

U.S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HYDROGRAPHY OF LYDONIA CANYON

DATA REPORT FOR R/V OCEANUS CRUISE 104, SEPTEMBER 25-OCTOBER 2, 1981

by

Bradford Butman¹, John A. Moody¹, and Sandra J. Conley¹

Open-File Report 86-504

Prepared in cooperation with the
U.S. Minerals Management Service
under Interagency Agreement
14-12-0001-30180

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS or MMS.

¹Branch of Atlantic Marine Geology
Woods Hole, MA 02543

CONTENTS

	Page
Introduction.....	1
Objectives.....	1
Station procedures.....	1
Instrument description.....	2
Instrument calibration.....	3
Temperature time-lag.....	3
Salinity.....	3
Oxygen.....	3
Light transmission.....	4
Accuracy.....	4
Data processing.....	5
Data products.....	5
Vertical sections.....	7
Horizontal sections.....	7
TS diagrams.....	7
Station profiles.....	7
Data listings.....	7
Acknowledgments.....	7
References.....	9
Tables.....	11
Illustrations.....	16
Appendix I. Data Listings.....	147
Appendix II. Instrument Specifications.....	210
Appendix III. NBIS CTD 9-track tape format.....	211

TABLES

Table 1. Hydrographic stations R/V OCEANUS cruise 104.....	11
2. Calibration data.....	13
3. Shipboard meteorological observations.....	14
4. Key to meteorological observations.....	15

ILLUSTRATIONS

	Page
Figure 1. Location of hydrographic stations	16
2. Location of hydrographic stations near Lydonia Canyon.....	17
3. Lydonia Canyon moored array, deployment II April-September 1981.....	18
4. Lydonia Canyon moored array, deployment III Sept. 1981-January 1982.....	19
5. Lydonia Canyon moored array, vertical section.....	20

Vertical Sections

6. Section 1	
a. Temperature.....	22
b. Salinity.....	23
c. Sigma-t.....	24
d. Oxygen.....	25
e. Attenuation coefficient.....	26
7. Section 2	
a. Temperature.....	27
b. Salinity.....	28
c. Sigma-t.....	29
d. Oxygen.....	30
e. Attenuation coefficient.....	31
8. Section 3	
a. Temperature.....	32
b. Salinity.....	33
c. Sigma-t.....	34
d. Oxygen.....	35
e. Attenuation coefficient.....	36
9. Section 4	
a. Temperature.....	37
b. Salinity.....	38
c. Sigma-t.....	39
d. Oxygen.....	40
e. Attenuation coefficient.....	41
10. Section 5	
a. Temperature.....	42
b. Salinity.....	43
c. Sigma-t.....	44
d. Oxygen.....	45
e. Attenuation coefficient.....	46
11. Section 6	
a. Temperature.....	47
b. Salinity.....	48
c. Sigma-t.....	49
d. Oxygen.....	50
e. Attenuation coefficient.....	51

Figure 12.	Section 7	
a.	Temperature.....	52
b.	Salinity.....	53
c.	Sigma-t.....	54
d.	Oxygen.....	55
e.	Attenuation coefficient.....	56

Horizontal Sections

Figure 13.	Temperature at 10 dbar - Lydonia Canyon.....	58
14.	Temperature at 50 dbar - Lydonia Canyon.....	59
15.	Temperature at 100 dbar - Lydonia Canyon.....	60
16.	Temperature at 200 dbar - Lydonia Canyon.....	61
17.	Salinity at 10 dbar - Lydonia Canyon.....	62
18.	Salinity at 50 dbar - Lydonia Canyon.....	63
19.	Salinity at 100 dbar - Lydonia Canyon.....	64
20.	Salinity at 200 dbar - Lydonia Canyon.....	65
21.	Sigma-t at 10 dbar - Lydonia Canyon.....	66
22.	Sigma-t at 50 dbar - Lydonia Canyon.....	67
23.	Sigma-t at 100 dbar - Lydonia Canyon.....	68
24.	Sigma-t at 200 dbar - Lydonia Canyon.....	69
25.	Oxygen at 10 dbar - Lydonia Canyon.....	70
26.	Oxygen at 50 dbar - Lydonia Canyon.....	71
27.	Oxygen at 100 dbar - Lydonia Canyon.....	72
28.	Oxygen at 200 dbar - Lydonia Canyon.....	73
29.	Light attenuation at 10 dbar - Lydonia Canyon.....	74
30.	Light attenuation at 50 dbar - Lydonia Canyon.....	75
31.	Light attenuation at 100 dbar - Lydonia Canyon.....	76
32.	Light attenuation at 200 dbar - Lydonia Canyon.....	77

TS Diagrams

Figure 33.	TS diagram for section 1.....	79
34.	TS diagram for section 2, stations 12, 13, 14.....	80
35.	TS diagram for section 2, stations 15, 16, 17.....	81
36.	TS diagram for section 3.....	82
37.	TS diagram for section 4, stations 33, 35, 37.....	83
38.	TS diagram for section 4, stations 38, 40, 42.....	84
39.	TS diagram for section 5.....	85
40.	TS diagram for section 6.....	86
41.	TS diagram for section 7.....	87

Station Profiles

Figure 42.	Station 1, CTD averaged data plot, 0-250 dbar.....	89
43.	Station 2, CTD averaged data plot, 0-250 dbar.....	90
44.	Station 3, CTD averaged data plot, 0-250 dbar.....	91
45.	Station 4, XBT data plot, 0-500 m.....	92
46.	Station 5, CTD averaged data plot, 0-250 dbar.....	93
47.	Station 6, XBT data plot, 0-500 m.....	94
48.	Station 7, CTD averaged data plot, 0-250 dbar.....	95
49.	Station 8, XBT data plot, 0-500 m.....	96
50.	Station 9, CTD averaged data plot, 0-250 dbar.....	97

		Page
Figure 51.	Station 10, XBT data plot, 0-500 m.....	98
52.	Station 11, XBT data plot, 0-500 m.....	99
53.	Station 12, CTD averaged data plot, 0-250 dbar.....	100
54.	Station 13, CTD averaged data plot, 0-250 dbar.....	101
55.	Station 14, CTD averaged data plot, 0-250 dbar.....	102
56.	Station 15, CTD averaged data plot, 0-500 dbar.....	103
57.	Station 16, CTD averaged data plot, 0-250 dbar.....	104
58.	Station 17, CTD averaged data plot, 0-250 dbar.....	105
59.	Station 18, XBT data plot, 0-500 m.....	106
60.	Station 19, CTD averaged data plot, 0-250 dbar.....	107
61.	Station 20, XBT data plot, 0-500 m.....	108
62.	Station 21, CTD averaged data plot, 0-250 dbar.....	109
63.	Station 22, XBT data plot, 0-500 m.....	110
64.	Station 23, CTD averaged data plot, 0-500 dbar.....	111
65.	Station 24, XBT data plot, 0-500 m.....	112
66.	Station 25, CTD averaged data plot, 0-250 dbar.....	113
67.	Station 26, XBT data plot, 0-500 m.....	114
68.	Station 27, CTD averaged data plot, 0-250 dbar.....	115
69.	Station 28, XBT data plot, 0-500 m.....	116
70.	Station 29, XBT data plot, 0-500 m.....	117
71.	Station 30, CTD averaged data plot, 0-500 dbar.....	118
72.	Station 31, XBT data plot, 0-500 m.....	119
73.	Station 32, XBT data plot, 0-500 m.....	120
74.	Station 33, CTD averaged data plot, 0-250 dbar.....	121
75.	Station 34, XBT data plot, 0-500 m.....	122
76.	Station 35, CTD averaged data plot, 0-250 dbar.....	123
77.	Station 36, XBT data plot, 0-500 m.....	124
78.	Station 37, CTD averaged data plot, 0-500 dbar.....	125
79.	Station 38, CTD averaged data plot, 0-1000 dbar.....	126
80.	Station 39, XBT data plot, 0-500 m.....	127
81.	Station 40, CTD averaged data plot, 0-500 dbar.....	128
82.	Station 42, CTD average data plot 0-250 dbar.....	129
83.	Station 43, CTD averaged data plot, 0-500 dbar.....	130
84.	Station 44, XBT data plot, 0-500 m.....	131
85.	Station 45, CTD averaged data plot, 0-250 dbar.....	132
86.	Station 46, XBT data plot, 0-500 m.....	133
87.	Station 47, CTD averaged data plot, 0-250 dbar.....	134
88.	Station 48, XBT data plot, 0-500 m.....	135
89.	Station 49, CTD averaged data plot 0-250 dbar.....	136
90.	Station 50, XBT data plot 0-500 m.....	137
91.	Station 51, CTD averaged data plot, 0-250 dbar.....	138
92.	Station 53, CTD averaged data plot, 0-250 dbar.....	139
93.	Station 54, XBT data plot, 0-500 m.....	140
94.	Station 55, CTD averaged data plot, 0-250 dbar.....	141
95.	Station 56, XBT data plot, 0-500 m.....	142
96.	Station 57, CTD averaged data plot, 0-250 dbar.....	143
97.	Station 58, XBT data plot, 0-500 m.....	144
98.	Station 59, CTD averaged data plot, 0-250 dbar.....	145
99.	Station 60, CTD averaged data plot, 0-500 dbar.....	146

APPENDIX I. DATA LISTINGS

Station	Page
1.....	148
2.....	148
3.....	149
4.....	149
5.....	150
6.....	150
7.....	151
8.....	151
9.....	152
10.....	153
11.....	153
12.....	154
13.....	155
14.....	156
15.....	157
16.....	159
17.....	160
18.....	161
19.....	162
20.....	163
21.....	163
22.....	164
23.....	165
24.....	167
25.....	168
26.....	169
27.....	169
28.....	170
29.....	171

Station	Page
30.....	171
31.....	174
32.....	174
33.....	175
34.....	176
35.....	176
36.....	178
37.....	179
38.....	182
39.....	185
40.....	186
42.....	189
43.....	191
44.....	193
45.....	194
46.....	196
47.....	196
48.....	197
49.....	198
50.....	199
51.....	199
53.....	201
54.....	202
55.....	202
56.....	203
57.....	204
58.....	205
59.....	205
60.....	207

HYDROGRAPHY OF LYDONIA CANYON:

DATA REPORT FOR R/V OCEANUS CRUISE 104, September 25-October 2, 1981

Bradford Butman, John A. Moody, and Sandra J. Conley

INTRODUCTION

This report presents hydrographic data obtained on R/V OCEANUS cruise 104, conducted from September 29 to October 1, 1981. The hydrographic measurements (temperature, salinity, oxygen, and light transmission) were obtained across the continental shelf and upper slope around Lydonia Canyon (between longitude 67°30' W., and longitude 67°50'W.) as part of a study of currents and sediment transport in the region.

During the R/V OCEANUS cruise 104, a total of 60 hydrographic profiles were obtained, 34 by means of a conductivity-temperature-depth (CTD) profiler and 26 by means of expendable bathythermographs (XBTs). Stations are numbered sequentially and station information is tabulated in table 1. The stations were arranged into seven sections. The first section began in a water depth of 54 m on Georges Bank, crossed the continental shelf, and ended in a water depth of 100 m near the head of Lydonia Canyon (fig. 1). Three sections (nos. 2, 3, and 4) crossed Lydonia Canyon perpendicular to the canyon axis; one section (no. 7) followed the axis of Lydonia Canyon, and sections nos. 5 and 6 crossed the adjacent shelf parallel to the canyon axis (fig. 2).

During the three-day hydrographic survey, winds were from the northwest at 30-40 knots and seas were typically 3-4 meters (see Table 3). As a result of these strong winds, the hydrography may have changes during the course of the survey and the sections may indicate temporal as well as spatial changes.

OBJECTIVES

This survey was conducted to acquire hydrographic sections in and adjacent to Lydonia Canyon, during the fall of 1981. The sections were designed to aid in the interpretation of currents, temperature, pressure, and light transmission measured by a large moored instrument array (figs. 3 to 5) located around Lydonia Canyon (Butman and Conley, 1984; Butman 1986).

STATION PROCEDURES

At each XBT station, a water sample for surface salinity (table 2) was obtained using a bucket sampler and an XBT was released while the ship was underway. At each CTD station, the ship was stopped and a surface-water sample was obtained, using a bucket sampler, for analysis of salinity. The CTD was lowered and held slightly below the surface while a 5-liter Niskin bottle was attached 4 m above the top of the CTD unit and CTD surface readings, latitude, longitude, and water depth were recorded in a deck log. The CTD was then lowered at approximately 30 m/min and stopped approximately 2-5 m above bottom. After the deepest readings were recorded, the Niskin

bottle was closed by a messenger and a water sample was obtained. The CTD was then raised at approximately 50 m/min and stopped at the surface while CTD readings were recorded in the deck log. The Niskin bottle was removed and one water sample was withdrawn for measurement of salinity and one to three samples for measurement of oxygen. Due to time and the severe weather only one deep salinity sample was collected at station 40 (494 dbar) and one deep oxygen sample was collected at station 9 (100 dbar). Meteorological observations obtained during the cruise are listed in tables 3 and 4.

INSTRUMENT DESCRIPTION

The CTD profiler (Neil Brown Instrument Systems, Mark III) was modified to also measure oxygen and light transmission. A scan of data (conductivity, temperature, pressure, oxygen current, oxygen temperature, and light transmission) was obtained 32 times each second. Conductivity was measured with a miniature four-electrode alumina ceramic cell (Neil Brown Instrument Systems, model no. B10086). The temperature sensor was a platinum resistance thermometer (Rosemount Engineering Co., model 171-BJ) mounted in a temperature bridge with a reference resistor. Pressure was measured with a bonded wire strain gauge bridge (Standard Control, Inc., model no. 211-35-440). The dissolved oxygen was computed from a time average measurement (1.024 s) of the current and internal temperature of a polarographic membrane (Beckman model no. 147737). Light transmission was measured using a Sea Tech 25-cm path length transmissometer (Bartz and others, 1978) mounted horizontally inside the CTD cage. The light source was a light-emitting diode with a wavelength of 660 nm and a beam diameter of 20 mm. All sensor ranges, accuracies, and resolutions from manufacturers' specifications are listed in Appendix II. For more detailed technical description of the CTD system, see Brown and Morrison (1978), and for more detailed description of field performance, see Fofonoff and others (1974).

Expendable bathythermographs or XBT's (Sippican Ocean Systems, models T-4, T-5, T-6, T-7, and T-10) were used to measure vertical temperature profiles. Systematic differences in XBT (models T-4 and T-7) and CTD profiles have been reported by Heinmiller and others (1983) from field data. They found mean temperature differences (XBT minus CTD) of 0.19°C and 0.13°C for the T-4 and T-7 compared to the generally accepted accuracy of ~0.1°C (Georgi and others, 1980). They also found that the mean T-7 depth error was within the generally accepted depth accuracy of $\pm 2\%$ of the recorded depth (Stegen and others, 1975), but the T-4 XBT's exceeded this below ~200 m. The XBT data in this report were not corrected for these possible systematic errors.

The salinity of water samples collected during the CTD cast was measured with a salinometer (Guildline Autosol 8400) and the oxygen was measured according to the Winkler chemical titrations method (Strickland and Parson, 1972). The accuracies of both methods are listed in Appendix II.

Navigation was by a Northstar 6000 Loran-C, and latitude and longitude were determined by the Northstar 5101 algorithm. The Northstar latitude/longitude grid in this region is offset from true latitude/longitude by about 0.92 km toward 294.5° (Butman and Moody, 1984). Water depth at each station was measured with a Giffit echo sounder.

INSTRUMENT CALIBRATION

Temperature time-lag

The platinum resistance thermometer time constant ($T_{lag} = 0.125$ s) was selected to minimize density inversions in regions of strong thermal gradients. Since the temperature sensor had a slower response than the conductivity and pressure sensors, an exponential recursive filter (Bendat and Piersol, 1971) was applied to the conductivity and pressure series to lag these variables to match the temperature (Millard, 1982). The digital form of the filter is:

$y(t) = y(t-dt) \cdot W_0 + x(t) \cdot W_1$
 $dt = \text{CTD sampling time interval} = 0.03125$ s
 $y(t)$ is the filtered output of conductivity or pressure
 $y(t-dt)$ is the previous value
 $x(t)$ is the unfiltered input
 $W_0 = e^{-dt/T_{lag}}$
 $W_1 = 1 - W_0$

A precruise laboratory calibration of the CTD temperature had been done on September 18, 1981 at the Woods Hole Oceanographic Institution (WHOI), and the temperature offset (calibration water bath minus CTD) ranged between -0.0010°C at 6° and -0.012°C at 19°C . No correction was made to the temperatures measured by the CTD to account for these offsets.

Salinity

Salinity in practical salinity units, psu, (Lewis, 1980) and sigma-t were calculated from conductivity, temperature, and pressure using the 1980 equation of state for seawater (Millero, 1980) and algorithms given by Fofonoff and Millard (1983). Salinity values of the bottle samples collected during CTD casts were determined using a salinometer (see Appendix II for accuracy). All 57 bottle salinities and 32 salinities computed from the CTD observations are listed in table 2. The surface and deep bottle salinities were not used as a calibration check of the CTD because (1) there was only one deep salinity measurement and (2) the mean difference (bottle minus CTD) for the 32 surface salinities was 0.040 psu with a standard deviation of ± 0.016 psu. Some of the difference between the bottle and CTD value of surface salinity is due to the difference in depth of the CTD (2-7 dbar) compared with the depth of the bottle sample (0 dbar). A precruise laboratory calibration of conductivity was made on September 18, 1981 at WHOI, and the offset (calibration bath minus CTD) ranged from 0.006 mmhos and 0.012 mmho, which corresponds to salinity offsets of 0.005 to 0.012 psu. Based on this laboratory calibration, no correction was made to the salinities reported here.

Oxygen

Oxygen was computed using an algorithm (Owens and Millard, 1984) with six adjustable parameters (OXB, OCS, τ , tcor, WT, pcor) that were determined by comparison with water sample oxygen values. The oxygen algorithm is:

$$OX = (OXB + OCS (OC + \tau \frac{dOC}{dt})) \cdot OXSAT \cdot e^{tcor \cdot (t + WT(ot - t))} + pcor \cdot p$$

where:

OX	=	CTD dissolved oxygen value in mL/L
t	=	CTD water temperature in °C
p	=	CTD pressure in dbar
OC	=	CTD oxygen current in μA
ot	=	CTD oxygen probe internal temperature in °C
OXB	=	oxygen current bias
OCS	=	oxygen current slope in μA^{-1}
τ	=	oxygen diffusion time-lag constant in s
tcor	=	temperature correction factor (°C ⁻¹) for membrane permeability
WT	=	weighting fraction of oxygen probe internal temperature
pcor	=	pressure correction factor (dbar ⁻¹) for membrane permeability
OXSAT	=	oxygen saturation value in mL/L after Weiss (1970).

Not enough oxygen samples were collected during this cruise to calibrate the oxygen sensor. The following oxygen parameters, determined from a subsequent cruise (OCEANUS 113, see Moody and others, 1986a), were used to process the oxygen data. These parameters are:

OXB = 0.23	tcor = -0.0353
OCS = 2.29	WT = 0.69
t = 12.00	pcor = 1.15×10^{-4}

The average oxygen value of three bottle samples from station 9 at a depth of 96 dbars was 4.54 ± 0.30 ml/l and the CTD oxygen value at this depth was 4.70 ml/l.

Light transmission

The beam attenuation coefficient (ATN in m⁻¹) over a 100-cm path length, was computed from the measured transmissometer voltages (TR) using

$$ATN = - \frac{1}{0.25} \ln \left(\frac{TR}{TR_{cw}} \right)$$

where TR_{cw} is the voltage measured in clear water. TR_{cw} is approximately 0.95 times the measured voltage in air (Bartz and others, 1978) or can be determined in a laboratory tank (see Moody and others, 1986b, for method). The transmission sensor (SN 44) was calibrated in the laboratory before and after the cruise and gave a value of TR_{cw} equal to 4.50 volts.

Accuracy

Based on the laboratory calibrations, the CTD temperature and salinity are accurate to $\pm 0.01^\circ C$ and 0.01 psu respectively. Based on the results from OCEANUS 113 the oxygen values are accurate to ± 0.2 ml/l. The transmissometer voltage is digitized to 0.008 volts and thus for a typical voltage of 4.0 volts the resolution of the attenuation coefficient is about 0.01 m⁻¹. The absolute value of the attenuation coefficient depends on the normalization voltage (TR_{cw}). In measurements in the laboratory, the repeatability of TR_{cw} was at least 0.01 volts. Although we made an effort to keep the

transmissometer sensor clean during the cruise, it could have been slightly fouled between stations changing TR_{cw} . We have no measure of these changes in TR_{cw} . However, there were relatively smooth changes in the light attenuation coefficient at a given depth from station to station suggesting these errors are less than 0.05 m^{-1} .

DATA PROCESSING

The CTD data (pressure, temperature, conductivity, oxygen current, oxygen temperature, and light transmission) were recorded at sea digitally on 9-track magnetic tape (see Appendix III) and the audio signal on 1/4" FM tape. The data were processed ashore using the techniques described by Millard (1982). The original 9-track data tapes were first checked for proper format and station sequence, and the data were then transferred to disc storage. The data obtained on both upcast and downcast were subsampled (usually every 100 to 200 points), listed, and plotted to check instrument performance. Spurious points were identified and replaced with the previous good value using range filters for each variable. The ranges were typically within one variable unit except for transmission, which was 0.05-0.10 volts. The conductivity and pressure data were time lagged to correct for the time constant of the temperature sensor (see above), and then the pressure was filtered to obtain a monotonically increasing series of water depths. Any unrealistic density inversions (>0.05 sigma-t units) not deleted by the range filter were identified by a point-editing program and replaced by interpolation between adjacent values of density. The editor recomputed the salinity from the interpolated value of density and the original temperature. Any spurious points in light transmission and oxygen not already deleted by the range filter were deleted using the point editor. The data were averaged over 2-dbar pressure intervals; at about 10 dbar above the bottom, this was changed to a 1-dbar average. These averaged data were used to contour the hydrographic sections presented in this report. The data have been submitted to the National Oceanographic Data Center (NODC), Whitehaven St., NW, Washington, D. C., 20235.

The XBT data were recorded on a strip chart. The traces were digitized approximately every 2 m with a depth accuracy of ± 1 m and a temperature accuracy of $\pm 0.2^\circ\text{C}$. The XBT data were not averaged to 2-dbar intervals due to the irregular number of data points.

DATA PRODUCTS

Vertical sections

The hydrographic data are presented in several ways. Vertical sections are shown in figures 6 to 12. The sections are numbered as OC104-N, where N is the section number (see figs. 1 and 2 and column 2 of table 1). The station numbers for each section are labeled across the top along with the station type (C = CTD or X = XBT). The surface value of the contoured variable is printed below. The vertical scale (1 cm = 40 m) is the same for all sections. The horizontal scale (1 cm = 1 km) for the sections 2, 3, and 4 across the canyon is not the same as the horizontal scale (1 cm = 6.5 km) for the sections parallel to the canyon axis (sections 1, 5, 6, and 7). The bathymetry for most sections is defined only by the depth at each station; thus the bottom profile is slightly different for sections where there are XBT

stations in addition to the CTD stations. Contours could not be drawn near the walls in the cross-canyon sections (2, 3, and 4) where there was often only one station located in the canyon axis.

The contour interval for each variable is the same for all sections and every fifth contour is thicker. Because of the contouring algorithms used, these sections do not show much detail at vertical scales less than 10 m and are intended to give an overall picture of the hydrography.

The sections showing temperature, salinity, sigma-t, and oxygen used the 2-dbar-averaged data which were contoured using DISPLA graphic subroutines (Integrated Software Systems Corp., 1981). These subroutines require data on a regularly spaced grid in both the horizontal and vertical. A regularly spaced vertical grid of $2N-1$ grid lines, where N is the number of stations, was constructed for each hydrographic section. The leftmost and rightmost vertical grid lines were set at the first and last stations in the section. The spacing between the remaining vertical grid lines was determined by computing the sum of the great circle distance, L , between successive stations along the trackline and dividing by $2N-2$. The position of the equally spaced interior, vertical grid lines does not always correspond to a station location. Horizontal grid lines were spaced every 10 m. A grid cell was 10 m high and $L/(2N-2)$ km wide.

Data values at each regularly spaced grid point were computed as a weighted average of the irregularly spaced data within a region of usually five grid cells (1 cell centered on the grid point and 2 cells on either side). The data were weighted by D^{-3} where D is the distance (in grid units) between the location of the data values and the grid point. This smoothing removes some of the fine structure from the sections and may spread some of the frontal features.

The contouring algorithm has no provisions for terminating contours at the sea floor and requires data in a rectangular format. For the sections in this data report, the left and right boundaries are the left and right vertical grid lines, the top boundary was the sea surface, and the bottom boundary was the deepest cast in the section. To speed contouring and to obtain reasonable contours at the sea floor, data were provided below the measurement depth by repeating the data measured at the greatest depth to a distance H into the bottom below the last measured value. Data below the distance H were taken from values observed at an adjacent (deeper) station, shifted upward or downward by a constant so that the values matched at the starting depth. In some cases the values from an adjacent station were inserted below the depth H without adjusting by a constant. The constant distance below H ranged from 0 to 100 m and was adjusted for each station to make the contours meet the sea floor in as reasonable a way as possible. The shape and slope of the contours near the sea floor should be interpreted with care. Contours below the sea floor were deleted in the sections presented here.

The contouring algorithm used a linear interpolation between the adjacent regularly spaced points. The tension parameter, which controls the smoothness vs. straight line connection of points of equal value, was varied over its entire range between 1 and 10 and little difference was noted in the contours due to the high density of data points used to control the contours.

Horizontal sections

Horizontal sections of temperature, salinity, sigma-t, oxygen and light attenuation were contoured for the 10-, 50-, 100-, and 200-dbars pressure surfaces within the region surrounding Lydonia Canyon (figs. 13-32). Because of the sparse data, all horizontal sections were contoured by hand.

TS diagrams

Plots of temperature versus salinity (TS plots, figs. 33 to 41) were organized by section (see column 2 of table 1). The symbol for each station was plotted every 100 dbar and the 100-, 200- and 500-dbar points have been annotated.

Station profiles

Plots of temperature, salinity, sigma-t, light attenuation coefficient, and buoyancy or Brunt-Vaisala frequency

$$N = \left[(g/\rho) \frac{\partial \rho}{\partial z} \right]^{1/2}$$

(ρ = water density, g = gravity) as a function of pressure at each station are shown in figures 42 to 99. For the Brunt-Vaisala frequency, density was determined using the 1980 equation of state (Millero and others, 1980), and the gradient of the specific volume anomaly was estimated from a least squares fit of a straight line to nine observations (± 8 dbar) centered about the specified depth. The Brunt-Vaisala frequency was not computed for the first four average depths nor for the last four average depths; the magnitudes of N listed at these depths are the same as the Brunt-Vaisala frequency for the fifth and fifth-to-last depths, respectively. The different symbols used to distinguish variables are shown on each variable axis. XBT profiles have been limited to 500 m. The units of salt are practical salinity units (psu) as defined by Lewis (1980).

Data listing

A listing of the 2-dbar-averaged data is contained in Appendix I. For the data listings, time is in Eastern Standard Time, SALIN is the salinity, OXY is the dissolved oxygen, ATN is the beam attenuation coefficient, SIGT is the density anomaly sigma-t, N is the Brunt-Vaisala frequency, DYHT A is the dynamic height anomaly, and S SPD is the speed of sound in seawater computed using a Fortran subroutine given in Fofonoff and Millard (1983). For pressures greater than 500 dbar, the 2-dbar-averaged data are listed at 20-dbar intervals.

ACKNOWLEDGEMENTS

This work was supported in part by Interagency Agreements IA 14-12-0001-30180 and AA851-IA2-26 between the U.S. Geological Survey and the U.S. Minerals Management Service. We thank the officers and crew of R/V OCEANUS (WHOI) for their help at sea collecting the data and Bob Millard (WHOI) for advice in the data processing. Maxine Jones (WHOI) wrote the CTD processing programs. M. Bothner, C. Parmenter, and R. Rendigs processed the oxygen samples. M. Shoukimas, F. Musialowski, M. Noble, J. Larson, L. Poppe, B. Strahle, A. Tanner and R. Petrocca (WHOI) assisted in all phases of the hydrographic work. V. Lyne and P. Valentine made very helpful suggestions in reviewing this data report.

REFERENCES

- Bartz, R., Zanevald, J. R. V., and Pak, H., 1978, A transmissometer for profiling and moored observations in water: SPIE Ocean Optics V, v. 160, p. 102-108.
- Bendat, J. S., and Piersol, A. G., 1971, Random data: Analysis and measurement procedures: New York, Wiley-Interscience, 407 p.
- Brown, N. L., and Morrison, G. K., 1978, Woods Hole Oceanographic Institution/Brown conductivity, temperature and depth microprofiler: Woods Hole Oceanographic Institution Technical Report 78-23, unpublished manuscript.
- Butman, B., (ed.), 1986, North Atlantic Slope and Canyon Study, Final report to the U.S. Bureau of Land Management: under IA 14-12-0001-30180.
- Butman, B. and Conley, S. J., 1984, Lydonia Canyon Experiment: Data report for moored array deployment I, October 1980 - April 1981, U.S. Geological Survey Open-File Report 84-201, 223 p.
- Butman, B., and Moody, J. A., 1984, Bathymetric map of Lydonia Canyon, U.S. Atlantic Outer Continental Shelf: U.S. Geological Survey Miscellaneous Field Studies Map MF-1710.
- Fofonoff, N. P., Hayes, S. P., and Millard, R. C., Jr., 1974, Woods Hole Oceanographic Institution/Brown microprofiler: Methods of calibration and data handling: Woods Hole Oceanographic Institution Technical Report No. 74-89, unpublished manuscript.
- Fofonoff, N. P., and Millard, R. C., Jr., 1983, Algorithms for computation of fundamental properties of sea water: Paris, UNESCO Technical Papers in Marine Science, no. 44.
- Georgi, D. T., Dean, J. P., and Chase, J. A., 1980, Temperature calibration of expendable bathythermographs: Ocean Engineering, v. 7, p. 491-499.
- Heinmiller, R. H., Ebbesmeyer, A. C., Taft, B. A., Olsen, D. B., and Nikitin, O. P., 1983, Systematic errors in expendable bathythermograph (XBT) profiles: Deep-Sea Research, v. 30, no. 11A, p. 1185-1197.
- Integrated Software Systems Corporation, 1981, DISSPLA, Display integrated software system and plotting language users manual, version 9.0: San Diego, Calif., Integrated Software Systems.
- Lewis, E. L., 1980, The practical salinity scale 1978 and its antecedents: IEEE Journal of Ocean Engineering, v. OE-5, no. 1, p. 3-8
- Millard, R. C., Jr., 1982, CTD calibration and data processing techniques at WHOI using the 1978 practical salinity scale: Proceedings of the International STD Conference and Workshop, La Jolla, Calif., 8-11 February 1982, Marine Technology.

- Millero, F. J., Chen, C.-T., Bradshaw, A., and Schleider, K., 1980, A new high-pressure equation of state for seawater: Deep-Sea Research, v. 27A, p. 255-264.
- Moody, J. A., Butman, B. and Conley, S. J., 1986a, Hydrography of Lydonia Canyon: Data report for R/V OCEANUS Cruise 113, January 29-February 3, 1982, Open-File Report 86-343, 271 pp.
- Moody, J. A., Butman, B., and Bothner, M. H., 1986b, Estimates of near-bottom suspended matter concentration during storms: Continental Shelf Research. (in press).
- Owens, W. Brechner, and Millard, Robert C., Jr., 1985, A new algorithm for CTD oxygen calibration: Journal of Physical Oceanography, v. 15, no. 5, p. 621-631.
- SAS Institute, Inc., 1982, SAS user's guide: Statistics: North Carolina, 584 p.
- Stegen, G. R., Delisi, D. P., and Von Collii, R. C., 1975, A portable, digital recording, expendable bathythermograph (XBT) system: Deep-Sea Research, v. 22, p. 447-453.
- Strickland, J. D. H., and Parson, T. R., 1972, A practical handbook of sea water analysis: Fisheries Research Board of Canada, Ottawa, 310 p.
- Weiss, R. F., 1970, The solubility of nitrogen, oxygen and argon in water and sea water: Deep-Sea Research, v. 17, p. 721-735.

Table 1. Hydrographic stations R/V OCEANUS Cruise 104, Sept - Oct. 1981.

Station	Section	Date	Time	Latitude (N.)	Longitude (W.)	Water Depth (m)	Type
1	1	SEP 29	1715	41 08.50'	67 36.78'	54	CTD
2	1	SEP 29	1826	41 03.22'	67 34.77'	60	CTD
3	1	SEP 29	1910	40 59.27'	67 36.76'	67	CTD
4	1	SEP 29	2004	40 54.84'	67 38.75'	71	XBT
5	1	SEP 29	2034	40 51.54'	67 38.75'	71	CTD
6	1	SEP 29	2111	40 47.55'	67 40.33'	72	XBT
7	1	SEP 29	2145	40 43.59'	67 41.71'	73	CTD
8	1	SEP 29	2227	40 39.00'	67 43.72'	77	XBT
9	7,1	SEP 29	2308	40 34.48'	67 44.14'	101	CTD
10	7	SEP 29	2336	40 32.94'	67 43.61'	128	XBT
11	7	SEP 29	2341	40 32.30'	67 43.31'	165	XBT
12	2	SEP 29	2356	40 32.68'	67 41.04'	126	CTD
13	2	SEP 30	0030	40 31.88'	67 42.05'	137	CTD
14	2	SEP 30	0101	40 31.78'	67 42.83'	240	CTD
15	2	SEP 30	0126	40 31.64'	67 43.07'	255	CTD
16	2	SEP 30	0151	40 31.51'	67 43.31'	207	CTD
17	2	SEP 30	0215	40 31.32'	67 43.76'	140	CTD
18	7	SEP 30	0235	40 30.54'	67 42.37'	320*	XBT
19	3	SEP 30	0251	40 29.74'	67 40.15'	145	CTD
20	3	SEP 30	0316	40 29.60'	67 41.10'	160*	XBT
21	3	SEP 30	0332	40 29.65'	67 41.50'	190	CTD
22	3	SEP 30	0345	40 29.39'	67 41.81'	325*	XBT
23	7, 3	SEP 30	0353	40 29.39'	67 42.18'	405	CTD
24	3	SEP 30	0600	40 29.40'	67 43.02'	245*	XBT
25	3	SEP 30	0611	40 28.90'	67 43.82'	145	CTD
26	3	SEP 30	0627	40 29.03'	67 43.94'	140	XBT
27	3	SEP 30	0648	40 28.55'	67 45.01'	135	CTD
28		SEP 30	0720	40 27.78'	67 42.60'	157	XBT
29		SEP 30	0737	40 26.74'	67 41.05'	265	XBT
30	7	SEP 30	0801	40 25.77'	67 39.77'	590	CTD
31		SEP 30	0832	40 25.64'	67 40.89'	225	XBT
32		SEP 30	0841	40 25.10'	67 42.14'	138*	XBT
33	4	SEP 30	0902	40 23.91'	67 44.64'	137	CTD
34	4	SEP 30	0931	40 22.66'	67 43.12'	169	XBT
35	4	SEP 30	0940	40 22.49'	67 42.50'	205	CTD
36	4	SEP 30	1006	40 21.73'	67 41.61'	450	XBT
37	4	SEP 30	1012	40 21.62'	67 41.25'	555	CTD
38	4	SEP 30	1055	40 20.89'	67 40.22'	925	CTD
39	4	SEP 30	1144	40 21.24'	67 39.69'	765	XBT
40	4	SEP 30	1157	40 21.64'	67 38.65'	530	CTD
41	4	SEP 30	1238	40 21.90'	67 38.20'	315	NG
42	4	SEP 30	1258	40 22.87'	67 36.20'	217	CTD

Table 1. Hydrographic stations R/V OCEANUS Cruise 104, Sept. - Oct. 1981. (Continued)

Station	Section	Date	Time	Latitude (N.)	Longitude (W.)	Water Depth (m)	Type
43	5	SEP 30	1354	40 21.08'	67 31.98'	550	CTD
44	5	SEP 30	1445	40 21.92'	67 32.38'	440*	XBT
45	5	SEP 30	1508	40 23.12'	67 32.73'	245	CTD
46	5	SEP 30	1604	40 24.33'	67 33.75'	185*	XBT
47	5	SEP 30	1629	40 25.66'	67 34.30'	157	CTD
48	5	SEP 30	1728	40 29.11'	67 35.59'	145*	XBT
49	5	SEP 30	1818	40 32.78'	67 37.09'	120	CTD
50	5	SEP 30	1849	40 33.94'	67 37.75'	108	XBT
51	5	SEP 30	1908	40 35.01'	67 38.22'	100	CTD
52		SEP 30	2008	40 33.23'	67 44.94'	117	NG
53	6	SEP 30	2042	40 32.26'	67 49.45'	100	CTD
54	6	SEP 30	2112	40 30.32'	67 49.31'	113	XBT
55	6	SEP 30	2124	40 29.44'	67 48.83'	117	CTD
56	6	SEP 30	2153	40 27.47'	67 48.82'	133	XBT
57	6	SEP 30	2212	40 25.67'	67 48.34'	155	CTD
58	6	SEP 30	2244	40 23.21'	67 48.51'	154	XBT
59	6	OCT 1	0033	40 20.74'	67 47.89'	195	CTD
60	6	OCT 1	0127	40 16.57'	67 47.22'	480	CTD

*depth determined from XBT trace

NG = malfunctioned

Table 2. - Surface salinity for R/V OCEANUS Cruise 104, September 29-October 1, 1981
 Bottle salinity was taken at the surface and CTD was 1-4 meters below surface.

Station	Salinity (psu)		Station	Salinity (psu)	
	Bottle	CTD		Bottle	CTD
1	32.650	32.577	32	32.649	-
2	32.610	32.572	33	32.639	-
3	32.602	32.575	34	32.697	-
4	32.602	-	35	32.784	32.717
5	32.614	32.567	36	32.827	-
6	32.622	-	37	32.823	32.782
7	32.628	32.566	38	32.744	32.720
8	32.597	-	39	32.733	-
9	32.601	32.577	40	32.731	32.704
10	32.600	-	41	32.801	-
11	32.603	-	42	32.804	32.750
12	32.572	32.544	43	32.847	32.768
13	32.588	32.568	44	32.791	-
14	32.613	32.571	46	32.715	-
15	32.608	32.567	47	32.760	32.703
16	32.618	32.570	48	32.586	-
17	32.612	32.573	49	32.587	32.564
19	32.620	32.570	50	32.611	-
20	32.602	-	51	32.611	32.591
21	32.614	32.569	52	32.610	-
22	32.636	-	53	32.617	32.588
23	32.606	32.575	54*	32.655	-
24	32.606	-	55	32.618	32.581
25	32.602	32.580	56	32.621	-
26	32.607	-	57	32.640	32.606
27	32.603	32.583	58	32.637	-
28	32.605	-	59	32.759	32.714
29	32.574	-	60	32.763	32.712

Table 3. - Meteorological observations for R/V OCEANUS Cruise 104 obtained from ship's Deck Log. (Time is Eastern Standard Time.)
[See Table 4 for key to meteorological observations]

Date	Time Est	Wind		Sea			Air		Weather
		Dir	Force	Dir	Swell	Height	Pressure (mb)	Temp (°c)	
Sept 25	1200	N	2	-	-	-	1024	17.2	bc
	1600	NNW	4	N	4	2	1022	15.6	bc
	2000	N	3	N	4	2-3	1024	16.7	bc
	2400	W	2	Var	2	2	1024	15.6	bc
Sept 26	0400	W	3	Var	2	2	1024	15.6	b
	0800	NNW	2-3	Var	2	1	1027	15.0	b
	1200	NW	2	Var	2	1	1028	15.6	bc
	1600	W	3	Var	1	1	1028	18.9	bc
	2000	Var	-	-	-	1	1028	16.7	bc
	2400	E	2	-	-	1	1027	15.6	bc
Sept 27	0400	S	3	Calm	Calm	1	1026	14.4	bc
	0800	SxE	3	-	-	1	1027	19.4	bc
	1200	SSE	3-4	Var	1	2	1026	19.4	bc
	1600	S	4	-	-	2	1024	20.0	bc
	2000	S	4	-	-	2	1022	17.2	bc
	2400	SSW	4-5	SSW	1	3	1020	17.8	bc
Sept 28	0400	SSW	5	SSW	1	3	1018	17.8	bc
	0800	SSW	5-6	SxW	3	3-4	1016	17.2	bc, z
	1200	SWxS	3-4	SSW	1	3	1015	17.8	oz
	1600	SW	3	SW	1	2-3	1012	18.9	fz
	2000	W	3	SW	2	2	1011	15.6	bc, z
	2400	WNW	5-6	WNW	3	4	1013	14.4	c
Sept 29	0400	NW	7	WNW	4	4-5	1013	12.2	bc
	0800	WNW	7-8	NWxW	3	5	1017	11.1	bc
	1200	WNW	6	WNW	4	5	1016	12.2	c
	1600	WNW	6	WNW	4	4-5	1016	11.1	c
	2000	WNW	5-6	WNW	4	4-5	1017	11.7	bc
	2400	WNW	4-5	WNW	3	4-5	1017	11.7	b
Sept 30	0400	NW	6	WNW	3	4	1016	12.2	bc
	0800	WNW	6-7	NW	3	5	1018	12.2	bc
	1200	WNW	6-7	WNW	3	5	1017	12.2	bc
	1600	WNW	7-8	WNW	3	5-6	1015	11.1	bc
	2000	WxN	6-7	WNW	3	5-6	1016	12.2	bc
	2400	WNW	6	WNW	3	5	1016	12.2	b
Oct 1	0400	WNW	5	WNW	3	4-5	1015	12.2	bc
	0800	WNW	5	WNW	3	5	1018	11.1	bc
	1200	WxS	4	W	3	4	1017	11.7	o
	1600	WSW	3	W	1	3	1015	12.2	od
	2000	S	3	W	1	3	1010	13.3	o
	2400	SE	2	Var	1	1	1016	15.6	f
Oct 2	0400	NNW	3	-	-	2	1003	16.7	fz

Table 4. - Key to meteorological observations.

Swell		Sea height	
0	No swell	0	Calm
1	Low, short or average	1	Smooth, less than 1'
2	Low, long	2	Slight 1-3'
3	Moderate, short	3	Moderate 3-5'
4	Moderate, average	4	Rough 5-8'
5	Moderate, long	5	Very rough 8-12'
6	Heavy, short	6	High 12-20'
7	Heavy, average	7	Very high 20-40'
8	Heavy, long	8	Mountainous 40' and higher
9	Confused	9	Confused

Weather		Wind	knots	mph
bc	scattered clouds	1	1-3	1-3
d	drizzle	2	4-6	4-7
f	fog	3	7-10	8-12
h	hail	4	11-16	13-18
l	lightning	5	17-21	19-24
o	overcast	6	22-27	25-31
c	mostly cloudy	7	28-33	32-38
p	passing rain showers	8	34-40	39-46
q	squalls	9	41-47	47-54
r	rain	10	48-55	55-63
s	snow	11	36-63	64-72
t	thunder	12	64-71	73-82
z	haze			

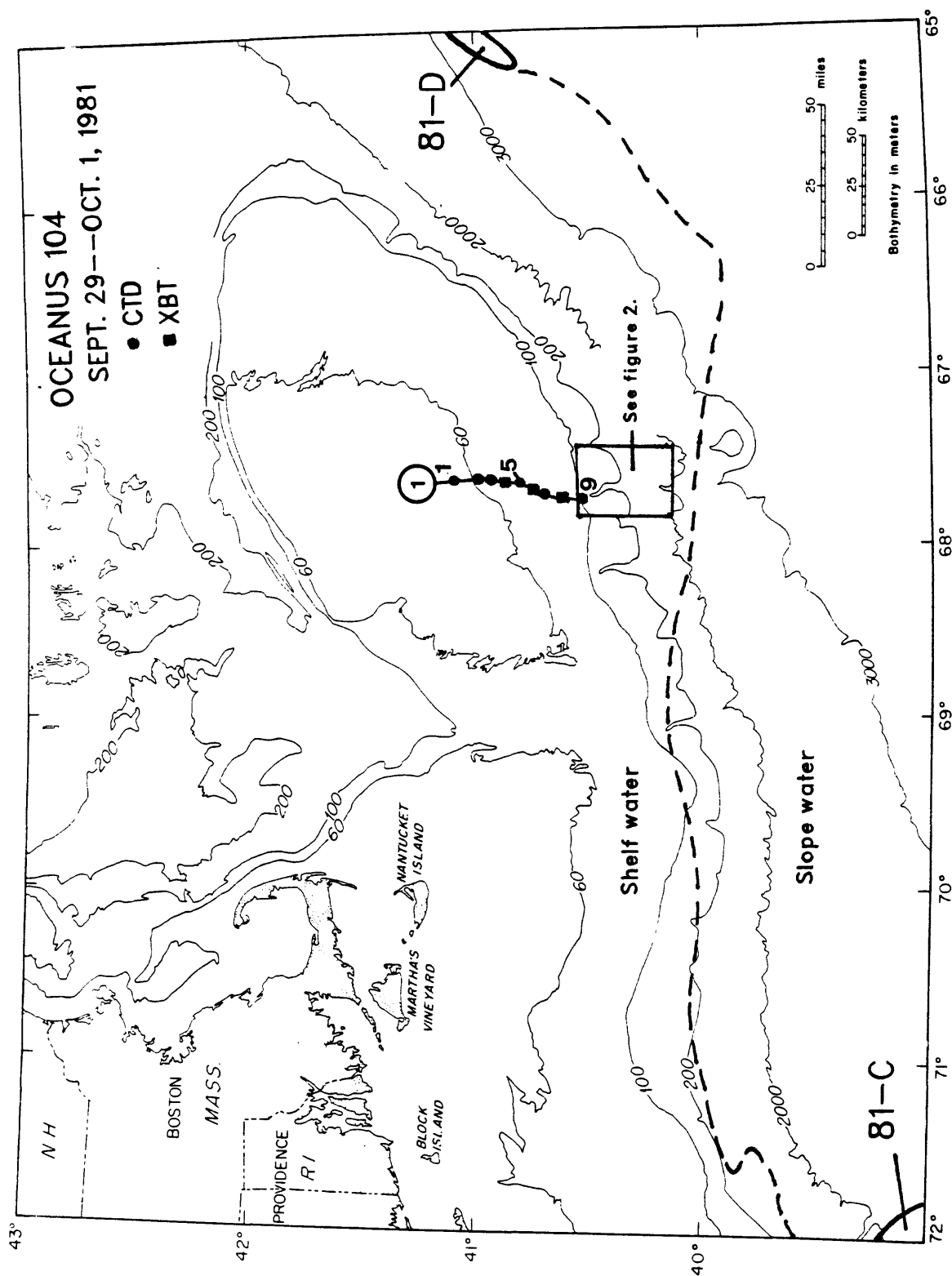


Figure 1. Location of stations from Georges Bank to Lydonia Canyon occupied on R/V OCEANUS Cruise 104, Sept 29-Oct 1, 1981. The circled number identifies the section shown in figure 6. The positions of warm core ring 81-C and 81-D (solid lines at the corner and edge of the figure) are based on the Oceanographic Analysis chart for Sept. 29, 1981 as modified by the Atlantic Environmental Group, National Marine Fisheries Service, Narragansett, R.I. The approximate boundary between the shelf and slope water is shown as a dashed line.

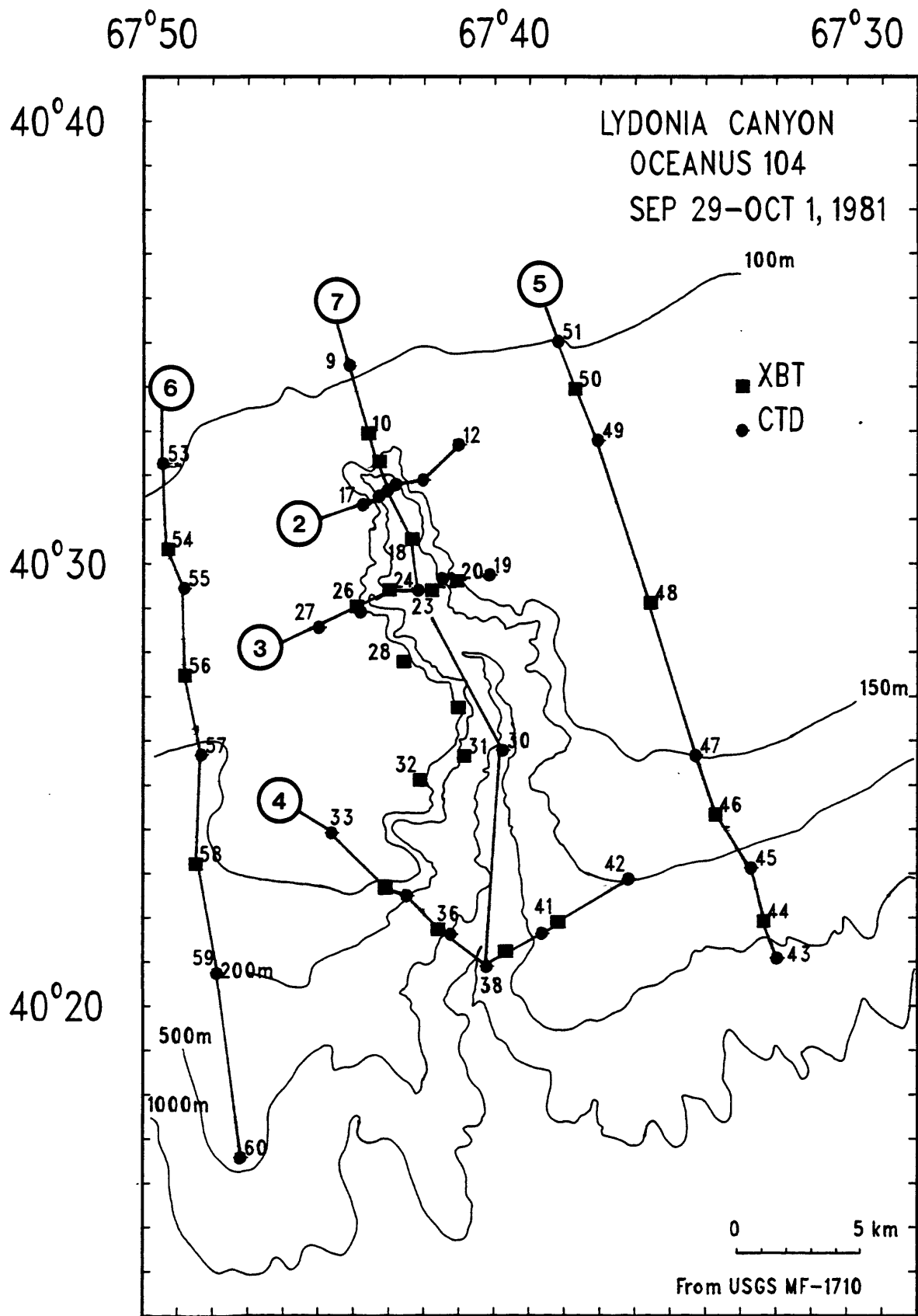


Figure 2. Location of stations around Lydonia Canyon occupied on R/V OCEANUS Cruise 104, September 29-October 1, 1981. The circled numbers identify the sections shown in figures 7 to 12.

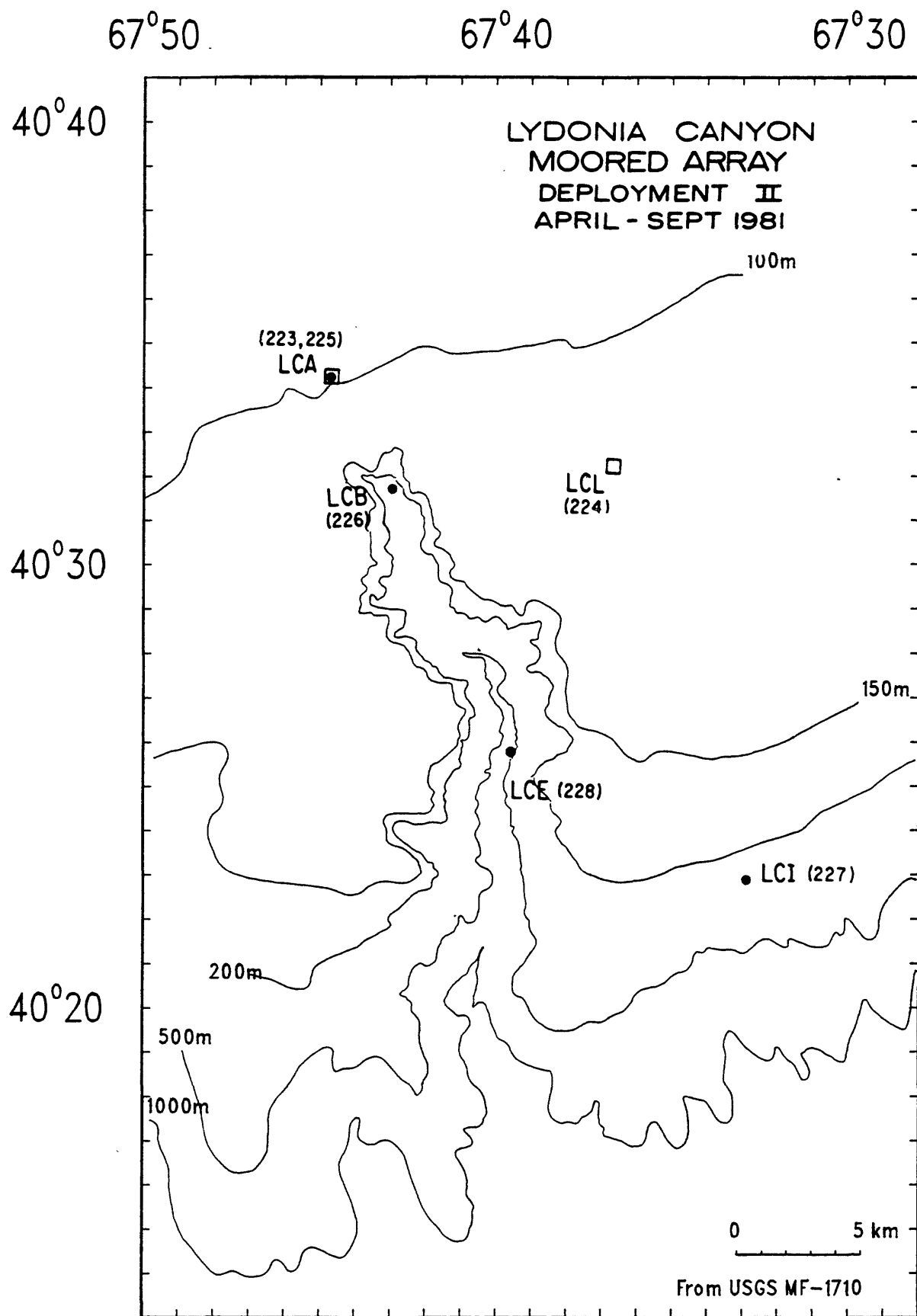


Figure 3. Lydonia Canyon moored array, deployment II. Stations are identified by letters. The three digit number following the station letters is the mooring number.

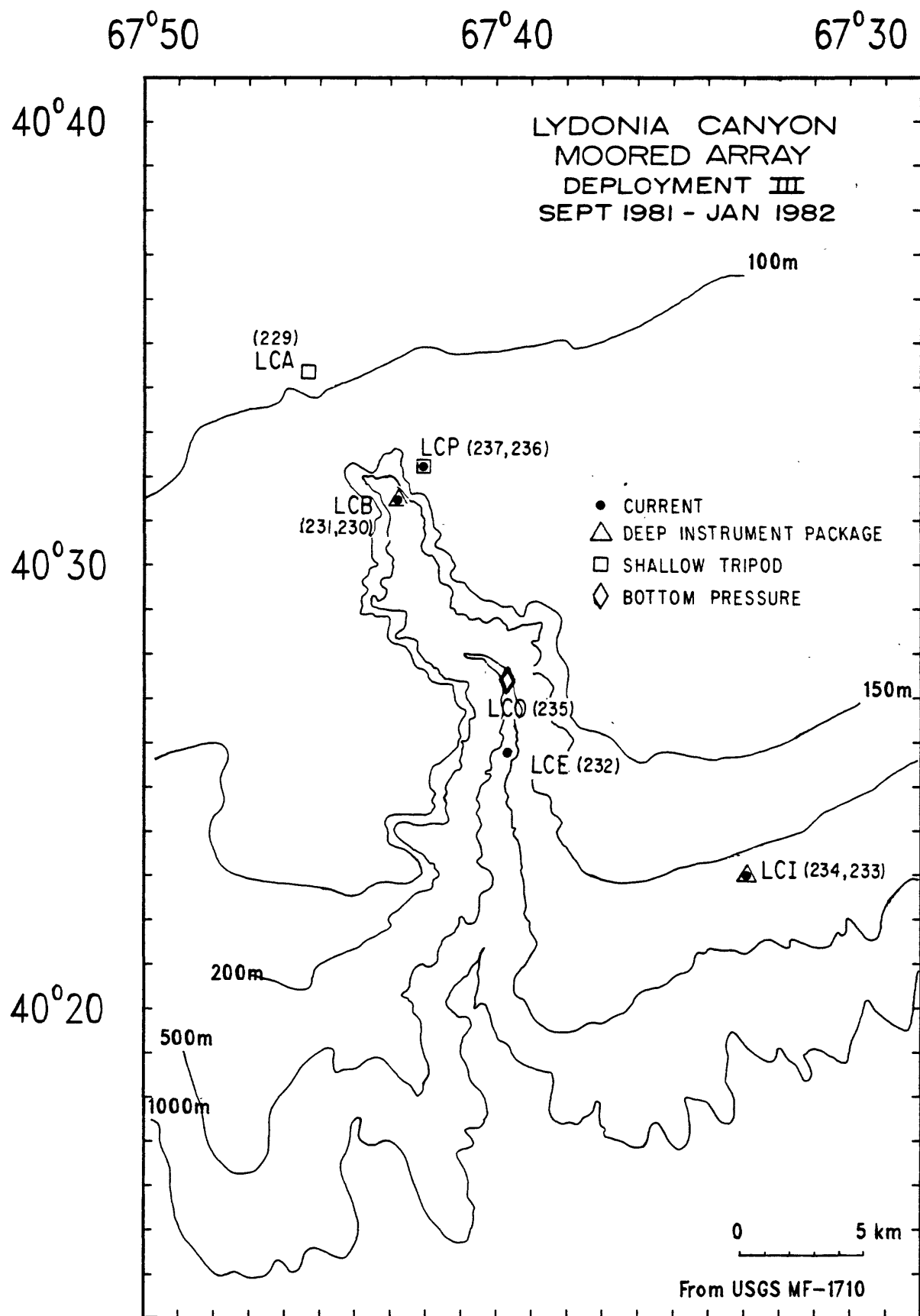


Figure 4. Lydonia Canyon moored array, deployment III. The three digit number following the station letters is the mooring number.

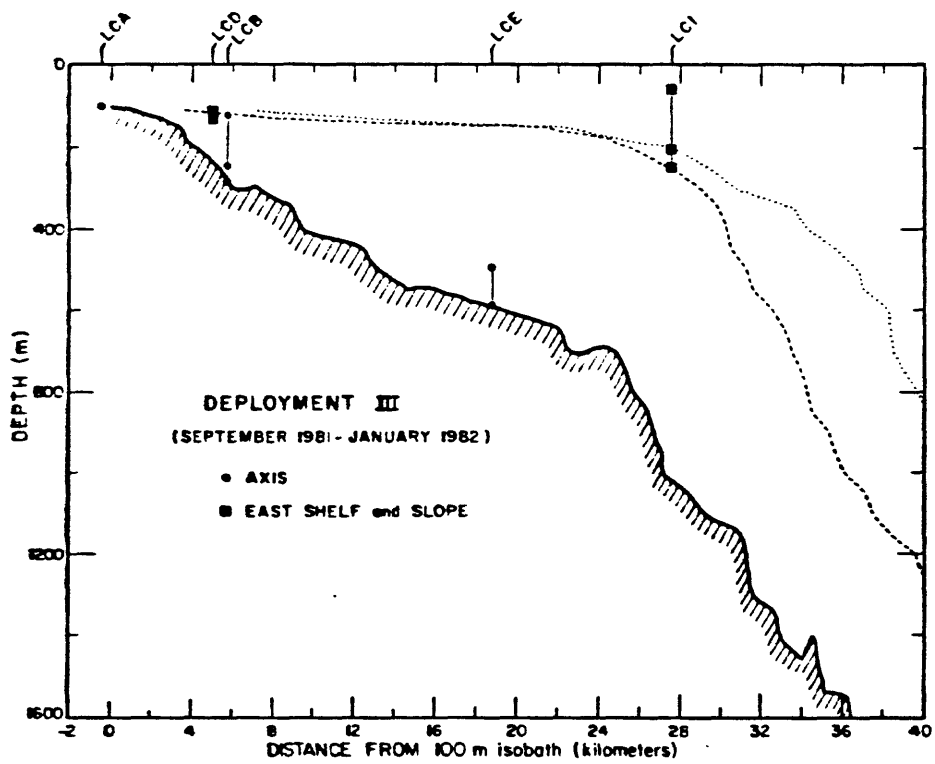
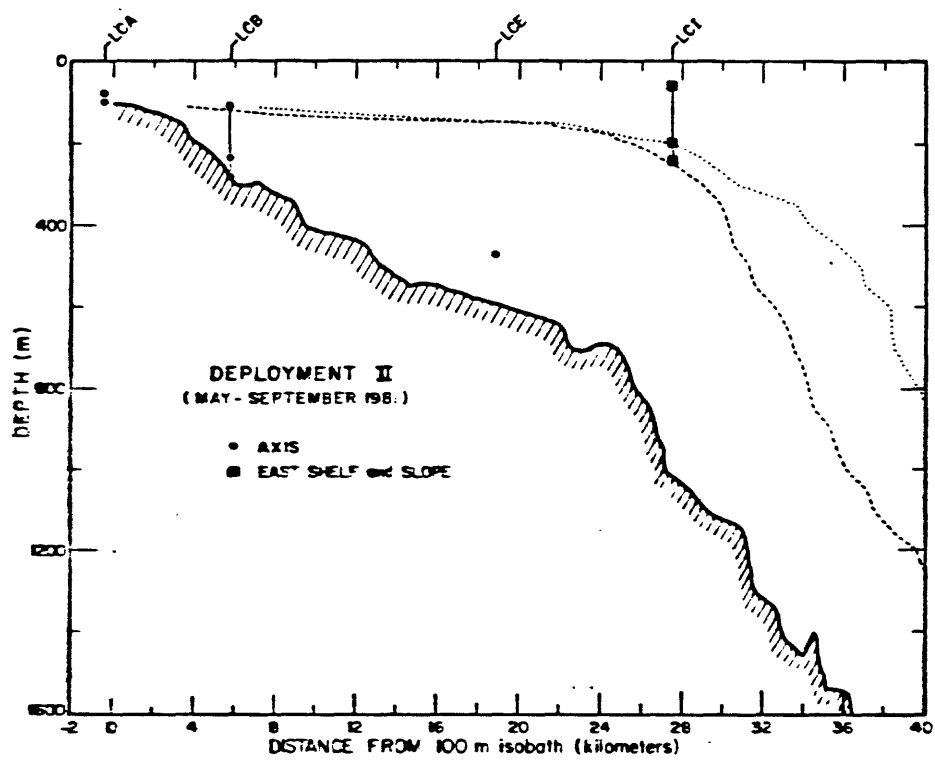
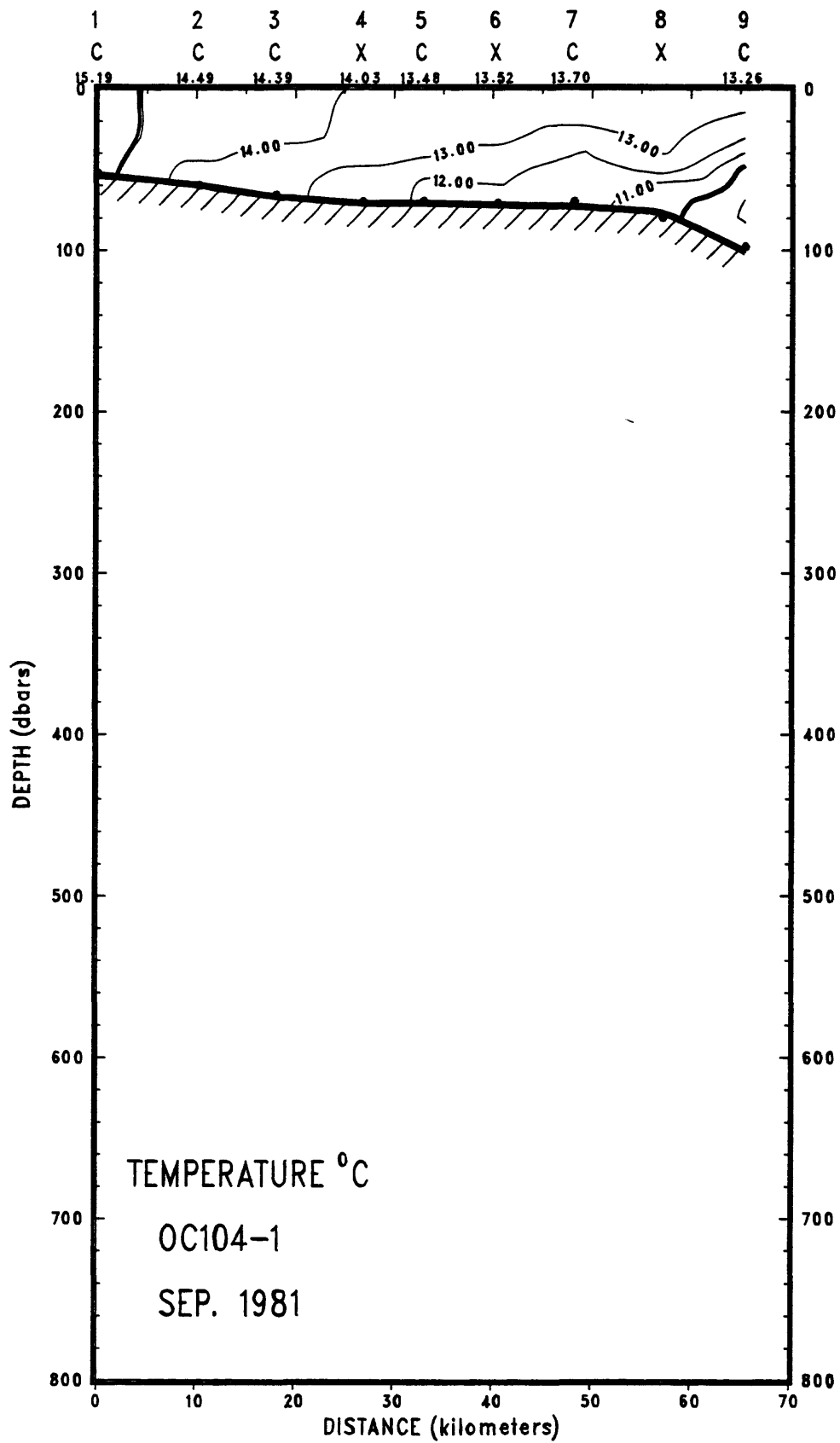
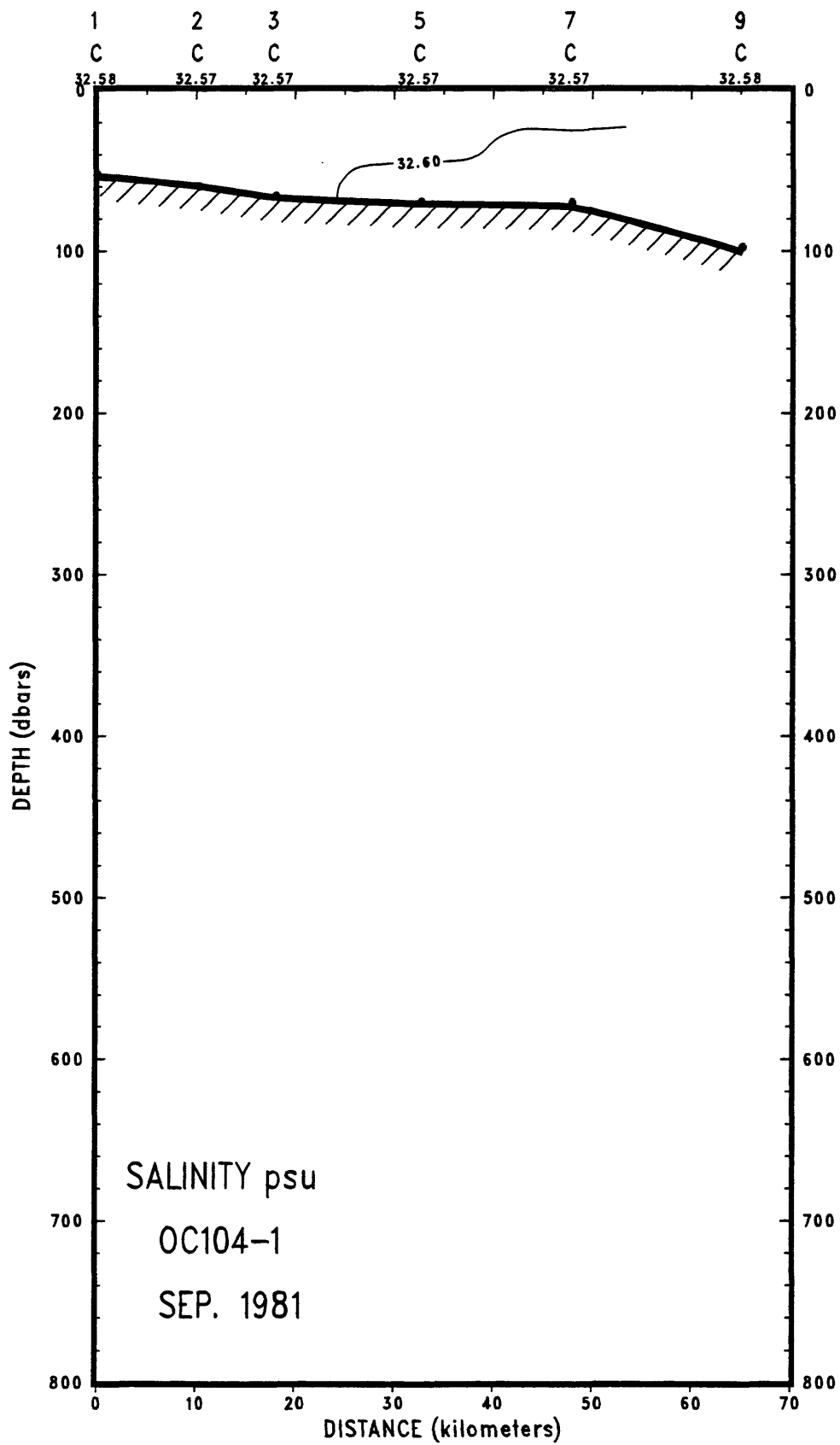


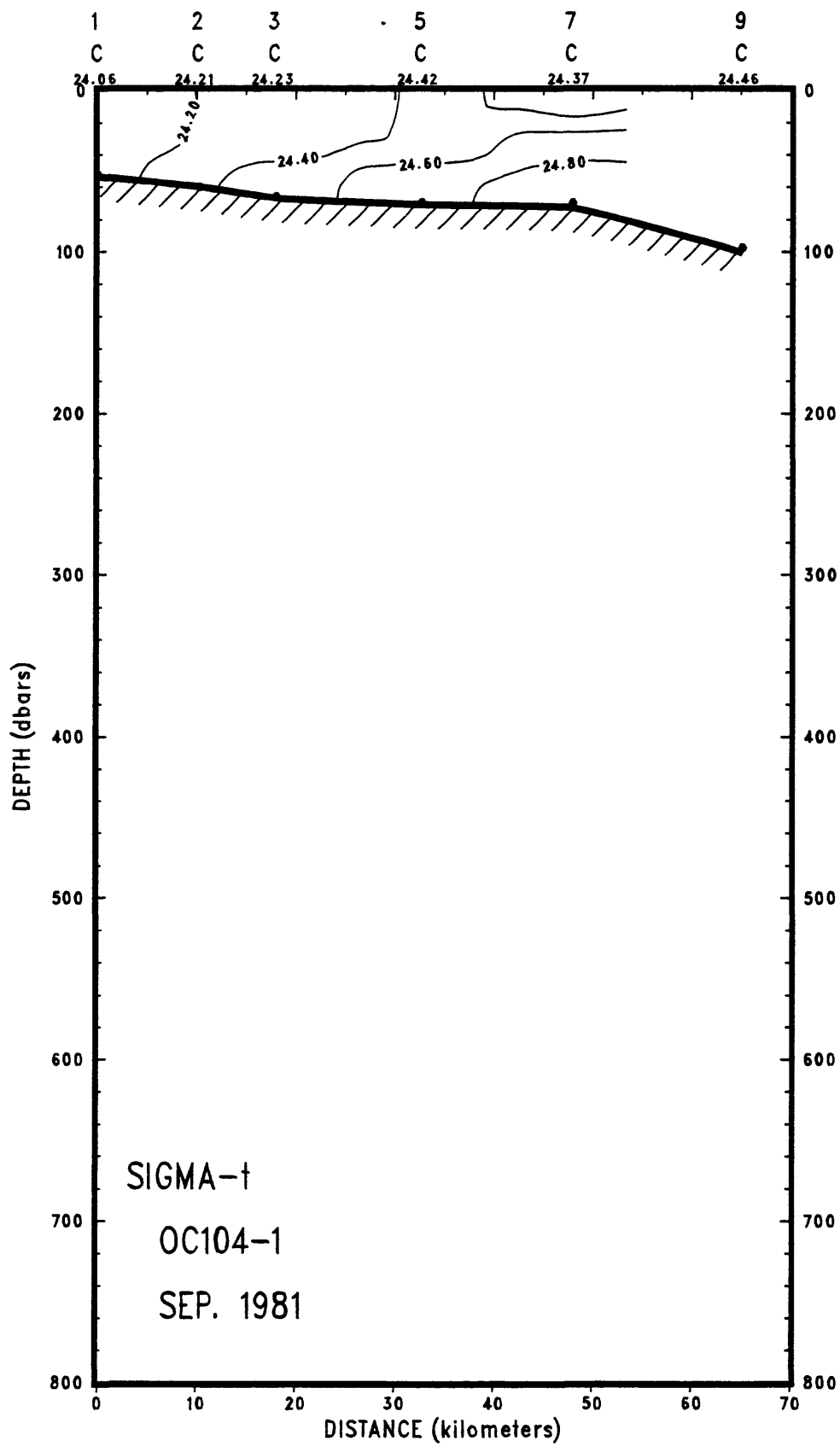
Figure 5. Lydonia Canyon moored array; north-south section along the canyon axis.

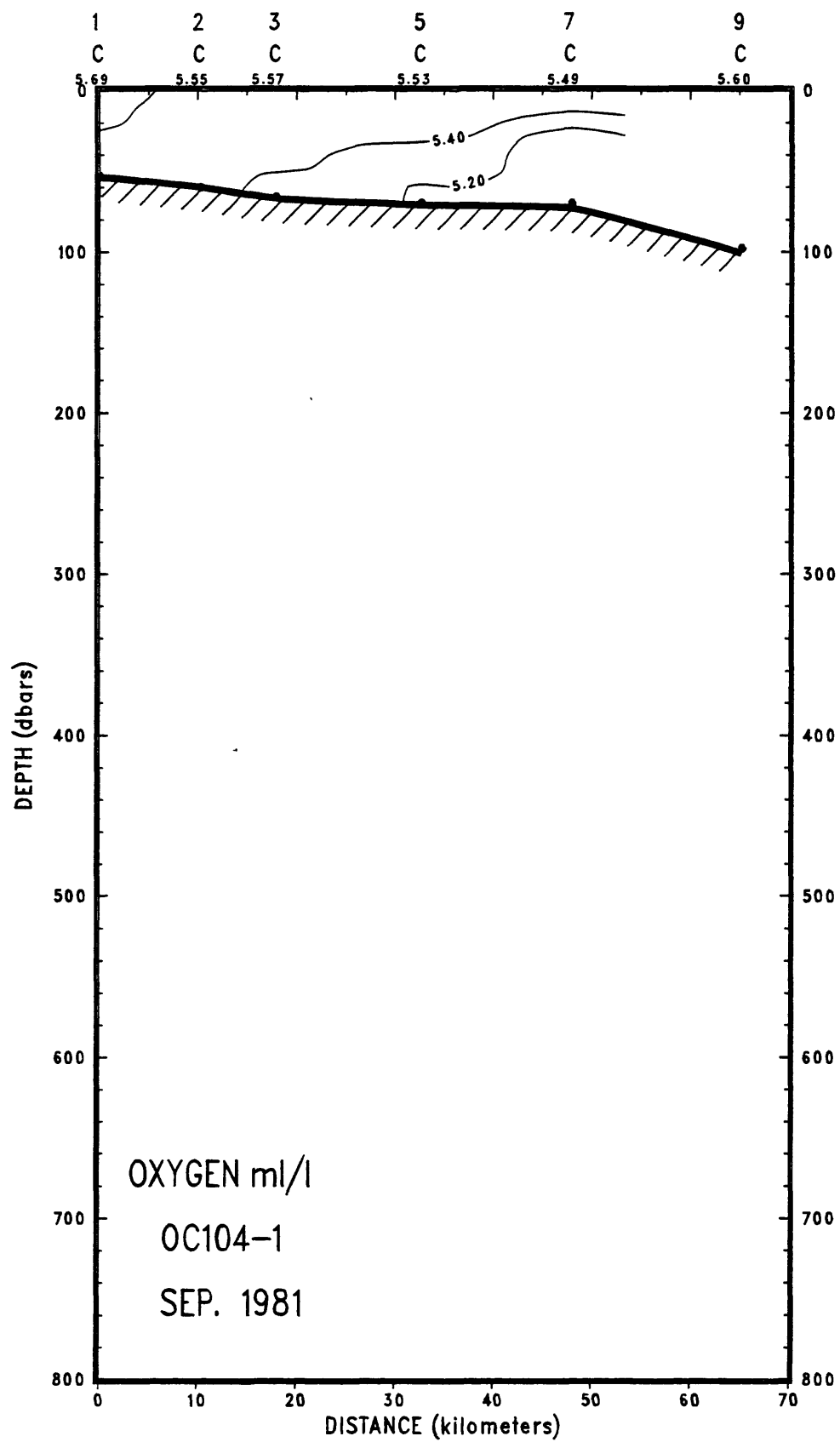
Vertical sections

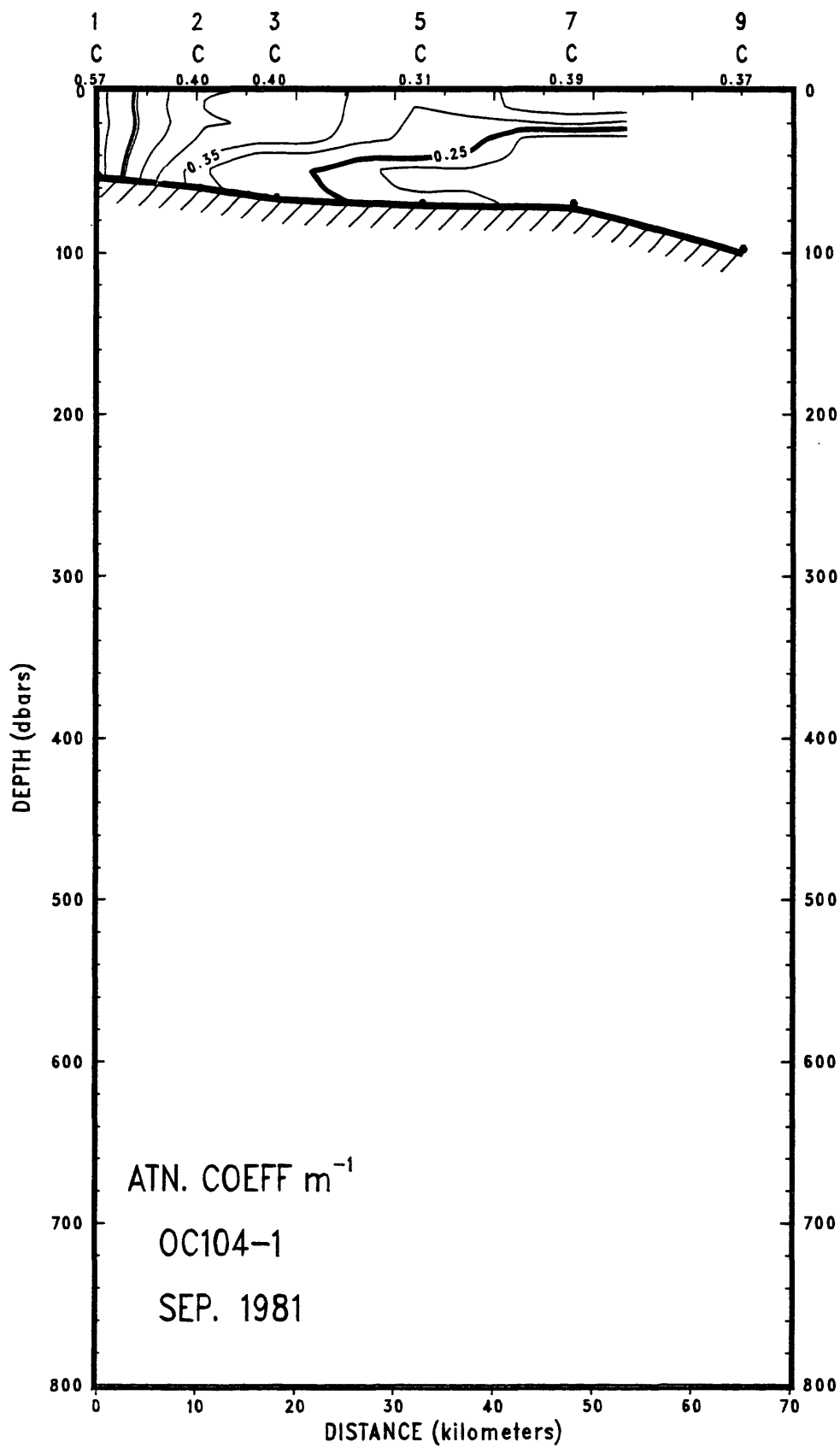
The section numbers follow the hyphen after the cruise symbol OC104 (see figs. 1, 2 and table 1). The station numbers are shown across the top of each section with the station type (C = CTD or X = XBT) and surface value of the contoured variable printed below. The contour intervals are the same for each section (1°C for temperature, 0.2 psu for salinity, 0.2 for sigma-t, 0.2 for oxygen, and 0.05 m⁻¹ for attenuation coefficient). The bathymetry for most sections is defined only by the depth at each station; thus the bottom profile is slightly different for sections where there are XBT stations in addition to the CTD stations. Contours were particularly difficult to draw near the walls in the cross-canyon sections (2, 3 and 4) where there was only one station in the center of the axis. Because of the computer contouring routine, the shape and slope of the contours near the sea floor should be interpreted with caution (see text).

