.0618	29	34.7	34.7	34.7	.0000	29	1508.0	1507.5	1507.1	.2542	29
4000	1.5	1.4	1.4	.0500	16	34.7	34.7	34.7	.0000	16	1523.8	1523.5	1523.2	.1731	16

DATA IGNORED - IN CONTROL MODE

PROVINCE 7 JUN – SEP

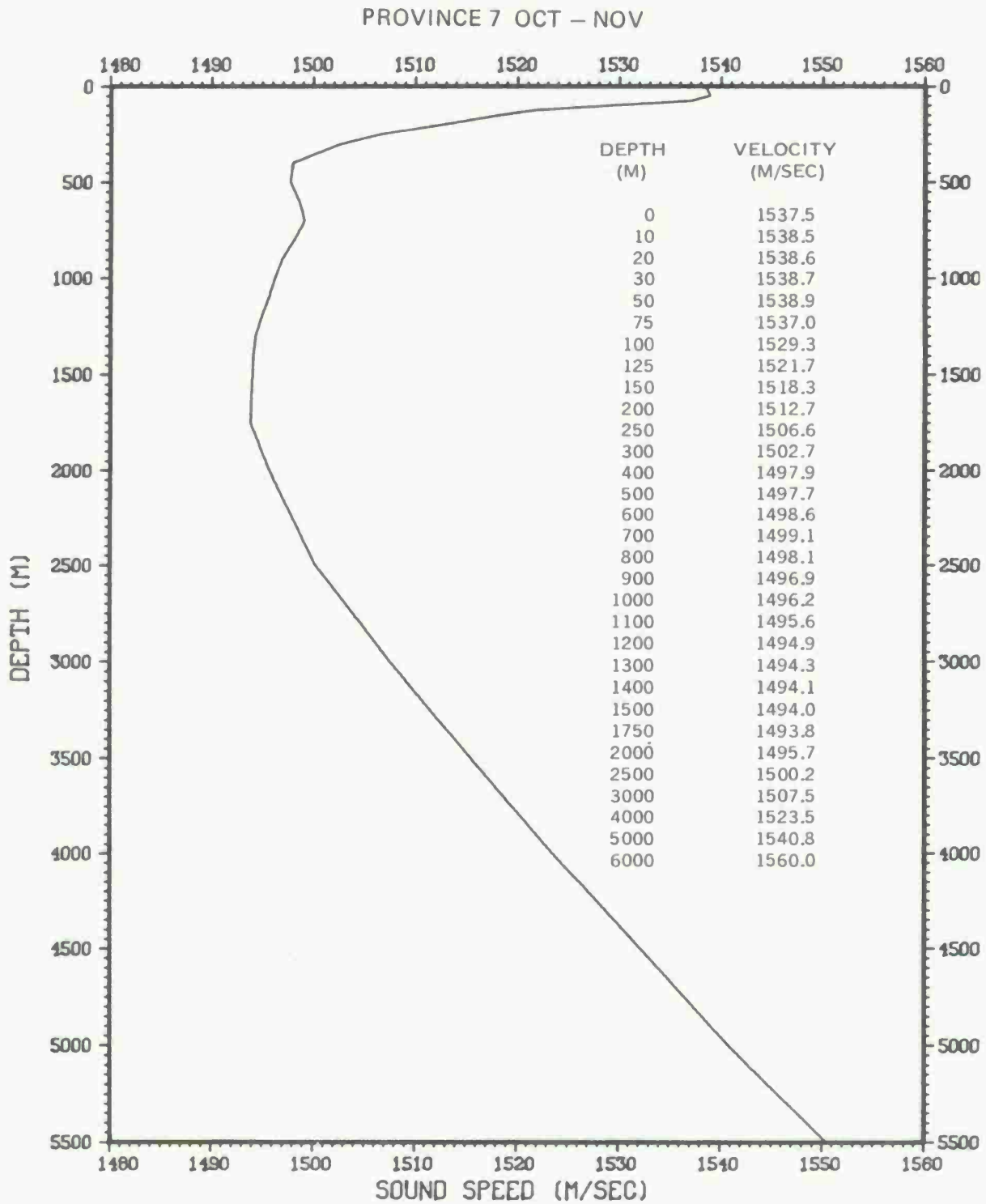


DEPTH (M)	VELOCITY (M/SEC)
0	1534.5
10	1534.7
20	1534.9
30	1535.0
50	1535.3
75	1535.4
100	1529.2
125	1523.7
150	1519.4
200	1510.6
250	1503.8
300	1502.3
400	1499.6
500	1497.8
600	1498.5
700	1498.2
800	1496.4
900	1496.0
1000	1496.2
1100	1495.7
1200	1494.5
1300	1493.7
1400	1493.3
1500	1493.1
1750	1493.1
2000	1494.6
2500	1500.2
3000	1507.5
4000	1523.5
5000	1540.8
6000	1560.0

PROVINCE 7 OCT – NOV

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0 ••	27.4	26.3	25.5	.7021	5 ••	35.6	35.3	35.1	.2121	5 ••	1540.9	1538.1	1536.1	1.7743	5
10 ••	26.7	26.4	26.2	.1924	5 ••	35.6	35.3	35.0	.2387	5 ••	1539.6	1538.5	1538.1	.6364	5
20 ••	26.3	26.3	26.2	.0548	5 ••	35.5	35.3	35.1	.1789	5 ••	1538.6	1538.4	1538.3	.1304	5
30 ••	26.3	26.1	25.9	.1673	5 ••	35.4	35.3	35.1	.1517	5 ••	1538.7	1538.2	1537.9	.3131	5
50 ••	26.1	25.8	25.4	.2950	5 ••	35.6	35.3	34.9	.2775	5 ••	1538.9	1537.9	1536.8	.8961	5
75 ••	26.2	24.9	23.6	.9633	5 ••	35.7	35.3	34.9	.3194	5 ••	1539.6	1536.2	1533.0	2.4358	5
100 ••	25.1	22.4	20.9	1.7598	5 ••	35.4	35.2	35.0	.1673	5 ••	1537.2	1530.3	1526.3	4.5251	5
125 ••	24.5	20.2	17.5	2.7581	5 ••	35.6	35.3	35.1	.1924	5 ••	1536.3	1524.8	1517.4	7.3792	5
150 ••	21.2	18.0	15.7	2.3801	5 ••	35.5	35.3	35.2	.1225	5 ••	1528.3	1519.2	1512.4	6.8598	5
200 ••	17.0	15.5	13.5	1.3700	5 ••	35.3	35.2	35.1	.0707	5 ••	1517.3	1512.5	1506.2	4.3107	5
250 ••	14.1	13.4	11.9	.8701	5 ••	35.2	35.1	35.1	.0447	5 ••	1508.7	1506.4	1501.4	2.8952	5
300 ••	12.1	11.9	11.6	.2363	4 ••	35.1	35.0	35.0	.0577	4 ••	1503.0	1502.2	1501.0	.8883	4
400 ••	10.7	10.5	10.3	.2082	3 ••	35.1	35.0	35.0	.0577	3 ••	1499.5	1498.6	1497.9	.8083	3
500 ••	10.0	9.8	9.6	.2000	3 ••	35.1	35.0	35.0	.0577	3 ••	1498.8	1497.9	1497.1	.8622	3
600 ••	9.6	9.4	9.2	.2082	3 ••	35.1	35.0	35.0	.0577	3 ••	1498.6	1497.8	1497.1	.7550	3
700 ••	9.3	9.1	8.9	.2082	3 ••	35.2	35.1	35.0	.1000	3 ••	1499.1	1498.6	1498.0	.5508	3
800 ••	8.6	8.6	8.5	.0577	3 ••	35.2	35.1	35.0	.1155	3 ••	1498.7	1498.5	1498.1	.3464	3
900 ••	7.9	7.8	7.8	.0577	3 ••	35.1	35.1	35.0	.0577	3 ••	1497.5	1497.2	1496.9	.3000	3
1000 ••	7.4	7.2	6.9	.2517	3 ••	35.1	35.0	35.0	.0577	3 ••	1497.1	1496.2	1495.2	.9609	3
1100 ••	7.1	6.6	6.1	.5000	3 ••	35.0	35.0	35.0	.0000	3 ••	1497.7	1495.6	1493.5	2.1008	3
1200 ••	6.7	6.0	5.4	.6506	3 ••	35.0	35.0	34.9	.0577	3 ••	1497.6	1494.9	1492.2	2.7000	3
1300 ••	6.2	5.5	4.8	.7000	3 ••	35.0	35.0	34.9	.0577	3 ••	1497.1	1494.3	1491.4	2.8537	3
1400 ••	5.5	5.0	4.4	.5568	3 ••	35.0	34.9	34.9	.0577	3 ••	1496.4	1494.1	1491.4	2.5166	3
1500 ••	5.0	4.6	4.0	.5132	3 ••	35.0	34.9	34.8	.1000	3 ••	1495.8	1494.0	1491.5	2.2189	3
1750 ••	3.7	3.4	3.2	.3536	2 ••	35.1	34.9	34.8	.2121	2 ••	1495.0	1493.7	1492.5	1.7678	2
2000 ••	3.2	2.9	2.7	.3536	2 ••	35.1	34.9	34.8	.2121	2 ••	1496.8	1495.7	1494.6	1.5556	2
2500 ••	2.2	2.2	2.2	.0000	1 ••	34.8	34.8	34.8	.0000	1 ••	1500.6	1500.6	1500.6	.0000	1
3000 ••	1.8	1.8	1.8	.0000	1 ••	34.7	34.7	34.7	.0000	1 ••	1507.6	1507.6	1507.6	.0000	1

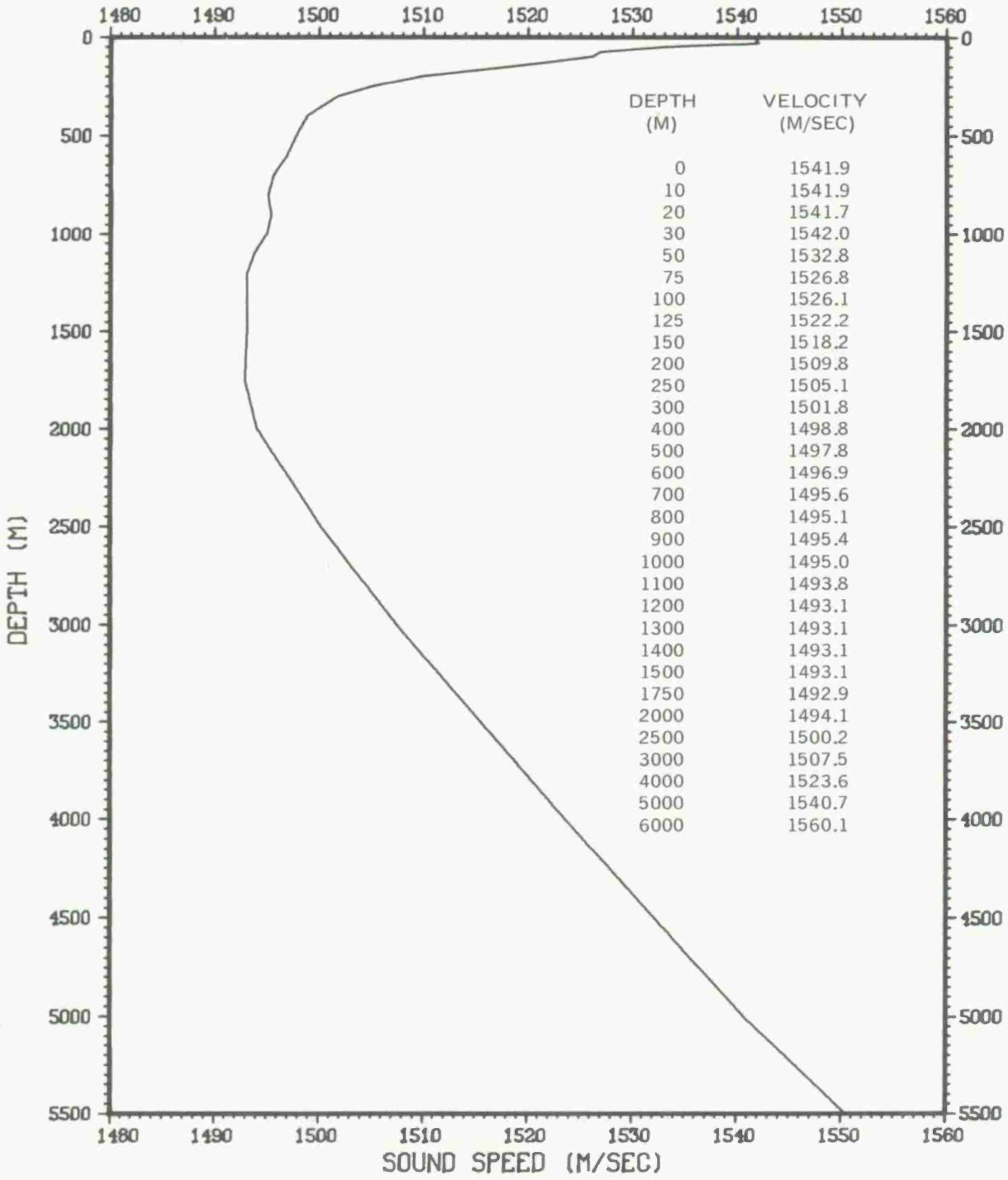
DATA IGNORED - IN CONTROL MODE


PROVINCE 7 OCT – NOV
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M) VELOCITY (M/SEC)
0 1537.5
10 1538.5
20 1538.6
30 1538.7
50 1538.9
75 1537.0
100 1529.3
125 1521.7
150 1518.3
200 1512.7
250 1506.6
300 1502.7
400 1497.9
500 1497.7
600 1498.6
700 1499.1
800 1498.1
900 1496.9
1000 1496.2
1100 1495.6
1200 1494.9
1300 1494.3
1400 1494.1
1500 1494.0
1750 1493.8
2000 1495.7
2500 1500.2
3000 1507.5
4000 1523.5
5000 1540.8
6000 1560.0

PROVINCE 8 DEC – FEB

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0 ••	30•4	28•3	27•6	.6413	35 ••	35•7	35•2	34•5	•2784	35 ••	1547•1	1542•6	1540•9	1•3731	35
10 ••	28•8	28•1	27•6	.3729	35 ••	35•6	35•2	34•5	•2668	35 ••	1543•8	1542•2	1541•0	•7937	35
20 ••	28•8	27•9	27•2	.3973	35 ••	35•6	35•2	34•5	•2753	35 ••	1543•9	1542•0	1540•8	•8504	35
30 ••	28•7	27•7	26•9	.4409	35 ••	35•6	35•2	34•5	•2578	35 ••	1543•8	1541•7	1540•1	•8852	35
50 ••	28•2	26•5	23•9	1•1218	35 ••	35•5	35•3	34•8	•1929	35 ••	1543•3	1539•4	1532•8	2•5469	35
75 ••	27•2	21•2	18•9	1•9627	35 ••	35•5	35•3	35•0	•1069	35 ••	1540•9	1531•9	1520•5	4•8974	35
100 ••	23•2	20•4	17•9	1•4855	35 ••	35•4	35•2	35•0	•0739	35 ••	1532•3	1525•2	1518•2	3•9828	35
125 ••	21•0	18•4	15•5	1•2238	35 ••	35•4	35•2	35•0	•0710	35 ••	1527•1	1520•0	1511•3	3•5115	35
150 ••	18•8	16•6	13•8	1•0880	35 ••	35•4	35•2	35•0	•0725	35 ••	1521•6	1515•1	1506•1	3•3519	35
200 ••	16•5	14•1	12•6	.8324	35 ••	35•2	35•1	35•1	•0502	35 ••	1515•3	1507•9	1502•9	2•7008	35
250 ••	14•8	12•8	11•6	.6824	35 ••	35•2	35•1	35•0	•0471	35 ••	1510•9	1504•3	1500•4	2•3019	35
300 ••	13•3	11•8	11•2	.4289	34 ••	35•2	35•1	35•0	•0569	34 ••	1506•0	1501•8	1499•6	1•5288	34
400 ••	11•2	10•5	9•8	.3294	34 ••	35•2	35•0	34•9	•0673	34 ••	1501•2	1498•7	1495•9	1•2164	34
500 ••	10•3	9•6	9•0	.3286	31 ••	35•1	35•0	34•8	•0729	31 ••	1499•8	1497•2	1495•0	1•2434	31
600 ••	9•5	9•0	8•5	.2561	30 ••	35•2	35•0	34•9	•0759	30 ••	1498•3	1496•6	1494•6	•9696	30
700 ••	9•1	8•5	8•0	.2504	30 ••	35•2	35•0	34•9	•0776	30 ••	1498•4	1496•4	1494•5	•9876	30
800 ••	8•5	8•0	7•5	.2674	30 ••	35•2	35•0	34•9	•0810	30 ••	1497•8	1496•2	1494•2	1•0307	30
900 ••	7•9	7•4	7•0	.2682	26 ••	35•1	35•0	34•9	•0599	26 ••	1497•5	1495•4	1493•6	1•0799	26
1000 ••	7•2	6•8	6•4	.2203	20 ••	35•1	35•0	34•9	•0733	20 ••	1496•4	1494•6	1493•0	•8938	20
1100 ••	6•8	6•2	5•8	.2231	20 ••	35•1	34•9	34•8	•0761	20 ••	1496•4	1494•1	1492•2	•9180	20
1200 ••	6•2	5•7	5•3	.2110	20 ••	35•1	34•9	34•8	•0754	20 ••	1495•9	1493•7	1491•7	•9633	20
1300 ••	5•6	5•2	4•8	.2183	20 ••	35•0	34•9	34•8	•0447	20 ••	1494•8	1493•3	1491•5	•8810	20
1400 ••	5•2	4•7	4•3	.2025	19 ••	35•0	34•9	34•8	•0535	19 ••	1495•0	1492•9	1491•2	•8731	19
1500 ••	4•6	4•2	3•9	.1807	17 ••	34•9	34•9	34•8	•0493	17 ••	1493•9	1492•6	1491•0	•7552	17
1750 ••	3•6	3•3	3•1	.1532	17 ••	34•9	34•8	34•8	•0243	17 ••	1493•9	1492•9	1491•6	•6590	17
2000 ••	2•9	2•7	2•6	.0961	14 ••	34•9	34•8	34•7	•0475	14 ••	1495•2	1494•4	1493•8	•4928	14
2500 ••	2•2	2•1	2•0	.0823	10 ••	34•8	34•7	34•7	•0516	10 ••	1500•9	1500•3	1499•9	•3565	10
3000 ••	1•9	1•8	1•7	.0707	9 ••	34•8	34•7	34•7	•0500	9 ••	1508•1	1507•5	1507•2	•3206	9
4000 ••	1•7	1•5	1•4	.1414	4 ••	34•7	34•7	34•7	•0000	4 ••	1524•7	1523•8	1523•4	•6131	4

PROVINCE 8 DEC – FEB

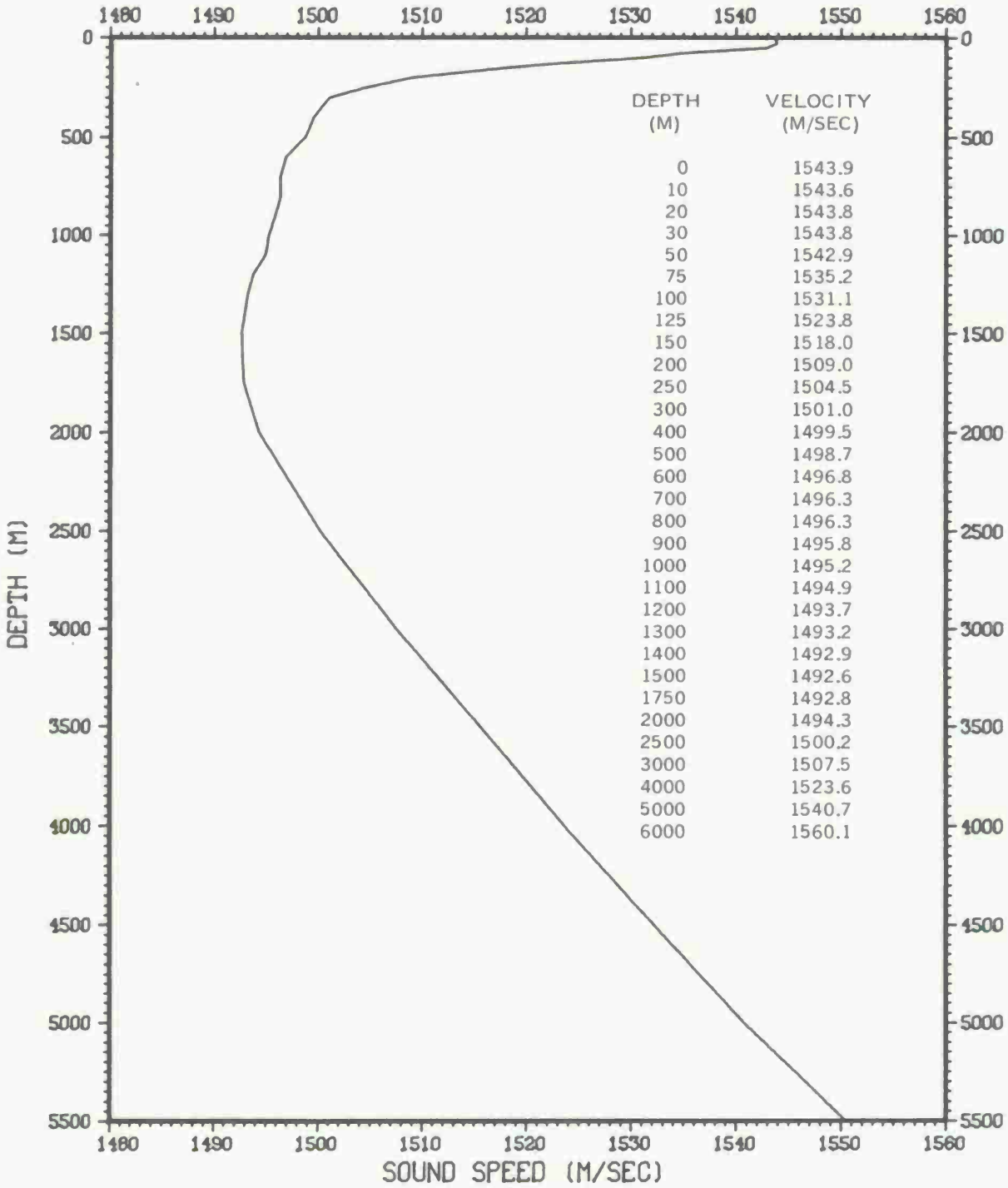


DEPTH (M)	VELOCITY (M/SEC)
0	1541.9
10	1541.9
20	1541.7
30	1542.0
50	1532.8
75	1526.8
100	1526.1
125	1522.2
150	1518.2
200	1509.8
250	1505.1
300	1501.8
400	1498.8
500	1497.8
600	1496.9
700	1495.6
800	1495.1
900	1495.4
1000	1495.0
1100	1493.8
1200	1493.1
1300	1493.1
1400	1493.1
1500	1493.1
1750	1492.9
2000	1494.1
2500	1500.2
3000	1507.5
4000	1523.6
5000	1540.7
6000	1560.1

PROVINCE 8 MAR – MAY

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	30.7	29.1	27.9	.6410	72	35.5	35.1	34.5	.2642	72	1547.8	1544.6	1541.5	1.3456	72
10	29.8	28.9	27.6	.6286	72	35.4	35.1	34.5	.2538	72	1545.8	1543.8	1541.4	1.3035	72
20	29.8	28.5	26.0	.8957	72	35.4	35.1	34.5	.2375	72	1545.7	1543.1	1537.7	1.8881	72
30	29.7	28.1	24.1	1.2682	72	35.4	35.2	34.6	.2256	72	1546.0	1542.4	1533.5	2.7239	72
50	29.3	27.0	22.6	1.7175	72	35.5	35.2	34.7	.1927	72	1545.6	1540.4	1530.0	3.8728	72
75	28.2	25.0	21.0	1.8742	72	35.7	35.3	34.8	.1202	72	1543.1	1536.3	1526.5	4.4822	72
100	25.1	21.9	18.0	1.5303	72	35.5	35.3	35.2	.0893	72	1537.1	1529.2	1518.6	3.9976	72
125	21.4	19.2	15.6	1.2000	72	35.4	35.3	35.1	.0642	72	1528.5	1522.1	1511.6	3.4381	72
150	19.8	16.9	13.6	1.0261	72	35.3	35.2	35.1	.0381	72	1524.5	1515.9	1505.6	3.0958	72
200	15.6	14.2	12.6	.6743	72	35.3	35.2	35.1	.0432	72	1512.7	1508.3	1502.9	2.2369	72
250	14.0	12.8	11.7	.5859	72	35.3	35.1	35.0	.0564	72	1508.5	1504.6	1500.5	2.0123	72
300	12.7	11.7	10.8	.4689	72	35.2	35.1	35.0	.0516	72	1505.1	1501.6	1498.3	1.6594	72
400	11.1	10.5	9.7	.3042	68	35.1	35.0	34.9	.0438	68	1500.8	1498.7	1495.9	1.0937	68
500	10.2	9.7	8.8	.2605	68	35.1	35.0	34.8	.0481	68	1499.5	1497.5	1494.1	.9739	68
600	9.7	9.1	8.3	.2414	68	35.1	35.0	34.9	.0423	68	1499.3	1496.9	1493.8	.9426	68
700	8.9	8.5	8.1	.1694	68	35.1	35.0	34.9	.0392	68	1497.9	1496.5	1494.9	.7174	68
800	8.4	7.9	7.6	.1873	68	35.1	35.0	35.0	.0341	68	1497.5	1495.9	1494.4	.7446	68
900	7.9	7.4	6.8	.2058	68	35.1	35.0	34.9	.0364	68	1497.3	1495.5	1493.0	.8389	68
1000	7.3	6.9	6.3	.2361	68	35.1	35.0	34.9	.0368	68	1496.9	1495.0	1492.5	.9639	68
1100	6.9	6.3	5.5	.2824	65	35.0	35.0	34.9	.0501	65	1496.8	1494.4	1491.2	1.1373	65
1200	6.2	5.7	5.3	.2035	27	35.0	34.9	34.8	.0456	27	1495.7	1493.5	1492.0	.8127	27
1300	5.7	5.2	4.9	.1691	27	35.0	34.9	34.8	.0392	27	1495.2	1493.2	1491.9	.7694	27
1400	5.1	4.7	4.4	.1744	22	34.9	34.9	34.8	.0429	22	1494.5	1492.9	1491.4	.7511	22
1500	4.6	4.3	3.8	.1882	22	34.9	34.8	34.8	.0503	22	1494.1	1492.6	1490.8	.7817	22
1750	3.5	3.3	3.0	.1430	22	34.9	34.8	34.8	.0213	22	1493.6	1492.8	1491.4	.5981	22
2000	2.9	2.7	2.5	.1068	19	34.8	34.8	34.8	.0000	19	1495.2	1494.3	1493.5	.4682	19
2500	2.2	2.1	2.0	.0561	15	34.8	34.7	34.7	.0458	15	1500.8	1500.2	1499.9	.1935	15
3000	1.8	1.8	1.7	.0458	15	34.8	34.7	34.7	.0352	15	1507.7	1507.5	1507.2	.1759	15
4000	1.5	1.5	1.4	.0522	11	34.7	34.7	34.7	.0000	11	1523.8	1523.6	1523.3	.1573	11

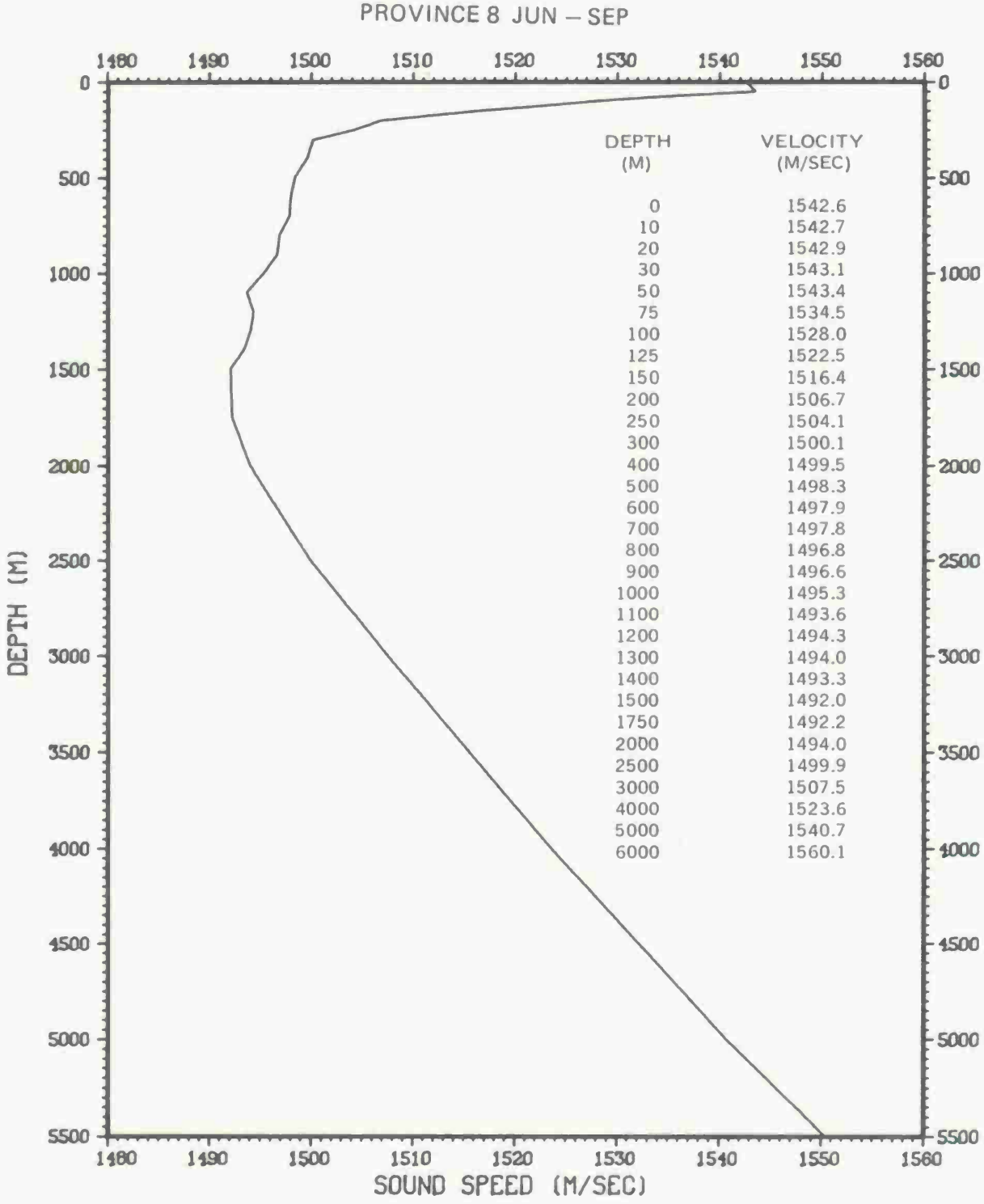
PROVINCE 8 MAR – MAY



DEPTH (M)	VELOCITY (M/SEC)
0	1543.9
10	1543.6
20	1543.8
30	1543.8
50	1542.9
75	1535.2
100	1531.1
125	1523.8
150	1518.0
200	1509.0
250	1504.5
300	1501.0
400	1499.5
500	1498.7
600	1496.8
700	1496.3
800	1496.3
900	1495.8
1000	1495.2
1100	1494.9
1200	1493.7
1300	1493.2
1400	1492.9
1500	1492.6
1750	1492.8
2000	1494.3
2500	1500.2
3000	1507.5
4000	1523.6
5000	1540.7
6000	1560.1

PROVINCE 8 JUN – SEP

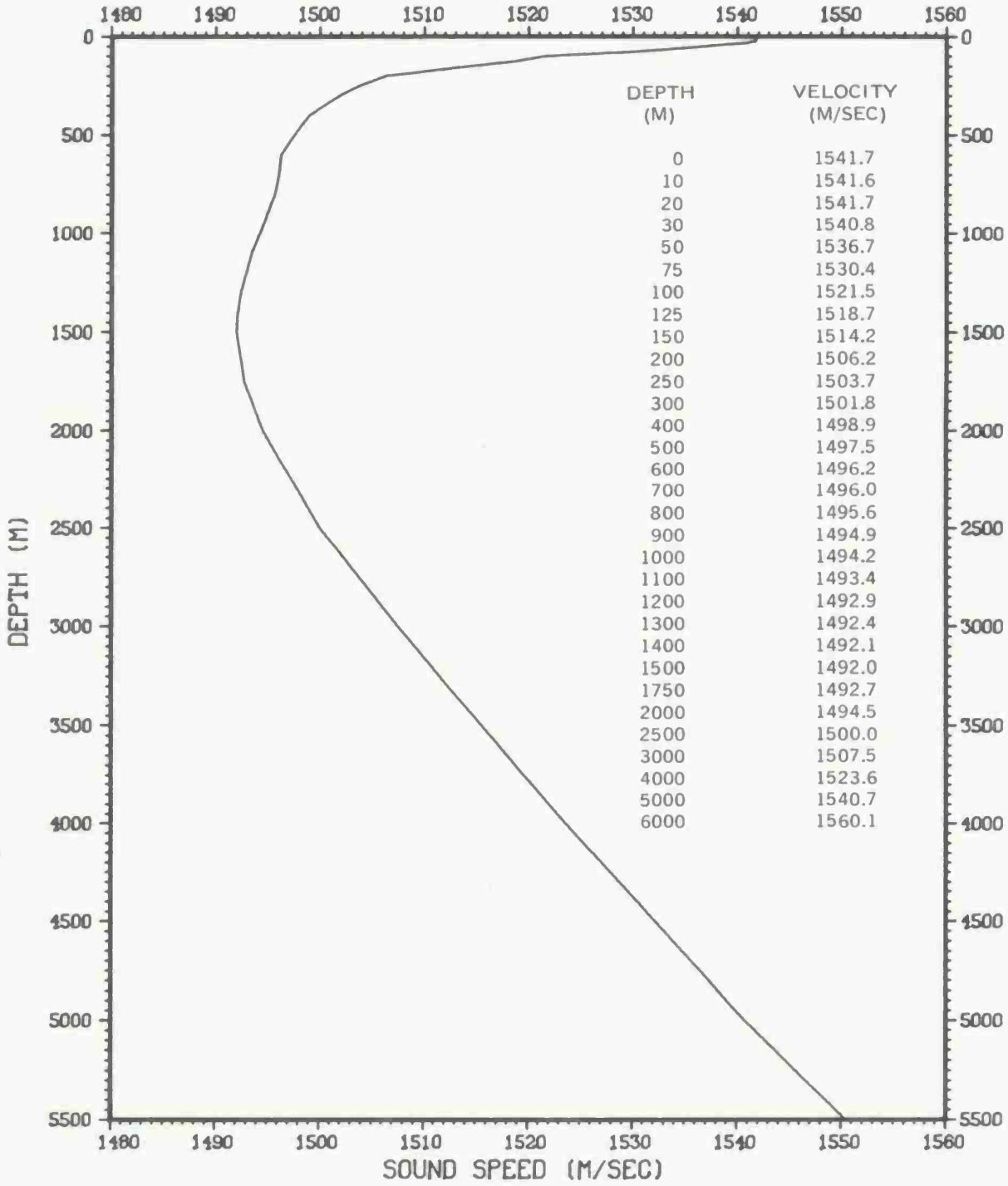
DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	30•0	28•2	25•2	1•1895	94 ••	35•8	35•1	34•7	•2204	94 ••	1546•1	1542•2	1535•5	2•4376	94
10 ••	30•0	28•2	25•2	1•1629	94 ••	35•8	35•1	34•7	•2251	94 ••	1546•2	1542•2	1535•6	2•3822	94
20 ••	29•9	28•1	25•2	1•1297	94 ••	35•8	35•1	34•7	•2157	94 ••	1546•1	1542•2	1535•8	2•3277	94
30 ••	29•6	27•9	24•4	1•1423	94 ••	35•8	35•2	34•7	•2092	94 ••	1545•7	1542•1	1534•2	2•3710	94
50 ••	29•4	27•3	21•9	1•2127	94 ••	35•9	35•2	34•8	•2032	94 ••	1545•4	1541•2	1528•3	2•6562	94
75 ••	29•1	25•1	19•2	1•6552	94 ••	35•7	35•3	35•0	•1342	94 ••	1545•3	1536•7	1521•5	3•9557	94
100 ••	26•4	21•6	15•9	2•2293	94 ••	35•7	35•3	35•2	•0907	94 ••	1540•4	1528•2	1512•3	5•8772	94
125 ••	25•4	18•7	15•5	1•9450	94 ••	35•7	35•3	35•2	•0793	94 ••	1538•7	1520•8	1511•2	5•4570	94
150 ••	23•5	16•7	14•5	1•5319	94 ••	35•5	35•2	35•1	•0598	94 ••	1534•2	1515•2	1508•5	4•5100	94
200 ••	18•5	14•0	12•8	•8379	94 ••	35•3	35•2	35•1	•0562	94 ••	1521•6	1507•7	1503•7	2•7052	94
250 ••	14•5	12•6	11•6	•5559	94 ••	35•2	35•1	35•0	•0421	94 ••	1510•1	1503•8	1500•4	1•9054	94
300 ••	13•2	11•7	10•9	•4577	94 ••	35•2	35•1	35•0	•0562	94 ••	1506•5	1501•3	1498•5	1•6197	94
400 ••	11•3	10•6	9•9	•2619	94 ••	35•1	35•0	34•9	•0336	94 ••	1501•7	1499•0	1496•6	•9552	94
500 ••	10•4	9•8	9•2	•2599	94 ••	35•2	35•0	34•9	•0595	94 ••	1500•4	1498•0	1495•4	1•0006	94
600 ••	10•0	9•2	8•7	•3017	93 ••	35•2	35•0	34•8	•0667	93 ••	1500•1	1497•5	1495•2	1•1628	93
700 ••	9•4	8•6	7•8	•3074	93 ••	35•2	35•0	34•8	•0646	93 ••	1500•0	1496•8	1493•4	1•2013	93
800 ••	8•8	8•0	7•0	•2683	93 ••	35•2	35•0	34•8	•0549	93 ••	1499•2	1495•9	1491•9	1•0599	93
900 ••	8•3	7•4	6•6	•2807	92 ••	35•2	35•0	34•8	•0548	92 ••	1499•1	1495•2	1492•2	1•1536	92
1000 ••	7•7	6•8	5•5	•3315	90 ••	35•1	35•0	34•8	•0608	90 ••	1498•4	1494•5	1489•3	1•3791	90
1100 ••	7•1	6•2	5•4	•2993	82 ••	35•1	34•9	34•8	•0585	82 ••	1497•7	1494•0	1490•4	1•2280	82
1200 ••	6•5	5•8	4•8	•2917	47 ••	35•0	34•9	34•8	•0477	47 ••	1497•1	1493•9	1489•8	1•2257	47
1300 ••	5•8	5•3	4•6	•2381	44 ••	35•0	34•9	34•8	•0429	44 ••	1495•6	1493•5	1490•4	•9998	44
1400 ••	5•3	4•8	4•2	•2330	38 ••	34•9	34•9	34•7	•0525	38 ••	1495•2	1493•1	1490•8	•9558	38
1500 ••	4•8	4•3	3•9	•2045	38 ••	34•9	34•8	34•7	•0515	38 ••	1495•0	1492•7	1491•1	•8936	38
1750 ••	3•6	3•3	3•0	•1550	38 ••	34•9	34•8	34•7	•0283	38 ••	1493•9	1492•6	1491•3	•6771	38
2000 ••	3•0	2•7	2•5	•1188	37 ••	34•9	34•8	34•7	•0287	37 ••	1495•5	1494•2	1493•3	•4788	37
2500 ••	2•1	2•0	1•9	•0572	27 ••	34•8	34•7	34•7	•0492	27 ••	1500•5	1500•0	1499•3	•2554	27
3000 ••	1•8	1•8	1•7	•0436	25 ••	34•8	34•7	34•7	•0277	25 ••	1507•8	1507•5	1507•1	•1748	25
4000 ••	1•5	1•5	1•4	•0514	18 ••	34•7	34•7	34•7	•0000	18 ••	1523•8	1523•5	1523•3	•1166	18
5000 ••	1•3	1•3	1•3	•0000	3 ••	34•7	34•7	34•7	•0000	3 ••	1540•7	1540•7	1540•7	•0000	3


PROVINCE 8 JUN – SEP
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1542.6
10 1542.7
20 1542.9
30 1543.1
50 1543.4
75 1534.5
100 1528.0
125 1522.5
150 1516.4
200 1506.7
250 1504.1
300 1500.1
400 1499.5
500 1498.3
600 1497.9
700 1497.8
800 1496.8
900 1496.6
1000 1495.3
1100 1493.6
1200 1494.3
1300 1494.0
1400 1493.3
1500 1492.0
1750 1492.2
2000 1494.0
2500 1499.9
3000 1507.5
4000 1523.6
5000 1540.7
6000 1560.1

PROVINCE 8 OCT – NOV

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	28.3	27.9	27.3	.2902	12	36.0	35.5	34.9	.2807	12	1542.6	1541.9	1540.8	.5054	12
10	28.5	27.8	27.3	.3695	12	36.0	35.5	35.0	.2725	12	1542.9	1541.9	1540.9	.6103	12
20	28.4	27.7	27.0	.4152	12	36.0	35.5	35.0	.2712	12	1542.9	1541.8	1540.9	.6620	12
30	28.4	27.3	26.1	.6337	12	35.8	35.5	35.0	.2209	12	1543.1	1541.2	1538.7	1.2182	12
50	28.5	25.8	23.2	1.6020	12	35.6	35.4	34.9	.2094	12	1543.5	1537.8	1531.8	3.5350	12
75	28.4	23.2	19.2	2.7084	12	35.5	35.3	35.1	.1165	12	1543.8	1531.9	1521.6	6.4609	12
100	24.8	20.7	17.0	2.4824	12	35.6	35.3	35.2	.1115	12	1536.5	1525.8	1515.7	6.6646	12
125	23.5	18.7	15.3	2.4330	12	35.4	35.3	35.2	.0669	12	1533.8	1520.7	1510.8	6.8407	12
150	21.7	16.7	14.1	2.1823	12	35.3	35.2	35.1	.0515	12	1529.5	1515.1	1507.2	6.4211	12
200	16.3	14.1	12.7	.9506	12	35.3	35.2	35.1	.0577	12	1515.1	1507.9	1503.5	3.1026	12
250	14.1	12.9	11.9	.6439	11	35.2	35.1	35.1	.0302	11	1508.7	1504.8	1501.4	2.1491	11
300	12.4	11.8	10.8	.5069	11	35.2	35.1	35.0	.0603	11	1504.0	1501.8	1498.1	1.7861	11
400	11.1	10.5	10.2	.2453	11	35.1	35.0	35.0	.0405	11	1500.9	1498.9	1497.7	.8767	11
500	11.0	9.8	9.5	.4268	11	35.1	35.0	34.9	.0447	11	1502.3	1498.0	1496.8	1.5804	11
600	10.1	9.2	8.7	.3957	10	35.1	35.0	35.0	.0422	10	1500.4	1497.2	1495.3	1.4143	10
700	9.4	8.6	8.0	.3653	10	35.1	35.0	35.0	.0422	10	1499.6	1496.8	1494.4	1.3453	10
800	8.2	7.9	7.4	.2394	10	35.1	35.0	34.9	.0667	10	1497.1	1495.7	1493.6	1.0042	10
900	7.8	7.3	6.8	.3674	9	35.1	35.0	34.9	.0667	9	1497.1	1494.9	1493.0	1.4552	9
1000	7.4	6.7	6.1	.4093	9	35.0	35.0	34.9	.0500	9	1497.2	1494.2	1492.0	1.6604	9
1100	6.6	6.1	5.7	.2877	9	35.0	34.9	34.9	.0500	9	1495.7	1493.7	1492.0	1.2098	9
1200	5.9	5.6	5.2	.2179	9	35.0	34.9	34.9	.0441	9	1494.3	1493.3	1491.7	.8710	9
1300	5.4	5.1	4.8	.2028	9	34.9	34.9	34.8	.0333	9	1493.9	1492.9	1491.5	.8775	9
1400	5.0	4.7	4.3	.2404	9	34.9	34.9	34.8	.0500	9	1494.1	1492.6	1491.2	.9912	9
1500	4.5	4.2	3.9	.1982	8	34.9	34.9	34.8	.0518	8	1493.6	1492.3	1491.0	.8812	8
1750	3.6	3.3	3.2	.1272	7	34.9	34.8	34.8	.0378	7	1493.9	1492.9	1492.4	.5336	7
2000	2.9	2.7	2.6	.0951	7	34.8	34.8	34.7	.0378	7	1495.2	1494.5	1493.8	.4451	7
2500	2.5	2.2	2.0	.2582	6	34.8	34.8	34.7	.0516	6	1502.0	1500.6	1499.9	1.0342	6
3000	1.8	1.7	1.7	.0577	4	34.8	34.7	34.7	.0500	4	1507.5	1507.4	1507.2	.1500	4
4000	1.4	1.4	1.4	.0000	1	34.7	34.7	34.7	.0000	1	1523.4	1523.4	1523.4	.0000	1

