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GEOLOGICAL SURVEY

HYDROGRAPHY OF NEW ENGLAND SHELF AND SLOPE

DATA REPORT FOR R/V OCEANUS CRUISE 149, MARCH 12-19, 1984

by

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HYDROGRAPHY OF NEW ENGLAND SHELF AND SLOPE

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INTRODUCTION

This report presents hydrographic data obtained on R/V OCEANUS Cruise 149 from March 17-19, 1984. The hydrographic measurements (pressure, temperature, salinity, oxygen, and light transmission) were obtained across the continental slope and upper rise south of New England (between longitude 68°00' W., and longitude 70°00'W.) as part of a study of currents and sediment transport in this region.

During the R/V OCEANUS cruise 149, a total of 36 hydrographic profiles were obtained, 18 by means of a conductivity-temperature-depth (CTD) profiler and 18 by means of expendable bathythermographs (XBTs). Stations are numbered sequentially and station information is tabulated in table 1. The stations were arranged into five sections. One XBT section (no. 1) and one CTD section (no. 4) followed the same transect along 70°W with stations approximately 10km apart (fig. 1a). Two additional sections (no. 2 and 3) began in a water depth of 75m on either side of the Great South Channel, crossed the shelf break and ended in a warm-core ring in water depths between 1000-2000m (fig. 1a). A short section (no. 5) with three stations was made across the Great South Channel where the water depth was 75m. Heavy weather was encountered during much of the cruise and 30-40 knots winds on March 18th and 19th probably generated large enough waves to suspend fine grain material over the area known as the Mud Patch (Twichell and others, 1981) which may explain the high near bottom attenuation coefficient (21.34 m^{-1}) and suspend matter concentration (3.4 mg/L) at the end of Section 4.

OBJECTIVES

The sections were designed to aid in the interpretation of currents, temperature, pressure and light transmission measured by a moored instrument array across the slope at 70°W longitude (fig. 1b and 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 held position 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 5 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. The Niskin bottle was removed and one water sample was withdrawn for measurement of deep salinity (table 3) and 1 to 3 samples for measurement of oxygen (table 3). Samples for nutrient analysis (PO_4, SiO_4, NO_3, NO_2, and NH_3) were obtained at 18 stations; the analysis (see table 4 and Appendix IV) was performed later at the Woods Hole Oceanographic Institution (WHOI). Approximately 2 liters of sea water were withdrawn for determination of suspended matter concentration. Deep salinity samples were obtained at 15 stations. The oxygen samples were obtained at 14 stations. Suspended-matter concentration was measured at 16 stations by filtering the seawater through preweighed, paired 0.45-μm Millipore filters, rinsing salt off with distilled water, air drying the filters under a laminar flow hood and reweighing (reweighing was not done until January 1987). The suspended matter and the corresponding light attenuation coefficient at the sample depth are listed in table 5. Meteorological observations during the cruise (obtained from the ships deck log) are listed in tables 6 and 7.

INSTRUMENT DESCRIPTION

The CTD profiler (Neil Brown Instrument Systems, Mark III) was modified to measure oxygen and light transmission. A scan of data (conductivity, temperature, pressure, oxygen current, oxygen temperature, and light transmission) was obtained at a rate of 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 polargraphic 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 ±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 Autosal 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 Gifft echo sounder.

INSTRUMENT CALIBRATION

Temperature time-lag

The platinum resistance thermometer time constant (Tlag = 0.125 s) was selected to minimize density inversions in regions of strong thermal gradients. Since the temperature sensor had a slower response then 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:

$y(t) = y(t-dt) \cdot W0 + x(t) \cdot W1$
dt = 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
$W0 = e^{-dt/Tlag}$
W1 = 1 - W0

A precruise laboratory calibration of the CTD temperature had been done on January 5, 1982 at the Woods Hole Oceanographic Institution, and the temperature offset (calibration bath minus CTD) ranged between -0.0081°C at 5° and -0.0099°C at 15°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). The surface salinity of the bucket samples for 34 stations were measured with the Guildline Autosal 8400 after the cruise and the values are listed in table 2 along with the CTD salinity value closest to the surface; the difference between measurements was typically 0.017 psu. The typical residual (Niskin bottle salinity-CTD salinity) for the deep salinities at 15 stations was ±0.010 psu and the estimated error in salinity (ΔS) due to the uncertainity in the sample depth was typically 0.011 psu (table 3). A precruise laboratory calibration of conductivity was done on January 5, 1982 at WHOI, and the offset (calibration bath minus CTD) ranged from 0.0058 mmhos and 0.0070 mmho, which corresponds to salinity offsets of 0.005 to 0.007 psu. Based on this laboratory calibration no correction was made to the salinities reported here.

Oxygen

The oxygen sensor malfunctined and no reliable oxygen values were obtained from the CTD unit. Dissolved oxygen was measured by the Winkler

chemical titration method (Strickland and Parsons, 1972) for 14 deep-water samples from 22 CTD casts which included a Niskin bottle. The oxygen values are listed in table 3 and also shown in figures 3d-5d preceeded by a + sign.

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, 1986, for method). The transmission sensor (SN 46) was calibated in the laboratory before and after the cruise and gave a value of TR_{cw} equal to 4.46 volts but the value 4.48 volts was used based on the maximum voltage obtained for the CTD cast at station 28. A calibration curve for converting light attenuation coefficient to suspended matter concentration (mg/L) is nearly linear for data obtain during this cruise (figure 2 and table 5).

Accuracy

Based on calibrations, the CTD temperature and salinity data are accurate to ±0.01°C, and 0.01 psu. The changes in the transmission voltage are accurate to ±0.04 volts so that with a typical output voltage of 4.00 volts the attenuation coefficient are accurate to about ±0.04 m^{-1}. Because there is some uncertainity in the normalization voltage for the transmissometer however, the absolute value of the coefficients could be offset by a constant.

DATA PROCESSING

The CTD data (pressure, temperature, conductivity, oxygen current, oxygen temperature, and light transmission) were recorded at sea on both 9-track magnetic tape (see Appendix III) and 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 the downcast and upcast 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 1 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 density inversions not deleted by the range filter were identified by a point-editing program and replaced by interpolating between adjacent values of density. The editor recomputed the salinity from the interpolated values 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 ±0.2°C. The XBT data were not averaged to 2-dbar intervals due to the irregular spacing of data points.

DATA PRODUCTS

Vertical sections

The hydrographic data are presented in several ways. Vertical sections are shown in figures 3-7. The sections are numbered as OC149-N, where N is the section number (see fig. 1 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 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.

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 attenuation cofficient used the 2-dbar-averaged data which were contoured using DISSPLA 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, and light attenuation were contoured for the 10-, 50-, and 100- dbars pressure surfaces (figs 8-11). Surface salinity values from the bucket sampler have been contoured in fig. 9a, and surface values of phosphate, silicate, nitrate and ammonia were contoured in figure 12. Because of the sparse data, all horizontal sections were contoured by hand.

TS diagrams

Plots of temperature versus salinity (TS plots, figs. 13-16) 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 600-dbar points have been annotated.

Station profiles

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

$$N^2 = -(g/\rho)\ \frac{\partial \rho}{\partial z}$$

(ρ = water density, g = gravity) as a function of pressure at each station are shown in figures 17-50. 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) and are 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, and no values are listed due to the malfunction of the oxygen sensor, 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.

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Table 1. Hydrographic stations R/V OCEANUS Cruise 149, March 12-19, 1984. The letter designation in the station column indicates a current mooring shown in figure 1b.

Station	Section	Date (EST)	Time	Latitude (N.)	Longitude (W.)	Water Depth (m)	Type
1 SG	1	MAR 16	2241	39° 48.30'	70° 04.46'	1380	XBT
2 SE	1	MAR 16	2311	39° 53.53'	70° 02.67'	605	XBT
3 ~SF	1	MAR 16	2337	39° 58.24'	70° 01.41'	173	XBT
4	1	MAR 17	0015	40° 4.82'	69° 59.53'	145	XBT
5	1	MAR 17	0052	40° 11.05'	69° 57.81'	102	XBT
6	1	MAR 17	0135	40° 18.04'	69° 55.84'	87	XBT
7	2	MAR 17	1550	39° 54.12'	68° 28.84'	2530[a]	CTD
8	2	MAR 17	1701	39° 58.94'	68° 30.93'	1290	XBT
9 SA	2	MAR 17	1755	40° 04.08'	68° 33.32'	600	CTD
10	2	MAR 17	1937	40° 09.28'	68° 37.03'	185	XBT
11	2	MAR 17	2011	40° 13.62'	68° 37.47'	146	CTD
12		MAR 17	2138	40° 18.99'	68° 34.60'	110	XBT
13	2	MAR 17	2317	40° 23.02'	68° 40.99'	90	CTD
14	2,5	MAR 18	0100	40° 29.99'	68° 44.91'	75	CTD
15	5	MAR 18	0304	40° 29.89'	69° 00.16'	75	CTD
16	3,5	MAR 18	0457	40° 30.07'	69° 16.21'	75	CTD
17	3	MAR 18	0605	40° 24.96'	69° 16.84'	78	XBT
18	3	MAR 18	0709	40° 20.40'	69° 15.24'	85	CTD
19	3	MAR 18	0827	40° 14.23'	69° 15.07'	95	XBT
20	3	MAR 18	0858	40° 10.02'	69° 13.90'	101	CTD
21	3	MAR 18	0950	40° 06.15'	69° 13.67'	117	XBT
22	3	MAR 18	1020	40° 01.52'	69° 12.37'	195	CTD
23	3	MAR 18	1131	39° 55.04'	69° 11.37'	950	CTD
24		MAR 18	1223	39° 55.27'	69° 11.56'	955	XBT
25		MAR 18	1352	39° 54.18'	69° 24.81'	985	XBT
26		MAR 18	1507	39° 52.16'	69° 38.86'	880	NG
27		MAR 18	1615	39° 50.55'	69° 51.10'	1000	NG
28 SG	4	MAR 18	1800	39° 48.34'	70° 04.58'	1200	CTD
29 SE	4	MAR 18	2030	39° 53.52'	70° 03.91'	590	CTD
30 ~ SF	4	MAR 18	2158	39° 58.06'	70° 01.85'	190	CTD
31	4	MAR 18	2320	40° 05.03'	69° 59.93'	145	CTD
32 ~ T	4	MAR 19	0037	40° 11.21'	69° 57.85'	102	CTD
33	4	MAR 19	0140	40° 17.58'	69° 58.10'	90	XBT
34	4	MAR 19	0223	40° 23.02'	69° 57.97'	80	CTD
35	4	MAR 19	0330	40° 30.10'	69° 58.18'	69	XBT
36	4	MAR 19	0425	40° 37.12'	69° 58.08'	58	CTD

[a]--from NOAA chart 13200
NG - failed

Table 2. Surface salinity for R/V OCEANUS Cruise 149, March 12-19, 1984. Diff. is bottle salinity - CTD salinity

Station	CTD Depth (dbar)	SALINITY CTD (psu)	SALINITY Bottle (o/oo)	Diff
3	XBT	--	34.709	--
4	XBT	--	33.456	--
5	XBT	--	33.033	--
6	XBT	--	32.586	--
7	4	35.020	35.070	0.050
8	XBT	--	34.629	--
9	3	34.561	34.623	0.062
10	XBT	--	33.161	--
11	3	32.926	32.981	0.055
12	XBT	--	32.882	--
13	2	32.691	32.696	0.005
14	2	32.474	32.493	0.019
15	3	32.417	32.431	0.014
16	4	32.677	32.685	0.008
17	XBT	--	32.515	--
18	3	32.520	32.526	0.006
19	XBT	--	33.013	--
20	2	33.810	33.836	0.026
21	XBT	--	34.012	--
22	2	34.297	34.300	0.003
23	3	34.889	34.906	0.017
24	XBT	--	34.974	--
25	XBT	--	34.556	--
26	XBT	--	35.323	--
27	XBT	--	35.235	--
28			35.128	
29			35.310	
30	2	35.083	35.110	0.027
31	3	33.505	33.494	-0.011
32	4	32.890	32.882	-0.008
33	XBT	--	32.815	--
34	3	32.624	32.629	0.005
35	XBT	--	32.635	--
36	3	32.421	32.414	-0.007
Mean				0.017±0.022

Table 3. Deep Salinity and Oxygen Data for OCEANUS Cruise 149, March 12-19, 1984.

Station	Bottle Sample depth (dbar)	Salinity (psu) Bottle	CTD	Residual	ΔS^a	Oxygen Bottle (ml/L) [b]
9	535	34.967	34.964	0.003	0.001	5.51
13	75	33.487	33.509	-0.022	0.026	6.37
14	60	32.491	32.483	0.008	0.000	6.55
15	61	32.427	32.407	0.020	0.007	6.69
16	64	32.682	32.675	0.007	0.001	7.42
18	75	32.635	32.634	0.001	0.010	7.23
20	91	34.976	34.971	0.005	0.027	--
22	177	35.474	35.466	0.008	0.001	3.65
28	~1152	34.951	34.954	-0.003	0.000	6.12
29	576	34.984	34.977	0.007	0.004	5.39
30	184	35.440	35.432	0.008	0.032	3.51
31	134	35.275	35.287	-0.012	0.019	4.84
32	92	34.050	34.052	-0.002	0.037	5.92
34	70	32.644	32.638	0.006	0.001	7.34
36	46	32.443	32.436	0.007	0.001	8.07
mean				0.003	0.011	
SD				±0.010	±0.013	

[a]Change in salinity (ΔS) between 2 dbar above and below sampling depth

[b]Three replicate O_2 samples were taken at stations 9, 14, 15. The standard deviations were ±0.05, ±0.43 and ±0.30 respectively.

Table 4. Nutrient data for R/V OCEANUS Cruise 149, March 12-19, 1984.

Station	Sample depth (dbar)	$P-PO_4$ (µg at/L)	$Si-SiO_2$ (µg at/L)	$N-NO_3$ (µg at/L)	$N-NO_2$ (µg at/L)	$N-NH_3$ (µg at/L)
7	0	.55	3.1	5.4	.21	.34
9	0	.56	4.5	6.6	.25	.14
	535	1.30	12.0	18.6	.01	.03
11	0	.61	6.0	7.2	.30	.48
13	0	.73	3.6	6.6	.16	.40
	75	.70	5.2	7.2	.13	.11
14	0	.63	.9	4.1	.10	.72
	60	.66	.9	4.2	.10	.64
15	0	.61	.4	3.6	.10	.73
	61	.58	.5	3.6	.09	.73
16	0	.81	5.3	7.6	.11	.17
	64	.88	5.8	8.1	.12	.09
18	0	.69	1.3	4.8	.12	.45
	75	.70	2.6	5.7	.14	.36
20	0	.61	4.6	6.5	.22	.17
	91	.66	5.4	8.5	.10	.00
22	0	.59	4.3	6.7	.25	.13
	177	1.23	9.6	18.3	.04	.00
23	0	.43	2.3	4.1	.15	.23
	555	1.30	11.5	18.1	.00	.05
28	0	.53	3.1	6.6	.27	.58
	1152	1.24	11.6	17.8	.00	.03
29	0	.46	2.4	5.2	.17	.16
	576	1.30	11.9	18.6	.00	.00
30	0	.52	3.0	6.3	.25	.12
	184	1.41	10.9	21.2	.02	.02
31	0	.66	4.4	6.3	.16	.14
	134	.52	3.6	6.4	.03	.06
32	0	.74	4.1	6.7	.17	.32
	92	.70	5.4	7.4	.16	.04
34	0	.73	2.9	6.1	.12	.36
	70	.80	3.4	6.6	.13	.29
36	0	.85	5.7	2.3	.07	.53
	46	.70	6.1	2.8	.08	.21

Table 5. Suspended matter concentration for water samples obtained on R/V OCEANUS Cruise 149, March 12-19, 1984.

Station	Water Depth (m)	Sample Depth (dbar)	Suspended Matter (mg/L)	Light Attenuation (1/m)
9	600	535	0.080	0.02
13	90	75	0.309	0.17
14	75	60	0.570	0.28
15	75	61	1.737	0.81
16	75	64	0.794	0.37
18	85	75	0.319	0.26
20	101	91	0.487	0.22
22	195	177	0.166	0.05
23	950	555	0.025	0.02
28	1200	1152	0.064	0.00
29	590	576	0.080	0.03
30	190	184	0.073	0.02
31	145	134	0.260	0.12
32	102	92	0.686	0.30
34	80	70	0.807	0.31
36	69	46	3.430	1.34

Table 6. Meteorological observations for R/V OCEANUS Cruise 149 obtained from ship's deck log. (time is Eastern Standard Time). (See Table 7 for key to meteorlogical observations).

Date	Time	Wind		Sea			Air		Weather
	EST	Dir	Force	Dir	Swell	Height	Pressure (mb)	Temp (°c)	
March 12	1600	WNW	4	WNW	1	2	1037	-3.3	b
	2000	W	3	W	1	2	1040	-3.9	b
	2400	E	airs	--	--	2	1042	-2.2	o
March 13	0400	E	3-4	--	--	1-2	1042	-1.7	bc
	0800	ExS	4	ExN	1	2	1042	1.6	o
	1200	E	5	E	1	3	1040	6.7	o
	1600	ESE	8	ESE	3	4	1034	7.2	o
	2000	SE	8	--	--	5	1030	11.1	o
	2400	SE	7-8	SE	3	5	1023	12.2	o
March 14	0400	SWxS	8	SE	4	5	1015	15.0	op
	0800	var	4	S	8	5	1016	15.0	or
	1200	WxN	7	--	9	5	1016	4.4	o
	1600	NW	7-8	--	9	5-6	1019	4.4	bc
	2000	NW	6	--	9	4	1023	5.6	b
	2400	NWxN	6	NW	3	4	1024	3.3	bc
March 15	0400	NNW	6	NW	3	4	1025	0.6	c
	0800	NW	6	NNW	3	4	1027	0.6	o
	1200	NxW	5	NNW	5	4	1025	2.2	o
	1600	NNW	5-6	NNW	4	4	1024	2.2	o
	2000	NxE	6	N	3	4	1024	2.2	o
	2400	NxE	4	N	1	3	1024	3.3	o
March 16	0400	NNE	4	N	1	2-3	1023	1.6	o
	0800	NxE	4-5	NNE	2	3	1023	1.6	of
	1200	NxE	4	NNE	1	3	1021	4.4	o
	1600	N	4	N	1-3	3	1018	6.1	f
	2000	N NE	3	N	2	3	1018	5.6	f
	2400	NW	3	E	2	3	1017	5.6	o
March 17	0400	N	4	E	3	2-3	1015	5.6	f
	0800	NE	3	E	2	3	1017	10.0	b
	1200	NxW	4	E	2	3	1018	7.8	bc
	1600	N	6	--	--	3-4	1017	9.4	f
	2000	N	6-7	NNW	3	5	1018	6.7	bc
	2400	N	6	N	3	4	1018	4.4	o
March 18	0400	NNE	7-8	N	6	5-6	1019	4.4	or
	0800	NxE	8	N	6	6	1019	3.9	of
	1200	NxE	7-8	N	3	5	1017	6.1	op
	1600	NNE	7-8	N	3-6	5-6	1017	5.6	o
	2000	N	8	NxE	6	7	1016	4.4	o
	2400	N	7	NxE	3	5	1016	3.3	op
March 19	0400	NNW	6	N	3	5	1013	2.8	op
	0800	NNW	6	N	1	4	1014	2.2	or

Table 7. - Key to meterological 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	lightening	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

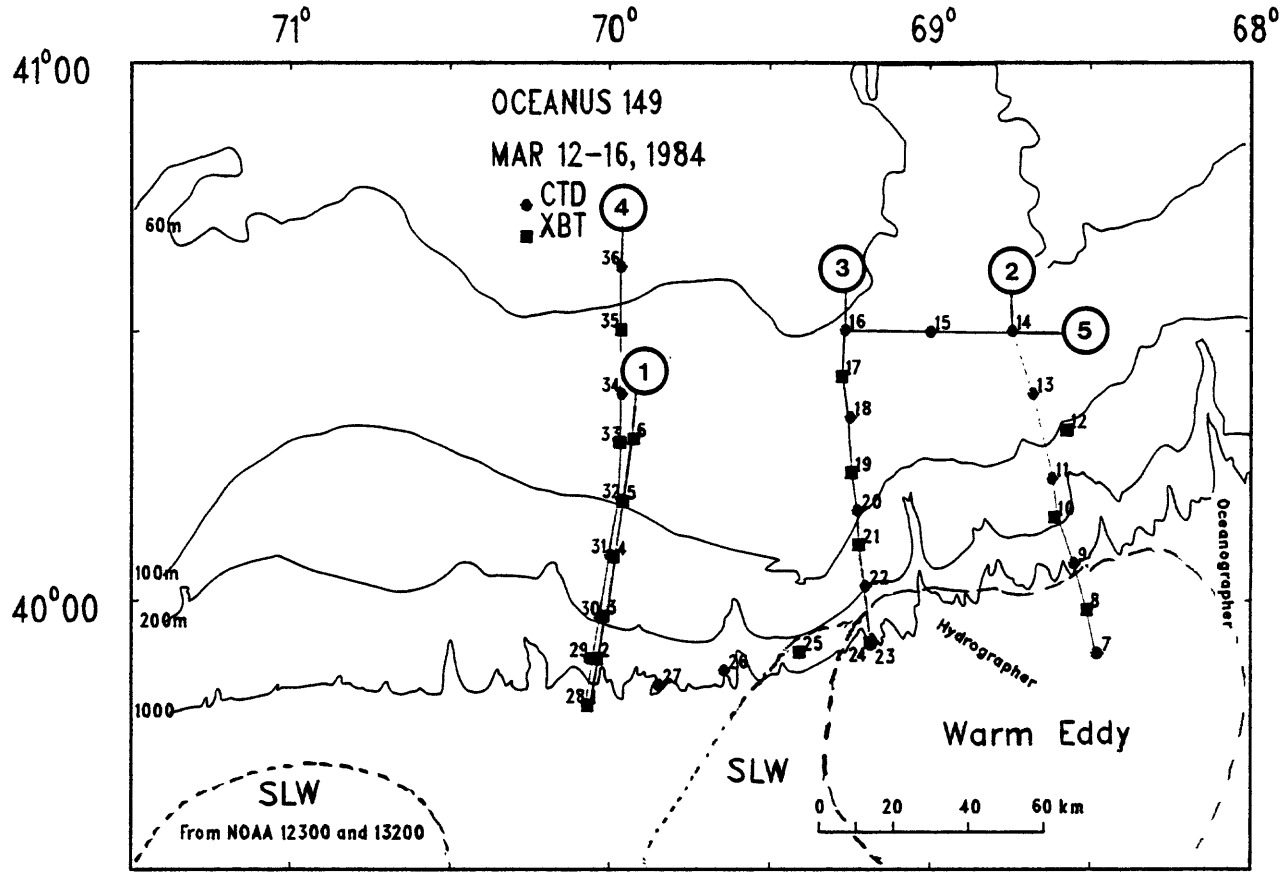


Figure 1a. Location of stations between 68°00' W. and 70°00' W. The circled numbers identify the sections shown in figure 3-7. Warm core eddy and slope water (SLW) are based on Oceanographic Analysis chart for March 14, 1984.

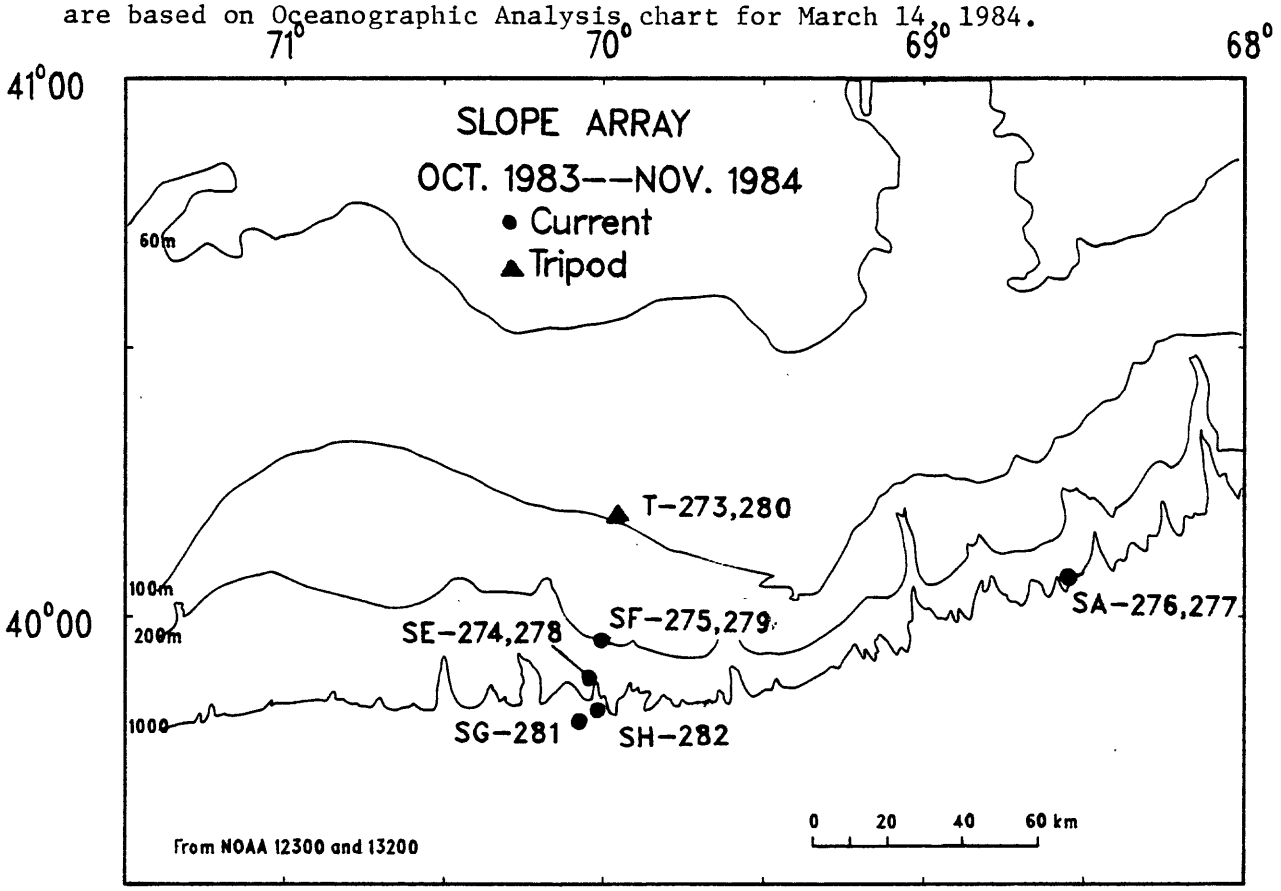


Figure 1b. Slope moored array. Stations are identified by letters. The three digit number following the station letter is the mooring number. Moorings 273-276 were recovered and moorings 277-282 were deployed on OCEANUS 149.

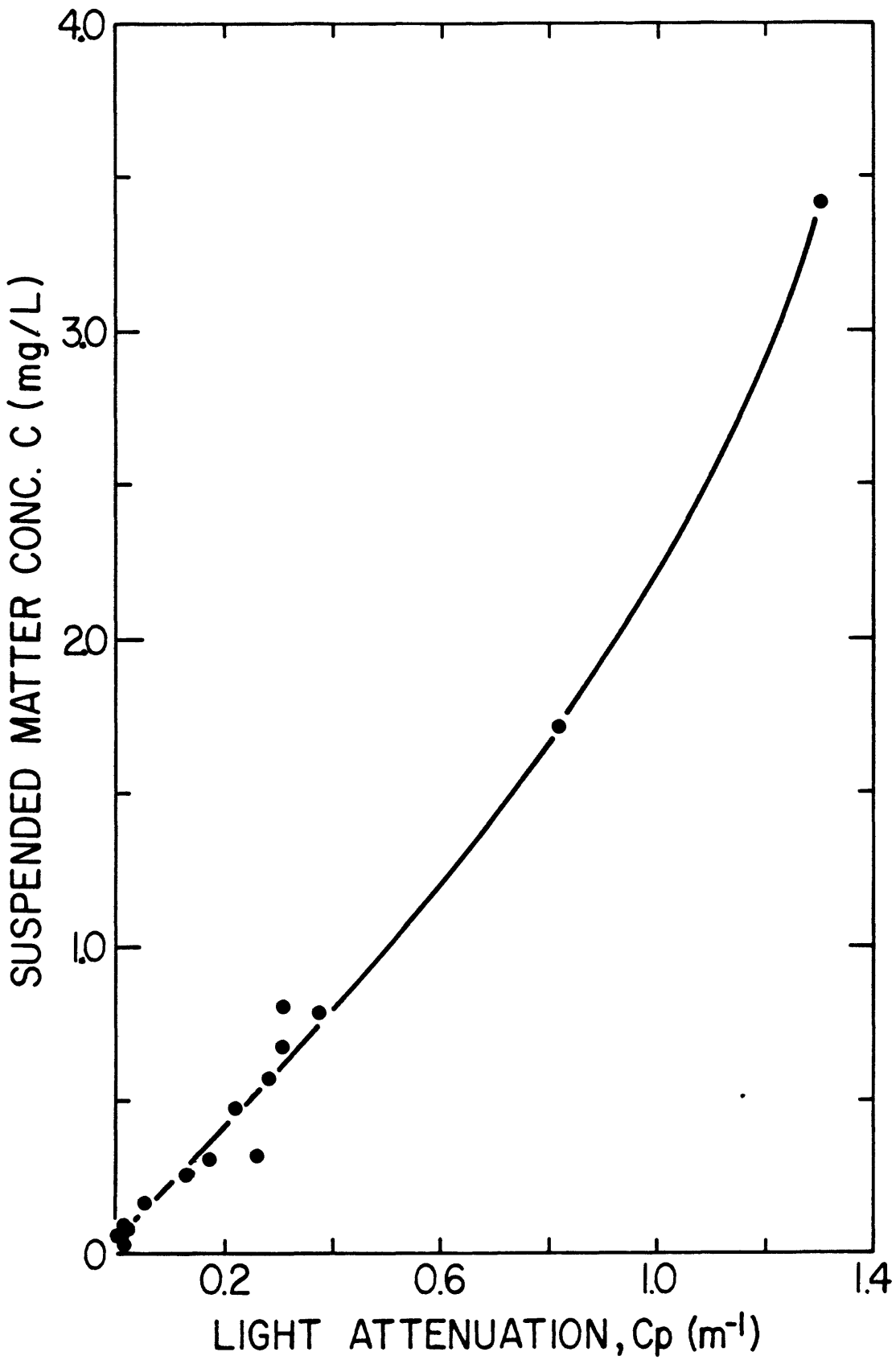
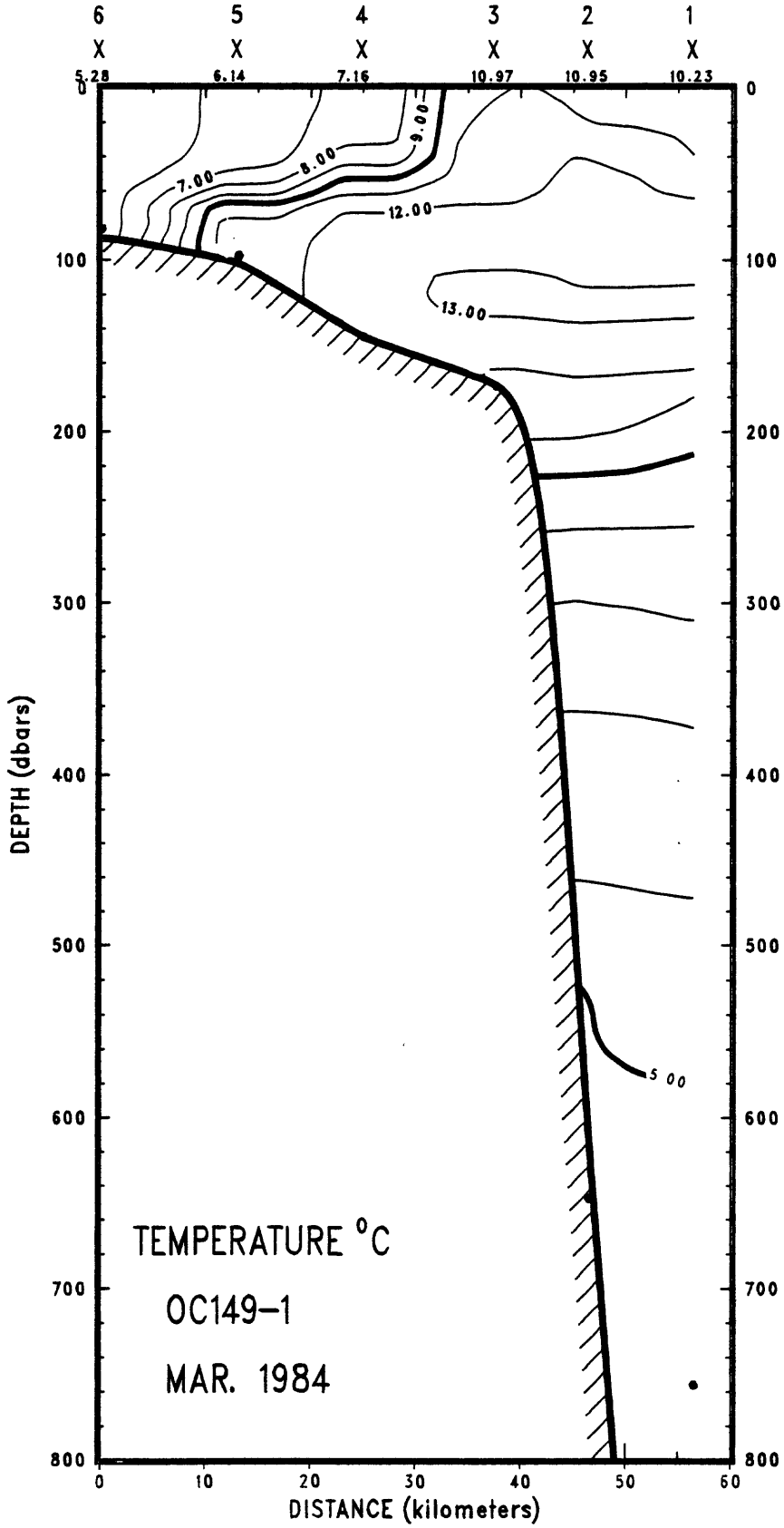


Figure 2. Calibration curve for determining suspended matter concentration from measurements of light attenuation. The transmissometer had a 25-cm path length, and used a light-emitting diode with a wavelength of 660 nm.

Vertical sections

The section numbers follow the hyphen after the cruise symbol OC149 (see fig. 1 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, and 0.05 m^{-1} for attenuation coefficient). Every fifth contour line is thicker. 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. Because of the computer contouring routine, the shape and slope of the contours near the sea floor should be interpreted with caution (see text). There were no reliable oxygen values obtain from the CTD; the oxygen values from the Niskin bottles samples are shown on a second salinity section preceeded by a + sign. The dot indicates the deepest data point at each station.


6
X
5.28
5
X
6.14
4
X
7.16
3
X
10.97
2
X
10.95
1
X
10.23
7.00
8.00
9.00
12.00
13.00
5.00
TEMPERATURE °C
OC149-1
MAR. 1984
DEPTH (dbars)
DISTANCE (kilometers)
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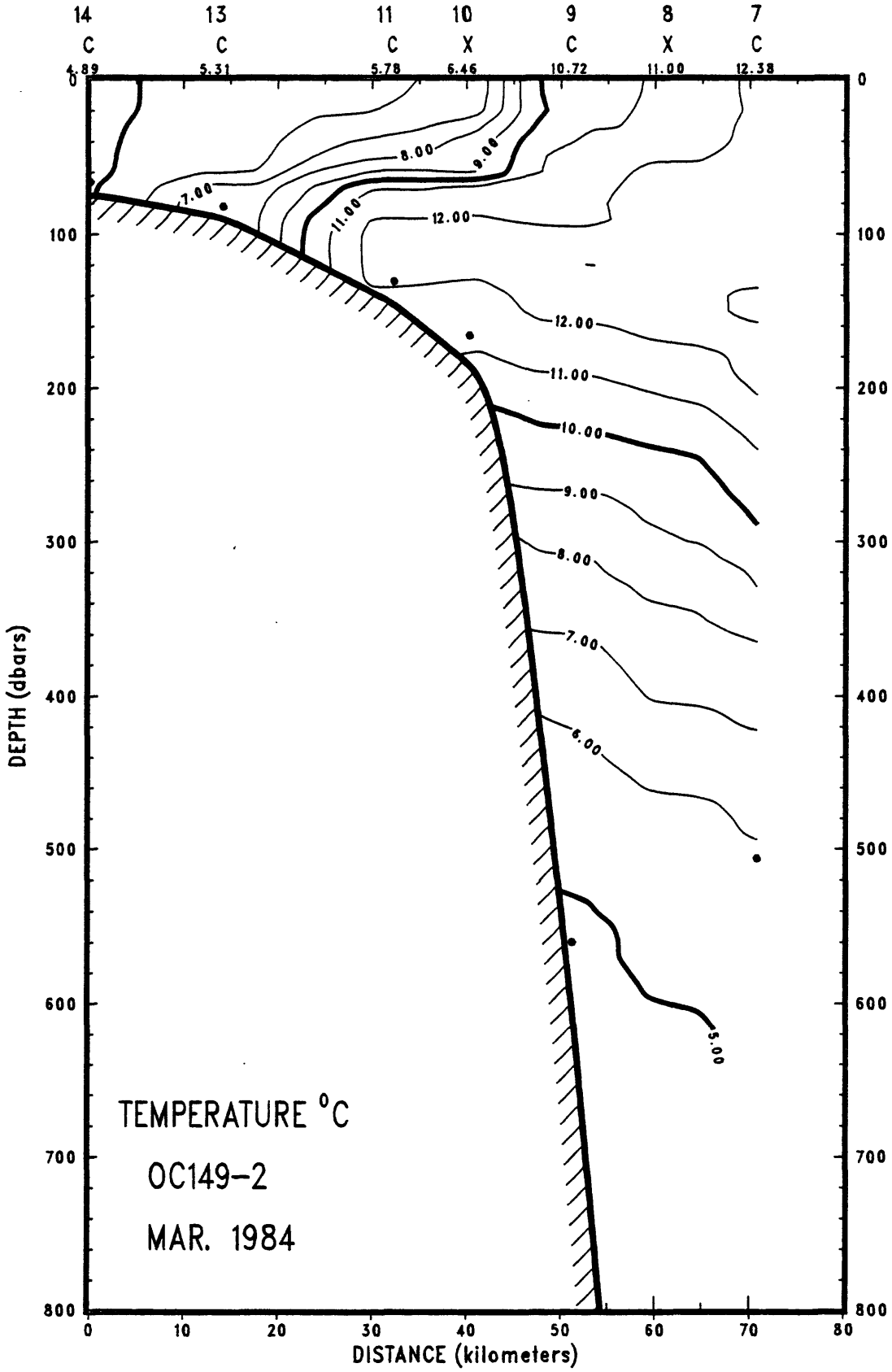
100
200
300
400
500
600
700
800
10
20
30
40
50
60


14 C 4.89
13 C 5.31
11 C 5.78
10 X 6.46
9 C 10.72
8 X 11.00
7 C 12.38
7.00
8.00
9.00
11.00
12.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
TEMPERATURE °C
OC149-2
MAR. 1984
DEPTH (dbars)
DISTANCE (kilometers)
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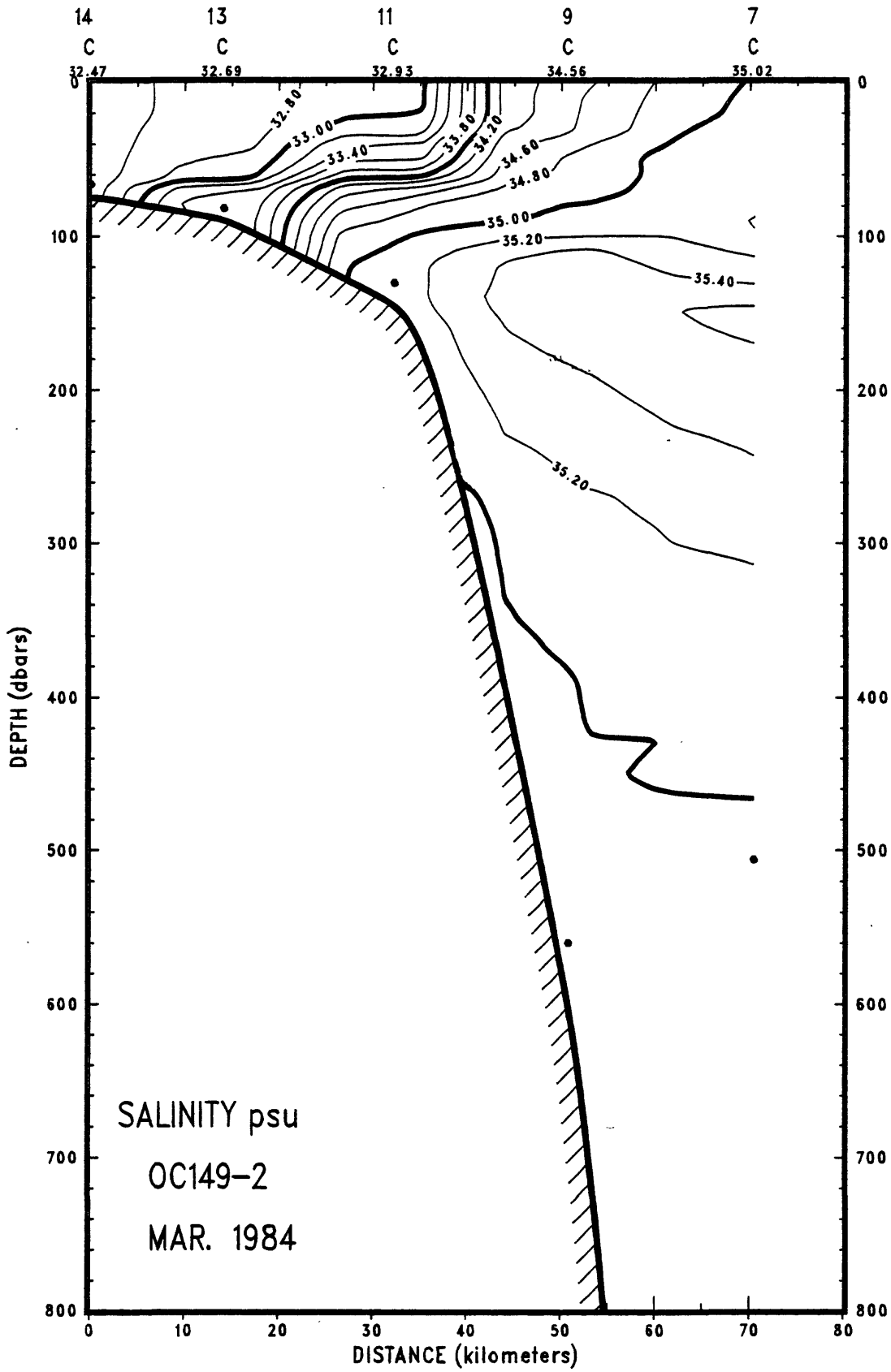
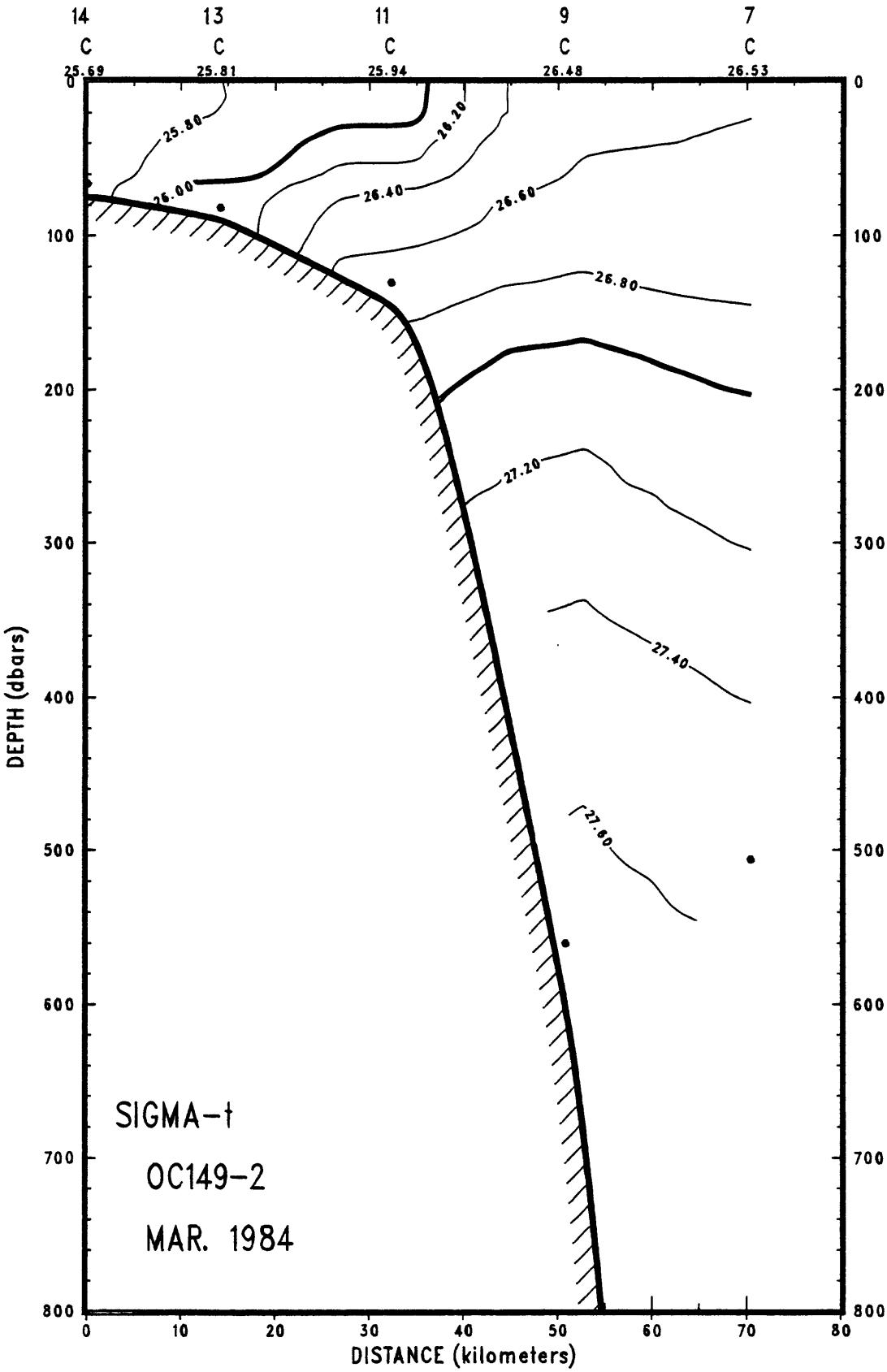
200
300
400
500
600
700
800
0
10
20
30
40
50
60
70
80


14 C
13 C
11 C
9 C
7 C
32.47
32.69
32.93
34.56
35.02
32.80
33.00
33.40
33.80
34.20
34.60
34.80
35.00
35.20
35.40
35.20
DEPTH (dbars)
DISTANCE (kilometers)
SALINITY psu
OC149-2
MAR. 1984