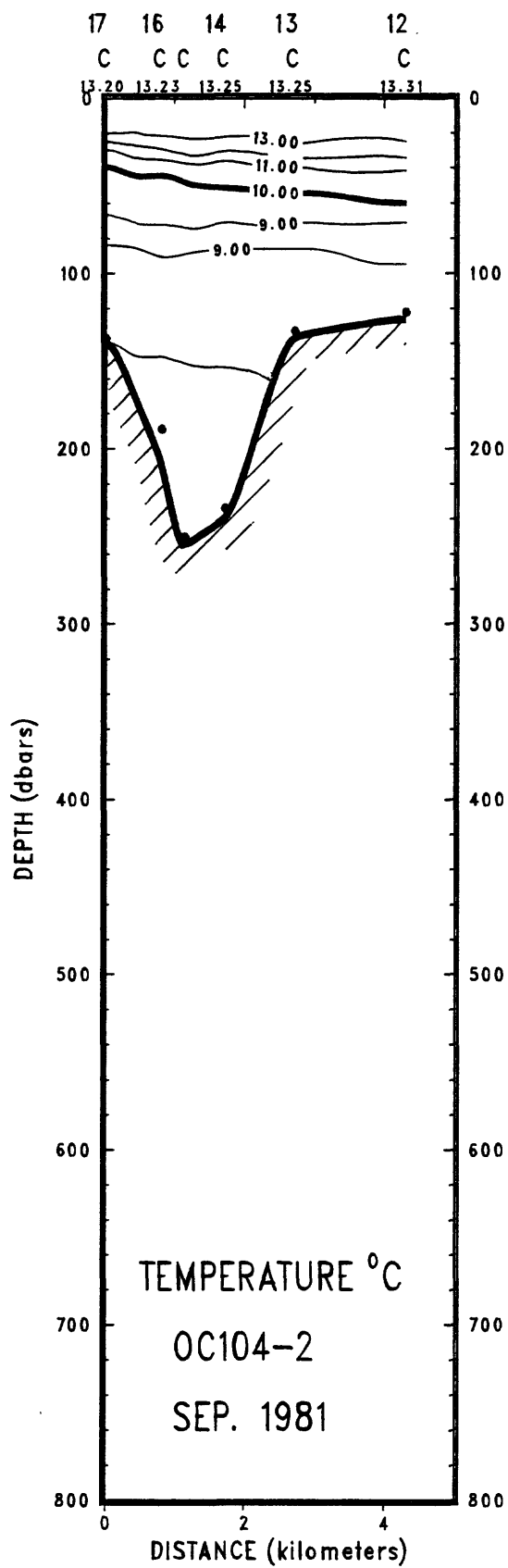


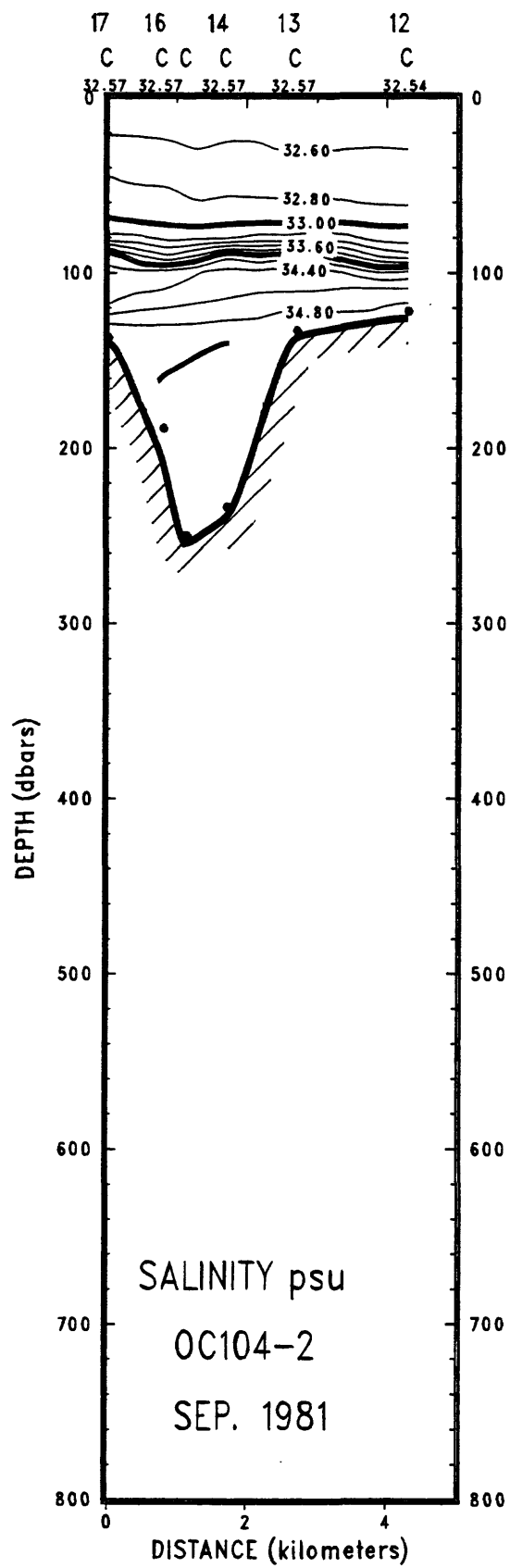


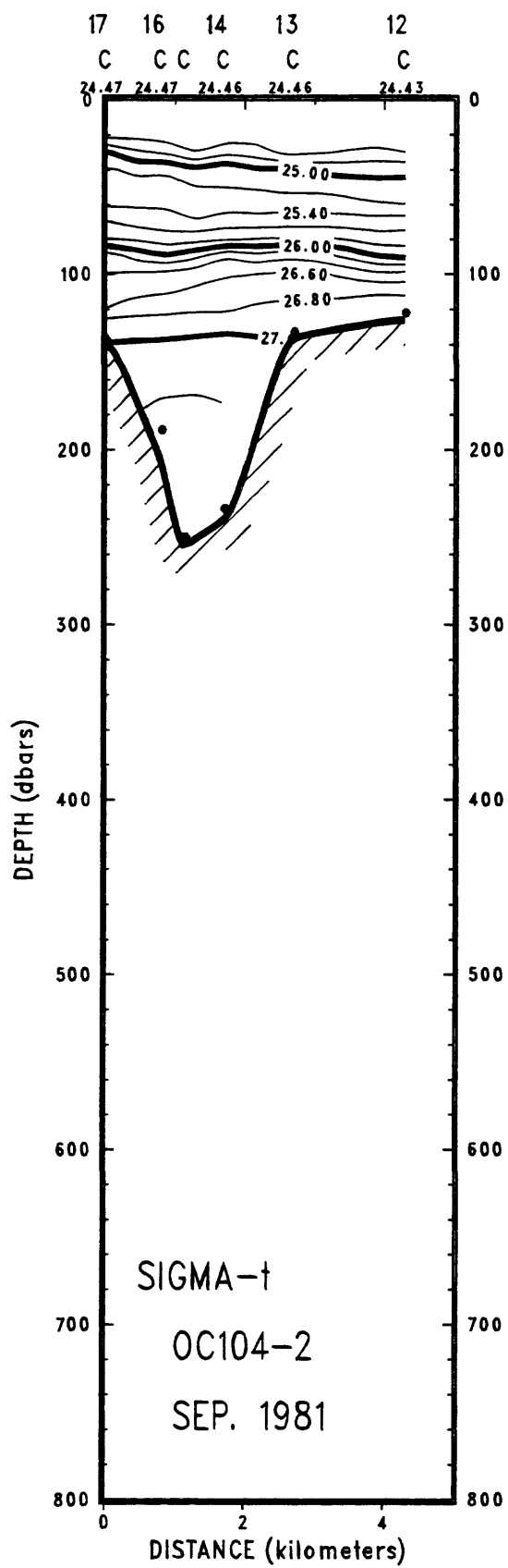


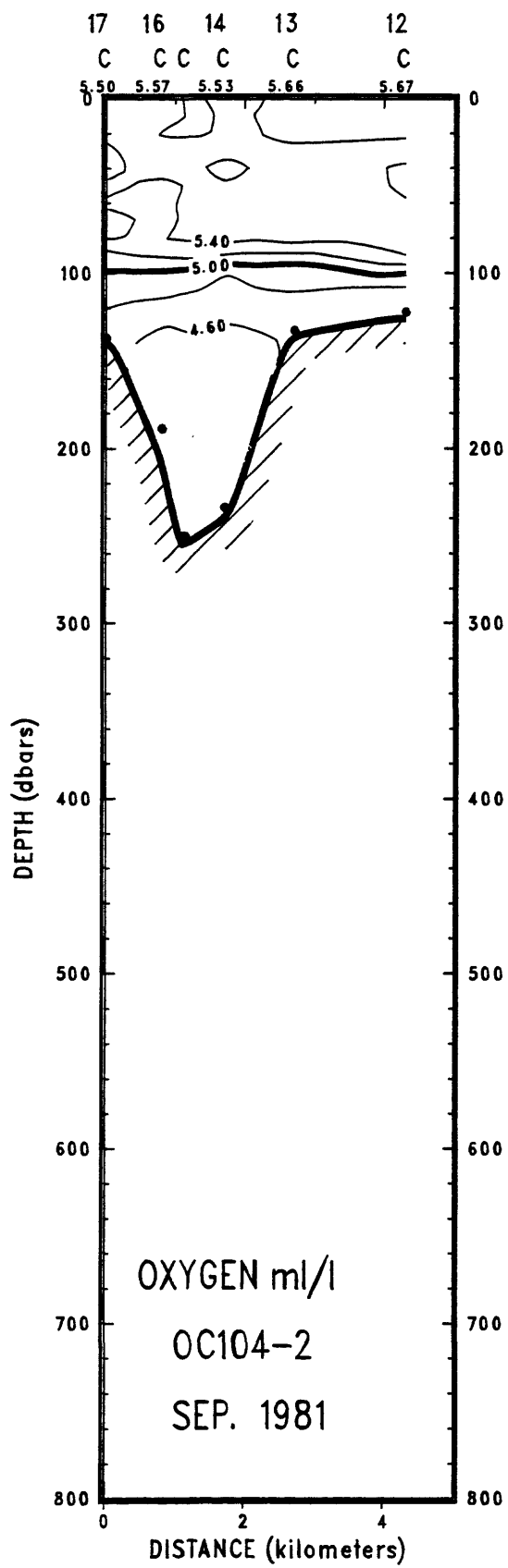


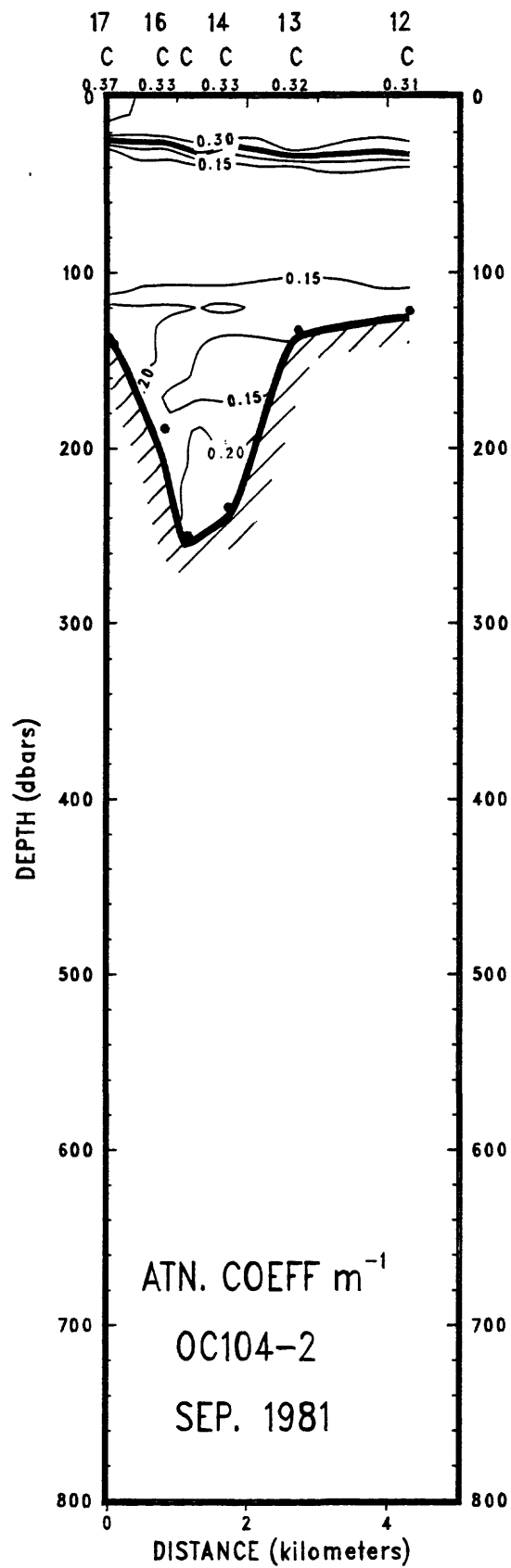


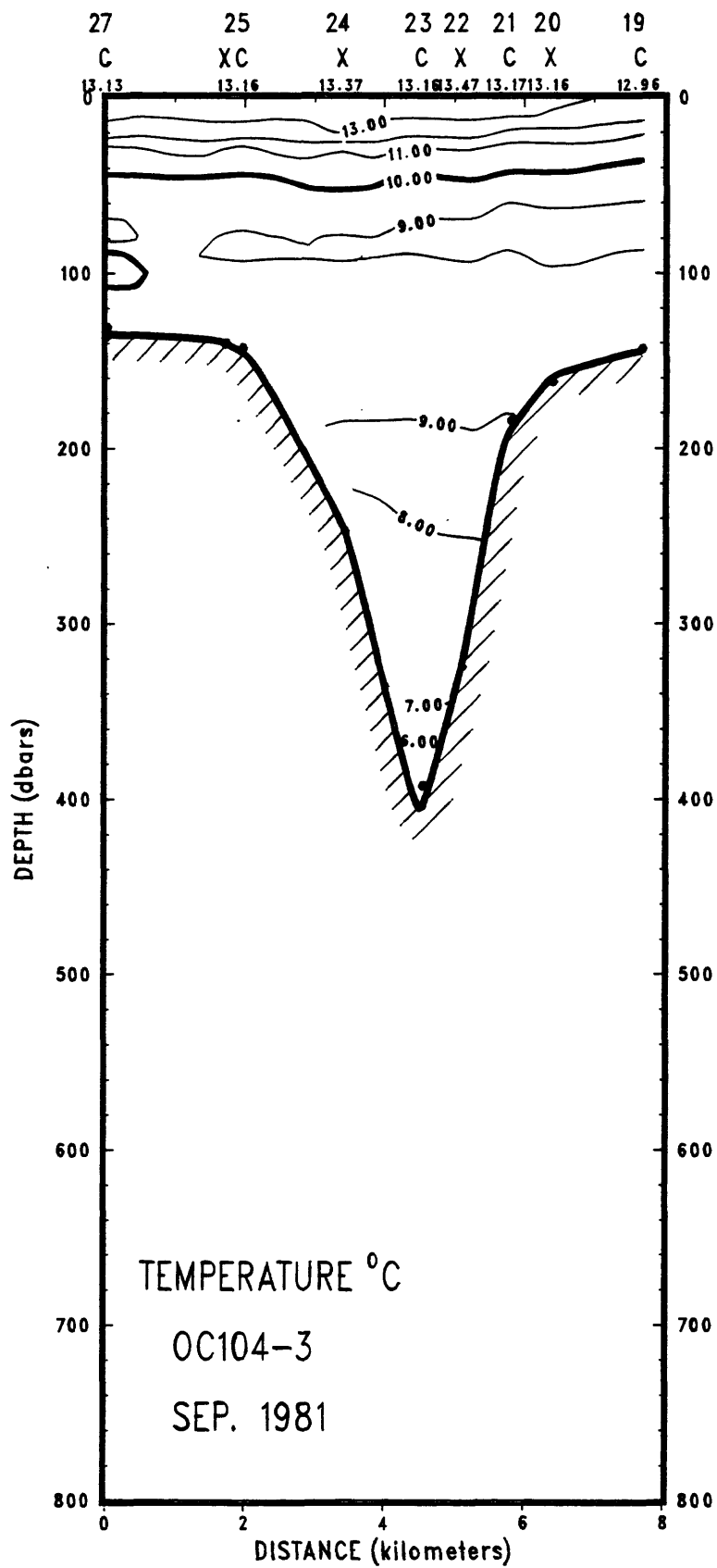


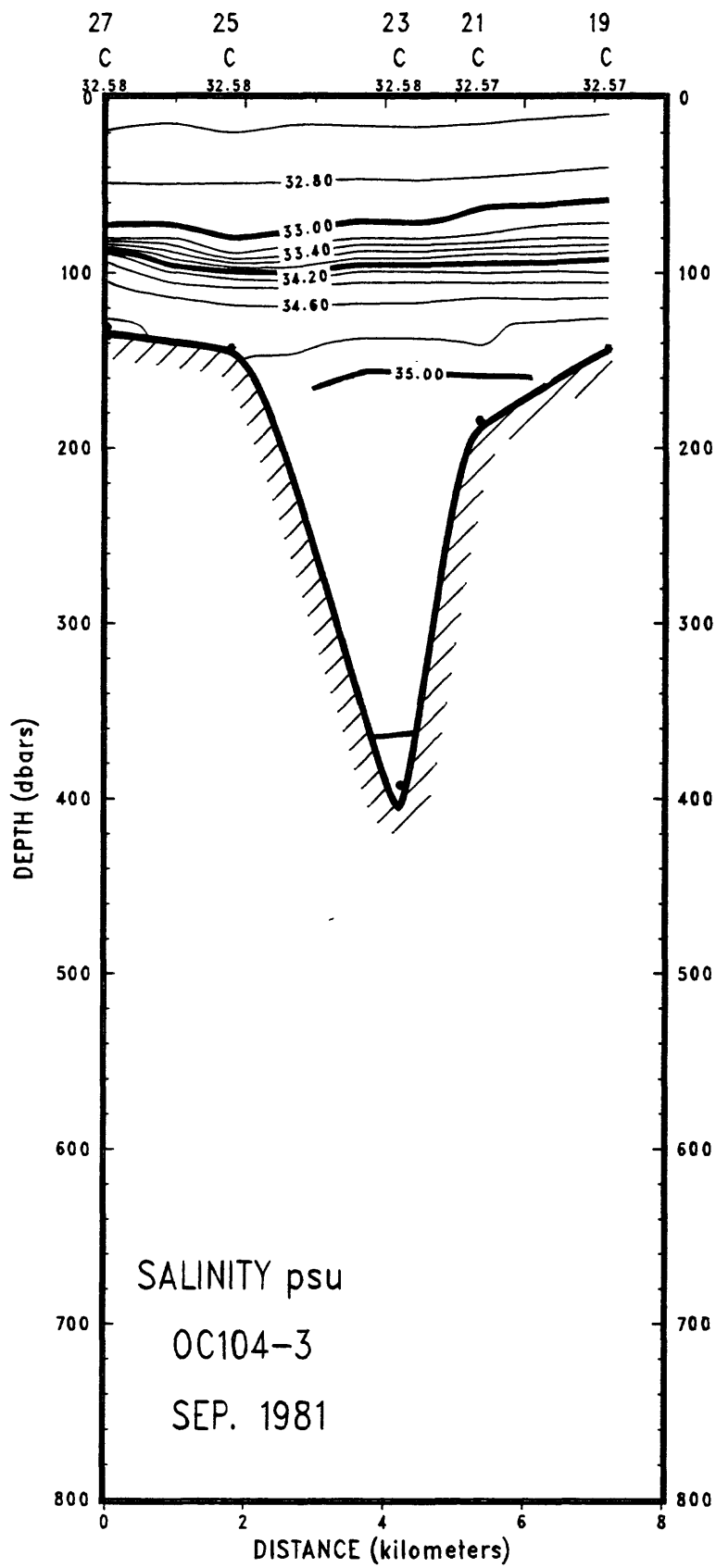


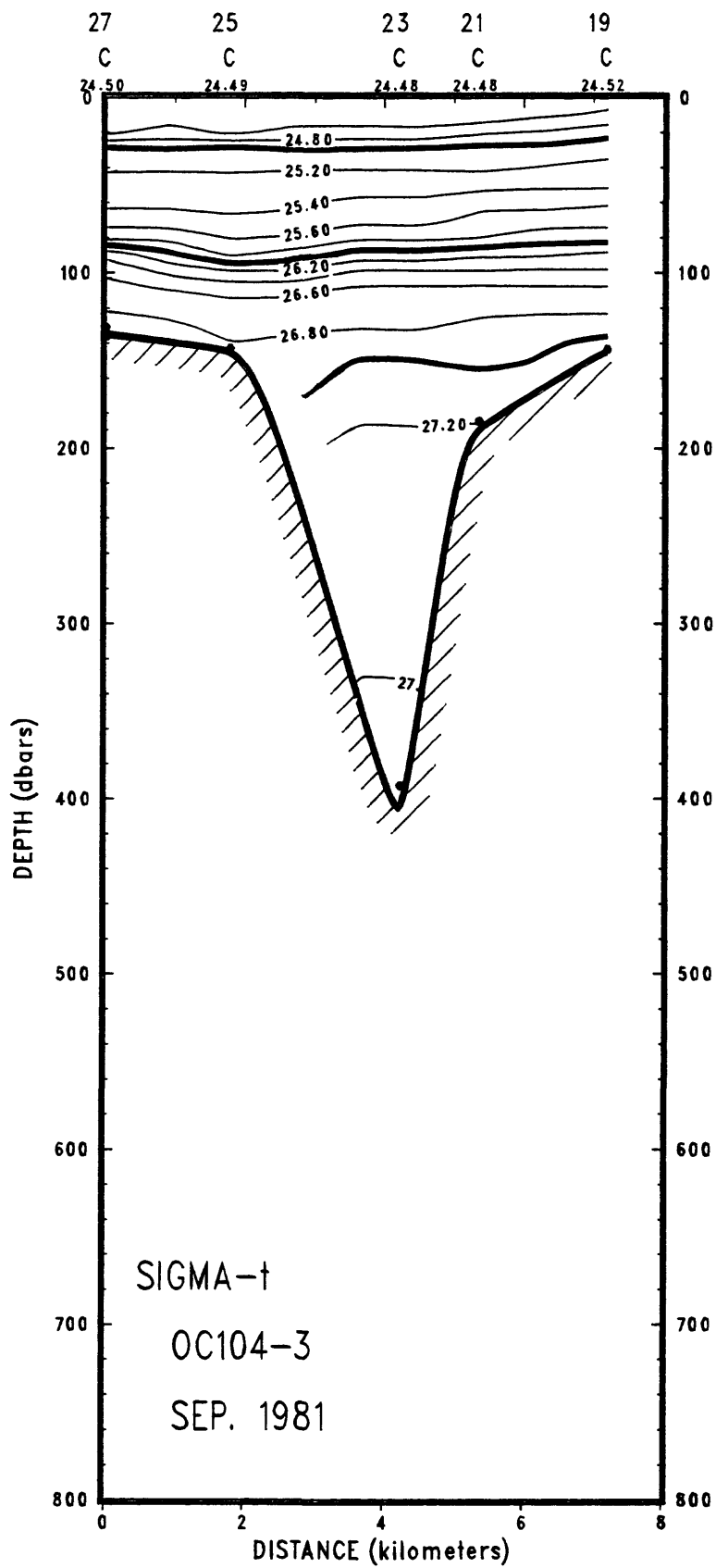


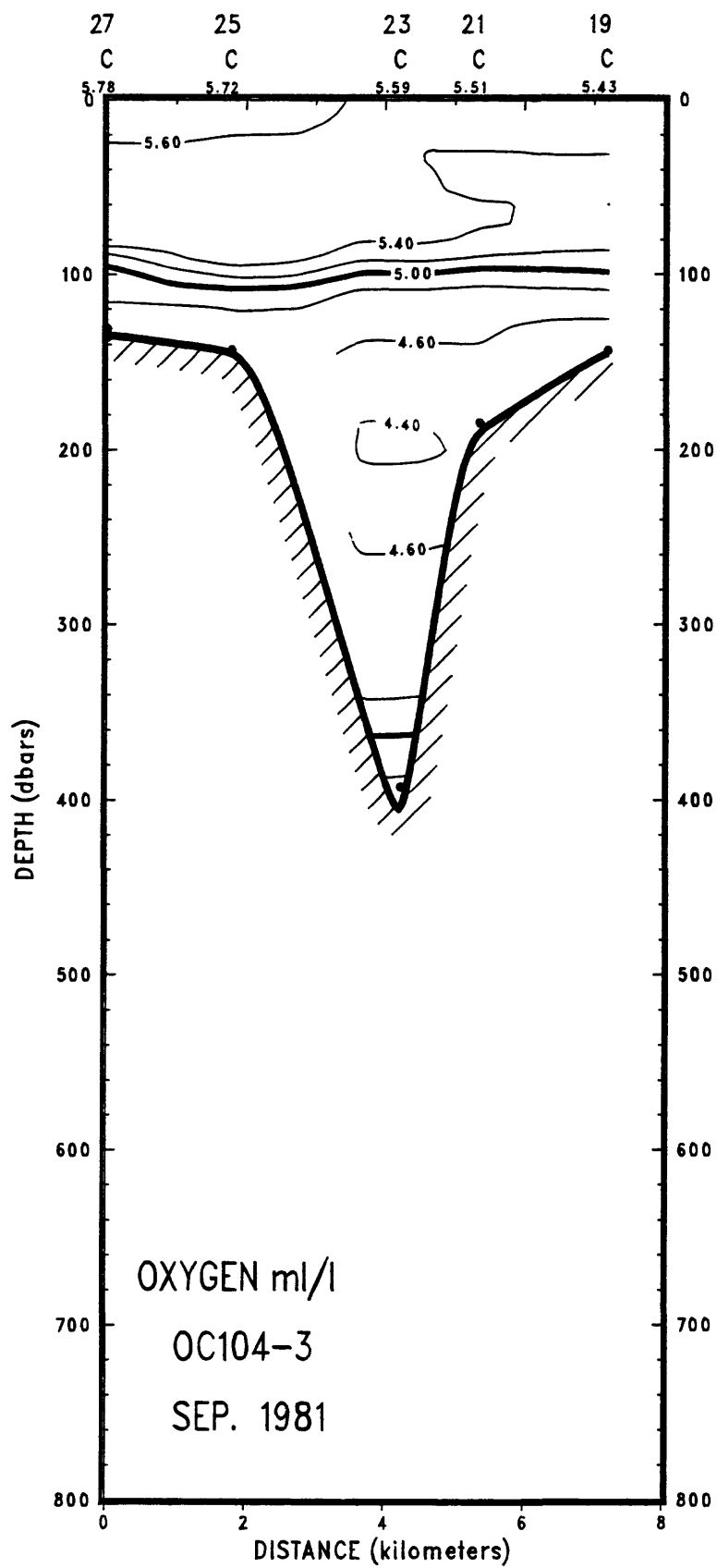


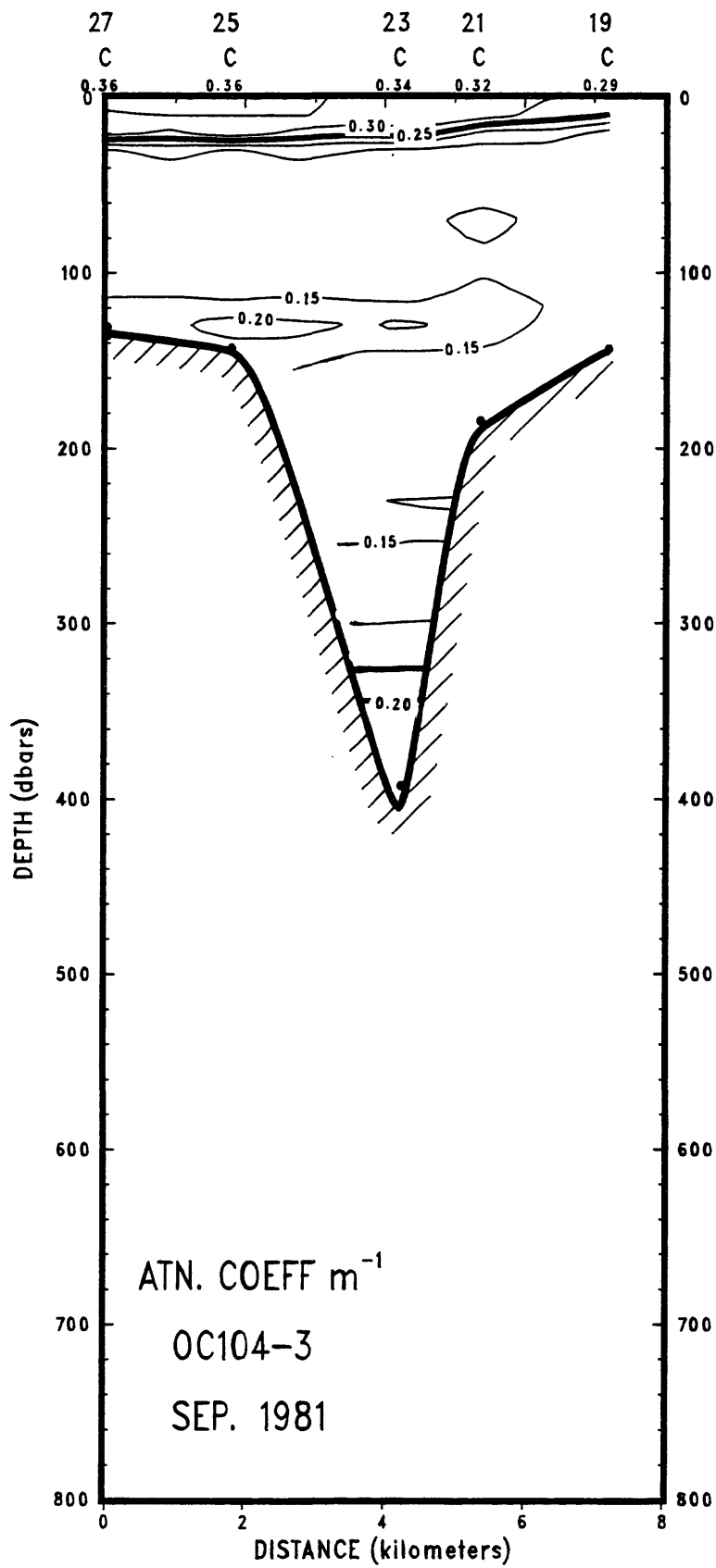


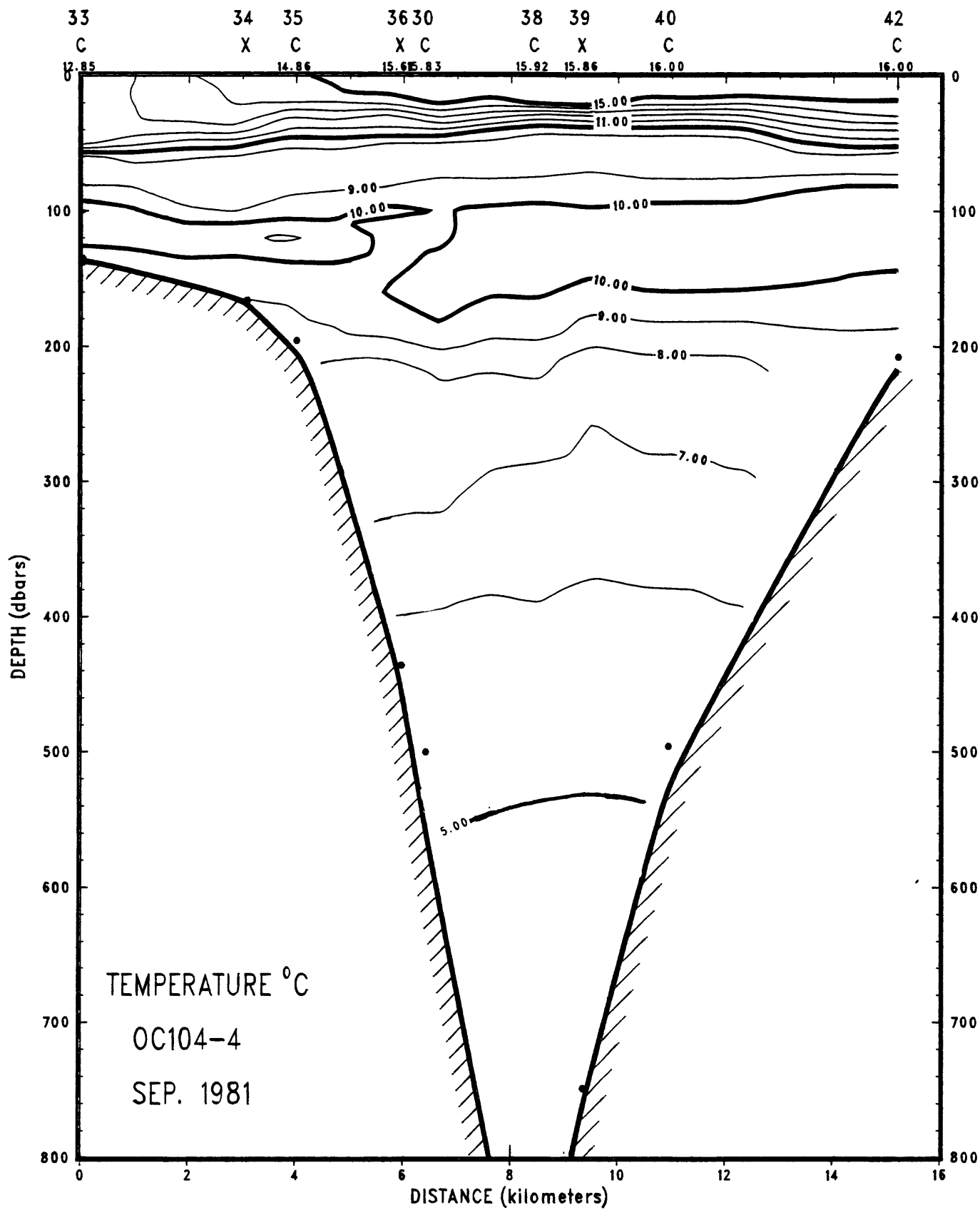


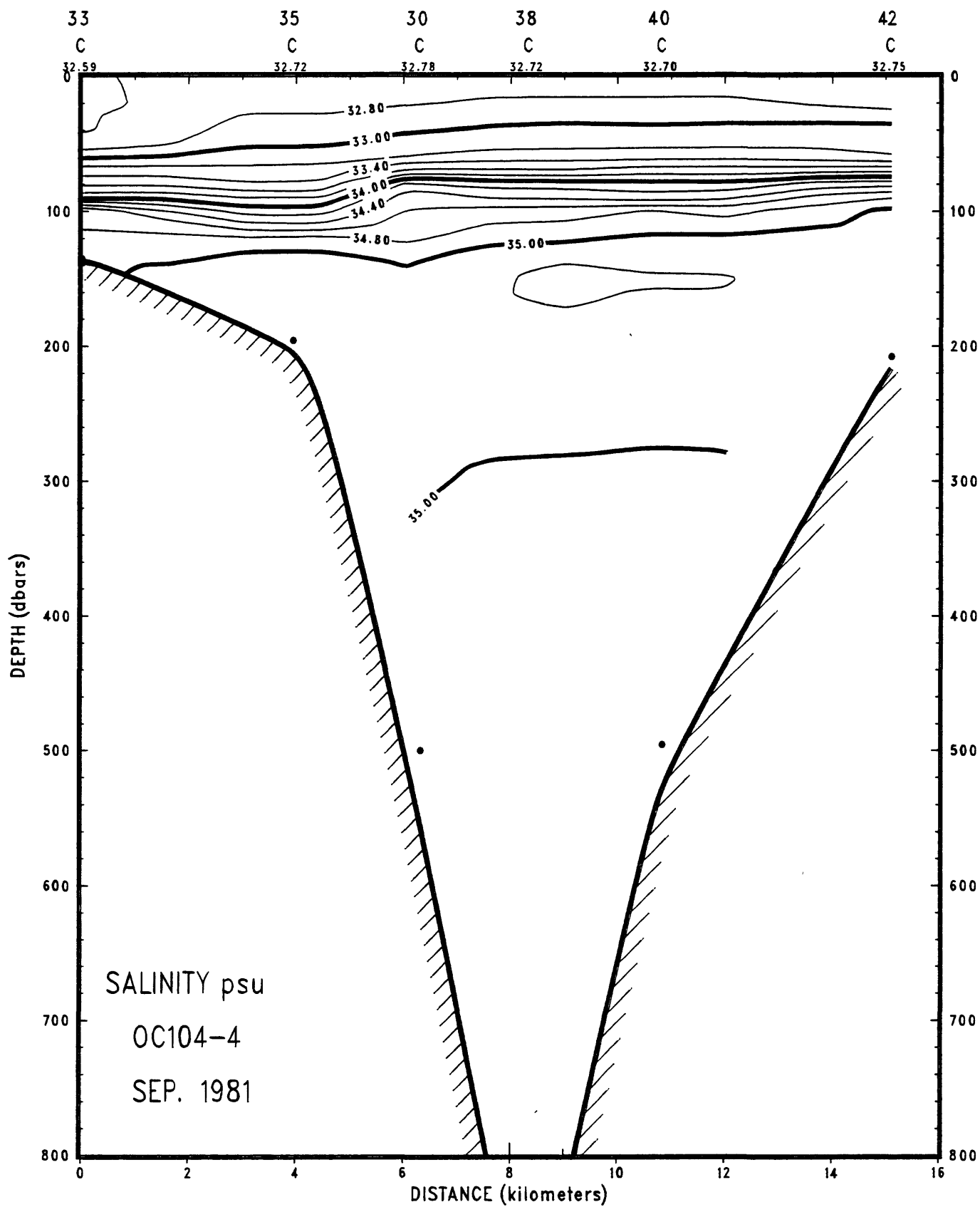


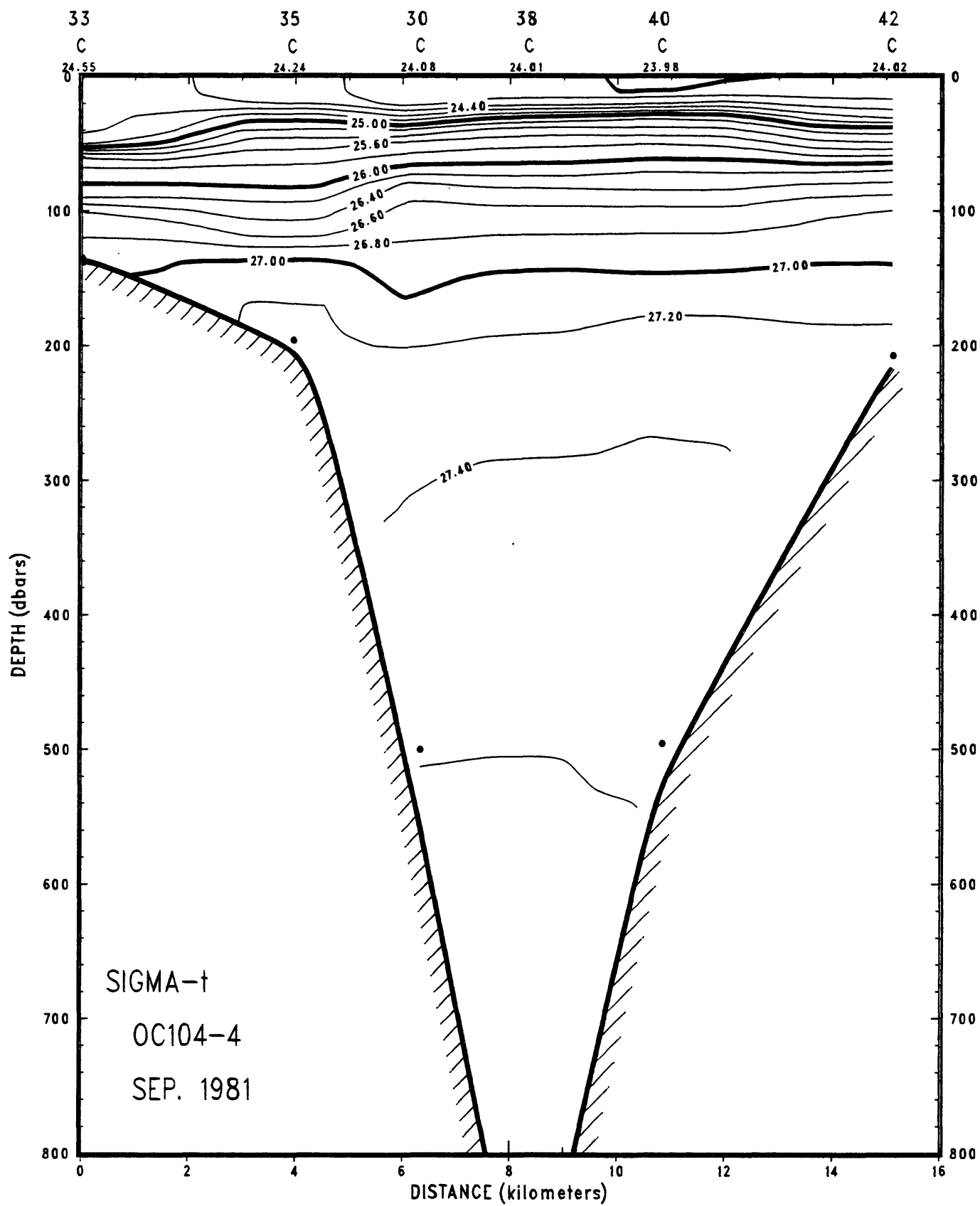


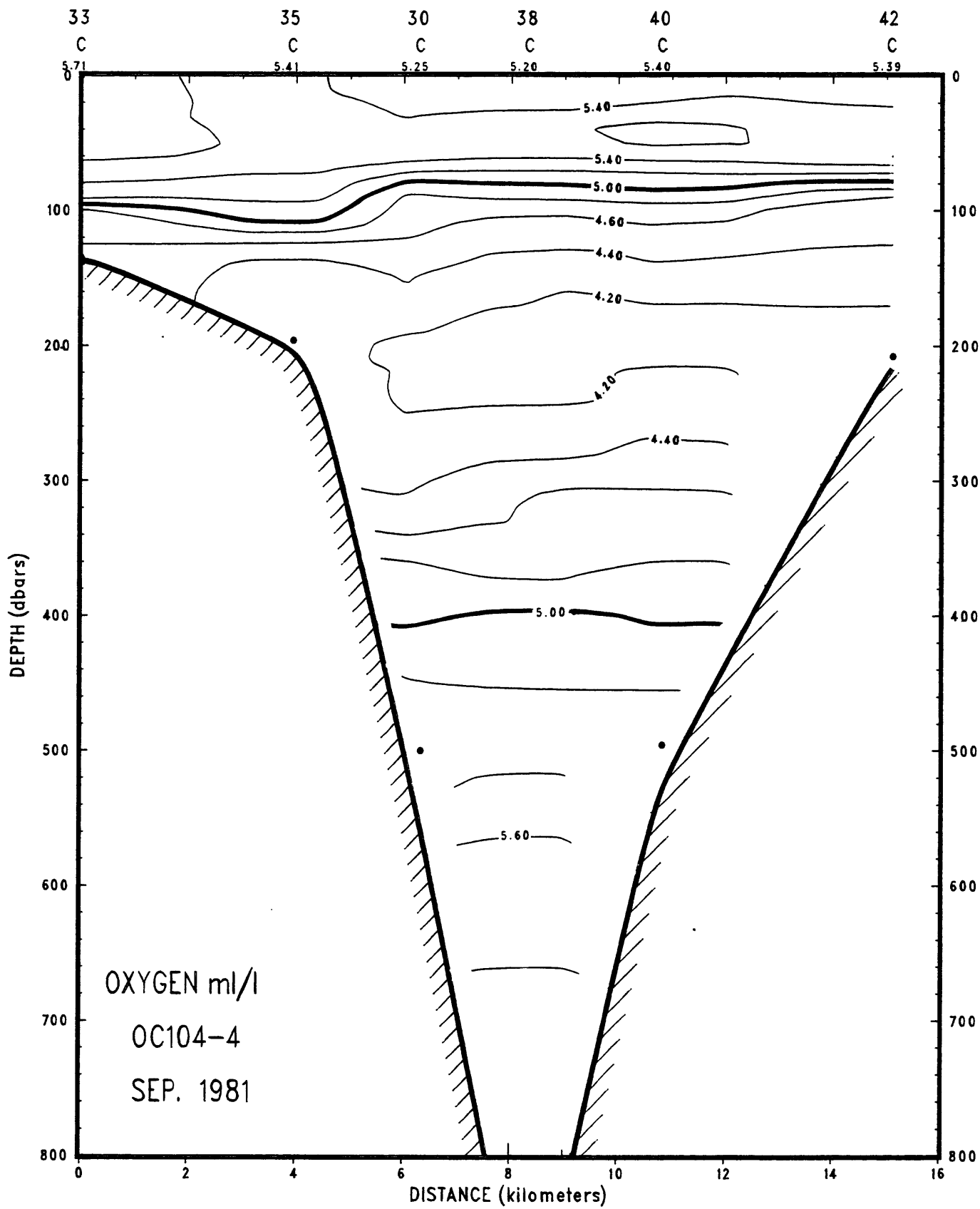


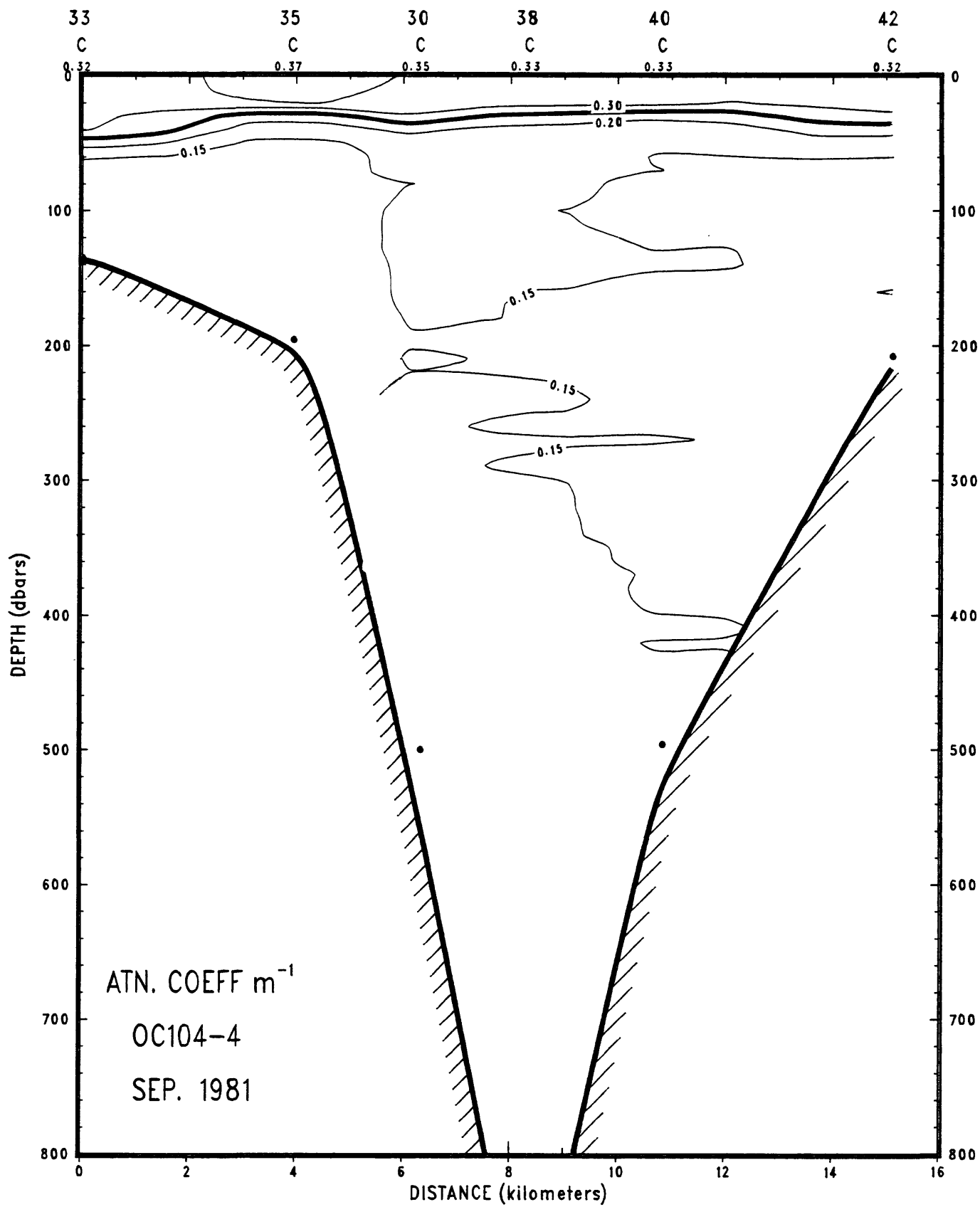


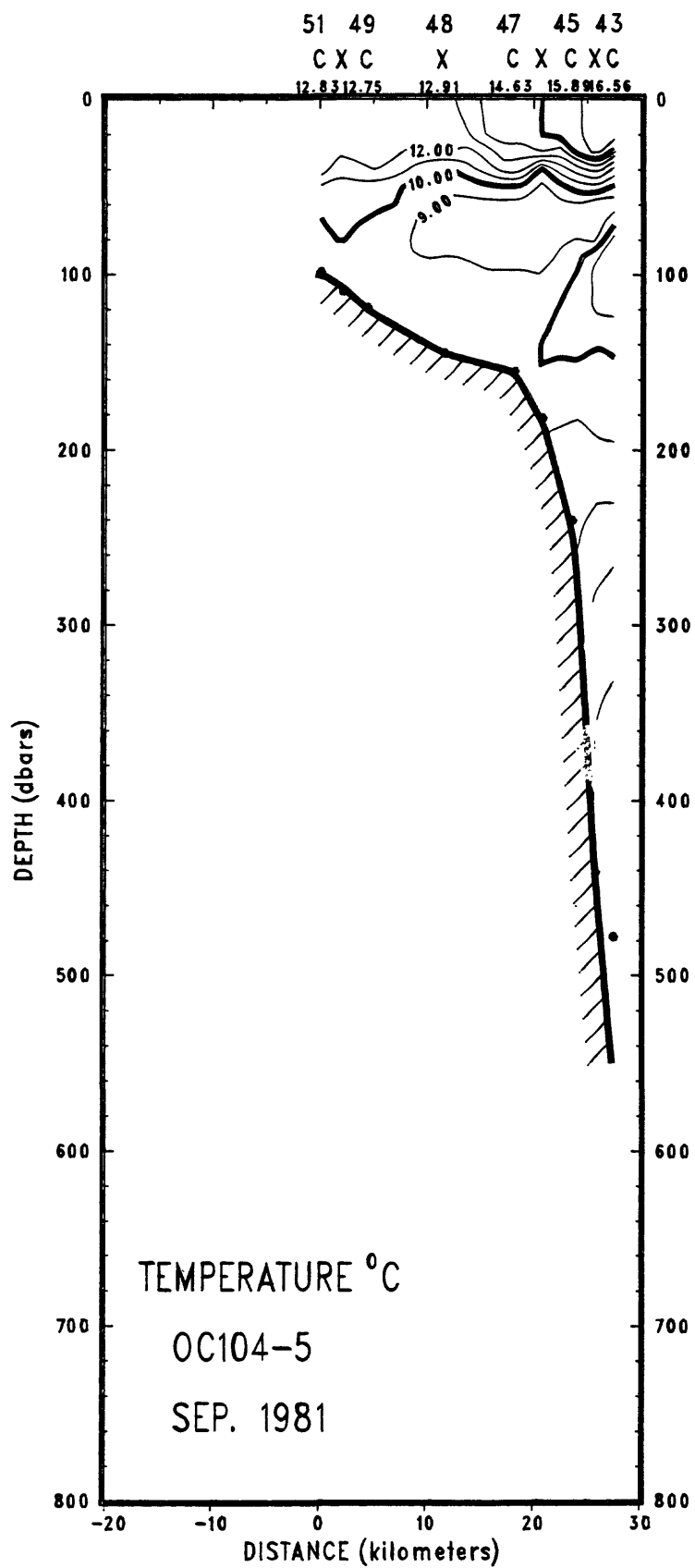


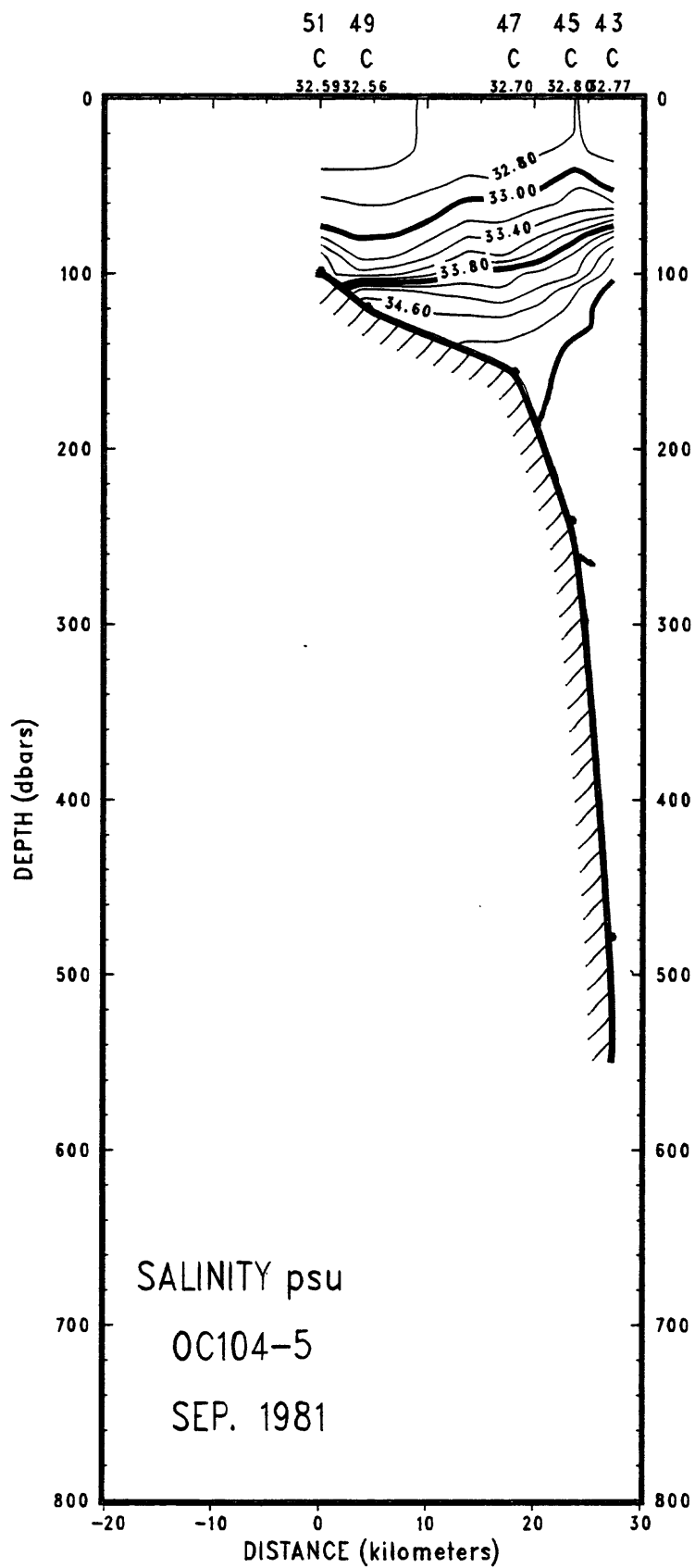


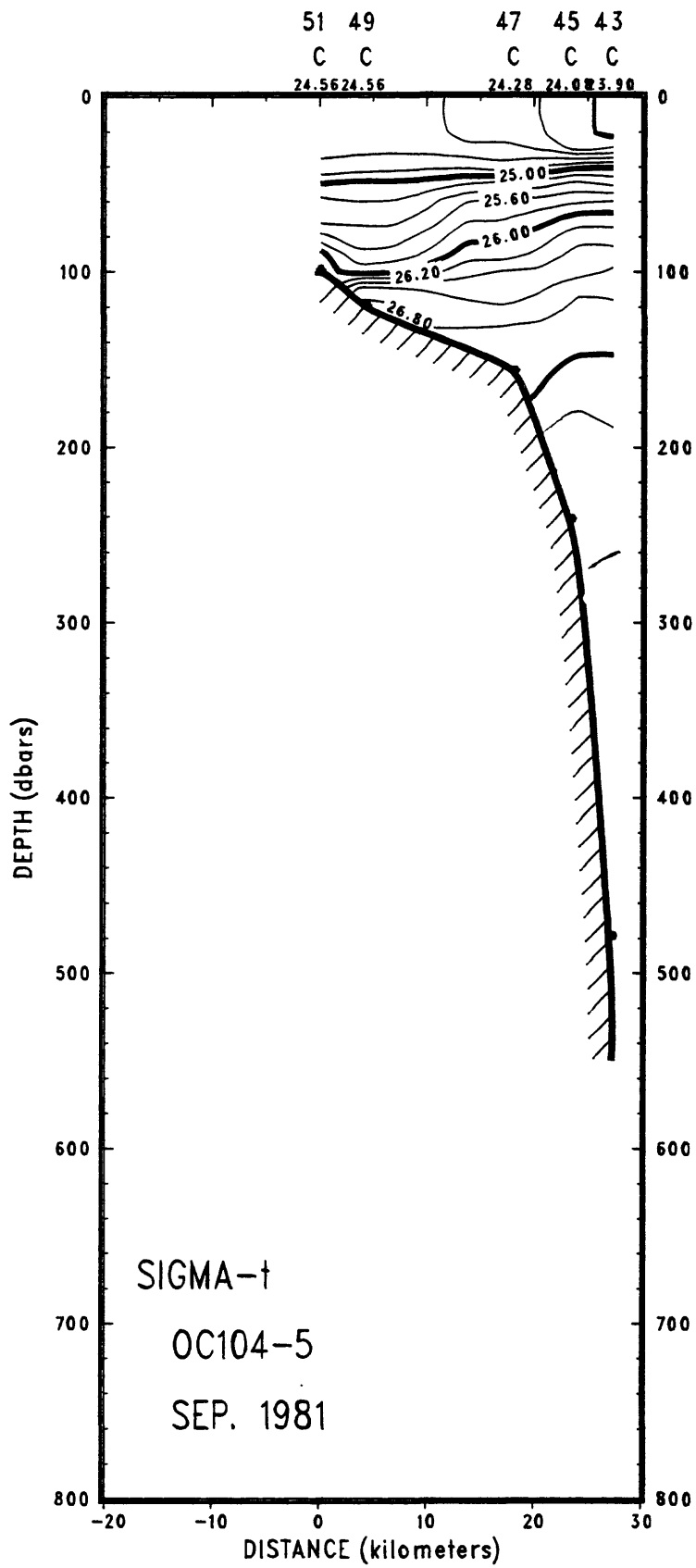


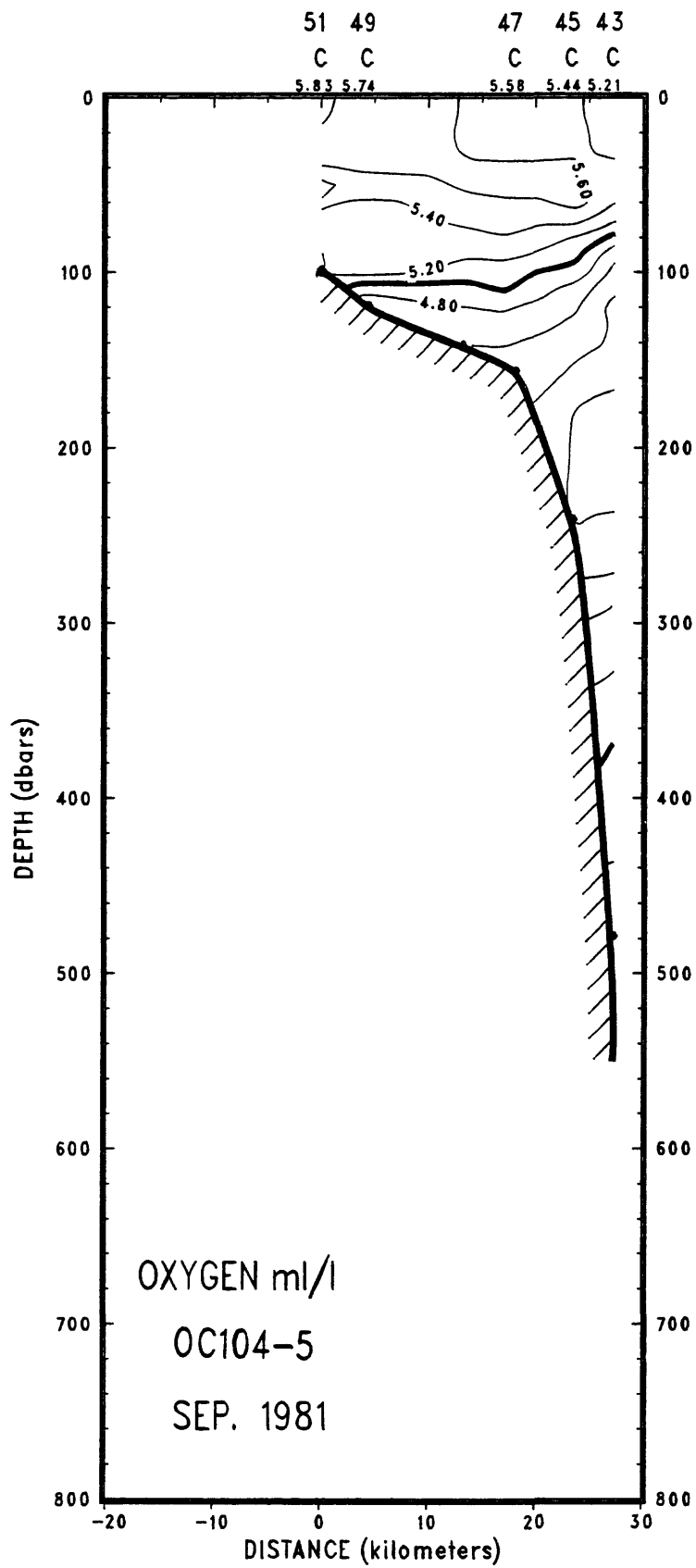


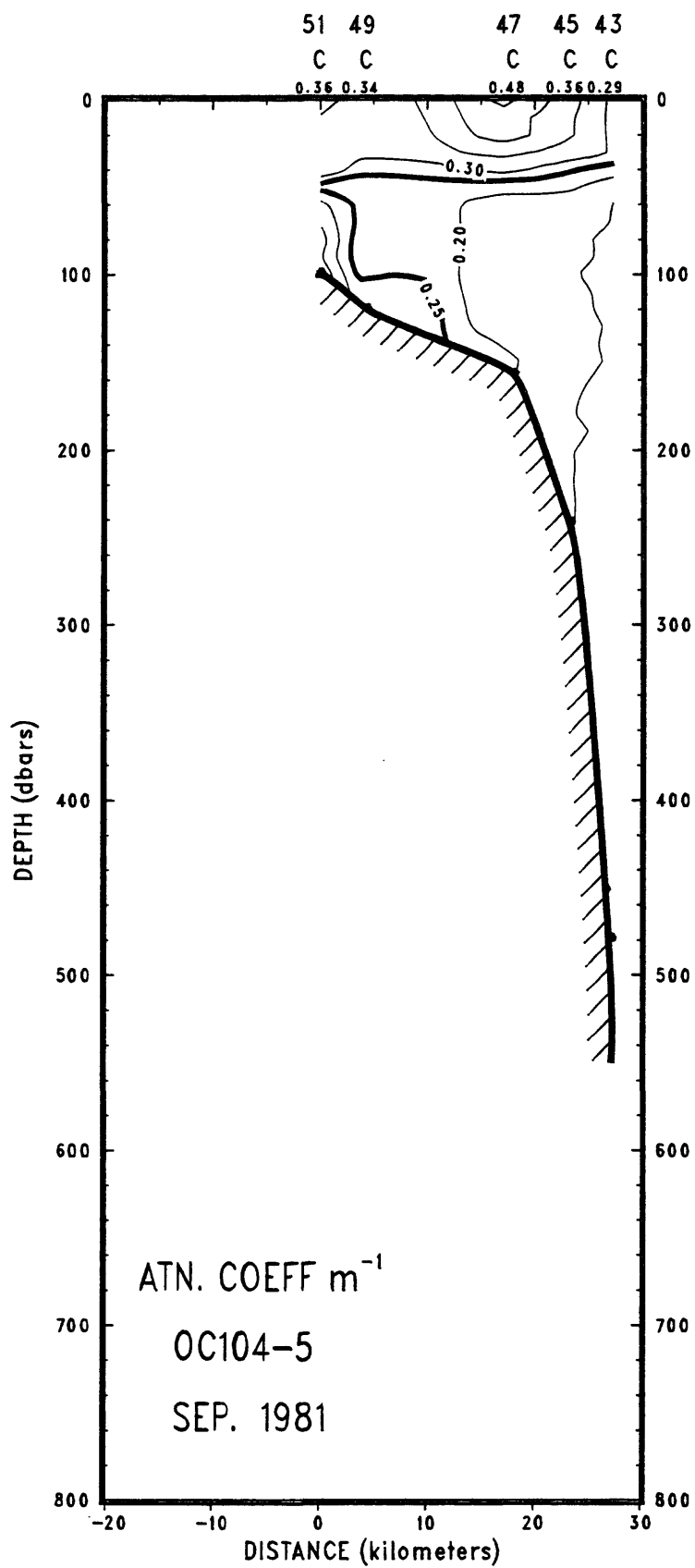


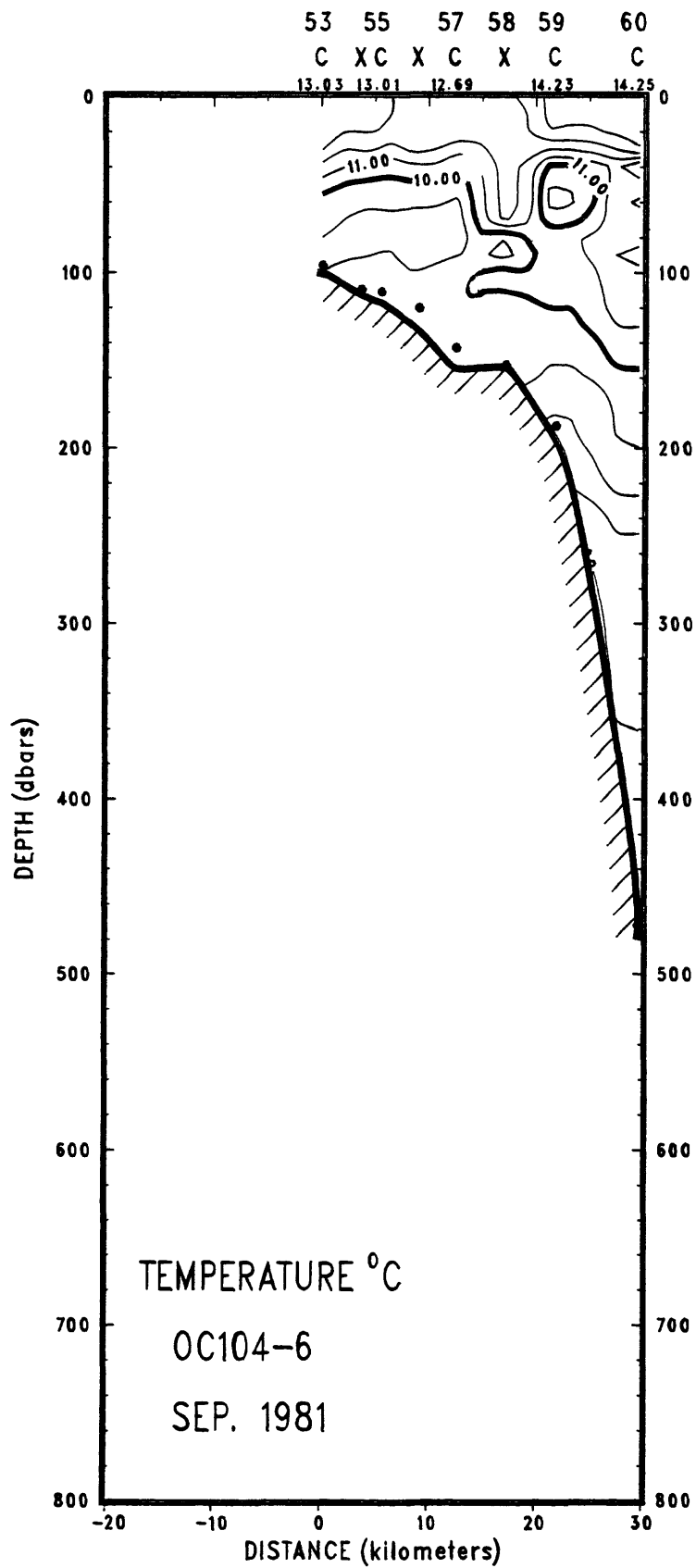


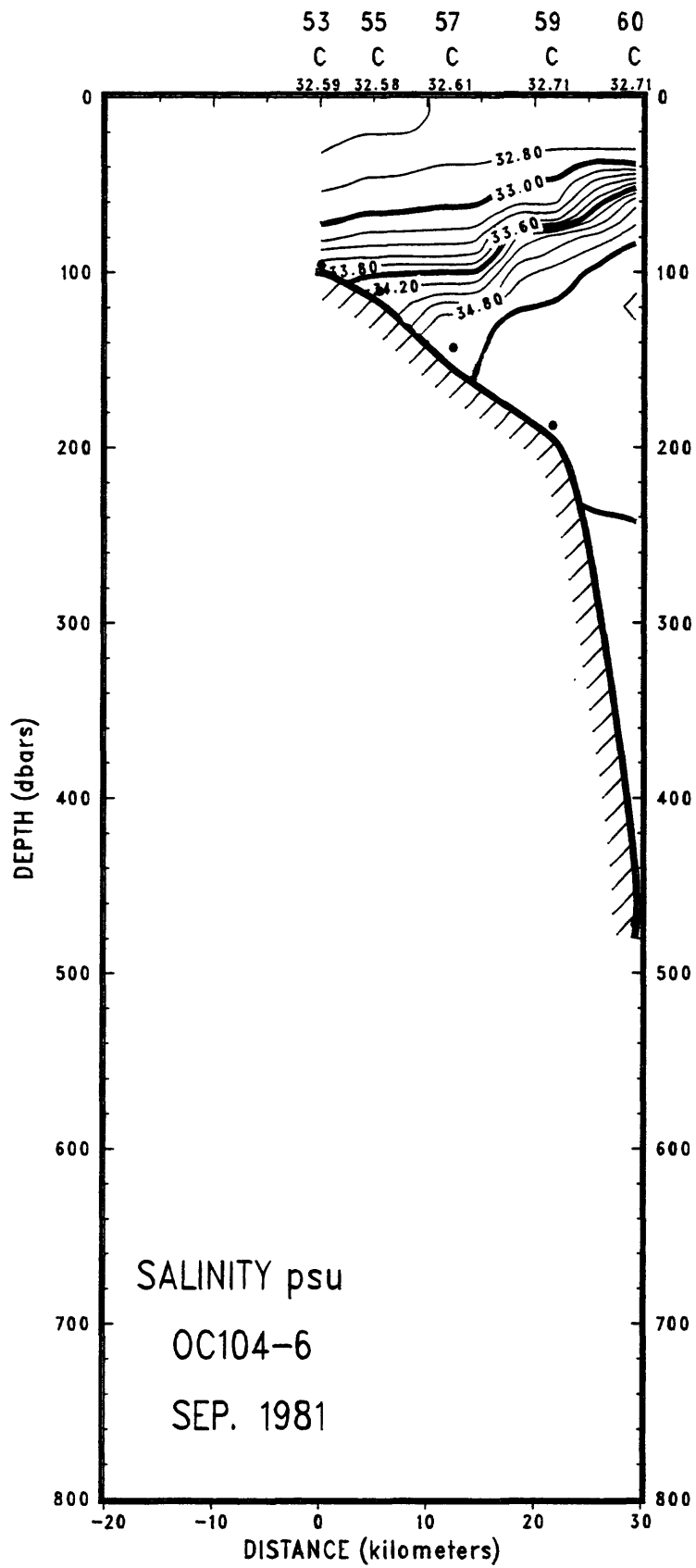


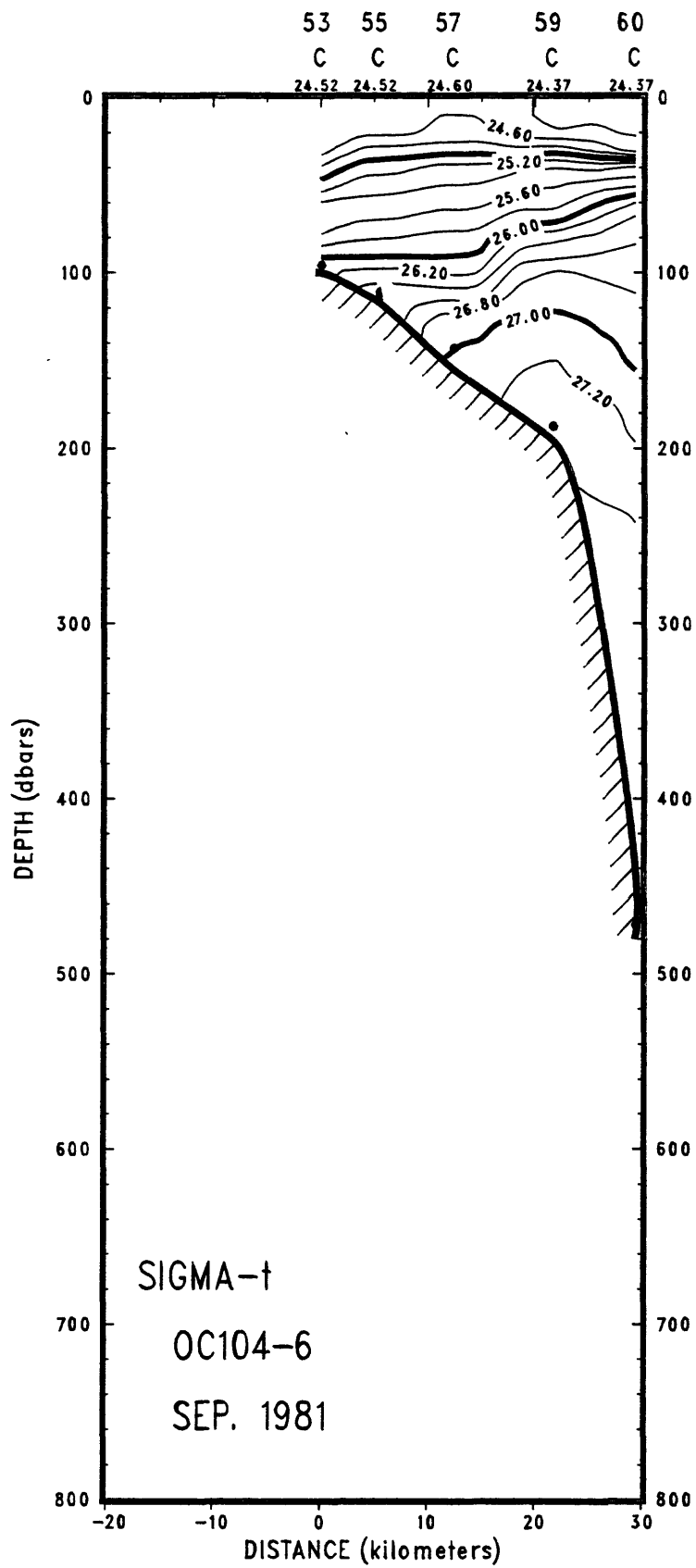


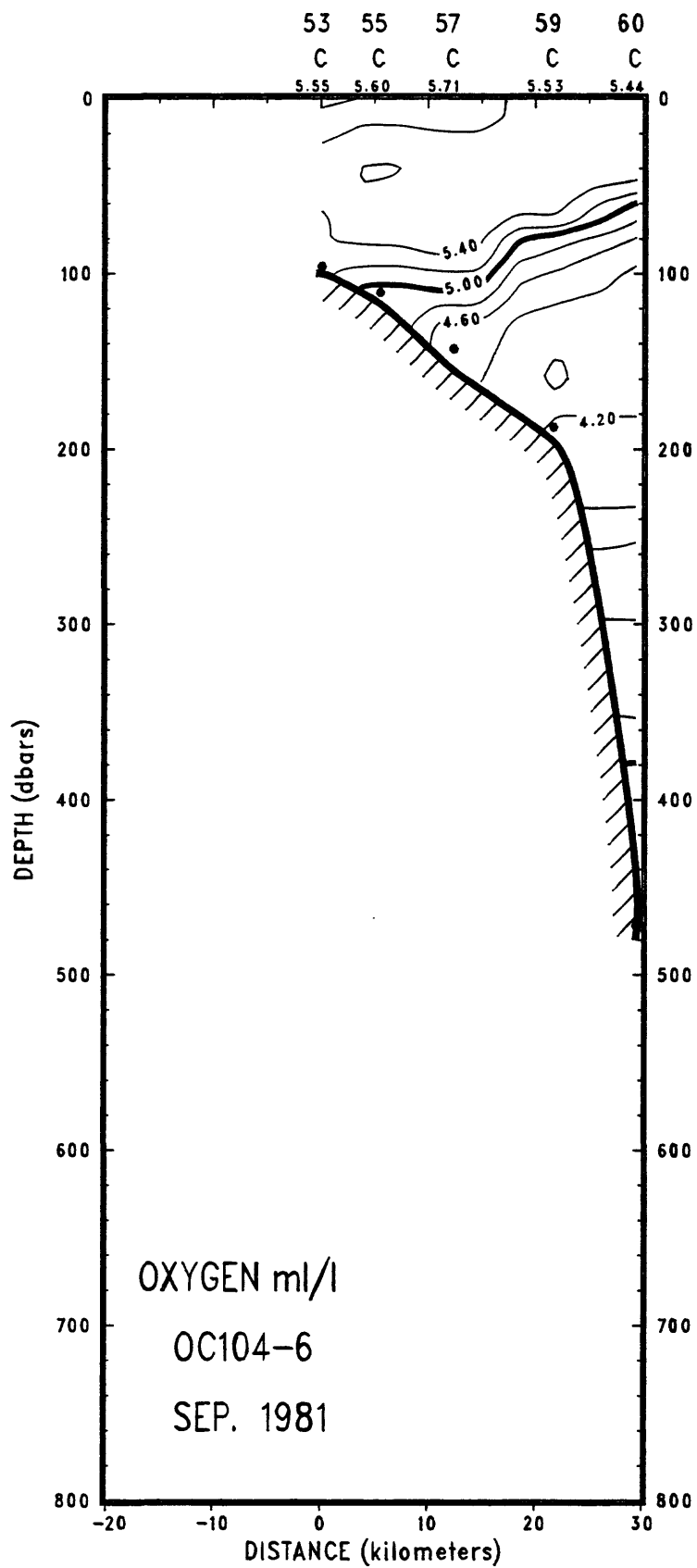


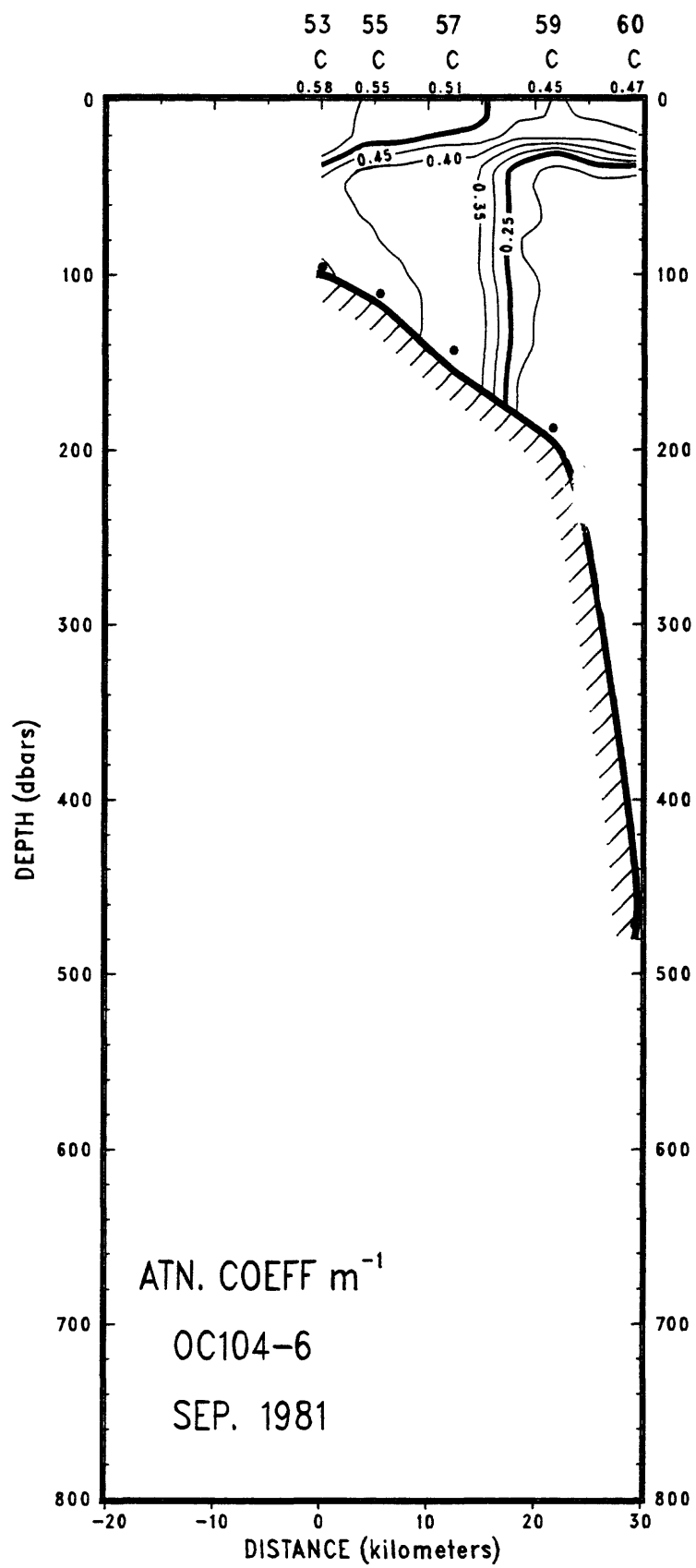


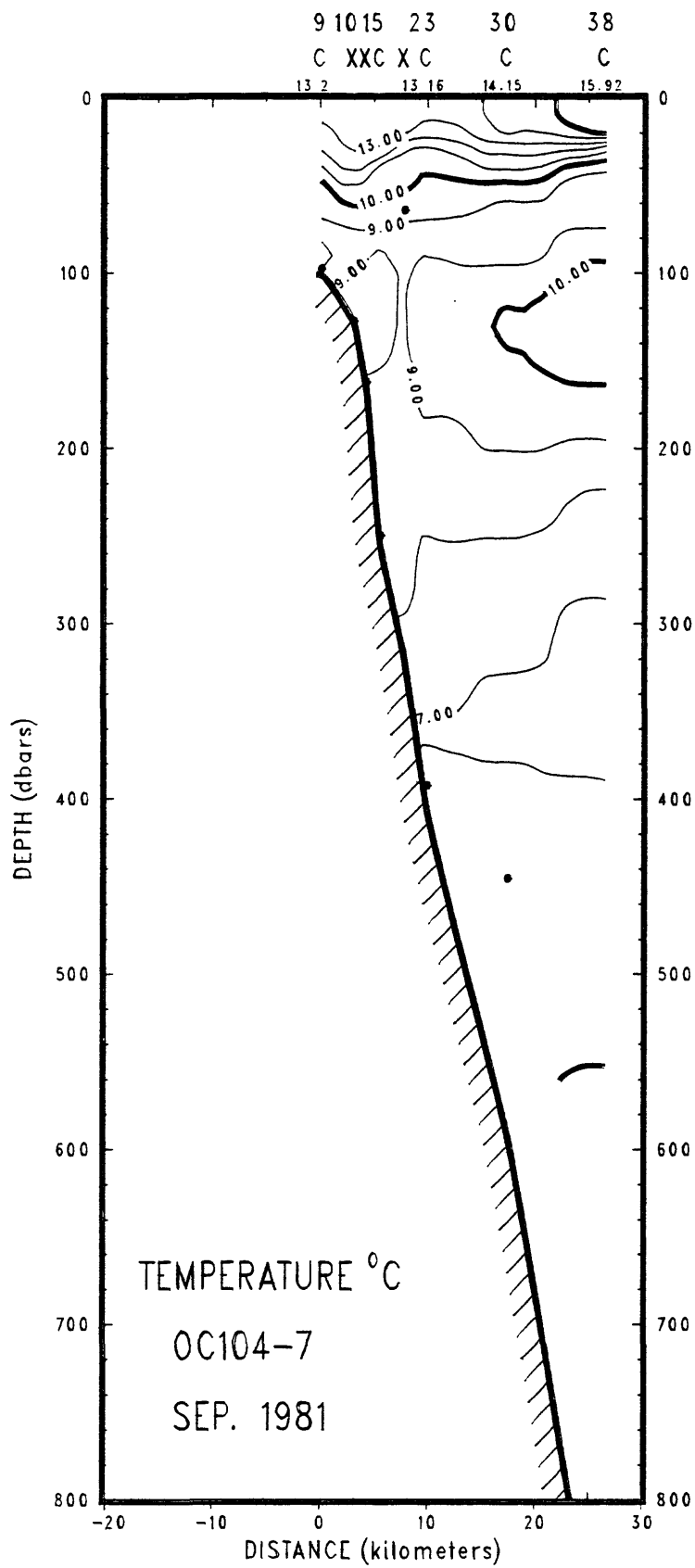


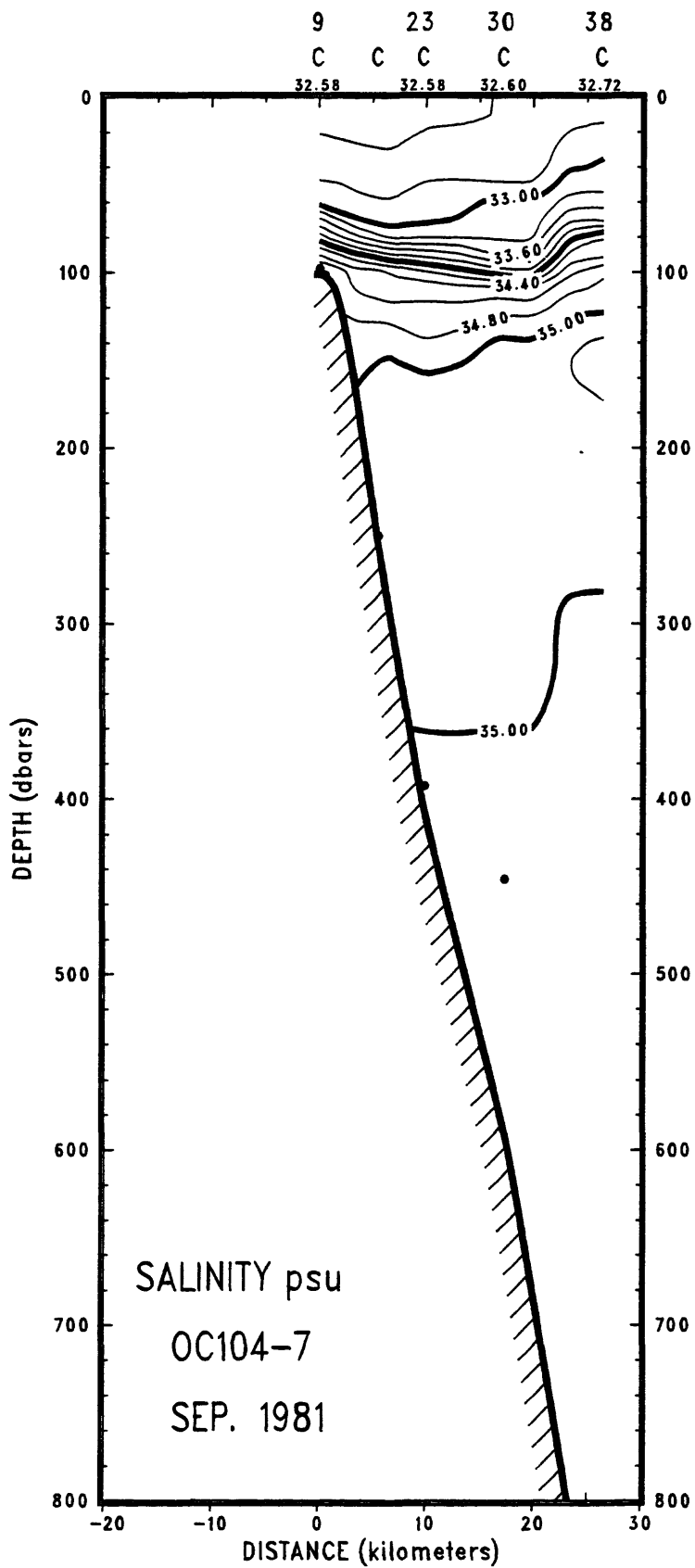


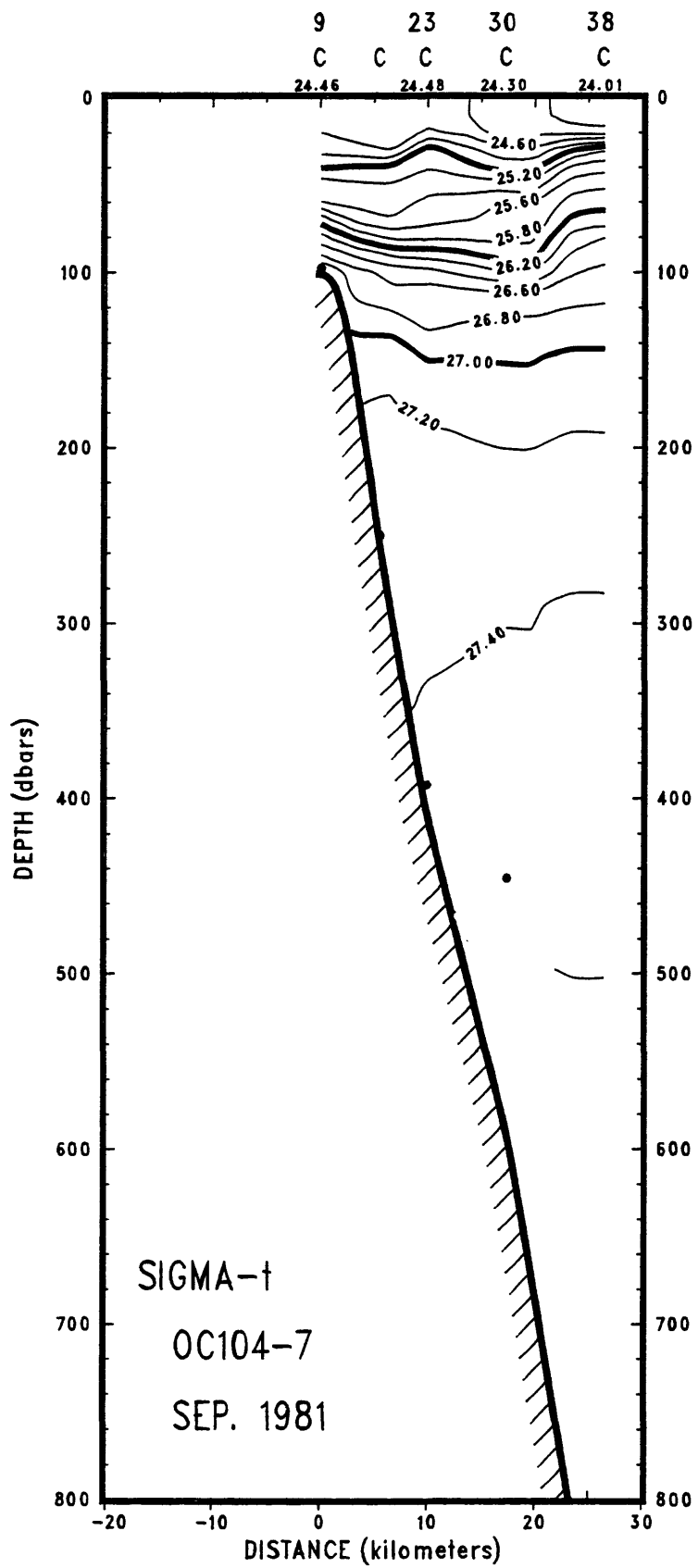


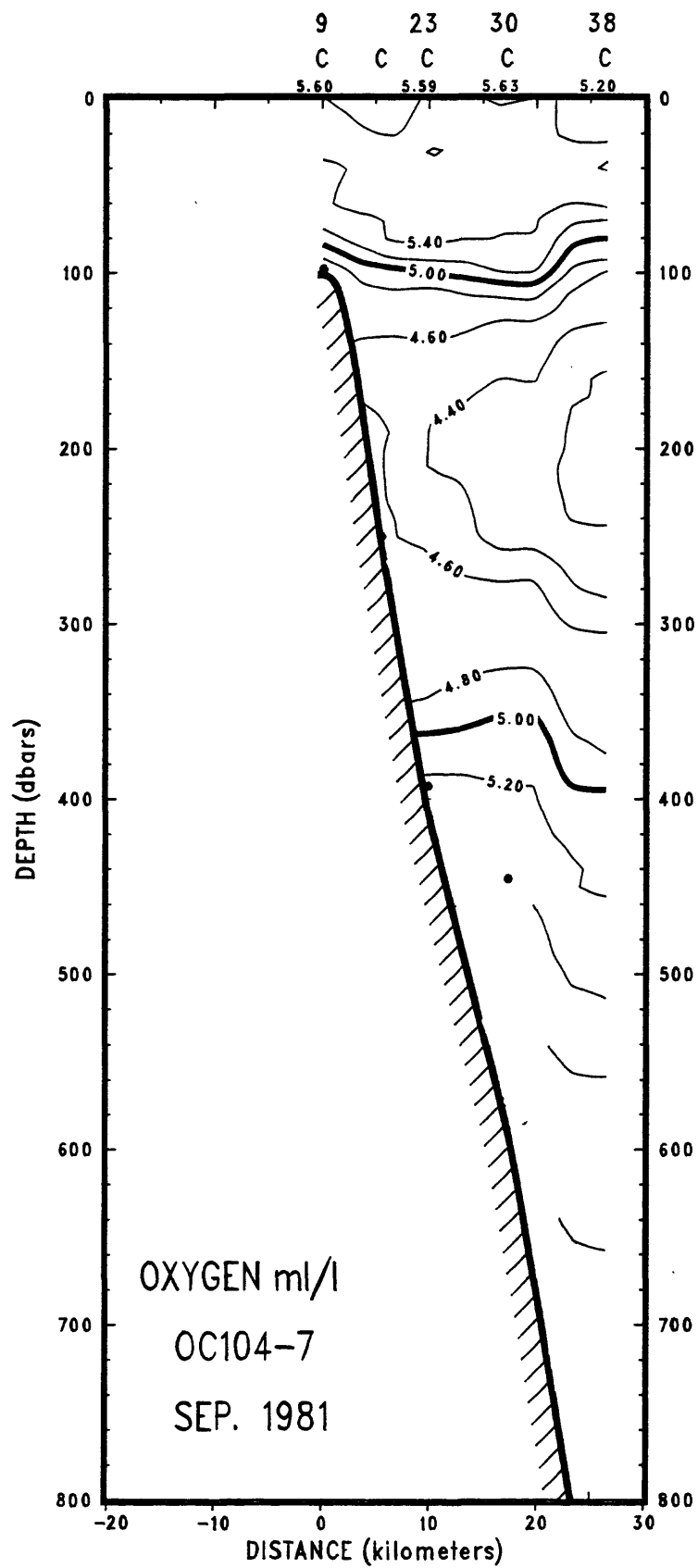


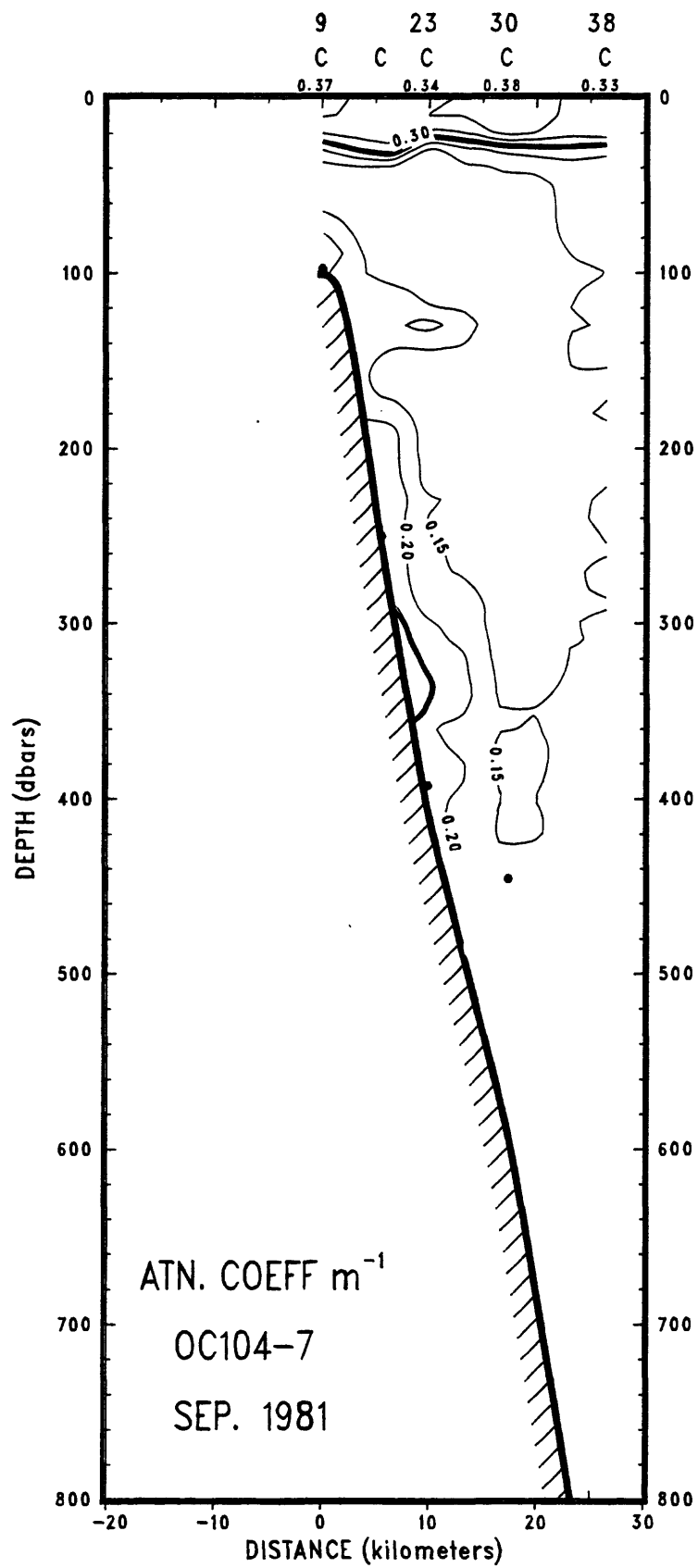






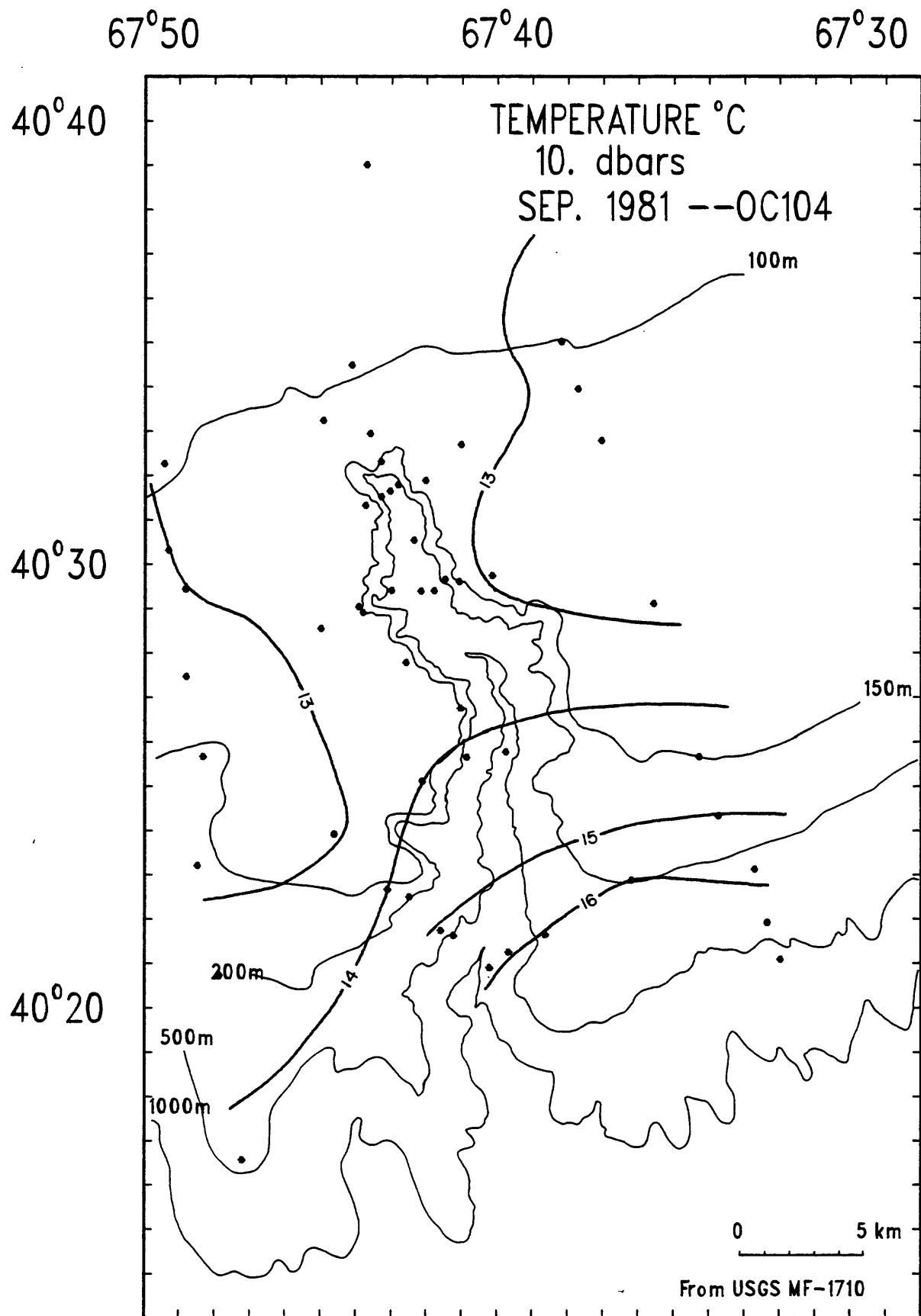


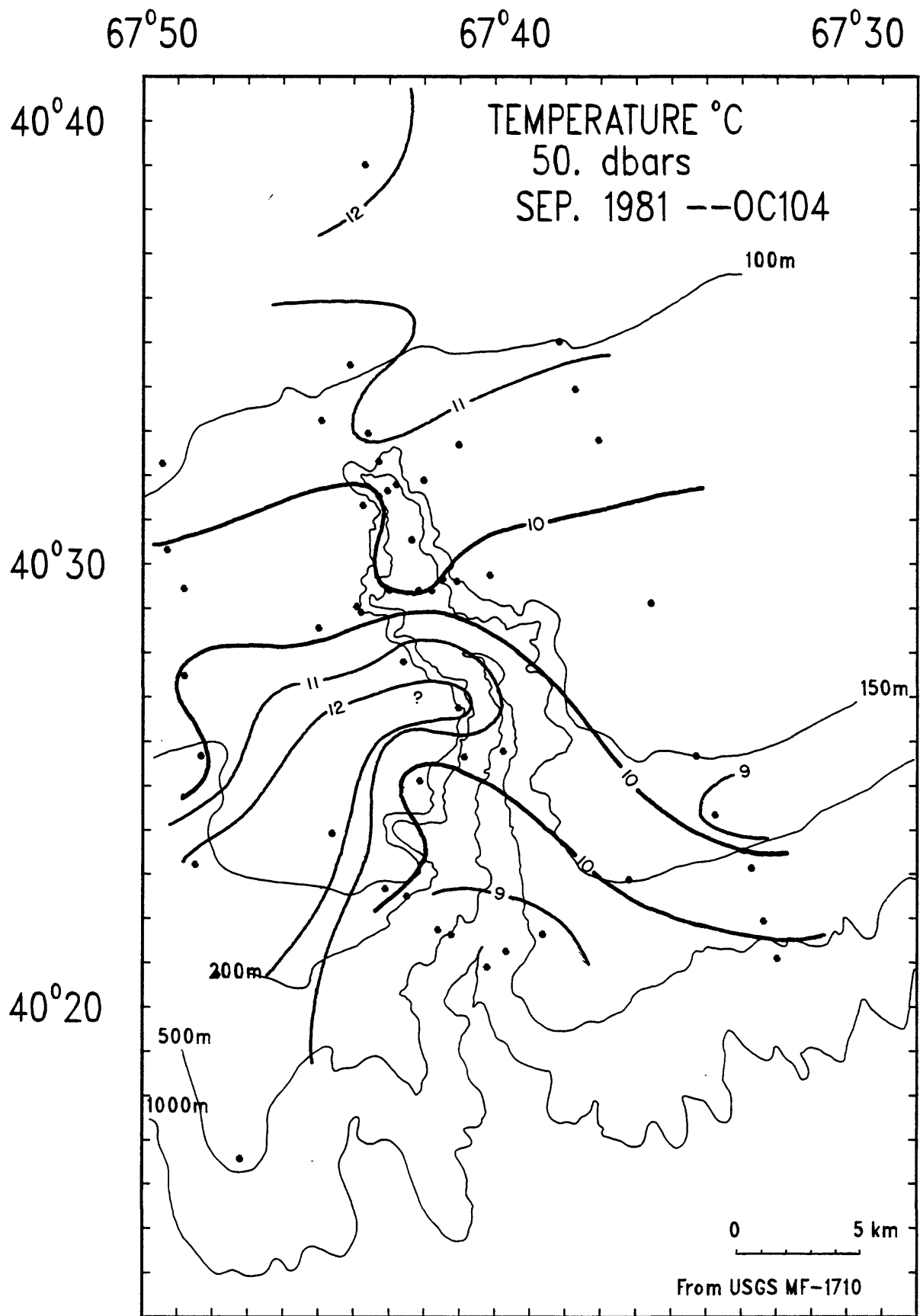


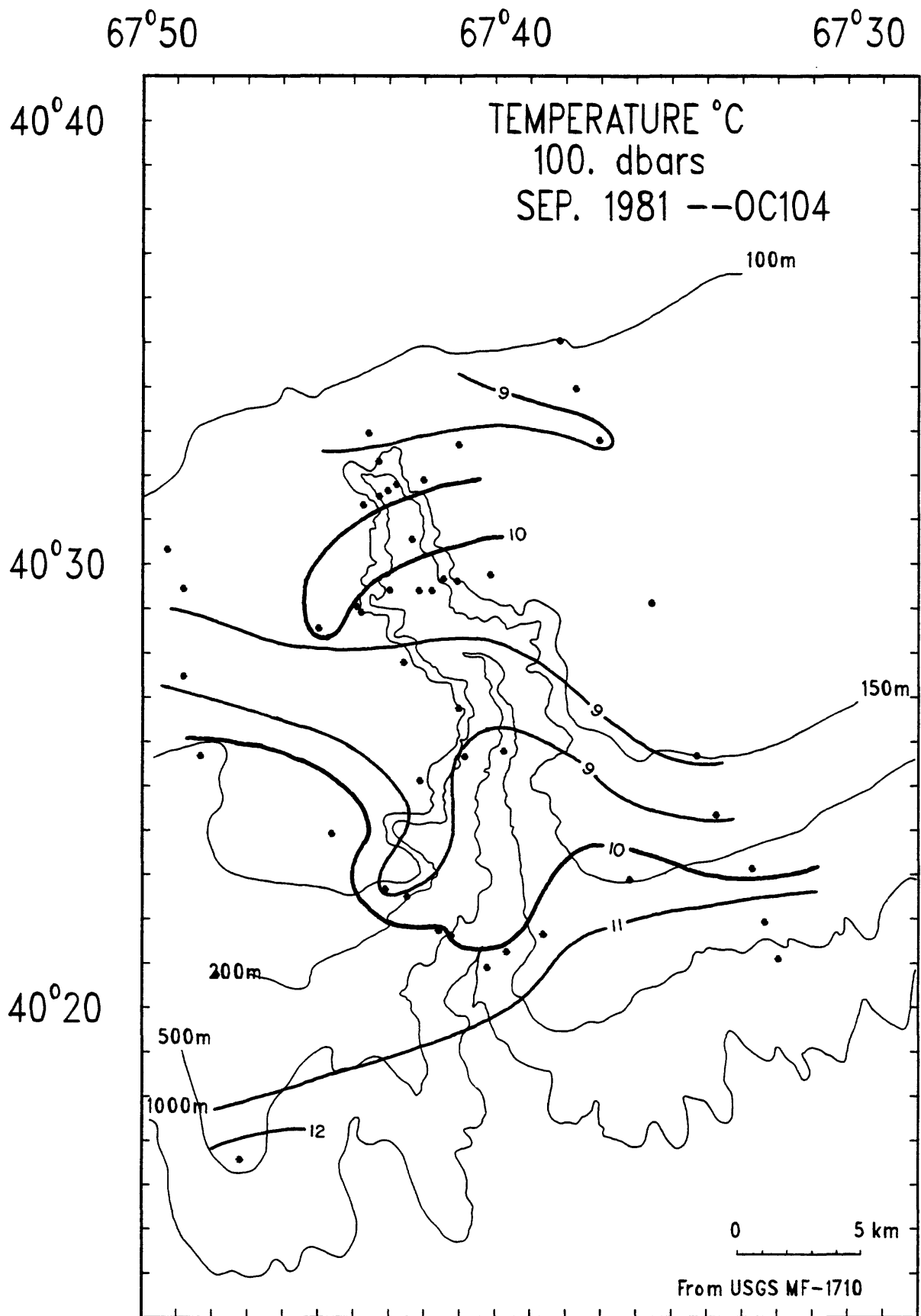


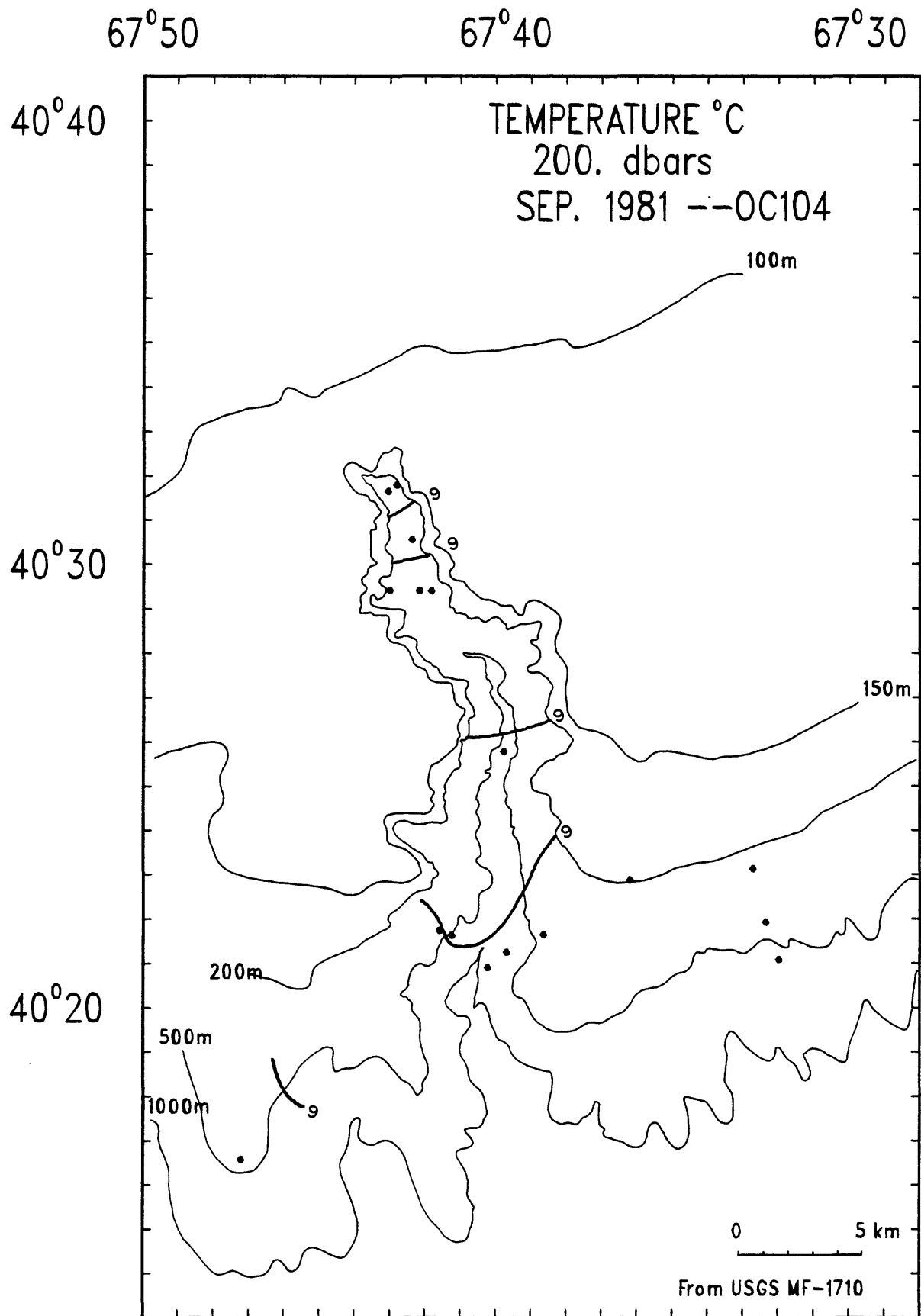
Horizontal sections

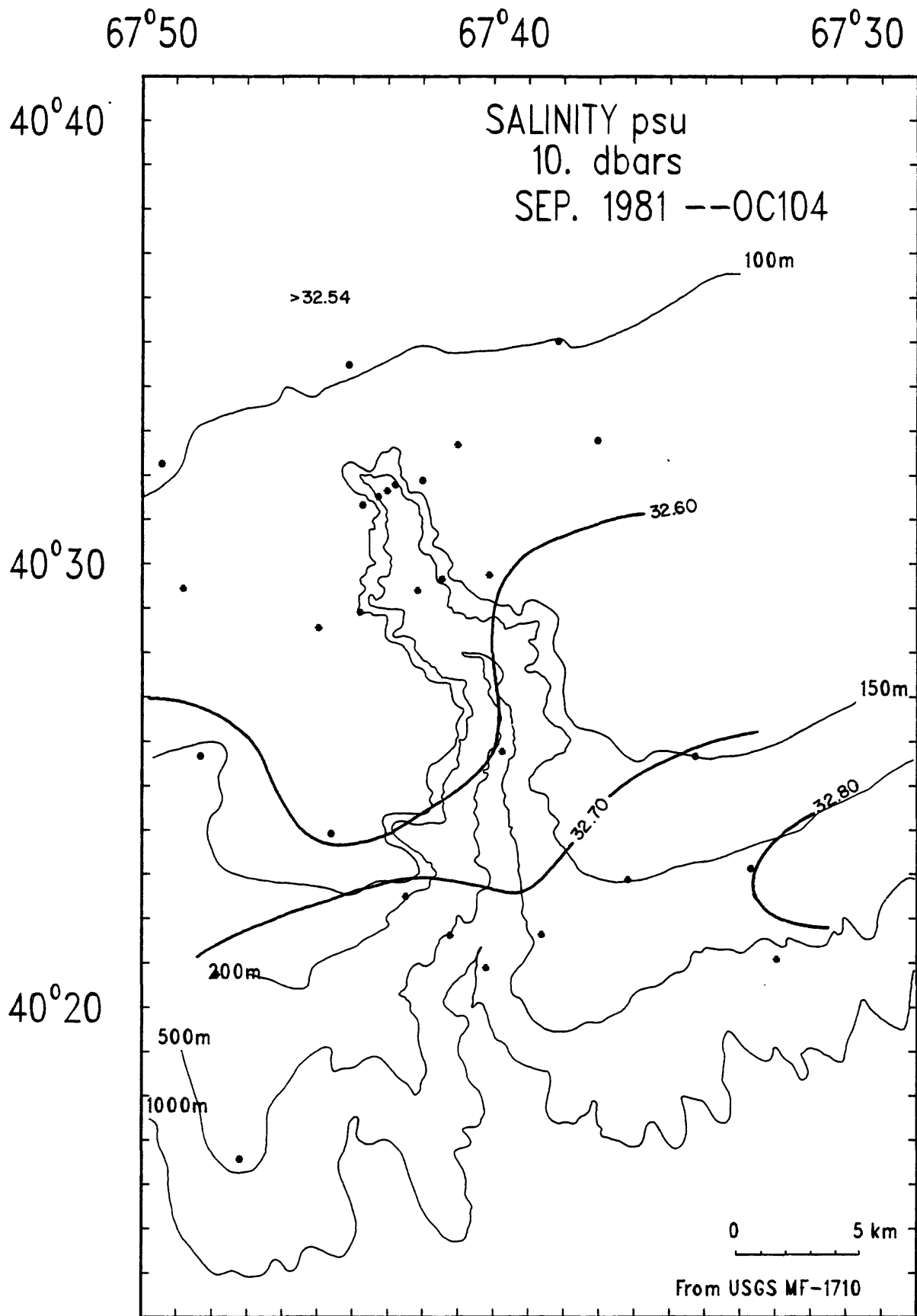
Horizontal sections were constructed on the 10-, 50-, 100-, and 200-dbar pressure surfaces for temperature, salinity, density, oxygen and light attenuation. Dots indicate the location of stations that were used in contouring the section. All sections were contoured by hand due to the sparse data.