PROVINCE 8 OCT – NOV

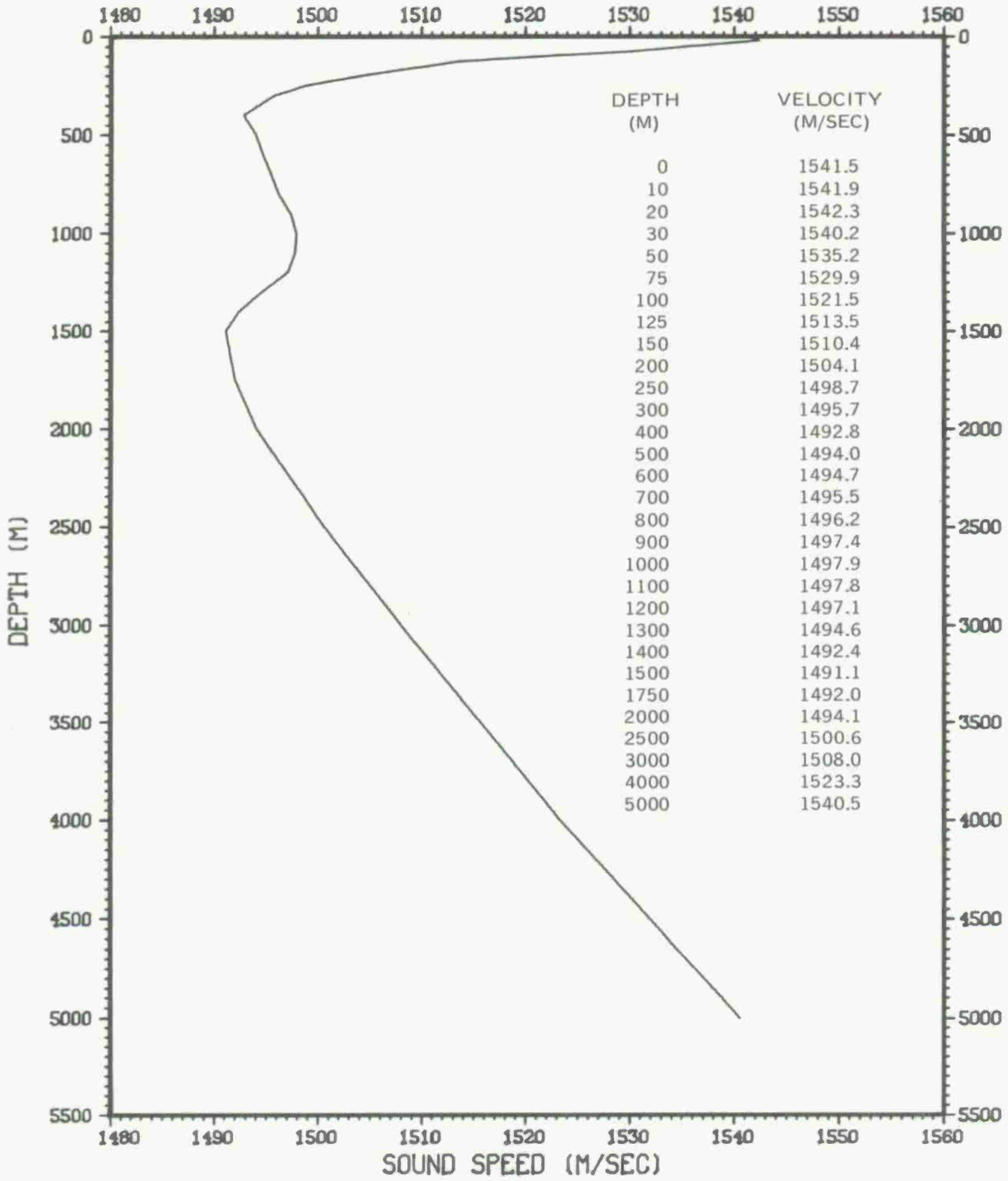


DEPTH (M)	VELOCITY (M/SEC)
0	1541.7
10	1541.6
20	1541.7
30	1540.8
50	1536.7
75	1530.4
100	1521.5
125	1518.7
150	1514.2
200	1506.2
250	1503.7
300	1501.8
400	1498.9
500	1497.5
600	1496.2
700	1496.0
800	1495.6
900	1494.9
1000	1494.2
1100	1493.4
1200	1492.9
1300	1492.4
1400	1492.1
1500	1492.0
1750	1492.7
2000	1494.5
2500	1500.0
3000	1507.5
4000	1523.6
5000	1540.7
6000	1560.1

PROVINCE 9 DEC – FEB

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	28.2	27.3	25.1	.9236	12	35.4	35.1	34.9	.1992	12	1542.3	1540.2	1535.4	1.9727	12
10	28.2	27.3	24.8	1.0166	12	35.4	35.1	34.9	.1913	12	1542.4	1540.4	1534.8	2.1919	12
20	28.4	27.3	24.7	1.0942	12	35.4	35.1	34.9	.1782	12	1542.8	1540.6	1534.7	2.3766	12
30	28.3	27.1	24.5	1.0740	12	35.4	35.1	34.9	.1782	12	1542.8	1540.1	1534.5	2.3388	12
50	28.1	26.0	23.6	1.4640	12	35.4	35.1	34.9	.1603	12	1542.8	1538.0	1532.3	3.3494	12
75	27.9	22.6	20.9	1.8211	12	35.3	35.1	34.9	.0996	12	1542.6	1530.2	1525.8	4.3408	12
100	25.1	19.4	16.6	2.2281	12	35.3	35.2	35.1	.0515	12	1536.8	1522.0	1514.3	5.9431	12
125	21.4	16.8	14.5	1.9660	12	35.3	35.2	35.1	.0622	12	1528.0	1515.1	1508.2	5.7169	12
150	18.6	15.0	13.0	1.7228	12	35.4	35.2	35.1	.0779	12	1520.9	1510.1	1503.5	5.4373	12
200	15.1	13.0	11.2	1.3331	12	35.3	35.1	35.0	.1084	12	1511.3	1504.3	1498.1	4.5304	12
250	12.9	11.5	10.2	.9829	11	35.2	35.0	34.9	.1027	11	1504.7	1499.8	1494.9	3.5841	11
300	11.6	10.6	9.3	.8882	11	35.1	35.0	34.8	.0820	11	1501.2	1497.4	1492.5	3.3154	11
400	10.6	9.5	8.8	.6389	11	35.0	34.9	34.8	.0539	11	1499.1	1495.1	1492.3	2.3417	11
500	9.3	9.1	8.5	.2464	11	35.1	34.9	34.8	.0905	11	1495.9	1495.0	1493.0	.9347	11
600	9.2	8.6	7.7	.4045	11	35.1	34.9	34.7	.1183	11	1497.6	1494.8	1491.6	1.6470	11
700	8.6	8.1	7.4	.3713	10	35.1	35.0	34.8	.0843	10	1496.9	1494.9	1491.9	1.5076	10
800	8.2	7.7	7.0	.4089	10	35.1	35.0	34.8	.0843	10	1496.7	1495.1	1492.0	1.6635	10
900	7.9	7.4	6.5	.5310	9	35.0	34.9	34.8	.0726	9	1497.4	1495.3	1491.7	2.1528	9
1000	7.6	7.0	6.0	.6653	8	35.0	35.0	34.9	.0518	8	1497.9	1495.4	1491.6	2.6897	8
1100	7.2	6.6	5.7	.6824	7	35.0	34.9	34.8	.0787	7	1497.8	1495.4	1491.7	2.7805	7
1200	6.6	5.9	5.1	.6137	7	35.0	34.9	34.8	.0690	7	1497.1	1494.4	1491.2	2.4812	7
1300	5.5	5.1	4.5	.4401	6	34.9	34.9	34.8	.0516	6	1494.6	1492.9	1490.3	1.9136	6
1400	4.7	4.4	4.0	.2739	6	34.8	34.8	34.8	.0000	6	1492.9	1491.8	1489.8	1.2090	6
1500	4.1	3.9	3.6	.1862	6	34.8	34.8	34.8	.0000	6	1491.8	1491.1	1489.8	.7581	6
1750	3.3	3.1	3.0	.1291	4	34.8	34.8	34.8	.0000	4	1492.7	1492.0	1491.3	.5944	4
2000	2.7	2.6	2.6	.0577	3	34.8	34.8	34.8	.0000	3	1494.5	1494.1	1493.8	.3786	3
2500	2.1	2.1	2.1	.0000	1	34.8	34.8	34.8	.0000	1	1500.4	1500.4	1500.4	.0000	1
3000	1.9	1.9	1.9	.0000	1	34.7	34.7	34.7	.0000	1	1507.9	1507.9	1507.9	.0000	1

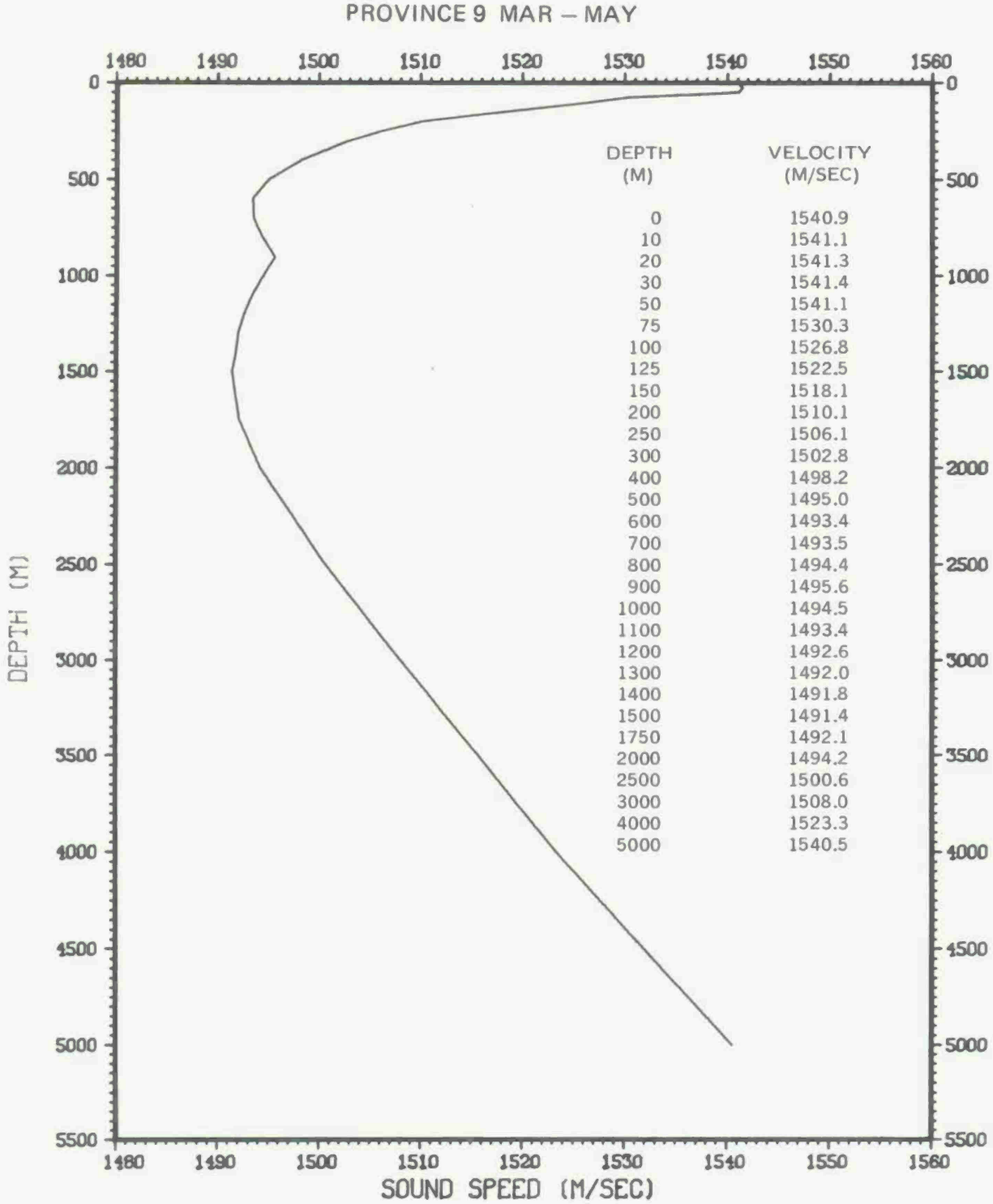
PROVINCE 9 DEC – FEB



DEPTH (M)	VELOCITY (M/SEC)
0	1541.5
10	1541.9
20	1542.3
30	1540.2
50	1535.2
75	1529.9
100	1521.5
125	1513.5
150	1510.4
200	1504.1
250	1498.7
300	1495.7
400	1492.8
500	1494.0
600	1494.7
700	1495.5
800	1496.2
900	1497.4
1000	1497.9
1100	1497.8
1200	1497.1
1300	1494.6
1400	1492.4
1500	1491.1
1750	1492.0
2000	1494.1
2500	1500.6
3000	1508.0
4000	1523.3
5000	1540.5

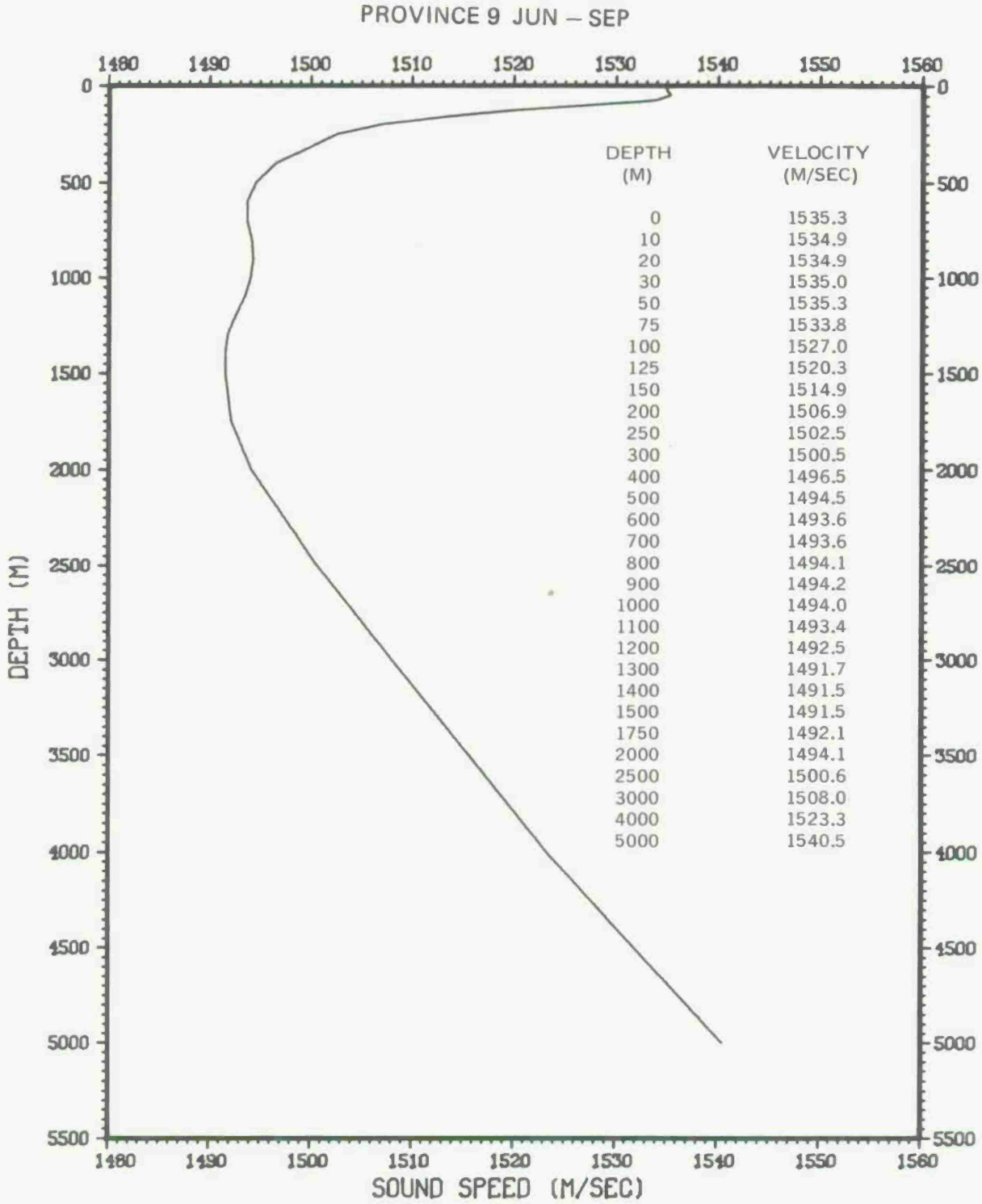
PROVINCE 9 MAR – MAY

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	29.9	28.8	27.8	.6754	14	35.5	34.9	34.5	.3180	14	1546.0	1543.3	1540.8	1.6734	14
10	29.7	28.7	27.7	.6928	14	35.5	34.8	33.1	.5816	14	1545.6	1543.0	1541.0	1.5324	14
20	29.5	28.5	27.6	.6197	14	35.5	34.9	34.5	.3183	14	1545.0	1543.0	1540.9	1.3835	14
30	29.5	27.9	27.4	.5676	14	35.6	35.0	34.5	.3197	14	1545.3	1541.9	1540.3	1.3167	14
50	28.1	25.2	23.0	1.7191	14	35.5	35.1	34.7	.2134	14	1542.7	1536.1	1530.8	3.9742	14
75	26.5	21.6	18.5	2.1570	14	35.6	35.2	35.0	.1492	14	1540.2	1527.7	1519.6	5.5656	14
100	25.6	19.4	15.0	2.6319	14	35.6	35.2	35.1	.1223	14	1538.5	1522.1	1509.5	7.2609	14
125	25.0	17.8	13.4	2.9185	14	35.5	35.3	35.1	.0938	14	1537.6	1517.9	1504.5	8.3767	14
150	17.9	15.9	12.1	1.9758	14	35.4	35.3	35.1	.0756	14	1519.0	1512.8	1500.4	6.2514	14
200	16.2	13.6	11.5	1.4950	14	35.3	35.2	35.0	.0975	14	1514.7	1506.4	1498.9	4.9922	14
250	14.4	12.2	10.8	1.2408	14	35.3	35.1	35.0	.0949	14	1510.0	1502.5	1497.2	4.3749	14
300	13.2	11.2	9.9	1.0960	14	35.3	35.0	34.9	.1269	14	1506.9	1499.5	1494.7	4.0170	14
400	11.3	9.9	9.2	.6408	13	35.1	34.9	34.8	.0816	13	1501.7	1496.3	1494.0	2.3493	13
500	9.4	9.0	8.3	.3516	12	35.0	34.9	34.8	.0888	12	1496.5	1494.7	1492.0	1.3908	12
600	9.2	8.5	7.8	.4522	12	35.1	34.9	34.8	.1084	12	1497.4	1494.4	1491.6	1.8047	12
700	8.8	8.0	7.5	.3793	12	35.1	34.9	34.8	.0953	12	1497.6	1494.4	1492.3	1.5501	12
800	8.0	7.5	7.1	.2667	12	35.1	34.9	34.9	.0669	12	1496.2	1494.2	1492.6	1.0596	12
900	7.5	7.0	6.6	.2382	11	35.0	34.9	34.9	.0405	11	1495.6	1493.9	1492.3	.9176	11
1000	6.8	6.5	6.0	.2573	11	35.0	34.9	34.9	.0302	11	1494.5	1493.3	1491.5	1.0271	11
1100	6.3	5.9	5.5	.2558	10	34.9	34.9	34.8	.0316	10	1494.1	1492.5	1491.0	.9914	10
1200	5.7	5.3	4.9	.2797	10	34.9	34.9	34.8	.0516	10	1493.6	1492.0	1490.2	1.1963	10
1300	5.4	4.8	4.5	.3011	10	34.9	34.8	34.8	.0527	10	1494.1	1491.6	1490.3	1.2419	10
1400	4.8	4.4	4.1	.2390	8	34.9	34.8	34.8	.0463	8	1493.2	1491.5	1490.2	1.0292	8
1500	4.1	3.9	3.7	.1604	8	34.8	34.8	34.7	.0354	8	1492.1	1491.3	1490.1	.7520	8
1750	3.5	3.1	2.9	.2204	8	34.8	34.8	34.7	.0463	8	1493.7	1492.0	1490.9	.9103	8
2000	2.9	2.7	2.4	.1618	7	34.8	34.8	34.7	.0535	7	1495.3	1494.1	1493.1	.6925	7
2500	2.2	2.1	2.1	.0707	2	34.9	34.8	34.8	.0707	2	1500.7	1500.5	1500.4	.2121	2
3000	1.8	1.8	1.8	.0000	1	34.7	34.7	34.7	.0000	1	1507.7	1507.7	1507.7	.0000	1


PROVINCE 9 MAR – MAY
1480 1490 1500 1510 1520 1530 1540 1550 1560
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M) VELOCITY (M/SEC)
0 1540.9
10 1541.1
20 1541.3
30 1541.4
50 1541.1
75 1530.3
100 1526.8
125 1522.5
150 1518.1
200 1510.1
250 1506.1
300 1502.8
400 1498.2
500 1495.0
600 1493.4
700 1493.5
800 1494.4
900 1495.6
1000 1494.5
1100 1493.4
1200 1492.6
1300 1492.0
1400 1491.8
1500 1491.4
1750 1492.1
2000 1494.2
2500 1500.6
3000 1508.0
4000 1523.3
5000 1540.5

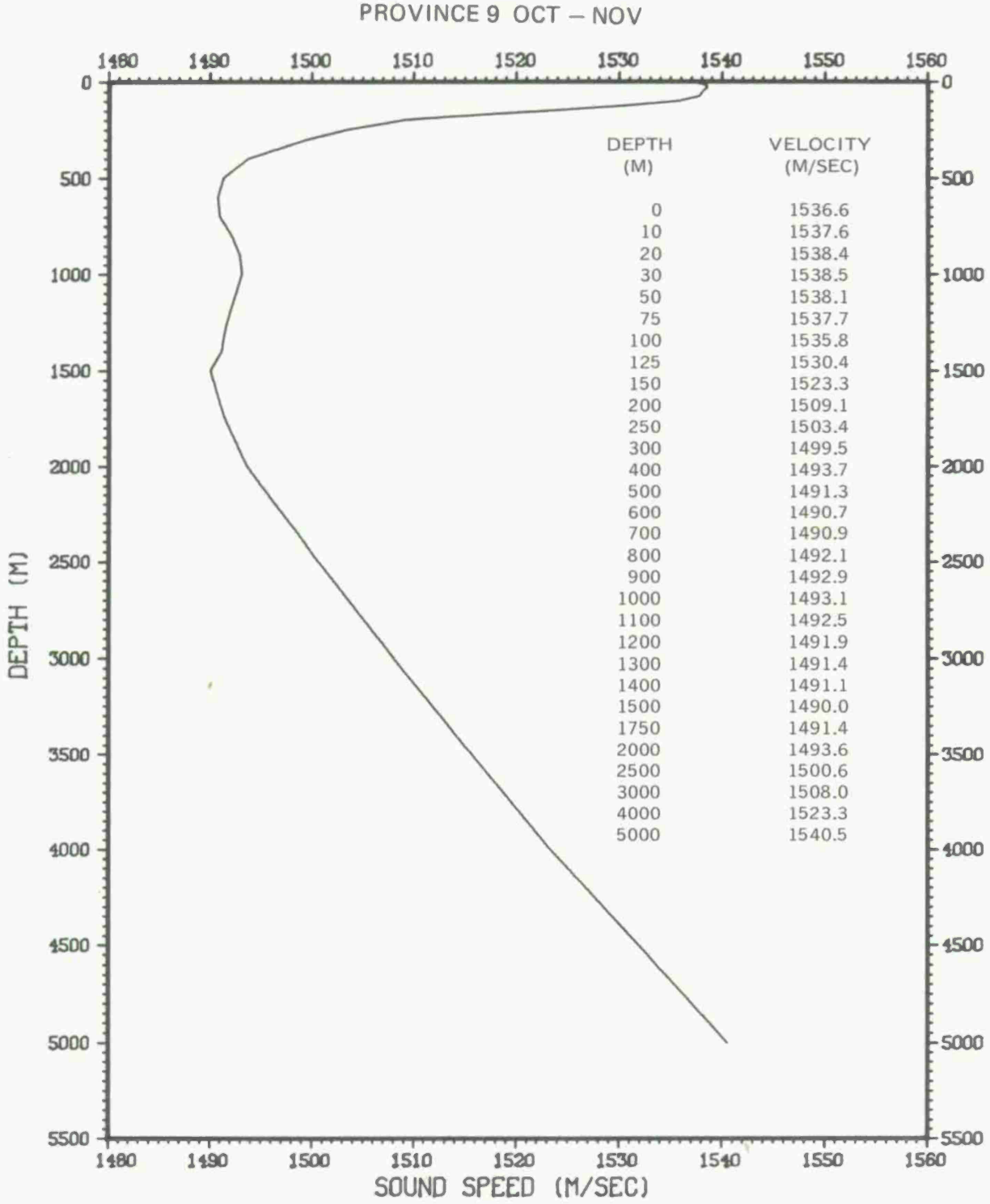
PROVINCE 9 JUN – SEP

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	25.5	25.0	24.2	.3192	29	35.4	35.2	34.9	.1354	29	1536.1	1535.1	1533.3	.7093	29
10	25.5	25.0	24.2	.3190	29	35.4	35.2	34.9	.1461	29	1536.2	1535.2	1533.4	.7098	29
20	25.6	25.0	24.1	.3345	29	35.4	35.2	34.9	.1442	29	1536.6	1535.2	1533.4	.7655	29
30	25.5	24.9	23.9	.3634	29	35.4	35.2	34.9	.1461	29	1536.5	1535.3	1533.0	.8308	29
50	25.4	24.7	22.8	.5003	29	35.4	35.2	34.9	.1545	29	1536.8	1535.2	1530.6	1.2313	29
75	25.2	23.9	19.5	1.3158	29	35.3	35.2	34.9	.1376	29	1537.0	1533.6	1522.2	3.3448	29
100	25.2	21.8	17.6	2.0515	29	35.3	35.2	34.9	.1146	29	1537.4	1528.5	1517.3	5.3677	29
125	22.5	19.0	15.1	1.9692	29	35.4	35.2	35.0	.0882	29	1531.0	1521.7	1510.1	5.5555	29
150	19.2	16.8	13.6	1.6053	29	35.4	35.2	35.1	.0682	29	1522.7	1515.6	1505.4	4.8942	29
200	16.0	14.1	11.7	1.1245	29	35.3	35.2	35.0	.0845	29	1514.2	1507.9	1499.6	3.7486	29
250	14.1	12.5	10.4	.9165	29	35.3	35.1	34.9	.0860	29	1509.0	1503.4	1495.8	3.2232	29
300	12.9	11.3	9.7	.7376	29	35.2	35.0	34.8	.0772	29	1505.8	1500.1	1493.9	2.6855	29
400	10.8	9.8	8.9	.4348	29	35.0	34.9	34.8	.0528	29	1499.9	1496.0	1492.6	1.6284	29
500	9.4	8.9	8.1	.3518	29	35.0	34.8	34.7	.0857	29	1496.4	1494.2	1491.2	1.3844	29
600	9.0	8.2	7.2	.4516	29	35.0	34.8	34.7	.0862	29	1496.5	1493.4	1489.4	1.7722	29
700	8.7	7.8	6.5	.5727	29	35.1	34.9	34.7	.0996	29	1497.0	1493.3	1488.1	2.2792	29
800	8.4	7.3	6.2	.5640	28	35.1	34.9	34.7	.0905	28	1497.5	1493.1	1488.7	2.2660	28
900	7.9	6.8	5.8	.5552	27	35.0	34.9	34.8	.0679	27	1497.4	1493.0	1488.6	2.2689	27
1000	7.3	6.3	5.4	.5006	25	35.0	34.9	34.8	.0688	25	1496.7	1492.5	1488.8	2.0424	25
1100	6.9	5.8	4.9	.5225	23	35.0	34.9	34.8	.0671	23	1496.7	1492.2	1488.5	2.1247	23
1200	6.4	5.3	4.6	.4843	23	35.0	34.9	34.8	.0635	23	1496.6	1491.8	1488.7	2.0666	23
1300	5.8	4.8	4.1	.4582	23	34.9	34.8	34.7	.0541	23	1495.7	1491.4	1488.5	1.8984	23
1400	5.4	4.3	3.7	.3838	21	34.9	34.8	34.7	.0539	21	1495.8	1491.1	1488.6	1.6066	21
1500	5.1	3.9	3.5	.3294	21	34.9	34.8	34.7	.0498	21	1496.3	1491.0	1489.2	1.4527	21
1750	3.8	3.1	2.9	.2058	18	34.8	34.8	34.7	.0428	18	1494.9	1491.9	1491.1	.8977	18
2000	2.7	2.6	2.5	.0778	12	34.8	34.8	34.7	.0492	12	1494.5	1494.1	1493.5	.3306	12
2500	2.3	2.2	2.1	.0632	11	34.8	34.7	34.7	.0467	11	1501.0	1500.7	1500.3	.2102	11
3000	2.0	1.9	1.8	.0816	4	34.7	34.7	34.7	.0000	4	1508.4	1508.1	1507.7	.2986	4


PROVINCE 9 JUN – SEP
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1535.3
10 1534.9
20 1534.9
30 1535.0
50 1535.3
75 1533.8
100 1527.0
125 1520.3
150 1514.9
200 1506.9
250 1502.5
300 1500.5
400 1496.5
500 1494.5
600 1493.6
700 1493.6
800 1494.1
900 1494.2
1000 1494.0
1100 1493.4
1200 1492.5
1300 1491.7
1400 1491.5
1500 1491.5
1750 1492.1
2000 1494.1
2500 1500.6
3000 1508.0
4000 1523.3
5000 1540.5

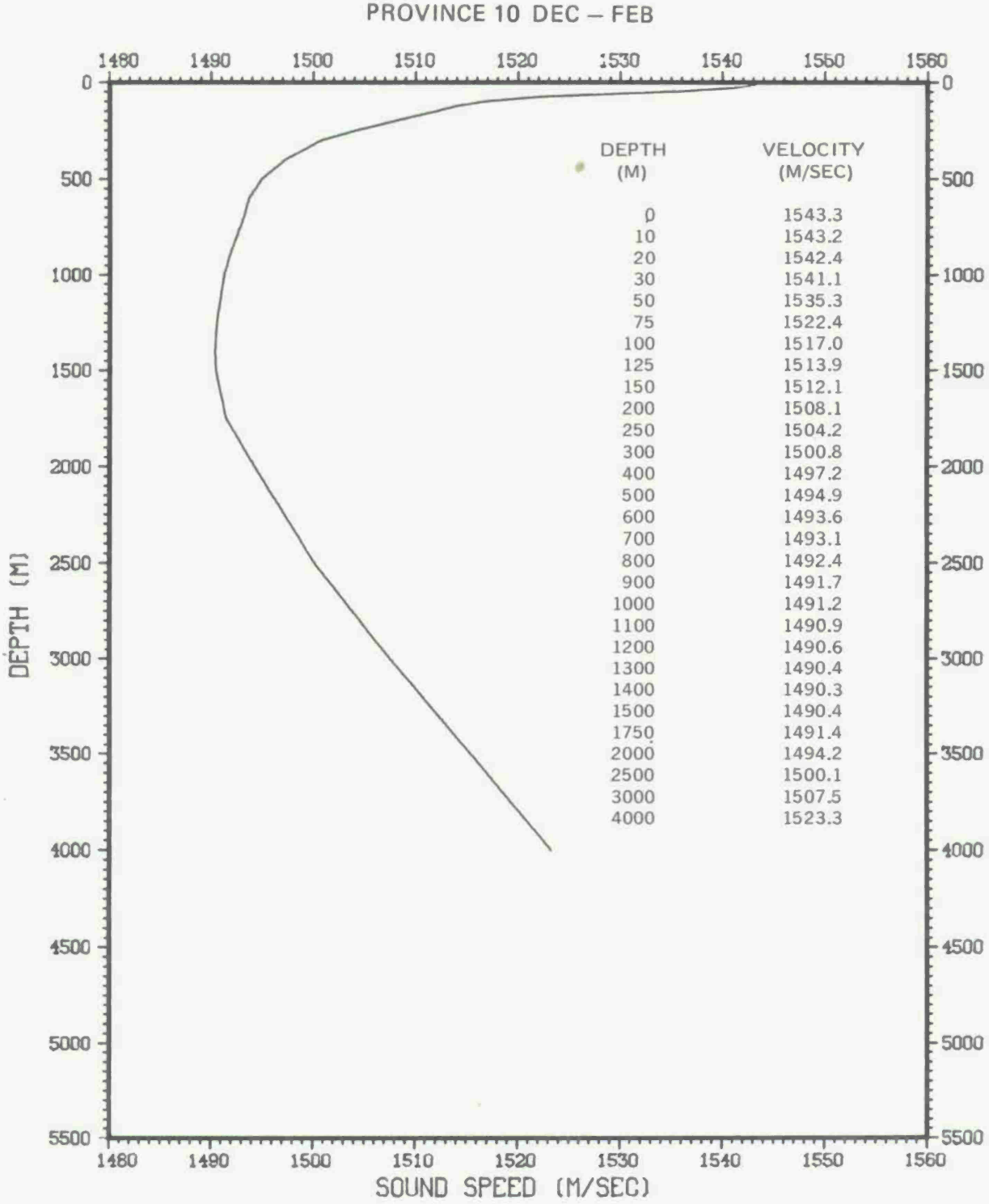
PROVINCE 9 OCT – NOV

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	26.5	26.1	25.6	.4031	4 ••	35.4	35.3	35.1	.1414	4 ••	1538.7	1537.7	1536.6	.9878	4
10 ••	26.5	26.1	25.8	.3109	4 ••	35.4	35.3	35.2	.0957	4 ••	1538.8	1538.0	1537.1	.7676	4
20 ••	26.4	26.1	25.7	.3109	4 ••	35.4	35.3	35.2	.0816	4 ••	1538.6	1538.2	1537.2	.6733	4
30 ••	26.2	26.0	25.7	.2217	4 ••	35.3	35.3	35.3	.0000	4 ••	1538.5	1538.1	1537.2	.5909	4
50 ••	25.9	25.5	24.9	.4193	4 ••	35.4	35.3	35.3	.0500	4 ••	1538.1	1537.1	1535.7	1.0079	4
75 ••	25.5	23.9	21.1	1.9891	4 ••	35.3	35.2	35.2	.0577	4 ••	1537.7	1533.7	1526.5	5.0659	4
100 ••	24.6	21.4	16.8	3.3649	4 ••	35.2	35.2	35.2	.0000	4 ••	1535.8	1527.4	1514.8	9.0886	4
125 ••	22.3	18.9	14.9	3.1775	4 ••	35.3	35.2	35.2	.0500	4 ••	1530.4	1521.1	1509.3	9.0981	4
150 ••	19.5	17.1	13.9	2.3698	4 ••	35.4	35.2	35.1	.1258	4 ••	1523.3	1516.3	1506.4	7.1844	4
200 ••	14.4	13.8	13.0	.5888	4 ••	35.2	35.2	35.1	.0500	4 ••	1509.1	1507.0	1504.2	2.0726	4
250 ••	12.7	12.3	11.9	.3862	4 ••	35.1	35.1	35.0	.0500	4 ••	1504.2	1502.6	1501.4	1.3961	4
300 ••	11.6	11.2	11.0	.2517	4 ••	35.1	35.0	35.0	.0577	4 ••	1501.1	1499.8	1499.0	.9142	4
400 ••	10.2	9.7	9.2	.4573	4 ••	34.9	34.8	34.8	.0577	4 ••	1497.5	1495.7	1493.7	1.7017	4
500 ••	9.2	8.6	8.1	.4546	4 ••	34.9	34.8	34.8	.0577	4 ••	1495.6	1493.3	1491.3	1.7689	4
600 ••	8.4	7.9	7.5	.3873	4 ••	34.9	34.8	34.8	.0577	4 ••	1493.9	1492.3	1490.7	1.3687	4
700 ••	7.7	7.4	7.1	.2944	4 ••	34.9	34.9	34.8	.0500	4 ••	1493.0	1491.9	1490.9	1.1045	4
800 ••	7.4	7.0	6.6	.3266	4 ••	34.9	34.9	34.8	.0500	4 ••	1493.6	492.1	1490.5	1.2662	4
900 ••	7.0	6.7	6.4	.3055	3 ••	34.9	34.9	34.8	.0577	3 ••	1493.8	1492.7	1491.3	1.2662	3
1000 ••	6.4	6.2	5.8	.3464	3 ••	35.0	34.9	34.8	.1000	3 ••	1493.1	1492.3	1490.7	1.3856	3
1100 ••	5.9	5.7	5.3	.3215	3 ••	34.9	34.8	34.8	.0577	3 ••	1492.5	1491.6	1490.1	1.3077	3
1200 ••	5.3	5.1	4.8	.2646	3 ••	34.9	34.8	34.8	.0577	3 ••	1491.9	1491.0	1489.8	1.0970	3
1300 ••	4.8	4.6	4.4	.2082	3 ••	34.9	34.8	34.8	.0577	3 ••	1491.4	1490.7	1489.6	.9452	3
1400 ••	4.3	4.2	4.0	.1732	3 ••	34.9	34.8	34.8	.0577	3 ••	1491.2	1490.6	1489.6	.8963	3
1500 ••	4.1	3.9	3.6	.2517	3 ••	34.8	34.8	34.8	.0000	3 ••	1491.8	1490.9	1489.8	1.0066	3
1750 ••	3.0	3.0	3.0	.0000	2 ••	34.8	34.8	34.8	.0000	2 ••	1491.6	1491.5	1491.4	.1414	2
2000 ••	2.6	2.5	2.5	.0707	2 ••	34.8	34.8	34.8	.0000	2 ••	1494.1	1493.9	1493.6	.3536	2
2500 ••	2.2	2.2	2.2	.0000	2 ••	34.8	34.8	34.8	.0000	2 ••	1500.9	1500.7	1500.6	.2121	2
3000 ••	1.9	1.9	1.9	.0000	2 ••	34.8	34.7	34.7	.0707	2 ••	1508.1	1508.0	1507.9	.1414	2


PROVINCE 9 OCT – NOV
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1536.6
10 1537.6
20 1538.4
30 1538.5
50 1538.1
75 1537.7
100 1535.8
125 1530.4
150 1523.3
200 1509.1
250 1503.4
300 1499.5
400 1493.7
500 1491.3
600 1490.7
700 1490.9
800 1492.1
900 1492.9
1000 1493.1
1100 1492.5
1200 1491.9
1300 1491.4
1400 1491.1
1500 1490.0
1750 1491.4
2000 1493.6
2500 1500.6
3000 1508.0
4000 1523.3
5000 1540.5

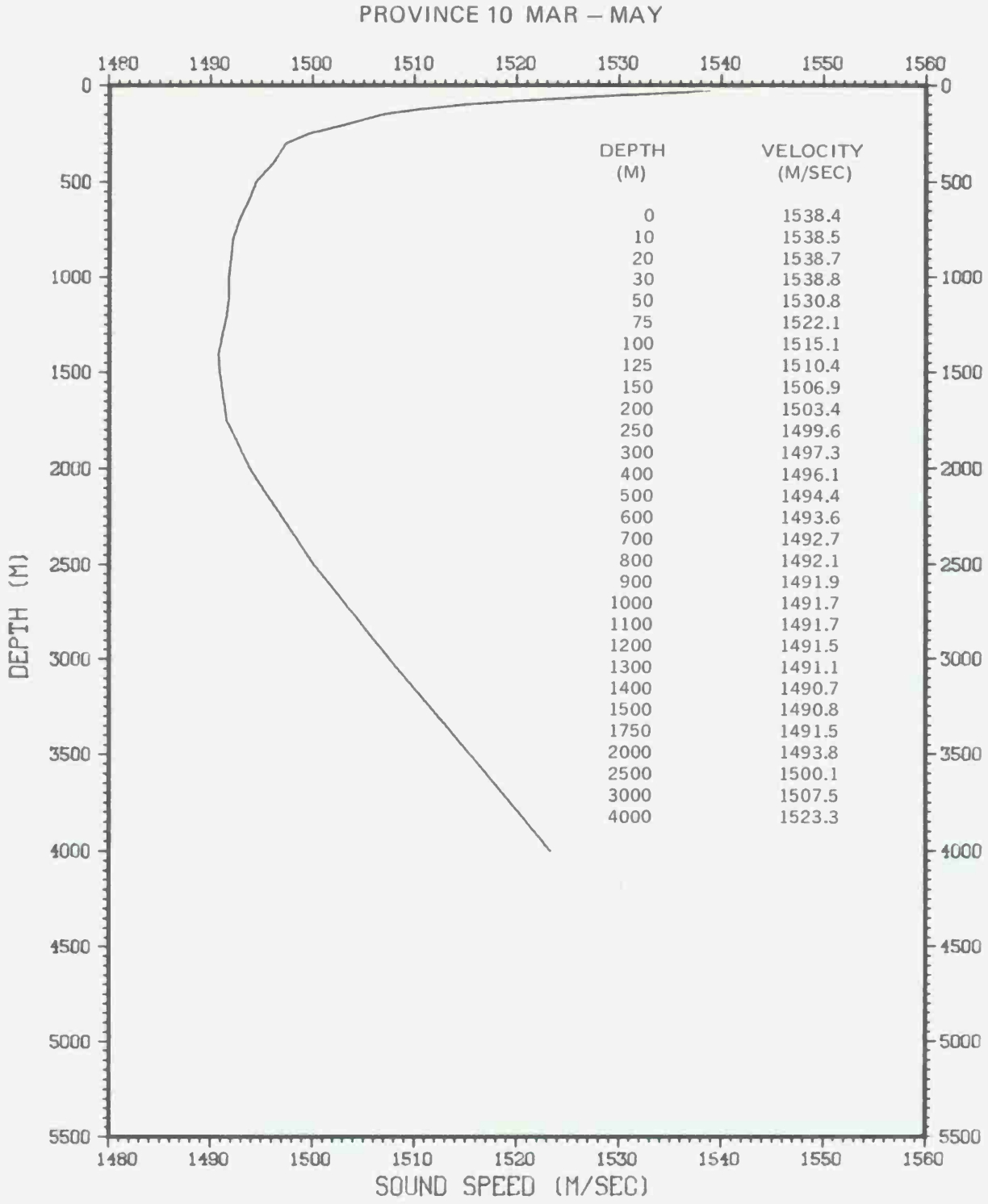
PROVINCE 10 DEC – FEB

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	29.98	28.37	26.12	.8381	35.81	35.00	32.08	.4074	1545.8	1542.36	1535.3	1.9267	69
10	29.31	28.17	25.55	.8966	35.73	35.04	34.16	.2141	1544.6	1542.16	1535.3	1.9613	69
20	29.18	27.93	24.92	.9655	35.75	35.07	34.83	.1761	1544.4	1541.81	1534.8	2.0915	69
30	29.01	27.36	24.45	1.0663	35.73	35.11	34.84	.1542	1544.3	1540.76	1534.1	2.3499	69
50	28.41	25.48	20.04	1.6972	35.67	35.16	34.85	.1336	1543.5	1536.84	1523.2	4.0154	69
75	27.42	22.35	17.61	2.3144	35.50	35.16	34.83	.1079	1542.0	1529.53	1516.7	5.9677	69
100	26.65	19.56	15.57	2.4492	35.42	35.14	34.92	.0796	1540.6	1522.46	1511.0	6.7034	69
125	24.92	17.38	14.06	2.2593	35.36	35.15	35.04	.0689	1536.9	1516.65	1506.5	6.5007	69
150	21.64	15.91	13.50	2.0094	35.40	35.15	35.05	.0838	1529.2	1512.68	1505.1	6.0806	69
200	18.61	13.98	12.07	1.5746	35.47	35.14	35.03	.0974	1521.8	1507.42	1501.0	5.0803	69
250	16.54	12.67	11.35	1.2226	35.48	35.10	34.98	.1058	1516.7	1503.88	1499.2	4.1570	69
300	15.26	11.69	10.41	.9631	35.36	35.04	34.92	.1004	1513.6	1501.30	1496.7	3.3985	69
400	12.96	10.31	9.29	.7101	35.22	34.93	34.80	.0787	1507.6	1497.91	1494.2	2.6169	69
500	11.47	9.24	8.35	.5262	35.05	34.85	34.75	.0440	1503.9	1495.57	1492.2	1.9786	67
600	9.75	8.39	7.77	.3868	34.87	34.81	34.70	.0340	1499.1	1493.99	1491.6	1.4684	46
700	8.37	7.76	7.31	.3507	34.90	34.82	34.79	.0330	1495.5	1493.22	1491.5	1.3310	11
800	7.95	7.17	6.79	.3706	34.91	34.83	34.75	.0459	1495.5	1492.58	1491.1	1.4275	11
900	7.71	6.67	6.27	.4381	34.91	34.82	34.76	.0465	1496.3	1492.30	1490.7	1.7372	11
1000	7.64	6.20	5.74	.5401	34.91	34.82	34.77	.0498	1497.7	1492.06	1490.2	2.1412	11
1100	5.89	5.48	5.24	.2012	34.88	34.79	34.76	.0400	1492.6	1490.84	1489.9	.8618	8
1200	5.43	5.01	4.79	.2318	34.85	34.78	34.75	.0315	1492.5	1490.57	1489.6	1.0110	8
1300	5.04	4.55	4.35	.2536	34.82	34.78	34.75	.0213	1492.5	1490.35	1489.5	1.0863	8
1400	4.66	4.12	3.89	.2717	34.79	34.77	34.75	.0128	1492.5	1490.22	1489.2	1.1732	8
1500	4.27	3.75	3.44	.2742	34.78	34.76	34.73	.0155	1492.5	1490.31	1489.0	1.1982	8
1750	3.41	2.99	2.70	.2494	34.77	34.76	34.73	.0138	1493.1	1491.29	1490.0	1.0637	7
2000	2.76	2.69	2.63	.0919	34.77	34.74	34.71	.0424	1494.6	1494.30	1494.0	.4243	2
2500	2.08	2.08	2.08	.0000	34.77	34.77	34.77	.0000	1500.2	1500.20	1500.2	.0000	1
3000	1.76	1.76	1.76	.0000	34.75	34.75	34.75	.0000	1507.3	1507.30	1507.3	.0000	1


PROVINCE 10 DEC – FEB
1480 1490 1500 1510 1520 1530 1540 1550 1560
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M) VELOCITY (M/SEC)
0 1543.3
10 1543.2
20 1542.4
30 1541.1
50 1535.3
75 1522.4
100 1517.0
125 1513.9
150 1512.1
200 1508.1
250 1504.2
300 1500.8
400 1497.2
500 1494.9
600 1493.6
700 1493.1
800 1492.4
900 1491.7
1000 1491.2
1100 1490.9
1200 1490.6
1300 1490.4
1400 1490.3
1500 1490.4
1750 1491.4
2000 1494.2
2500 1500.1
3000 1507.5
4000 1523.3