14 C 25.69
13 C 25.81
11 C 25.94
9 C 26.48
7 C 26.53
25.80
26.00
26.20
26.40
26.60
26.80
27.20
27.40
27.60
SIGMA-t
OC149-2
MAR. 1984
DEPTH (dbars)
DISTANCE (kilometers)
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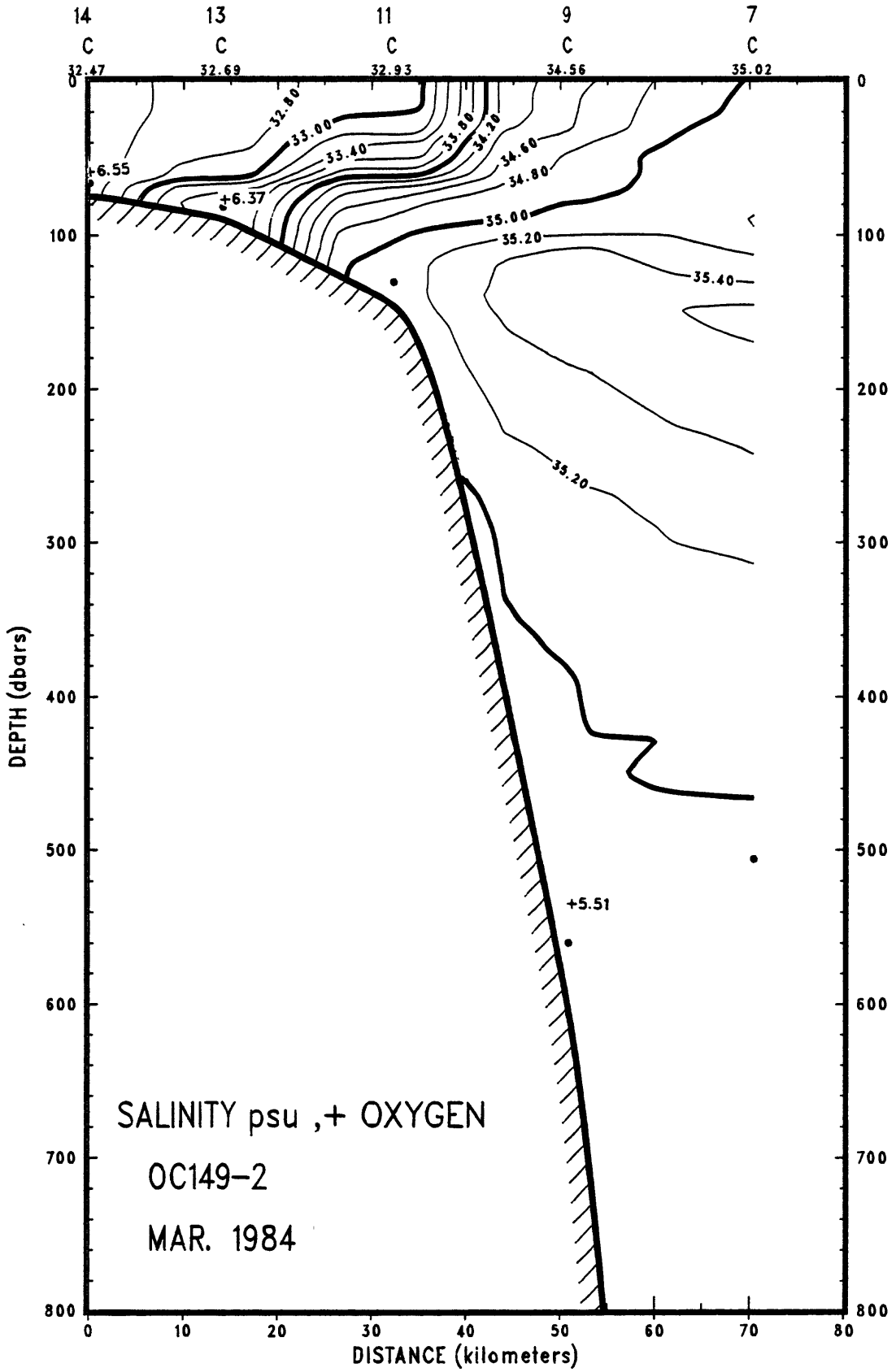
100
200
300
400
500
600
700
800
0
10
20
30
40
50
60
70
80


14
C
32.47
13
C
32.69
11
C
32.93
9
C
34.56
7
C
35.02
32.80
33.00
33.40
33.80
34.20
34.60
34.80
35.00
35.20
35.40
35.20
+6.55
+6.37
+5.51
SALINITY psu ,+ OXYGEN
OC149-2
MAR. 1984
DEPTH (dbars)
DISTANCE (kilometers)
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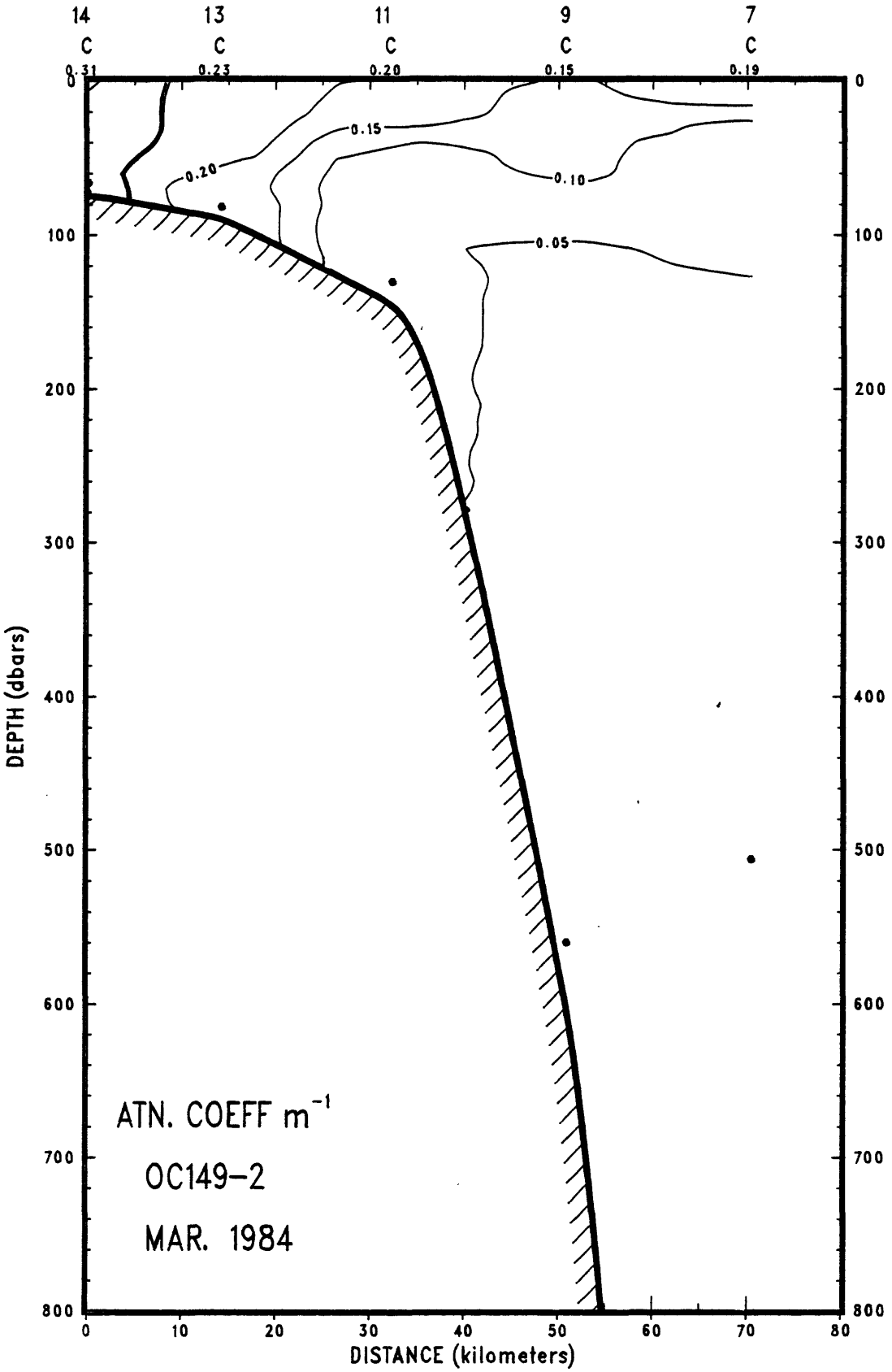
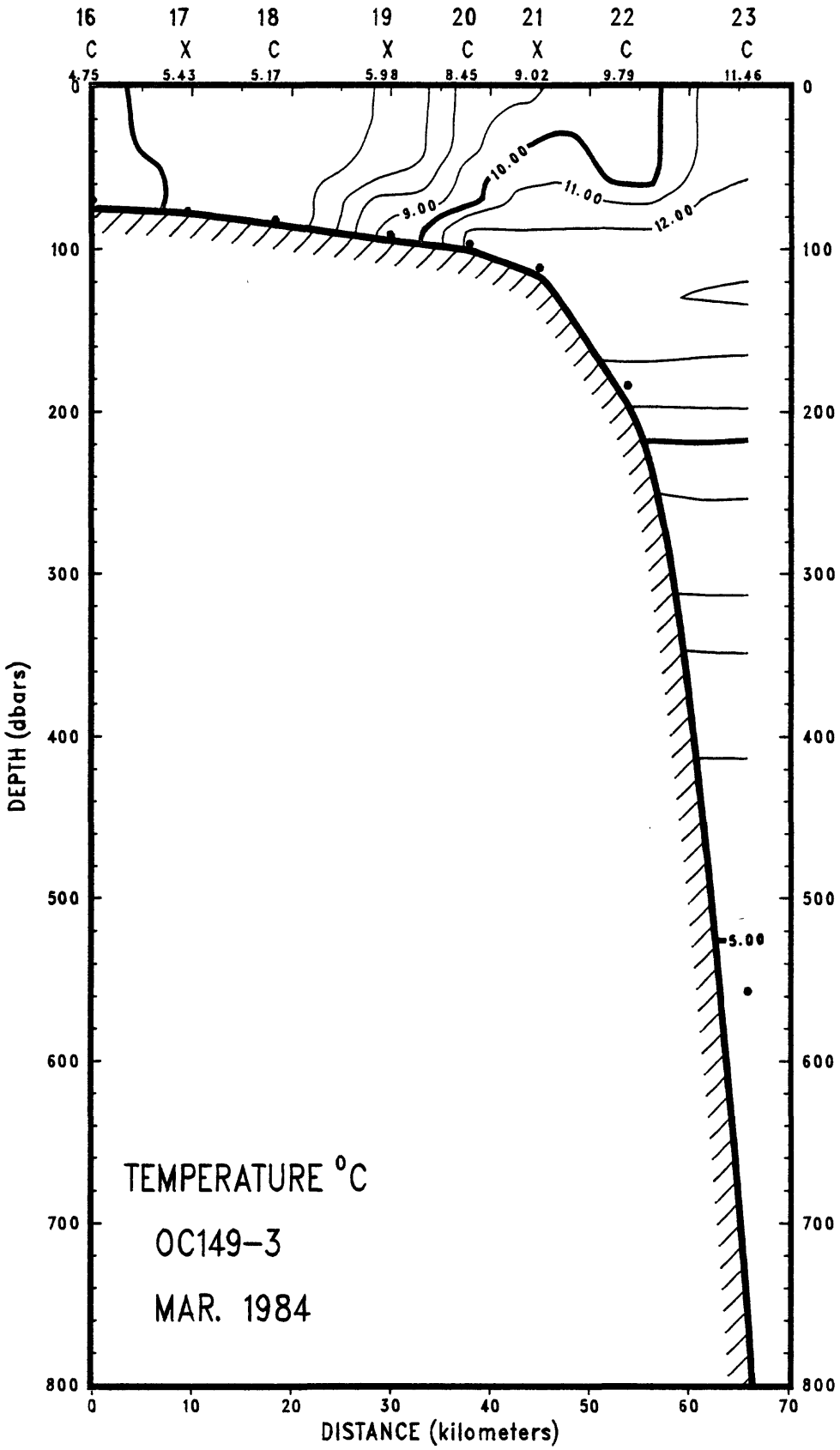
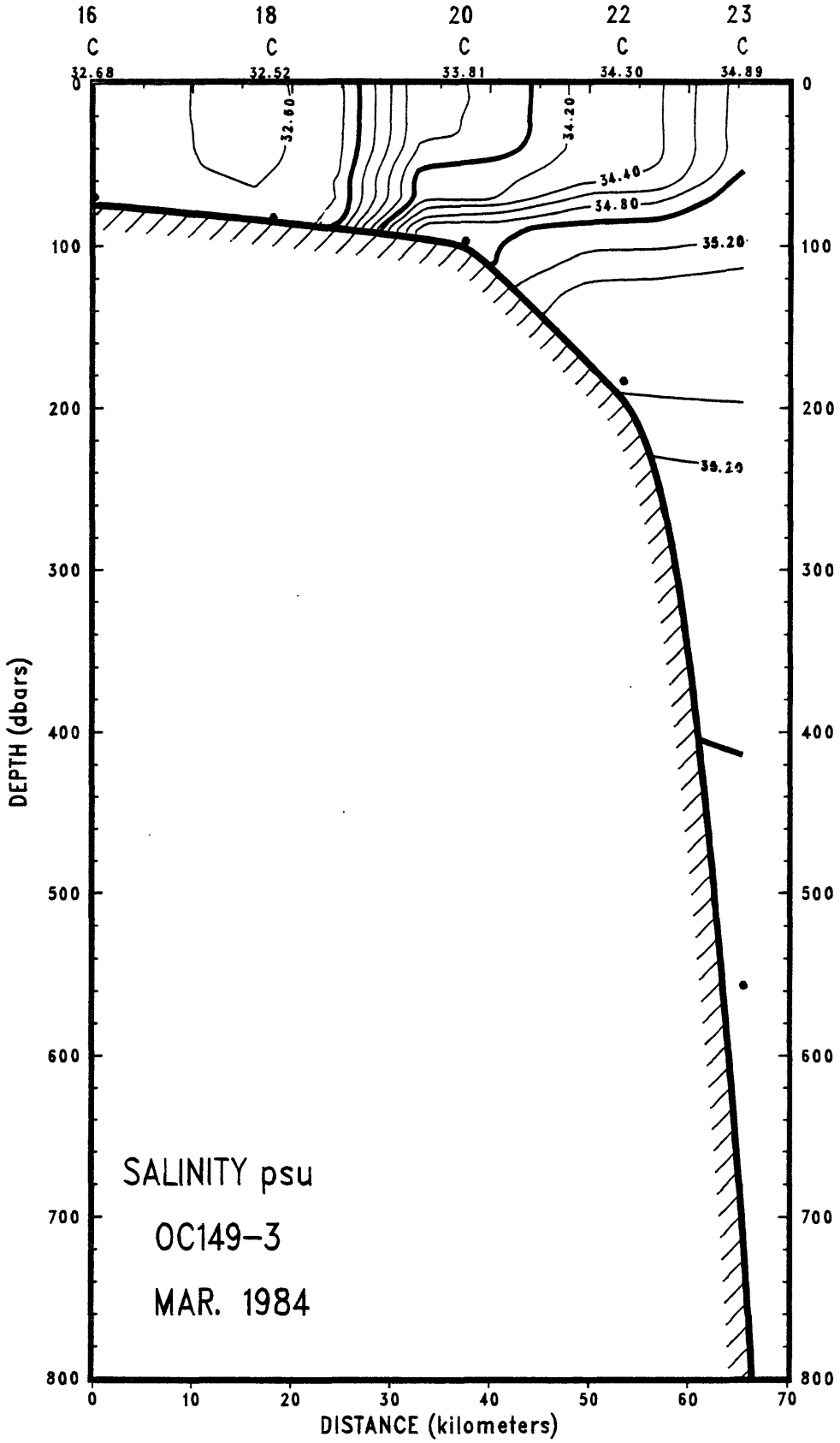
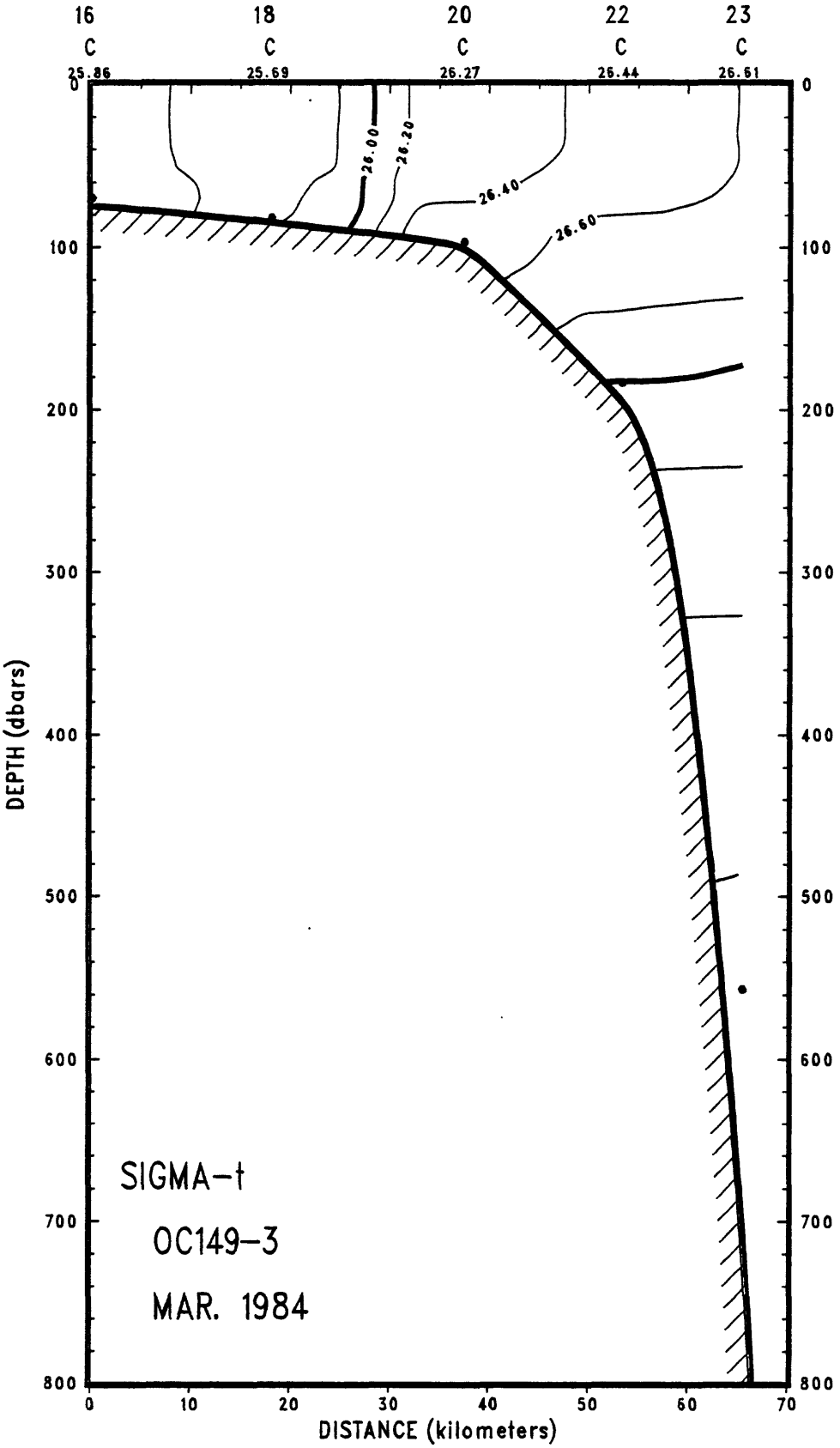
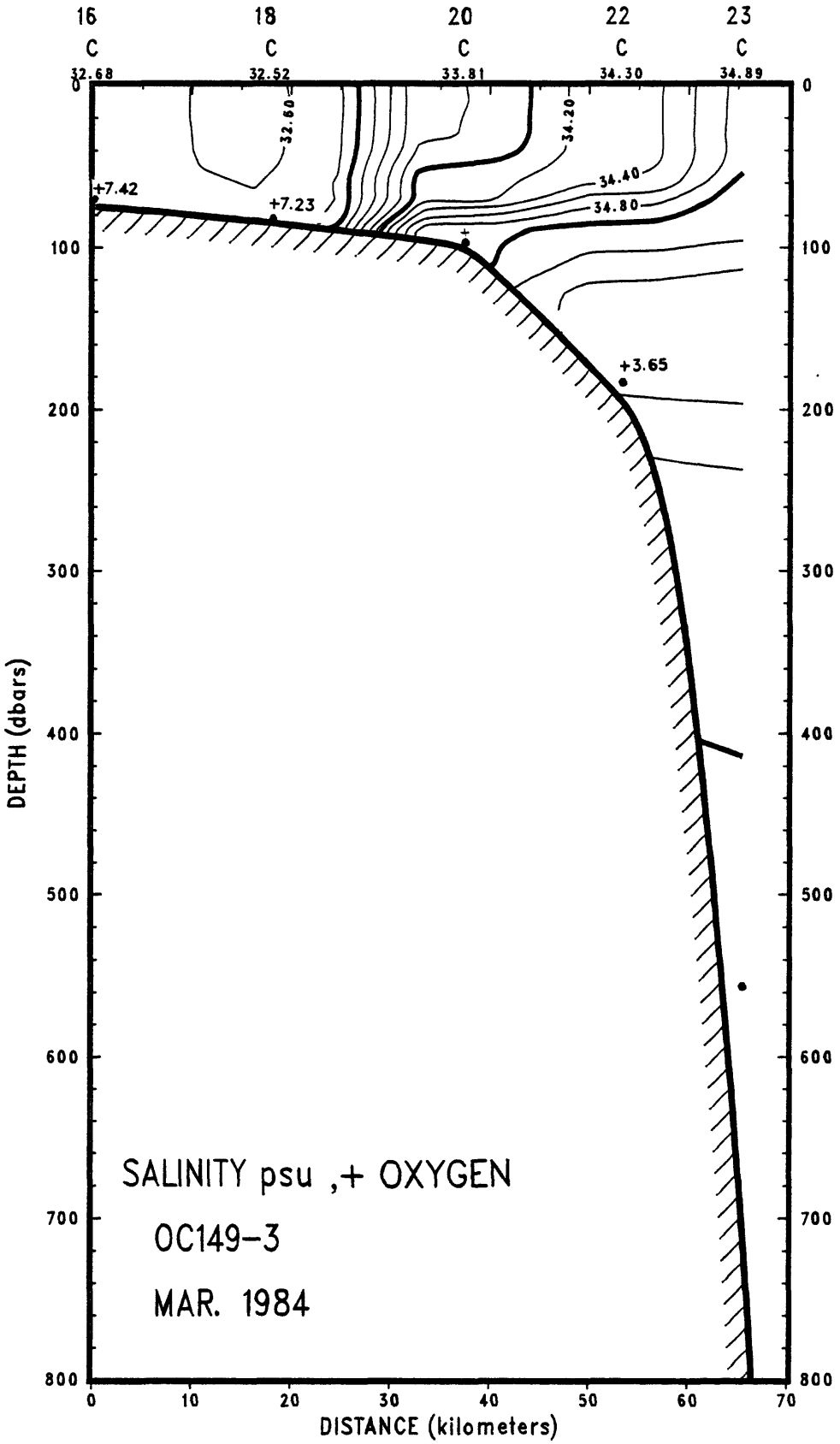
100
200
300
400
500
600
700
800
0
10
20
30
40
50
60
70
80

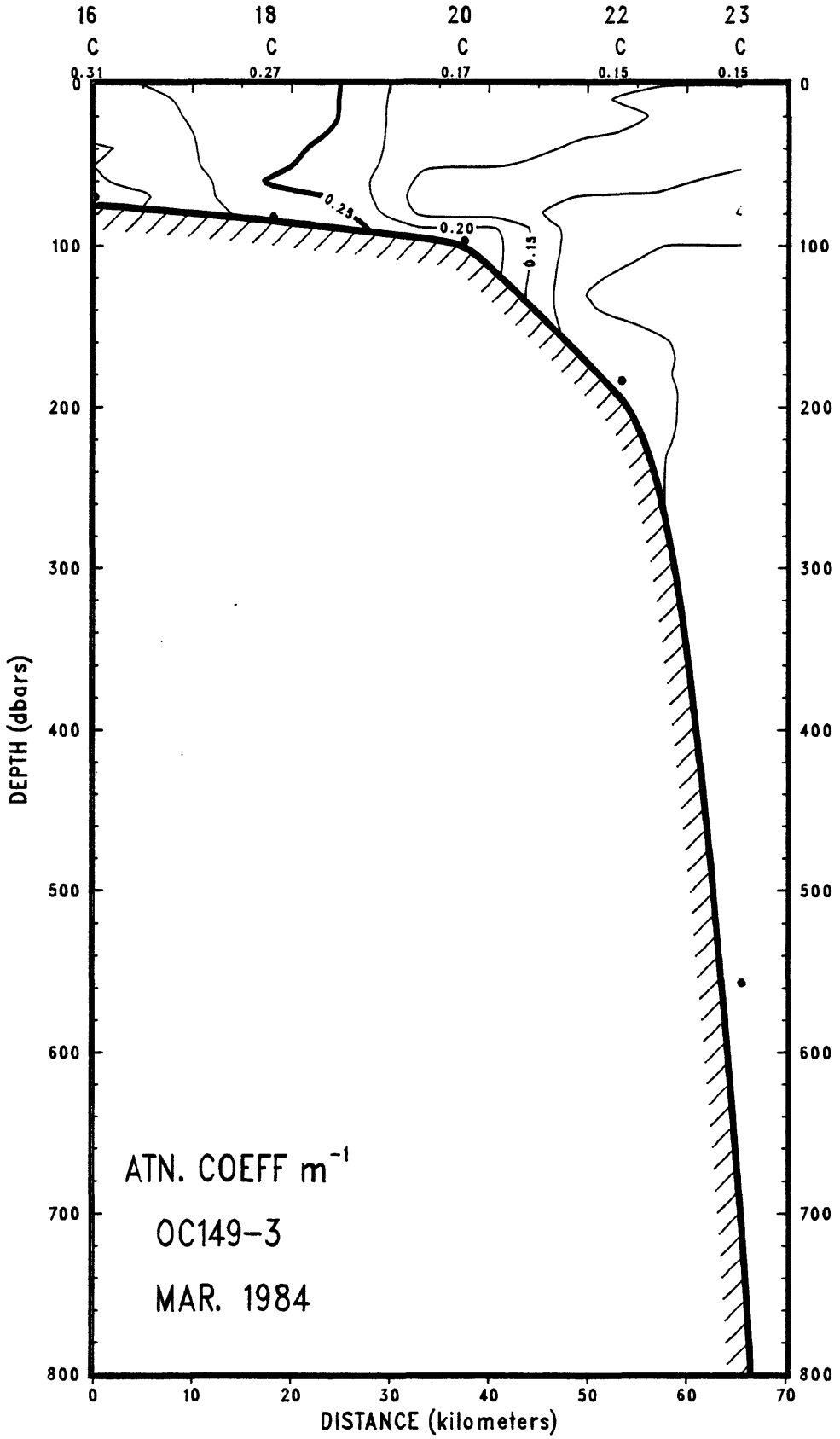

14 C
13 C
11 C
9 C
7 C
0.31
0.23
0.20
0.15
0.19
0.20
0.15
0.10
0.05
DEPTH (dbars)
0
100
200
300
400
500
600
700
800
ATN. COEFF m^{-1}
OC149-2
MAR. 1984
0
10
20
30
40
50
60
70
80
DISTANCE (kilometers)

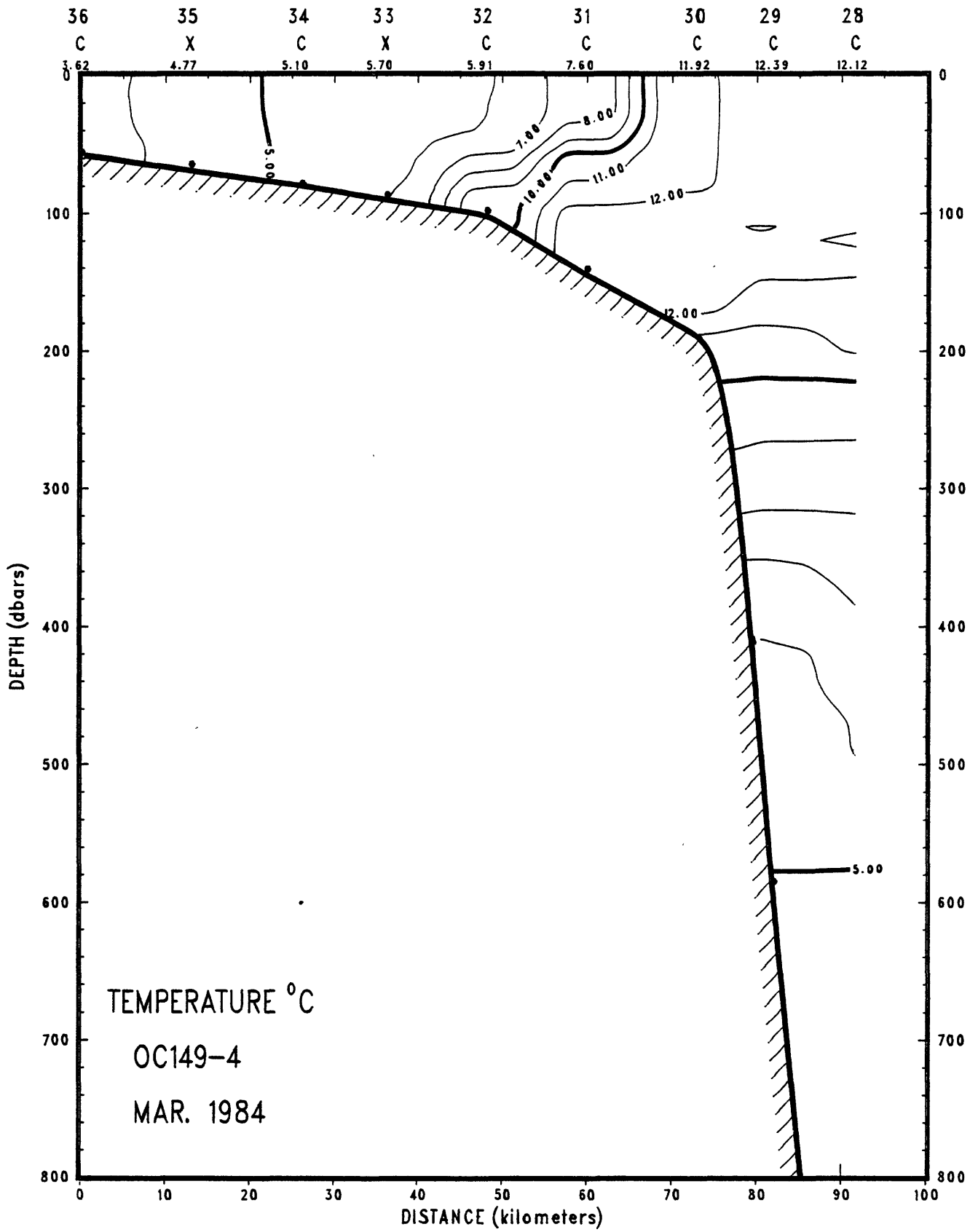

16 17 18 19 20 21 22 23
C X C X C X C C
4.75 5.43 5.17 5.98 8.45 9.02 9.79 11.46
9.00
10.00
11.00
12.00
5.00
DEPTH (dbars)
0 100 200 300 400 500 600 700 800
0 10 20 30 40 50 60 70
DISTANCE (kilometers)
TEMPERATURE °C
OC149-3
MAR. 1984

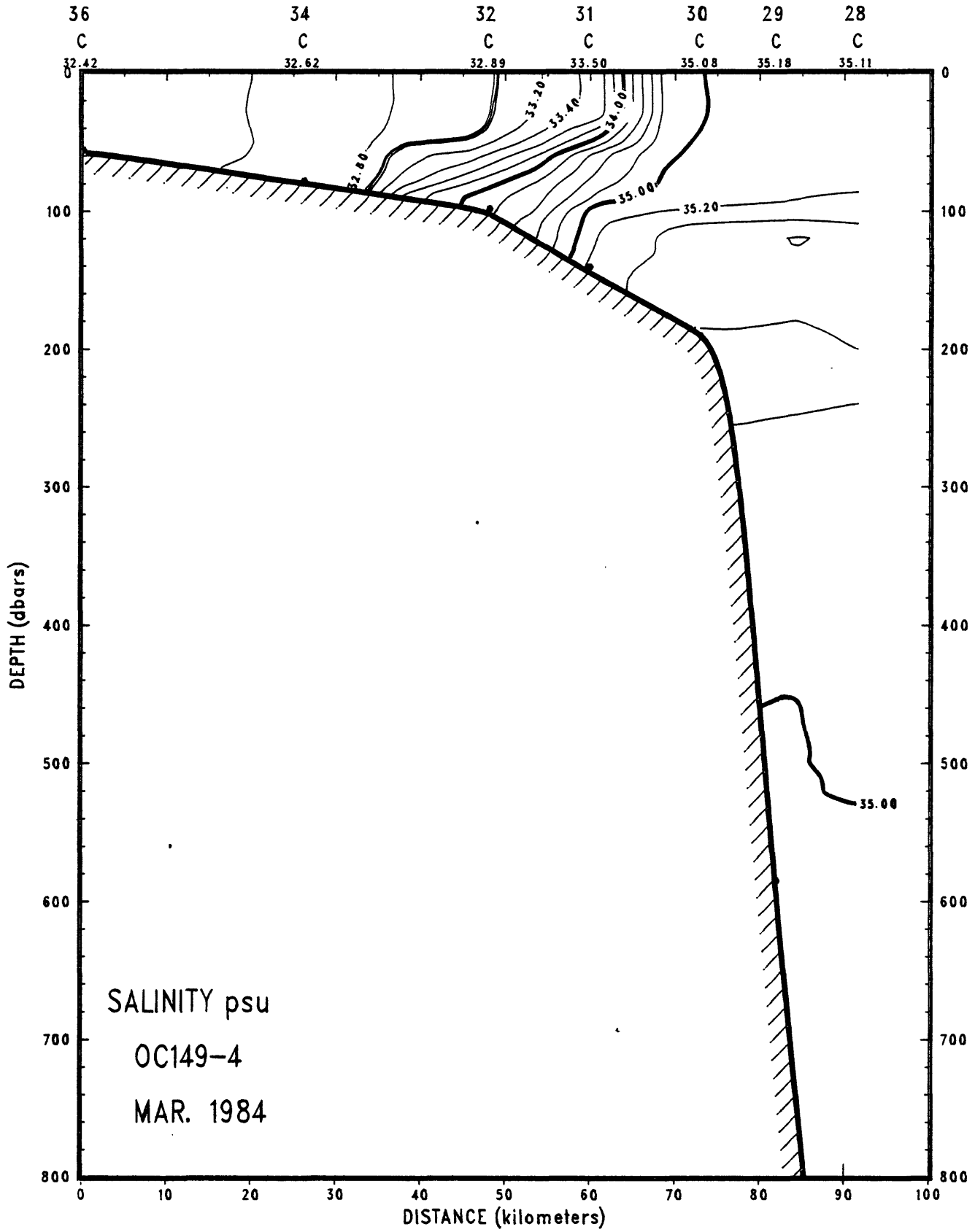

16 C
18 C
20 C
22 C
23 C
32.68
32.52
33.81
34.30
34.89
32.60
34.20
34.40
34.80
35.20
35.24
DEPTH (dbars)
0
100
200
300
400
500
600
700
800
SALINITY psu
OC149-3
MAR. 1984
0
10
20
30
40
50
60
70
DISTANCE (kilometers)

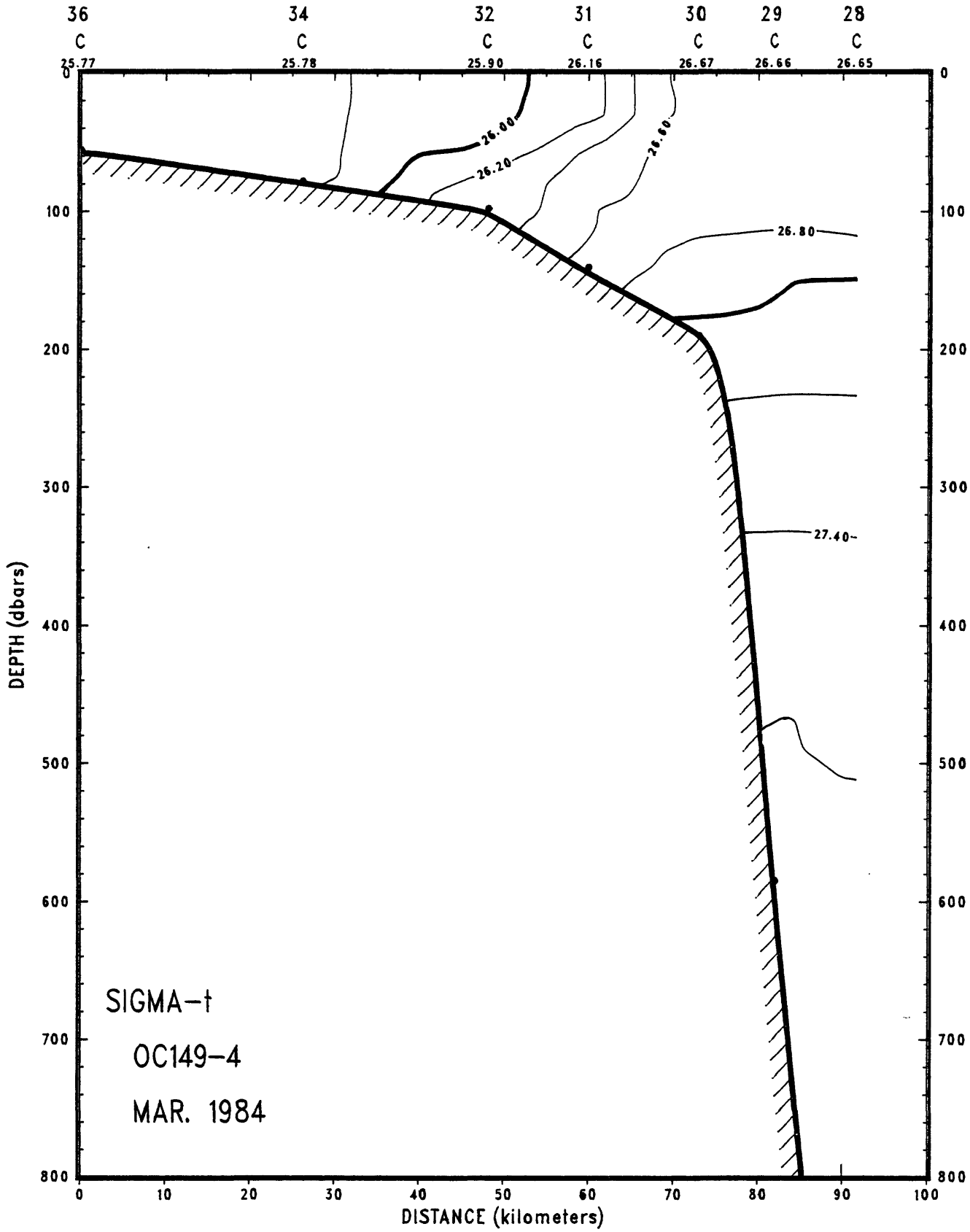

16 C
18 C
20 C
22 C
23 C
25.86
25.69
26.27
26.44
26.61
26.00
26.20
26.40
26.60
DEPTH (dbars)
0
100
200
300
400
500
600
700
800
SIGMA-t
OC149-3
MAR. 1984
0
10
20
30
40
50
60
70
DISTANCE (kilometers)

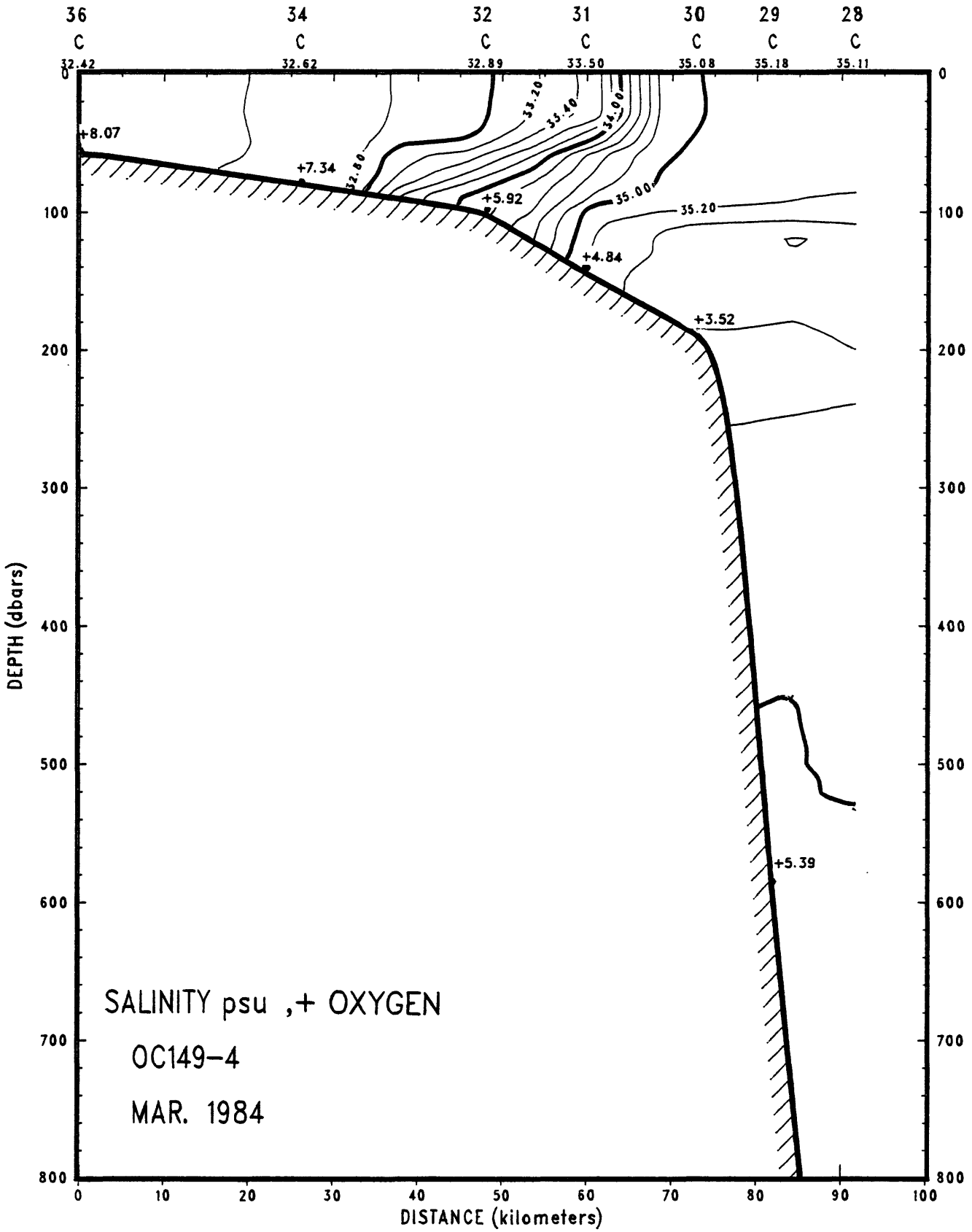

16 C
18 C
20 C
22 C
23 C
32.68
32.52
33.81
34.30
34.89
32.60
34.20
34.40
34.80
+7.42
+7.23
+3.65
DEPTH (dbars)
DISTANCE (kilometers)
SALINITY psu ,+ OXYGEN
OC149-3
MAR. 1984

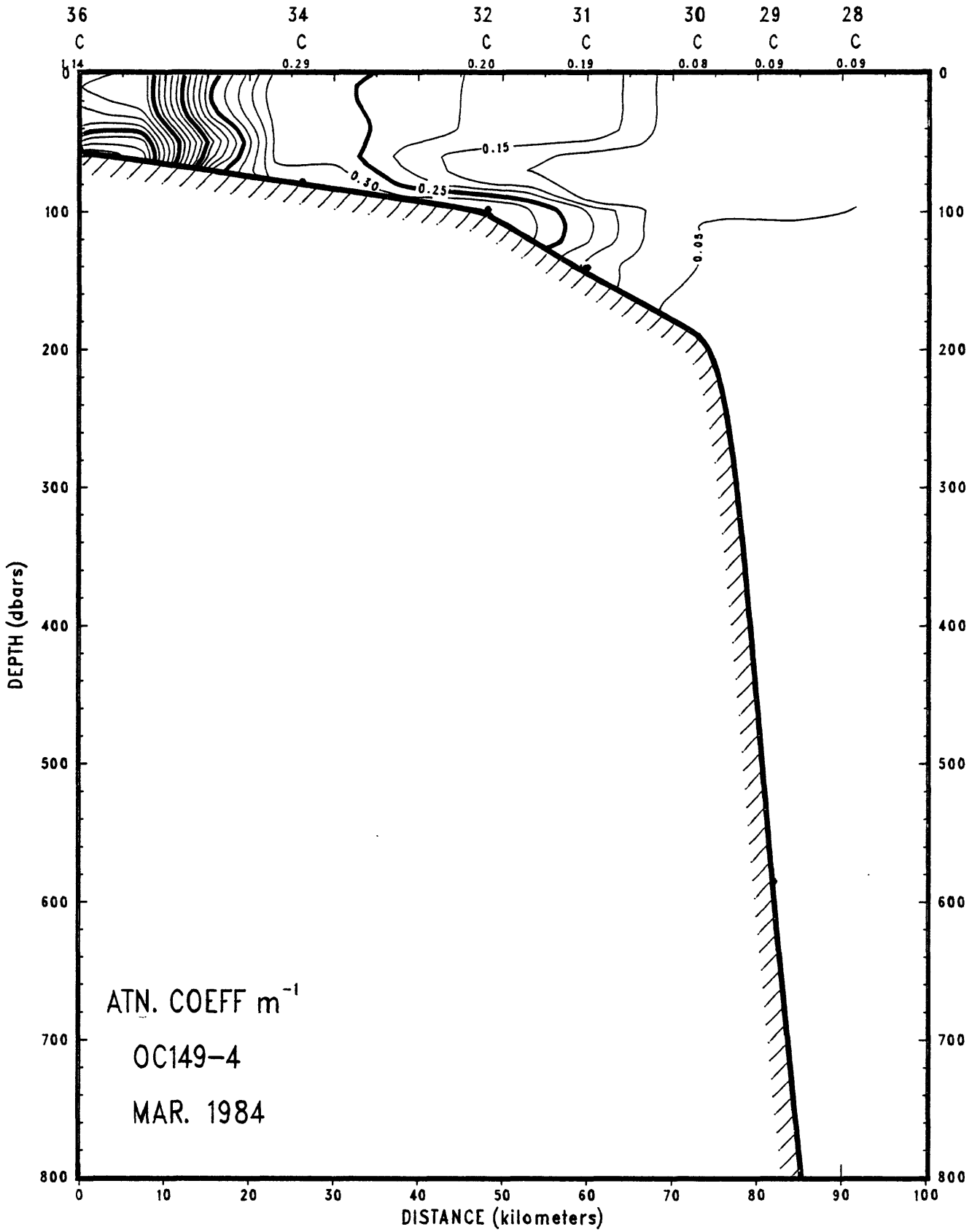

16 C
18 C
20 C
22 C
23 C
0.31
0.27
0.17
0.15
0.15
0.25
0.20
0.15
DEPTH (dbars)
0
100
200
300
400
500
600
700
800
ATN. COEFF m^{-1}
OC149-3
MAR. 1984
0
10
20
30
40
50
60
70
DISTANCE (kilometers)

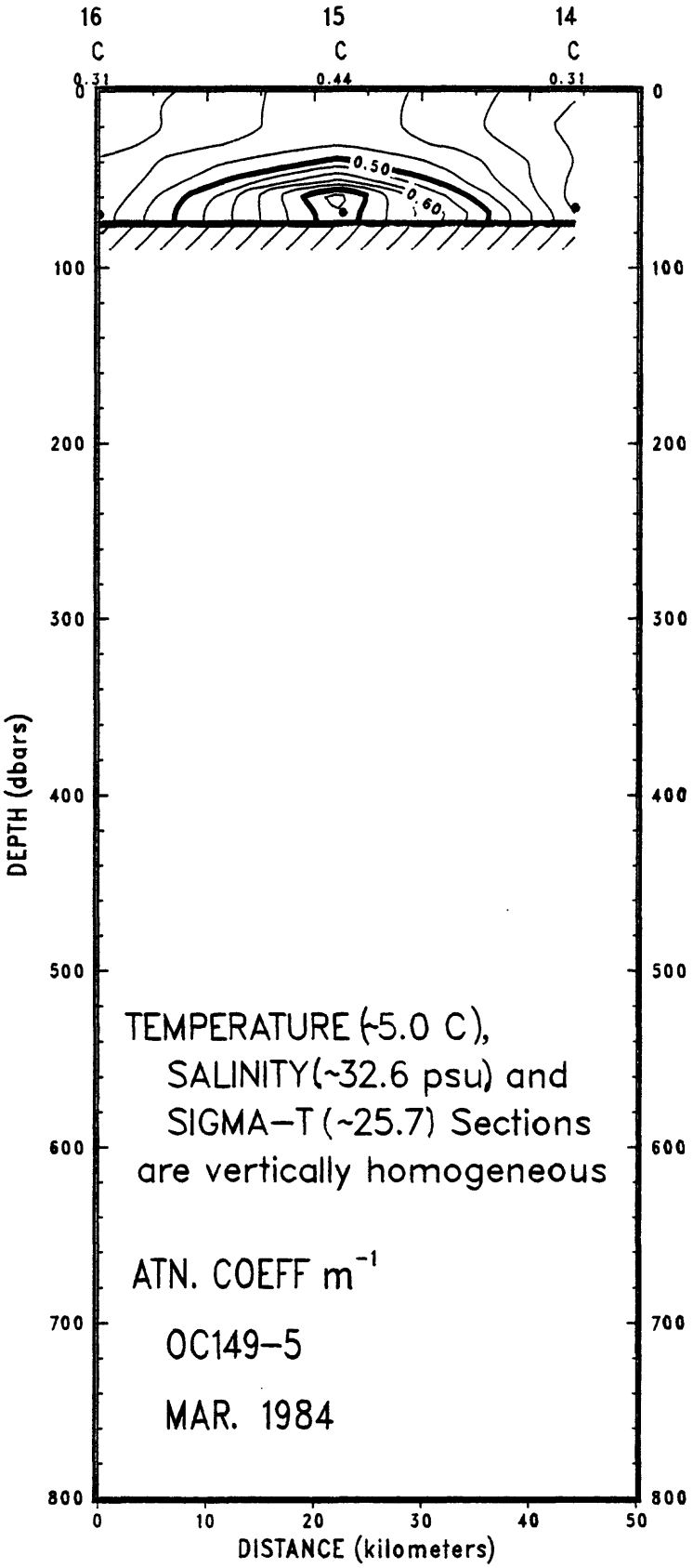

36 C 3.62
35 X 4.77
34 C 5.10
33 X 5.70
32 C 5.91
31 C 7.60
30 C 11.92
29 C 12.39
28 C 12.12
5.00
7.00
8.00
10.00
11.00
12.00
12.00
5.00
DEPTH (dbars)
0
100
200
300
400
500
600
700
800
0
10
20
30
40
50
60
70
80
90
100
DISTANCE (kilometers)
TEMPERATURE °C
OC149-4
MAR. 1984