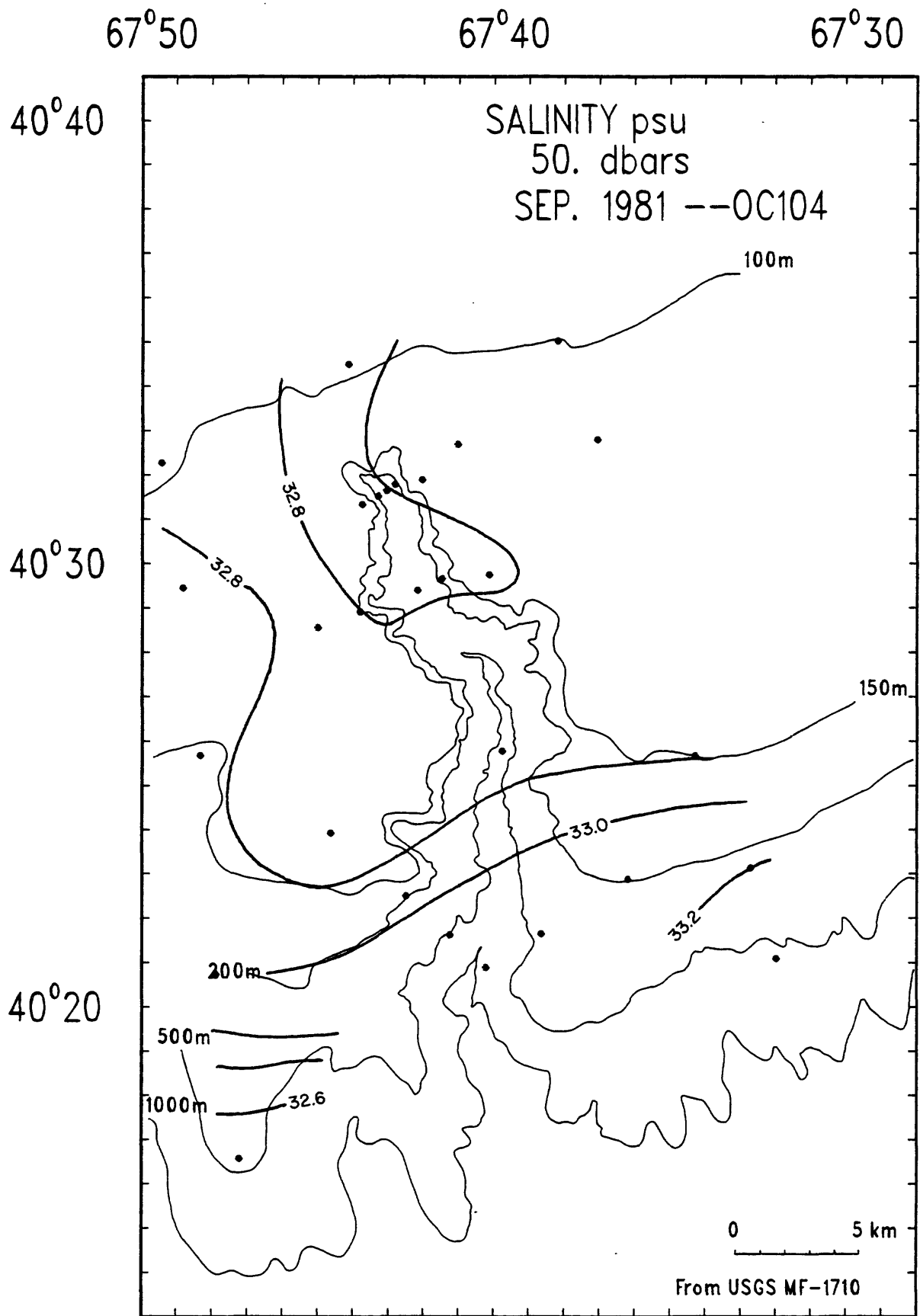


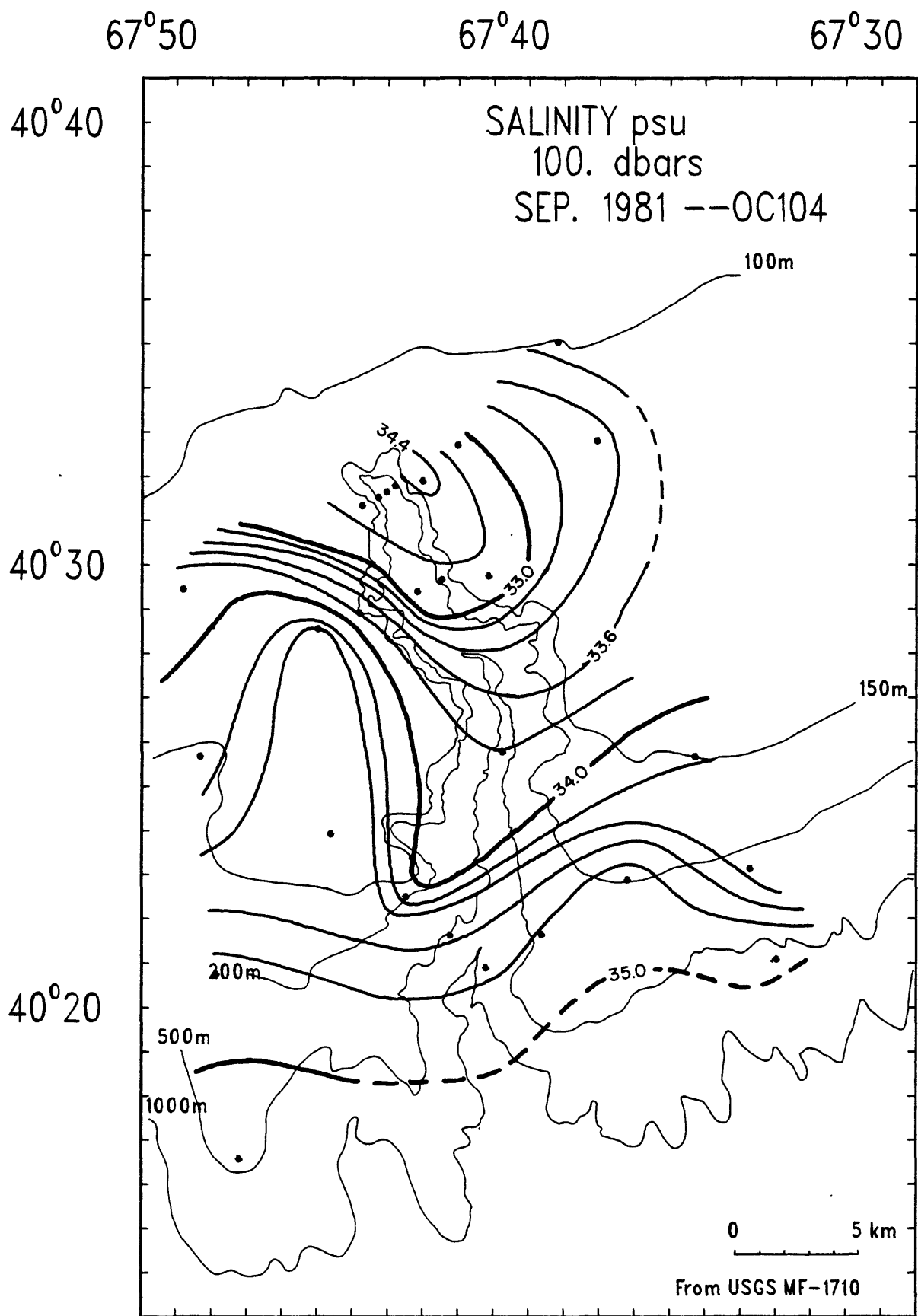


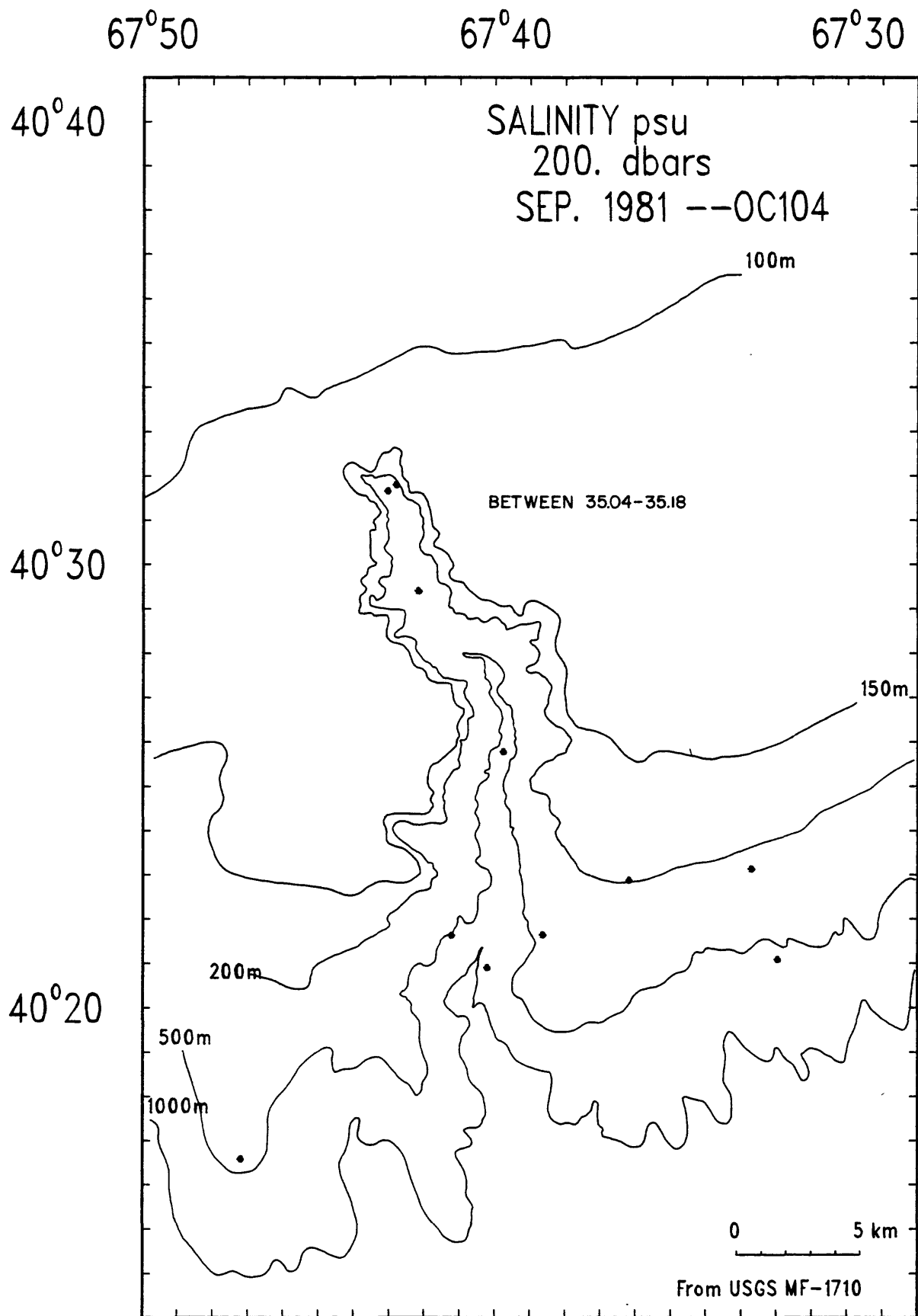


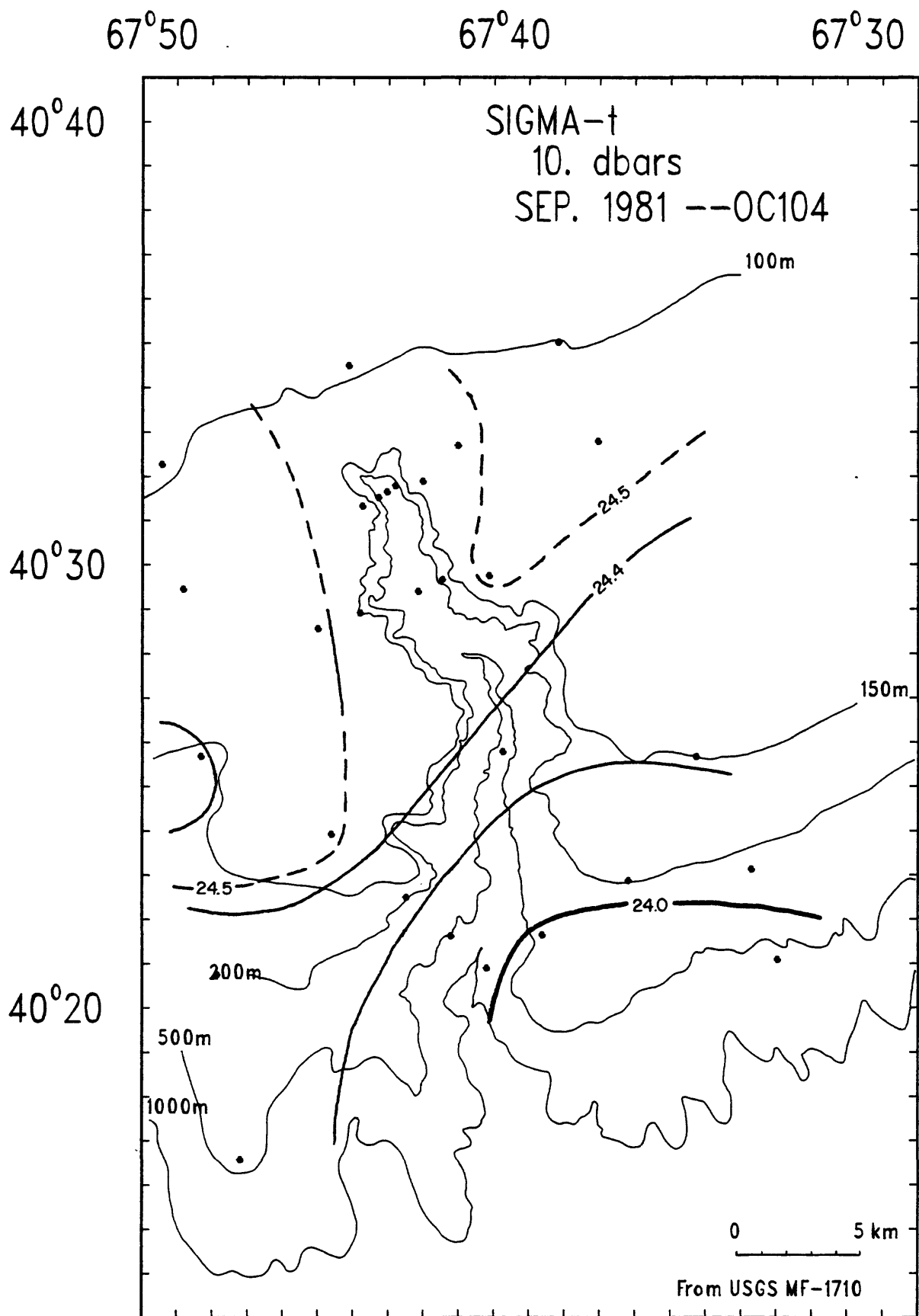


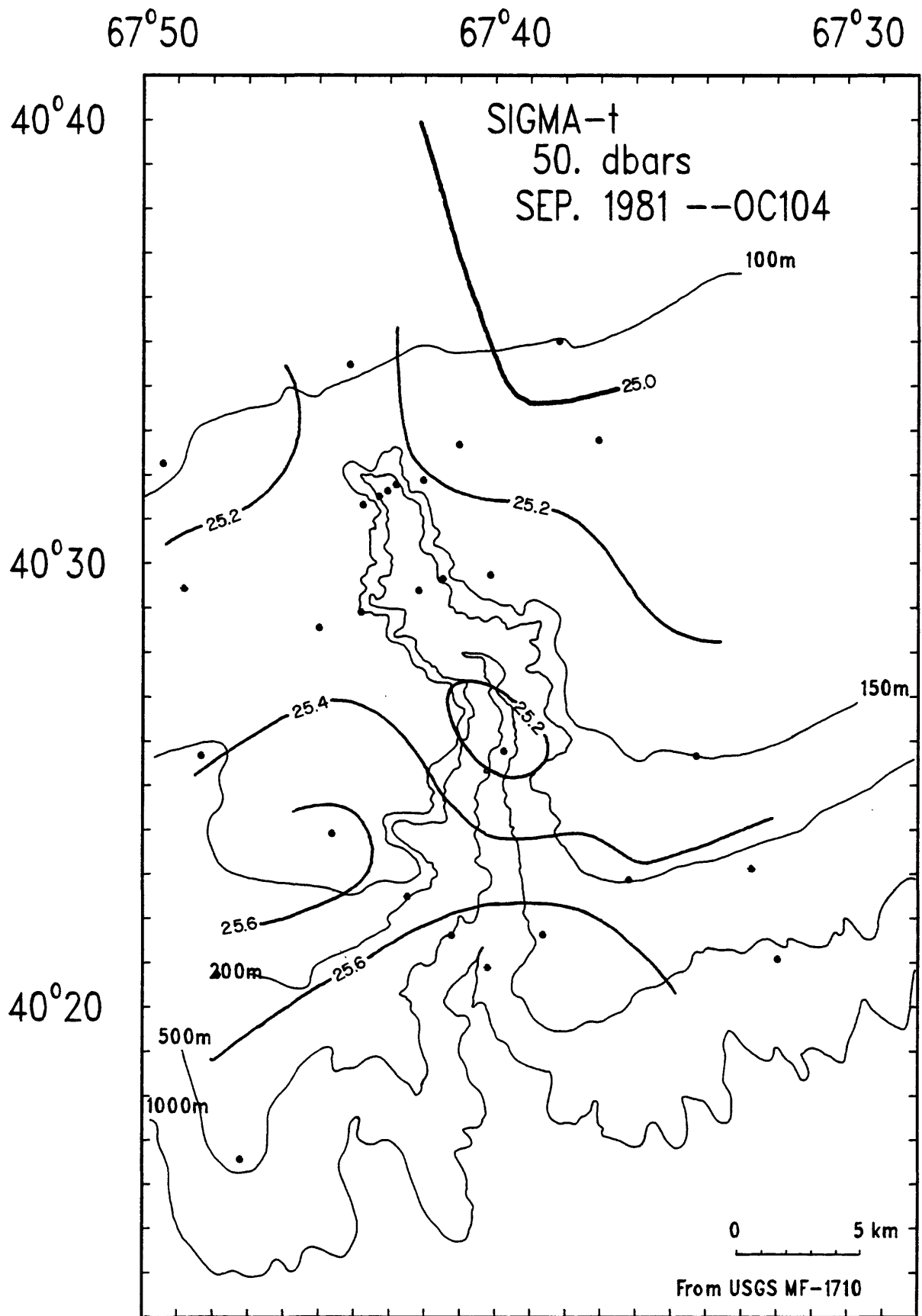


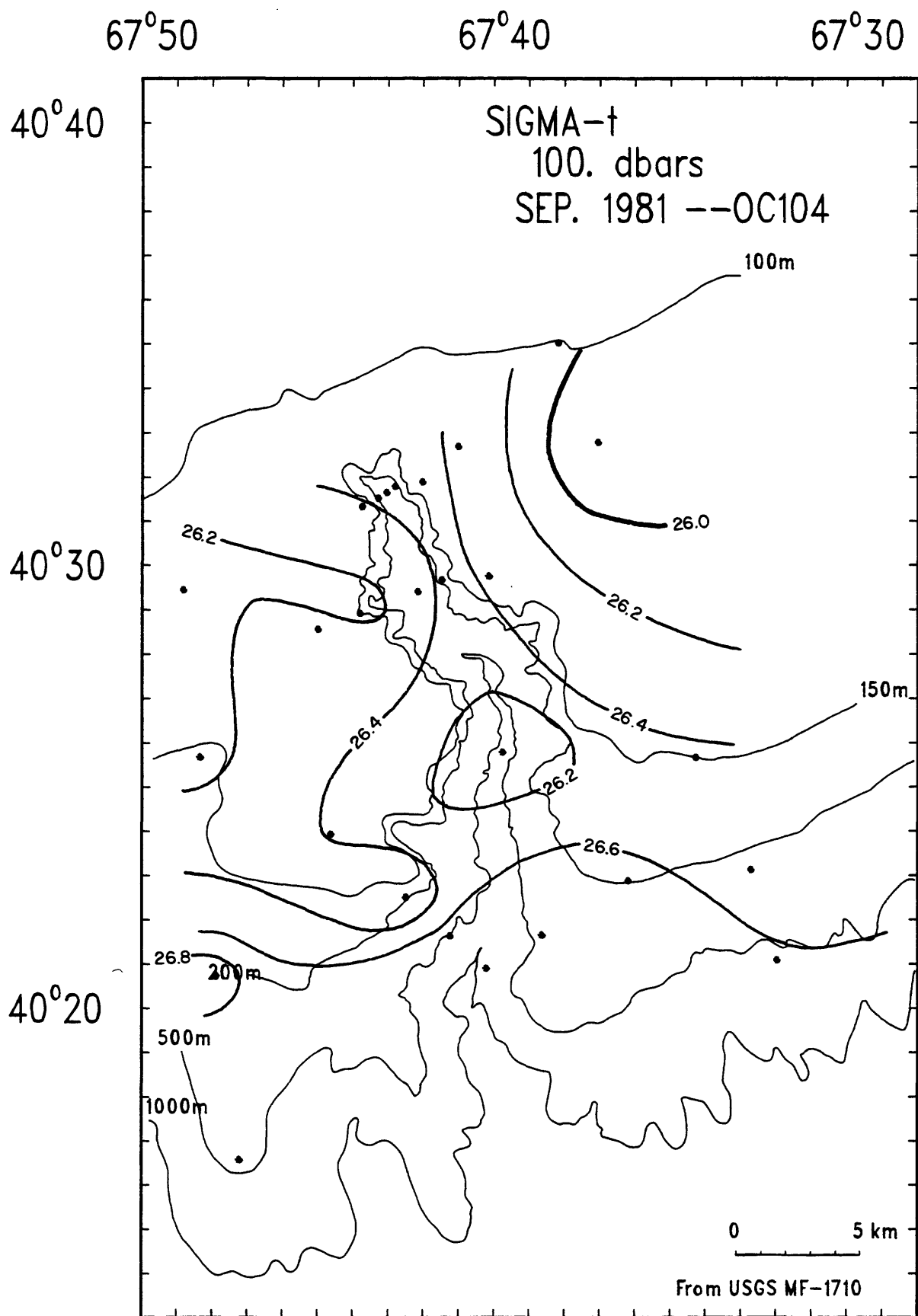


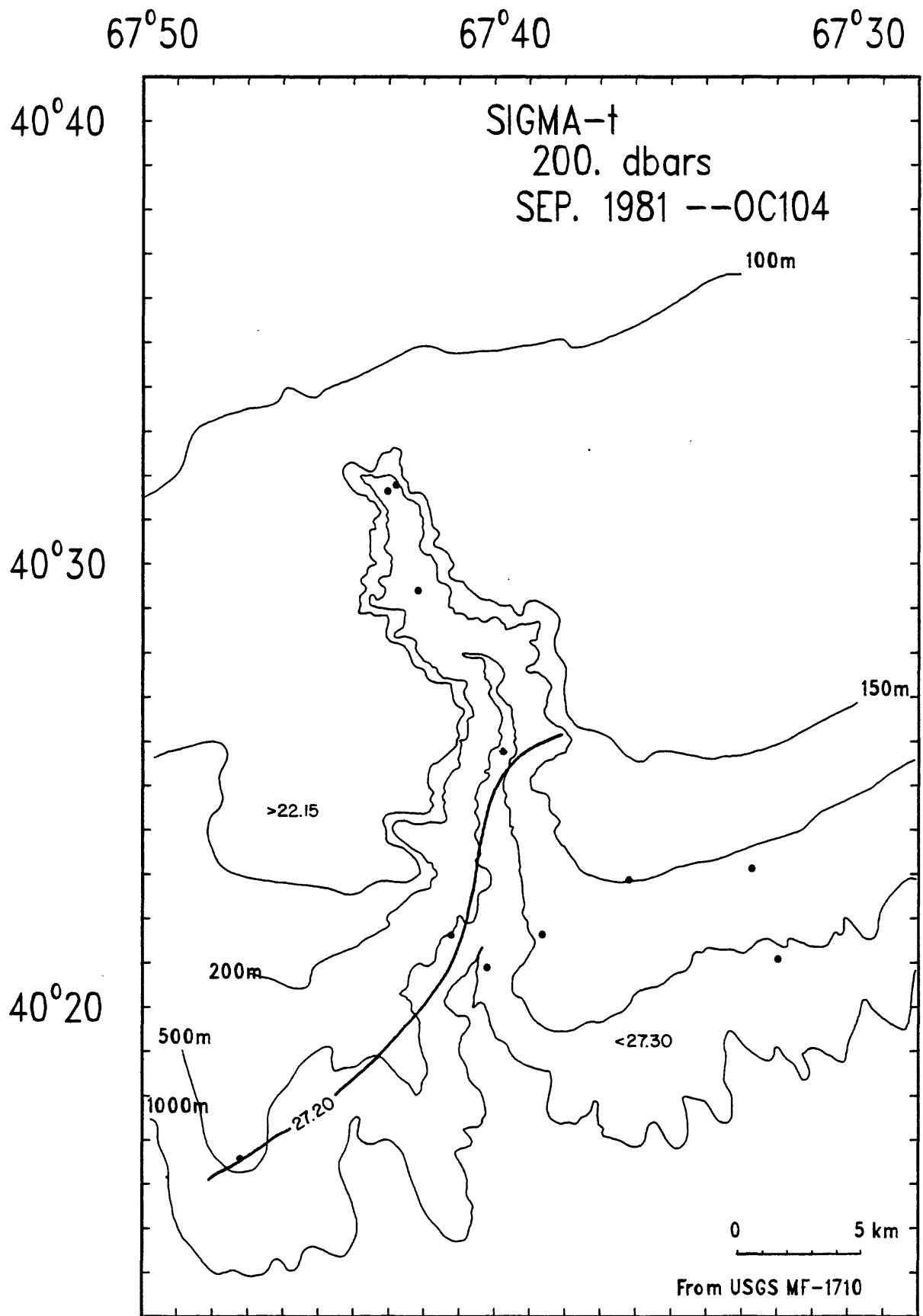


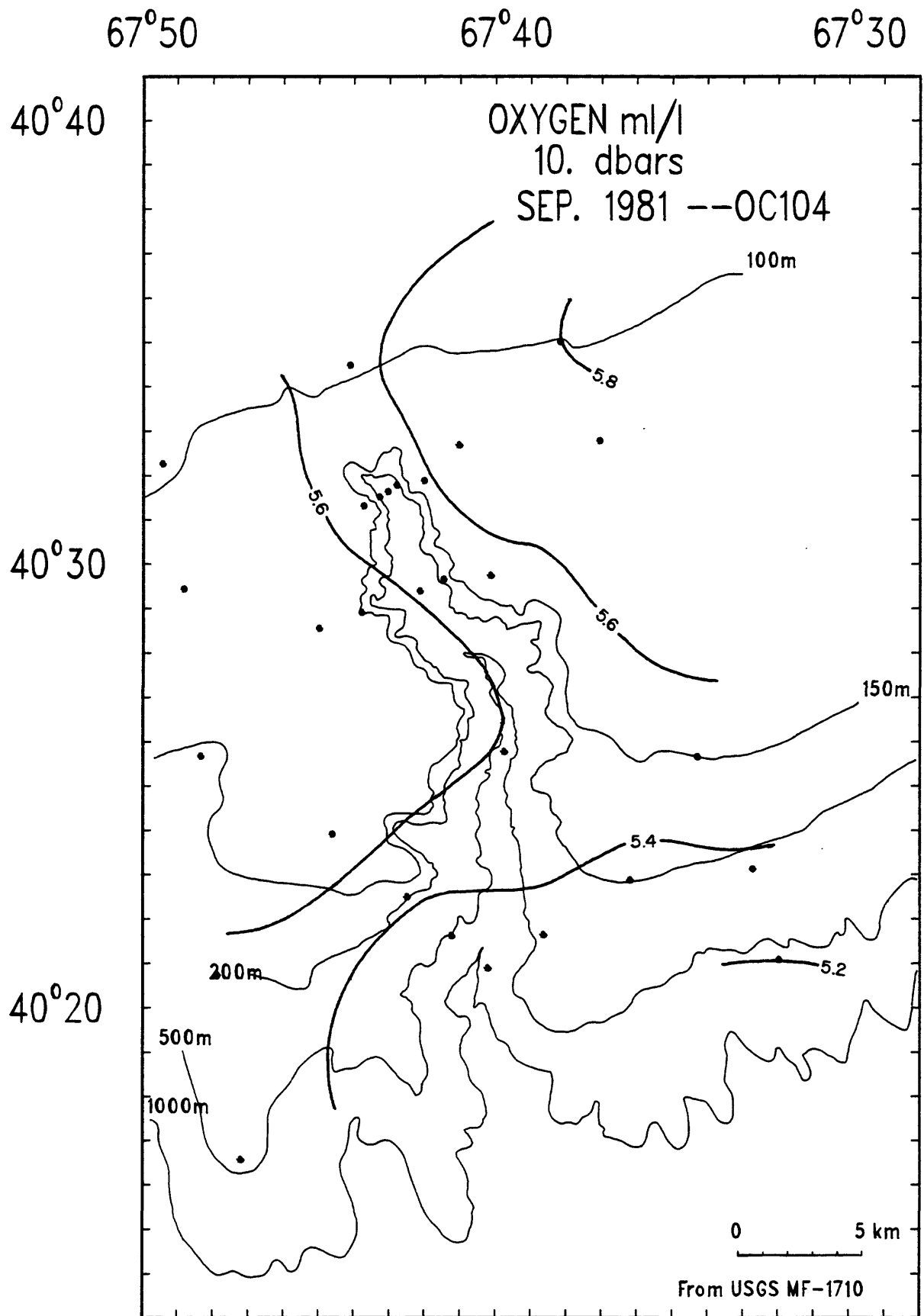


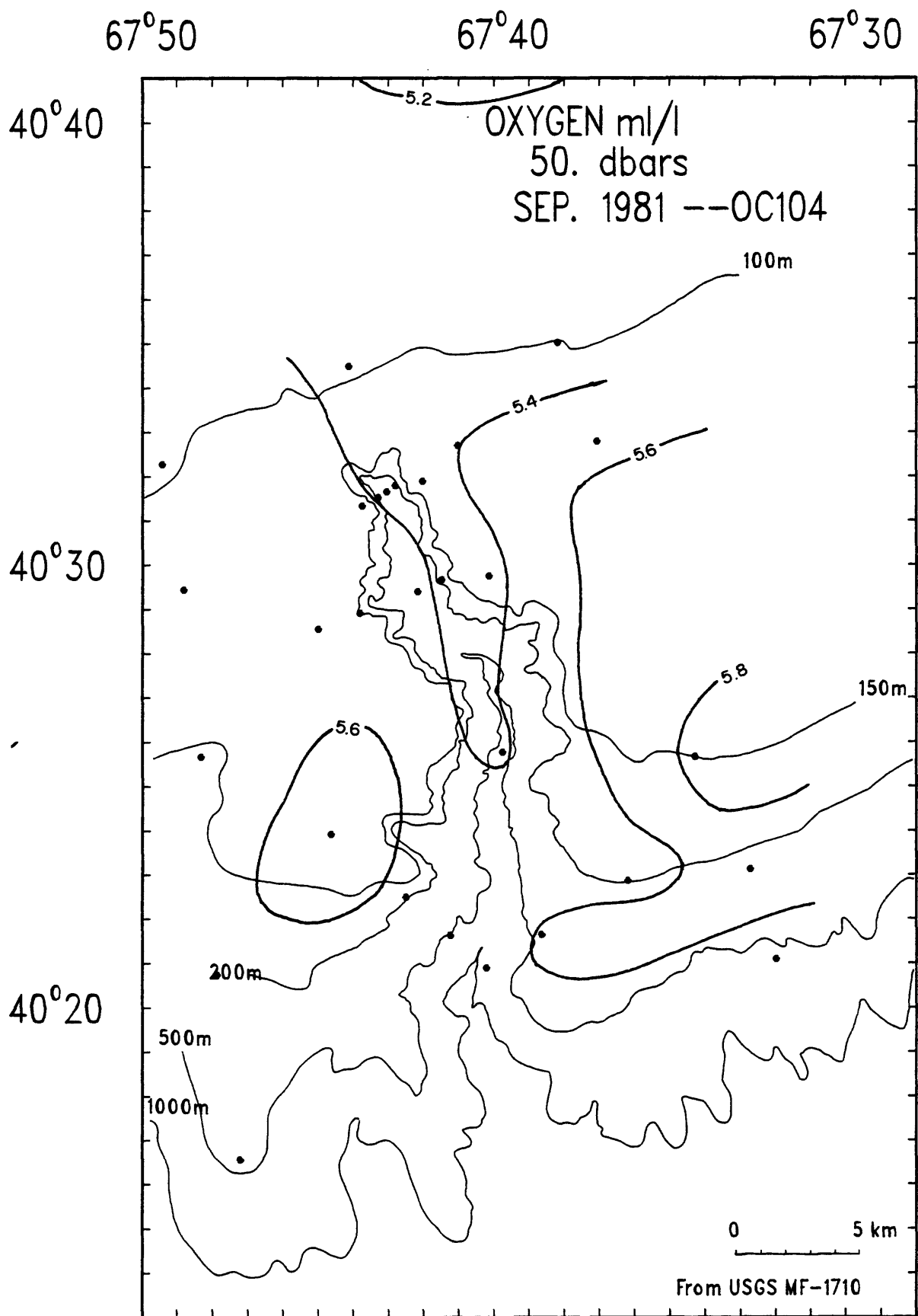


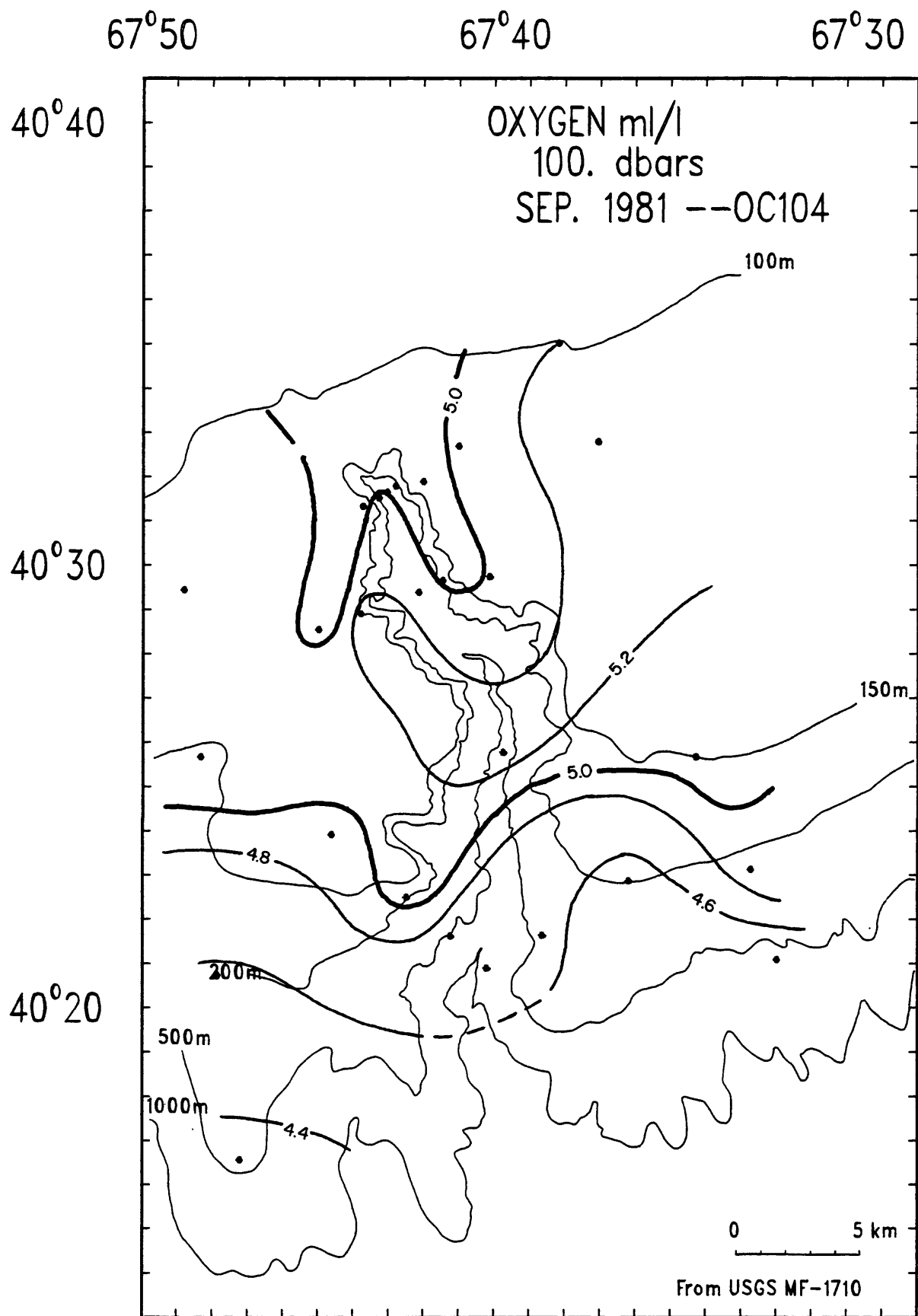


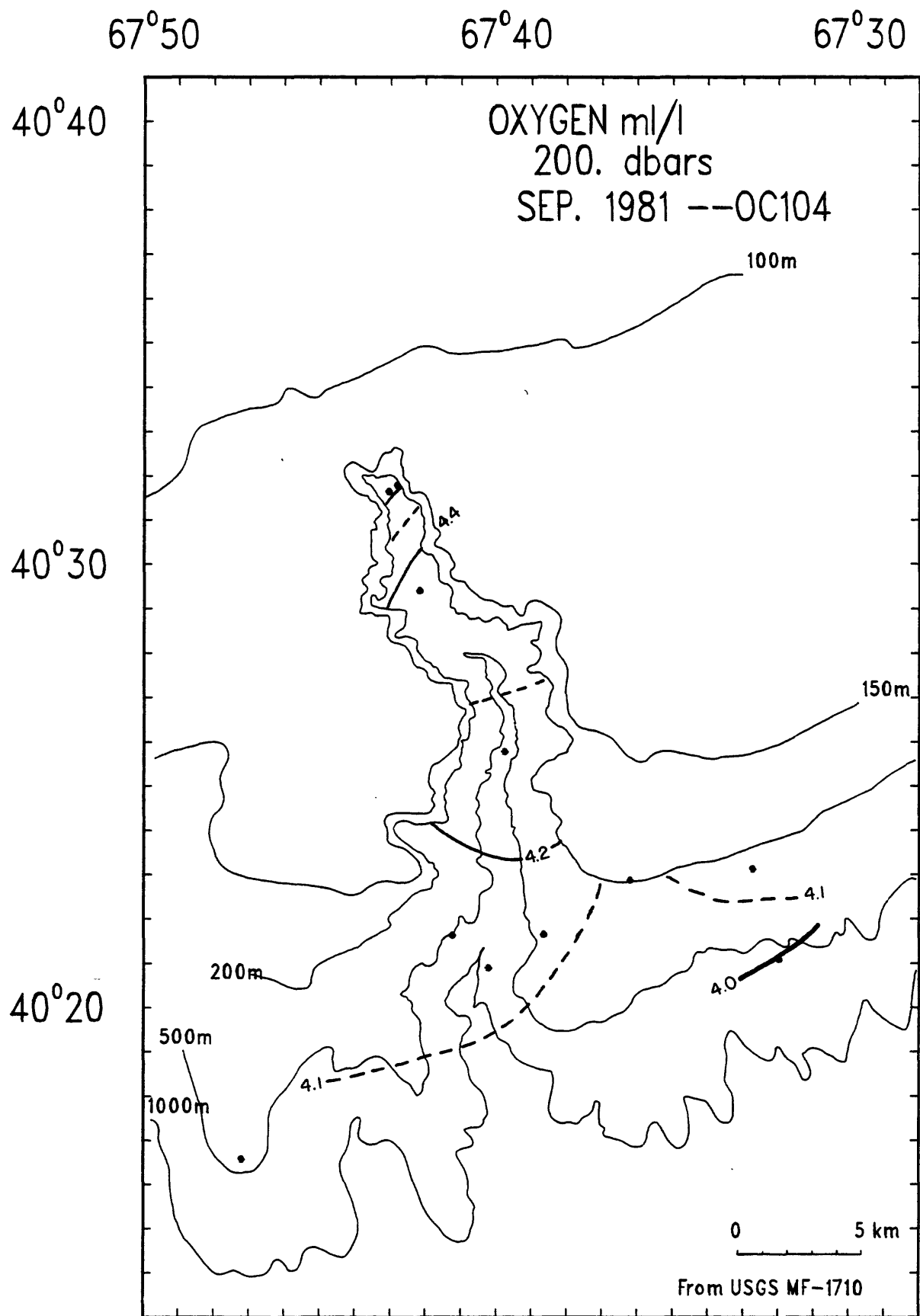


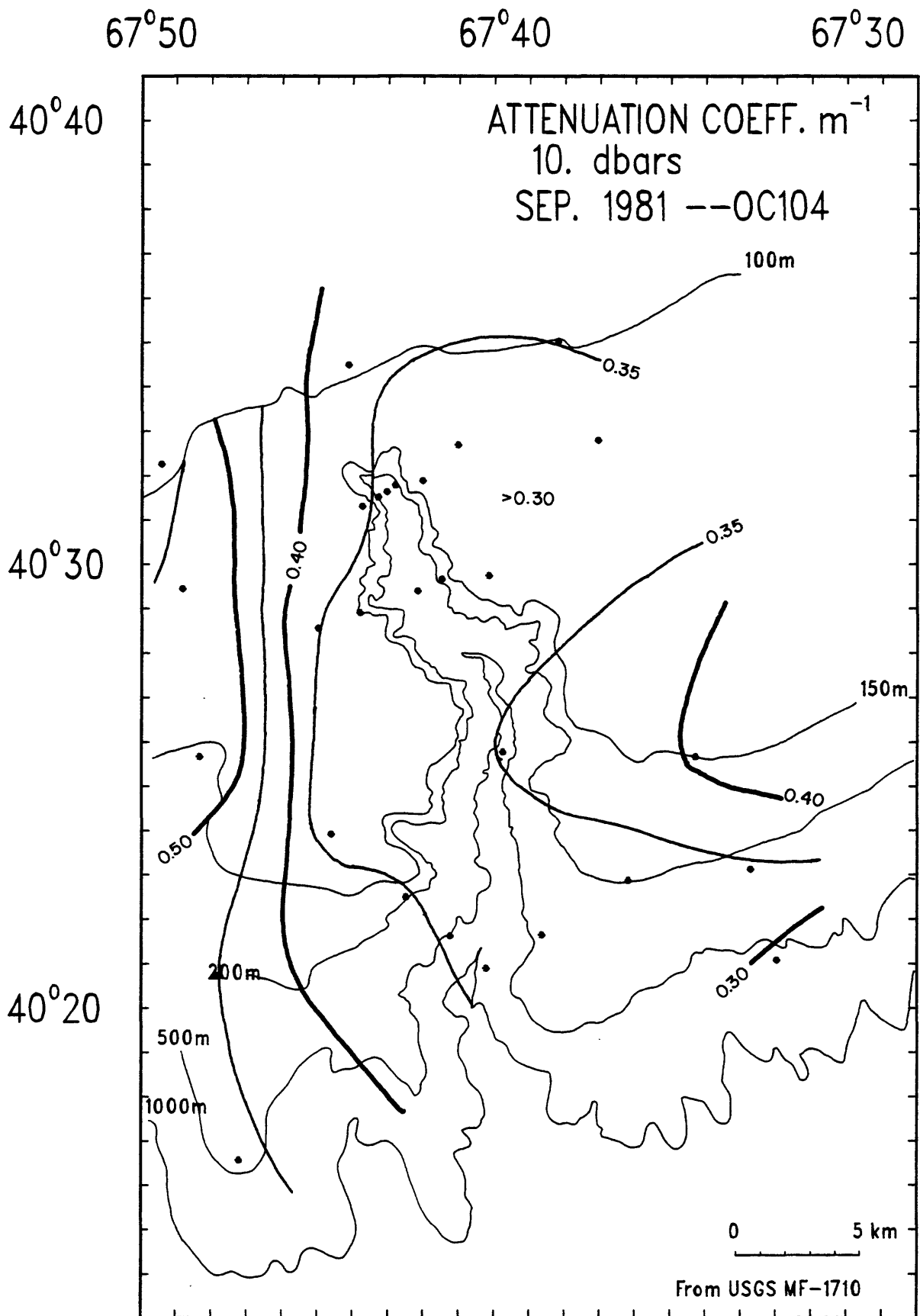


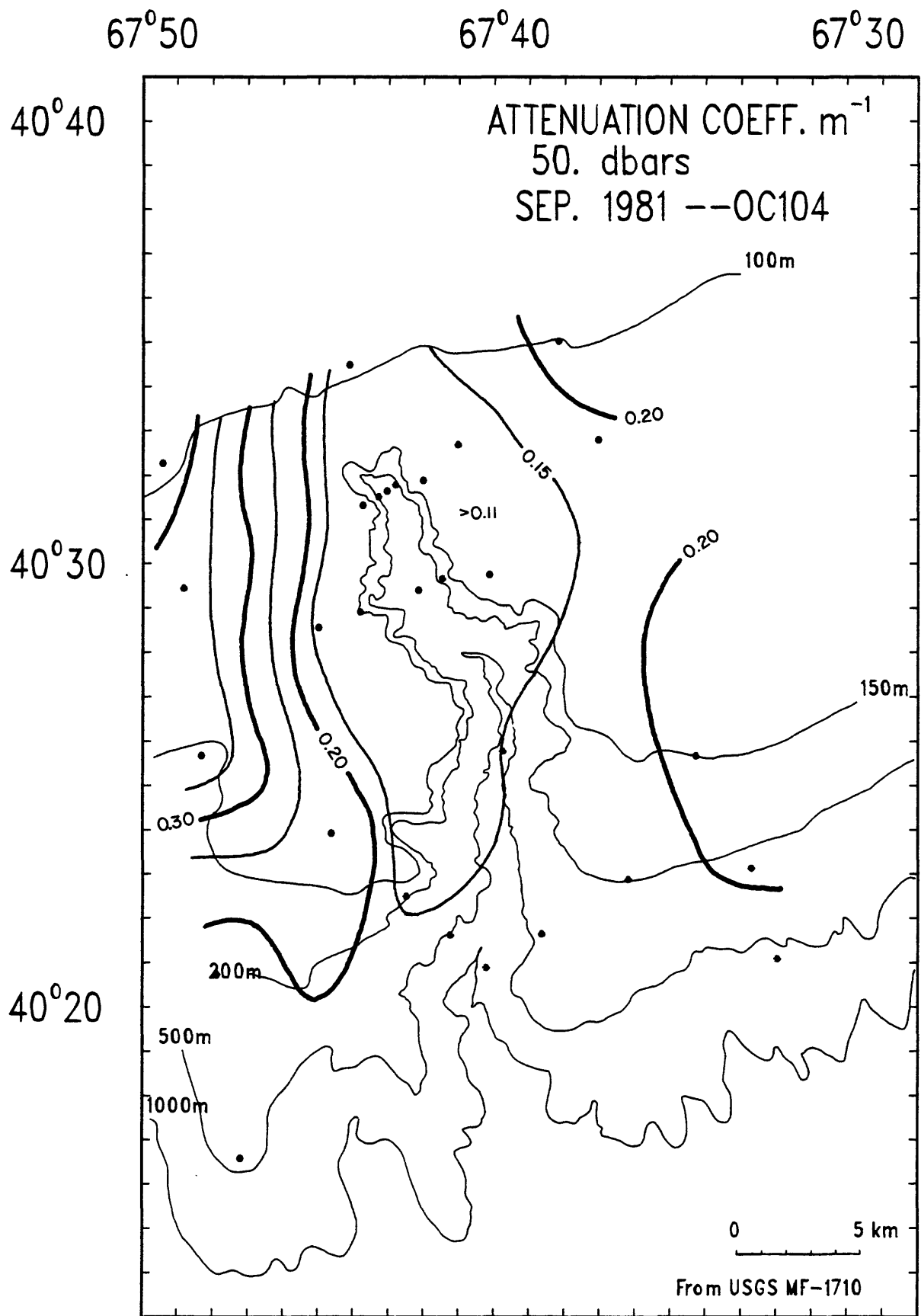


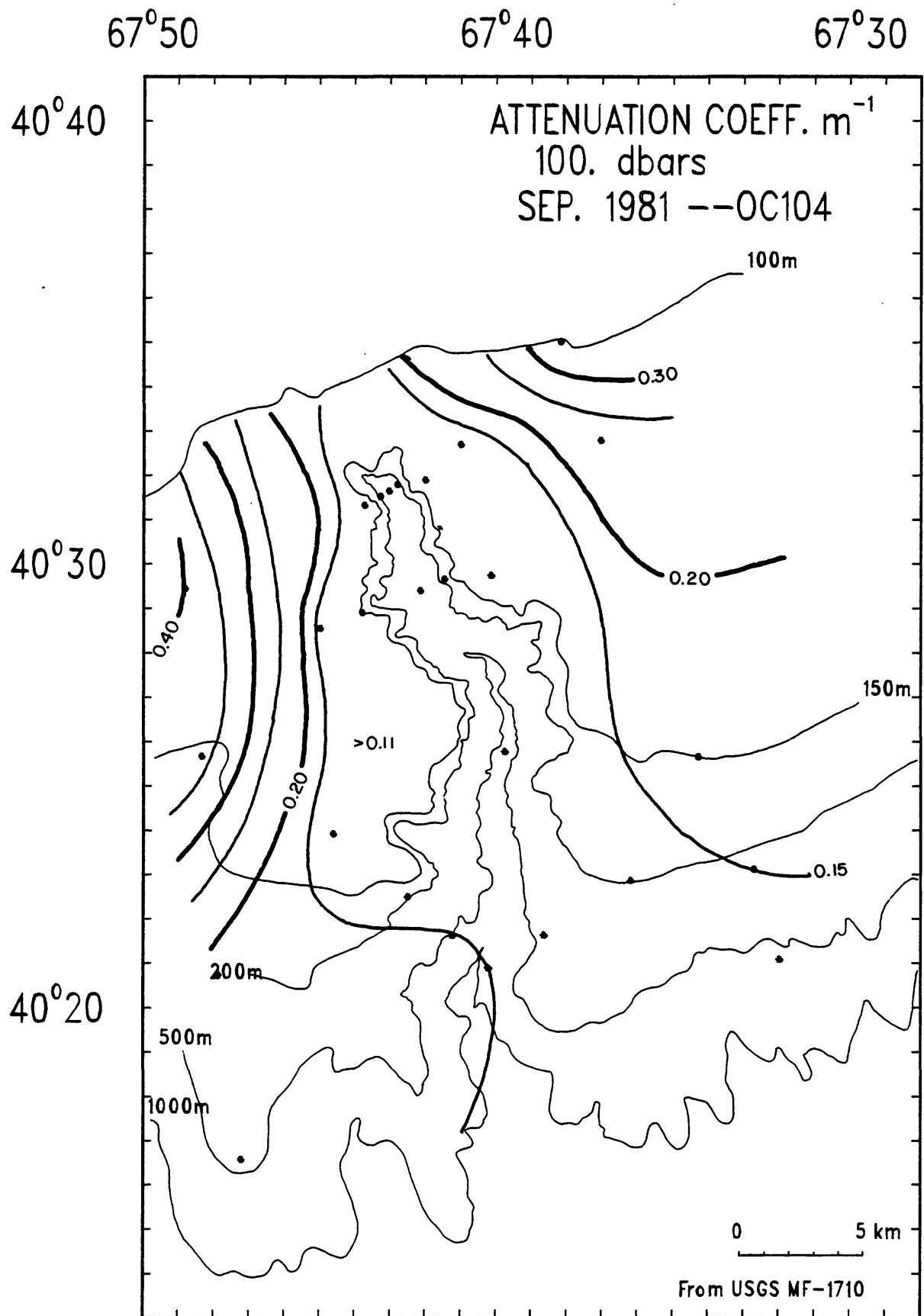


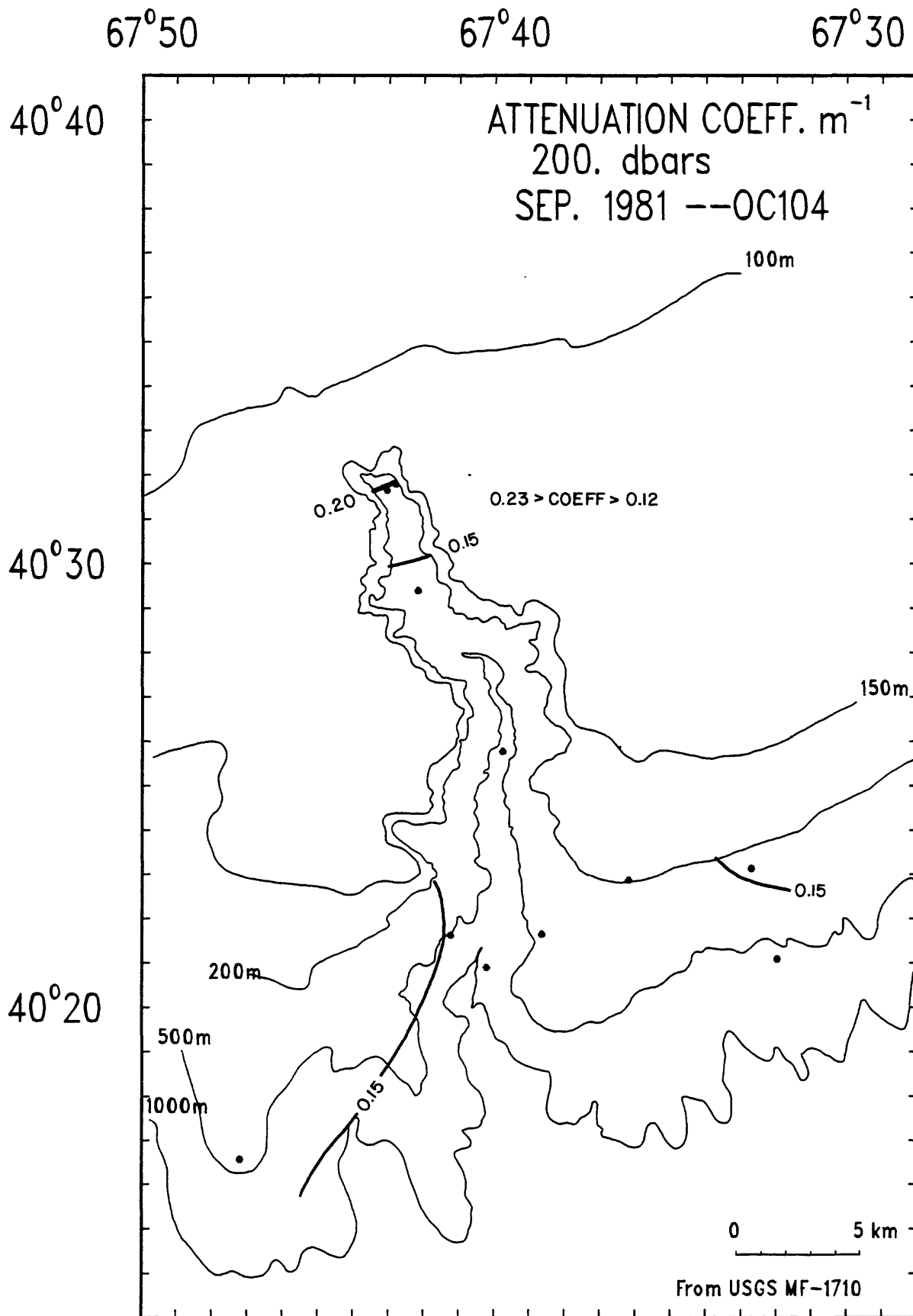








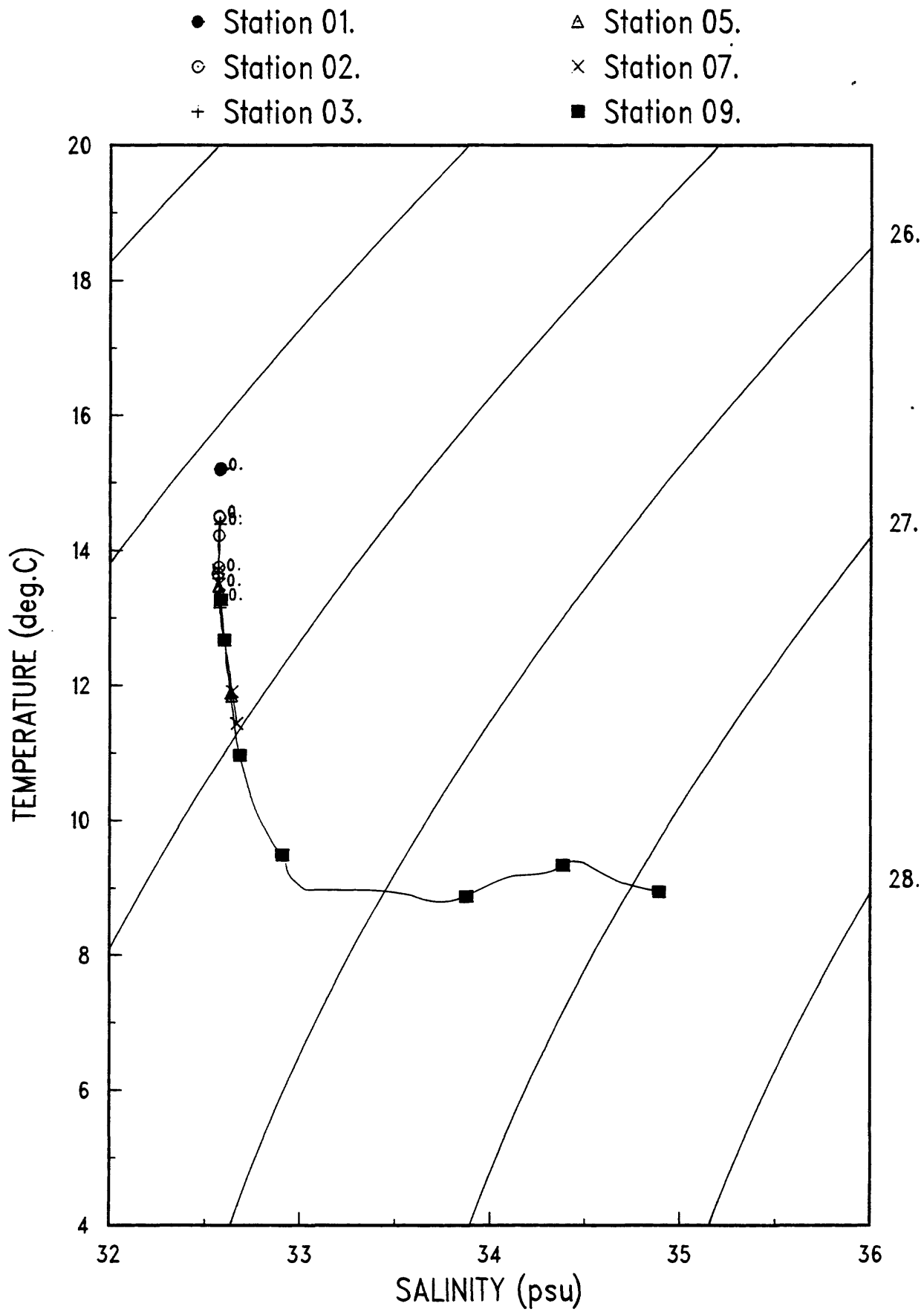




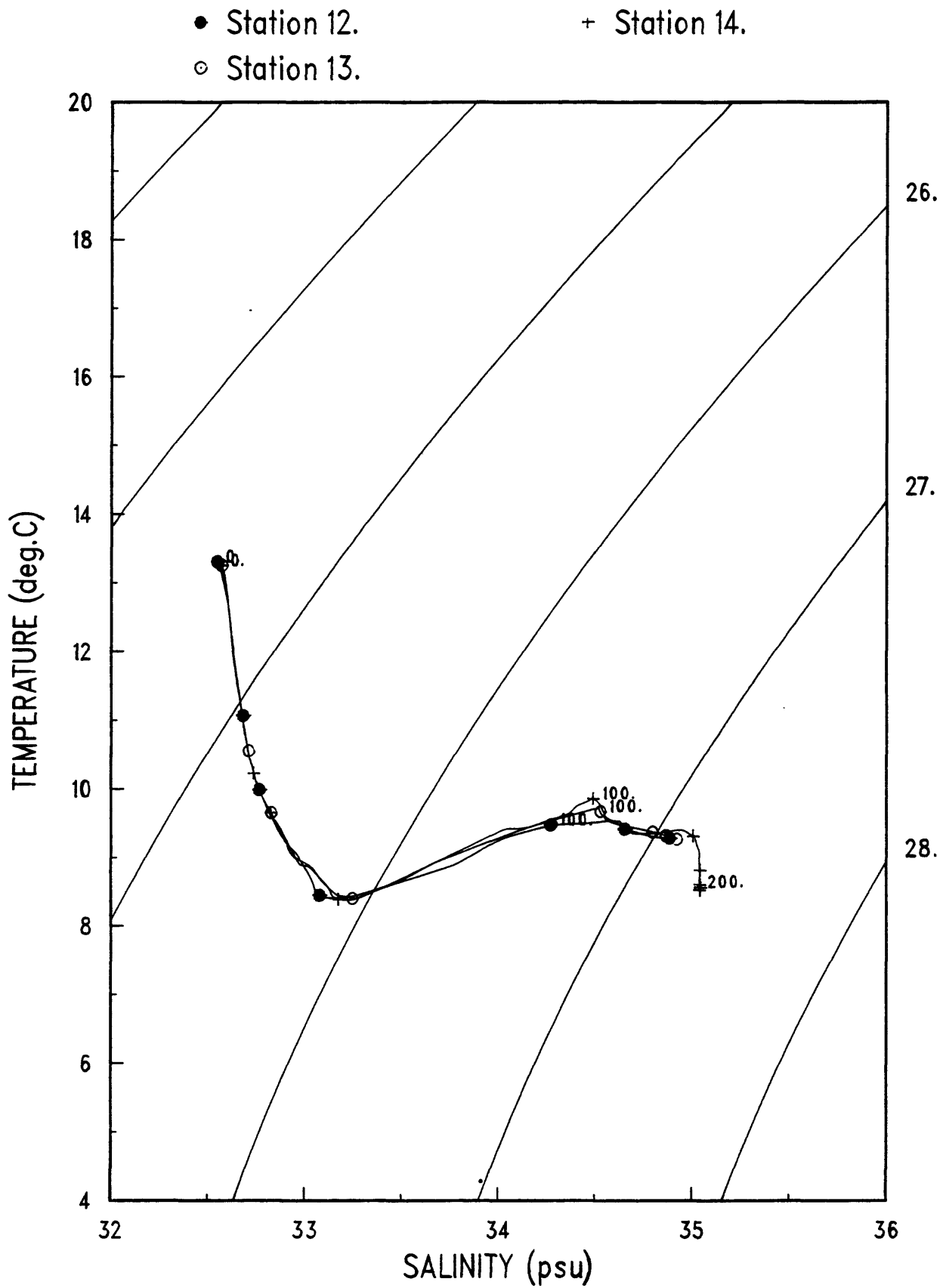
Temperature salinity diagrams

Plots of temperature vs. salinity are by section (see figs. 1 and 2). Each station is identified with a different symbol. The symbols are plotted every 20 dbars, and the 100-, 200-, and 500-dbar points have been labeled.

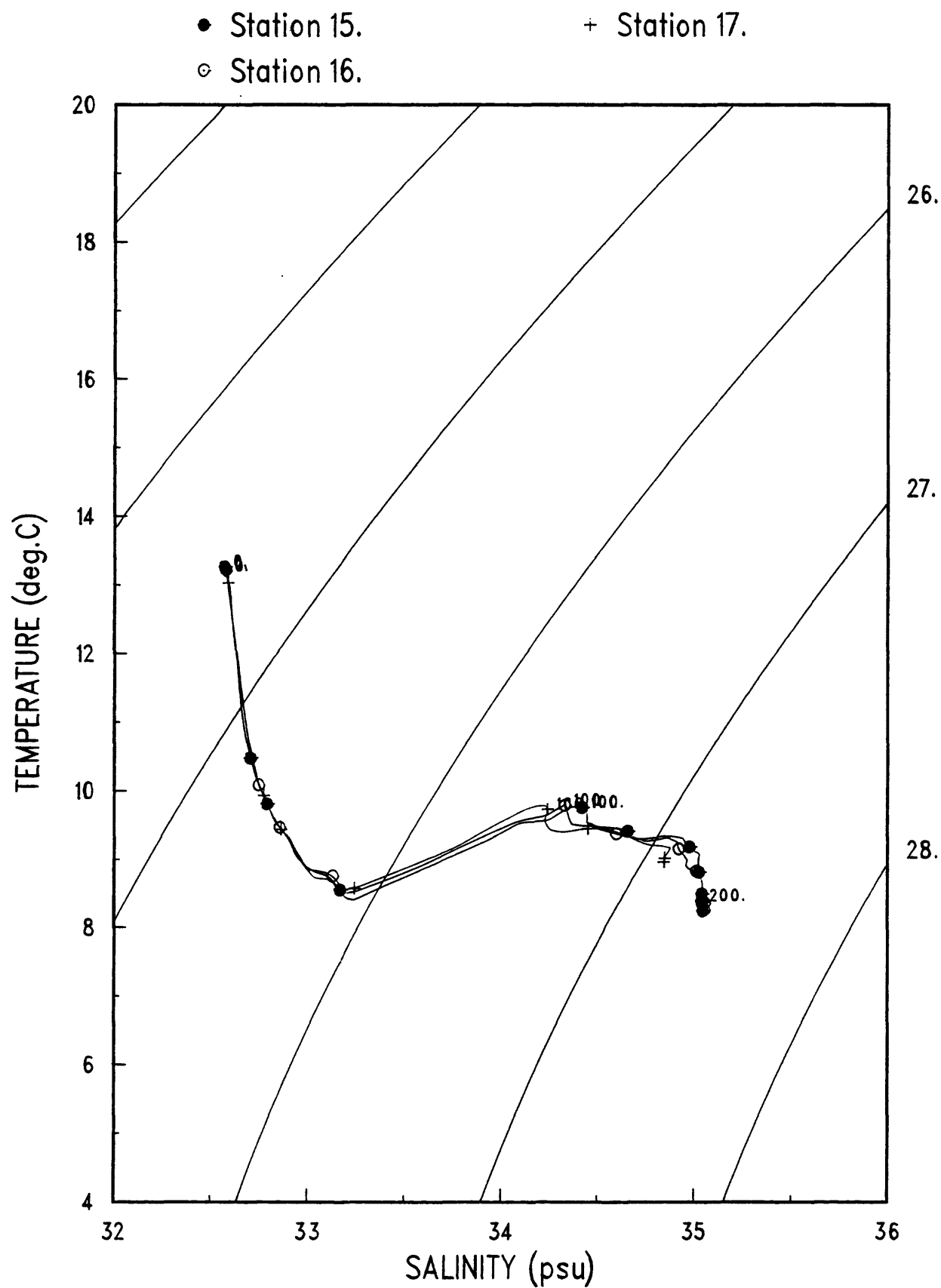
OC104--TS Diagram--Section 1



OC104--TS Diagram--Section 2



OC104--TS Diagram--Section 2



OC104--TS Diagram--Section 3

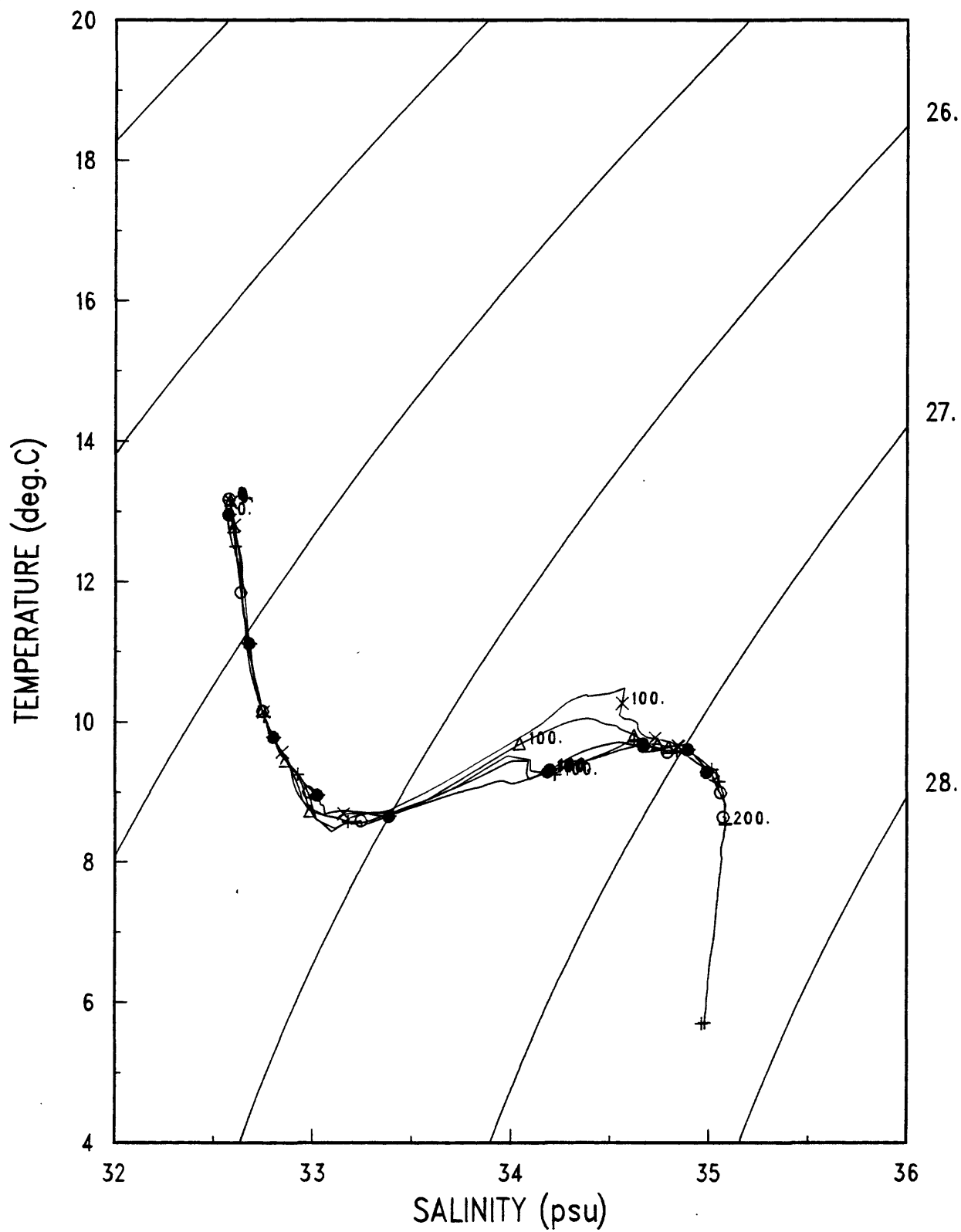
● Station 19.

△ Station 25.

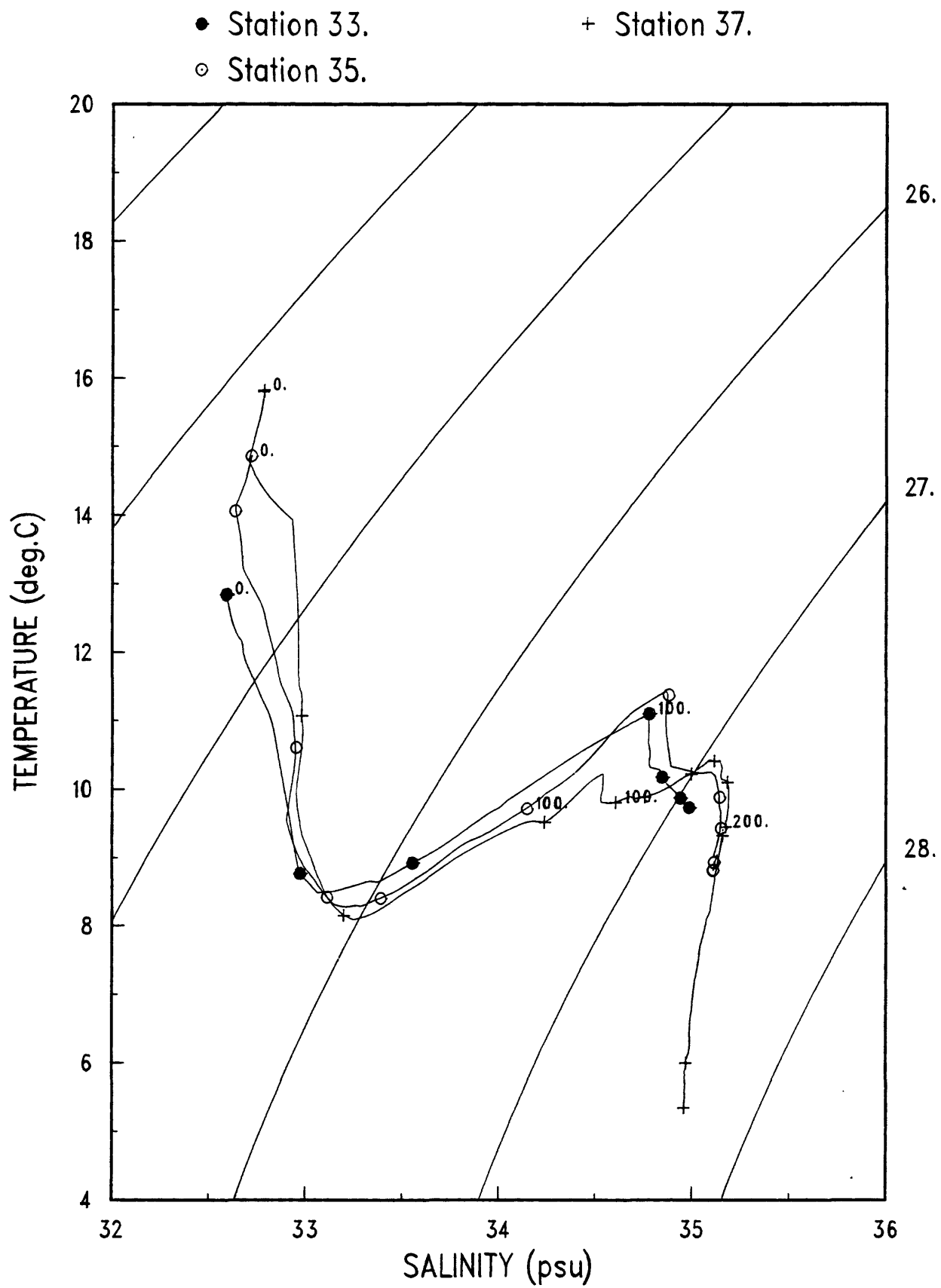
○ Station 21.

× Station 27.

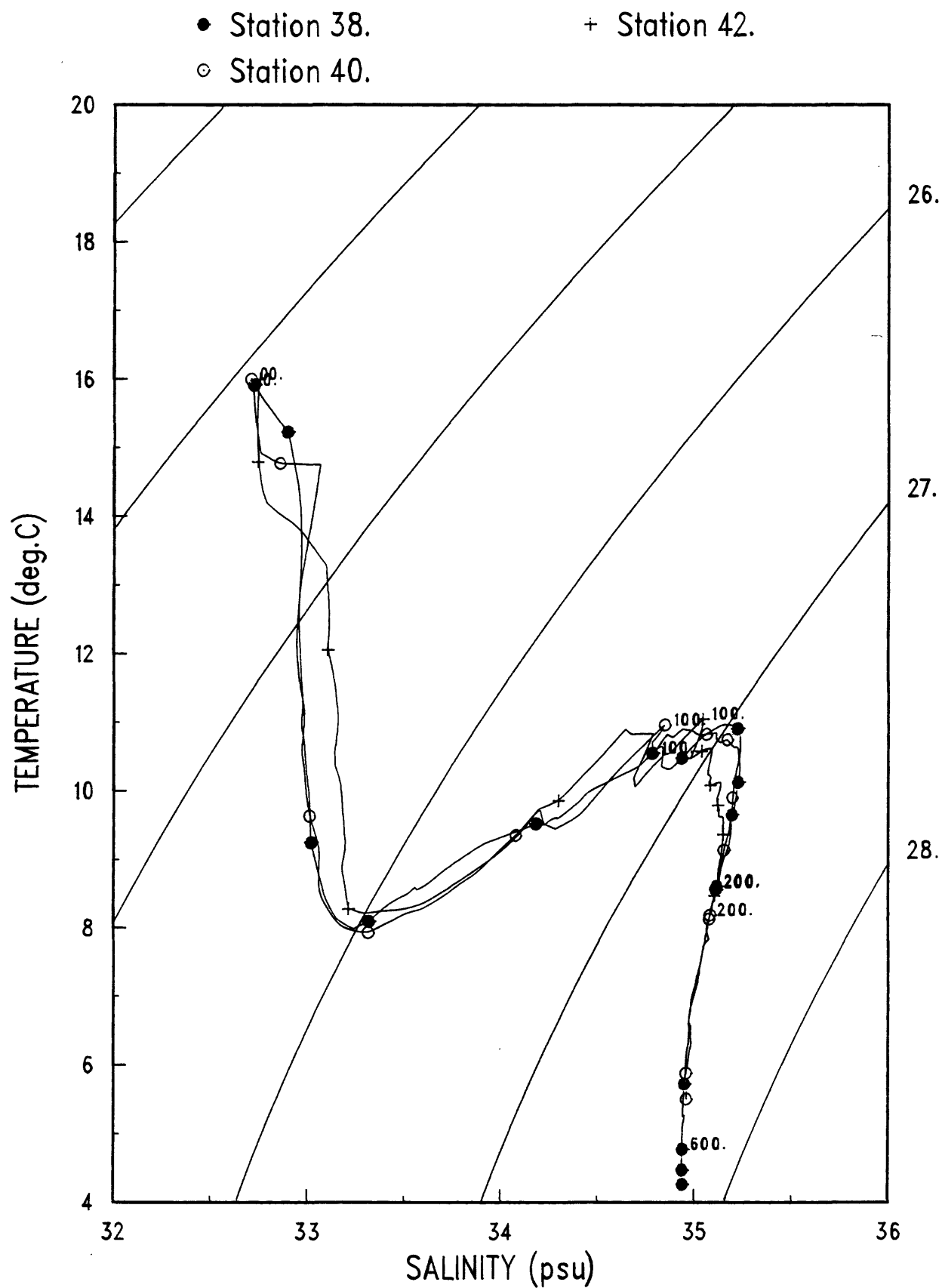
+ Station 23.



OC104--TS Diagram--Section 4



OC104--TS Diagram--Section 4



OC104--TS Diagram--Section 5

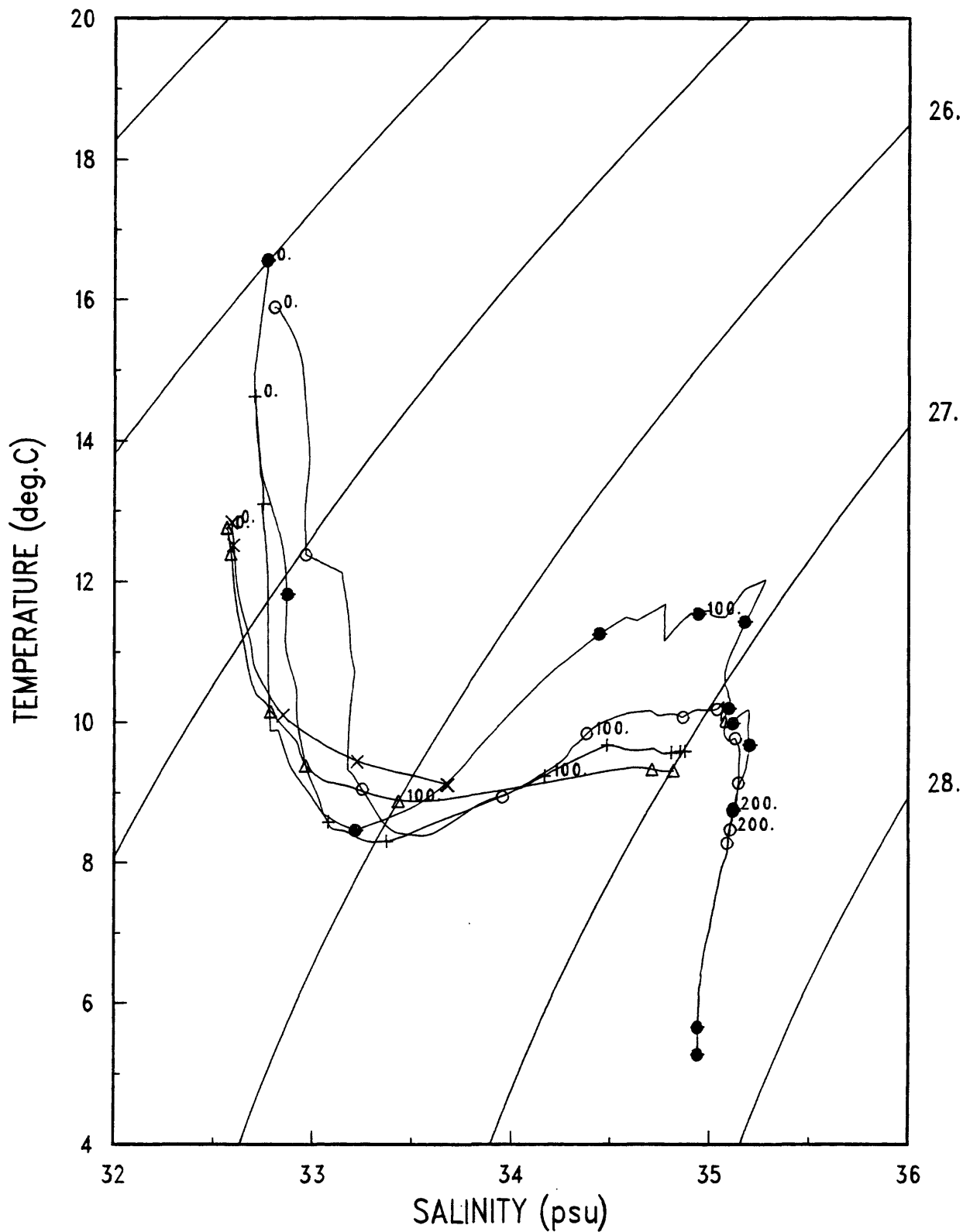
● Station 43.

△ Station 49.

○ Station 45.

× Station 51.

+ Station 47.



OC104--TS Diagram--Section 6

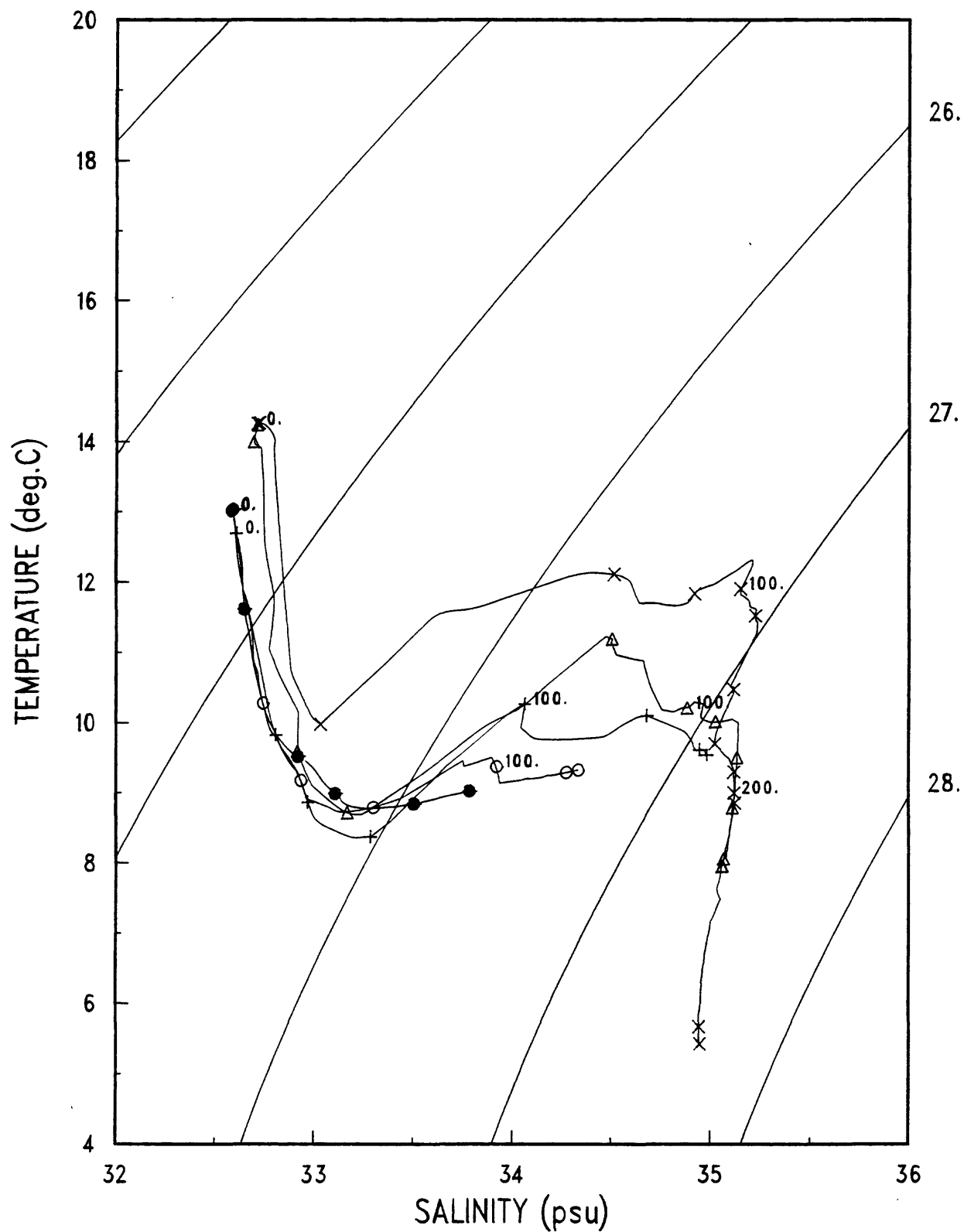
● Station 53.

△ Station 59.

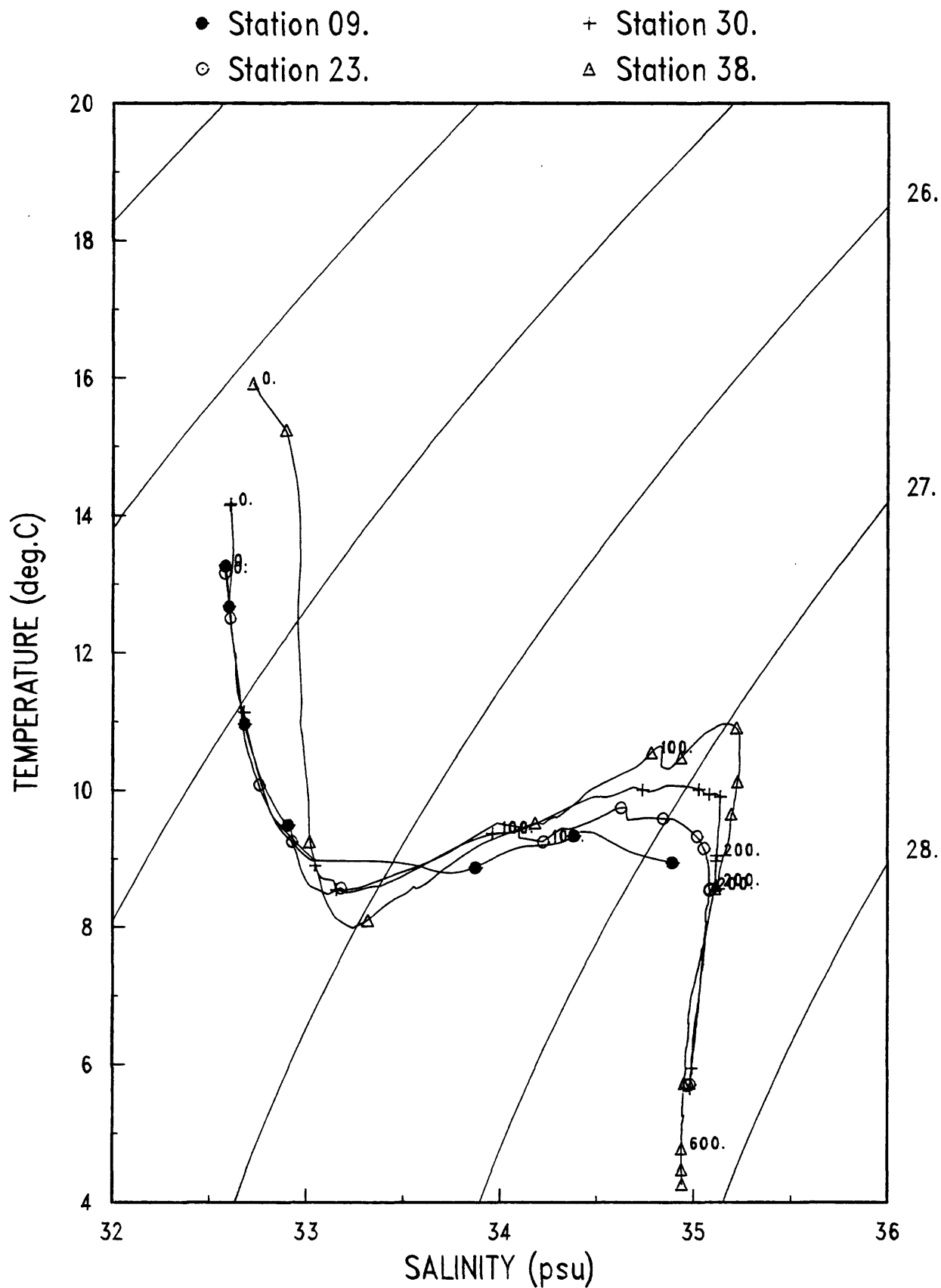
○ Station 55.

× Station 60.

+ Station 57.



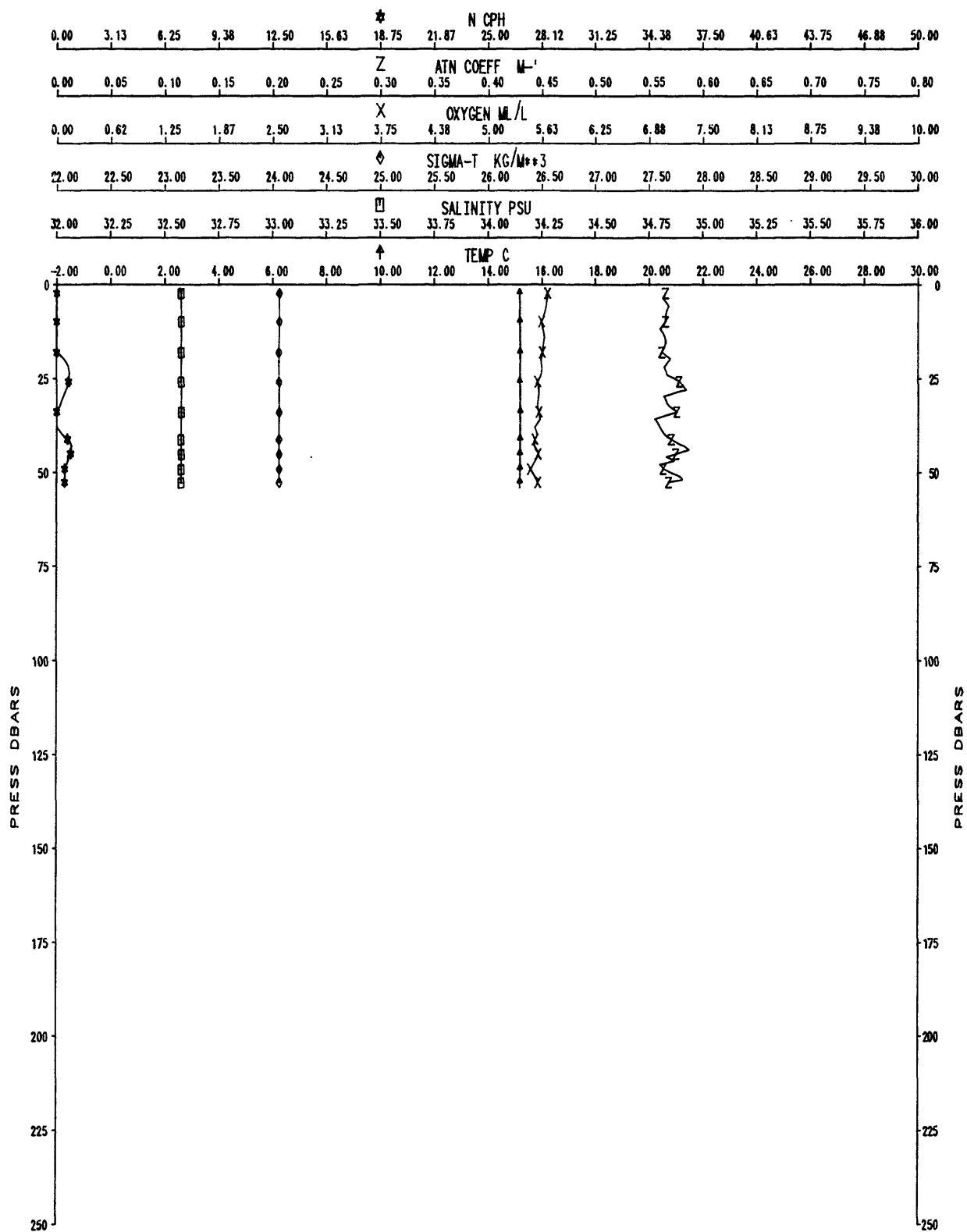
OC104--TS Diagram--Section 7



Station profiles

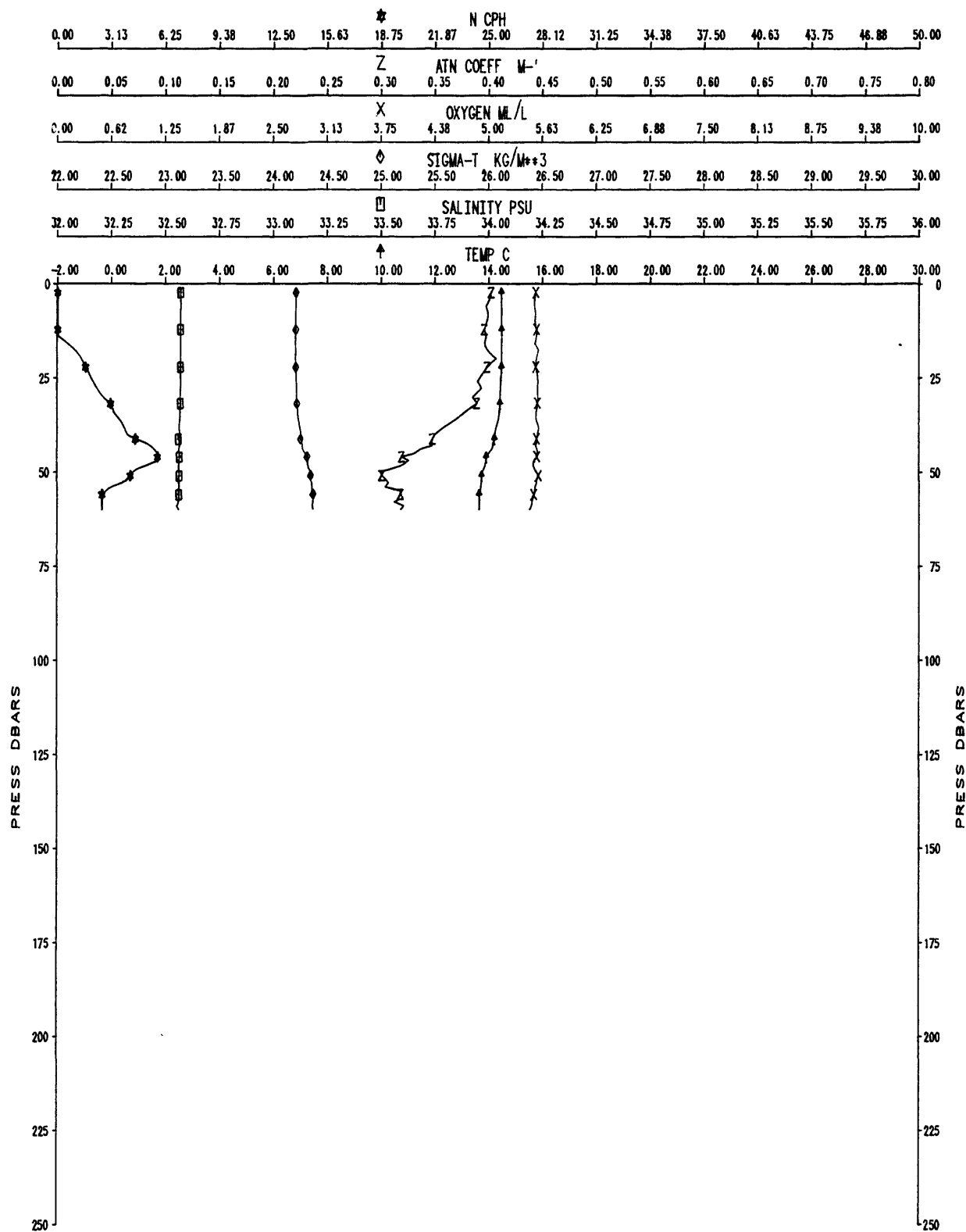
Vertical profiles of temperature, salinity, sigma-t, oxygen, attenuation coefficient, and Brunt-Vaisala frequency at each station are shown in figures 42-99. The profiles are drawn using the 2-dbar-averaged data; at approximately 10 dbars above the bottom, the averaging interval becomes 1 dbar. The data are listed in Appendix I. The different symbols used to distinguish variables are shown on each variable axis. XBT profiles are limited to 500 m. The units of salinity are practical salinity units (psu) and are defined by Lewis (1980). The XBT for stations 41 and 52 malfunctioned and there are no plot for these stations.