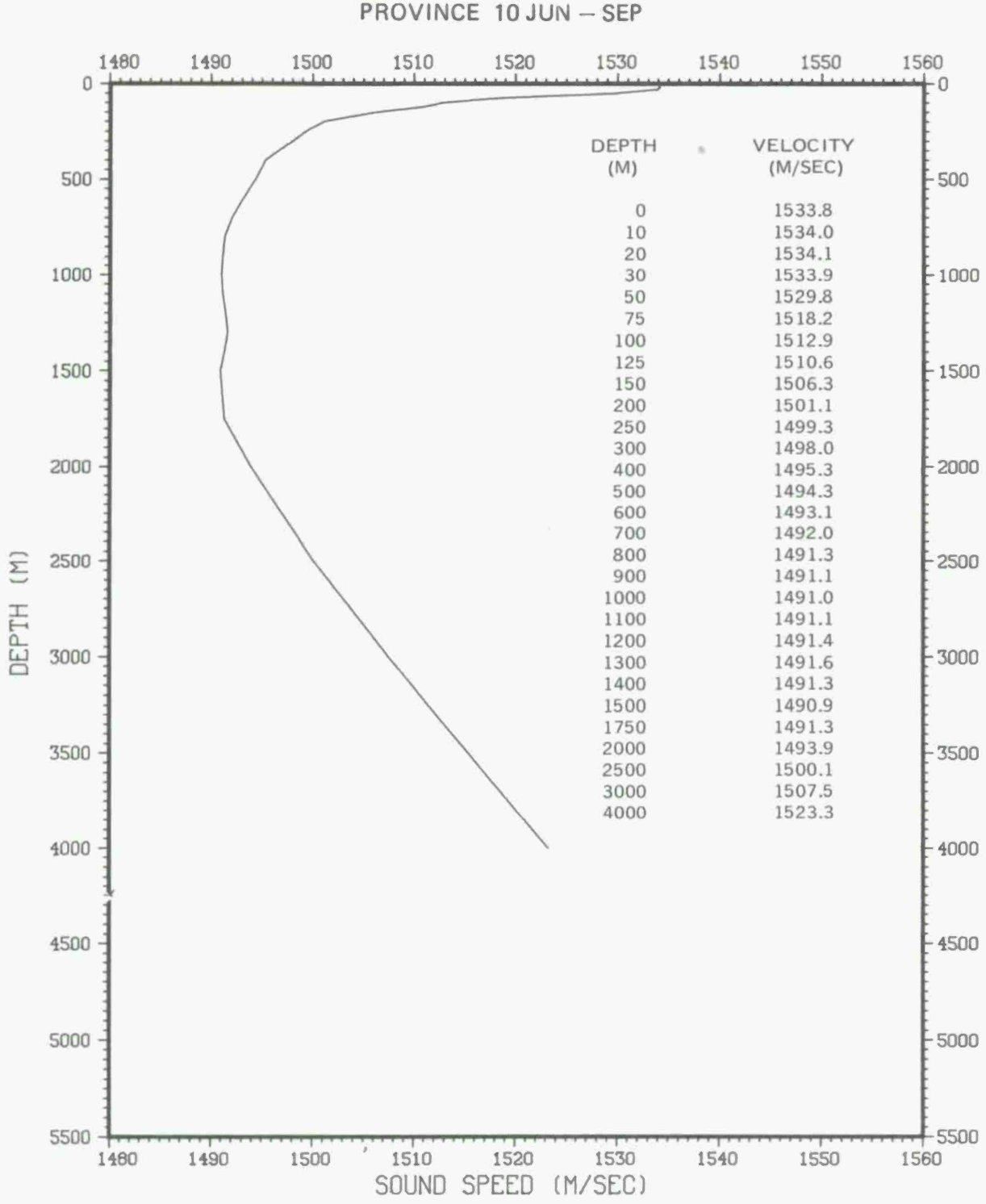
PROVINCE 10 MAR – MAY

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0 ••	29.6	28.0	25.8	1.1667	25 ••	35.4	34.9	34.4	.2309	25 ••	1544.9	1541.5	1536.7	2.5384	25
10 ••	29.5	28.0	25.8	1.1599	25 ••	35.3	34.9	34.4	.2055	25 ••	1544.8	1541.6	1536.8	2.5569	25
20 ••	29.3	27.8	24.6	1.2359	25 ••	35.3	34.9	34.5	.1803	25 ••	1544.7	1541.3	1534.2	2.7452	25
30 ••	29.2	26.9	20.9	1.8239	25 ••	35.3	34.9	34.7	.1658	25 ••	1544.5	1539.6	1525.2	4.2192	25
50 ••	28.2	24.2	19.6	2.5818	25 ••	35.4	35.0	34.7	.1535	25 ••	1542.7	1533.6	1522.0	6.2306	25
75 ••	26.8	21.3	16.8	2.6953	25 ••	35.3	35.1	34.9	.1052	25 ••	1540.4	1526.8	1514.3	6.9413	25
100 ••	24.7	19.1	15.1	2.7220	25 ••	35.3	35.1	34.9	.1208	25 ••	1535.6	1521.0	1509.4	7.4177	25
125 ••	23.5	17.3	13.7	2.6218	25 ••	35.4	35.1	34.9	.1190	25 ••	1533.3	1516.4	1505.5	7.5607	25
150 ••	22.7	16.0	12.8	2.5303	25 ••	35.5	35.2	34.8	.1447	25 ••	1531.6	1513.0	1502.8	7.5585	25
200 ••	19.3	13.9	11.8	1.9582	25 ••	35.5	35.1	34.9	.1399	25 ••	1523.5	1507.2	1500.2	6.2630	25
250 ••	16.0	12.5	11.0	1.3035	25 ••	35.4	35.0	34.9	.1003	25 ••	1514.7	1503.1	1497.9	4.4332	25
300 ••	13.5	11.5	10.3	.9101	25 ••	35.2	35.0	34.9	.0866	25 ••	1507.5	1500.6	1496.3	3.2484	25
400 ••	11.8	10.2	9.3	.7767	25 ••	35.1	34.9	34.8	.0881	25 ••	1503.3	1497.4	1494.3	2.8758	25
500 ••	10.7	9.2	8.2	.6934	25 ••	35.0	34.8	34.7	.0600	25 ••	1500.9	1495.4	1491.8	2.5645	25
600 ••	9.5	8.3	7.5	.5300	25 ••	34.9	34.8	34.7	.0473	25 ••	1498.1	1493.8	1490.5	1.9700	25
700 ••	8.9	7.6	6.8	.4537	25 ••	34.9	34.8	34.7	.0500	25 ••	1497.6	1492.7	1489.5	1.7459	25
800 ••	8.5	7.0	6.3	.4842	24 ••	34.9	34.8	34.6	.0637	24 ••	1497.6	1491.8	1488.9	1.8849	24
900 ••	8.0	6.4	5.7	.5181	24 ••	34.9	34.8	34.6	.0779	24 ••	1497.3	1491.3	1488.3	2.0315	24
1000 ••	7.4	5.9	5.3	.5015	23 ••	34.9	34.8	34.6	.0647	23 ••	1496.7	1491.0	1488.4	1.9925	23
1100 ••	6.7	5.5	4.8	.4470	23 ••	34.8	34.8	34.6	.0573	23 ••	1495.6	1490.7	1488.0	1.8030	23
1200 ••	5.8	5.0	4.5	.3483	22 ••	34.8	34.8	34.7	.0456	22 ••	1493.6	1490.6	1488.2	1.4651	22
1300 ••	5.3	4.6	4.1	.3002	21 ••	34.8	34.8	34.7	.0436	21 ••	1493.3	1490.4	1488.4	1.2339	21
1400 ••	4.9	4.2	3.8	.2585	18 ••	34.8	34.8	34.7	.0485	18 ••	1493.5	1490.7	1488.9	1.1216	18
1500 ••	4.5	3.8	3.5	.2593	18 ••	34.8	34.8	34.7	.0511	18 ••	1493.7	1490.8	1489.4	1.1224	18
1750 ••	3.6	3.1	2.8	.2144	17 ••	34.8	34.7	34.7	.0507	17 ••	1494.1	1491.7	1490.7	.9556	17
2000 ••	2.8	2.5	2.4	.1094	16 ••	34.8	34.7	34.7	.0447	16 ••	1494.6	1493.7	1492.8	.4801	16
2500 ••	2.3	2.0	1.9	.1424	9 ••	34.7	34.7	34.7	.0000	9 ••	1501.0	1500.1	1499.4	.5263	9
3000 ••	1.8	1.7	1.7	.0516	6 ••	34.7	34.7	34.7	.0000	6 ••	1507.5	1507.3	1507.0	.1941	6


PROVINCE 10 MAR – MAY
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1538.4
10 1538.5
20 1538.7
30 1538.8
50 1530.8
75 1522.1
100 1515.1
125 1510.4
150 1506.9
200 1503.4
250 1499.6
300 1497.3
400 1496.1
500 1494.4
600 1493.6
700 1492.7
800 1492.1
900 1491.9
1000 1491.7
1100 1491.7
1200 1491.5
1300 1491.1
1400 1490.7
1500 1490.8
1750 1491.5
2000 1493.8
2500 1500.1
3000 1507.5
4000 1523.3

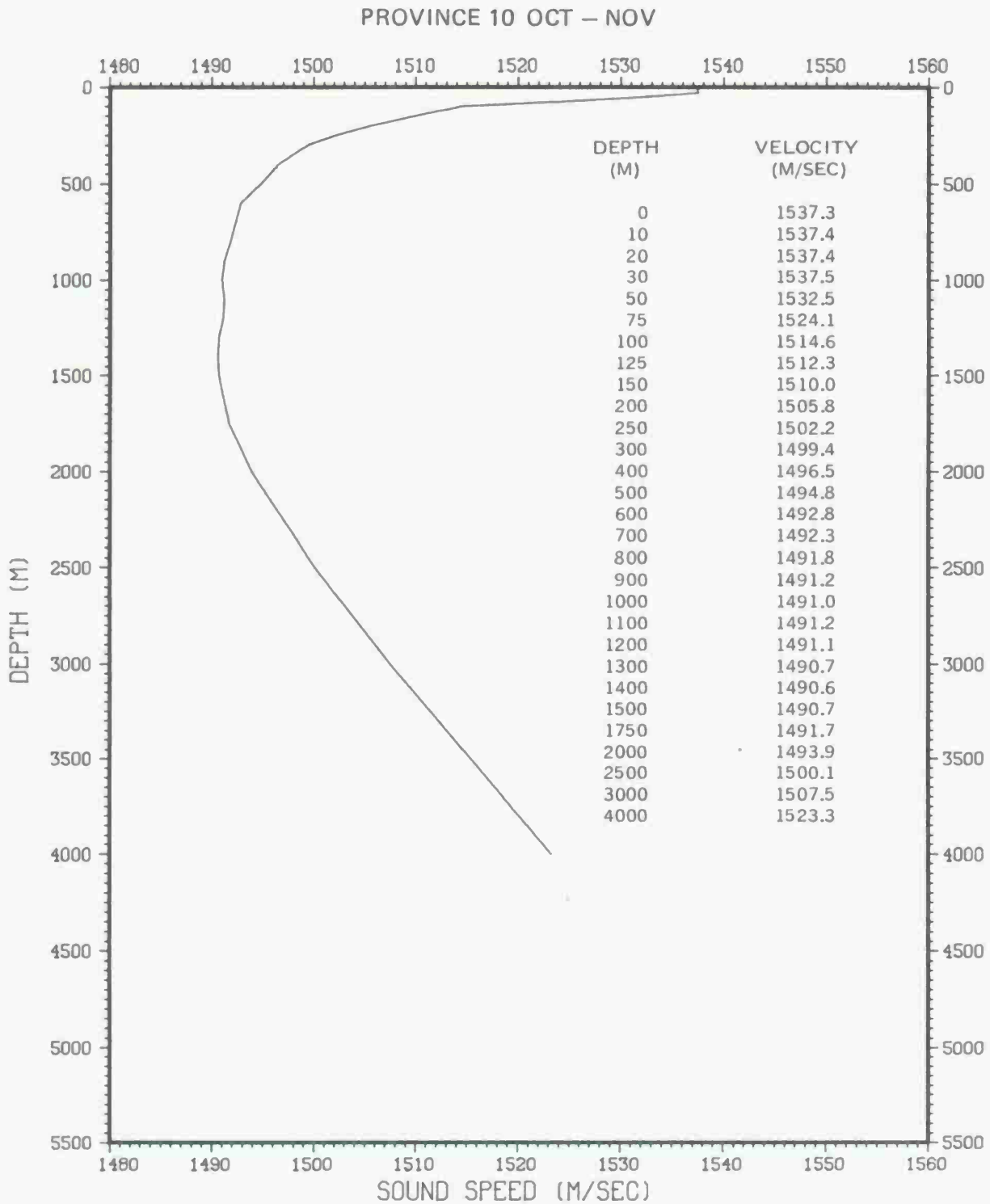
PROVINCE 10 JUN – SEP

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	28.5	25.0	24.0	1.0952	26	35.3	35.1	34.2	.2658	26	1542.9	1534.8	1532.1	2.3817	26
10	28.5	24.9	24.0	1.1085	26	35.3	35.1	34.2	.2658	26	1543.0	1534.8	1532.3	2.4198	26
20	28.5	24.8	23.3	1.1670	26	35.3	35.1	34.2	.2658	26	1543.2	1534.7	1531.1	2.5899	26
30	28.3	24.6	22.2	1.1548	26	35.4	35.1	34.3	.2572	26	1543.0	1534.4	1528.6	2.6793	26
50	25.2	23.2	19.0	1.7510	26	35.3	35.1	34.7	.2049	26	1536.5	1531.4	1520.4	4.4366	26
75	24.9	19.8	14.6	2.9606	26	35.3	35.1	34.7	.1357	26	1536.2	1522.8	1507.6	7.9697	26
100	23.9	17.7	13.7	2.6685	26	35.3	35.1	34.9	.0977	26	1533.7	1517.3	1505.0	7.5457	26
125	22.0	16.2	13.2	2.2205	26	35.3	35.1	35.0	.0647	26	1529.7	1513.1	1503.6	6.6028	26
150	20.1	14.9	12.3	1.7636	26	35.3	35.2	35.0	.0703	26	1525.0	1509.7	1501.2	5.4766	26
200	16.9	13.2	11.7	1.2962	26	35.4	35.1	35.0	.1008	26	1516.9	1504.9	1499.7	4.3402	26
250	15.1	12.1	11.1	1.0995	26	35.3	35.1	35.0	.0948	26	1512.3	1502.1	1498.3	3.8065	26
300	13.9	11.3	10.2	.9920	26	35.3	35.0	34.9	.1033	26	1509.1	1499.8	1495.8	3.5508	26
400	12.4	10.0	9.2	.8100	26	35.2	34.9	34.8	.0981	26	1505.5	1496.6	1493.8	2.9575	26
500	10.6	9.0	8.2	.5771	26	34.9	34.8	34.7	.0516	26	1500.7	1494.6	1491.6	2.1971	26
600	9.2	8.2	7.5	.4162	26	34.9	34.8	34.7	.0543	26	1496.8	1493.1	1490.3	1.5738	26
700	8.3	7.4	6.9	.3751	25	34.9	34.8	34.7	.0572	25	1495.1	1492.0	1489.7	1.4461	25
800	7.3	6.8	6.0	.3062	24	34.9	34.8	34.7	.0637	24	1493.1	1491.3	1488.1	1.2265	24
900	6.8	6.3	5.8	.2723	24	34.9	34.8	34.7	.0408	24	1492.8	1490.9	1488.9	1.1390	24
1000	6.4	5.8	5.2	.3420	24	34.9	34.8	34.7	.0537	24	1492.9	1490.6	1488.1	1.4095	24
1100	6.0	5.4	4.6	.3668	23	34.9	34.8	34.7	.0626	23	1493.2	1490.6	1487.3	1.5179	23
1200	5.6	5.1	4.5	.3144	18	34.9	34.8	34.7	.0583	18	1493.1	1490.8	1488.6	1.3325	18
1300	5.0	4.6	4.2	.2640	18	34.9	34.8	34.7	.0471	18	1492.4	1490.8	1488.8	1.1474	18
1400	4.6	4.2	3.9	.2523	17	34.8	34.8	34.7	.0470	17	1492.2	1490.8	1489.3	1.0351	17
1500	4.1	3.8	3.5	.2063	17	34.8	34.8	34.7	.0507	17	1491.9	1490.8	1489.2	.9027	17
1750	3.2	3.1	2.9	.1060	15	34.8	34.7	34.7	.0516	15	1492.3	1491.6	1491.0	.3994	15
2000	2.7	2.6	2.5	.0579	14	34.8	34.7	34.7	.0363	14	1494.2	1493.8	1493.3	.2464	14
2500	2.2	2.1	2.0	.0633	14	34.8	34.7	34.7	.0363	14	1500.6	1500.1	1499.7	.2526	14
3000	1.8	1.8	1.7	.0405	11	34.7	34.7	34.7	.0000	11	1507.8	1507.5	1507.3	.1555	11
4000	1.4	1.4	1.4	.0000	4	34.7	34.7	34.7	.0000	4	1523.5	1523.4	1523.2	.1258	4


PROVINCE 10 JUN – SEP
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1533.8
10 1534.0
20 1534.1
30 1533.9
50 1529.8
75 1518.2
100 1512.9
125 1510.6
150 1506.3
200 1501.1
250 1499.3
300 1498.0
400 1495.3
500 1494.3
600 1493.1
700 1492.0
800 1491.3
900 1491.1
1000 1491.0
1100 1491.1
1200 1491.4
1300 1491.6
1400 1491.3
1500 1490.9
1750 1491.3
2000 1493.9
2500 1500.1
3000 1507.5
4000 1523.3

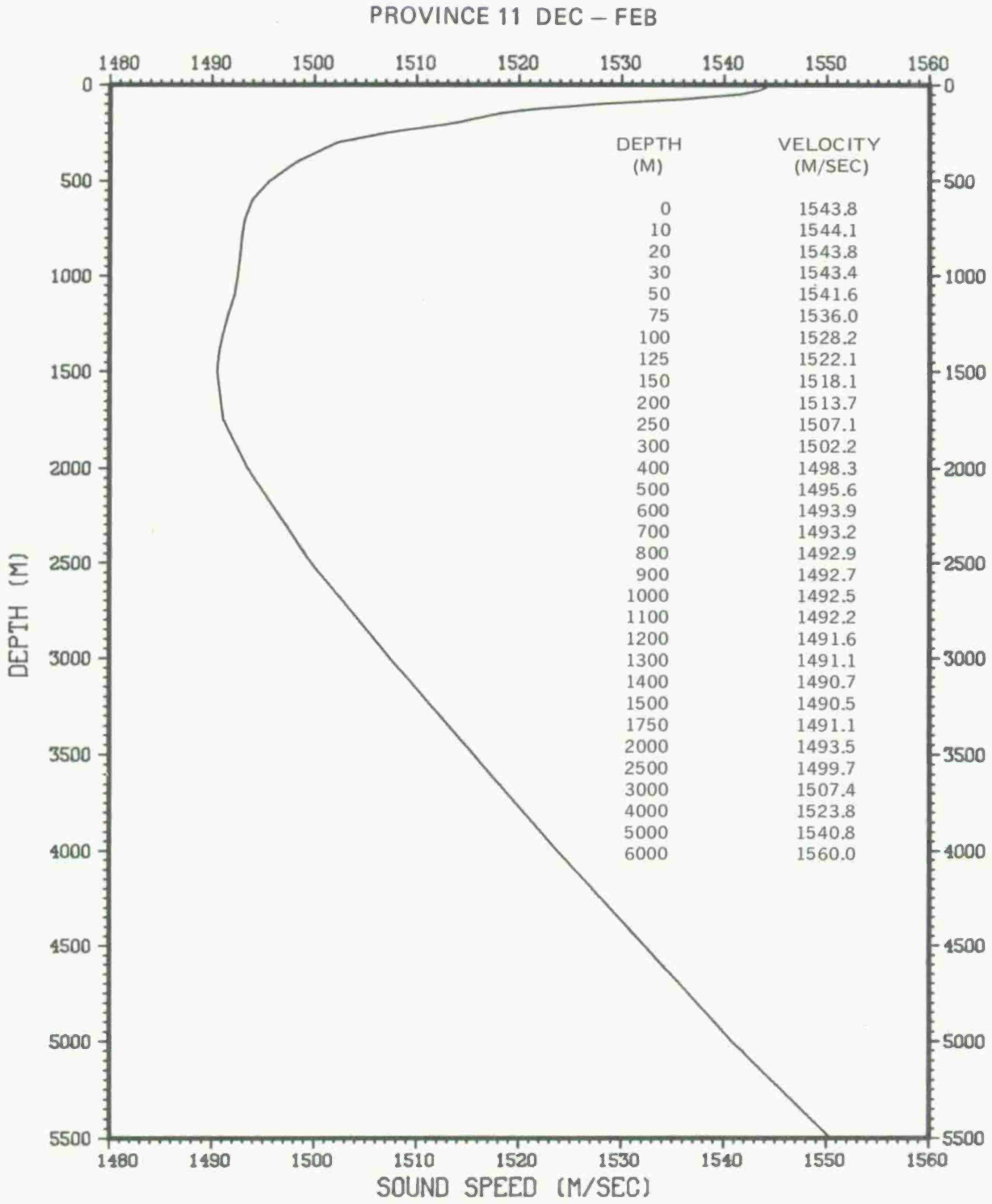
PROVINCE 10 OCT – NOV

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	26.5	25.7	24.4	.7367	9	35.3	35.2	35.1	.0866	9	1538.4	1536.8	1533.7	1.6897	9
10	26.5	25.7	24.4	.7379	9	35.3	35.2	35.0	.1093	9	1538.5	1536.9	1533.9	1.6366	9
20	26.4	25.7	24.4	.7348	9	35.3	35.2	35.1	.0726	9	1538.4	1537.0	1534.0	1.6853	9
30	26.2	25.5	24.2	.7618	9	35.3	35.3	35.2	.0500	9	1538.5	1536.7	1533.8	1.7706	9
50	26.2	24.3	21.8	1.3491	9	35.3	35.3	35.2	.0500	9	1538.8	1534.3	1528.0	3.2864	9
75	25.8	22.2	19.1	2.1722	9	35.3	35.3	35.2	.0527	9	1538.2	1529.3	1521.0	5.5414	9
100	23.7	19.5	16.8	2.5303	9	35.3	35.2	35.1	.0601	9	1533.5	1522.4	1514.6	6.8999	9
125	23.1	17.6	15.2	2.3686	9	35.3	35.2	35.1	.0601	9	1532.5	1517.5	1510.3	6.6669	9
150	21.3	16.0	14.0	2.1933	9	35.3	35.2	35.1	.0667	9	1528.2	1513.2	1506.8	6.4333	9
200	15.6	13.9	12.5	.9880	9	35.2	35.1	35.1	.0500	9	1512.9	1507.4	1502.8	3.2319	9
250	14.1	12.7	11.8	.8074	9	35.2	35.1	35.0	.0601	9	1508.8	1504.1	1501.0	2.8004	9
300	13.0	11.6	10.9	.7008	9	35.2	35.0	35.0	.0726	9	1505.9	1501.1	1498.4	2.4837	9
400	10.8	10.1	9.4	.4428	9	35.0	34.9	34.8	.0500	9	1499.9	1497.1	1494.6	1.6523	9
500	10.6	9.2	8.8	.5788	9	35.0	34.8	34.7	.0833	9	1500.6	1495.4	1493.7	2.1955	9
600	9.0	8.3	7.8	.3775	9	34.9	34.8	34.7	.0601	9	1496.4	1493.5	1491.7	1.5263	9
700	7.8	7.5	7.0	.2522	9	34.8	34.8	34.7	.0527	9	1493.6	1492.3	1490.0	1.1069	9
800	7.2	6.9	6.2	.3536	9	34.8	34.8	34.7	.0500	9	1492.8	1491.6	1488.6	1.4555	9
900	6.8	6.4	5.6	.3822	9	34.9	34.8	34.7	.0601	9	1492.8	1491.2	1487.8	1.5786	9
1000	6.3	5.9	5.3	.3005	9	34.9	34.8	34.7	.0601	9	1492.5	1490.7	1488.3	1.2194	9
1100	5.7	5.5	5.3	.1598	8	34.8	34.8	34.8	.0000	8	1491.9	1490.7	1489.9	.6999	8
1200	5.2	5.0	4.8	.1488	8	34.8	34.8	34.7	.0463	8	1491.5	1490.5	1489.8	.6175	8
1300	4.7	4.5	4.4	.1061	8	34.8	34.8	34.7	.0463	8	1491.2	1490.3	1489.6	.5392	8
1400	4.3	4.1	3.9	.1302	8	34.8	34.8	34.7	.0518	8	1491.0	1490.3	1489.3	.5303	8
1500	3.9	3.8	3.5	.1195	8	34.8	34.7	34.7	.0535	8	1491.0	1490.4	1489.2	.5548	8
1750	3.1	3.0	2.8	.1309	8	34.8	34.7	34.7	.0463	8	1491.8	1491.3	1490.7	.4340	8
2000	2.7	2.5	2.4	.0916	8	34.8	34.7	34.7	.0354	8	1494.1	1493.6	1493.1	.3780	8
2500	2.1	2.0	2.0	.0535	7	34.7	34.7	34.7	.0000	7	1500.3	1500.0	1499.7	.1976	7
3000	1.8	1.8	1.7	.0408	6	34.7	34.7	34.7	.0000	6	1507.7	1507.5	1507.3	.1761	6
4000	1.3	1.3	1.2	.0707	2	34.7	34.7	34.7	.0000	2	1523.0	1522.7	1522.4	.4243	2


PROVINCE 10 OCT – NOV
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1537.3
10 1537.4
20 1537.4
30 1537.5
50 1532.5
75 1524.1
100 1514.6
125 1512.3
150 1510.0
200 1505.8
250 1502.2
300 1499.4
400 1496.5
500 1494.8
600 1492.8
700 1492.3
800 1491.8
900 1491.2
1000 1491.0
1100 1491.2
1200 1491.1
1300 1490.7
1400 1490.6
1500 1490.7
1750 1491.7
2000 1493.9
2500 1500.1
3000 1507.5
4000 1523.3

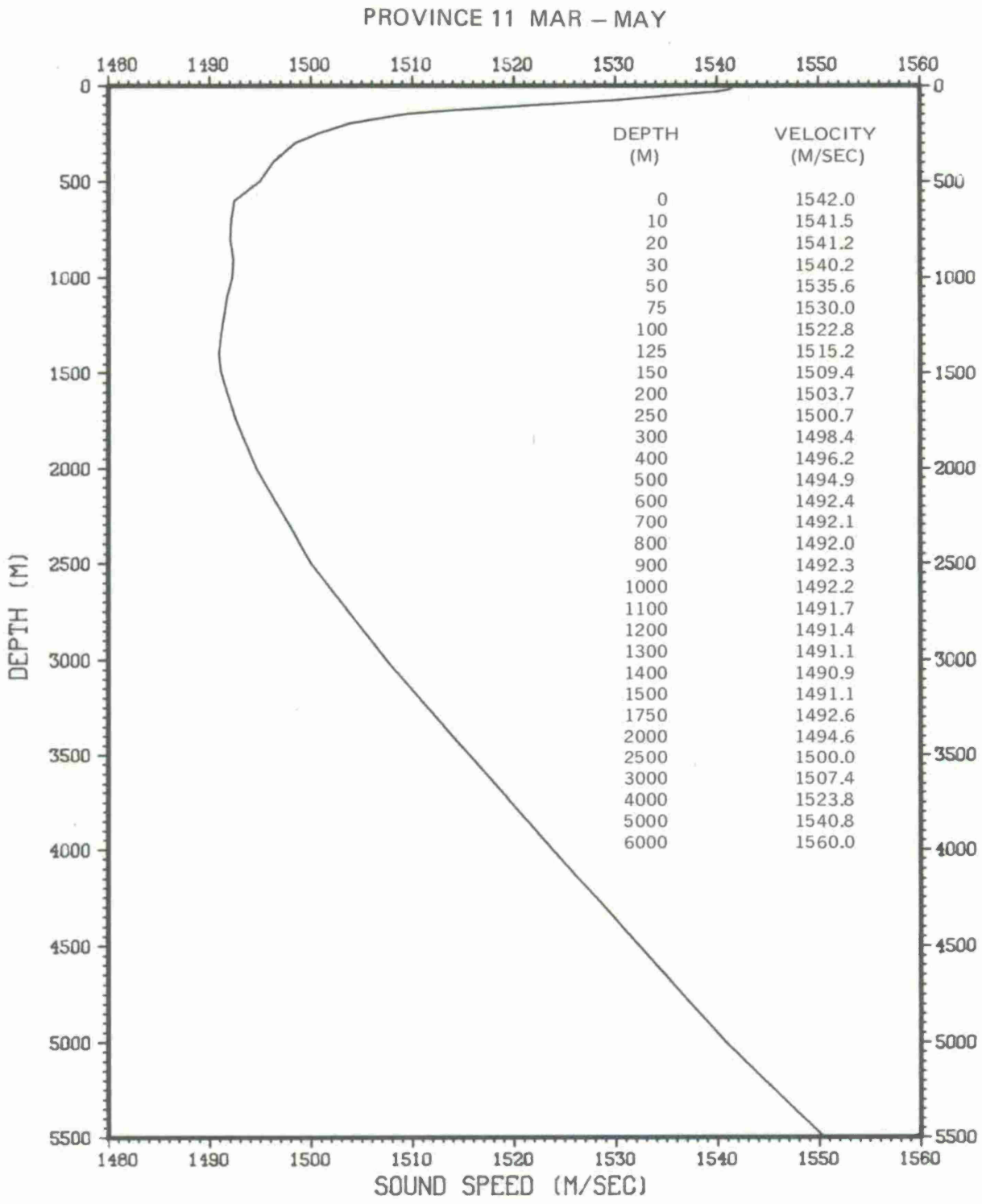
PROVINCE 11 DEC – FEB

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0 ••	29•2	28•7	28•0	.3289	11 ••	35•3	35•2	34•8	•1673	11 ••	1544•4	1543•3	1541•9	•8344	11
10 ••	28•9	28•6	28•0	.2803	11 ••	35•3	35•2	34•8	•1673	11 ••	1544•1	1543•4	1542•0	•7395	11
20 ••	28•8	28•4	27•2	.4692	11 ••	35•3	35•2	34•8	•1662	11 ••	1544•0	1543•1	1540•5	1•0600	11
30 ••	28•6	28•0	26•6	.8429	11 ••	35•4	35•3	34•8	•1672	11 ••	1543•7	1542•4	1539•3	1•7645	11
50 ••	28•4	26•6	23•5	1.7356	11 ••	35•4	35•3	35•1	•2701	11 ••	1543•6	1540•1	1532•3	3•9911	11
75 ••	25•8	23•6	19•8	2.1355	11 ••	35•4	35•3	34•2	•3751	11 ••	1538•3	1532•8	1523•1	5•4143	11
100 ••	24•2	21•1	17•1	2.1781	11 ••	35•4	35•3	34•2	•3647	11 ••	1535•0	1526•9	1515•7	5•9111	11
125 ••	21•4	18•6	16•1	1.4446	11 ••	35•3	35•2	34•2	•3505	11 ••	1528•3	1520•8	1513•2	4•1435	11
150 ••	19•0	17•3	15•6	.9523	11 ••	35•3	35•2	34•2	•3405	11 ••	1522•2	1517•2	1511•9	2•8620	11
200 ••	16•5	15•7	14•6	.6714	11 ••	35•2	35•2	34•1	•3302	11 ••	1515•5	1513•2	1509•6	2•0566	11
250 ••	14•7	13•7	13•0	.5510	11 ••	35•2	35•1	34•1	•3505	11 ••	1510•6	1507•5	1505•2	1•8214	11
300 ••	12•6	12•1	11•4	.3459	11 ••	35•1	35•0	34•0	•3505	11 ••	1504•6	1502•8	1500•5	1•1844	11
400 ••	10•9	10•5	10•0	.2663	11 ••	35•0	34•9	34•9	•3467	11 ••	1500•3	1498•7	1496•7	1•0348	11
500 ••	9•8	9•3	8•8	.2609	11 ••	34•9	34•9	34•8	•0405	11 ••	1497•7	1495•9	1493•9	1•0653	11
600 ••	8•9	8•5	8•1	.2442	11 ••	34•9	34•9	34•8	•0405	11 ••	1496•0	1494•4	1492•8	•9244	11
700 ••	8•2	7•9	7•5	.2359	10 ••	34•9	34•9	34•8	•0422	10 ••	1494•9	1493•8	1492•2	•9371	10
800 ••	7•6	7•3	6•8	.2759	10 ••	34•9	34•9	34•8	•0483	10 ••	1494•4	1493•4	1491•2	1•1045	10
900 ••	7•2	6•8	6•2	.3098	10 ••	34•9	34•9	34•8	•0483	10 ••	1494•4	1493•1	1490•4	1•2987	10
1000 ••	6•8	6•3	5•7	.3621	9 ••	34•9	34•9	34•8	•0500	9 ••	1494•6	1492•6	1490•2	1•4763	9
1100 ••	6•2	5•8	5•3	.3312	6 ••	34•9	34•8	34•8	•0548	6 ••	1493•9	1492•1	1490•1	1•3452	6
1200 ••	5•2	5•0	4•8	.1915	4 ••	34•9	34•8	34•8	•0500	4 ••	1491•6	1490•9	1489•9	•7853	4
1300 ••	4•7	4•6	4•4	.1414	4 ••	34•8	34•8	34•8	•0000	4 ••	1491•1	1490•7	1489•8	•6131	4
1400 ••	4•3	4•2	4•0	.1258	4 ••	34•8	34•8	34•8	•0000	4 ••	1491•0	1490•6	1489•9	•4830	4
1500 ••	4•0	3•9	3•7	.1500	4 ••	34•8	34•8	34•8	•0000	4 ••	1491•5	1490•9	1490•2	•6238	4
1750 ••	3•3	3•1	2•9	.2062	4 ••	34•8	34•8	34•8	•0000	4 ••	1492•7	1491•9	1491•1	•8421	4
2000 ••	2•7	2•5	2•4	.1528	3 ••	34•8	34•8	34•8	•0000	3 ••	1494•4	1493•7	1493•1	•6658	3
2500 ••	2•0	2•0	1•9	.0707	2 ••	34•8	34•7	34•7	•0707	2 ••	1500•0	1499•8	1499•6	•2828	2
3000 ••	1•8	1•7	1•7	.0707	2 ••	34•8	34•7	34•7	•0707	2 ••	1507•4	1507•2	1507•1	•2121	2


PROVINCE 11 DEC – FEB
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1543.8
10 1544.1
20 1543.8
30 1543.4
50 1541.6
75 1536.0
100 1528.2
125 1522.1
150 1518.1
200 1513.7
250 1507.1
300 1502.2
400 1498.3
500 1495.6
600 1493.9
700 1493.2
800 1492.9
900 1492.7
1000 1492.5
1100 1492.2
1200 1491.6
1300 1491.1
1400 1490.7
1500 1490.5
1750 1491.1
2000 1493.5
2500 1499.7
3000 1507.4
4000 1523.8
5000 1540.8
6000 1560.0

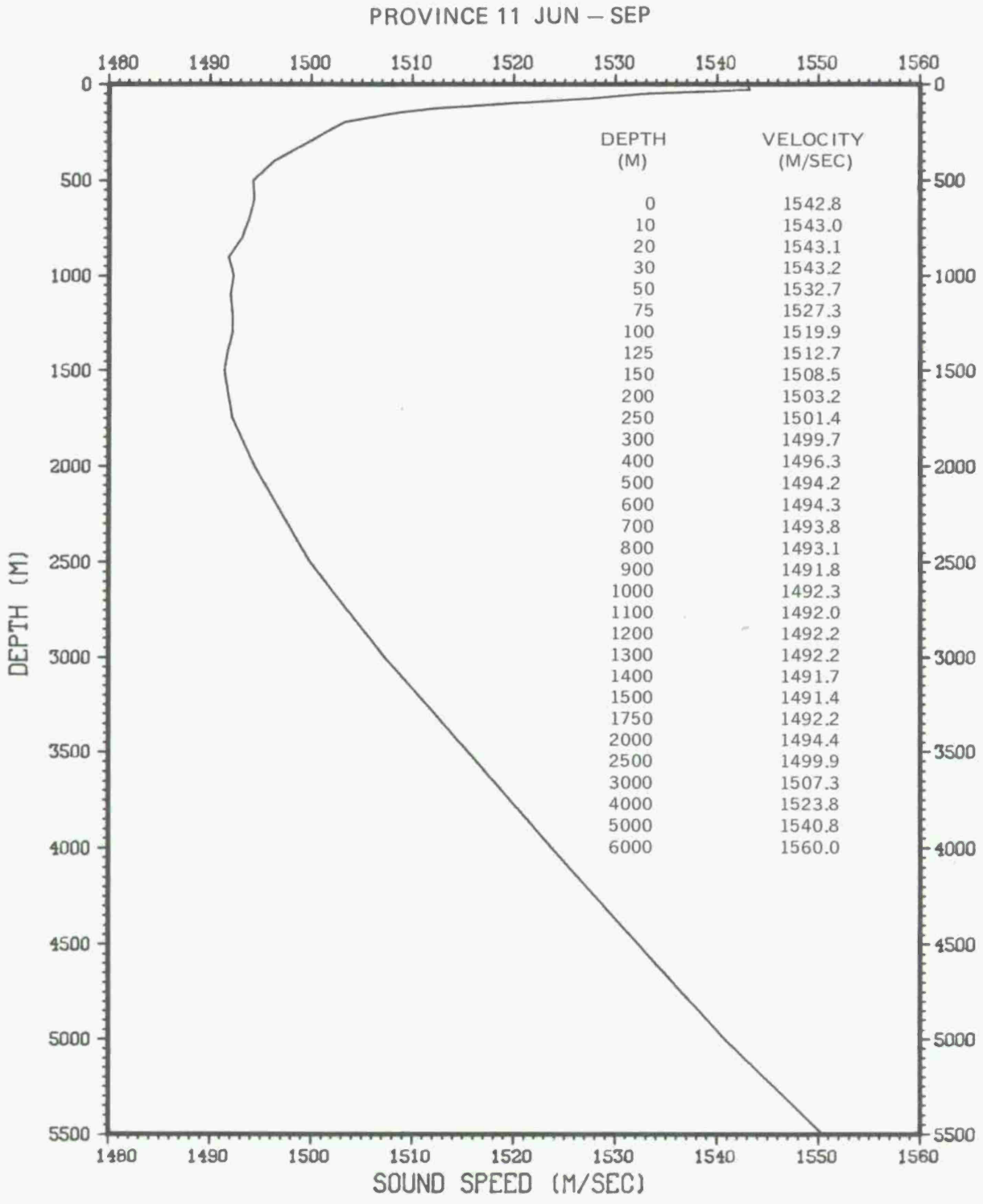
PROVINCE 11 MAR – MAY

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	30.5	28.9	26.2	.8424	29	35.3	34.6	34.0	.3736	29	1546.3	1543.1	1537.6	1.6259	29
10	30.2	28.8	26.2	.8488	29	35.3	34.7	34.0	.3728	29	1545.7	1543.0	1537.6	1.6588	29
20	29.9	28.6	24.1	.9776	29	35.3	34.7	34.0	.3846	29	1545.4	1542.8	1537.6	1.9658	29
30	29.6	28.1	24.9	1.3813	29	35.4	34.8	34.0	.3660	29	1544.9	1541.9	1535.3	2.8748	29
50	29.2	25.7	19.6	2.7320	29	35.4	35.0	34.3	.2636	29	1545.0	1537.1	1522.2	6.4013	29
75	28.5	21.8	16.1	3.4782	29	35.4	35.1	34.7	.1505	29	1544.0	1527.9	1512.3	8.8140	29
100	23.5	18.1	14.5	2.3574	29	35.3	35.2	34.9	.0946	29	1533.0	1518.2	1507.6	6.6956	29
125	19.6	16.0	13.3	1.5528	29	35.2	35.1	34.9	.0797	29	1523.3	1512.7	1504.1	4.7398	29
150	17.0	14.6	12.5	1.0055	29	35.2	35.1	35.0	.0704	29	1516.3	1508.5	1501.7	3.2748	29
200	14.6	12.8	11.7	.7021	29	35.2	35.1	35.0	.0574	29	1509.5	1503.6	1499.7	2.3784	29
250	12.8	11.7	11.0	.4773	29	35.1	35.0	34.9	.0409	29	1504.3	1500.6	1497.9	1.6992	29
300	11.7	10.9	10.3	.4146	29	35.1	35.0	34.9	.0561	29	1501.3	1498.6	1496.1	1.5098	29
400	10.7	9.9	9.3	.3317	29	35.0	34.9	34.8	.0378	29	1499.6	1496.3	1494.2	1.2763	29
500	9.-	9.0	8.5.	.2915	29	35.0	34.9	34.8	.0574	29	1497.0	1494.7	1492.8	1.0971	29
600	9.2	8.3	7.8	.3033	28	34.9	34.8	34.8	.0497	28	1497.1	1493.6	1491.9	1.1440	28
700	8.7	7.6	7.2	.2953	27	35.0	34.9	34.8	.0580	27	1497.1	1492.8	1491.0	1.2075	27
800	8.3	7.1	5.9	.4373	27	35.0	34.9	34.8	.0641	27	1497.0	1492.3	1487.5	1.7632	27
900	7.8	6.6	5.4	.4508	27	35.0	34.9	34.8	.0580	27	1496.9	1492.0	1487.3	1.8439	27
1000	7.3	6.1	5.1	.4246	27	35.0	34.9	34.8	.0580	27	1496.7	1491.7	1487.5	1.7619	27
1100	6.2	5.6	4.8	.2741	26	34.9	34.8	34.8	.0452	26	1494.0	1491.2	1488.3	1.1328	26
1200	5.5	5.1	4.8	.1826	19	34.9	34.8	34.8	.0375	19	1492.7	1491.0	1489.7	.7572	19
1300	5.1	4.7	4.3	.1900	19	34.8	34.8	34.8	.0000	19	1492.6	1491.0	1489.5	.7608	19
1400	4.6	4.4	3.9	.1929	12	34.8	34.8	34.8	.0000	12	1492.2	1491.3	1489.5	.7849	12
1500	4.3	4.0	3.6	.1749	12	34.8	34.8	34.8	.0000	12	1492.7	1491.4	1489.7	.7793	12
1750	3.4	3.2	2.8	.1749	12	34.8	34.8	34.8	.0000	12	1493.2	1492.2	1490.5	.7596	12
2000	2.8	2.6	2.1	.2044	10	34.8	34.8	34.8	.0000	10	1494.9	1494.0	1491.8	.8537	10
2500	2.1	2.0	2.0	.0516	10	34.8	34.7	34.7	.0316	10	1500.3	1500.0	1499.7	.1897	10
3000	1.8	1.7	.0516	10	34.8	34.7	34.7	.0316	10	1507.6	1507.4	1507.3	.1135	10
4000	1.7	1.6	1.5	.1414	2	34.7	34.7	34.7	.0000	2	1524.4	1524.1	1523.9	.3536	2


PROVINCE 11 MAR – MAY
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1542.0
10 1541.5
20 1541.2
30 1540.2
50 1535.6
75 1530.0
100 1522.8
125 1515.2
150 1509.4
200 1503.7
250 1500.7
300 1498.4
400 1496.2
500 1494.9
600 1492.4
700 1492.1
800 1492.0
900 1492.3
1000 1492.2
1100 1491.7
1200 1491.4
1300 1491.1
1400 1490.9
1500 1491.1
1750 1492.6
2000 1494.6
2500 1500.0
3000 1507.4
4000 1523.8
5000 1540.8
6000 1560.0