36 C
34 C
32 C
31 C
30 C
29 C
28 C
32.42
32.62
32.89
33.50
35.08
35.18
35.11
32.80
33.20
33.40
34.00
35.00
35.20
35.00
DEPTH (dbars)
DISTANCE (kilometers)
SALINITY psu
OC149-4
MAR. 1984


36 C 25.77
34 C 25.78
32 C 25.90
31 C 26.16
30 C 26.67
29 C 26.66
28 C 26.65
26.00
26.20
26.60
26.80
27.40
DEPTH (dbars)
0
100
200
300
400
500
600
700
800
SIGMA-t
OC149-4
MAR. 1984
0
10
20
30
40
50
60
70
80
90
100
DISTANCE (kilometers)

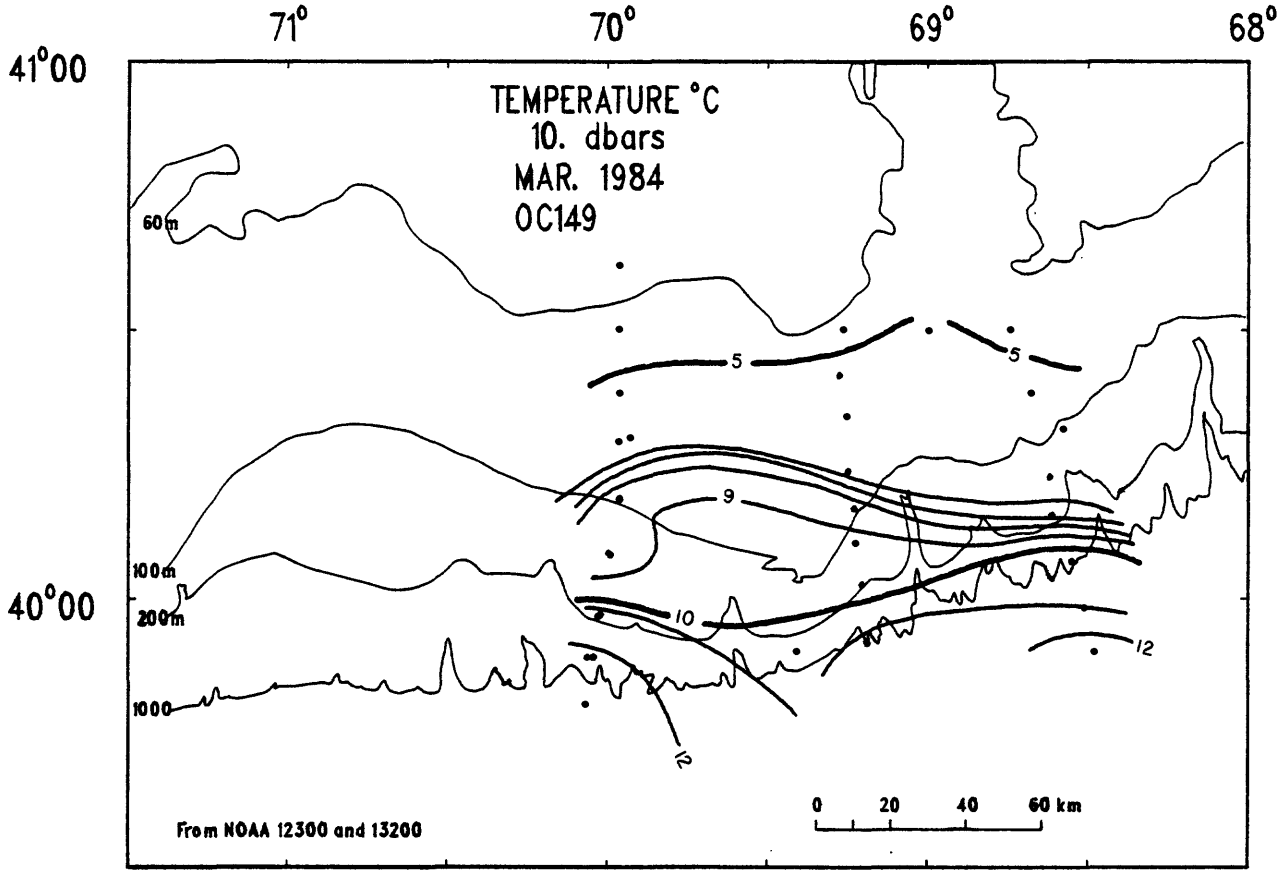

36 C 32.42
34 C 32.62
32 C 32.89
31 C 33.50
30 C 35.08
29 C 35.18
28 C 35.11
+8.07
+7.34
+5.92
+4.84
+3.52
+5.39
32.80
33.20
33.40
34.00
35.00
35.20
SALINITY psu ,+ OXYGEN
OC149-4
MAR. 1984
DEPTH (dbars)
DISTANCE (kilometers)
0
100
200
300
400
500
600
700
800
10
20
30
40
50
60
70
80
90

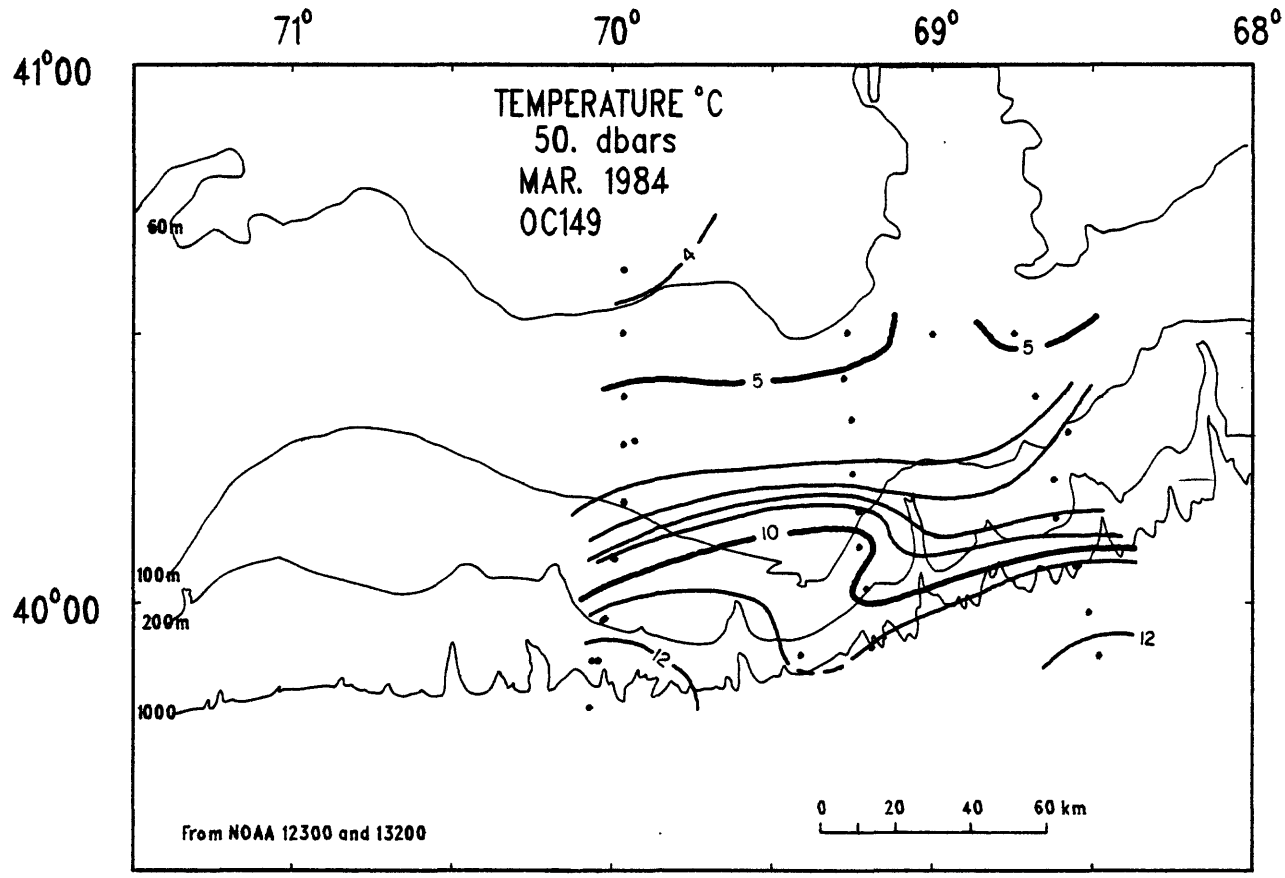

36 C
34 C
32 C
31 C
30 C
29 C
28 C
0.29
0.20
0.19
0.08
0.09
0.09
0.15
0.30
0.25
0.05
DEPTH (dbars)
DISTANCE (kilometers)
ATN. COEFF m⁻¹
OC149-4
MAR. 1984

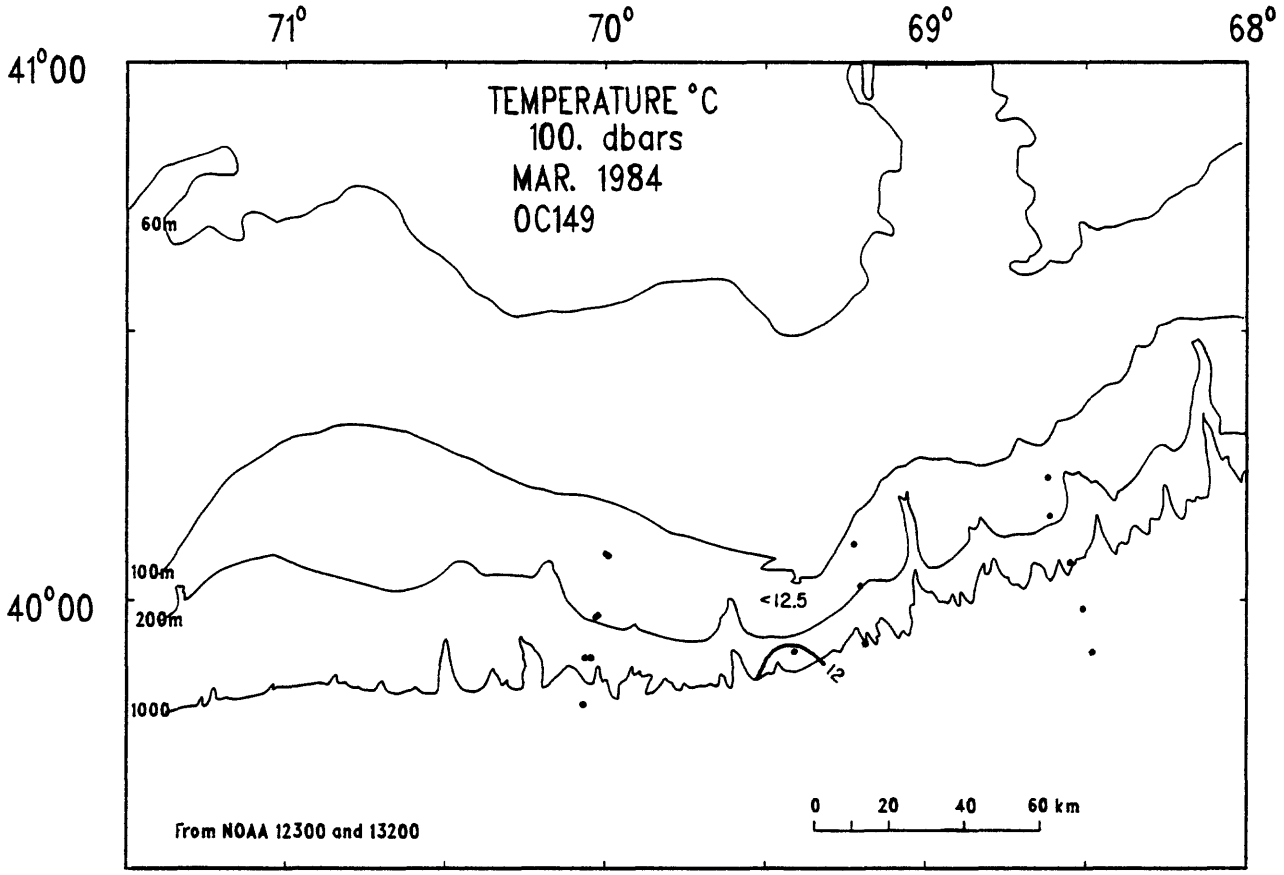

16
C
15
C
14
C
0.31
0.44
0.31
0.50
0.60
DEPTH (dbars)
0
100
200
300
400
500
600
700
800
TEMPERATURE (~5.0 C),
SALINITY (~32.6 psu) and
SIGMA–T (~25.7) Sections
are vertically homogeneous
ATN. COEFF m^{-1}
OC149–5
MAR. 1984
0
10
20
30
40
50
DISTANCE (kilometers)

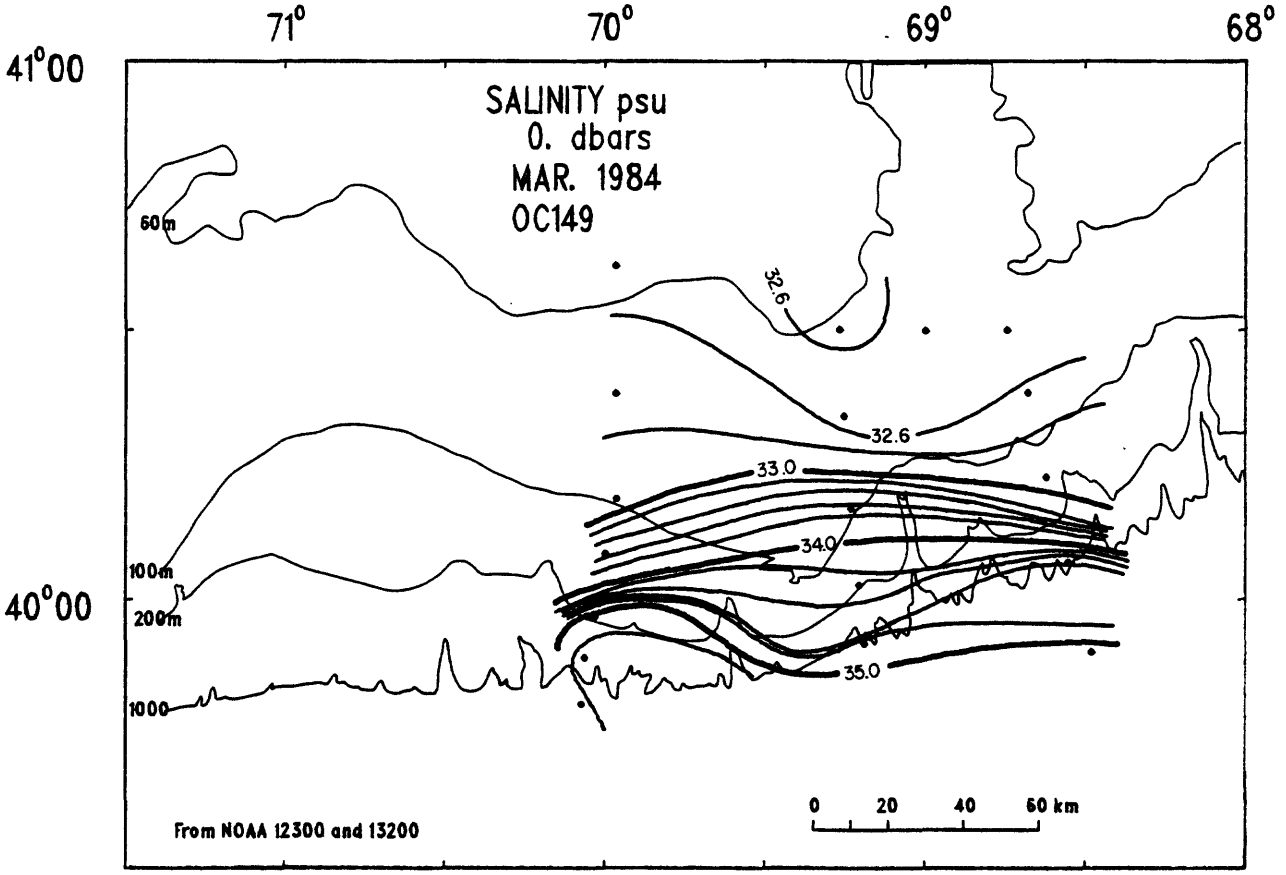
Horizontal sections

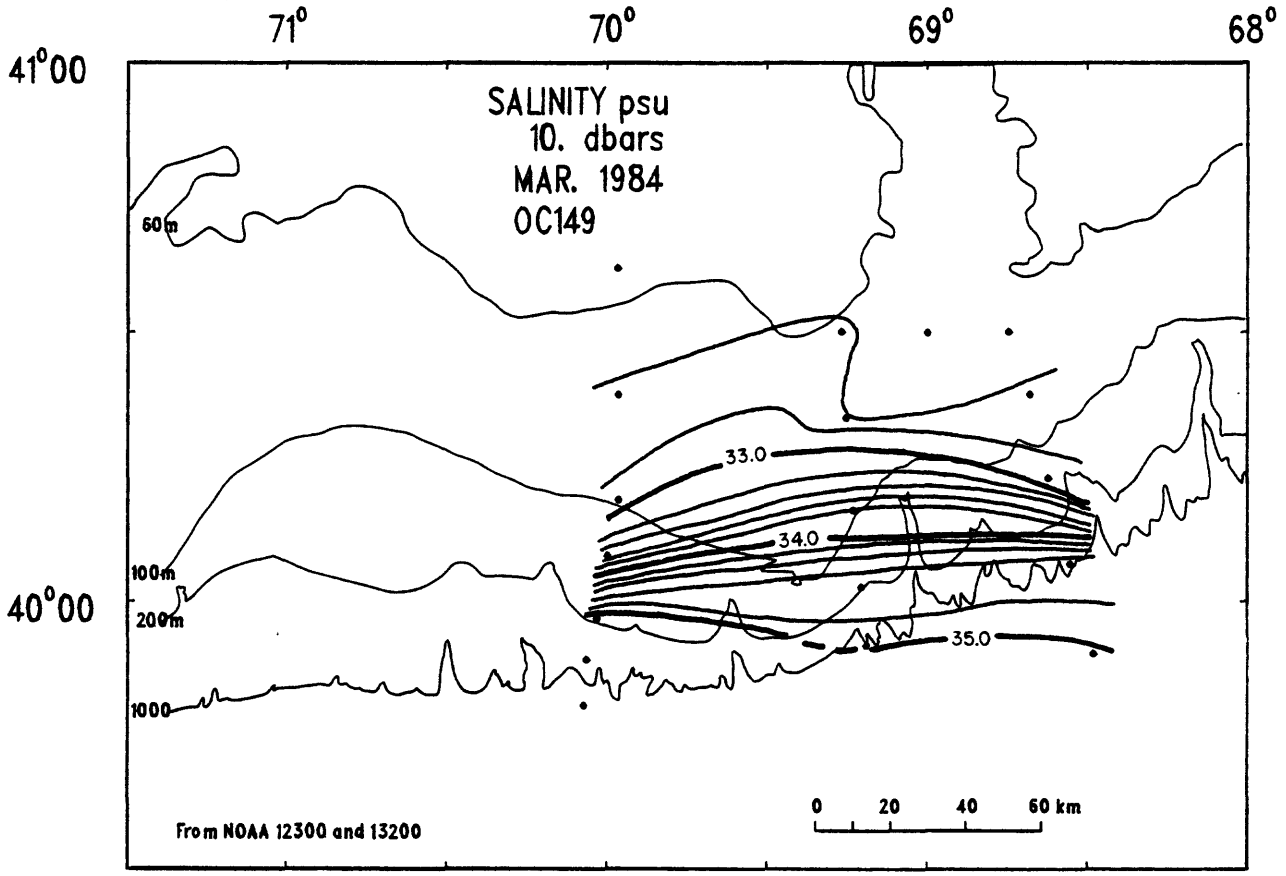
Horizontal sections were constructed on the 10-, 50-, and 100-dbar pressure surfaces for temperature, salinity, density and attenuation coefficient. Surface values of phosphate, silicate, nitrate and ammonia were also contoured. Dots indicate the location of stations that were used in contouring the section and all sections were contoured by hand due to the sparse data.

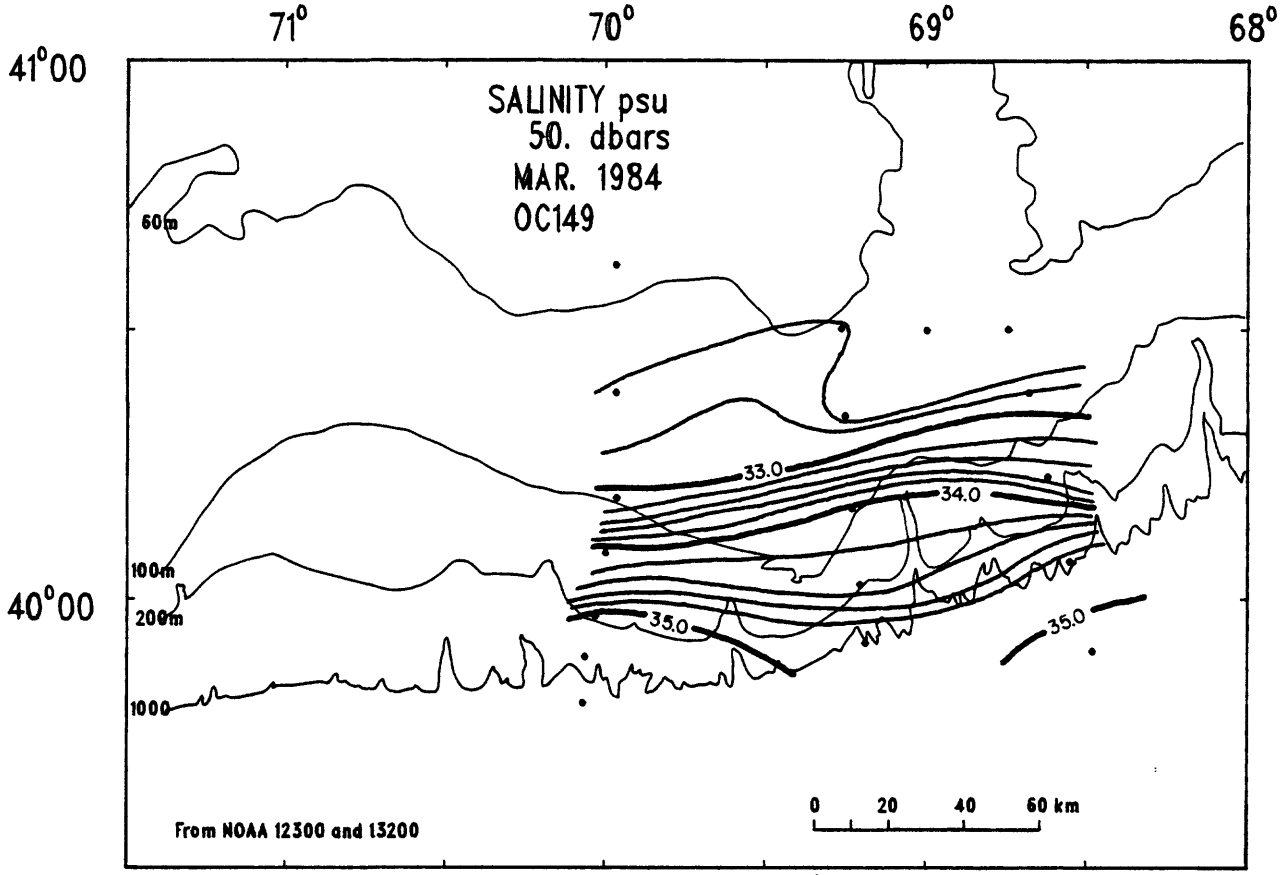

71°
70°
69°
68°
41°00
40°00
TEMPERATURE °C
10. dbars
MAR. 1984
OC149
60m
100m
200m
1000
5
5
9
10
12
12
0 20 40 60 km
From NOAA 12300 and 13200

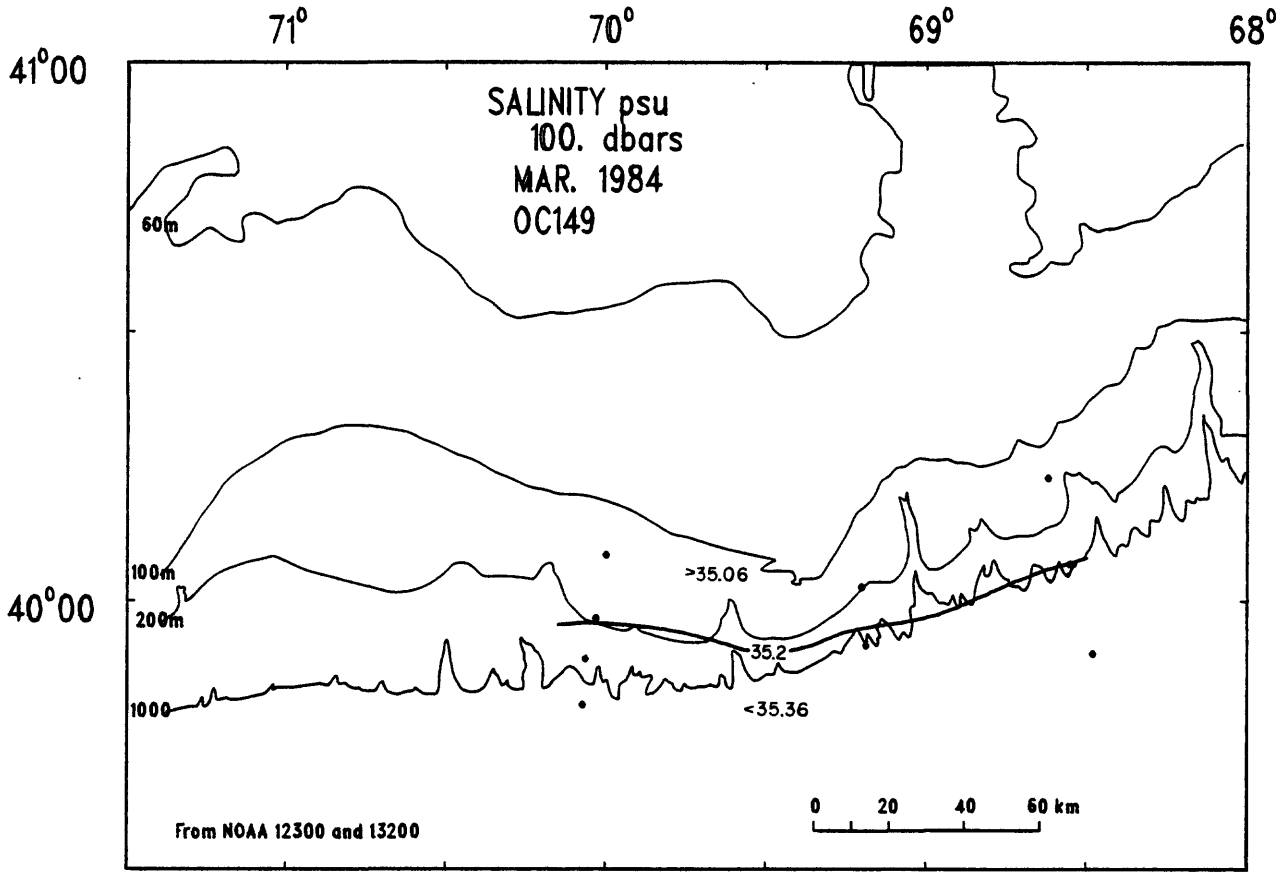

71°
70°
69°
68°
41°00
40°00
TEMPERATURE °C
50. dbars
MAR. 1984
OC149
60m
100m
200m
1000
4
5
5
10
12
12
0 20 40 60 km
From NOAA 12300 and 13200

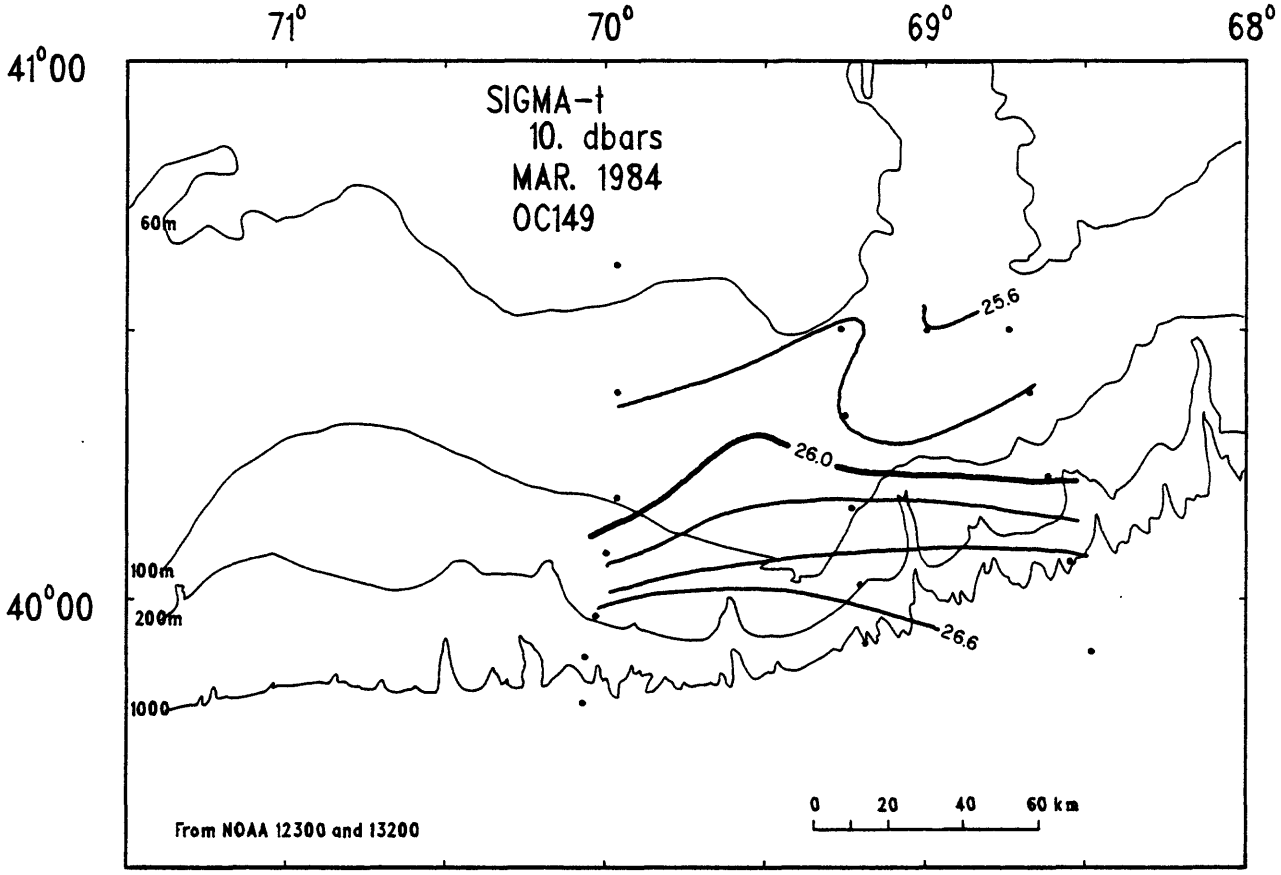

71°
70°
69°
68°
41°00
40°00
TEMPERATURE °C
100. dbars
MAR. 1984
OC149
60m
100m
200m
1000
<12.5
12
From NOAA 12300 and 13200
0 20 40 60 km

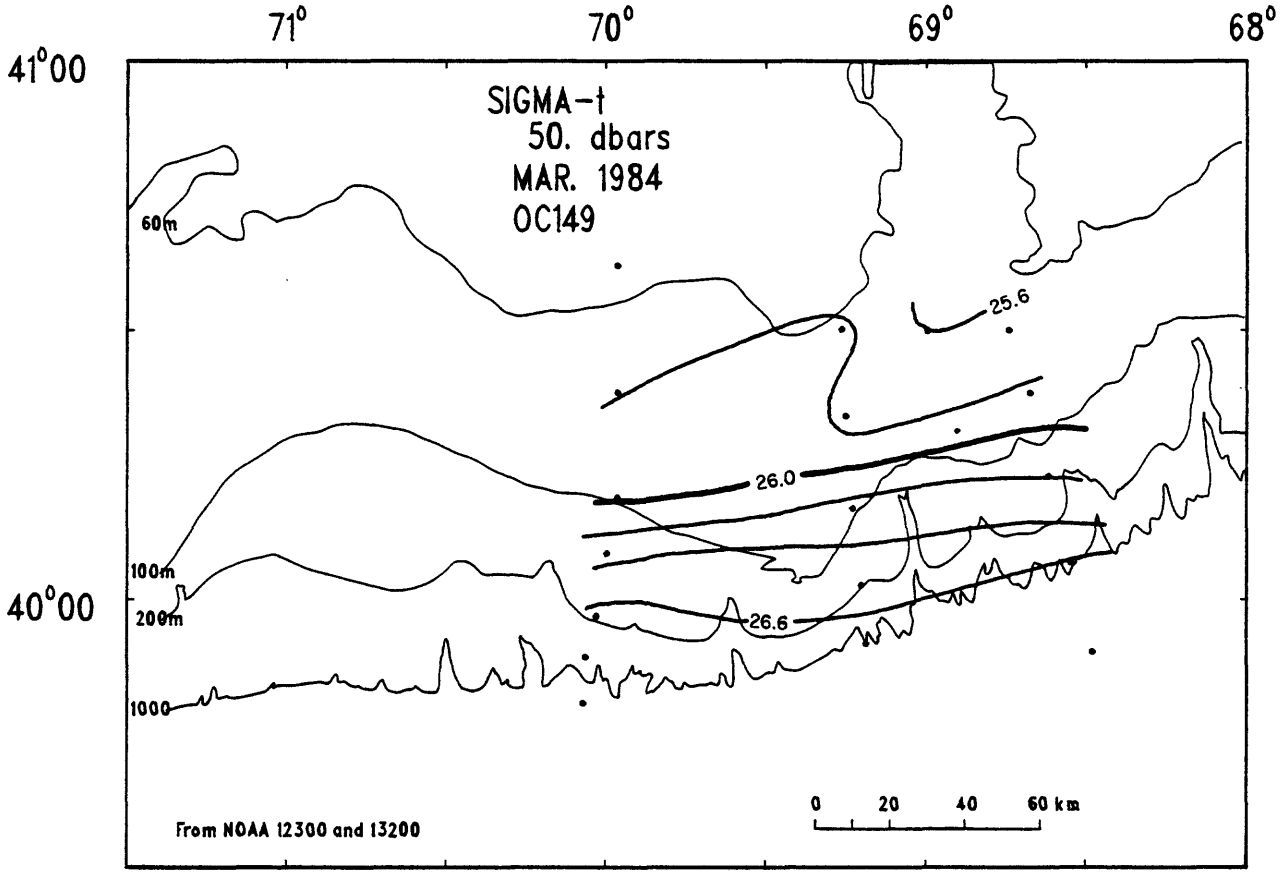

71°
70°
69°
68°
41°00
40°00
SALINITY psu
0. dbars
MAR. 1984
OC149
60m
100m
200m
1000
32.6
32.6
33.0
34.0
35.0
0 20 40 60 km
From NOAA 12300 and 13200

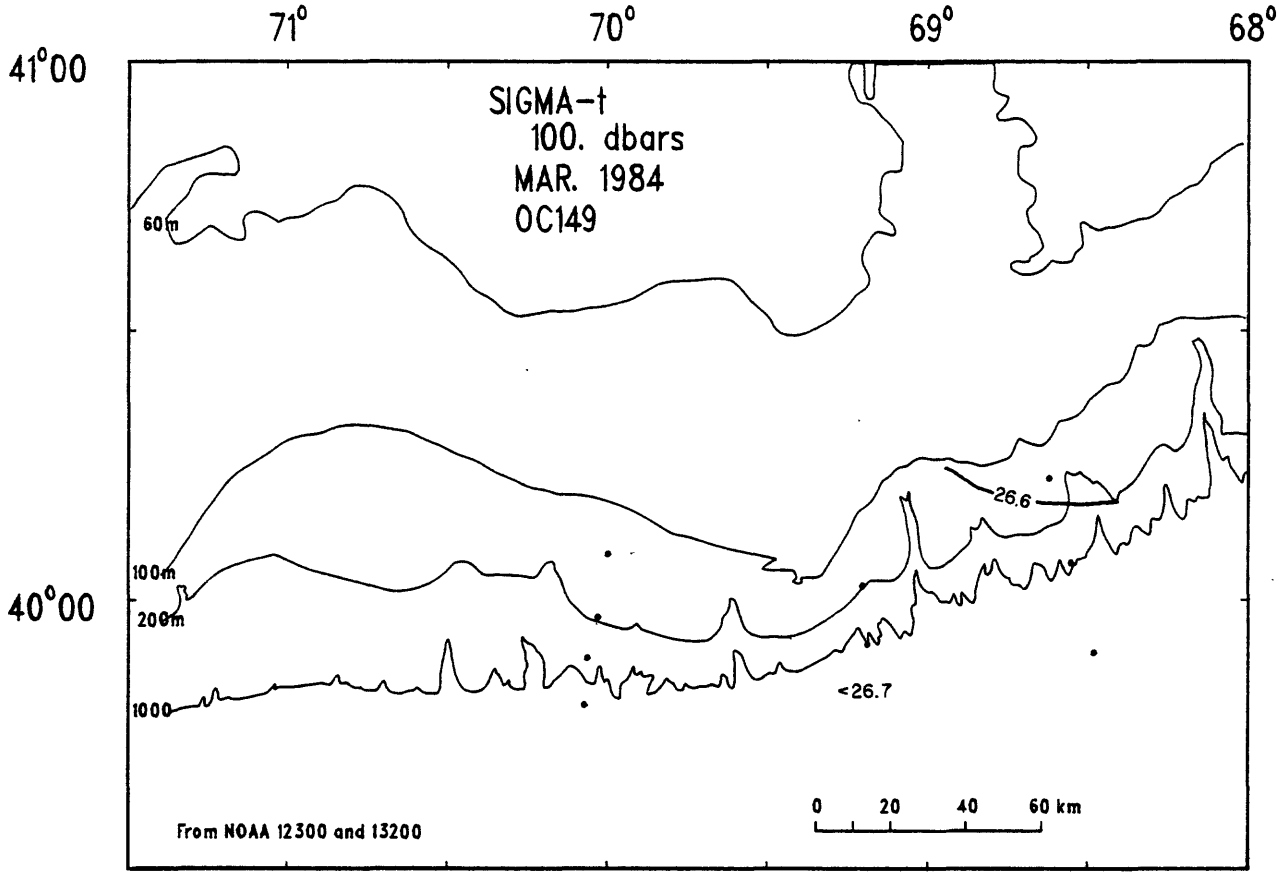

71°
70°
69°
68°
41°00
40°00
SALINITY psu
10. dbars
MAR. 1984
OC149
60m
100m
200m
1000
33.0
34.0
35.0
0 20 40 60 km
From NOAA 12300 and 13200

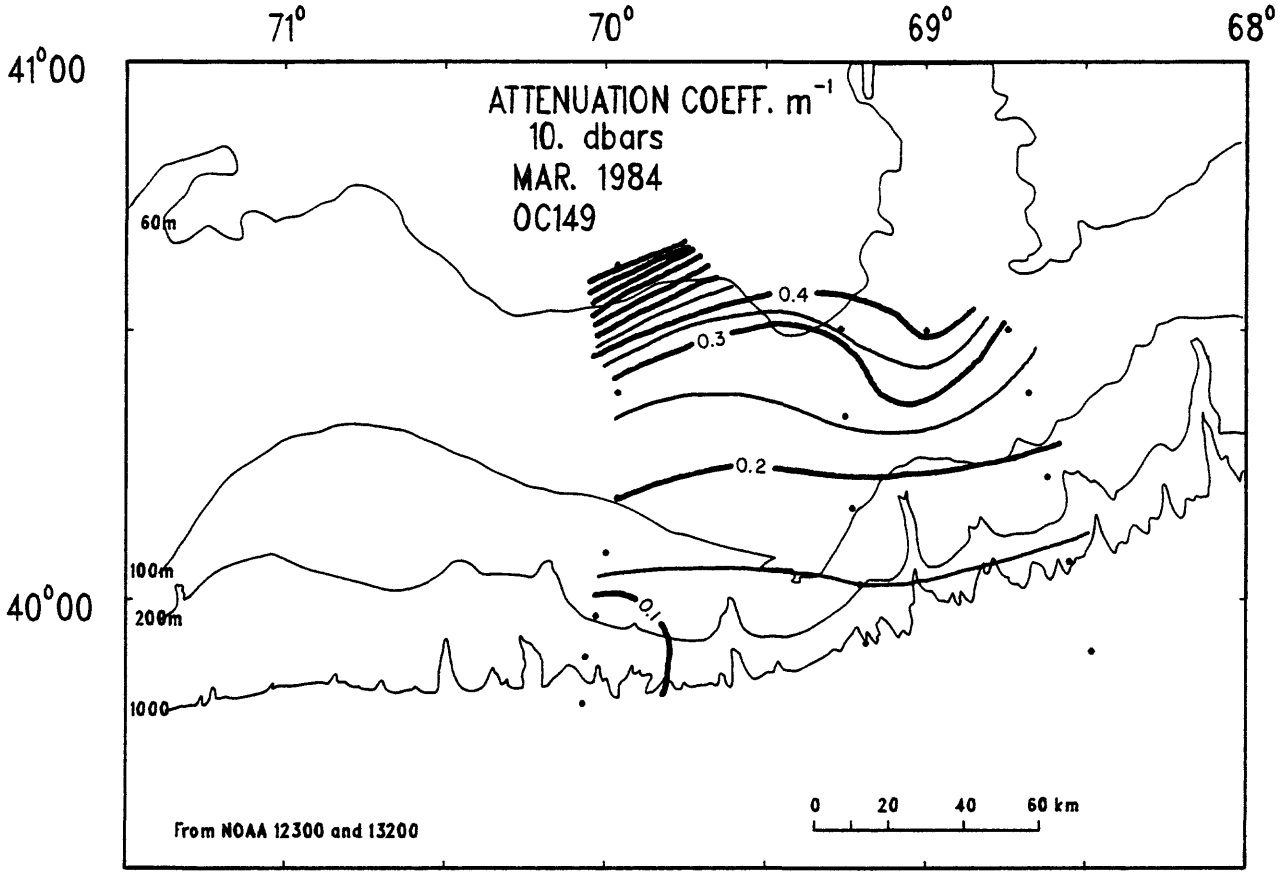

71°
70°
69°
68°
41°00
40°00
SALINITY psu
50. dbars
MAR. 1984
OC149
60m
100m
200m
1000
33.0
34.0
35.0
35.0
0 20 40 60 km
From NOAA 12300 and 13200

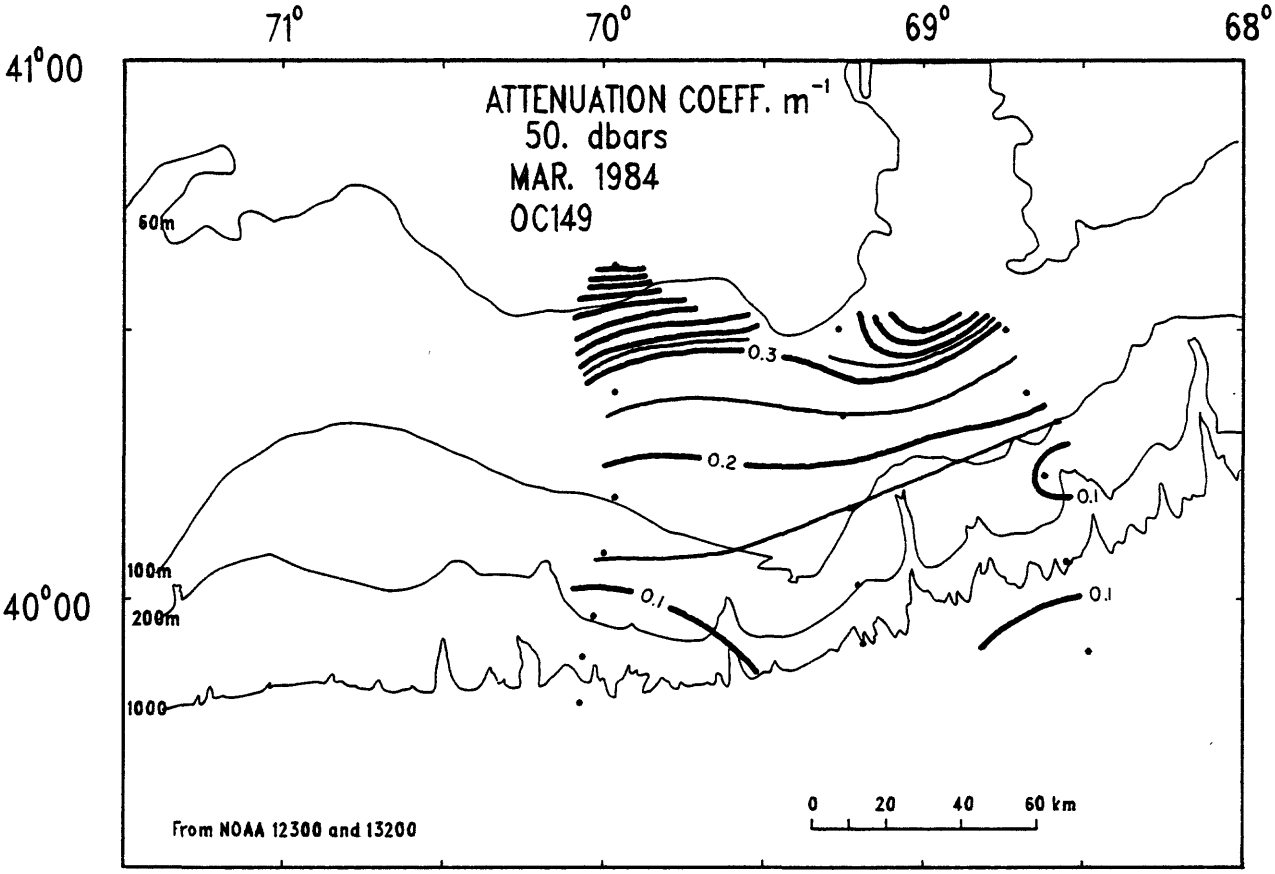

71°
70°
69°
68°
41°00
40°00
SALINITY psu
100. dbars
MAR. 1984
OC149
60m
100m
200m
1000
>35.06
35.2
<35.36
0 20 40 60 km
From NOAA 12300 and 13200