OC104B CAST #1

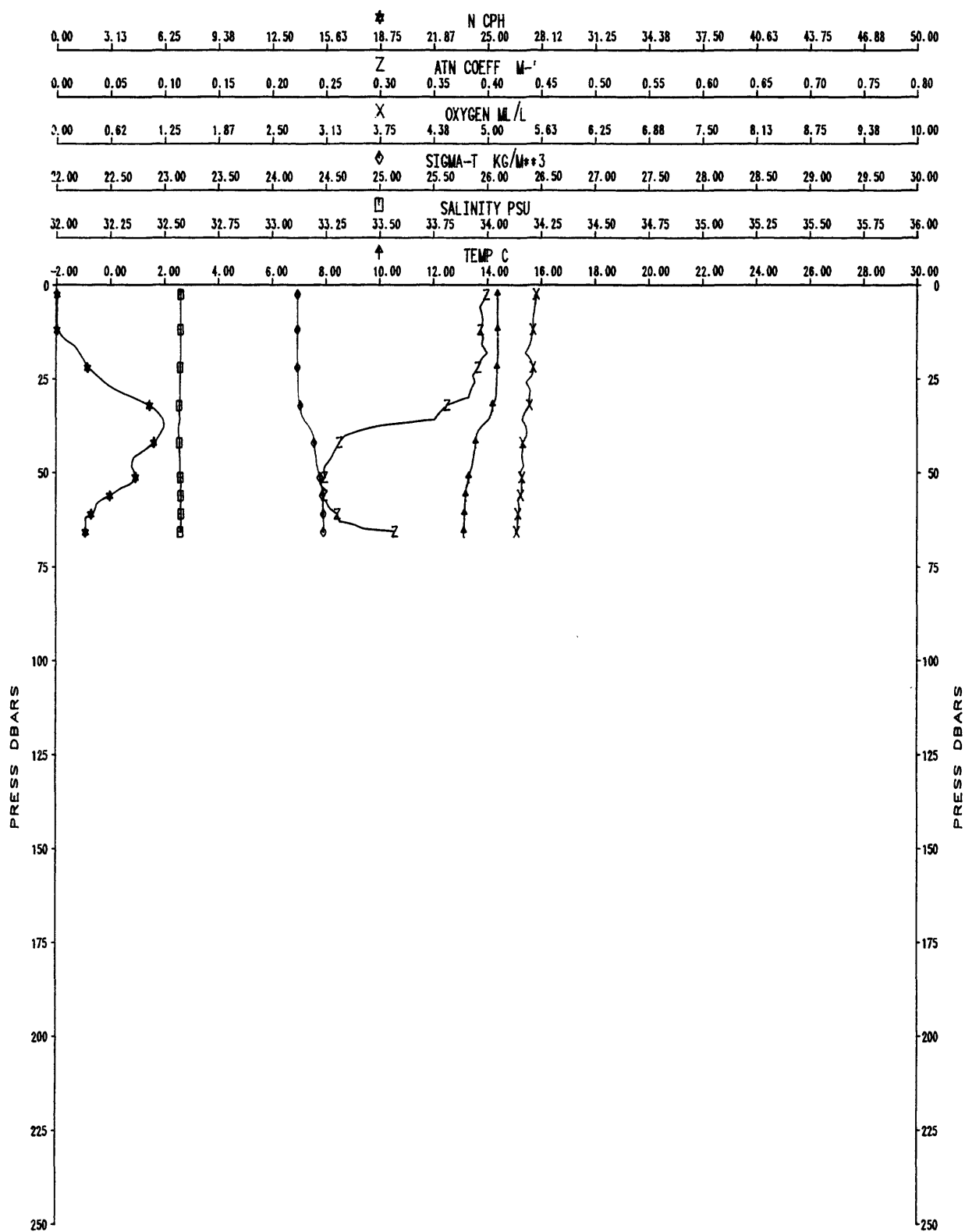


THIS DATA FROM UPCAST

OC104B CAST #2

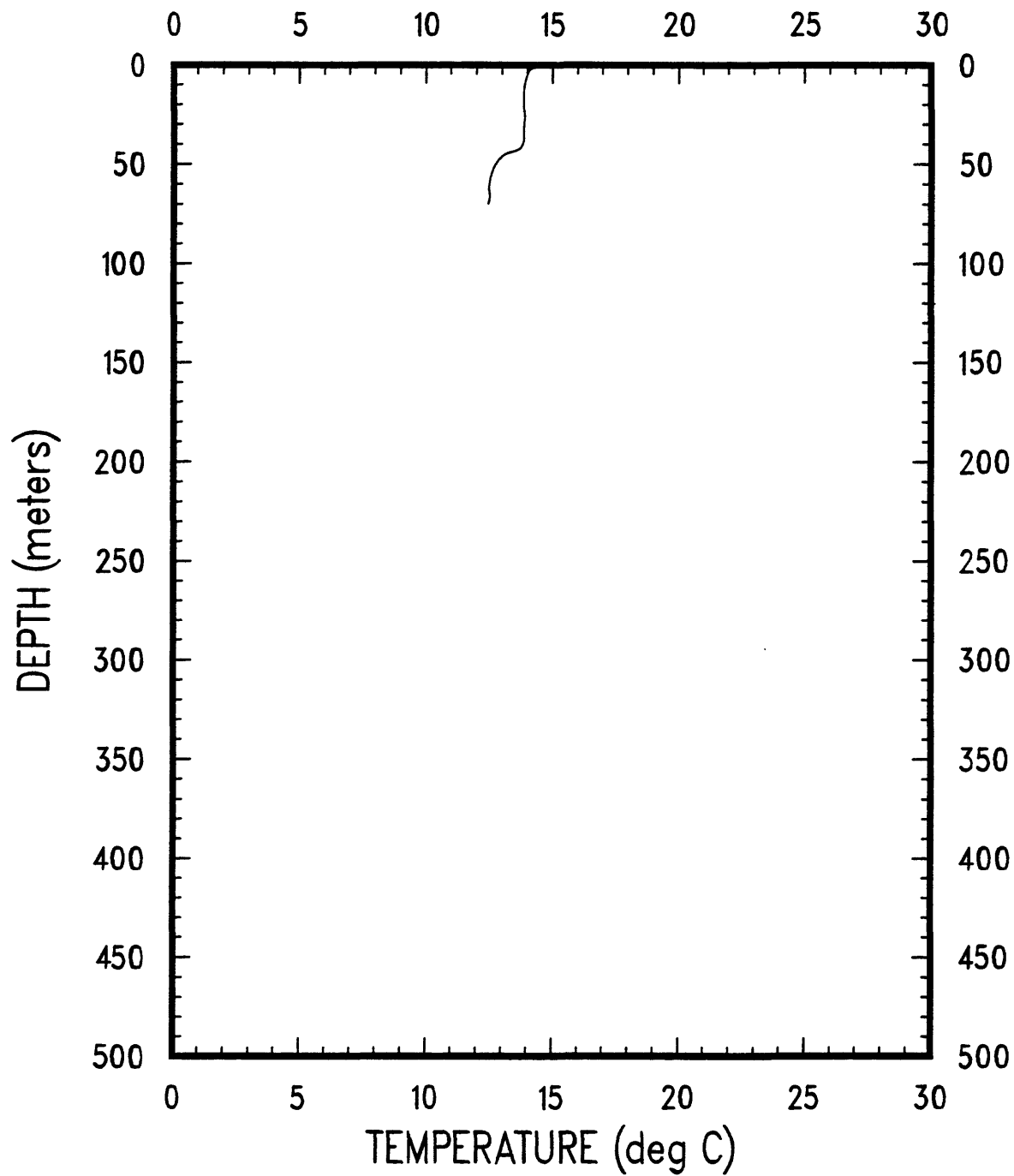


OC104B CAST #3

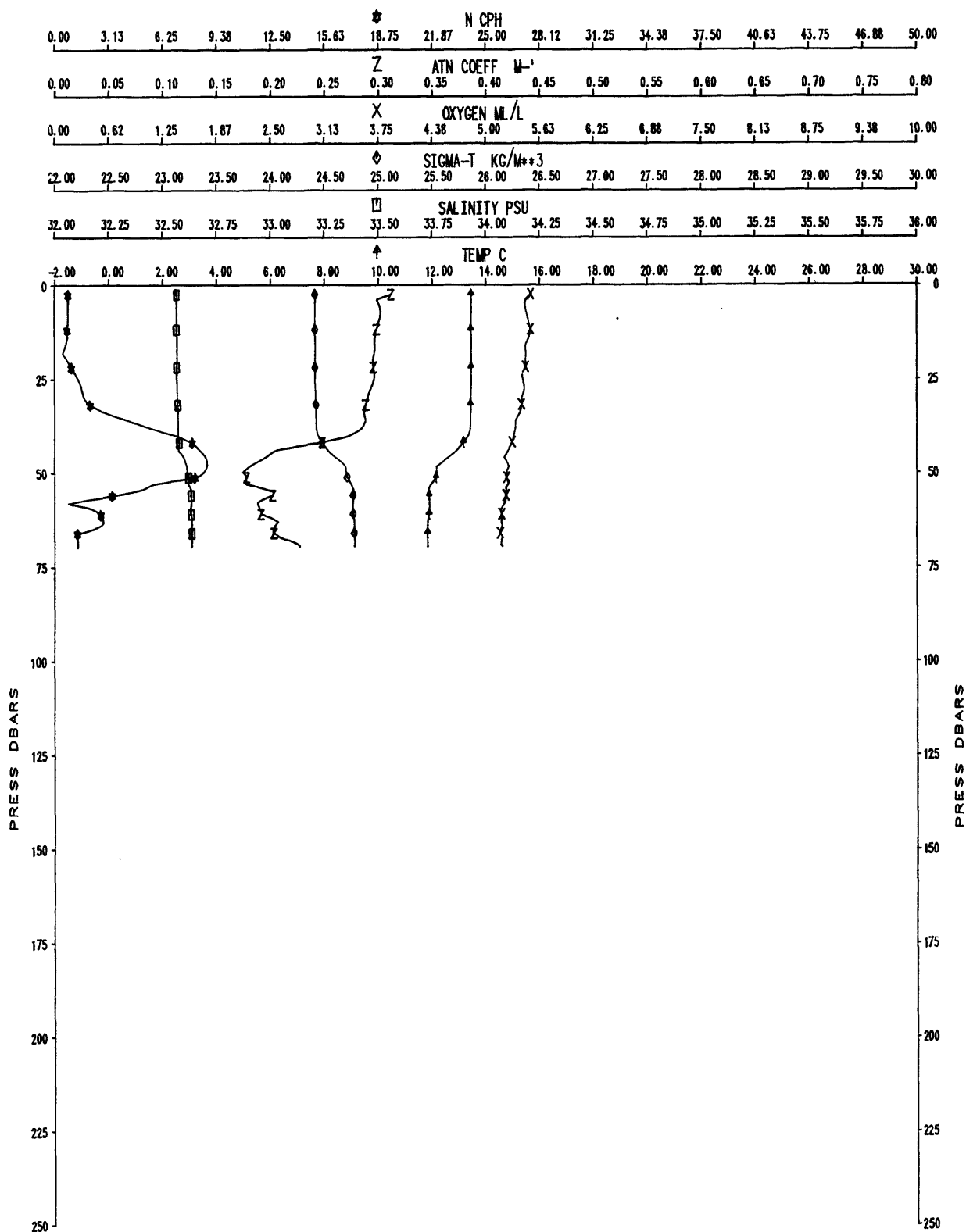


OC104

XBT-4

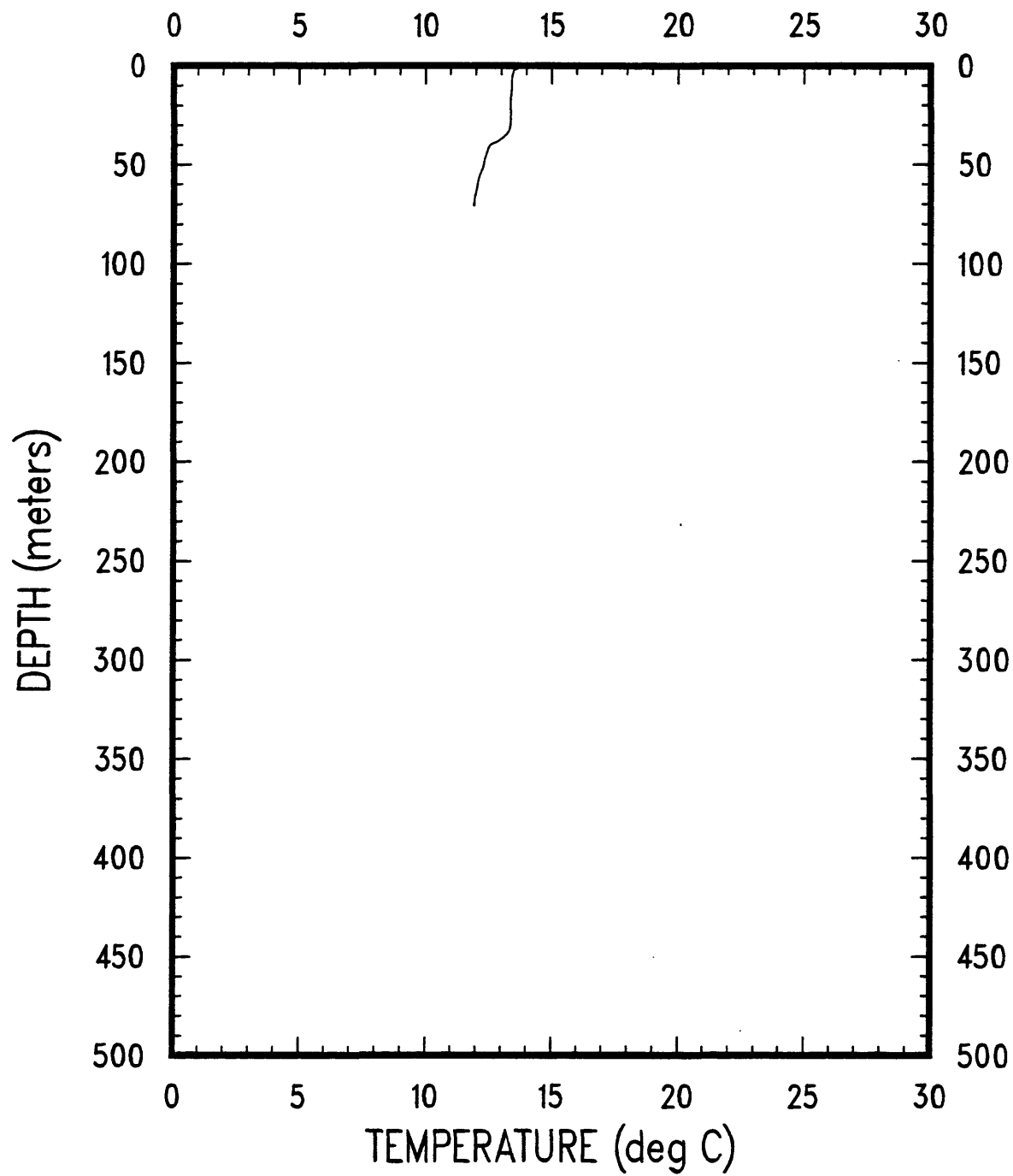


OC104A CAST #5



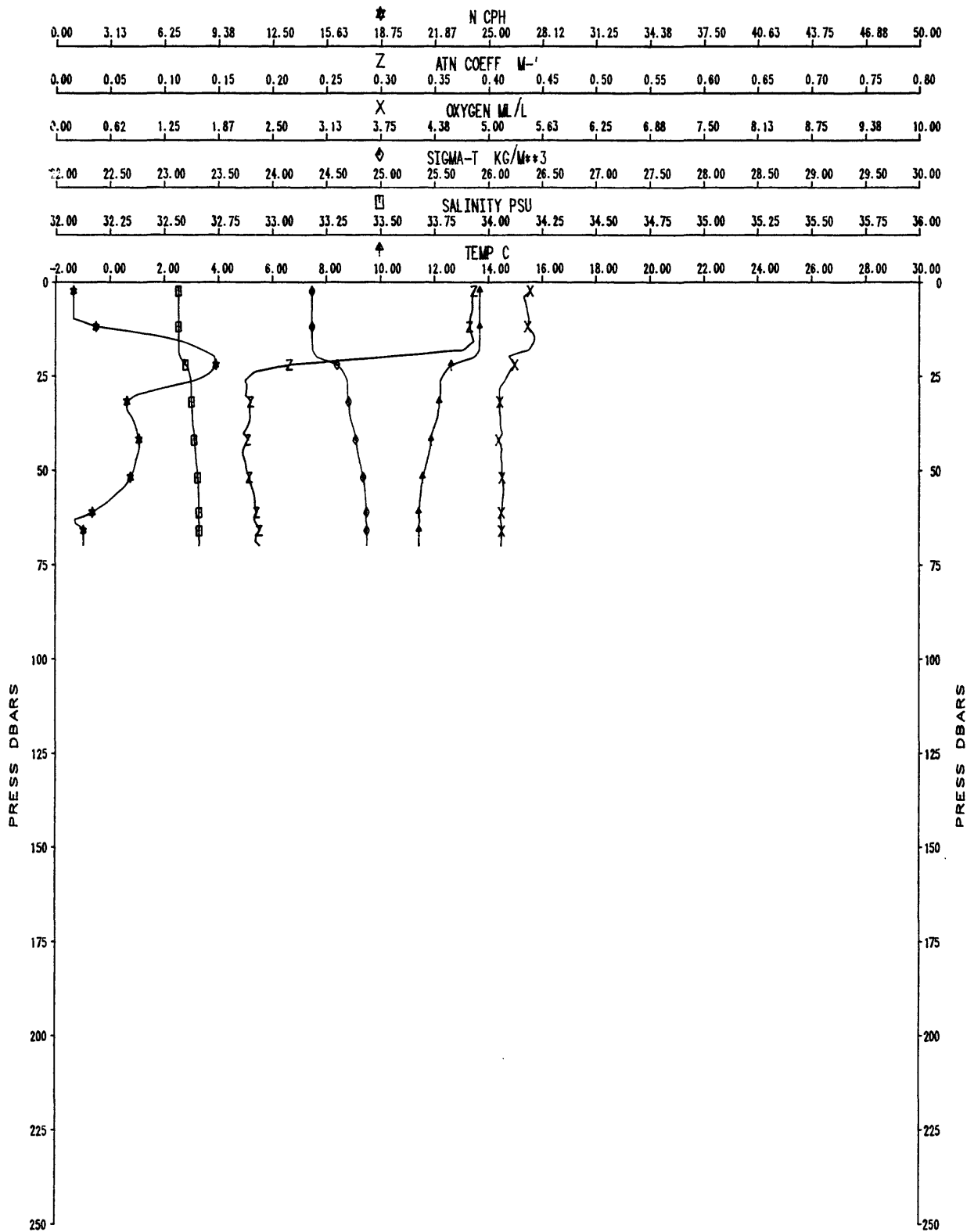
OC104

XBT-6



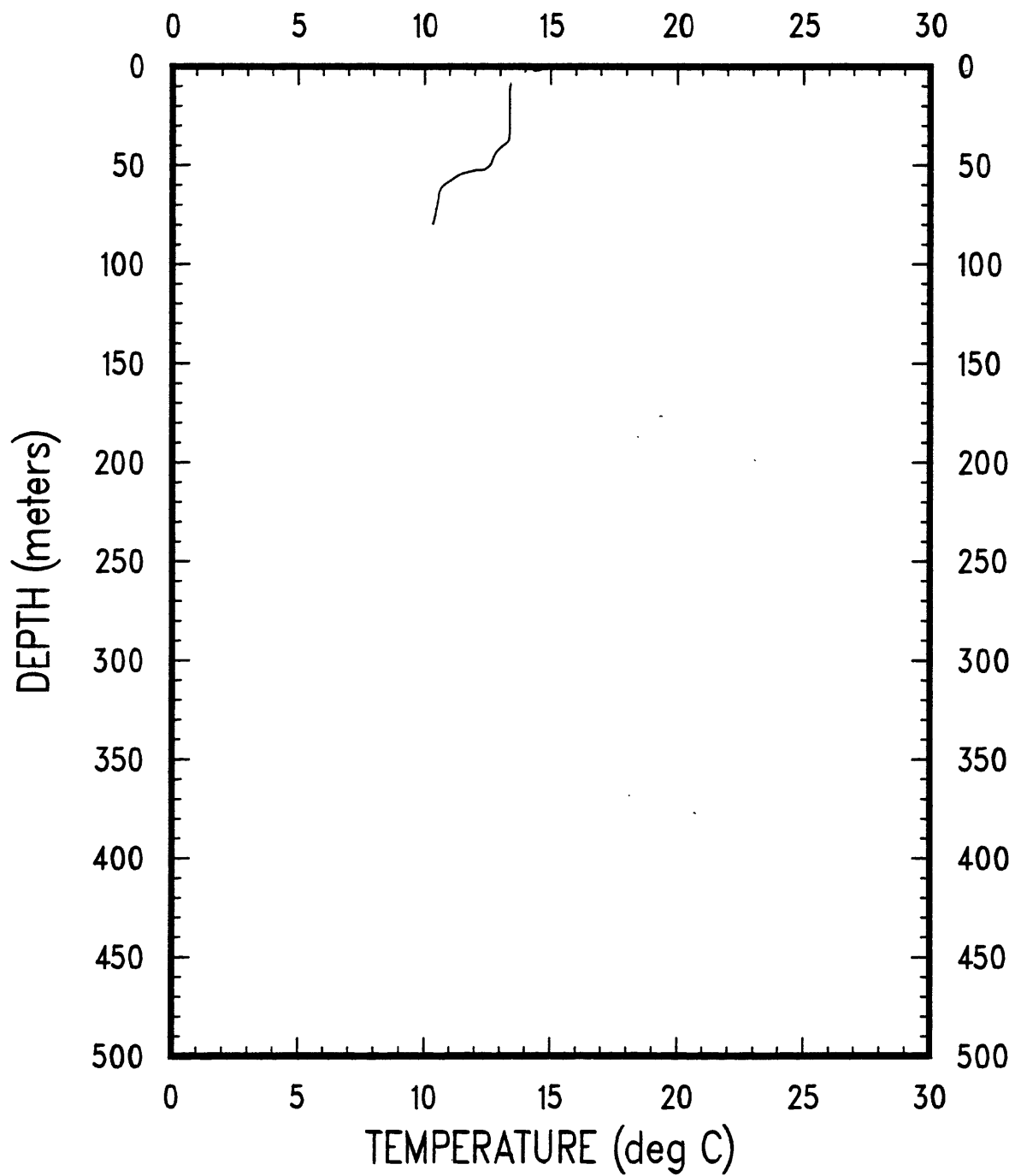
THIS DATA FROM UPCAST

0C104U CAST #7

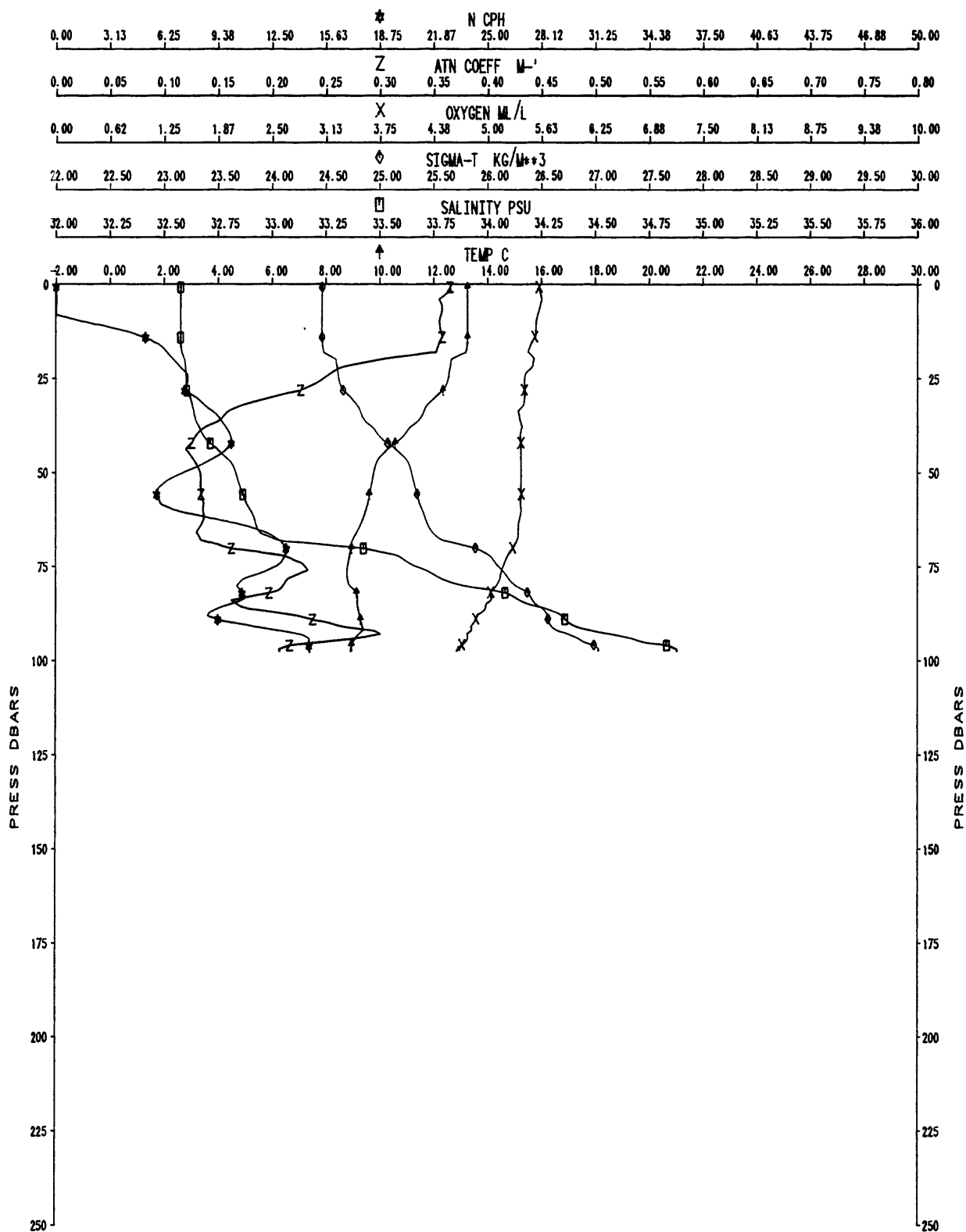


OC104

XBT-8

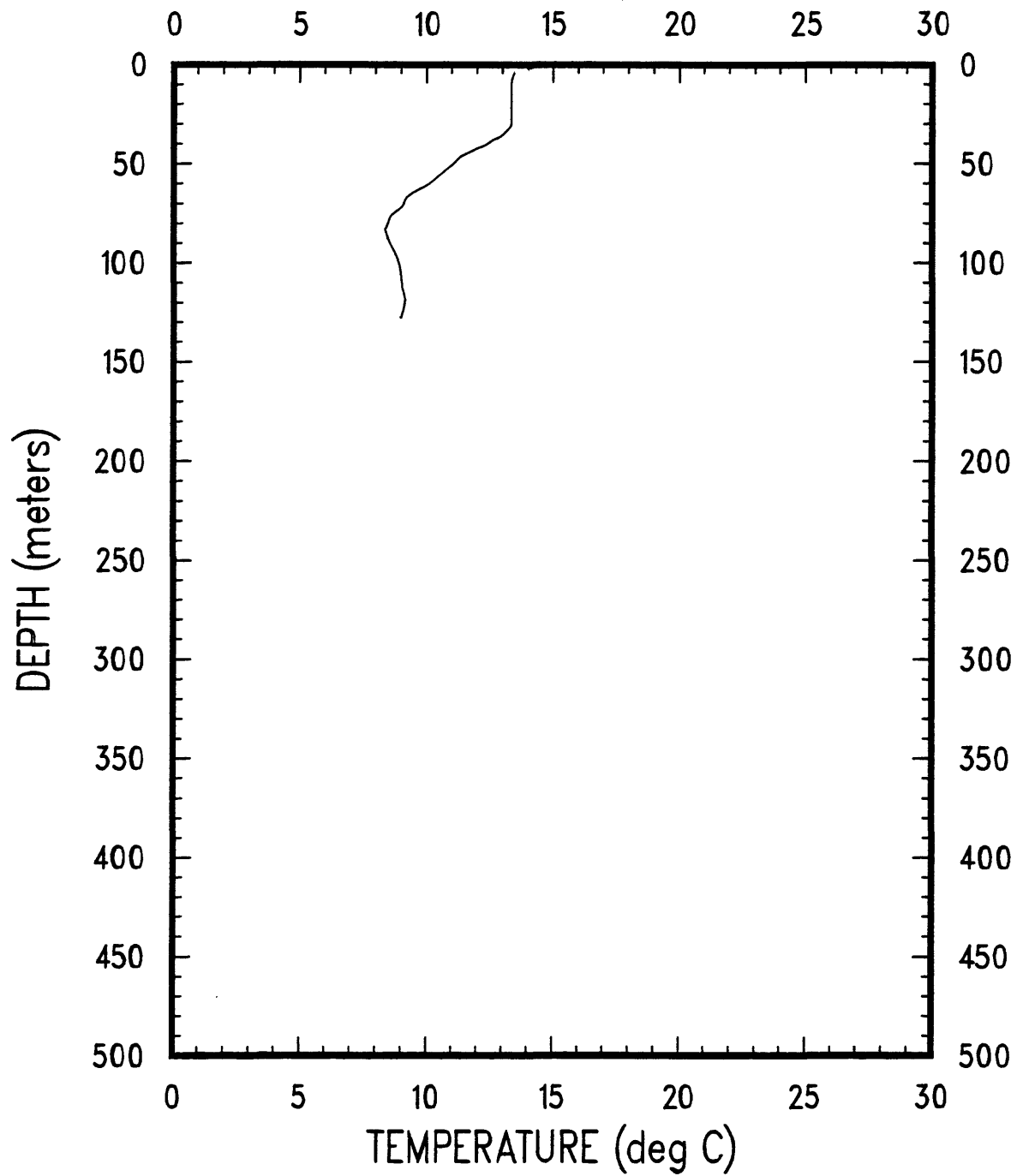


OC104A CAST #9



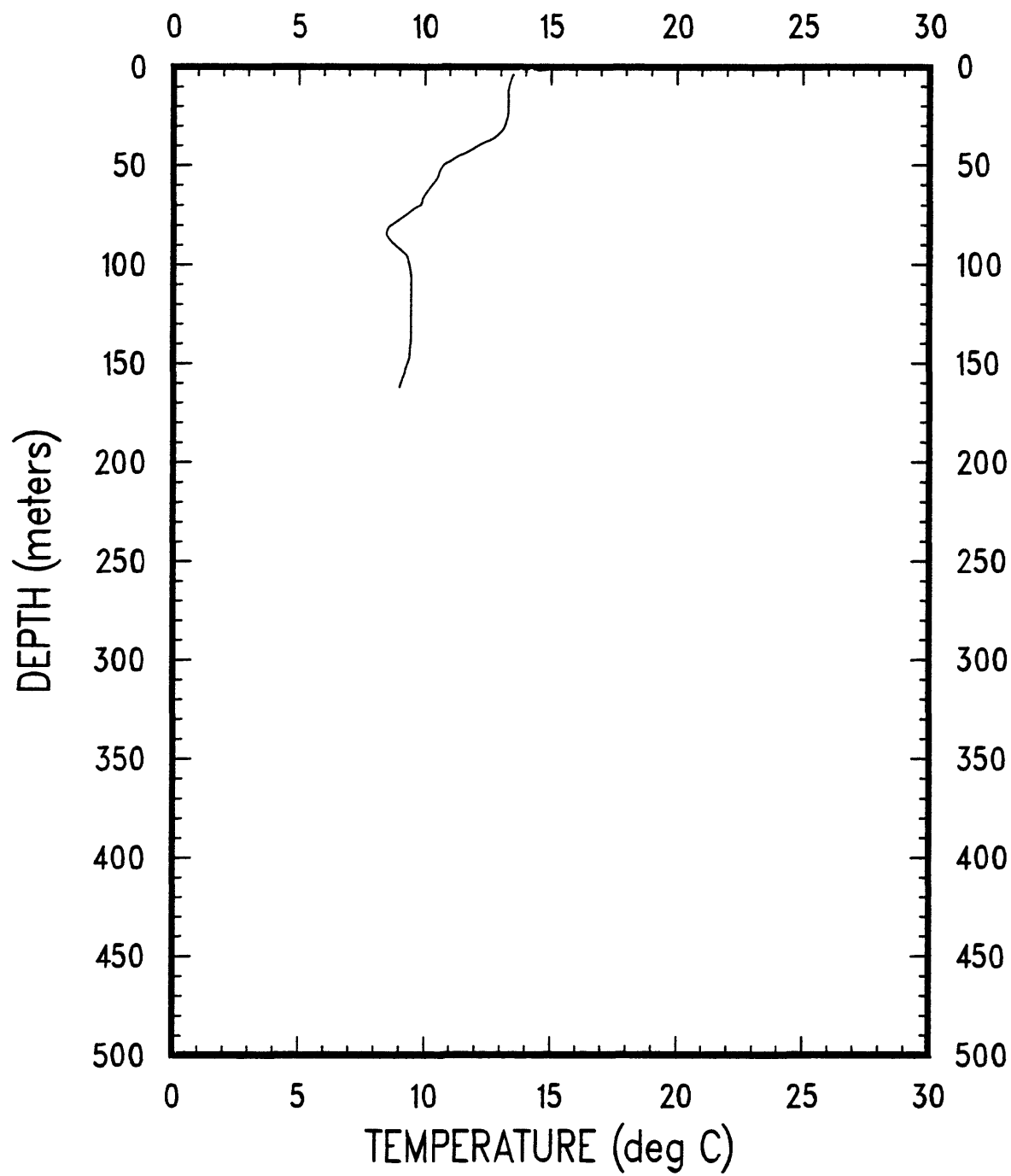
OC104

XBT-10

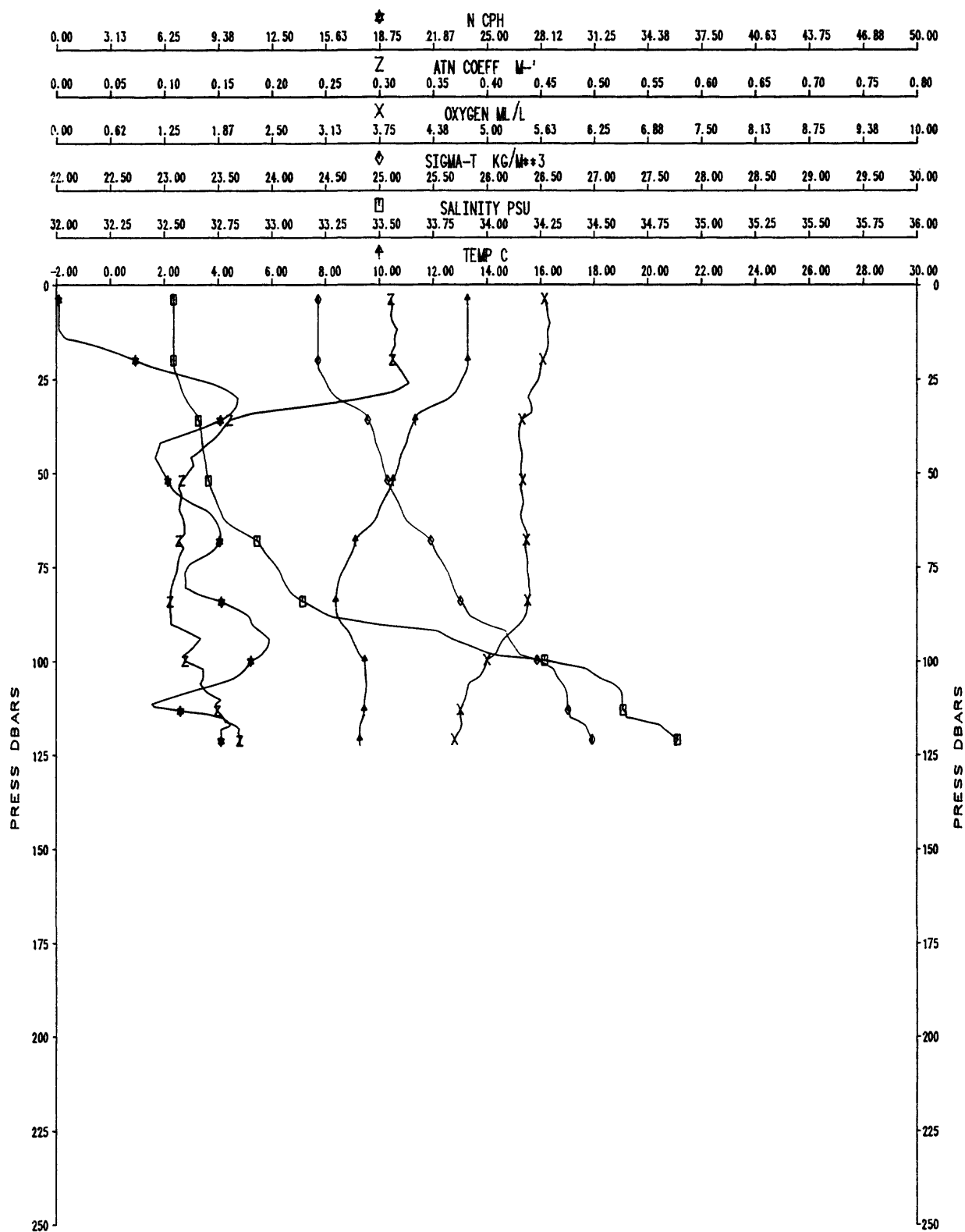


OC104

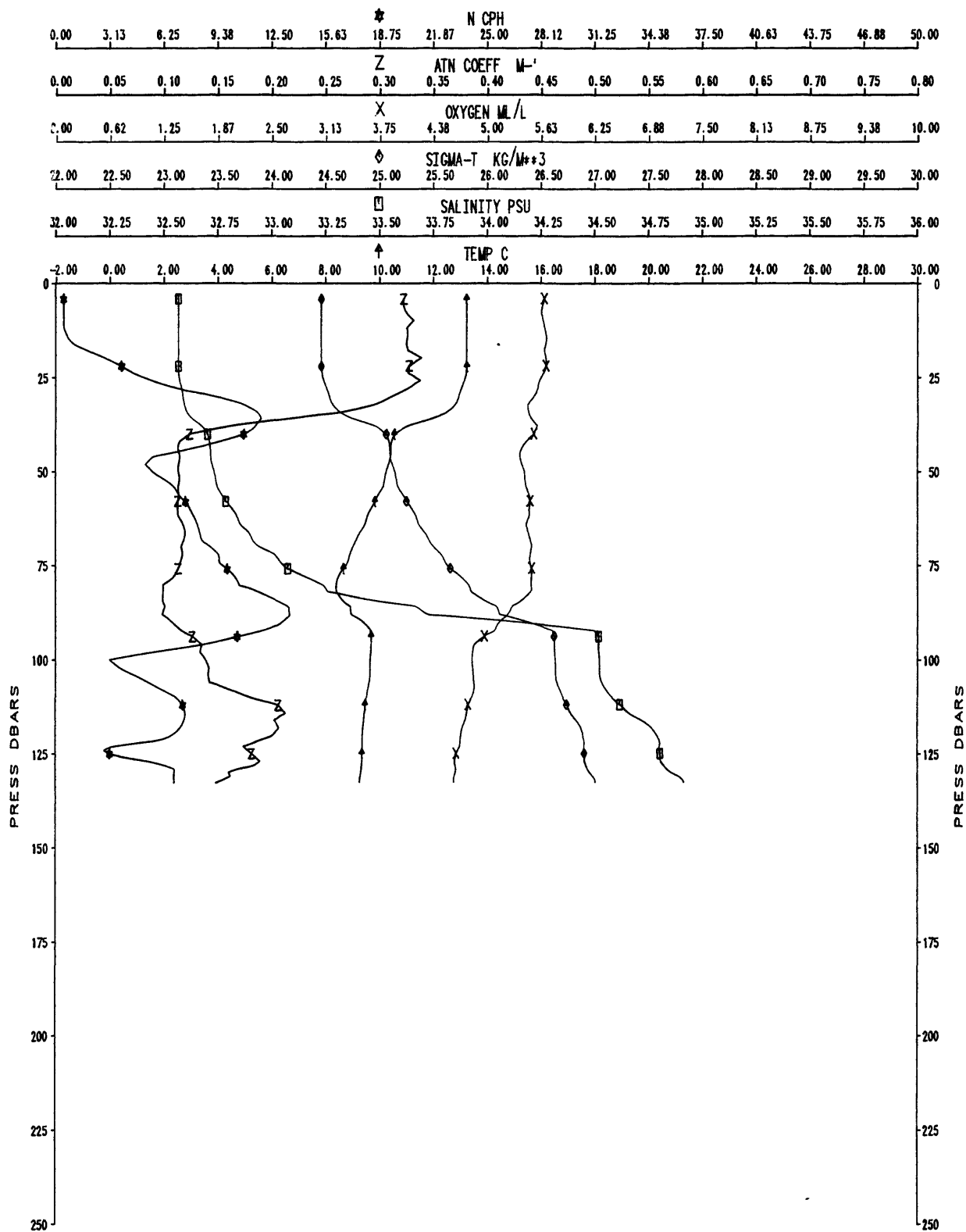
XBT-11



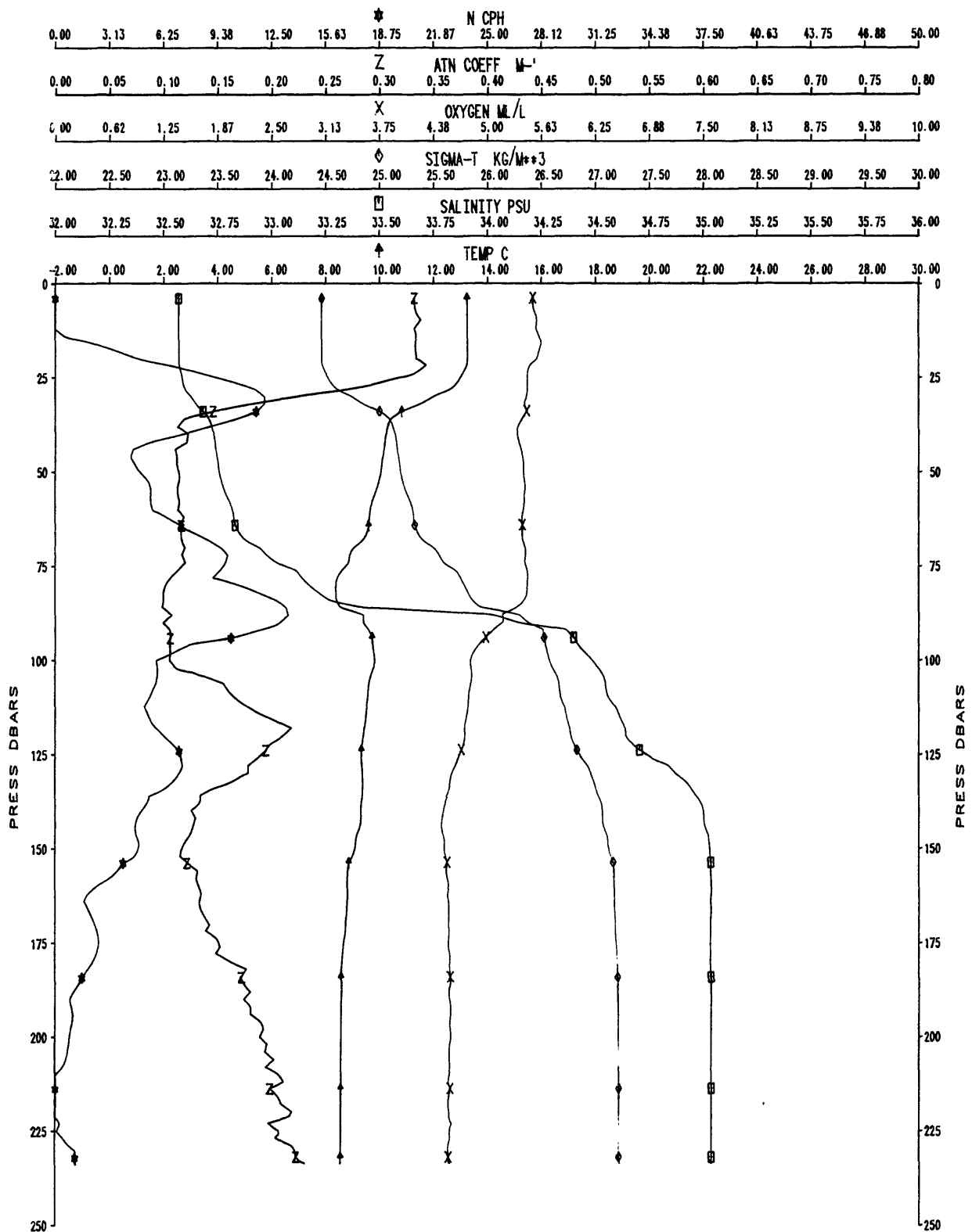
OC104A CAST #12



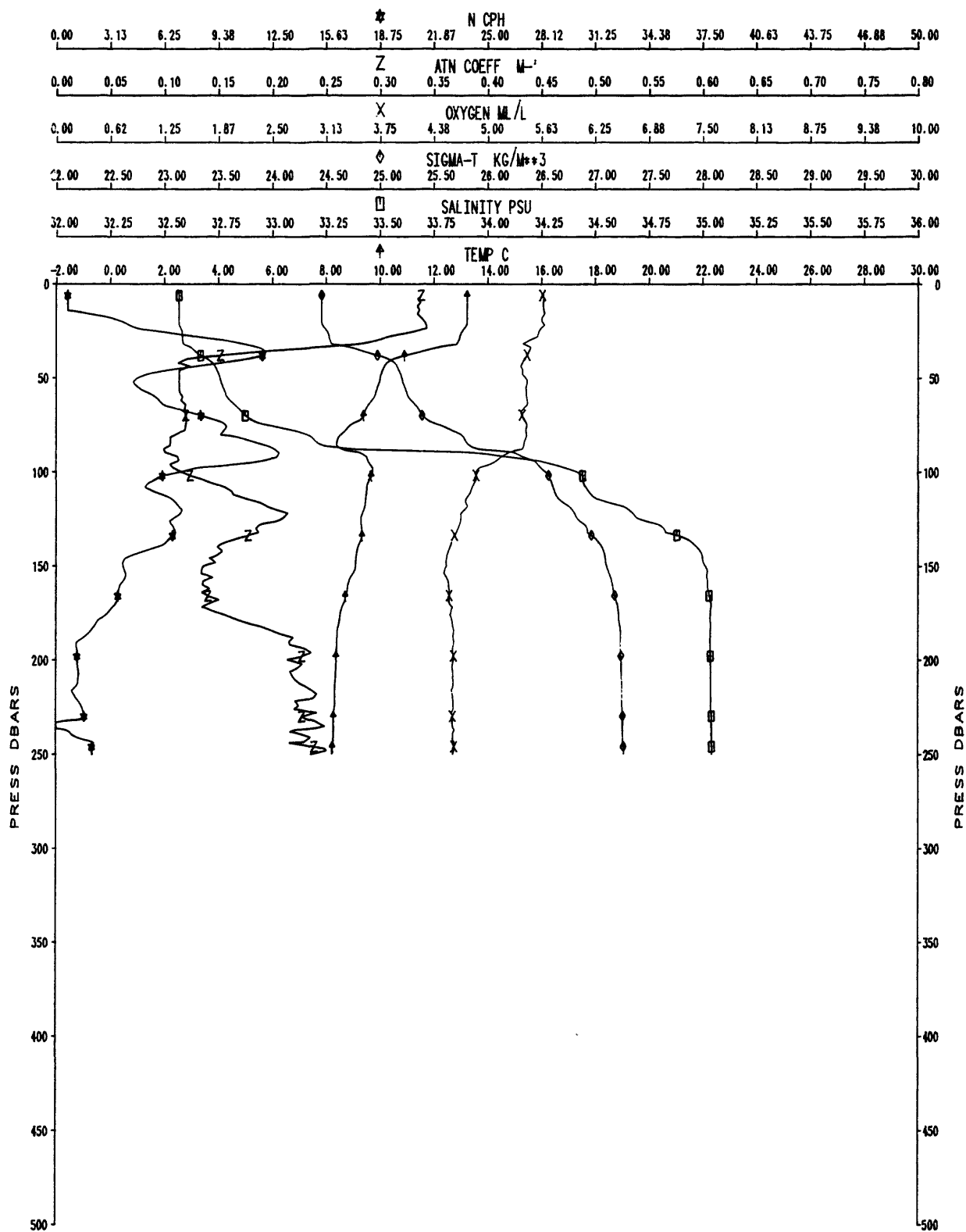
OC104A CAST #13



OC104A CAST #14

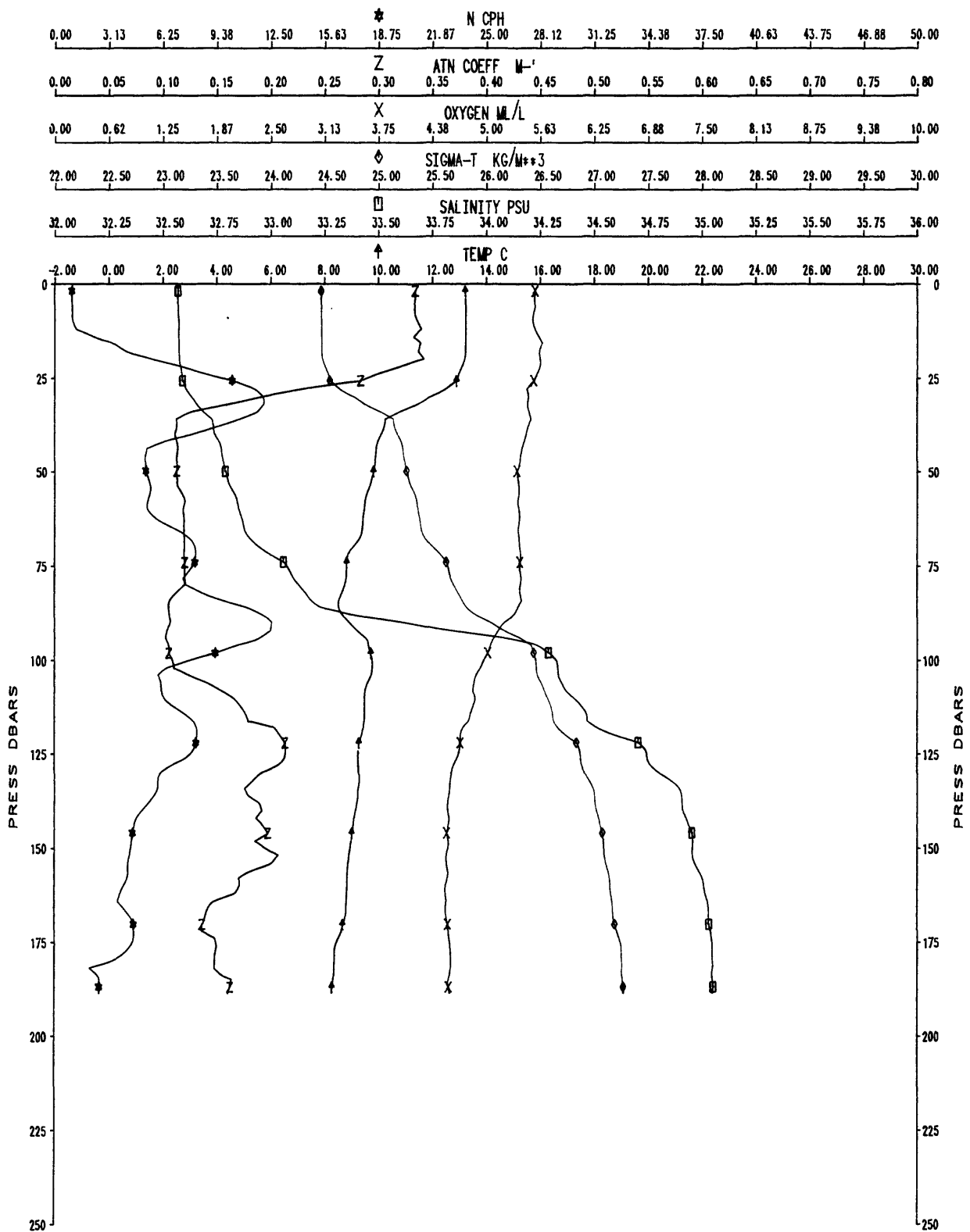


OC104A CAST #15

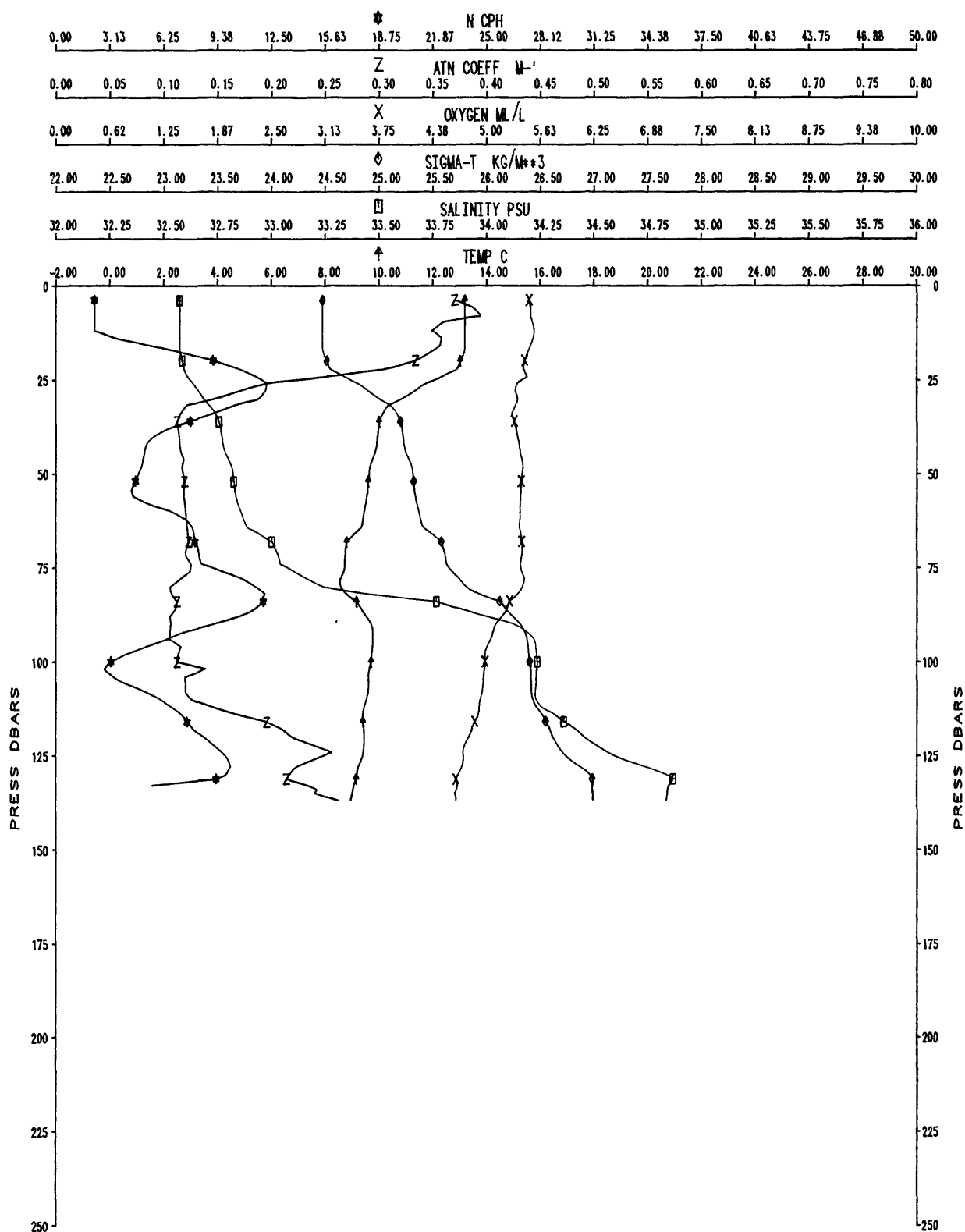


THIS DATA FROM UPCAST

OC104U CAST #16

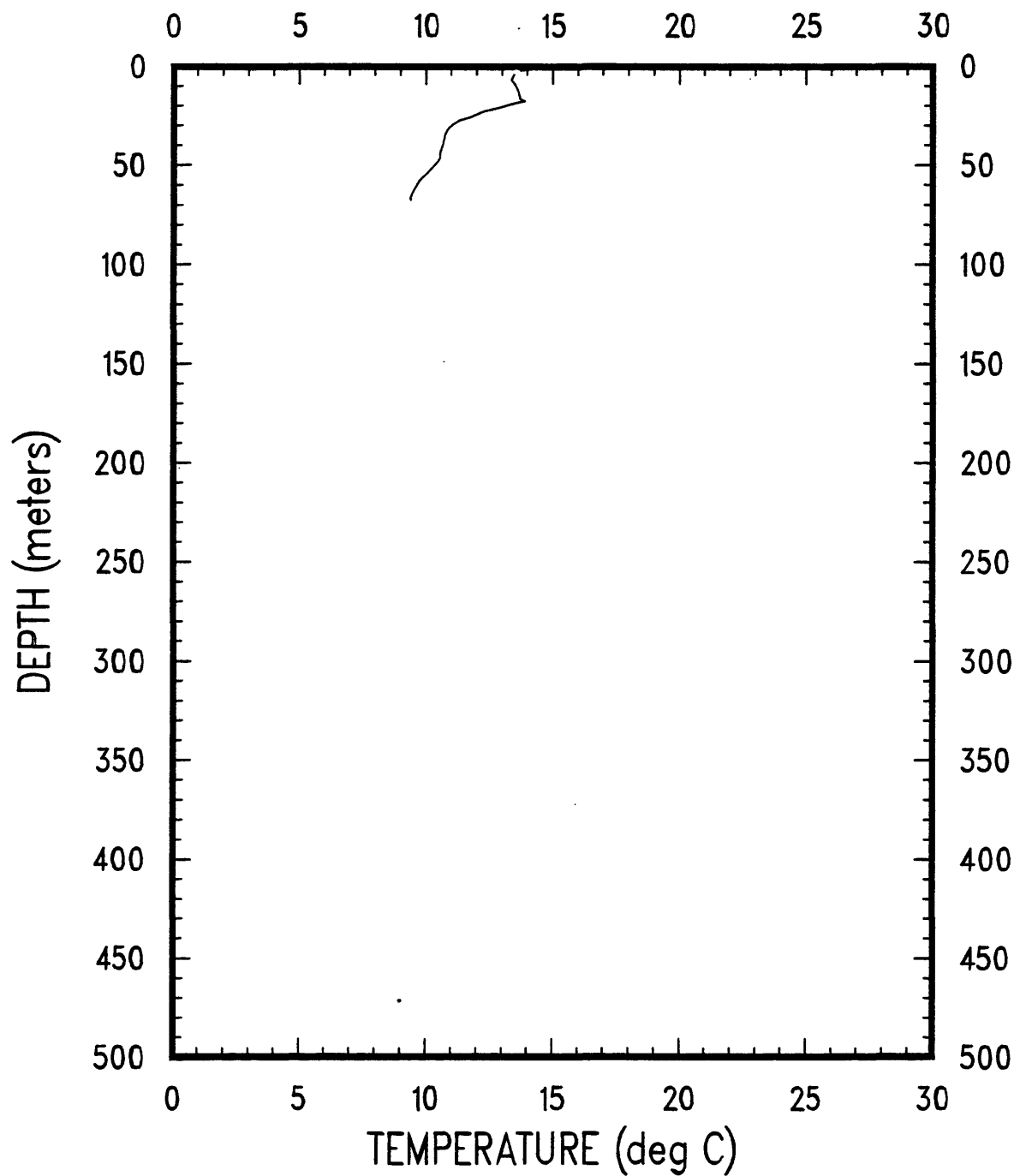


OC104B CAST #17



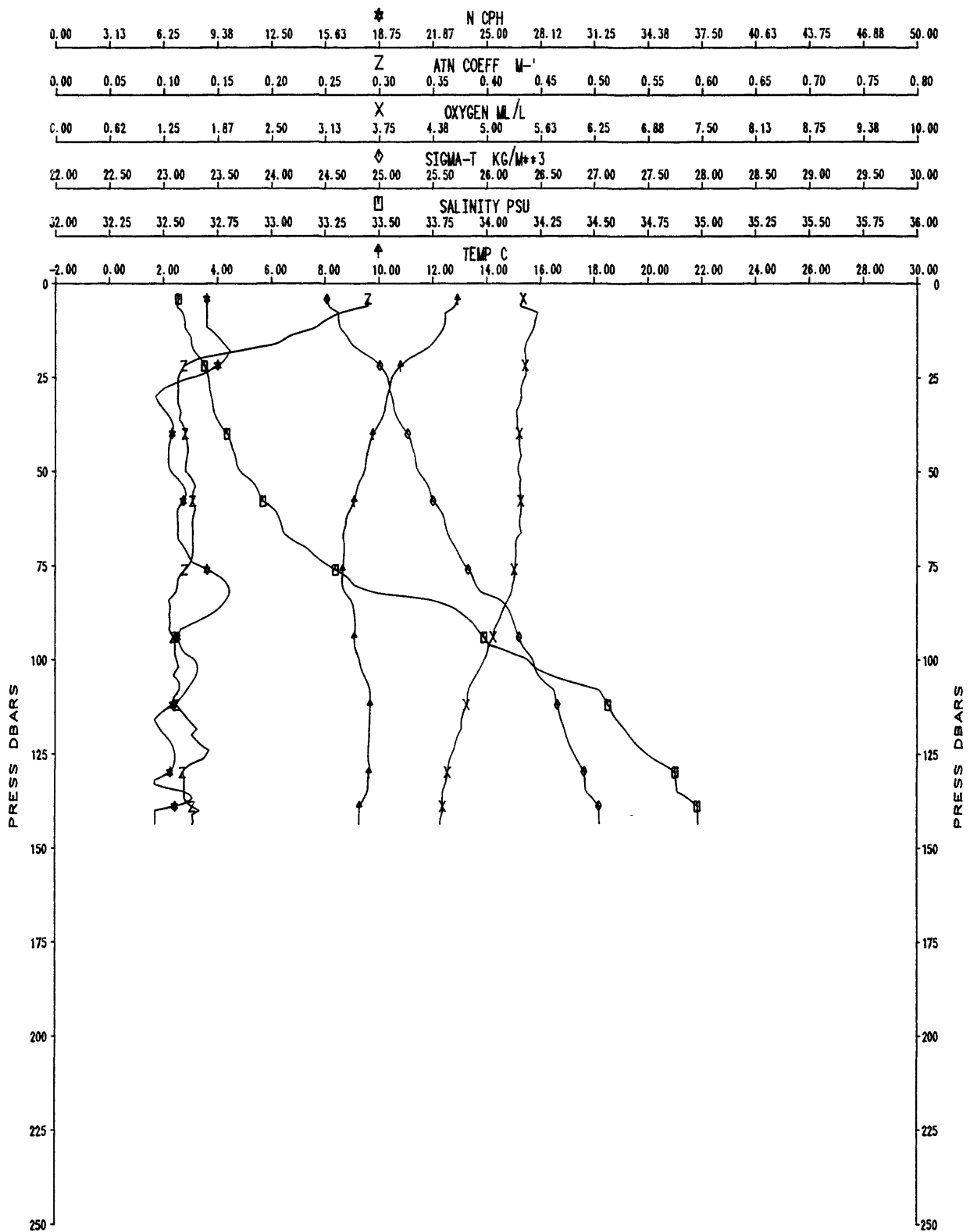
OC104

XBT-18



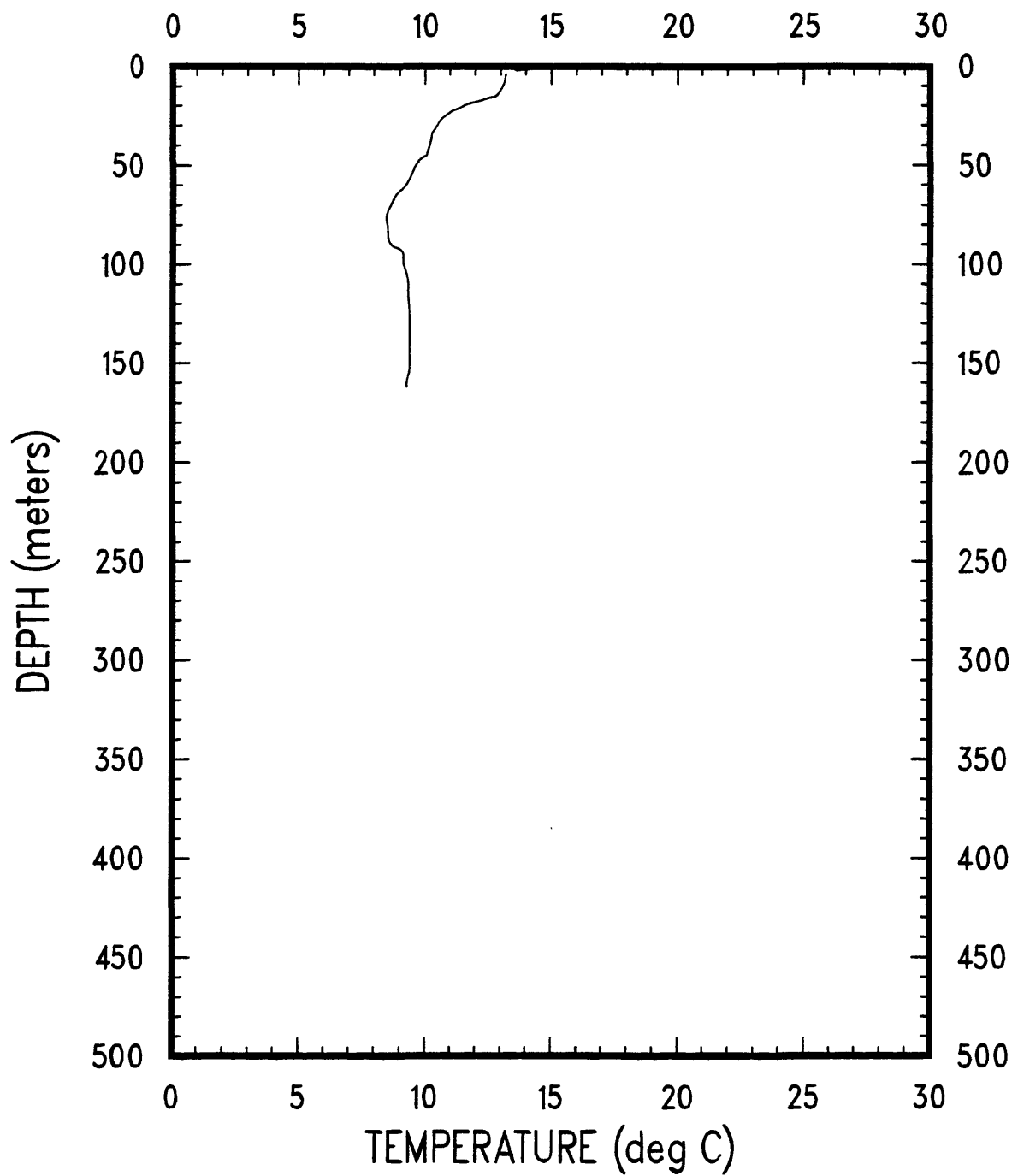
THIS DATA FROM UPCAST

OC104U CAST #19



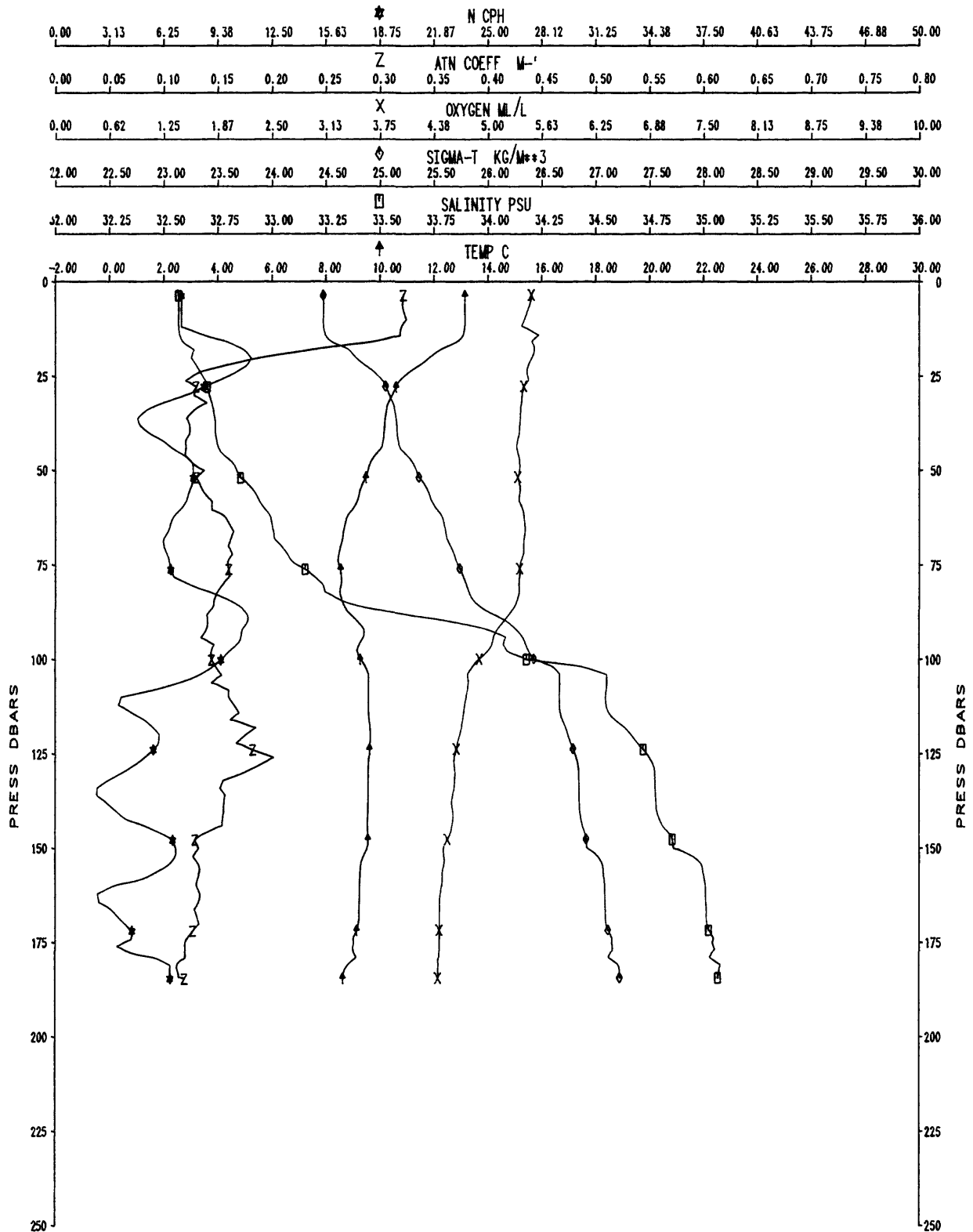
OC104

XBT-20



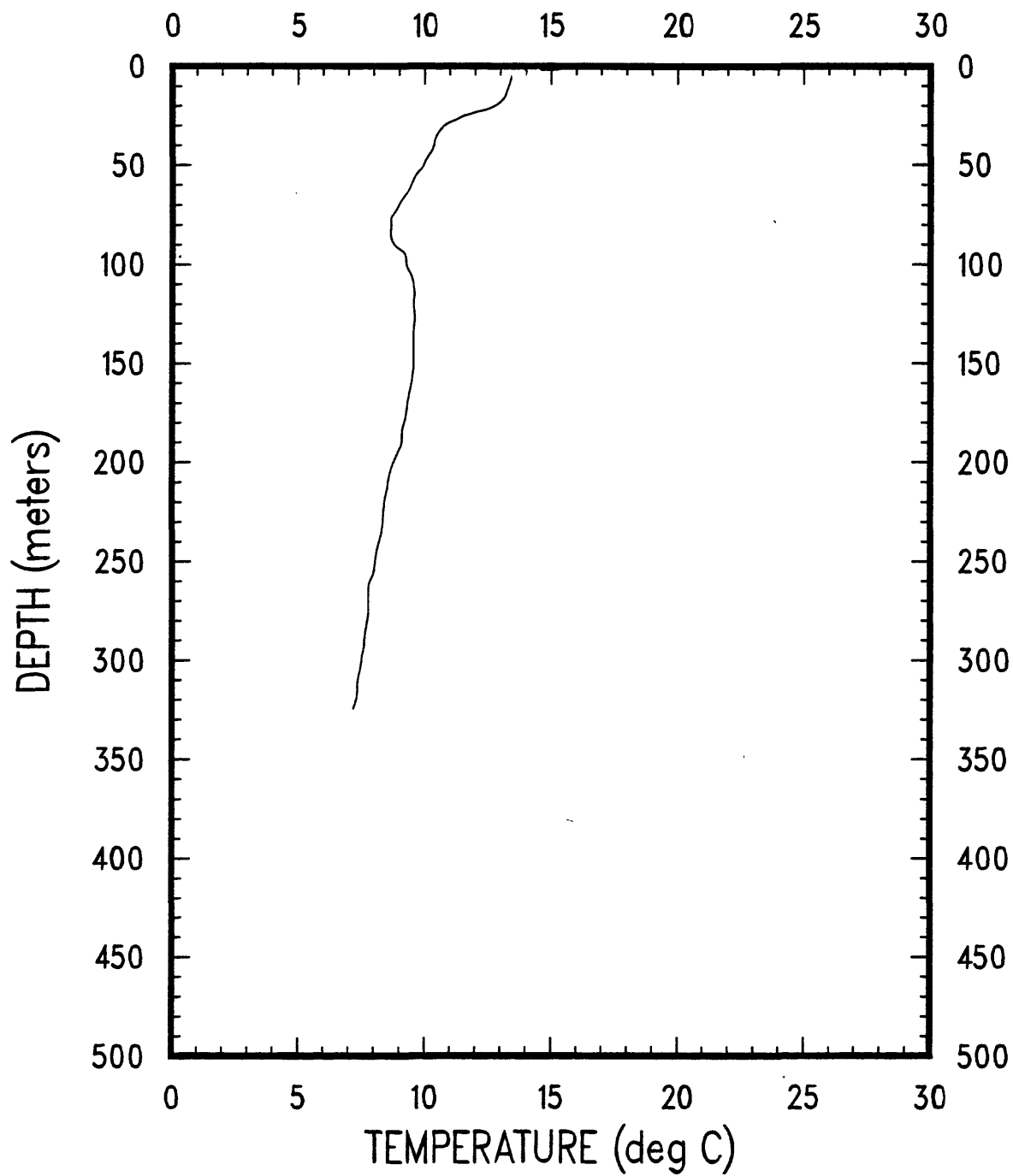
THIS DATA FROM UPGAST

0C104U CAST #21

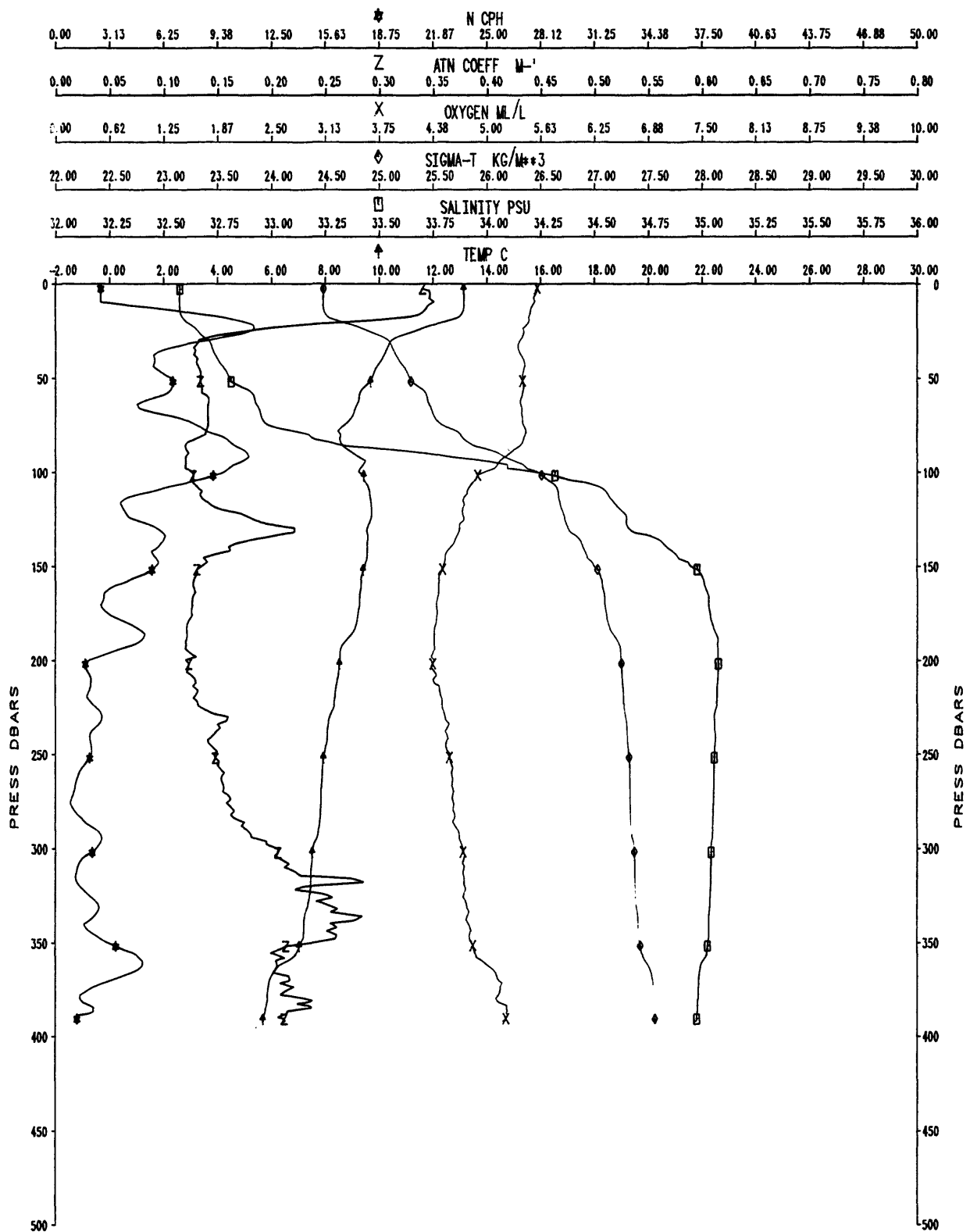


OC104

XBT-22

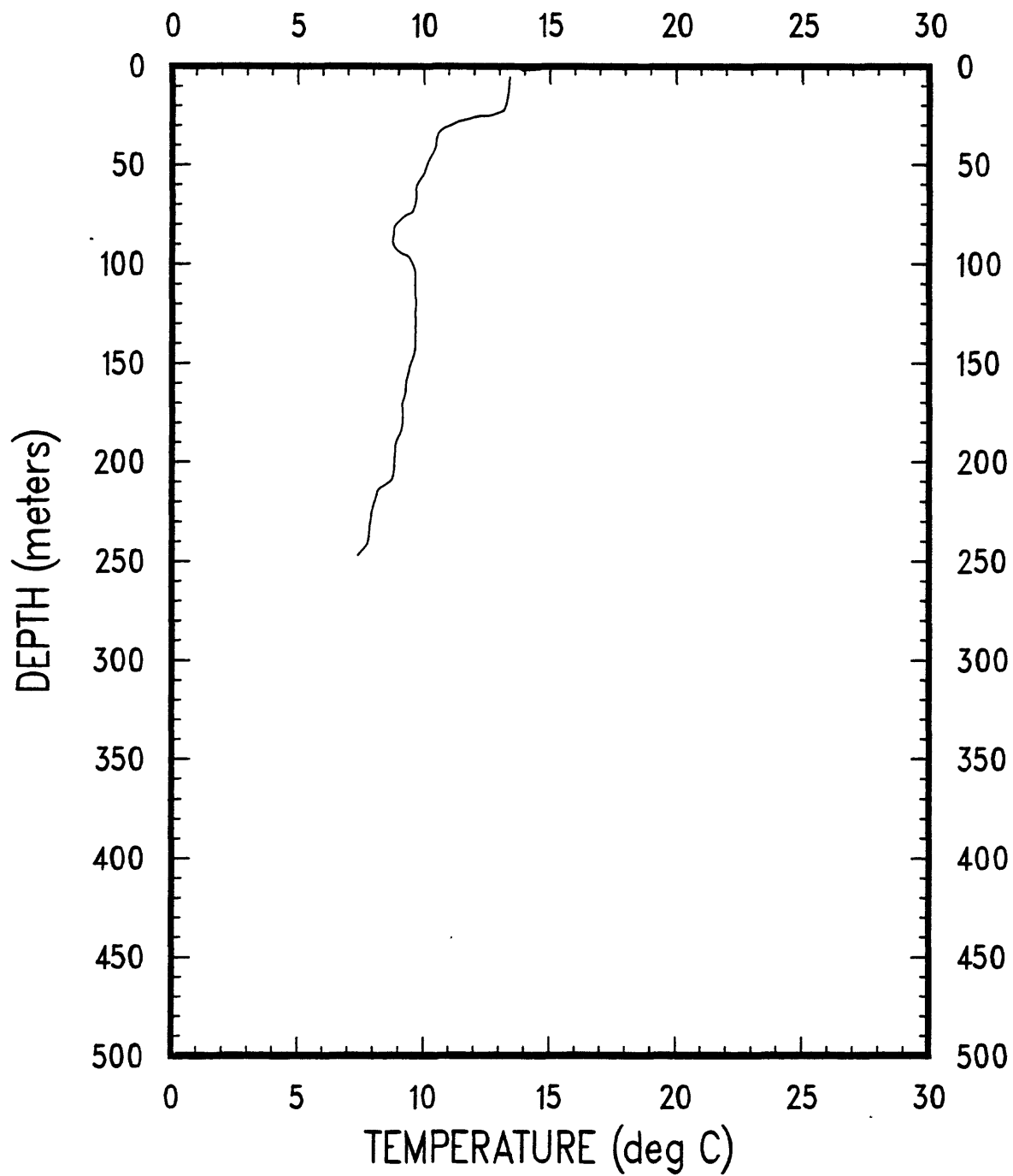


OC104A CAST #23

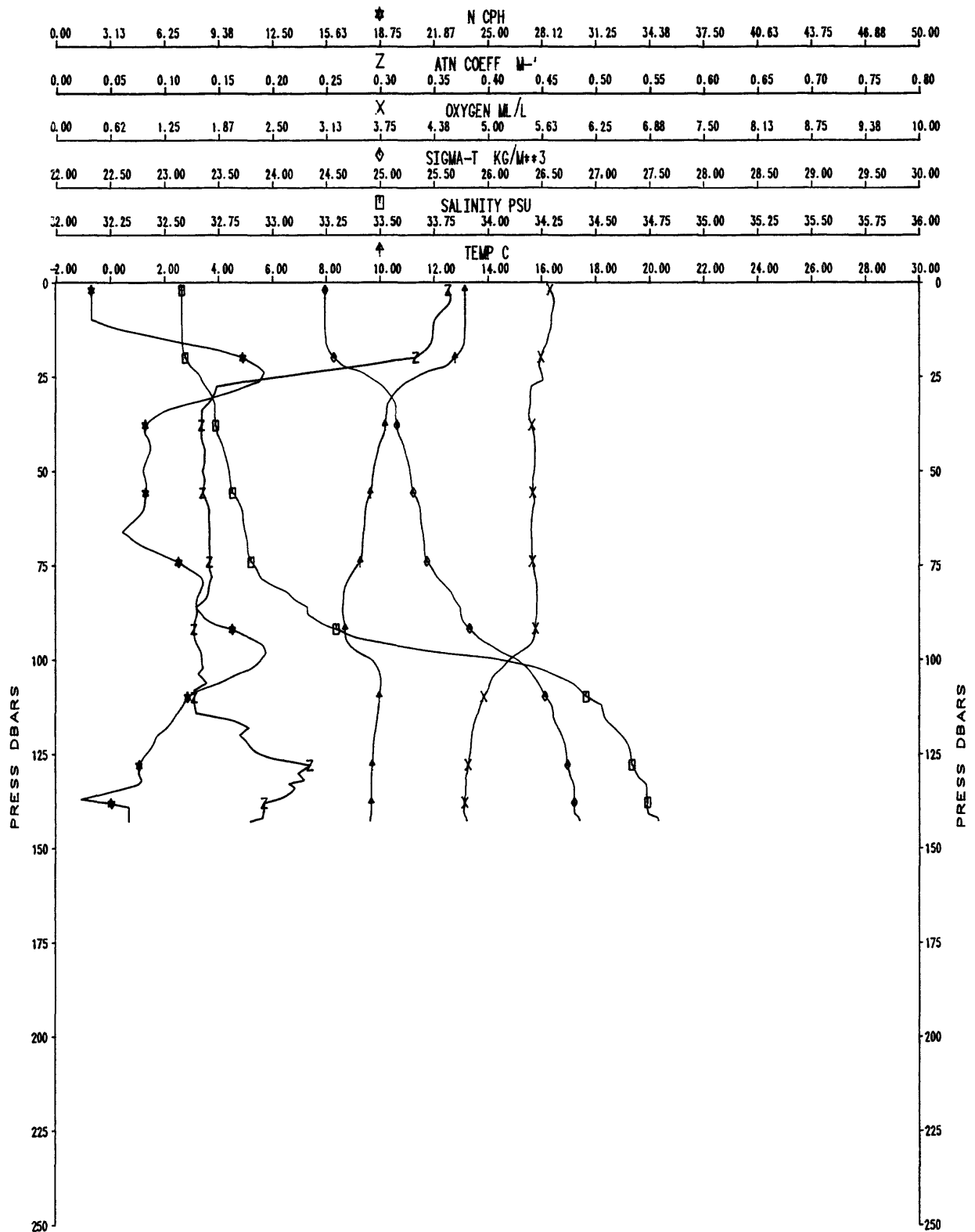


OC104

XBT-24

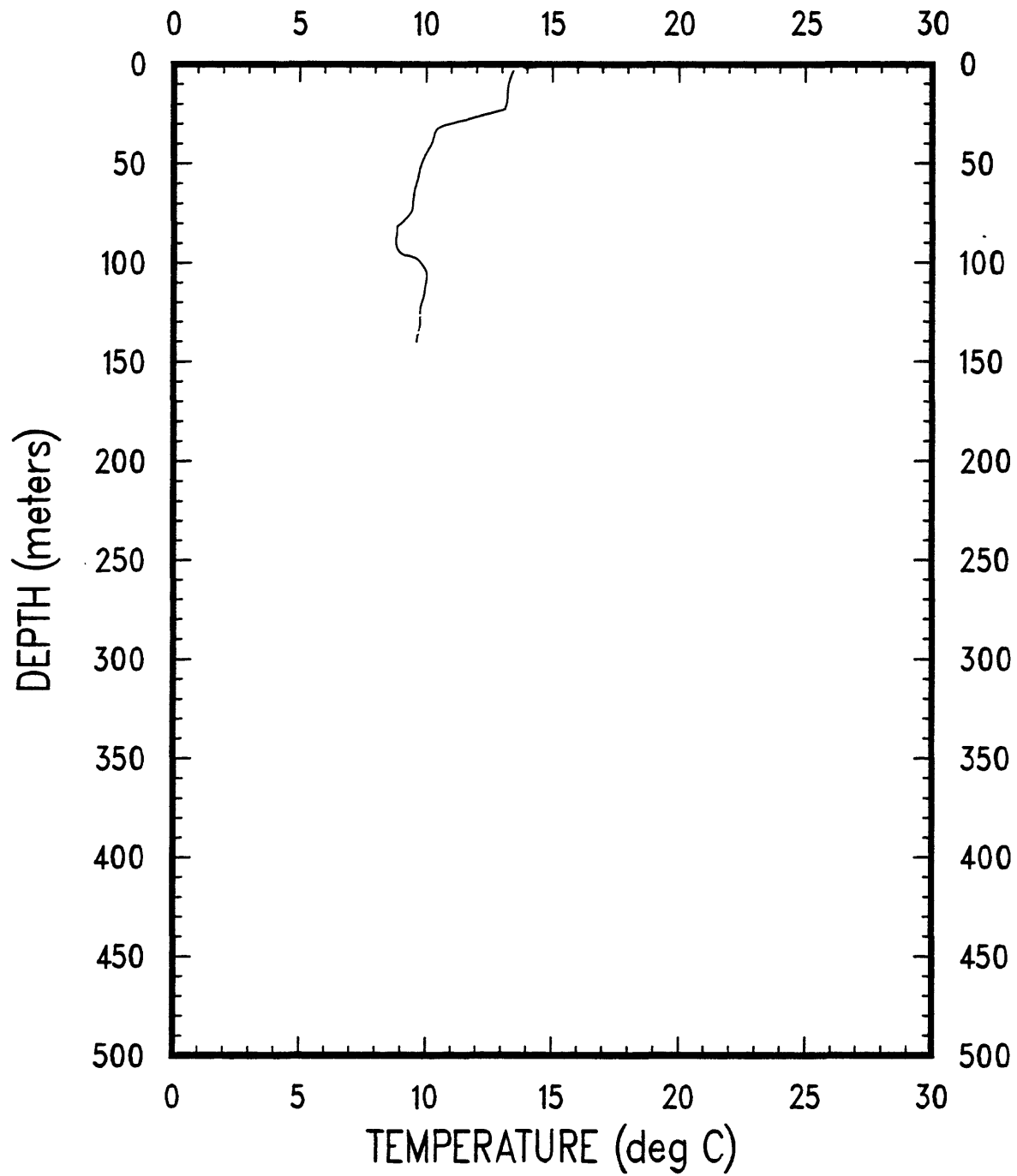


OC104A CAST #25

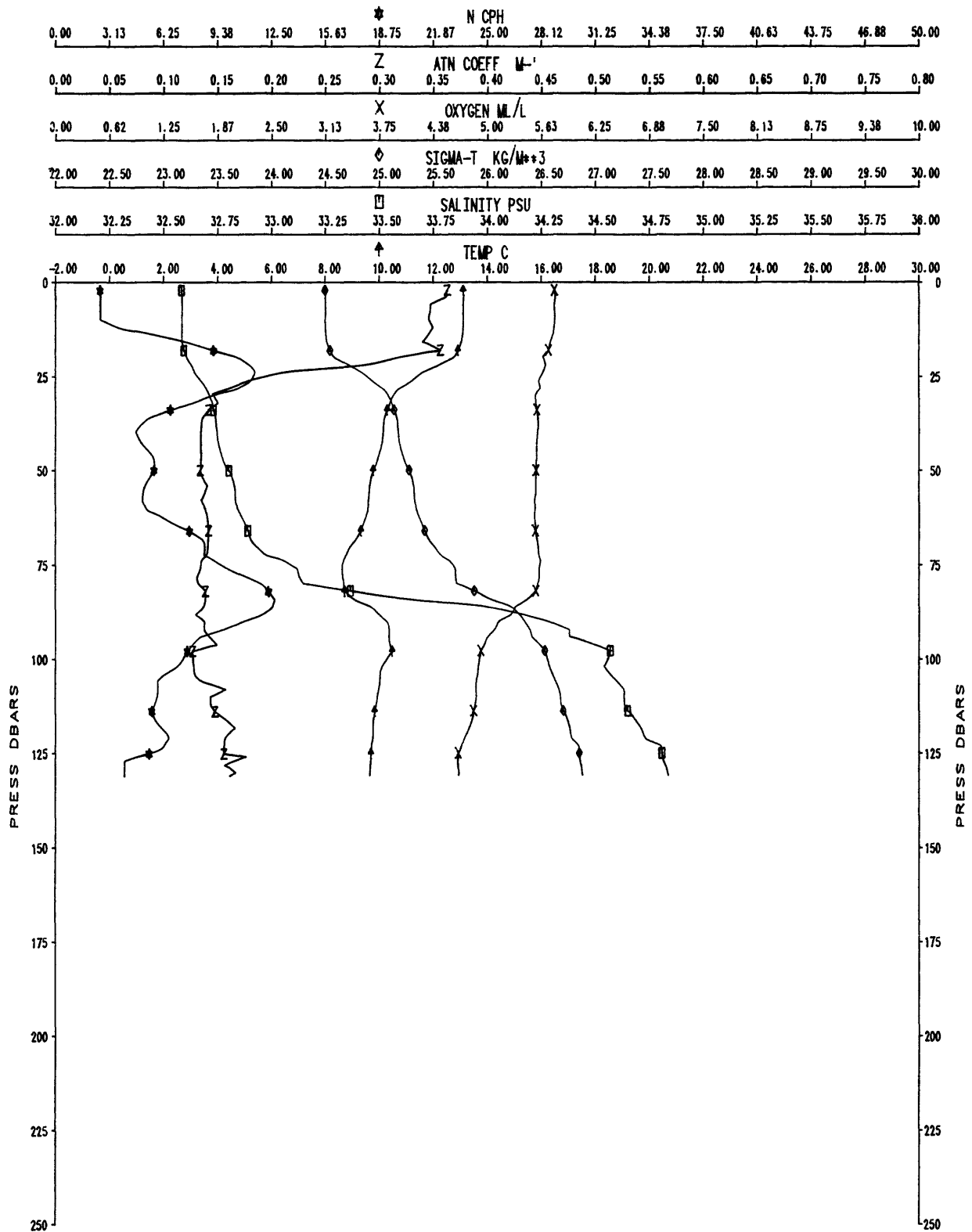


OC104

XBT-26

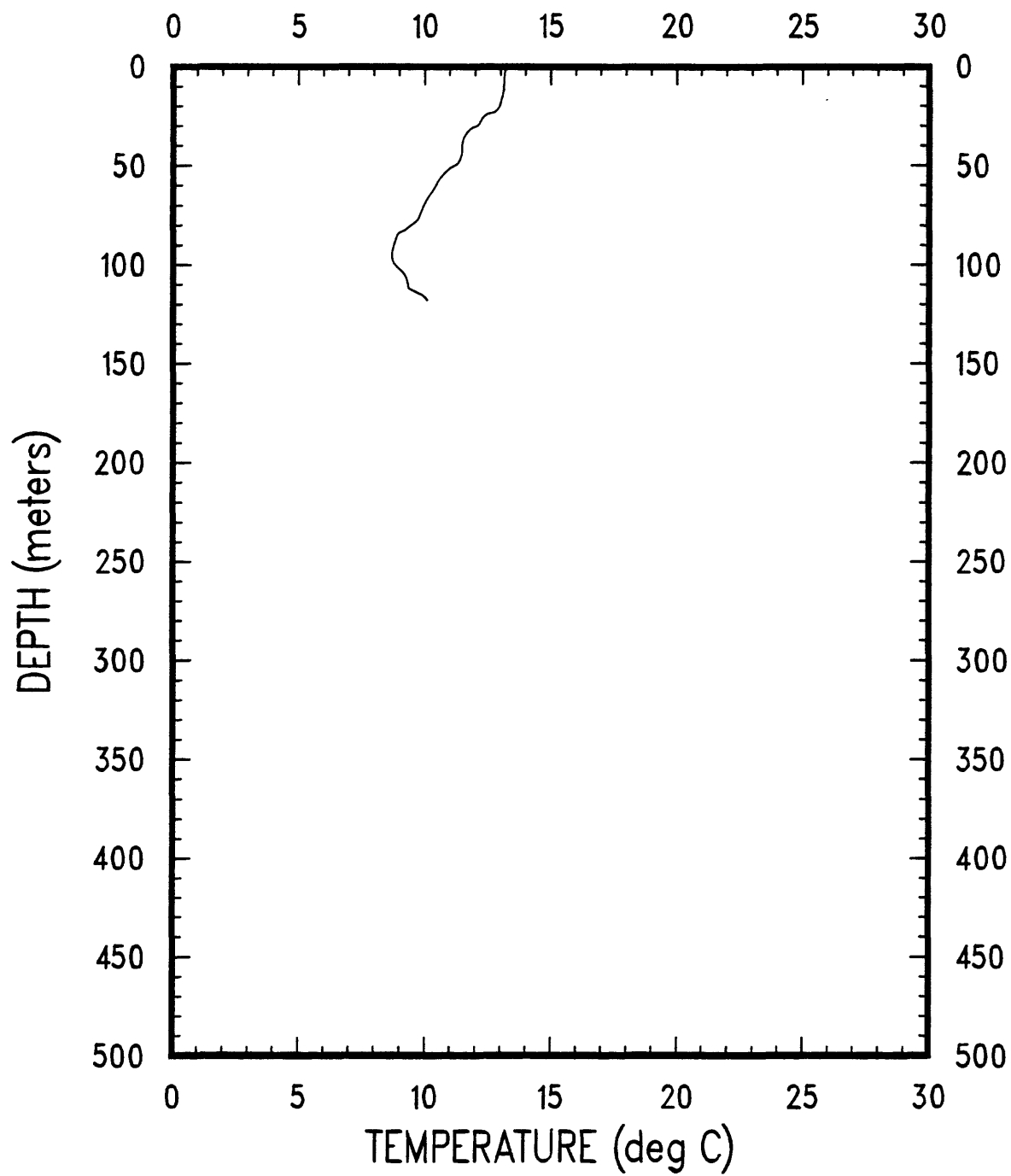


OC104A CAST #27



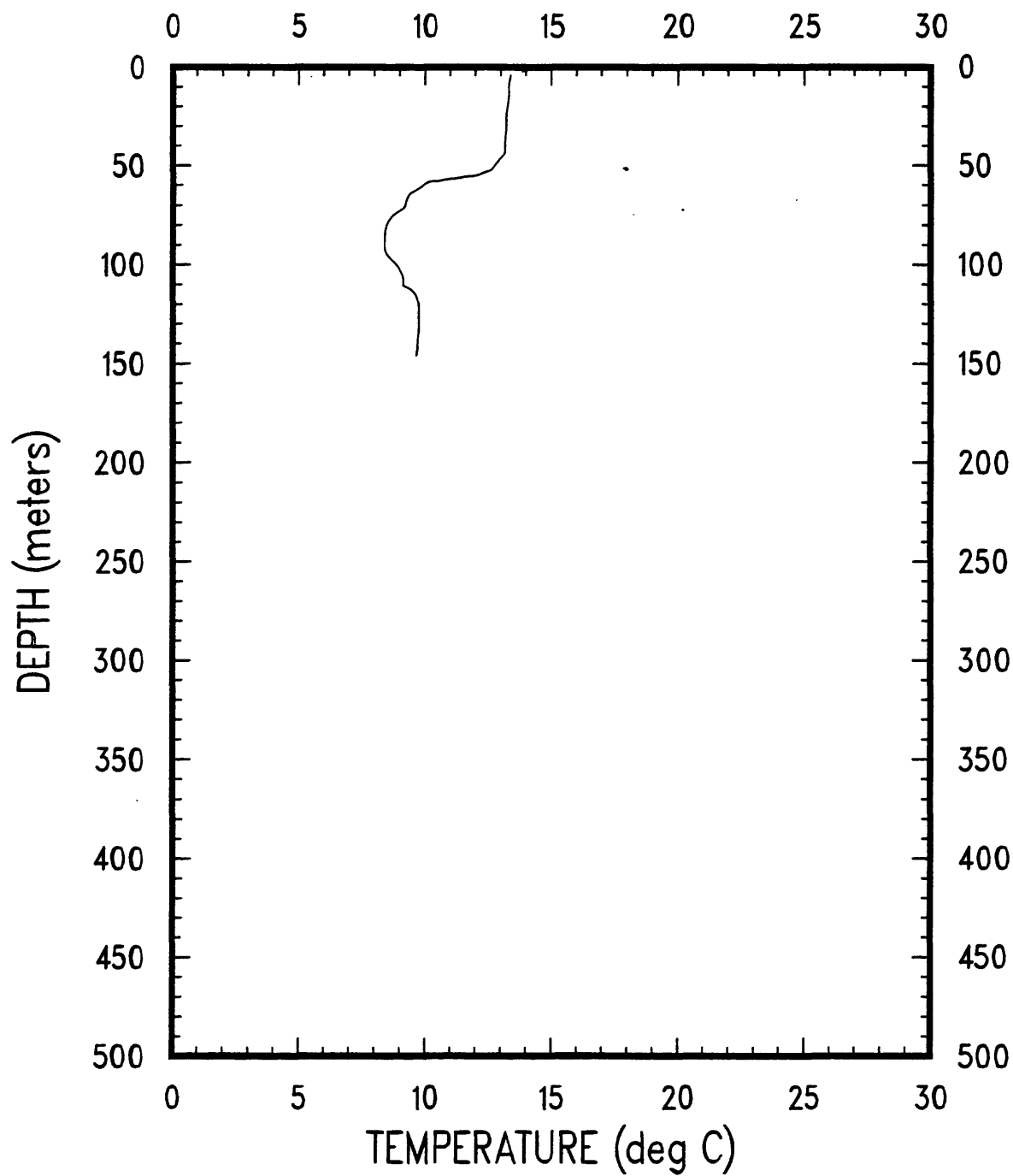
OC104

XBT-28

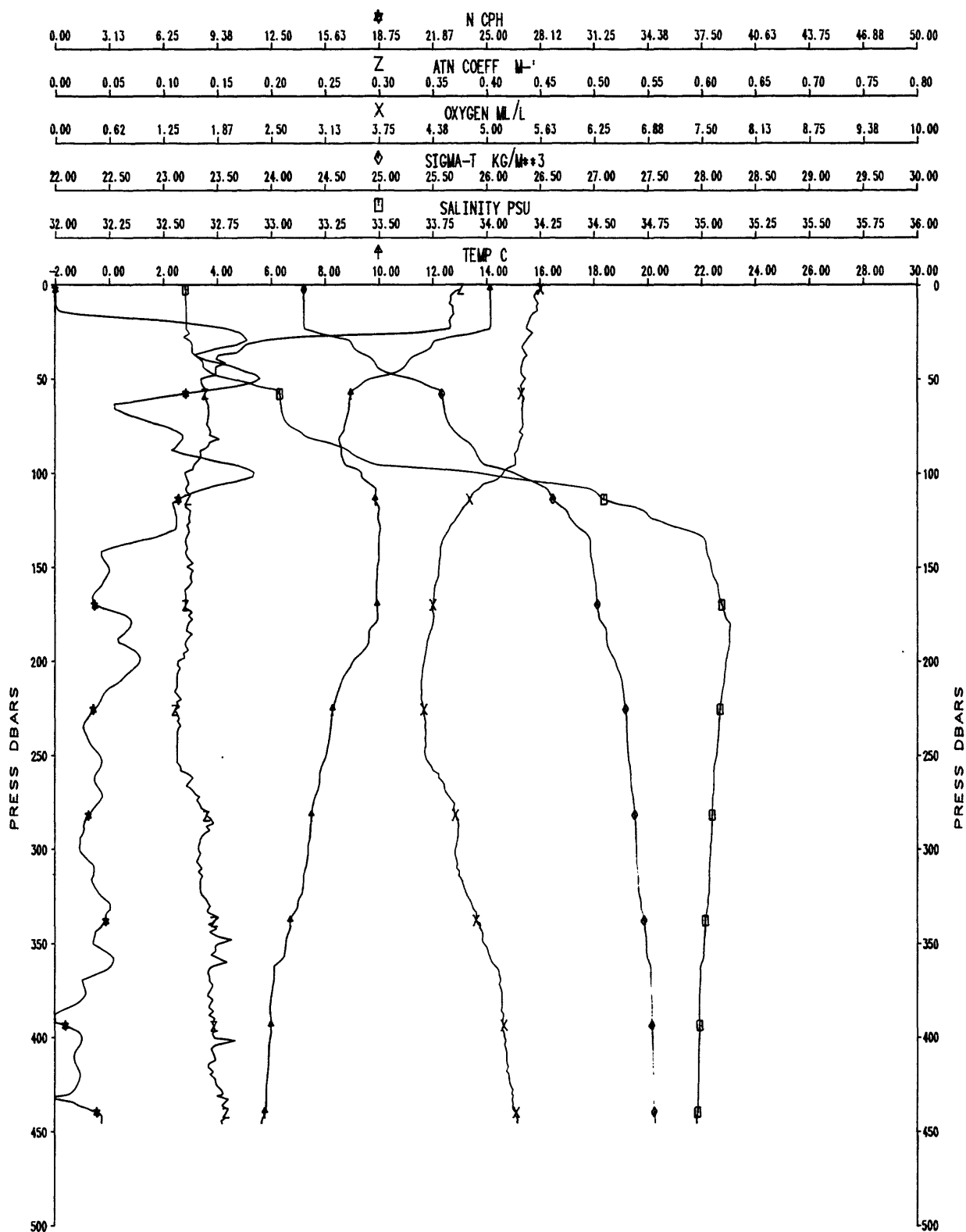


OC104

XBT-29

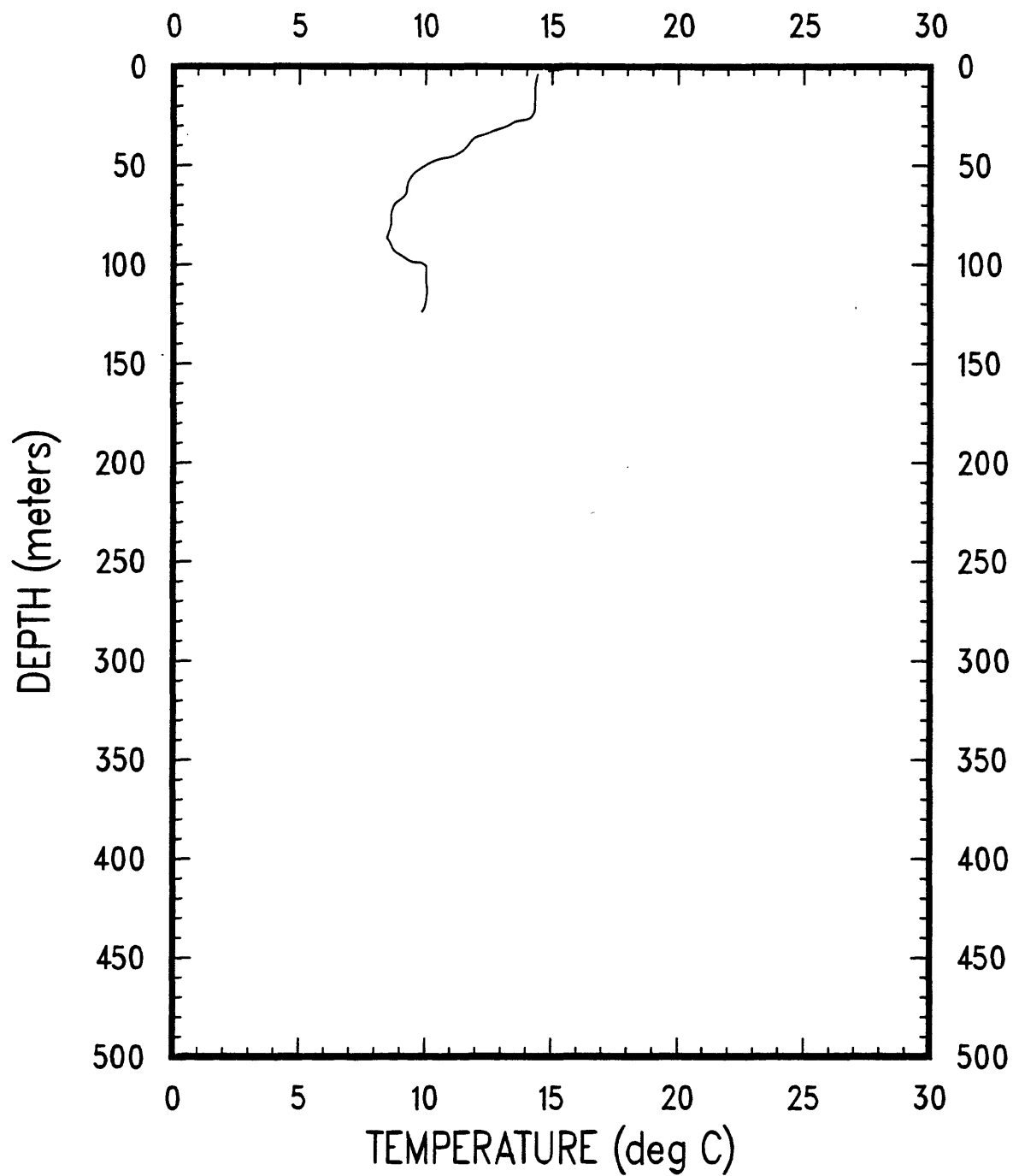


OC104B CAST #30



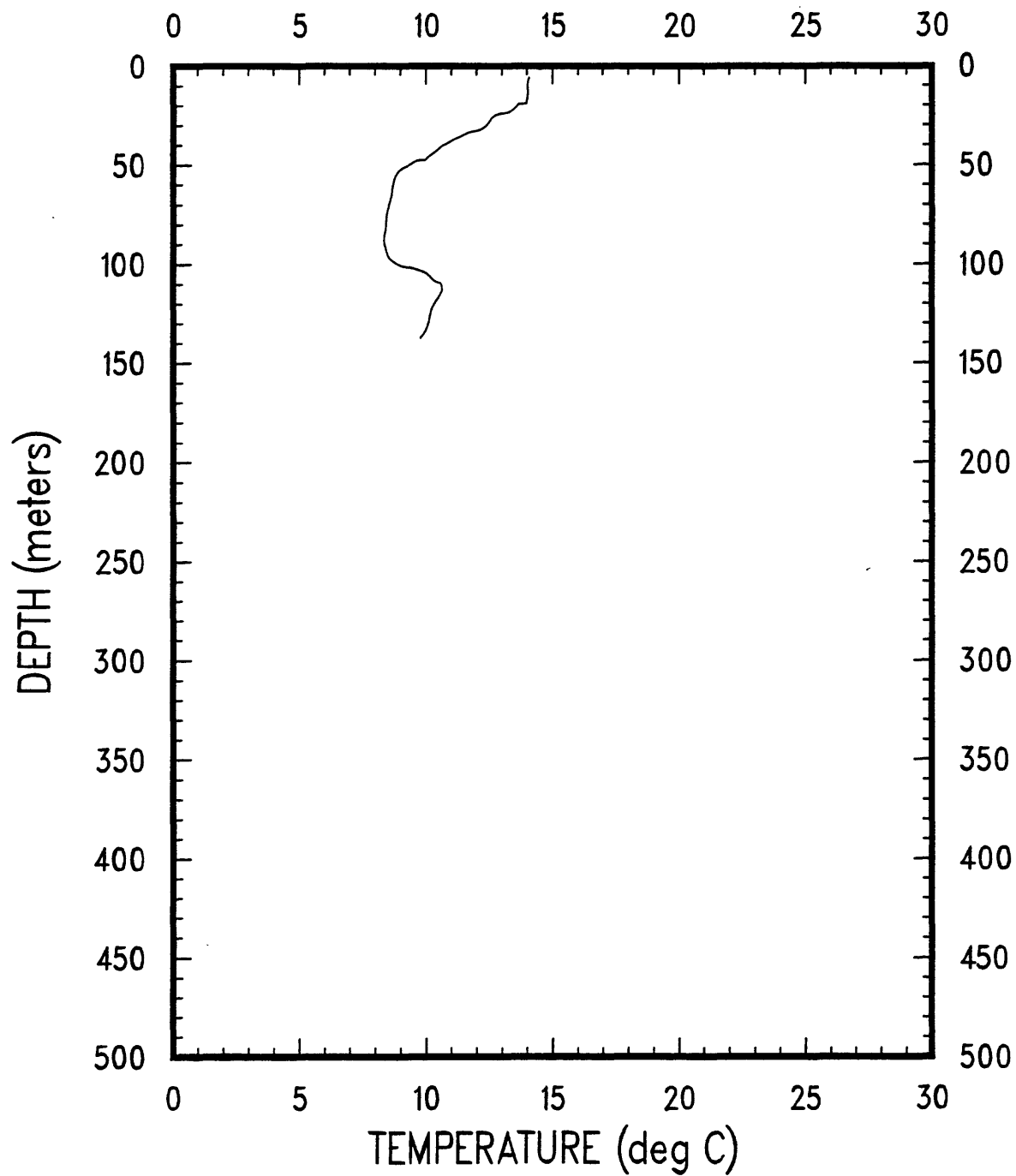
OC104

XBT-31



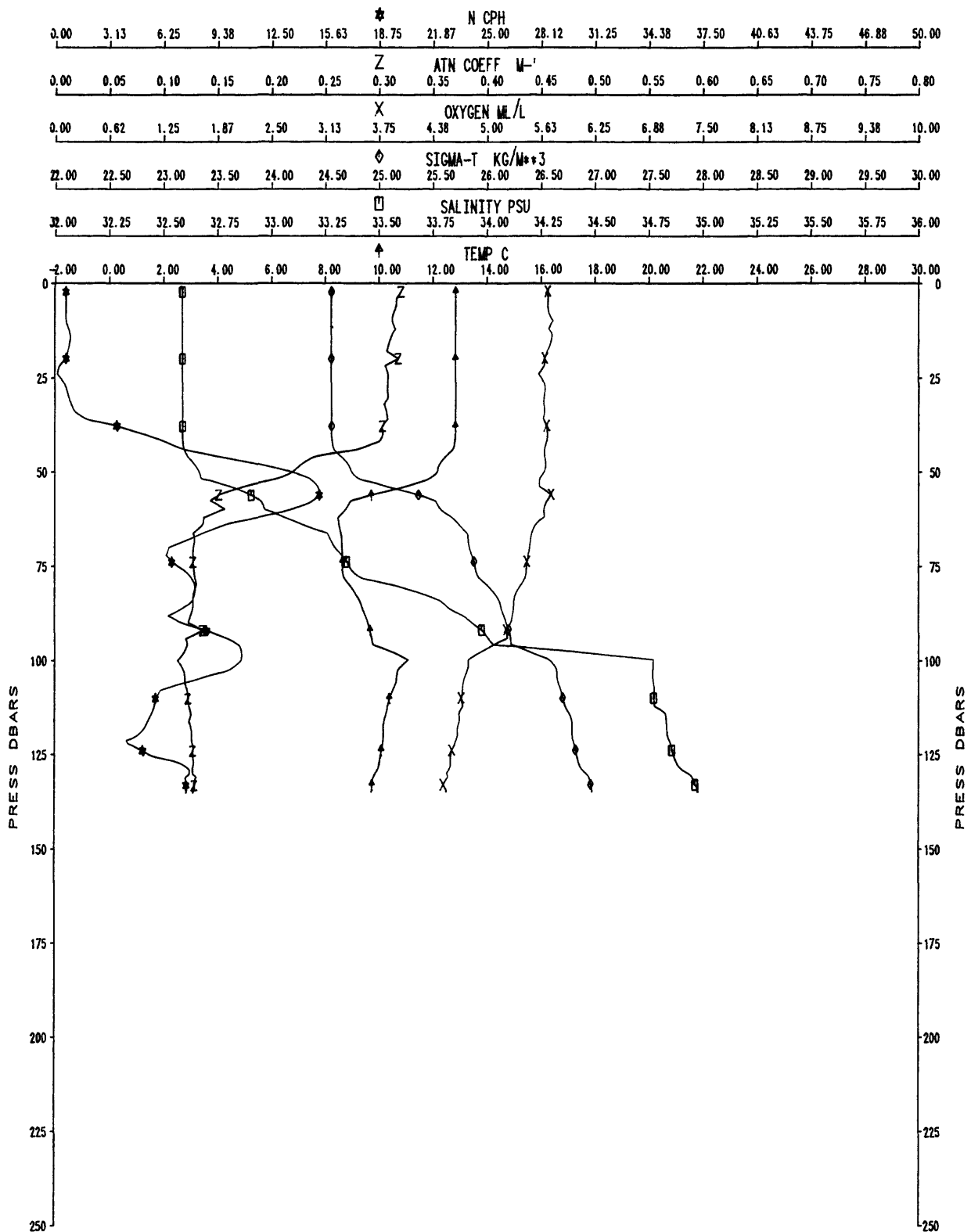
OC104

XBT-32



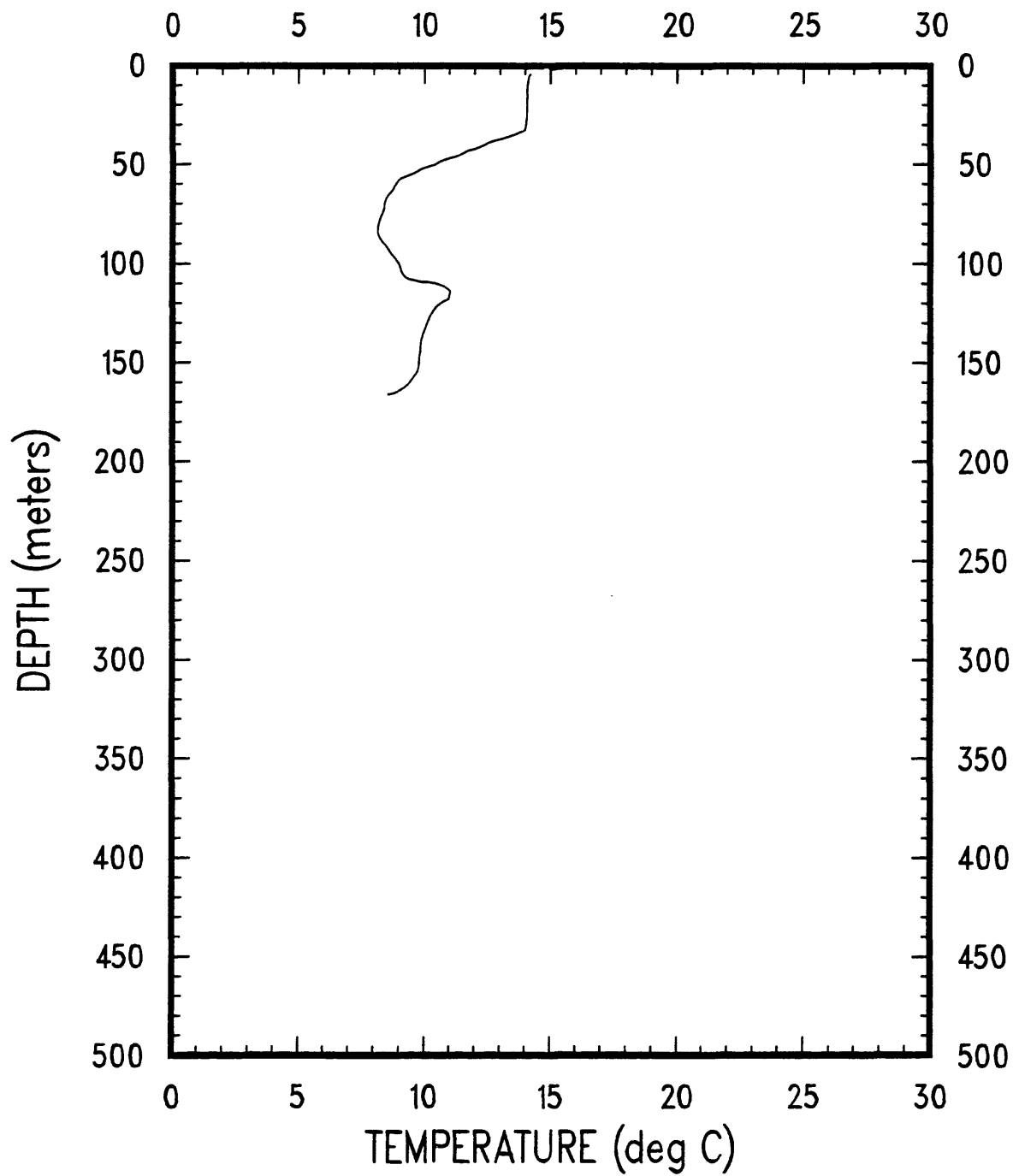
THIS DATA FROM UPCAST

0C104U CAST #33

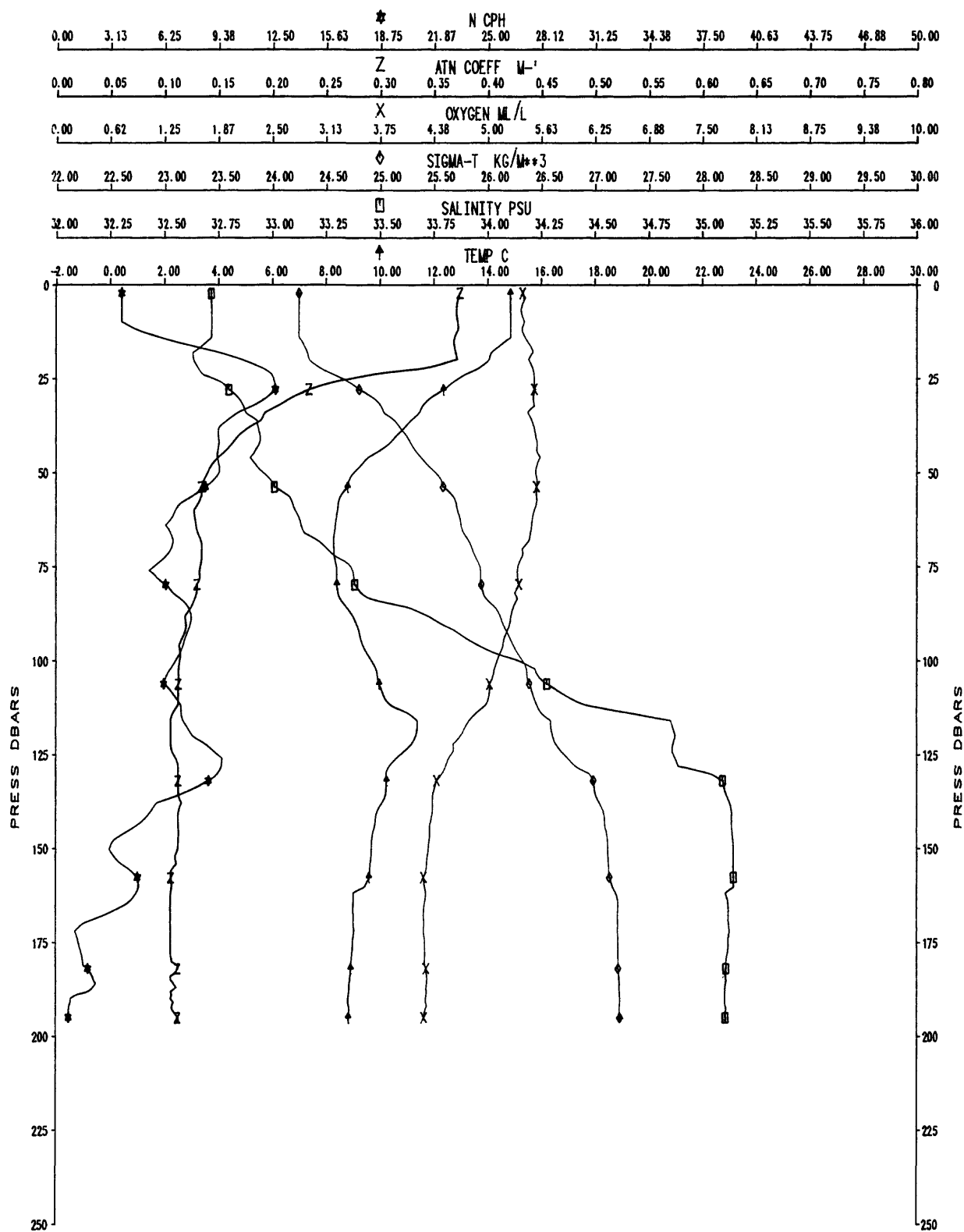


OC104

XBT-34

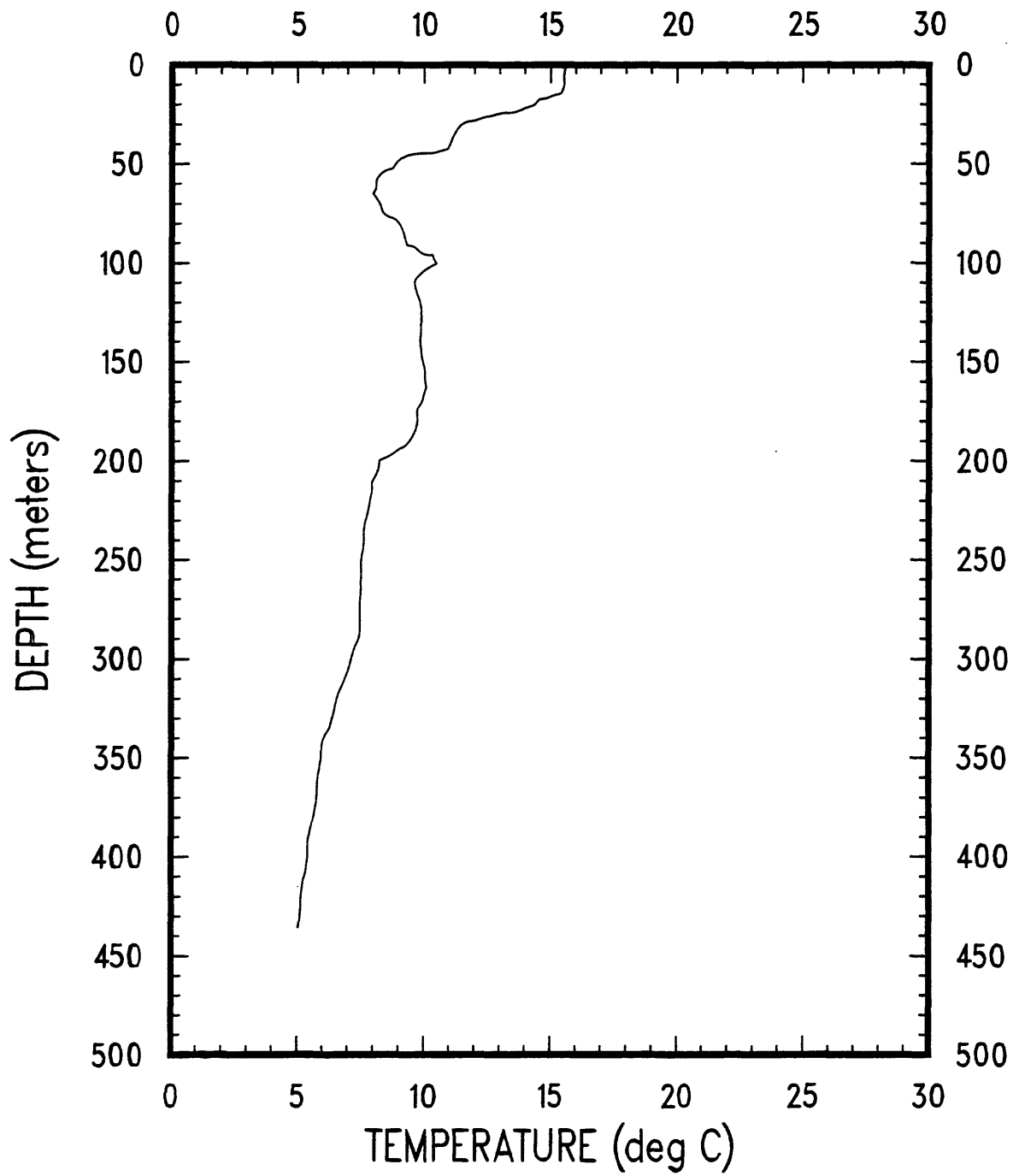


OC104A CAST #35

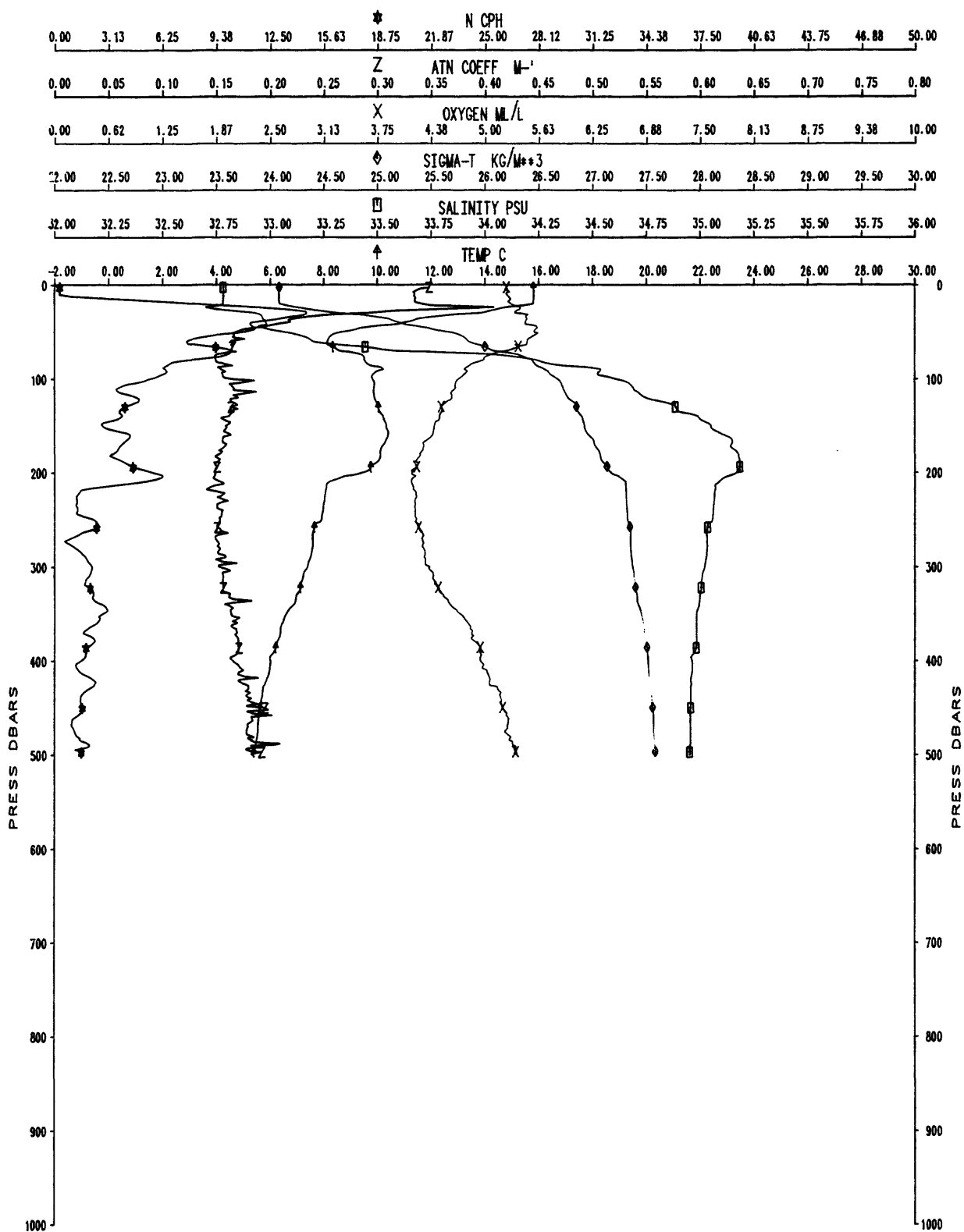


OC104

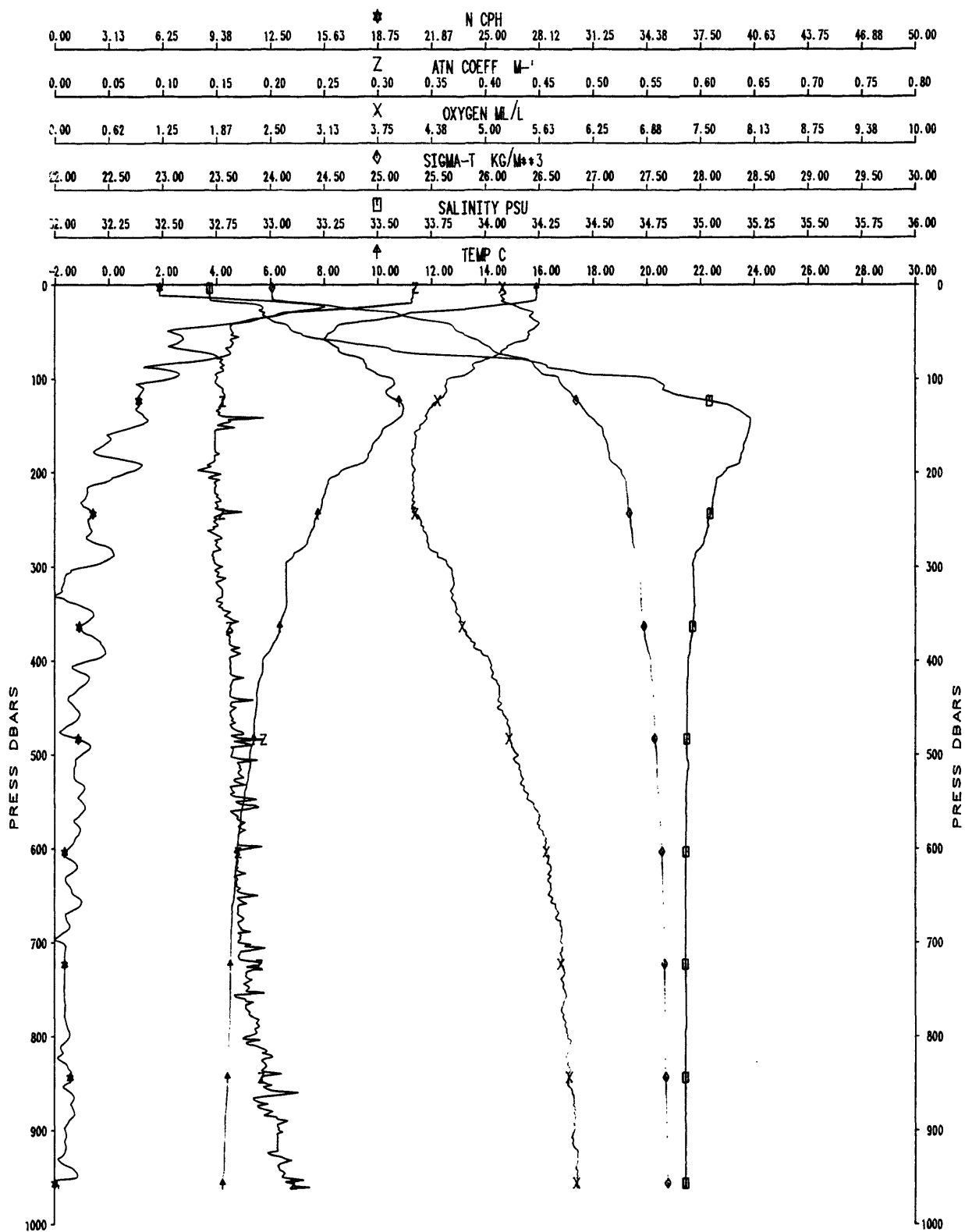
XBT-36



OC104A CAST #37

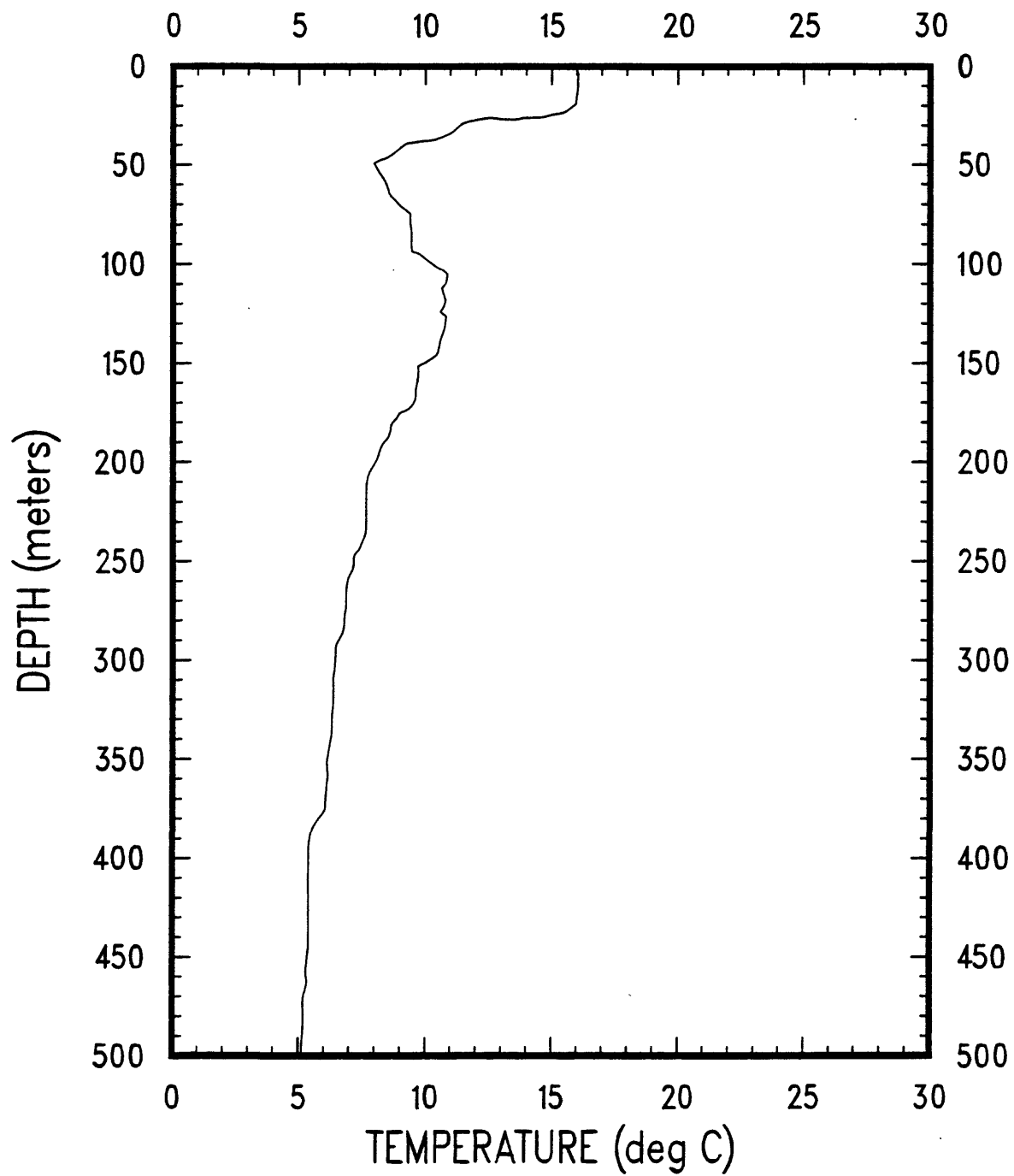


OC104B CAST #38

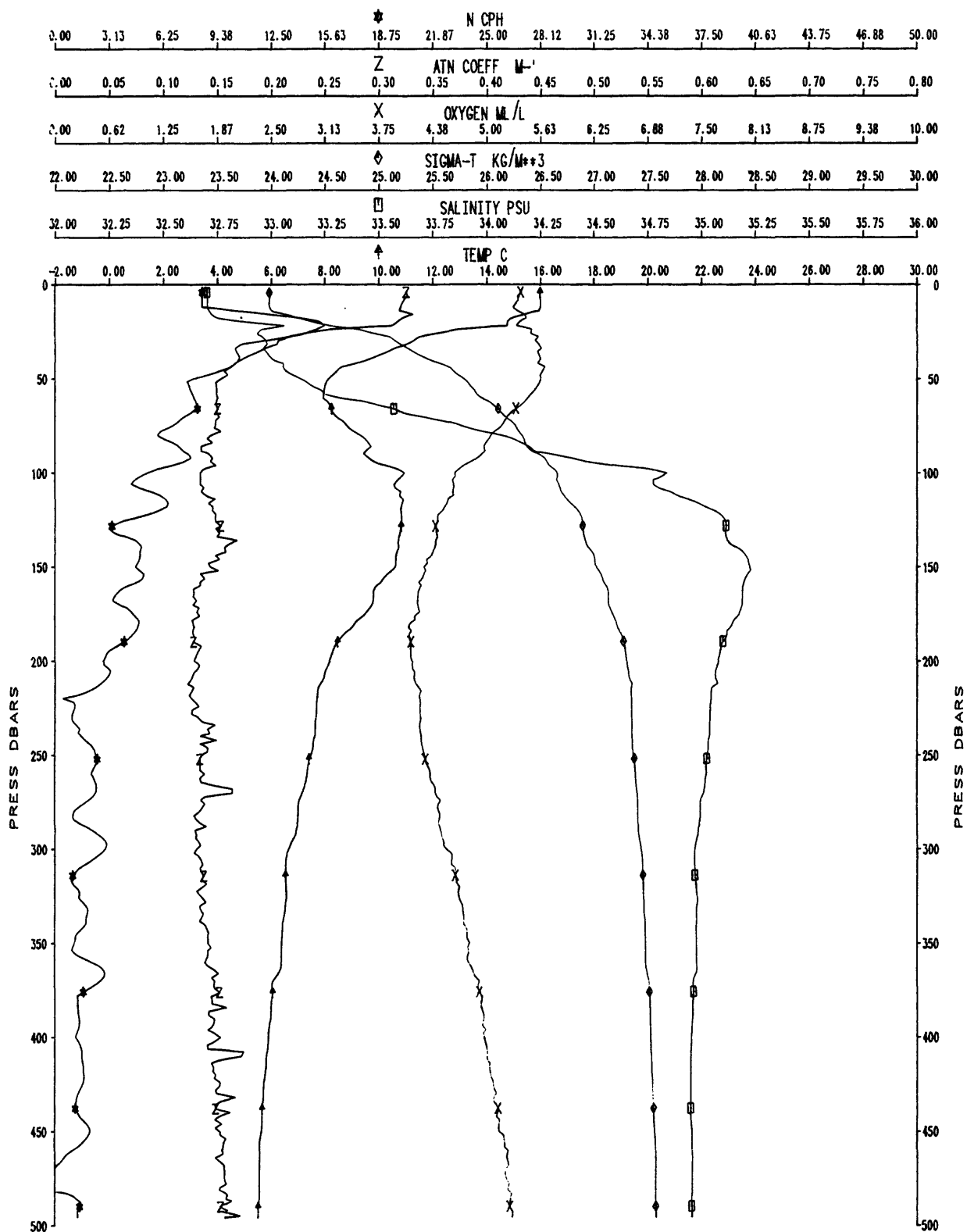


OC104

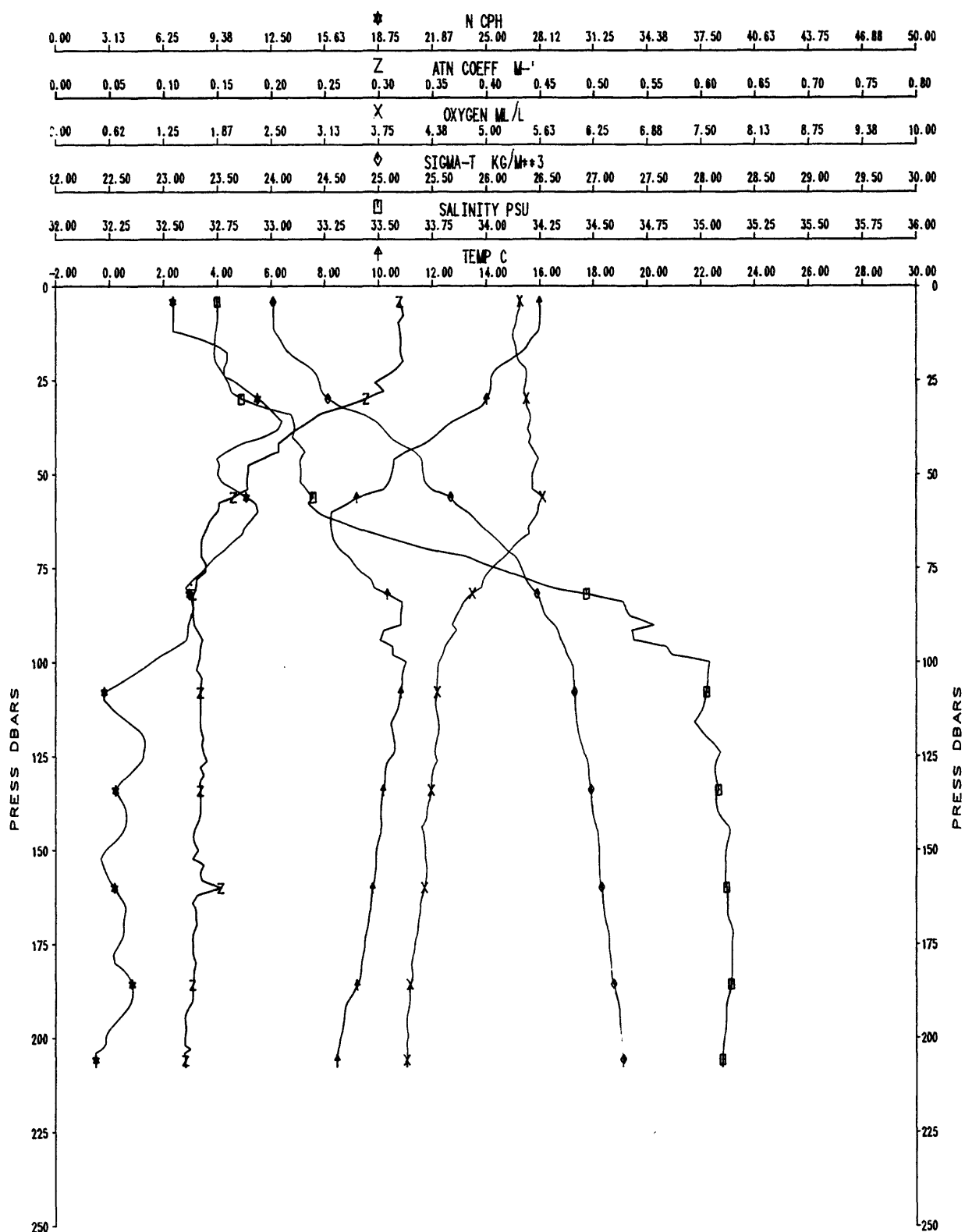
XBT-39



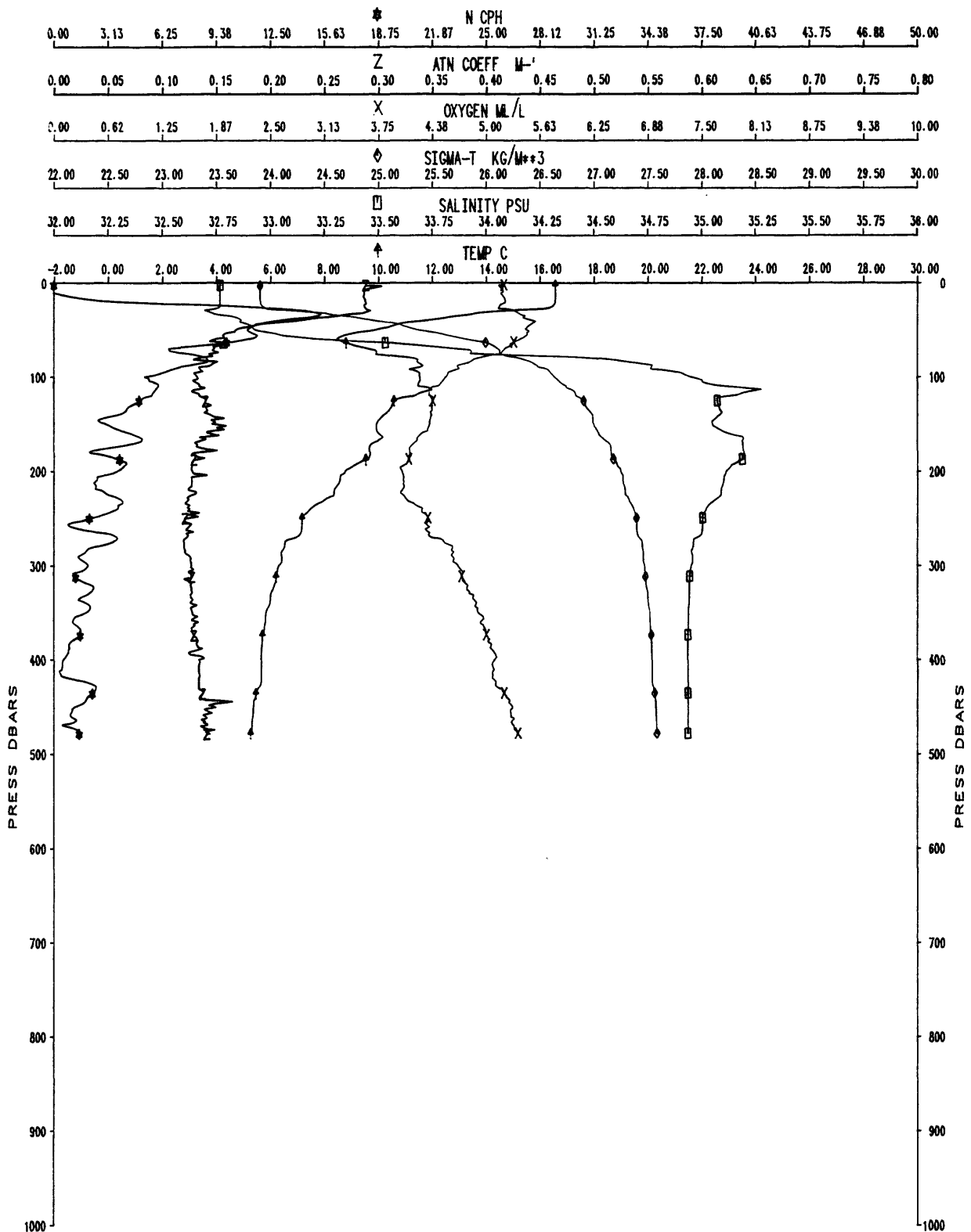
OC104B CAST #40



OC104A CAST #42

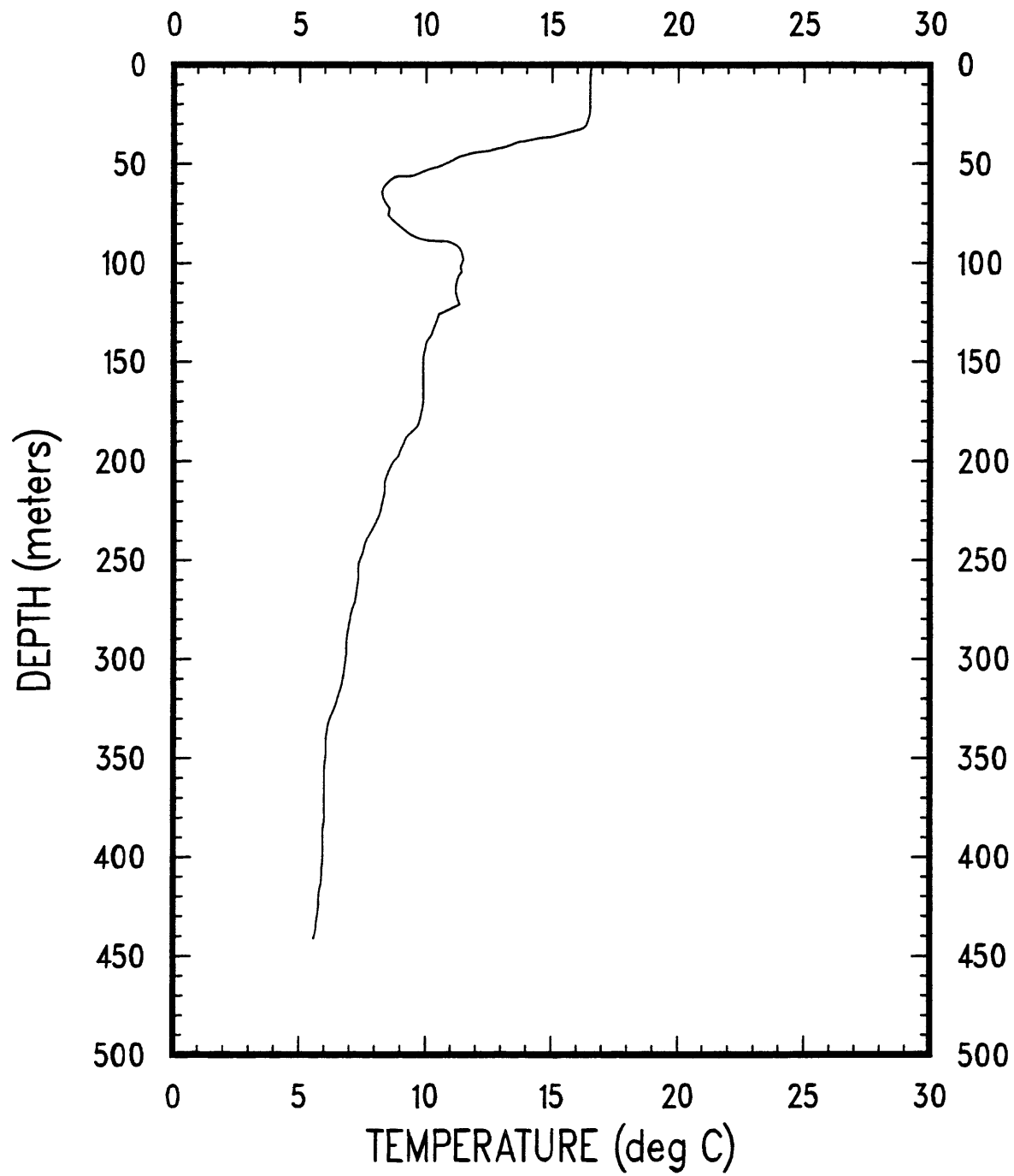


OC104A CAST #43



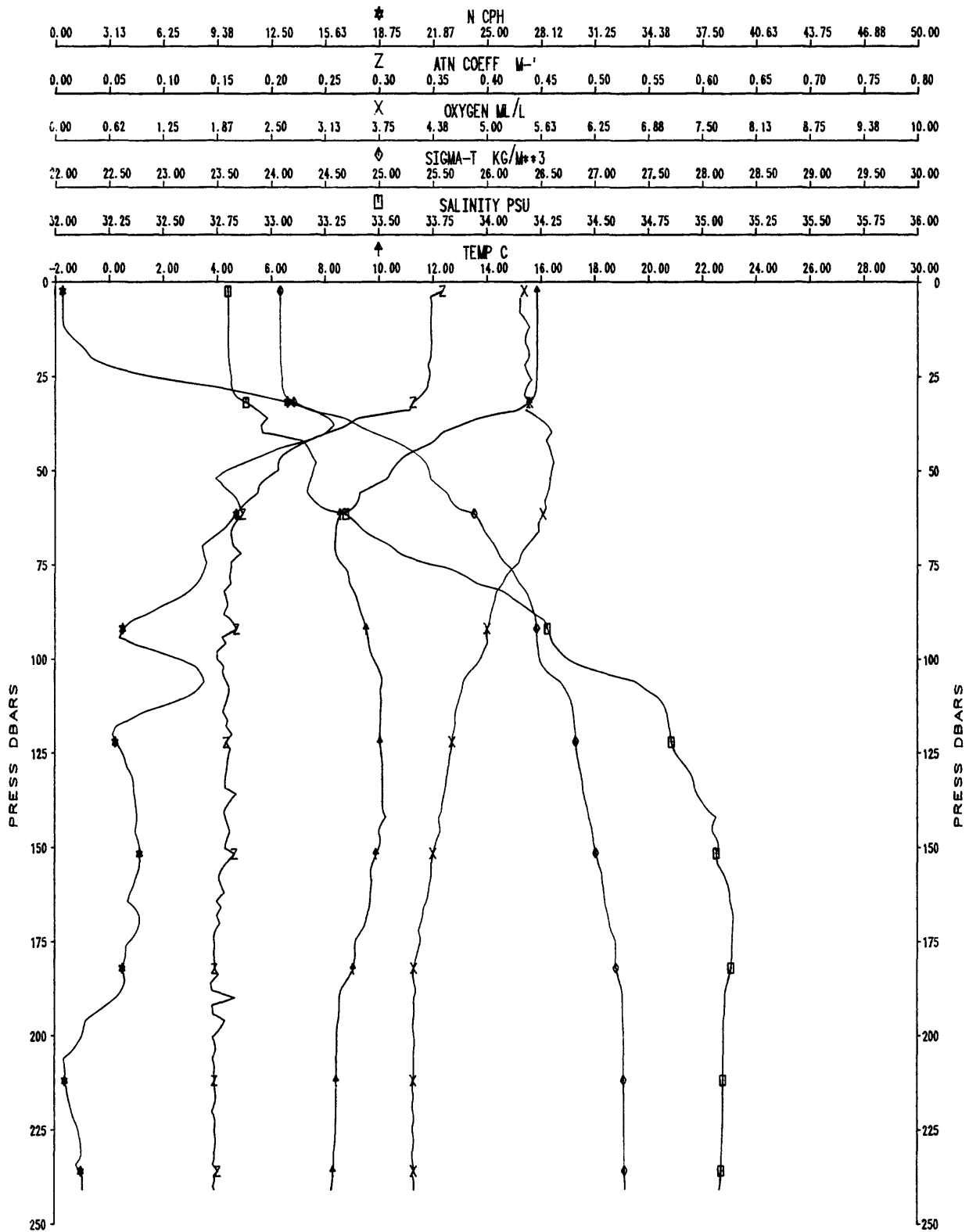
OC104

XBT-44



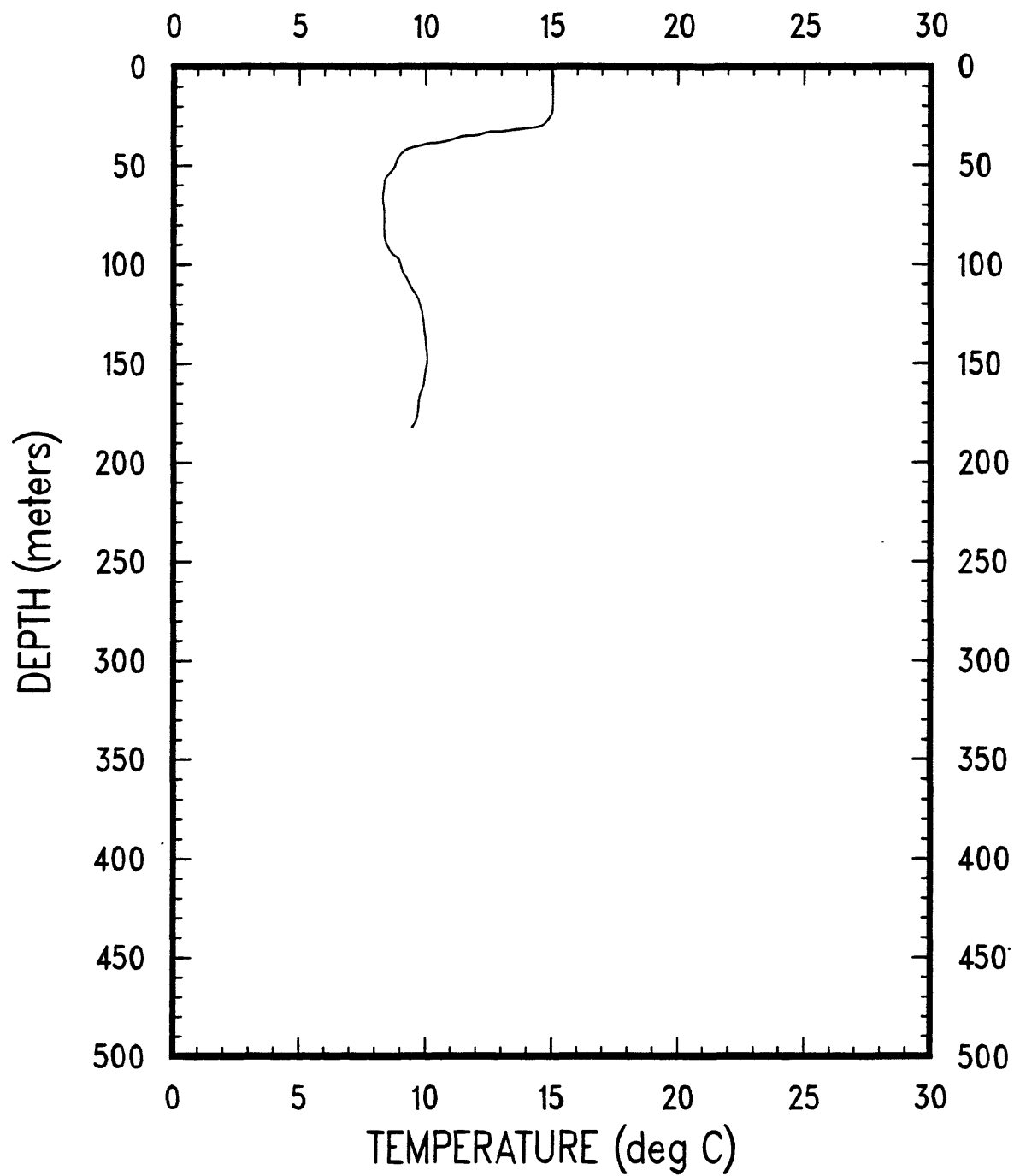
THIS DATA FROM UPGAST

0C104U CAST #45



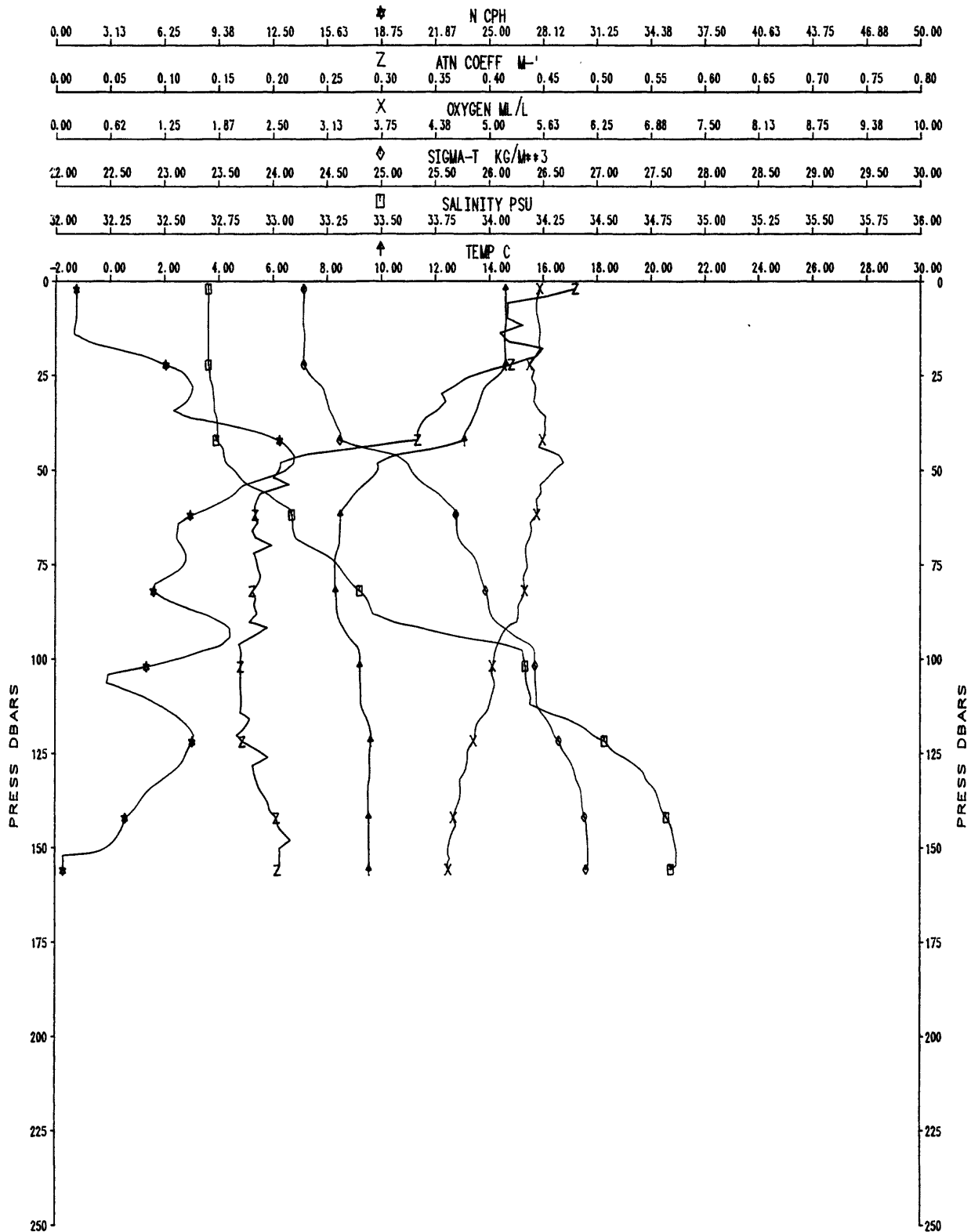
OC104

XBT-46



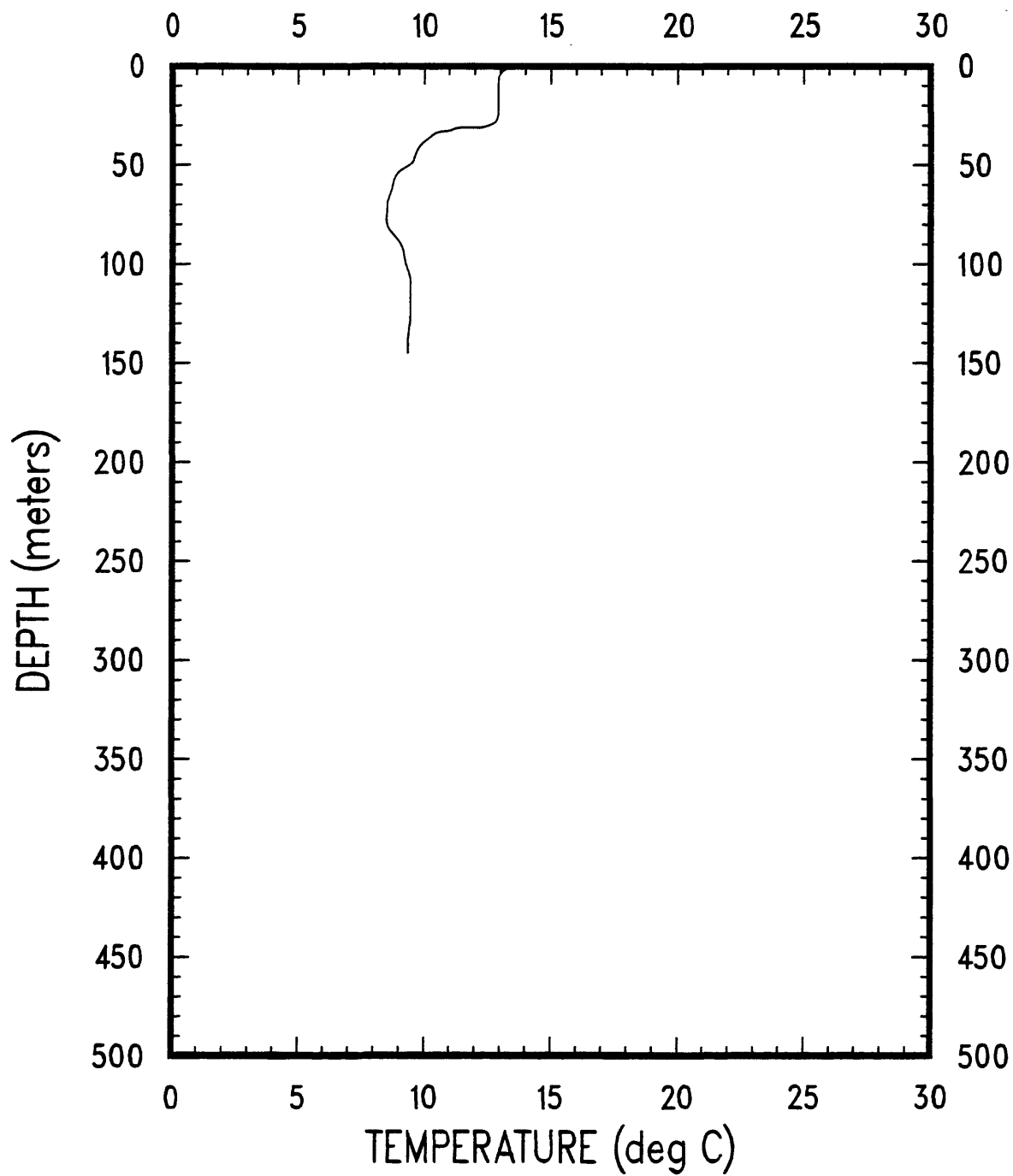
THIS DATA FROM UPCAST

OC104U CAST #47



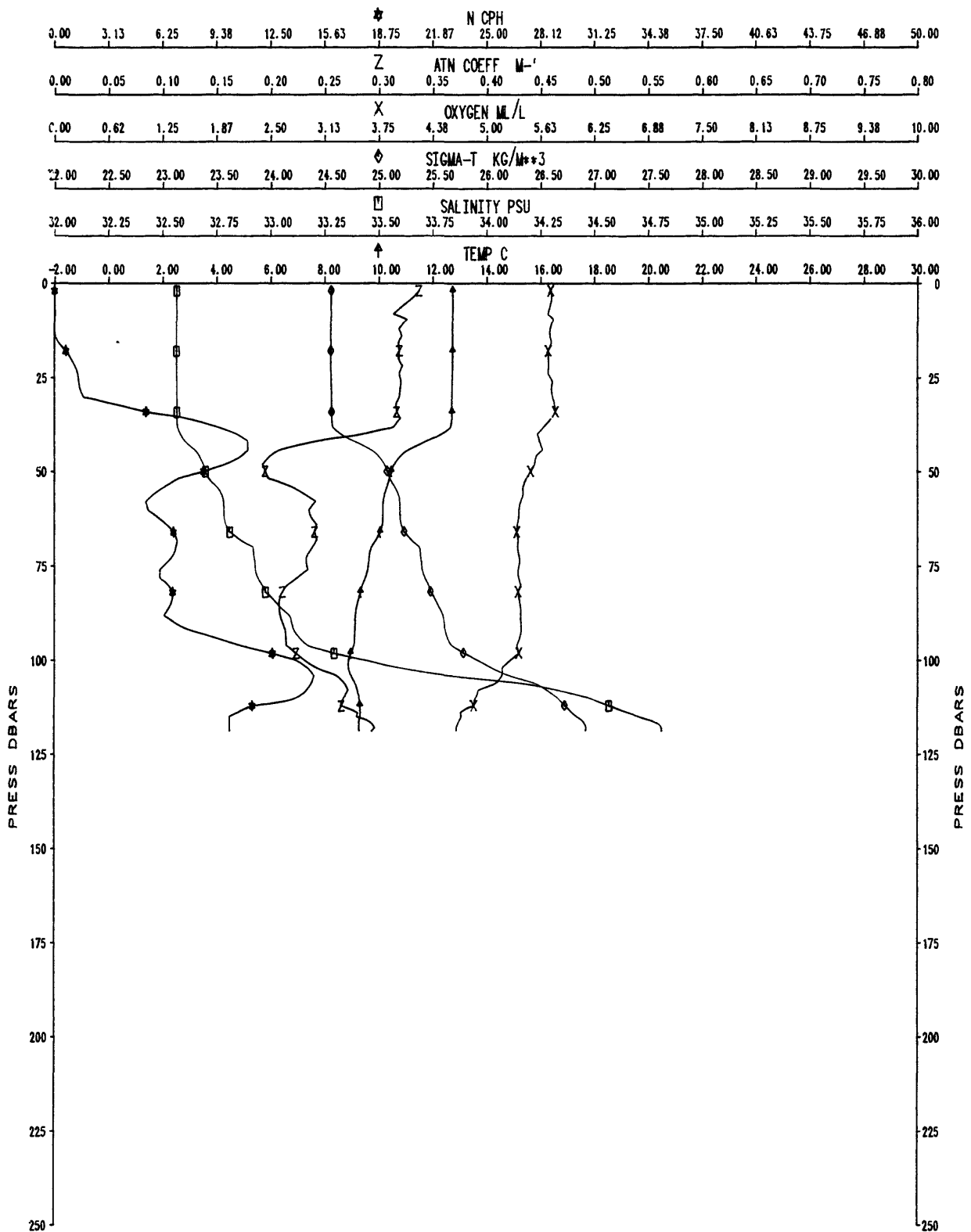
OC104

XBT-48



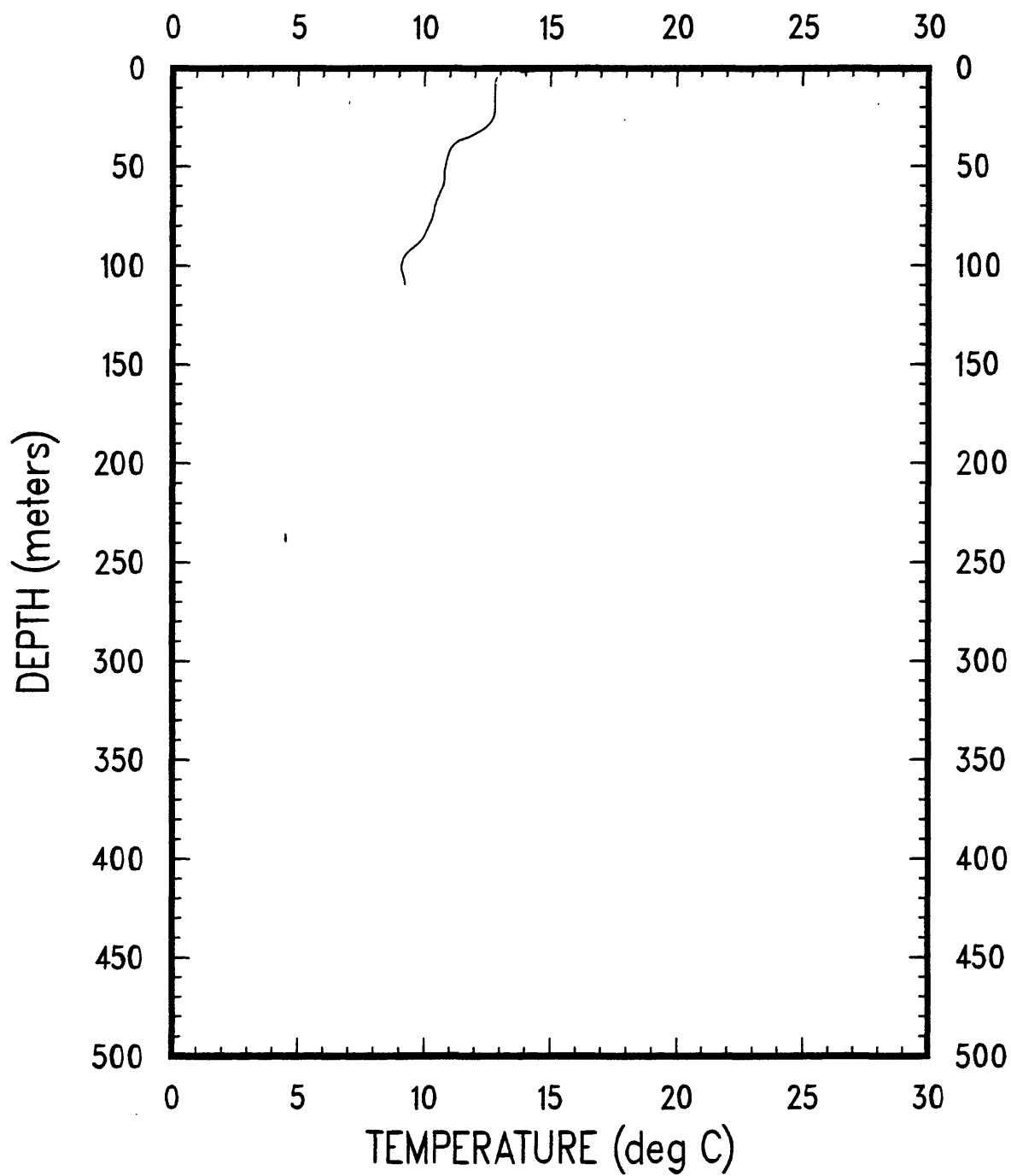
THIS DATA FROM UPCAST

OC104B CAST #49

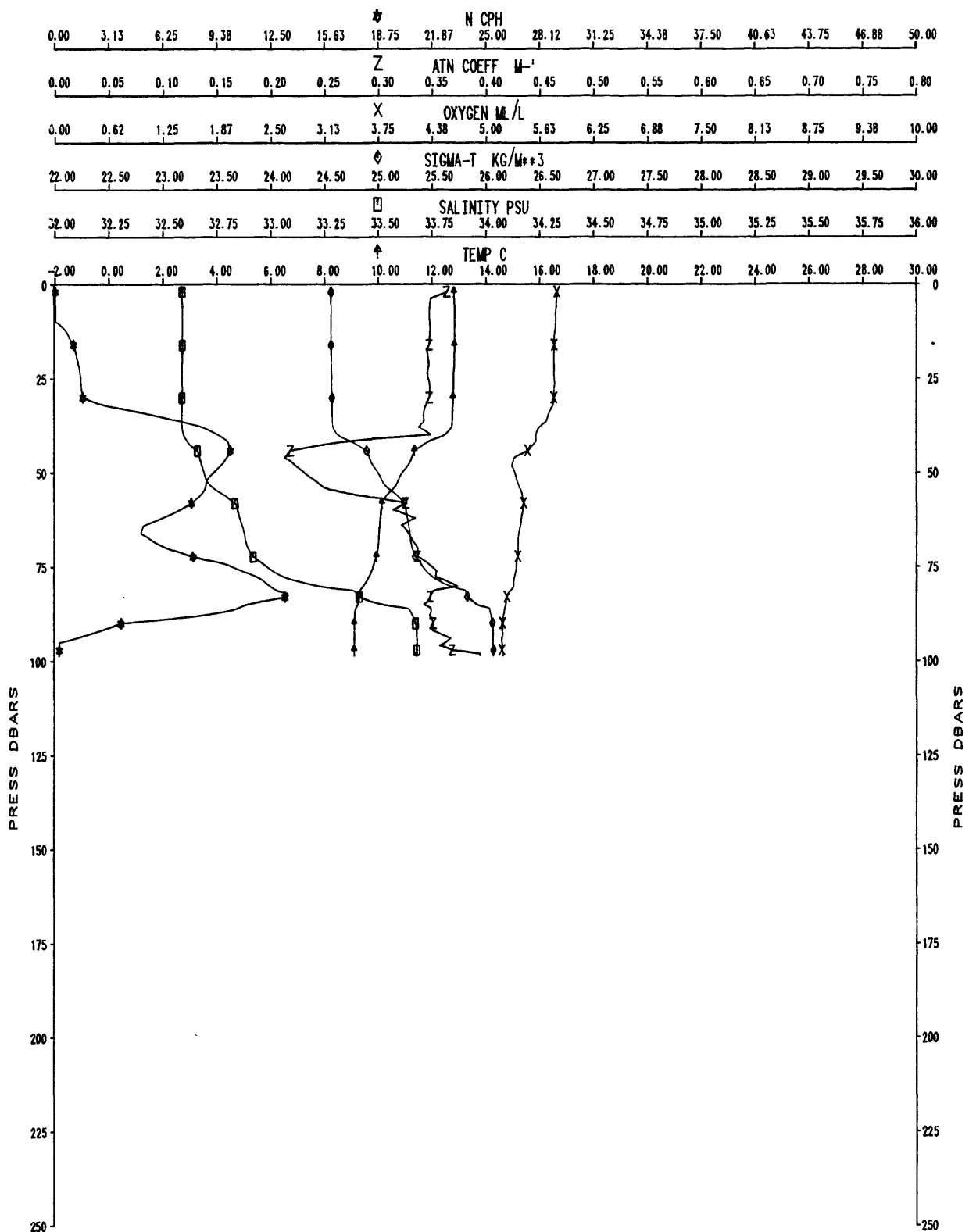


OC104

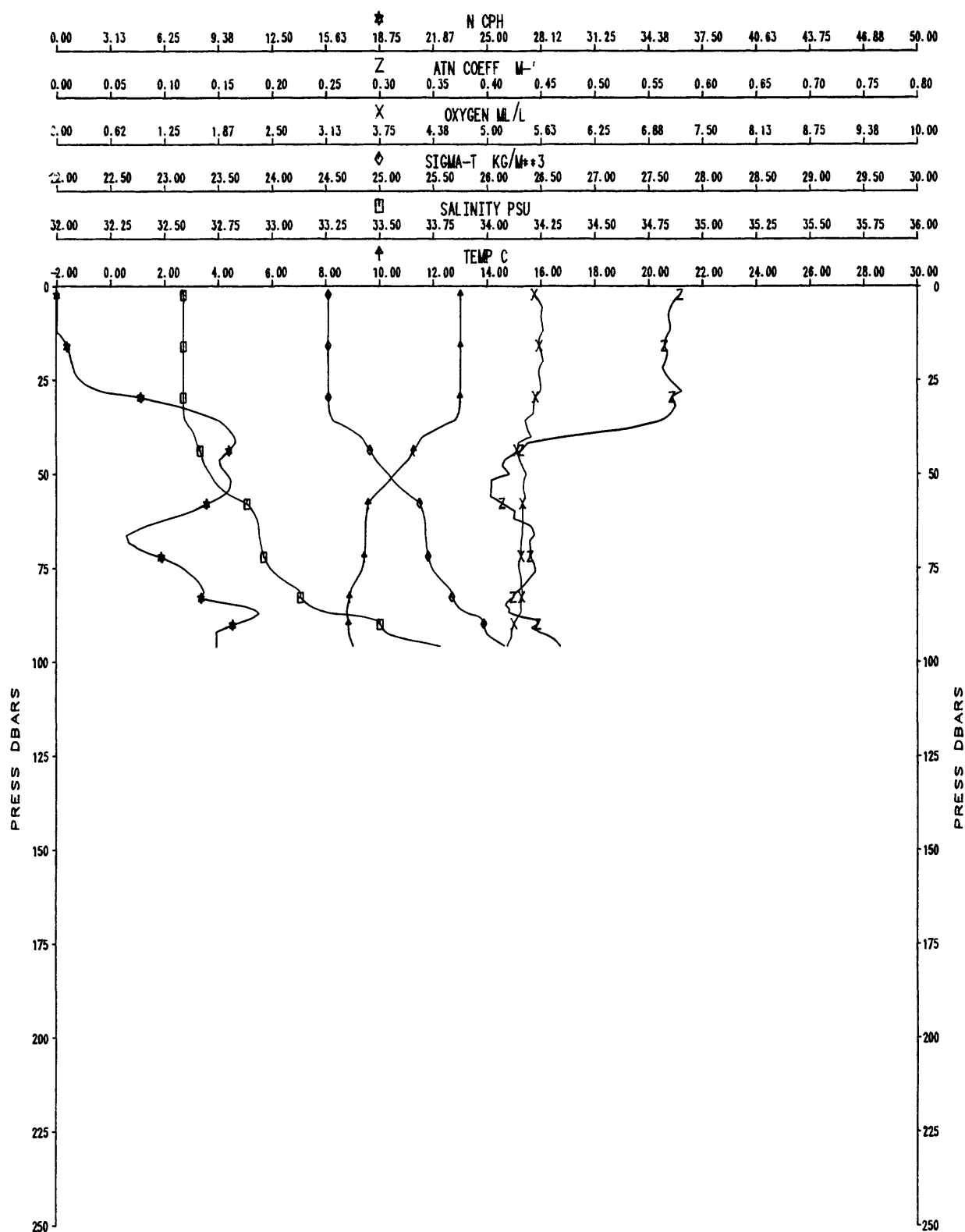
XBT-50



OC104B CAST #51

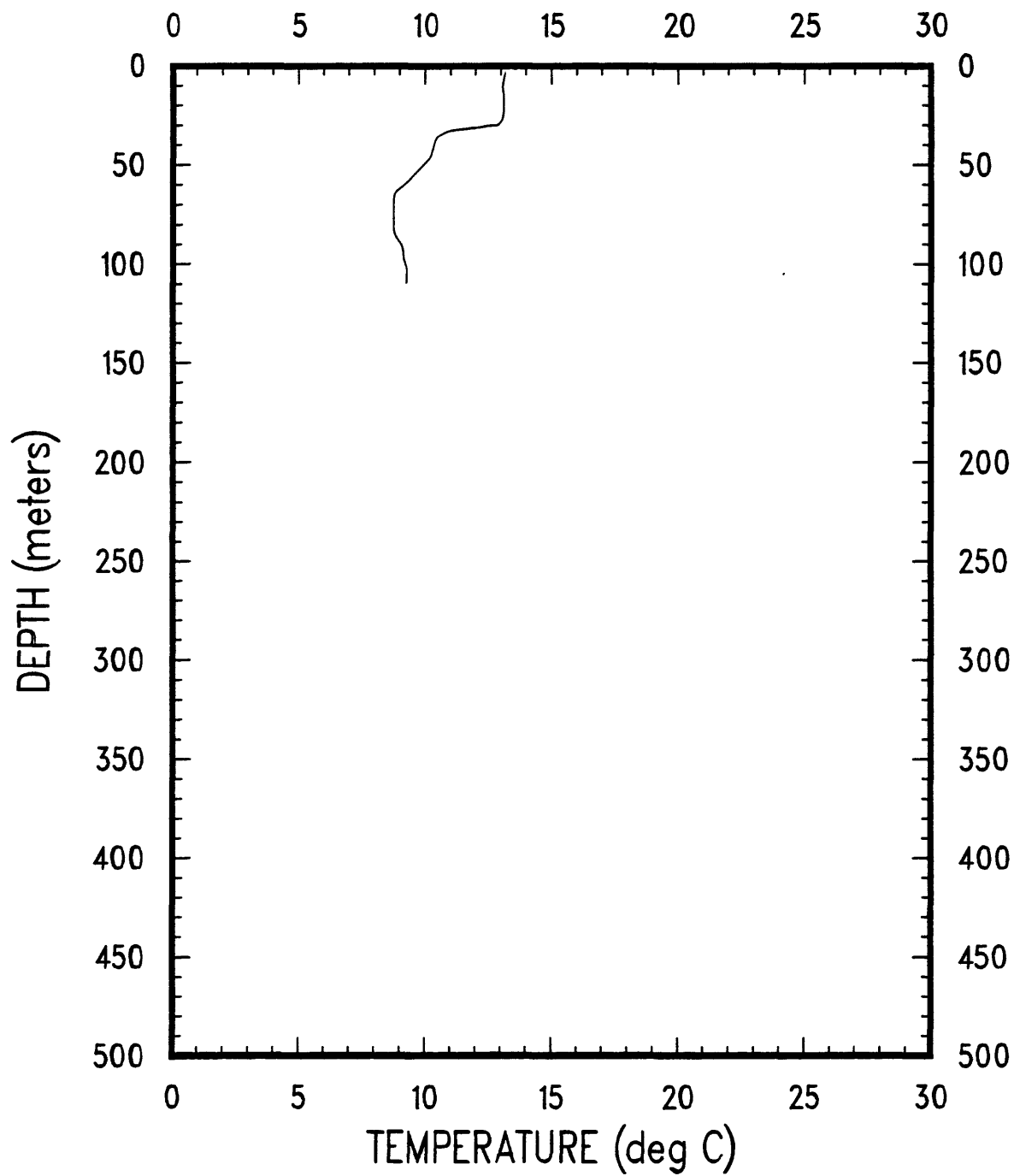


OC104A CAST #53

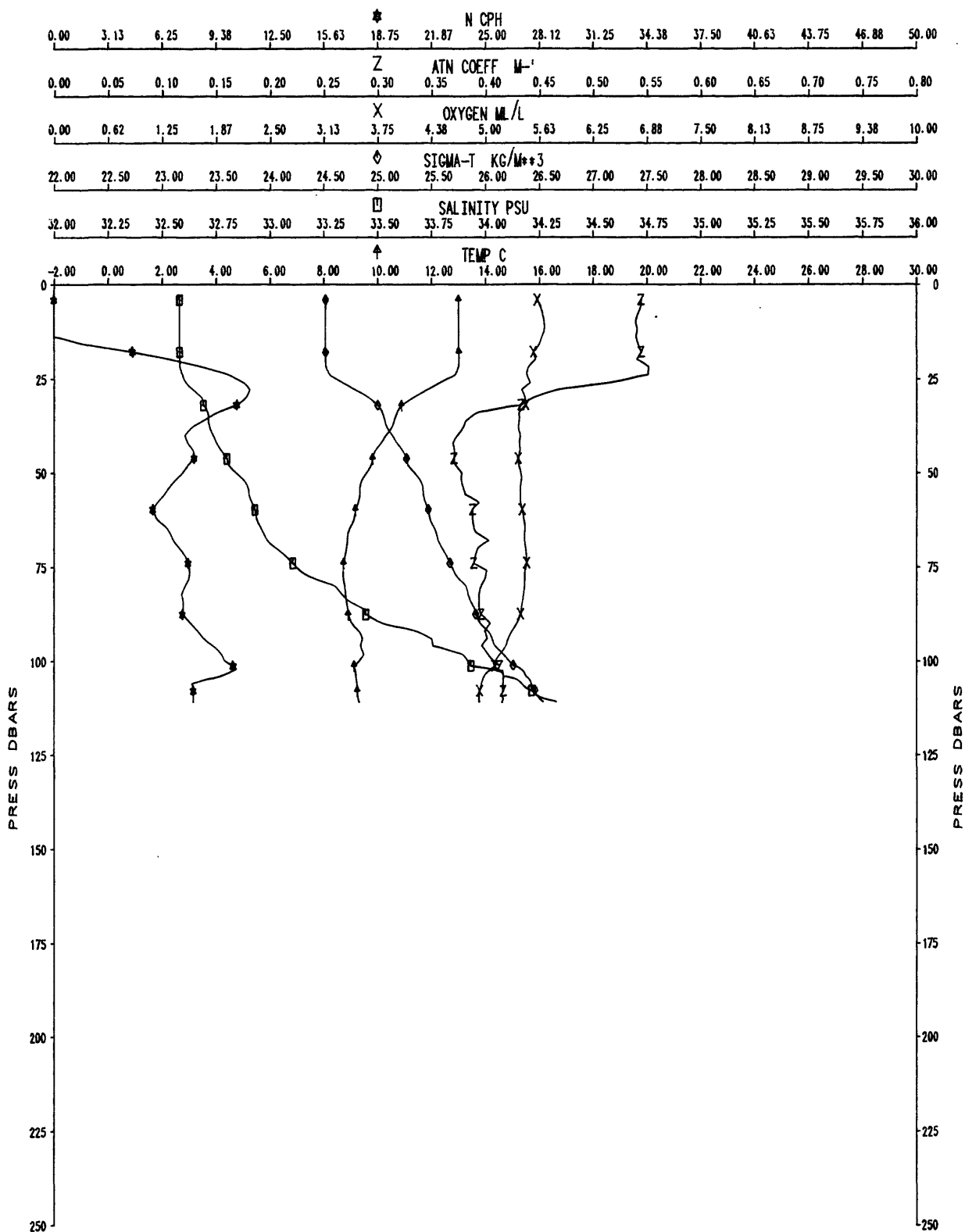


OC104

XBT-54

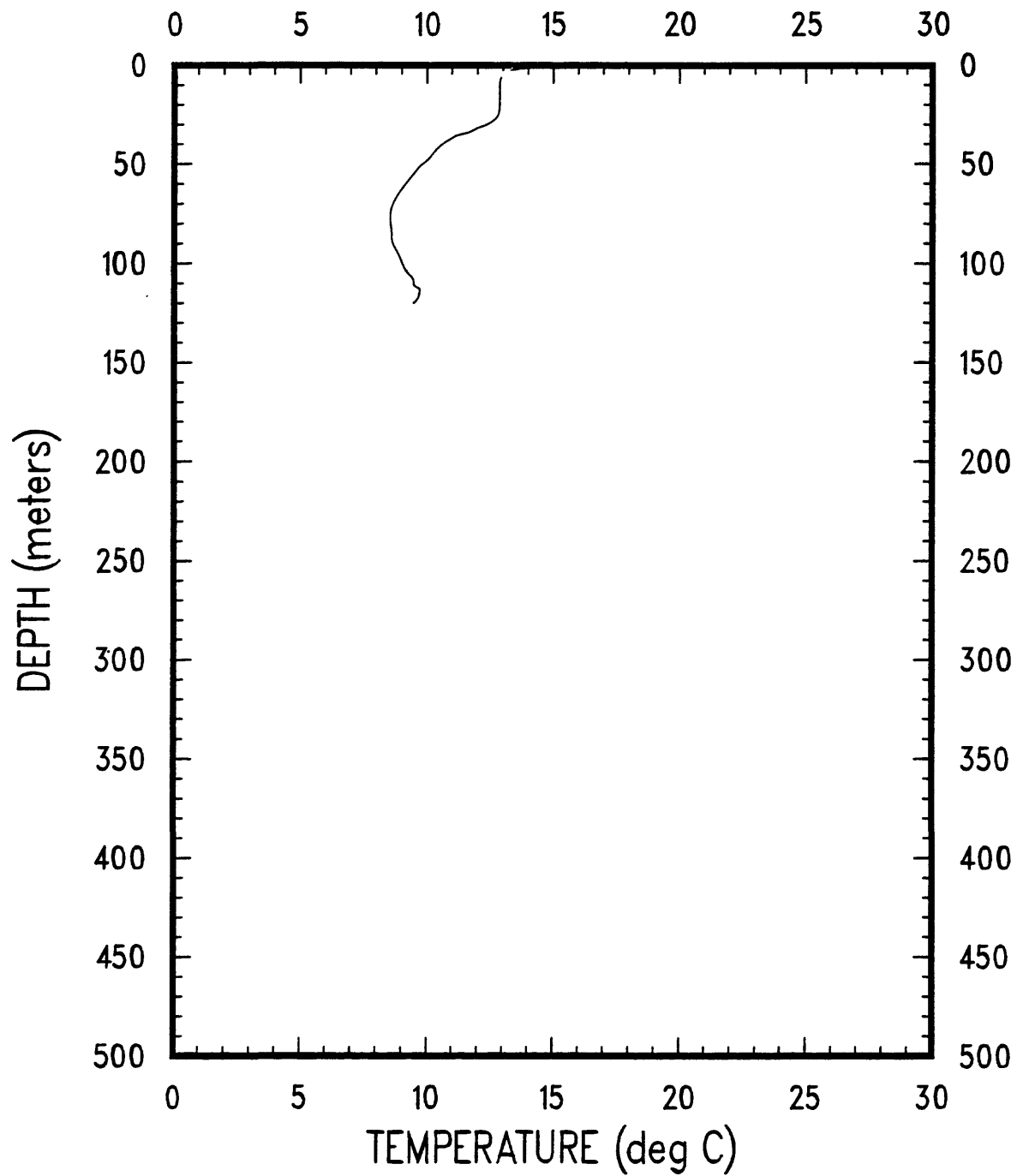


OC104B CAST #55

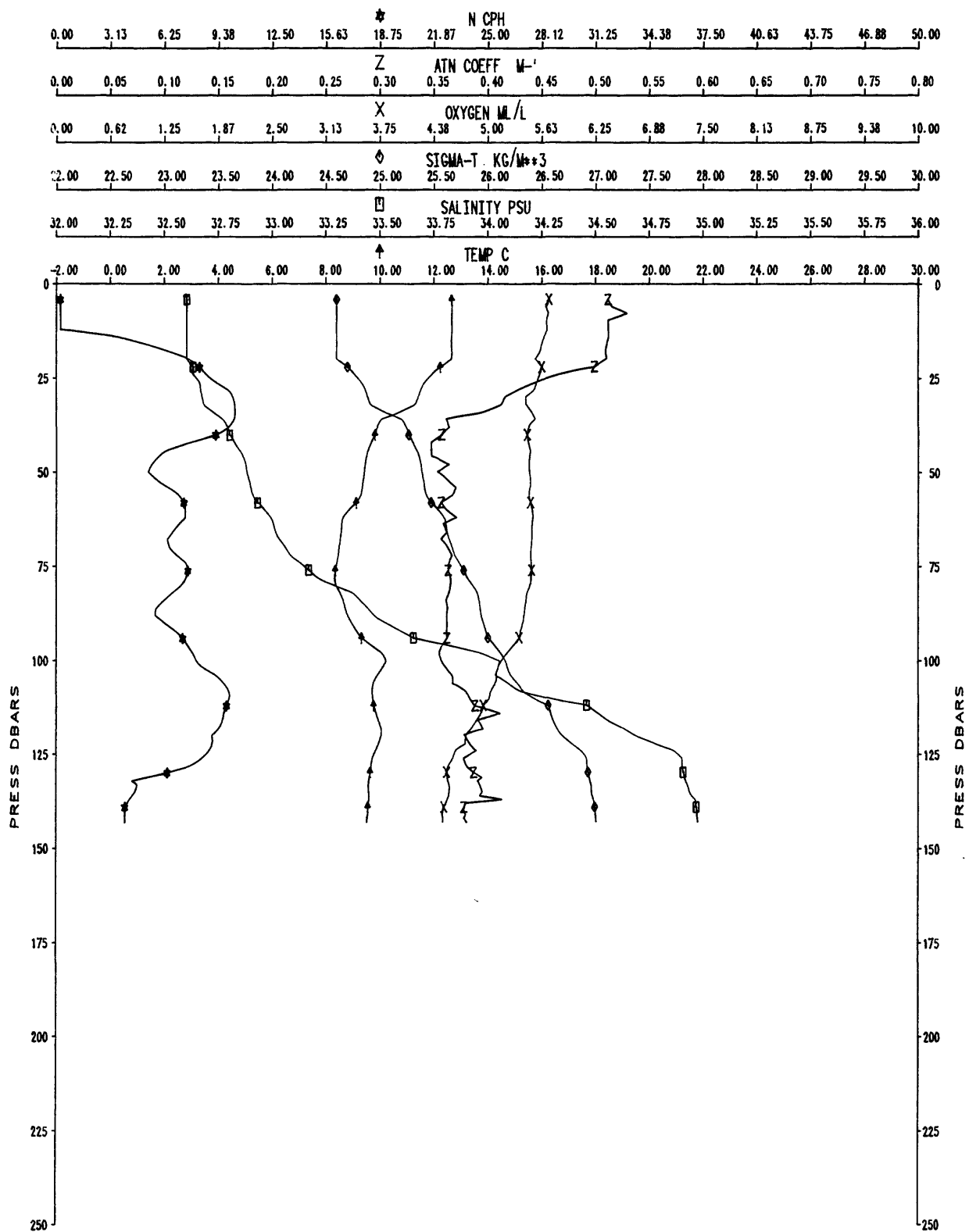


OC104

XBT-56

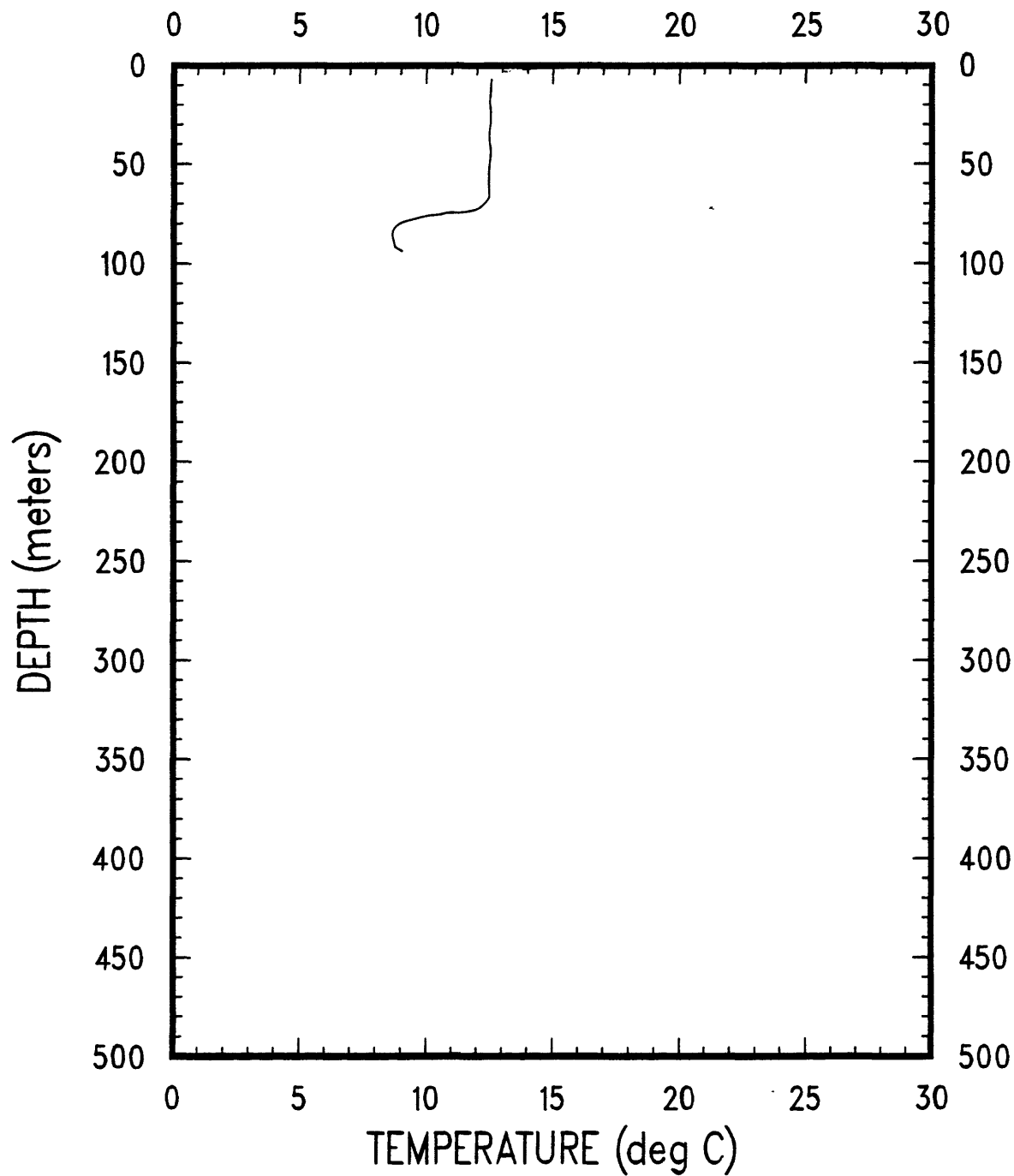


OC104A CAST #57

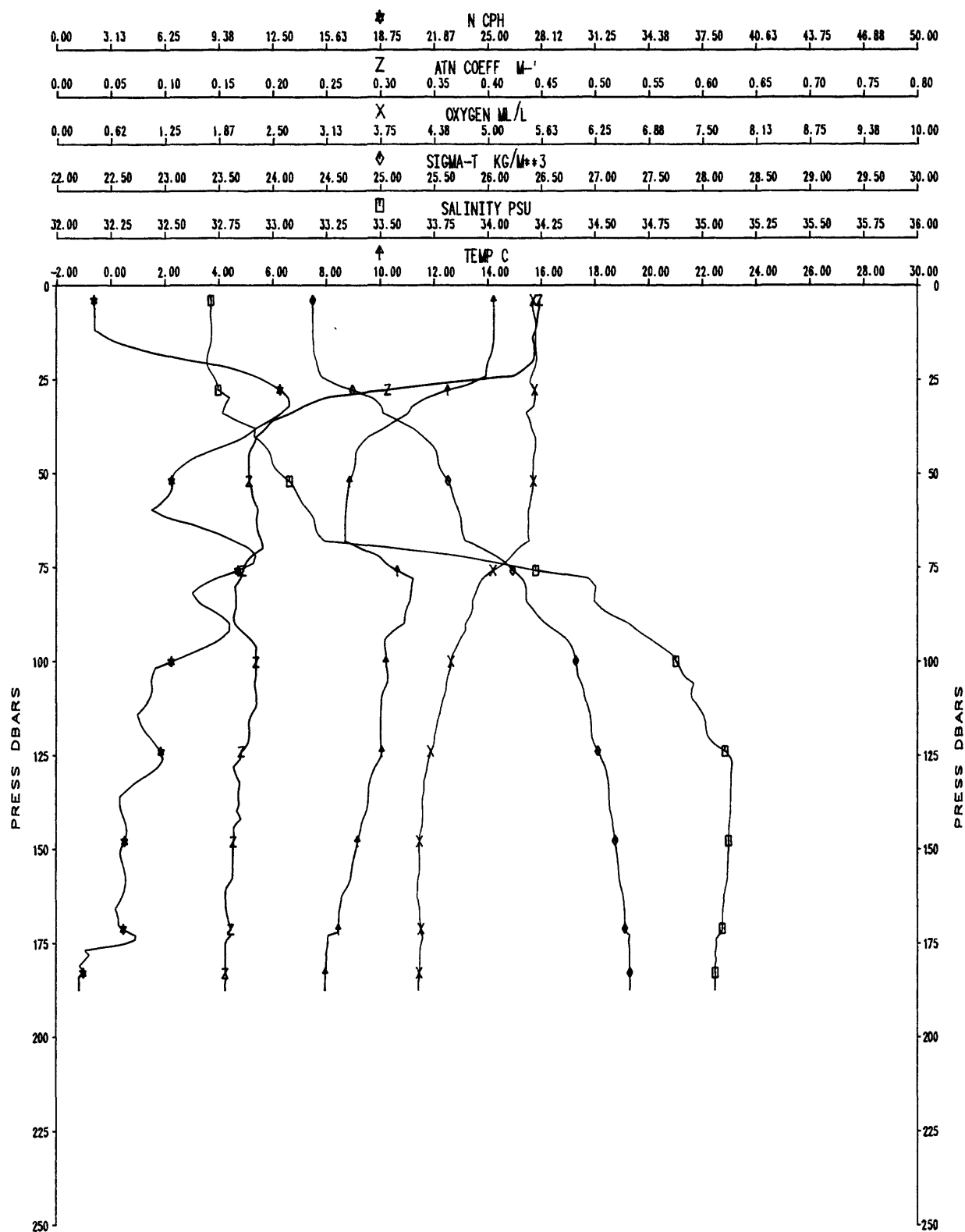


OC104

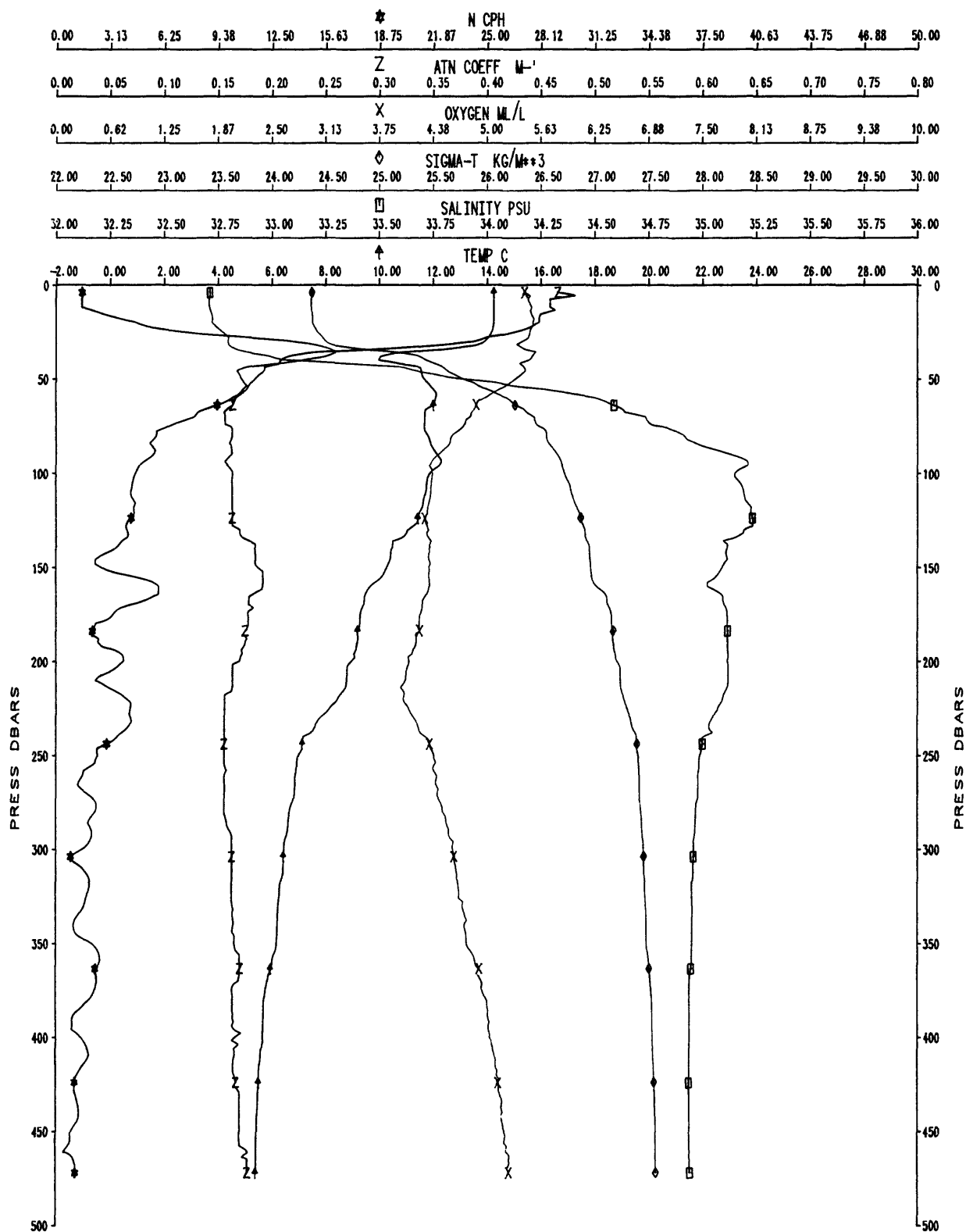
XBT-58



OC104A CAST #59



OC104A CAST #60



Appendix I. - Data listings

The 2-dbar-averaged data are listed in Appendix I. For the data listings, time is in Eastern Standard Time, SALIN is the salinity, OXY is the dissolved oxygen, ATN is the beam attenuation coefficient, SIGT is the density anomaly σ_t , N is the Brunt-Vaisala frequency, DYHT A is the dynamic height anomaly, and S SPD is the speed of sound in seawater. For pressures greater than 500 dbar, the 2-dbar-averaged data are subsampled at 20-dbar intervals. The XBT for stations 41 and 52 malfunctioned so that there is no data for these stations.

SHIP OC	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH			
104	1	1	29 SEP 1981	1715	41°08.5'N	67°36.8'W	54			
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N	DEPTH (cph)
2	2.5	15.191	32.577	5.69	0.57	24.064	0.000	1504.	-0.7	
4	3.9	15.195	32.576	5.68	0.56	24.063	0.006	1505.	-0.7	
6	5.9	15.198	32.577	5.67	0.57	24.063	0.013	1505.	-0.7	
8	8.0	15.197	32.578	5.65	0.57	24.064	0.021	1505.	-0.7	
10	10.0	15.197	32.578	5.62	0.57	24.064	0.029	1505.	-0.7	
12	12.0	15.200	32.578	5.63	0.56	24.063	0.036	1505.	-0.7	
14	14.1	15.206	32.579	5.66	0.56	24.062	0.045	1505.	-0.7	
16	15.9	15.209	32.578	5.64	0.57	24.061	0.051	1505.	-0.6	
18	18.2	15.212	32.578	5.63	0.56	24.060	0.060	1505.	-0.3	
20	20.0	15.209	32.578	5.61	0.57	24.061	0.067	1505.	0.5	
22	22.1	15.206	32.578	5.62	0.56	24.062	0.075	1505.	0.7	
24	24.1	15.201	32.578	5.62	0.57	24.062	0.083	1505.	0.8	
26	25.9	15.201	32.578	5.57	0.58	24.063	0.090	1505.	0.7	
28	28.1	15.199	32.578	5.58	0.58	24.063	0.099	1505.	0.5	
30	29.9	15.200	32.578	5.59	0.56	24.063	0.105	1505.	0.3	
32	32.0	15.201	32.578	5.56	0.57	24.063	0.113	1505.	0.2	
34	34.0	15.203	32.578	5.59	0.58	24.062	0.121	1505.	-0.3	
36	36.0	15.204	32.578	5.60	0.56	24.062	0.129	1505.	-0.3	
38	38.0	15.204	32.578	5.54	0.56	24.062	0.136	1505.	-0.3	
40	40.1	15.201	32.578	5.57	0.56	24.063	0.145	1505.	0.4	
41	41.2	15.203	32.577	5.54	0.57	24.062	0.149	1505.	0.6	
42	42.0	15.201	32.578	5.54	0.57	24.063	0.152	1505.	0.8	
43	43.0	15.203	32.578	5.53	0.58	24.062	0.156	1505.	0.9	
44	44.0	15.200	32.578	5.57	0.59	24.063	0.160	1505.	0.8	
45	45.1	15.198	32.579	5.58	0.57	24.064	0.164	1505.	0.8	
46	45.9	15.197	32.578	5.57	0.57	24.064	0.167	1505.	0.7	
47	47.0	15.197	32.578	5.54	0.57	24.064	0.171	1505.	0.7	
48	48.0	15.200	32.578	5.51	0.56	24.063	0.175	1505.	0.5	
49	49.1	15.198	32.578	5.49	0.56	24.063	0.179	1505.	0.5	
50	50.0	15.197	32.578	5.52	0.57	24.064	0.183	1505.	0.5	
51	51.1	15.196	32.578	5.54	0.58	24.064	0.187	1505.	0.5	
52	52.1	15.195	32.578	5.60	0.58	24.064	0.191	1505.	0.5	
52	52.7	15.197	32.578	5.58	0.57	24.064	0.193	1505.	0.5	

SHIP OC	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH			
104	2	2	29 SEP 1981	1826	41°03.2'N	67°34.8'W	60			
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N	DEPTH (cph)
2	2.5	14.490	32.572	5.55	0.40	24.210	0.000	1502.	-0.8	
4	3.8	14.492	32.572	5.54	0.40	24.210	0.005	1502.	-0.8	
6	6.1	14.498	32.574	5.54	0.40	24.210	0.014	1502.	-0.8	
8	8.0	14.503	32.572	5.55	0.40	24.207	0.020	1502.	-0.8	
10	9.9	14.502	32.572	5.54	0.40	24.208	0.028	1502.	-0.8	
12	12.2	14.504	32.572	5.56	0.40	24.207	0.036	1502.	-0.7	
14	13.8	14.506	32.572	5.56	0.40	24.207	0.042	1502.	-0.4	
16	16.1	14.505	32.572	5.54	0.40	24.207	0.050	1503.	0.6	
18	17.8	14.503	32.572	5.59	0.40	24.207	0.057	1503.	1.1	
20	20.0	14.504	32.572	5.56	0.41	24.207	0.065	1503.	1.4	
22	22.2	14.498	32.572	5.55	0.40	24.208	0.073	1503.	1.6	
24	23.9	14.487	32.571	5.57	0.39	24.210	0.079	1503.	1.8	
26	26.0	14.466	32.572	5.58	0.39	24.215	0.087	1503.	2.1	
28	27.9	14.456	32.572	5.57	0.39	24.217	0.094	1503.	2.3	
30	30.2	14.440	32.571	5.58	0.39	24.220	0.103	1503.	2.7	
32	31.9	14.431	32.571	5.57	0.39	24.222	0.109	1503.	3.1	
34	34.2	14.395	32.570	5.56	0.38	24.229	0.117	1502.	3.3	
36	35.9	14.370	32.569	5.55	0.37	24.233	0.124	1502.	3.6	
38	37.9	14.280	32.564	5.59	0.36	24.248	0.131	1502.	3.9	
40	40.0	14.220	32.569	5.58	0.35	24.265	0.139	1502.	4.1	
41	41.3	14.220	32.562	5.56	0.35	24.259	0.144	1502.	4.5	
42	42.0	14.166	32.569	5.56	0.35	24.276	0.146	1502.	5.1	
43	43.0	14.170	32.569	5.55	0.35	24.275	0.150	1502.	5.4	
44	44.0	14.115	32.563	5.57	0.34	24.282	0.154	1502.	5.6	
45	45.0	13.996	32.566	5.57	0.33	24.308	0.157	1501.	5.8	
46	46.0	13.925	32.568	5.57	0.32	24.325	0.161	1501.	5.8	
47	47.0	13.901	32.566	5.53	0.33	24.327	0.164	1501.	5.8	
48	48.0	13.891	32.565	5.52	0.32	24.329	0.168	1501.	5.3	
49	49.0	13.840	32.563	5.53	0.31	24.338	0.172	1501.	4.7	
50	50.1	13.749	32.567	5.56	0.30	24.360	0.175	1501.	4.3	
51	51.0	13.756	32.567	5.58	0.30	24.358	0.179	1501.	4.2	
52	51.9	13.754	32.563	5.56	0.30	24.356	0.182	1501.	4.1	
53	53.0	13.711	32.564	5.56	0.31	24.365	0.186	1501.	3.6	
54	54.0	13.707	32.564	5.54	0.30	24.366	0.189	1501.	3.1	
55	55.0	13.678	32.564	5.54	0.32	24.372	0.193	1500.	2.7	
56	56.0	13.654	32.564	5.53	0.32	24.376	0.196	1500.	2.6	
57	57.0	13.649	32.564	5.51	0.32	24.377	0.200	1500.	2.6	
58	58.0	13.649	32.563	5.51	0.31	24.377	0.204	1500.	2.6	
59	59.0	13.650	32.553	5.50	0.32	24.369	0.207	1500.	2.6	
60	60.0	13.650	32.563	5.48	0.32	24.377	0.211	1500.	2.6	

SHIP OC	CRUISE 104	STATION 3	DATE 29 SEP 1981	EST 1910	LATITUDE 40°59.3'N	LONGITUDE 67°36.8'W	DEPTH 67	STA	4	DAY: 29	TIME: 2004		
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N (cph)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
3	2.5	14.387	32.575	5.57	0.40	24.234	0.000	1502.	-0.6	2.9	14.0	66.0	12.5
4	3.9	14.389	32.575	5.56	0.40	24.233	0.005	1502.	-0.6	3.9	14.0	67.0	12.5
6	6.0	14.387	32.574	5.55	0.39	24.233	0.013	1502.	-0.6	6.8	13.9	68.0	12.5
8	7.9	14.386	32.575	5.53	0.39	24.234	0.020	1502.	-0.6	7.8	13.9	69.0	12.4
10	9.7	14.390	32.575	5.52	0.40	24.233	0.026	1502.	-0.6	9.7	13.9	69.9	12.4