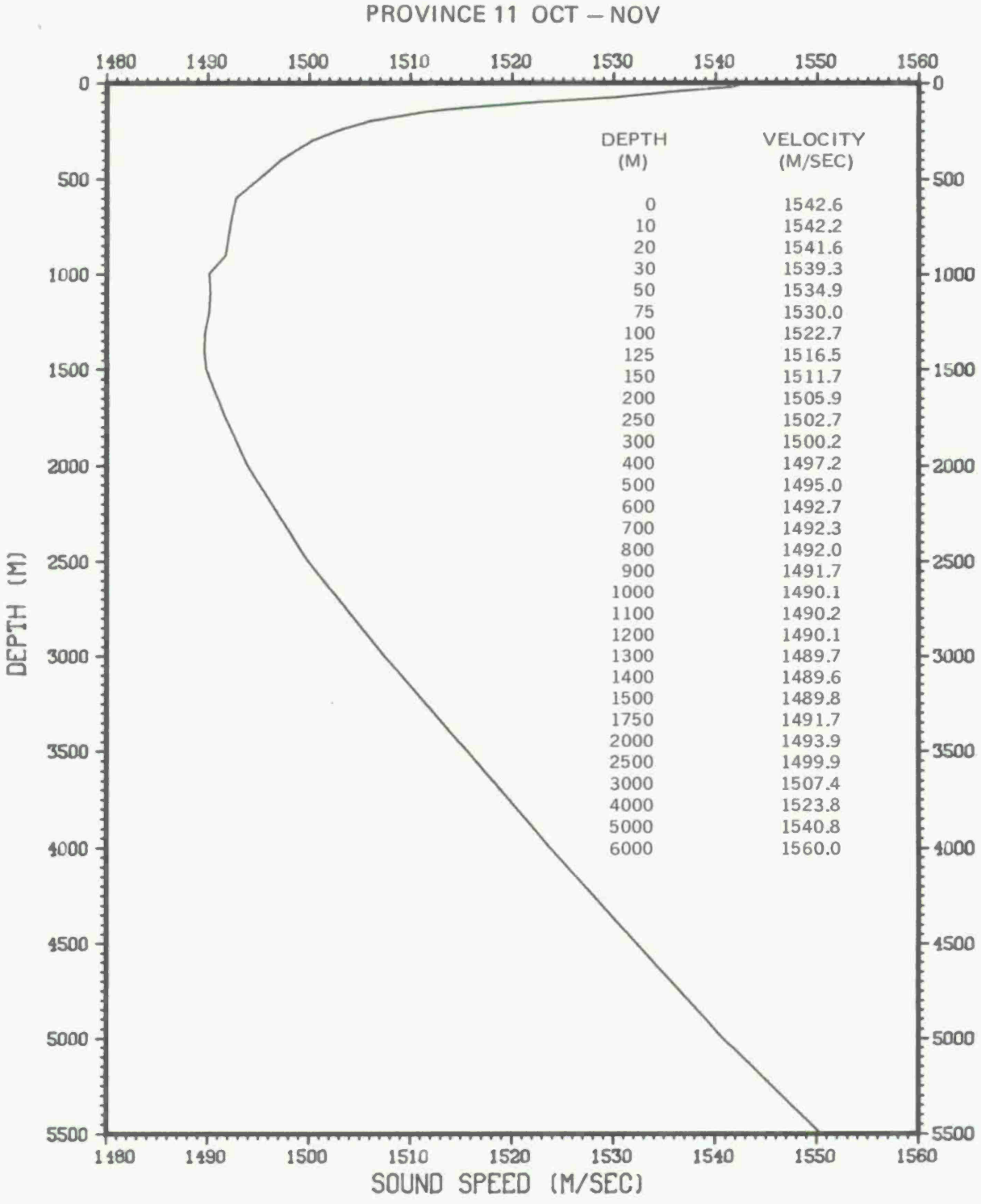
PROVINCE 11 JUN – SEP

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	28.8	28.0	26.5	.6676	17 ••	35.4	35.1	34.6	.2359	17 ••	1543.7	1541.6	1538.3	1.5769	17
10 ••	28.8	27.8	25.9	.8630	17 ••	35.4	35.1	34.6	.2229	17 ••	1543.8	1541.4	1536.6	2.0597	17
20 ••	28.8	27.6	24.6	1.1926	17 ••	35.4	35.1	34.6	.2157	17 ••	1544.0	1541.1	1533.8	2.8096	17
30 ••	28.8	27.1	23.4	1.7252	17 ••	35.3	35.1	34.6	.2058	17 ••	1544.1	1540.3	1531.0	4.0246	17
50 ••	28.5	25.0	18.4	3.1448	17 ••	35.3	35.1	34.7	.1562	17 ••	1543.4	1535.3	1518.7	7.6958	17
75 ••	27.9	20.9	15.3	3.6102	17 ••	35.3	35.1	34.9	.1320	17 ••	1542.6	1525.5	1509.7	9.4301	17
100 ••	25.7	18.1	14.0	2.9875	17 ••	35.3	35.1	34.9	.1169	17 ••	1538.3	1518.2	1506.0	8.3283	17
125 ••	19.0	15.9	13.4	1.6242	17 ••	35.3	35.1	35.0	.0931	17 ••	1521.6	1512.4	1504.3	5.0604	17
150 ••	16.1	14.5	12.8	1.0313	17 ••	35.2	35.1	35.0	.0707	17 ••	1513.6	1508.5	1502.7	3.3995	17
200 ••	14.4	12.8	11.5	.7830	17 ••	35.2	35.1	35.0	.0606	17 ••	1509.1	1503.6	1499.1	2.7292	17
250 ••	13.3	11.8	11.0	.5911	17 ••	35.1	35.0	35.0	.0493	17 ••	1506.0	1501.0	1498.0	2.0548	17
300 ••	12.0	11.2	10.5	.4767	17 ••	35.1	35.0	34.9	.0562	17 ••	1502.6	1499.5	1497.2	1.7246	17
400 ••	10.8	10.0	9.4	.3984	17 ••	35.0	34.9	34.8	.0500	17 ••	1500.0	1496.8	1494.5	1.5183	17
500 ••	10.1	9.1	8.5	.4145	17 ••	34.9	34.9	34.8	.0514	17 ••	1498.7	1495.1	1492.7	1.5492	17
600 ••	8.9	8.3	7.8	.2867	17 ••	34.9	34.8	34.8	.0493	17 ••	1496.0	1493.9	1491.9	1.0648	17
700 ••	8.1	7.7	6.8	.3018	17 ••	34.9	34.8	34.8	.0507	17 ••	1494.8	1493.1	1489.4	1.2530	17
800 ••	7.5	7.1	5.8	.4070	17 ••	34.9	34.9	34.8	.0514	17 ••	1494.0	1492.5	1487.1	1.6837	17
900 ••	7.3	6.6	5.8	.3526	17 ••	34.9	34.8	34.8	.0514	17 ••	1494.8	1492.3	1488.8	1.4204	17
1000 ••	6.7	6.1	5.5	.3002	17 ••	35.0	34.9	34.8	.0624	17 ••	1494.3	1491.9	1489.6	1.1779	17
1100 ••	6.1	5.6	5.2	.2421	16 ••	34.9	34.8	34.8	.0500	16 ••	1493.3	1491.6	1490.0	.9600	16
1200 ••	5.5	5.2	4.9	.2658	10 ••	34.9	34.8	34.8	.0422	10 ••	1492.5	1491.3	1490.2	.8048	10
1300 ••	5.0	4.7	4.4	.2300	10 ••	34.9	34.8	34.8	.0316	10 ••	1492.2	1491.1	1489.9	.9370	10
1400 ••	4.7	4.3	4.0	.2271	10 ••	34.8	34.8	34.8	.0000	10 ••	1493.0	1491.2	1489.6	1.0236	10
1500 ••	4.5	4.0	3.6	.2424	10 ••	34.8	34.8	34.8	.0000	10 ••	1493.4	1491.4	1489.7	.9916	10
1750 ••	3.5	3.1	2.9	.2068	9 ••	34.8	34.8	34.8	.0000	9 ••	1493.4	1492.1	1491.1	.8016	9
2000 ••	2.8	2.7	2.5	.1134	7 ••	34.8	34.8	34.7	.0378	7 ••	1494.7	1494.2	1493.4	.4645	7
2500 ••	2.0	2.0	1.8	.0787	7 ••	34.8	34.7	34.7	.0378	7 ••	1500.0	1499.7	1499.1	.3251	7
3000 ••	1.7	1.7	1.7	.0000	4 ••	34.7	34.7	34.7	.0000	4 ••	1507.3	1507.3	1507.3	.0000	4
4000 ••	1.5	1.5	1.5	.0000	1 ••	34.7	34.7	34.7	.0000	1 ••	1523.6	1523.6	1523.6	.0000	1


PROVINCE 11 JUN – SEP
1480 1490 1500 1510 1520 1530 1540 1550 1560
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M) VELOCITY (M/SEC)
0 1542.8
10 1543.0
20 1543.1
30 1543.2
50 1532.7
75 1527.3
100 1519.9
125 1512.7
150 1508.5
200 1503.2
250 1501.4
300 1499.7
400 1496.3
500 1494.2
600 1494.3
700 1493.8
800 1493.1
900 1491.8
1000 1492.3
1100 1492.0
1200 1492.2
1300 1492.2
1400 1491.7
1500 1491.4
1750 1492.2
2000 1494.4
2500 1499.9
3000 1507.3
4000 1523.8
5000 1540.8
6000 1560.0

PROVINCE 11 OCT – NOV

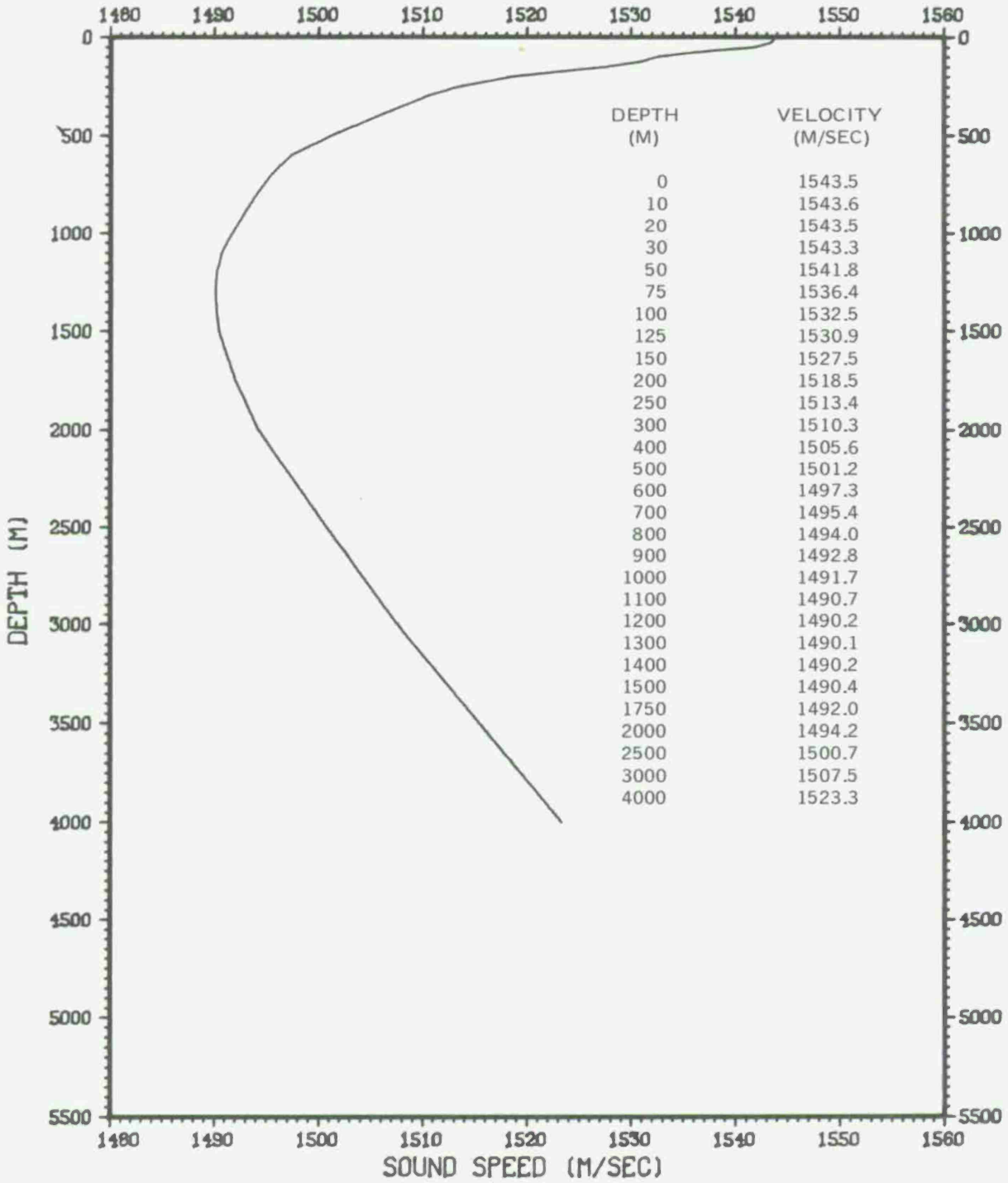
DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	29.4	28.3	26.5	.6199	16	35.3	34.8	34.1	.3304	16	1544.5	1542.0	1538.6	1.2194	16
10	28.8	28.1	26.5	.5718	16	35.3	34.8	34.4	.2955	16	1543.0	1541.7	1538.7	1.1423	16
20	28.8	27.9	26.5	.5907	16	35.3	34.9	34.5	.2869	16	1543.1	1541.6	1538.9	1.2059	16
30	28.7	27.4	26.0	.8601	16	35.4	35.0	34.6	.2568	16	1543.1	1540.7	1537.6	1.8046	16
50	28.3	25.1	19.6	2.3919	16	35.3	35.1	34.6	.1778	16	1542.8	1536.0	1522.0	5.7566	16
75	26.0	21.2	16.1	2.7965	16	35.3	35.2	35.1	.0750	16	1538.6	1526.6	1512.3	7.4596	16
100	22.5	18.4	13.8	2.5405	16	35.3	35.2	35.0	.0806	16	1530.6	1519.3	1505.1	7.3941	16
125	19.7	16.4	13.1	2.0007	16	35.2	35.1	34.9	.0816	16	1523.5	1513.9	1503.1	6.1366	16
150	17.6	15.0	12.5	1.5207	16	35.2	35.1	35.0	.0500	16	1518.0	1509.9	1501.6	4.8389	16
200	14.9	13.1	11.6	.8869	16	35.1	35.1	34.9	.0619	16	1510.5	1504.7	1499.3	2.9958	16
250	13.6	12.0	11.1	.5702	16	35.1	35.0	34.9	.0443	16	1505.1	1501.7	1498.6	1.9550	16
300	12.6	11.2	10.6	.4135	16	35.0	35.0	34.9	.0447	16	1502.3	1499.5	1497.3	1.4646	16
400	10.7	10.0	9.5	.2680	16	34.9	34.9	34.9	.0000	16	1499.5	1496.9	1494.9	1.0227	16
500	9.7	9.1	8.7	.2373	16	34.9	34.9	34.8	.0512	16	1497.2	1495.1	1493.6	.8671	16
600	8.6	8.3	8.0	.1706	16	34.9	34.8	34.8	.0447	16	1494.8	1493.7	1492.7	.6152	16
700	7.9	7.6	7.3	.1746	16	34.9	34.8	34.8	.0479	16	1493.9	1492.8	1491.5	.6940	16
800	7.3	7.0	6.6	.2120	15	34.9	34.8	34.8	.0458	15	1493.1	1492.0	1490.5	.8137	15
900	6.8	6.4	5.8	.2563	15	34.9	34.8	34.8	.0352	15	1492.7	1491.3	1488.8	1.0452	15
1000	6.2	5.8	5.4	.2293	15	34.9	34.8	34.8	.0352	15	1492.4	1490.7	1488.9	.9187	15
1100	5.7	5.4	5.1	.1831	15	34.9	34.8	34.8	.0414	15	1491.8	1490.5	1489.4	.7047	15
1200	5.3	5.0	4.7	.1642	15	34.9	34.8	34.8	.0414	15	1492.0	1490.5	1489.5	.6902	15
1300	5.0	4.6	4.3	.1981	15	34.9	34.8	34.7	.0458	15	1492.3	1490.5	1489.5	.8314	15
1400	4.6	4.2	3.9	.2167	15	34.9	34.8	34.7	.0378	15	1492.5	1490.5	1489.4	.9478	15
1500	4.3	3.8	3.5	.2396	15	34.8	34.8	34.7	.0258	15	1492.6	1490.7	1489.3	.9907	15
1750	3.3	3.1	2.9	.1521	15	34.8	34.8	34.7	.0258	15	1492.9	1491.7	1490.8	.6455	15
2000	2.7	2.6	2.5	.0724	15	34.8	34.8	34.7	.0458	15	1494.6	1493.7	1493.3	.3980	15
2500	2.1	2.0	1.9	.0475	14	34.7	34.7	34.7	.0000	14	1500.3	1499.8	1499.5	.2311	14
3000	1.8	1.7	1.7	.0469	14	34.7	34.7	34.7	.0000	14	1507.6	1507.3	1507.1	.1657	14
4000	1.5	1.5	1.5	.0000	2	34.7	34.7	34.7	.0000	2	1523.8	1523.7	1523.6	.1414	2


PROVINCE 11 OCT – NOV
1480 1490 1500 1510 1520 1530 1540 1550 1560
0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M) VELOCITY (M/SEC)
0 1542.6
10 1542.2
20 1541.6
30 1539.3
50 1534.9
75 1530.0
100 1522.7
125 1516.5
150 1511.7
200 1505.9
250 1502.7
300 1500.2
400 1497.2
500 1495.0
600 1492.7
700 1492.3
800 1492.0
900 1491.7
1000 1490.1
1100 1490.2
1200 1490.1
1300 1489.7
1400 1489.6
1500 1489.8
1750 1491.7
2000 1493.9
2500 1499.9
3000 1507.4
4000 1523.8
5000 1540.8
6000 1560.0

PROVINCE 12 DEC – FEB

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	29.7	28.7	27.5	.5721	26 ••	35.2	34.9	34.3	.2308	26 ••	1545.1	1543.1	1540.7	1.2525	26
10 ••	29.1	28.5	27.5	.3949	26 ••	35.2	34.9	34.3	.1925	26 ••	1544.3	1542.8	1541.0	.8096	26
20 ••	28.8	28.4	27.5	.3486	26 ••	35.2	35.0	34.7	.1120	26 ••	1543.7	1542.7	1540.7	.7531	26
30 ••	28.6	28.1	27.2	.3822	26 ••	35.2	35.0	34.7	.1134	26 ••	1543.4	1542.4	1540.2	.8117	26
50 ••	28.2	27.4	26.1	.7874	26 ••	35.2	35.1	34.8	.0838	26 ••	1543.1	1541.2	1538.2	1.7549	26
75 ••	27.7	25.9	23.8	.9279	26 ••	35.2	35.1	34.9	.0765	26 ••	1542.2	1538.2	1533.4	2.1096	26
100 ••	27.0	24.4	22.5	.9596	26 ••	35.2	35.1	34.9	.0724	26 ••	1541.0	1535.0	1530.6	2.2470	26
125 ••	25.8	22.8	21.3	1.1818	26 ••	35.2	35.1	35.0	.0516	26 ••	1538.6	1531.6	1527.8	2.8815	26
150 ••	24.2	21.1	19.4	1.1721	26 ••	35.3	35.1	35.0	.0761	26 ••	1535.3	1527.6	1523.1	3.0275	26
200 ••	21.5	18.0	15.9	1.2023	26 ••	35.3	35.2	35.1	.0283	26 ••	1529.7	1520.1	1513.7	3.3719	26
250 ••	19.1	15.9	14.1	.9137	25 ••	35.3	35.2	35.1	.0440	25 ••	1523.9	1514.6	1508.8	2.7507	25
300 ••	15.1	14.3	12.7	.4917	25 ••	35.3	35.2	35.1	.0400	25 ••	1512.9	1510.2	1504.8	1.6405	25
400 ••	13.2	12.1	10.8	.5243	25 ••	35.2	35.1	35.0	.0677	25 ••	1508.2	1504.6	1499.9	1.8178	25
500 ••	11.7	10.5	9.1	.5573	25 ••	35.0	34.9	34.8	.0597	25 ••	1504.6	1500.3	1495.1	2.0476	25
600 ••	10.7	9.2	7.9	.6055	24 ••	34.9	34.8	34.7	.0448	24 ••	1502.6	1497.2	1492.1	2.2862	24
700 ••	9.6	8.2	7.5	.5076	24 ••	34.8	34.8	34.7	.0504	24 ••	1500.1	1495.0	1492.2	1.9412	24
800 ••	8.5	7.3	6.9	.3740	21 ••	34.8	34.7	34.7	.0483	21 ••	1497.8	1493.2	1491.4	1.4774	21
900 ••	7.5	6.6	6.2	.2910	18 ••	34.8	34.8	34.7	.0461	18 ••	1495.6	1492.1	1490.3	1.1563	18
1000 ••	6.2	5.9	5.6	.1761	13 ••	34.8	34.8	34.7	.0277	13 ••	1492.2	1491.1	1489.5	.8242	13
1100 ••	5.7	5.4	5.2	.1981	13 ••	34.8	34.8	34.7	.0277	13 ••	1491.6	1490.7	1489.8	.7029	13
1200 ••	5.3	5.0	4.7	.1613	13 ••	34.8	34.8	34.8	.0000	13 ••	1491.6	1490.4	1489.4	.6894	13
1300 ••	4.9	4.5	4.3	.1676	12 ••	34.8	34.8	34.7	.0289	12 ••	1491.7	1490.3	1489.1	.7633	12
1400 ••	4.4	4.1	3.8	.2066	10 ••	34.8	34.8	34.7	.0316	10 ••	1491.6	1490.4	1489.1	.8364	10
1500 ••	4.0	3.8	3.6	.1476	10 ••	34.8	34.8	34.7	.0422	10 ••	1491.5	1490.6	1489.6	.6467	10
1750 ••	3.2	3.2	3.0	.0726	9 ••	34.8	34.8	34.7	.0441	9 ••	1492.4	1492.0	1491.2	.3779	9
2000 ••	2.8	2.7	2.6	.0756	7 ••	34.8	34.7	34.7	.0535	7 ••	1494.8	1494.2	1493.8	.3359	7

PROVINCE 12 DEC – FEB

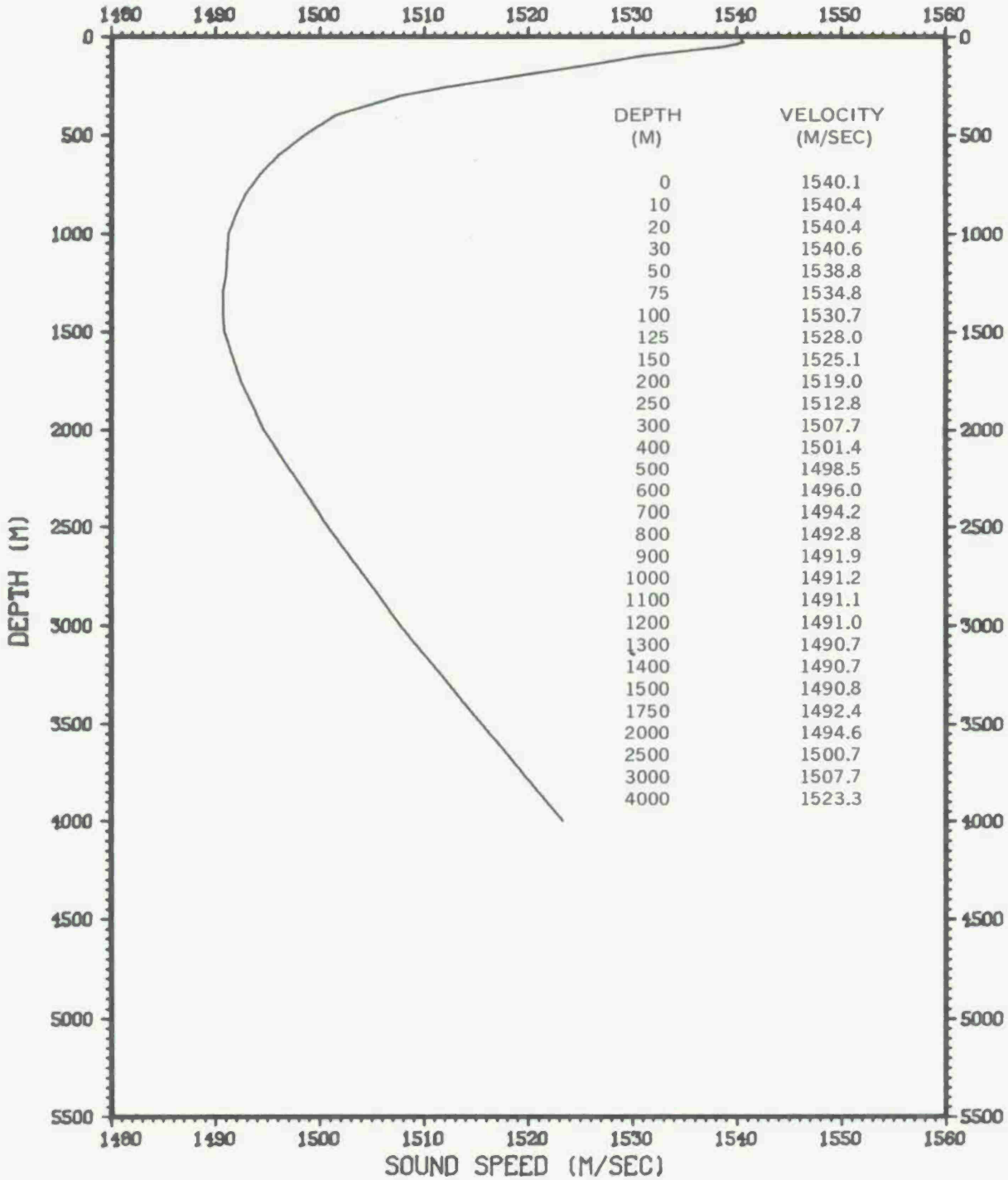


DEPTH (M)	VELOCITY (M/SEC)
0	1543.5
10	1543.6
20	1543.5
30	1543.3
50	1541.8
75	1536.4
100	1532.5
125	1530.9
150	1527.5
200	1518.5
250	1513.4
300	1510.3
400	1505.6
500	1501.2
600	1497.3
700	1495.4
800	1494.0
900	1492.8
1000	1491.7
1100	1490.7
1200	1490.2
1300	1490.1
1400	1490.2
1500	1490.4
1750	1492.0
2000	1494.2
2500	1500.7
3000	1507.5
4000	1523.3

PROVINCE 12 MAR – MAY

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	30.8	28.0	25.5	.8748	96	35.1	34.7	33.2	.2767	96	1546.7	1541.3	1536.0	1.8563	96
10	29.9	27.9	25.6	.7739	96	35.1	34.7	33.9	.2044	96	1545.2	1541.2	1536.3	1.6557	96
20	29.8	27.8	25.6	.7363	96	35.1	34.7	34.3	.1634	96	1545.3	1541.2	1536.5	1.6011	96
30	29.7	27.6	25.5	.7384	96	35.2	34.8	34.3	.1422	96	1545.4	1541.1	1536.3	1.6285	96
50	28.6	26.6	23.4	1.1140	96	35.2	34.9	34.6	.1378	96	1543.4	1539.2	1531.9	2.4661	96
75	28.1	24.7	20.9	1.4862	96	35.3	35.0	34.7	.1242	96	1543.0	1535.4	1526.0	3.4675	96
100	26.4	22.9	19.1	1.3918	96	35.3	35.1	34.8	.1097	96	1539.5	1531.3	1521.6	3.4215	96
125	24.2	21.1	16.9	1.2854	96	35.4	35.2	34.9	.0934	96	1535.0	1527.2	1515.8	3.3546	96
150	22.6	19.4	15.4	1.2333	96	35.5	35.2	35.0	.0808	96	1531.6	1523.2	1511.5	3.4068	96
200	19.6	16.9	14.1	1.0705	96	35.5	35.3	35.1	.0694	96	1524.9	1516.7	1508.1	3.2108	96
250	17.1	14.9	13.4	.7706	96	35.5	35.2	35.1	.0634	96	1518.4	1511.6	1506.6	2.4716	96
300	14.9	13.5	12.3	.5458	93	35.4	35.2	35.1	.0494	93	1512.3	1507.7	1503.7	1.8635	93
400	12.3	11.6	10.4	.3798	93	35.1	35.0	34.9	.0496	93	1505.1	1502.7	1498.6	1.3525	93
500	11.1	10.2	9.0	.3621	87	35.0	34.9	34.8	.0437	87	1502.5	1499.1	1494.8	1.3305	87
600	10.1	9.0	8.0	.3530	83	34.9	34.8	34.7	.0402	83	1500.4	1496.2	1492.6	1.3431	83
700	8.8	8.0	7.2	.3026	81	34.8	34.7	34.7	.0448	81	1496.9	1494.0	1491.1	1.1332	81
800	7.7	7.1	6.3	.2805	80	34.9	34.7	34.7	.0470	80	1494.4	1492.4	1489.1	1.0744	80
900	7.1	6.5	5.7	.2645	79	34.9	34.8	34.6	.0535	79	1494.0	1491.6	1488.3	1.0813	79
1000	6.5	6.0	5.2	.2722	74	34.9	34.8	34.7	.0382	74	1493.5	1491.2	1488.2	1.1034	74
1100	6.1	5.5	4.8	.2695	70	34.9	34.8	34.7	.0289	70	1493.4	1491.0	1488.0	1.0916	70
1200	5.7	5.1	4.3	.2891	48	34.8	34.8	34.7	.0279	48	1493.6	1490.9	1487.9	1.1816	48
1300	5.3	4.7	4.0	.2831	44	34.9	34.8	34.7	.0409	44	1493.6	1490.8	1488.0	1.1845	44
1400	4.9	4.3	3.7	.2739	44	34.9	34.8	34.7	.0476	44	1493.3	1490.8	1488.3	1.1401	44
1500	4.4	3.9	3.4	.2662	40	34.8	34.8	34.7	.0501	40	1493.0	1491.0	1488.8	1.0737	40
1750	3.7	3.2	2.9	.1850	34	34.8	34.8	34.7	.0493	34	1494.5	1492.3	1490.8	.8032	34
2000	3.1	2.7	2.5	.1338	31	34.8	34.8	34.7	.0445	31	1495.9	1494.5	1493.5	.5366	31
2500	2.4	2.2	2.1	.1025	16	34.8	34.8	34.7	.0479	16	1501.7	1500.8	1500.3	.4465	16
3000	1.8	1.7	1.7	.0548	5	34.8	34.7	34.7	.0447	5	1507.7	1507.4	1507.2	.2074	5

PROVINCE 12 MAR – MAY

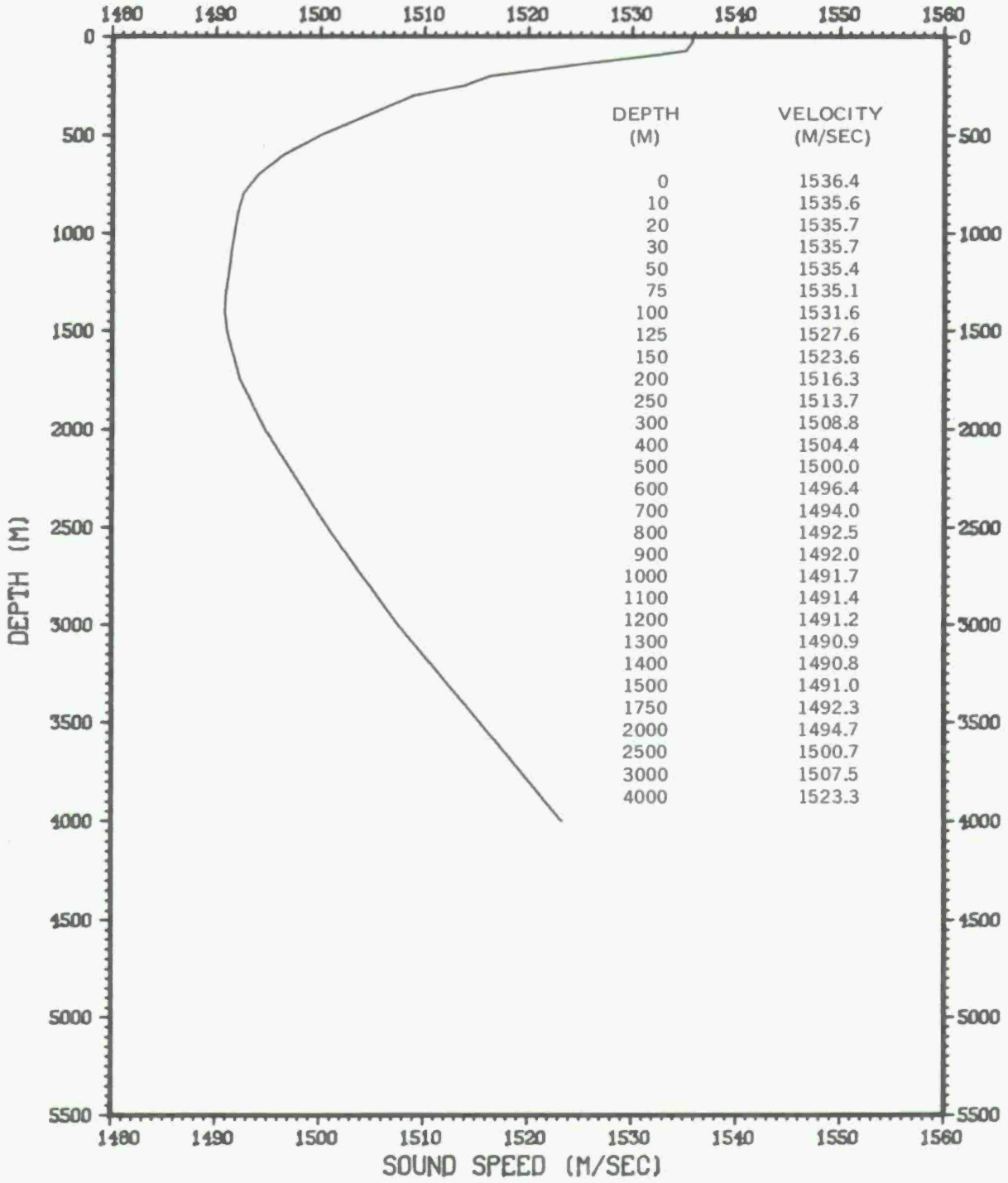


DEPTH (M)	VELOCITY (M/SEC)
0	1540.1
10	1540.4
20	1540.4
30	1540.6
50	1538.8
75	1534.8
100	1530.7
125	1528.0
150	1525.1
200	1519.0
250	1512.8
300	1507.7
400	1501.4
500	1498.5
600	1496.0
700	1494.2
800	1492.8
900	1491.9
1000	1491.2
1100	1491.1
1200	1491.0
1300	1490.7
1400	1490.7
1500	1490.8
1750	1492.4
2000	1494.6
2500	1500.7
3000	1507.7
4000	1523.3

PROVINCE 12 JUN – SEP

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	28.5	25.3	23.3	.7974	150	35.3	35.0	34.7	.1348	150	1542.4	1535.6	1531.1	1.8127	150
10	28.0	25.2	23.3	.7277	150	35.3	35.0	34.7	.1321	150	1541.6	1535.5	1531.3	1.6580	150
20	28.0	25.2	23.3	.7314	150	35.3	35.0	34.7	.1290	150	1541.8	1535.6	1531.4	1.6665	150
30	27.8	25.1	22.2	.8067	150	35.3	35.0	34.7	.1326	150	1541.7	1535.6	1528.5	1.8698	150
50	27.2	24.8	20.1	.9793	150	35.3	35.0	34.7	.1369	150	1540.7	1535.2	1523.6	2.3196	150
75	26.2	24.3	18.4	1.3383	150	35.4	35.0	34.7	.1431	150	1538.8	1534.3	1519.2	3.3226	150
100	25.5	23.3	17.0	1.7254	150	35.4	35.0	34.8	.1319	150	1537.7	1532.4	1515.5	4.3955	150
125	25.0	21.8	16.3	2.0199	150	35.4	35.1	34.8	.1286	150	1536.9	1529.0	1513.9	5.2415	150
150	24.5	20.3	15.6	2.1462	150	35.5	35.2	34.8	.1278	150	1535.8	1525.6	1512.1	5.7143	150
200	22.8	17.4	14.1	1.7958	150	35.5	35.3	34.8	.0931	150	1533.2	1518.3	1508.3	5.1532	150
250	19.5	15.4	13.2	1.2399	146	35.5	35.2	34.8	.0781	146	1525.4	1512.9	1505.8	3.8471	146
300	16.9	13.9	12.2	.9186	142	35.5	35.2	34.8	.0803	142	1518.5	1508.9	1503.2	3.0223	142
400	13.2	11.8	10.4	.5800	139	35.2	35.1	34.8	.0716	139	1508.1	1503.4	1498.2	2.0596	139
500	11.5	10.3	9.1	.4387	136	35.0	34.9	34.7	.0624	136	1504.1	1499.5	1495.2	1.6203	136
600	10.2	9.0	8.1	.3981	130	35.0	34.8	34.7	.0474	130	1500.9	1496.4	1492.8	1.5114	130
700	8.9	8.0	7.2	.3478	124	35.0	34.7	34.6	.0643	124	1497.7	1494.1	1491.0	1.3560	124
800	8.1	7.2	6.5	.2869	122	35.0	34.7	34.6	.0619	122	1496.3	1492.8	1489.9	1.1403	122
900	7.4	6.6	6.0	.2435	117	34.9	34.8	34.6	.0560	117	1495.2	1492.1	1489.7	.9787	117
1000	6.8	6.1	5.2	.2504	103	34.9	34.8	34.7	.0397	103	1494.4	1491.6	1488.1	1.0103	103
1100	6.2	5.6	4.6	.2639	101	34.9	34.8	34.7	.0366	101	1493.9	1491.2	1487.3	1.1057	101
1200	5.8	5.1	4.5	.2587	99	34.9	34.8	34.7	.0319	99	1493.8	1491.0	1488.4	1.0987	99
1300	5.3	4.6	4.1	.2417	91	34.9	34.8	34.7	.0327	91	1493.5	1490.8	1488.6	1.0019	91
1400	4.9	4.2	3.8	.2137	88	34.8	34.8	34.7	.0357	88	1493.3	1490.8	1488.8	.8972	88
1500	4.5	3.9	3.6	.1792	83	34.8	34.8	34.7	.0423	83	1493.4	1491.0	1489.6	.7718	83
1750	3.6	3.2	2.9	.1431	75	34.8	34.8	34.7	.0483	75	1494.0	1492.1	1490.9	.6214	75
2000	3.0	2.7	2.5	.0972	56	34.8	34.8	34.7	.0471	56	1495.7	1494.4	1493.6	.4073	56
2500	2.4	2.2	2.1	.0668	23	34.8	34.7	34.7	.0507	23	1501.5	1500.7	1500.2	.3160	23
3000	1.8	1.7	1.7	.0577	3	34.7	34.7	34.7	.0000	3	1507.6	1507.4	1507.2	.2082	3

PROVINCE 12 JUN – SEP

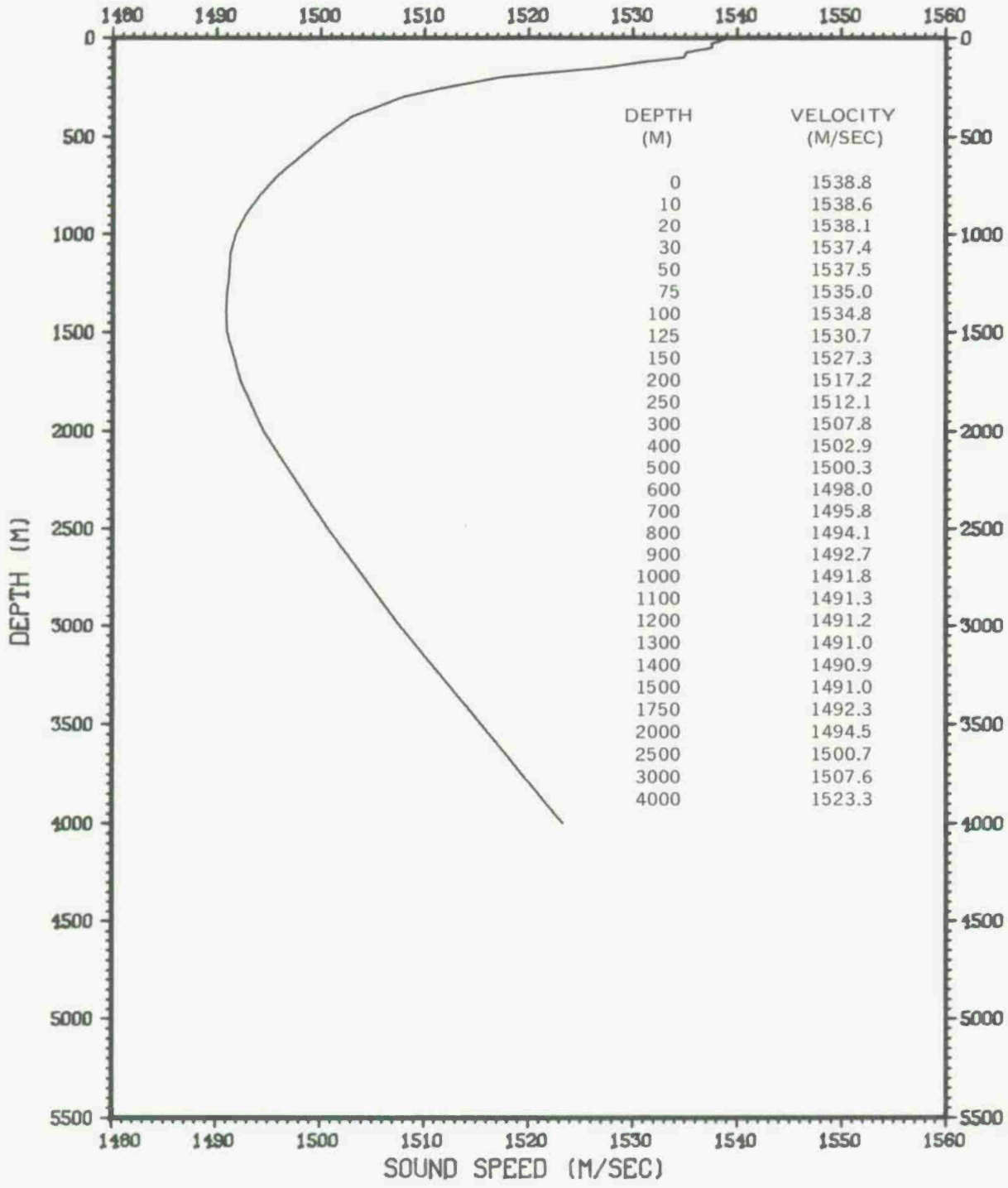


DEPTH (M)	VELOCITY (M/SEC)
0	1536.4
10	1535.6
20	1535.7
30	1535.7
50	1535.4
75	1535.1
100	1531.6
125	1527.6
150	1523.6
200	1516.3
250	1513.7
300	1508.8
400	1504.4
500	1500.0
600	1496.4
700	1494.0
800	1492.5
900	1492.0
1000	1491.7
1100	1491.4
1200	1491.2
1300	1490.9
1400	1490.8
1500	1491.0
1750	1492.3
2000	1494.7
2500	1500.7
3000	1507.5
4000	1523.3

PROVINCE 12 OCT – NOV

DEPTH (M)	TEMPERATURE (C) MAX	MEAN	MIN	ST DEV	NUM	SALINITY (PPT) MAX	MEAN	MIN	ST DEV	NUM	VELOCITY (M/SEC) MAX	MEAN	MIN	ST DEV	NUM
0	29.8	27.0	24.4	1.3207	95	35.4	35.2	34.8	.1124	95	1545.8	1539.7	1533.7	3.0064	95
10	28.8	26.8	24.4	1.2030	95	35.4	35.2	34.8	.1086	95	1543.5	1539.4	1533.9	2.7457	95
20	28.6	26.7	24.2	1.1592	95	35.4	35.2	34.9	.1062	95	1543.5	1539.2	1533.4	2.6936	95
30	28.1	26.3	23.7	1.0348	95	35.4	35.2	34.8	.1030	95	1542.7	1538.5	1532.6	2.4172	95
50	27.6	25.5	21.7	1.0201	95	35.4	35.1	34.8	.0994	95	1542.0	1536.9	1527.6	2.4245	95
75	26.3	24.7	19.9	1.1490	95	35.4	35.1	34.8	.0974	95	1539.4	1535.4	1523.3	2.7977	95
100	25.3	23.8	18.5	1.3946	95	35.4	35.1	34.8	.0942	95	1537.3	1533.6	1520.0	3.4887	95
125	25.0	22.6	16.8	1.7162	95	35.4	35.1	34.9	.0921	95	1537.0	1531.2	1515.5	4.4076	95
150	24.5	21.3	15.6	1.9202	95	35.5	35.2	34.9	.1020	95	1536.3	1528.1	1511.9	5.0736	95
200	22.6	18.2	14.0	1.7650	95	35.5	35.2	34.2	.1308	95	1532.3	1520.5	1507.7	5.0021	95
250	19.3	15.8	13.0	1.1249	95	35.4	35.3	35.1	.0580	95	1524.6	1514.3	1505.0	3.4854	95
300	16.2	14.1	12.3	.8194	94	35.4	35.2	35.1	.0574	94	1516.3	1509.8	1503.6	2.7143	94
400	13.2	12.0	10.8	.5272	92	35.2	35.1	34.9	.0579	92	1508.2	1504.2	1499.9	1.8826	92
500	11.5	10.5	9.5	.4729	90	35.0	34.9	34.8	.0598	90	1503.8	1500.4	1496.3	1.7556	90
600	10.2	9.3	8.4	.4178	85	35.0	34.8	34.7	.0544	85	1500.7	1497.5	1493.8	1.5909	85
700	9.0	8.2	7.3	.3779	81	34.9	34.8	34.7	.0550	81	1498.0	1495.0	1491.3	1.4465	81
800	7.9	7.4	6.5	.2916	75	34.9	34.7	34.7	.0528	75	1495.5	1493.3	1489.8	1.1494	75
900	7.1	6.7	6.0	.2092	70	34.8	34.8	34.7	.0478	70	1493.8	1492.3	1489.6	.8089	70
1000	6.5	6.1	5.5	.2043	59	34.8	34.8	34.7	.0305	59	1493.4	1491.8	1489.3	.8109	59
1100	6.4	5.7	5.2	.2374	53	34.9	34.8	34.8	.0192	53	1494.7	1491.6	1489.5	.9723	53
1200	5.5	5.2	4.9	.1572	22	34.9	34.8	34.8	.0213	22	1492.6	1491.5	1490.0	.6751	22
1300	5.0	4.7	4.5	.1649	22	34.9	34.8	34.8	.0213	22	1492.3	1491.2	1490.1	.6796	22
1400	4.5	4.3	3.9	.1638	22	34.9	34.8	34.8	.0213	22	1492.1	1490.9	1489.2	.7191	22
1500	4.1	3.9	3.6	.1295	18	34.8	34.8	34.7	.0323	18	1491.9	1491.0	1489.8	.5193	18
1750	3.3	3.2	3.0	.1029	17	34.8	34.8	34.7	.0332	17	1492.8	1492.3	1491.5	.4182	17
2000	2.9	2.7	2.6	.0957	16	34.8	34.8	34.7	.0479	16	1495.4	1494.5	1493.8	.4115	16
2500	2.2	2.2	2.1	.0422	10	34.8	34.8	34.7	.0422	10	1500.9	1500.7	1500.3	.1932	10
3000	1.8	1.8	1.7	.0447	5	34.8	34.8	34.7	.0548	5	1507.7	1507.6	1507.4	.1304	5