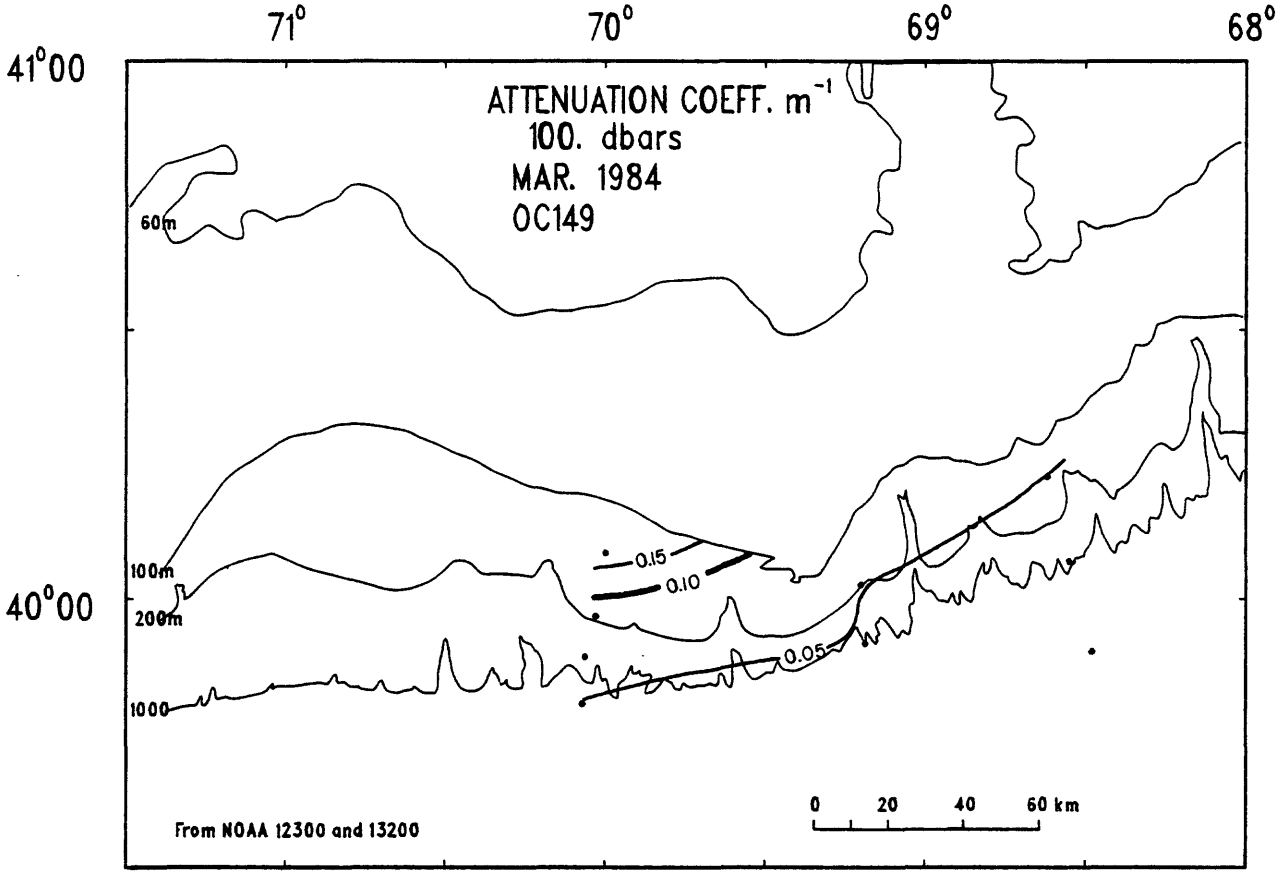

71°
70°
69°
68°
41°00
40°00
SIGMA-t
10. dbars
MAR. 1984
OC149
60m
100m
200m
1000
25.6
26.0
26.6
0 20 40 60 km
From NOAA 12300 and 13200

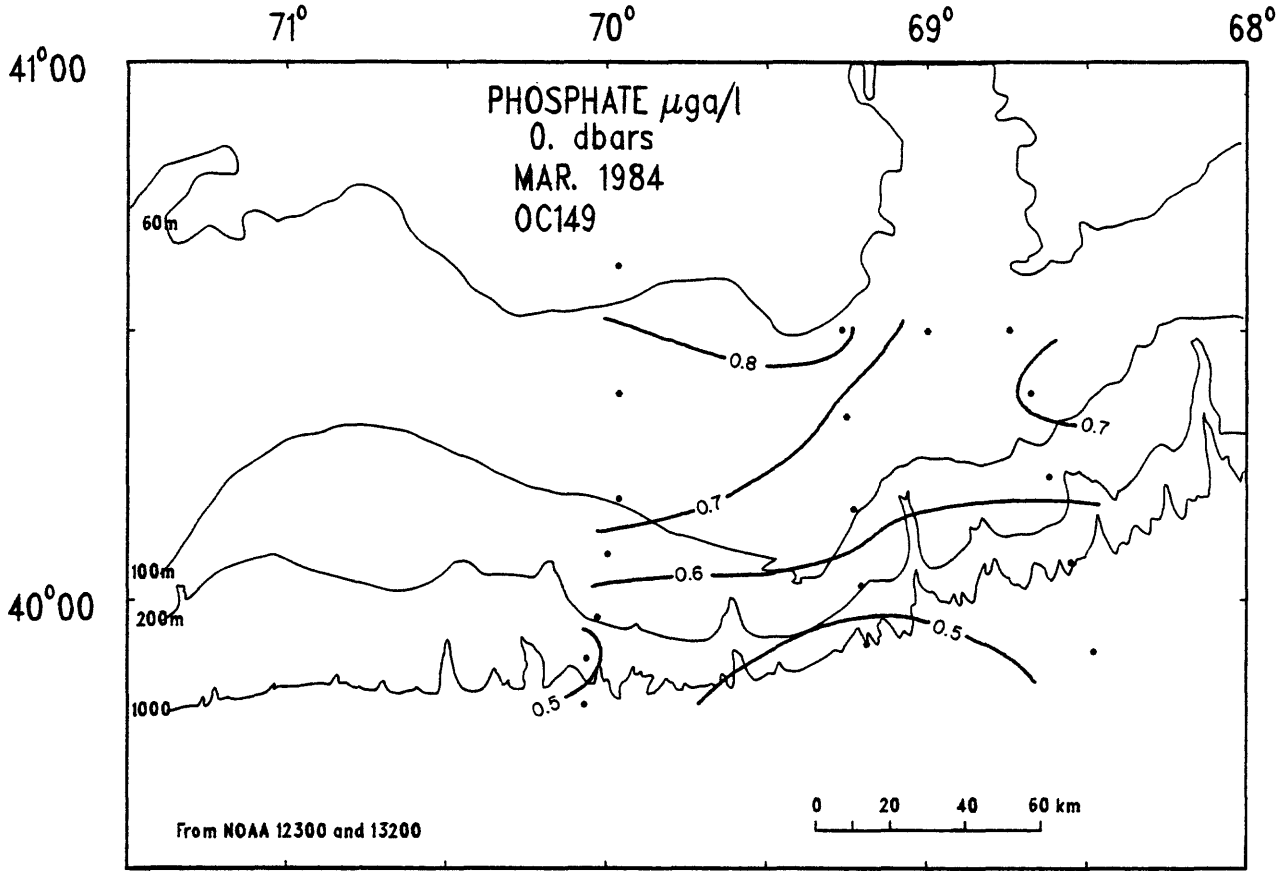

71°
70°
69°
68°
41°00
40°00
SIGMA-t
50. dbars
MAR. 1984
OC149
60m
100m
200m
1000
25.6
26.0
26.6
0 20 40 60 km
From NOAA 12300 and 13200

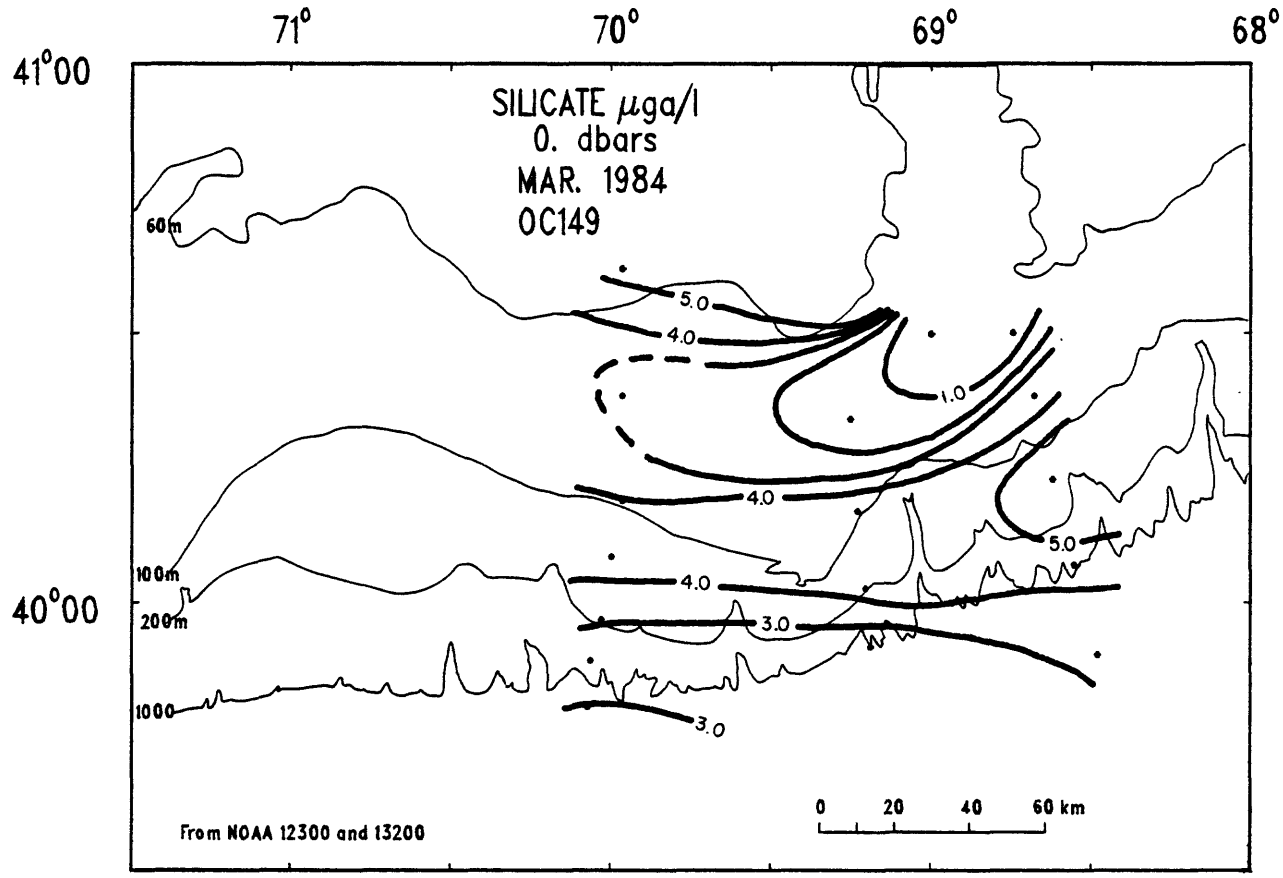

71°
70°
69°
68°
41°00
40°00
SIGMA-t
100. dbars
MAR. 1984
OC149
60m
100m
200m
1000
26.6
<26.7
From NOAA 12300 and 13200
0 20 40 60 km

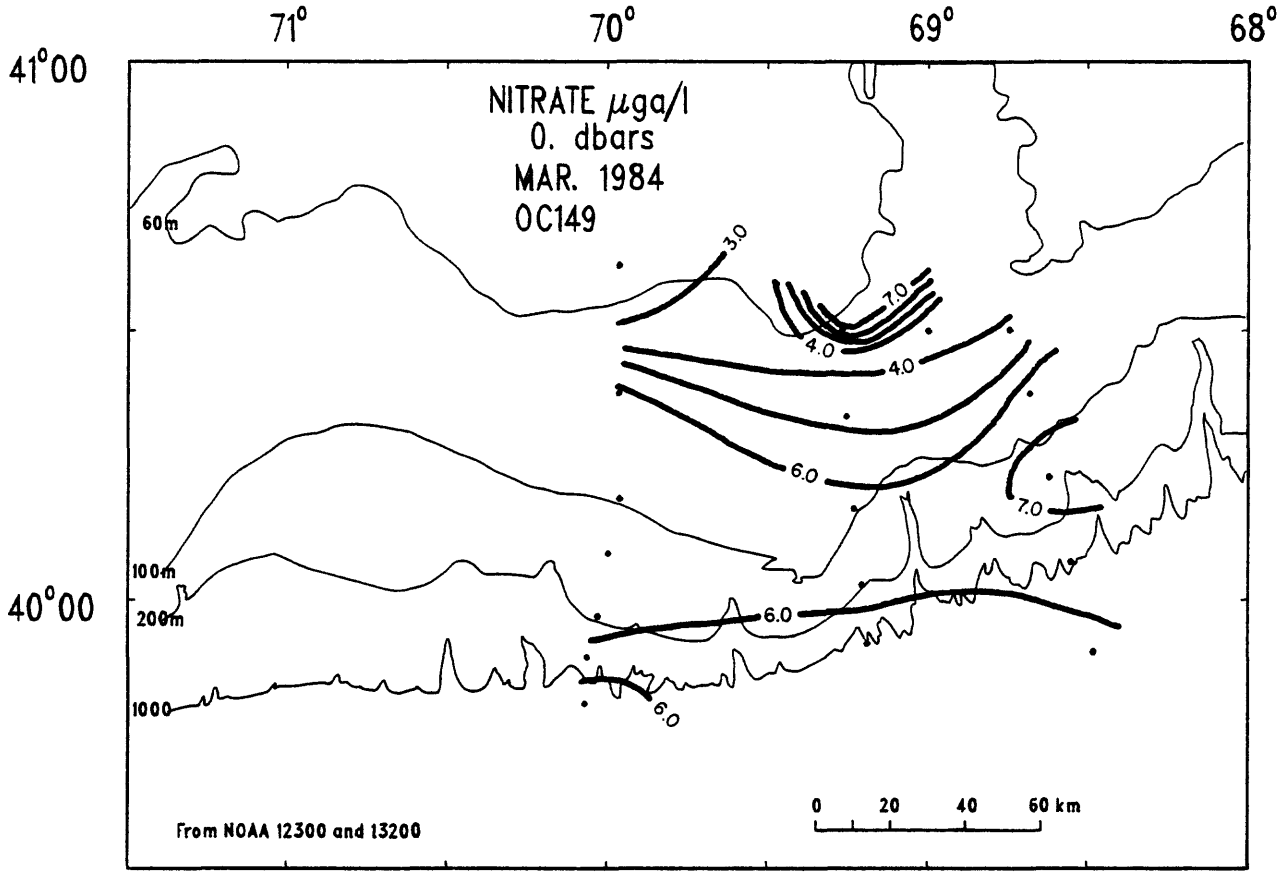

71°
70°
69°
68°
41°00
40°00
ATTENUATION COEFF. m⁻¹
10. dbars
MAR. 1984
OC149
60m
100m
200m
1000
0.4
0.3
0.2
0.1
0 20 40 60 km
From NOAA 12300 and 13200

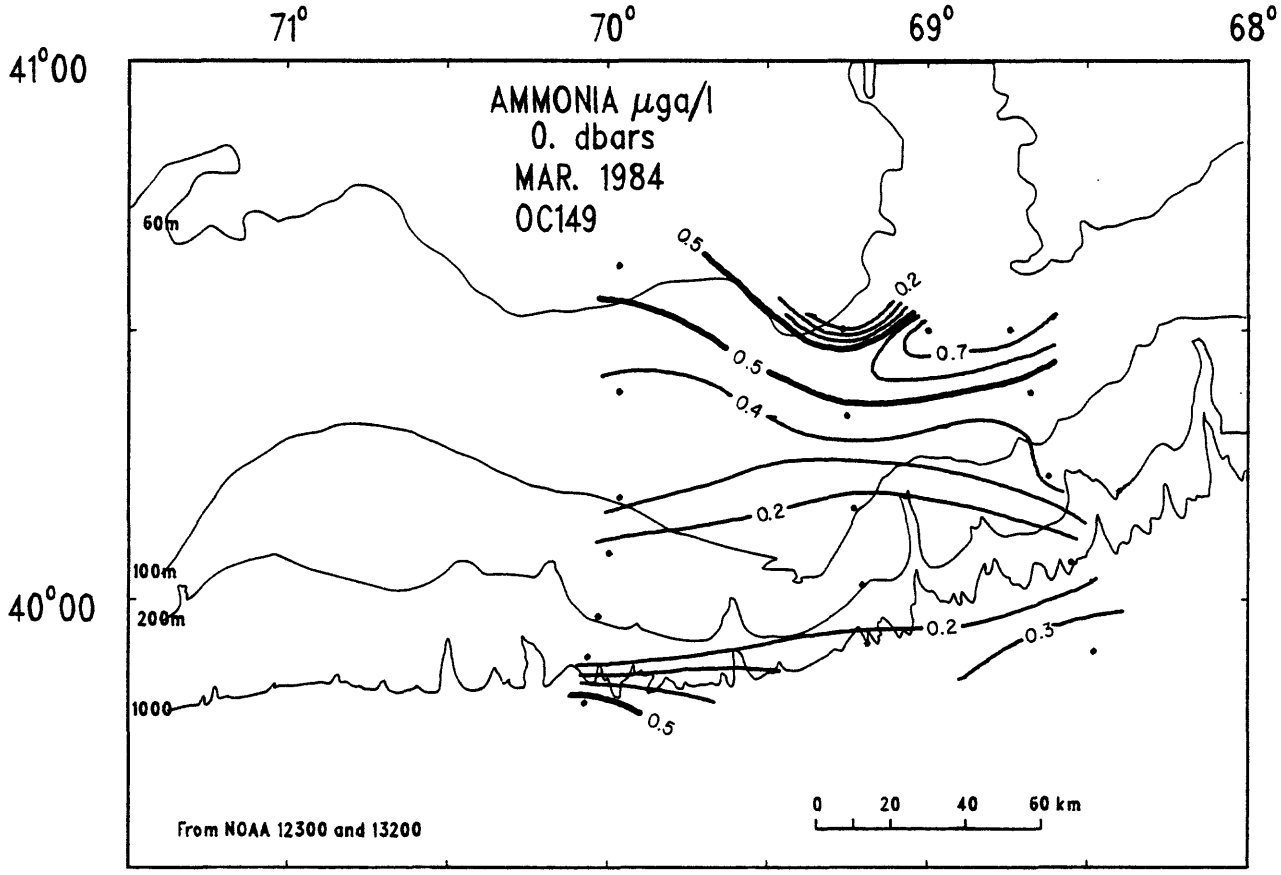

71°
70°
69°
68°
41°00
40°00
ATTENUATION COEFF. m⁻¹
50. dbars
MAR. 1984
OC149
60m
100m
200m
1000
0.3
0.2
0.1
0.1
0.1
0 20 40 60 km
From NOAA 12300 and 13200


71°
70°
69°
68°
41°00
40°00
ATTENUATION COEFF. m⁻¹
100. dbars
MAR. 1984
OC149
60m
100m
200m
1000
0.15
0.10
0.05
0 20 40 60 km
From NOAA 12300 and 13200


71°
70°
69°
68°
41°00
40°00
PHOSPHATE µga/l
0. dbars
MAR. 1984
OC149
60m
100m
200m
1000
0.8
0.7
0.7
0.6
0.5
0.5
0 20 40 60 km
From NOAA 12300 and 13200


71°
70°
69°
68°
41°00
40°00
SILICATE µga/l
0. dbars
MAR. 1984
OC149
60m
100m
200m
1000
5.0
4.0
1.0
4.0
5.0
4.0
3.0
3.0
0 20 40 60 km
From NOAA 12300 and 13200

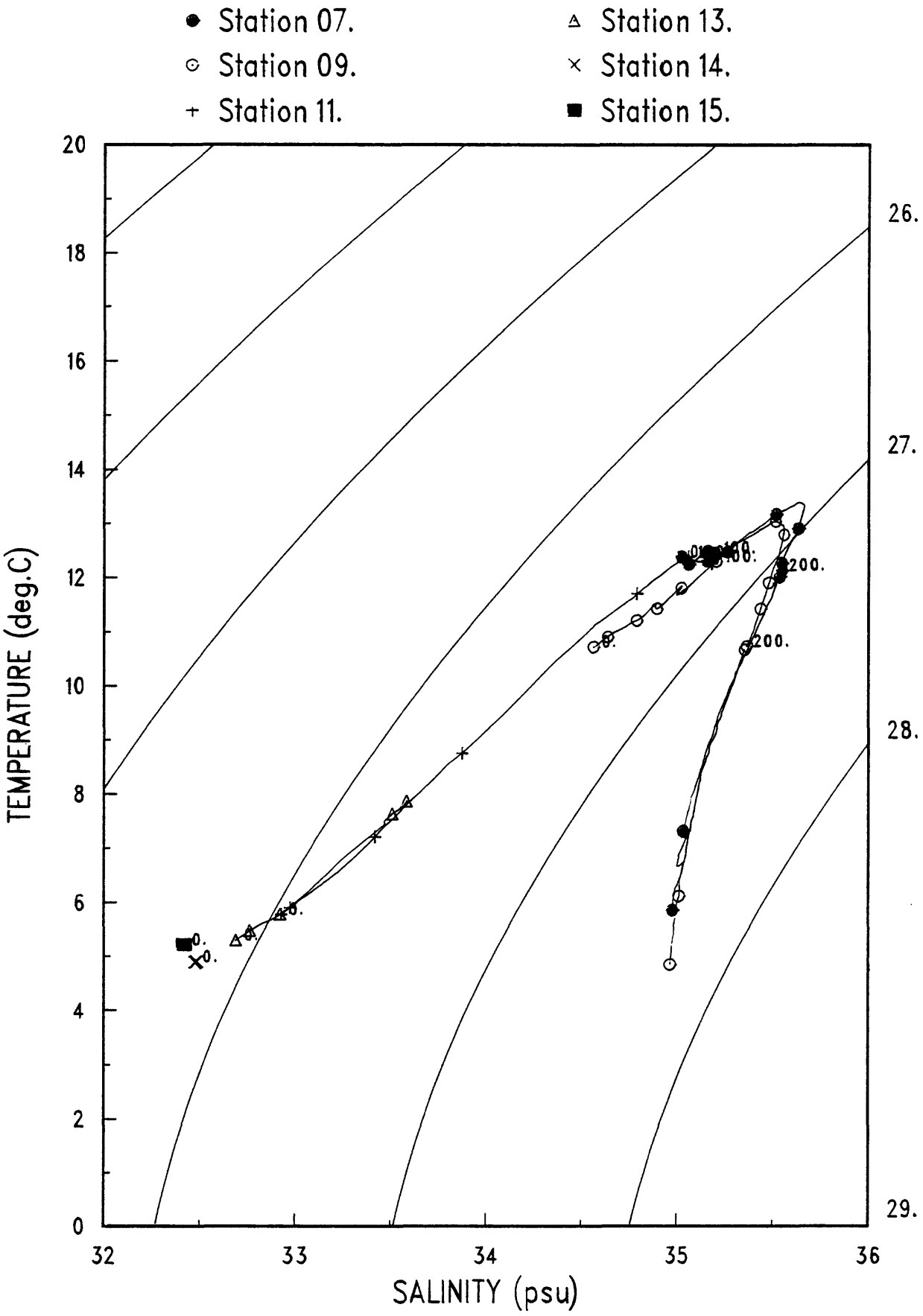

71°
70°
69°
68°
41°00
40°00
NITRATE µga/l
0. dbars
MAR. 1984
OC149
60m
100m
200m
1000
3.0
4.0
4.0
6.0
7.0
7.0
6.0
6.0
From NOAA 12300 and 13200
0 20 40 60 km


71°
70°
69°
68°
41°00
40°00
AMMONIA µga/l
0. dbars
MAR. 1984
OC149
60m
100m
200m
1000
0.5
0.2
0.7
0.5
0.4
0.2
0.2
0.3
0.5
From NOAA 12300 and 13200
0 20 40 60 km

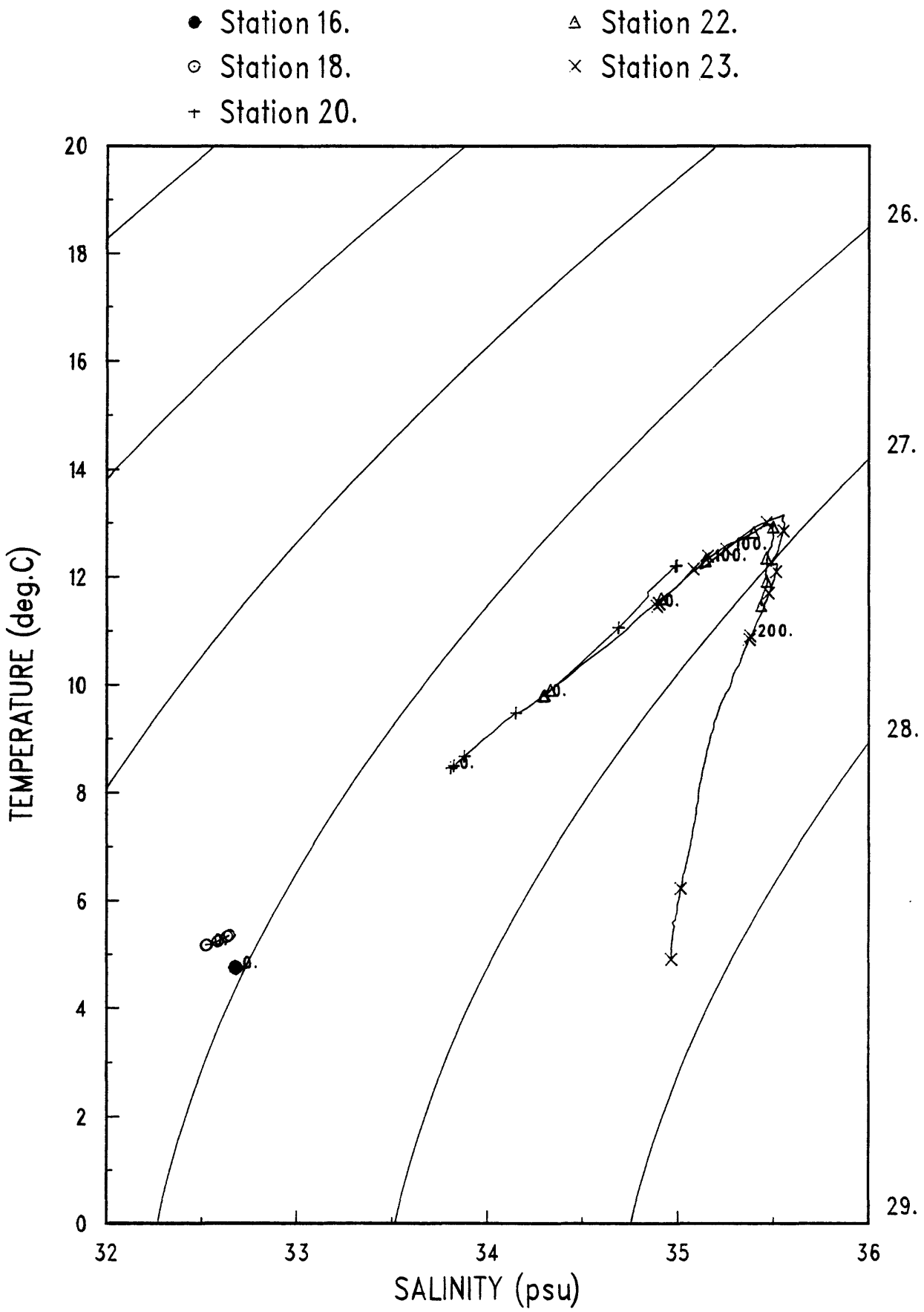
Temperature salinity diagrams

Plots of temperature vs. salinity are by section (see fig. 1). Each station is identified with a different symbol. The symbols are plotted every 20 dbars, and the 100-, 200-, and 600-dbar points have been labeled.

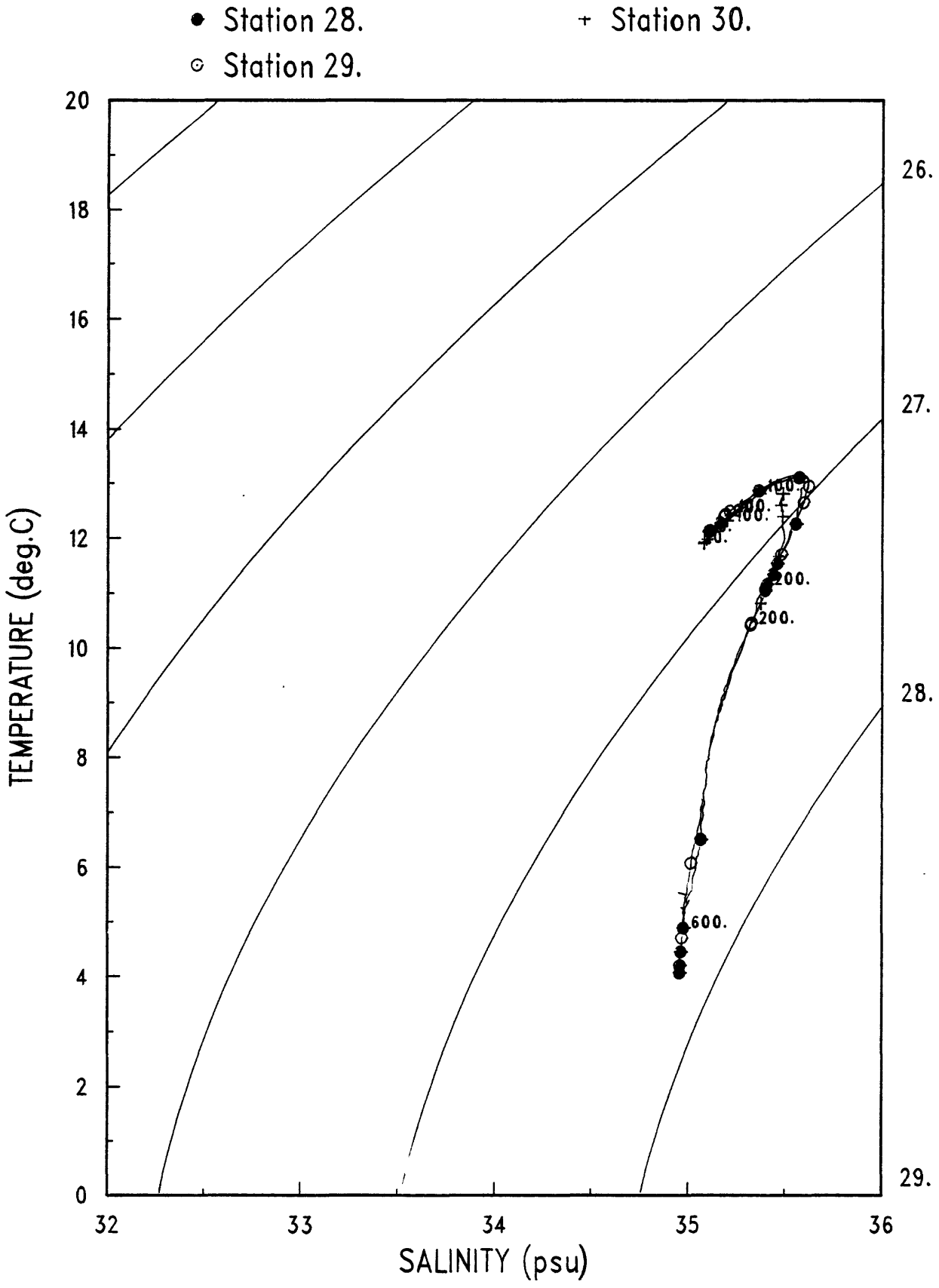
OC149--TS Diagram--Section 2



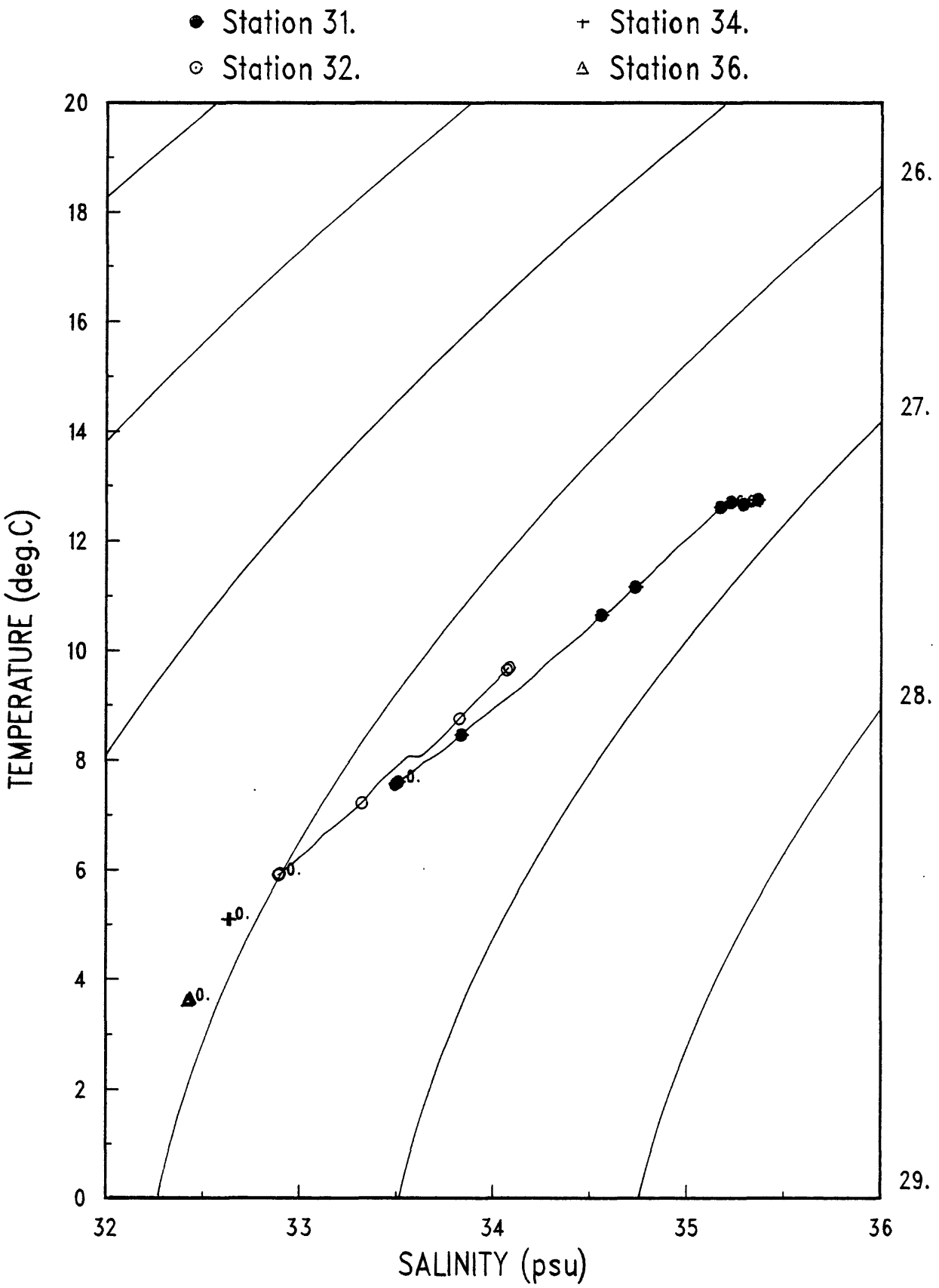
OC149--TS Diagram--Section 3



OC149--TS Diagram--Section 4

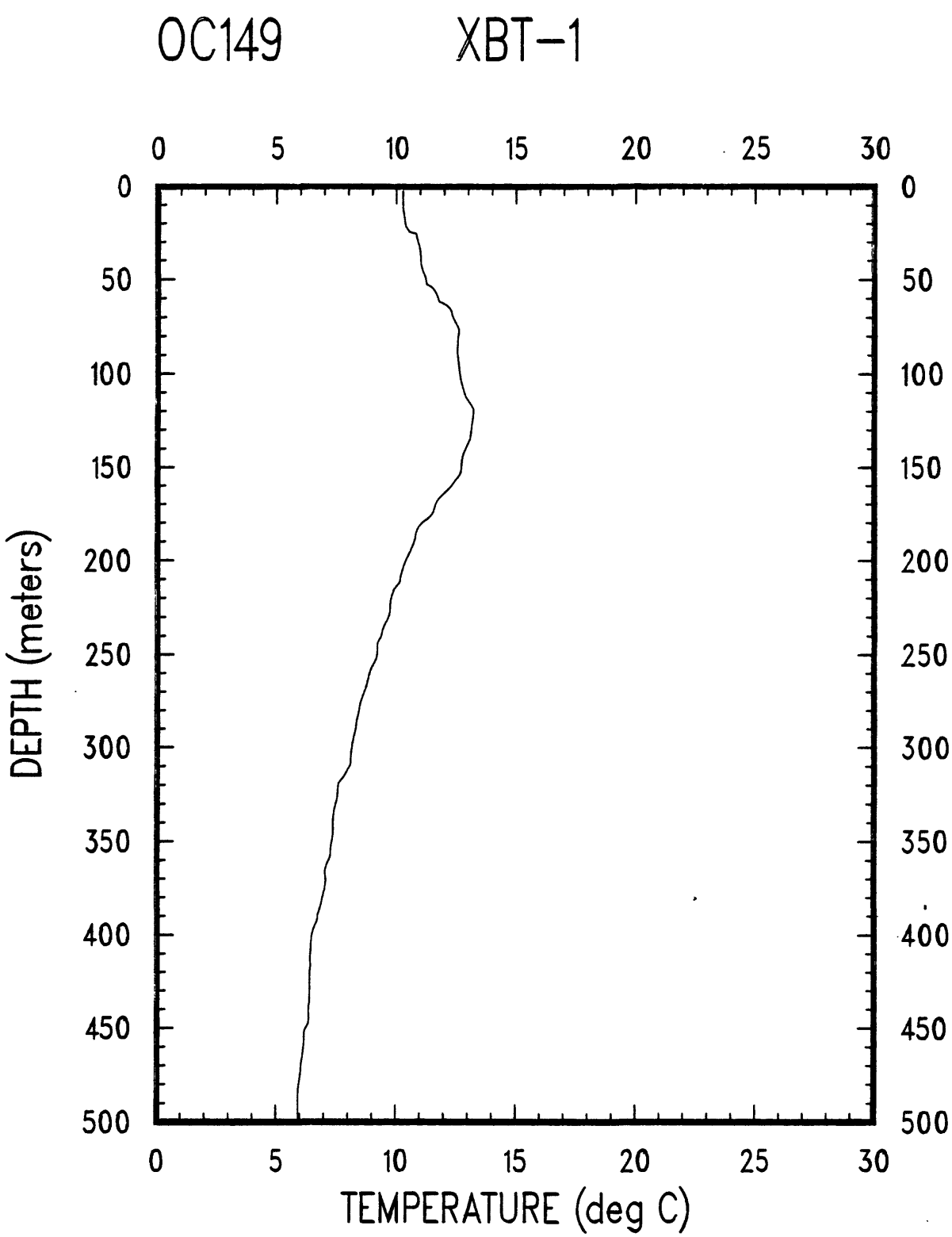


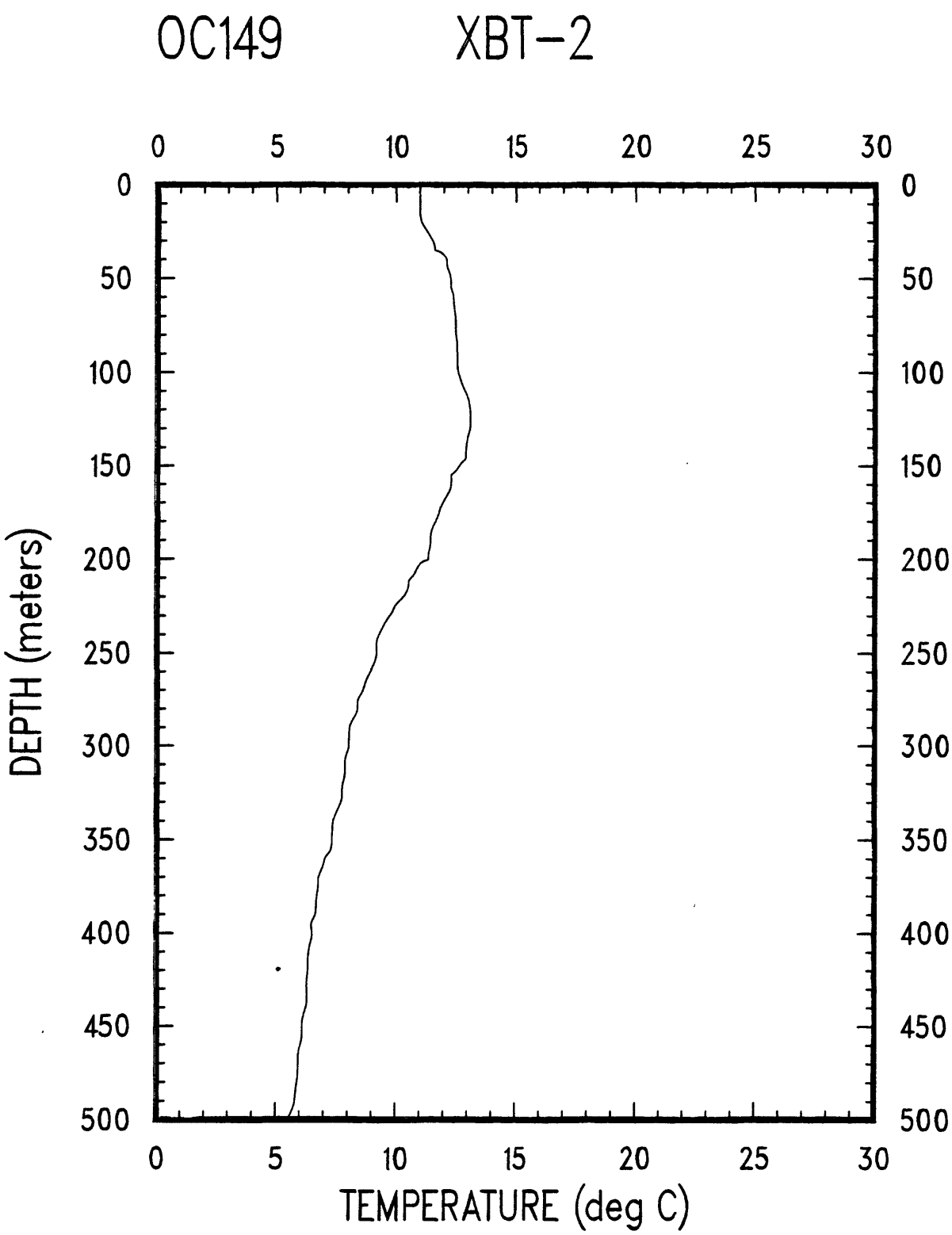
OC149--TS Diagram--Section 4

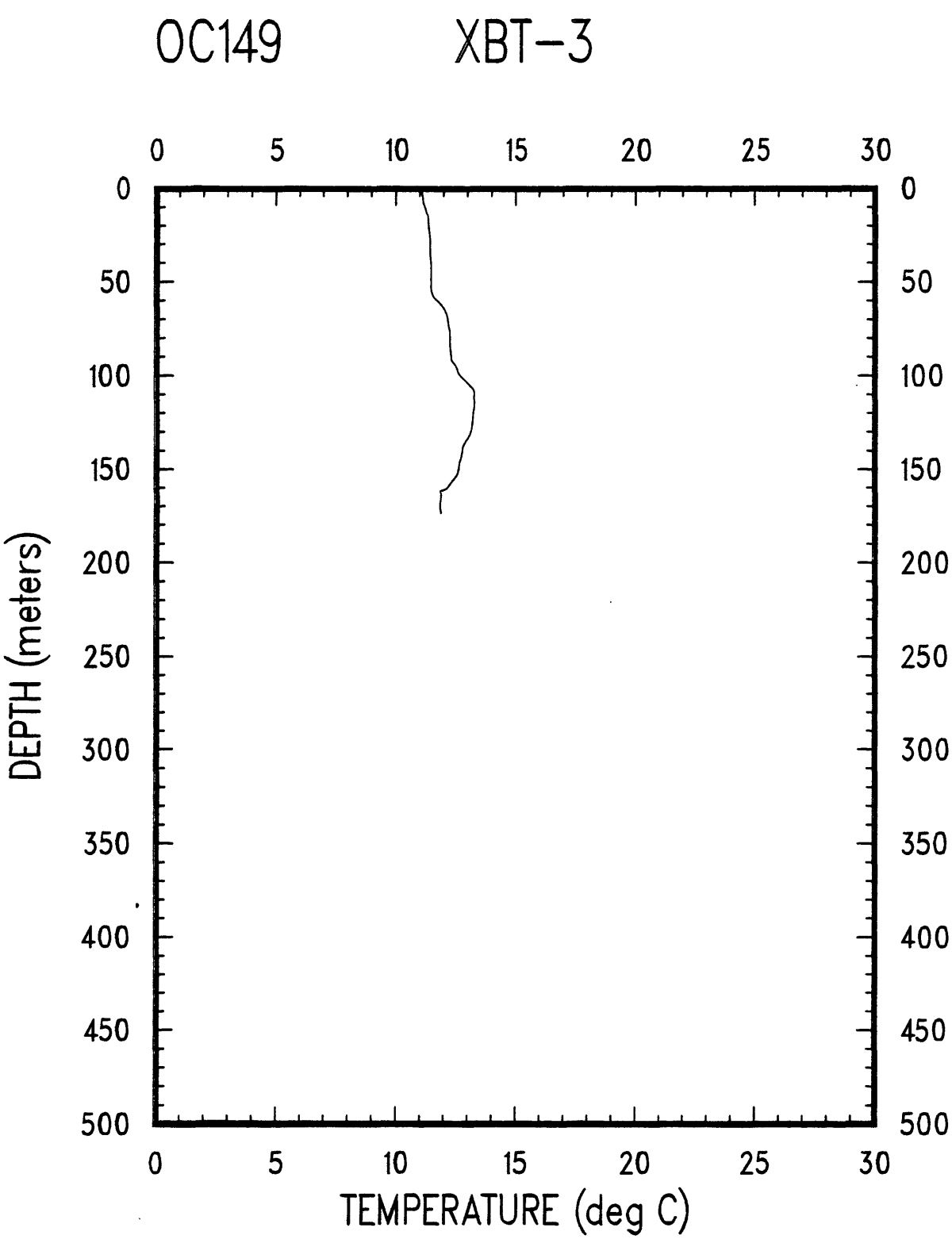


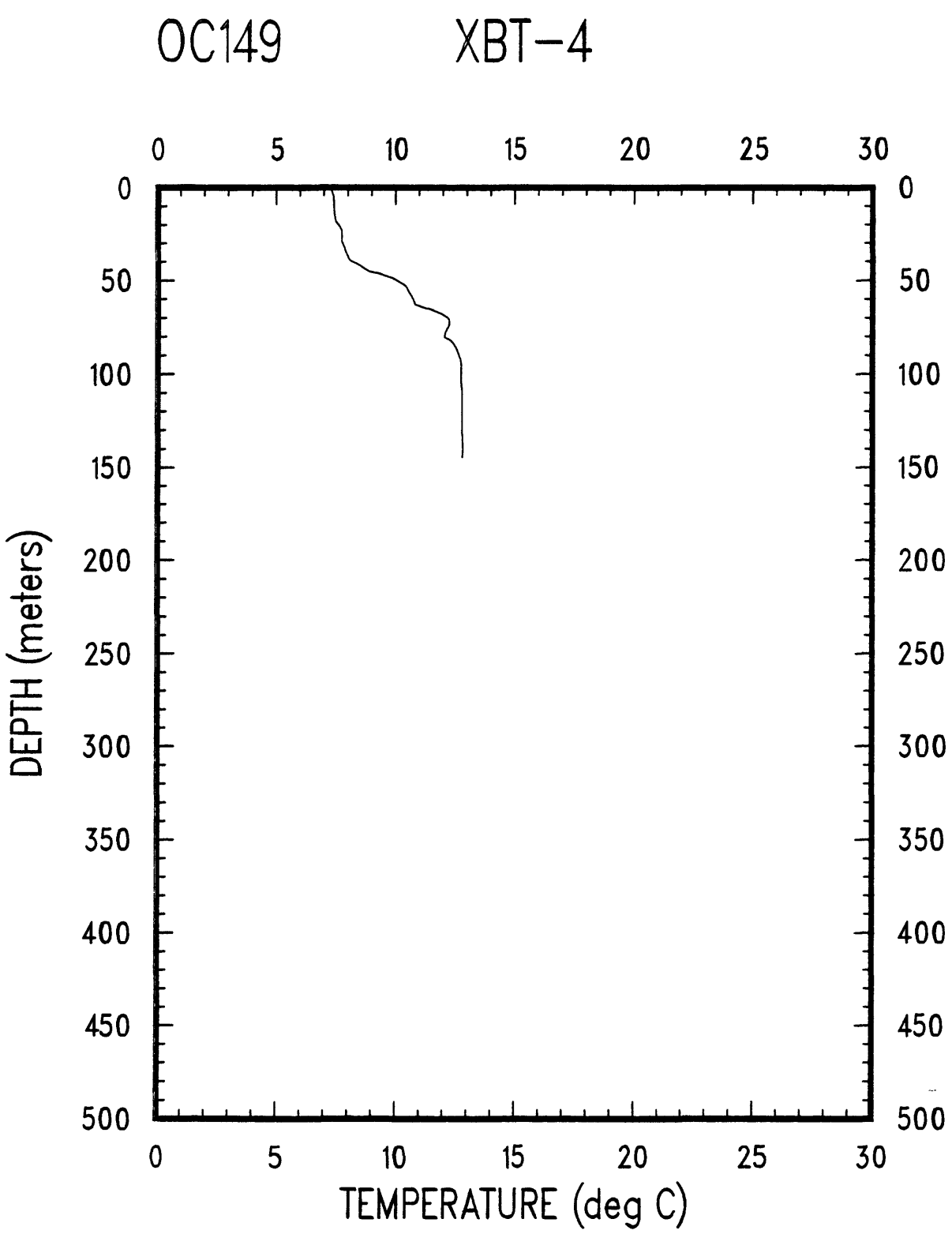
Station profiles

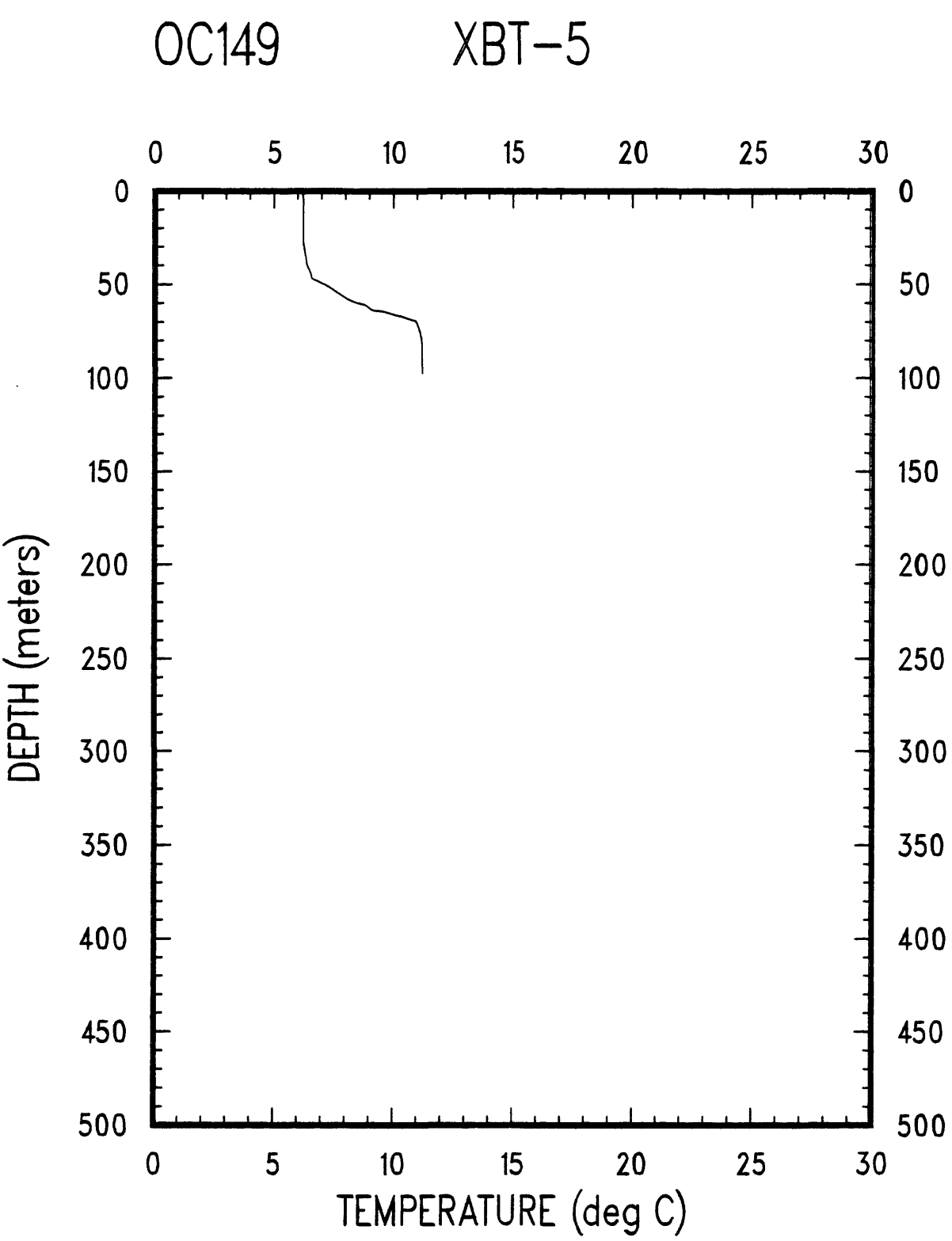
Vertical profiles of temperature, salinity, sigma-t, oxygen, attenuation coefficient, and Brunt-Vaisala frequency at each station (figures 17-50). The profiles are drawn using the 2-dbar-averaged data; at approximately 10 dbars above the bottom, the averaging interval becomes 1 dbar. The data are listed 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's at station 26 and 27 malfunctioned and no plots are included.