12	11.9	14.387	32.574	5.53	0.39	24.234	0.035	1502.	-0.5	11.7	13.9		
14	14.1	14.392	32.574	5.51	0.40	24.232	0.042	1502.	0.4	13.6	13.8		
16	15.9	14.395	32.575	5.49	0.39	24.232	0.049	1502.	1.0	15.6	13.8		
18	18.1	14.400	32.575	5.43	0.40	24.231	0.057	1502.	1.3	17.5	13.8		
20	19.7	14.392	32.574	5.50	0.39	24.232	0.063	1502.	1.6	19.5	13.8		
22	22.0	14.371	32.573	5.53	0.39	24.236	0.072	1502.	1.8	22.4	13.8		
24	24.1	14.349	32.573	5.52	0.39	24.241	0.079	1502.	2.4	23.4	13.8		
26	26.0	14.344	32.573	5.45	0.39	24.242	0.086	1502.	2.8	25.3	13.9		
28	28.0	14.330	32.573	5.49	0.38	24.244	0.094	1502.	3.4	27.3	13.9		
30	30.1	14.323	32.573	5.49	0.38	24.246	0.101	1502.	4.5	28.2	13.8		
32	32.2	14.212	32.569	5.49	0.36	24.266	0.109	1502.	5.4	30.2	13.8		
34	34.1	14.181	32.569	5.43	0.36	24.273	0.116	1502.	5.9	31.1	13.8		
36	36.0	14.037	32.571	5.40	0.35	24.304	0.123	1501.	6.2	32.1	13.8		
38	37.9	13.734	32.563	5.45	0.29	24.359	0.130	1500.	6.2	34.1	13.8		
40	40.2	13.586	32.567	5.45	0.27	24.392	0.138	1500.	5.9	36.0	13.8		
42	42.0	13.571	32.569	5.41	0.26	24.397	0.144	1500.	5.6	37.9	13.8		
44	43.9	13.532	32.569	5.41	0.26	24.405	0.151	1500.	5.1	38.9	13.8		
46	45.9	13.474	32.571	5.39	0.26	24.418	0.158	1500.	4.4	39.9	13.8		
48	48.2	13.434	32.571	5.42	0.25	24.427	0.166	1500.	4.3	40.9	13.8		
50	50.0	13.343	32.572	5.38	0.25	24.446	0.172	1499.	4.5	40.9	13.8		
51	51.2	13.318	32.575	5.40	0.25	24.452	0.177	1499.	4.6	41.8	13.7		
52	52.1	13.299	32.573	5.41	0.25	24.455	0.180	1499.	4.5	42.8	13.7		
53	52.9	13.268	32.579	5.39	0.24	24.465	0.182	1499.	4.3	42.8	13.6		
54	54.0	13.219	32.575	5.40	0.25	24.472	0.186	1499.	3.7	43.8	13.5		
55	55.0	13.212	32.576	5.40	0.25	24.474	0.190	1499.	3.4	43.8	13.4		
56	56.0	13.211	32.577	5.38	0.25	24.475	0.193	1499.	3.1	44.7	13.3		
57	57.0	13.200	32.577	5.35	0.25	24.478	0.197	1499.	2.6	44.7	13.3		
58	58.1	13.184	32.576	5.36	0.25	24.480	0.200	1499.	2.3	44.7	13.2		
59	58.9	13.180	32.576	5.37	0.25	24.480	0.203	1499.	2.3	44.7	13.1		
60	60.0	13.171	32.577	5.37	0.26	24.483	0.207	1499.	2.2	45.7	13.1		
61	61.0	13.164	32.577	5.36	0.26	24.485	0.211	1499.	2.0	46.7	12.9		
62	61.9	13.168	32.577	5.36	0.26	24.484	0.214	1499.	1.7	47.6	12.9		
63	63.0	13.158	32.578	5.35	0.26	24.487	0.218	1499.	1.7	47.6	12.8		
64	64.0	13.152	32.577	5.35	0.28	24.487	0.221	1499.	1.7	49.6	12.8		
65	64.9	13.152	32.577	5.35	0.28	24.487	0.224	1499.	1.7	51.5	12.7		
65	65.8	13.152	32.574	5.34	0.31	24.485	0.227	1499.	1.7	52.5	12.6		
										53.5	12.6		
										54.4	12.5		
										55.4	12.5		
										57.3	12.5		
										58.3	12.5		
										60.2	12.5		
										61.2	12.4		
										63.1	12.4		
										64.1	12.5		

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	6	DAY:	29	TIME:
OC	104	5	29 SEP 1981	2034	40°51.5'N	67°38.8'W	71					2111
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT	A	S	SPD	DEPTH	TEMP
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)			(m)	(°C)
3	2.6	13.475	32.567	5.53	0.31	24.415	0.000	1499.	0.8		1.9	13.5
4	4.1	13.471	32.568	5.46	0.30	24.416	0.005	1499.	0.8		2.9	13.4
6	6.1	13.473	32.568	5.46	0.30	24.416	0.012	1499.	0.8		3.9	13.4
8	7.8	13.473	32.567	5.48	0.30	24.416	0.018	1499.	0.8		5.8	13.4
10	10.3	13.472	32.568	5.51	0.30	24.416	0.027	1499.	0.8		7.8	13.4
12	11.9	13.468	32.568	5.52	0.30	24.417	0.033	1499.	0.7		8.8	13.4
14	14.0	13.468	32.569	5.51	0.30	24.418	0.040	1499.	0.7		10.7	13.4
16	16.1	13.468	32.569	5.46	0.30	24.418	0.047	1499.	0.6		11.7	13.3
18	18.0	13.468	32.569	5.47	0.30	24.418	0.054	1499.	0.5		13.6	13.4
20	22.0	13.469	32.569	5.46	0.29	24.418	0.061	1499.	0.7		14.6	13.3
22	22.0	13.469	32.569	5.46	0.30	24.417	0.068	1499.	1.0		17.5	13.3
24	24.0	13.469	32.568	5.42	0.30	24.417	0.075	1499.	1.3		18.5	13.3
26	25.8	13.460	32.572	5.44	0.30	24.418	0.081	1499.	1.5		19.5	13.4
28	28.3	13.460	32.572	5.45	0.29	24.422	0.090	1499.	1.6		21.4	13.3
30	30.0	13.454	32.572	5.42	0.29	24.423	0.096	1499.	1.7		22.4	13.3
32	31.9	13.446	32.573	5.42	0.29	24.426	0.103	1499.	2.1		24.3	13.3
34	34.2	13.439	32.574	5.40	0.29	24.428	0.111	1499.	3.1		25.3	13.3
36	36.0	13.436	32.575	5.35	0.29	24.429	0.117	1499.	4.2		27.3	13.3
38	38.0	13.435	32.575	5.35	0.28	24.429	0.124	1499.	5.6		29.2	13.4
40	40.2	13.372	32.577	5.33	0.27	24.443	0.132	1499.	7.1		29.2	13.3
42	41.9	13.171	32.581	5.31	0.25	24.487	0.138	1499.	8.0		31.1	13.3
44	44.0	12.935	32.578	5.27	0.21	24.530	0.145	1498.	8.5		32.1	13.3
46	45.9	12.636	32.605	5.22	0.20	24.609	0.151	1497.	8.8		33.1	13.3
48	48.3	12.186	32.616	5.27	0.18	24.704	0.159	1495.	8.9		34.1	13.2
50	49.9	12.163	32.619	5.25	0.17	24.711	0.164	1495.	8.7		35.0	13.2
51	51.3	12.148	32.624	5.25	0.18	24.717	0.169	1495.	8.1		35.0	13.1
52	52.0	12.080	32.627	5.26	0.18	24.732	0.171	1495.	7.0		36.0	13.1
53	53.0	11.965	32.623	5.27	0.18	24.751	0.174	1495.	5.6		37.0	13.0
54	54.0	11.880	32.635	5.24	0.19	24.775	0.178	1494.	5.3		37.9	13.0
55	55.0	11.883	32.635	5.25	0.20	24.775	0.181	1494.	4.5		37.9	12.9
56	56.0	11.892	32.635	5.24	0.20	24.774	0.184	1495.	3.3		38.9	12.8
57	57.0	11.899	32.636	5.24	0.19	24.773	0.187	1495.	1.9		38.9	12.7
58	58.0	11.902	32.637	5.23	0.19	24.773	0.190	1495.	0.8		39.9	12.6
59	59.0	11.911	32.636	5.20	0.19	24.770	0.193	1495.	1.9		39.9	12.5
60	60.0	11.897	32.633	5.18	0.19	24.771	0.197	1495.	2.4		40.9	12.5
61	61.0	11.894	32.635	5.19	0.19	24.773	0.200	1495.	2.7		41.8	12.4
62	62.0	11.862	32.638	5.19	0.20	24.781	0.203	1495.	2.8		41.8	12.4
63	63.1	11.840	32.639	5.19	0.21	24.787	0.207	1494.	2.8		42.8	12.4
64	64.0	11.843	32.640	5.20	0.20	24.787	0.209	1495.	2.6		45.7	12.3
65	65.0	11.842	32.639	5.18	0.20	24.786	0.212	1495.	2.1		46.7	12.3
66	66.0	11.840	32.640	5.17	0.20	24.787	0.216	1495.	1.3		48.6	12.3
67	67.1	11.830	32.640	5.20	0.21	24.789	0.219	1495.	1.3		49.6	12.2
68	68.0	11.828	32.640	5.19	0.22	24.789	0.222	1495.	1.3		51.5	12.2
69	69.1	11.830	32.638	5.18	0.23	24.787	0.225	1495.	1.3		52.5	12.2
69	69.6	11.834	32.638	5.20	0.23	24.786	0.227	1495.	1.3		54.4	12.1
											55.4	12.1
											56.4	12.1
											57.3	12.1
											58.3	12.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	8	DAY:	29	TIME:	2227
OC	104	7	29 SEP 1981	2145	40°43.6'N	67°41.7'W	73						
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N (cph)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
3	2.5	13.704	32.566	5.49	0.39	24.368	0.000	1500.	1.0	9.7	13.3	62.2	10.6
4	4.0	13.704	32.566	5.41	0.39	24.368	0.005	1500.	1.0	10.7	13.3	63.1	10.5
6	6.0	13.702	32.566	5.44	0.39	24.368	0.012	1500.	1.0	12.7	13.3	66.0	10.5
8	8.1	13.702	32.566	5.45	0.39	24.369	0.020	1500.	1.0	14.6	13.3	68.0	10.5
10	9.9	13.701	32.567	5.48	0.38	24.369	0.026	1500.	1.0	16.6	13.3	69.0	10.4
12	12.0	13.700	32.567	5.46	0.38	24.369	0.034	1500.	2.3	18.5	13.3	70.9	10.4
14	14.0	13.701	32.567	5.54	0.38	24.369	0.041	1500.	5.4	19.5	13.3	72.8	10.4
16	15.9	13.692	32.568	5.54	0.39	24.372	0.048	1500.	7.3	21.4	13.3	74.8	10.4
18	18.2	13.682	32.568	5.47	0.38	24.373	0.056	1500.	8.5	24.3	13.3	76.7	10.3
20	19.9	13.497	32.572	5.24	0.31	24.414	0.062	1499.	9.2	27.3	13.3	77.7	10.3
22	22.2	12.630	32.602	5.31	0.22	24.609	0.069	1496.	9.3	29.2	13.3	79.6	10.3
24	24.0	12.378	32.620	5.24	0.18	24.671	0.076	1496.	9.0	32.1	13.3		
26	26.3	12.230	32.626	5.20	0.17	24.703	0.083	1495.	8.2	34.1	13.3		
28	27.8	12.221	32.626	5.13	0.18	24.705	0.088	1495.	6.7	35.0	13.3		
30	30.2	12.212	32.627	5.12	0.18	24.707	0.095	1495.	4.6	37.0	13.3		
32	31.9	12.180	32.629	5.13	0.18	24.715	0.101	1495.	4.1	37.9	13.3		
34	34.1	12.151	32.630	5.12	0.18	24.721	0.108	1495.	4.1	38.9	13.2		
36	35.8	12.118	32.631	5.14	0.18	24.728	0.114	1495.	4.3	38.9	13.2		
38	38.0	12.012	32.634	5.13	0.18	24.750	0.121	1495.	4.6	38.9	13.1		
40	40.2	11.906	32.641	5.16	0.17	24.776	0.128	1494.	4.7	39.9	13.1		
42	42.0	11.880	32.641	5.12	0.18	24.780	0.133	1494.	4.8	40.9	13.0		
44	44.3	11.830	32.646	5.15	0.17	24.793	0.140	1494.	4.8	41.8	13.0		
46	46.0	11.779	32.648	5.14	0.17	24.804	0.146	1494.	4.7	41.8	12.9		
48	48.2	11.696	32.653	5.16	0.18	24.823	0.153	1494.	4.6	42.8	12.8		
50	50.0	11.637	32.657	5.16	0.18	24.837	0.158	1494.	4.5	43.8	12.7		
52	51.9	11.566	32.659	5.16	0.18	24.852	0.164	1493.	4.3	45.7	12.7		
54	54.1	11.504	32.661	5.18	0.18	24.865	0.171	1493.	4.0	46.7	12.7		
56	55.9	11.495	32.662	5.18	0.18	24.868	0.177	1493.	3.5	47.6	12.6		
58	58.2	11.448	32.664	5.16	0.18	24.878	0.184	1493.	3.0	49.6	12.6		
59	59.7	11.434	32.665	5.16	0.18	24.880	0.188	1493.	2.5	50.6	12.5		
61	61.2	11.421	32.664	5.15	0.19	24.882	0.193	1493.	2.1	51.5	12.4		
62	62.0	11.447	32.662	5.14	0.19	24.876	0.196	1493.	1.8	52.5	12.3		
63	63.0	11.455	32.663	5.14	0.18	24.875	0.199	1493.	1.1	52.5	12.2		
64	64.1	11.435	32.665	5.15	0.19	24.880	0.202	1493.	1.1	52.5	12.0		
65	65.0	11.427	32.666	5.15	0.19	24.882	0.205	1493.	1.4	53.5	11.9		
66	66.0	11.430	32.665	5.15	0.19	24.881	0.208	1493.	1.6	53.5	11.7		
67	67.1	11.429	32.665	5.15	0.18	24.882	0.211	1493.	1.6	53.5	11.6		
68	68.0	11.424	32.665	5.16	0.18	24.882	0.214	1493.	1.6	54.4	11.5		
69	68.9	11.424	32.666	5.15	0.18	24.883	0.217	1493.	1.6	54.4	11.4		
70	70.0	11.431	32.665	5.15	0.19	24.881	0.220	1493.	1.6	55.4	11.4		
										55.4	11.3		
										56.4	11.2		
										57.3	11.1		
										57.3	11.1		
										58.3	10.9		
										58.3	10.8		
										59.3	10.8		
										60.2	10.7		
										60.2	10.6		