PROVINCE 12 OCT – NOV

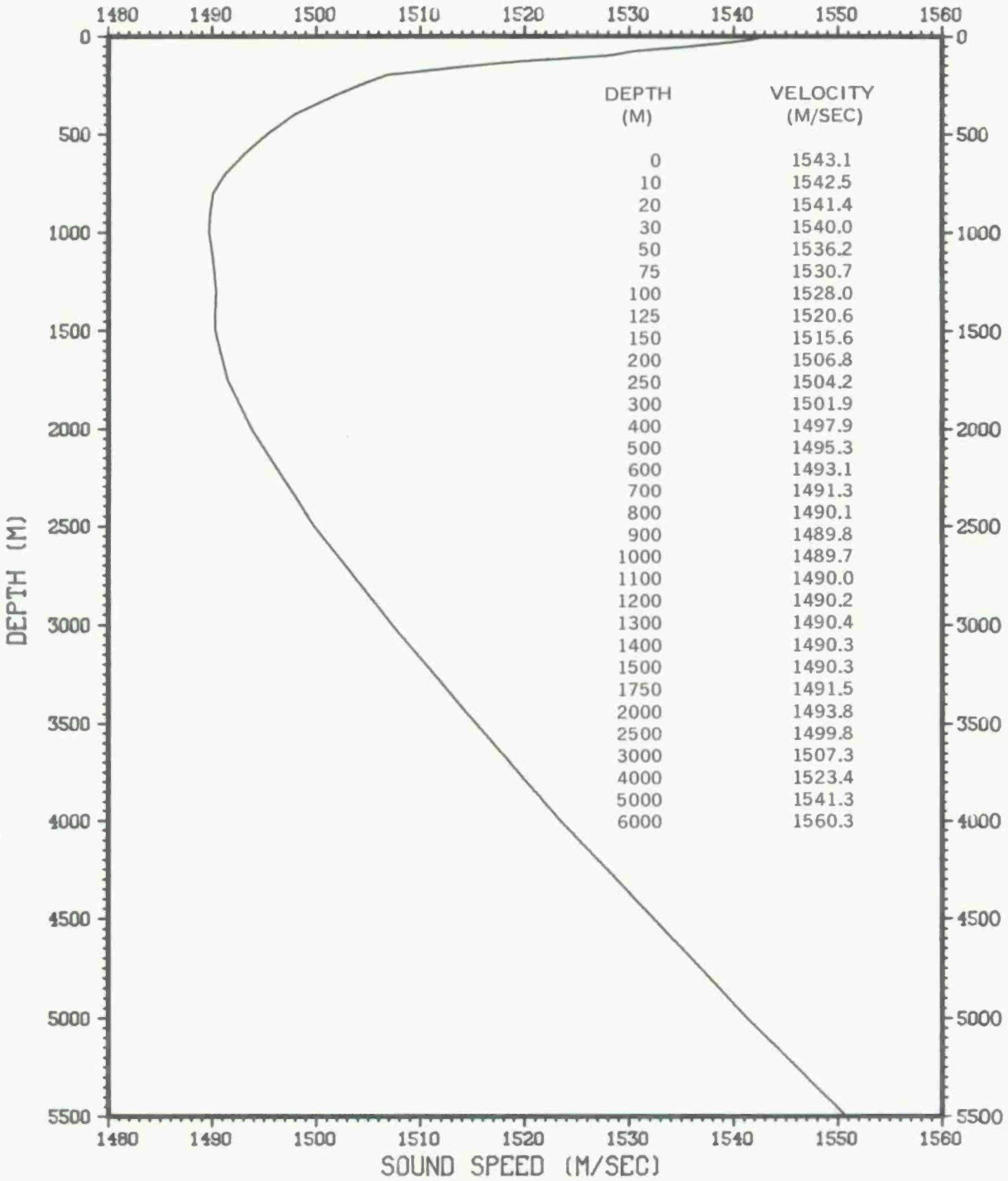


DEPTH (M)	VELOCITY (M/SEC)
0	1538.8
10	1538.6
20	1538.1
30	1537.4
50	1537.5
75	1535.0
100	1534.8
125	1530.7
150	1527.3
200	1517.2
250	1512.1
300	1507.8
400	1502.9
500	1500.3
600	1498.0
700	1495.8
800	1494.1
900	1492.7
1000	1491.8
1100	1491.3
1200	1491.2
1300	1491.0
1400	1490.9
1500	1491.0
1750	1492.3
2000	1494.5
2500	1500.7
3000	1507.6
4000	1523.3

PROVINCE 13 DEC – FEB

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	29.2	28.1	26.4	.7833	29 ••	35.0	34.7	33.9	.2713	29 ••	1544.2	1541.5	1537.9	1.6982	29
10 ••	29.1	28.0	26.4	.7913	29 ••	35.0	34.7	33.9	.2685	29 ••	1544.0	1541.5	1538.1	1.7045	29
20 ••	29.0	27.8	25.6	.9678	29 ••	35.0	34.7	33.9	.2704	29 ••	1544.0	1541.1	1536.6	2.0756	29
30 ••	28.8	26.9	23.3	1.4288	29 ••	35.1	34.8	34.0	.2531	29 ••	1543.7	1539.5	1531.2	3.1760	29
50 ••	28.5	24.5	18.8	2.5242	29 ••	35.3	35.0	34.5	.2037	29 ••	1543.2	1534.3	1519.7	6.0336	29
75 ••	28.3	21.9	16.8	2.8344	29 ••	35.3	35.1	34.5	.1864	29 ••	1543.3	1528.2	1514.4	7.1026	29
100 ••	27.8	20.0	15.7	2.7436	29 ••	35.4	35.1	34.5	.1947	29 ••	1542.5	1523.5	1511.5	7.1905	29
125 ••	24.8	18.4	14.9	2.5340	29 ••	35.5	35.1	34.7	.1725	29 ••	1536.1	1519.5	1509.1	6.9972	29
150 ••	22.6	16.9	13.4	2.3952	29 ••	35.4	35.1	34.9	.1382	29 ••	1531.4	1515.5	1504.9	6.9907	29
200 ••	20.8	14.7	12.4	1.8188	29 ••	35.5	35.1	34.8	.1679	29 ••	1527.8	1509.8	1502.1	5.6777	29
250 ••	19.1	13.3	11.3	1.5663	29 ••	35.5	35.1	34.8	.1663	29 ••	1524.2	1505.9	1499.0	5.1261	29
300 ••	14.8	11.9	10.3	.8779	28 ••	35.5	35.0	34.8	.1307	28 ••	1512.1	1502.2	1496.1	3.1160	28
400 ••	11.4	10.2	9.2	.6137	28 ••	35.1	34.9	34.8	.0766	28 ••	1502.1	1497.7	1493.7	2.2905	28
500 ••	9.8	9.0	8.0	.4818	28 ••	34.9	34.8	34.7	.0716	28 ••	1497.7	1494.7	1490.6	1.9009	28
600 ••	8.9	8.1	6.8	.5368	28 ••	34.8	34.7	34.6	.0693	28 ••	1496.0	1492.7	1487.7	2.1298	28
700 ••	8.0	7.3	6.4	.4740	28 ••	34.8	34.7	34.7	.0504	28 ••	1494.1	1491.5	1487.7	1.9001	28
800 ••	7.3	6.7	5.7	.4249	28 ••	34.8	34.7	34.7	.0488	28 ••	1493.2	1490.6	1486.6	1.7315	28
900 ••	6.7	6.1	5.2	.3553	28 ••	34.8	34.7	34.7	.0486	28 ••	1492.3	1490.1	1486.5	1.4179	28
1000 ••	6.0	5.6	4.9	.2902	25 ••	34.8	34.7	34.7	.0490	25 ••	1491.4	1489.8	1486.6	1.2302	25
1100 ••	5.5	5.2	4.6	.2406	23 ••	34.8	34.7	34.7	.0487	23 ••	1490.9	1489.7	1487.1	.9977	23
1200 ••	5.0	4.8	4.3	.1866	23 ••	34.8	34.7	34.7	.0470	23 ••	1490.6	1489.6	1487.6	.7934	23
1300 ••	4.7	4.4	4.0	.1723	23 ••	34.8	34.7	34.7	.0470	23 ••	1490.7	1489.6	1488.0	.6886	23
1400 ••	4.3	4.0	3.7	.1703	21 ••	34.8	34.7	34.7	.0436	21 ••	1490.9	1489.7	1488.3	.7025	21
1500 ••	4.0	3.7	3.4	.1789	21 ••	34.8	34.7	34.7	.0436	21 ••	1491.2	1490.1	1488.8	.6983	21
1750 ••	3.3	3.0	2.7	.1605	20 ••	34.8	34.7	34.7	.0510	20 ••	1492.6	1491.6	1490.1	.6862	20
2000 ••	2.8	2.6	2.3	.1326	14 ••	34.8	34.7	34.7	.0497	14 ••	1494.7	1493.8	1492.6	.5711	14
2500 ••	2.3	2.0	1.9	.1250	11 ••	34.8	34.7	34.7	.0505	11 ••	1501.0	1499.9	1499.3	.4976	11
3000 ••	1.9	1.7	1.5	.1464	7 ••	34.8	34.7	34.7	.0378	7 ••	1508.0	1507.2	1506.1	.6701	7
4000 ••	1.4	1.4	1.3	.0577	3 ••	34.8	34.7	34.7	.0577	3 ••	1523.3	1523.2	1523.1	.1155	3

PROVINCE 13 DEC – FEB

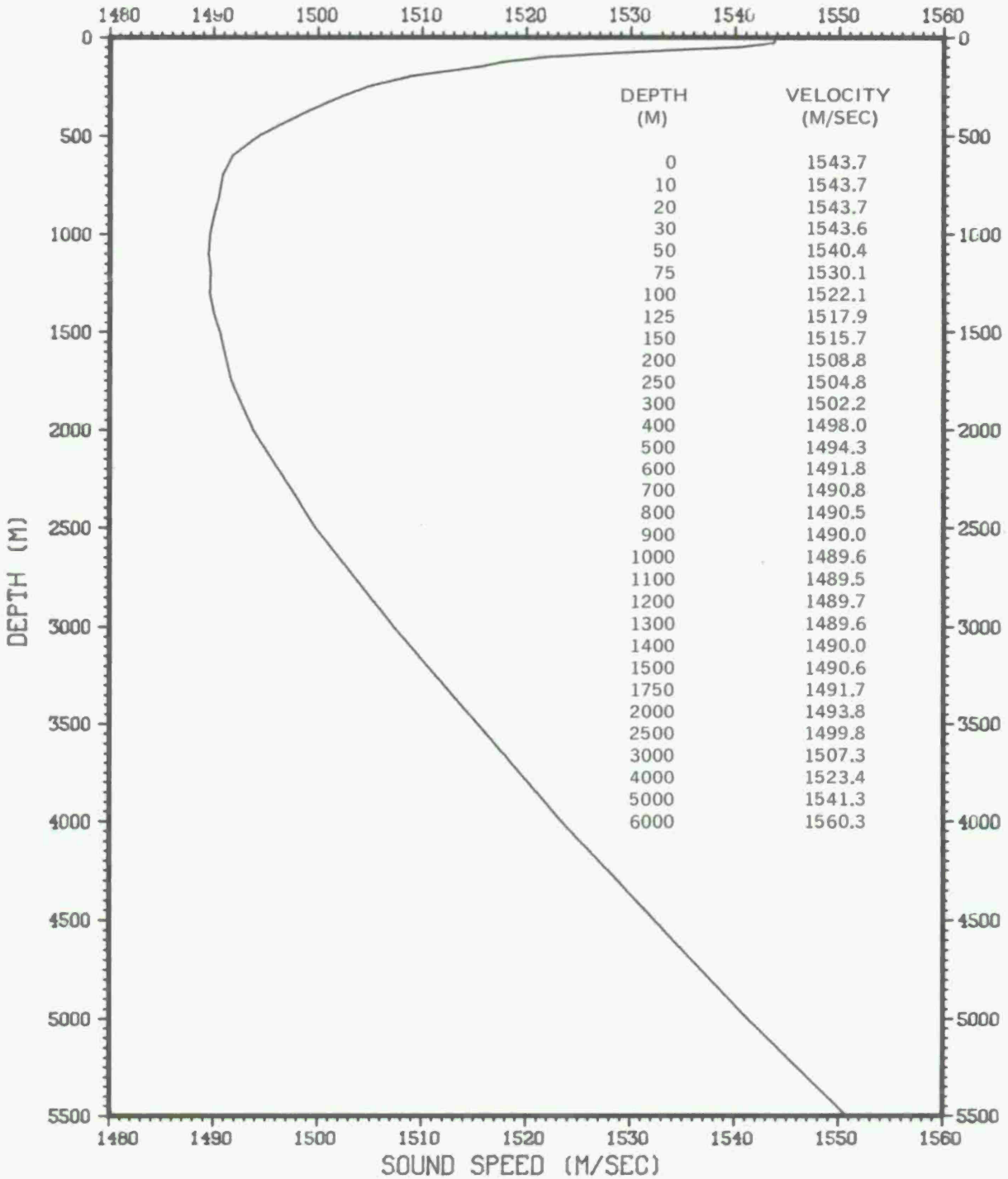


DEPTH (M)	VELOCITY (M/SEC)
0	1543.1
10	1542.5
20	1541.4
30	1540.0
50	1536.2
75	1530.7
100	1528.0
125	1520.6
150	1515.6
200	1506.8
250	1504.2
300	1501.9
400	1497.9
500	1495.3
600	1493.1
700	1491.3
800	1490.1
900	1489.8
1000	1489.7
1100	1490.0
1200	1490.2
1300	1490.4
1400	1490.3
1500	1490.3
1750	1491.5
2000	1493.8
2500	1499.8
3000	1507.3
4000	1523.4
5000	1541.3
6000	1560.3

PROVINCE 13 MAR – MAY

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	29.8	28.5	25.4	1.1606	57 ••	35.0	34.6	34.1	.2237	57 ••	1544.8	1542.1	1535.2	2.4451	57
10 ••	29.5	28.4	25.4	1.1166	57 ••	35.0	34.6	34.2	.2071	57 ••	1544.7	1542.1	1535.4	2.3770	57
20 ••	29.4	28.2	24.1	1.2489	57 ••	35.0	34.6	34.2	.2088	57 ••	1544.6	1541.9	1533.0	2.6815	57
30 ••	29.3	27.8	20.9	1.6952	57 ••	35.1	34.6	34.2	.2185	57 ••	1544.5	1541.2	1525.2	3.7899	57
50 ••	29.0	25.9	18.5	2.6347	57 ••	35.2	34.8	34.4	.1950	57 ••	1544.1	1537.2	1518.9	6.1626	57
75 ••	27.4	22.9	15.6	2.8311	57 ••	35.3	35.0	34.4	.1963	57 ••	1541.4	1530.6	1510.5	7.1688	57
100 ••	25.2	20.2	14.7	2.4838	57 ••	35.3	35.1	34.8	.1455	57 ••	1537.0	1524.1	1508.0	6.7722	57
125 ••	23.5	18.1	13.6	2.1966	57 ••	35.4	35.1	34.8	.1508	57 ••	1533.3	1518.8	1505.0	6.3570	57
150 ••	22.7	16.5	12.8	2.0561	57 ••	35.5	35.1	34.8	.1680	57 ••	1531.6	1514.4	1502.7	6.2218	57
200 ••	19.3	14.2	11.8	1.5670	57 ••	35.4	35.1	34.7	.1323	57 ••	1523.5	1508.0	1500.0	5.0659	57
250 ••	16.0	12.7	11.2	.9967	57 ••	35.2	35.0	34.8	.0877	57 ••	1514.7	1503.9	1498.7	3.3849	57
300 ••	13.5	11.7	10.5	.7362	56 ••	35.1	35.0	34.8	.0745	56 ••	1507.4	1501.3	1496.9	2.6051	56
400 ••	11.6	10.2	9.3	.5625	56 ••	35.1	34.9	34.7	.0749	56 ••	1502.6	1497.4	1494.3	2.0886	56
500 ••	10.5	9.0	8.2	.4721	55 ••	34.9	34.8	34.7	.0501	55 ••	1500.1	1494.5	1491.5	1.7610	55
600 ••	9.5	8.0	7.2	.4113	55 ••	34.8	34.7	34.7	.0505	55 ••	1498.1	1492.5	1489.4	1.5643	55
700 ••	8.5	7.3	6.6	.3655	54 ••	34.8	34.7	34.7	.0503	54 ••	1496.1	1491.3	1488.7	1.4503	54
800 ••	7.5	6.6	5.7	.3356	54 ••	34.8	34.7	34.7	.0499	54 ••	1493.7	1490.5	1486.7	1.3781	54
900 ••	6.9	6.1	5.5	.3009	53 ••	34.8	34.7	34.6	.0541	53 ••	1493.1	1490.0	1487.7	1.2155	53
1000 ••	6.4	5.6	5.1	.2791	52 ••	34.8	34.7	34.6	.0534	52 ••	1493.0	1489.7	1487.5	1.1696	52
1100 ••	5.9	5.2	4.7	.2590	52 ••	34.8	34.7	34.6	.0530	52 ••	1492.4	1489.6	1487.7	1.0637	52
1200 ••	5.2	4.8	4.3	.2381	41 ••	34.8	34.7	34.7	.0505	41 ••	1491.6	1489.7	1487.8	1.0134	41
1300 ••	4.9	4.4	3.9	.2301	41 ••	34.8	34.8	34.7	.0505	41 ••	1491.7	1489.8	1487.5	.9667	41
1400 ••	4.5	4.1	3.5	.2089	35 ••	34.8	34.7	34.7	.0490	35 ••	1492.0	1490.0	1487.4	.9286	35
1500 ••	4.2	3.7	3.1	.2108	34 ••	34.8	34.7	34.7	.0462	34 ••	1492.2	1490.3	1487.7	.9096	34
1750 ••	3.4	3.0	2.7	.1722	33 ••	34.8	34.7	34.7	.0496	33 ••	1493.0	1491.5	1490.2	.6797	33
2000 ••	2.8	2.5	2.3	.1297	30 ••	34.8	34.7	34.7	.0430	30 ••	1494.8	1493.5	1492.6	.5074	30
2500 ••	2.2	2.0	1.8	.0919	26 ••	34.8	34.7	34.7	.0196	26 ••	1500.5	1499.7	1499.0	.3809	26
3000 ••	1.8	1.7	1.6	.0737	19 ••	34.8	34.7	34.7	.0229	19 ••	1507.7	1507.1	1506.6	.3372	19
4000 ••	1.6	1.4	1.2	.2000	3 ••	34.7	34.7	34.7	.0000	3 ••	1524.2	1523.3	1522.5	.8505	3
5000 ••	1.7	1.7	1.7	.0000	1 ••	34.7	34.7	34.7	.0000	1 ••	1542.4	1542.4	1542.4	.0000	1

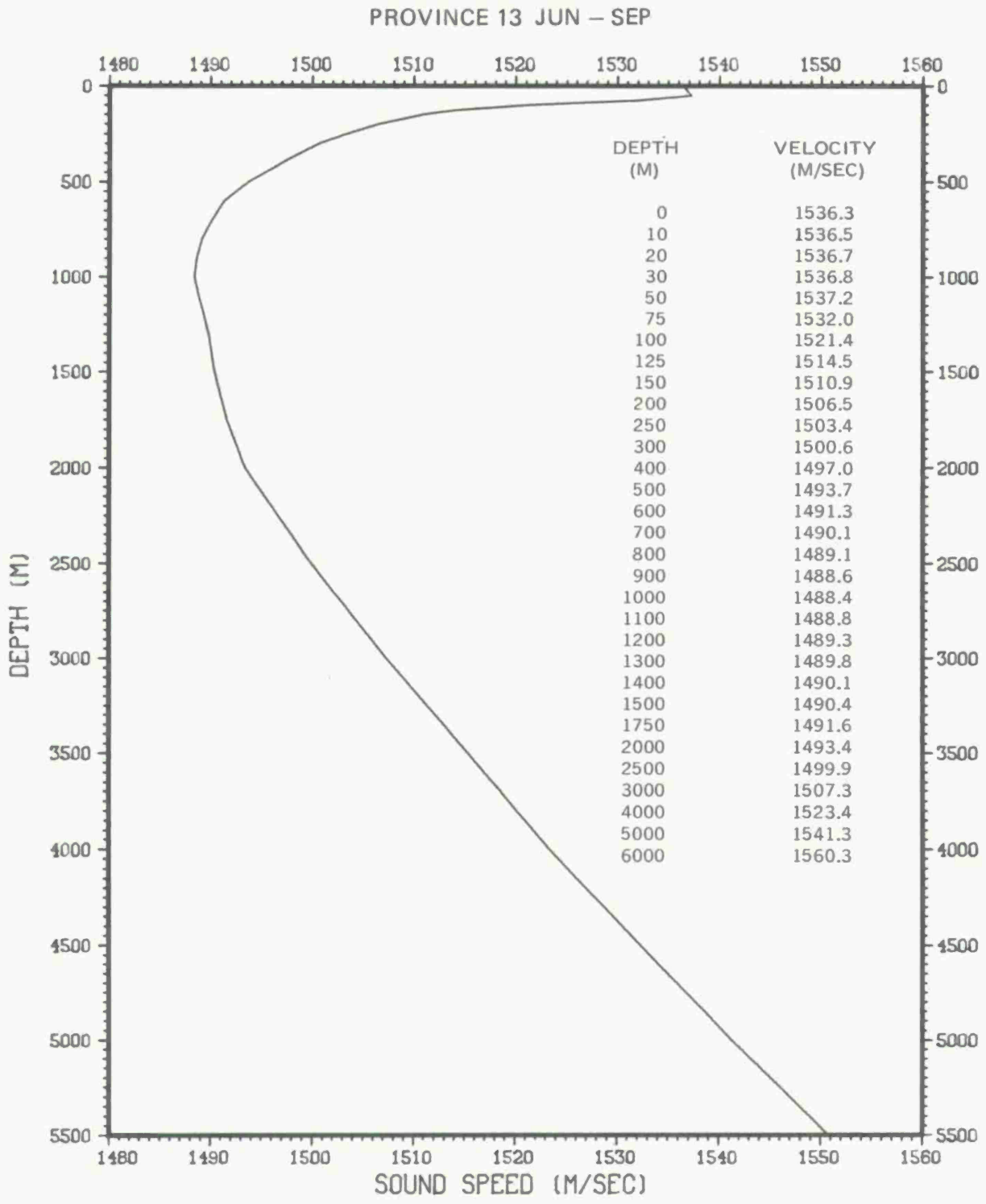
PROVINCE 13 MAR – MAY



DEPTH (M)	VELOCITY (M/SEC)
0	1543.7
10	1543.7
20	1543.7
30	1543.6
50	1540.4
75	1530.1
100	1522.1
125	1517.9
150	1515.7
200	1508.8
250	1504.8
300	1502.2
400	1498.0
500	1494.3
600	1491.8
700	1490.8
800	1490.5
900	1490.0
1000	1489.6
1100	1489.5
1200	1489.7
1300	1489.6
1400	1490.0
1500	1490.6
1750	1491.7
2000	1493.8
2500	1499.8
3000	1507.3
4000	1523.4
5000	1541.3
6000	1560.3

PROVINCE 13 JUN – SEP

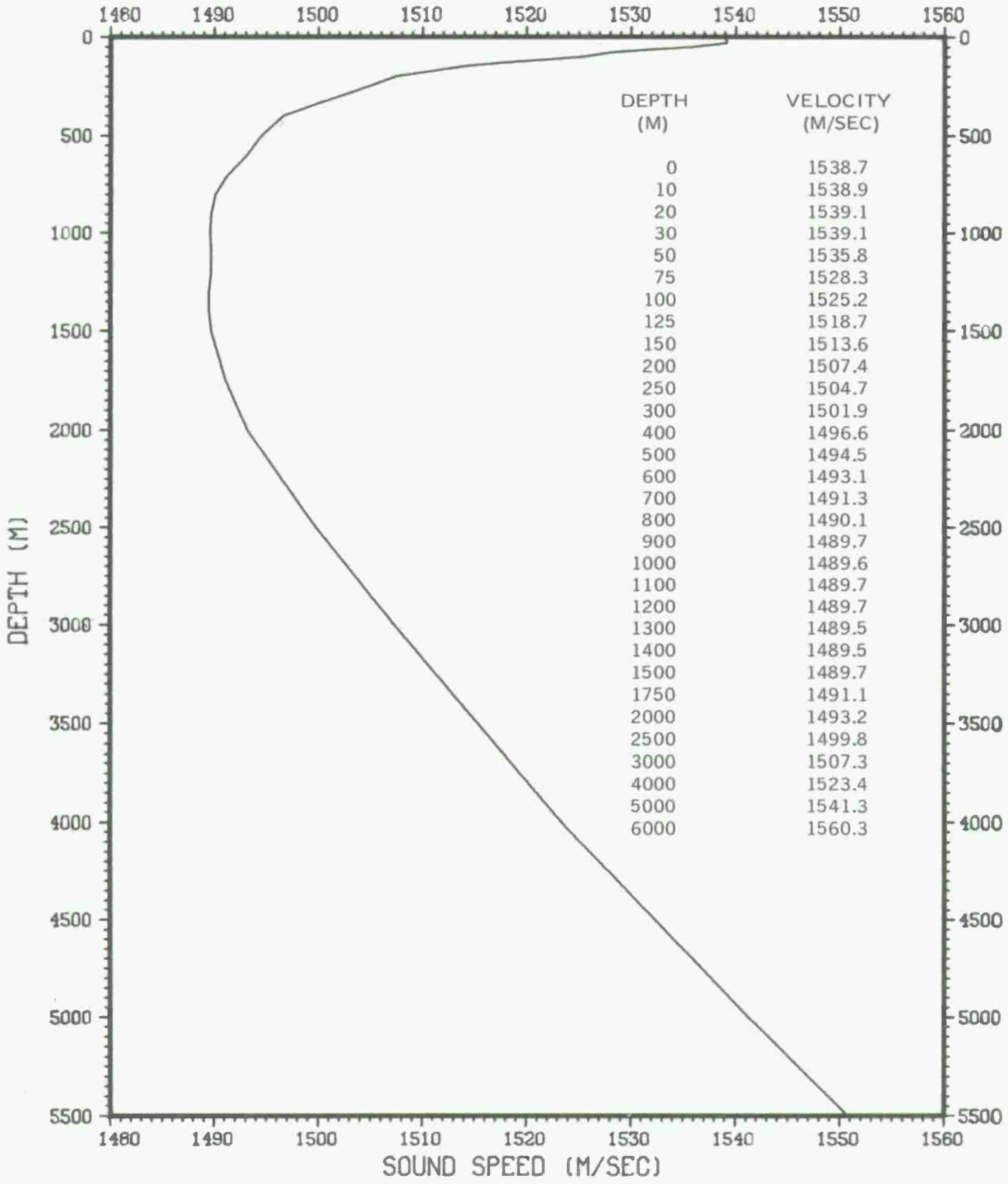
DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	28.2	25.7	23.9	.9403	51	35.3	34.5	25.1	1.3880	51	1541.7	1536.0	1521.2	2.9041	51
10	28.1	25.7	23.9	.9610	51	35.2	34.6	30.1	.7241	51	1541.8	1536.2	1526.9	2.4354	51
20	28.0	25.6	23.3	1.0172	51	35.2	34.7	33.9	.3435	51	1542.0	1536.3	1531.1	2.2912	51
30	28.0	25.5	22.2	1.0804	51	35.2	34.7	34.2	.3264	51	1542.2	1536.0	1528.6	2.4136	51
50	27.8	24.6	18.4	1.8832	51	35.2	34.8	34.3	.2901	51	1542.1	1534.3	1518.7	4.5544	51
75	25.7	21.5	15.3	2.4614	51	35.4	35.0	34.5	.2176	51	1537.4	1527.2	1509.7	6.4659	51
100	23.3	18.7	14.0	2.0381	51	35.5	35.1	34.7	.1620	51	1532.4	1520.1	1506.0	5.8009	51
125	21.9	17.0	13.4	1.9205	51	35.6	35.1	34.8	.1408	51	1529.4	1515.7	1504.5	5.7064	51
150	20.5	15.8	12.9	1.7806	51	35.7	35.1	34.9	.1519	51	1526.2	1512.2	1503.2	5.5167	51
200	17.3	13.8	11.9	1.3060	51	35.6	35.1	34.9	.1265	51	1518.1	1506.9	1500.3	4.3402	51
250	15.0	12.5	11.3	.8830	51	35.4	35.0	34.8	.1027	51	1511.8	1503.3	1499.2	3.0326	51
300	13.4	11.5	10.6	.5862	50	35.2	35.0	34.8	.0678	50	1507.4	1500.6	1497.4	2.1028	50
400	11.2	9.9	8.9	.4097	50	35.0	34.9	34.7	.0563	50	1501.1	1496.5	1492.7	1.5340	50
500	9.7	8.8	7.8	.4152	50	34.9	34.8	34.7	.0558	50	1497.2	1493.8	1490.0	1.6015	50
600	8.7	7.9	7.0	.4057	50	34.8	34.7	34.7	.0505	50	1495.2	1492.0	1488.6	1.5974	50
700	8.3	7.2	6.4	.4179	49	34.8	34.7	34.7	.0500	49	1495.1	1490.9	1487.8	1.6392	49
800	7.4	6.6	6.0	.3592	49	34.9	34.7	34.7	.0545	49	1493.4	1490.2	1487.7	1.4463	49
900	6.9	6.0	5.4	.3300	48	34.8	34.8	34.7	.0504	48	1493.2	1489.7	1487.0	1.3797	48
1000	6.4	5.6	5.0	.3141	48	34.8	34.8	34.7	.0501	48	1492.8	1489.4	1487.1	1.3348	48
1100	5.9	5.1	4.6	.2863	47	34.8	34.8	34.7	.0505	47	1492.5	1489.4	1487.3	1.1846	47
1200	5.4	4.8	4.3	.2399	33	34.8	34.7	34.7	.0508	33	1492.1	1489.5	1487.6	1.0113	33
1300	4.8	4.4	4.0	.1970	31	34.8	34.8	34.7	.0508	31	1491.6	1489.6	1487.9	.8608	31
1400	4.4	4.0	3.7	.1725	29	34.8	34.7	34.7	.0509	29	1491.2	1489.8	1488.5	.7061	29
1500	4.0	3.7	3.4	.1636	29	34.8	34.7	34.7	.0509	29	1491.5	1490.1	1488.8	.6858	29
1750	3.6	3.0	2.8	.1644	28	34.8	34.7	34.7	.0488	28	1493.9	1491.4	1490.6	.6577	28
2000	3.4	2.5	2.3	.2189	21	34.8	34.7	34.7	.0402	21	1497.4	1493.6	1492.6	.9449	21
2500	3.1	2.0	1.7	.2877	19	34.8	34.7	34.7	.0229	19	1504.3	1499.8	1498.7	1.1715	19
3000	2.7	1.8	1.5	.2858	13	34.7	34.7	34.7	.0000	13	1511.4	1507.6	1506.4	1.1936	13
4000	2.0	1.7	1.4	.3055	3	34.7	34.7	34.7	.0000	3	1525.7	1524.4	1523.3	1.2124	3


PROVINCE 13 JUN – SEP
1480
1490
1500
1510
1520
1530
1540
1550
1560
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
DEPTH (M)
SOUND SPEED (M/SEC)
DEPTH (M)
VELOCITY (M/SEC)
0 1536.3
10 1536.5
20 1536.7
30 1536.8
50 1537.2
75 1532.0
100 1521.4
125 1514.5
150 1510.9
200 1506.5
250 1503.4
300 1500.6
400 1497.0
500 1493.7
600 1491.3
700 1490.1
800 1489.1
900 1488.6
1000 1488.4
1100 1488.8
1200 1489.3
1300 1489.8
1400 1490.1
1500 1490.4
1750 1491.6
2000 1493.4
2500 1499.9
3000 1507.3
4000 1523.4
5000 1541.3
6000 1560.3

PROVINCE 13 OCT – NOV

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	28.0	26.8	24.9	.7810	30 ••	35.3	34.9	34.3	.2891	30 ••	1541.2	1538.8	1534.8	1.5537	30
10 ••	28.0	26.8	24.9	.7810	30 ••	35.3	34.9	34.3	.2874	30 ••	1541.3	1538.9	1535.0	1.5256	30
20 ••	28.0	26.7	24.9	.7902	30 ••	35.3	34.9	34.3	.2896	30 ••	1541.5	1539.0	1535.2	1.5590	30
30 ••	28.0	26.5	24.4	.8687	30 ••	35.3	34.9	34.3	.2956	30 ••	1541.7	1538.7	1534.3	1.7289	30
50 ••	27.9	25.5	19.6	1.7993	30 ••	35.3	34.9	34.5	.2675	30 ••	1541.8	1536.7	1522.0	4.2108	30
75 ••	27.2	23.2	16.1	2.6683	30 ••	35.3	35.1	34.6	.1886	30 ••	1540.7	1531.4	1512.3	6.8476	30
100 ••	24.3	20.0	13.8	2.4091	30 ••	35.3	35.1	34.9	.0997	30 ••	1535.1	1523.8	1505.1	6.7447	30
125 ••	23.3	17.9	13.1	1.9934	30 ••	35.3	35.1	34.9	.0877	30 ••	1532.9	1518.1	1503.1	5.8080	30
150 ••	21.5	16.2	12.5	1.7190	30 ••	35.3	35.1	35.0	.0758	30 ••	1528.8	1513.5	1501.6	5.1755	30
200 ••	17.7	14.0	11.6	1.2549	30 ••	35.4	35.1	34.9	.0928	30 ••	1519.3	1507.4	1499.3	4.1017	30
250 ••	14.6	12.6	11.1	.8250	30 ••	35.3	35.0	34.9	.0817	30 ••	1510.2	1503.8	1498.6	2.8253	30
300 ••	13.0	11.6	10.6	.6669	30 ••	35.1	35.0	34.9	.0556	30 ••	1505.9	1500.9	1497.4	2.3503	30
400 ••	11.4	10.1	8.6	.5661	29 ••	35.0	34.9	34.8	.0557	29 ••	1501.8	1497.1	1491.7	2.0866	29
500 ••	10.0	9.0	8.0	.3990	29 ••	34.9	34.8	34.7	.0421	29 ••	1498.3	1494.5	1490.9	1.4934	29
600 ••	8.8	8.0	7.2	.3580	29 ••	34.8	34.8	34.6	.0568	29 ••	1495.5	1492.6	1489.6	1.3525	29
700 ••	7.8	7.3	6.5	.3093	29 ••	34.8	34.7	34.7	.0509	29 ••	1493.2	1491.3	1488.3	1.1981	29
800 ••	7.2	6.7	6.1	.2873	28 ••	34.8	34.7	34.7	.0509	28 ••	1492.5	1490.5	1488.3	1.1421	28
900 ••	6.7	6.1	5.6	.2646	28 ••	34.8	34.8	34.7	.0508	28 ••	1492.4	1490.1	1487.8	1.0616	28
1000 ••	6.1	5.6	5.3	.2062	26 ••	34.8	34.8	34.7	.0508	26 ••	1491.6	1489.8	1488.3	.8354	26
1100 ••	5.5	5.2	4.9	.1598	26 ••	34.8	34.7	34.7	.0496	26 ••	1490.9	1489.6	1488.5	.6378	26
1200 ••	5.1	4.8	4.5	.1564	26 ••	34.8	34.7	34.7	.0471	26 ••	1490.7	1489.6	1488.4	.6251	26
1300 ••	4.7	4.4	4.1	.1442	26 ••	34.8	34.7	34.7	.0430	26 ••	1490.9	1489.7	1488.2	.6244	26
1400 ••	4.3	4.0	3.7	.1531	25 ••	34.8	34.7	34.7	.0458	25 ••	1491.0	1489.9	1488.4	.6410	25
1500 ••	3.9	3.7	3.4	.1517	24 ••	34.8	34.7	34.7	.0442	24 ••	1491.2	1490.1	1488.8	.6543	24
1750 ••	3.4	3.0	2.8	.1359	23 ••	34.8	34.7	34.7	.0422	23 ••	1493.0	1491.4	1490.4	.5710	23
2000 ••	2.8	2.5	2.4	.1118	23 ••	34.8	34.7	34.7	.0288	23 ••	1495.0	1493.6	1492.8	.4781	23
2500 ••	2.1	2.0	1.9	.0510	20 ••	34.7	34.7	34.7	.0000	20 ••	1500.3	1499.9	1499.3	.2300	20
3000 ••	1.9	1.8	1.6	.0814	16 ••	34.7	34.7	34.7	.0000	16 ••	1507.9	1507.4	1506.7	.3317	16
4000 ••	1.4	1.3	1.1	.1049	6 ••	34.7	34.7	34.7	.0000	6 ••	1523.1	1522.7	1521.8	.5269	6
5000 ••	1.4	1.4	1.4	.0000	1 ••	34.7	34.7	34.7	.0000	1 ••	1541.1	1541.1	1541.1	.0000	1

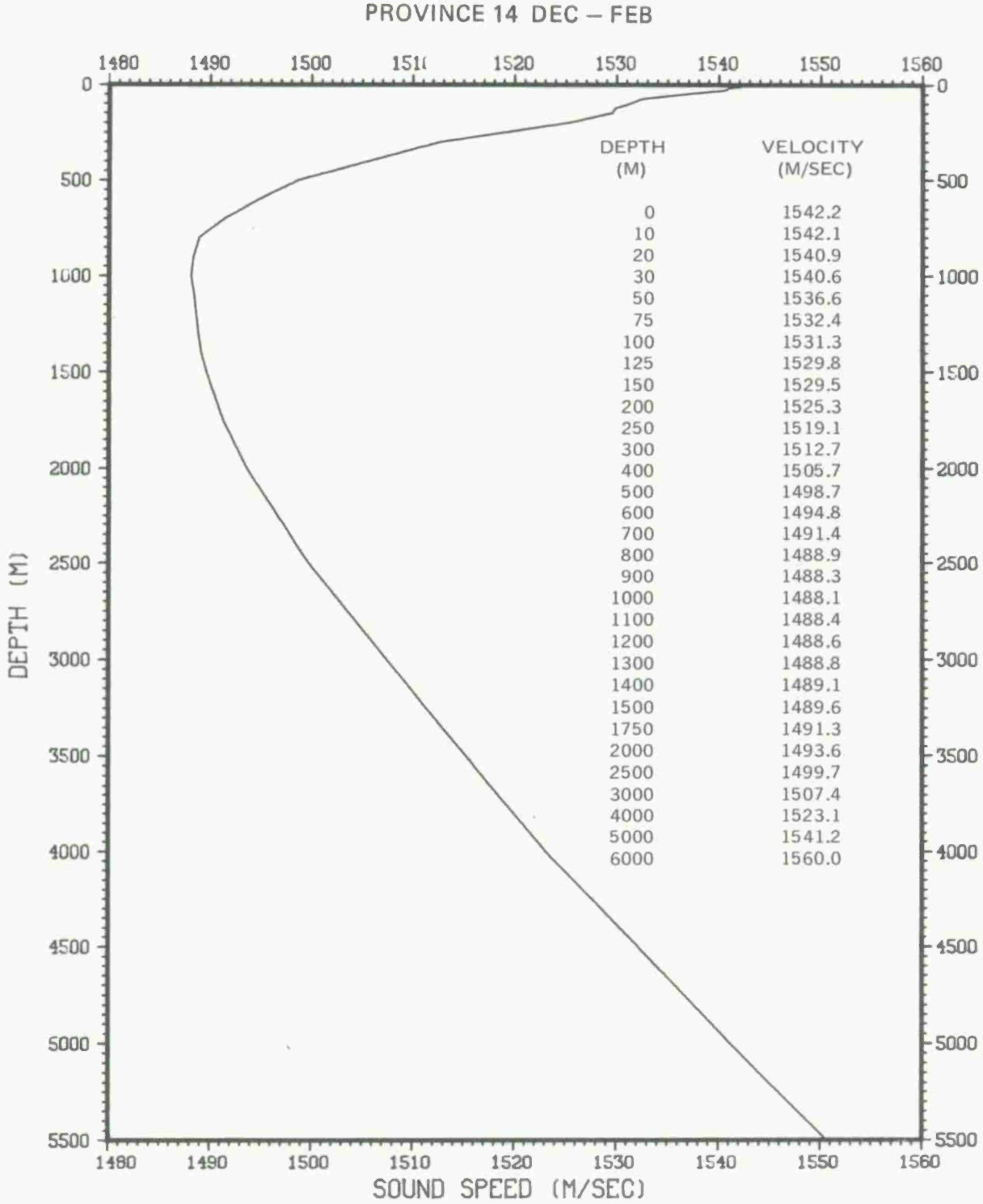
PROVINCE 13 OCT – NOV



DEPTH (M)	VELOCITY (M/SEC)
0	1538.7
10	1538.9
20	1539.1
30	1539.1
50	1535.8
75	1528.3
100	1525.2
125	1518.7
150	1513.6
200	1507.4
250	1504.7
300	1501.9
400	1496.6
500	1494.5
600	1493.1
700	1491.3
800	1490.1
900	1489.7
1000	1489.6
1100	1489.7
1200	1489.7
1300	1489.5
1400	1489.5
1500	1489.7
1750	1491.1
2000	1493.2
2500	1499.8
3000	1507.3
4000	1523.4
5000	1541.3
6000	1560.3

PROVINCE 14 DEC – FEB

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	28.9	27.5	25.2	.9979	28 ••	35.2	34.7	34.2	.3109	28 ••	1543.3	1540.1	1535.5	2.1039	28
10 ••	29.0	27.4	25.2	.9990	28 ••	35.2	34.7	34.2	.2909	28 ••	1543.6	1540.2	1535.7	2.0835	28
20 ••	28.9	27.4	25.2	.9646	28 ••	35.2	34.7	34.2	.2934	28 ••	1543.6	1540.2	1535.9	2.0052	28
30 ••	28.8	27.1	24.3	1.1599	28 ••	35.2	34.8	34.2	.2872	28 ••	1543.5	1539.8	1533.4	2.4646	28
50 ••	28.3	26.0	20.3	1.8067	28 ••	35.2	34.8	34.2	.2546	28 ••	1542.7	1537.7	1523.8	4.1170	28
75 ••	27.7	24.2	19.1	1.8384	28 ••	35.3	35.0	34.4	.2183	28 ••	1541.9	1534.1	1521.2	4.3332	28
100 ••	25.9	22.7	18.3	1.5207	28 ••	35.5	35.1	34.8	.1988	28 ••	1538.5	1530.8	1519.6	3.7535	28
125 ••	24.3	21.5	17.4	1.4176	28 ••	35.6	35.2	34.9	.1938	28 ••	1535.0	1528.3	1517.5	3.6334	28
150 ••	22.6	20.4	15.1	1.5509	28 ••	35.7	35.3	34.9	.2038	28 ••	1531.5	1525.9	1510.4	4.3184	28
200 ••	20.9	18.3	13.7	1.5415	28 ••	35.8	35.4	34.9	.2233	28 ••	1528.0	1521.0	1506.6	4.6249	28
250 ••	19.0	16.6	12.2	1.4612	28 ••	35.7	35.4	35.1	.2077	28 ••	1523.9	1516.8	1502.5	4.5918	28
300 ••	17.4	14.7	11.0	1.4286	27 ••	35.6	35.4	35.0	.1575	27 ••	1520.0	1511.8	1498.8	4.6879	27
400 ••	15.1	12.0	9.2	1.1755	26 ••	35.4	35.1	34.8	.1350	26 ••	1514.5	1504.2	1493.8	4.1587	26
500 ••	13.7	10.0	8.0	1.0810	26 ••	35.2	34.9	34.7	.1116	26 ••	1511.5	1498.5	1490.6	3.9950	26
600 ••	11.9	8.5	6.8	1.0049	26 ••	35.0	34.7	34.6	.0864	26 ••	1506.9	1494.3	1487.7	3.8112	26
700 ••	10.0	7.3	6.4	.7157	26 ••	34.9	34.6	34.5	.0762	26 ••	1501.8	1491.1	1487.7	2.8209	26
800 ••	8.6	6.3	5.7	.5566	26 ••	34.8	34.6	34.5	.0752	26 ••	1498.0	1488.8	1486.6	2.1997	26
900 ••	7.4	5.6	5.2	.4369	25 ••	34.8	34.7	34.5	.0614	25 ••	1495.2	1488.0	1486.2	1.7733	25
1000 ••	6.5	5.2	4.7	.3759	25 ••	34.7	34.7	34.6	.0332	25 ••	1493.2	1487.8	1485.9	1.5076	25
1100 ••	5.8	4.8	4.3	.3323	25 ••	34.8	34.7	34.6	.0351	25 ••	1492.1	1488.0	1485.8	1.3696	25
1200 ••	5.2	4.5	4.0	.2801	25 ••	34.8	34.7	34.6	.0289	25 ••	1491.2	1488.2	1486.2	1.1706	25
1300 ••	4.7	4.1	3.7	.2500	25 ••	34.8	34.7	34.6	.0289	25 ••	1490.6	1488.5	1486.6	1.0405	25
1400 ••	4.2	3.8	3.4	.2136	24 ••	34.8	34.7	34.6	.0359	24 ••	1490.5	1488.8	1487.3	.8632	24
1500 ••	3.9	3.5	3.1	.1794	24 ••	34.8	34.7	34.6	.0408	24 ••	1490.8	1489.3	1487.7	.7379	24
1750 ••	3.2	2.9	2.7	.1560	21 ••	34.8	34.7	34.6	.0561	21 ••	1492.3	1491.1	1490.1	.6523	21
2000 ••	2.6	2.5	2.1	.1219	17 ••	34.8	34.7	34.7	.0470	17 ••	1494.1	1493.4	1491.8	.5243	17
2500 ••	2.1	1.9	1.7	.1027	11 ••	34.8	34.7	34.7	.0522	11 ••	1500.0	1499.6	1498.5	.3995	11
3000 ••	1.9	1.7	1.6	.0991	8 ••	34.8	34.7	34.7	.0535	8 ••	1507.9	1507.1	1506.6	.3882	8
4000 ••	1.4	1.4	1.3	.0516	6 ••	34.8	34.7	34.7	.0548	6 ••	1523.3	1523.1	1522.7	.2345	6

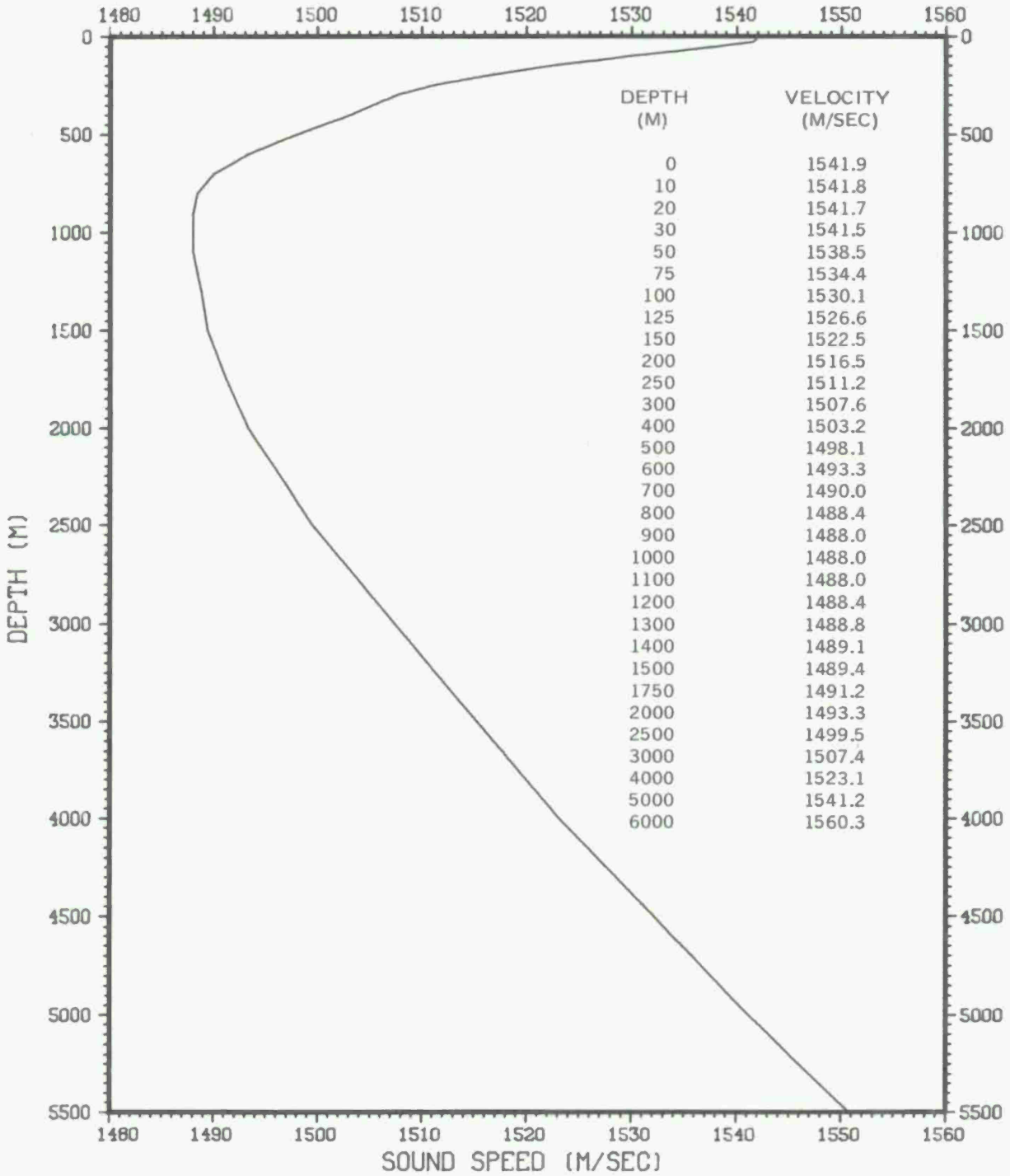


DEPTH (M)	VELOCITY (M/SEC)
0	1542.2
10	1542.1
20	1540.9
30	1540.6
50	1536.6
75	1532.4
100	1531.3
125	1529.8
150	1529.5
200	1525.3
250	1519.1
300	1512.7
400	1505.7
500	1498.7
600	1494.8
700	1491.4
800	1488.9
900	1488.3
1000	1488.1
1100	1488.4
1200	1488.6
1300	1488.8
1400	1489.1
1500	1489.6
1750	1491.3
2000	1493.6
2500	1499.7
3000	1507.4
4000	1523.1
5000	1541.2
6000	1560.0