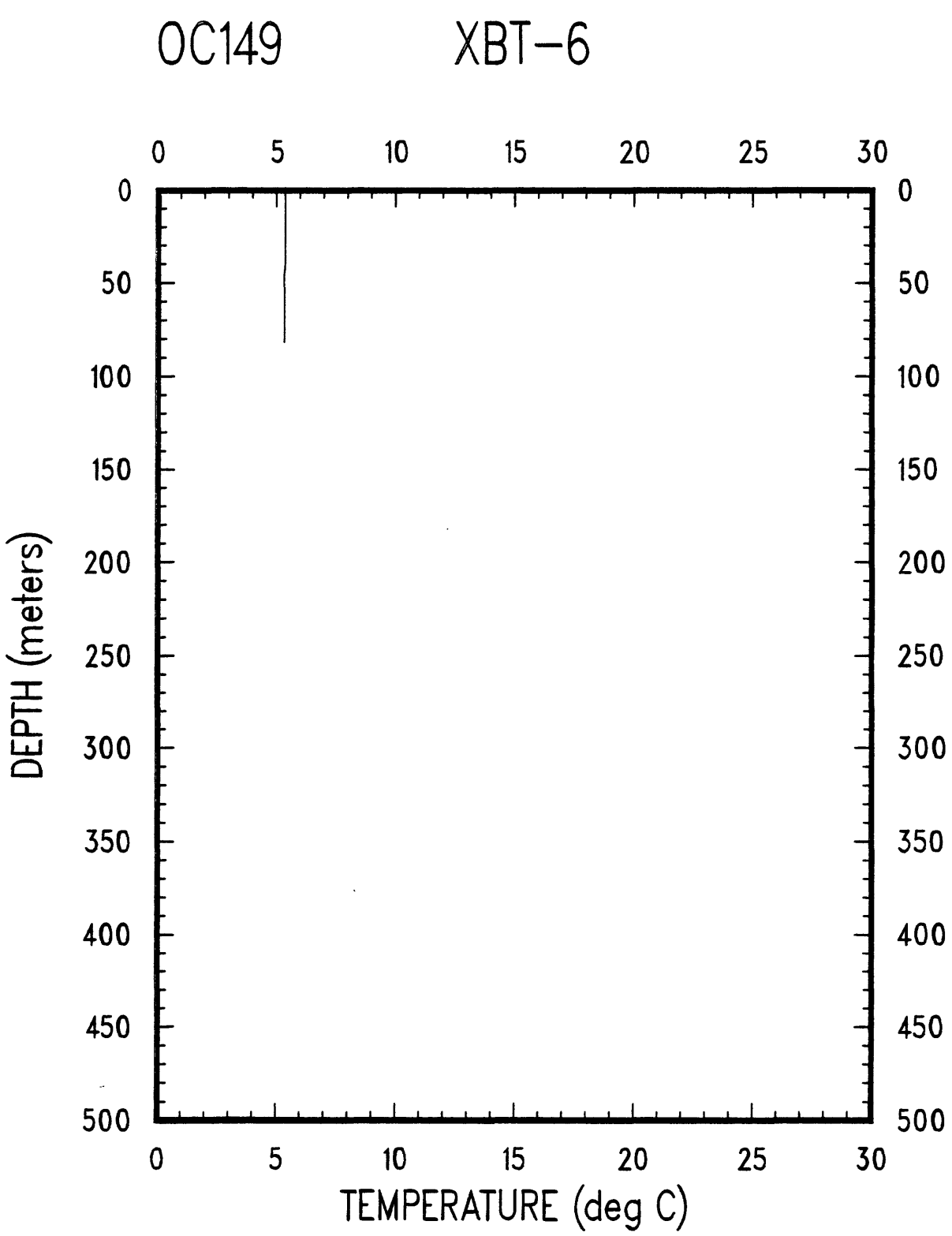

OC149
XBT-1
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)


OC149
XBT-2
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

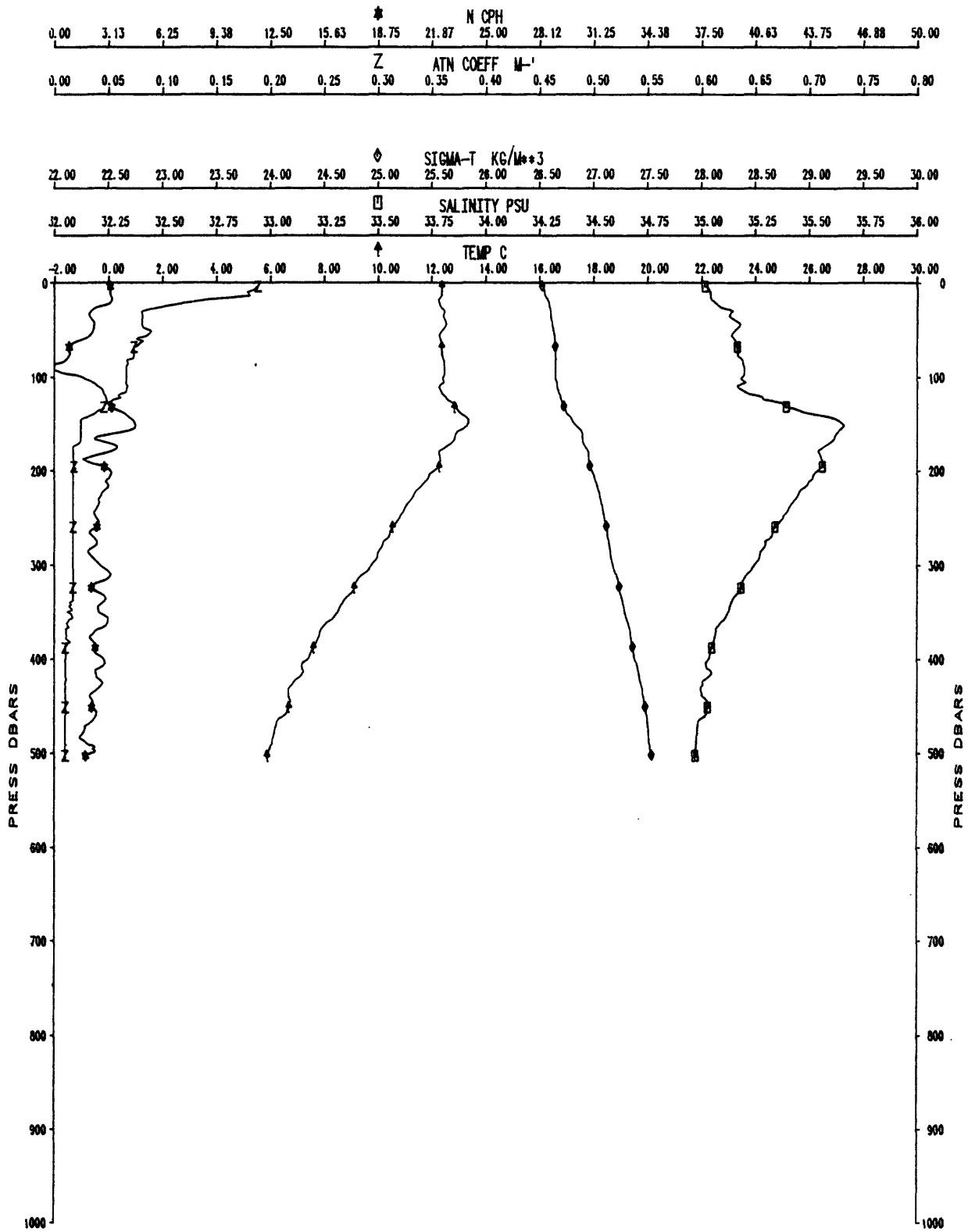

OC149
XBT-3
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

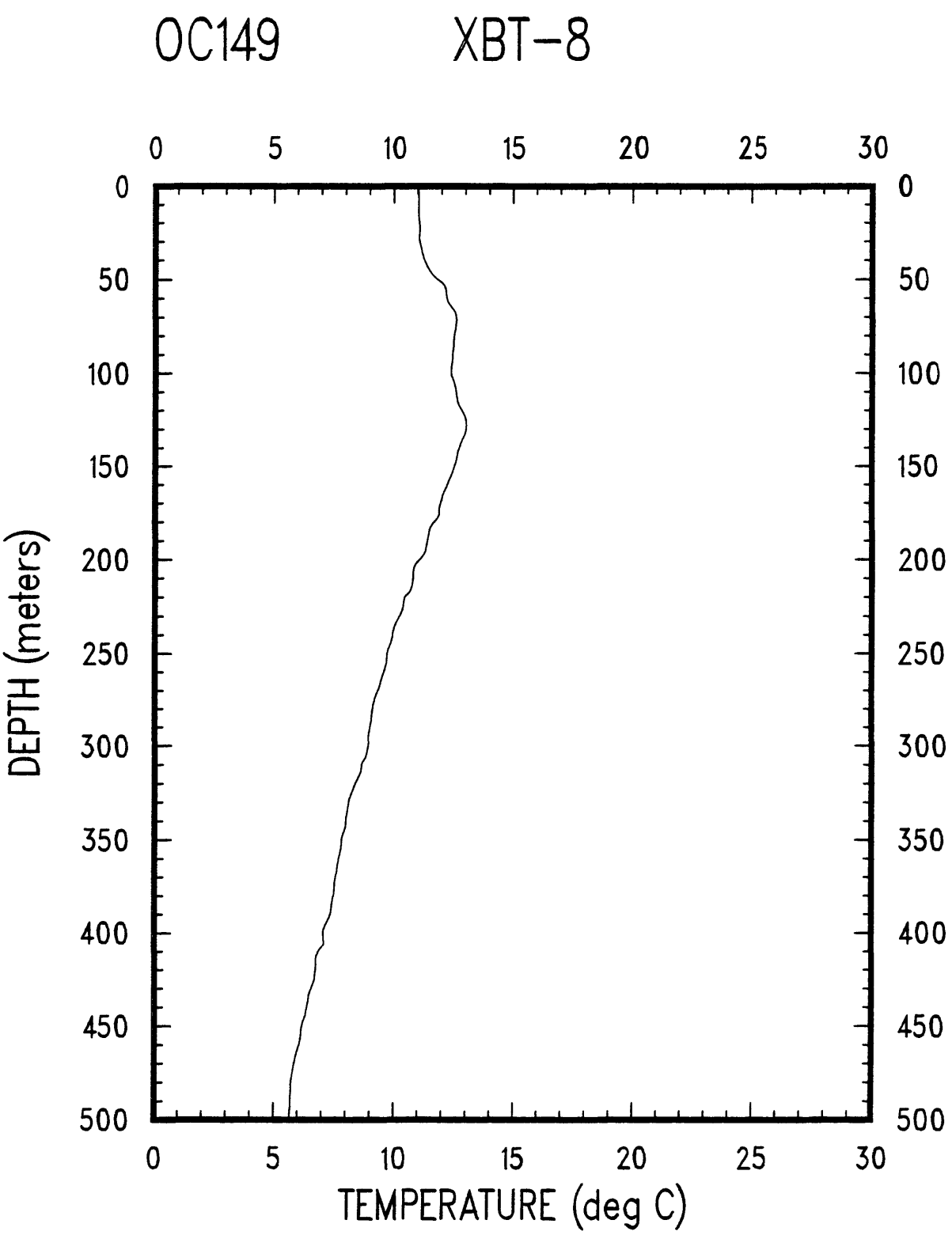

OC149 XBT-4
0 5 10 15 20 25 30
0 50 100 150 200 250 300 350 400 450 500
DEPTH (meters)
TEMPERATURE (deg C)


OC149
XBT-5
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

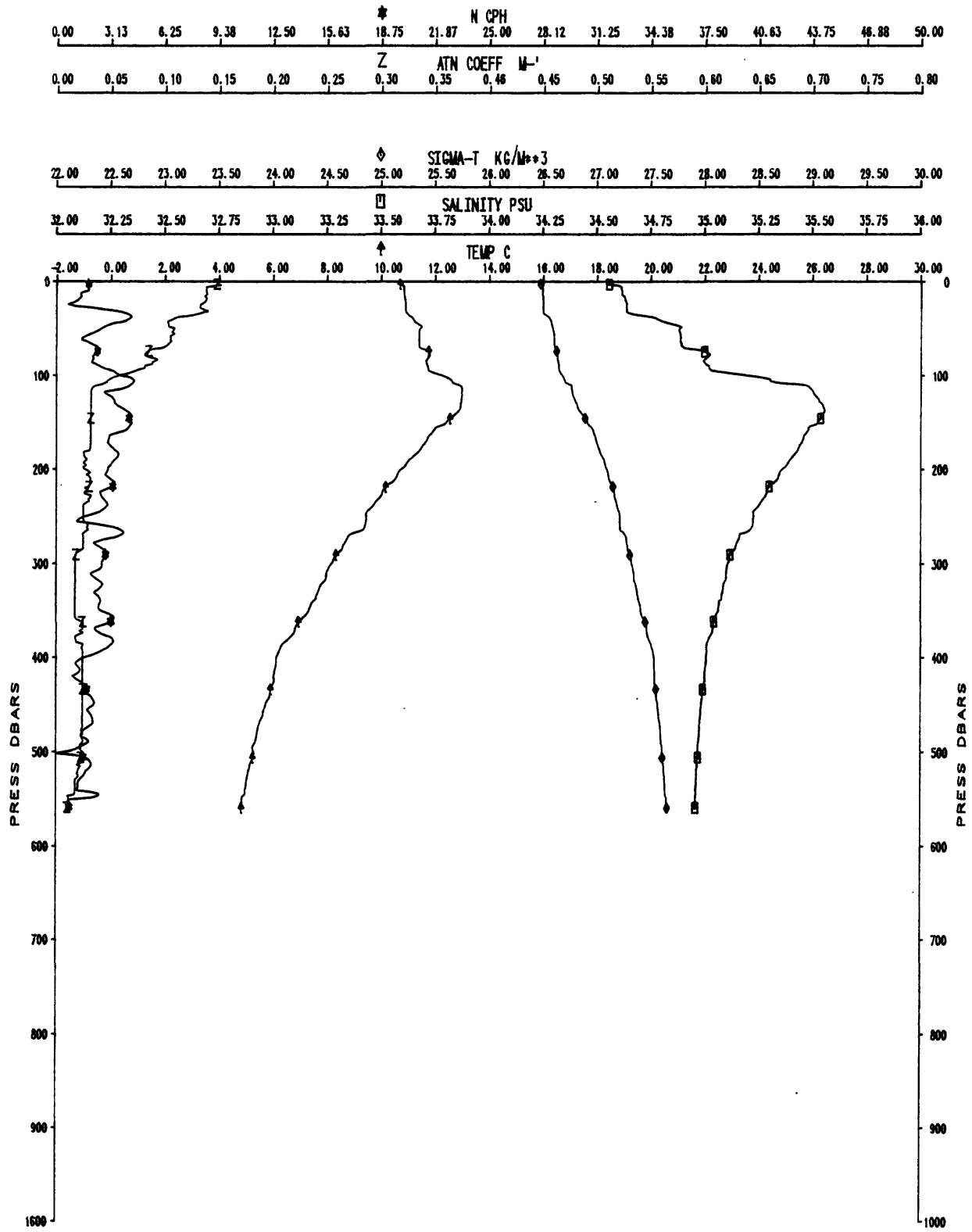

OC149
XBT-6
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

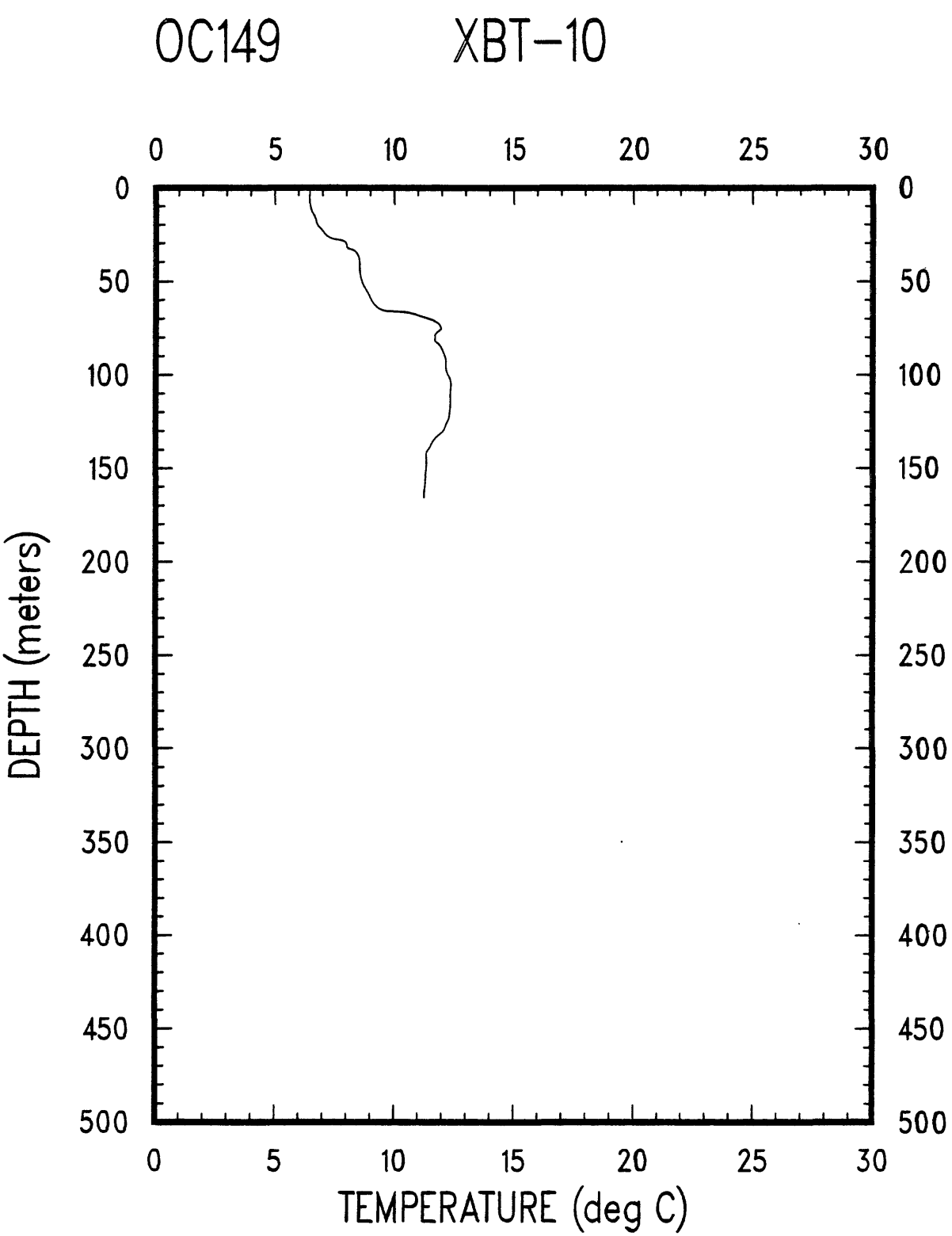
OC149A CAST #7



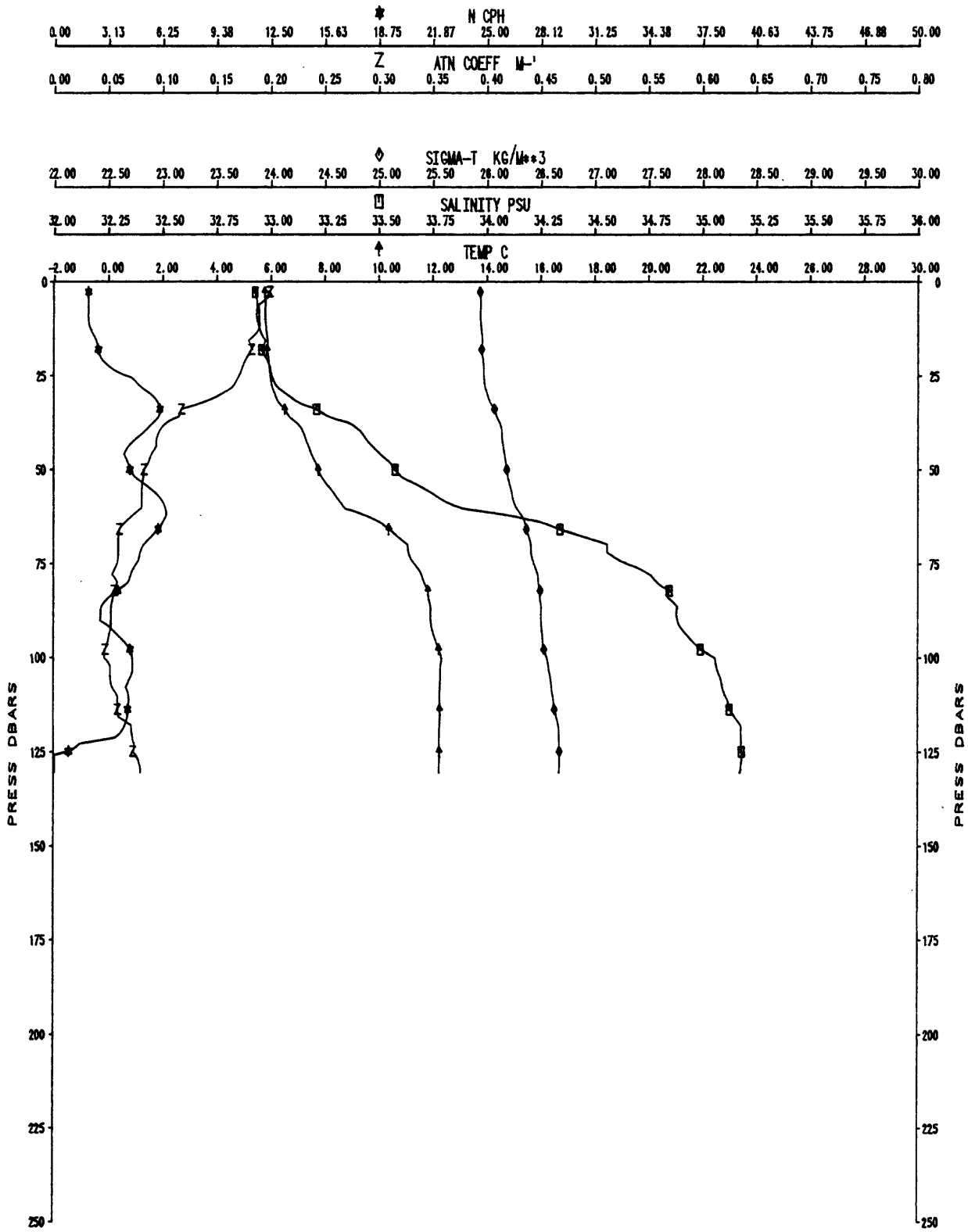

OC149
XBT-8
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

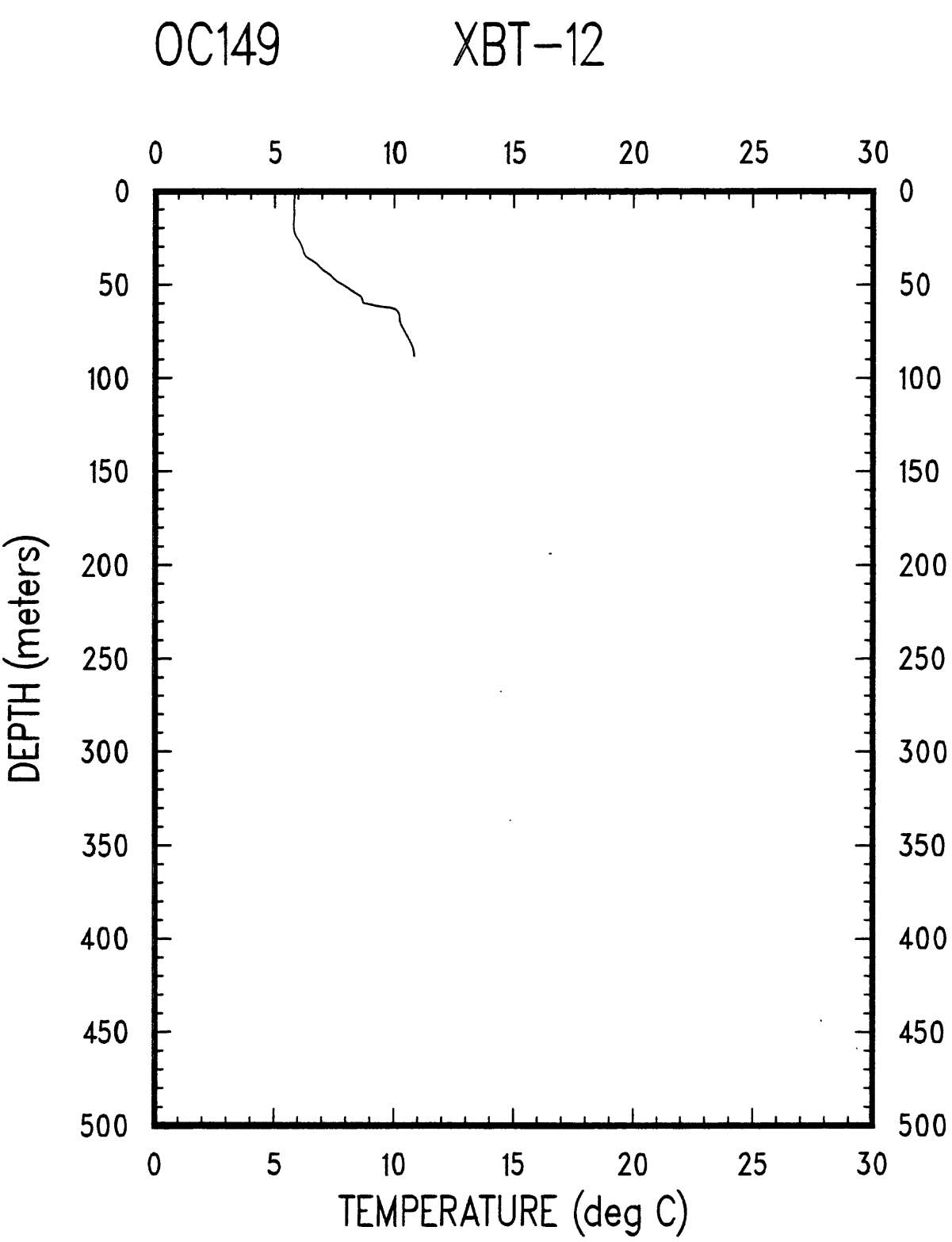
OC149A CAST #9



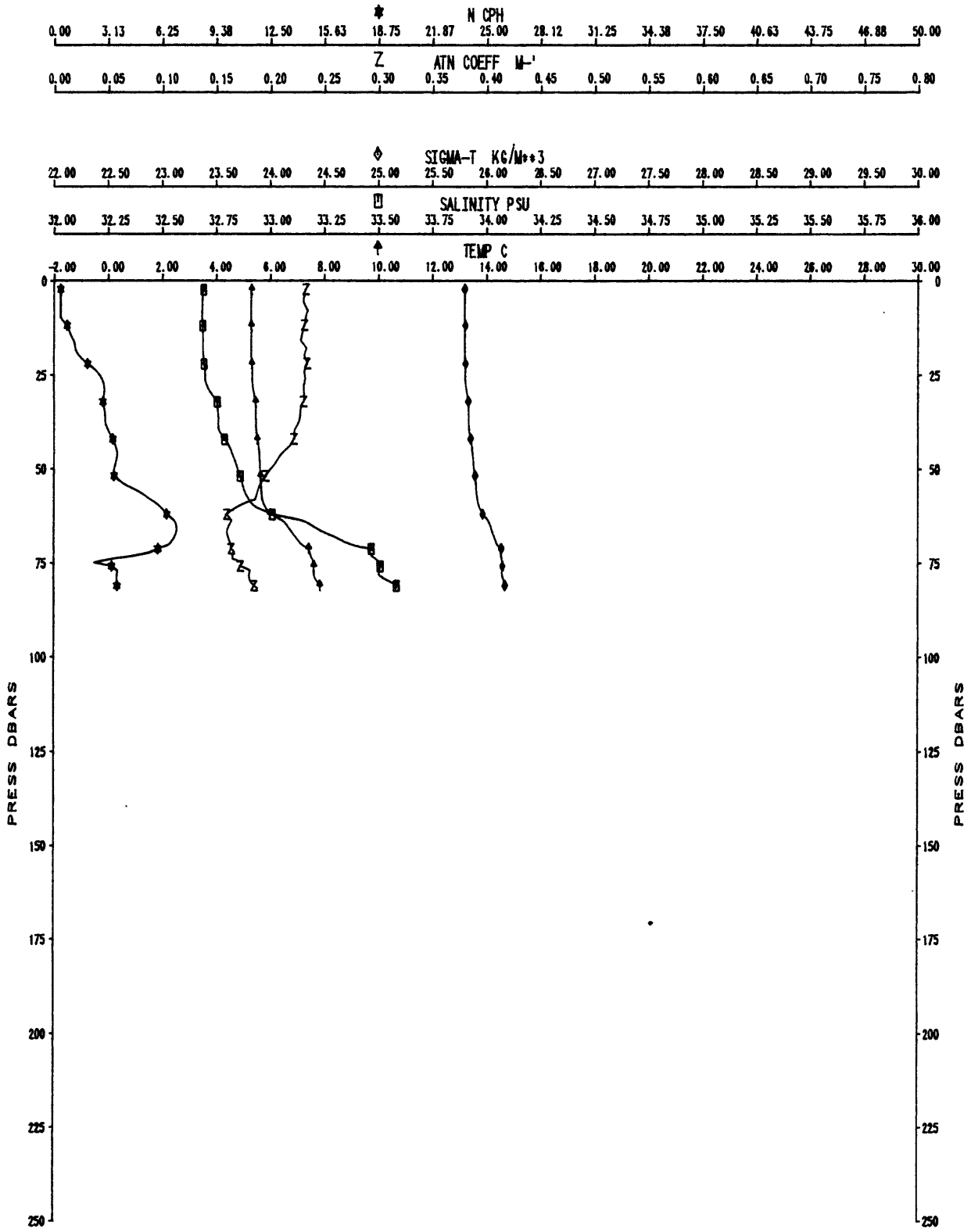

OC149
XBT-10
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

OC149A CAST #11

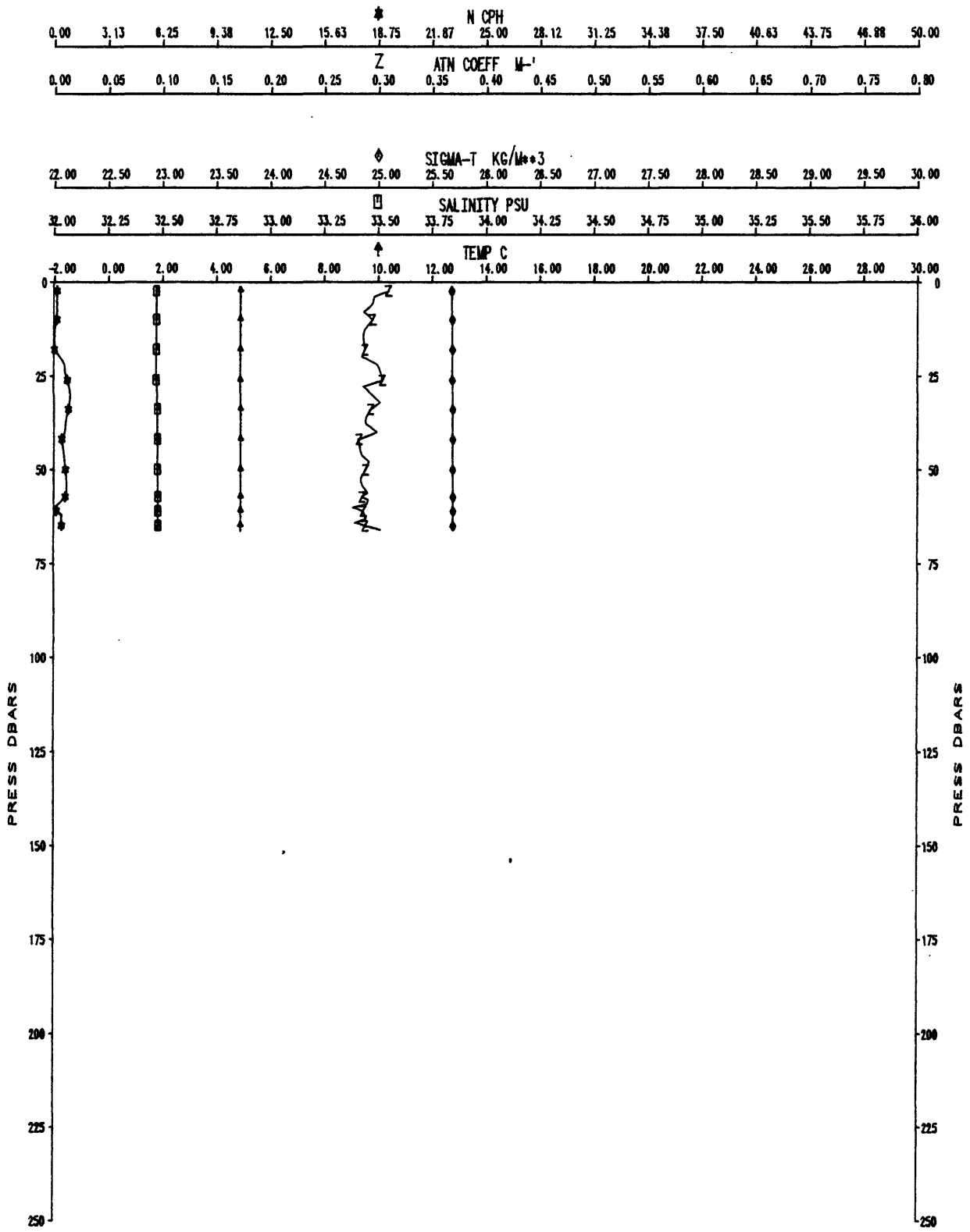



OC149 XBT-12
0 5 10 15 20 25 30
0 50 100 150 200 250 300 350 400 450 500
DEPTH (meters)
TEMPERATURE (deg C)