SHIP OC	CRUISE 104	STATION 9	DATE 29 SEP 1981	EST 2308	LATITUDE 40°34.5'N	LONGITUDE 67°44.1'W	DEPTH 101		
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N (cph)
1	0.9	13.263	32.577	5.60	0.37	24.465	0.000	1498.	-0.4
2	1.7	13.262	32.576	5.60	0.37	24.465	0.003	1498.	-0.4
4	4.2	13.267	32.576	5.63	0.36	24.464	0.011	1498.	-0.4
6	5.9	13.267	32.576	5.61	0.36	24.464	0.017	1498.	-0.4
8	8.0	13.269	32.576	5.59	0.36	24.463	0.025	1498.	-0.4
10	9.7	13.270	32.576	5.56	0.35	24.463	0.031	1498.	1.4
12	12.2	13.271	32.576	5.56	0.36	24.463	0.039	1498.	3.9
14	14.1	13.269	32.576	5.54	0.36	24.463	0.046	1498.	5.2
16	15.8	13.263	32.576	5.49	0.35	24.465	0.052	1498.	6.0
18	18.1	13.196	32.582	5.47	0.35	24.482	0.060	1498.	6.5
20	19.9	12.671	32.597	5.53	0.30	24.596	0.066	1497.	6.8
22	22.1	12.601	32.602	5.52	0.26	24.614	0.073	1496.	7.3
24	23.8	12.568	32.604	5.44	0.25	24.622	0.079	1496.	7.6
26	26.1	12.521	32.607	5.42	0.24	24.633	0.086	1496.	7.7
28	28.2	12.353	32.609	5.43	0.23	24.667	0.093	1496.	7.5
30	30.0	12.072	32.625	5.43	0.20	24.732	0.099	1495.	8.2
32	32.2	11.749	32.635	5.42	0.17	24.800	0.106	1494.	8.6
34	33.8	11.666	32.642	5.35	0.16	24.820	0.111	1493.	9.2
36	36.3	11.471	32.651	5.37	0.15	24.863	0.119	1493.	9.6
38	38.0	11.117	32.669	5.40	0.14	24.941	0.124	1492.	9.9
40	39.9	10.963	32.680	5.37	0.13	24.976	0.130	1491.	10.1
42	42.3	10.570	32.718	5.39	0.13	25.075	0.137	1490.	10.2
44	43.9	10.258	32.753	5.38	0.12	25.155	0.141	1489.	9.9
46	46.1	9.970	32.796	5.38	0.13	25.237	0.147	1488.	9.2
48	47.9	9.854	32.820	5.39	0.13	25.275	0.152	1487.	8.4
50	50.1	9.765	32.836	5.39	0.13	25.302	0.158	1487.	7.3
52	51.9	9.723	32.845	5.39	0.13	25.315	0.163	1487.	6.5
54	54.1	9.660	32.858	5.38	0.13	25.336	0.169	1487.	5.9
56	55.8	9.613	32.868	5.39	0.13	25.352	0.173	1487.	5.8
58	58.1	9.566	32.883	5.37	0.14	25.371	0.179	1487.	6.0
59	59.8	9.490	32.904	5.39	0.14	25.400	0.184	1486.	6.8
62	62.1	9.396	32.922	5.37	0.14	25.429	0.190	1486.	9.2
64	64.0	9.282	32.928	5.35	0.14	25.452	0.194	1486.	11.1
66	66.0	9.156	32.948	5.36	0.13	25.487	0.199	1485.	12.3
68	68.0	8.971	33.026	5.35	0.13	25.577	0.204	1485.	13.0
70	70.2	8.960	33.427	5.29	0.16	25.893	0.209	1485.	13.4
72	72.0	8.889	33.589	5.23	0.21	26.031	0.213	1485.	13.3
74	74.2	8.827	33.639	5.20	0.23	26.080	0.217	1485.	13.0
76	76.0	8.786	33.722	5.16	0.23	26.152	0.221	1485.	12.2
78	78.2	8.791	33.784	5.15	0.21	26.199	0.225	1485.	10.8
79	79.9	8.669	33.872	5.11	0.21	26.256	0.228	1486.	10.5
81	81.2	9.086	34.025	5.06	0.21	26.341	0.230	1487.	10.7
82	82.0	9.154	34.086	5.04	0.20	26.378	0.231	1487.	10.8
83	83.1	9.183	34.129	5.04	0.18	26.407	0.233	1487.	11.0
84	84.0	9.182	34.152	5.04	0.16	26.425	0.235	1487.	10.7
85	85.0	9.192	34.195	4.98	0.17	26.458	0.236	1487.	9.9
86	86.1	9.210	34.269	4.98	0.18	26.513	0.238	1487.	9.4
87	87.1	9.242	34.318	4.95	0.20	26.546	0.239	1488.	8.9
87	87.9	9.276	34.350	4.88	0.22	26.565	0.241	1488.	8.8
89	89.0	9.306	34.364	4.86	0.24	26.571	0.242	1488.	9.4

STA 10 DAY: 29 TIME: 2336

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
4.9	13.4	56.4	10.4	104.7	9.0
6.8	13.3	57.3	10.3	105.6	9.0
7.8	13.3	58.3	10.3	107.6	9.0
9.7	13.3	59.3	10.2	109.5	9.0
11.7	13.3	60.2	10.1	111.4	9.0
14.6	13.3	60.2	10.0	113.4	9.0
16.6	13.3	61.2	10.0	115.3	9.0
19.5	13.3	62.2	9.9	115.3	9.1
22.4	13.3	63.1	9.8	116.2	9.1
24.3	13.3	63.1	9.7	117.2	9.1
26.3	13.3	64.1	9.5	118.2	9.1
28.2	13.3	64.1	9.5	120.1	9.1
30.2	13.3	65.1	9.4	122.0	9.1
31.1	13.3	66.0	9.3	123.0	9.1
33.1	13.2	67.0	9.2	125.9	9.1
34.1	13.1	69.0	9.1	126.8	9.0
35.0	13.0	70.9	9.1	127.8	9.0
37.0	12.8	71.9	9.0		
39.9	12.5	72.8	8.9		
41.8	12.1	73.8	8.8		
43.8	11.9	74.8	8.7		
45.7	11.5	75.7	8.6		
47.6	11.4	76.7	8.5		
49.6	11.3	77.7	8.5		
51.5	10.9	78.6	8.5		
53.5	10.8	79.6	8.4		
55.4	10.6	80.6	8.4		
57.4	10.5	81.5	8.3		
59.4	10.4	82.5	8.3		
61.4	10.3	83.5	8.3		
63.4	10.2	84.4	8.3		
65.4	10.1	85.4	8.3		
67.4	10.0	86.4	8.4		
69.4	9.9	87.3	8.4		
71.4	9.8	88.3	8.5		
73.4	9.7	89.2	8.5		
75.4	9.6	90.2	8.5		
77.4	9.5	91.2	8.5		
79.4	9.4	92.1	8.5		
81.4	9.3	93.1	8.6		
83.4	9.2	94.1	8.7		
85.4	9.1	95.0	8.8		
87.4	9.0	96.0	8.8		
89.4	8.9	97.0	8.8		
91.4	8.8	98.9	8.9		
93.4	8.7	99.9	8.9		
95.4	8.6	100.8	8.9		
97.4	8.5	101.8	8.9		
99.4	8.4	102.8	8.9		
101.4	8.3	103.7	9.0		

STA 11 DAY: 29 TIME: 2341

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
6.8	13.3	55.4	10.5	105.6	9.4
7.8	13.3	56.4	10.5	108.5	9.4
9.7	13.3	57.3	10.4	109.5	9.4
11.7	13.3	58.3	10.3	111.4	9.4
13.6	13.3	59.3	10.3	113.4	9.4
15.6	13.3	60.2	10.2	115.3	9.4
17.5	13.3	61.2	10.2	117.2	9.4
19.5	13.3	62.2	10.1	118.2	9.4
21.4	13.3	63.1	10.1	120.1	9.4
23.4	13.3	64.1	10.0	121.1	9.4
25.3	13.3	65.0	9.9	123.0	9.4
27.3	13.2	66.0	9.9	125.9	9.4
29.2	13.2	67.0	9.8	127.8	9.4
31.1	13.1	68.0	9.7	129.7	9.4
33.1	13.0	69.0	9.5	131.6	9.4
35.0	12.9	70.9	9.4	133.5	9.4
37.0	12.7	71.9	9.4	135.4	9.4
39.9	12.6	72.8	9.4	137.3	9.4
41.8	12.4	73.8	9.3	139.2	9.4
43.8	12.3	74.8	9.2	141.1	9.4
45.7	12.2	75.7	9.2	143.0	9.4
47.6	12.1	76.7	9.0	144.9	9.4
49.6	12.0	77.7	8.9	146.8	9.4
51.5	11.9	78.6	8.8	148.7	9.4
53.5	11.8	79.6	8.7	150.6	9.4
55.4	11.7	80.6	8.7	152.5	9.4
57.4	11.6	81.5	8.5	154.4	9.4
59.4	11.5	82.5	8.5	156.3	9.4
61.4	11.4	83.5	8.4	158.2	9.4
63.4	11.3	84.4	8.4	160.1	9.4
65.4	11.2	85.4	8.4	162.0	9.4
67.4	11.1	86.4	8.4	163.9	9.4
69.4	11.0	87.3	8.5	165.8	9.4
71.4	10.9	88.3	8.6	167.7	9.4
73.4	10.8	89.2	8.7	169.6	9.4
75.4	10.7	90.2	8.7	171.5	9.4
77.4	10.6	91.2	8.8	173.4	9.4
79.4	10.5	92.1	8.9	175.3	9.4
81.4	10.4	93.1	9.0	177.2	9.4
83.4	10.3	94.1	9.1	179.1	9.4
85.4	10.2	95.0	9.2	181.0	9.4
87.4	10.1	96.0	9.2	182.9	9.4
89.4	10.0	97.0	9.3	184.8	9.4
91.4	9.9	98.9	9.3	186.7	9.4
93.4	9.8	99.9	9.4	188.6	9.4
95.4	9.7	100.8	9.4	190.5	9.4
97.4	9.6	101.8	9.4	192.4	9.4
99.4	9.5	102.8	9.4	194.3	9.4
101.4	9.4	103.7	9.4	196.2	9.4

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	12	29 SEP 1981	2356	40°32.7'N	67°41.0'W	126		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
4	3.9	13.307	32.544	5.67	0.31	24.431	0.000	1498.	0.1
6	6.0	13.308	32.545	5.70	0.31	24.431	0.007	1498.	0.1
8	8.0	13.308	32.545	5.71	0.31	24.431	0.014	1498.	0.1
10	10.2	13.309	32.545	5.74	0.31	24.431	0.022	1498.	0.1
12	11.9	13.309	32.545	5.71	0.32	24.431	0.028	1499.	0.1
14	14.0	13.310	32.545	5.71	0.31	24.431	0.035	1499.	0.5
16	16.0	13.310	32.545	5.72	0.31	24.431	0.043	1499.	2.3
18	18.0	13.309	32.545	5.69	0.31	24.431	0.050	1499.	3.5
20	19.9	13.309	32.544	5.65	0.31	24.431	0.056	1499.	4.6
22	22.0	13.301	32.545	5.62	0.32	24.433	0.064	1499.	5.8
24	24.0	13.147	32.563	5.61	0.32	24.478	0.070	1498.	7.4
26	26.0	13.013	32.575	5.58	0.33	24.513	0.077	1498.	9.0
28	27.9	12.889	32.586	5.52	0.32	24.546	0.084	1497.	10.0
30	30.0	12.644	32.603	5.48	0.29	24.606	0.091	1497.	10.5
32	32.0	12.051	32.624	5.52	0.24	24.735	0.097	1495.	10.5
34	34.1	11.453	32.654	5.52	0.18	24.869	0.104	1493.	10.1
36	35.9	11.342	32.662	5.41	0.16	24.895	0.109	1492.	9.5
38	37.9	11.153	32.674	5.37	0.15	24.938	0.115	1492.	8.5
40	40.1	11.065	32.679	5.37	0.15	24.958	0.122	1491.	7.1
42	41.9	11.032	32.680	5.38	0.14	24.964	0.127	1491.	6.0
44	44.1	10.853	32.688	5.40	0.13	25.002	0.134	1491.	5.8
46	45.8	10.779	32.692	5.41	0.12	25.018	0.139	1491.	5.7
48	48.0	10.717	32.699	5.40	0.13	25.034	0.145	1490.	6.0
50	50.1	10.610	32.703	5.40	0.12	25.056	0.152	1490.	6.3
52	52.0	10.516	32.708	5.42	0.12	25.076	0.157	1490.	6.5
54	53.9	10.415	32.720	5.39	0.11	25.102	0.163	1489.	6.7
56	56.0	10.251	32.737	5.41	0.12	25.143	0.169	1489.	7.2
58	58.3	10.077	32.751	5.43	0.11	25.183	0.175	1488.	8.0
60	59.9	9.987	32.765	5.40	0.11	25.209	0.179	1488.	8.8
62	62.0	9.902	32.776	5.39	0.12	25.233	0.185	1488.	9.2
64	64.0	9.671	32.813	5.43	0.12	25.299	0.191	1487.	9.4
66	66.2	9.282	32.883	5.47	0.12	25.417	0.196	1486.	9.6
68	68.0	9.119	32.934	5.46	0.11	25.482	0.201	1485.	9.5
70	70.0	9.059	32.958	5.44	0.12	25.510	0.206	1485.	9.2
72	72.1	8.916	32.985	5.47	0.11	25.554	0.211	1485.	8.5
74	74.0	8.788	33.016	5.47	0.11	25.598	0.216	1484.	7.7
76	76.3	8.614	33.043	5.47	0.11	25.646	0.221	1484.	7.4
77	77.8	8.534	33.049	5.49	0.11	25.663	0.224	1483.	7.5
80	80.2	8.447	33.076	5.49	0.11	25.697	0.230	1483.	7.5
81	81.8	8.417	33.091	5.51	0.11	25.713	0.234	1483.	8.1
84	84.1	8.391	33.147	5.47	0.11	25.761	0.239	1483.	9.6
86	86.0	8.404	33.212	5.47	0.11	25.810	0.243	1483.	10.5
87	87.9	8.439	33.265	5.45	0.11	25.846	0.247	1483.	11.2
90	90.0	8.614	33.464	5.40	0.11	25.976	0.252	1484.	11.4
91	91.9	8.886	33.773	5.30	0.12	26.176	0.255	1486.	11.9
93	93.9	8.978	33.833	5.21	0.13	26.208	0.259	1486.	12.4
95	96.0	9.139	33.930	5.15	0.13	26.258	0.263	1487.	12.3
98	98.2	9.279	34.021	5.10	0.12	26.307	0.267	1488.	11.9
99	99.8	9.473	34.272	5.00	0.12	26.472	0.269	1489.	11.3
101	102.0	9.498	34.465	4.98	0.14	26.619	0.273	1489.	11.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH				
OC	104	13	30 SEP 1981	0030	40°31.9'N	67°42.1'W	137				
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT	A	S	SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(m/s)	(m/s)	(cph)
4	4.3	13.249	32.568	5.66	0.32	24.460	0.000	1498.	0.5	1498.	0.5
6	5.9	13.257	32.567	5.64	0.32	24.459	0.006	1498.	0.5	1498.	0.5
8	8.0	13.257	32.567	5.62	0.32	24.459	0.013	1498.	0.5	1498.	0.5
10	10.0	13.258	32.567	5.65	0.33	24.459	0.020	1498.	0.5	1498.	0.5
12	11.9	13.256	32.567	5.66	0.33	24.459	0.027	1498.	0.5	1498.	0.5
14	14.1	13.256	32.568	5.69	0.33	24.459	0.034	1498.	0.7	1498.	0.7
16	16.0	13.256	32.568	5.68	0.32	24.459	0.041	1498.	1.0	1498.	1.0
18	17.9	13.254	32.568	5.66	0.33	24.460	0.047	1498.	1.8	1498.	1.8
20	20.0	13.249	32.568	5.68	0.34	24.461	0.055	1498.	2.9	1498.	2.9
22	22.0	13.250	32.568	5.68	0.33	24.460	0.062	1498.	3.8	1498.	3.8
24	24.0	13.224	32.567	5.65	0.33	24.465	0.068	1498.	4.5	1498.	4.5
26	25.9	13.152	32.573	5.60	0.34	24.484	0.075	1498.	5.6	1498.	5.6
28	28.1	13.021	32.584	5.58	0.33	24.518	0.082	1498.	7.1	1498.	7.1
30	30.0	12.928	32.588	5.54	0.31	24.540	0.089	1498.	9.2	1498.	9.2
32	31.9	12.855	32.594	5.47	0.30	24.559	0.096	1497.	10.8	1497.	10.8
34	34.1	12.550	32.608	5.46	0.27	24.628	0.103	1496.	11.7	1496.	11.7
36	35.9	12.020	32.630	5.49	0.22	24.745	0.109	1495.	11.9	1495.	11.9
38	37.9	11.002	32.682	5.58	0.16	24.971	0.115	1491.	11.7	1491.	11.7
40	40.1	10.552	32.707	5.54	0.12	25.069	0.121	1490.	10.9	1490.	10.9
42	41.9	10.427	32.715	5.45	0.11	25.097	0.127	1489.	9.6	1489.	9.6
44	44.0	10.414	32.720	5.39	0.11	25.102	0.132	1489.	7.8	1489.	7.8
46	46.0	10.402	32.721	5.37	0.11	25.105	0.138	1489.	5.7	1489.	5.7

SHIP OC	CRUISE 104	STATION 14	DATE 30 SEP 1981	EST 0101	LATITUDE 40°31.8'N	LONGITUDE 67°42.8'W	DEPTH 240		
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N (cph)
4	4.1	13.249	32.571	5.53	0.33	24.463	0.000	1498.	-0.5
6	6.0	13.253	32.571	5.52	0.33	24.462	0.007	1498.	-0.5
8	8.1	13.254	32.571	5.56	0.33	24.462	0.014	1498.	-0.5
10	9.9	13.258	32.571	5.58	0.34	24.461	0.020	1498.	-0.5
12	12.1	13.260	32.571	5.56	0.33	24.461	0.028	1498.	-0.5
14	14.0	13.258	32.571	5.60	0.33	24.461	0.034	1498.	0.5
16	16.0	13.258	32.571	5.63	0.33	24.461	0.041	1498.	2.3
18	18.0	13.260	32.571	5.60	0.33	24.461	0.048	1498.	3.6
20	20.2	13.258	32.571	5.58	0.33	24.461	0.056	1498.	4.9
22	21.9	13.243	32.572	5.49	0.34	24.465	0.062	1498.	6.8
24	23.9	13.076	32.584	5.46	0.33	24.507	0.069	1498.	8.5
26	26.1	12.917	32.592	5.46	0.31	24.545	0.076	1497.	10.2
28	28.0	12.681	32.600	5.46	0.28	24.597	0.082	1497.	11.6
30	30.1	12.013	32.631	5.45	0.23	24.748	0.089	1495.	12.1
32	31.9	11.600	32.650	5.42	0.19	24.839	0.095	1493.	12.1
34	34.1	10.829	32.687	5.45	0.15	25.005	0.102	1491.	11.6
36	35.9	10.427	32.717	5.40	0.12	25.098	0.107	1489.	10.6
38	38.0	10.307	32.728	5.35	0.11	25.127	0.113	1489.	9.0
40	40.0	10.229	32.737	5.34	0.12	25.147	0.118	1489.	7.4
42	42.1	10.186	32.742	5.36	0.12	25.159	0.124	1488.	5.5
44	44.0	10.164	32.745	5.39	0.11	25.165	0.130	1488.	4.5
46	46.0	10.114	32.752	5.41	0.11	25.178	0.135	1488.	4.3
48	47.9	10.077	32.757	5.42	0.11	25.188	0.141	1488.	4.5
50	50.1	10.054	32.761	5.42	0.11	25.196	0.147	1488.	5.0
52	52.2	9.985	32.770	5.43	0.11	25.214	0.152	1488.	5.4
54	53.9	9.928	32.778	5.45	0.11	25.230	0.157	1488.	5.5
56	56.1	9.816	32.793	5.43	0.11	25.260	0.163	1487.	5.6
58	57.9	9.718	32.809	5.43	0.11	25.288	0.168	1487.	5.5
60	60.0	9.649	32.823	5.42	0.11	25.311	0.174	1487.	5.7
62	62.0	9.625	32.829	5.40	0.12	25.319	0.179	1487.	6.6
64	64.2	9.600	32.834	5.40	0.12	25.327	0.185	1487.	7.3
65	65.8	9.554	32.843	5.40	0.12	25.342	0.189	1487.	7.9
68	68.0	9.401	32.879	5.40	0.12	25.394	0.195	1486.	8.9
70	70.1	9.030	32.946	5.44	0.12	25.505	0.200	1485.	9.6
72	71.9	8.894	32.977	5.44	0.12	25.551	0.205	1484.	10.0
74	74.1	8.859	33.023	5.43	0.12	25.593	0.210	1484.	9.9
76	76.0	8.605	33.113	5.47	0.11	25.702	0.214	1484.	9.5
78	78.0	8.432	33.141	5.47	0.11	25.750	0.219	1483.	9.1
80	80.0	8.382	33.175	5.47	0.10	25.784	0.223	1483.	10.7
82	82.2	8.371	33.221	5.46	0.10	25.822	0.228	1483.	11.8
83	83.9	8.377	33.264	5.44	0.10	25.855	0.232	1483.	12.8
85	85.9	8.540	33.390	5.36	0.10	25.929	0.236	1484.	13.4
88	88.0	9.416	34.034	5.17	0.11	26.296	0.240	1488.	13.5
90	90.1	9.418	34.134	5.18	0.10	26.373	0.244	1488.	13.0
91	91.9	9.633	34.365	5.08	0.11	26.519	0.246	1489.	11.9
94	94.1	9.739	34.403	4.98	0.11	26.530	0.250	1490.	10.2
95	95.9	9.758	34.420	4.90	0.11	26.540	0.252	1490.	7.7
97	98.0	9.806	34.457	4.83	0.11	26.561	0.256	1490.	6.8
99	100.0	9.857	34.489	4.80	0.11	26.578	0.259	1490.	5.8
101	102.1	9.811	34.517	4.80	0.11	26.607	0.262	1490.	5.9

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	15	30 SEP 1981	0126	40°31.6'N	67°43.1'W	255		
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
(m)	OC	104	30 SEP 1981	0126	40°31.6'N	67°43.1'W	255		
6	6.3	13.264	32.567	5.64	0.34	24.457	0.000	1498.	0.7
8	8.1	13.264	32.567	5.65	0.33	24.457	0.006	1498.	0.7
10	9.9	13.265	32.567	5.64	0.34	24.457	0.012	1498.	0.7
12	11.9	13.265	32.567	5.64	0.33	24.457	0.019	1498.	0.7
14	14.0	13.266	32.566	5.65	0.34	24.456	0.027	1498.	0.7
16	16.2	13.266	32.567	5.66	0.33	24.456	0.034	1498.	2.0
18	17.9	13.265	32.566	5.63	0.34	24.456	0.040	1498.	3.1
20	20.0	13.265	32.566	5.62	0.34	24.456	0.047	1499.	3.8
22	22.2	13.246	32.567	5.66	0.34	24.461	0.055	1498.	4.3
24	23.7	13.125	32.577	5.61	0.34	24.493	0.060	1498.	4.7
26	26.0	13.009	32.582	5.58	0.33	24.519	0.068	1498.	6.5
28	28.1	12.974	32.584	5.57	0.31	24.527	0.075	1498.	8.2
30	29.9	12.942	32.585	5.50	0.30	24.535	0.082	1498.	9.7
32	31.9	12.846	32.590	5.41	0.28	24.557	0.088	1497.	10.9
34	34.0	12.052	32.629	5.50	0.24	24.739	0.095	1495.	11.8
36	36.0	11.529	32.645	5.48	0.19	24.848	0.101	1493.	12.2
38	38.1	10.909	32.670	5.45	0.15	24.978	0.108	1491.	11.9
40	39.9	10.476	32.704	5.42	0.12	25.079	0.113	1489.	11.1
42	42.1	10.236	32.728	5.40	0.11	25.139	0.119	1489.	9.4
44	44.0	10.169	32.736	5.38	0.12	25.157	0.125	1488.	7.9
46	45.9	10.102	32.745	5.40	0.11	25.175	0.130	1488.	6.4
48	48.1	10.031	32.756	5.39	0.11	25.195	0.136	1488.	5.2
50	50.1	9.998	32.760	5.44	0.11	25.204	0.142	1488.	4.7
52	52.1	9.979	32.765	5.46	0.11	25.211	0.147	1488.	4.5
54	53.9	9.918	32.772	5.45	0.11	25.227	0.152	1488.	4.5
56	56.0	9.875	32.779	5.44	0.11	25.239	0.158	1488.	4.9
58	58.0	9.830	32.786	5.45	0.11	25.252	0.163	1487.	5.4
60	60.1	9.807	32.790	5.44	0.12	25.259	0.169	1487.	5.8
62	62.0	9.697	32.808	5.46	0.12	25.291	0.174	1487.	6.0
64	64.2	9.570	32.830	5.46	0.12	25.329	0.180	1487.	6.2
65	65.8	9.498	32.845	5.43	0.12	25.353	0.184	1486.	6.8
68	68.0	9.442	32.863	5.39	0.12	25.375	0.190	1486.	7.6
70	70.0	9.395	32.877	5.40	0.12	25.394	0.195	1486.	8.4
72	72.1	9.311	32.899	5.41	0.12	25.425	0.201	1486.	9.2
74	74.0	9.026	32.943	5.45	0.12	25.504	0.205	1485.	9.7
75	75.9	8.838	33.014	5.46	0.12	25.589	0.210	1484.	9.9
77	77.9	8.748	33.104	5.44	0.12	25.673	0.215	1484.	9.7
80	80.1	8.551	33.167	5.45	0.11	25.753	0.220	1484.	9.5
81	81.7	8.456	33.186	5.45	0.11	25.782	0.223	1483.	10.6
84	84.0	8.422	33.206	5.42	0.11	25.803	0.228	1483.	11.4
86	86.2	8.395	33.239	5.42	0.10	25.832	0.233	1483.	12.3
88	88.0	8.572	33.373	5.40	0.10	25.911	0.237	1484.	12.7
89	89.7	9.289	33.941	5.25	0.10	26.243	0.240	1487.	12.9
92	92.0	9.530	34.096	5.16	0.11	26.325	0.244	1489.	12.8
94	94.1	9.562	34.241	5.11	0.11	26.433	0.248	1489.	12.0
96	96.2	9.678	34.310	5.04	0.11	26.468	0.251	1489.	10.4
97	97.8	9.761	34.361	4.91	0.11	26.494	0.254	1490.	8.2
99	100.0	9.755	34.420	4.87	0.12	26.541	0.257	1490.	7.2
101	102.0	9.697	34.445	4.87	0.12	26.570	0.260	1490.	6.1
103	104.1	9.604	34.448	4.86	0.14	26.588	0.263	1489.	5.7

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	15	30 SEP 1981	0126	40°31.6'N	67°43.1'W	255		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
105	105.9	9.545	34.446	4.84	0.14	26.596	0.266	1489.	5.3
107	108.0	9.516	34.459	4.81	0.16	26.611	0.269	1489.	5.1
110	110.3	9.509	34.473	4.80	0.16	26.623	0.272	1489.	5.7
111	111.9	9.492	34.484	4.79	0.16	26.635	0.274	1489.	6.2
113	114.0	9.470	34.506	4.74	0.17	26.656	0.277	1489.	6.7
115	116.1	9.464	34.555	4.74	0.19	26.695	0.280	1489.	7.0
118	118.3	9.435	34.629	4.76	0.19	26.758	0.283	1489.	7.1
119	119.8	9.411	34.655	4.75	0.20	26.782	0.285	1489.	7.3
121	122.0	9.342	34.680	4.69	0.21	26.812	0.288	1489.	7.2
123	124.1	9.304	34.690	4.69	0.21	26.827	0.290	1489.	6.8
125	126.1	9.290	34.728	4.69	0.21	26.859	0.293	1489.	6.5
127	127.9	9.318	34.799	4.67	0.19	26.910	0.295	1489.	6.7
129	130.0	9.334	34.823	4.65	0.18	26.926	0.297	1489.	6.8
131	132.1	9.336	34.831	4.64	0.19	26.932	0.300	1489.	6.9
133	133.8	9.343	34.882	4.62	0.18	26.971	0.302	1490.	6.7
135	136.1	9.305	34.941	4.58	0.16	27.022	0.304	1489.	6.4
137	138.1	9.240	34.955	4.58	0.15	27.044	0.306	1489.	6.3
139	139.8	9.182	34.975	4.56	0.15	27.070	0.308	1489.	5.8
141	142.0	9.170	34.992	4.54	0.15	27.085	0.310	1489.	5.1
143	144.2	9.126	35.001	4.53	0.15	27.099	0.312	1489.	4.3
145	145.8	9.116	35.000	4.53	0.14	27.100	0.314	1489.	4.0
147	148.1	9.109	35.007	4.51	0.15	27.106	0.316	1489.	3.8
149	150.0	9.103	35.016	4.52	0.14	27.114	0.318	1489.	3.9
151	151.9	9.079	35.026	4.50	0.13	27.126	0.320	1489.	3.9
153	154.0	9.011	35.022	4.49	0.13	27.134	0.322	1489.	4.0
155	156.1	8.885	35.022	4.52	0.14	27.154	0.324	1488.	4.0
157	158.0	8.872	35.027	4.54	0.14	27.160	0.326	1488.	3.9
159	159.9	8.812	35.025	4.55	0.13	27.168	0.327	1488.	3.7
161	162.0	8.789	35.028	4.55	0.14	27.175	0.329	1488.	3.6
163	164.0	8.773	35.033	4.56	0.14	27.181	0.331	1488.	3.5
165	165.9	8.726	35.033	4.56	0.14	27.188	0.333	1488.	3.6
167	168.0	8.719	35.038	4.55	0.15	27.194	0.335	1488.	3.5
169	170.1	8.639	35.045	4.56	0.14	27.211	0.337	1488.	3.4
171	171.8	8.590	35.042	4.59	0.14	27.217	0.338	1488.	3.2
173	173.9	8.555	35.041	4.58	0.15	27.221	0.340	1487.	3.1
175	176.2	8.520	35.040	4.57	0.16	27.226	0.342	1487.	2.8
177	177.7	8.511	35.038	4.59	0.16	27.226	0.343	1487.	2.5
179	180.0	8.494	35.039	4.59	0.17	27.229	0.345	1487.	2.3
181	182.0	8.445	35.041	4.60	0.19	27.238	0.347	1487.	2.2
183	183.9	8.426	35.039	4.62	0.20	27.239	0.349	1487.	2.0
185	186.0	8.418	35.039	4.61	0.21	27.241	0.350	1487.	1.8
187	188.1	8.412	35.039	4.60	0.22	27.242	0.352	1487.	1.5
189	190.1	8.406	35.038	4.61	0.22	27.242	0.354	1487.	1.2
191	191.9	8.405	35.038	4.61	0.22	27.243	0.355	1487.	1.1
193	193.9	8.397	35.038	4.60	0.23	27.244	0.357	1487.	1.2
195	196.1	8.391	35.039	4.60	0.24	27.245	0.359	1487.	1.2
197	198.0	8.389	35.039	4.61	0.23	27.246	0.361	1487.	1.2
199	199.8	8.388	35.039	4.61	0.21	27.246	0.362	1487.	1.2
201	202.0	8.373	35.040	4.59	0.23	27.249	0.364	1487.	1.2
203	204.0	8.377	35.040	4.59	0.23	27.248	0.366	1487.	1.3
205	208.1	8.370	35.040	4.60	0.22	27.249	0.367	1487.	1.3
207	208.0	8.365	35.041	4.60	0.22	27.251	0.369	1487.	1.3
209	210.0	8.365	35.040	4.60	0.22	27.250	0.371	1487.	1.3
211	212.2	8.344	35.040	4.61	0.23	27.254	0.373	1487.	1.3
213	213.9	8.344	35.040	4.61	0.23	27.254	0.374	1487.	1.2
215	216.0	8.339	35.041	4.58	0.24	27.255	0.376	1487.	0.9
217	218.0	8.337	35.040	4.60	0.24	27.255	0.378	1487.	1.0
219	220.2	8.338	35.041	4.60	0.24	27.255	0.380	1487.	1.1
220	221.7	8.344	35.042	4.61	0.22	27.255	0.381	1487.	1.3
222	223.3	8.349	35.041	4.60	0.22	27.253	0.383	1488.	1.5
224	225.8	8.311	35.041	4.61	0.22	27.259	0.384	1487.	1.6
226	228.1	8.298	35.042	4.58	0.24	27.262	0.386	1487.	1.6
228	229.9	8.299	35.043	4.59	0.23	27.263	0.388	1487.	1.6
230	231.2	8.296	35.043	4.60	0.23	27.263	0.389	1487.	1.5
232	233.0	8.296	35.042	4.59	0.24	27.263	0.390	1487.	-0.4
234	235.0	8.299	35.042	4.59	0.24	27.263	0.391	1487.	-0.3
236	237.1	8.301	35.044	4.62	0.22	27.263	0.393	1488.	-0.4
238	239.0	8.300	35.043	4.60	0.23	27.262	0.395	1488.	0.9
239	240.0	8.301	35.042	4.60	0.23	27.262	0.396	1488.	1.0
240	241.0	8.294	35.044	4.60	0.24	27.264	0.397	1488.	1.3
241	242.0	8.292	35.043	4.59	0.23	27.264	0.398	1488.	1.6
242	243.1	8.295	35.043	4.61	0.23	27.263	0.399	1488.	2.1
243	243.9	8.286	35.043	4.62	0.22	27.265	0.399	1488.	2.2
244	245.0	8.265	35.044	4.62	0.23	27.268	0.400	1488.	2.1
245	246.0	8.262	35.044	4.61	0.24	27.269	0.401	1488.	2.1
246	247.0	8.235	35.046	4.61	0.25	27.275	0.402	1487.	2.1
247	248.0	8.239	35.044	4.61	0.25	27.273	0.403	1488.	2.1
248	249.1	8.253	35.045	4.60	0.24	27.271	0.404	1488.	2.1
248	249.9	8.248	35.045	4.60	0.24	27.272	0.405	1488.	2.1

SHIP OC	CRUISE 104	STATION 16	DATE 30 SEP 1981	EST 0151	LATITUDE 40°31.5'N	LONGITUDE 67°43.3'W	DEPTH 207		
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DVHT A (10m ² /s ²)	S SPD (m/s)	N (cph)
2	2.0	13.227	32.570	5.57	0.33	24.467	0.000	1498.	1.0
4	4.2	13.227	32.569	5.56	0.33	24.466	0.008	1498.	1.0
6	5.8	13.229	32.570	5.57	0.33	24.467	0.013	1498.	1.0
8	8.2	13.231	32.569	5.54	0.33	24.465	0.021	1498.	1.0
10	9.8	13.230	32.572	5.53	0.34	24.468	0.027	1498.	1.0
12	12.0	13.231	32.573	5.56	0.34	24.468	0.035	1498.	1.2
14	14.2	13.229	32.573	5.61	0.33	24.468	0.042	1498.	2.2
16	15.7	13.226	32.574	5.65	0.34	24.470	0.047	1498.	3.3
18	18.1	13.224	32.574	5.61	0.34	24.471	0.056	1498.	4.0
20	19.9	13.210	32.575	5.63	0.34	24.474	0.062	1498.	5.3
22	21.9	13.091	32.582	5.63	0.32	24.503	0.069	1498.	7.2
24	24.0	12.958	32.592	5.59	0.30	24.537	0.076	1498.	8.7
26	25.8	12.897	32.594	5.55	0.28	24.550	0.082	1497.	10.3
28	28.0	12.517	32.607	5.47	0.23	24.634	0.089	1496.	11.5
30	30.1	11.903	32.639	5.49	0.19	24.775	0.096	1494.	12.1
32	31.9	11.480	32.658	5.47	0.16	24.867	0.102	1493.	12.1
34	34.0	10.787	32.691	5.49	0.13	25.015	0.108	1490.	11.8
36	35.9	10.271	32.732	5.52	0.11	25.136	0.114	1489.	10.9
38	38.0	10.214	32.738	5.48	0.11	25.151	0.120	1488.	9.5
40	40.1	10.083	32.765	5.46	0.11	25.178	0.125	1488.	8.0
42	42.0	9.962	32.768	5.44	0.11	25.217	0.131	1488.	6.4
44	43.9	9.927	32.775	5.41	0.11	25.228	0.136	1488.	5.3
46	46.0	9.892	32.781	5.40	0.11	25.238	0.142	1487.	5.2
48	48.1	9.852	32.788	5.38	0.11	25.250	0.147	1487.	5.2
50	49.9	9.814	32.793	5.35	0.11	25.260	0.152	1487.	5.2
52	52.2	9.731	32.804	5.37	0.11	25.282	0.159	1487.	5.4
54	53.8	9.683	32.813	5.38	0.11	25.297	0.163	1487.	5.6
56	55.9	9.549	32.838	5.38	0.12	25.339	0.168	1486.	5.5
58	57.9	9.500	32.848	5.36	0.12	25.354	0.174	1486.	5.4
60	60.0	9.466	32.856	5.38	0.12	25.366	0.179	1486.	5.3
62	62.2	9.421	32.869	5.39	0.12	25.383	0.185	1486.	5.7
64	63.9	9.406	32.876	5.38	0.12	25.391	0.189	1486.	6.4
66	66.1	9.383	32.885	5.36	0.12	25.402	0.195	1486.	7.3
68	68.1	9.275	32.914	5.39	0.12	25.442	0.200	1486.	7.9
70	69.9	9.051	32.945	5.39	0.12	25.502	0.204	1485.	8.1
72	72.0	8.848	32.998	5.40	0.12	25.575	0.210	1484.	8.2
74	74.1	8.816	33.063	5.39	0.12	25.630	0.215	1484.	8.1
76	76.0	8.805	33.090	5.39	0.12	25.653	0.219	1484.	7.8
78	78.2	8.783	33.107	5.41	0.12	25.670	0.224	1484.	7.4
79	79.8	8.756	33.128	5.40	0.12	25.690	0.228	1484.	7.5
82	82.0	8.635	33.163	5.39	0.11	25.737	0.233	1484.	8.5
84	84.2	8.506	33.188	5.42	0.11	25.776	0.238	1484.	9.7
85	85.9	8.498	33.226	5.37	0.10	25.807	0.242	1484.	11.1
88	88.1	8.650	33.369	5.33	0.11	25.896	0.246	1484.	12.1
89	89.9	8.915	33.597	5.21	0.11	26.034	0.250	1486.	12.6
91	92.0	9.183	33.793	5.14	0.10	26.145	0.254	1487.	12.5
94	94.2	9.563	34.090	5.08	0.10	26.314	0.258	1489.	11.9
95	95.9	9.636	34.235	5.05	0.11	26.416	0.261	1489.	10.7
98	98.1	9.731	34.291	5.01	0.11	26.444	0.264	1490.	9.3
99	100.0	9.785	34.329	4.96	0.11	26.464	0.267	1490.	7.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH				
OC	104	17	30 SEP 1981	0215	40°31.3'N	67°43.8'W	140	OC	104	17	30 SEP 1981	0215	40°31.3'N	67°43.8'W	140				
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N (cph)	DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N (cph)
4	3.9	13.201	32.573	5.50	0.37	24.475	0.000	1498.	2.2	103	104.0	9.626	34.233	4.97	0.12	26.416	0.259	1489.	3.3
6	5.9	13.200	32.575	5.51	0.39	24.476	0.007	1498.	2.2	106	106.2	9.606	34.229	4.96	0.12	26.417	0.263	1489.	4.3
8	8.2	13.201	32.575	5.51	0.39	24.475	0.015	1498.	2.2	107	108.0	9.586	34.226	4.95	0.12	26.418	0.265	1489.	5.2
10	9.7	13.204	32.575	5.53	0.36	24.475	0.020	1498.	2.2	109	109.8	9.534	34.228	4.92	0.12	26.427	0.268	1489.	6.1
12	12.1	13.202	32.574	5.56	0.35	24.475	0.028	1498.	2.2	111	112.1	9.430	34.255	4.91	0.15	26.465	0.272	1489.	6.8
14	14.0	13.201	32.575	5.55	0.36	24.476	0.035	1498.	3.3	113	113.8	9.389	34.317	4.91	0.17	26.521	0.275	1489.	7.3
16	16.1	13.201	32.575	5.51	0.36	24.475	0.042	1498.	5.5	115	116.0	9.409	34.362	4.86	0.20	26.553	0.278	1489.	7.7
18	17.9	13.183	32.576	5.48	0.35	24.480	0.048	1498.	7.4	117	118.1	9.441	34.425	4.83	0.21	26.597	0.281	1489.	8.0
20	20.0	13.031	32.587	5.44	0.33	24.519	0.055	1498.	9.2	119	119.8	9.445	34.451	4.80	0.22	26.617	0.284	1489.	8.6
22	22.0	12.918	32.594	5.42	0.31	24.546	0.062	1497.	10.5	121	122.0	9.452	34.508	4.74	0.24	26.660	0.287	1489.	9.2
24	24.3	12.296	32.616	5.47	0.25	24.683	0.070	1495.	11.7	123	124.1	9.432	34.564	4.73	0.26	26.707	0.290	1489.	9.7
26	25.9	11.732	32.642	5.36	0.20	24.808	0.075	1493.	12.3	125	126.1	9.360	34.638	4.74	0.24	26.776	0.292	1489.	10.1
28	28.0	11.319	32.666	5.33	0.17	24.902	0.081	1492.	12.3	127	128.0	9.215	34.744	4.72	0.22	26.884	0.295	1489.	10.2
30	30.2	10.800	32.691	5.36	0.15	25.014	0.088	1490.	11.7	129	129.9	9.189	34.838	4.67	0.22	26.962	0.297	1489.	10.0
32	31.7	10.344	32.717	5.34	0.12	25.112	0.092	1489.	10.5	131	131.3	9.167	34.872	4.65	0.21	26.992	0.298	1489.	9.3
34	34.0	10.113	32.748	5.29	0.11	25.175	0.099	1488.	9.1	133	132.0	9.113	34.870	4.66	0.22	26.998	0.299	1489.	7.9
36	36.1	10.012	32.761	5.32	0.11	25.202	0.105	1488.	8.5	132	133.0	9.063	34.847	4.67	0.23	26.990	0.300	1488.	5.6
38	37.9	9.963	32.769	5.34	0.11	25.217	0.110	1488.	6.5	133	134.1	9.035	34.847	4.66	0.24	26.993	0.301	1488.	5.6
40	40.2	9.931	32.774	5.36	0.11	25.226	0.116	1488.	5.7	134	135.0	9.016	34.845	4.63	0.24	26.995	0.302	1488.	5.6
42	41.8	9.903	32.778	5.38	0.11	25.234	0.120	1487.	5.3	135	136.0	8.977	34.840	4.65	0.25	26.997	0.303	1488.	5.6
44	43.9	9.856	32.787	5.39	0.12	25.248	0.126	1487.	5.2	136	136.9	8.960	34.839	4.65	0.26	26.999	0.304	1488.	5.6
46	46.1	9.742	32.805	5.41	0.12	25.282	0.132	1487.	5.1										
48	48.1	9.645	32.821	5.43	0.12	25.309	0.137	1487.	4.8										
50	49.9	9.621	32.826	5.42	0.12	25.317	0.142	1487.	4.6										
52	52.0	9.599	32.829	5.40	0.12	25.323	0.148	1487.	4.4										
54	54.2	9.581	32.833	5.40	0.12	25.330	0.153	1487.	4.4										
56	55.9	9.540	32.840	5.40	0.12	25.342	0.158	1486.	4.5										
58	58.0	9.502	32.849	5.39	0.12	25.355	0.163	1486.	6.7										
60	60.0	9.436	32.864	5.39	0.12	25.377	0.169	1486.	6.7										
62	62.0	9.403	32.873	5.39	0.12	25.390	0.174	1486.	7.6										
64	64.2	9.354	32.891	5.38	0.12	25.412	0.179	1486.	8.0										
65	65.7	9.129	32.939	5.40	0.12	25.485	0.183	1485.	8.1										
68	68.1	8.814	33.006	5.41	0.12	25.587	0.189	1484.	8.1										
70	70.0	8.761	33.023	5.42	0.12	25.608	0.194	1484.	8.3										
71	71.9	8.728	33.037	5.41	0.12	25.624	0.198	1484.	8.3										
74	73.9	8.722	33.043	5.39	0.13	25.629	0.203	1484.	8.5										
76	76.1	8.702	33.110	5.40	0.12	25.685	0.208	1484.	9.7										
77	77.9	8.547	33.168	5.44	0.12	25.754	0.212	1484.	10.9										
80	80.1	8.566	33.243	5.42	0.11	25.810	0.217	1484.	11.7										
81	81.8	8.763	33.416	5.38	0.11	25.916	0.221	1485.	12.2										
84	84.0	9.179	33.769	5.27	0.11	26.126	0.225	1487.	12.0										
86	86.1	9.374	33.888	5.24	0.11	26.188	0.229	1488.	11.5										
87	88.0	9.549	34.001	5.19	0.11	26.248	0.232	1488.	10.7										
89	90.0	9.743	34.137	5.10	0.11	26.322	0.236	1489.	9.2										
92	92.1	9.778	34.195	5.08	0.11	26.361	0.240	1490.	7.4										
93	94.0	9.782	34.225	5.05	0.11	26.384	0.243	1490.	6.5										
95	95.9	9.774	34.232	5.00	0.12	26.391	0.246	1490.	5.3										
98	98.1	9.746	34.239	4.98	0.11	26.401	0.249	1490.	4.1										
99	100.0	9.726	34.240	4.98	0.11	26.405	0.253	1490.	3.2										
101	101.9	9.637	34.236	4.98	0.14	26.417	0.256	1489.	2.8										

STA 18 DAY: 30 TIME: 0235

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
2.9	13.6	27.3	11.6
2.9	13.5	27.3	11.5
3.9	13.4	27.3	11.4
4.9	13.4	27.3	11.3
5.8	13.4	28.2	11.2
6.8	13.3	29.2	11.1
8.8	13.3	29.2	11.0
8.8	13.4	31.1	10.8
8.8	13.4	32.1	10.8
9.7	13.5	33.1	10.7
9.7	13.5	34.1	10.7
10.7	13.5	35.0	10.7
11.7	13.6	37.0	10.6
12.7	13.6	37.9	10.6
13.6	13.6	38.9	10.6
14.6	13.6	39.9	10.6
15.6	13.6	40.9	10.6
16.6	13.6	41.8	10.5
16.6	13.7	42.8	10.5
17.5	13.7	43.8	10.5
17.5	13.8	45.7	10.5
17.5	13.8	47.6	10.5
17.5	13.9	47.6	10.4
17.5	13.9	49.6	10.3
18.5	13.9	50.6	10.3
18.5	13.8	51.5	10.2
18.5	13.7	52.5	10.2
18.5	13.6	52.5	10.1
18.5	13.5	53.5	10.1
19.5	13.5	54.4	10.0
19.5	13.4	55.4	9.9
19.5	13.3	55.4	9.9
19.5	13.2	56.4	9.8
20.4	13.1	57.3	9.7
20.4	13.1	58.3	9.7
20.4	13.0	59.3	9.6
20.4	12.9	60.2	9.6
21.4	12.8	61.2	9.5
21.4	12.7	62.2	9.5
21.4	12.6	62.2	9.4
22.4	12.5	63.1	9.4
22.4	12.4	64.1	9.4
23.4	12.3	65.1	9.3
23.4	12.3	65.1	9.3
23.4	12.2	66.0	9.3
23.4	12.1	66.0	9.3
24.3	12.0	66.0	9.4
25.3	11.8	67.0	9.3
26.3	11.7	67.0	9.3
26.3	11.6	67.0	9.3

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	19	30 SEP 1981	0251	40°29.7'N	67°40.2'W	145		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
4	4.2	12.956	32.570	5.43	0.29	24.520	0.000	1497.	8.8
6	6.1	12.840	32.563	5.38	0.29	24.538	0.006	1497.	8.8
8	7.8	12.485	32.592	5.60	0.26	24.628	0.012	1496.	8.8
10	10.2	12.476	32.602	5.56	0.25	24.638	0.020	1496.	8.8
12	11.7	12.428	32.600	5.55	0.24	24.645	0.025	1496.	8.8
14	14.0	12.211	32.629	5.49	0.22	24.709	0.032	1495.	9.4
16	16.0	12.018	32.630	5.45	0.21	24.746	0.039	1494.	9.8
18	18.0	11.606	32.646	5.43	0.17	24.834	0.045	1493.	10.2
20	20.0	11.111	32.675	5.45	0.13	24.947	0.051	1491.	10.0
22	21.9	10.805	32.693	5.45	0.12	25.014	0.057	1490.	9.4
24	24.2	10.527	32.710	5.46	0.11	25.076	0.064	1489.	8.7
26	25.8	10.470	32.714	5.42	0.11	25.089	0.068	1489.	7.4
28	28.1	10.389	32.719	5.39	0.11	25.106	0.075	1489.	6.3
30	30.1	10.305	32.726	5.40	0.11	25.126	0.080	1489.	5.8
32	31.9	10.249	32.733	5.39	0.11	25.141	0.085	1488.	5.9
34	34.0	10.227	32.735	5.34	0.12	25.147	0.091	1488.	6.4
36	36.2	10.091	32.753	5.35	0.11	25.183	0.098	1488.	6.7
38	37.8	9.966	32.769	5.34	0.12	25.216	0.102	1488.	6.9
40	40.1	9.783	32.800	5.38	0.12	25.271	0.108	1487.	6.8
42	41.9	9.679	32.814	5.37	0.12	25.298	0.113	1487.	6.6
44	44.1	9.609	32.826	5.38	0.12	25.319	0.119	1486.	6.5
46	45.9	9.541	32.837	5.40	0.12	25.339	0.124	1486.	6.5
48	48.0	9.522	32.842	5.36	0.12	25.346	0.129	1486.	6.5
50	50.0	9.473	32.857	5.36	0.12	25.366	0.135	1486.	6.7
52	52.0	9.330	32.905	5.39	0.13	25.426	0.140	1486.	7.1
54	53.9	9.223	32.934	5.38	0.13	25.466	0.145	1485.	7.5
56	56.2	9.157	32.950	5.39	0.13	25.489	0.150	1485.	7.6
58	57.9	9.106	32.966	5.40	0.13	25.510	0.154	1485.	7.4
60	60.0	8.954	33.020	5.40	0.13	25.575	0.160	1485.	7.1
62	61.9	8.811	33.038	5.39	0.13	25.612	0.164	1484.	7.1
64	64.0	8.806	33.053	5.37	0.13	25.624	0.169	1484.	7.1
66	66.2	8.680	33.062	5.40	0.13	25.650	0.174	1484.	7.1
68	67.9	8.712	33.095	5.34	0.13	25.672	0.178	1484.	7.1
70	70.1	8.736	33.164	5.34	0.13	25.722	0.183	1484.	7.5
72	72.0	8.720	33.200	5.34	0.13	25.753	0.188	1484.	7.7
74	73.9	8.709	33.246	5.33	0.13	25.791	0.192	1484.	7.9
76	76.1	8.676	33.303	5.32	0.12	25.840	0.197	1484.	8.8
78	78.0	8.649	33.360	5.33	0.11	25.889	0.201	1484.	9.6
79	79.9	8.651	33.383	5.30	0.11	25.906	0.205	1484.	10.0
82	82.0	8.742	33.465	5.29	0.11	25.957	0.209	1485.	10.2
84	84.1	9.009	33.749	5.25	0.11	26.138	0.213	1486.	10.0
85	86.0	9.073	33.847	5.20	0.11	26.204	0.217	1486.	9.6
88	88.1	9.126	33.898	5.17	0.11	26.236	0.220	1487.	9.0
89	89.9	9.158	33.938	5.14	0.11	26.262	0.224	1487.	8.2
91	92.0	9.159	33.964	5.08	0.11	26.282	0.227	1487.	7.3
94	94.0	9.120	33.993	5.08	0.11	26.311	0.231	1487.	7.1
95	95.9	9.112	34.014	5.02	0.11	26.329	0.234	1487.	7.2
98	98.1	9.214	34.117	5.01	0.11	26.393	0.238	1488.	7.5
99	99.8	9.308	34.193	4.98	0.11	26.437	0.241	1488.	8.1
101	101.9	9.350	34.223	4.93	0.11	26.454	0.244	1488.	8.3

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	104	21					
DEPTH	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD
(m)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)
4	3.8	32.569	5.51	0.32	24.477	0.000	1498.
6	6.1	32.571	5.49	0.32	24.481	0.008	1498.
8	7.9	32.571	5.46	0.32	24.481	0.014	1498.
10	10.1	32.569	5.42	0.32	24.478	0.022	1498.
12	11.9	32.570	5.39	0.32	24.478	0.028	1498.
14	14.3	32.576	5.59	0.32	24.495	0.036	1498.
16	15.9	32.590	5.51	0.30	24.548	0.042	1497.
18	18.0	32.642	5.54	0.24	24.715	0.049	1495.
20	20.1	32.632	5.52	0.19	24.779	0.055	1494.
22	21.8	32.649	5.47	0.16	24.845	0.061	1493.
24	23.9	32.674	5.45	0.13	24.953	0.067	1491.
26	26.2	32.697	5.47	0.12	25.031	0.074	1490.
28	27.9	32.707	5.42	0.13	25.060	0.079	1490.
30	30.1	32.717	5.39	0.13	25.092	0.085	1489.
32	32.1	32.728	5.39	0.14	25.129	0.091	1489.
34	33.9	32.734	5.38	0.13	25.141	0.096	1489.
36	36.1	32.742	5.38	0.12	25.158	0.102	1488.
38	37.8	32.744	5.37	0.12	25.162	0.107	1488.
40	40.3	32.745	5.37	0.12	25.166	0.114	1488.
42	41.9	32.750	5.34	0.12	25.175	0.118	1488.
44	44.1	32.757	5.33	0.12	25.192	0.125	1488.
46	45.8	32.781	5.35	0.12	25.249	0.129	1487.
48	48.0	32.828	5.37	0.13	25.316	0.135	1487.
50	50.1	32.841	5.37	0.14	25.339	0.141	1486.
52	52.0	32.860	5.35	0.13	25.367	0.146	1486.
54	54.1	32.904	5.38	0.13	25.429	0.151	1486.
55	55.7	32.928	5.38	0.14	25.458	0.155	1485.
58	58.0	32.944	5.36	0.15	25.480	0.161	1485.
60	60.3	32.977	5.41	0.15	25.536	0.167	1485.
62	61.9	32.998	5.42	0.16	25.582	0.170	1484.
64	64.0	33.004	5.43	0.16	25.597	0.176	1484.
66	66.0	33.014	5.44	0.17	25.618	0.180	1484.
68	68.0	33.017	5.42	0.16	25.624	0.185	1483.
70	70.0	33.051	5.42	0.16	25.663	0.190	1483.
72	72.0	33.076	5.42	0.16	25.692	0.194	1483.
73	73.9	33.095	5.39	0.16	25.715	0.199	1483.
76	76.1	33.158	5.37	0.16	25.746	0.204	1483.
77	77.9	33.201	5.37	0.16	25.777	0.208	1484.
80	80.0	33.242	5.36	0.15	25.806	0.212	1484.
82	82.0	33.250	5.37	0.15	25.825	0.217	1484.
84	84.0	33.307	5.35	0.15	25.858	0.221	1484.
85	86.0	33.404	5.32	0.15	25.919	0.225	1484.
88	88.0	33.609	5.26	0.14	26.041	0.229	1486.
89	90.0	33.833	5.19	0.14	26.173	0.233	1487.
91	92.0	33.998	5.11	0.14	26.263	0.237	1488.
94	94.1	34.086	5.07	0.13	26.331	0.240	1488.
95	96.0	34.076	5.06	0.15	26.354	0.244	1488.
97	97.8	34.093	5.01	0.14	26.380	0.247	1487.
99	100.0	34.183	4.90	0.14	26.432	0.250	1488.
101	101.9	34.444	4.82	0.15	26.603	0.253	1489.

STA	20	DAY:	30	TIME:	0316
DEPTH	TEMP	TEMP	DEPTH	TEMP	TEMP
(m)	(°C)	(°C)	(m)	(°C)	(°C)
4.9	13.2	9.7	101.8	9.2	9.2
5.8	13.1	9.7	102.8	9.2	9.2
6.8	13.1	9.6	102.8	9.3	9.3
7.8	13.1	9.5	103.7	9.3	9.3
8.8	13.1	9.5	105.6	9.3	9.3
9.7	13.1	9.5	107.6	9.3	9.3
10.7	13.1	9.5	109.5	9.3	9.3
11.7	13.0	9.4	112.4	9.3	9.3
12.7	13.0	9.3	114.3	9.3	9.3
13.6	12.9	9.3	117.2	9.3	9.3
14.6	12.9	9.2	120.1	9.3	9.3
15.6	12.8	9.2	122.0	9.4	9.4
16.6	12.6	9.1	123.9	9.4	9.4
17.5	12.5	9.1	126.8	9.4	9.4
18.5	12.4	9.0	127.8	9.4	9.4
19.5	12.2	8.9	130.7	9.4	9.4
20.4	12.1	8.8	133.5	9.4	9.4
21.4	11.9	8.7	135.5	9.4	9.4
22.4	11.8	8.7	138.3	9.4	9.4
23.4	11.7	8.7	141.2	9.4	9.4
24.3	11.6	8.5	143.1	9.4	9.4
25.3	11.5	8.5	145.1	9.4	9.4
26.3	11.4	8.5	147.0	9.4	9.4
27.3	11.3	8.5	148.9	9.4	9.4
28.2	11.2	8.5	150.8	9.4	9.4
29.2	11.1	8.4	152.7	9.4	9.4
30.2	11.0	8.4	153.7	9.4	9.4
31.1	10.9	8.4	154.7	9.4	9.4
32.1	10.8	8.5	156.6	9.3	9.3
33.1	10.7	8.5	157.5	9.3	9.3
34.1	10.6	8.5	159.4	9.3	9.3
35.1	10.5	8.5	160.4	9.3	9.3
36.0	10.4	8.5	162.3	9.3	9.3
37.9	10.3	8.5	162.3	9.3	9.3
38.9	10.2	8.5	162.3	9.3	9.3
39.9	10.1	8.5	162.3	9.3	9.3
40.9	10.0	8.5	162.3	9.3	9.3
41.9	9.9	8.5	162.3	9.3	9.3
42.8	9.8	8.5	162.3	9.3	9.3
43.8	9.7	8.5	162.3	9.3	9.3
44.7	9.6	8.5	162.3	9.3	9.3
45.7	9.5	8.5	162.3	9.3	9.3
46.7	9.4	8.5	162.3	9.3	9.3

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	104	21	30 SEP 1981	0332	40°29.7'N	67°41.5'W	190
DEPTH	TEMP	SALIN	OXY	ATN	SIGT	DVHT A	S SPD
(m)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)
103	104.0	34.553	4.76	0.15	26.671	0.256	1490.
105	106.1	34.557	4.78	0.14	26.673	0.259	1490.
107	108.1	34.553	4.76	0.16	26.671	0.262	1490.
109	109.9	34.549	4.75	0.16	26.669	0.264	1490.
111	111.9	34.551	4.73	0.17	26.670	0.267	1490.
113	114.1	34.560	4.72	0.17	26.676	0.270	1490.
115	115.9	34.589	4.71	0.16	26.695	0.272	1490.
117	118.1	34.637	4.70	0.19	26.726	0.275	1490.
119	119.7	34.679	4.68	0.18	26.745	0.278	1490.
121	122.1	34.696	4.65	0.17	26.771	0.281	1490.
123	123.9	34.724	4.64	0.18	26.797	0.283	1490.
125	125.9	34.753	4.61	0.20	26.825	0.285	1490.
127	128.0	34.772	4.61	0.19	26.844	0.288	1490.
129	130.1	34.778	4.62	0.17	26.850	0.291	1490.
131	132.0	34.779	4.62	0.16	26.851	0.293	1490.
133	134.0	34.780	4.62	0.15	26.852	0.295	1490.
135	135.8	34.780	4.59	0.16	26.852	0.298	1490.
137	138.0	34.785	4.58	0.16	26.856	0.300	1490.
139	140.2	34.786	4.60	0.16	26.858	0.303	1490.
141	141.9	34.796	4.60	0.15	26.867	0.305	1490.
143	143.9	34.811	4.59	0.15	26.881	0.307	1490.
145	146.1	34.846	4.57	0.14	26.906	0.310	1490.
147	147.8	34.861	4.53	0.13	26.916	0.312	1491.
149	150.0	34.866	4.48	0.13	26.923	0.314	1491.
151	152.1	34.954	4.49	0.13	27.019	0.317	1490.
153	154.3	34.996	4.50	0.13	27.067	0.319	1490.
155	155.8	35.002	4.48	0.13	27.073	0.321	1490.
157	158.1	35.011	4.48	0.13	27.084	0.323	1490.
159	159.7	35.014	4.47	0.13	27.089	0.325	1490.
161	162.0	35.017	4.45	0.13	27.092	0.327	1490.
163	164.1	35.021	4.44	0.13	27.093	0.329	1490.
165	166.1	35.021	4.44	0.13	27.097	0.331	1490.
167	168.0	35.019	4.44	0.13	27.096	0.333	1490.
169	170.0	35.021	4.44	0.13	27.100	0.335	1490.
171	171.9	35.030	4.44	0.13	27.117	0.337	1490.
173	173.9	35.053	4.44	0.12	27.159	0.339	1489.
174	175.2	35.046	4.44	0.12	27.149	0.340	1489.
175	176.0	35.053	4.44	0.12	27.160	0.340	1489.
176	177.0	35.057	4.44	0.12	27.164	0.341	1489.
177	178.1	35.044	4.45	0.12	27.143	0.342	1489.
178	179.0	35.036	4.44	0.12	27.124	0.343	1490.
179	179.9	35.084	4.43	0.11	27.212	0.345	1489.
180	181.0	35.084	4.44	0.11	27.212	0.345	1489.
181	182.0	35.080	4.43	0.11	27.221	0.346	1488.
182	183.0	35.076	4.43	0.11	27.230	0.348	1488.
183	184.6	35.069	4.43	0.12	27.229	0.348	1488.

STA 22 DAY: 30 TIME: 0345

DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP
(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)
4.9	13.5	45.7	10.1	101.8	9.2	206.3	8.6	307.6	7.4								
4.9	13.4	46.7	10.0	102.8	9.3	208.2	8.6	310.5	7.3								
5.8	13.4	47.6	10.0	103.7	9.4	209.1	8.5	312.4	7.3								
6.8	13.3	48.6	10.0	104.7	9.4	211.0	8.5	314.2	7.3								
8.7	13.3	50.6	9.9	105.6	9.5	212.9	8.5	317.1	7.3								
10.7	13.3	51.5	9.9	106.6	9.5	214.8	8.5	319.9	7.3								
12.7	13.2	52.5	9.9	109.5	9.5	216.7	8.4	322.7	7.3								
13.6	13.2	52.5	9.8	110.5	9.5	218.6	8.4	323.6	7.2								
14.6	13.2	53.5	9.7	113.4	9.5	219.6	8.4	324.6	7.2								
15.6	13.1	54.4	9.7	114.3	9.6	222.4	8.4										
16.6	13.1	55.4	9.7	117.2	9.5	224.4	8.3										
17.5	13.1	56.4	9.5	119.1	9.5	226.3	8.3										
18.5	13.0	57.3	9.5	122.0	9.5	228.2	8.3										
18.5	13.0	58.3	9.5	123.9	9.6	230.1	8.3										
19.5	12.9	60.2	9.4	125.9	9.6	232.0	8.3										
19.5	12.8	61.2	9.4	128.7	9.6	233.9	8.3										
20.4	12.7	62.2	9.3	132.6	9.5	235.8	8.2										
21.4	12.6	63.1	9.3	135.5	9.5	237.7	8.2										
21.4	12.5	64.1	9.3	138.3	9.5	239.6	8.2										
22.4	12.3	66.0	9.2	141.2	9.5	241.5	8.1										
22.4	12.3	66.0	9.1	144.1	9.5	244.3	8.1										
22.4	12.2	68.0	9.1	147.9	9.5	245.2	8.1										
23.4	12.0	69.0	9.0	150.8	9.5	247.1	8.1										
23.4	11.9	69.9	9.0	152.7	9.5	248.1	8.0										
24.3	11.9	70.9	8.9	156.6	9.5	250.0	8.0										
24.3	11.7	71.9	8.9	158.5	9.5	251.9	8.0										
25.3	11.6	72.8	8.9	160.4	9.4	253.8	8.0										
25.3	11.5	73.8	8.8	162.3	9.4	256.6	8.0										
26.3	11.4	73.8	8.7	164.2	9.4	257.6	7.9										
27.3	11.3	75.7	8.7	166.2	9.3	258.5	7.9										
27.3	11.2	77.7	8.6	169.0	9.3	259.5	7.8										
28.2	11.1	80.6	8.7	170.9	9.3	261.4	7.8										
28.2	11.0	82.5	8.7	172.9	9.3	264.2	7.8										
29.2	10.9	83.5	8.6	175.7	9.2	267.0	7.8										
29.2	10.8	85.4	8.6	178.6	9.2	269.9	7.8										
30.2	10.7	87.3	8.6	181.5	9.2	272.7	7.8										
31.1	10.6	88.3	8.7	182.4	9.1	274.6	7.8										
32.1	10.5	89.2	8.7	183.4	9.1	277.4	7.8										
33.1	10.5	90.2	8.8	186.2	9.1	280.3	7.7										
34.1	10.4	91.2	8.8	188.1	9.1	282.2	7.7										
35.0	10.4	92.1	8.9	189.1	9.1	285.0	7.6										
36.0	10.4	92.1	9.0	191.0	9.1	286.9	7.6										
37.9	10.4	93.1	9.1	193.9	9.0	288.8	7.6										
38.9	10.3	94.1	9.1	194.8	8.9	291.6	7.6										
39.9	10.3	94.1	9.2	196.7	8.9	294.4	7.6										
40.9	10.3	95.0	9.2	198.6	8.8	295.4	7.5										
41.8	10.3	97.0	9.2	200.5	8.8	298.2	7.5										
42.8	10.3	97.0	9.2	201.5	8.7	300.1	7.5										
43.8	10.2	98.9	9.2	202.5	8.7	302.9	7.4										
44.7	10.2	100.8	9.2	204.4	8.7	304.8	7.4										

165

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH				
OC	104	23	30 SEP 1981	0353	40°29.4'N	67°42.2'W	405				
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT	A	S	SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(10m ² /s ²)	(m/s)	(cph)	
201	202.0	8.535	35.081	4.38	0.12	27.256	0.373	1488.	1.8		
203	204.0	8.514	35.081	4.36	0.12	27.259	0.374	1488.	1.8		
205	206.1	8.504	35.080	4.40	0.12	27.260	0.376	1488.	1.9		
207	207.9	8.489	35.079	4.42	0.13	27.262	0.378	1488.	2.1		
209	210.1	8.461	35.078	4.39	0.13	27.265	0.379	1488.	2.1		
211	212.1	8.431	35.076	4.39	0.13	27.268	0.381	1488.	2.1		
213	213.8	8.414	35.076	4.45	0.13	27.270	0.383	1488.	2.1		
215	216.0	8.375	35.075	4.47	0.13	27.276	0.384	1488.	2.0		
217	218.1	8.374	35.075	4.47	0.13	27.277	0.386	1488.	1.9		
219	219.9	8.363	35.075	4.49	0.13	27.278	0.388	1488.	1.9		
221	222.0	8.342	35.074	4.50	0.13	27.280	0.389	1487.	2.1		
223	224.1	8.330	35.072	4.49	0.13	27.281	0.391	1487.	2.3		
225	226.1	8.289	35.066	4.50	0.14	27.282	0.393	1487.	2.5		
226	227.7	8.225	35.060	4.51	0.14	27.287	0.394	1487.	2.7		
229	230.0	8.158	35.059	4.53	0.16	27.297	0.396	1487.	2.7		
231	232.1	8.126	35.060	4.53	0.16	27.302	0.398	1487.	2.7		
233	234.0	8.109	35.060	4.58	0.15	27.305	0.399	1487.	2.6		
235	235.9	8.086	35.061	4.56	0.15	27.309	0.401	1487.	2.3		
237	238.0	8.077	35.061	4.53	0.15	27.311	0.402	1487.	2.1		
239	240.1	8.073	35.064	4.55	0.15	27.313	0.404	1487.	2.0		
241	242.0	8.073	35.064	4.56	0.14	27.314	0.406	1487.	2.0		
242	243.9	8.057	35.063	4.54	0.14	27.315	0.407	1487.	2.1		
244	246.0	8.011	35.061	4.53	0.14	27.321	0.409	1487.	2.1		
247	248.3	7.990	35.061	4.55	0.15	27.323	0.410	1487.	2.1		
248	249.9	7.965	35.060	4.58	0.15	27.326	0.412	1487.	2.1		
251	252.1	7.941	35.058	4.58	0.15	27.329	0.413	1486.	2.0		
252	254.0	7.927	35.058	4.59	0.15	27.331	0.415	1486.	1.8		
254	256.0	7.908	35.057	4.60	0.15	27.333	0.416	1486.	1.7		
256	258.0	7.894	35.057	4.62	0.15	27.335	0.418	1486.	1.5		
258	260.0	7.892	35.057	4.60	0.16	27.335	0.420	1486.	1.4		
260	262.0	7.888	35.057	4.61	0.15	27.336	0.421	1486.	1.3		
262	264.0	7.885	35.057	4.62	0.15	27.336	0.423	1486.	1.2		
264	266.0	7.869	35.056	4.61	0.16	27.338	0.424	1486.	1.2		
266	268.1	7.856	35.055	4.61	0.16	27.339	0.426	1486.	1.1		
268	269.8	7.851	35.055	4.63	0.16	27.340	0.427	1486.	1.1		
270	272.0	7.849	35.055	4.62	0.16	27.340	0.429	1486.	1.0		
272	274.0	7.846	35.055	4.61	0.16	27.340	0.430	1486.	0.9		
274	276.0	7.844	35.055	4.63	0.16	27.341	0.432	1486.	1.0		
276	278.0	7.833	35.053	4.63	0.16	27.341	0.434	1486.	1.0		
278	280.1	7.827	35.053	4.62	0.17	27.342	0.435	1486.	1.1		
280	282.1	7.826	35.053	4.64	0.16	27.342	0.437	1487.	1.3		
282	283.8	7.818	35.053	4.65	0.16	27.343	0.438	1487.	1.6		
284	286.1	7.798	35.052	4.62	0.18	27.345	0.440	1486.	1.7		
286	288.0	7.788	35.051	4.64	0.17	27.346	0.441	1486.	2.1		
288	290.0	7.756	35.050	4.67	0.18	27.349	0.443	1486.	2.4		
290	292.0	7.724	35.048	4.69	0.18	27.353	0.444	1486.	2.6		
292	293.8	7.720	35.049	4.69	0.18	27.354	0.446	1486.	2.7		
294	296.1	7.625	35.045	4.70	0.20	27.365	0.447	1486.	2.7		
296	297.7	7.570	35.042	4.72	0.20	27.371	0.449	1486.	2.6		
298	300.0	7.550	35.043	4.73	0.21	27.374	0.450	1486.	2.4		

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA 24 DAY: 30 TIME: 0600					
OC	104	23	30 SEP 1981	0353	40°29.4'N	67°42.2'W	405	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N	(m)	(°C)	(m)	(°C)
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)				
388	391.0	5.707	34.977	5.23	0.21	27.572	0.512	1480.	1.3	4.9	13.4	55.4	10.0
390	392.1	5.716	34.975	5.21	0.21	27.569	0.512	1480.	1.3	6.8	13.3	56.4	9.9
390	392.5	5.700	34.963	5.20	0.21	27.562	0.512	1480.	1.3	8.8	13.3	57.3	9.8
										10.7	13.3	59.3	9.7
										12.7	13.3	60.2	9.7
										15.6	13.3	63.1	9.7
										17.5	13.3	65.1	9.7
										18.5	13.3	67.0	9.7
										19.5	13.2	69.0	9.6
										21.4	13.2	70.9	9.6
										21.4	13.1	71.9	9.6
										22.4	13.1	72.8	9.6
										23.4	13.1	73.8	9.5
										24.3	13.0	74.8	9.4
										24.3	12.9	75.7	9.3
										24.3	12.8	75.7	9.2
										24.3	12.7	76.7	9.1
										25.3	12.5	77.7	9.1
										25.3	12.4	78.6	9.0
										25.3	12.2	79.6	8.9
										26.3	12.1	79.6	8.8
										26.3	12.0	81.5	8.8
										26.3	11.9	82.5	8.8
										27.3	11.7	84.4	8.8
										27.3	11.6	85.4	8.8
										27.3	11.5	86.4	8.8
										28.2	11.4	87.3	8.7
										28.2	11.3	89.2	8.7
										29.2	11.2	91.2	8.7
										29.2	11.1	91.2	8.8
										30.2	11.1	93.1	8.9
										30.2	10.9	94.1	8.9
										31.1	10.8	94.1	9.0
										32.1	10.7	95.0	9.1
										33.1	10.6	95.0	9.1
										34.1	10.5	95.0	9.2
										36.0	10.5	96.0	9.3
										37.0	10.5	97.9	9.4
										38.9	10.4	98.9	9.5
										40.9	10.4	100.8	9.5
										42.8	10.4	101.8	9.6
										43.8	10.4	103.7	9.7
										44.7	10.3	106.6	9.7
										46.7	10.2	108.5	9.7
										47.6	10.2	111.4	9.7
										48.6	10.1	114.3	9.7
										50.6	10.1	116.2	9.7
										51.5	10.1	117.2	9.7
										52.5	10.0	119.1	9.7
										54.4	10.0	121.1	9.7

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	25	30 SEP 1981	0611	40°28.9'N	67°43.8'W	145		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
2	2.1	13.162	32.580	5.72	0.36	24.487	0.000	1498.	2.0
4	4.1	13.163	32.580	5.77	0.37	24.487	0.007	1498.	2.0
6	5.8	13.163	32.580	5.77	0.36	24.487	0.013	1498.	2.0
8	8.1	13.163	32.580	5.74	0.36	24.487	0.021	1498.	2.0
10	9.9	13.164	32.580	5.73	0.35	24.487	0.027	1498.	2.0
12	12.2	13.162	32.580	5.73	0.35	24.488	0.035	1498.	3.5
14	13.8	13.151	32.581	5.69	0.35	24.490	0.040	1498.	5.1
16	16.2	13.120	32.582	5.68	0.35	24.497	0.048	1498.	7.4
18	17.8	13.028	32.585	5.63	0.34	24.517	0.054	1498.	9.3
20	20.0	12.784	32.598	5.61	0.33	24.575	0.061	1497.	10.8
22	22.1	12.493	32.619	5.58	0.29	24.647	0.068	1496.	11.7
24	23.9	11.675	32.660	5.62	0.24	24.833	0.074	1493.	12.1
26	26.2	11.045	32.677	5.63	0.18	24.959	0.081	1491.	11.8
28	27.7	10.723	32.699	5.50	0.15	25.033	0.086	1490.	10.9
30	30.0	10.469	32.722	5.47	0.15	25.095	0.092	1489.	9.6
32	32.2	10.251	32.739	5.49	0.14	25.145	0.099	1489.	7.7
34	33.8	10.243	32.737	5.46	0.13	25.145	0.103	1488.	6.4
36	36.1	10.211	32.740	5.47	0.13	25.153	0.110	1488.	5.6
38	37.9	10.188	32.743	5.51	0.13	25.159	0.114	1488.	5.1
40	40.0	10.163	32.747	5.53	0.13	25.166	0.120	1488.	5.1
42	42.0	10.017	32.768	5.54	0.13	25.207	0.126	1488.	5.4
44	44.2	9.929	32.778	5.54	0.14	25.229	0.132	1488.	5.5
46	46.0	9.874	32.788	5.55	0.14	25.246	0.137	1487.	5.4
48	48.1	9.800	32.798	5.54	0.14	25.266	0.142	1487.	5.1
50	50.0	9.744	32.804	5.54	0.13	25.280	0.148	1487.	5.0
52	51.9	9.718	32.808	5.51	0.14	25.288	0.153	1487.	5.2
54	54.2	9.685	32.813	5.52	0.14	25.297	0.159	1487.	5.2
56	55.8	9.646	32.819	5.52	0.13	25.308	0.163	1487.	5.2
58	58.1	9.503	32.848	5.54	0.14	25.354	0.169	1486.	5.1
60	60.1	9.447	32.862	5.52	0.14	25.374	0.174	1486.	5.1
62	61.9	9.431	32.866	5.50	0.14	25.379	0.179	1486.	5.1
64	63.9	9.414	32.869	5.50	0.14	25.384	0.184	1486.	5.1
66	66.0	9.377	32.877	5.50	0.14	25.397	0.190	1486.	5.1
68	67.9	9.322	32.885	5.51	0.14	25.410	0.195	1486.	5.1
70	70.2	9.326	32.888	5.50	0.14	25.414	0.201	1486.	5.1
71	71.9	9.322	32.889	5.51	0.14	25.415	0.205	1486.	5.1
74	74.1	9.253	32.904	5.51	0.14	25.438	0.211	1486.	5.1
75	75.9	9.048	32.933	5.53	0.14	25.492	0.215	1485.	5.1
78	78.1	8.881	32.946	5.55	0.14	25.529	0.221	1485.	5.1
79	79.7	8.728	32.987	5.57	0.14	25.585	0.225	1484.	5.1
82	82.1	8.650	33.074	5.57	0.14	25.665	0.230	1484.	5.1
83	83.8	8.650	33.101	5.58	0.14	25.686	0.234	1484.	5.1
86	86.1	8.585	33.166	5.56	0.13	25.747	0.239	1484.	5.1
87	87.9	8.599	33.170	5.57	0.13	25.748	0.243	1484.	5.1
90	90.2	8.671	33.224	5.55	0.13	25.779	0.249	1484.	5.1
91	92.0	8.702	33.299	5.55	0.13	25.833	0.252	1485.	5.1
94	94.1	8.694	33.380	5.53	0.13	25.897	0.257	1485.	5.1
95	95.9	8.820	33.537	5.50	0.13	26.001	0.261	1485.	5.1
97	97.9	9.174	33.745	5.38	0.13	26.108	0.265	1487.	5.1
99	99.8	9.690	34.044	5.25	0.13	26.258	0.268	1489.	5.1
STATION	CRUISE	DATE	EST	LATITUDE	LONGITUDE	DEPTH			
25	104	30 SEP 1981	0611	40°28.9'N	67°43.8'W	145			
TEMP	PRESS	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH	
(°C)	(dbar)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)	
9.928	102.2	34.228	5.17	0.14	26.361	0.272	1490.	11.3	
10.011	103.8	34.298	5.07	0.13	26.402	0.275	1491.	10.5	
10.032	106.1	34.389	5.02	0.14	26.467	0.279	1491.	9.5	
10.052	108.0	34.430	4.99	0.13	26.503	0.282	1491.	8.3	
9.979	109.9	34.456	4.95	0.13	26.531	0.285	1491.	7.6	
9.944	111.2	34.526	4.91	0.13	26.592	0.288	1491.	7.3	
9.928	113.0	34.537	4.88	0.13	26.603	0.291	1491.	7.0	
9.892	115.0	34.569	4.85	0.16	26.619	0.293	1491.	6.7	
9.860	117.0	34.587	4.82	0.18	26.654	0.296	1491.	6.4	
9.801	119.9	34.621	4.80	0.17	26.690	0.299	1491.	5.8	
9.767	121.2	34.649	4.80	0.18	26.718	0.302	1491.	5.7	
9.754	123.9	34.661	4.79	0.18	26.729	0.304	1491.	5.4	
9.738	125.8	34.667	4.78	0.20	26.737	0.307	1491.	5.0	
9.722	127.0	34.670	4.77	0.24	26.742	0.310	1491.	4.8	
9.696	129.0	34.690	4.75	0.22	26.762	0.313	1490.	4.8	
9.682	130.1	34.701	4.74	0.23	26.773	0.314	1490.	4.9	
9.681	131.2	34.715	4.74	0.23	26.784	0.316	1491.	4.8	
9.682	132.0	34.736	4.74	0.21	26.800	0.317	1491.	4.1	
9.684	133.0	34.739	4.74	0.22	26.802	0.317	1491.	4.1	
9.684	134.0	34.740	4.74	0.22	26.803	0.319	1491.	3.1	
9.685	135.0	34.741	4.74	0.21	26.803	0.320	1491.	2.3	
9.685	136.0	34.741	4.72	0.21	26.803	0.321	1491.	1.4	
9.685	137.0	34.743	4.73	0.19	26.805	0.322	1491.	3.2	
9.684	138.0	34.737	4.73	0.19	26.801	0.324	1491.	4.3	
9.684	139.0	34.763	4.71	0.19	26.805	0.325	1491.	4.3	
9.681	140.0	34.745	4.72	0.19	26.807	0.326	1491.	4.3	
9.646	141.0	34.789	4.75	0.19	26.847	0.328	1491.	4.3	
9.639	142.0	34.795	4.75	0.18	26.853	0.329	1491.	4.3	

STA 26				DAY: 30		TIME: 0627	
DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP
(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)
3.9	13.4	49.6	9.9	98.9	9.7		
4.9	13.3	50.6	9.8	98.9	9.8		
5.8	13.3	50.6	9.8	99.9	9.8		
7.8	13.3	51.5	9.8	100.8	9.8		
8.8	13.2	53.5	9.7	102.8	9.9		
10.7	13.2	54.4	9.7	102.8	9.9		
12.7	13.2	56.4	9.7	103.7	10.0		
14.6	13.2	58.3	9.7	104.7	10.0		
16.6	13.2	58.3	9.7	104.7	10.0		
18.5	13.2	60.2	9.6	106.6	10.0		
19.5	13.2	61.2	9.5	108.5	10.0		
21.4	13.1	62.2	9.5	109.5	10.0		
22.4	13.1	64.1	9.5	111.4	10.0		
23.4	13.0	65.1	9.5	112.4	10.0		
24.3	12.9	66.0	9.5	114.3	10.0		
24.3	12.8	68.0	9.4	115.3	10.0		
24.3	12.7	69.0	9.4	117.2	9.9		
25.3	12.6	70.9	9.4	118.2	9.9		
25.3	12.4	71.9	9.5	119.1	9.8		
26.3	12.4	72.8	9.5	121.1	9.8		
26.3	12.2	74.8	9.4	122.0	9.8		
27.3	12.0	75.7	9.3	123.9	9.8		
27.3	11.9	75.7	9.3	126.8	9.8		
27.3	11.7	76.7	9.3	129.7	9.8		
28.2	11.6	77.7	9.2	131.6	9.8		
28.2	11.5	78.6	9.2	133.5	9.8		
28.2	11.3	79.6	9.1	134.5	9.8		
29.2	11.3	79.6	9.1	135.5	9.7		
29.2	11.2	79.6	9.0	136.4	9.7		
30.2	11.1	80.6	8.9	137.4	9.7		
30.2	11.1	81.5	8.9	138.3	9.6		
30.2	10.9	82.5	8.8	140.3	9.6		
31.1	10.7	84.4	8.8				
31.1	10.6	86.4	8.8				
32.1	10.6	87.3	8.8				
32.1	10.5	89.2	8.8				
33.1	10.4	91.2	8.8				
34.1	10.3	92.1	8.8				
35.0	10.3	93.1	8.8				
36.0	10.3	94.1	8.9				
37.9	10.2	95.0	8.9				
39.9	10.2	96.0	9.0				
40.9	10.2	96.0	9.0				
41.8	10.1	97.0	9.1				
42.8	10.1	97.0	9.2				
43.8	10.0	97.0	9.4				
45.7	10.0	97.9	9.5				
46.7	9.9	97.9	9.5				
47.6	9.9	97.9	9.6				

SHIP	CRUISE	STATION	DATE		EST	LATITUDE	LONGITUDE	DEPTH
OC	104	27	30 SEP 1981		0648	40°28.6'N	67°45.0'W	135
DEPTH	CRUISE	STATION	SALIN	OXY	ATN	SIGT	DHHT A	S SPD
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)
2	2.2	13.126	32.583	5.78	0.36	24.497	0.000	1498.
4	5.9	13.124	32.583	5.79	0.36	24.497	0.006	1498.
6	5.9	13.117	32.584	5.77	0.35	24.499	0.013	1498.
8	7.9	13.110	32.584	5.77	0.35	24.501	0.019	1498.
10	9.9	13.116	32.583	5.78	0.35	24.499	0.026	1498.
12	12.1	13.115	32.583	5.77	0.35	24.499	0.034	1498.
14	13.9	13.096	32.584	5.76	0.35	24.503	0.040	1498.
16	15.9	13.049	32.584	5.72	0.34	24.513	0.047	1498.
18	18.1	12.924	32.595	5.70	0.36	24.546	0.054	1497.
20	19.7	12.804	32.602	5.64	0.32	24.575	0.060	1497.
22	22.1	12.196	32.637	5.67	0.29	24.718	0.088	1495.
24	23.9	11.584	32.642	5.65	0.21	24.835	0.073	1493.
26	26.0	11.240	32.676	5.59	0.18	24.924	0.080	1492.
28	28.2	10.743	32.700	5.56	0.16	25.030	0.086	1490.
30	29.7	10.531	32.714	5.56	0.15	25.078	0.091	1489.
32	32.0	10.389	32.729	5.55	0.15	25.114	0.097	1489.
34	33.9	10.292	32.734	5.57	0.14	25.134	0.103	1489.
36	36.0	10.176	32.745	5.58	0.14	25.162	0.108	1488.
38	38.1	10.156	32.748	5.59	0.13	25.168	0.114	1488.
40	39.8	10.139	32.751	5.58	0.13	25.174	0.119	1488.
42	42.2	10.109	32.756	5.57	0.13	25.182	0.126	1488.
44	43.9	10.070	32.761	5.56	0.13	25.193	0.130	1488.
46	46.1	9.969	32.774	5.57	0.13	25.219	0.137	1488.
48	48.1	9.907	32.783	5.56	0.13	25.237	0.142	1488.
50	50.0	9.782	32.805	5.56	0.13	25.275	0.147	1487.
52	51.9	9.701	32.821	5.56	0.14	25.300	0.152	1487.
54	54.0	9.645	32.833	5.56	0.14	25.319	0.158	1487.
56	56.2	9.626	32.834	5.56	0.14	25.323	0.164	1487.
58	57.9	9.602	32.835	5.54	0.14	25.328	0.168	1487.
60	60.3	9.570	32.846	5.55	0.14	25.341	0.175	1487.
62	61.9	9.517	32.861	5.54	0.14	25.361	0.179	1486.
64	64.1	9.406	32.880	5.55	0.14	25.394	0.184	1486.
66	65.9	9.319	32.892	5.55	0.14	25.418	0.189	1486.
68	68.1	9.159	32.901	5.57	0.14	25.450	0.195	1485.
70	69.9	8.928	32.931	5.58	0.14	25.510	0.199	1485.
72	72.2	8.806	32.968	5.59	0.14	25.557	0.205	1484.
73	73.7	8.662	33.055	5.62	0.14	25.648	0.208	1484.
76	76.0	8.623	33.121	5.60	0.13	25.706	0.214	1484.
78	78.2	8.650	33.131	5.60	0.13	25.709	0.219	1484.
79	79.9	8.686	33.154	5.59	0.13	25.722	0.223	1484.
81	82.0	8.719	33.369	5.56	0.14	25.885	0.227	1484.
83	84.0	9.033	33.605	5.48	0.14	26.021	0.231	1486.
85	86.0	9.701	34.001	5.33	0.14	26.222	0.235	1489.
88	88.1	9.988	34.165	5.27	0.13	26.303	0.239	1490.
89	90.0	10.294	34.288	5.13	0.14	26.346	0.242	1491.
92	92.2	10.383	34.381	5.09	0.14	26.403	0.246	1492.
93	93.9	10.358	34.384	5.00	0.14	26.410	0.249	1492.
96	96.1	10.404	34.499	4.97	0.15	26.492	0.252	1492.
97	97.8	10.481	34.573	4.92	0.13	26.536	0.255	1493.
100	100.2	10.256	34.560	4.90	0.13	26.565	0.258	1492.

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:					
OC	104	27	30 SEP 1981	0648	40°28.6'N	67°45.0'W	135	28	30	0720					
DEPTH	CRUISE	STATION	TEMP	SALIN	OXY	ATN	SIGT	DYHT	A	S	SPD	DEPTH	TEMP	DEPTH	TEMP
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(m/s)	(cph)	(m)	(°C)	(m)	(°C)
101	102.0	10.095	34.543	4.89	0.13	26.579	0.261	1491.	7.0			1.0	13.2	52.5	10.9
104	104.1	10.038	34.571	4.89	0.13	26.611	0.264	1491.	6.3			2.9	13.2	53.5	10.8
105	105.7	10.040	34.600	4.87	0.13	26.633	0.266	1491.	5.9			4.9	13.1	54.4	10.7
107	108.0	9.983	34.636	4.86	0.16	26.671	0.270	1491.	5.9			6.8	13.1	54.4	10.7
109	110.0	9.928	34.638	4.87	0.14	26.682	0.272	1491.	5.9			8.8	13.1	56.4	10.6
112	112.2	9.888	34.639	4.85	0.14	26.690	0.275	1491.	5.7			9.7	13.1	58.3	10.5
113	113.9	9.842	34.654	4.84	0.15	26.709	0.278	1491.	5.6			11.7	13.1	59.3	10.5
115	115.7	9.778	34.685	4.83	0.16	26.744	0.280	1491.	5.7			12.7	13.1	60.2	10.4
118	118.2	9.768	34.714	4.79	0.17	26.769	0.283	1491.	6.2			13.6	13.1	61.2	10.4
119	120.1	9.763	34.726	4.75	0.16	26.778	0.286	1491.	6.6			15.6	13.1	62.2	10.3
121	121.2	9.754	34.738	4.72	0.16	26.789	0.287	1491.	6.6			16.6	13.0	63.1	10.3
121	122.1	9.732	34.770	4.72	0.16	26.818	0.288	1491.	6.4			17.5	13.0	64.1	10.2
122	123.0	9.707	34.808	4.70	0.16	26.852	0.289	1491.	6.3			18.5	12.9	65.1	10.1
123	123.9	9.704	34.812	4.69	0.15	26.856	0.290	1491.	6.1			21.4	12.9	66.0	10.1
124	125.1	9.701	34.814	4.66	0.16	26.858	0.292	1491.	5.4			22.4	12.9	68.0	10.1
125	126.0	9.700	34.814	4.66	0.18	26.858	0.293	1491.	4.6			23.4	12.8	70.9	9.9
126	127.0	9.692	34.819	4.66	0.16	26.864	0.294	1491.	4.0			24.3	12.7	72.8	9.9
127	128.1	9.672	34.831	4.66	0.16	26.876	0.295	1491.	4.0			25.3	12.3	73.8	9.8
128	129.0	9.667	34.834	4.66	0.16	26.879	0.297	1491.	4.0			26.3	12.2	74.8	9.8
129	130.0	9.656	34.840	4.68	0.17	26.886	0.298	1491.	4.0			28.2	12.2	76.7	9.8
130	130.9	9.650	34.844	4.67	0.16	26.890	0.299	1491.	4.0			29.2	12.1	77.7	9.7
												30.2	12.1	78.6	9.7
												31.1	11.9	78.6	9.6
												31.1	11.8	79.6	9.5
												32.1	11.7	80.6	9.4
												32.1	11.7	81.5	9.3
												33.1	11.7	82.5	9.2
												33.1	11.6	82.5	9.1
												35.0	11.6	83.5	9.1
												36.0	11.5	83.5	9.0
												37.0	11.5	84.4	8.9
												38.9	11.5	84.4	8.9
												40.9	11.5	85.4	8.9
												41.8	11.5	87.3	8.8
												43.8	11.4	88.3	8.8
												44.7	11.4	90.2	8.7
												46.7	11.4	91.2	8.7
												47.6	11.4	92.1	8.7
												48.6	11.3	94.1	8.7
												49.6	11.3	95.0	8.7
												50.6	11.2	96.0	8.7
												51.5	11.1	97.9	8.7
												51.5	11.0	98.9	8.7
												51.5	11.0	99.9	8.8
												51.5	11.0	100.8	8.8
												51.5	11.0	101.8	8.9
												51.5	11.0	101.8	9.0
												51.5	11.0	102.8	9.1

STA 29				DAY: 30		TIME: 0737		SHIP OC	CRUISE 104	STATION 30	DATE 30 SEP 1981		EST 0801	LATITUDE 40°25.8'N	LONGITUDE 67°39.8'W	DEPTH 590
DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	SALIN (psu)	OXY (ml/l)									
2.9	13.5	57.3	10.8	104.7	9.1	3	2.7	14.151	32.602	5.63	0.38	24.304	0.000	1501.	-0.1	
2.9	13.4	57.3	10.7	106.6	9.1	4	3.8	14.153	32.603	5.58	0.37	24.305	0.004	1501.	-0.1	
3.9	13.4	57.3	10.6	108.5	9.1	6	6.3	14.153	32.602	5.55	0.37	24.304	0.013	1501.	-0.1	
4.9	13.3	58.3	10.5	109.5	9.1	8	7.8	14.155	32.603	5.56	0.37	24.304	0.019	1501.	-0.1	
6.8	13.3	58.3	10.4	110.5	9.1	10	10.2	14.157	32.603	5.59	0.36	24.303	0.027	1501.	-0.1	
7.8	13.3	58.3	10.2	111.4	9.2	12	11.8	14.160	32.604	5.57	0.37	24.303	0.033	1501.	-0.1	
9.7	13.3	58.3	10.1	111.4	9.3	14	14.1	14.161	32.604	5.58	0.37	24.303	0.041	1501.	0.2	
12.7	13.3	59.3	10.0	112.4	9.3	16	15.9	14.161	32.604	5.52	0.37	24.304	0.048	1501.	1.0	
13.6	13.3	60.2	9.9	112.4	9.4	18	18.1	14.165	32.605	5.50	0.37	24.304	0.056	1501.	4.0	
16.6	13.3	61.2	9.8	113.4	9.4	20	19.7	14.166	32.605	5.49	0.37	24.304	0.061	1502.	6.5	
18.5	13.2	61.2	9.7	113.4	9.5	22	22.1	14.167	32.605	5.46	0.37	24.303	0.070	1502.	8.7	
20.4	13.2	62.2	9.7	113.4	9.6	24	23.8	14.120	32.605	5.46	0.37	24.312	0.076	1501.	10.0	
22.4	13.2	63.1	9.5	114.3	9.6	26	26.1	13.517	32.620	5.53	0.33	24.448	0.084	1500.	10.7	
23.4	13.2	63.1	9.5	115.3	9.6	28	28.0	12.701	32.592	5.49	0.23	24.587	0.091	1497.	11.0	
25.3	13.2	64.1	9.4	116.2	9.6	30	29.9	12.092	32.622	5.46	0.19	24.726	0.097	1495.	11.1	
27.3	13.2	64.1	9.3	117.2	9.7	32	32.1	11.975	32.632	5.42	0.18	24.756	0.104	1494.	10.7	
29.2	13.2	65.1	9.3	117.2	9.7	34	33.7	11.918	32.632	5.41	0.17	24.767	0.110	1494.	9.7	
31.1	13.2	66.0	9.2	118.2	9.7	36	36.2	11.633	32.633	5.43	0.17	24.820	0.117	1493.	8.6	
33.1	13.2	68.0	9.2	119.1	9.8	38	37.9	11.311	32.651	5.46	0.15	24.892	0.122	1492.	8.0	
34.1	13.2	69.9	9.2	121.1	9.8	40	39.9	11.131	32.677	5.42	0.15	24.944	0.129	1492.	8.5	
36.0	13.1	70.9	9.2	123.0	9.8	42	42.1	11.037	32.688	5.41	0.16	24.969	0.135	1491.	9.5	
37.9	13.1	71.9	9.1	124.9	9.8	44	43.8	10.959	32.688	5.39	0.15	24.983	0.140	1491.	10.3	
39.9	13.1	71.9	9.1	126.8	9.8	46	46.2	10.728	32.709	5.39	0.15	25.040	0.147	1490.	10.8	
41.8	13.1	72.8	9.0	127.8	9.8	48	48.0	10.300	32.743	5.40	0.15	25.140	0.153	1489.	11.6	
43.8	13.1	73.8	8.9	127.8	9.8	50	50.1	9.639	32.818	5.45	0.13	25.309	0.158	1487.	11.9	
44.7	13.1	73.8	8.8	129.7	9.8	52	52.0	9.410	32.889	5.42	0.13	25.401	0.163	1486.	11.6	
45.7	13.1	74.8	8.7	130.7	9.8	54	54.0	9.270	32.934	5.39	0.14	25.458	0.168	1486.	10.7	
46.7	13.0	75.7	8.6	133.5	9.8	55	55.8	9.031	33.024	5.41	0.14	25.566	0.173	1485.	9.4	
46.7	12.9	77.7	8.5	134.5	9.8	58	58.1	8.956	33.042	5.40	0.14	25.593	0.178	1485.	7.6	
47.6	12.9	78.6	8.5	136.4	9.7	60	60.1	8.904	33.045	5.43	0.14	25.602	0.183	1484.	6.1	
48.6	12.8	80.6	8.4	138.3	9.7	62	62.2	8.888	33.046	5.42	0.14	25.606	0.188	1484.	4.8	
50.6	12.8	82.5	8.4	139.3	9.7	63	63.8	8.884	33.046	5.41	0.14	25.607	0.192	1484.	3.4	
51.5	12.7	83.5	8.4	142.2	9.7	66	66.2	8.858	33.050	5.40	0.14	25.614	0.198	1484.	3.4	
52.5	12.7	85.4	8.4	143.1	9.7	68	67.9	8.839	33.051	5.41	0.14	25.618	0.202	1484.	3.8	
52.5	12.6	88.3	8.4	145.1	9.7	70	70.2	8.791	33.058	5.41	0.14	25.631	0.207	1484.	4.5	
53.5	12.5	90.2	8.3	146.0	9.7	72	71.9	8.773	33.064	5.41	0.14	25.638	0.211	1484.	5.1	
53.5	12.4	92.1	8.4	146.0	9.7	74	74.2	8.713	33.080	5.42	0.14	25.660	0.216	1484.	5.8	
53.5	12.3	94.1	8.4			75	75.9	8.702	33.104	5.42	0.14	25.680	0.220	1484.	6.5	
54.4	12.2	95.0	8.4			78	78.2	8.681	33.140	5.37	0.14	25.712	0.226	1484.	7.1	
54.4	12.1	96.0	8.5			80	80.0	8.548	33.154	5.42	0.14	25.743	0.230	1484.	7.4	
55.4	12.0	97.0	8.5			82	82.1	8.501	33.202	5.39	0.15	25.788	0.235	1483.	7.4	
55.4	11.9	97.9	8.7			83	83.7	8.539	33.271	5.38	0.14	25.836	0.238	1484.	7.3	
55.4	11.8	98.9	8.8			86	86.4	8.587	33.333	5.36	0.14	25.877	0.244	1484.	7.0	
56.4	11.7	98.9	8.8			87	88.0	8.596	33.360	5.36	0.13	25.897	0.247	1484.	6.7	
56.4	11.6	99.9	8.9			90	90.2	8.596	33.382	5.31	0.13	25.914	0.252	1484.	7.4	
56.4	11.5	100.8	8.9			91	91.9	8.642	33.410	5.33	0.13	25.929	0.255	1484.	8.4	
56.4	11.4	101.8	9.0			94	94.4	8.694	33.462	5.33	0.13	25.962	0.261	1485.	9.5	
56.4	11.2	102.8	9.0			95	95.7	8.742	33.499	5.33	0.13	25.984	0.263	1485.	10.4	
56.4	11.2	103.7	9.0			97	98.0	9.219	33.807	5.22	0.13	26.150	0.268	1487.	11.1	
57.3	11.0	104.7	9.0			99	99.7	9.370	33.960	5.20	0.12	26.245	0.271	1488.	11.5	

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	30	30 SEP 1981	0801	40°25.8'N	67°39.8'W	590	OC	104	30	30 SEP 1981	0801	40°25.8'N	67°39.8'W	590		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)
101	102.1	9.376	34.065	5.16	0.12	26.326	0.275	1488.	201	202.2	8.966	35.115	4.26	0.11	27.214	0.389	1490.
103	104.0	9.527	34.203	5.10	0.12	26.409	0.278	1489.	203	203.8	8.930	35.114	4.26	0.12	27.219	0.391	1489.
105	106.0	9.727	34.336	4.96	0.12	26.480	0.281	1490.	205	206.1	8.787	35.111	4.24	0.11	27.239	0.393	1489.
107	108.1	9.906	34.476	4.92	0.12	26.559	0.285	1491.	207	208.0	8.714	35.111	4.25	0.11	27.251	0.394	1489.
109	110.1	9.909	34.512	4.85	0.12	26.586	0.287	1491.	209	210.1	8.635	35.108	4.24	0.11	27.261	0.396	1488.
111	111.7	9.902	34.520	4.83	0.12	26.594	0.290	1491.	211	212.2	8.578	35.105	4.24	0.11	27.268	0.398	1488.
114	114.2	9.890	34.548	4.80	0.12	26.618	0.293	1491.	213	213.9	8.539	35.103	4.24	0.11	27.272	0.399	1488.
115	116.1	9.928	34.595	4.78	0.12	26.649	0.296	1491.	215	215.8	8.485	35.097	4.24	0.11	27.276	0.401	1488.
117	118.0	10.048	34.686	4.73	0.12	26.699	0.299	1492.	217	217.9	8.435	35.095	4.24	0.11	27.282	0.402	1488.
119	120.0	10.004	34.733	4.70	0.12	26.743	0.301	1491.	219	220.1	8.399	35.094	4.24	0.12	27.287	0.404	1488.
121	122.1	9.999	34.749	4.67	0.12	26.757	0.304	1492.	220	221.8	8.354	35.090	4.26	0.11	27.291	0.406	1488.
123	123.8	9.971	34.762	4.64	0.12	26.772	0.306	1491.	223	224.1	8.321	35.088	4.26	0.11	27.295	0.408	1487.
125	126.1	10.006	34.816	4.62	0.12	26.807	0.309	1492.	224	225.8	8.293	35.087	4.27	0.11	27.298	0.409	1487.
127	127.8	10.069	34.852	4.57	0.12	26.825	0.311	1492.	227	228.0	8.254	35.084	4.27	0.11	27.302	0.411	1487.
129	130.1	10.065	34.920	4.56	0.12	26.879	0.314	1492.	229	230.2	8.236	35.083	4.27	0.11	27.303	0.412	1487.
131	131.8	10.055	34.969	4.54	0.12	26.919	0.316	1492.	231	231.9	8.224	35.082	4.29	0.11	27.305	0.414	1487.
133	134.3	10.027	35.009	4.50	0.12	26.955	0.319	1492.	233	234.1	8.208	35.080	4.28	0.12	27.306	0.416	1487.
135	135.7	10.014	35.018	4.48	0.12	26.964	0.321	1492.	234	235.8	8.199	35.080	4.28	0.11	27.307	0.417	1487.
137	138.0	10.009	35.024	4.47	0.12	26.969	0.323	1492.	237	238.2	8.181	35.078	4.29	0.11	27.308	0.419	1487.
139	140.1	10.010	35.025	4.46	0.12	26.970	0.326	1492.	238	239.9	8.167	35.078	4.28	0.11	27.310	0.420	1487.
141	142.0	10.013	35.029	4.46	0.12	26.973	0.328	1492.	240	241.9	8.146	35.076	4.28	0.11	27.312	0.422	1487.
143	144.1	10.019	35.032	4.46	0.12	26.974	0.330	1492.	243	244.2	8.117	35.074	4.29	0.11	27.315	0.424	1487.
145	145.7	10.027	35.041	4.45	0.12	26.980	0.332	1492.	244	245.7	8.088	35.073	4.28	0.11	27.318	0.425	1487.
147	148.1	9.993	35.046	4.45	0.13	26.990	0.334	1492.	247	248.1	8.066	35.071	4.28	0.11	27.320	0.427	1487.
149	149.9	9.966	35.048	4.45	0.12	26.996	0.336	1492.	248	249.7	8.050	35.070	4.29	0.11	27.322	0.428	1487.
151	152.0	9.955	35.050	4.43	0.13	27.000	0.339	1492.	251	252.1	7.995	35.066	4.29	0.11	27.327	0.430	1487.
153	153.8	9.954	35.055	4.44	0.13	27.004	0.341	1492.	252	253.8	7.942	35.062	4.32	0.11	27.332	0.431	1486.
155	156.2	9.943	35.063	4.43	0.13	27.012	0.343	1492.	255	256.1	7.864	35.059	4.36	0.12	27.341	0.433	1486.
157	158.0	9.933	35.074	4.41	0.13	27.021	0.345	1492.	257	258.1	7.828	35.056	4.38	0.12	27.344	0.434	1486.
159	160.2	9.934	35.079	4.40	0.12	27.025	0.347	1492.	258	260.0	7.799	35.057	4.45	0.12	27.349	0.436	1486.
161	162.0	9.936	35.081	4.39	0.12	27.026	0.349	1492.	261	262.2	7.797	35.057	4.45	0.13	27.349	0.438	1486.
163	164.0	9.934	35.084	4.39	0.12	27.029	0.351	1492.	263	264.1	7.788	35.057	4.50	0.12	27.350	0.439	1486.
165	166.1	9.930	35.087	4.38	0.12	27.032	0.354	1492.	264	266.0	7.781	35.057	4.52	0.12	27.351	0.441	1486.
167	168.0	9.938	35.092	4.38	0.12	27.034	0.355	1492.	266	267.9	7.752	35.056	4.52	0.13	27.355	0.442	1486.
169	170.3	9.950	35.098	4.38	0.12	27.037	0.358	1493.	268	270.0	7.693	35.055	4.54	0.13	27.363	0.444	1486.
171	171.8	9.955	35.104	4.37	0.12	27.042	0.360	1493.	270	272.0	7.639	35.052	4.57	0.13	27.369	0.445	1486.
173	174.1	9.953	35.109	4.38	0.13	27.045	0.362	1493.	272	273.8	7.602	35.050	4.60	0.13	27.372	0.446	1486.
175	175.7	9.952	35.112	4.39	0.12	27.048	0.364	1493.	274	276.0	7.567	35.050	4.63	0.13	27.377	0.448	1485.
177	178.1	9.951	35.118	4.38	0.13	27.053	0.366	1493.	276	278.1	7.536	35.049	4.62	0.14	27.381	0.450	1485.
179	179.7	9.901	35.135	4.37	0.12	27.074	0.368	1493.	278	280.0	7.530	35.049	4.63	0.14	27.382	0.451	1485.
181	182.1	9.689	35.134	4.37	0.12	27.110	0.370	1492.	280	282.2	7.517	35.049	4.64	0.14	27.384	0.453	1485.
183	184.0	9.640	35.133	4.34	0.12	27.118	0.372	1492.	282	283.9	7.515	35.048	4.66	0.15	27.384	0.454	1485.
185	185.8	9.626	35.132	4.33	0.13	27.119	0.374	1492.	284	286.2	7.464	35.047	4.67	0.15	27.390	0.455	1485.
187	188.0	9.610	35.133	4.32	0.12	27.122	0.376	1492.	286	287.8	7.461	35.047	4.68	0.14	27.391	0.457	1485.
189	190.1	9.598	35.133	4.30	0.12	27.125	0.378	1492.	288	290.1	7.452	35.046	4.67	0.14	27.391	0.458	1485.
191	191.8	9.573	35.133	4.30	0.12	27.129	0.380	1492.	290	291.8	7.444	35.046	4.67	0.14	27.392	0.460	1485.
193	194.1	9.434	35.128	4.30	0.12	27.148	0.382	1491.	292	294.3	7.440	35.046	4.67	0.13	27.393	0.461	1485.
195	195.7	9.350	35.124	4.28	0.12	27.159	0.383	1491.	294	295.9	7.404	35.043	4.66	0.13	27.395	0.463	1485.
197	198.1	9.162	35.121	4.28	0.12	27.187	0.385	1490.	296	297.9	7.371	35.040	4.66	0.13	27.398	0.464	1485.
199	199.8	9.048	35.115	4.27	0.11	27.201	0.387	1490.	298	299.9	7.379	35.041	4.64	0.13	27.397	0.465	1485.