PROVINCE 14 MAR – MAY

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	29.0	27.5	24.4	1.2142	36 ••	35.0	34.6	34.2	.2457	36 ••	1543.6	1540.1	1533.3	2.6575	36
10 ••	29.0	27.5	24.4	1.2038	36 ••	35.0	34.6	34.2	.2344	36 ••	1543.8	1540.3	1533.6	2.6175	36
20 ••	29.0	27.4	24.4	1.1704	36 ••	35.0	34.6	34.2	.2263	36 ••	1543.9	1540.3	1533.7	2.5563	36
30 ••	28.7	27.3	24.4	1.1609	36 ••	35.1	34.7	34.2	.2335	36 ••	1543.5	1540.2	1533.8	2.5071	36
50 ••	28.7	26.4	24.4	1.1002	36 ••	35.2	34.8	34.2	.2298	36 ••	1543.7	1538.7	1534.1	2.3982	36
75 ••	26.6	24.5	22.4	1.1571	36 ••	35.3	35.0	34.4	.2048	36 ••	1539.7	1534.8	1530.1	2.6172	36
100 ••	25.1	22.5	21.3	.8347	36 ••	35.5	35.1	34.7	.1876	36 ••	1537.0	1530.4	1527.2	2.0293	36
125 ••	23.0	20.9	19.4	.8810	36 ••	35.5	35.3	35.0	.1539	36 ••	1532.1	1527.0	1522.6	2.3590	36
150 ••	21.9	19.7	17.7	1.0686	36 ••	35.6	35.3	35.0	.1687	36 ••	1529.8	1524.2	1518.5	3.0414	36
200 ••	20.3	17.9	15.3	1.2727	36 ••	35.7	35.4	35.1	.1730	36 ••	1526.7	1519.9	1511.7	3.8126	36
250 ••	18.9	16.0	13.6	1.4600	36 ••	35.7	35.4	35.1	.1903	36 ••	1523.6	1514.9	1507.2	4.6717	36
300 ••	17.5	14.3	12.5	1.3279	36 ••	35.7	35.3	34.8	.2049	36 ••	1520.4	1510.5	1504.1	4.4641	36
400 ••	15.0	12.0	10.4	1.0093	36 ••	35.4	35.1	34.8	.1464	36 ••	1514.2	1504.2	1498.2	3.5929	36
500 ••	12.8	10.4	9.0	.9063	36 ••	35.3	34.9	34.8	.1260	36 ••	1508.4	1499.7	1494.5	3.3777	36
600 ••	10.9	8.9	7.7	.8714	35 ••	35.1	34.8	34.6	.1065	35 ••	1503.5	1495.8	1491.3	3.3296	35
700 ••	9.8	7.6	6.6	.7805	35 ••	35.0	34.7	34.5	.0843	35 ••	1500.8	1492.6	1488.6	3.0473	35
800 ••	8.3	6.5	5.7	.5241	34 ••	34.9	34.6	34.5	.0783	34 ••	1496.8	1490.0	1486.7	2.0910	34
900 ••	6.8	5.8	5.3	.3839	30 ••	34.8	34.6	34.5	.0728	30 ••	1492.7	1488.8	1486.6	1.5410	30
1000 ••	6.0	5.2	4.7	.3203	29 ••	34.7	34.7	34.5	.0632	29 ••	1491.3	1488.1	1485.8	1.3410	29
1100 ••	5.4	4.8	4.3	.3004	28 ••	34.7	34.7	34.5	.0559	28 ••	1490.3	1488.0	1485.7	1.2878	28
1200 ••	5.0	4.4	3.9	.3258	22 ••	34.7	34.7	34.5	.0581	22 ••	1490.5	1487.9	1485.8	1.3914	22
1300 ••	4.7	4.0	3.5	.3356	21 ••	34.7	34.7	34.6	.0436	21 ••	1490.8	1488.1	1485.9	1.4534	21
1400 ••	4.3	3.7	3.2	.3066	20 ••	34.7	34.7	34.6	.0366	20 ••	1491.1	1488.5	1486.2	1.3061	20
1500 ••	4.0	3.4	3.0	.2665	20 ••	34.7	34.7	34.6	.0224	20 ••	1491.3	1489.0	1487.2	1.1500	20
1750 ••	3.2	2.8	2.6	.2009	19 ••	34.8	34.7	34.6	.0333	19 ••	1492.2	1490.6	1489.4	.8595	19
2000 ••	2.7	2.4	2.2	.1401	16 ••	34.8	34.7	34.7	.0342	16 ••	1494.2	1493.1	1492.3	.5439	16
2500 ••	2.0	1.9	1.8	.0786	11 ••	34.8	34.7	34.7	.0302	11 ••	1499.9	1499.5	1499.0	.3443	11
3000 ••	1.8	1.8	1.7	.0408	6 ••	34.7	34.7	34.7	.0000	6 ••	1507.6	1507.5	1507.4	.0817	6
4000 ••	1.3	1.3	1.3	.0000	1 ••	34.7	34.7	34.7	.0000	1 ••	1522.8	1522.8	1522.8	.0000	1

PROVINCE 14 MAR – MAY

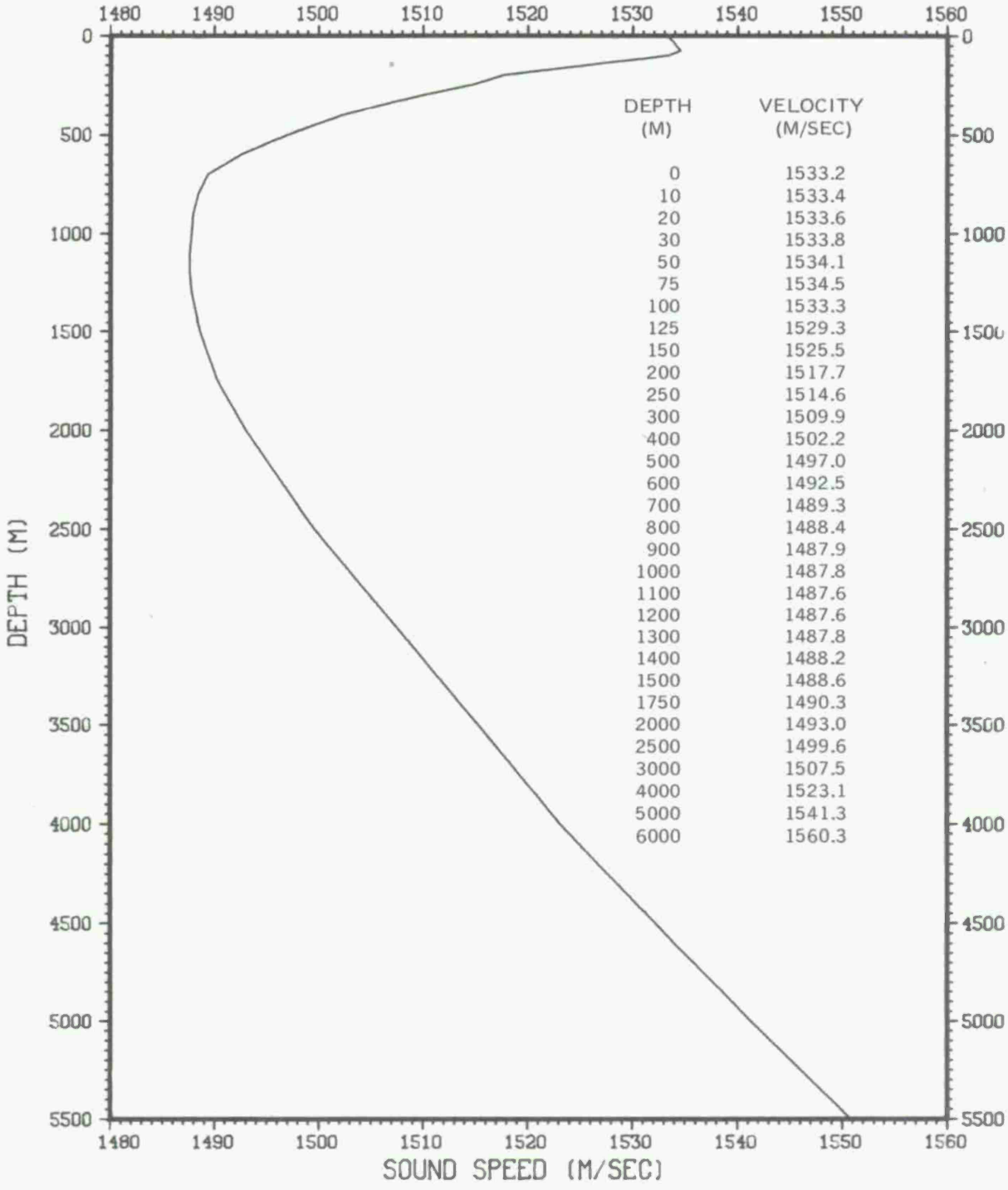


DEPTH (M)	VELOCITY (M/SEC)
0	1541.9
10	1541.8
20	1541.7
30	1541.5
50	1538.5
75	1534.4
100	1530.1
125	1526.6
150	1522.5
200	1516.5
250	1511.2
300	1507.6
400	1503.2
500	1498.1
600	1493.3
700	1490.0
800	1488.4
900	1488.0
1000	1488.0
1100	1488.0
1200	1488.4
1300	1488.8
1400	1489.1
1500	1489.4
1750	1491.2
2000	1493.3
2500	1499.5
3000	1507.4
4000	1523.1
5000	1541.2
6000	1560.3

PROVINCE 14 JUN – SEP

DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0	26.1	24.7	22.6	.8146	37	35.3	34.8	34.4	.2130	37	1536.9	1533.9	1529.1	1.8249	37
10	26.2	24.7	22.6	.8221	37	35.3	34.8	34.4	.2128	37	1537.1	1534.0	1529.2	1.8260	37
20	26.2	24.7	22.6	.8177	37	35.3	34.8	34.4	.2065	37	1537.3	1534.2	1529.4	1.8105	37
30	26.2	24.7	22.6	.8074	37	35.3	34.8	34.4	.2132	37	1537.5	1534.3	1529.6	1.7862	37
50	25.8	24.6	22.5	.7939	37	35.3	34.8	34.4	.2137	37	1537.2	1534.4	1529.7	1.7360	37
75	25.5	24.0	21.6	.9166	37	35.3	35.0	34.6	.1774	37	1536.7	1533.5	1527.9	2.1305	37
100	24.1	22.6	19.6	1.0243	37	35.4	35.1	34.8	.1300	37	1534.4	1530.9	1523.0	2.5311	37
125	23.2	21.3	18.1	1.0938	37	35.5	35.3	35.1	.1004	37	1532.8	1528.0	1519.0	2.9125	37
150	22.5	20.1	17.0	1.1369	37	35.6	35.4	35.2	.1146	37	1531.6	1525.3	1516.2	3.1811	37
200	21.1	18.0	15.5	1.3357	37	35.7	35.4	35.2	.1387	37	1528.9	1520.4	1512.6	3.9760	37
250	19.6	16.3	13.9	1.4331	36	35.7	35.4	35.1	.1743	36	1525.8	1515.9	1508.2	4.5766	36
300	17.6	14.7	12.6	1.3260	36	35.6	35.4	35.0	.1966	36	1520.9	1511.6	1504.5	4.4097	36
400	14.2	12.2	10.0	1.0467	36	35.3	35.1	34.9	.1327	36	1511.7	1504.7	1497.0	3.7275	36
500	12.0	10.4	8.5	1.0086	36	35.1	34.9	34.7	.1260	36	1505.8	1500.0	1492.7	3.7973	36
600	10.6	8.9	7.5	.9967	36	34.9	34.7	34.6	.0910	36	1502.2	1496.0	1490.3	3.8405	36
700	9.0	7.6	6.5	.8426	36	34.7	34.7	34.5	.0607	36	1498.0	1492.6	1488.3	3.2604	36
800	7.6	6.6	5.7	.5835	35	34.7	34.6	34.5	.0598	35	1494.0	1490.0	1486.5	2.2819	35
900	6.5	5.8	5.3	.3309	35	34.7	34.6	34.5	.0611	35	1491.3	1488.6	1486.5	1.3289	35
1000	5.9	5.2	4.8	.2393	35	34.7	34.7	34.6	.0490	35	1490.6	1487.9	1486.1	.9471	35
1100	5.2	4.8	4.5	.2020	34	34.7	34.7	34.6	.0475	34	1489.8	1487.9	1486.5	.8969	34
1200	4.8	4.4	4.0	.2250	32	34.7	34.7	34.6	.0440	32	1489.8	1487.9	1486.4	.9448	32
1300	4.5	4.0	3.6	.2471	32	34.7	34.7	34.6	.0369	32	1490.2	1488.1	1486.1	1.0234	32
1400	4.2	3.7	3.4	.2407	28	34.8	34.7	34.6	.0272	28	1490.4	1488.5	1487.1	.9826	28
1500	3.9	3.4	3.1	.2269	28	34.7	34.7	34.6	.0189	28	1490.9	1489.0	1487.6	.9684	28
1750	3.6	2.9	2.6	.2101	26	34.7	34.7	34.7	.0000	26	1493.8	1490.7	1489.4	.8946	26
2000	3.3	2.4	2.2	.2449	16	34.7	34.7	34.7	.0000	16	1496.8	1493.2	1492.3	1.0175	16
2500	2.7	2.0	1.8	.2086	15	34.8	34.7	34.7	.0352	15	1502.8	1499.9	1499.0	.8749	15
3000	2.1	1.8	1.7	.1188	13	34.7	34.7	34.7	.0000	13	1508.9	1507.6	1507.1	.4816	13
4000	1.3	1.3	1.1	.0756	7	34.7	34.7	34.7	.0000	7	1523.1	1522.8	1522.1	.3259	7

PROVINCE 14 JUN – SEP

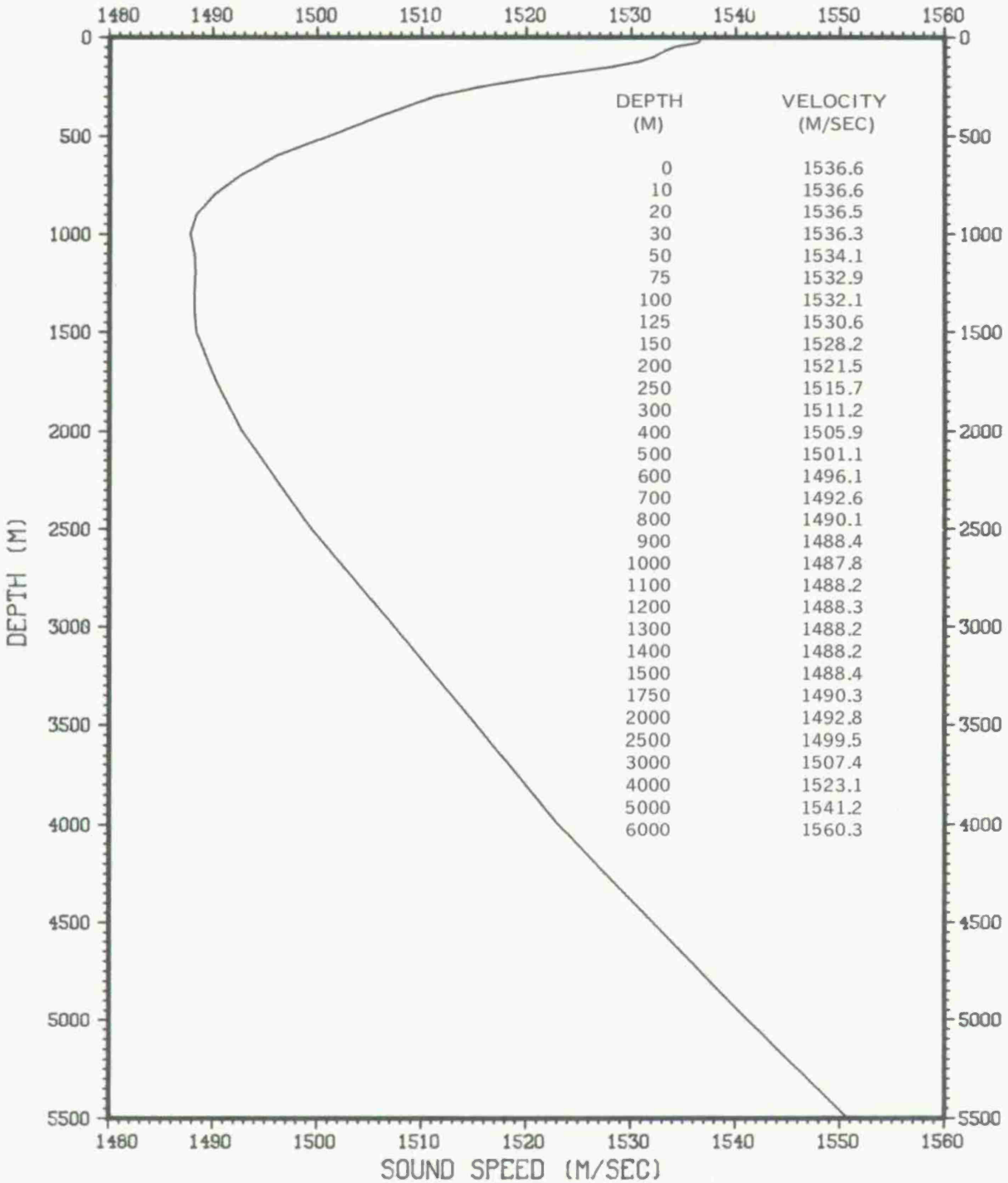


DEPTH (M)	VELOCITY (M/SEC)
0	1533.2
10	1533.4
20	1533.6
30	1533.8
50	1534.1
75	1534.5
100	1533.3
125	1529.3
150	1525.5
200	1517.7
250	1514.6
300	1509.9
400	1502.2
500	1497.0
600	1492.5
700	1489.3
800	1488.4
900	1487.9
1000	1487.8
1100	1487.6
1200	1487.6
1300	1487.8
1400	1488.2
1500	1488.6
1750	1490.3
2000	1493.0
2500	1499.6
3000	1507.5
4000	1523.1
5000	1541.3
6000	1560.3

PROVINCE 14 OCT – NOV

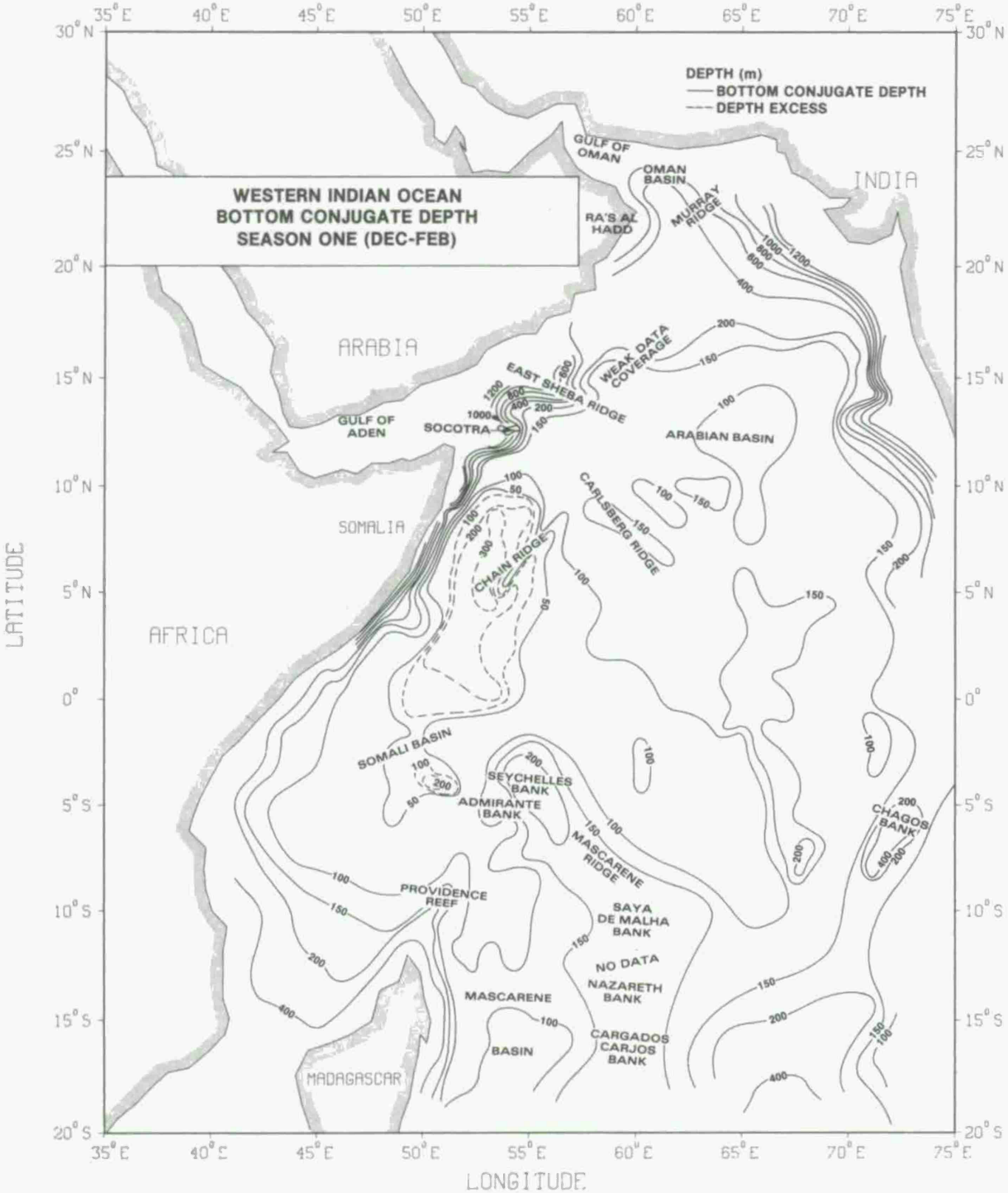
DEPTH (M)	TEMPERATURE (C)					SALINITY (PPT)					VELOCITY (M/SEC)				
	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM	MAX	MEAN	MIN	ST DEV	NUM
0 ••	26.2	25.4	23.8	.5902	14 ••	35.3	35.2	35.1	.0646	14 ••	1537.8	1536.1	1532.2	1.4090	14
10 ••	26.1	25.4	23.8	.5677	14 ••	35.3	35.2	35.2	.0469	14 ••	1537.8	1536.2	1532.3	1.3607	14
20 ••	26.0	25.2	23.5	.6298	14 ••	35.3	35.2	35.2	.0514	14 ••	1537.8	1535.9	1531.7	1.5345	14
30 ••	25.9	24.9	22.5	.8635	14 ••	35.3	35.2	35.1	.0611	14 ••	1537.6	1535.3	1529.7	2.0395	14
50 ••	25.6	24.1	22.3	.7910	14 ••	35.3	35.2	35.0	.0829	14 ••	1537.3	1533.8	1529.4	1.9227	14
75 ••	24.8	23.4	21.8	.6924	14 ••	35.4	35.2	35.0	.1016	14 ••	1535.8	1532.5	1528.6	1.6731	14
100 ••	23.9	22.9	21.4	.6426	14 ••	35.4	35.1	35.0	.1019	14 ••	1534.1	1531.6	1527.9	1.5703	14
125 ••	23.3	22.2	20.8	.7670	14 ••	35.5	35.2	35.1	.1092	14 ••	1533.1	1530.2	1526.9	1.8993	14
150 ••	22.7	21.2	19.9	.8306	14 ••	35.5	35.3	35.2	.0975	14 ••	1531.8	1528.2	1524.6	2.1000	14
200 ••	20.5	18.9	17.4	.8185	14 ••	35.6	35.4	35.2	.1051	14 ••	1527.1	1522.9	1518.2	2.3581	14
250 ••	18.2	16.7	15.4	.7240	14 ••	35.6	35.4	35.2	.1328	14 ••	1521.5	1517.3	1513.0	2.2094	14
300 ••	15.7	14.8	13.9	.4991	13 ••	35.6	35.4	35.1	.1561	13 ••	1515.2	1512.1	1508.9	1.7764	13
400 ••	13.2	12.3	11.7	.4781	13 ••	35.3	35.2	35.1	.0768	13 ••	1508.6	1505.1	1503.0	1.7236	13
500 ••	11.8	10.6	9.6	.7047	13 ••	35.1	34.9	34.8	.1050	13 ••	1505.1	1500.7	1496.8	2.6423	13
600 ••	11.1	9.0	7.8	.8436	11 ••	35.0	34.7	34.6	.1036	11 ••	1504.1	1496.1	1491.5	3.1825	11
700 ••	7.8	7.3	6.7	.3472	10 ••	34.7	34.6	34.6	.0422	10 ••	1493.4	1491.5	1488.9	1.3666	10
800 ••	6.7	6.3	5.9	.2591	10 ••	34.7	34.6	34.6	.0422	10 ••	1490.3	1489.1	1487.4	.9924	10
900 ••	5.9	5.7	5.4	.1647	10 ••	34.7	34.6	34.6	.0516	10 ••	1489.0	1488.1	1487.0	.6377	10
1000 ••	5.3	5.1	4.8	.1494	10 ••	34.7	34.7	34.6	.0516	10 ••	1488.3	1487.6	1486.4	.5395	10
1100 ••	5.0	4.7	4.4	.1955	10 ••	34.7	34.7	34.6	.0483	10 ••	1488.8	1487.7	1486.3	.7885	10
1200 ••	4.5	4.3	4.1	.1509	10 ••	34.7	34.7	34.6	.0422	10 ••	1488.6	1487.8	1486.6	.6767	10
1300 ••	4.2	4.0	3.8	.1101	10 ••	34.7	34.7	34.7	.0000	10 ••	1489.0	1488.0	1487.1	.5122	10
1400 ••	3.9	3.7	3.5	.1317	10 ••	34.7	34.7	34.7	.0000	10 ••	1489.1	1488.3	1487.6	.4644	10
1500 ••	3.6	3.4	3.2	.1197	10 ••	34.7	34.7	34.7	.0000	10 ••	1489.6	1488.8	1488.1	.4864	10
1750 ••	2.9	2.8	2.7	.0816	10 ••	34.7	34.7	34.7	.0000	10 ••	1491.1	1490.5	1489.9	.3860	10
2000 ••	2.6	2.5	2.2	.1188	8 ••	34.7	34.7	34.7	.0000	8 ••	1493.7	1493.2	1492.2	.4950	8
2500 ••	2.1	2.0	1.8	.1113	7 ••	34.7	34.7	34.7	.0000	7 ••	1500.3	1499.8	1499.0	.4860	7
3000 ••	1.9	1.8	1.6	.1169	6 ••	34.7	34.7	34.7	.0000	6 ••	1508.1	1507.6	1506.9	.4446	6
4000 ••	1.4	1.3	1.1	.1140	5 ••	34.7	34.7	34.7	.0000	5 ••	1523.2	1522.7	1522.2	.4159	5

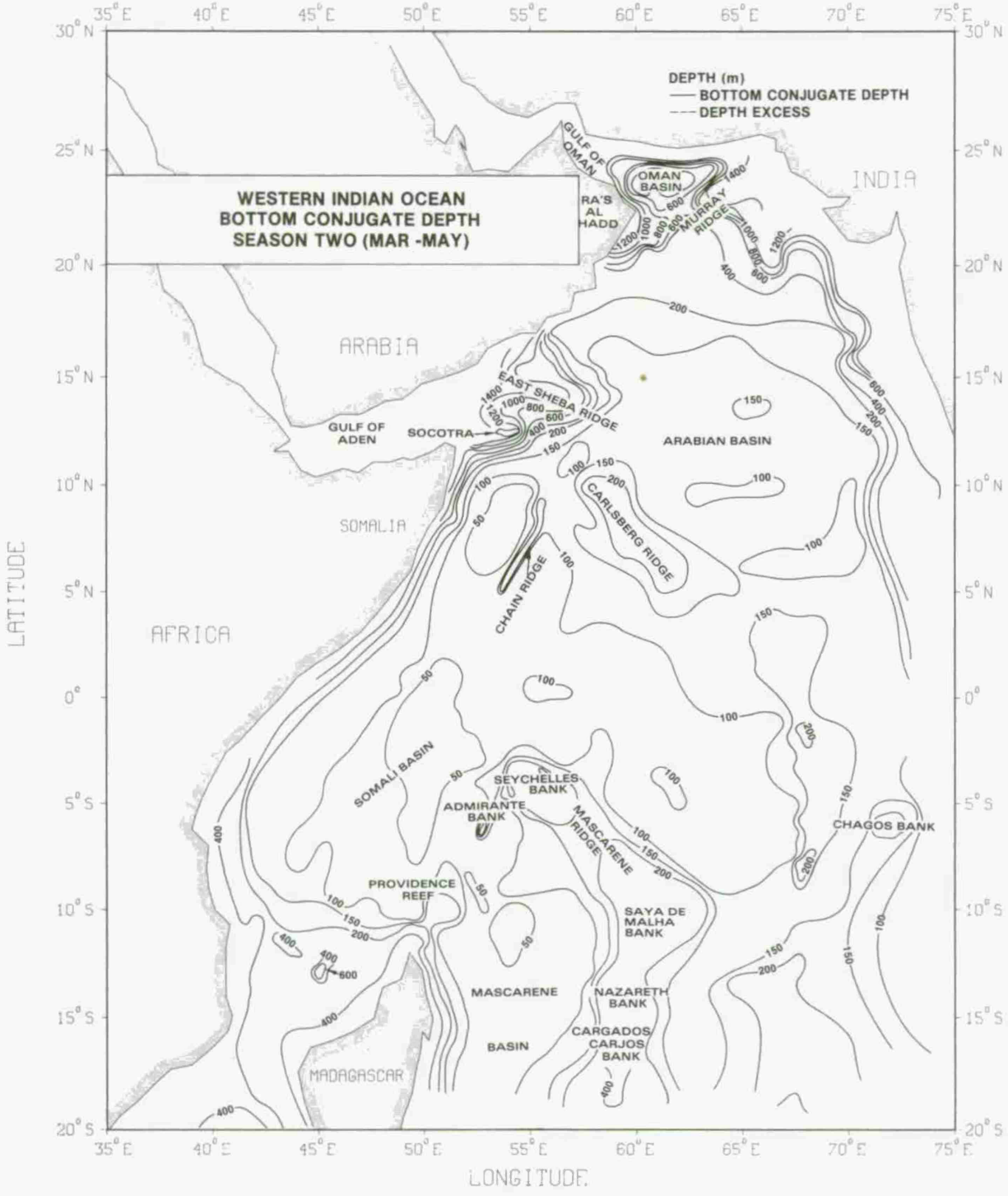
PROVINCE 14 OCT – NOV

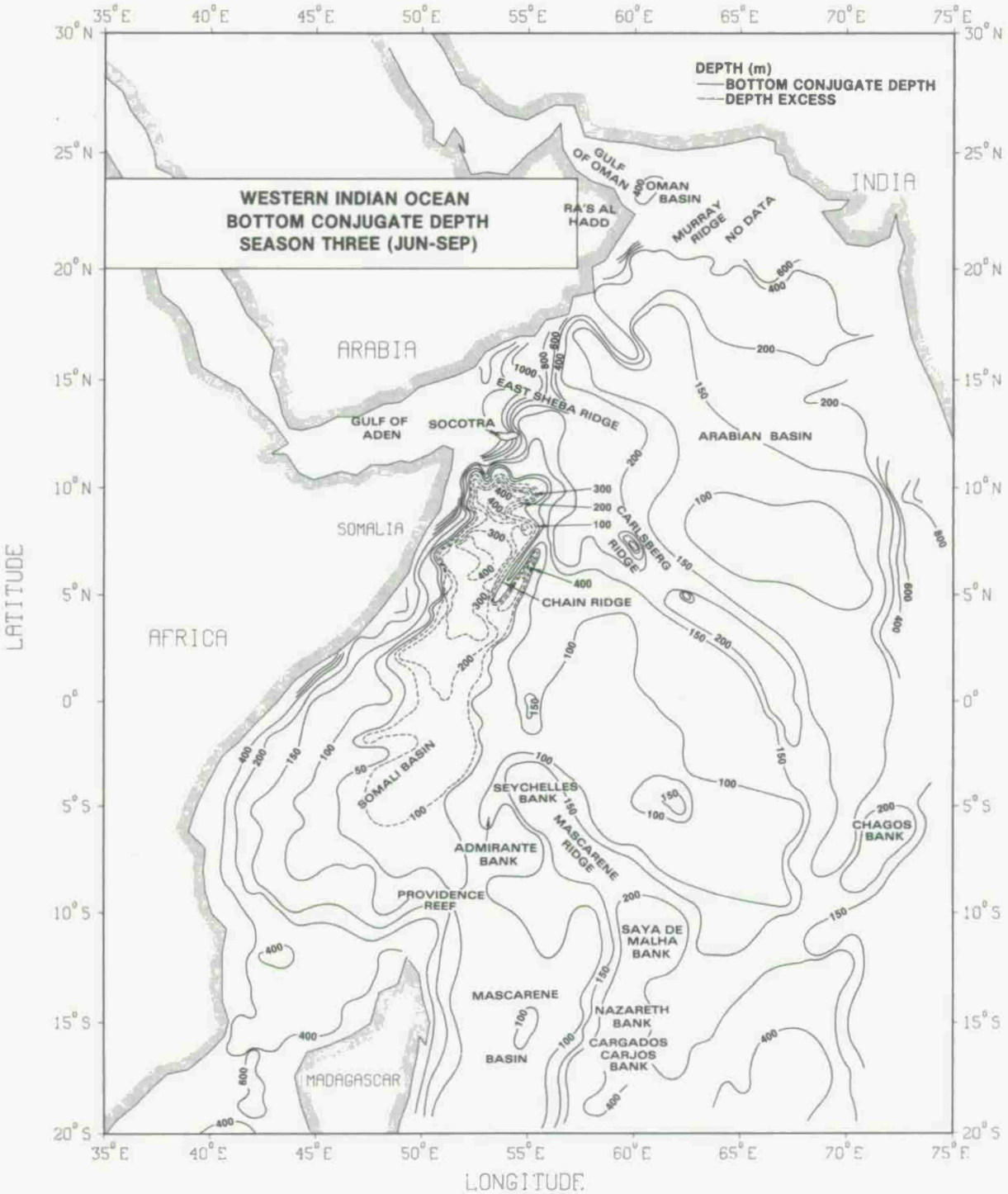


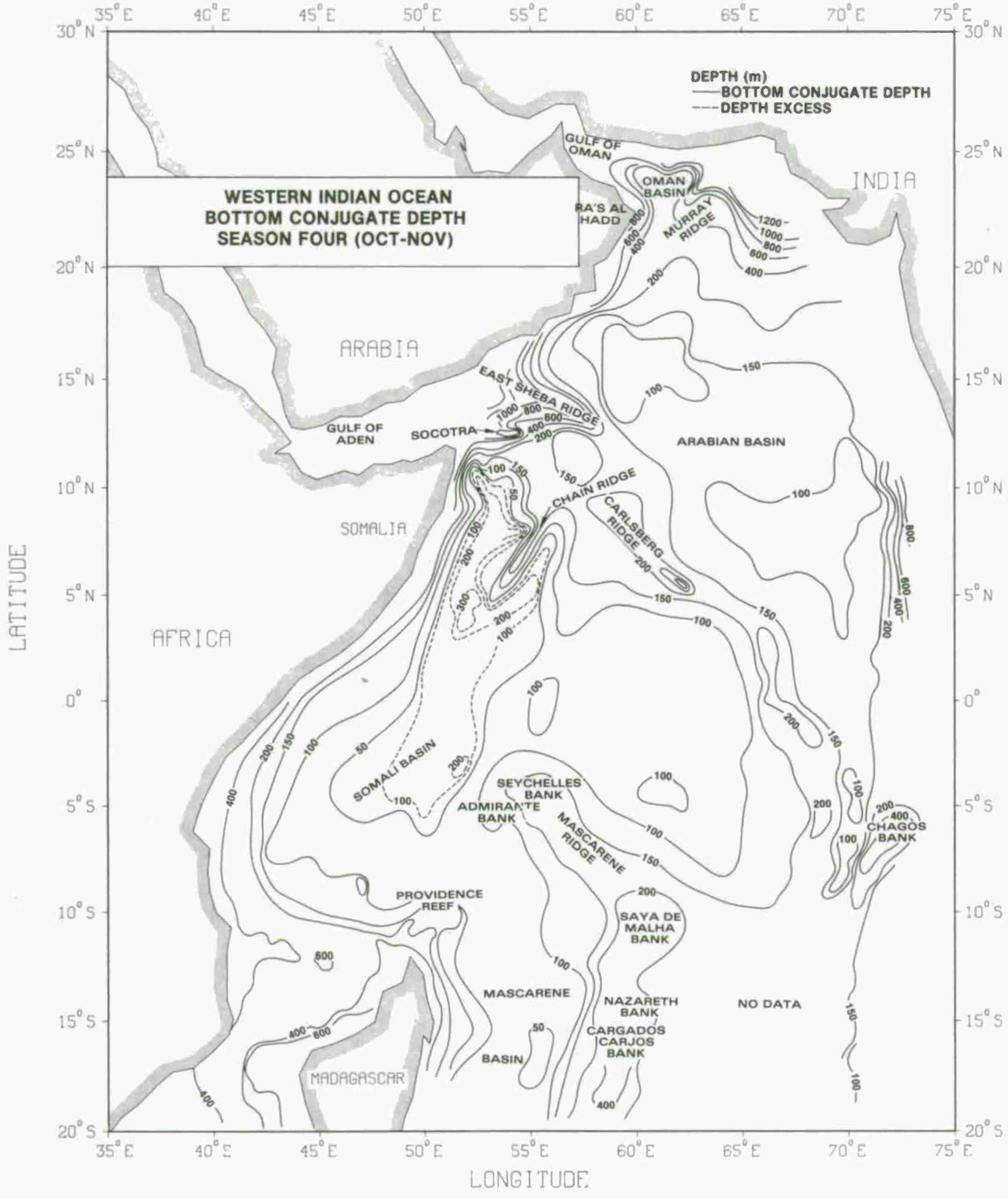
DEPTH (M)	VELOCITY (M/SEC)
0	1536.6
10	1536.6
20	1536.5
30	1536.3
50	1534.1
75	1532.9
100	1532.1
125	1530.6
150	1528.2
200	1521.5
250	1515.7
300	1511.2
400	1505.9
500	1501.1
600	1496.1
700	1492.6
800	1490.1
900	1488.4
1000	1487.8
1100	1488.2
1200	1488.3
1300	1488.2
1400	1488.2
1500	1488.4
1750	1490.3
2000	1492.8
2500	1499.5
3000	1507.4
4000	1523.1
5000	1541.2
6000	1560.3

APPENDIX B: BOTTOM CONJUGATE DEPTH AND DEPTH EXCESS CONTOUR CHARTS ARRANGED BY SEASON

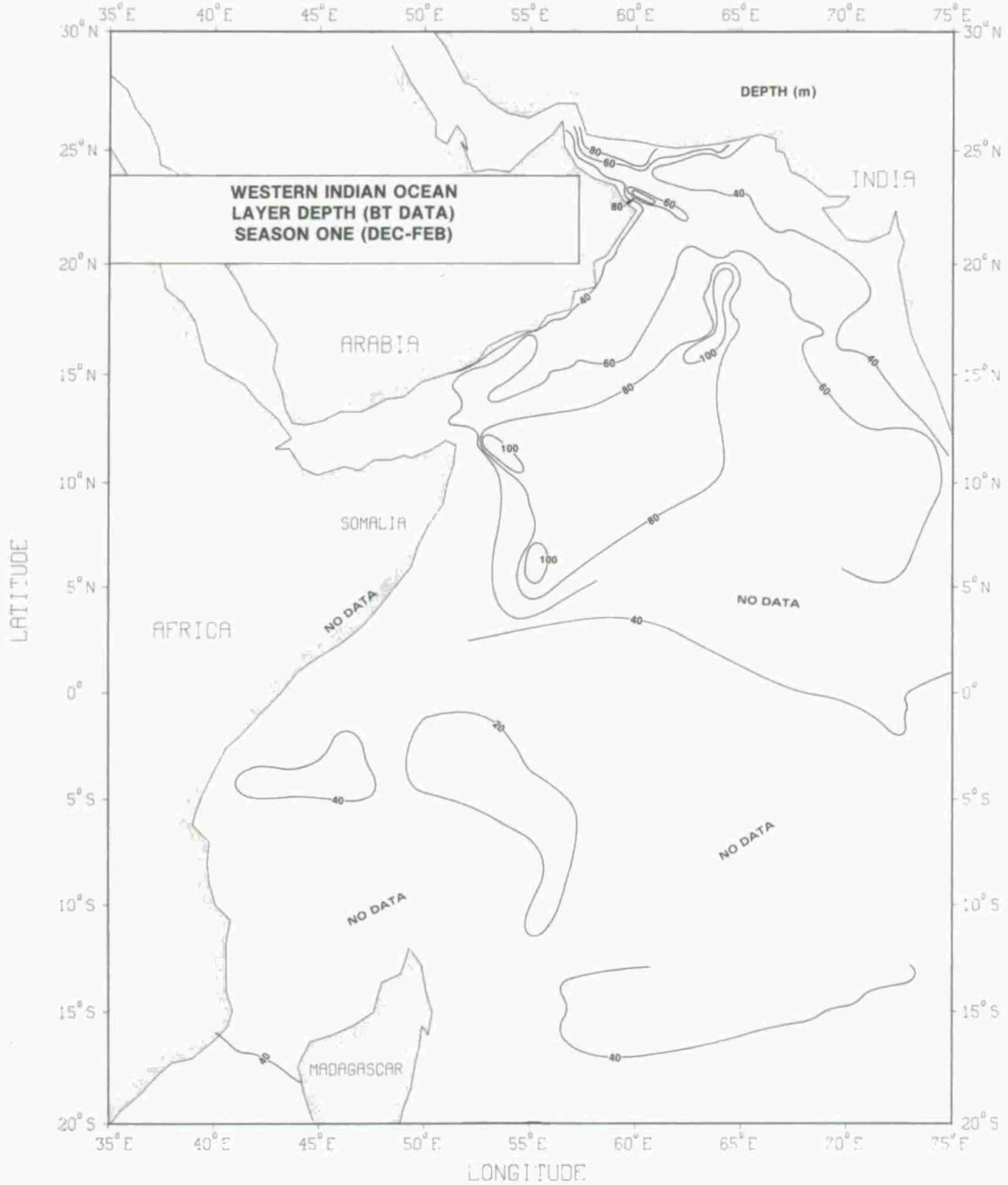

WESTERN INDIAN OCEAN
BOTTOM CONJUGATE DEPTH
SEASON ONE (DEC-FEB)
DEPTH (m)
BOTTOM CONJUGATE DEPTH
DEPTH EXCESS
35° E
40° E
45° E
50° E
55° E
60° E
65° E
70° E
75° E
30° N
25° N
20° N
15° N
10° N
5° N
0°
5° S
10° S
15° S
20° S
LATITUDE
LONGITUDE
ARABIA
INDIA
AFRICA
SOMALIA
MADAGASCAR
GULF OF OMAN
OMAN BASIN
RA'S AL HADD
MURRAY RIDGE
WEAK DATA COVERAGE
EAST SHEBA RIDGE
GULF OF ADEN
SOCOTRA
ARABIAN BASIN
CARLSBERG RIDGE
CHAIN RIDGE
SOMALI BASIN
SEYCHELLES BANK
ADMIRANTE BANK
MASCARENE RIDGE
CHAGOS BANK
PROVIDENCE REEF
SAYA DE MALHA BANK
NO DATA
NAZARETH BANK
MASCARENE BASIN
CARGADOS CARJOS BANK