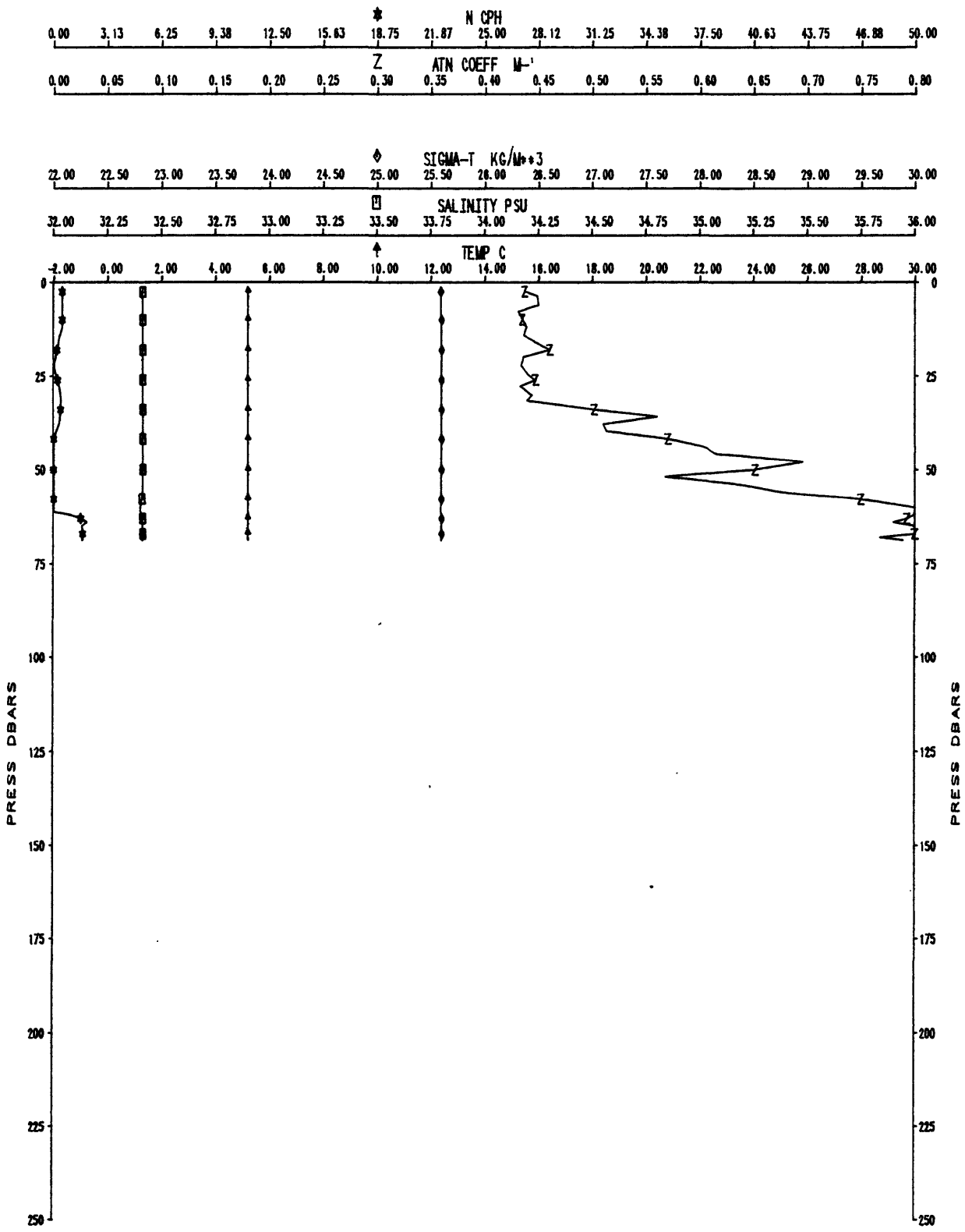
OC149A CAST #13



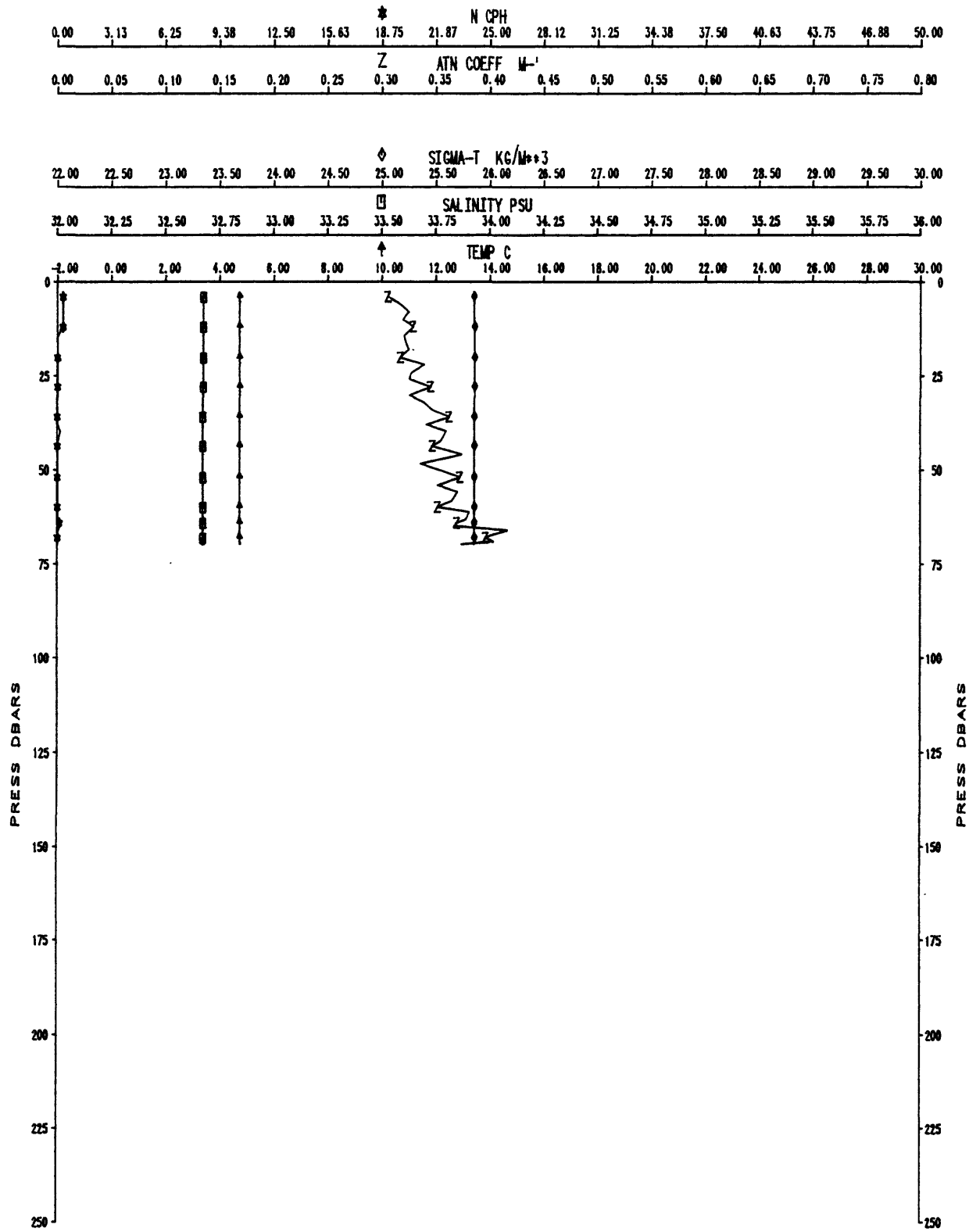
OC149A CAST #14

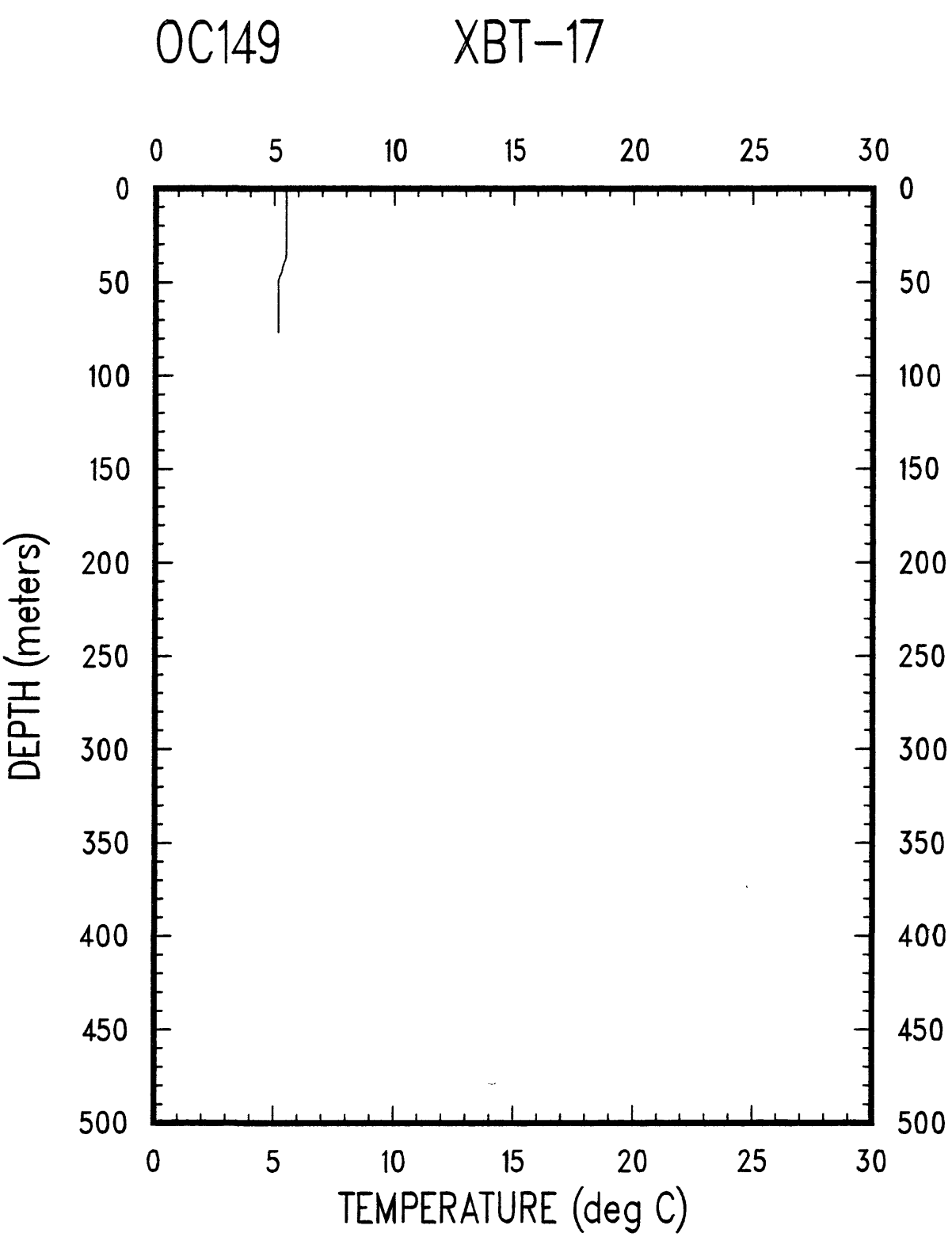


OC149A CAST #15

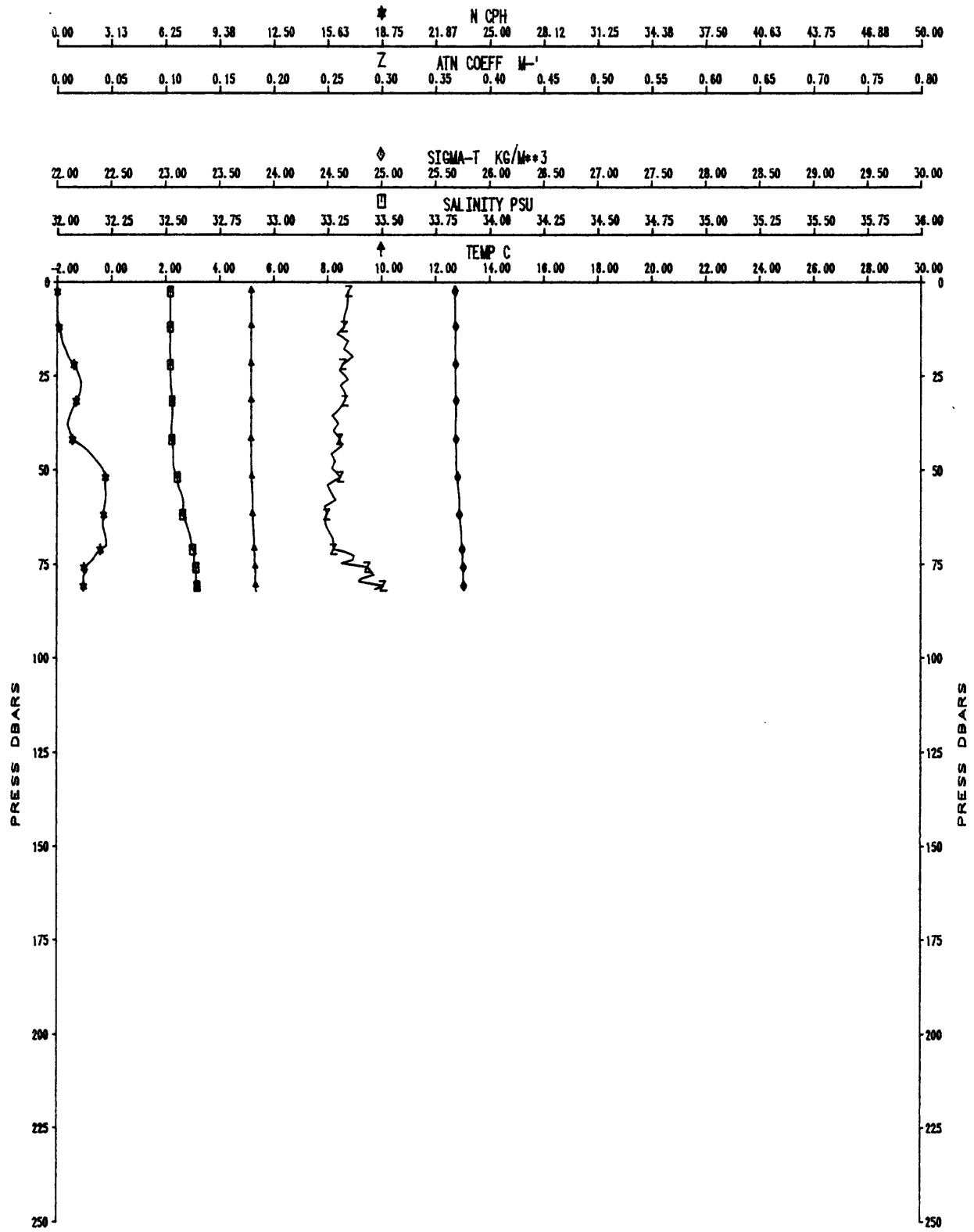


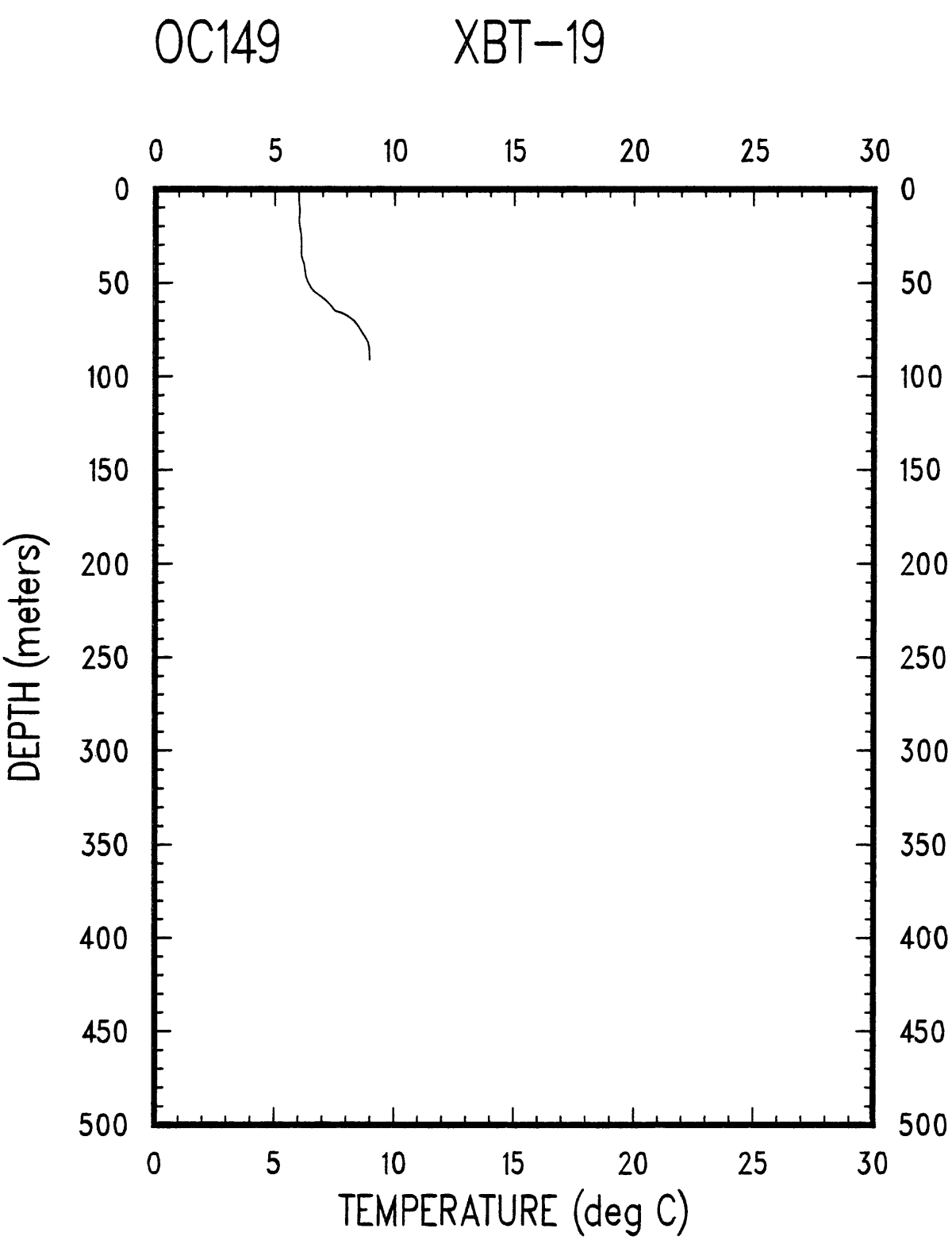
OC149U CAST #16



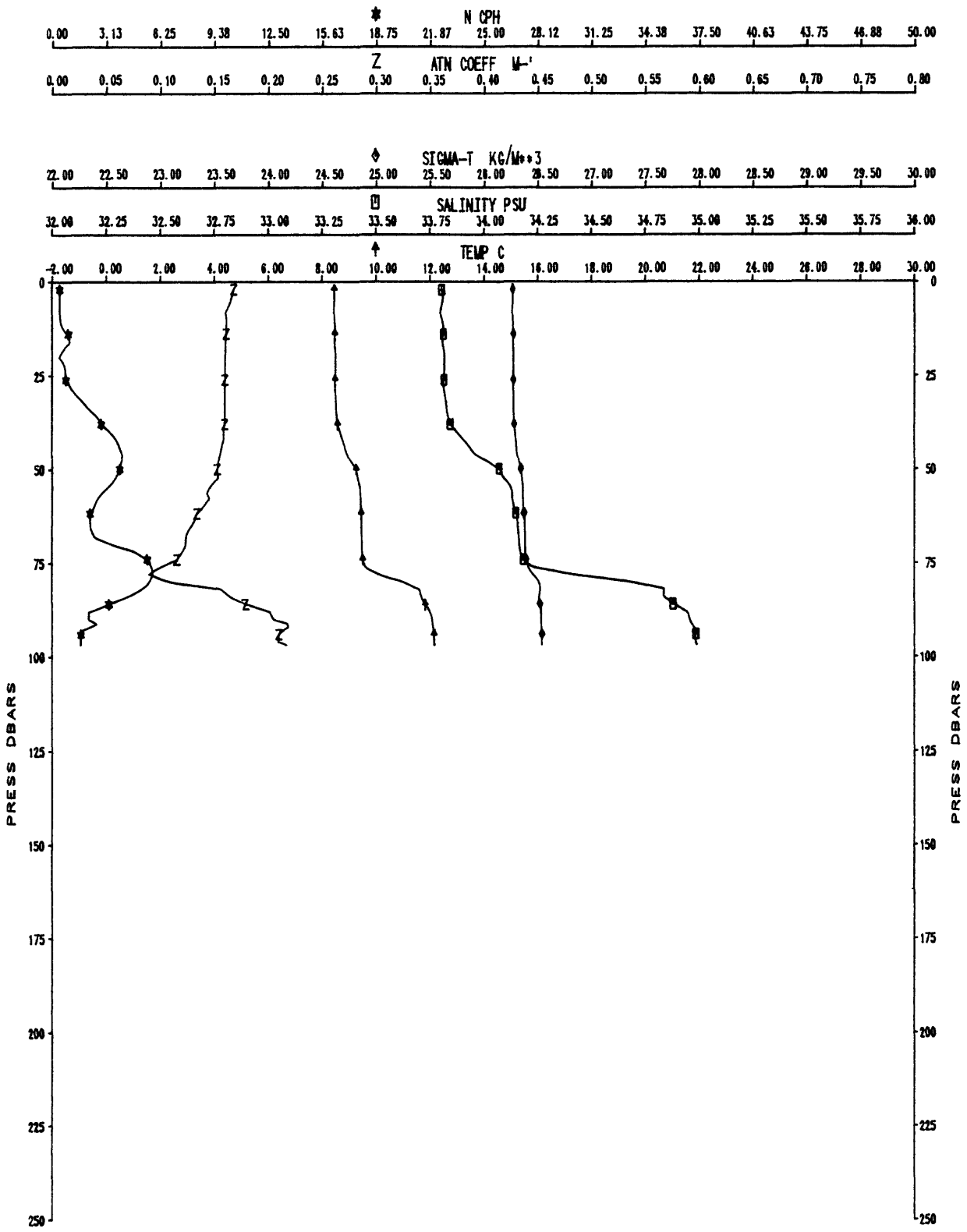

OC149
XBT-17
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

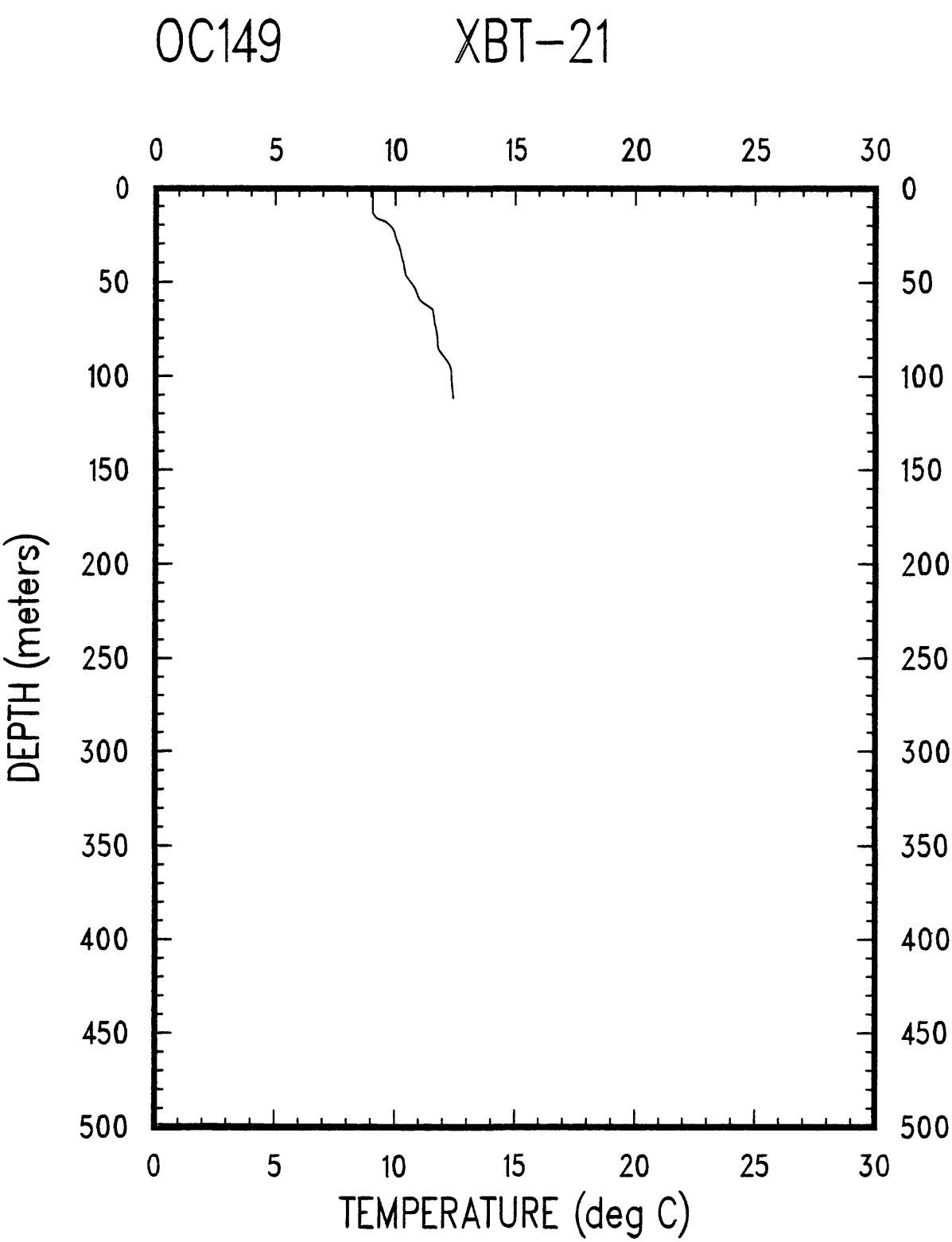
OC149A CAST #18



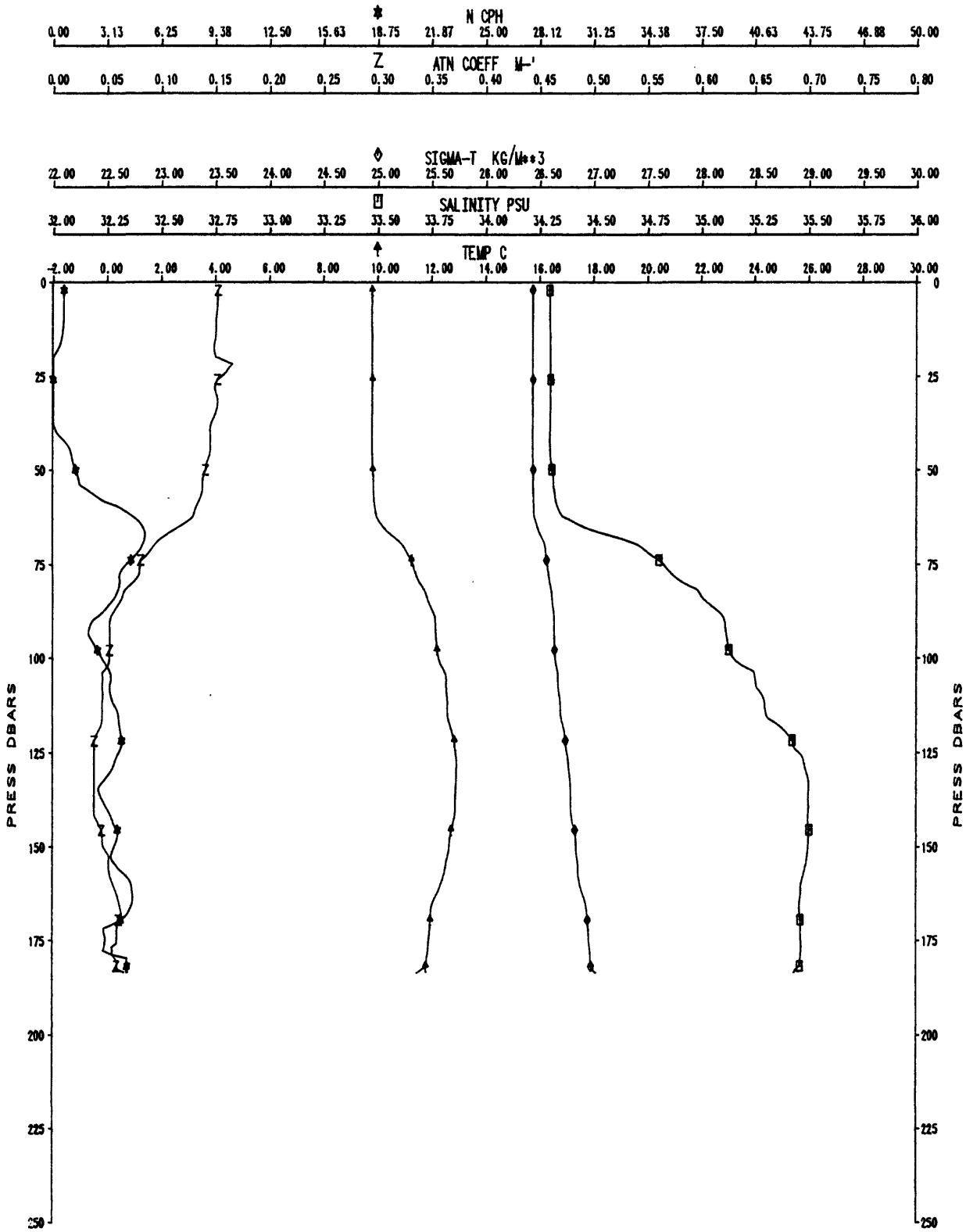

OC149 XBT-19
0 5 10 15 20 25 30
0 50 100 150 200 250 300 350 400 450 500
DEPTH (meters)
TEMPERATURE (deg C)

OC149A CAST #20

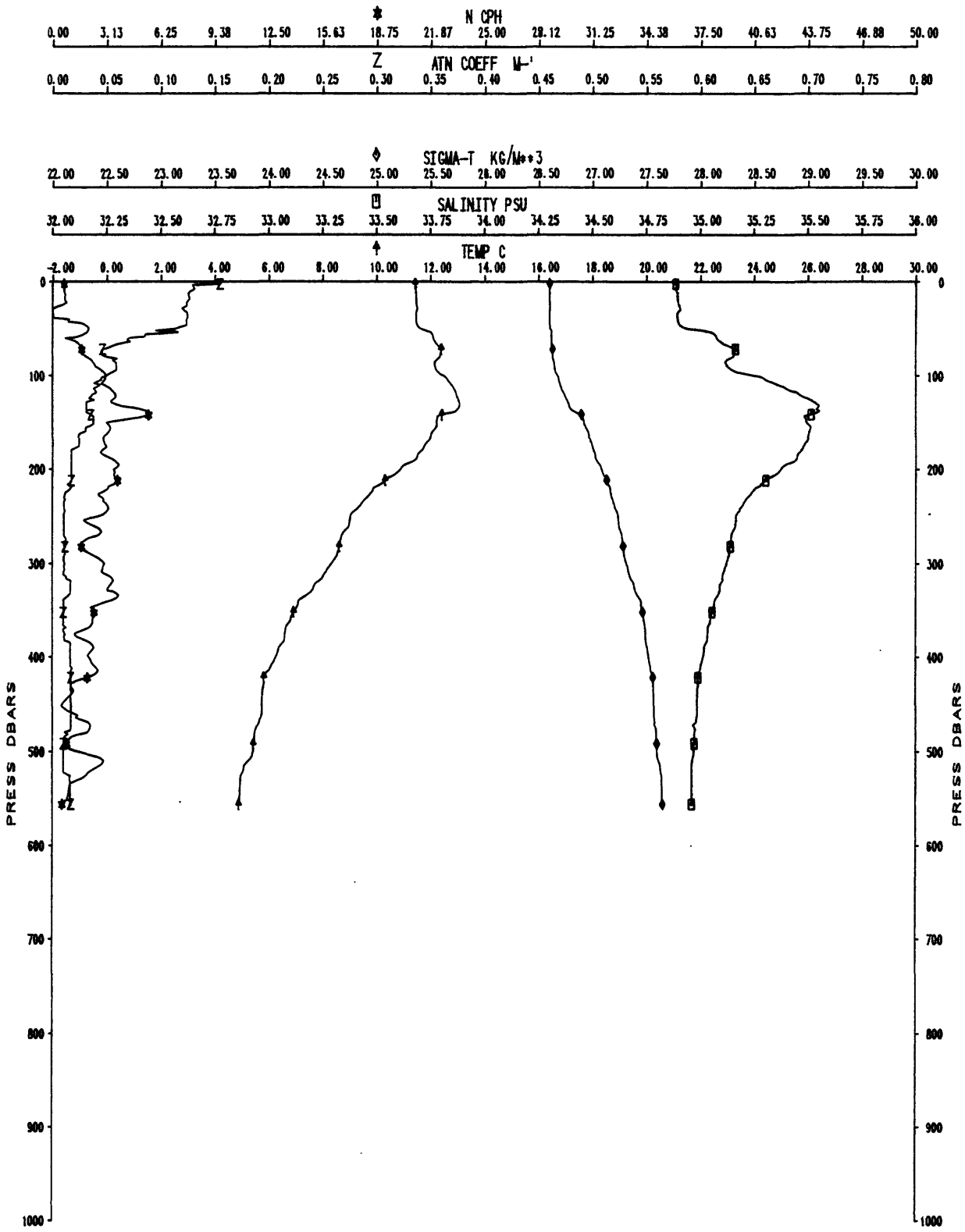


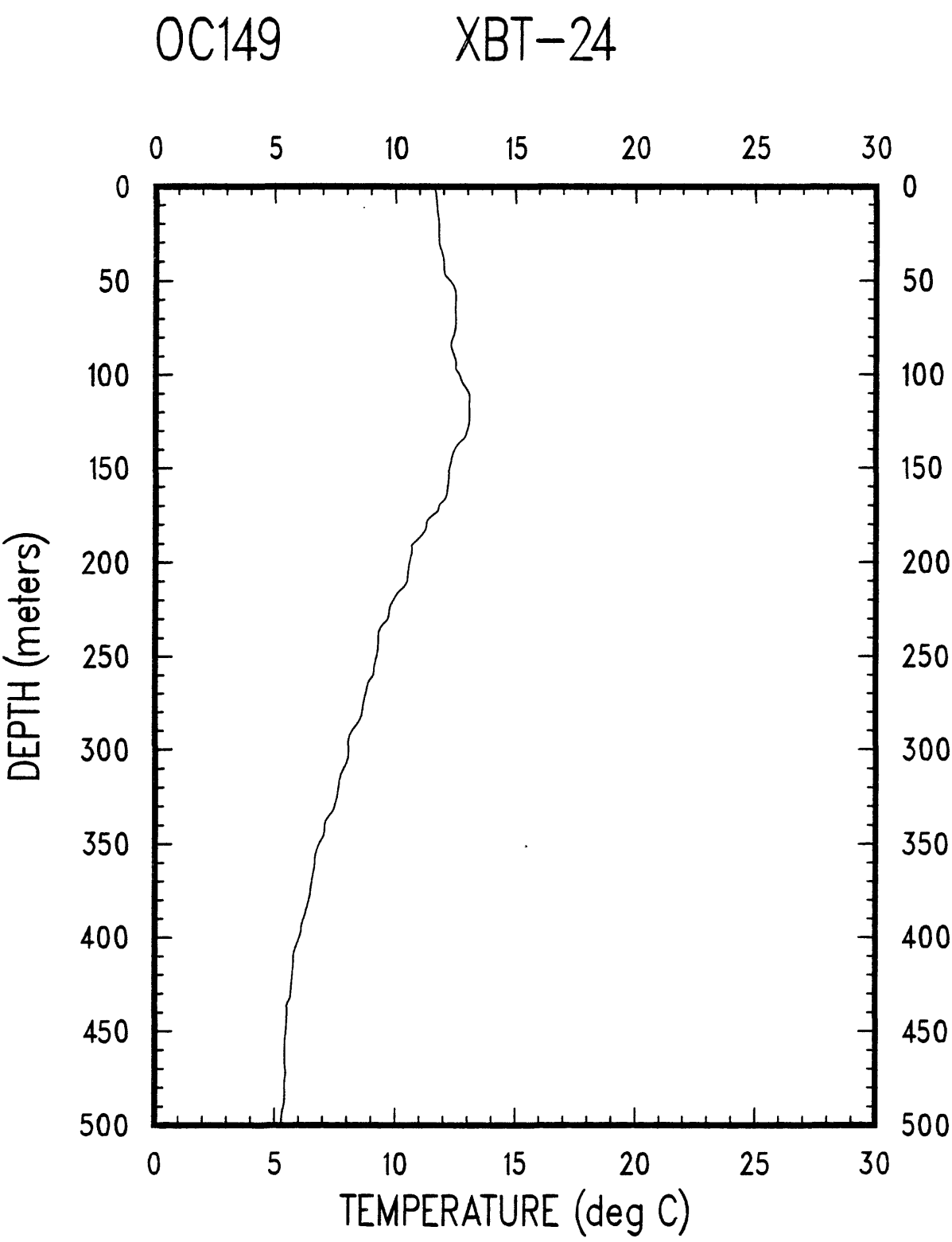

OC149
XBT-21
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

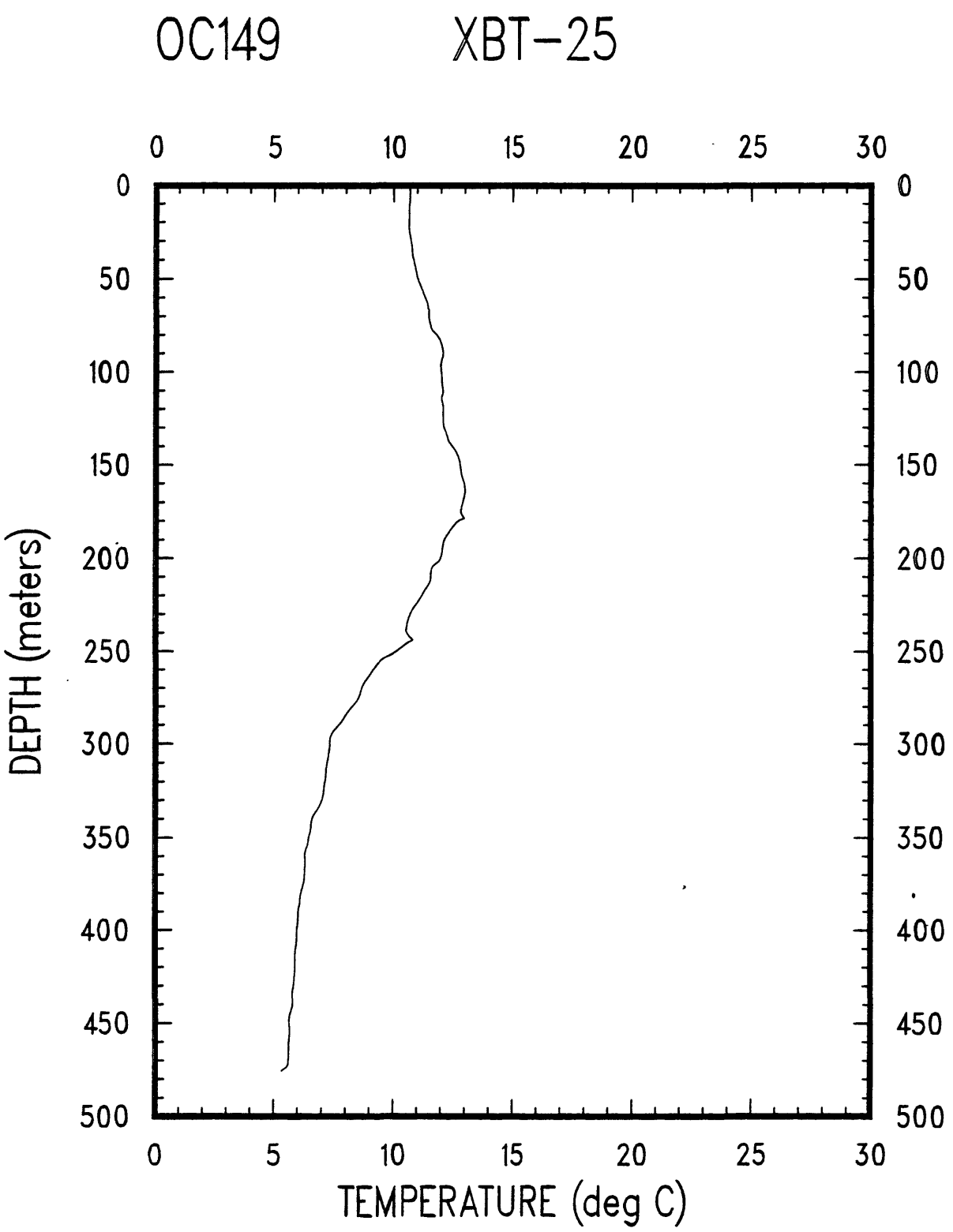
OC149A CAST #22



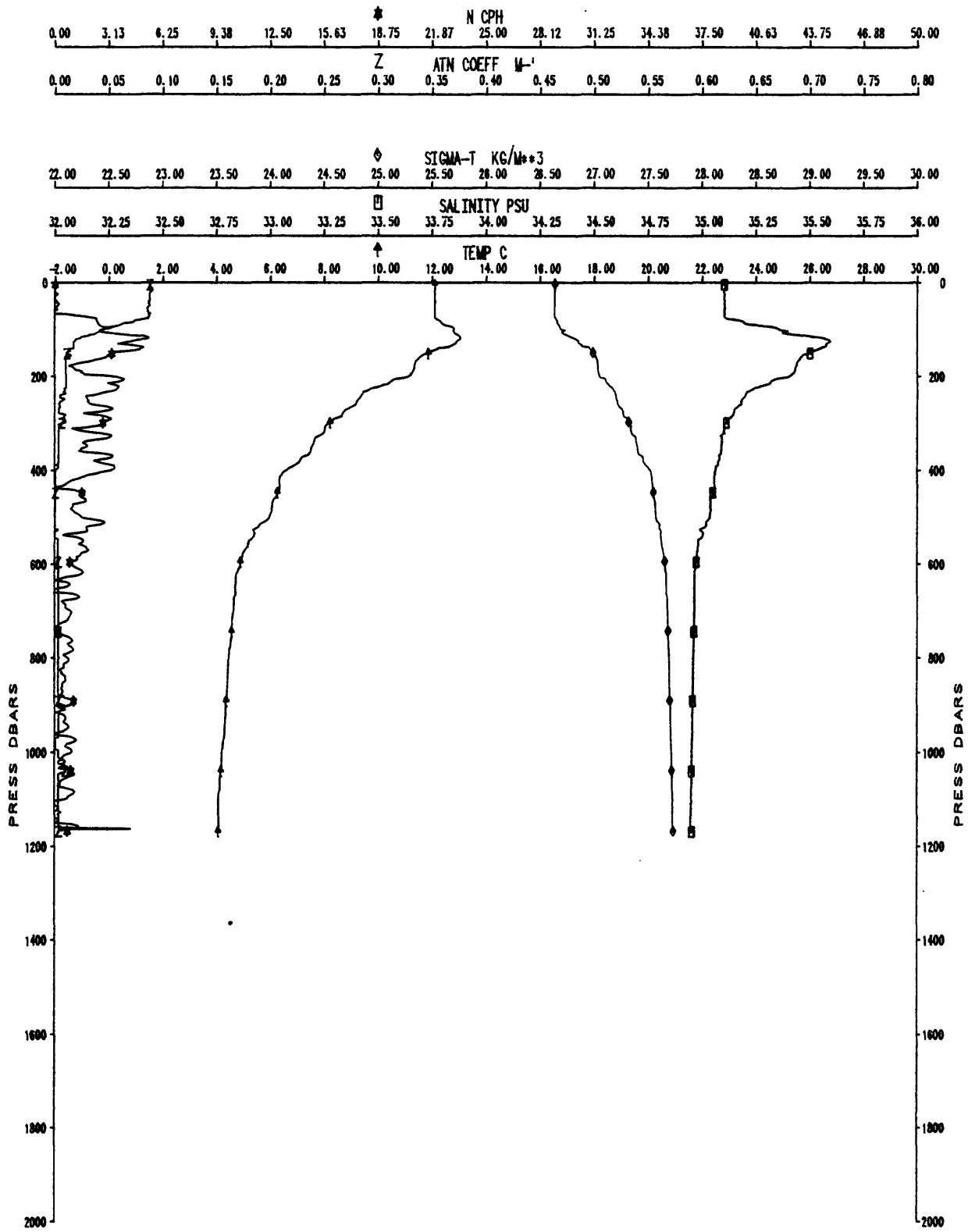
OC149A CAST #23



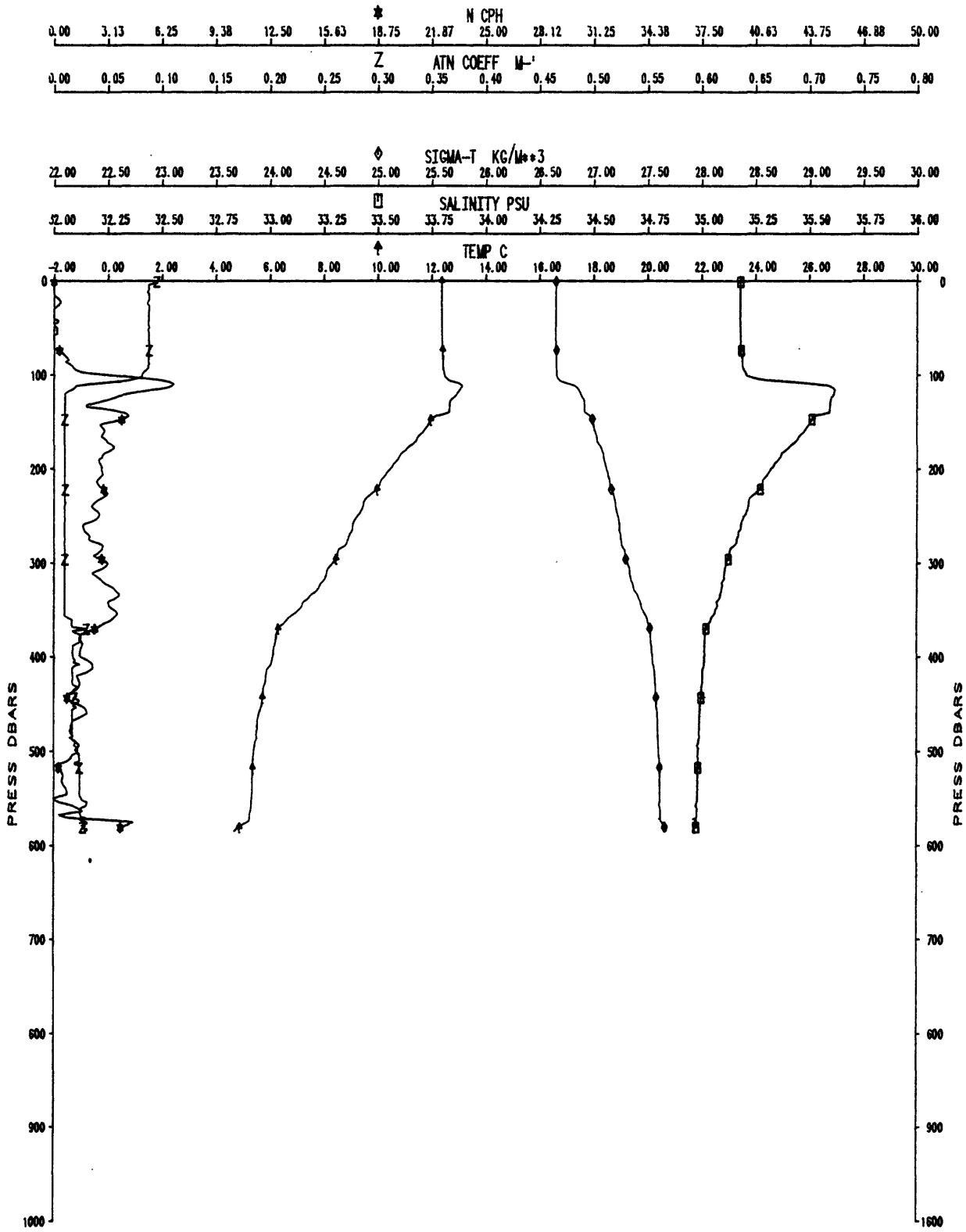

OC149
XBT-24
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)