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	30	30 SEP 1981	0801	40°25.8'N	67°39.8'W	590		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
300	302.1	7.373	35.041	4.64	0.13	27.398	0.467	1485.	1.5
302	303.7	7.355	35.039	4.64	0.13	27.399	0.468	1485.	1.7
304	306.3	7.336	35.036	4.66	0.13	27.400	0.470	1485.	2.0
306	307.8	7.327	35.035	4.67	0.13	27.401	0.471	1485.	2.2
308	310.2	7.279	35.034	4.66	0.14	27.406	0.473	1485.	2.3
310	311.8	7.239	35.034	4.69	0.13	27.412	0.474	1485.	2.3
312	314.1	7.207	35.034	4.68	0.14	27.417	0.476	1485.	2.2
314	315.9	7.203	35.035	4.72	0.13	27.418	0.477	1485.	2.1
316	318.0	7.194	35.034	4.73	0.13	27.419	0.478	1485.	2.2
318	320.3	7.172	35.034	4.75	0.13	27.422	0.480	1485.	2.3
320	321.9	7.177	35.034	4.76	0.13	27.421	0.481	1485.	2.5
322	324.0	7.146	35.033	4.77	0.14	27.425	0.483	1485.	2.6
324	326.0	7.026	35.027	4.80	0.14	27.437	0.484	1484.	2.8
326	328.0	6.997	35.028	4.83	0.14	27.442	0.485	1484.	3.1
328	330.0	6.995	35.029	4.84	0.14	27.442	0.487	1484.	3.2
330	332.2	6.937	35.024	4.85	0.14	27.447	0.488	1484.	3.2
332	333.7	6.858	35.022	4.89	0.14	27.456	0.489	1484.	3.0
334	336.0	6.745	35.018	4.89	0.15	27.469	0.491	1483.	3.0
336	338.1	6.721	35.016	4.88	0.15	27.470	0.492	1483.	2.9
338	339.7	6.704	35.016	4.93	0.14	27.473	0.493	1483.	2.8
340	342.2	6.693	35.016	4.92	0.15	27.474	0.495	1483.	2.5
342	343.7	6.633	35.014	4.95	0.14	27.478	0.496	1483.	2.3
344	346.0	6.587	35.013	4.96	0.15	27.486	0.497	1483.	2.3
346	348.0	6.553	35.011	4.95	0.16	27.489	0.498	1483.	2.2
348	350.2	6.538	35.010	4.96	0.15	27.490	0.500	1483.	2.2
350	351.8	6.525	35.008	5.01	0.15	27.490	0.501	1483.	2.4
352	354.0	6.507	35.007	5.01	0.15	27.492	0.502	1483.	2.8
354	356.0	6.494	35.007	5.03	0.14	27.494	0.504	1483.	3.2
356	358.0	6.452	35.007	5.05	0.15	27.500	0.505	1482.	3.4
358	360.0	6.286	35.001	5.06	0.16	27.517	0.506	1482.	3.4
360	362.2	6.126	34.992	5.10	0.15	27.530	0.507	1481.	3.3
362	364.0	6.117	34.994	5.14	0.14	27.533	0.508	1481.	3.0
364	366.0	6.103	34.993	5.15	0.14	27.534	0.510	1481.	2.6
366	368.3	6.106	34.994	5.16	0.14	27.535	0.511	1481.	2.0
367	369.8	6.103	34.994	5.17	0.14	27.535	0.512	1481.	1.6
370	372.0	6.070	34.992	5.15	0.15	27.537	0.513	1481.	1.6
372	374.2	6.048	34.990	5.17	0.14	27.539	0.515	1481.	1.7
374	376.1	6.026	34.990	5.18	0.14	27.542	0.516	1481.	1.8
375	377.8	6.013	34.988	5.19	0.14	27.542	0.517	1481.	1.8
378	380.0	5.987	34.988	5.18	0.15	27.545	0.518	1481.	1.6
380	382.3	5.971	34.988	5.19	0.14	27.547	0.519	1481.	1.3
381	383.9	5.961	34.988	5.19	0.14	27.548	0.520	1481.	0.9
384	386.0	5.967	34.989	5.18	0.15	27.548	0.521	1481.	0.4
386	388.0	5.974	34.988	5.21	0.14	27.547	0.523	1481.	-0.8
387	390.0	5.988	34.989	5.20	0.15	27.545	0.524	1481.	-0.9
390	392.3	6.007	34.990	5.19	0.15	27.544	0.525	1481.	-0.6
391	393.9	6.010	34.991	5.21	0.15	27.544	0.526	1481.	0.6
394	396.1	6.007	34.991	5.18	0.15	27.545	0.527	1481.	1.2
395	397.8	5.989	34.989	5.21	0.15	27.546	0.528	1481.	1.4
398	400.2	5.964	34.988	5.20	0.15	27.548	0.530	1481.	1.6

STA 31 DAY: 30 TIME: 0832

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
3.9	14.4	46.7	10.5	94.1	8.8
3.9	14.4	47.6	10.4	94.1	8.8
4.9	14.4	47.6	10.3	95.0	8.9
6.8	14.3	47.6	10.2	95.0	9.0
7.8	14.3	48.6	10.1	96.0	9.0
9.7	14.3	48.6	10.1	96.0	9.1
11.7	14.3	49.6	10.0	97.0	9.2
13.6	14.3	50.6	9.9	97.9	9.2
15.6	14.3	50.6	9.9	97.9	9.3
17.5	14.3	51.5	9.8	98.9	9.4
19.5	14.3	51.5	9.7	98.9	9.5
21.4	14.3	52.5	9.7	98.9	9.6
22.4	14.3	53.5	9.6	98.9	9.7
24.3	14.2	53.5	9.5	98.9	9.8
25.3	14.2	54.4	9.4	98.9	9.9
26.3	14.1	55.4	9.4	99.9	9.9
27.3	13.9	57.3	9.3	100.8	10.0
27.3	13.8	58.3	9.3	100.8	10.0
27.3	13.7	60.2	9.2	101.8	10.0
27.3	13.6	62.2	9.2	103.7	10.0
28.2	13.5	63.1	9.2	105.6	10.0
29.2	13.4	65.1	9.2	107.6	10.0
30.2	13.2	65.1	9.1	108.5	10.0
30.2	13.1	67.0	9.0	110.5	10.0
31.1	13.1	67.0	8.9	112.4	10.1
31.1	12.9	68.0	8.9	115.3	10.0
31.1	12.8	69.0	8.8	116.2	10.0
32.1	12.7	70.9	8.7	118.2	10.0
33.1	12.6	71.9	8.7	119.1	10.0
33.1	12.5	73.8	8.7	120.1	10.0
34.1	12.4	74.8	8.6	122.0	10.0
35.0	12.3	76.7	8.6	122.0	9.9
35.0	12.2	78.6	8.6	123.9	9.9
35.0	12.1	80.6	8.6		
36.0	12.0	81.5	8.5		
36.0	11.9	83.5	8.5		
37.0	11.8	83.5	8.5		
37.9	11.7	85.4	8.5		
38.9	11.7	85.4	8.4		
40.9	11.6	86.4	8.4		
41.8	11.6	87.3	8.4		
42.8	11.5	88.3	8.5		
42.8	11.4	89.2	8.5		
43.8	11.4	89.2	8.5		
44.7	11.3	90.2	8.6		
44.7	11.2	91.2	8.6		
45.7	11.0	91.2	8.7		
45.7	10.9	91.2	8.7		
45.7	10.7	92.1	8.7		
46.7	10.6	93.1	8.7		

STA 32 DAY: 30 TIME: 0841

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
4.9	14.1	43.8	10.3	98.9	8.7
5.8	14.0	44.7	10.3	98.9	8.8
7.8	14.0	44.7	10.2	99.9	8.8
10.7	14.0	45.7	10.1	100.8	8.9
12.7	14.0	45.7	10.0	100.8	9.0
14.6	14.0	46.7	10.0	101.8	9.1
16.6	14.0	47.6	9.9	101.8	9.2
17.5	13.9	47.6	9.8	101.8	9.3
19.5	13.9	47.6	9.7	102.8	9.4
18.5	13.8	48.6	9.5	102.8	9.5
19.5	13.8	48.6	9.4	103.7	9.7
19.5	13.6	49.6	9.4	103.7	9.8
20.4	13.5	50.6	9.3	103.7	9.9
21.4	13.5	51.5	9.2	104.7	9.9
22.4	13.4	51.5	9.0	105.6	10.0
23.4	13.3	52.5	8.9	105.6	10.1
24.3	13.1	53.5	8.9	106.6	10.2
24.3	13.1	54.4	8.8	107.6	10.2
24.3	13.0	55.4	8.8	108.5	10.3
24.3	12.9	56.4	8.8	108.5	10.4
24.3	12.8	58.3	8.7	108.5	10.5
25.3	12.7	60.2	8.7	109.5	10.5
26.3	12.6	62.2	8.7	110.5	10.6
26.3	12.5	64.1	8.7	111.4	10.7
27.3	12.5	66.0	8.6	112.4	10.7
29.2	12.4	68.0	8.6	113.4	10.6
30.2	12.4	69.0	8.5	114.3	10.6
31.1	12.3	70.9	8.5	115.3	10.6
32.1	12.2	71.9	8.4	116.2	10.5
32.1	12.1	73.8	8.4	118.2	10.4
33.1	12.0	75.7	8.4	119.1	10.4
33.1	11.9	76.7	8.4	120.1	10.3
34.1	11.8	78.6	8.4	120.1	10.2
34.1	11.7	79.6	8.4	121.1	10.2
34.1	11.6	81.5	8.4	123.0	10.2
35.0	11.5	82.5	8.3	123.9	10.1
35.0	11.4	84.4	8.3	126.8	10.1
36.0	11.3	86.4	8.3	127.8	10.1
36.0	11.3	88.3	8.3	128.7	10.1
37.0	11.2	89.2	8.3	130.7	10.0
37.0	11.1	90.2	8.3	132.6	10.0
37.0	11.1	91.2	8.3	133.5	10.0
38.9	10.9	92.1	8.4	135.5	9.9
38.9	10.8	93.1	8.4	136.4	9.8
39.9	10.6	95.0	8.4	137.4	9.8
40.9	10.5	96.0	8.4		
41.8	10.4	97.0	8.5		
42.8	10.4	97.9	8.6		

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH				
OC	104	33	30 SEP 1981	0902	40°23.9'N	67°44.6'W	137				
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT	A	S	SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(10m ² /s ²)	(m/s)	(m/s)	(cph)
2	2.4	12.848	32.587	5.71	0.32	24.554	0.000	1497.	0.6	1497.	0.6
4	4.0	12.848	32.587	5.71	0.32	24.554	0.005	1497.	0.6	1497.	0.6
6	5.9	12.850	32.586	5.71	0.32	24.553	0.012	1497.	0.6	1497.	0.6
8	8.1	12.850	32.586	5.71	0.31	24.554	0.019	1497.	0.6	1497.	0.6
10	10.0	12.850	32.587	5.77	0.31	24.554	0.026	1497.	0.6	1497.	0.6
12	12.2	12.856	32.586	5.72	0.31	24.552	0.033	1497.	0.7	1497.	0.7
14	13.7	12.844	32.587	5.76	0.31	24.555	0.038	1497.	0.9	1497.	0.9
16	16.3	12.844	32.587	5.74	0.31	24.555	0.047	1497.	0.8	1497.	0.8
18	18.0	12.845	32.587	5.70	0.31	24.555	0.053	1497.	0.7	1497.	0.7
20	20.0	12.842	32.588	5.67	0.32	24.556	0.059	1497.	0.6	1497.	0.6
22	21.8	12.840	32.587	5.67	0.31	24.556	0.066	1497.	0.2	1497.	0.2
24	24.1	12.847	32.587	5.60	0.31	24.555	0.073	1497.	0.1	1497.	0.1
26	26.0	12.848	32.587	5.66	0.31	24.555	0.080	1497.	0.4	1497.	0.4
28	27.9	12.847	32.588	5.68	0.31	24.555	0.086	1497.	0.6	1497.	0.6
30	30.3	12.844	32.587	5.66	0.31	24.555	0.094	1497.	0.8	1497.	0.8
32	31.9	12.846	32.588	5.66	0.30	24.555	0.100	1497.	0.9	1497.	0.9
34	33.9	12.838	32.588	5.67	0.31	24.557	0.106	1497.	1.1	1497.	1.1
36	36.0	12.835	32.588	5.65	0.31	24.558	0.114	1497.	1.7	1497.	1.7
38	37.9	12.834	32.587	5.69	0.30	24.558	0.120	1497.	3.5	1497.	3.5
40	40.2	12.832	32.587	5.70	0.30	24.558	0.128	1497.	5.1	1497.	5.1
42	41.8	12.819	32.588	5.70	0.30	24.561	0.133	1497.	6.2	1497.	6.2
44	43.9	12.758	32.592	5.66	0.28	24.576	0.140	1497.	7.2	1497.	7.2
46	46.0	12.449	32.616	5.67	0.24	24.654	0.147	1496.	9.4	1496.	9.4
48	48.1	12.227	32.650	5.69	0.23	24.722	0.154	1496.	11.9	1496.	11.9
50	50.1	12.174	32.669	5.67	0.22	24.747	0.160	1495.	13.7	1495.	13.7
51	51.8	11.921	32.680	5.61	0.21	24.803	0.166	1495.	14.7	1495.	14.7
54	54.0	11.006	32.823	5.60	0.17	25.080	0.172	1492.	15.2	1492.	15.2
56	56.2	9.720	32.909	5.75	0.15	25.366	0.178	1487.	15.3	1487.	15.3
57	57.7	8.967	32.954	5.69	0.14	25.521	0.182	1485.	14.9	1485.	14.9
60	59.9	8.765	32.972	5.65	0.16	25.567	0.188	1484.	13.8	1484.	13.8
62	62.1	8.487	33.063	5.66	0.14	25.681	0.193	1483.	11.7	1483.	11.7
64	64.0	8.498	33.142	5.56	0.14	25.741	0.197	1483.	9.8	1483.	9.8
66	66.2	8.595	33.263	5.52	0.13	25.821	0.202	1484.	8.5	1484.	8.5
67	67.9	8.609	33.279	5.50	0.13	25.832	0.206	1484.	7.7	1484.	7.7
70	70.0	8.629	33.297	5.49	0.13	25.843	0.210	1484.	6.5	1484.	6.5
72	72.0	8.652	33.331	5.47	0.13	25.866	0.215	1484.	6.4	1484.	6.4
73	73.9	8.646	33.354	5.46	0.13	25.885	0.219	1484.	6.7	1484.	6.7
76	76.0	8.640	33.373	5.46	0.13	25.901	0.223	1484.	7.5	1484.	7.5
78	78.1	8.697	33.417	5.45	0.13	25.926	0.227	1484.	7.9	1484.	7.9
79	79.8	8.917	33.554	5.40	0.13	25.999	0.231	1485.	8.1	1485.	8.1
82	82.0	9.126	33.686	5.34	0.13	26.070	0.235	1486.	8.1	1486.	8.1
84	84.1	9.315	33.788	5.31	0.13	26.119	0.239	1487.	7.9	1487.	7.9
86	86.0	9.386	33.819	5.31	0.13	26.131	0.243	1488.	7.4	1488.	7.4
88	88.1	9.528	33.891	5.29	0.12	26.165	0.247	1488.	6.5	1488.	6.5
89	89.8	9.611	33.931	5.29	0.12	26.182	0.250	1489.	7.2	1489.	7.2
91	91.9	9.690	33.977	5.23	0.14	26.206	0.254	1489.	8.8	1489.	8.8
94	94.1	9.733	34.008	5.24	0.12	26.222	0.258	1489.	10.0	1489.	10.0
95	95.8	9.808	34.032	5.09	0.12	26.229	0.261	1490.	10.6	1490.	10.6
97	98.0	10.604	34.453	4.92	0.12	26.421	0.265	1493.	10.8	1493.	10.8
99	99.9	11.095	34.776	4.79	0.11	26.585	0.268	1495.	10.8	1495.	10.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	104	35	30 SEP 1981	0940	40°22.5'N	67°42.5'W	205
DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP
6.8	14.1	49.6	10.5	101.8	9.0	151.8	9.8
8.8	14.0	50.6	10.4	103.7	9.1	152.7	9.7
10.7	14.0	50.6	10.2	104.7	9.1	154.7	9.7
11.7	14.0	51.5	10.1	105.6	9.1	156.6	9.7
14.6	14.0	52.5	9.9	106.6	9.2	157.5	9.6
16.6	14.0	52.5	9.9	107.6	9.3	157.5	9.5
18.5	14.0	53.5	9.7	107.6	9.4	159.4	9.4
19.5	14.0	54.4	9.7	108.5	9.5	160.4	9.4
21.4	14.0	54.4	9.5	108.5	9.6	161.4	9.3
24.3	14.0	55.4	9.4	109.5	9.7	162.3	9.2
25.3	14.0	56.4	9.2	109.5	9.9	163.3	9.1
26.3	14.0	56.4	9.1	109.5	10.0	164.2	9.0
29.2	14.0	57.3	9.0	109.5	10.1	165.2	8.9
30.2	14.0	57.3	8.9	109.5	10.3	165.2	8.8
31.1	14.0	58.3	8.9	110.5	10.4	165.2	8.7
32.1	14.0	60.2	8.8	110.5	10.5	166.2	8.5
33.1	13.9	62.2	8.8	111.4	10.6	166.2	8.5
34.1	13.8	63.1	8.7	111.4	10.7		
34.1	13.7	64.1	8.7	112.4	10.8		
35.0	13.6	65.1	8.5	112.4	10.9		
35.0	13.6	65.1	8.5	113.4	11.0		
35.0	13.5	67.0	8.5	114.3	11.0		
36.0	13.3	68.0	8.4	115.3	11.0		
36.0	13.3	69.0	8.4	117.2	11.0		
37.0	13.2	69.9	8.4	118.2	11.0		
37.0	13.1	71.9	8.3	119.1	10.8		
37.0	13.0	73.8	8.3	119.1	10.7		
37.9	12.9	75.7	8.3	120.1	10.6		
37.9	12.8	76.7	8.2	121.1	10.5		
37.9	12.7	78.6	8.2	122.0	10.4		
38.9	12.6	79.6	8.1	123.0	10.4		
38.9	12.5	81.5	8.1	124.9	10.3		
39.9	12.4	83.5	8.1	125.9	10.2		
40.9	12.3	84.4	8.1	127.8	10.2		
40.9	12.3	85.4	8.1	128.7	10.1		
41.8	12.1	86.4	8.2	130.7	10.1		
41.8	12.0	88.3	8.2	131.6	10.0		
42.8	11.9	88.3	8.2	133.5	10.0		
42.8	11.8	89.2	8.3	135.5	10.0		
42.8	11.7	89.2	8.3	135.5	9.9		
43.8	11.6	90.2	8.4	137.4	9.9		
44.7	11.5	91.2	8.5	138.3	9.8		
45.7	11.4	93.1	8.5	139.3	9.8		
46.7	11.3	94.1	8.6	141.2	9.8		
46.7	11.1	96.0	8.7	143.1	9.8		
47.6	11.0	96.0	8.8	144.1	9.8		
47.6	10.9	97.0	8.8	146.0	9.8		
47.6	10.8	97.9	8.9	147.9	9.8		
47.6	10.6	99.9	9.0	147.9	9.8		
50.6	10.4	100.8	9.0	150.8	9.8		
DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP
2	2.4	14.862	32.717	5.41	0.37	24.243	0.000
4	4.1	14.861	32.717	5.43	0.37	24.243	0.006
6	5.9	14.864	32.718	5.39	0.37	24.243	0.013
8	7.9	14.868	32.718	5.40	0.37	24.242	0.020
10	10.0	14.871	32.718	5.43	0.37	24.242	0.028
12	11.9	14.871	32.718	5.40	0.37	24.242	0.035
14	14.0	14.868	32.718	5.43	0.37	24.242	0.043
16	16.1	14.869	32.682	5.50	0.37	24.299	0.050
18	18.0	14.134	32.631	5.53	0.37	24.330	0.057
20	20.0	14.058	32.631	5.48	0.37	24.346	0.064
22	22.2	13.710	32.657	5.53	0.35	24.437	0.072
24	24.2	13.200	32.675	5.54	0.30	24.553	0.077
26	26.1	12.720	32.771	5.55	0.26	24.721	0.085
28	28.0	12.368	32.803	5.54	0.23	24.814	0.091
30	30.0	11.864	32.850	5.52	0.22	24.945	0.098
32	32.3	11.570	32.870	5.54	0.21	25.015	0.104
34	33.9	11.487	32.880	5.47	0.19	25.038	0.109
36	36.0	11.138	32.932	5.51	0.19	25.141	0.115
38	37.9	10.922	32.937	5.54	0.18	25.183	0.120
40	40.0	10.605	32.949	5.56	0.17	25.248	0.126
42	42.2	10.354	32.946	5.59	0.16	25.289	0.132
44	44.2	9.977	32.922	5.57	0.16	25.334	0.137
46	46.0	9.546	32.898	5.62	0.15	25.386	0.142
48	47.9	9.316	32.921	5.58	0.14	25.441	0.147
50	50.1	9.001	32.965	5.56	0.14	25.525	0.152
52	52.0	8.842	32.998	5.58	0.14	25.576	0.157
54	53.8	8.800	33.012	5.57	0.13	25.593	0.161
56	56.1	8.532	33.079	5.57	0.13	25.687	0.167
58	58.1	8.456	33.098	5.58	0.13	25.713	0.171
60	59.9	8.422	33.109	5.54	0.13	25.727	0.175
62	62.1	8.365	33.130	5.52	0.13	25.752	0.180
64	64.0	8.343	33.135	5.51	0.13	25.759	0.184
66	65.9	8.306	33.151	5.50	0.13	25.777	0.189
68	68.1	8.266	33.285	5.41	0.13	25.885	0.202
70	70.2	8.299	33.258	5.40	0.13	25.862	0.198
71	71.9	8.286	33.258	5.41	0.13	25.885	0.202
74	74.1	8.373	33.358	5.36	0.13	25.929	0.206
76	76.0	8.395	33.378	5.34	0.13	25.941	0.210
78	78.1	8.400	33.383	5.34	0.13	25.945	0.215
79	79.8	8.407	33.387	5.36	0.13	25.947	0.218
82	82.1	8.444	33.415	5.32	0.13	25.964	0.223
83	83.7	8.502	33.462	5.35	0.13	25.991	0.226
86	86.0	8.816	33.641	5.29	0.12	26.083	0.231
88	88.0	8.994	33.723	5.27	0.12	26.119	0.235
90	90.3	9.144	33.790	5.26	0.12	26.148	0.239
91	91.8	9.243	33.847	5.23	0.12	26.177	0.242
94	94.1	9.299	33.903	5.19	0.12	26.212	0.246
95	96.0	9.385	33.960	5.18	0.11	26.242	0.249
97	98.0	9.528	34.034	5.14	0.11	26.277	0.253
99	99.9	9.716	34.144	5.11	0.11	26.331	0.256

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH				
OC	104	35	30 SEP 1981	0940	40°22.5'N	67°42.5'W	205				
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT	A	S	SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(m/s)	(m/s)	(cph)
102	102.1	9.879	34.222	5.08	0.11	26.365	0.260	1490.	1490.	6.6	6.6
103	103.8	9.913	34.232	5.07	0.11	26.367	0.263	1490.	1490.	6.3	6.3
106	106.2	10.000	34.278	5.02	0.11	26.388	0.267	1491.	1491.	6.2	6.2
107	107.7	10.079	34.322	5.03	0.11	26.410	0.269	1491.	1491.	6.6	6.6
110	110.2	10.226	34.390	5.01	0.11	26.437	0.273	1492.	1492.	6.9	6.9
111	111.7	10.392	34.452	4.98	0.11	26.457	0.276	1492.	1492.	7.2	7.2
113	114.0	11.089	34.670	4.86	0.11	26.503	0.279	1495.	1495.	7.2	7.2
115	115.9	11.410	34.852	4.79	0.11	26.585	0.282	1497.	1497.	7.3	7.3
117	117.9	11.424	34.866	4.74	0.11	26.594	0.285	1497.	1497.	7.6	7.6
119	120.1	11.372	34.876	4.69	0.11	26.611	0.288	1496.	1496.	7.9	7.9
121	122.1	11.209	34.864	4.60	0.11	26.632	0.291	1496.	1496.	8.6	8.6
123	124.1	10.891	34.861	4.60	0.11	26.687	0.294	1495.	1495.	9.1	9.1
125	125.9	10.608	34.876	4.55	0.11	26.750	0.296	1494.	1494.	9.6	9.6
127	128.0	10.331	34.890	4.52	0.11	26.809	0.299	1493.	1493.	9.6	9.6
129	130.1	10.225	35.041	4.48	0.11	26.946	0.301	1493.	1493.	9.4	9.4
131	131.9	10.247	35.098	4.41	0.11	26.986	0.303	1493.	1493.	8.8	8.8
133	134.0	10.227	35.105	4.39	0.11	26.995	0.306	1493.	1493.	8.0	8.0
135	136.1	10.203	35.118	4.36	0.11	27.009	0.308	1493.	1493.	6.9	6.9
137	137.8	10.071	35.131	4.36	0.12	27.042	0.310	1493.	1493.	5.8	5.8
139	140.0	9.882	35.140	4.37	0.11	27.082	0.312	1492.	1492.	5.4	5.4
141	141.9	9.837	35.139	4.35	0.11	27.089	0.314	1492.	1492.	5.1	5.1
143	144.0	9.806	35.140	4.33	0.11	27.095	0.316	1492.	1492.	4.6	4.6
145	146.0	9.716	35.142	4.34	0.11	27.112	0.318	1491.	1491.	3.9	3.9
147	147.9	9.690	35.148	4.32	0.11	27.120	0.320	1491.	1491.	3.3	3.3
149	150.2	9.680	35.147	4.32	0.11	27.122	0.322	1491.	1491.	3.0	3.0
151	151.9	9.671	35.148	4.30	0.11	27.124	0.324	1491.	1491.	3.2	3.2
153	154.0	9.638	35.148	4.30	0.11	27.129	0.326	1491.	1491.	3.8	3.8
155	155.9	9.615	35.148	4.29	0.11	27.133	0.327	1491.	1491.	4.3	4.3
157	157.7	9.602	35.148	4.26	0.11	27.135	0.329	1491.	1491.	4.7	4.7
159	160.3	9.427	35.147	4.27	0.11	27.164	0.332	1491.	1491.	4.8	4.8
161	161.8	9.023	35.109	4.29	0.11	27.200	0.333	1489.	1489.	4.6	4.6
163	164.2	9.005	35.121	4.27	0.11	27.212	0.335	1489.	1489.	4.2	4.2
165	165.8	8.993	35.122	4.26	0.10	27.215	0.336	1489.	1489.	3.7	3.7
167	168.1	9.008	35.123	4.25	0.11	27.214	0.338	1489.	1489.	2.6	2.6
169	170.0	9.005	35.123	4.27	0.11	27.214	0.340	1489.	1489.	1.5	1.5
171	172.0	9.053	35.129	4.25	0.11	27.211	0.342	1489.	1489.	1.1	1.1
173	173.9	8.979	35.120	4.27	0.11	27.216	0.344	1489.	1489.	1.2	1.2
175	176.0	8.994	35.124	4.27	0.11	27.217	0.345	1489.	1489.	1.3	1.3
177	178.0	8.949	35.117	4.27	0.11	27.218	0.347	1489.	1489.	1.4	1.4
179	180.1	8.929	35.112	4.27	0.11	27.218	0.349	1489.	1489.	1.5	1.5
180	181.2	8.912	35.113	4.27	0.11	27.221	0.350	1489.	1489.	1.6	1.6
181	182.0	8.927	35.112	4.29	0.11	27.218	0.351	1489.	1489.	1.8	1.8
182	183.1	8.900	35.111	4.28	0.11	27.222	0.352	1489.	1489.	1.9	1.9
183	184.0	8.892	35.108	4.30	0.11	27.221	0.352	1489.	1489.	2.1	2.1
184	185.0	8.879	35.114	4.30	0.11	27.227	0.353	1489.	1489.	2.1	2.1
185	186.0	8.858	35.109	4.30	0.11	27.227	0.354	1489.	1489.	2.3	2.3
186	187.0	8.856	35.108	4.29	0.11	27.226	0.355	1489.	1489.	2.1	2.1
187	188.2	8.842	35.107	4.29	0.11	27.228	0.356	1489.	1489.	1.9	1.9
188	189.0	8.825	35.107	4.29	0.11	27.230	0.357	1489.	1489.	1.2	1.2
189	190.0	8.810	35.106	4.28	0.11	27.232	0.358	1489.	1489.	0.8	0.8

STA 36				DAY: 30				TIME: 1006				STA 36				DAY: 30				TIME: 1006			
DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
0.0	15.6	28.2	11.9	51.5	8.8	78.6	8.9	103.7	10.0	153.7	10.0	212.0	7.9	292.6	7.3	354.6	5.9	430.2	5.0				
0.0	15.6	28.2	11.8	52.5	8.8	79.6	8.9	104.7	9.9	154.7	10.0	212.9	7.9	294.4	7.2	356.5	5.9	432.0	5.0				
1.0	15.6	28.2	11.7	52.5	8.7	79.6	9.0	105.6	9.8	155.6	10.0	213.9	7.9	295.4	7.2	357.4	5.8	433.9	5.0				
1.9	15.5	29.2	11.6	52.5	8.6	80.6	9.0	106.6	9.8	156.6	10.0	214.8	7.9	296.3	7.2	359.3	5.8	435.7	5.0				
2.9	15.5	29.2	11.6	52.5	8.5	81.5	9.1	106.6	9.7	157.5	10.0	215.8	7.9	297.3	7.2	360.2	5.8						
3.9	15.5	29.2	11.5	52.5	8.5	81.5	9.1	108.5	9.6	159.4	10.0	217.7	7.9	299.2	7.1	363.0	5.8						
4.9	15.5	30.2	11.4	53.5	8.4	82.5	9.1	108.5	9.6	161.4	10.1	218.6	7.9	300.1	7.1	364.9	5.8						
5.8	15.5	30.2	11.4	54.4	8.3	83.5	9.1	109.5	9.6	164.2	10.1	219.6	7.9	301.0	7.1	366.8	5.8						
6.8	15.5	31.1	11.4	54.4	8.2	84.4	9.2	110.5	9.6	165.2	10.0	221.5	7.9	302.0	7.1	367.7	5.8						
7.8	15.5	31.1	11.4	55.4	8.2	85.4	9.2	111.4	9.6	166.2	10.0	222.4	7.8	302.9	7.1	368.7	5.8						
8.7	15.5	32.1	11.3	56.4	8.2	86.4	9.2	113.4	9.6	168.1	10.0	224.4	7.8	304.8	7.0	370.5	5.7						
10.7	15.5	32.1	11.3	56.4	8.1	87.3	9.2	113.4	9.6	169.0	10.0	225.3	7.8	306.7	7.0	371.5	5.7						
11.7	15.5	33.1	11.3	57.3	8.1	88.3	9.3	114.3	9.7	170.0	9.9	227.2	7.8	307.6	6.9	373.3	5.7						
12.7	15.5	34.1	11.3	58.3	8.1	89.2	9.3	115.3	9.7	171.9	9.8	231.0	7.6	309.5	6.8	375.2	5.7						
13.6	15.5	35.0	11.2	60.2	8.1	90.2	9.3	116.2	9.7	172.9	9.7	232.0	7.6	310.5	6.8	377.1	5.7						
14.6	15.4	36.0	11.2	60.2	8.1	90.2	9.3	116.2	9.7	174.8	9.7	232.9	7.6	312.4	6.8	378.9	5.6						
14.6	15.2	37.9	11.1	62.2	8.1	91.2	9.4	118.2	9.8	176.7	9.7	233.9	7.6	313.3	6.7	380.8	5.6						
15.6	15.1	38.9	11.1	63.1	8.1	92.1	9.5	119.1	9.8	179.5	9.7	234.8	7.6	314.2	6.7	381.7	5.6						
15.6	15.0	38.9	11.1	64.1	8.1	92.1	9.6	120.1	9.8	180.5	9.7	237.7	7.6	315.2	6.7	382.7	5.5						
15.6	14.9	39.9	11.0	64.1	8.0	92.1	9.7	120.1	9.8	181.5	9.7	240.5	7.6	316.1	6.6	384.5	5.5						
16.6	14.8	40.9	11.0	65.1	8.0	92.1	9.7	121.1	9.8	182.4	9.7	242.4	7.6	318.0	6.6	386.4	5.4						
17.5	14.8	41.8	11.0	65.1	7.9	93.1	9.8	123.0	9.9	184.3	9.7	243.4	7.5	318.9	6.6	387.3	5.4						
17.5	14.6	42.8	10.8	65.1	7.9	93.1	9.8	123.9	9.9	185.3	9.6	245.2	7.5	319.9	6.5	389.2	5.4						
17.5	14.6	42.8	10.8	66.0	7.9	94.1	9.8	124.9	9.9	186.2	9.5	246.2	7.5	321.8	6.5	390.1	5.4						
17.5	14.5	43.8	10.7	67.0	8.0	95.0	9.9	125.9	9.9	188.1	9.5	248.1	7.5	322.7	6.5	391.1	5.4						
18.5	14.4	43.8	10.6	67.0	8.0	95.0	9.9	126.8	9.9	190.1	9.4	250.0	7.5	323.6	6.5	392.0	5.4						
19.5	14.4	43.8	10.5	67.0	8.1	95.0	10.0	127.8	9.9	191.0	9.3	251.9	7.5	325.5	6.4	393.9	5.4						
20.4	14.3	44.7	10.5	68.0	8.1	96.0	10.0	131.6	9.9	192.0	9.3	253.8	7.5	327.4	6.4	395.7	5.4						
20.4	14.3	44.7	10.4	68.0	8.1	96.0	10.1	133.5	9.9	193.9	9.2	256.6	7.5	328.3	6.4	398.5	5.4						
21.4	14.2	44.7	10.3	69.0	8.2	95.0	10.2	134.5	9.9	195.8	9.1	258.5	7.5	330.2	6.4	400.4	5.4						
21.4	14.1	44.7	10.3	69.0	8.2	95.0	10.2	135.5	9.9	196.7	9.0	259.5	7.5	331.2	6.3	402.3	5.4						
21.4	14.0	44.7	10.2	69.9	8.2	96.0	10.3	137.4	9.9	194.8	8.9	261.4	7.5	332.1	6.3	404.1	5.3						
22.4	13.9	44.7	10.1	69.9	8.2	96.0	10.3	139.3	9.9	195.8	8.8	263.3	7.5	334.0	6.3	405.1	5.3						
23.4	13.8	44.7	10.1	70.9	8.2	97.0	10.3	139.3	9.8	196.7	8.7	265.1	7.5	334.9	6.2	406.9	5.3						
23.4	13.7	44.7	10.0	70.9	8.2	97.0	10.3	140.3	9.8	197.7	8.7	267.0	7.5	334.9	6.2	407.8	5.3						
23.4	13.6	44.7	9.9	71.9	8.2	97.9	10.3	141.2	9.8	197.7	8.5	268.9	7.5	335.9	6.1	408.8	5.3						
24.3	13.5	44.7	9.7	72.8	8.2	98.9	10.4	142.2	9.8	198.6	8.4	270.8	7.4	336.8	6.1	410.6	5.3						
24.3	13.4	45.7	9.6	72.8	8.2	98.9	10.4	143.1	9.9	198.6	8.3	272.7	7.4	337.7	6.1	412.5	5.2						
24.3	13.3	45.7	9.5	73.8	8.3	98.9	10.5	144.1	9.9	199.6	8.2	275.6	7.4	340.5	6.0	416.2	5.2						
24.3	13.2	46.7	9.3	74.8	8.3	98.9	10.6	146.0	9.9	201.5	8.2	278.4	7.4	341.5	6.0	417.2	5.1						
24.3	13.1	46.7	9.2	75.7	8.4	99.9	10.5	147.0	9.9	202.5	8.2	280.3	7.4	342.4	5.9	419.0	5.1						
25.3	12.9	46.7	9.2	75.7	8.4	99.9	10.5	147.0	9.9	204.4	8.2	282.2	7.4	344.3	5.9	419.9	5.1						
25.3	12.7	46.7	9.1	76.7	8.5	100.8	10.5	147.9	9.9	206.3	8.1	284.1	7.4	345.2	5.9	421.8	5.1						
26.3	12.5	47.6	9.0	76.7	8.5	100.8	10.4	148.9	9.9	207.2	8.1	285.0	7.4	347.1	5.9	423.7	5.1						
26.3	12.4	47.6	9.0	76.7	8.7	101.8	10.3	148.9	9.9	208.2	8.0	286.9	7.4	349.0	5.9	425.5	5.1						
26.3	12.3	48.6	8.9	76.7	8.7	101.8	10.3	149.9	10.0	208.2	8.0	288.8	7.4	349.9	5.9	427.4	5.1						
27.3	12.2	49.6	8.9	77.7	8.8	101.8	10.2	150.8	10.0	210.1	7.9	290.7	7.4	350.9	5.9	428.3	5.0						
27.3	12.1	50.6	8.9	77.7	8.8	102.8	10.1	151.8	10.0	210.1	7.9	291.6	7.4	353.7	5.9	429.2	5.0						
28.2	12.0	51.5	8.8	77.7	8.8	103.7	10.1	152.7	10.0	210.1	7.9	291.6	7.4	353.7	5.9	429.2	5.0						

SHIP OC	CRUISE 104	STATION 37	DATE 30 SEP 1981	EST 1012	LATITUDE 40°21.6'N	LONGITUDE 67°41.3'W	DEPTH 555		
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N (cph)
3	2.6	15.825	32.782	5.25	0.35	24.082	0.000	1507.	0.3
4	3.9	15.828	32.782	5.23	0.34	24.082	0.005	1507.	0.3
6	6.2	15.834	32.782	5.26	0.34	24.081	0.013	1507.	0.3
8	8.0	15.840	32.782	5.26	0.33	24.079	0.021	1507.	0.3
10	10.0	15.833	32.782	5.24	0.33	24.081	0.028	1507.	0.3
12	12.0	15.832	32.782	5.27	0.33	24.081	0.036	1507.	0.9
14	14.1	15.828	32.782	5.29	0.34	24.081	0.044	1507.	2.7
16	15.9	15.829	32.782	5.30	0.33	24.081	0.051	1507.	4.8
18	17.9	15.820	32.780	5.26	0.33	24.081	0.059	1507.	6.7
20	20.2	15.804	32.781	5.30	0.34	24.086	0.067	1507.	8.5
22	21.9	15.500	32.766	5.33	0.35	24.142	0.074	1506.	10.2
24	24.1	14.789	32.700	5.41	0.41	24.245	0.082	1504.	12.1
26	26.1	14.486	32.749	5.42	0.37	24.347	0.089	1503.	13.6
28	28.0	14.183	32.833	5.36	0.31	24.476	0.096	1502.	14.6
30	30.0	13.928	32.931	5.35	0.30	24.604	0.103	1501.	14.7
32	32.1	12.808	32.959	5.51	0.25	24.850	0.109	1498.	14.3
34	33.7	12.259	32.963	5.47	0.24	24.959	0.114	1496.	13.6
36	36.2	11.492	32.966	5.49	0.22	25.104	0.122	1493.	12.9
38	38.0	11.391	32.980	5.48	0.22	25.134	0.127	1493.	12.2
40	39.9	11.062	32.979	5.47	0.22	25.192	0.132	1492.	11.4
42	42.0	10.831	32.987	5.47	0.21	25.239	0.138	1491.	11.3
44	44.1	9.877	32.945	5.60	0.20	25.368	0.143	1488.	11.5
46	46.2	9.354	32.978	5.61	0.18	25.479	0.149	1486.	11.6
47	47.7	9.204	33.002	5.58	0.17	25.522	0.152	1485.	11.5
50	50.3	8.705	33.066	5.57	0.17	25.650	0.159	1484.	10.9
52	51.8	8.429	33.108	5.62	0.16	25.725	0.162	1483.	9.9
54	54.3	8.278	33.147	5.57	0.17	25.778	0.168	1482.	8.9
55	55.8	8.223	33.170	5.54	0.16	25.804	0.171	1482.	8.4
58	58.1	8.171	33.191	5.50	0.18	25.828	0.176	1482.	7.8
59	59.7	8.153	33.197	5.49	0.16	25.835	0.180	1482.	7.6
62	62.3	8.089	33.247	5.48	0.17	25.885	0.185	1482.	7.7
64	64.0	8.157	33.337	5.48	0.16	25.945	0.189	1482.	8.4
66	66.1	8.347	33.444	5.38	0.16	26.001	0.193	1483.	9.4
68	67.9	8.467	33.501	5.35	0.16	26.027	0.197	1483.	10.0
70	70.1	8.564	33.561	5.29	0.16	26.059	0.201	1484.	10.2
72	72.0	9.067	33.815	5.15	0.16	26.180	0.204	1486.	10.2
74	74.0	9.377	34.028	5.09	0.15	26.297	0.208	1488.	10.1
76	76.1	9.498	34.119	5.02	0.15	26.348	0.212	1488.	9.6
78	78.0	9.537	34.179	4.99	0.15	26.389	0.215	1488.	8.8
80	80.1	9.514	34.237	4.99	0.15	26.437	0.218	1488.	7.7
81	81.9	9.553	34.262	4.93	0.15	26.451	0.221	1489.	6.8
83	84.0	9.635	34.297	4.85	0.16	26.465	0.224	1489.	6.6
86	86.1	9.771	34.350	4.82	0.17	26.483	0.228	1490.	6.4
88	88.0	10.134	34.483	4.79	0.15	26.526	0.231	1491.	6.3
89	90.0	10.229	34.540	4.75	0.15	26.554	0.234	1492.	6.4
92	92.2	9.991	34.539	4.79	0.16	26.594	0.237	1491.	6.5
93	93.7	9.909	34.526	4.78	0.15	26.598	0.239	1490.	6.4
95	96.0	9.811	34.528	4.74	0.16	26.616	0.242	1490.	6.1
98	98.3	9.791	34.579	4.73	0.16	26.659	0.246	1490.	5.8
99	99.9	9.810	34.605	4.70	0.16	26.676	0.248	1490.	5.5

SHIP OC	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
			30 SEP 1981	1012	40°21.6'N	67°41.3'W	555		
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DYHT A (10m ² /s ²)	S SPD (m/s)	N (cph)
201	202.0	9.323	35.157	4.14	0.15	27.189	0.364	1491.	6.2
203	204.1	8.824	35.122	4.20	0.15	27.243	0.366	1489.	6.3
204	205.7	8.650	35.110	4.16	0.15	27.260	0.367	1488.	6.1
207	208.0	8.392	35.097	4.14	0.15	27.291	0.369	1487.	5.6
209	210.0	8.203	35.088	4.14	0.15	27.313	0.371	1487.	4.9
211	212.2	8.115	35.071	4.15	0.16	27.313	0.373	1486.	3.9
213	214.0	8.098	35.071	4.16	0.15	27.315	0.374	1486.	3.1
215	215.9	8.085	35.071	4.16	0.14	27.317	0.375	1486.	2.5
217	218.0	8.070	35.071	4.16	0.14	27.320	0.377	1486.	1.2
219	219.9	8.051	35.068	4.19	0.15	27.320	0.379	1486.	1.5
221	222.0	8.043	35.067	4.19	0.16	27.320	0.380	1486.	1.3
223	224.1	8.030	35.066	4.19	0.16	27.322	0.382	1486.	1.2
225	226.1	8.020	35.066	4.20	0.15	27.323	0.383	1486.	1.2
227	227.9	8.016	35.065	4.19	0.15	27.323	0.385	1486.	1.3
229	230.0	8.008	35.065	4.18	0.16	27.324	0.387	1486.	1.3
231	232.2	7.993	35.063	4.18	0.15	27.325	0.388	1486.	1.2
233	234.0	7.978	35.063	4.19	0.15	27.327	0.390	1486.	1.2
235	236.0	7.972	35.062	4.17	0.15	27.327	0.391	1486.	1.3
237	238.0	7.964	35.061	4.19	0.15	27.328	0.393	1486.	1.3
238	240.0	7.960	35.062	4.19	0.16	27.329	0.394	1486.	1.3
241	242.3	7.955	35.062	4.18	0.15	27.329	0.396	1486.	1.2
242	243.9	7.922	35.059	4.19	0.15	27.332	0.397	1486.	1.3
245	246.1	7.913	35.057	4.18	0.15	27.332	0.399	1486.	1.8
247	248.1	7.911	35.058	4.19	0.15	27.333	0.401	1486.	2.1
248	249.9	7.910	35.058	4.20	0.15	27.333	0.402	1486.	2.3
251	252.1	7.874	35.054	4.19	0.15	27.336	0.404	1486.	2.4
253	254.1	7.707	35.038	4.21	0.15	27.347	0.405	1486.	2.5
254	255.7	7.676	35.037	4.24	0.15	27.351	0.406	1485.	2.6
256	258.0	7.655	35.036	4.22	0.15	27.354	0.408	1485.	2.4
259	260.1	7.634	35.035	4.24	0.15	27.356	0.410	1485.	2.2
260	261.8	7.613	35.033	4.26	0.15	27.357	0.411	1485.	1.7
262	264.0	7.583	35.032	4.26	0.16	27.361	0.413	1485.	1.5
265	266.3	7.584	35.033	4.28	0.15	27.362	0.414	1485.	1.3
266	267.9	7.586	35.033	4.28	0.15	27.362	0.416	1485.	1.0
268	270.1	7.586	35.034	4.26	0.15	27.362	0.417	1485.	0.8
270	271.9	7.587	35.034	4.27	0.15	27.362	0.419	1485.	0.5
272	274.2	7.587	35.034	4.28	0.15	27.362	0.420	1485.	0.7
274	275.9	7.594	35.034	4.28	0.15	27.361	0.422	1486.	0.9
276	278.0	7.590	35.035	4.27	0.15	27.363	0.423	1486.	1.1
278	280.2	7.583	35.034	4.28	0.15	27.363	0.425	1486.	1.3
280	281.7	7.563	35.033	4.30	0.15	27.365	0.426	1485.	1.4
282	284.0	7.550	35.032	4.30	0.15	27.366	0.428	1485.	1.5
285	286.3	7.545	35.032	4.30	0.15	27.367	0.429	1485.	1.6
286	287.9	7.527	35.032	4.30	0.16	27.369	0.431	1485.	1.8
288	290.0	7.506	35.029	4.29	0.16	27.370	0.432	1485.	1.8
290	292.2	7.481	35.028	4.31	0.15	27.373	0.434	1485.	1.9
292	293.9	7.457	35.027	4.30	0.15	27.375	0.435	1485.	1.9
294	296.1	7.419	35.024	4.30	0.17	27.379	0.437	1485.	2.1
296	298.1	7.406	35.023	4.31	0.15	27.380	0.438	1485.	2.2
298	299.8	7.391	35.023	4.36	0.15	27.382	0.439	1485.	2.2

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH				
OC	104	37	30 SEP 1981	1012	40°21.6'N	67°41.3'W	555	OC	104	37	30 SEP 1981	1012	40°21.6'N	67°41.3'W	555				
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N	DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)	(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
399	401.9	6.002	34.967	4.97	0.17	27.527	0.508	1481.	1.3	488	491.0	5.419	34.955	5.36	0.19	27.590	0.559	1480.	2.0
401	403.8	5.993	34.966	4.98	0.17	27.527	0.509	1481.	1.2	489	492.0	5.408	34.956	5.36	0.19	27.592	0.559	1480.	1.8
403	406.0	5.986	34.966	4.98	0.17	27.528	0.510	1481.	1.2	490	493.0	5.404	34.956	5.35	0.18	27.593	0.560	1480.	1.5
405	408.1	5.985	34.967	4.97	0.17	27.528	0.511	1481.	1.3	491	494.0	5.397	34.955	5.35	0.18	27.593	0.561	1480.	1.2
407	410.0	5.977	34.966	5.02	0.18	27.529	0.513	1481.	1.4	492	495.1	5.398	34.955	5.38	0.18	27.593	0.561	1480.	1.4
409	412.0	5.951	34.965	5.02	0.17	27.531	0.514	1481.	1.5	492	495.8	5.396	34.955	5.37	0.18	27.593	0.561	1480.	1.6
412	414.2	5.936	34.963	5.03	0.17	27.532	0.515	1481.	1.7	494	497.0	5.396	34.954	5.36	0.19	27.592	0.562	1480.	1.6
413	416.0	5.927	34.964	5.05	0.17	27.533	0.516	1481.	1.9	495	498.0	5.393	34.956	5.37	0.19	27.594	0.563	1480.	1.6
415	418.0	5.888	34.960	5.05	0.19	27.535	0.517	1481.	2.1	496	499.0	5.368	34.956	5.38	0.18	27.597	0.563	1480.	1.6
418	420.3	5.857	34.958	5.06	0.17	27.538	0.519	1481.	2.3	497	500.0	5.350	34.955	5.36	0.18	27.598	0.564	1480.	1.6
419	421.9	5.846	34.960	5.05	0.17	27.541	0.520	1481.	2.4										
421	424.0	5.808	34.961	5.05	0.17	27.547	0.521	1481.	2.4										
423	426.2	5.779	34.962	5.06	0.18	27.551	0.522	1481.	2.3										
425	427.9	5.726	34.957	5.14	0.18	27.553	0.523	1481.	2.1										
427	430.0	5.726	34.960	5.14	0.18	27.556	0.524	1481.	1.9										
429	432.2	5.710	34.958	5.16	0.18	27.556	0.526	1481.	1.7										
431	434.0	5.702	34.958	5.20	0.18	27.558	0.527	1481.	1.6										
433	436.0	5.698	34.959	5.17	0.18	27.559	0.528	1481.	1.5										
435	437.9	5.705	34.960	5.18	0.18	27.559	0.529	1481.	1.5										
437	440.0	5.663	34.960	5.19	0.18	27.564	0.530	1481.	1.5										
439	441.9	5.658	34.959	5.19	0.18	27.564	0.531	1481.	1.5										
441	444.0	5.660	34.959	5.19	0.18	27.564	0.532	1481.	1.5										
443	446.0	5.647	34.959	5.19	0.19	27.565	0.534	1481.	1.5										
445	447.9	5.637	34.959	5.20	0.18	27.567	0.535	1481.	1.5										
447	450.0	5.632	34.959	5.21	0.20	27.567	0.536	1481.	1.6										
449	452.1	5.600	34.957	5.21	0.20	27.569	0.537	1481.	1.6										
451	453.9	5.573	34.957	5.23	0.18	27.573	0.538	1480.	1.5										
453	456.0	5.568	34.957	5.26	0.18	27.573	0.539	1480.	1.4										
455	458.0	5.563	34.957	5.24	0.20	27.574	0.540	1480.	1.3										
457	460.0	5.556	34.957	5.27	0.18	27.575	0.541	1480.	1.1										
459	462.0	5.555	34.957	5.28	0.18	27.575	0.543	1480.	1.0										
461	464.0	5.552	34.957	5.27	0.18	27.575	0.544	1481.	1.0										
463	466.2	5.546	34.957	5.27	0.18	27.576	0.545	1481.	1.0										
465	467.8	5.541	34.957	5.27	0.18	27.577	0.546	1481.	0.9										
467	470.0	5.540	34.957	5.26	0.18	27.577	0.547	1481.	1.0										
469	472.2	5.538	34.958	5.27	0.18	27.578	0.548	1481.	1.1										
471	473.9	5.538	34.958	5.24	0.18	27.578	0.549	1481.	1.1										
473	476.0	5.539	34.958	5.23	0.18	27.578	0.550	1481.	1.2										
475	478.0	5.522	34.958	5.25	0.18	27.580	0.552	1481.	1.2										
477	480.1	5.509	34.958	5.28	0.18	27.581	0.553	1481.	1.3										
478	481.2	5.508	34.959	5.30	0.18	27.582	0.553	1481.	1.4										
479	482.0	5.504	34.958	5.30	0.18	27.582	0.554	1481.	1.5										
480	483.0	5.503	34.958	5.29	0.18	27.582	0.554	1481.	1.4										
481	484.0	5.496	34.959	5.29	0.18	27.583	0.555	1481.	1.5										
482	485.0	5.490	34.958	5.28	0.18	27.584	0.556	1481.	1.5										
483	486.0	5.480	34.959	5.32	0.18	27.585	0.556	1481.	1.8										
484	487.0	5.480	34.958	5.32	0.19	27.585	0.557	1481.	1.9										
485	488.0	5.473	34.958	5.32	0.21	27.586	0.557	1481.	2.0										
486	489.0	5.456	34.956	5.32	0.21	27.587	0.558	1481.	2.0										
487	490.1	5.426	34.956	5.33	0.18	27.590	0.558	1480.	2.0										

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	104	38	30 SEP 1981	1055	40°20.9'N	67°40.2'W	925
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
(m)	(dbar)	(°C)	SALIN	OXY	ATN	DYHT A	S SPD
			(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)
203	204.0	8.438	35.099	4.15	0.15	27.285	0.346
205	205.9	8.253	35.081	4.16	0.14	27.300	0.347
207	207.0	8.185	35.079	4.15	0.15	27.308	0.349
209	210.2	8.157	35.076	4.15	0.15	27.310	0.351
211	211.9	8.129	35.075	4.17	0.15	27.313	0.352
213	214.3	8.095	35.071	4.15	0.15	27.316	0.354
215	215.9	8.078	35.071	4.17	0.15	27.318	0.355
217	218.1	8.050	35.068	4.16	0.15	27.320	0.357
219	219.9	8.043	35.068	4.16	0.15	27.321	0.358
221	221.9	8.030	35.067	4.14	0.15	27.322	0.360
223	224.1	7.991	35.063	4.15	0.15	27.325	0.362
224	225.8	7.975	35.062	4.16	0.15	27.327	0.363
227	228.0	7.926	35.059	4.15	0.15	27.332	0.365
229	230.2	7.917	35.058	4.14	0.15	27.332	0.366
230	231.7	7.914	35.058	4.18	0.15	27.332	0.367
233	234.0	7.903	35.057	4.16	0.15	27.333	0.369
235	236.1	7.891	35.056	4.14	0.15	27.334	0.371
236	237.9	7.882	35.055	4.19	0.15	27.335	0.372
238	239.9	7.877	35.055	4.17	0.15	27.336	0.374
241	242.0	7.810	35.051	4.15	0.17	27.343	0.375
243	244.0	7.777	35.047	4.18	0.15	27.344	0.377
244	246.0	7.757	35.048	4.22	0.15	27.348	0.378
247	248.0	7.717	35.043	4.22	0.15	27.350	0.380
248	250.0	7.658	35.037	4.24	0.15	27.354	0.382
251	252.1	7.645	35.036	4.26	0.15	27.355	0.383
252	253.9	7.645	35.036	4.26	0.15	27.355	0.384
255	256.2	7.642	35.039	4.26	0.15	27.358	0.386
256	258.0	7.625	35.038	4.29	0.15	27.360	0.388
258	259.9	7.573	35.033	4.28	0.15	27.363	0.389
260	262.0	7.531	35.032	4.28	0.14	27.368	0.391
262	263.7	7.516	35.029	4.31	0.15	27.369	0.392
264	266.0	7.489	35.027	4.32	0.15	27.371	0.394
266	268.0	7.453	35.024	4.33	0.15	27.374	0.395
268	270.0	7.405	35.020	4.34	0.16	27.377	0.396
270	272.1	7.399	35.019	4.33	0.15	27.377	0.398
272	274.0	7.395	35.019	4.33	0.15	27.378	0.399
275	276.3	7.372	35.017	4.34	0.15	27.380	0.401
276	277.9	7.303	35.009	4.35	0.15	27.384	0.402
278	280.0	7.237	35.005	4.34	0.15	27.389	0.404
280	282.1	7.141	34.997	4.35	0.15	27.397	0.405
282	284.2	7.000	34.983	4.41	0.15	27.406	0.407
284	285.8	6.901	34.980	4.45	0.15	27.417	0.408
286	288.0	6.884	34.980	4.45	0.15	27.419	0.409
288	290.1	6.835	34.977	4.46	0.15	27.424	0.411
290	292.3	6.771	34.972	4.52	0.15	27.428	0.412
292	293.9	6.660	34.968	4.55	0.15	27.441	0.414
294	295.9	6.592	34.968	4.55	0.15	27.450	0.415
296	297.9	6.602	34.966	4.57	0.15	27.447	0.416
298	300.0	6.585	34.968	4.58	0.16	27.451	0.418
300	302.0	6.587	34.969	4.61	0.15	27.451	0.419

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	38	30 SEP 1981	1055	40°20.9'N	67°40.2'W	925		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
401	404.0	5.713	34.946	5.08	0.16	27.547	0.485	1480.	1.3
403	405.9	5.709	34.946	5.08	0.16	27.547	0.486	1480.	1.0
405	408.0	5.710	34.947	5.07	0.16	27.547	0.487	1480.	1.0
407	410.0	5.705	34.945	5.08	0.16	27.547	0.488	1480.	1.2
410	412.2	5.708	34.946	5.09	0.16	27.547	0.490	1480.	1.5
411	413.9	5.689	34.945	5.10	0.16	27.548	0.491	1480.	1.7
413	416.0	5.669	34.945	5.09	0.17	27.551	0.492	1480.	1.9
415	418.0	5.640	34.944	5.08	0.18	27.554	0.493	1480.	2.0
417	420.1	5.604	34.943	5.10	0.17	27.558	0.494	1480.	2.0
419	422.0	5.582	34.943	5.14	0.16	27.560	0.495	1480.	1.9
421	424.1	5.562	34.943	5.14	0.16	27.562	0.496	1480.	1.8
423	425.9	5.561	34.943	5.16	0.16	27.563	0.497	1480.	1.7
425	428.0	5.555	34.943	5.17	0.16	27.563	0.499	1480.	1.5
427	430.0	5.525	34.941	5.18	0.16	27.566	0.500	1480.	1.4
429	431.9	5.518	34.942	5.17	0.16	27.567	0.501	1480.	1.3
431	434.0	5.505	34.941	5.18	0.16	27.568	0.502	1480.	1.2
433	436.0	5.504	34.941	5.16	0.16	27.568	0.503	1480.	1.1
435	437.8	5.501	34.941	5.18	0.16	27.569	0.504	1480.	0.9
437	439.9	5.499	34.941	5.17	0.17	27.569	0.505	1480.	0.8
439	442.0	5.496	34.941	5.15	0.18	27.569	0.507	1480.	0.7
441	444.1	5.494	34.941	5.15	0.16	27.570	0.508	1480.	0.8
443	446.0	5.494	34.941	5.19	0.16	27.570	0.509	1480.	1.0
445	447.9	5.488	34.940	5.19	0.16	27.570	0.510	1480.	1.1
447	450.0	5.480	34.940	5.15	0.17	27.570	0.511	1480.	1.1
449	452.1	5.470	34.940	5.15	0.17	27.572	0.512	1480.	1.3
451	453.9	5.459	34.940	5.21	0.16	27.573	0.513	1480.	1.4
453	456.0	5.455	34.940	5.20	0.16	27.574	0.515	1480.	1.5
455	457.9	5.449	34.940	5.21	0.16	27.574	0.516	1480.	1.5
457	460.0	5.428	34.940	5.24	0.16	27.577	0.517	1480.	1.4
459	462.1	5.418	34.940	5.24	0.17	27.578	0.518	1480.	1.3
461	463.9	5.404	34.940	5.27	0.16	27.580	0.519	1480.	1.3
463	466.0	5.402	34.939	5.25	0.17	27.579	0.520	1480.	1.1
465	468.0	5.397	34.939	5.25	0.16	27.580	0.521	1480.	0.9
467	469.9	5.394	34.940	5.27	0.16	27.581	0.522	1480.	0.7
469	472.0	5.394	34.939	5.29	0.17	27.580	0.523	1480.	0.6
471	474.0	5.394	34.940	5.28	0.17	27.581	0.525	1480.	0.4
473	476.0	5.393	34.939	5.29	0.17	27.581	0.526	1480.	0.2
475	478.0	5.394	34.939	5.28	0.18	27.581	0.527	1480.	0.3
477	480.0	5.393	34.940	5.28	0.16	27.581	0.528	1480.	0.6
479	482.0	5.394	34.939	5.28	0.17	27.580	0.529	1480.	1.0
481	484.1	5.393	34.939	5.28	0.19	27.581	0.530	1480.	1.4
483	485.8	5.386	34.939	5.30	0.17	27.581	0.531	1480.	1.6
485	487.9	5.376	34.939	5.30	0.18	27.583	0.532	1480.	1.9
487	490.0	5.335	34.939	5.31	0.18	27.587	0.533	1480.	2.0
489	492.0	5.311	34.939	5.31	0.16	27.590	0.535	1480.	2.1
491	493.9	5.290	34.938	5.33	0.17	27.592	0.536	1480.	2.0
493	496.0	5.263	34.939	5.34	0.16	27.596	0.537	1480.	1.9
495	498.0	5.248	34.938	5.35	0.17	27.597	0.538	1480.	1.7
497	500.3	5.246	34.940	5.38	0.16	27.599	0.539	1480.	1.6
516	519.9	5.201	34.943	5.42	0.17	27.606	0.550	1480.	1.1

STA 39				DAY: 30				TIME: 1144				STA 39				DAY: 30				TIME: 1144			
DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
0.0	15.9	33.1	11.1	62.2	8.5	97.9	10.0	135.5	10.6	182.4	8.7	249.0	7.2	327.4	6.3	428.3	5.4	571.0	4.7				
1.0	15.9	33.1	11.1	63.1	8.5	98.9	10.1	135.5	10.6	183.4	8.7	250.9	7.2	329.3	6.3	433.0	5.4	573.8	4.7				
1.0	16.0	34.1	11.0	63.1	8.5	98.9	10.1	136.4	10.6	185.3	8.6	251.9	7.1	331.2	6.3	436.7	5.4	576.5	4.7				
1.9	16.0	35.0	10.9	64.1	8.5	98.9	10.2	137.4	10.6	187.2	8.5	252.8	7.1	333.0	6.3	439.4	5.4	579.3	4.7				
3.9	16.0	35.0	10.8	65.1	8.6	99.9	10.2	139.3	10.6	188.1	8.5	254.7	7.1	334.0	6.3	444.1	5.4	582.0	4.7				
5.8	16.0	36.0	10.7	66.0	8.6	100.8	10.2	140.3	10.5	189.1	8.4	255.7	7.1	335.9	6.3	446.9	5.4	584.7	4.6				
7.8	16.0	36.0	10.6	67.0	8.7	100.8	10.2	141.2	10.5	189.1	8.4	256.6	7.1	336.8	6.3	449.6	5.3	587.5	4.6				
10.7	16.0	37.0	10.5	67.0	8.7	101.8	10.3	143.1	10.5	191.0	8.3	256.6	7.0	338.7	6.2	452.4	5.3	589.3	4.6				
12.7	16.0	37.0	10.4	68.0	8.8	101.8	10.4	144.1	10.5	191.0	8.3	257.6	6.9	340.5	6.2	456.1	5.3	592.0	4.7				
13.6	16.0	37.0	10.3	68.0	8.8	102.8	10.4	146.0	10.4	192.9	8.2	259.5	6.9	340.5	6.2	458.9	5.3	592.9	4.7				
15.6	16.0	37.9	10.2	68.0	8.9	102.8	10.6	146.0	10.4	194.8	8.2	261.4	6.9	342.4	6.2	462.6	5.3	595.7	4.6				
16.6	16.0	37.9	10.2	69.0	8.9	102.8	10.6	147.9	10.3	195.8	8.1	262.3	6.9	345.2	6.2	463.5	5.3	597.5	4.6				
18.5	16.0	37.9	10.0	69.9	8.9	103.7	10.7	147.9	10.2	196.7	8.1	264.2	6.8	346.2	6.2	466.3	5.3	601.1	4.7				
19.5	15.9	37.9	10.0	70.9	9.0	103.7	10.8	148.9	10.1	198.6	8.1	265.1	6.8	348.1	6.1	468.2	5.2	602.9	4.7				
20.4	15.8	37.9	9.9	70.9	9.0	104.7	10.9	148.9	10.1	199.6	8.0	267.0	6.8	349.0	6.1	470.0	5.2	605.7	4.7				
21.4	15.7	38.9	9.8	71.9	9.0	105.6	10.8	148.9	10.0	201.5	8.0	269.9	6.8	350.9	6.1	472.8	5.2	606.6	4.7				
22.4	15.6	38.9	9.7	71.9	9.1	106.6	10.8	149.9	10.0	202.5	7.9	271.8	6.8	352.7	6.1	473.7	5.2	608.4	4.7				
23.4	15.5	38.9	9.5	72.8	9.2	107.6	10.8	150.8	9.9	203.4	7.9	273.7	6.8	353.7	6.1	475.5	5.2	612.0	4.7				
24.3	15.4	38.9	9.4	72.8	9.2	108.5	10.8	150.8	9.8	204.4	7.8	275.6	6.8	356.5	6.1	479.2	5.2	615.7	4.7				
24.3	15.2	38.9	9.3	72.8	9.3	109.5	10.8	150.8	9.8	205.3	7.8	276.5	6.8	359.3	6.1	482.0	5.2	617.5	4.6				
24.3	15.0	39.9	9.2	73.8	9.3	110.5	10.8	151.8	9.7	207.2	7.8	279.3	6.8	362.1	6.1	485.7	5.2	620.2	4.6				
25.3	14.9	40.9	9.1	74.8	9.4	111.4	10.7	152.7	9.7	208.2	7.7	282.2	6.8	364.9	6.1	488.5	5.2	622.0	4.6				
25.3	14.7	41.8	9.0	75.7	9.4	111.4	10.7	153.7	9.7	210.1	7.7	284.1	6.8	366.8	6.1	492.2	5.1	622.9	4.6				
26.3	14.5	42.8	8.9	77.7	9.4	112.4	10.6	155.6	9.7	212.0	7.7	285.9	6.7	368.7	6.0	494.9	5.1	622.9	4.6				
26.3	14.3	43.8	8.8	77.7	9.4	112.4	10.6	157.5	9.7	212.9	7.6	286.9	6.7	370.5	6.0	497.7	5.1	625.6	4.6				
26.3	14.2	44.7	8.7	78.6	9.4	113.4	10.6	158.5	9.7	214.8	7.6	287.8	6.7	373.3	6.0	499.5	5.1	627.5	4.6				
26.3	13.9	46.7	8.4	79.6	9.4	115.3	10.7	160.4	9.7	216.7	7.6	288.8	6.6	375.2	6.0	502.3	5.0	630.2	4.6				
27.3	13.7	46.7	8.4	80.6	9.4	116.2	10.7	161.4	9.7	218.6	7.6	289.7	6.5	377.1	6.0	506.9	5.0	632.0	4.6				
27.3	13.5	47.6	8.2	81.5	9.4	117.2	10.8	162.3	9.6	221.5	7.6	290.7	6.5	378.9	5.9	510.6	5.0	633.8	4.5				
27.3	13.3	47.6	8.1	82.5	9.4	118.2	10.8	165.2	9.6	224.4	7.6	293.5	6.5	379.9	5.8	516.1	4.9	637.4	4.4				
26.3	13.1	48.6	8.1	83.5	9.4	119.1	10.8	168.1	9.6	229.1	7.6	295.4	6.5	380.8	5.8	517.9	4.9	640.1	4.4				
27.3	12.9	48.6	8.0	84.4	9.4	121.1	10.8	169.0	9.5	232.0	7.6	297.3	6.4	381.7	5.7	520.7	4.9	643.8	4.5				
27.3	12.8	49.6	8.0	85.4	9.4	121.1	10.7	170.0	9.5	232.9	7.6	299.2	6.4	382.7	5.6	523.4	4.9	647.4	4.4				
26.3	12.7	50.6	8.0	85.4	9.4	122.0	10.7	170.9	9.5	234.8	7.6	300.1	6.4	383.6	5.5	525.3	4.9	652.8	4.4				
26.3	12.5	51.5	8.0	85.4	9.4	122.0	10.7	171.9	9.4	235.8	7.6	302.9	6.4	384.5	5.5	528.0	4.9	655.5	4.4				
26.3	12.4	51.5	8.0	86.4	9.4	123.0	10.6	172.9	9.4	235.8	7.6	303.9	6.4	386.4	5.5	529.9	4.8	660.0	4.4				
27.3	12.2	52.5	8.0	88.3	9.4	123.9	10.6	172.9	9.3	237.7	7.6	305.8	6.4	387.3	5.4	534.4	4.8	663.6	4.4				
27.3	12.2	52.5	8.1	89.2	9.4	124.9	10.6	173.8	9.3	238.6	7.6	306.7	6.4	389.2	5.4	538.1	4.8	666.3	4.4				
27.3	12.0	53.5	8.1	91.2	9.4	124.9	10.7	173.8	9.2	239.6	7.5	309.5	6.4	392.0	5.4	540.9	4.8	670.0	4.4				
27.3	12.0	54.4	8.1	93.1	9.4	124.9	10.7	173.8	9.1	240.5	7.5	312.4	6.4	397.6	5.4	544.5	4.8	673.6	4.4				
28.2	11.8	54.4	8.2	93.1	9.4	125.9	10.8	174.8	9.1	240.5	7.5	312.4	6.4	397.6	5.4	544.5	4.8	673.6	4.4				
28.2	11.7	55.4	8.2	94.1	9.5	126.8	10.8	174.8	9.0	241.5	7.5	314.2	6.4	399.5	5.4	550.0	4.8	679.9	4.4				
28.2	11.6	56.4	8.2	94.1	9.5	127.8	10.8	175.7	9.0	242.4	7.5	315.2	6.4	401.3	5.4	551.8	4.8	683.5	4.4				
29.2	11.5	56.4	8.3	95.0	9.7	128.7	10.8	177.6	8.9	243.4	7.4	317.1	6.4	405.1	5.4	555.5	4.8	686.2	4.4				
29.2	11.4	57.3	8.3	95.0	9.8	129.7	10.8	177.6	8.8	244.3	7.4	318.9	6.4	407.8	5.4	557.3	4.8	689.8	4.4				
30.2	11.3	58.3	8.4	95.0	9.8	130.7	10.8	178.6	8.8	244.3	7.3	319.9	6.4	411.6	5.3	559.2	4.8	692.5	4.4				
31.1	11.3	59.3	8.4	96.0	9.9	132.6	10.7	180.5	8.8	245.2	7.3	321.8	6.4	416.2	5.4	562.8	4.8	695.2	4.4				
31.1	11.3	60.2	8.4	96.0	9.9	133.5	10.7	180.5	8.7	246.2	7.2	323.6	6.4	419.9	5.4	565.6	4.7	697.0	4.4				
32.1	11.2	61.2	8.4	97.0	9.9	134.5	10.7	180.5	8.7	247.1	7.2	325.5	6.3	423.7	5.4	568.3	4.7	699.7	4.4				

SHIP		CRUISE		STATION		DATE		EST		LATITUDE		LONGITUDE		DEPTH	
OC	DEPTH	104	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT	A	S	SPD	N		
	(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)				(cph)		
	4	4.3	15.995	32.704	5.40	0.33	23.984	0.000	1507.	8.5					
	6	6.0	15.996	32.704	5.36	0.33	23.984	0.007	1507.	8.5					
	8	8.1	16.007	32.707	5.37	0.32	23.984	0.015	1507.	8.5					
	10	9.8	16.017	32.705	5.34	0.32	23.980	0.022	1507.	8.5					
	12	12.0	16.019	32.705	5.31	0.32	23.980	0.030	1507.	8.5					
	14	14.0	15.939	32.712	5.34	0.32	24.003	0.038	1507.	10.4					
	16	16.1	15.350	32.730	5.45	0.33	24.147	0.046	1505.	12.6					
	18	18.0	14.923	32.754	5.47	0.32	24.258	0.053	1504.	14.2					
	20	19.8	14.774	32.855	5.38	0.32	24.368	0.060	1504.	15.4					
	22	22.0	14.748	33.065	5.35	0.31	24.535	0.067	1504.	15.7					
	24	24.0	12.997	32.956	5.52	0.26	24.811	0.074	1498.	15.3					
	26	26.2	12.121	32.936	5.52	0.23	24.964	0.081	1495.	14.5					
	28	28.0	11.476	32.960	5.60	0.22	25.102	0.086	1493.	13.6					
	30	30.0	11.298	32.977	5.57	0.21	25.148	0.092	1492.	12.2					
	32	31.8	11.037	32.983	5.61	0.21	25.199	0.097	1492.	10.8					
	34	34.2	10.564	32.965	5.64	0.19	25.268	0.103	1490.	10.4					
	36	35.9	10.331	32.981	5.59	0.19	25.320	0.108	1489.	10.4					
	38	38.0	9.961	32.992	5.62	0.18	25.391	0.113	1488.	10.6					
	40	39.9	9.635	33.009	5.63	0.17	25.459	0.118	1487.	10.6					
	42	42.0	9.197	33.059	5.60	0.17	25.568	0.123	1485.	10.5					
	44	44.0	8.604	33.058	5.68	0.16	25.659	0.128	1483.	10.2					
	46	46.1	8.446	33.071	5.66	0.16	25.693	0.133	1483.	9.6					
	48	48.0	8.290	33.102	5.62	0.16	25.741	0.137	1482.	9.0					
	50	50.2	8.128	33.140	5.63	0.15	25.795	0.142	1481.	8.1					
	52	51.9	8.044	33.169	5.62	0.15	25.830	0.146	1481.	7.6					
	54	54.0	8.003	33.193	5.58	0.15	25.854	0.150	1481.	7.7					
	56	55.8	7.963	33.235	5.56	0.15	25.893	0.154	1481.	7.8					
	58	58.0	7.947	33.248	5.52	0.15	25.906	0.159	1481.	7.9					
	60	60.2	7.934	33.314	5.47	0.15	25.960	0.163	1481.	8.0					
	62	62.0	8.099	33.431	5.44	0.15	26.027	0.167	1482.	8.2					
	64	64.0	8.202	33.499	5.40	0.15	26.066	0.171	1482.	8.2					
	66	66.0	8.262	33.570	5.33	0.15	26.112	0.175	1483.	8.3					
	68	67.9	8.298	33.606	5.27	0.15	26.135	0.178	1483.	7.9					
	70	70.2	8.457	33.701	5.23	0.15	26.185	0.183	1484.	7.5					
	71	71.9	8.619	33.776	5.21	0.15	26.219	0.186	1484.	7.3					
	73	73.9	8.780	33.862	5.18	0.15	26.262	0.189	1485.	7.0					
	76	76.0	8.895	33.911	5.15	0.15	26.282	0.193	1486.	6.6					
	78	78.0	9.104	33.982	5.08	0.15	26.305	0.196	1487.	6.1					
	80	80.2	9.352	34.076	5.05	0.14	26.338	0.200	1488.	5.9					
	81	81.7	9.492	34.124	5.03	0.14	26.353	0.203	1488.	6.2					
	84	84.1	9.637	34.165	4.98	0.15	26.361	0.207	1489.	6.8					
	85	86.0	9.724	34.202	4.97	0.14	26.376	0.210	1489.	7.2					
	88	88.3	9.519	34.223	4.98	0.13	26.426	0.214	1489.	7.4					
	89	89.8	9.469	34.284	4.96	0.14	26.485	0.216	1488.	7.7					
	92	92.2	9.629	34.401	4.89	0.15	26.547	0.220	1489.	7.9					
	93	93.9	9.826	34.462	4.82	0.14	26.562	0.222	1490.	7.6					
	96	96.1	10.244	34.587	4.74	0.15	26.588	0.225	1492.	6.8					
	97	97.9	10.711	34.753	4.68	0.14	26.635	0.228	1494.	6.0					
	100	100.1	10.956	34.843	4.63	0.13	26.662	0.231	1495.	5.3					
	101	102.1	10.834	34.818	4.63	0.13	26.664	0.234	1494.	4.9					

STA 39 DAY: 30 TIME: 1144

DEPTH	TEMP
(m)	(°C)
700.6	4.4
700.6	4.4
704.1	4.4
705.0	4.4
706.8	4.4
708.6	4.3
711.3	4.3
714.0	4.3
716.7	4.3
718.5	4.3
720.3	4.3
723.0	4.3
724.8	4.3
727.5	4.3
729.2	4.3
731.0	4.3
732.8	4.3
734.6	4.3
736.4	4.3
740.0	4.3
741.8	4.3
744.4	4.3
745.3	4.3
747.1	4.3
748.9	4.3

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	40	30 SEP 1981	1157	40°21.6'N	67°38.7'W	530		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
103	103.8	10.701	34.777	4.61	0.13	26.656	0.236	1494.	4.6
105	106.0	10.577	34.777	4.62	0.13	26.678	0.239	1493.	4.4
107	108.0	10.598	34.798	4.62	0.14	26.690	0.242	1493.	4.9
109	110.0	10.821	34.856	4.61	0.14	26.696	0.245	1494.	5.6
112	112.2	10.777	34.886	4.62	0.14	26.728	0.248	1494.	6.2
113	114.0	10.894	34.939	4.55	0.15	26.747	0.250	1495.	6.4
115	116.1	10.880	34.983	4.54	0.14	26.785	0.253	1495.	6.6
117	118.0	10.813	35.015	4.50	0.15	26.822	0.255	1495.	6.5
119	120.2	10.818	35.059	4.49	0.15	26.855	0.258	1495.	6.0
121	122.0	10.828	35.087	4.44	0.15	26.875	0.260	1495.	5.5
123	124.1	10.839	35.107	4.43	0.15	26.888	0.262	1495.	4.6
125	125.7	10.841	35.113	4.42	0.15	26.893	0.264	1495.	3.9
127	128.2	10.832	35.115	4.41	0.15	26.896	0.267	1495.	3.3
129	129.7	10.814	35.114	4.42	0.15	26.899	0.269	1495.	3.2
131	132.0	10.776	35.110	4.42	0.15	26.903	0.272	1495.	3.4
133	134.0	10.744	35.115	4.43	0.15	26.912	0.274	1495.	4.1
135	136.0	10.717	35.120	4.41	0.17	26.920	0.276	1495.	4.7
137	138.2	10.705	35.135	4.41	0.16	26.934	0.279	1495.	4.9
139	139.7	10.741	35.166	4.40	0.16	26.952	0.281	1495.	5.0
141	142.1	10.653	35.194	4.38	0.16	26.990	0.283	1495.	4.9
143	144.0	10.626	35.207	4.37	0.15	27.004	0.285	1495.	5.0
145	146.0	10.634	35.216	4.31	0.15	27.010	0.288	1495.	4.9
147	148.1	10.631	35.220	4.31	0.14	27.014	0.290	1495.	4.8
149	150.0	10.609	35.226	4.27	0.14	27.022	0.292	1495.	4.6
151	152.1	10.459	35.230	4.29	0.15	27.052	0.294	1494.	4.9
153	153.8	10.327	35.219	4.27	0.13	27.067	0.296	1494.	5.2
155	156.2	10.153	35.204	4.25	0.14	27.086	0.298	1493.	5.1
157	158.1	10.099	35.201	4.21	0.13	27.092	0.300	1493.	4.8
159	160.0	9.898	35.192	4.24	0.13	27.120	0.302	1492.	4.3
161	161.8	9.819	35.190	4.21	0.13	27.132	0.304	1492.	3.8
163	164.4	9.809	35.191	4.20	0.13	27.135	0.306	1492.	3.6
165	165.8	9.803	35.192	4.20	0.13	27.136	0.308	1492.	3.4
167	167.9	9.797	35.190	4.19	0.13	27.136	0.310	1492.	3.4
169	170.2	9.751	35.188	4.19	0.13	27.142	0.312	1492.	3.8
171	171.9	9.655	35.187	4.21	0.13	27.157	0.313	1492.	4.2
173	174.1	9.544	35.178	4.21	0.13	27.168	0.315	1491.	4.4
175	176.1	9.422	35.173	4.16	0.13	27.185	0.317	1491.	4.7
177	178.2	9.205	35.152	4.17	0.13	27.204	0.319	1490.	4.9
179	179.9	9.132	35.148	4.11	0.13	27.213	0.321	1490.	4.9
181	182.2	9.028	35.138	4.09	0.13	27.222	0.323	1489.	4.8
183	184.0	8.832	35.120	4.13	0.13	27.240	0.324	1489.	4.7
185	185.9	8.704	35.121	4.10	0.13	27.261	0.326	1488.	4.5
187	188.1	8.584	35.114	4.11	0.13	27.274	0.328	1488.	4.3
189	189.8	8.486	35.100	4.12	0.13	27.278	0.329	1488.	4.0
191	192.0	8.366	35.092	4.12	0.14	27.291	0.331	1487.	3.6
193	194.2	8.327	35.089	4.12	0.13	27.294	0.333	1487.	3.2
195	196.0	8.269	35.086	4.12	0.13	27.300	0.334	1487.	3.0
197	198.2	8.216	35.080	4.12	0.13	27.304	0.336	1487.	2.9
199	199.9	8.182	35.077	4.14	0.13	27.307	0.337	1487.	2.8
201	202.0	8.128	35.074	4.13	0.13	27.313	0.339	1486.	2.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	40	30 SEP 1981	1157	40°21.6'N	67°38.7'W	530	OC	104	40	30 SEP 1981	1157	40°21.6'N	67°38.7'W	530		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)
302	303.9	6.572	34.967	4.60	0.13	27.451	0.413	1482.	401	404.0	5.872	34.953	5.01	0.14	27.532	0.477	1481.
304	305.9	6.543	34.966	4.60	0.14	27.455	0.414	1482.	403	406.1	5.860	34.952	5.01	0.14	27.533	0.478	1481.
306	308.1	6.541	34.967	4.60	0.14	27.456	0.416	1482.	405	407.7	5.838	34.950	5.02	0.17	27.534	0.479	1481.
308	309.8	6.539	34.968	4.64	0.13	27.457	0.417	1482.	407	410.0	5.807	34.951	5.01	0.17	27.539	0.480	1481.
310	312.0	6.535	34.969	4.65	0.14	27.458	0.418	1482.	409	412.1	5.805	34.951	5.01	0.15	27.539	0.481	1481.
312	314.0	6.542	34.969	4.64	0.14	27.458	0.420	1482.	411	413.8	5.801	34.951	5.04	0.14	27.540	0.482	1481.
314	316.0	6.554	34.972	4.65	0.14	27.458	0.421	1482.	413	416.0	5.796	34.951	5.04	0.15	27.541	0.484	1481.
316	318.1	6.554	34.975	4.66	0.14	27.460	0.422	1482.	415	417.9	5.787	34.952	5.05	0.15	27.542	0.485	1481.
318	320.0	6.559	34.975	4.69	0.14	27.460	0.424	1482.	417	420.0	5.764	34.951	5.05	0.15	27.544	0.486	1481.
320	322.0	6.564	34.977	4.68	0.13	27.461	0.425	1482.	419	421.9	5.743	34.951	5.07	0.15	27.547	0.487	1481.
322	324.0	6.573	34.978	4.68	0.13	27.461	0.426	1482.	421	424.0	5.717	34.951	5.09	0.15	27.550	0.488	1481.
324	326.0	6.578	34.983	4.68	0.14	27.463	0.428	1482.	423	426.1	5.710	34.950	5.09	0.15	27.550	0.490	1481.
326	327.8	6.550	34.982	4.71	0.14	27.467	0.429	1482.	425	428.2	5.702	34.950	5.10	0.15	27.551	0.491	1481.
328	329.9	6.529	34.981	4.73	0.13	27.468	0.430	1482.	427	429.9	5.698	34.951	5.12	0.15	27.552	0.492	1481.
330	331.9	6.520	34.977	4.73	0.13	27.467	0.432	1482.	429	432.1	5.688	34.950	5.09	0.17	27.553	0.493	1481.
332	334.2	6.505	34.976	4.74	0.14	27.468	0.433	1482.	431	434.1	5.680	34.951	5.09	0.15	27.554	0.494	1481.
334	336.0	6.473	34.978	4.74	0.14	27.473	0.434	1482.	433	436.1	5.667	34.951	5.12	0.15	27.556	0.495	1481.
336	338.0	6.437	34.978	4.75	0.13	27.479	0.436	1482.	435	437.9	5.663	34.951	5.14	0.15	27.556	0.496	1481.
338	340.0	6.427	34.976	4.74	0.14	27.479	0.437	1482.	437	440.0	5.660	34.951	5.12	0.16	27.557	0.498	1481.
340	341.9	6.419	34.976	4.78	0.14	27.479	0.438	1482.	439	442.1	5.660	34.951	5.12	0.15	27.557	0.499	1481.
342	344.0	6.414	34.975	4.78	0.14	27.480	0.439	1482.	441	443.7	5.659	34.952	5.15	0.15	27.558	0.500	1481.
344	346.0	6.405	34.976	4.78	0.14	27.481	0.441	1482.	443	446.0	5.654	34.953	5.15	0.15	27.560	0.501	1481.
346	348.3	6.397	34.976	4.79	0.14	27.483	0.442	1482.	445	448.1	5.641	34.956	5.14	0.15	27.563	0.502	1481.
348	349.9	6.396	34.976	4.81	0.14	27.483	0.443	1482.	447	450.1	5.626	34.957	5.15	0.15	27.566	0.504	1481.
350	352.1	6.388	34.977	4.79	0.15	27.484	0.445	1482.	449	451.7	5.615	34.957	5.20	0.15	27.568	0.504	1481.
351	353.7	6.386	34.977	4.80	0.14	27.484	0.446	1482.	451	454.0	5.570	34.958	5.21	0.16	27.573	0.506	1480.
354	355.9	6.385	34.977	4.79	0.14	27.484	0.447	1482.	453	456.0	5.560	34.956	5.22	0.16	27.574	0.507	1480.
356	357.9	6.386	34.977	4.78	0.14	27.484	0.448	1482.	455	458.3	5.562	34.958	5.21	0.16	27.575	0.508	1480.
358	360.0	6.385	34.978	4.79	0.14	27.485	0.450	1482.	457	459.8	5.556	34.958	5.25	0.15	27.575	0.509	1480.
360	361.9	6.380	34.978	4.83	0.14	27.486	0.451	1482.	459	462.0	5.556	34.957	5.24	0.16	27.574	0.510	1480.
362	364.0	6.352	34.981	4.84	0.15	27.492	0.452	1482.	461	464.0	5.556	34.958	5.24	0.15	27.576	0.511	1481.
364	366.1	6.266	34.978	4.86	0.15	27.501	0.454	1482.	463	466.5	5.550	34.958	5.25	0.15	27.576	0.513	1481.
366	368.2	6.161	34.966	4.89	0.15	27.505	0.455	1481.	465	467.9	5.551	34.957	5.26	0.16	27.575	0.514	1481.
368	369.9	6.061	34.964	4.93	0.15	27.517	0.456	1481.	467	470.0	5.546	34.957	5.23	0.16	27.576	0.515	1481.
370	372.0	6.048	34.961	4.91	0.15	27.516	0.457	1481.	469	472.1	5.548	34.956	5.22	0.16	27.575	0.516	1481.
372	374.0	6.047	34.962	4.91	0.15	27.517	0.458	1481.	471	474.0	5.550	34.956	5.22	0.16	27.575	0.517	1481.
374	376.0	6.047	34.963	4.92	0.15	27.517	0.460	1481.	473	476.0	5.551	34.957	5.24	0.16	27.575	0.518	1481.
376	378.1	6.026	34.961	4.95	0.14	27.519	0.461	1481.	475	478.0	5.550	34.956	5.27	0.16	27.575	0.519	1481.
377	379.9	6.003	34.961	4.95	0.14	27.522	0.462	1481.	477	479.9	5.550	34.956	5.25	0.15	27.575	0.520	1481.
380	382.0	5.988	34.959	4.94	0.15	27.522	0.463	1481.	478	481.3	5.552	34.956	5.25	0.15	27.575	0.521	1481.
382	384.1	5.986	34.959	4.94	0.16	27.523	0.465	1481.	479	482.1	5.553	34.957	5.27	0.16	27.575	0.522	1481.
384	386.0	5.984	34.960	4.96	0.14	27.523	0.466	1481.	480	482.9	5.550	34.956	5.30	0.16	27.575	0.522	1481.
385	387.8	5.981	34.960	4.97	0.14	27.523	0.467	1481.	481	483.9	5.549	34.955	5.29	0.16	27.574	0.523	1481.
387	390.0	5.970	34.960	4.98	0.15	27.525	0.468	1481.	482	485.0	5.545	34.955	5.28	0.16	27.574	0.523	1481.
390	392.0	5.933	34.956	4.96	0.15	27.527	0.469	1481.	483	486.0	5.543	34.956	5.28	0.16	27.575	0.524	1481.
392	394.2	5.911	34.955	4.96	0.15	27.529	0.471	1481.	484	487.0	5.529	34.956	5.28	0.16	27.577	0.524	1481.
393	395.8	5.901	34.954	5.00	0.14	27.529	0.472	1481.	485	488.0	5.523	34.955	5.27	0.16	27.577	0.525	1481.
395	398.0	5.890	34.954	4.97	0.15	27.530	0.473	1481.	486	489.0	5.519	34.955	5.26	0.15	27.577	0.525	1481.
397	400.0	5.884	34.953	4.98	0.15	27.530	0.474	1481.	487	490.0	5.518	34.955	5.27	0.15	27.578	0.526	1481.
399	402.1	5.878	34.953	4.98	0.15	27.531	0.475	1481.	488	491.1	5.514	34.956	5.28	0.16	27.579	0.527	1481.

SHIP OC	CRUISE 104	STATION 40	DATE 30 SEP 1981	EST 1157	LATITUDE 40°21.6'N	LONGITUDE 67°38.7'W	DEPTH 530		
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DXHT A (10m ² /s ²)	S SPD (m/s)	N (cph)
489	492.0	5.510	34.957	5.30	0.16	27.580	0.527	1481.	1.3
490	493.0	5.508	34.956	5.30	0.16	27.580	0.528	1481.	1.3
491	494.0	5.506	34.956	5.30	0.17	27.580	0.528	1481.	1.3
492	495.0	5.505	34.957	5.30	0.17	27.581	0.529	1481.	1.3
492	495.7	5.505	34.956	5.30	0.16	27.580	0.529	1481.	1.3

SHIP OC	CRUISE 104	STATION 42	DATE 30 SEP 1981	EST 1258	LATITUDE 40°22.9'N	LONGITUDE 67°36.2'W	DEPTH 217		
DEPTH (m)	PRESS (dbar)	TEMP (°C)	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DXHT A (10m ² /s ²)	S SPD (m/s)	N (cph)
4	4.2	16.000	32.750	5.39	0.32	24.018	0.000	1507.	6.8
6	6.2	15.999	32.750	5.38	0.32	24.019	0.008	1507.	6.8
8	8.1	16.000	32.750	5.35	0.32	24.018	0.015	1507.	6.8
10	9.9	16.001	32.750	5.35	0.32	24.018	0.022	1507.	6.8
12	12.1	15.929	32.741	5.30	0.32	24.028	0.031	1507.	6.8
14	14.0	15.662	32.738	5.30	0.32	24.085	0.038	1506.	8.3
16	16.1	15.508	32.738	5.34	0.32	24.119	0.046	1506.	9.4
18	17.8	15.288	32.733	5.34	0.32	24.163	0.052	1505.	10.0
20	20.1	14.794	32.740	5.38	0.32	24.275	0.061	1504.	10.0
22	21.9	14.379	32.762	5.46	0.32	24.380	0.067	1502.	9.8
24	24.0	14.185	32.788	5.48	0.31	24.441	0.075	1502.	9.8
26	25.7	14.158	32.803	5.47	0.30	24.458	0.081	1502.	10.5
28	28.0	14.120	32.815	5.43	0.30	24.475	0.089	1502.	11.2
30	30.0	14.012	32.864	5.46	0.29	24.535	0.095	1501.	11.7
32	31.8	13.855	32.946	5.46	0.27	24.631	0.101	1501.	12.3
34	34.0	13.294	33.094	5.51	0.25	24.859	0.109	1499.	12.7
36	36.0	12.760	33.111	5.52	0.24	24.978	0.115	1498.	13.2
38	38.1	12.385	33.113	5.48	0.22	25.052	0.121	1497.	13.0
40	40.1	12.057	33.104	5.52	0.21	25.106	0.126	1495.	12.2
42	41.8	11.772	33.131	5.50	0.21	25.181	0.131	1494.	10.9
44	44.0	11.032	33.163	5.57	0.21	25.340	0.137	1492.	10.0
46	46.1	10.560	33.137	5.61	0.19	25.402	0.143	1490.	9.3
47	47.7	10.537	33.138	5.57	0.18	25.407	0.147	1490.	9.5
50	50.0	10.457	33.140	5.53	0.18	25.423	0.153	1490.	9.4
52	52.1	10.381	33.138	5.53	0.18	25.434	0.158	1490.	9.6
54	54.0	10.163	33.169	5.53	0.18	25.496	0.163	1489.	10.4
56	56.2	9.189	33.199	5.66	0.16	25.678	0.168	1486.	11.1
57	57.7	8.895	33.177	5.61	0.15	25.708	0.172	1485.	11.6
60	60.0	8.276	33.214	5.60	0.15	25.831	0.177	1482.	11.8
62	62.0	8.209	33.296	5.55	0.14	25.905	0.181	1482.	11.4
64	64.1	8.252	33.391	5.49	0.14	25.973	0.185	1482.	11.0
66	66.0	8.266	33.490	5.49	0.14	26.049	0.189	1483.	10.8
67	67.8	8.349	33.597	5.38	0.13	26.121	0.193	1483.	10.3
70	70.2	8.599	33.739	5.28	0.13	26.194	0.197	1484.	9.8
71	71.9	8.922	33.910	5.23	0.13	26.277	0.200	1486.	9.3
73	73.9	9.089	33.990	5.11	0.14	26.313	0.204	1486.	8.9
76	76.2	9.400	34.108	5.03	0.14	26.355	0.207	1488.	8.5
77	77.9	9.727	34.192	4.96	0.13	26.367	0.210	1489.	8.0
80	80.3	9.854	34.295	4.95	0.13	26.427	0.214	1490.	7.6
82	82.0	10.342	34.469	4.84	0.13	26.479	0.217	1492.	7.8
84	84.1	10.892	34.642	4.74	0.13	26.517	0.220	1494.	8.0
85	85.9	10.864	34.652	4.70	0.13	26.530	0.223	1494.	8.0
87	87.7	10.827	34.672	4.65	0.13	26.552	0.226	1494.	7.9
90	90.1	10.830	34.784	4.60	0.13	26.638	0.229	1494.	7.7
91	91.6	10.188	34.680	4.66	0.13	26.670	0.231	1492.	7.7
94	94.1	10.051	34.686	4.58	0.14	26.699	0.235	1491.	7.6
95	95.9	10.523	34.840	4.52	0.13	26.737	0.237	1493.	7.1
98	98.1	10.540	34.868	4.50	0.13	26.756	0.240	1493.	6.2
99	99.9	11.042	35.041	4.45	0.13	26.801	0.242	1495.	5.6
101	102.0	10.928	35.039	4.44	0.13	26.820	0.245	1495.	5.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	42	30 SEP 1981	1258	40°22.9'N	67°36.2'W	217		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
104	104.3	10.891	35.035	4.44	0.14	26.823	0.248	1495.	4.2
106	106.2	10.867	35.033	4.42	0.13	26.825	0.250	1495.	3.5
107	108.0	10.825	35.026	4.43	0.13	26.828	0.252	1495.	2.8
109	109.9	10.766	35.019	4.41	0.13	26.833	0.255	1494.	2.8
112	112.3	10.713	35.010	4.42	0.13	26.835	0.257	1494.	3.2
113	114.0	10.614	34.994	4.43	0.13	26.841	0.260	1494.	3.7
115	115.9	10.461	34.972	4.45	0.13	26.851	0.262	1493.	4.2
117	117.8	10.493	34.993	4.46	0.13	26.861	0.264	1494.	4.8
119	120.0	10.570	35.032	4.43	0.14	26.878	0.267	1494.	5.2
121	121.8	10.607	35.065	4.42	0.14	26.897	0.269	1494.	5.2
123	124.0	10.605	35.092	4.40	0.14	26.919	0.272	1494.	5.2
126	126.3	10.322	35.071	4.43	0.14	26.952	0.274	1493.	5.0
127	127.9	10.267	35.067	4.39	0.13	26.959	0.276	1493.	4.7
129	130.1	10.228	35.066	4.37	0.14	26.965	0.278	1493.	4.2
131	131.8	10.227	35.074	4.37	0.13	26.971	0.280	1493.	3.8
133	134.1	10.175	35.083	4.36	0.13	26.987	0.283	1493.	3.5
135	136.0	10.116	35.069	4.36	0.13	26.986	0.285	1493.	3.7
137	137.9	10.094	35.072	4.32	0.13	26.993	0.287	1493.	4.0
139	140.1	10.079	35.080	4.31	0.13	27.001	0.289	1493.	4.1
141	142.0	10.097	35.104	4.30	0.13	27.017	0.291	1493.	4.2
143	143.9	10.122	35.133	4.25	0.13	27.035	0.293	1493.	4.1
145	146.0	10.047	35.135	4.27	0.13	27.050	0.296	1493.	3.8
147	148.0	9.966	35.124	4.29	0.13	27.055	0.298	1492.	3.4
149	150.0	9.901	35.118	4.29	0.13	27.061	0.300	1492.	2.9
151	152.3	9.901	35.115	4.29	0.13	27.059	0.302	1492.	2.6
153	154.0	9.903	35.116	4.31	0.14	27.059	0.304	1492.	2.7
155	156.0	9.880	35.116	4.31	0.13	27.064	0.306	1492.	3.0
157	158.0	9.840	35.113	4.31	0.14	27.068	0.308	1492.	3.1
159	160.1	9.785	35.120	4.28	0.15	27.083	0.310	1492.	3.5
161	161.9	9.743	35.125	4.26	0.13	27.094	0.312	1492.	3.7
163	163.9	9.728	35.126	4.23	0.13	27.097	0.314	1492.	4.0
165	166.1	9.685	35.123	4.23	0.13	27.102	0.316	1492.	4.1
167	167.9	9.621	35.124	4.22	0.13	27.113	0.318	1491.	4.0
169	170.0	9.617	35.143	4.20	0.13	27.129	0.320	1491.	4.0
171	172.2	9.519	35.150	4.20	0.13	27.151	0.322	1491.	4.0
173	174.0	9.487	35.145	4.17	0.13	27.153	0.323	1491.	3.8
175	176.3	9.475	35.146	4.17	0.13	27.155	0.326	1491.	3.5
177	177.7	9.431	35.146	4.15	0.13	27.162	0.327	1491.	3.4
179	180.1	9.361	35.146	4.13	0.13	27.174	0.329	1491.	3.5
181	181.8	9.358	35.146	4.14	0.13	27.175	0.331	1491.	4.0
183	184.3	9.314	35.146	4.14	0.13	27.182	0.333	1491.	4.4
185	185.8	9.213	35.142	4.11	0.13	27.195	0.334	1490.	4.5
187	188.0	9.063	35.134	4.11	0.13	27.213	0.336	1490.	4.5
189	190.2	8.852	35.121	4.11	0.13	27.237	0.338	1489.	4.4
191	191.9	8.764	35.119	4.10	0.12	27.249	0.340	1489.	4.2
193	193.9	8.743	35.119	4.08	0.12	27.253	0.341	1489.	3.9
195	196.2	8.694	35.117	4.08	0.12	27.259	0.343	1488.	3.5
197	198.1	8.663	35.114	4.08	0.12	27.262	0.345	1488.	3.1
199	199.9	8.587	35.109	4.09	0.12	27.270	0.346	1488.	2.9
200	201.3	8.559	35.106	4.08	0.12	27.272	0.348	1488.	3.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	43	30 SEP 1981	1354	40°21.1'N	67°32.0'W	550	OC	104	43	30 SEP 1981	1354	40°21.1'N	67°32.0'W	550		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)
3	3.0	16.564	32.768	5.21	0.29	23.904	0.000	1509.	101	102.0	11.584	34.976	4.51	0.13	26.650	0.264	1497.
4	3.8	16.558	32.767	5.14	0.30	23.905	0.003	1509.	103	103.9	11.582	35.006	4.51	0.13	26.674	0.267	1497.
6	5.9	16.560	32.767	5.17	0.29	23.904	0.012	1509.	105	105.9	11.530	35.005	4.49	0.13	26.682	0.270	1497.
8	7.7	16.562	32.766	5.19	0.29	23.903	0.019	1509.	107	108.0	11.496	35.030	4.46	0.13	26.708	0.273	1497.
10	10.2	16.569	32.767	5.20	0.29	23.902	0.029	1509.	109	109.9	11.495	35.078	4.45	0.13	26.745	0.275	1497.
12	11.9	16.571	32.767	5.17	0.29	23.902	0.036	1509.	111	112.0	11.895	35.176	4.36	0.14	26.747	0.278	1499.
14	14.1	16.573	32.767	5.19	0.29	23.901	0.045	1509.	114	114.3	12.023	35.280	4.34	0.13	26.803	0.281	1499.
16	16.0	16.566	32.767	5.20	0.29	23.903	0.052	1509.	115	115.9	11.755	35.233	4.33	0.13	26.817	0.283	1498.
18	18.2	16.564	32.767	5.22	0.29	23.903	0.061	1509.	118	118.2	11.480	35.187	4.34	0.13	26.833	0.286	1497.
20	19.9	16.550	32.766	5.22	0.29	23.905	0.068	1509.	119	119.9	11.427	35.173	4.32	0.13	26.833	0.288	1497.
22	22.3	16.543	32.766	5.22	0.29	23.907	0.077	1509.	121	122.0	10.937	35.095	4.37	0.14	26.861	0.290	1495.
24	23.9	16.512	32.765	5.17	0.29	23.914	0.084	1509.	123	123.9	10.703	35.071	4.39	0.14	26.885	0.293	1494.
26	26.1	16.429	32.767	5.16	0.29	23.934	0.092	1509.	125	126.1	10.574	35.074	4.38	0.14	26.910	0.295	1494.
28	28.0	16.177	32.753	5.14	0.29	23.981	0.100	1508.	127	127.6	10.524	35.072	4.38	0.14	26.918	0.297	1494.
30	29.8	14.840	32.695	5.30	0.29	24.231	0.107	1504.	129	130.1	10.503	35.077	4.37	0.15	26.925	0.300	1494.
32	32.2	13.687	32.732	5.36	0.29	24.500	0.115	1500.	131	131.7	10.494	35.079	4.38	0.14	26.928	0.302	1494.
34	33.7	13.466	32.746	5.38	0.27	24.555	0.121	1500.	133	134.0	10.430	35.087	4.37	0.14	26.946	0.304	1494.
36	36.3	12.733	32.827	5.45	0.26	24.763	0.129	1497.	135	136.2	10.358	35.089	4.38	0.14	26.960	0.307	1493.
38	37.9	12.380	32.855	5.43	0.24	24.852	0.134	1496.	137	138.0	10.323	35.099	4.35	0.14	26.974	0.309	1493.
40	40.2	11.819	32.870	5.50	0.23	24.969	0.141	1494.	139	140.2	10.196	35.094	4.37	0.14	26.992	0.311	1493.
42	41.9	11.081	32.860	5.58	0.21	25.095	0.146	1492.	141	141.9	10.132	35.079	4.37	0.15	26.991	0.313	1493.
44	43.9	10.728	32.893	5.55	0.19	25.183	0.152	1491.	143	144.1	10.082	35.074	4.36	0.16	26.996	0.315	1493.
46	46.0	10.514	32.916	5.50	0.18	25.239	0.157	1490.	145	145.9	10.011	35.059	4.35	0.15	26.996	0.317	1492.
48	47.9	10.147	32.917	5.49	0.17	25.302	0.162	1489.	147	148.1	9.957	35.049	4.35	0.15	26.998	0.320	1492.
50	50.0	9.887	32.928	5.45	0.17	25.353	0.168	1488.	149	149.7	9.935	35.050	4.35	0.15	27.003	0.322	1492.
52	52.3	9.302	32.971	5.50	0.17	25.482	0.174	1486.	151	152.0	9.926	35.053	4.35	0.16	27.006	0.324	1492.
54	53.9	8.983	33.023	5.47	0.16	25.573	0.178	1485.	153	154.0	9.923	35.065	4.33	0.15	27.016	0.326	1492.
56	56.0	8.693	33.053	5.48	0.16	25.642	0.183	1484.	155	156.1	9.925	35.084	4.33	0.16	27.031	0.328	1492.
58	58.2	8.535	33.142	5.45	0.16	25.736	0.188	1483.	157	158.3	9.943	35.101	4.32	0.14	27.041	0.331	1492.
60	60.1	8.462	33.215	5.41	0.15	25.804	0.192	1483.	159	159.6	9.980	35.113	4.27	0.14	27.044	0.332	1493.
62	62.2	8.645	33.392	5.36	0.14	25.915	0.197	1484.	161	162.0	10.093	35.146	4.24	0.15	27.051	0.335	1493.
63	63.8	8.826	33.535	5.32	0.16	25.998	0.200	1485.	163	163.9	10.174	35.192	4.22	0.13	27.072	0.336	1493.
66	66.2	9.106	33.663	5.27	0.15	26.055	0.205	1486.	165	166.0	10.083	35.198	4.19	0.14	27.093	0.339	1493.
68	68.0	9.330	33.746	5.28	0.15	26.084	0.208	1487.	167	168.1	9.952	35.191	4.20	0.13	27.110	0.341	1493.
69	69.8	9.608	33.825	5.23	0.15	26.100	0.212	1488.	169	169.8	9.816	35.193	4.17	0.13	27.135	0.342	1492.
71	71.7	9.917	33.927	5.21	0.15	26.128	0.215	1489.	171	172.0	9.703	35.193	4.14	0.13	27.154	0.344	1492.
74	74.1	9.959	33.937	5.18	0.15	26.129	0.220	1490.	173	174.0	9.674	35.192	4.13	0.13	27.158	0.346	1492.
75	75.8	9.923	33.927	5.18	0.14	26.127	0.223	1489.	175	176.0	9.670	35.194	4.10	0.14	27.160	0.348	1492.
78	78.1	10.636	34.167	5.04	0.15	26.192	0.227	1492.	177	178.0	9.669	35.196	4.11	0.15	27.162	0.350	1492.
79	79.9	11.256	34.442	4.95	0.13	26.295	0.231	1495.	179	180.1	9.674	35.198	4.11	0.13	27.163	0.352	1492.
81	81.9	11.490	34.574	4.86	0.13	26.354	0.234	1496.	181	181.9	9.677	35.199	4.11	0.13	27.163	0.354	1492.
84	84.0	11.446	34.633	4.84	0.15	26.408	0.237	1496.	183	184.0	9.673	35.201	4.09	0.13	27.165	0.356	1492.
85	86.0	11.557	34.703	4.79	0.15	26.443	0.241	1496.	185	186.1	9.643	35.202	4.09	0.14	27.171	0.357	1492.
88	88.2	11.679	34.775	4.68	0.14	26.476	0.244	1497.	187	187.8	9.526	35.190	4.10	0.13	27.181	0.359	1491.
89	89.8	11.614	34.769	4.66	0.13	26.484	0.247	1497.	189	190.0	9.316	35.177	4.08	0.13	27.206	0.361	1491.
92	92.0	11.148	34.768	4.69	0.13	26.568	0.250	1495.	191	192.3	9.179	35.154	4.07	0.13	27.210	0.363	1490.
94	94.2	11.424	34.853	4.61	0.14	26.584	0.253	1496.	193	193.8	9.101	35.141	4.05	0.13	27.212	0.364	1490.
95	95.9	11.545	34.903	4.56	0.13	26.601	0.256	1497.	195	195.9	8.996	35.137	4.00	0.13	27.227	0.366	1490.
98	98.3	11.539	34.927	4.55	0.13	26.620	0.259	1497.	197	198.0	8.810	35.127	4.00	0.13	27.249	0.368	1489.
99	100.0	11.541	34.941	4.54	0.13	26.630	0.262	1497.	199	200.1	8.768	35.116	4.02	0.13	27.247	0.370	1489.