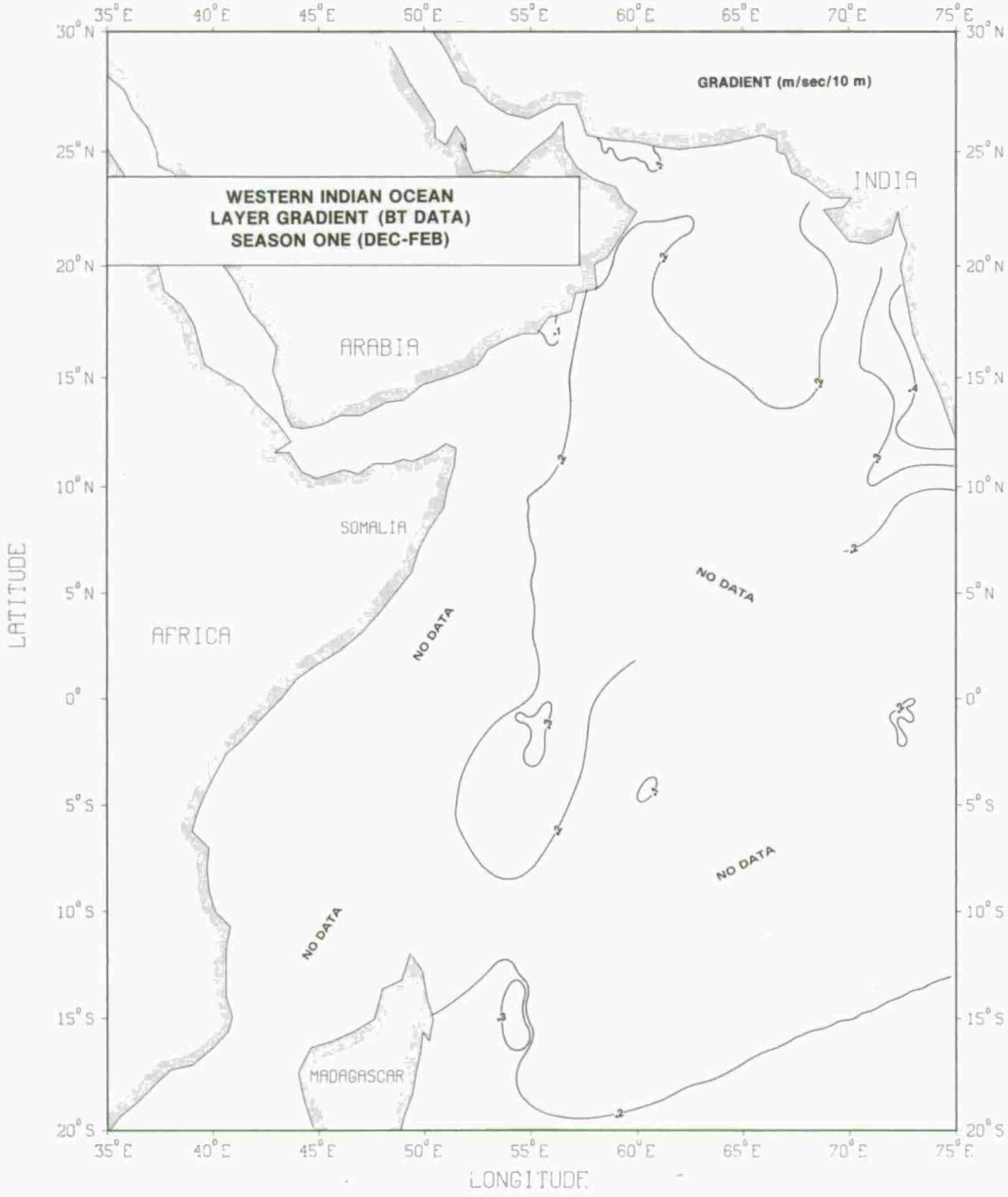

WESTERN INDIAN OCEAN
BOTTOM CONJUGATE DEPTH
SEASON TWO (MAR -MAY)
DEPTH (m)
BOTTOM CONJUGATE DEPTH
DEPTH EXCESS
LATITUDE
LONGITUDE
ARABIA
INDIA
AFRICA
SOMALIA
MADAGASCAR
GULF OF OMAN
OMAN BASIN
RA'S AL HADD
MURRAY RIDGE
GULF OF ADEN
SOCOTRA
EAST SHEBA RIDGE
ARABIAN BASIN
CARLSBERG RIDGE
CHAIN RIDGE
SOMALI BASIN
SEYCHELLES BANK
ADMIRANTE BANK
MASCARENE RIDGE
CHAGOS BANK
PROVIDENCE REEF
SAYA DE MALHA BANK
MASCARENE BASIN
NAZARETH BANK
CARGADOS CARJOS BANK
35° E
40° E
45° E
50° E
55° E
60° E
65° E
70° E
75° E
30° N
25° N
20° N
15° N
10° N
5° N
0°
5° S
10° S
15° S
20° S

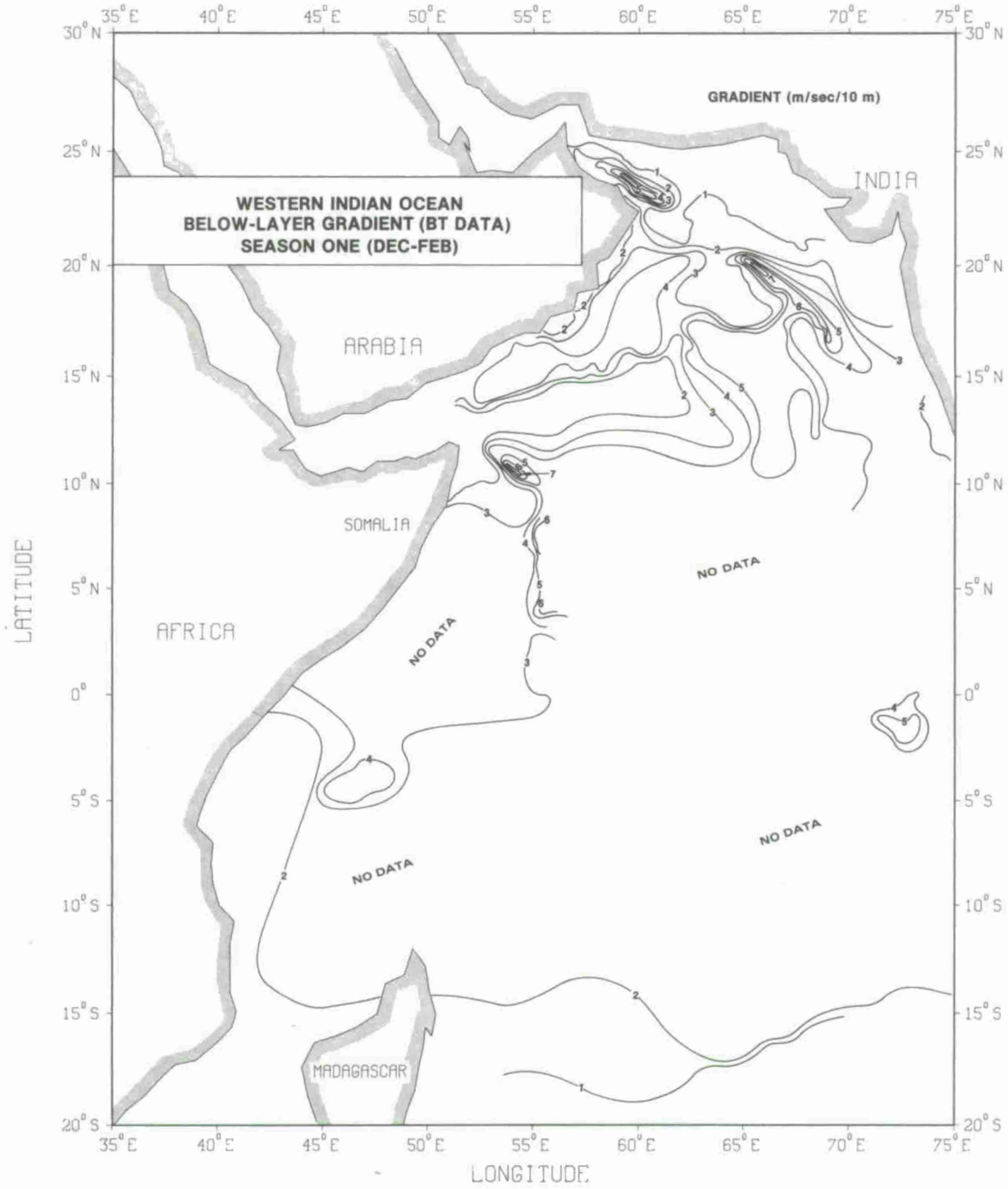

WESTERN INDIAN OCEAN
BOTTOM CONJUGATE DEPTH
SEASON THREE (JUN-SEP)
DEPTH (m)
BOTTOM CONJUGATE DEPTH
DEPTH EXCESS
LATITUDE
LONGITUDE
35° E
40° E
45° E
50° E
55° E
60° E
65° E
70° E
75° E
30° N
25° N
20° N
15° N
10° N
5° N
0°
5° S
10° S
15° S
20° S
INDIA
ARABIA
AFRICA
SOMALIA
MADAGASCAR
GULF OF OMAN
OMAN BASIN
RA'S AL HADD
MURRAY RIDGE
NO DATA
GULF OF ADEN
SOCOTRA
EAST SHEBA RIDGE
ARABIAN BASIN
CARLSBERG RIDGE
CHAIN RIDGE
SOMALI BASIN
SEYCHELLES BANK
MASCARENE RIDGE
ADMIRANTE BANK
PROVIDENCE REEF
CHAGOS BANK
SAYA DE MALHA BANK
NAZARETH BANK
CARGADOS CARJOS BANK
MASCARENE BASIN


WESTERN INDIAN OCEAN
BOTTOM CONJUGATE DEPTH
SEASON FOUR (OCT-NOV)
DEPTH (m)
BOTTOM CONJUGATE DEPTH
DEPTH EXCESS
GULF OF OMAN
OMAN BASIN
RA'S AL HADD
MURRAY RIDGE
INDIA
ARABIA
EAST SHEBA RIDGE
GULF OF ADEN
SOCOTRA
ARABIAN BASIN
CHAIN RIDGE
CARLSBERG RIDGE
SOMALIA
AFRICA
SOMALI BASIN
SEYCHELLES BANK
ADMIRANTE BANK
MASCARENE RIDGE
CHAGOS BANK
PROVIDENCE REEF
SAYA DE MALHA BANK
MASCARENE BASIN
NAZARETH BANK
CARGADOS CARJOS BANK
NO DATA
MADAGASCAR
LATITUDE
LONGITUDE
35° E
40° E
45° E
50° E
55° E
60° E
65° E
70° E
75° E
30° N
25° N
20° N
15° N
10° N
5° N
0°
5° S
10° S
15° S
20° S

APPENDIX C: NEAR-SURFACE PARAMETER CONTOUR CHARTS BASED ON BT DATA ARRANGED BY SEASON


WESTERN INDIAN OCEAN
LAYER DEPTH (BT DATA)
SEASON ONE (DEC-FEB)
DEPTH (m)
INDIA
ARABIA
SOMALIA
AFRICA
MADAGASCAR
NO DATA
NO DATA
NO DATA
NO DATA
LATITUDE
LONGITUDE
35° E
40° E
45° E
50° E
55° E
60° E
65° E
70° E
75° E
30° N
25° N
20° N
15° N
10° N
5° N
0°
5° S
10° S
15° S
20° S


WESTERN INDIAN OCEAN
LAYER GRADIENT (BT DATA)
SEASON ONE (DEC-FEB)
GRADIENT (m/sec/10 m)
INDIA
ARABIA
SOMALIA
AFRICA
MADAGASCAR
NO DATA
NO DATA
NO DATA
NO DATA
LATITUDE
LONGITUDE
35° E
40° E
45° E
50° E
55° E
60° E
65° E
70° E
75° E
30° N
25° N
20° N
15° N
10° N
5° N
0°
5° S
10° S
15° S
20° S


WESTERN INDIAN OCEAN
BELOW-LAYER GRADIENT (BT DATA)
SEASON ONE (DEC-FEB)
GRADIENT (m/sec/10 m)
INDIA
ARABIA
SOMALIA
AFRICA
MADAGASCAR
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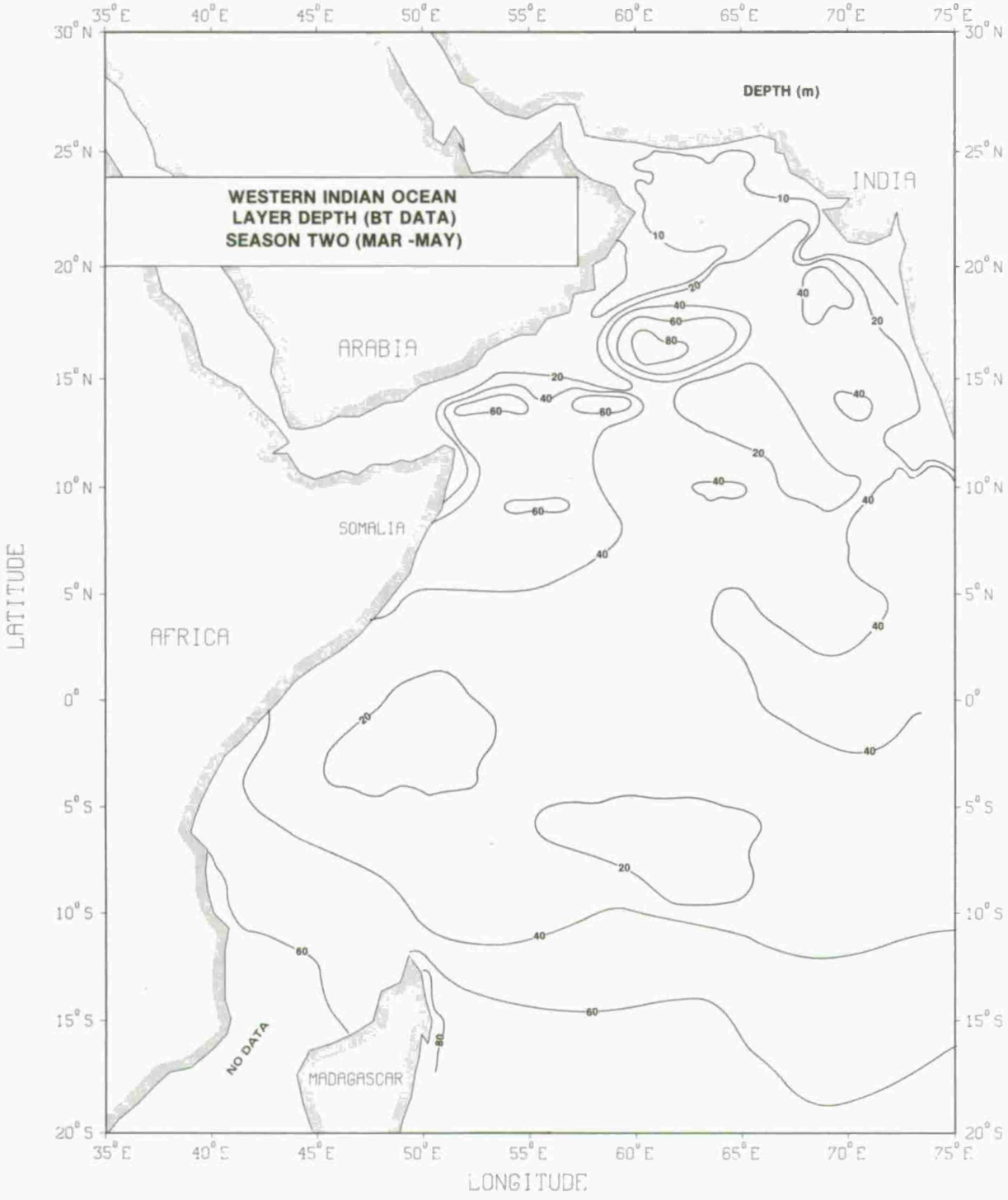
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SEASON TWO (MAR -MAY)
DEPTH (m)
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ARABIA
SOMALIA
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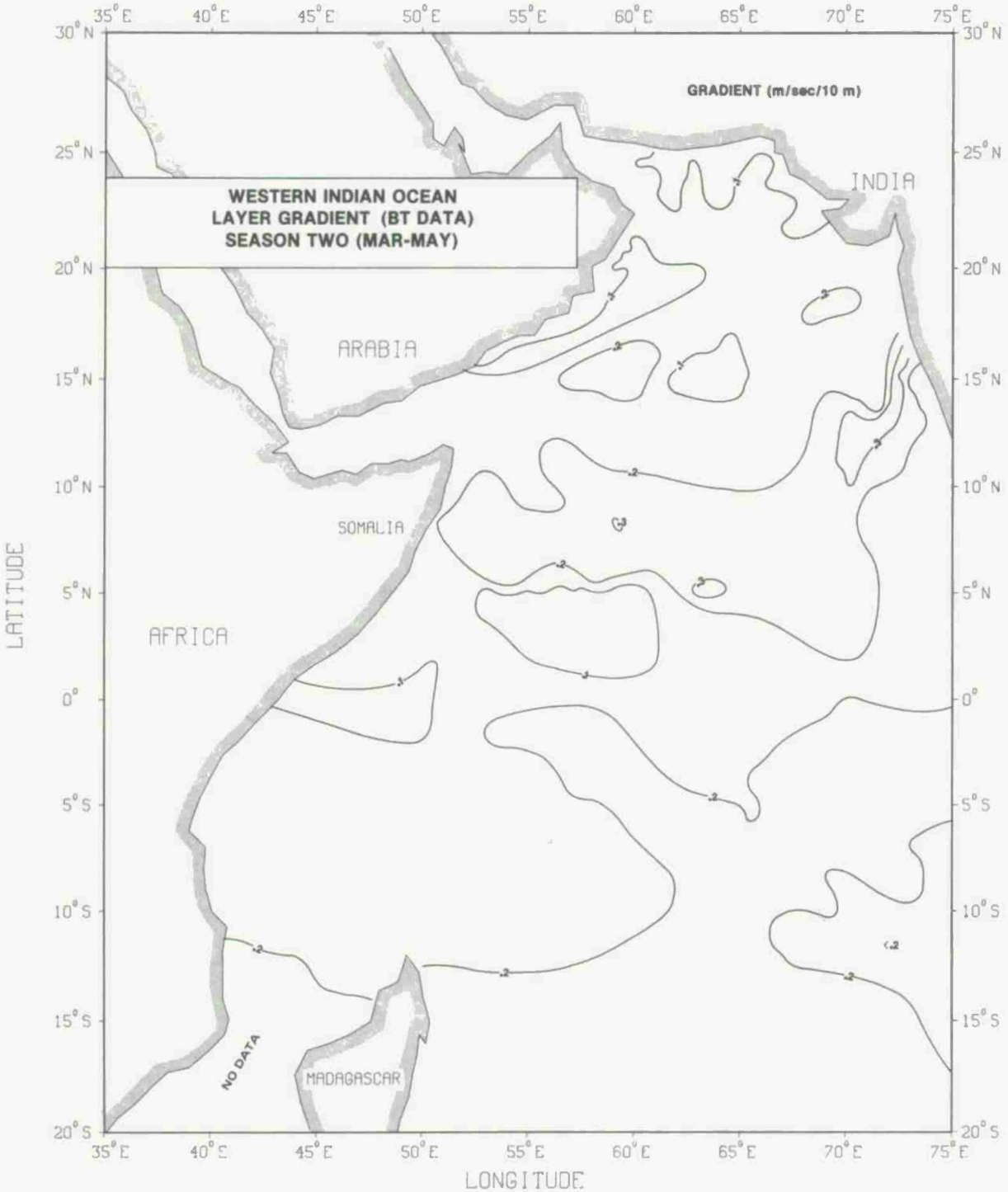
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GRADIENT (m/sec/10 m)
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ARABIA
SOMALIA
AFRICA
NO DATA
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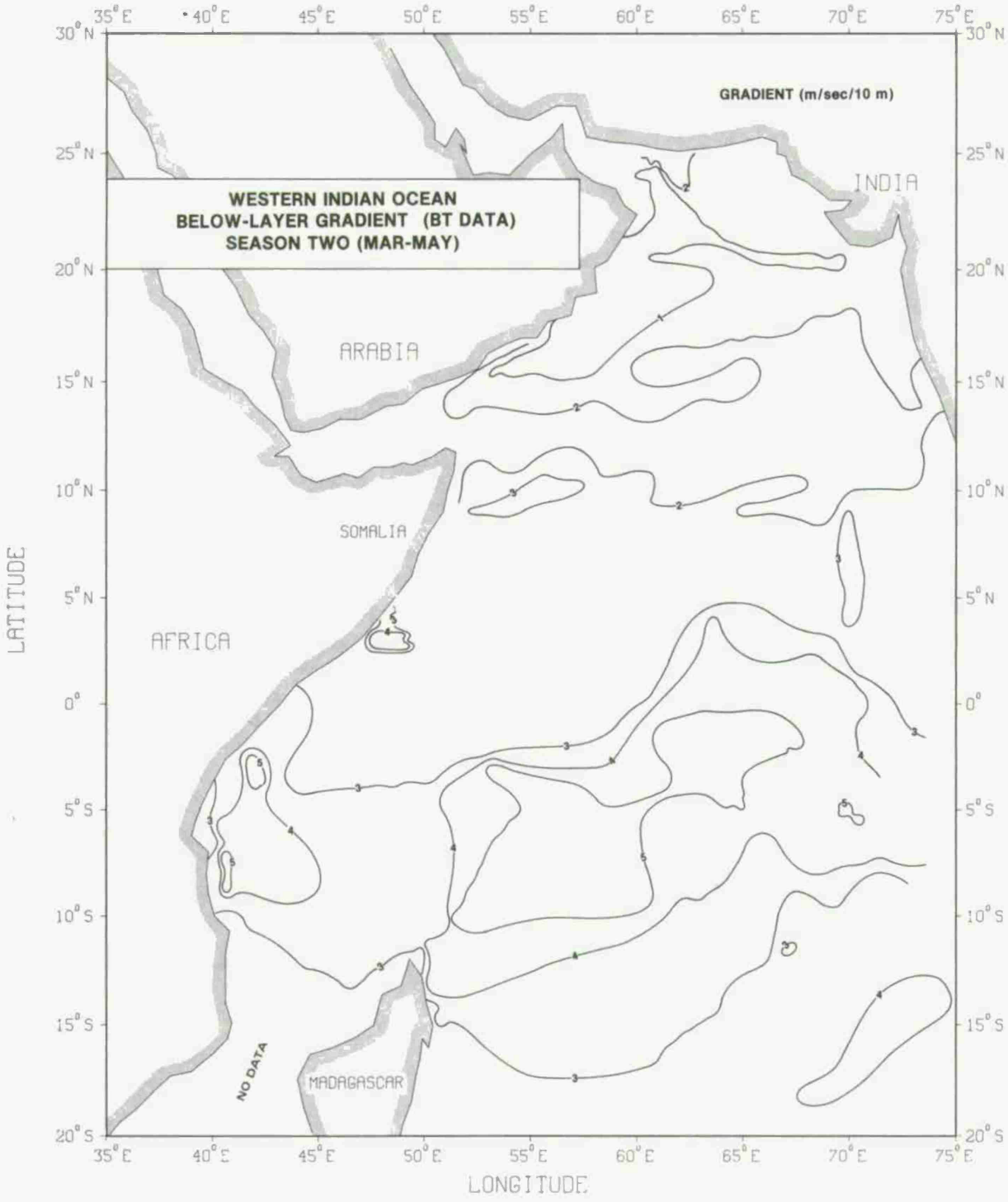
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BELOW-LAYER GRADIENT (BT DATA)
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GRADIENT (m/sec/10 m)
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ARABIA
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AFRICA
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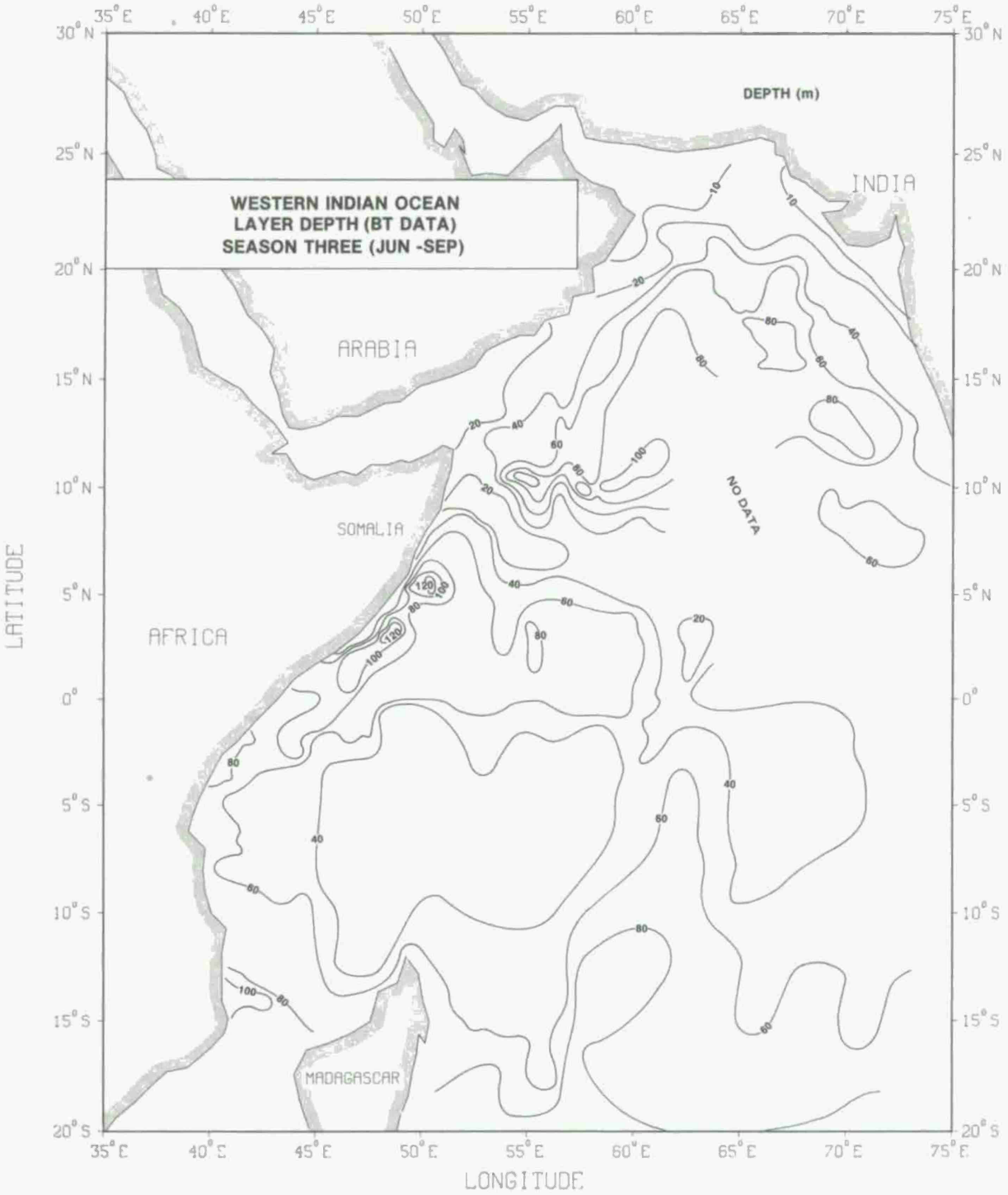
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SEASON THREE (JUN -SEP)
DEPTH (m)
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SOMALIA
AFRICA
MADAGASCAR
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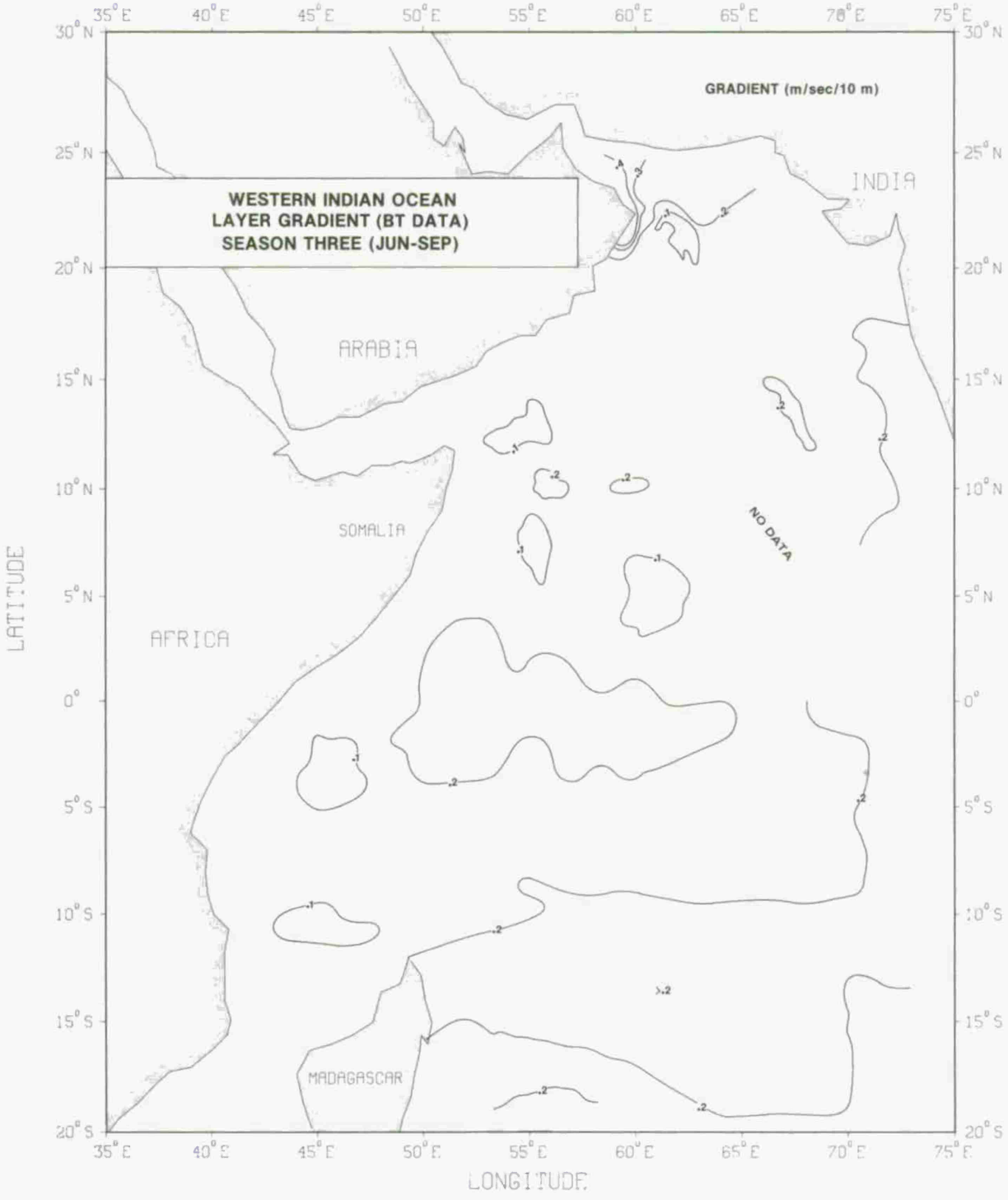
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GRADIENT (m/sec/10 m)
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NO DATA
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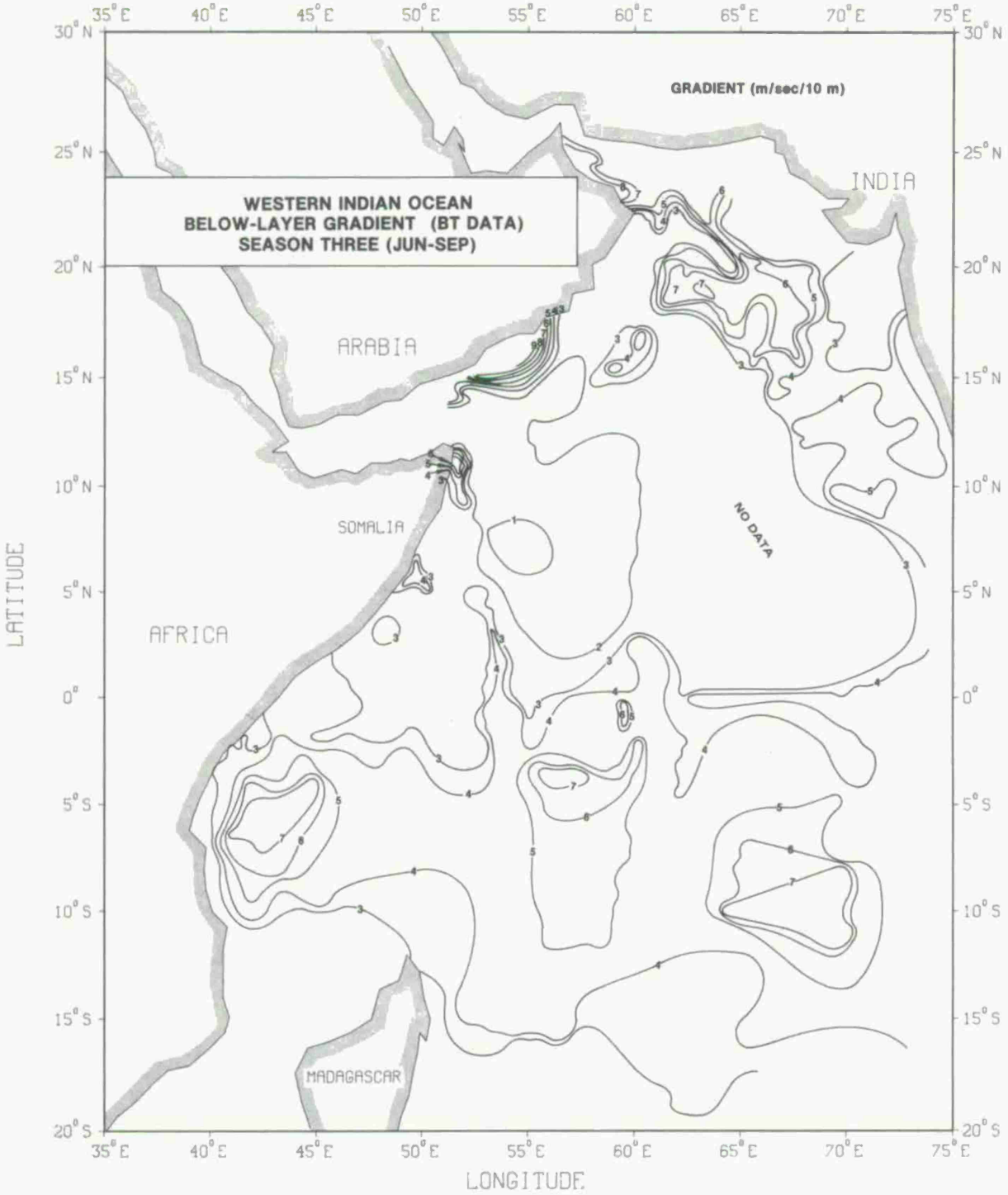
WESTERN INDIAN OCEAN
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GRADIENT (m/sec/10 m)
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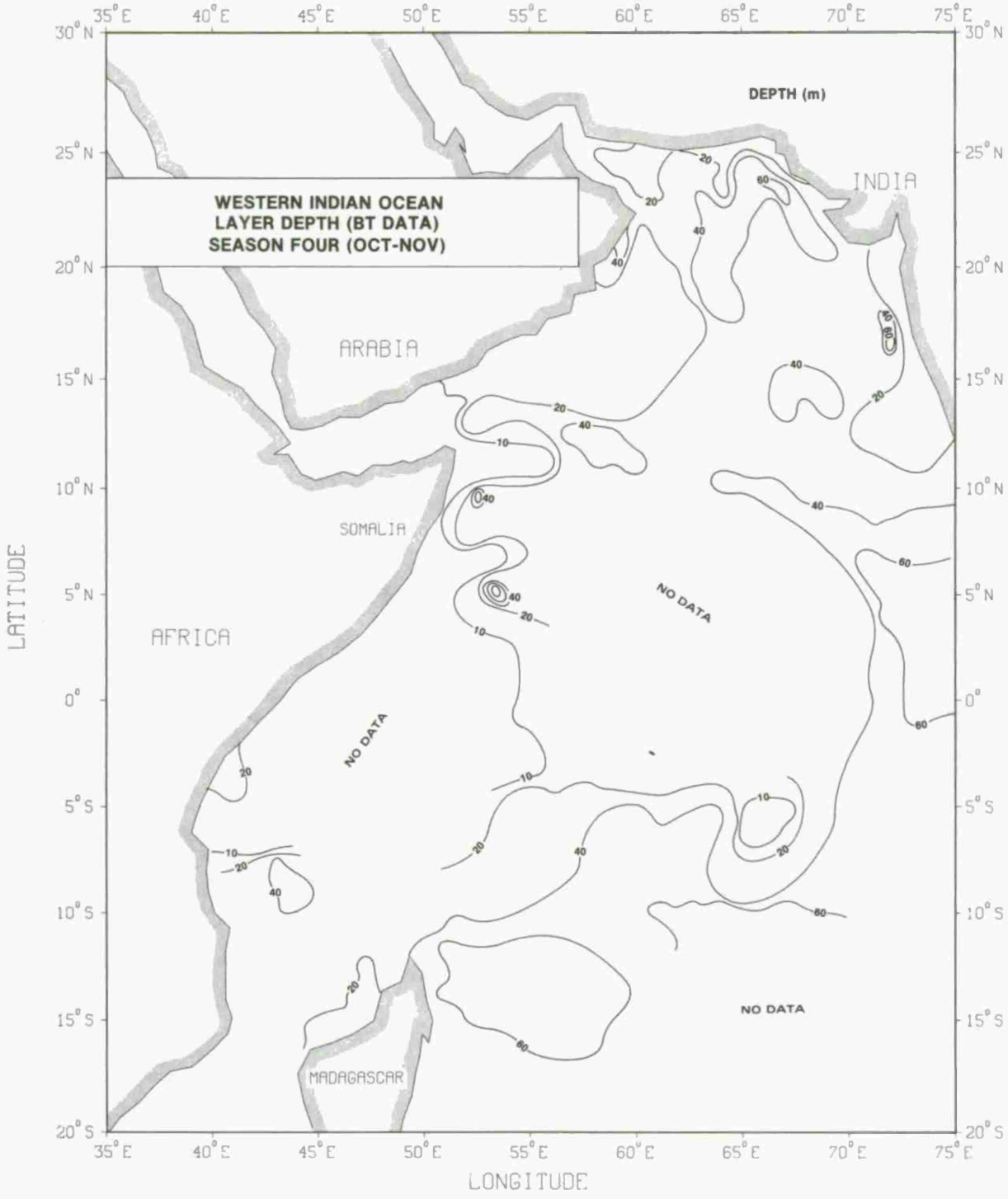
LATITUDE
LONGITUDE