OC149
XBT-25
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

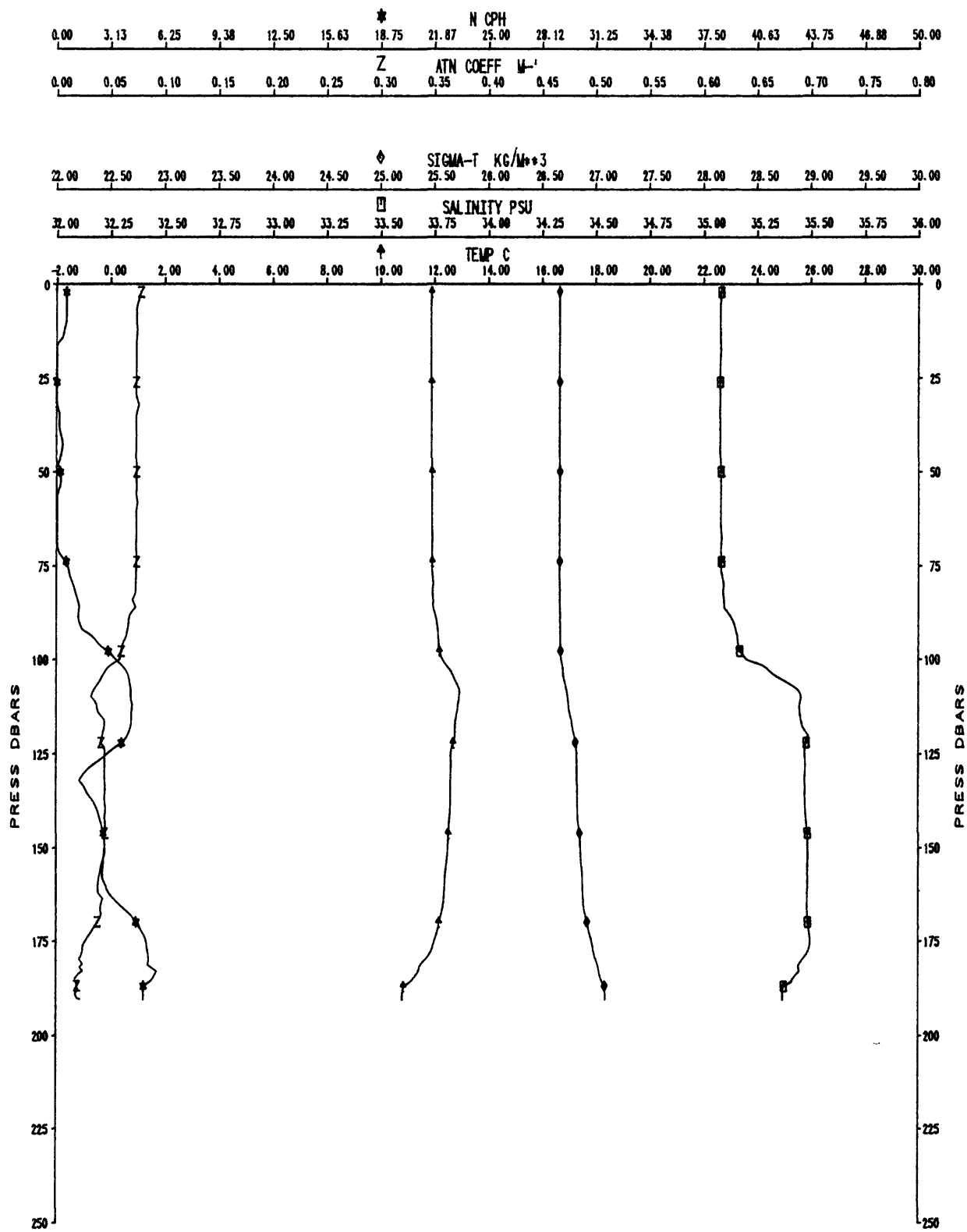
OC149U CAST #28



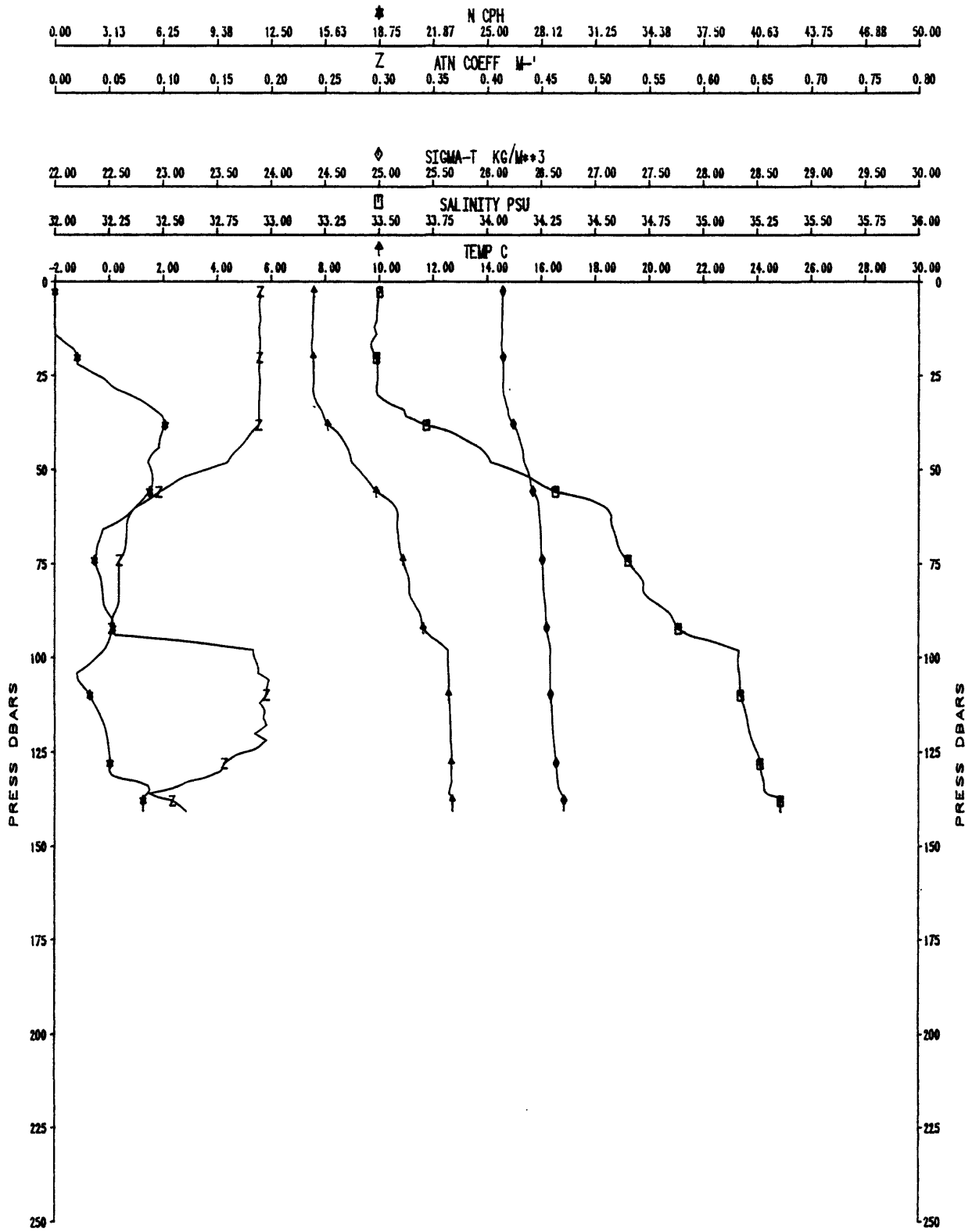
OC149B CAST #29



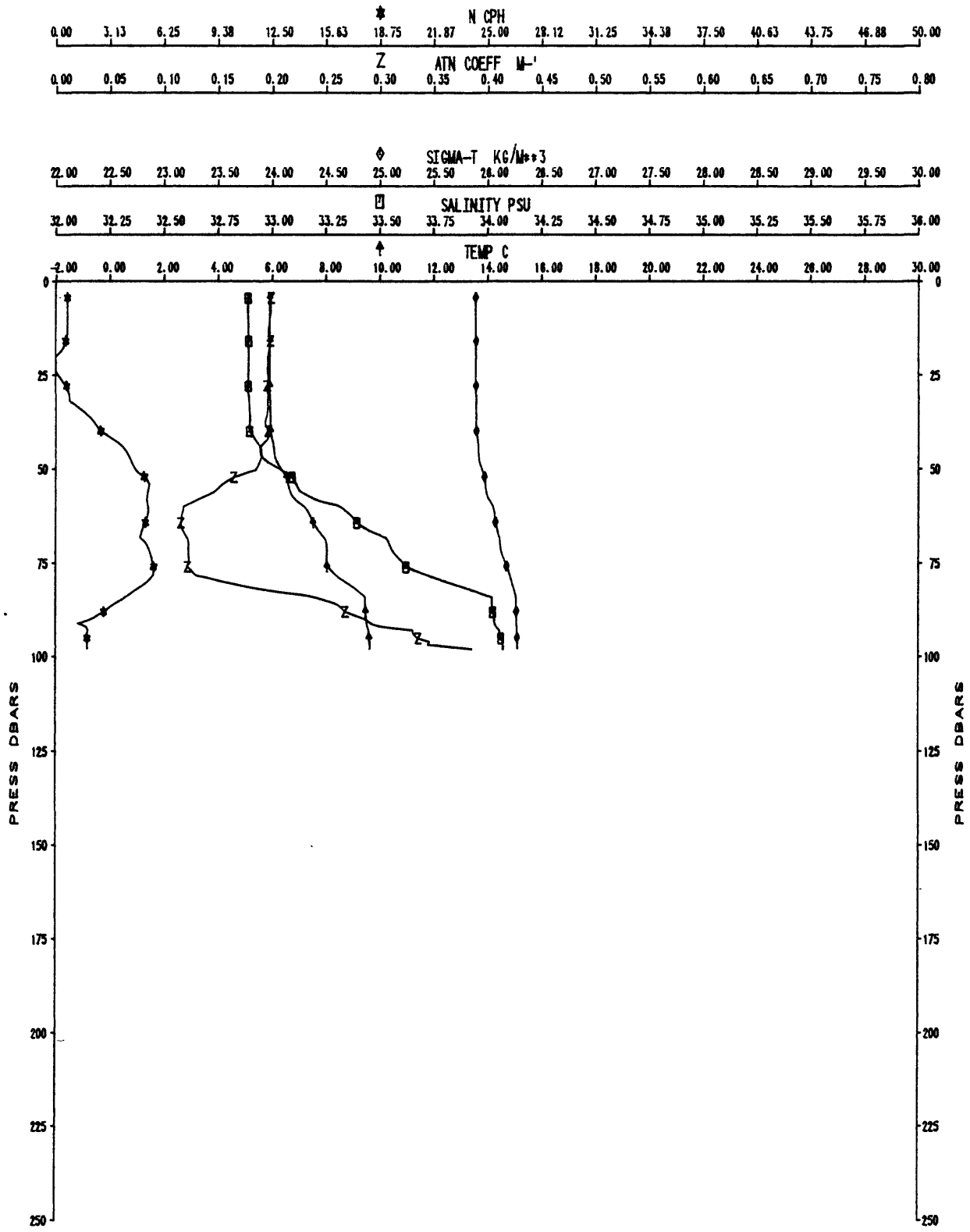
OC149A CAST #30

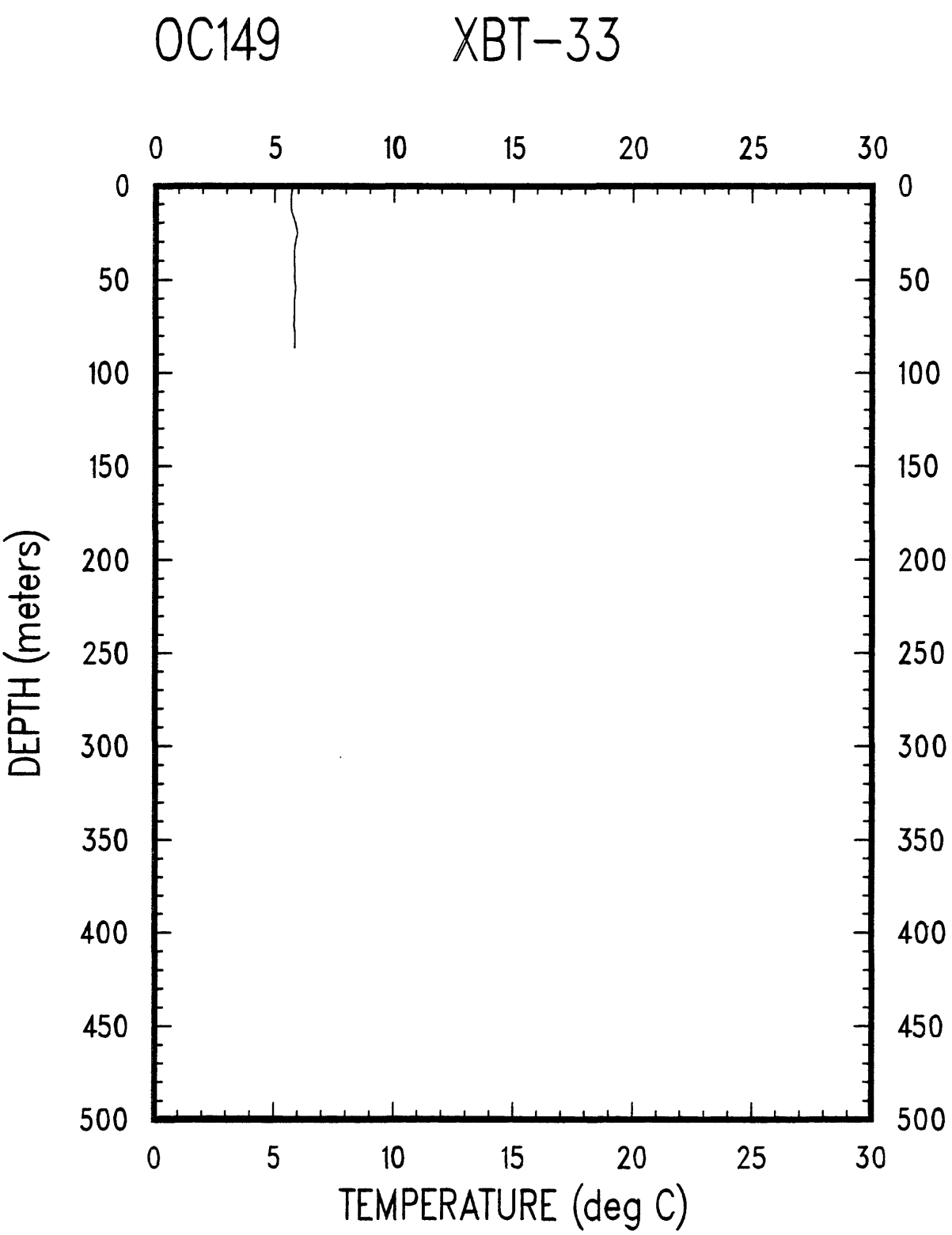


OC149A CAST #31

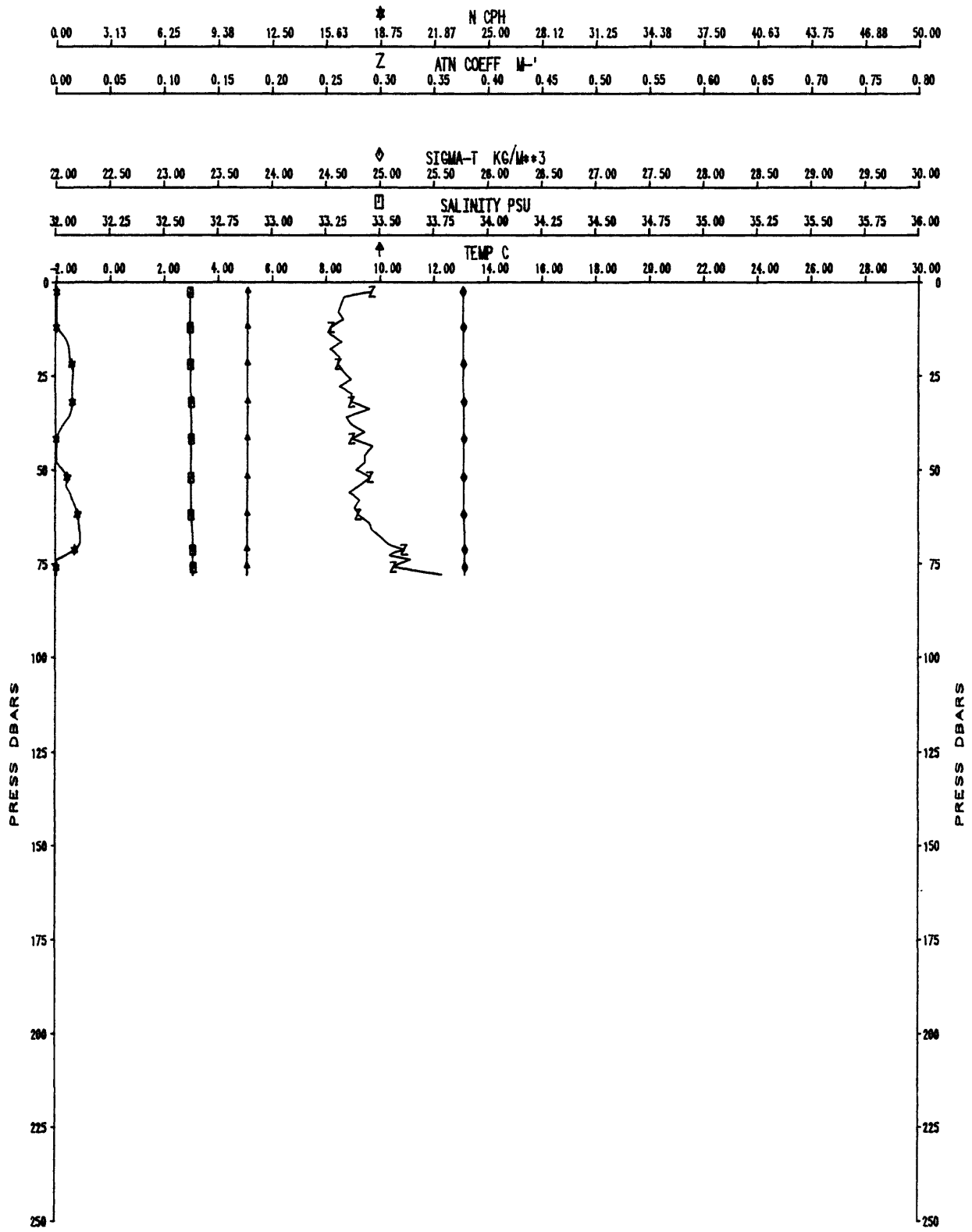


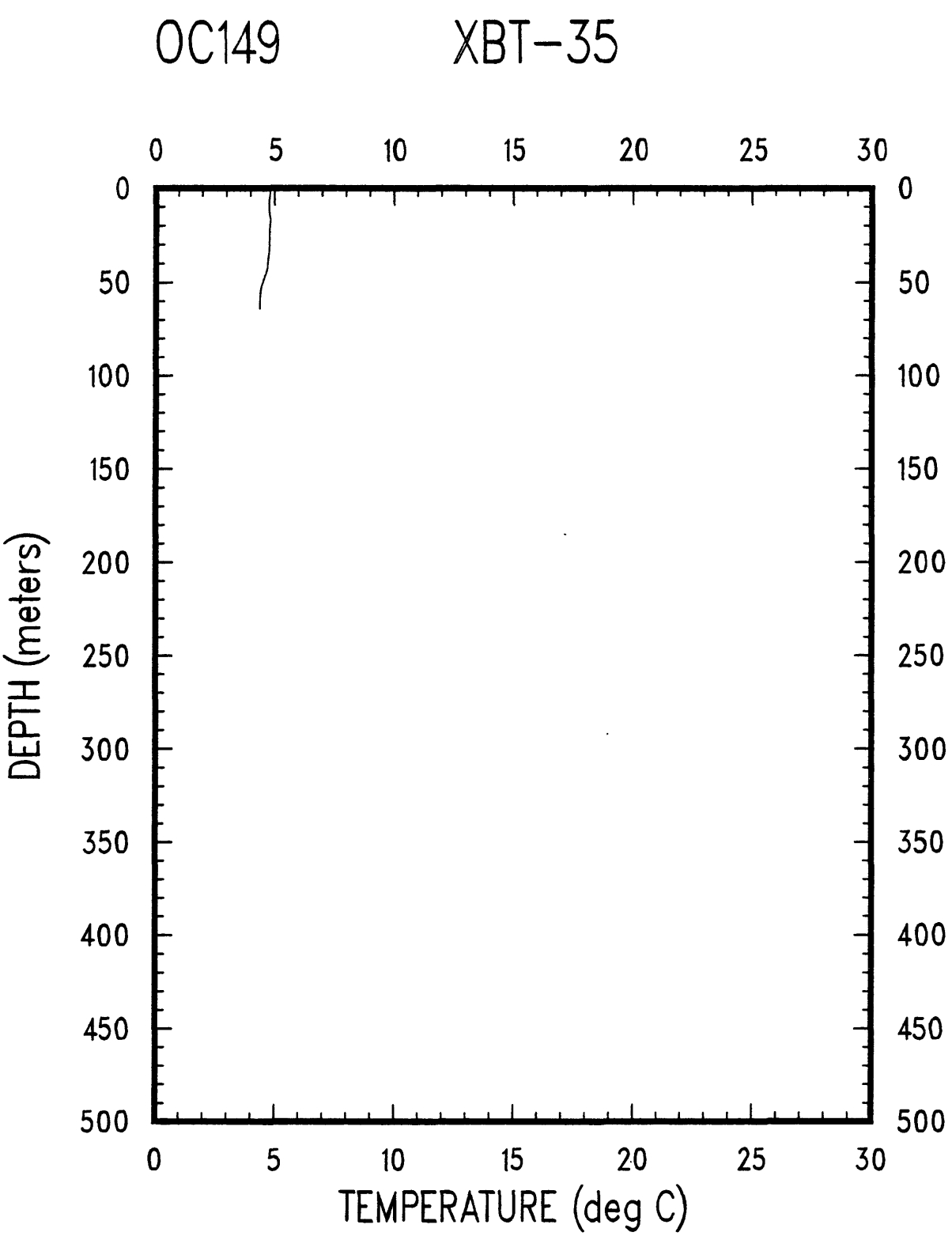
OC149A CAST #32



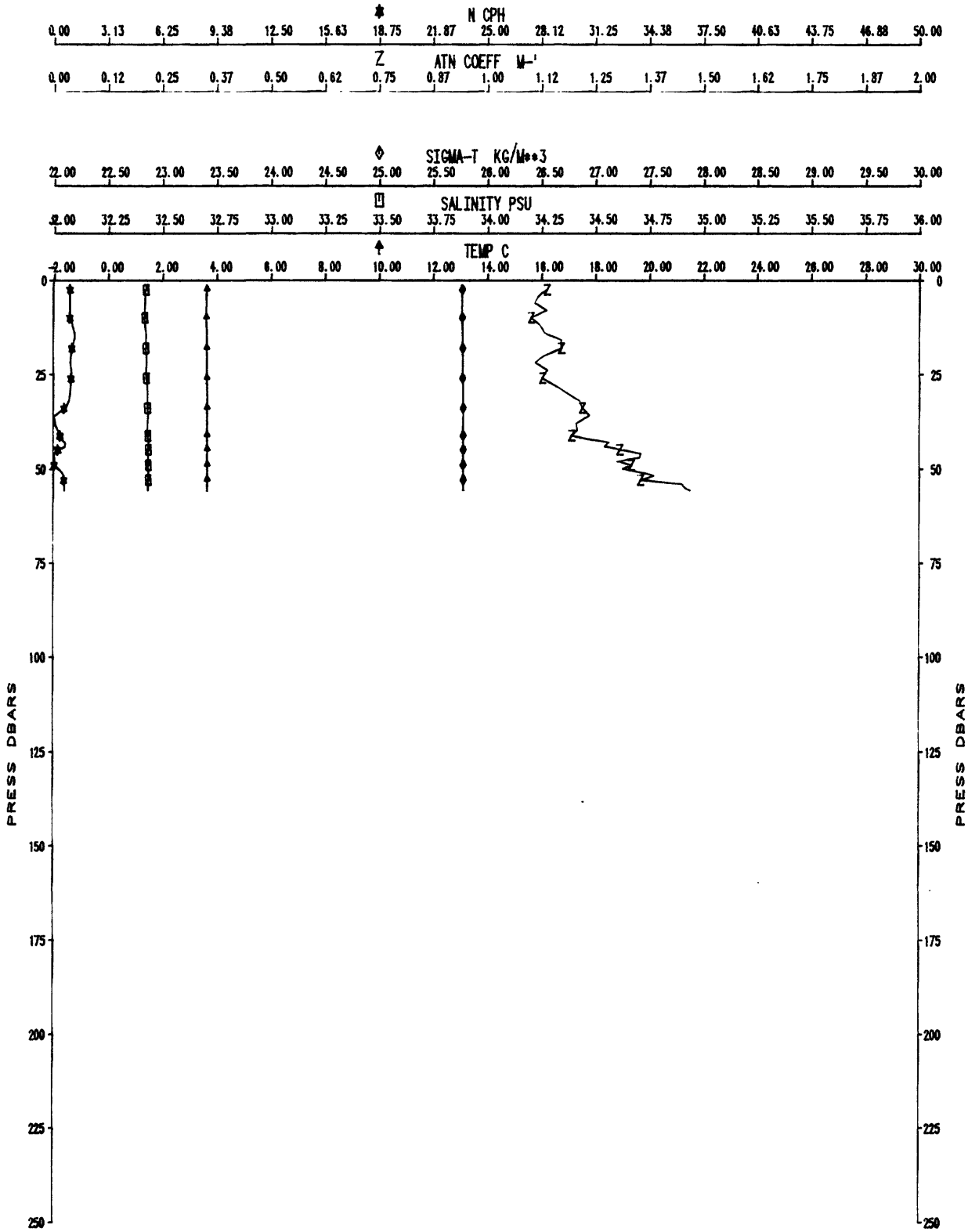

OC149
XBT-33
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

OC149A CAST #34




OC149
XBT-35
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
DEPTH (meters)
TEMPERATURE (deg C)

OC149A CAST #36



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 (no oxygens are listed due to sensor malfunction), 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. For pressures greater than 500 dbar, the 2-dbar-averaged data are subsampled at 20-dbar intervals. The XBT for stations 26 and 27 malfunctioned so that there is no data for these stations.

STA 1 DAY: 16 TIME: 2241

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
1.0	10.2	112.4	12.9	209.1	10.1	302.0	8.1	419.9	6.4
1.9	10.2	114.3	13.0	211.0	10.1	304.8	8.1	422.7	6.4
3.9	10.2	116.2	13.1	212.9	10.0	307.6	8.1	425.5	6.4
5.8	10.2	118.2	13.2	213.9	9.9	310.5	8.0	429.2	6.4
7.8	10.2	121.1	13.2	215.8	9.9	311.4	7.9	432.0	6.4
9.7	10.2	123.0	13.2	217.7	9.8	314.2	7.9	433.9	6.4
12.7	10.2	124.9	13.2	218.6	9.8	315.2	7.8	436.7	6.4
15.6	10.3	126.8	13.2	221.5	9.7	317.1	7.7	439.4	6.3
18.5	10.3	128.7	13.2	223.4	9.7	318.0	7.6	442.2	6.3
21.4	10.3	130.7	13.1	224.4	9.7	320.8	7.5	445.0	6.4
23.4	10.4	133.5	13.1	227.2	9.7	323.6	7.5	447.8	6.3
24.3	10.5	135.5	13.1	229.1	9.7	325.5	7.5	449.6	6.3
25.3	10.8	136.4	13.0	230.1	9.6	327.4	7.5	449.6	6.2
26.3	10.9	138.3	12.9	231.0	9.5	330.2	7.4	452.4	6.1
29.2	10.9	140.3	12.8	232.0	9.5	331.2	7.4	454.3	6.1
32.1	11.0	143.1	12.8	234.8	9.5	333.0	7.4	457.1	6.1
34.1	11.1	145.1	12.7	235.8	9.4	335.9	7.3	459.8	6.1
38.9	11.0	147.0	12.7	236.7	9.4	337.7	7.3	461.7	6.1
41.8	11.1	148.9	12.7	238.6	9.4	338.7	7.3	463.5	6.1
44.7	11.1	150.8	12.7	240.5	9.3	341.5	7.3	467.2	6.0
48.6	11.2	152.7	12.7	241.5	9.2	344.3	7.3	469.1	6.0
52.5	11.3	154.7	12.6	243.4	9.2	345.2	7.3	471.8	6.0
52.5	11.4	155.6	12.5	245.2	9.2	347.1	7.3	475.5	6.0
55.4	11.6	158.5	12.3	248.1	9.2	349.0	7.3	476.5	5.9
57.3	11.7	160.4	12.2	250.0	9.2	351.8	7.3	479.2	5.9
60.2	11.7	161.4	12.1	251.9	9.1	354.6	7.2	481.1	5.9
62.2	11.8	164.2	12.0	252.8	9.0	357.4	7.2	483.9	5.9
63.1	11.9	165.2	11.8	254.7	9.0	359.3	7.2	485.7	5.9
63.1	12.1	167.1	11.8	256.6	8.9	360.2	7.1	487.5	5.9
65.1	12.2	168.1	11.7	258.5	8.9	362.1	7.1	490.3	5.9
68.0	12.3	169.0	11.6	261.4	8.8	365.8	7.0	493.1	5.9
69.9	12.3	171.9	11.6	263.3	8.8	367.7	7.0	494.9	5.9
71.9	12.3	174.8	11.5	265.1	8.8	371.5	7.1	497.7	5.9
72.8	12.5	176.7	11.4	267.0	8.7	374.3	7.0	499.5	5.9
75.7	12.6	178.6	11.2	268.9	8.7	377.1	7.0	501.4	5.9
78.6	12.6	180.5	11.0	269.9	8.6	377.1	6.9	504.1	5.9
81.5	12.5	182.4	10.8	271.8	8.5	379.9	6.9	507.8	5.8
84.4	12.5	185.3	10.8	274.6	8.5	382.7	6.8	509.6	5.8
87.3	12.5	187.2	10.7	276.5	8.4	384.5	6.8	512.4	5.8
89.2	12.5	189.1	10.7	279.3	8.4	386.4	6.7	515.2	5.8
91.2	12.5	192.0	10.7	282.2	8.4	388.3	6.7	517.9	5.8
93.1	12.6	192.9	10.6	284.1	8.3	391.1	6.7	519.8	5.8
95.0	12.6	195.8	10.5	285.9	8.3	392.9	6.7	523.4	5.8
97.9	12.7	196.7	10.5	287.8	8.3	393.9	6.6	527.1	5.8
100.8	12.7	198.6	10.4	289.7	8.3	395.7	6.5	531.7	5.8
101.8	12.7	200.5	10.3	292.6	8.2	399.5	6.5	536.3	5.7
103.7	12.7	202.5	10.3	293.5	8.2	403.2	6.4	541.8	5.7
105.6	12.8	205.3	10.2	295.4	8.2	407.8	6.4	547.3	5.7
108.5	12.8	206.3	10.2	297.3	8.1	413.4	6.4	550.0	5.7
111.4	12.9	208.2	10.1	299.2	8.1	416.2	6.4	553.7	5.6

STA 1 DAY: 16 TIME: 2241

DEPTH (m)	TEMP (°C)
554.6	5.4
558.3	5.4
562.8	5.3
567.4	5.3
570.1	5.2
572.0	5.0
574.7	5.0
578.3	5.0
582.0	5.0
587.5	4.9
592.0	4.9
596.6	4.8
602.0	4.8
609.3	4.8
617.5	4.8
627.5	4.7
637.4	4.7
647.4	4.7
657.3	4.7
666.3	4.6
677.2	4.6
687.1	4.5
697.0	4.4
706.8	4.4
716.7	4.5
725.7	4.4
736.4	4.3
746.2	4.3
756.1	4.4

STA 2 DAY: 16 TIME: 2311

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
1.0	11.0	100.8	12.6	194.8	11.4	302.9	7.9	525.3	4.9
2.9	11.0	102.8	12.7	196.7	11.3	305.8	7.9	539.0	4.9
4.9	11.0	104.7	12.7	198.6	11.3	310.5	7.9	549.1	4.8
6.8	11.0	106.6	12.8	200.5	11.3	317.1	7.9	560.1	4.8
8.8	11.0	107.6	12.8	201.5	11.1	318.0	7.8	569.2	4.8
9.7	11.0	110.5	12.9	204.4	11.0	323.6	7.8	580.2	4.8
11.7	11.0	111.4	13.0	204.4	10.8	328.3	7.8	589.3	4.8
14.6	11.0	113.4	13.0	207.2	10.8	332.1	7.6	598.4	4.8
15.6	11.0	116.2	13.0	208.2	10.7	334.9	7.5	609.3	4.8
17.5	11.0	119.1	13.1	209.1	10.6	336.8	7.5	619.3	4.8
19.5	11.0	121.1	13.1	210.1	10.5	337.7	7.4	629.3	4.7
21.4	11.1	123.0	13.1	212.9	10.5	339.6	7.4	634.7	4.7
23.4	11.1	124.9	13.1	214.8	10.5	342.4	7.4	638.3	4.8
24.3	11.2	127.8	13.1	217.7	10.4	347.1	7.3	644.7	4.8
26.3	11.3	128.7	13.1	218.6	10.4	351.8	7.3	647.4	4.7
28.2	11.4	129.7	13.1	219.6	10.3	355.6	7.3		
30.2	11.5	132.6	13.1	221.5	10.2	357.4	7.2		
32.1	11.6	133.5	13.0	223.4	10.1	359.3	7.1		
35.0	11.6	135.5	13.0	224.4	10.0	362.1	7.0		
36.0	11.8	138.3	13.0	226.3	9.9	365.8	6.9		
37.9	12.0	139.3	13.0	228.2	9.9	367.7	6.8		
39.9	12.1	141.2	13.0	230.1	9.8	372.4	6.8		
42.8	12.1	142.2	12.9	231.0	9.7	378.0	6.7		
44.7	12.2	146.0	12.9	232.9	9.6	383.6	6.7		
47.6	12.2	147.9	12.8	234.8	9.5	389.2	6.7		
50.6	12.3	149.9	12.6	237.7	9.4	391.1	6.6		
52.5	12.3	150.8	12.6	239.6	9.3	392.9	6.5		
54.4	12.3	152.7	12.5	241.5	9.2	403.2	6.5		
57.3	12.3	154.7	12.3	243.4	9.2	406.9	6.4		
58.3	12.4	155.6	12.3	245.2	9.2	412.5	6.4		
60.2	12.4	158.5	12.3	248.1	9.2	418.1	6.4		
62.2	12.4	159.4	12.3	250.9	9.2	427.4	6.3		
65.1	12.4	162.3	12.2	252.8	9.1	433.0	6.3		
66.0	12.4	163.3	12.2	254.7	9.1	441.3	6.2		
68.0	12.4	165.2	12.1	256.6	9.1	444.1	6.1		
70.9	12.5	167.1	12.1	257.6	9.0	449.6	6.1		
72.8	12.5	169.0	12.0	260.4	8.9	454.3	6.1		
73.8	12.5	170.0	11.9	262.3	8.8	460.8	6.0		
76.7	12.5	172.9	11.9	267.0	8.8	461.7	6.0		
78.6	12.5	173.8	11.8	268.0	8.7	468.2	5.9		
80.6	12.5	175.7	11.7	271.8	8.5	474.6	5.9		
82.5	12.5	179.5	11.7	272.7	8.4	481.1	5.9		
84.4	12.5	181.5	11.6	275.6	8.4	484.8	5.8		
86.4	12.5	182.4	11.5	279.3	8.4	488.5	5.8		
88.3	12.5	182.4	11.5	282.2	8.3	493.1	5.8		
90.2	12.5	184.3	11.5	285.0	8.3	497.7	5.6		
92.1	12.5	187.2	11.4	286.9	8.1	501.4	5.4		
94.1	12.5	189.1	11.4	291.6	8.1	509.6	5.3		
96.0	12.5	190.1	11.4	296.3	8.0	516.1	5.2		
97.9	12.5	192.0	11.4	302.0	8.0	520.7	5.0		

STA 3 DAY: 16 TIME: 2337

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
0.0	11.0	43.8	11.5	97.8	12.6	161.1	11.9
1.1	11.0	45.0	11.5	99.0	12.6	161.8	11.8
1.9	11.0	46.1	11.5	100.5	12.7	162.9	11.8
3.0	11.0	47.2	11.5	101.6	12.8	164.4	11.8
3.4	11.1	48.3	11.5	103.1	12.9	166.2	11.8
4.2	11.1	49.1	11.5	104.2	13.0	168.1	11.8
5.3	11.1	50.2	11.5	105.3	13.1	169.6	11.8
6.1	11.1	51.4	11.5	106.8	13.2	170.7	11.8
7.2	11.1	52.1	11.5	108.7	13.3	172.2	11.8
8.3	11.1	53.2	11.5	110.5	13.3	173.6	11.8
8.7	11.2	54.0	11.5	113.1	13.3		
9.8	11.2	55.1	11.5	115.0	13.3		
11.0	11.2	55.9	11.5	116.1	13.3		
11.4	11.2	57.4	11.5	118.4	13.3		
12.1	11.3	58.5	11.6	120.6	13.2		
12.9	11.3	59.2	11.6	121.7	13.2		
14.4	11.3	60.0	11.7	123.6	13.2		
15.1	11.3	60.8	11.8	125.4	13.2		
15.9	11.3	61.9	11.9	126.2	13.2		
17.0	11.3	63.0	11.9	128.4	13.2		
18.2	11.3	63.8	11.9	129.5	13.2		
18.9	11.4	64.9	12.0	131.4	13.1		
19.7	11.4	66.0	12.1	132.5	13.1		
20.8	11.4	66.4	12.1	133.2	13.0		
21.2	11.4	67.9	12.1	134.0	12.9		
22.3	11.4	69.0	12.1	135.8	12.8		
23.1	11.4	69.8	12.1	137.7	12.8		
23.8	11.4	70.9	12.1	138.8	12.8		
25.0	11.4	71.6	12.1	140.3	12.8		
26.1	11.4	73.1	12.2	142.2	12.7		
26.9	11.4	74.3	12.2	143.3	12.7		
28.0	11.4	75.0	12.2	144.0	12.7		
29.1	11.4	75.8	12.2	144.8	12.7		
29.9	11.4	77.3	12.2	145.9	12.6		
30.6	11.4	78.8	12.2	147.4	12.6		
31.8	11.4	80.3	12.2	148.5	12.7		
32.1	11.4	81.0	12.2	149.2	12.6		
33.3	11.4	82.5	12.2	150.3	12.6		
34.4	11.4	83.6	12.2	151.1	12.6		
35.2	11.4	84.4	12.3	152.5	12.6		
35.9	11.4	85.5	12.3	153.3	12.6		
36.7	11.4	87.0	12.3	154.0	12.5		
37.4	11.4	88.1	12.3	154.4	12.5		
38.2	11.4	89.6	12.3	155.1	12.4		
39.3	11.5	90.7	12.3	156.2	12.4		
40.1	11.4	92.6	12.4	157.0	12.3		
40.8	11.4	93.7	12.4	157.7	12.2		
41.6	11.5	94.9	12.5	158.8	12.2		
42.3	11.5	95.2	12.6	160.0	12.2		
43.1	11.5	96.7	12.6	160.7	12.0		

STA 4 DAY: 17 TIME: 0015

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
0.0	7.2	37.0	8.0	76.1	12.2	134.7	12.8
0.4	7.3	37.8	8.0	76.5	12.1	135.8	12.8
0.8	7.3	38.5	8.1	77.6	12.1	136.6	12.8
1.9	7.3	39.7	8.1	78.4	12.0	137.7	12.9
2.7	7.3	40.1	8.1	79.1	12.0	139.2	12.9
3.8	7.3	40.4	8.2	79.9	12.0	139.9	12.8
4.5	7.3	40.8	8.3	80.6	12.0	141.0	12.9
5.3	7.3	41.2	8.3	81.4	12.1	141.8	12.9
6.1	7.3	41.6	8.4	82.1	12.3	143.3	12.9
6.8	7.4	41.9	8.4	82.5	12.4	144.8	12.8
8.0	7.4	42.3	8.5	83.6	12.4		
9.1	7.4	43.1	8.6	84.4	12.5		
9.5	7.4	43.8	8.6	85.1	12.5		
10.6	7.4	44.2	8.7	86.2	12.6		
11.7	7.4	44.6	8.7	87.4	12.6		
12.5	7.4	45.3	8.8	88.1	12.6		
13.3	7.4	45.7	8.9	88.9	12.6		
13.6	7.4	46.5	9.3	90.0	12.7		
14.8	7.4	47.6	9.4	90.7	12.7		
15.5	7.4	48.0	9.6	91.9	12.8		
16.3	7.4	48.7	9.8	93.4	12.8		
17.0	7.4	49.5	9.9	95.2	12.7		
17.8	7.5	51.4	10.1	96.0	12.8		
18.5	7.5	52.1	10.2	97.5	12.8		
18.9	7.5	52.5	10.3	98.6	12.7		
19.7	7.5	53.2	10.4	99.3	12.8		
20.1	7.6	54.4	10.5	100.5	12.8		
20.4	7.6	55.9	10.5	101.6	12.8		
20.8	7.6	56.2	10.5	103.1	12.8		
21.6	7.7	57.0	10.7	104.6	12.8		
21.9	7.7	57.7	10.7	105.7	12.8		
22.7	7.7	58.9	10.7	107.2	12.8		
23.8	7.7	60.0	10.8	108.7	12.8		
24.2	7.7	61.1	10.8	110.5	12.8		
25.3	7.7	62.6	10.8	112.4	12.8		
25.7	7.7	63.8	10.9	113.5	12.8		
26.5	7.7	64.5	11.0	115.4	12.8		
27.2	7.7	64.9	11.2	116.5	12.8		
28.4	7.7	65.3	11.3	118.4	12.8		
29.1	7.7	65.6	11.5	119.8	12.8		
29.9	7.8	67.1	11.7	122.1	12.8		
30.6	7.8	67.5	11.8	123.9	12.8		
31.4	7.8	68.6	12.0	126.2	12.8		
31.8	7.8	70.1	12.1	127.3	12.9		
32.5	7.8	70.5	12.2	128.4	12.8		
33.3	7.9	71.3	12.3	129.9	12.8		
34.0	7.9	72.0	12.3	131.0	12.8		
34.8	7.9	73.1	12.3	131.8	12.8		
35.5	7.9	73.9	12.3	132.9	12.8		
36.3	8.0	74.6	12.2	134.0	12.8		

STA 5 DAY: 17 TIME: 0052

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
0.4	6.1	44.2	6.5	82.9	11.2
0.8	6.2	45.3	6.6	84.0	11.2
1.5	6.2	46.1	6.6	85.5	11.2
2.7	6.2	46.8	6.6	87.0	11.2
3.0	6.2	47.6	6.6	88.5	11.2
4.2	6.2	48.0	6.7	89.6	11.2
5.3	6.2	49.1	6.8	90.4	11.2
6.1	6.2	49.5	6.9	91.1	11.2
6.8	6.2	50.2	7.1	92.2	11.2
8.0	6.2	50.6	7.2	93.0	11.2
8.7	6.2	51.4	7.3	93.7	11.2
9.1	6.2	52.1	7.3	94.5	11.2
10.2	6.2	52.9	7.4	95.6	11.2
11.0	6.2	53.6	7.5	96.3	11.2
12.1	6.2	54.4	7.6	97.5	11.2
12.9	6.2	54.7	7.6		
13.6	6.1	55.5	7.8		
14.8	6.2	56.6	7.9		
15.9	6.2	57.4	8.0		
16.7	6.2	58.1	8.0		
18.2	6.2	58.9	8.1		
18.9	6.2	59.2	8.2		
19.7	6.2	60.0	8.4		
20.8	6.2	60.4	8.5		
21.9	6.2	60.4	8.6		
22.7	6.2	61.1	8.7		
23.5	6.2	61.5	8.8		
24.6	6.2	62.3	8.9		
25.3	6.2	63.4	8.9		
26.5	6.2	64.1	9.1		
27.6	6.2	64.5	9.3		
28.4	6.2	64.9	9.6		
29.5	6.3	65.6	9.8		
30.3	6.3	66.4	10.0		
31.0	6.3	67.1	10.2		
32.1	6.3	67.9	10.4		
32.9	6.3	68.6	10.5		
33.6	6.3	69.0	10.7		
34.8	6.4	69.8	10.9		
35.2	6.4	70.1	11.0		
36.3	6.3	71.3	11.0		
37.4	6.4	72.4	11.1		
38.2	6.4	73.1	11.1		
38.5	6.4	74.3	11.1		
39.7	6.4	75.4	11.1		
40.4	6.4	76.5	11.1		
41.2	6.5	77.6	11.2		
41.9	6.5	78.8	11.2		
42.7	6.5	80.3	11.2		
43.1	6.5	81.8	11.2		

STA 6 DAY: 17 TIME: 0135

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
0.4	5.3	45.3	5.3
1.1	5.3	46.1	5.3
1.9	5.3	47.2	5.3
2.7	5.3	48.0	5.3
3.4	5.3	48.7	5.3
4.2	5.3	49.8	5.3
4.9	5.3	51.0	5.3
5.7	5.3	51.7	5.3
6.4	5.3	52.9	5.3
7.2	5.3	53.6	5.3
8.0	5.3	54.7	5.3
8.7	5.3	55.9	5.3
9.5	5.3	57.0	5.3
10.2	5.3	58.1	5.3
11.0	5.3	59.2	5.3
12.1	5.3	60.4	5.3
12.9	5.3	61.9	5.3
14.4	5.3	63.0	5.3
15.1	5.3	64.1	5.3
16.3	5.3	65.3	5.3
17.0	5.3	66.0	5.3
17.8	5.3	67.5	5.3
18.9	5.3	69.0	5.3
20.1	5.3	70.1	5.3
20.8	5.3	72.0	5.3
21.6	5.3	73.5	5.3
22.7	5.3	75.0	5.3
23.5	5.3	76.5	5.3
24.6	5.3	77.6	5.3
25.3	5.3	78.4	5.3
26.5	5.3	79.5	5.3
27.6	5.3	80.6	5.3
28.4	5.3	81.8	5.3
29.5	5.3		
30.3	5.3		
31.4	5.3		
32.1	5.3		
32.9	5.3		
34.0	5.3		
34.4	5.3		
35.5	5.3		
35.9	5.3		
37.0	5.3		
37.8	5.3		
38.9	5.3		
40.1	5.3		
40.8	5.3		
41.9	5.3		
43.1	5.3		
44.2	5.3		

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	7	17 MAR 1984	1550	39°54.1'N	68°28.8'W	2530

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	4.4	12.381	35.020		0.19	26.531	0.000	1498.	3.2
6	5.9	12.380	35.034		0.19	26.543	0.002	1498.	3.2
8	8.0	12.380	35.041		0.18	26.548	0.005	1498.	3.2
10	10.0	12.362	35.044		0.18	26.554	0.008	1498.	3.2
12	11.9	12.369	35.047		0.18	26.555	0.011	1498.	3.2
14	14.0	12.373	35.048		0.18	26.555	0.014	1498.	3.2
16	15.8	12.321	35.048		0.17	26.565	0.017	1498.	3.3
18	18.1	12.238	35.050		0.14	26.583	0.020	1498.	3.3
20	19.8	12.245	35.059		0.13	26.588	0.023	1498.	3.3
22	22.0	12.264	35.072		0.12	26.595	0.026	1498.	3.2
24	24.1	12.279	35.078		0.11	26.597	0.029	1498.	2.9
26	25.8	12.302	35.089		0.10	26.601	0.031	1498.	2.4
28	28.0	12.404	35.120		0.09	26.604	0.034	1499.	2.2
30	30.2	12.481	35.150		0.08	26.613	0.038	1499.	2.1
32	31.9	12.458	35.142		0.08	26.611	0.040	1499.	2.0
34	34.1	12.437	35.137		0.08	26.611	0.043	1499.	2.0
36	36.2	12.428	35.136		0.08	26.612	0.046	1499.	2.0
37	37.7	12.441	35.144		0.08	26.616	0.048	1499.	2.1
40	40.0	12.486	35.159		0.08	26.619	0.052	1499.	2.2
42	42.1	12.522	35.175		0.08	26.624	0.054	1499.	2.3
44	44.2	12.533	35.185		0.08	26.630	0.057	1500.	2.3
46	46.0	12.519	35.182		0.08	26.630	0.060	1500.	2.3
48	48.0	12.474	35.173		0.08	26.632	0.063	1499.	2.3
50	50.1	12.410	35.162		0.09	26.636	0.066	1499.	2.2
51	51.8	12.357	35.152		0.09	26.638	0.068	1499.	2.2
54	54.0	12.312	35.146		0.09	26.643	0.071	1499.	2.1
56	56.0	12.260	35.139		0.09	26.648	0.074	1499.	2.0
58	58.2	12.287	35.148		0.08	26.650	0.077	1499.	1.8
59	59.7	12.303	35.153		0.08	26.650	0.079	1499.	1.6
62	62.1	12.326	35.159		0.08	26.651	0.083	1499.	1.3
63	63.9	12.341	35.165		0.08	26.652	0.085	1499.	1.0
66	66.1	12.351	35.169		0.08	26.653	0.088	1499.	0.9
67	67.9	12.357	35.170		0.07	26.653	0.091	1499.	0.8
69	70.0	12.360	35.170		0.07	26.652	0.094	1499.	0.7
72	72.1	12.361	35.172		0.07	26.653	0.097	1499.	0.8
73	73.8	12.364	35.173		0.07	26.654	0.099	1499.	0.9
75	76.0	12.366	35.173		0.07	26.653	0.102	1500.	0.9
77	78.1	12.370	35.174		0.07	26.653	0.105	1500.	0.8
79	80.0	12.402	35.187		0.07	26.657	0.108	1500.	0.8
81	82.0	12.443	35.196		0.07	26.656	0.110	1500.	0.7
83	84.1	12.451	35.197		0.07	26.655	0.113	1500.	0.5
85	85.9	12.454	35.197		0.07	26.654	0.116	1500.	-0.2
87	88.1	12.467	35.202		0.07	26.656	0.119	1500.	-0.6
89	89.9	12.482	35.204		0.07	26.655	0.121	1500.	-0.3
91	92.1	12.488	35.206		0.07	26.655	0.124	1500.	-0.4
93	93.9	12.484	35.205		0.07	26.655	0.127	1500.	0.2
95	96.0	12.479	35.203		0.07	26.655	0.130	1500.	0.5
97	98.0	12.480	35.204		0.07	26.655	0.133	1500.	1.3
99	100.0	12.450	35.195		0.07	26.654	0.136	1500.	1.6
101	102.1	12.408	35.187		0.07	26.656	0.138	1500.	1.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	7	17 MAR 1984	1550	39°54.1'N	68°28.8'W	2530

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
103	104.0	12.450	35.199		0.07	26.657	0.141	1500.	2.1
105	106.1	12.437	35.209		0.07	26.667	0.144	1500.	2.3
107	108.1	12.322	35.180		0.07	26.667	0.147	1500.	2.4
109	110.0	12.258	35.167		0.07	26.669	0.149	1500.	2.5
111	111.8	12.262	35.172		0.07	26.673	0.152	1500.	2.7
113	114.0	12.302	35.188		0.07	26.678	0.155	1500.	2.8
115	116.0	12.351	35.207		0.07	26.683	0.158	1500.	2.8
117	118.3	12.365	35.218		0.06	26.689	0.161	1500.	2.9
119	120.1	12.473	35.262		0.06	26.701	0.163	1501.	3.0
121	121.8	12.561	35.288		0.06	26.704	0.166	1501.	3.0
123	124.1	12.582	35.290		0.05	26.701	0.169	1501.	3.0
125	125.9	12.707	35.334		0.05	26.711	0.171	1502.	3.1
127	128.2	12.834	35.380		0.05	26.722	0.174	1502.	3.1
129	129.9	12.822	35.381		0.05	26.725	0.177	1502.	3.2
131	131.9	12.844	35.396		0.05	26.732	0.179	1502.	3.3
133	134.0	12.938	35.432		0.05	26.741	0.182	1503.	3.5
135	136.0	12.997	35.459		0.04	26.750	0.185	1503.	3.8
137	138.0	13.064	35.476		0.04	26.749	0.187	1503.	4.0
139	140.1	13.166	35.517		0.03	26.760	0.190	1504.	4.2
141	142.1	13.247	35.566		0.03	26.782	0.193	1504.	4.3
143	143.7	13.327	35.609		0.03	26.799	0.195	1504.	4.4
145	146.0	13.386	35.634		0.02	26.806	0.198	1505.	4.6
147	148.0	13.377	35.645		0.02	26.817	0.200	1505.	4.7
149	150.0	13.364	35.657		0.02	26.828	0.203	1505.	4.7
151	152.0	13.323	35.666		0.02	26.844	0.205	1505.	4.7
153	154.1	13.223	35.661		0.02	26.861	0.208	1504.	4.7
155	156.2	13.070	35.647		0.02	26.881	0.210	1504.	4.5
157	157.9	12.960	35.639		0.02	26.897	0.212	1503.	4.1
159	160.0	12.901	35.631		0.02	26.902	0.215	1503.	3.5
161	162.0	12.863	35.624		0.02	26.904	0.217	1503.	2.9
163	163.8	12.851	35.621		0.02	26.905	0.220	1503.	2.4
165	165.9	12.828	35.617		0.02	26.907	0.222	1503.	2.3
167	168.1	12.805	35.614		0.02	26.909	0.225	1503.	2.6
169	169.9	12.736	35.601		0.02	26.912	0.227	1503.	3.0
171	172.1	12.665	35.591		0.02	26.919	0.229	1503.	3.4
172	173.9	12.555	35.574		0.02	26.927	0.231	1502.	3.6
175	176.1	12.466	35.565		0.02	26.938	0.234	1502.	3.7
177	178.0	12.340	35.547		0.02	26.949	0.236	1502.	3.5
178	179.8	12.265	35.544		0.02	26.961	0.238	1501.	3.2
181	182.0	12.267	35.549		0.02	26.965	0.241	1501.	2.8
183	184.0	12.281	35.554		0.02	26.966	0.243	1501.	2.4
185	186.1	12.291	35.557		0.02	26.966	0.245	1502.	2.0
186	187.9	12.297	35.560		0.02	26.967	0.247	1502.	1.6
188	190.0	12.303	35.564		0.02	26.969	0.250	1502.	1.9
191	192.1	12.290	35.565		0.02	26.973	0.252	1502.	2.1
192	193.8	12.284	35.565		0.02	26.974	0.254	1502.	2.5
194	195.9	12.273	35.564		0.02	26.975	0.256	1502.	2.9
196	198.0	12.184	35.554		0.02	26.984	0.259	1501.	3.1
198	199.8	12.132	35.543		0.02	26.986	0.261	1501.	3.3
200	202.0	12.018	35.533		0.02	27.000	0.263	1501.	3.3

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	7	17 MAR 1984	1550	39°54.1'N	68°28.8'W	2530

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
202	204.1	11.917	35.522		0.02	27.011	0.265	1501.	3.3
204	205.9	11.894	35.519		0.02	27.013	0.267	1500.	3.2
206	208.0	11.866	35.518		0.02	27.018	0.270	1500.	3.2
208	210.1	11.822	35.512		0.02	27.022	0.272	1500.	3.0
210	212.0	11.730	35.498		0.02	27.028	0.274	1500.	2.9
212	213.7	11.692	35.496		0.02	27.034	0.276	1500.	3.1
214	216.0	11.614	35.489		0.02	27.043	0.278	1500.	3.1
216	218.2	11.548	35.477		0.02	27.046	0.281	1499.	3.1
218	220.0	11.483	35.465		0.02	27.049	0.282	1499.	3.0
220	221.9	11.393	35.456		0.02	27.059	0.284	1499.	2.8
222	224.0	11.358	35.454		0.02	27.064	0.287	1499.	2.7
224	226.1	11.322	35.449		0.02	27.067	0.289	1499.	2.7
226	228.0	11.289	35.444		0.02	27.069	0.291	1499.	2.7
228	230.0	11.234	35.437		0.02	27.073	0.293	1499.	2.5
230	231.9	11.186	35.430		0.02	27.077	0.295	1498.	2.6
232	234.0	11.136	35.424		0.02	27.082	0.297	1498.	2.6
234	236.0	11.064	35.414		0.02	27.087	0.299	1498.	2.6
236	238.0	11.041	35.411		0.02	27.089	0.301	1498.	2.5
238	239.9	10.989	35.406		0.02	27.095	0.303	1498.	2.4
240	242.1	10.952	35.401		0.02	27.097	0.305	1498.	2.4
242	244.0	10.931	35.399		0.02	27.099	0.307	1498.	2.3
244	246.1	10.877	35.388		0.02	27.101	0.309	1497.	2.3
246	247.9	10.811	35.381		0.02	27.107	0.311	1497.	2.3
248	250.1	10.802	35.381		0.02	27.109	0.313	1497.	2.4
250	252.2	10.752	35.372		0.02	27.110	0.315	1497.	2.5
252	253.8	10.692	35.365		0.02	27.116	0.317	1497.	2.6
254	256.1	10.644	35.360		0.02	27.121	0.319	1497.	2.6
256	258.3	10.592	35.352		0.02	27.124	0.321	1497.	2.5
258	259.7	10.527	35.342		0.02	27.127	0.323	1496.	2.4
260	262.0	10.473	35.337		0.02	27.133	0.325	1496.	2.2
262	264.0	10.453	35.336		0.02	27.136	0.327	1496.	2.1
264	266.3	10.427	35.331		0.02	27.137	0.329	1496.	2.0
266	267.9	10.415	35.330		0.02	27.138	0.331	1496.	2.1
268	270.0	10.404	35.328		0.02	27.139	0.333	1496.	2.2
270	272.1	10.353	35.320		0.02	27.141	0.335	1496.	2.3
272	273.9	10.234	35.299		0.02	27.146	0.337	1496.	2.4
274	276.0	10.181	35.298		0.02	27.154	0.339	1495.	2.5
276	278.2	10.168	35.299		0.02	27.157	0.341	1495.	2.5
278	279.9	10.159	35.298		0.02	27.158	0.343	1495.	2.4
280	282.0	10.107	35.291		0.02	27.161	0.345	1495.	2.2
282	284.0	10.062	35.284		0.02	27.163	0.346	1495.	2.0
283	285.8	10.012	35.277		0.02	27.167	0.348	1495.	1.9
286	288.1	9.991	35.276		0.02	27.169	0.350	1495.	2.0
288	290.0	9.974	35.273		0.02	27.170	0.352	1495.	2.1
290	292.0	9.958	35.271		0.02	27.171	0.354	1495.	2.2
291	293.8	9.944	35.269		0.02	27.172	0.356	1495.	2.3
293	295.9	9.872	35.262		0.02	27.179	0.358	1495.	2.4
296	298.0	9.806	35.255		0.02	27.184	0.360	1494.	2.6
298	300.2	9.756	35.247		0.02	27.187	0.362	1494.	2.6
299	302.0	9.711	35.242		0.02	27.191	0.363	1494.	2.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	7	17 MAR 1984	1550	39°54.1'N	68°28.8'W	2530