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	43	30 SEP 1981	1354	40°21.1'N	67°32.0'W	550	OC	104	43	30 SEP 1981	1354	40°21.1'N	67°32.0'W	550		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)
201	201.9	8.738	35.116	4.02	0.13	27.251	0.371	1489.	300	301.8	6.281	34.950	4.68	0.13	27.477	0.444	1481.
203	204.1	8.602	35.110	4.02	0.14	27.268	0.373	1488.	302	304.1	6.255	34.947	4.70	0.13	27.478	0.446	1481.
205	206.0	8.573	35.104	4.04	0.13	27.268	0.375	1488.	304	306.2	6.228	34.944	4.73	0.12	27.479	0.447	1481.
207	208.0	8.566	35.104	4.04	0.13	27.269	0.376	1488.	306	308.1	6.225	34.944	4.74	0.13	27.480	0.448	1481.
209	210.0	8.559	35.104	4.03	0.13	27.270	0.378	1488.	308	309.9	6.229	34.945	4.73	0.13	27.480	0.448	1481.
210	211.8	8.552	35.103	4.04	0.13	27.271	0.380	1488.	310	312.0	6.210	34.943	4.72	0.13	27.481	0.451	1481.
213	214.2	8.484	35.099	4.03	0.13	27.278	0.382	1488.	312	314.0	6.211	34.942	4.73	0.12	27.480	0.452	1481.
215	215.9	8.443	35.097	4.05	0.13	27.282	0.383	1488.	314	316.0	6.202	34.944	4.72	0.12	27.482	0.453	1481.
217	218.2	8.372	35.092	4.04	0.12	27.289	0.385	1488.	316	318.1	6.177	34.942	4.75	0.13	27.485	0.455	1481.
219	219.8	8.362	35.092	4.03	0.12	27.291	0.386	1488.	318	320.1	6.157	34.942	4.77	0.13	27.487	0.456	1481.
221	222.0	8.351	35.091	4.01	0.13	27.292	0.388	1488.	320	321.8	6.132	34.941	4.79	0.13	27.489	0.457	1480.
223	224.1	8.342	35.091	4.00	0.13	27.293	0.390	1488.	322	323.9	6.112	34.942	4.78	0.13	27.493	0.458	1480.
224	225.7	8.329	35.090	4.04	0.13	27.295	0.391	1488.	324	326.1	6.076	34.942	4.78	0.13	27.497	0.460	1480.
227	228.1	8.123	35.083	4.05	0.12	27.321	0.393	1487.	326	327.9	6.027	34.942	4.81	0.13	27.503	0.461	1480.
229	230.1	8.021	35.068	4.06	0.12	27.324	0.395	1486.	328	330.2	6.010	34.941	4.81	0.13	27.505	0.462	1480.
231	232.0	7.957	35.058	4.09	0.12	27.326	0.396	1486.	330	331.7	6.006	34.941	4.86	0.13	27.505	0.463	1480.
233	234.0	7.768	35.044	4.15	0.12	27.343	0.398	1485.	332	334.1	6.005	34.941	4.85	0.13	27.506	0.465	1480.
235	236.0	7.652	35.035	4.17	0.13	27.353	0.399	1485.	334	336.1	5.997	34.942	4.85	0.13	27.507	0.466	1480.
237	238.3	7.544	35.026	4.23	0.12	27.362	0.401	1485.	336	338.0	5.985	34.941	4.88	0.13	27.508	0.467	1480.
238	239.8	7.488	35.023	4.27	0.13	27.368	0.402	1484.	338	340.0	5.973	34.940	4.90	0.13	27.509	0.468	1480.
241	242.0	7.399	35.019	4.26	0.12	27.377	0.404	1484.	340	341.9	5.959	34.941	4.89	0.13	27.511	0.470	1480.
243	244.1	7.357	35.015	4.26	0.14	27.380	0.405	1484.	342	344.2	5.924	34.938	4.88	0.13	27.514	0.471	1480.
244	245.8	7.259	35.008	4.30	0.12	27.389	0.406	1484.	344	345.9	5.871	34.938	4.91	0.13	27.521	0.472	1480.
247	248.1	7.185	35.003	4.32	0.13	27.396	0.408	1483.	346	348.0	5.848	34.938	4.90	0.13	27.524	0.473	1480.
249	250.1	7.180	35.004	4.33	0.12	27.397	0.409	1483.	348	349.9	5.834	34.938	4.91	0.13	27.525	0.474	1480.
250	252.0	7.172	35.003	4.35	0.12	27.397	0.411	1483.	350	351.9	5.827	34.938	4.93	0.13	27.526	0.476	1480.
252	253.9	7.169	35.003	4.32	0.12	27.398	0.412	1483.	352	354.1	5.820	34.938	4.97	0.13	27.527	0.477	1480.
254	256.0	7.169	35.003	4.31	0.13	27.398	0.414	1484.	354	356.0	5.815	34.938	4.98	0.13	27.528	0.478	1480.
256	258.3	7.170	35.003	4.32	0.13	27.398	0.415	1484.	355	357.7	5.812	34.938	4.98	0.13	27.528	0.479	1480.
258	259.7	7.168	35.003	4.35	0.12	27.398	0.416	1484.	358	360.0	5.808	34.938	4.95	0.13	27.528	0.480	1480.
260	262.0	7.164	35.002	4.30	0.12	27.398	0.418	1484.	360	362.1	5.793	34.938	4.94	0.13	27.530	0.482	1480.
263	264.2	7.145	35.002	4.31	0.13	27.400	0.419	1484.	361	363.8	5.784	34.937	4.97	0.13	27.531	0.483	1480.
264	265.7	7.124	34.999	4.35	0.12	27.401	0.421	1483.	364	366.1	5.780	34.937	4.98	0.13	27.531	0.484	1480.
266	268.1	7.074	34.998	4.33	0.12	27.407	0.422	1483.	366	368.0	5.782	34.937	5.00	0.13	27.531	0.485	1480.
268	270.1	6.944	34.985	4.36	0.12	27.415	0.424	1483.	368	369.9	5.754	34.937	5.00	0.13	27.535	0.486	1480.
270	271.9	6.670	34.964	4.47	0.12	27.436	0.425	1482.	369	371.9	5.733	34.936	5.00	0.13	27.536	0.487	1480.
272	274.0	6.563	34.962	4.51	0.12	27.449	0.426	1481.	372	374.2	5.716	34.936	5.01	0.13	27.539	0.489	1480.
274	276.0	6.535	34.959	4.52	0.12	27.450	0.428	1481.	374	375.9	5.709	34.936	5.02	0.13	27.539	0.490	1480.
276	278.1	6.523	34.959	4.57	0.12	27.452	0.429	1481.	376	377.9	5.703	34.936	5.03	0.13	27.540	0.491	1480.
278	280.0	6.516	34.959	4.62	0.12	27.453	0.430	1481.	378	380.0	5.700	34.936	5.03	0.13	27.540	0.492	1480.
280	282.0	6.502	34.958	4.62	0.12	27.454	0.432	1481.	380	382.3	5.695	34.937	5.03	0.13	27.541	0.494	1480.
282	284.2	6.412	34.951	4.61	0.12	27.460	0.433	1481.	381	383.8	5.696	34.936	5.07	0.13	27.542	0.496	1480.
284	285.9	6.388	34.951	4.64	0.12	27.464	0.434	1481.	383	386.0	5.686	34.936	5.07	0.13	27.542	0.497	1480.
286	287.8	6.391	34.952	4.61	0.12	27.464	0.435	1481.	386	388.1	5.682	34.936	5.05	0.14	27.542	0.497	1480.
288	290.0	6.409	34.956	4.60	0.13	27.465	0.437	1481.	387	389.7	5.677	34.936	5.07	0.13	27.543	0.498	1480.
290	292.0	6.405	34.954	4.63	0.13	27.464	0.438	1481.	389	392.0	5.674	34.936	5.10	0.12	27.543	0.499	1480.
292	293.7	6.405	34.955	4.64	0.13	27.464	0.439	1481.	392	394.2	5.668	34.935	5.10	0.13	27.544	0.501	1480.
294	296.2	6.411	34.957	4.62	0.13	27.465	0.441	1481.	393	396.0	5.665	34.936	5.12	0.14	27.544	0.502	1480.
296	298.2	6.392	34.956	4.65	0.13	27.467	0.442	1481.	396	398.2	5.664	34.934	5.13	0.14	27.544	0.503	1480.
298	300.1	6.294	34.951	4.68	0.13	27.476	0.443	1481.	397	399.8	5.660	34.935	5.11	0.13	27.545	0.504	1480.

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH				
OC	104	43	30 SEP 1981	1354	40°21.1'N	67°32.0'W	550				
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT	A	S	SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)		(cph)	
399	402.0	5.659	34.935	5.09	0.14	27.544	0.505	1480.		0.5	
402	404.2	5.661	34.936	5.07	0.13	27.545	0.506	1480.		0.5	
403	406.1	5.662	34.936	5.07	0.13	27.545	0.507	1480.		0.5	
405	407.9	5.663	34.936	5.08	0.13	27.545	0.509	1480.		0.4	
408	410.2	5.659	34.935	5.09	0.13	27.545	0.510	1480.		0.4	
409	411.6	5.658	34.935	5.09	0.13	27.545	0.511	1480.		0.3	
411	414.0	5.659	34.936	5.07	0.13	27.545	0.512	1480.		0.4	
414	416.3	5.657	34.936	5.08	0.14	27.545	0.513	1480.		0.4	
415	417.9	5.658	34.935	5.08	0.13	27.545	0.514	1480.		0.6	
417	420.1	5.658	34.935	5.07	0.13	27.544	0.516	1480.		1.0	
419	422.1	5.656	34.936	5.10	0.13	27.546	0.517	1480.		1.6	
421	423.9	5.656	34.936	5.12	0.13	27.545	0.518	1480.		2.0	
423	425.9	5.646	34.936	5.11	0.13	27.547	0.519	1480.		2.3	
425	428.0	5.613	34.938	5.11	0.13	27.553	0.520	1480.		2.5	
427	430.2	5.530	34.934	5.14	0.13	27.560	0.522	1480.		2.5	
429	431.9	5.501	34.936	5.20	0.14	27.565	0.523	1480.		2.4	
431	434.1	5.484	34.937	5.19	0.14	27.567	0.524	1480.		2.4	
433	435.8	5.466	34.935	5.21	0.14	27.569	0.525	1480.		2.2	
435	438.0	5.468	34.935	5.23	0.13	27.568	0.526	1480.		2.0	
437	440.0	5.448	34.936	5.23	0.13	27.572	0.527	1480.		1.9	
439	441.8	5.404	34.936	5.27	0.14	27.577	0.528	1480.		1.9	
441	444.0	5.377	34.935	5.28	0.17	27.579	0.529	1479.		1.8	
443	446.1	5.385	34.935	5.26	0.15	27.579	0.531	1480.		1.7	
445	447.8	5.374	34.936	5.29	0.14	27.581	0.531	1480.		1.5	
447	450.1	5.358	34.936	5.30	0.15	27.582	0.533	1479.		1.2	
449	452.1	5.356	34.936	5.31	0.14	27.582	0.534	1480.		1.1	
451	454.0	5.358	34.936	5.28	0.14	27.582	0.535	1480.		1.1	
453	456.0	5.352	34.937	5.29	0.15	27.583	0.536	1480.		1.0	
455	458.0	5.349	34.936	5.29	0.14	27.584	0.537	1480.		0.9	
457	460.1	5.344	34.936	5.29	0.14	27.584	0.538	1480.		1.0	
458	461.3	5.337	34.936	5.28	0.14	27.585	0.539	1480.		1.1	
459	462.1	5.339	34.937	5.31	0.14	27.585	0.539	1480.		1.2	
460	463.1	5.336	34.936	5.33	0.14	27.585	0.540	1480.		1.3	
461	463.9	5.326	34.936	5.32	0.14	27.586	0.540	1480.		1.3	
462	465.0	5.321	34.936	5.31	0.14	27.587	0.541	1480.		1.2	
463	466.0	5.316	34.936	5.30	0.14	27.587	0.542	1480.		1.2	
464	467.0	5.314	34.936	5.29	0.14	27.588	0.542	1480.		1.0	
465	468.0	5.312	34.936	5.30	0.14	27.588	0.543	1480.		0.7	
466	469.0	5.313	34.936	5.31	0.14	27.588	0.543	1480.		0.5	
467	469.9	5.313	34.936	5.32	0.14	27.588	0.544	1480.		0.6	
468	471.0	5.315	34.936	5.32	0.14	27.587	0.544	1480.		0.9	
469	471.9	5.316	34.935	5.33	0.14	27.587	0.545	1480.		1.1	
470	473.0	5.312	34.936	5.33	0.14	27.588	0.545	1480.		1.3	
471	474.0	5.298	34.935	5.33	0.15	27.589	0.546	1480.		1.4	
472	475.1	5.293	34.936	5.34	0.14	27.590	0.547	1480.		1.5	
473	475.9	5.290	34.935	5.36	0.14	27.590	0.547	1480.		1.5	
474	477.0	5.287	34.936	5.36	0.14	27.591	0.548	1480.		1.5	
475	478.1	5.279	34.936	5.36	0.14	27.592	0.548	1480.		1.5	
475	478.6	5.275	34.935	5.37	0.14	27.591	0.548	1480.		1.5	

STA 44 DAY: 30 TIME: 1445

DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP
(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)
0.0	16.5	42.8	12.8	84.1	8.2	123.0	11.1								
1.0	16.5	42.8	12.7	65.1	8.2	89.2	10.8								
2.9	16.5	43.8	12.6	66.0	8.2	90.2	11.0								
5.8	16.5	43.8	12.5	67.0	8.2	90.2	11.1								
8.8	16.5	43.8	12.4	67.0	8.2	90.2	11.1								
11.7	16.5	43.8	12.4	68.0	8.3	91.2	11.2								
13.6	16.5	44.7	12.1	69.0	8.3	91.2	11.2								
16.6	16.5	44.7	11.9	69.9	8.3	92.1	11.3								
20.4	16.5	44.7	11.8	69.9	8.4	92.1	11.3								
24.3	16.5	45.7	11.7	70.9	8.4	93.1	11.4								
27.3	16.4	45.7	11.6	70.9	8.5	94.1	11.4								
27.3	16.4	45.7	11.5	71.9	8.5	95.0	11.4								
28.2	16.4	45.7	11.4	72.8	8.5	96.0	11.4								
29.2	16.4	46.7	11.3	74.8	8.5	96.0	11.5								
30.2	16.3	46.7	11.3	74.8	8.5	97.0	11.5								
31.1	16.3	46.7	11.2	75.7	8.5	97.9	11.5								
31.1	16.2	47.6	11.2	76.7	8.5	98.9	11.5								
32.1	16.2	48.6	11.1	77.7	8.5	99.9	11.5								
33.1	16.1	49.6	11.0	77.7	8.5	99.9	11.4								
33.1	16.0	49.6	10.9	78.6	8.7	100.8	11.4								
34.1	15.9	49.6	10.8	78.6	8.7	101.8	11.4								
34.1	15.7	50.6	10.7	79.6	8.8	101.8	11.4								
35.0	15.6	50.6	10.7	80.6	8.8	102.8	11.3								
35.0	15.5	50.6	10.6	80.6	8.8	103.7	11.4								
35.0	15.4	51.5	10.5	81.5	8.9	104.7	11.4								
36.0	15.3	52.5	10.4	82.5	9.0	104.7	11.4								
36.0	15.1	52.5	10.3	82.5	9.1	104.7	11.4								
36.0	15.1	52.5	10.2	82.5	9.1	105.6	11.5								
36.0	15.0	53.5	10.1	83.5	9.1	105.6	11.5								
36.0	14.8	53.5	10.0	83.5	9.2	105.6	11.3								
37.0	14.7	53.5	10.0	83.5	9.2	106.6	11.3								
37.0	14.5	54.4	9.9	84.4	9.2	106.6	11.3								
37.0	14.5	54.4	9.9	84.4	9.2	106.6	11.3								
37.9	14.4	55.4	9.7	85.4	9.3	108.5	11.2								
37.9	14.2	56.4	9.5	86.4	9.4	108.5	11.2								
37.9	14.1	56.4	9.3	86.4	9.5	112.4	11.2								
37.9	14.0	56.4	9.3	87.3	9.5	112.4	11.2								
38.9	13.9	56.4	9.2	87.3	9.6	113.4	11.2								
38.9	13.8	56.4	9.1	88.3	9.7	115.3	11.1								
38.9	13.7	56.4	9.0	88.3	9.8	116.2	11.2								
38.9	13.7	56.4	8.8	88.3	9.8	116.2	11.2								
39.9	13.6	57.3	8.7	88.3	9.9	117.2	11.2								
39.9	13.5	57.3	8.7	88.3	10.0	118.2	11.2								
40.9	13.4	58.3	8.5	89.2	10.1	119.1	11.2								
40.9	13.3	58.3	8.5	88.3	10.2	120.1	11.3								
40.9	13.3	59.3	8.4	88.3	10.3	120.1	11.3								
41.8	13.2	60.2	8.4	89.2	10.4	121.1	11.3								
41.8	13.1	61.2	8.3	89.2	10.5	122.0	11.2								
41.8	13.0	61.2	8.3	89.2	10.6	122.0	11.2								
42.8	12.9	63.1	8.3	89.2	10.7	123.0	11.1								

STA 44			DAY: 30			TIME: 1445			SHIP		CRUISE		STATION		DATE		EST		LATITUDE		LONGITUDE		DEPTH	
DEPTH (m)		TEMP (°C)	DEPTH (m)		TEMP (°C)	DEPTH (m)		TEMP (°C)	OC	104	45	SALIN (psu)	OXY (ml/l)	ATN (m ⁻¹)	SIGT (gm/cm ³)	DVHT A (10m ² /s ²)	S SPD (m/s)	N (cph)						
183.4	9.5	240.5	7.6	323.6	6.4	424.6	5.8	2	2.5	15.887		32.802	5.44	0.36	24.084	0.000	1507.	0.4						
184.3	9.5	241.5	7.6	323.6	6.4	427.4	5.8	4	4.0	15.889		32.803	5.39	0.35	24.084	0.006	1507.	0.4						
185.3	9.4	243.4	7.5	325.5	6.4	429.2	5.7	6	5.8	15.886		32.803	5.39	0.35	24.085	0.013	1507.	0.4						
185.3	9.3	244.3	7.5	327.4	6.3	431.1	5.7	8	8.0	15.894		32.804	5.38	0.35	24.084	0.021	1507.	0.4						
186.2	9.3	245.2	7.5	329.3	6.2	433.9	5.7	10	10.0	15.893		32.804	5.44	0.35	24.084	0.028	1507.	0.4						
187.2	9.2	246.2	7.5	329.3	6.2	435.7	5.7	12	11.9	15.889		32.803	5.50	0.35	24.084	0.036	1507.	0.5						
188.1	9.2	247.1	7.5	330.2	6.1	437.6	5.7	14	14.0	15.889		32.803	5.45	0.35	24.084	0.044	1507.	0.8						
188.1	9.1	248.1	7.4	333.0	6.1	439.4	5.6	16	16.2	15.887		32.803	5.45	0.35	24.084	0.052	1507.	1.3						
189.1	9.1	249.0	7.4	334.9	6.1	440.4	5.5	18	18.0	15.889		32.804	5.49	0.35	24.085	0.059	1507.	1.7						
191.0	9.1	250.9	7.3	334.9	6.1	441.3	5.5	20	20.0	15.890		32.805	5.49	0.35	24.085	0.067	1507.	2.0						
192.8	9.1	252.8	7.3	336.8	6.1			22	22.0	15.888		32.809	5.44	0.35	24.089	0.075	1507.	2.8						
192.9	9.1	254.7	7.3	339.6	6.0			24	24.1	15.876		32.814	5.47	0.35	24.096	0.082	1507.	4.4						
192.9	9.0	257.6	7.3	341.5	6.0			26	25.9	15.869		32.819	5.52	0.35	24.101	0.090	1507.	6.4						
193.4	9.0	260.4	7.3	343.4	6.0			28	28.0	15.867		32.821	5.46	0.35	24.103	0.097	1507.	9.5						
194.8	8.9	262.3	7.3	345.2	6.0			30	30.2	15.794		32.839	5.44	0.34	24.133	0.106	1507.	11.7						
196.7	8.9	264.2	7.3	347.1	6.0			32	31.9	15.584		32.888	5.50	0.33	24.217	0.112	1507.	13.5						
197.7	8.9	266.1	7.3	349.9	6.0			34	34.0	15.171		32.943	5.46	0.33	24.350	0.120	1505.	14.9						
198.6	8.9	267.0	7.2	352.7	6.0			36	36.1	13.741		32.987	5.61	0.28	24.686	0.127	1501.	15.9						
198.6	8.8	268.9	7.2	354.6	6.0			38	37.9	13.075		32.959	5.71	0.27	24.798	0.133	1499.	16.2						
199.6	8.7	270.8	7.2	358.4	6.0			40	39.9	12.374		32.961	5.76	0.25	24.936	0.139	1496.	15.8						
200.5	8.7	272.7	7.2	360.2	6.0			42	42.0	12.123		33.144	5.70	0.24	25.125	0.145	1496.	14.7						
201.5	8.6	273.7	7.2	362.1	6.0			44	44.0	11.525		33.180	5.73	0.22	25.264	0.151	1494.	13.0						
202.5	8.6	274.6	7.1	364.9	6.0			46	46.0	10.999		33.190	5.76	0.21	25.367	0.156	1492.	12.0						
204.4	8.5	274.6	7.1	367.7	6.0			48	47.8	10.715		33.214	5.78	0.21	25.436	0.160	1491.	11.0						
206.3	8.5	275.6	7.1	369.6	6.0			50	50.0	10.475		33.198	5.76	0.21	25.465	0.166	1490.	9.9						
207.2	8.4	277.4	7.1	372.4	6.0			52	52.1	10.343		33.191	5.75	0.20	25.482	0.171	1490.	9.3						
208.2	8.4	279.3	7.0	375.2	6.0			54	54.0	9.872		33.175	5.74	0.19	25.549	0.176	1488.	9.7						
210.1	8.4	280.3	7.0	378.0	6.0			56	56.0	9.319		33.172	5.71	0.19	25.637	0.181	1486.	10.2						
211.0	8.3	281.2	6.9	381.7	6.0			58	58.0	9.260		33.197	5.67	0.18	25.666	0.185	1486.	10.6						
212.9	8.3	283.1	6.9	384.5	5.9			60	60.2	9.046		33.249	5.69	0.17	25.741	0.190	1485.	10.7						
214.8	8.4	285.0	6.9	386.4	5.9			61	61.6	8.579		33.351	5.65	0.17	25.893	0.194	1484.	10.5						
215.8	8.3	285.9	6.9	389.2	5.9			64	64.0	8.445		33.404	5.60	0.17	25.955	0.199	1483.	10.0						
217.7	8.3	287.8	6.9	392.0	5.9			66	66.1	8.422		33.433	5.61	0.16	25.981	0.203	1483.	9.6						
218.6	8.3	290.7	6.8	393.9	5.9			67	67.7	8.401		33.484	5.55	0.16	26.024	0.206	1483.	9.1						
220.5	8.3	292.6	6.8	396.7	5.9			70	69.9	8.377		33.555	5.47	0.16	26.083	0.210	1483.	8.5						
222.4	8.2	295.4	6.8	398.5	5.9			72	72.0	8.400		33.596	5.40	0.17	26.112	0.214	1483.	8.6						
224.4	8.2	296.3	6.8	399.5	5.9			74	74.2	8.557		33.692	5.38	0.16	26.163	0.219	1484.	8.8						
225.3	8.2	298.2	6.8	400.4	5.9			75	75.9	8.811		33.825	5.30	0.16	26.228	0.222	1485.	8.7						
226.3	8.2	301.0	6.8	402.3	5.9			78	78.0	8.915		33.906	5.23	0.16	26.276	0.225	1486.	8.5						
228.2	8.1	302.9	6.8	404.1	5.9			79	79.9	8.936		33.954	5.20	0.16	26.309	0.229	1486.	8.2						
229.1	8.1	304.8	6.8	405.1	5.9			82	82.0	9.123		34.078	5.12	0.16	26.377	0.232	1487.	7.8						
231.0	8.0	307.6	6.7	406.9	5.9			84	84.2	9.224		34.133	5.10	0.16	26.404	0.236	1487.	7.0						
232.0	8.0	309.5	6.7	409.7	5.9			85	85.8	9.293		34.176	5.07	0.16	26.426	0.238	1488.	6.2						
232.9	7.9	311.4	6.7	411.6	5.9			88	88.1	9.386		34.226	5.05	0.16	26.450	0.242	1488.	5.4						
233.9	7.9	313.3	6.7	413.4	5.9			89	89.7	9.483		34.272	5.04	0.16	26.470	0.245	1489.	4.5						
235.8	7.9	315.2	6.6	414.4	5.8			91	92.0	9.556		34.286	5.01	0.17	26.469	0.248	1489.	3.9						
236.7	7.8	316.1	6.6	416.2	5.8			94	94.3	9.624		34.303	5.00	0.15	26.471	0.252	1489.	3.7						
237.7	7.8	318.0	6.5	418.1	5.8			95	95.8	9.643		34.310	5.01	0.16	26.473	0.254	1489.	4.4						
239.6	7.7	320.8	6.5	419.9	5.8			97	97.9	9.709		34.341	4.96	0.15	26.487	0.257	1490.	5.9						
240.5	7.6	321.8	6.5	422.7	5.8			100	100.1	9.834		34.377	4.93	0.15	26.494	0.261	1490.	7.2						

STA 44 DAY: 30 TIME: 1445

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
183.4	9.5	240.5	7.6	323.6	6.4	424.6	5.8
184.3	9.5	241.5	7.6	323.6	6.4	427.4	5.8
185.3	9.4	243.4	7.5	325.5	6.4	429.2	5.7
185.3	9.3	244.3	7.5	327.4	6.3	431.1	5.7
186.2	9.3	245.2	7.5	329.3	6.2	433.9	5.7
187.2	9.2	246.2	7.5	329.3	6.2	435.7	5.7
188.1	9.2	247.1	7.5	330.2	6.1	437.6	5.7
188.1	9.1	248.1	7.4	333.0	6.1	439.4	5.6
189.1	9.1	249.0	7.4	334.9	6.1	440.4	5.5
191.0	9.1	250.9	7.3	334.9	6.1	441.3	5.5
192.0	9.1	252.8	7.3	336.8	6.1		
192.9	9.1	254.7	7.3	339.6	6.0		
192.9	9.0	257.6	7.3	341.5	6.0		
193.9	9.0	260.4	7.3	343.4	6.0		
194.8	8.9	262.3	7.3	345.2	6.0		
196.7	8.9	264.2	7.3	347.1	6.0		
197.7	8.9	266.1	7.3	349.9	6.0		
198.6	8.9	267.0	7.2	352.7	6.0		
198.6	8.8	268.9	7.2	354.6	6.0		
199.6	8.7	270.8	7.2	358.4	6.0		
200.5	8.7	272.7	7.2	360.2	6.0		
201.5	8.6	273.7	7.2	362.1	6.0		
202.5	8.6	274.6	7.1	364.9	6.0		
204.4	8.5	274.6	7.1	367.7	6.0		
206.3	8.5	275.6	7.1	369.6	6.0		
207.2	8.4	277.4	7.1	372.4	6.0		
208.2	8.4	279.3	7.0	375.2	6.0		
210.1	8.4	280.3	7.0	378.0	6.0		
211.0	8.3	281.2	6.9	381.7	6.0		
212.9	8.3	283.1	6.9	384.5	5.9		
214.8	8.4	285.0	6.9	386.4	5.9		
215.8	8.3	285.9	6.9	389.2	5.9		
217.7	8.3	287.8	6.9	392.0	5.9		
218.6	8.3	290.7	6.8	393.9	5.9		
220.5	8.3	292.6	6.8	396.7	5.9		
222.4	8.2	295.4	6.8	398.5	5.9		
224.4	8.2	296.3	6.8	399.5	5.9		
225.3	8.2	298.2	6.8	400.4	5.9		
226.3	8.2	301.0	6.8	402.3	5.9		
228.2	8.1	302.9	6.8	404.1	5.9		
229.1	8.1	304.8	6.8	405.1	5.9		
231.0	8.0	307.6	6.7	406.9	5.9		
232.0	8.0	309.5	6.7	409.7	5.9		
232.9	7.9	311.4	6.7	411.6	5.9		
233.9	7.9	313.3	6.7	413.4	5.9		
235.8	7.9	315.2	6.6	414.4	5.8		
236.7	7.8	316.1	6.6	416.2	5.8		
237.7	7.8	318.0	6.5	418.1	5.8		
239.6	7.7	320.8	6.5	419.9	5.8		
240.5	7.6	321.8	6.5	422.7	5.8		

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	45	30 SEP 1981	1508	40°23.1'N	67°32.7'W	245		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
101	101.8	9.966	34.437	4.87	0.16	26.518	0.263	1491.	8.1
103	104.0	10.110	34.555	4.79	0.16	26.586	0.267	1491.	8.5
105	106.0	10.162	34.697	4.74	0.16	26.688	0.270	1492.	8.7
107	107.8	10.086	34.738	4.72	0.16	26.733	0.272	1492.	8.4
109	110.0	10.110	34.795	4.69	0.16	26.774	0.275	1492.	7.7
111	112.0	10.111	34.825	4.67	0.16	26.797	0.277	1492.	6.5
113	114.0	10.090	34.841	4.64	0.16	26.813	0.280	1492.	5.1
116	116.3	10.084	34.847	4.64	0.16	26.819	0.283	1492.	4.3
117	117.8	10.067	34.853	4.64	0.16	26.826	0.285	1492.	3.5
119	119.9	10.065	34.860	4.61	0.16	26.832	0.287	1492.	3.3
121	122.1	10.069	34.863	4.60	0.16	26.834	0.290	1492.	3.5
123	123.9	10.083	34.871	4.60	0.16	26.837	0.292	1492.	3.8
125	125.9	10.121	34.892	4.57	0.16	26.847	0.295	1492.	4.0
128	128.3	10.165	34.925	4.57	0.16	26.865	0.298	1492.	4.2
129	129.8	10.173	34.948	4.55	0.16	26.882	0.299	1493.	4.4
131	132.0	10.167	34.963	4.54	0.16	26.895	0.302	1493.	4.5
133	134.1	10.165	34.971	4.53	0.16	26.901	0.304	1493.	4.6
135	135.8	10.170	34.980	4.51	0.17	26.908	0.306	1493.	4.6
137	138.0	10.162	35.005	4.49	0.16	26.929	0.309	1493.	4.7
139	140.2	10.180	35.033	4.49	0.16	26.947	0.311	1493.	4.7
141	141.9	10.292	35.070	4.45	0.16	26.957	0.313	1493.	4.8
143	144.1	10.095	35.054	4.46	0.16	26.978	0.316	1493.	4.7
145	146.0	10.015	35.054	4.47	0.16	26.992	0.318	1492.	4.6
147	147.9	10.091	35.077	4.42	0.16	26.997	0.320	1493.	4.8
149	150.1	10.025	35.082	4.40	0.16	27.012	0.322	1492.	4.9
151	151.6	9.922	35.069	4.38	0.17	27.020	0.324	1492.	4.9
153	154.0	9.805	35.072	4.36	0.16	27.042	0.326	1492.	5.0
155	156.2	9.724	35.098	4.37	0.15	27.076	0.329	1492.	4.9
157	158.0	9.756	35.111	4.36	0.15	27.081	0.330	1492.	4.7
159	160.0	9.765	35.126	4.34	0.15	27.091	0.332	1492.	4.6
161	161.9	9.717	35.132	4.33	0.16	27.104	0.334	1492.	4.3
163	164.3	9.704	35.134	4.31	0.15	27.108	0.337	1492.	4.2
165	165.9	9.678	35.142	4.27	0.15	27.118	0.338	1492.	4.7
167	168.0	9.584	35.150	4.27	0.15	27.140	0.340	1491.	4.9
169	170.1	9.529	35.149	4.24	0.15	27.148	0.342	1491.	4.9
171	171.9	9.422	35.146	4.21	0.15	27.164	0.344	1491.	4.8
173	174.2	9.191	35.144	4.24	0.15	27.200	0.346	1490.	4.5
175	175.8	9.140	35.142	4.23	0.15	27.207	0.347	1490.	4.1
177	178.1	9.140	35.142	4.20	0.15	27.207	0.350	1490.	4.1
179	180.0	9.135	35.143	4.18	0.15	27.208	0.351	1490.	4.1
181	182.1	9.092	35.139	4.16	0.15	27.213	0.353	1490.	3.9
183	183.8	8.978	35.132	4.15	0.15	27.226	0.355	1489.	4.0
185	186.0	8.775	35.121	4.17	0.14	27.249	0.356	1489.	4.1
187	188.0	8.618	35.112	4.19	0.15	27.267	0.358	1488.	3.9
189	190.0	8.573	35.108	4.17	0.17	27.271	0.360	1488.	3.6
191	192.0	8.568	35.108	4.17	0.15	27.272	0.361	1488.	3.0
193	194.2	8.552	35.107	4.17	0.15	27.274	0.363	1488.	2.3
195	195.9	8.523	35.101	4.16	0.16	27.274	0.365	1488.	1.8
197	198.0	8.470	35.101	4.15	0.16	27.281	0.366	1488.	1.7
199	200.3	8.468	35.101	4.16	0.15	27.282	0.368	1488.	1.6

STA 46				DAY: 30		TIME: 1604		SHIP OC	CRUISE 104	STATION 47	DATE		EST	LATITUDE	LONGITUDE	DEPTH
DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP				30 SEP 1981	1629				
(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD
								(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)
0.0	15.0	35.0	11.5	84.4	8.3	150.8	10.0	2	2.2	14.626	32.703	5.58	0.48	24.283	0.000	1503.
0.0	14.9	36.0	11.3	86.4	8.4	152.7	10.0	4	3.9	14.627	32.704	5.55	0.46	24.283	0.006	1503.
1.0	14.9	36.0	11.2	88.3	8.4	152.7	10.0	6	6.0	14.627	32.703	5.54	0.42	24.282	0.014	1503.
1.9	15.0	37.0	11.2	89.2	8.4	154.7	10.0	8	8.1	14.636	32.702	5.54	0.42	24.280	0.021	1503.
3.9	15.0	37.0	11.1	90.2	8.4	156.6	10.0	10	10.0	14.638	32.702	5.56	0.42	24.279	0.028	1503.
4.9	15.0	37.0	11.0	91.2	8.4	158.5	10.0	12	11.9	14.633	32.700	5.58	0.43	24.279	0.035	1503.
6.8	15.0	37.9	10.9	91.2	8.5	159.4	10.0	14	14.0	14.577	32.702	5.59	0.41	24.292	0.043	1503.
8.8	15.0	37.9	10.8	93.1	8.5	160.4	9.9	16	16.2	14.596	32.702	5.57	0.42	24.288	0.051	1503.
10.7	15.0	38.9	10.6	94.1	8.5	162.3	9.9	18	18.1	14.606	32.702	5.59	0.45	24.286	0.058	1503.
12.7	15.0	38.9	10.5	94.1	8.6	163.3	9.9	20	20.0	14.625	32.702	5.53	0.44	24.282	0.065	1503.
14.6	15.0	38.9	10.3	95.0	8.7	164.2	9.8	22	22.2	14.622	32.703	5.46	0.42	24.283	0.073	1503.
16.6	15.0	38.9	10.2	95.0	8.8	165.2	9.8	24	23.7	14.506	32.708	5.52	0.40	24.312	0.078	1503.
18.5	15.0	39.9	10.0	96.0	8.9	166.2	9.8	26	26.0	14.182	32.710	5.49	0.38	24.381	0.086	1502.
20.4	15.0	39.9	10.0	97.9	8.9	167.1	9.7	28	28.0	13.843	32.724	5.54	0.37	24.462	0.093	1501.
21.4	15.0	39.9	9.8	99.9	9.0	169.0	9.7	30	30.0	13.727	32.727	5.53	0.36	24.488	0.100	1500.
22.4	15.0	39.9	9.7	100.8	9.0	170.9	9.7	32	32.0	13.623	32.732	5.52	0.36	24.513	0.107	1500.
24.3	14.9	40.9	9.6	101.8	9.0	171.9	9.7	34	34.3	13.526	32.731	5.57	0.35	24.531	0.115	1500.
25.3	14.9	40.9	9.5	103.7	9.1	175.7	9.7	36	35.8	13.424	32.745	5.65	0.34	24.563	0.120	1500.
25.3	14.8	40.9	9.4	104.7	9.1	177.6	9.6	38	38.0	13.291	32.746	5.65	0.34	24.590	0.127	1499.
26.3	14.8	40.9	9.4	104.7	9.2	179.5	9.6	40	40.1	13.094	32.751	5.65	0.33	24.633	0.134	1498.
27.3	14.8	41.8	9.2	105.6	9.2	180.5	9.5	42	42.1	13.092	32.740	5.61	0.33	24.625	0.141	1498.
29.2	14.8	41.8	9.2	107.6	9.3	181.5	9.5	44	43.9	12.250	32.771	5.57	0.29	24.812	0.147	1496.
29.2	14.7	42.8	9.1	109.5	9.3	182.4	9.4	46	46.1	10.449	32.776	5.80	0.23	25.141	0.153	1489.
30.2	14.6	43.8	9.0	110.5	9.3			48	48.1	9.868	32.789	5.86	0.21	25.248	0.159	1487.
30.2	14.5	43.8	9.0	111.4	9.4			50	49.9	9.880	32.826	5.76	0.21	25.275	0.164	1488.
31.1	14.3	44.7	8.9	113.4	9.5			52	52.1	9.650	32.853	5.68	0.20	25.334	0.170	1487.
31.1	14.2	46.7	8.9	114.3	9.6			54	53.9	9.349	32.888	5.59	0.22	25.410	0.174	1486.
31.1	14.1	47.6	8.8	115.3	9.7			56	56.1	9.018	32.976	5.59	0.19	25.531	0.180	1485.
31.1	14.0	48.6	8.8	116.2	9.7			57	57.8	8.857	33.012	5.54	0.18	25.584	0.184	1484.
31.1	13.9	50.6	8.8	117.2	9.7			60	60.1	8.581	33.079	5.55	0.18	25.679	0.189	1483.
32.1	13.7	51.5	8.8	119.1	9.8			62	61.9	8.500	33.092	5.55	0.18	25.701	0.193	1483.
32.1	13.6	52.5	8.7	120.1	9.8			64	63.9	8.491	33.095	5.47	0.19	25.705	0.198	1483.
32.1	13.5	53.5	8.6	122.0	9.8			66	66.1	8.483	33.098	5.49	0.18	25.709	0.203	1483.
32.1	13.4	54.4	8.5	124.9	9.9			67	67.8	8.470	33.109	5.47	0.18	25.719	0.207	1483.
32.1	13.3	54.4	8.4	125.9	9.9			70	70.0	8.452	33.164	5.42	0.20	25.765	0.212	1483.
33.1	13.1	56.4	8.4	127.8	9.9			72	72.0	8.331	33.242	5.42	0.18	25.844	0.221	1483.
33.1	13.0	57.3	8.3	128.7	9.9			74	74.1	8.295	33.290	5.43	0.18	25.888	0.221	1483.
33.1	12.9	59.3	8.3	129.7	9.9			75	75.9	8.288	33.318	5.44	0.19	25.910	0.225	1483.
33.1	12.8	60.2	8.3	131.6	9.9			78	77.9	8.306	33.341	5.39	0.19	25.926	0.229	1483.
33.1	12.7	62.2	8.3	133.5	10.0			80	80.0	8.302	33.371	5.40	0.19	25.950	0.233	1483.
33.1	12.5	65.1	8.3	134.5	10.0			82	82.1	8.326	33.406	5.41	0.18	25.974	0.237	1483.
34.1	12.4	67.0	8.3	136.4	10.0			83	83.8	8.355	33.439	5.39	0.18	25.995	0.241	1483.
34.1	12.3	69.9	8.3	137.4	10.0			85	86.0	8.370	33.452	5.33	0.18	26.003	0.245	1483.
34.1	12.2	71.9	8.3	139.3	10.0			88	88.1	8.385	33.467	5.34	0.19	26.013	0.249	1483.
34.1	12.1	73.8	8.3	140.3	10.0			90	90.3	8.498	33.556	5.32	0.18	26.066	0.254	1484.
34.1	12.1	74.8	8.3	142.2	10.0			91	91.7	8.638	33.678	5.20	0.20	26.140	0.257	1485.
35.0	12.0	76.7	8.3	143.1	10.1			93	93.9	8.803	33.832	5.14	0.18	26.235	0.261	1486.
35.0	11.8	79.6	8.3	144.1	10.1			96	96.2	9.096	34.071	5.10	0.17	26.376	0.264	1487.
35.0	11.6	81.5	8.3	147.0	10.1			97	97.8	9.225	34.156	5.06	0.17	26.422	0.267	1488.
35.0	11.5	83.5	8.3	147.9	10.1			99	100.0	9.238	34.166	5.05	0.17	26.428	0.271	1488.

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
OC	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:
(m)	104	47	30 SEP 1981	1629	40°25.7'N	67°34.3'W	157	48	30	1728
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA	DAY:	TIME:

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	49	30 SEP 1981	1818	40°32.8'N	67°37.1'W	120		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
2	2.1	12.753	32.564	5.74	0.34	24.555	0.000	1497.	-0.3
4	3.8	12.755	32.564	5.76	0.33	24.555	0.006	1497.	-0.3
6	6.0	12.759	32.564	5.74	0.32	24.554	0.013	1497.	-0.3
8	8.3	12.757	32.564	5.71	0.31	24.555	0.021	1497.	-0.3
10	9.8	12.757	32.564	5.77	0.33	24.555	0.026	1497.	-0.3
12	12.0	12.757	32.564	5.74	0.32	24.555	0.034	1497.	-0.2
14	14.2	12.759	32.564	5.74	0.32	24.554	0.041	1497.	0.0
16	15.7	12.758	32.565	5.76	0.32	24.555	0.046	1497.	0.2
18	18.0	12.761	32.564	5.72	0.32	24.554	0.054	1497.	0.7
20	20.1	12.760	32.564	5.72	0.32	24.554	0.061	1497.	1.0
22	21.9	12.760	32.564	5.72	0.32	24.554	0.067	1497.	1.2
24	24.0	12.755	32.565	5.71	0.32	24.555	0.074	1497.	1.4
26	25.9	12.740	32.565	5.77	0.32	24.558	0.080	1497.	1.4
28	28.0	12.734	32.565	5.75	0.32	24.560	0.087	1497.	1.5
30	30.2	12.729	32.566	5.77	0.32	24.561	0.095	1497.	1.7
32	31.9	12.727	32.567	5.80	0.32	24.562	0.101	1497.	3.2
34	34.2	12.726	32.566	5.80	0.32	24.562	0.109	1497.	5.3
36	35.9	12.721	32.567	5.75	0.32	24.564	0.114	1497.	7.8
38	38.1	12.675	32.567	5.66	0.31	24.573	0.122	1497.	9.5
40	40.0	12.388	32.584	5.59	0.29	24.641	0.128	1496.	10.6
42	41.8	11.801	32.601	5.61	0.24	24.764	0.134	1494.	11.2
44	44.2	11.081	32.654	5.65	0.21	24.935	0.141	1492.	11.2
46	45.9	10.782	32.673	5.57	0.20	25.003	0.146	1491.	10.9
48	48.1	10.552	32.693	5.56	0.19	25.058	0.153	1490.	9.9
50	49.9	10.464	32.702	5.51	0.19	25.080	0.158	1490.	8.6
51	51.8	10.388	32.713	5.46	0.20	25.102	0.163	1489.	7.2
54	54.0	10.295	32.758	5.42	0.22	25.152	0.170	1489.	6.4
56	56.2	10.196	32.778	5.43	0.23	25.185	0.176	1489.	5.7
58	57.9	10.156	32.786	5.39	0.24	25.197	0.181	1489.	5.3
60	60.2	10.149	32.788	5.38	0.24	25.201	0.187	1489.	5.4
61	61.8	10.147	32.789	5.38	0.24	25.201	0.191	1489.	6.0
64	64.0	10.135	32.794	5.35	0.24	25.208	0.197	1489.	6.5
66	66.0	10.055	32.814	5.35	0.24	25.237	0.203	1488.	6.9
68	68.1	9.892	32.864	5.38	0.24	25.303	0.209	1488.	7.1
69	69.8	9.718	32.920	5.36	0.24	25.375	0.213	1487.	7.1
72	72.0	9.655	32.926	5.38	0.23	25.390	0.219	1487.	6.9
74	74.1	9.623	32.932	5.39	0.23	25.400	0.224	1487.	6.5
75	75.9	9.591	32.932	5.37	0.23	25.405	0.229	1487.	6.1
78	78.1	9.512	32.943	5.37	0.23	25.426	0.234	1487.	6.1
80	80.0	9.379	32.966	5.41	0.21	25.466	0.239	1486.	6.6
81	81.9	9.332	32.979	5.37	0.21	25.484	0.244	1486.	6.9
84	84.1	9.235	33.021	5.39	0.21	25.532	0.249	1486.	6.8
86	86.2	9.170	33.053	5.40	0.21	25.568	0.255	1486.	6.6
87	87.9	9.136	33.090	5.40	0.21	25.602	0.259	1486.	6.4
89	90.0	9.134	33.100	5.40	0.21	25.610	0.264	1486.	6.9
92	92.0	9.122	33.112	5.41	0.21	25.621	0.269	1486.	7.9
93	93.7	9.113	33.132	5.40	0.21	25.638	0.273	1486.	9.2
95	96.0	9.091	33.173	5.36	0.21	25.674	0.278	1486.	10.7
98	98.1	8.967	33.298	5.38	0.22	25.791	0.283	1486.	12.6
99	99.8	8.878	33.432	5.28	0.23	25.910	0.286	1485.	14.0

SHIP			CRUISE	STATION	DATE		EST	LATITUDE	LONGITUDE	DEPTH	
OC	104	51			30 SEP 1981	31 SEP 1981					
DEPTH	TEMP	TEMP	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DVHT A	S SPD	N
(m)	(°C)	(°C)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
2	12.831	10.3	2.1	12.831	32.591	5.83	0.36	24.561	0.000	1497.	0.1
4	12.836	10.3	3.9	12.836	32.590	5.82	0.35	24.559	0.006	1497.	0.1
6	12.838	10.3	6.0	12.838	32.590	5.81	0.35	24.559	0.013	1497.	0.1
8	12.839	10.3	8.1	12.839	32.590	5.80	0.35	24.558	0.020	1497.	0.1
10	12.841	10.2	10.0	12.841	32.590	5.81	0.35	24.558	0.027	1497.	0.1
12	12.838	10.2	12.2	12.838	32.590	5.80	0.35	24.559	0.034	1497.	0.7
14	12.838	10.1	13.9	12.838	32.590	5.79	0.35	24.558	0.040	1497.	0.8
16	12.839	10.1	16.2	12.839	32.590	5.79	0.35	24.558	0.048	1497.	1.1
18	12.831	10.0	17.8	12.831	32.591	5.79	0.34	24.561	0.053	1497.	1.2
20	12.824	9.9	20.0	12.824	32.589	5.79	0.35	24.561	0.060	1497.	1.3
22	12.819	9.9	21.9	12.819	32.589	5.79	0.35	24.561	0.067	1497.	1.4
24	12.798	9.7	23.9	12.798	32.589	5.79	0.34	24.566	0.073	1497.	1.5
26	12.801	9.6	26.1	12.801	32.589	5.80	0.35	24.566	0.081	1497.	1.6
28	12.798	9.7	27.8	12.798	32.590	5.79	0.35	24.566	0.087	1497.	1.6
30	12.785	9.5	30.1	12.785	32.589	5.79	0.35	24.568	0.094	1497.	1.7
32	12.771	9.5	32.0	12.771	32.588	5.78	0.34	24.571	0.101	1497.	2.8
34	12.760	9.4	34.0	12.760	32.588	5.73	0.34	24.572	0.107	1497.	5.0
36	12.752	9.3	36.3	12.752	32.588	5.70	0.34	24.574	0.115	1497.	7.3
38	12.734	9.2	37.9	12.734	32.587	5.61	0.34	24.577	0.121	1497.	8.7
40	12.507	9.1	40.0	12.507	32.596	5.57	0.35	24.627	0.128	1496.	9.5
41	11.898	9.1	41.7	11.898	32.612	5.58	0.27	24.755	0.133	1494.	10.1
44	11.344	9.1	44.1	11.344	32.665	5.48	0.22	24.897	0.141	1492.	10.2
46	11.236	9.0	46.1	11.236	32.675	5.33	0.21	24.924	0.147	1492.	10.0
48	11.126	9.1	48.0	11.126	32.687	5.30	0.22	24.953	0.152	1492.	9.7
50	10.860	9.1	50.1	10.860	32.698	5.34	0.23	25.008	0.159	1491.	9.2
52	10.766	9.1	52.0	10.766	32.706	5.36	0.24	25.031	0.164	1491.	8.8
54	10.605	9.1	54.0	10.605	32.738	5.40	0.25	25.084	0.170	1490.	8.8
55	10.328	9.1	55.7	10.328	32.790	5.43	0.28	25.172	0.175	1489.	8.5
58	10.135	9.2	58.1	10.135	32.839	5.44	0.33	25.242	0.181	1489.	7.9
60	10.094	9.2	59.9	10.094	32.850	5.42	0.31	25.258	0.187	1489.	7.2
62	10.064	9.2	62.1	10.064	32.860	5.41	0.33	25.271	0.192	1488.	6.2
64	10.039	9.1	64	10.039	32.871	5.40	0.32	25.284	0.197	1488.	5.1
66	10.016	9.1	66.0	10.016	32.881	5.38	0.33	25.296	0.203	1488.	5.0
68	10.006	9.1	68.0	10.006	32.886	5.37	0.33	25.301	0.208	1488.	5.7
70	9.980	9.1	70.0	9.980	32.897	5.37	0.34	25.314	0.214	1488.	6.5
72	9.925	9.1	72.3	9.925	32.922	5.37	0.34	25.343	0.220	1488.	8.0
73	9.843	9.1	73.9	9.843	32.962	5.35	0.34	25.387	0.224	1488.	9.8
76	9.750	9.1	76.2	9.750	33.016	5.35	0.35	25.445	0.230	1488.	11.0
77	9.652	9.1	77.8	9.652	33.064	5.32	0.35	25.498	0.234	1487.	11.9
80	9.432	9.1	80.3	9.432	33.224	5.32	0.37	25.659	0.240	1487.	12.6
81	9.311	9.1	81.3	9.311	33.389	5.29	0.35	25.807	0.242	1487.	12.9
81	9.301	9.1	81.9	9.301	33.401	5.26	0.35	25.819	0.243	1487.	13.6
83	9.290	9.1	83.0	9.290	33.414	5.24	0.35	25.830	0.246	1487.	13.4
84	9.262	9.1	84.0	9.262	33.461	5.23	0.35	25.871	0.248	1487.	12.2
85	9.235	9.1	85.1	9.235	33.514	5.23	0.34	25.918	0.250	1487.	11.1
86	9.142	9.1	86.0	9.142	33.638	5.21	0.35	26.030	0.252	1486.	10.6
87	9.130	9.1	87.0	9.130	33.653	5.21	0.35	26.043	0.254	1486.	9.8
88	9.124	9.1	88.1	9.124	33.660	5.20	0.35	26.049	0.256	1486.	8.4
88	9.115	9.1	88.9	9.115	33.670	5.18	0.35	26.059	0.258	1486.	6.4
90	9.110	9.1	90.0	9.110	33.674	5.19	0.35	26.063	0.260	1486.	3.9

STA 50 DAY: 30 TIME: 1849

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
4.9	12.9	72.8	10.3
5.8	12.8	74.8	10.3
6.8	12.8	75.7	10.3
9.7	12.8	77.7	10.3
11.7	12.8	78.6	10.2
13.6	12.8	78.6	10.2
15.6	12.8	79.6	10.1
17.5	12.8	81.5	10.1
19.5	12.7	83.5	10.0
21.4	12.8	84.4	10.0
23.4	12.8	86.4	9.9
25.3	12.7	87.3	9.9
26.3	12.7	88.3	9.8
28.2	12.5	89.2	9.7
29.2	12.5	90.2	9.6
29.2	12.4	91.2	9.5
30.2	12.3	92.1	9.4
32.1	12.2	93.1	9.3
32.1	12.1	94.1	9.2
33.1	12.1	97.0	9.1
33.1	12.0	97.9	9.1
35.0	11.9	98.9	9.1
35.0	11.7	100.8	9.1
36.0	11.6	102.8	9.0
36.0	11.5	103.7	9.1
37.0	11.4	104.7	9.1
37.9	11.3	105.6	9.1
37.9	11.2	106.6	9.1
38.9	11.1	108.5	9.2
39.9	11.1	109.5	9.2
40.9	11.0		
42.8	11.0		
44.7	10.9		
46.7	10.9		
47.6	10.8		
49.6	10.8		
50.6	10.7		
53.5	10.7		
56.4	10.7		
57.3	10.7		
58.3	10.7		
60.2	10.7		
62.2	10.6		
62.2	10.6		
64.1	10.5		
65.1	10.5		
67.0	10.4		
69.0	10.4		
69.9	10.4		
70.9	10.3		

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH				
OC	104	51	30 SEP 1981	1908	40°35.0'N	67°38.2'W	100				
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DXHT	A	S	SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)			(cph)
91	91.0	9.107	33.678	5.19	0.35	26.067	0.262	1486.			3.2
91	91.9	9.105	33.681	5.18	0.35	26.069	0.264	1486.			2.6
92	93.0	9.106	33.680	5.20	0.36	26.068	0.266	1485.			1.9
93	94.0	9.105	33.682	5.18	0.37	26.070	0.268	1487.			1.2
95	95.1	9.104	33.682	5.19	0.36	26.070	0.270	1487.			0.3
95	95.9	9.104	33.681	5.19	0.36	26.069	0.271	1487.			0.3
96	97.0	9.105	33.680	5.18	0.37	26.068	0.274	1487.			0.3
97	98.1	9.105	33.679	5.20	0.39	26.068	0.276	1487.			0.3
98	98.6	9.105	33.679	5.19	0.39	26.067	0.277	1487.			0.3

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	53	30 SEP 1981	2042	40°32.3'N	67°49.5'W	100		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
2	2.4	13.028	32.588	5.55	0.58	24.520	0.000	1497.	-0.4
4	4.0	13.025	32.588	5.61	0.57	24.521	0.005	1497.	-0.4
6	5.8	13.026	32.588	5.65	0.57	24.520	0.011	1498.	-0.4
8	8.0	13.027	32.587	5.63	0.57	24.520	0.019	1498.	-0.4
10	10.0	13.028	32.587	5.64	0.57	24.520	0.026	1498.	-0.4
12	12.1	13.028	32.587	5.66	0.57	24.519	0.033	1498.	-0.3
14	13.7	13.028	32.587	5.61	0.57	24.519	0.038	1498.	0.4
16	16.0	13.028	32.587	5.60	0.56	24.519	0.046	1498.	0.6
18	18.0	13.028	32.587	5.63	0.57	24.519	0.053	1498.	0.8
20	20.3	13.026	32.587	5.65	0.57	24.520	0.061	1498.	0.9
22	21.9	13.020	32.587	5.61	0.56	24.521	0.066	1498.	1.0
24	24.0	13.019	32.588	5.60	0.57	24.521	0.073	1498.	1.2
26	25.9	13.017	32.588	5.62	0.57	24.522	0.080	1498.	1.6
28	28.2	13.012	32.588	5.62	0.58	24.523	0.088	1498.	2.6
30	29.8	13.009	32.588	5.56	0.57	24.523	0.093	1498.	4.9
32	32.0	12.995	32.588	5.53	0.58	24.527	0.101	1498.	7.1
34	34.1	12.954	32.589	5.54	0.57	24.535	0.108	1498.	8.5
36	35.8	12.817	32.596	5.44	0.56	24.567	0.114	1497.	9.5
38	37.9	12.216	32.630	5.45	0.54	24.709	0.121	1495.	10.0
40	40.3	11.613	32.647	5.51	0.47	24.834	0.128	1493.	10.4
42	41.9	11.458	32.654	5.36	0.44	24.868	0.133	1493.	10.4
44	43.9	11.269	32.670	5.34	0.43	24.914	0.139	1492.	10.0
46	46.1	11.068	32.680	5.37	0.42	24.958	0.146	1492.	9.4
48	47.8	10.844	32.691	5.41	0.41	25.006	0.151	1491.	9.5
50	50.1	10.528	32.719	5.46	0.42	25.082	0.158	1490.	9.9
51	51.7	10.369	32.730	5.42	0.40	25.118	0.162	1489.	10.1
54	54.1	10.034	32.768	5.42	0.40	25.204	0.169	1488.	10.0
56	56.1	9.767	32.822	5.45	0.40	25.291	0.174	1487.	9.5
58	57.9	9.571	32.885	5.41	0.41	25.372	0.179	1487.	8.7
60	60.1	9.515	32.916	5.41	0.43	25.405	0.185	1487.	7.8
62	61.9	9.477	32.931	5.41	0.43	25.423	0.190	1486.	6.4
64	64.0	9.469	32.939	5.41	0.44	25.431	0.195	1486.	5.0
66	66.2	9.467	32.942	5.40	0.44	25.433	0.201	1486.	4.0
68	67.9	9.464	32.947	5.39	0.44	25.438	0.205	1486.	4.1
70	70.2	9.453	32.956	5.39	0.44	25.446	0.210	1486.	4.9
72	72.0	9.429	32.963	5.39	0.44	25.456	0.215	1486.	6.1
74	74.0	9.396	32.980	5.36	0.44	25.475	0.220	1486.	7.1
76	76.1	9.306	33.011	5.37	0.44	25.513	0.225	1486.	7.7
77	77.8	9.150	33.043	5.40	0.44	25.563	0.230	1486.	8.2
80	80.0	8.987	33.107	5.39	0.43	25.638	0.235	1485.	8.5
81	81.3	8.912	33.132	5.41	0.43	25.670	0.238	1485.	8.6
82	82.0	8.897	33.136	5.41	0.42	25.675	0.240	1485.	8.5
82	82.9	8.880	33.136	5.40	0.42	25.678	0.242	1485.	8.4
84	84.0	8.841	33.154	5.39	0.42	25.698	0.244	1485.	9.5
85	85.0	8.803	33.180	5.38	0.42	25.724	0.246	1485.	10.8
86	86.0	8.786	33.213	5.39	0.42	25.753	0.249	1485.	11.6
87	87.0	8.762	33.262	5.39	0.42	25.795	0.251	1485.	11.8
87	87.9	8.802	33.425	5.36	0.43	25.916	0.253	1485.	11.5
88	89.0	8.833	33.491	5.32	0.45	25.963	0.255	1485.	10.9
90	90.0	8.840	33.504	5.31	0.45	25.972	0.257	1485.	10.2

STA 54				DAY: 30		TIME: 2112			
SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	55	30 SEP 1981	2124	40°29.4'N	67°48.8'W	117		
DEPTH	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
(m)	(dbar)	TEMP	SALIN	OXY	ATN	SIGT	DVHT A	S SPD	N
		(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
4	4.2	13.011	32.581	5.60	0.55	24.518	0.000	1497.	-0.6
6	6.0	13.014	32.581	5.64	0.55	24.518	0.006	1497.	-0.6
8	7.9	13.014	32.582	5.67	0.54	24.518	0.013	1497.	-0.6
10	10.0	13.014	32.582	5.68	0.54	24.518	0.020	1498.	-0.6
12	12.1	13.018	32.581	5.69	0.54	24.517	0.027	1498.	-0.6
14	13.8	13.019	32.581	5.66	0.54	24.516	0.033	1498.	-0.4
16	16.2	13.019	32.581	5.62	0.54	24.517	0.041	1498.	1.9
18	18.0	13.021	32.581	5.55	0.54	24.516	0.047	1498.	4.6
20	19.9	13.020	32.581	5.58	0.54	24.517	0.054	1498.	6.7
22	21.9	13.015	32.581	5.49	0.55	24.517	0.060	1498.	8.6
24	24.0	12.877	32.593	5.47	0.55	24.554	0.067	1497.	10.1
26	26.2	12.278	32.613	5.51	0.52	24.684	0.075	1495.	11.0
28	27.9	11.824	32.646	5.41	0.47	24.794	0.080	1494.	11.4
30	30.0	11.325	32.686	5.45	0.45	24.917	0.087	1492.	11.2
32	32.0	10.873	32.694	5.46	0.43	25.003	0.093	1491.	10.6
34	34.0	10.696	32.717	5.39	0.39	25.051	0.098	1490.	9.5
36	36.2	10.604	32.717	5.39	0.38	25.068	0.105	1490.	8.7
38	38.0	10.528	32.723	5.37	0.38	25.086	0.110	1490.	8.0
40	40.0	10.275	32.741	5.40	0.37	25.143	0.116	1489.	7.6
42	42.1	10.138	32.754	5.38	0.37	25.176	0.122	1488.	7.7
44	43.8	9.902	32.776	5.40	0.37	25.232	0.126	1487.	8.1
46	46.2	9.810	32.802	5.37	0.37	25.268	0.133	1487.	8.1
47	47.7	9.791	32.806	5.37	0.37	25.274	0.137	1487.	7.8
50	50.1	9.571	32.847	5.41	0.38	25.342	0.143	1486.	7.5
52	51.9	9.405	32.882	5.41	0.38	25.396	0.148	1486.	7.1
54	53.8	9.333	32.901	5.40	0.38	25.423	0.153	1486.	6.7
56	55.9	9.333	32.904	5.40	0.38	25.425	0.158	1486.	6.4
58	58.1	9.258	32.919	5.40	0.39	25.449	0.164	1486.	6.0
60	59.9	9.171	32.932	5.42	0.39	25.472	0.168	1485.	5.7
62	62.3	9.130	32.939	5.44	0.39	25.485	0.174	1485.	6.0
64	63.9	9.008	32.953	5.46	0.39	25.515	0.178	1485.	6.4
65	65.7	8.897	32.969	5.45	0.39	25.545	0.183	1484.	6.7
68	68.1	8.876	32.990	5.45	0.40	25.564	0.189	1484.	6.9
69	69.9	8.840	33.027	5.47	0.39	25.599	0.193	1484.	7.3
72	72.0	8.786	33.073	5.48	0.39	25.643	0.198	1484.	7.6
74	74.1	8.735	33.108	5.48	0.39	25.678	0.203	1484.	7.8
76	76.0	8.715	33.140	5.45	0.40	25.707	0.207	1484.	7.9
78	78.3	8.735	33.214	5.45	0.40	25.761	0.212	1484.	7.8
79	79.9	8.786	33.301	5.45	0.40	25.821	0.216	1485.	7.6
82	82.3	8.821	33.338	5.44	0.39	25.845	0.221	1485.	7.4
83	83.9	8.842	33.365	5.43	0.39	25.863	0.225	1485.	7.5
86	86.2	8.915	33.440	5.41	0.39	25.910	0.230	1485.	7.5
87	87.6	8.921	33.447	5.40	0.40	25.915	0.233	1485.	7.5
89	90.0	9.047	33.516	5.36	0.40	25.949	0.237	1486.	8.0
91	92.0	9.332	33.679	5.31	0.40	26.031	0.241	1487.	8.3
94	94.1	9.436	33.751	5.26	0.40	26.067	0.246	1488.	8.7
95	95.9	9.368	33.759	5.24	0.40	26.088	0.249	1488.	9.3
98	98.2	9.501	33.896	5.16	0.40	26.173	0.253	1488.	9.8
99	99.8	9.369	33.919	5.12	0.41	26.213	0.256	1488.	9.9
101	101.3	9.130	33.936	5.11	0.41	26.265	0.259	1487.	10.4

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	STA 56				DAY: 30				TIME: 2153
OC	104	55	30 SEP 1981	2124	40°29.4'N	67°48.8'W	117	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT	A	S	SPU	N	DEPTH	TEMP	DEPTH	TEMP	
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)				(m)	(°C)	(m)	(°C)	
101	102.1	9.167	34.029	5.08	0.41	26.332	0.260	1487.	10.6			4.9	13.0	52.5	9.6	9.4
102	103.0	9.197	34.079	5.01	0.42	26.366	0.262	1487.	10.2			7.8	12.9	55.4	9.5	9.4
103	104.0	9.193	34.089	4.99	0.42	26.374	0.264	1487.	9.7			8.8	12.9	55.4	9.4	9.5
104	105.0	9.215	34.151	4.97	0.42	26.419	0.265	1488.	8.8			10.7	12.9	56.4	9.4	9.5
105	106.0	9.243	34.172	4.95	0.42	26.431	0.267	1488.	8.0			11.7	12.9	56.4	9.3	9.6
106	106.9	9.239	34.183	4.94	0.42	26.440	0.268	1488.	8.1			13.6	12.9	57.3	9.2	9.7
107	107.9	9.248	34.217	4.93	0.42	26.466	0.270	1488.	8.1			15.6	12.9	59.3	9.2	9.7
108	109.0	9.260	34.233	4.92	0.42	26.476	0.272	1488.	8.1			17.5	12.9	60.2	9.1	9.7
109	110.0	9.285	34.271	4.92	0.42	26.502	0.273	1488.	8.1			20.4	12.9	61.2	9.1	9.7
110	110.9	9.323	34.332	4.93	0.42	26.543	0.275	1488.	8.1			21.4	12.9	63.1	9.0	9.7
												23.4	12.9	64.1	9.0	9.7
												24.3	12.8	64.1	8.9	9.6
												25.3	12.8	65.1	8.9	9.5
												26.3	12.8	66.0	8.8	9.5
												27.3	12.8	67.0	8.8	9.5
												28.2	12.7	69.0	8.7	
												29.2	12.7	69.9	8.7	
												29.2	12.5	70.9	8.7	
												29.2	12.5	71.9	8.6	
												30.2	12.4	73.8	8.5	
												31.1	12.2	75.7	8.5	
												32.1	12.2	78.6	8.6	
												32.1	12.1	79.6	8.5	
												32.1	12.0	82.5	8.6	
												33.1	11.9	83.5	8.6	
												34.1	11.8	84.4	8.6	
												34.1	11.7	86.4	8.6	
												34.1	11.6	88.3	8.6	
												35.0	11.5	89.2	8.6	
												35.0	11.4	91.2	8.7	
												35.0	11.3	92.1	8.7	
												36.0	11.2	92.1	8.8	
												36.0	11.1	93.1	8.8	
												37.0	11.0	95.0	8.9	
												37.9	10.9	96.0	8.9	
												38.9	10.7	97.0	8.9	
												39.9	10.6	97.9	8.9	
												41.8	10.5	97.9	8.9	
												41.8	10.4	97.9	9.0	
												42.8	10.4	98.9	9.0	
												43.8	10.3	99.9	9.1	
												44.7	10.2	100.8	9.1	
												46.7	10.2	101.8	9.1	
												47.6	10.1	102.8	9.1	
												48.6	10.0	103.7	9.1	
												48.6	10.0	104.7	9.1	
												49.6	9.9	104.7	9.2	
												50.6	9.8	105.6	9.2	
												51.5	9.7	106.6	9.3	
												51.5	9.7	107.6	9.4	

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	57	30 SEP 1981	2212	40°25.7'N	67°48.3'W	155		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
4	4.3	12.689	32.606	5.71	0.51	24.600	0.000	1496.	0.2
6	6.2	12.693	32.606	5.67	0.52	24.599	0.006	1496.	0.2
8	8.0	12.695	32.606	5.70	0.53	24.599	0.012	1496.	0.2
10	9.8	12.695	32.606	5.67	0.51	24.599	0.018	1496.	0.2
12	12.1	12.699	32.606	5.69	0.51	24.598	0.026	1497.	0.2
14	13.9	12.692	32.606	5.65	0.51	24.599	0.032	1497.	3.4
16	15.9	12.686	32.606	5.62	0.51	24.601	0.039	1497.	5.1
18	18.1	12.694	32.606	5.61	0.51	24.599	0.046	1497.	6.6
20	19.9	12.689	32.604	5.55	0.51	24.599	0.052	1497.	7.7
22	22.1	12.262	32.637	5.63	0.50	24.706	0.059	1495.	8.3
24	23.7	11.952	32.633	5.60	0.47	24.761	0.064	1494.	8.6
26	26.0	11.676	32.668	5.56	0.45	24.839	0.072	1493.	9.2
28	28.3	11.524	32.672	5.53	0.43	24.870	0.078	1493.	10.0
30	29.9	11.428	32.681	5.44	0.42	24.894	0.084	1493.	10.2
32	32.0	11.322	32.687	5.44	0.41	24.918	0.090	1492.	10.3
34	33.9	10.821	32.727	5.51	0.40	25.038	0.096	1491.	10.4
36	35.9	10.077	32.778	5.55	0.36	25.204	0.101	1488.	10.4
38	38.0	9.889	32.799	5.47	0.36	25.252	0.107	1487.	10.0
40	40.1	9.823	32.807	5.45	0.36	25.270	0.113	1487.	9.2
42	42.1	9.674	32.828	5.47	0.35	25.310	0.118	1487.	7.8
44	44.2	9.567	32.854	5.49	0.35	25.348	0.123	1486.	6.4
45	45.8	9.512	32.868	5.49	0.35	25.368	0.128	1486.	5.9
48	48.1	9.450	32.882	5.48	0.37	25.389	0.134	1486.	5.5
50	49.9	9.436	32.884	5.48	0.35	25.393	0.138	1486.	5.3
52	52.0	9.386	32.899	5.50	0.36	25.412	0.144	1486.	5.8
54	54.2	9.354	32.904	5.50	0.37	25.421	0.149	1486.	6.5
56	56.0	9.323	32.912	5.48	0.37	25.433	0.154	1486.	7.1
58	58.2	9.138	32.937	5.50	0.36	25.482	0.159	1485.	7.4
60	60.0	8.862	32.968	5.52	0.36	25.549	0.164	1484.	7.5
62	62.2	8.641	33.001	5.53	0.37	25.609	0.169	1483.	7.4
63	63.7	8.617	33.007	5.51	0.36	25.617	0.173	1483.	7.1
66	66.1	8.578	33.022	5.51	0.36	25.635	0.179	1483.	6.7
67	67.9	8.548	33.035	5.51	0.36	25.650	0.183	1483.	6.4
70	69.9	8.500	33.066	5.50	0.36	25.681	0.187	1483.	6.5
72	72.3	8.474	33.087	5.50	0.37	25.702	0.193	1483.	7.0
73	73.9	8.420	33.131	5.51	0.36	25.744	0.197	1483.	7.5
76	76.1	8.371	33.175	5.51	0.36	25.786	0.202	1483.	7.6
77	77.9	8.349	33.208	5.50	0.37	25.816	0.206	1483.	7.5
80	80.1	8.375	33.286	5.49	0.37	25.872	0.210	1483.	7.2
82	82.0	8.564	33.377	5.45	0.36	25.915	0.214	1484.	6.7
84	84.0	8.660	33.412	5.45	0.36	25.928	0.218	1484.	6.2
86	86.1	8.755	33.450	5.43	0.36	25.943	0.223	1485.	5.8
87	87.9	8.826	33.471	5.42	0.36	25.948	0.226	1485.	5.7
89	89.8	8.965	33.524	5.41	0.36	25.968	0.230	1486.	6.2
92	92.0	9.164	33.596	5.38	0.36	25.993	0.235	1487.	6.9
93	94.0	9.361	33.661	5.36	0.36	26.012	0.239	1487.	7.3
95	95.9	9.701	33.808	5.31	0.36	26.072	0.243	1489.	7.6
97	97.9	10.112	33.970	5.23	0.36	26.129	0.246	1491.	7.9
100	100.1	10.261	34.061	5.16	0.36	26.175	0.251	1491.	8.1
101	102.1	10.130	34.057	5.11	0.36	26.194	0.254	1491.	8.6

STA 58 DAY: 30 TIME: 2212										SHIP CRUISE STATION DATE EST LATITUDE LONGITUDE DEPTH									
										OC 104 59 01 OCT 1981 0033 40°20.7'N 67°47.9'W 195									
DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP	DEPTH	TEMP
(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)	(m)	(°C)
5.8	12.6	75.7	10.6	107.6	10.2	4	4.1	14.233	32.714	5.53	0.45	24.374	0.000	1502.	2.2	4	4.1	14.233	32.714
6.8	12.5	75.7	10.5	107.6	10.1	6	5.9	14.238	32.714	5.51	0.45	24.372	0.006	1502.	2.2	6	5.9	14.238	32.714
9.7	12.5	75.7	10.4	108.5	10.1	8	7.7	14.240	32.709	5.53	0.45	24.368	0.013	1502.	2.2	8	7.7	14.240	32.709
10.7	12.5	75.7	10.2	109.5	10.0	10	10.1	14.240	32.714	5.56	0.45	24.372	0.021	1502.	2.2	10	10.1	14.240	32.714
12.7	12.5	76.7	10.1	110.5	10.0	12	12.0	14.239	32.714	5.56	0.44	24.372	0.028	1502.	2.2	12	12.0	14.239	32.714
15.6	12.5	76.7	10.0	111.4	9.9	14	14.1	14.237	32.714	5.55	0.44	24.373	0.035	1502.	2.9	14	14.1	14.237	32.714
19.5	12.4	76.7	9.8	112.4	9.9	16	15.9	14.202	32.712	5.55	0.44	24.378	0.042	1502.	3.8	16	15.9	14.202	32.712
22.4	12.5	77.7	9.7	113.4	9.9	18	17.9	14.146	32.698	5.56	0.44	24.379	0.049	1502.	5.4	18	17.9	14.146	32.698
24.3	12.4	77.7	9.5	114.3	9.8	20	20.1	13.996	32.694	5.57	0.44	24.407	0.057	1501.	7.7	20	20.1	13.996	32.694
26.3	12.5	77.7	9.3	115.3	9.8	22	21.8	13.956	32.697	5.55	0.44	24.418	0.063	1501.	9.9	22	21.8	13.956	32.697
28.2	12.5	78.6	9.3	116.2	9.7	24	24.2	13.906	32.728	5.50	0.42	24.452	0.071	1501.	11.4	24	24.2	13.906	32.728
30.2	12.5	78.6	9.2	117.2	9.7	26	26.0	13.451	32.743	5.49	0.36	24.556	0.077	1499.	12.3	26	26.0	13.451	32.743
32.1	12.4	79.6	9.1	119.1	9.7	28	27.9	12.509	32.748	5.54	0.31	24.745	0.083	1496.	13.0	28	27.9	12.509	32.748
35.0	12.4	79.6	9.0	121.1	9.7	30	29.9	11.751	32.802	5.55	0.25	24.929	0.090	1494.	13.4	30	29.9	11.751	32.802
36.0	12.5	79.6	8.9	123.0	9.7	32	32.2	11.173	32.777	5.53	0.23	25.030	0.102	1491.	13.1	32	32.2	11.173	32.777
38.9	12.4	80.6	8.8	124.9	9.7	34	34.0	11.048	32.769	5.44	0.22	25.030	0.102	1491.	13.1	34	34.0	11.048	32.769
41.8	12.5	81.5	8.8	126.8	9.7	36	36.1	10.567	32.842	5.49	0.20	25.171	0.108	1490.	12.3	36	36.1	10.567	32.842
43.8	12.5	81.5	8.7	127.8	9.7	38	38.0	10.151	32.922	5.50	0.19	25.304	0.113	1488.	11.6	38	38.0	10.151	32.922
45.7	12.5	82.5	8.7	130.7	9.7	40	40.2	9.586	32.918	5.55	0.18	25.395	0.119	1486.	11.0	40	40.2	9.586	32.918
46.7	12.5	84.4	8.7	131.6	9.8	42	41.8	9.312	32.954	5.56	0.18	25.467	0.123	1486.	10.2	42	41.8	9.312	32.954
48.6	12.5	85.4	8.6	133.5	9.8	44	44.0	9.104	32.988	5.56	0.18	25.527	0.128	1485.	9.0	44	44.0	9.104	32.988
50.6	12.4	87.3	8.6	135.5	9.8	46	45.9	9.079	32.997	5.52	0.18	25.537	0.133	1485.	8.0	46	45.9	9.079	32.997
52.5	12.4	88.3	8.7	137.4	9.8	48	48.0	9.054	33.007	5.53	0.18	25.550	0.138	1485.	7.3	48	48.0	9.054	33.007
53.5	12.4	90.2	8.7	140.3	9.8	50	49.9	8.983	33.035	5.52	0.18	25.583	0.143	1485.	6.8	50	49.9	8.983	33.035
54.4	12.4	91.2	8.7	142.2	9.8	52	52.1	8.865	33.082	5.53	0.18	25.638	0.148	1484.	6.6	52	52.1	8.865	33.082
57.3	12.4	92.1	8.8	145.1	9.8	54	54.1	8.806	33.108	5.52	0.18	25.667	0.152	1484.	6.7	54	54.1	8.806	33.108
59.3	12.4	93.1	8.9	146.0	9.8	56	55.8	8.782	33.122	5.50	0.18	25.682	0.157	1484.	6.5	56	55.8	8.782	33.122
60.2	12.4	94.1	9.0	147.0	9.8	58	58.4	8.729	33.146	5.49	0.18	25.709	0.162	1484.	5.9	58	58.4	8.729	33.146
62.2	12.4	94.1	9.1	148.9	9.8	59	59.8	8.712	33.169	5.46	0.19	25.730	0.166	1484.	5.5	59	59.8	8.712	33.169
64.1	12.4	95.0	9.2	149.9	9.8	62	62.2	8.685	33.196	5.47	0.18	25.755	0.171	1484.	6.5	62	62.2	8.685	33.196
65.1	12.4	95.0	9.4	150.8	9.7	63	63.8	8.681	33.199	5.47	0.18	25.758	0.175	1484.	7.9	63	63.8	8.681	33.199
67.0	12.4	96.0	9.5	151.8	9.7	66	66.0	8.678	33.210	5.46	0.19	25.767	0.180	1484.	9.3	66	66.0	8.678	33.210
68.0	12.4	97.0	9.7	152.7	9.6	68	68.0	8.679	33.244	5.48	0.19	25.793	0.184	1484.	10.3	68	68.0	8.679	33.244
69.0	12.3	97.0	9.9	152.7	9.5	70	70.1	9.307	33.571	5.35	0.19	25.950	0.188	1487.	11.2	70	70.1	9.307	33.571
70.9	12.2	97.9	10.1	152.7	9.5	72	72.0	9.953	33.857	5.28	0.18	26.067	0.192	1489.	11.5	72	72.0	9.953	33.857
71.9	12.2	97.9	10.3			74	74.0	10.207	34.045	5.20	0.17	26.171	0.196	1491.	11.4	74	74.0	10.207	34.045
71.9	12.1	97.9	10.4			76	76.0	10.652	34.224	5.05	0.17	26.233	0.200	1492.	10.5	76	76.0	10.652	34.224
72.8	12.0	98.9	10.5			78	78.0	11.224	34.469	4.93	0.17	26.322	0.203	1495.	9.2	78	78.0	11.224	34.469
73.8	12.0	98.9	10.6			80	80.1	11.190	34.504	4.88	0.16	26.355	0.207	1495.	8.3	80	80.1	11.190	34.504
73.8	11.9	99.9	10.6			81	81.9	11.156	34.501	4.85	0.17	26.359	0.210	1495.	7.9	81	81.9	11.156	34.501
73.8	11.7	100.8	10.6			84	84.1	11.130	34.498	4.82	0.17	26.362	0.213	1495.	8.1	84	84.1	11.130	34.498
73.8	11.6	101.8	10.5			85	85.9	10.963	34.526	4.82	0.17	26.414	0.216	1494.	8.8	85	85.9	10.963	34.526
74.8	11.5	102.8	10.5			88	88.0	10.913	34.586	4.79	0.16	26.469	0.220	1494.	9.6	88	88.0	10.913	34.586
74.8	11.4	103.7	10.6			89	90.0	10.880	34.661	4.73	0.16	26.533	0.223	1494.	10.0	89	90.0	10.880	34.661
74.8	11.3	104.7	10.6			91	91.9	10.490	34.698	4.74	0.17	26.631	0.226	1493.	10.0	91	91.9	10.490	34.698
74.8	11.2	105.6	10.5			93	94.0	10.180	34.756	4.67	0.18	26.731	0.229	1492.	9.5	93	94.0	10.180	34.756
74.8	11.1	106.6	10.5			96	96.2	10.146	34.812	4.64	0.18	26.781	0.231	1492.	8.7	96	96.2	10.146	34.812
74.8	11.0	106.6	10.4			97	98.1	10.208	34.860	4.58	0.18	26.807	0.234	1492.	7.8	97	98.1	10.208	34.860
74.8	10.7	106.6	10.3			100	100.1	10.207	34.881	4.57	0.18	26.824	0.236	1492.	6.6	100	100.1	10.207	34.881
						101	101.7	10.235	34.901	4.57	0.18	26.835	0.238	1492.	5.7	101	101.7	10.235	34.901

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	59	01 OCT 1981	0033	40°20.7'N	67°47.9'W	195		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
104	104.1	10.289	34.920	4.53	0.18	26.840	0.241	1492.	5.5
105	105.9	10.263	34.965	4.52	0.18	26.880	0.243	1492.	5.5
107	108.0	10.098	34.952	4.51	0.18	26.898	0.246	1492.	5.5
109	109.8	10.052	34.955	4.48	0.19	26.908	0.248	1492.	5.4
111	112.1	10.013	34.984	4.45	0.18	26.937	0.250	1492.	5.1
113	114.1	10.002	35.006	4.44	0.18	26.957	0.253	1492.	4.7
115	115.8	10.001	35.016	4.41	0.18	26.965	0.255	1492.	4.7
118	118.2	10.001	35.021	4.39	0.18	26.968	0.257	1492.	5.0
119	120.0	10.009	35.026	4.37	0.18	26.971	0.259	1492.	5.4
121	122.1	10.011	35.056	4.37	0.18	26.994	0.262	1492.	5.7
123	124.0	10.049	35.108	4.33	0.17	27.028	0.264	1492.	6.1
125	126.0	9.997	35.138	4.31	0.17	27.061	0.266	1492.	6.1
127	128.0	9.803	35.140	4.29	0.16	27.095	0.268	1491.	5.9
129	130.1	9.693	35.137	4.28	0.17	27.112	0.270	1491.	5.3
131	132.1	9.595	35.137	4.25	0.17	27.128	0.272	1491.	4.6
133	134.2	9.554	35.134	4.26	0.17	27.133	0.274	1491.	4.1
135	135.9	9.542	35.134	4.24	0.17	27.134	0.275	1491.	3.7
137	137.1	9.528	35.133	4.23	0.17	27.136	0.277	1491.	3.6
139	139.8	9.498	35.134	4.24	0.17	27.142	0.279	1490.	3.7
141	142.0	9.346	35.131	4.24	0.17	27.165	0.281	1490.	3.9
143	144.0	9.283	35.126	4.23	0.16	27.171	0.283	1490.	4.0
145	146.0	9.221	35.127	4.20	0.16	27.182	0.285	1490.	4.1
147	148.0	9.150	35.124	4.20	0.16	27.191	0.286	1489.	3.9
149	150.0	9.101	35.125	4.19	0.16	27.200	0.288	1489.	3.7
151	152.1	9.014	35.120	4.20	0.16	27.211	0.290	1489.	3.7
153	154.1	8.966	35.120	4.20	0.16	27.218	0.292	1489.	3.8
155	156.1	8.915	35.117	4.20	0.16	27.224	0.294	1489.	3.9
157	158.0	8.898	35.119	4.18	0.16	27.228	0.295	1489.	4.0
159	160.0	8.779	35.111	4.18	0.16	27.241	0.297	1488.	4.0
161	162.2	8.585	35.102	4.17	0.16	27.265	0.299	1487.	3.8
163	163.8	8.557	35.101	4.18	0.16	27.268	0.300	1487.	3.6
165	165.8	8.472	35.095	4.20	0.16	27.277	0.302	1487.	3.4
167	168.2	8.451	35.094	4.20	0.16	27.279	0.304	1487.	3.5
169	170.1	8.442	35.094	4.21	0.16	27.281	0.305	1487.	3.5
170	171.2	8.444	35.094	4.22	0.16	27.280	0.306	1487.	3.8
171	172.1	8.430	35.092	4.20	0.16	27.281	0.307	1487.	4.1
172	173.0	8.071	35.076	4.23	0.16	27.323	0.308	1486.	4.6
173	174.0	8.052	35.063	4.23	0.16	27.316	0.308	1486.	4.6
174	175.1	8.056	35.066	4.22	0.16	27.317	0.309	1486.	4.1
175	175.8	8.050	35.066	4.21	0.16	27.318	0.310	1486.	3.3
176	177.0	7.995	35.062	4.21	0.16	27.324	0.311	1485.	1.6
177	178.1	7.983	35.060	4.20	0.16	27.324	0.312	1485.	1.9
178	179.0	8.013	35.063	4.20	0.16	27.322	0.312	1486.	1.7
179	179.8	8.001	35.065	4.21	0.16	27.325	0.313	1486.	1.5
180	181.1	7.985	35.061	4.20	0.16	27.324	0.314	1485.	1.3
181	181.9	7.986	35.060	4.20	0.16	27.324	0.314	1485.	1.5
182	183.0	7.964	35.059	4.19	0.16	27.326	0.315	1485.	1.5
183	184.0	7.966	35.061	4.20	0.16	27.327	0.316	1485.	1.3
184	184.8	7.955	35.059	4.19	0.16	27.327	0.317	1485.	1.3
185	186.0	7.951	35.059	4.19	0.16	27.328	0.318	1485.	1.3

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	60	01 OCT 1981	0127	40°16.6'N	67°47.2'W	480		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	DEPTH
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
4	4.2	14.249	32.712	5.44	0.47	24.368	0.000	1502.	1.5
6	6.1	14.252	32.712	5.50	0.48	24.368	0.007	1502.	1.5
8	7.9	14.258	32.709	5.49	0.46	24.364	0.013	1502.	1.5
10	9.8	14.259	32.708	5.50	0.46	24.364	0.020	1502.	1.5
12	12.1	14.259	32.710	5.53	0.46	24.365	0.028	1502.	1.5
14	13.7	14.259	32.714	5.51	0.46	24.368	0.034	1502.	2.1
16	15.9	14.260	32.723	5.52	0.45	24.375	0.042	1502.	2.7
18	18.1	14.258	32.727	5.56	0.45	24.378	0.049	1502.	3.6
20	20.0	14.261	32.722	5.54	0.45	24.374	0.056	1502.	4.5
22	22.1	14.247	32.741	5.54	0.44	24.391	0.064	1502.	5.1
24	23.8	14.223	32.756	5.51	0.44	24.408	0.069	1502.	6.0
26	26.1	14.141	32.783	5.51	0.42	24.446	0.077	1502.	8.1
28	28.2	14.038	32.800	5.49	0.40	24.480	0.085	1501.	11.2
30	30.1	13.916	32.796	5.43	0.39	24.502	0.091	1501.	13.5
32	32.0	13.652	32.800	5.35	0.37	24.559	0.098	1500.	15.0
34	34.2	12.620	32.827	5.41	0.31	24.785	0.105	1497.	15.9
36	36.1	10.700	32.884	5.58	0.24	25.181	0.111	1490.	16.2
38	38.0	10.066	32.988	5.53	0.22	25.371	0.116	1488.	15.8
40	39.8	9.972	33.032	5.51	0.21	25.421	0.120	1488.	14.6
42	42.3	10.848	33.364	5.38	0.21	25.529	0.127	1492.	12.8
44	43.9	11.513	33.601	5.43	0.19	25.594	0.130	1494.	11.0
46	45.9	11.575	33.664	5.44	0.19	25.631	0.135	1495.	10.4
48	48.1	11.602	33.771	5.41	0.19	25.709	0.140	1495.	10.6
49	49.7	11.639	33.835	5.35	0.18	25.752	0.144	1495.	10.6
52	52.2	11.844	34.048	5.28	0.18	25.880	0.149	1496.	11.0
54	53.8	11.904	34.110	5.23	0.18	25.916	0.153	1496.	11.0
56	55.9	12.076	34.285	5.14	0.18	26.020	0.157	1497.	10.8
58	58.0	12.137	34.389	5.07	0.17	26.089	0.161	1498.	10.6
60	60.2	12.106	34.512	4.99	0.17	26.190	0.165	1498.	10.2
62	61.9	12.078	34.552	4.89	0.16	26.226	0.169	1498.	9.9
64	64.1	12.019	34.592	4.88	0.16	26.269	0.172	1497.	9.3
66	66.2	11.746	34.633	4.86	0.16	26.353	0.176	1497.	8.6
67	67.8	11.698	34.642	4.82	0.16	26.369	0.179	1496.	8.2
70	70.3	11.691	34.739	4.81	0.16	26.446	0.183	1497.	8.0
71	71.9	11.686	34.743	4.76	0.16	26.449	0.185	1497.	7.5
74	74.2	11.671	34.763	4.75	0.16	26.468	0.189	1497.	6.8
76	76.0	11.658	34.838	4.71	0.16	26.528	0.192	1497.	6.3
77	77.9	11.702	34.885	4.66	0.16	26.557	0.194	1497.	5.8
80	80.2	11.827	34.920	4.59	0.16	26.561	0.198	1497.	5.8
81	81.8	11.851	34.927	4.58	0.16	26.561	0.200	1498.	5.6
84	84.2	11.927	34.973	4.57	0.16	26.583	0.204	1498.	5.4
85	85.7	11.944	35.006	4.55	0.16	26.605	0.206	1498.	5.5
88	88.0	12.060	35.074	4.49	0.16	26.635	0.209	1499.	5.7
89	89.9	12.143	35.124	4.45	0.16	26.658	0.212	1499.	5.7
92	92.1	12.274	35.184	4.38	0.16	26.680	0.215	1499.	5.4
93	93.9	12.308	35.212	4.37	0.16	26.695	0.217	1500.	5.1
95	96.0	12.253	35.215	4.33	0.16	26.708	0.220	1500.	4.8
97	98.1	12.025	35.174	4.36	0.16	26.720	0.223	1499.	4.7
99	100.0	11.897	35.152	4.37	0.16	26.727	0.226	1498.	4.6
101	102.0	11.813	35.150	4.37	0.16	26.742	0.228	1498.	4.5

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	60	01 OCT 1981	0127	40°16.6'N	67°47.2'W	480		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGCT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
203	204.0	8.817	35.122	4.07	0.16	27.243	0.337	1489.	3.4
205	206.0	8.809	35.123	4.06	0.16	27.245	0.339	1489.	3.0
207	207.9	8.792	35.121	4.06	0.16	27.247	0.341	1489.	2.5
209	210.1	8.787	35.121	4.05	0.16	27.248	0.343	1489.	2.2
210	211.7	8.780	35.121	4.04	0.16	27.248	0.344	1489.	2.6
213	214.2	8.760	35.119	4.00	0.16	27.250	0.346	1489.	3.0
215	216.0	8.646	35.106	4.04	0.16	27.258	0.348	1489.	3.4
217	218.0	8.519	35.097	4.04	0.16	27.271	0.349	1488.	3.8
219	219.9	8.473	35.095	4.03	0.16	27.276	0.351	1488.	4.0
221	222.0	8.351	35.088	4.04	0.16	27.290	0.353	1488.	4.3
223	223.9	8.198	35.072	4.08	0.16	27.301	0.354	1487.	4.3
225	226.0	8.115	35.071	4.10	0.16	27.312	0.356	1487.	4.3
227	228.2	7.951	35.053	4.12	0.16	27.323	0.358	1486.	4.2
229	230.0	7.816	35.049	4.16	0.16	27.340	0.359	1486.	4.3
231	232.1	7.696	35.035	4.18	0.16	27.347	0.361	1485.	4.4
232	233.7	7.646	35.031	4.20	0.16	27.351	0.362	1485.	4.3
235	236.0	7.584	35.032	4.21	0.16	27.361	0.363	1485.	4.1
237	238.0	7.481	35.048	4.23	0.16	27.389	0.365	1484.	3.7
239	240.1	7.189	35.004	4.29	0.16	27.396	0.366	1483.	3.5
241	242.0	7.159	34.996	4.34	0.16	27.393	0.368	1483.	3.3
243	244.0	7.145	35.001	4.34	0.16	27.399	0.369	1483.	2.9
245	246.1	7.137	34.996	4.35	0.16	27.397	0.371	1483.	2.4
246	247.8	7.100	34.996	4.38	0.16	27.402	0.372	1483.	2.3
248	250.0	6.976	34.988	4.39	0.16	27.413	0.374	1483.	2.4
251	252.2	6.952	34.984	4.39	0.16	27.413	0.375	1483.	2.2
252	253.9	6.943	34.984	4.41	0.16	27.414	0.376	1483.	2.2
254	255.9	6.926	34.983	4.38	0.16	27.416	0.378	1483.	1.9
256	258.1	6.900	34.982	4.38	0.16	27.419	0.379	1482.	1.6
259	260.2	6.868	34.977	4.42	0.16	27.420	0.381	1482.	1.5
260	261.9	6.848	34.978	4.43	0.16	27.423	0.382	1482.	1.4
262	263.9	6.854	34.979	4.41	0.16	27.423	0.383	1482.	1.3
264	266.0	6.862	34.979	4.41	0.16	27.422	0.385	1482.	1.2
266	268.0	6.853	34.979	4.44	0.16	27.423	0.386	1482.	1.4
268	270.0	6.837	34.978	4.43	0.16	27.424	0.387	1482.	1.7
270	272.0	6.831	34.977	4.43	0.16	27.425	0.389	1482.	2.0
272	274.0	6.802	34.975	4.46	0.16	27.427	0.390	1482.	2.2
274	275.9	6.726	34.969	4.48	0.16	27.433	0.391	1482.	2.3
276	277.9	6.688	34.969	4.49	0.16	27.438	0.393	1482.	2.3
278	280.0	6.662	34.968	4.49	0.16	27.440	0.394	1482.	2.2
280	282.0	6.630	34.967	4.53	0.16	27.444	0.396	1482.	2.1
282	283.9	6.631	34.968	4.53	0.16	27.445	0.397	1482.	2.1
284	286.1	6.603	34.965	4.53	0.16	27.446	0.398	1482.	1.8
286	288.0	6.597	34.966	4.56	0.16	27.448	0.400	1482.	1.9
288	289.7	6.589	34.966	4.57	0.16	27.448	0.401	1482.	2.0
290	291.9	6.558	34.965	4.56	0.16	27.452	0.402	1482.	2.1
292	294.2	6.500	34.959	4.58	0.16	27.455	0.404	1481.	2.0
294	295.9	6.458	34.958	4.62	0.16	27.460	0.405	1481.	1.9
296	298.1	6.450	34.959	4.61	0.16	27.462	0.406	1481.	1.8
298	300.2	6.447	34.959	4.61	0.16	27.462	0.408	1481.	1.5
300	301.9	6.457	34.960	4.62	0.16	27.461	0.409	1481.	1.1

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH		
OC	104	60	01 OCT 1981	0127	40°16.6'N	67°47.2'W	480		
DEPTH	PRESS	TEMP	SALIN	OXY	ATN	SIGT	DYHT A	S SPD	N
(m)	(dbar)	(°C)	(psu)	(ml/l)	(m ⁻¹)	(gm/cm ³)	(10m ² /s ²)	(m/s)	(cph)
401	404.0	5.652	34.938	5.06	0.17	27.548	0.472	1480.	1.7
404	406.1	5.604	34.939	5.08	0.17	27.555	0.473	1480.	1.8
405	408.0	5.594	34.940	5.09	0.17	27.556	0.474	1480.	1.9
408	410.2	5.593	34.940	5.10	0.17	27.557	0.475	1480.	1.9
409	411.9	5.574	34.939	5.12	0.16	27.559	0.476	1480.	1.8
411	414.0	5.551	34.939	5.11	0.16	27.561	0.478	1480.	1.6
413	416.2	5.539	34.939	5.11	0.16	27.563	0.479	1480.	1.5
415	417.8	5.525	34.939	5.14	0.16	27.564	0.480	1480.	1.4
417	420.2	5.516	34.939	5.12	0.17	27.565	0.481	1480.	1.2
419	421.9	5.519	34.939	5.15	0.17	27.565	0.482	1480.	1.1
421	424.2	5.527	34.939	5.14	0.17	27.564	0.483	1480.	1.1
423	425.9	5.513	34.939	5.15	0.16	27.566	0.484	1480.	1.1
425	428.1	5.503	34.938	5.14	0.17	27.567	0.486	1480.	1.0
427	429.8	5.495	34.939	5.16	0.17	27.568	0.486	1480.	1.1
429	432.1	5.488	34.939	5.17	0.17	27.569	0.488	1480.	1.2
431	434.0	5.484	34.939	5.19	0.17	27.570	0.489	1480.	1.2
433	436.0	5.493	34.939	5.18	0.17	27.568	0.490	1480.	1.3
435	438.2	5.485	34.939	5.18	0.17	27.569	0.491	1480.	1.3
437	439.9	5.467	34.939	5.19	0.17	27.572	0.492	1480.	1.3
439	441.9	5.450	34.939	5.17	0.17	27.574	0.493	1480.	1.3
441	444.1	5.441	34.940	5.18	0.17	27.575	0.495	1480.	1.3
443	445.8	5.441	34.940	5.19	0.17	27.575	0.496	1480.	1.2
445	448.0	5.440	34.940	5.20	0.17	27.575	0.497	1480.	1.0
447	450.3	5.438	34.940	5.21	0.17	27.576	0.498	1480.	0.8
449	452.0	5.437	34.940	5.23	0.17	27.576	0.499	1480.	0.8
451	453.9	5.434	34.940	5.22	0.17	27.577	0.500	1480.	0.8
453	456.3	5.431	34.941	5.21	0.17	27.577	0.501	1480.	0.8
455	458.0	5.429	34.941	5.24	0.17	27.577	0.502	1480.	0.7
457	460.1	5.430	34.941	5.24	0.18	27.578	0.503	1480.	0.5
458	461.3	5.429	34.942	5.24	0.18	27.578	0.504	1480.	0.4
459	461.8	5.431	34.941	5.25	0.18	27.577	0.504	1480.	0.7
460	463.0	5.434	34.941	5.27	0.17	27.577	0.505	1480.	0.9
461	464.0	5.436	34.941	5.28	0.17	27.577	0.506	1480.	1.0
462	465.0	5.432	34.942	5.27	0.18	27.578	0.506	1480.	1.0
463	466.0	5.423	34.943	5.27	0.18	27.580	0.507	1480.	1.0
464	466.9	5.424	34.943	5.28	0.18	27.579	0.507	1480.	1.1
465	468.0	5.425	34.942	5.27	0.18	27.579	0.508	1480.	1.1
466	469.0	5.425	34.942	5.25	0.18	27.579	0.508	1480.	1.1
467	470.0	5.424	34.942	5.25	0.18	27.579	0.509	1480.	1.1
468	471.0	5.424	34.943	5.25	0.18	27.580	0.510	1480.	1.1
469	472.1	5.416	34.944	5.26	0.18	27.581	0.510	1480.	1.1

Appendix II

Manufacturers' specifications for instruments used on R/V OCEANUS
Cruise 113 See text for calibration of CTD.

Instrument	Sensor	Range	Accuracy	Resolution
CTD	Conductivity	1 to 65 mmhos	± 0.005 mmhos	0.001 mmhos
	Temperature	-32 to +32°C	$\pm 0.005^\circ\text{C}$	0.0005°C
	Pressure	0-3200 dbar	± 3.2 dbar	0.048 dbar
	Oxygen	0-2 μA	± 2 nA	0.5 nA
	Light	0-4.50 v	± 0.1 v	0.01 v
XBT*	T-4	0-460 m	$\pm 0.1^\circ\text{C}$, $\pm 2\%$ depth	0.01°C, 0.65 m
	T-5	0-1830 m	$\pm 0.1^\circ\text{C}$, $\pm 2\%$ depth	0.01°C, 0.65 m
	T-6	0-460 m	$\pm 0.1^\circ\text{C}$, $\pm 2\%$ depth	0.01°C, 0.65 m
	T-7	0-760 m	$\pm 0.1^\circ\text{C}$, $\pm 2\%$ depth	0.01°C, 0.65 m
	T-10	0-200 m	$\pm 0.1^\circ\text{C}$, $\pm 2\%$ depth	0.01°C, 0.65 m
Salinometer	--	0-40 ppt	± 0.003 ppt	0.0002 ppt
Winkler	--	0-10 ml/l	± 0.04 ml/l	0.2%

*See text for discussion of temperature and depth accuracy.