WESTERN INDIAN OCEAN
LAYER DEPTH (BT DATA)
SEASON FOUR (OCT-NOV)
DEPTH (m)
INDIA
ARABIA
SOMALIA
AFRICA
MADAGASCAR
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NO DATA
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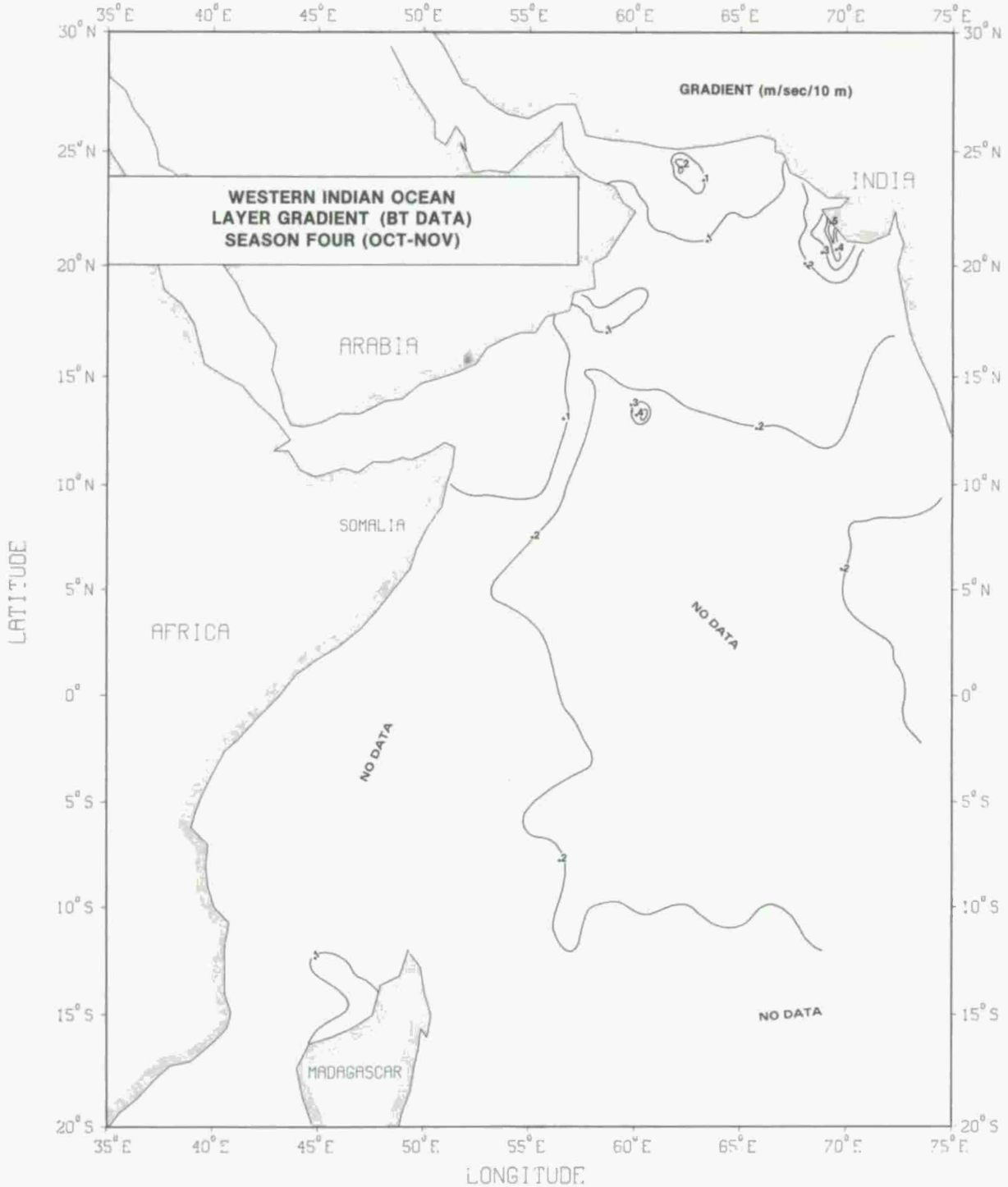
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GRADIENT (m/sec/10 m)
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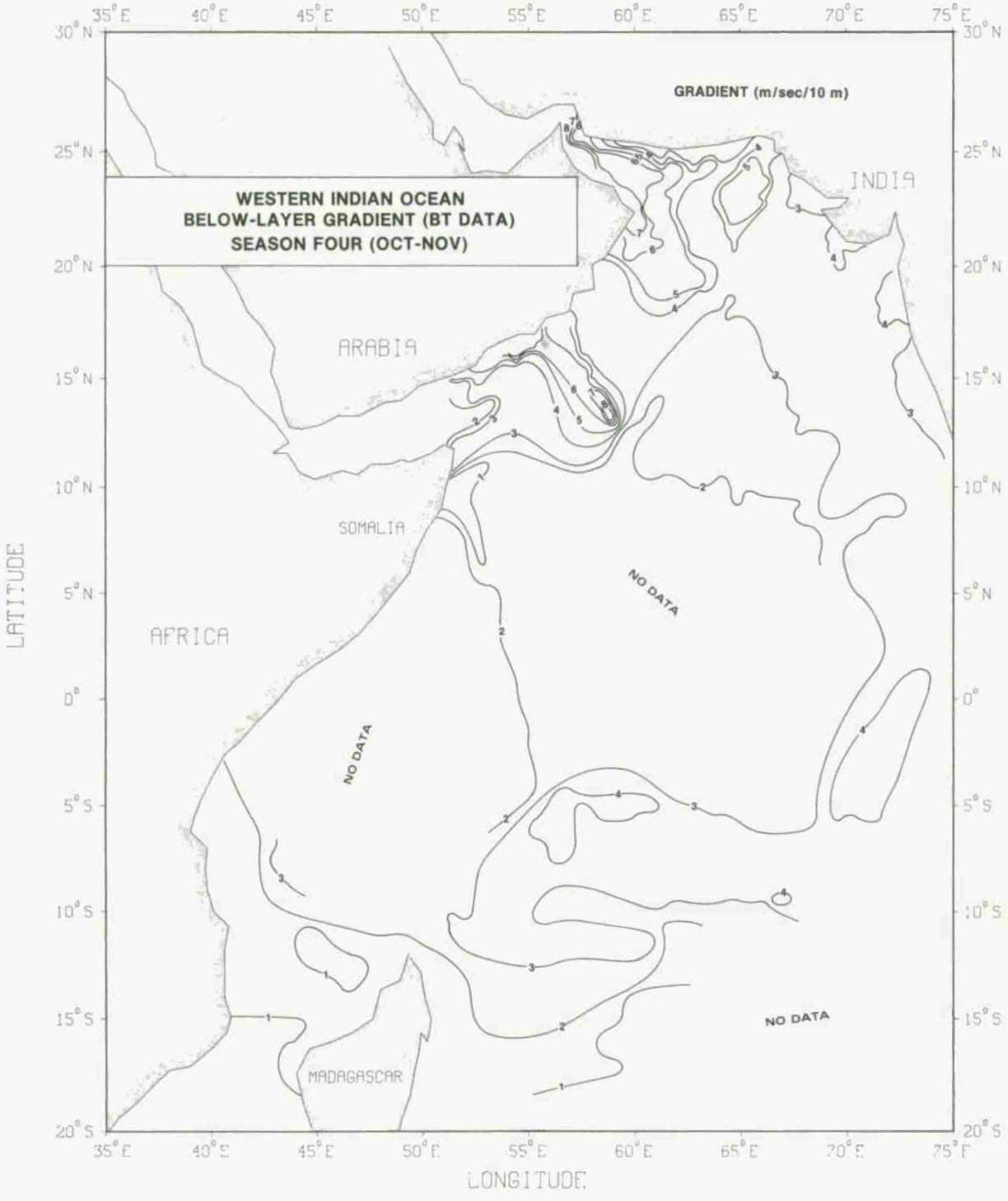
WESTERN INDIAN OCEAN
BELOW-LAYER GRADIENT (BT DATA)
SEASON FOUR (OCT-NOV)
GRADIENT (m/sec/10 m)
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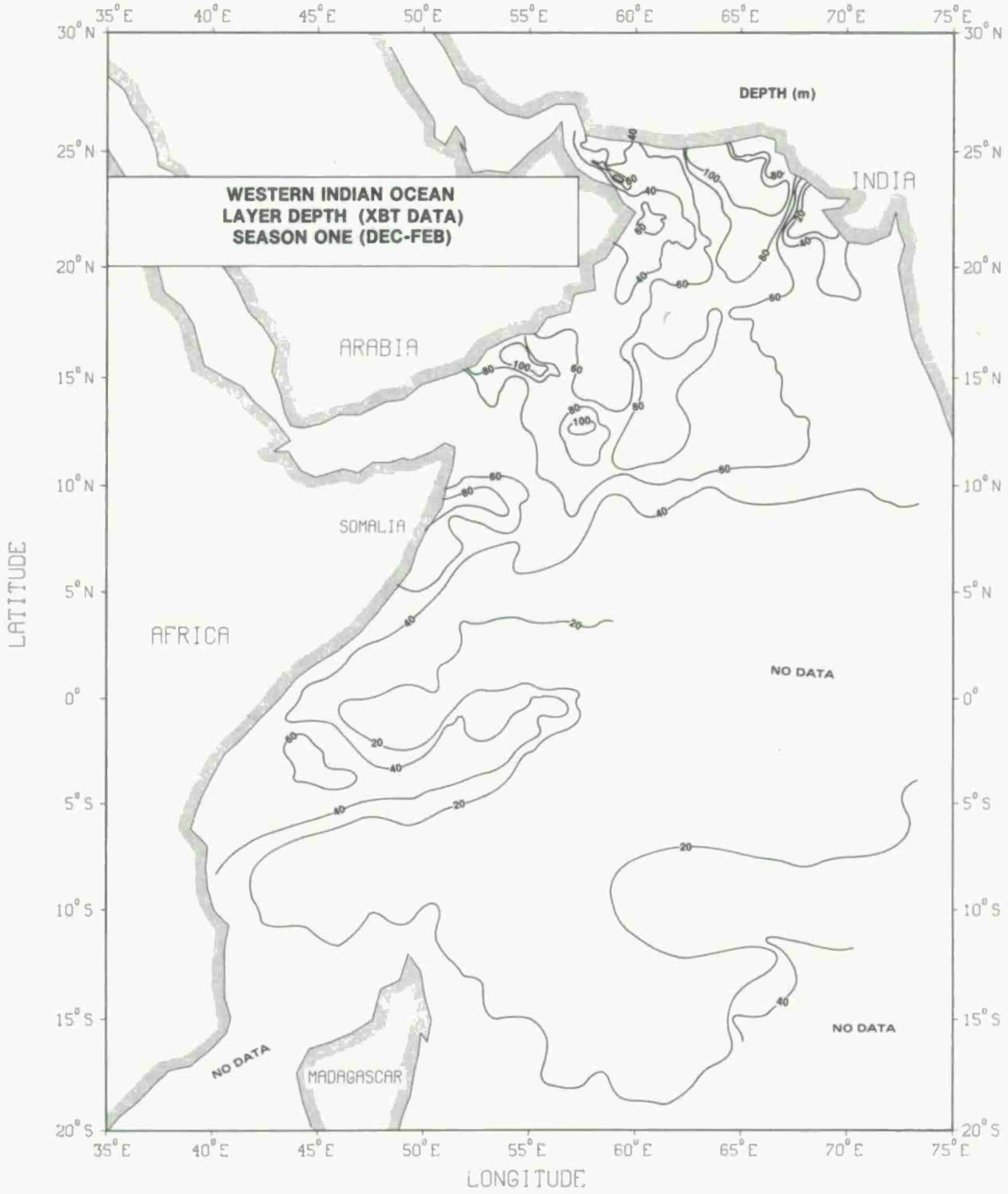
APPENDIX D: NEAR-SURFACE PARAMETER CONTOUR CHARTS BASED ON XBT DATA ARRANGED BY SEASON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LAYER DEPTH (XBT DATA)
SEASON ONE (DEC-FEB)
DEPTH (m)
INDIA
ARABIA
SOMALIA
AFRICA
NO DATA
NO DATA
NO DATA
MADAGASCAR
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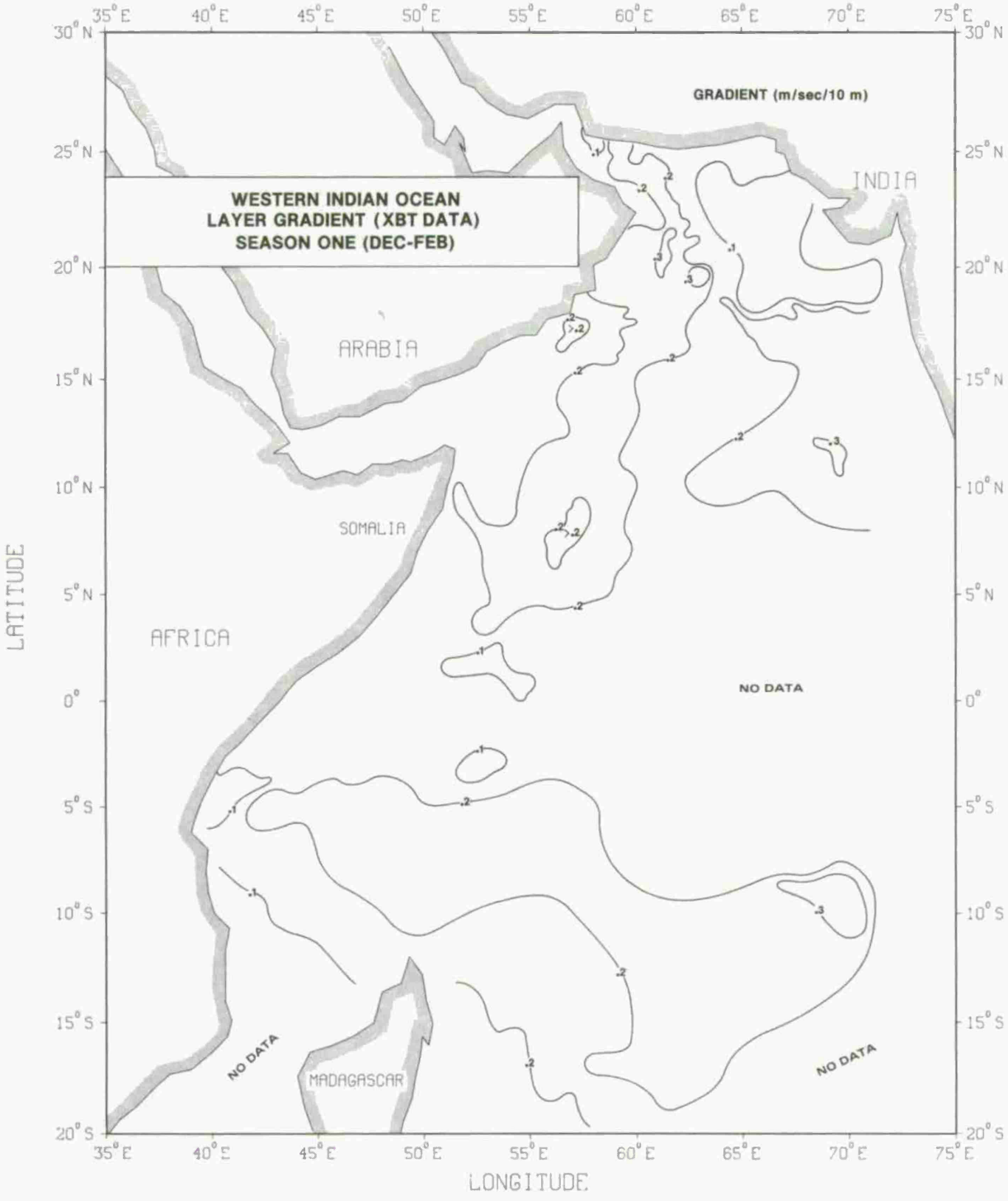
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LAYER GRADIENT (XBT DATA)
SEASON ONE (DEC-FEB)
GRADIENT (m/sec/10 m)
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ARABIA
SOMALIA
AFRICA
NO DATA
NO DATA
NO DATA
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LATITUDE
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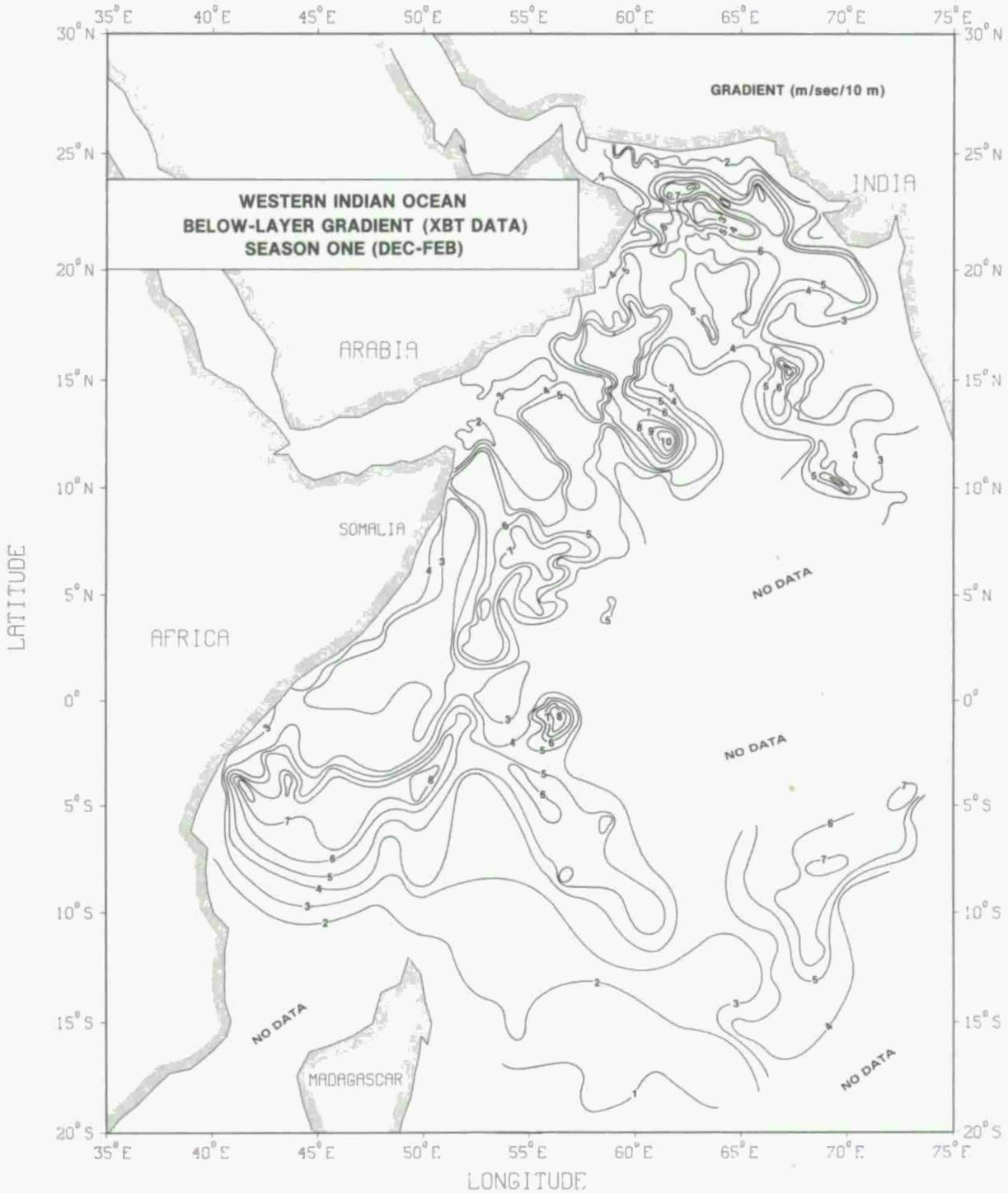
WESTERN INDIAN OCEAN
BELOW-LAYER GRADIENT (XBT DATA)
SEASON ONE (DEC-FEB)
GRADIENT (m/sec/10 m)
INDIA
ARABIA
SOMALIA
AFRICA
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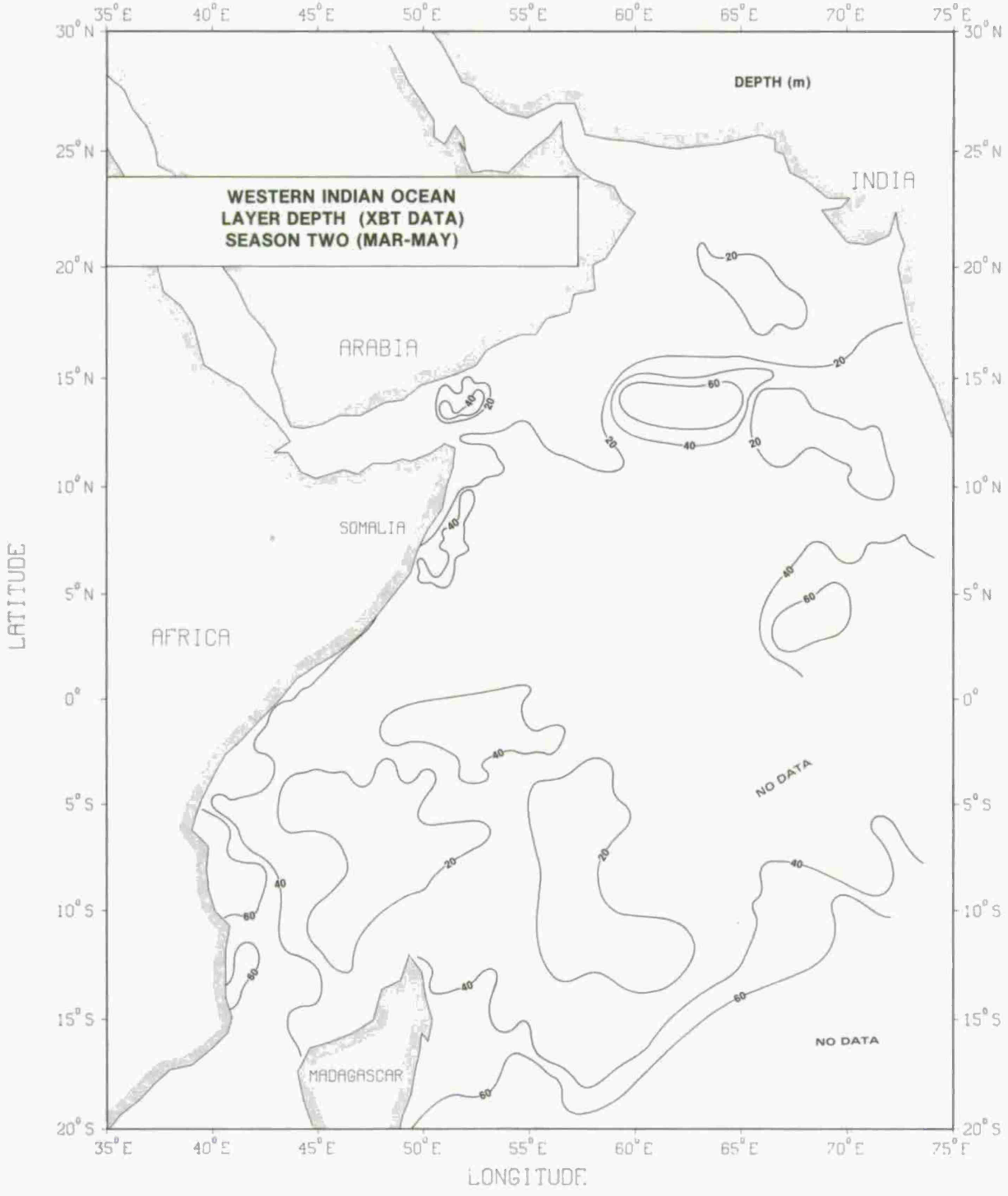
WESTERN INDIAN OCEAN
LAYER DEPTH (XBT DATA)
SEASON TWO (MAR-MAY)
DEPTH (m)
INDIA
ARABIA
SOMALIA
AFRICA
MADAGASCAR
NO DATA
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LATITUDE
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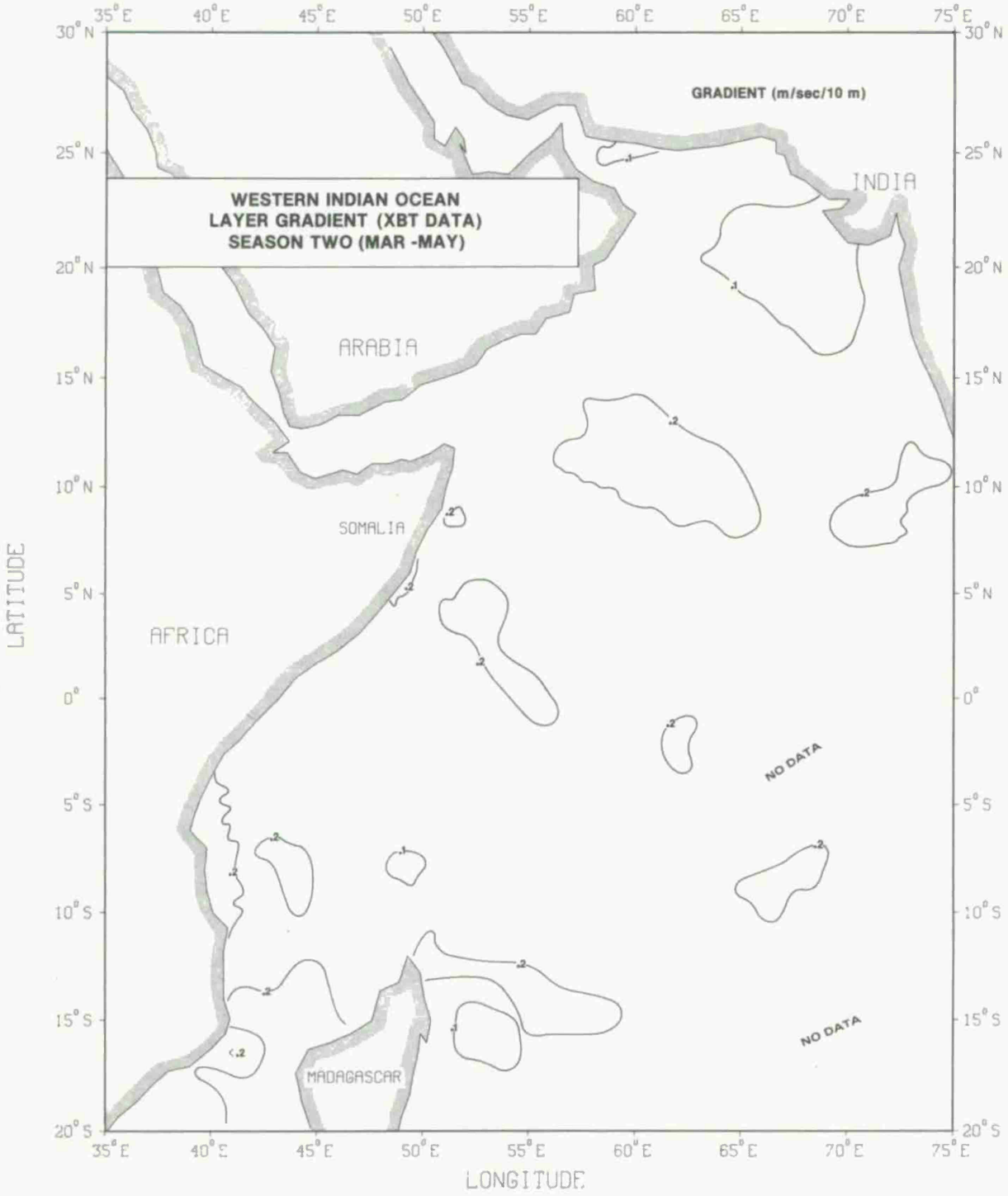
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GRADIENT (m/sec/10 m)
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ARABIA
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AFRICA
MADAGASCAR
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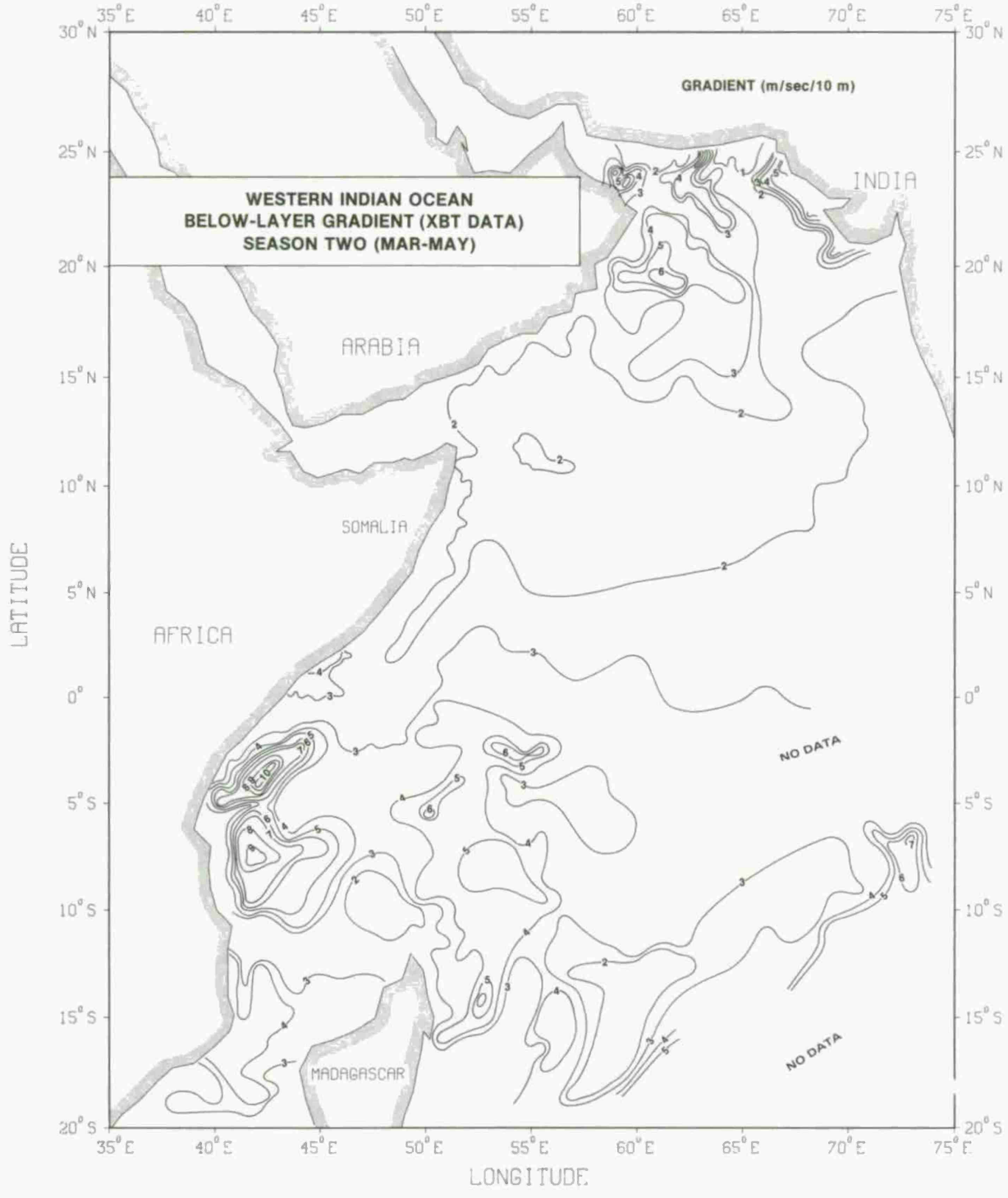
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SEASON TWO (MAR-MAY)
GRADIENT (m/sec/10 m)
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AFRICA
MADAGASCAR
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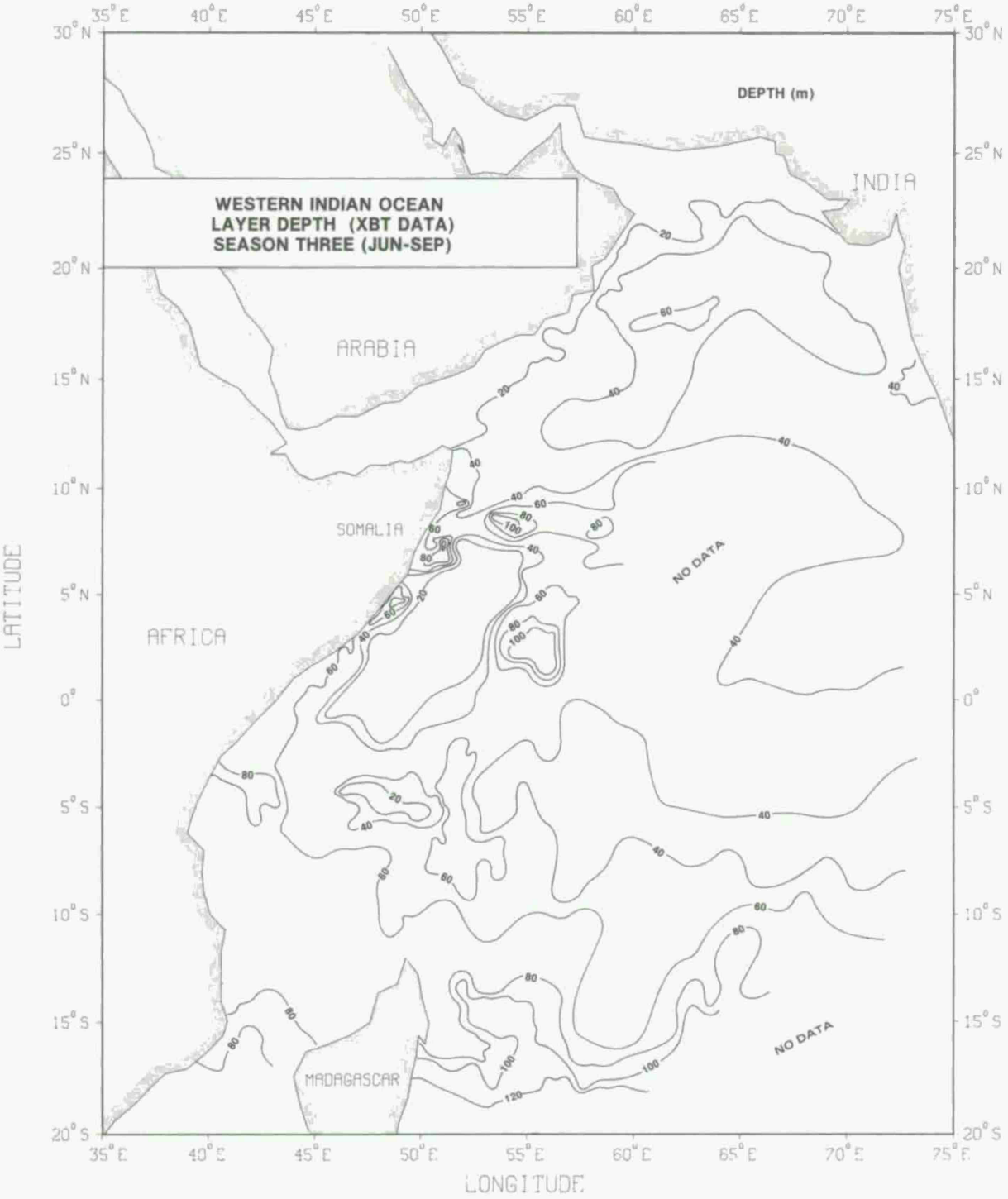
WESTERN INDIAN OCEAN
LAYER DEPTH (XBT DATA)
SEASON THREE (JUN-SEP)
DEPTH (m)
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ARABIA
SOMALIA
AFRICA
MADAGASCAR
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NO DATA
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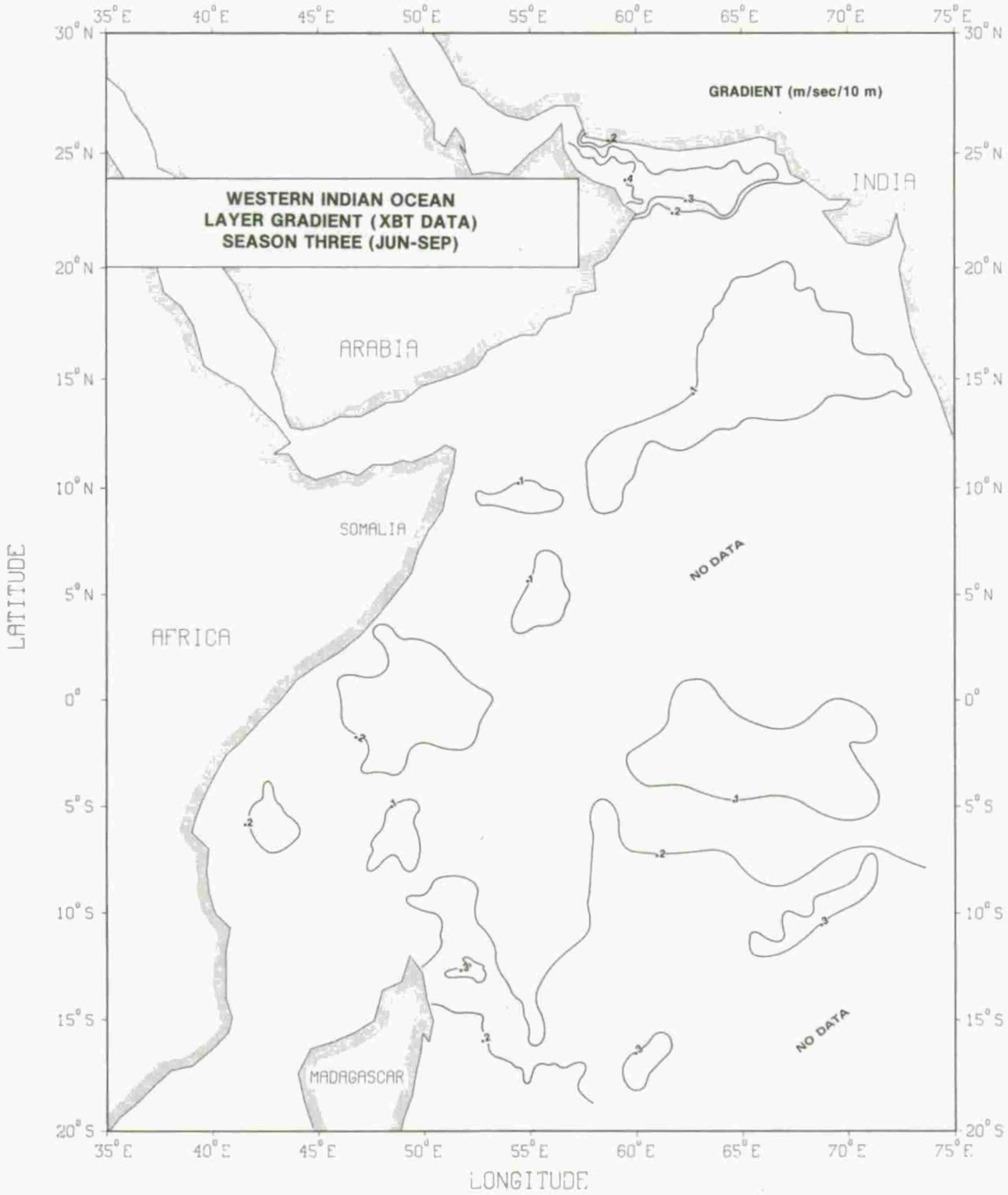
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GRADIENT (m/sec/10 m)
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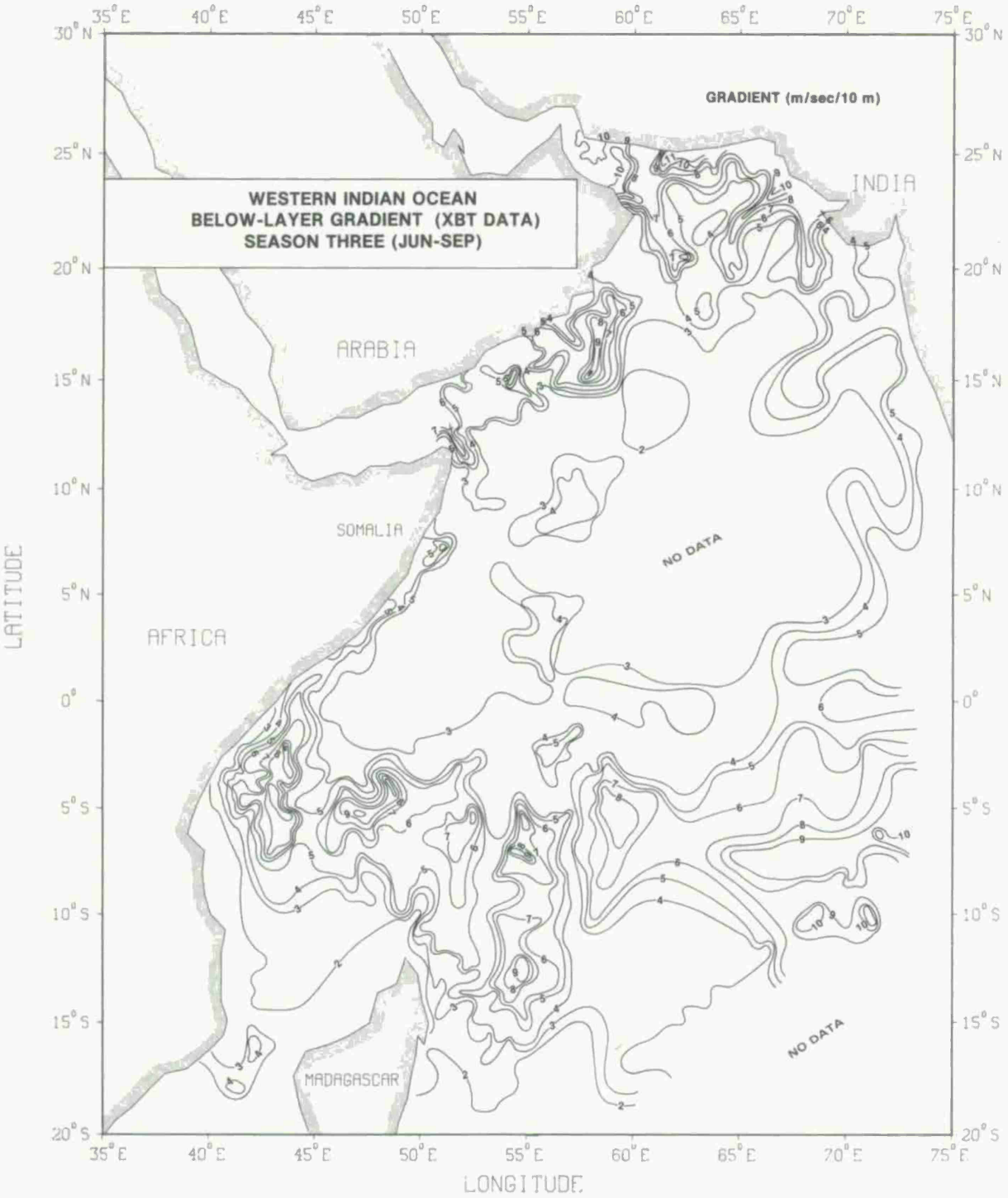
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SEASON THREE (JUN-SEP)
GRADIENT (m/sec/10 m)
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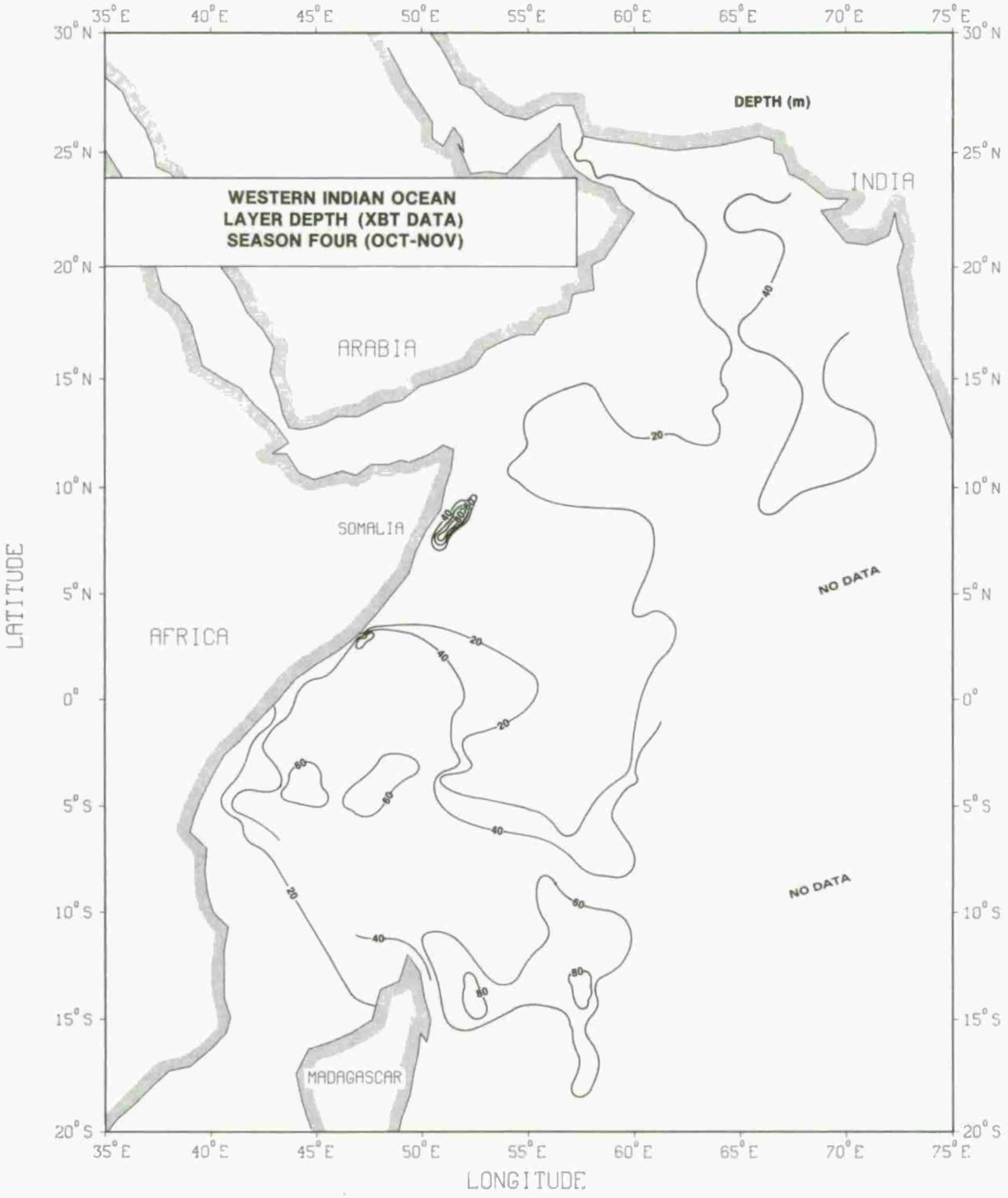
WESTERN INDIAN OCEAN
LAYER DEPTH (XBT DATA)
SEASON FOUR (OCT-NOV)
DEPTH (m)
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ARABIA
SOMALIA
AFRICA
MADAGASCAR
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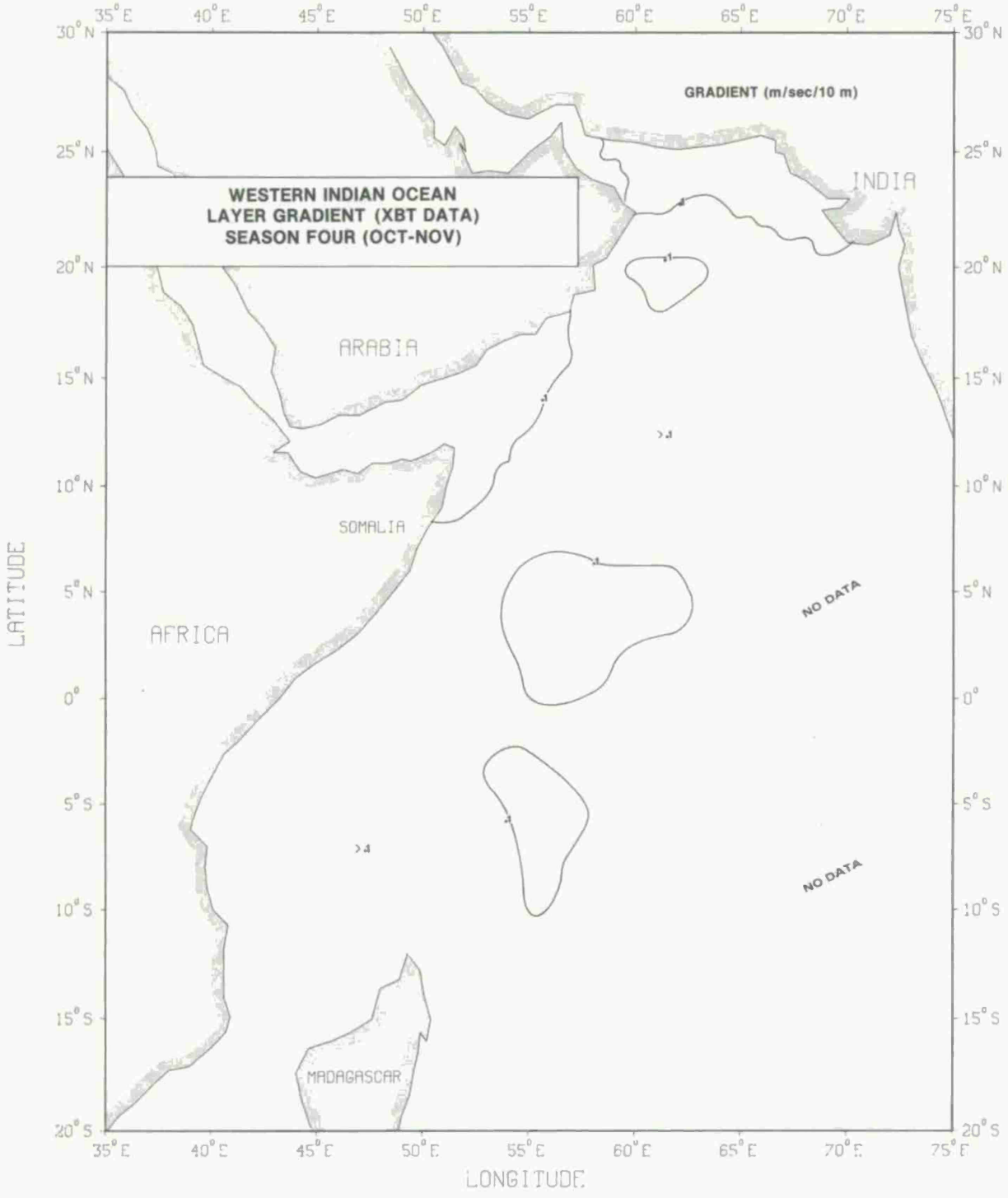
WESTERN INDIAN OCEAN
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SEASON FOUR (OCT-NOV)
GRADIENT (m/sec/10 m)
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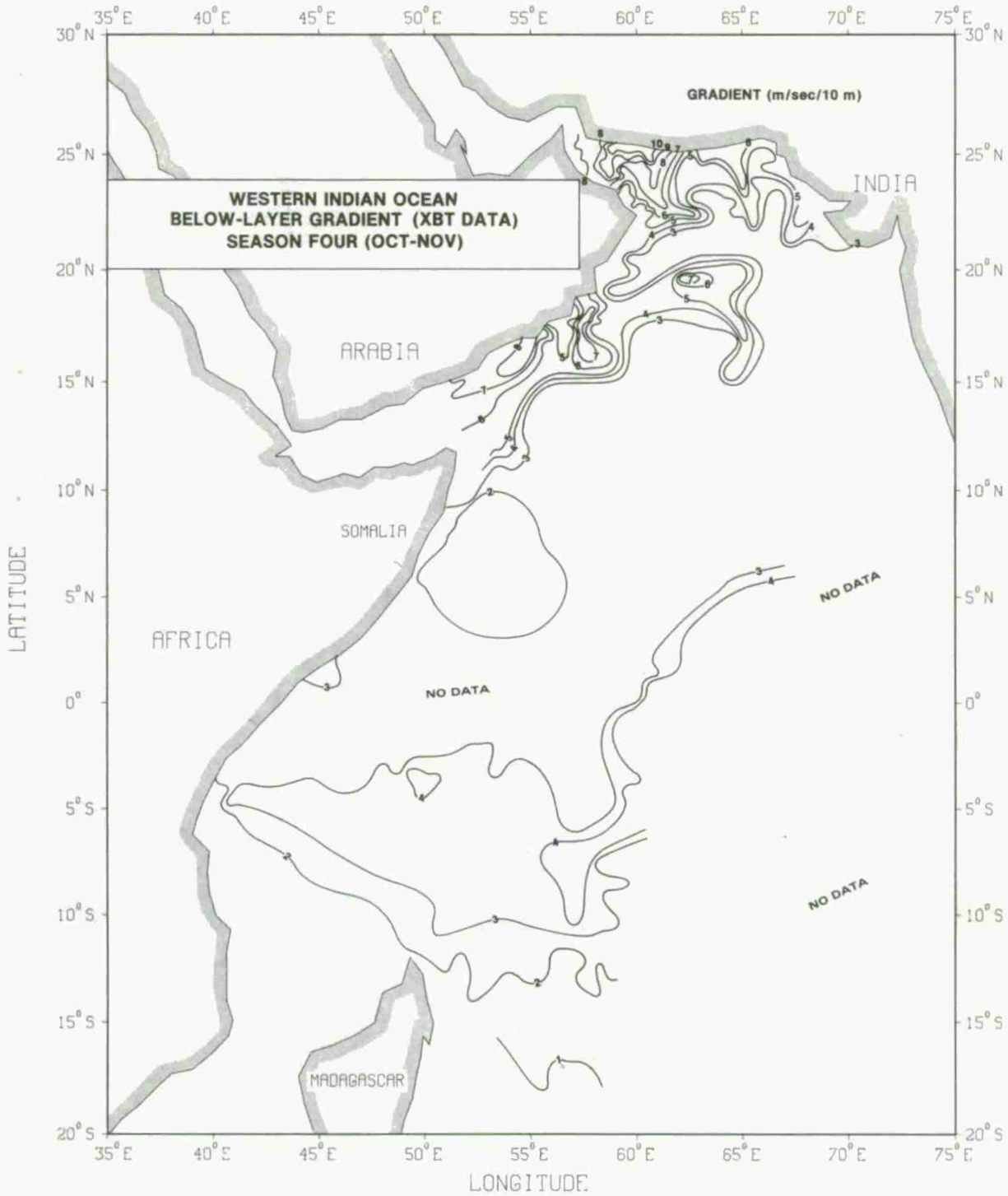
WESTERN INDIAN OCEAN
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