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
301	304.0	9.654	35.235		0.02	27.195	0.365	1494.	2.9
303	306.0	9.611	35.231		0.02	27.199	0.367	1494.	3.1
306	308.1	9.516	35.216		0.02	27.203	0.369	1493.	3.2
307	309.9	9.426	35.210		0.02	27.213	0.371	1493.	3.3
309	312.0	9.337	35.202		0.02	27.222	0.373	1493.	3.3
311	314.0	9.279	35.197		0.02	27.228	0.374	1493.	3.2
313	316.1	9.222	35.191		0.02	27.232	0.376	1492.	2.9
315	317.9	9.164	35.186		0.02	27.238	0.378	1492.	2.6
317	320.1	9.136	35.185		0.02	27.242	0.380	1492.	2.3
319	322.0	9.118	35.184		0.02	27.244	0.382	1492.	2.2
321	324.1	9.103	35.183		0.02	27.245	0.383	1492.	2.1
323	326.0	9.097	35.183		0.02	27.246	0.385	1492.	2.2
325	327.9	9.082	35.181		0.02	27.247	0.387	1492.	2.4
327	330.1	8.989	35.169		0.02	27.253	0.389	1492.	2.7
329	332.1	8.904	35.157		0.02	27.257	0.390	1491.	2.8
331	333.8	8.857	35.155		0.02	27.263	0.392	1491.	2.9
333	336.0	8.767	35.145		0.02	27.270	0.394	1491.	3.0
335	338.0	8.717	35.141		0.02	27.274	0.396	1491.	2.9
337	339.9	8.678	35.138		0.01	27.278	0.397	1491.	2.8
339	342.2	8.623	35.135		0.02	27.284	0.399	1491.	2.6
341	343.8	8.577	35.130		0.01	27.288	0.400	1490.	2.5
343	346.0	8.548	35.130		0.02	27.292	0.402	1490.	2.5
345	348.1	8.530	35.128		0.02	27.294	0.404	1490.	2.5
347	350.0	8.505	35.125		0.01	27.295	0.406	1490.	2.5
349	351.9	8.440	35.118		0.02	27.300	0.407	1490.	2.7
351	354.0	8.383	35.115		0.02	27.306	0.409	1490.	2.9
353	356.0	8.338	35.112		0.02	27.311	0.411	1490.	3.1
355	358.2	8.279	35.105		0.01	27.314	0.412	1490.	3.1
357	359.9	8.156	35.093		0.01	27.323	0.414	1489.	3.1
359	362.0	8.070	35.086		0.01	27.331	0.415	1489.	3.1
361	364.1	8.029	35.083		0.01	27.335	0.417	1489.	3.0
363	366.3	7.947	35.071		0.01	27.338	0.419	1488.	2.8
365	367.8	7.891	35.068		0.01	27.344	0.420	1488.	2.6
367	369.9	7.861	35.069		0.01	27.349	0.422	1488.	2.4
369	372.0	7.842	35.068		0.01	27.351	0.423	1488.	2.3
371	374.2	7.821	35.065		0.01	27.352	0.425	1488.	2.2
373	375.8	7.804	35.063		0.01	27.353	0.426	1488.	2.0
375	377.9	7.766	35.061		0.01	27.357	0.428	1488.	2.0
377	380.0	7.740	35.060		0.01	27.360	0.430	1488.	2.2
379	382.1	7.713	35.057		0.01	27.362	0.431	1488.	2.3
381	384.0	7.675	35.053		0.01	27.364	0.433	1488.	2.3
383	385.9	7.646	35.053		0.01	27.368	0.434	1488.	2.4
385	388.0	7.606	35.050		0.01	27.372	0.436	1487.	2.4
387	390.0	7.558	35.046		0.01	27.376	0.437	1487.	2.4
389	392.0	7.525	35.044		0.01	27.379	0.439	1487.	2.3
391	394.1	7.496	35.042		0.01	27.382	0.440	1487.	2.4
392	395.9	7.469	35.041		0.01	27.384	0.442	1487.	2.6
395	398.0	7.452	35.040		0.01	27.386	0.443	1487.	2.8
397	400.0	7.424	35.038		0.01	27.389	0.445	1487.	2.9
399	402.1	7.324	35.029		0.01	27.396	0.446	1487.	2.9

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	7	17 MAR 1984	1550	39°54.1'N	68°28.8'W	2530

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
401	404.2	7.206	35.020		0.01	27.406	0.448	1486.	3.0
402	405.9	7.174	35.022		0.01	27.412	0.449	1486.	2.9
404	407.9	7.163	35.022		0.01	27.414	0.451	1486.	2.8
407	410.1	7.169	35.026		0.01	27.416	0.452	1486.	2.5
408	411.9	7.201	35.040		0.01	27.423	0.453	1486.	2.4
410	414.0	7.226	35.047		0.01	27.424	0.455	1486.	2.4
413	416.2	7.190	35.048		0.01	27.430	0.456	1486.	2.4
414	417.8	7.167	35.043		0.01	27.429	0.458	1486.	2.4
416	420.0	7.067	35.031		0.01	27.434	0.459	1486.	2.4
418	422.0	6.983	35.021		0.01	27.438	0.461	1486.	2.6
421	424.3	6.883	35.006		0.01	27.440	0.462	1485.	2.7
422	425.8	6.859	35.006		0.01	27.443	0.463	1485.	2.8
424	428.0	6.831	35.009		0.01	27.449	0.465	1485.	2.8
426	430.0	6.724	34.999		0.01	27.456	0.466	1485.	2.6
428	432.2	6.674	34.997		0.01	27.462	0.468	1484.	2.5
430	433.7	6.670	34.998		0.01	27.463	0.469	1484.	2.4
432	436.0	6.673	35.002		0.01	27.466	0.470	1485.	2.2
434	438.2	6.676	35.003		0.01	27.466	0.472	1485.	2.1
436	439.8	6.672	35.003		0.01	27.467	0.473	1485.	2.0
438	442.0	6.682	35.016		0.01	27.476	0.474	1485.	2.1
440	444.1	6.728	35.026		0.01	27.477	0.476	1485.	2.2
442	445.9	6.743	35.031		0.01	27.479	0.477	1485.	2.2
444	448.1	6.715	35.029		0.01	27.482	0.478	1485.	2.2
446	449.9	6.715	35.033		0.01	27.485	0.479	1485.	2.1
448	452.0	6.684	35.032		0.01	27.488	0.481	1485.	2.2
450	453.9	6.652	35.030		0.01	27.491	0.482	1485.	2.3
452	456.0	6.613	35.028		0.01	27.494	0.483	1485.	2.4
454	458.3	6.606	35.028		0.01	27.496	0.485	1485.	2.4
456	459.7	6.576	35.026		0.01	27.497	0.486	1485.	2.4
458	461.9	6.466	35.016		0.01	27.505	0.487	1484.	2.4
460	464.1	6.320	34.999		0.01	27.510	0.489	1484.	2.3
462	465.8	6.280	34.989		0.01	27.508	0.490	1483.	2.3
464	468.0	6.242	34.987		0.01	27.511	0.491	1483.	2.1
466	470.1	6.224	34.986		0.01	27.513	0.492	1483.	1.9
468	471.9	6.202	34.983		0.01	27.514	0.494	1483.	1.8
470	474.1	6.170	34.983		0.01	27.517	0.495	1483.	1.8
472	475.8	6.148	34.981		0.01	27.519	0.496	1483.	1.7
474	478.0	6.146	34.983		0.01	27.521	0.497	1483.	1.7
476	480.0	6.142	34.983		0.01	27.521	0.499	1483.	1.6
478	481.9	6.111	34.980		0.01	27.523	0.500	1483.	1.5
480	484.1	6.086	34.979		0.01	27.525	0.501	1483.	1.4
482	485.8	6.078	34.978		0.01	27.526	0.502	1483.	1.6
484	488.2	6.070	34.978		0.01	27.526	0.504	1483.	1.8
486	489.9	6.064	34.978		0.01	27.527	0.505	1483.	1.9
487	491.3	6.050	34.976		0.01	27.528	0.506	1483.	2.0
488	492.0	6.007	34.976		0.01	27.533	0.506	1483.	2.1
489	493.0	5.994	34.976		0.01	27.535	0.507	1483.	2.3
490	494.0	5.991	34.977		0.01	27.536	0.507	1483.	2.3
491	495.0	5.986	34.975		0.01	27.535	0.508	1483.	2.4
492	496.0	5.974	34.976		0.01	27.537	0.508	1483.	2.2

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	7	17 MAR 1984	1550	39°54.1'N	68°28.8'W	2530

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
493	497.0	5.955	34.973		0.01	27.538	0.509	1483.	2.3
494	498.0	5.918	34.971		0.01	27.541	0.510	1483.	2.4
495	499.0	5.903	34.973		0.01	27.544	0.510	1483.	2.4
496	500.0	5.900	34.972		0.01	27.544	0.511	1483.	2.3

STA 8 DAY: 17 TIME: 1701

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
1.0	11.0	91.2	12.4	201.5	11.0	306.7	8.7	422.7	6.7
1.9	11.0	93.1	12.4	203.4	10.8	309.5	8.7	427.4	6.7
2.9	11.0	96.0	12.4	206.3	10.8	312.4	8.7	429.2	6.6
4.9	11.0	99.9	12.3	208.2	10.8	314.2	8.6	432.0	6.5
6.8	11.0	101.8	12.4	213.9	10.7	315.2	8.5	434.8	6.5
7.8	11.0	102.8	12.5	215.8	10.7	317.1	8.5	438.5	6.4
9.7	11.0	104.7	12.5	217.7	10.6	318.9	8.4	440.4	6.4
11.7	11.0	106.6	12.5	219.6	10.5	319.9	8.4	444.1	6.4
13.6	11.0	108.5	12.5	219.6	10.4	320.8	8.3	446.9	6.2
15.6	11.0	111.4	12.6	222.4	10.4	321.8	8.3	449.6	6.2
17.5	11.0	114.3	12.7	223.4	10.4	323.6	8.3	453.3	6.1
19.5	11.0	116.2	12.7	227.2	10.3	324.6	8.2	458.0	6.1
21.4	11.1	118.2	12.8	230.1	10.2	326.5	8.2	460.8	6.0
24.3	11.1	121.1	12.9	231.0	10.2	328.3	8.1	462.6	6.0
26.3	11.1	122.0	12.9	232.9	10.1	331.2	8.1	468.2	5.9
28.2	11.1	123.0	13.0	235.8	10.0	333.0	8.1	471.8	5.8
30.2	11.0	125.9	13.0	237.7	10.0	334.0	8.1	472.8	5.8
31.1	11.1	127.8	13.0	238.6	9.9	335.9	8.0	474.6	5.8
32.1	11.1	130.7	13.0	240.5	9.9	338.7	8.0	476.5	5.8
35.0	11.1	133.5	13.0	242.4	9.9	340.5	8.0	479.2	5.7
36.0	11.1	135.5	12.9	244.3	9.9	341.5	8.0	482.0	5.7
37.0	11.2	138.3	12.8	245.2	9.8	343.4	8.0	485.7	5.7
38.9	11.2	140.3	12.7	247.1	9.8	345.2	8.0	487.5	5.7
39.9	11.3	144.1	12.7	248.1	9.7	346.2	7.9	490.3	5.7
41.8	11.3	147.0	12.6	250.9	9.7	348.1	7.8	494.0	5.7
43.8	11.4	147.9	12.5	252.8	9.7	349.9	7.8	495.8	5.7
46.7	11.5	150.8	12.5	254.7	9.7	353.7	7.8	497.7	5.7
47.6	11.6	153.7	12.4	258.5	9.6	357.4	7.8	508.7	5.5
49.6	11.7	155.6	12.3	259.5	9.5	359.3	7.7	517.9	5.5
50.6	11.8	157.5	12.3	262.3	9.5	360.2	7.6	527.1	5.4
51.5	11.9	160.4	12.2	264.2	9.5	362.1	7.6	538.1	5.3
52.5	12.0	162.3	12.2	265.1	9.4	364.9	7.6	547.3	5.3
52.5	12.1	164.2	12.1	268.0	9.4	368.7	7.6	558.3	5.2
53.5	12.1	166.2	12.0	270.8	9.3	371.5	7.5	568.3	5.2
56.4	12.2	169.0	12.0	272.7	9.2	373.3	7.5	578.3	5.1
58.3	12.2	169.0	11.9	275.6	9.2	378.0	7.5	587.5	5.0
61.2	12.2	171.9	11.9	278.4	9.2	379.9	7.5	597.5	5.0
63.1	12.3	177.6	11.9	278.4	9.1	381.7	7.4	608.4	4.9
64.1	12.3	179.5	11.8	282.2	9.1	389.2	7.4	618.4	4.9
66.0	12.5	178.6	11.6	285.0	9.0	391.1	7.3	627.5	4.9
67.0	12.6	180.5	11.6	287.8	9.0	393.9	7.3	637.4	4.9
70.9	12.6	182.4	11.5	289.7	9.0	395.7	7.1	647.4	4.8
73.8	12.6	184.3	11.5	292.6	9.0	397.6	7.1	657.3	4.8
76.7	12.6	187.2	11.4	294.4	8.9	401.3	7.1	668.1	4.8
77.7	12.5	191.0	11.4	297.3	8.9	406.9	7.1	678.1	4.8
80.6	12.5	193.9	11.3	299.2	8.9	407.8	6.9	687.1	4.8
83.5	12.5	196.7	11.3	301.0	8.9	411.6	6.8	697.0	4.8
85.4	12.5	198.6	11.3	302.9	8.9	413.4	6.7	707.7	4.7
87.3	12.4	199.6	11.1	304.8	8.8	416.2	6.7	717.6	4.7
88.3	12.4	200.5	11.0	306.7	8.8	419.9	6.7	727.5	4.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	9	17 MAR 1984	1755	40°04.1'N	68°33.3'W	600

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	10.717	34.561		0.15	26.485	0.000	1492.	1.8
4	4.0	10.836	34.606		0.15	26.499	0.002	1492.	1.8
6	6.0	10.868	34.619		0.14	26.503	0.005	1493.	1.8
8	8.0	10.859	34.616		0.14	26.502	0.008	1493.	1.8
10	9.7	10.872	34.622		0.14	26.505	0.011	1493.	1.8
12	12.1	10.873	34.620		0.14	26.503	0.014	1493.	1.4
14	14.0	10.874	34.622		0.14	26.504	0.017	1493.	1.4
16	15.9	10.900	34.633		0.14	26.508	0.020	1493.	1.4
18	18.1	10.901	34.633		0.14	26.508	0.023	1493.	1.3
20	19.8	10.903	34.635		0.14	26.510	0.026	1493.	1.2
22	21.9	10.928	34.643		0.14	26.511	0.029	1493.	1.0
24	24.3	10.928	34.644		0.13	26.512	0.033	1493.	0.6
26	25.9	10.929	34.641		0.13	26.509	0.035	1493.	0.9
28	28.1	10.928	34.642		0.13	26.510	0.039	1493.	2.0
30	30.2	10.929	34.642		0.13	26.510	0.042	1493.	2.9
32	31.8	10.927	34.642		0.14	26.510	0.044	1493.	3.6
34	34.1	10.968	34.657		0.13	26.515	0.048	1493.	4.0
36	36.2	11.075	34.720		0.12	26.545	0.051	1494.	4.3
37	37.7	11.177	34.767		0.11	26.563	0.053	1494.	4.4
40	40.0	11.208	34.786		0.11	26.572	0.057	1494.	4.2
42	42.2	11.259	34.815		0.10	26.584	0.060	1495.	3.9
44	44.0	11.359	34.841		0.10	26.586	0.062	1495.	3.3
46	46.2	11.477	34.878		0.10	26.593	0.066	1496.	3.0
47	47.8	11.541	34.896		0.10	26.596	0.068	1496.	2.7
50	50.0	11.454	34.884		0.11	26.602	0.071	1496.	2.5
52	52.3	11.446	34.887		0.11	26.606	0.074	1496.	2.4
53	53.9	11.437	34.889		0.11	26.610	0.077	1496.	2.2
56	56.1	11.429	34.891		0.11	26.612	0.080	1496.	1.9
58	58.0	11.421	34.892		0.10	26.615	0.083	1496.	1.6
60	60.3	11.423	34.893		0.10	26.615	0.086	1496.	1.4
62	62.2	11.415	34.891		0.10	26.615	0.089	1496.	1.4
63	63.9	11.423	34.892		0.11	26.615	0.091	1496.	1.7
65	65.9	11.433	34.898		0.10	26.617	0.094	1496.	2.0
67	68.0	11.418	34.895		0.10	26.618	0.097	1496.	2.2
70	70.2	11.449	34.909		0.10	26.623	0.100	1496.	2.4
71	71.9	11.651	34.969		0.09	26.632	0.102	1497.	2.5
73	74.0	11.778	35.002		0.08	26.634	0.105	1497.	2.3
75	76.0	11.830	35.020		0.08	26.637	0.108	1498.	2.3
77	77.7	11.846	35.028		0.08	26.641	0.111	1498.	2.2
79	79.9	11.804	35.020		0.08	26.642	0.114	1497.	2.0
82	82.2	11.729	35.001		0.09	26.642	0.117	1497.	2.1
83	83.9	11.684	34.996		0.09	26.647	0.119	1497.	2.0
85	85.9	11.682	35.001		0.09	26.651	0.122	1497.	2.0
87	88.0	11.695	35.008		0.09	26.653	0.125	1497.	2.2
89	89.9	11.728	35.021		0.08	26.658	0.128	1497.	2.4
91	92.1	11.738	35.021		0.08	26.656	0.131	1497.	2.7
94	94.3	11.756	35.029		0.07	26.659	0.134	1498.	3.0
95	95.8	11.862	35.068		0.07	26.669	0.136	1498.	3.3
97	98.0	12.077	35.131		0.06	26.677	0.139	1499.	3.5
99	100.1	12.294	35.201		0.06	26.689	0.142	1500.	3.6

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	9	17 MAR 1984	1755	40°04.1'N	68°33.3'W	600

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
101	101.9	12.470	35.261		0.05	26.701	0.144	1500.	4.2
103	104.1	12.615	35.308		0.05	26.709	0.147	1501.	4.4
105	105.9	12.622	35.309		0.05	26.708	0.150	1501.	4.5
107	108.0	12.692	35.343		0.05	26.721	0.152	1501.	4.5
109	110.1	12.938	35.469		0.04	26.770	0.155	1502.	4.3
111	111.9	13.003	35.488		0.03	26.771	0.158	1503.	4.1
113	114.0	13.016	35.496		0.03	26.775	0.160	1503.	3.8
115	116.1	13.023	35.504		0.03	26.780	0.163	1503.	3.3
117	117.8	13.026	35.510		0.03	26.783	0.165	1503.	2.7
119	120.2	13.033	35.513		0.03	26.785	0.168	1503.	2.8
121	121.8	13.039	35.522		0.03	26.790	0.170	1503.	3.1
123	124.2	13.016	35.531		0.03	26.802	0.173	1503.	3.2
125	125.8	13.005	35.535		0.03	26.808	0.175	1503.	3.3
127	128.1	12.999	35.537		0.03	26.810	0.178	1503.	3.4
129	130.1	12.969	35.550		0.03	26.826	0.181	1503.	3.4
131	131.9	12.967	35.554		0.03	26.829	0.183	1503.	3.5
133	134.0	12.969	35.558		0.03	26.832	0.186	1503.	3.7
135	136.3	12.935	35.561		0.03	26.841	0.189	1503.	3.9
137	137.8	12.886	35.563		0.03	26.852	0.190	1503.	4.0
139	140.0	12.787	35.555		0.03	26.866	0.193	1502.	4.2
141	142.1	12.706	35.552		0.03	26.880	0.196	1502.	4.3
143	144.0	12.645	35.548		0.03	26.889	0.198	1502.	4.2
145	145.8	12.556	35.540		0.03	26.900	0.200	1502.	4.2
147	148.2	12.449	35.532		0.03	26.915	0.203	1501.	4.3
149	150.0	12.414	35.528		0.03	26.920	0.205	1501.	4.3
151	152.0	12.353	35.521		0.03	26.926	0.207	1501.	4.3
153	154.1	12.145	35.493		0.03	26.945	0.210	1500.	4.2
155	156.0	12.002	35.484		0.03	26.965	0.212	1500.	4.2
157	158.0	11.973	35.484		0.03	26.971	0.214	1500.	4.1
159	159.9	11.901	35.475		0.03	26.978	0.216	1500.	3.8
161	162.1	11.854	35.471		0.03	26.984	0.219	1500.	3.4
162	163.8	11.772	35.462		0.03	26.993	0.220	1499.	3.1
165	166.0	11.735	35.461		0.03	26.999	0.223	1499.	3.0
167	168.0	11.718	35.459		0.03	27.000	0.225	1499.	3.0
169	170.0	11.668	35.454		0.03	27.005	0.227	1499.	3.0
170	171.8	11.625	35.450		0.03	27.011	0.229	1499.	2.9
173	174.0	11.571	35.445		0.03	27.017	0.231	1499.	3.0
175	176.1	11.509	35.439		0.03	27.024	0.234	1499.	3.1
176	177.9	11.475	35.436		0.03	27.028	0.236	1498.	3.2
179	180.2	11.420	35.431		0.03	27.035	0.238	1498.	3.3
180	181.8	11.381	35.429		0.03	27.040	0.240	1498.	3.5
182	183.9	11.284	35.416		0.02	27.048	0.242	1498.	3.6
184	186.0	11.193	35.409		0.02	27.060	0.244	1498.	3.6
186	187.7	11.142	35.404		0.03	27.065	0.246	1497.	3.5
188	189.9	11.024	35.395		0.03	27.079	0.248	1497.	3.4
191	192.1	10.984	35.391		0.03	27.084	0.250	1497.	3.2
192	193.7	10.947	35.384		0.02	27.085	0.252	1497.	3.1
195	196.1	10.887	35.379		0.03	27.092	0.255	1497.	3.1
196	198.0	10.849	35.373		0.02	27.094	0.256	1497.	3.0
198	200.1	10.732	35.360		0.02	27.105	0.259	1496.	3.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	9	17 MAR 1984	1755	40°04.1'N	68°33.3'W	600

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
200	201.7	10.664	35.351		0.03	27.110	0.260	1496.	2.9
202	204.1	10.621	35.350		0.03	27.117	0.262	1496.	2.9
204	206.0	10.590	35.344		0.03	27.118	0.264	1496.	2.8
206	207.6	10.564	35.341		0.03	27.120	0.266	1496.	2.9
208	210.0	10.529	35.340		0.03	27.126	0.268	1496.	3.0
210	212.0	10.467	35.334		0.03	27.132	0.270	1495.	3.2
212	214.0	10.402	35.323		0.03	27.135	0.272	1495.	3.4
214	216.0	10.235	35.307		0.03	27.152	0.274	1495.	3.3
216	218.2	10.171	35.300		0.03	27.157	0.276	1494.	3.2
218	219.6	10.129	35.297		0.03	27.162	0.277	1494.	3.0
220	222.0	10.074	35.292		0.03	27.168	0.280	1494.	2.8
222	223.9	10.054	35.290		0.03	27.170	0.282	1494.	2.5
224	226.1	10.015	35.286		0.03	27.173	0.284	1494.	2.5
226	228.0	9.999	35.284		0.03	27.174	0.285	1494.	2.6
228	230.2	9.938	35.275		0.03	27.178	0.287	1494.	2.6
230	232.1	9.863	35.269		0.03	27.186	0.289	1493.	2.7
232	233.9	9.804	35.262		0.03	27.191	0.291	1493.	2.8
234	236.0	9.755	35.257		0.03	27.195	0.293	1493.	2.9
236	238.1	9.711	35.252		0.02	27.199	0.295	1493.	3.0
238	239.8	9.659	35.246		0.02	27.203	0.296	1493.	2.9
240	242.1	9.579	35.238		0.02	27.210	0.298	1493.	2.8
242	244.1	9.486	35.227		0.02	27.217	0.300	1492.	2.6
246	247.9	9.450	35.228		0.02	27.223	0.303	1492.	2.0
248	250.1	9.449	35.228		0.02	27.223	0.305	1492.	1.7
250	251.9	9.446	35.228		0.02	27.224	0.307	1492.	1.3
252	254.3	9.439	35.227		0.02	27.225	0.309	1492.	1.2
253	255.6	9.429	35.225		0.02	27.225	0.310	1492.	1.2
256	258.0	9.409	35.224		0.03	27.227	0.312	1492.	2.2
258	260.1	9.399	35.223		0.03	27.228	0.314	1492.	2.8
259	261.7	9.381	35.220		0.03	27.229	0.316	1492.	3.4
262	264.0	9.337	35.210		0.03	27.228	0.318	1492.	3.7
264	266.0	9.099	35.200		0.03	27.259	0.319	1491.	3.9
266	268.1	8.907	35.167		0.02	27.264	0.321	1490.	3.9
268	270.0	8.792	35.164		0.02	27.280	0.323	1490.	3.7
270	271.9	8.768	35.162		0.02	27.283	0.324	1490.	3.4
272	274.2	8.719	35.157		0.02	27.286	0.326	1490.	2.8
273	275.7	8.685	35.152		0.02	27.288	0.328	1490.	2.5
276	278.0	8.662	35.149		0.02	27.289	0.329	1490.	2.1
278	280.2	8.588	35.146		0.02	27.298	0.331	1489.	2.3
279	281.8	8.577	35.143		0.02	27.298	0.333	1489.	2.4
282	284.0	8.575	35.143		0.02	27.298	0.334	1489.	2.6
284	286.1	8.524	35.136		0.02	27.300	0.336	1489.	2.8
286	288.0	8.400	35.122		0.02	27.309	0.338	1489.	2.8
288	290.1	8.340	35.120		0.02	27.317	0.339	1489.	2.9
289	291.9	8.290	35.117		0.02	27.322	0.341	1489.	2.9
292	294.0	8.264	35.117		0.02	27.326	0.342	1488.	2.8
294	296.2	8.242	35.117		0.02	27.329	0.344	1488.	2.7
295	297.8	8.223	35.115		0.02	27.330	0.345	1488.	2.6
298	300.2	8.159	35.110		0.02	27.336	0.347	1488.	2.6

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	9	17 MAR 1984	1755	40°04.1'N	68°33.3'W	600

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
299	301.9	8.111	35.106		0.02	27.341	0.349	1488.	2.6
301	304.0	8.069	35.106		0.02	27.347	0.350	1488.	2.6
303	306.1	8.043	35.105		0.02	27.350	0.352	1488.	2.5
305	308.0	7.995	35.100		0.02	27.354	0.353	1488.	2.2
308	310.3	7.975	35.102		0.02	27.358	0.355	1488.	2.0
309	311.8	7.967	35.101		0.02	27.358	0.356	1488.	2.0
311	314.1	7.963	35.101		0.02	27.359	0.358	1488.	2.1
313	316.1	7.960	35.101		0.02	27.360	0.360	1488.	2.3
315	317.9	7.938	35.098		0.02	27.360	0.361	1488.	2.5
317	320.1	7.832	35.091		0.02	27.371	0.363	1487.	2.6
319	321.8	7.784	35.088		0.02	27.376	0.364	1487.	2.7
321	323.7	7.759	35.090		0.02	27.381	0.365	1487.	2.7
323	326.0	7.727	35.087		0.02	27.383	0.367	1487.	2.6
325	328.2	7.692	35.086		0.02	27.387	0.369	1487.	2.4
327	329.7	7.679	35.085		0.02	27.389	0.370	1487.	2.2
329	332.1	7.640	35.080		0.02	27.391	0.372	1487.	2.2
331	334.1	7.599	35.080		0.02	27.397	0.373	1487.	2.4
333	335.9	7.593	35.080		0.02	27.398	0.374	1487.	2.5
335	337.9	7.585	35.080		0.02	27.399	0.376	1487.	2.5
337	340.0	7.477	35.067		0.02	27.404	0.377	1486.	2.6
339	342.0	7.434	35.071		0.02	27.413	0.379	1486.	2.5
341	343.9	7.422	35.070		0.02	27.415	0.380	1486.	2.5
343	346.1	7.385	35.067		0.02	27.417	0.382	1486.	2.5
345	348.0	7.349	35.065		0.02	27.421	0.383	1486.	2.4
347	349.9	7.337	35.065		0.02	27.423	0.384	1486.	2.5
349	352.0	7.321	35.064		0.02	27.424	0.386	1486.	2.8
351	354.1	7.223	35.054		0.02	27.431	0.387	1485.	3.1
353	355.8	7.188	35.056		0.02	27.437	0.388	1485.	3.3
355	358.0	7.110	35.051		0.02	27.444	0.390	1485.	3.4
357	360.1	6.994	35.045		0.02	27.455	0.391	1485.	3.3
359	361.8	6.954	35.044		0.02	27.460	0.393	1484.	3.1
361	364.0	6.896	35.043		0.02	27.468	0.394	1484.	2.9
363	366.3	6.860	35.041		0.02	27.471	0.396	1484.	2.6
365	367.9	6.836	35.039		0.02	27.473	0.397	1484.	2.2
367	370.0	6.822	35.039		0.02	27.474	0.398	1484.	2.2
369	371.9	6.809	35.038		0.02	27.475	0.399	1484.	2.3
371	374.0	6.780	35.036		0.02	27.478	0.401	1484.	2.5
373	376.4	6.717	35.029		0.02	27.481	0.402	1484.	2.7
375	377.9	6.629	35.022		0.02	27.488	0.403	1483.	3.1
377	380.0	6.581	35.021		0.02	27.493	0.404	1483.	3.2
379	382.1	6.513	35.017		0.02	27.499	0.406	1483.	3.3
380	383.7	6.420	35.012		0.02	27.508	0.407	1483.	3.3
383	386.0	6.330	35.010		0.02	27.518	0.408	1482.	3.2
385	388.1	6.312	35.009		0.02	27.520	0.410	1482.	3.1
386	389.6	6.290	35.009		0.02	27.523	0.410	1482.	2.9
389	392.1	6.234	35.012		0.02	27.532	0.412	1482.	2.7
391	394.2	6.204	35.010		0.02	27.534	0.413	1482.	2.5
392	395.7	6.183	35.010		0.02	27.537	0.414	1482.	2.3
395	397.9	6.150	35.009		0.02	27.541	0.415	1482.	2.0
397	400.1	6.116	35.007		0.02	27.543	0.417	1482.	1.6

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	9	17 MAR 1984	1755	40°04.1'N	68°33.3'W	600

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
398	401.8	6.118	35.007		0.02	27.543	0.418	1482.	1.4
401	404.1	6.120	35.007		0.02	27.543	0.419	1482.	1.2
403	406.2	6.114	35.007		0.02	27.544	0.420	1482.	1.1
404	407.9	6.104	35.006		0.02	27.544	0.421	1482.	1.1
406	409.7	6.098	35.005		0.02	27.544	0.422	1482.	1.2
409	412.1	6.073	35.003		0.02	27.546	0.424	1482.	1.3
410	414.0	6.059	35.002		0.02	27.547	0.425	1482.	1.4
413	416.2	6.041	35.001		0.02	27.549	0.426	1482.	1.3
414	417.9	6.040	35.001		0.02	27.549	0.427	1482.	1.2
416	420.0	6.016	35.000		0.02	27.551	0.428	1482.	0.9
418	422.1	6.023	35.001		0.02	27.551	0.430	1482.	1.0
420	424.0	6.033	35.002		0.02	27.551	0.431	1482.	1.2
422	426.0	6.034	35.002		0.02	27.550	0.432	1482.	1.4
424	428.0	6.017	34.998		0.02	27.549	0.433	1482.	1.5
426	430.2	5.955	34.994		0.02	27.554	0.434	1482.	1.7
428	432.0	5.927	34.993		0.02	27.557	0.435	1482.	1.8
430	433.9	5.916	34.994		0.02	27.559	0.437	1482.	1.8
432	436.0	5.900	34.993		0.02	27.560	0.438	1481.	1.7
434	437.9	5.894	34.994		0.02	27.562	0.439	1482.	1.7
436	440.0	5.886	34.993		0.02	27.562	0.440	1482.	1.9
438	442.1	5.871	34.992		0.02	27.563	0.441	1481.	2.0
440	444.0	5.856	34.992		0.02	27.565	0.442	1481.	2.1
442	446.0	5.794	34.989		0.02	27.570	0.444	1481.	2.2
444	448.2	5.747	34.989		0.02	27.576	0.445	1481.	2.2
446	449.9	5.734	34.988		0.02	27.577	0.446	1481.	2.2
448	452.2	5.722	34.986		0.02	27.577	0.447	1481.	2.1
450	453.7	5.702	34.986		0.02	27.580	0.448	1481.	1.9
452	456.1	5.656	34.983		0.02	27.583	0.449	1481.	1.8
454	458.1	5.637	34.984		0.02	27.586	0.450	1481.	1.8
456	459.9	5.629	34.984		0.02	27.587	0.451	1481.	2.0
458	462.0	5.624	34.984		0.02	27.587	0.452	1481.	2.0
460	464.0	5.603	34.982		0.02	27.589	0.454	1481.	2.1
462	466.0	5.556	34.979		0.02	27.592	0.455	1481.	2.1
464	468.0	5.513	34.980		0.02	27.598	0.456	1480.	2.1
466	470.1	5.504	34.980		0.02	27.599	0.457	1480.	2.1
468	471.8	5.475	34.979		0.02	27.602	0.458	1480.	2.1
470	474.0	5.454	34.978		0.02	27.604	0.459	1480.	1.9
472	476.3	5.438	34.978		0.02	27.605	0.460	1480.	1.7
473	477.7	5.423	34.977		0.02	27.607	0.461	1480.	1.6
476	479.9	5.410	34.977		0.02	27.608	0.462	1480.	1.5
478	482.1	5.400	34.976		0.02	27.609	0.463	1480.	1.4
480	483.9	5.394	34.976		0.02	27.610	0.464	1480.	1.4
482	485.9	5.380	34.975		0.02	27.611	0.465	1480.	1.7
484	488.1	5.365	34.975		0.02	27.612	0.466	1480.	1.8
486	490.1	5.355	34.975		0.02	27.613	0.468	1480.	1.9
487	491.7	5.327	34.972		0.02	27.614	0.468	1480.	1.8
490	494.0	5.255	34.972		0.02	27.623	0.470	1480.	1.5
492	496.1	5.251	34.972		0.02	27.623	0.471	1480.	1.3
493	497.7	5.258	34.971		0.02	27.622	0.471	1480.	1.1
496	500.1	5.292	34.972		0.02	27.619	0.473	1480.	0.7

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	9	17 MAR 1984	1755	40°04.1'N	68°33.3'W	600

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
515	520.0	5.098	34.967		0.02	27.638	0.483	1480.	1.8
535	539.8	4.974	34.962		0.02	27.648	0.493	1479.	1.2
554	559.0	4.849	34.961		0.01	27.662	0.502	1479.	0.7

STA 10 DAY: 17 TIME: 1937

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
0.0	6.5	85.4	11.9
1.9	6.4	88.3	12.0
3.9	6.4	91.2	12.0
5.8	6.4	91.2	12.1
7.8	6.4	94.1	12.1
11.7	6.4	96.0	12.1
11.7	6.6	98.9	12.2
13.6	6.6	100.8	12.2
16.6	6.5	103.7	12.4
16.6	6.7	105.6	12.4
17.5	6.7	108.5	12.3
19.5	6.7	110.5	12.3
22.4	6.8	113.4	12.3
22.4	6.9	116.2	12.3
23.4	7.0	119.1	12.3
25.3	7.1	122.0	12.3
27.3	7.2	123.9	12.3
28.2	7.5	124.9	12.2
29.2	8.0	127.8	12.1
30.2	7.9	129.7	12.0
32.1	7.9	131.6	12.0
33.1	8.1	132.6	11.8
34.1	8.3	133.5	11.7
34.1	8.3	135.5	11.6
35.0	8.5	136.4	11.5
37.0	8.5	139.3	11.5
38.9	8.5	139.3	11.3
40.9	8.5	142.2	11.3
42.8	8.5	146.0	11.3
44.7	8.5	149.9	11.3
47.6	8.5	153.7	11.3
50.6	8.7	157.5	11.3
52.5	8.7	159.4	11.2
54.4	8.8	162.3	11.2
55.4	8.9	166.2	11.2
57.3	8.9		
60.2	9.0		
62.2	9.2		
64.1	9.2		
66.0	9.5		
67.0	10.5		
69.0	11.1		
70.9	11.6		
71.9	11.8		
73.8	11.9		
74.8	12.0		
76.7	11.9		
78.6	11.7		
81.5	11.6		
83.5	11.8		

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	11	17 MAR 1984	2011	40°13.6'N	68°37.5'W	146

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	2.7	5.780	32.926		0.20	25.941	0.000	1471.	1.9
4	3.7	5.799	32.932		0.20	25.944	0.002	1471.	1.9
6	6.2	5.813	32.939		0.19	25.947	0.007	1471.	1.9
8	7.7	5.806	32.936		0.19	25.946	0.010	1471.	1.9
10	10.1	5.806	32.936		0.19	25.945	0.015	1472.	1.9
12	12.2	5.841	32.949		0.19	25.951	0.019	1472.	2.0
14	13.9	5.863	32.958		0.19	25.956	0.023	1472.	2.3
16	15.7	5.909	32.978		0.18	25.966	0.026	1472.	2.4
18	18.0	5.880	32.957		0.18	25.953	0.031	1472.	2.5
20	19.8	5.911	32.975		0.18	25.964	0.035	1472.	2.6
22	21.9	5.961	32.996		0.17	25.974	0.039	1472.	3.0
24	24.1	5.977	33.001		0.17	25.976	0.044	1473.	3.6
25	25.6	6.004	33.009		0.17	25.979	0.047	1473.	4.5
28	28.1	6.062	33.029		0.17	25.988	0.052	1473.	5.0
30	29.9	6.161	33.073		0.16	26.010	0.055	1473.	5.6
32	32.2	6.291	33.125		0.14	26.035	0.060	1474.	6.0
34	34.0	6.532	33.213		0.12	26.073	0.063	1475.	6.1
36	36.1	6.692	33.264		0.12	26.093	0.067	1476.	6.0
38	37.8	7.032	33.369		0.10	26.130	0.071	1477.	5.6
40	39.9	7.212	33.418		0.10	26.144	0.075	1478.	
44	44.0	7.431	33.475		0.09	26.158	0.082	1479.	4.2
46	46.1	7.522	33.508		0.09	26.171	0.086	1480.	4.0
48	48.0	7.681	33.550		0.09	26.182	0.089	1480.	4.2
50	50.1	7.774	33.576		0.08	26.189	0.093	1481.	4.4
52	52.0	7.866	33.602		0.08	26.196	0.097	1481.	4.6
54	54.1	8.120	33.679		0.08	26.219	0.101	1482.	5.3
56	56.1	8.332	33.743		0.08	26.238	0.104	1483.	5.8
57	57.9	8.515	33.788		0.08	26.245	0.107	1484.	6.2
60	60.3	8.748	33.873		0.08	26.276	0.112	1485.	6.4
62	62.1	9.511	34.100		0.07	26.331	0.115	1488.	6.5
64	64.0	10.084	34.260		0.06	26.360	0.118	1490.	6.3
65	65.9	10.389	34.341		0.06	26.371	0.121	1491.	6.0
67	68.0	10.758	34.460		0.06	26.399	0.124	1493.	5.5
69	69.9	11.082	34.560		0.06	26.418	0.128	1494.	5.1
71	72.0	11.121	34.562		0.06	26.413	0.131	1494.	4.9
74	74.1	11.227	34.613		0.06	26.433	0.134	1495.	4.9
75	75.9	11.453	34.694		0.06	26.455	0.137	1496.	4.6
77	77.9	11.600	34.762		0.05	26.480	0.140	1496.	4.4
79	80.0	11.701	34.788		0.06	26.482	0.144	1497.	4.2
82	82.2	11.860	34.848		0.06	26.499	0.147	1498.	3.7
83	83.9	11.860	34.842		0.05	26.494	0.150	1498.	3.1
86	86.3	11.958	34.885		0.05	26.509	0.153	1498.	2.7
87	87.9	11.950	34.880		0.05	26.506	0.156	1498.	2.7
90	90.2	11.967	34.886		0.05	26.507	0.159	1498.	2.6
91	92.0	11.995	34.898		0.05	26.511	0.162	1498.	3.2
93	93.9	12.078	34.929		0.05	26.520	0.165	1499.	3.6
95	95.7	12.167	34.956		0.05	26.524	0.168	1499.	4.1
97	97.9	12.258	34.992		0.05	26.534	0.171	1499.	4.4
99	100.2	12.376	35.059		0.05	26.562	0.175	1500.	4.5

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	11	17 MAR 1984	2011	40°13.6'N	68°37.5'W	146

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
101	102.0	12.337	35.064		0.05	26.574	0.177	1500.	4.5
103	104.0	12.327	35.076		0.05	26.585	0.180	1500.	4.5
105	105.9	12.312	35.090		0.05	26.599	0.183	1500.	4.3
107	107.9	12.299	35.094		0.05	26.605	0.186	1500.	4.1
109	110.0	12.290	35.106		0.06	26.616	0.189	1500.	4.3
111	111.9	12.290	35.124		0.06	26.630	0.192	1500.	4.3
113	113.9	12.289	35.127		0.06	26.633	0.194	1500.	4.2
115	115.9	12.306	35.154		0.06	26.650	0.197	1500.	4.2
117	118.1	12.287	35.181		0.07	26.675	0.200	1500.	4.1
119	119.9	12.281	35.181		0.07	26.676	0.203	1500.	3.8
120	121.3	12.277	35.182		0.07	26.677	0.205	1500.	3.6
121	122.1	12.270	35.183		0.07	26.680	0.206	1500.	2.7
122	123.0	12.269	35.182		0.08	26.680	0.207	1500.	1.5
123	123.9	12.271	35.183		0.08	26.679	0.208	1500.	1.2
124	125.0	12.272	35.184		0.07	26.680	0.210	1500.	0.8
125	126.0	12.270	35.184		0.08	26.680	0.211	1500.	-0.4
126	127.1	12.268	35.183		0.08	26.680	0.213	1500.	-0.9
127	127.9	12.262	35.181		0.08	26.680	0.214	1500.	-0.9
128	129.1	12.256	35.179		0.08	26.679	0.216	1500.	-0.9
129	130.0	12.258	35.178		0.08	26.678	0.217	1500.	-0.9
130	130.6	12.250	35.174		0.08	26.677	0.218	1500.	-0.9

STA 12 DAY: 17 TIME: 2138

DEPTH (m)	TEMP (°C)
0.0	5.8
1.9	5.8
3.9	5.8
5.8	5.8
7.8	5.8
9.7	5.8
11.7	5.8
14.6	5.8
16.6	5.8
18.5	5.8
21.4	5.8
23.4	5.8
26.3	5.9
28.2	6.1
31.1	6.1
32.1	6.2
35.0	6.2
37.0	6.5
38.9	6.7
40.9	6.9
43.8	7.1
44.7	7.3
46.7	7.4
48.6	7.6
50.6	7.9
52.5	8.1
54.4	8.3
56.4	8.6
59.3	8.7
61.2	9.1
62.2	9.7
64.1	10.2
67.0	10.2
69.9	10.2
70.9	10.3
74.8	10.4
76.7	10.5
78.6	10.6
80.6	10.7
82.5	10.8
84.4	10.8
87.3	10.8
88.3	10.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	13	17 MAR 1984	2317	40°23.0'N	68°41.0'W	90

DEPTH m	PRESS dbar	TEMP °C	SALIN psu	OXY ml/L	ATN m^{-1}	[IFT gm/cm^3	DYHT A $10m^2/s^2$	S SPD m/s	N cph
2	2.3	5.307	32.691		0.23	25.810	0.000	1469.	0.4
4	4.2	5.291	32.685		0.23	25.808	0.004	1469.	0.4
6	5.8	5.293	32.685		0.23	25.807	0.008	1469.	0.4
8	8.0	5.287	32.683		0.23	25.807	0.012	1469.	0.4
10	9.9	5.290	32.684		0.23	25.807	0.017	1469.	0.4
12	11.9	5.297	32.687		0.23	25.808	0.021	1469.	0.7
14	14.2	5.301	32.688		0.23	25.809	0.026	1469.	0.9
16	16.0	5.303	32.689		0.23	25.809	0.030	1469.	1.2
18	18.0	5.304	32.688		0.23	25.809	0.034	1469.	1.2
20	20.0	5.307	32.690		0.23	25.810	0.038	1469.	1.4
22	22.0	5.319	32.695		0.23	25.812	0.043	1469.	1.9
24	23.9	5.335	32.701		0.23	25.815	0.047	1470.	2.5
26	26.2	5.331	32.699		0.23	25.814	0.052	1470.	2.8
28	28.1	5.352	32.710		0.23	25.820	0.056	1470.	2.9
30	29.9	5.402	32.732		0.23	25.832	0.060	1470.	2.9
32	32.1	5.466	32.758		0.23	25.845	0.065	1470.	2.8
33	33.7	5.466	32.758		0.23	25.845	0.068	1470.	2.9
36	36.1	5.480	32.763		0.23	25.848	0.073	1470.	3.0
38	38.0	5.483	32.763		0.23	25.847	0.077	1470.	3.0
39	39.7	5.484	32.764		0.22	25.848	0.081	1470.	3.1
42	42.1	5.532	32.792		0.22	25.865	0.086	1471.	3.4
44	44.1	5.592	32.817		0.22	25.877	0.091	1471.	3.6
46	45.9	5.612	32.827		0.21	25.883	0.094	1471.	3.7
48	48.1	5.639	32.843		0.21	25.892	0.099	1471.	3.6
50	50.2	5.653	32.853		0.20	25.899	0.103	1471.	3.5
51	51.9	5.667	32.864		0.20	25.906	0.107	1472.	3.5
53	53.9	5.681	32.874		0.19	25.912	0.111	1472.	4.0
55	55.9	5.699	32.884		0.19	25.918	0.115	1472.	4.9
58	58.1	5.733	32.904		0.19	25.929	0.120	1472.	5.6
59	59.7	5.789	32.925		0.17	25.939	0.123	1472.	6.1
62	62.0	6.028	33.012		0.16	25.978	0.128	1473.	6.5
63	63.8	6.503	33.162		0.16	26.037	0.131	1475.	7.0
66	66.2	6.748	33.229		0.16	26.058	0.136	1477.	7.1
68	68.1	6.969	33.303		0.16	26.086	0.140	1478.	7.0
70	70.2	7.174	33.372		0.16	26.113	0.144	1478.	6.6
71	71.3	7.455	33.471		0.16	26.152	0.146	1480.	6.0
71	72.0	7.484	33.464		0.17	26.142	0.147	1480.	5.7
73	73.1	7.519	33.471		0.16	26.143	0.149	1480.	4.7
73	73.9	7.587	33.496		0.17	26.153	0.151	1480.	3.3
74	75.0	7.640	33.509		0.17	26.155	0.153	1480.	2.3
75	75.9	7.643	33.513		0.17	26.158	0.154	1481.	3.3
76	77.0	7.642	33.507		0.18	26.154	0.156	1481.	3.7
77	78.0	7.641	33.507		0.18	26.153	0.158	1481.	3.7
78	79.0	7.665	33.523		0.18	26.163	0.160	1481.	3.7
79	80.0	7.762	33.564		0.18	26.181	0.162	1481.	3.7
80	81.1	7.865	33.587		0.19	26.184	0.164	1482.	3.7
81	81.8	7.870	33.584		0.19	26.181	0.165	1482.	3.7

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	14	18 MAR 1984	0100	40°30.0'N	68°44.9'W	75

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
2	2.4	4.891	32.474		0.31	25.685	0.000	1467.	0.1
4	3.9	4.890	32.475		0.30	25.686	0.003	1467.	0.1
6	6.0	4.890	32.474		0.29	25.686	0.008	1467.	0.1
8	8.0	4.890	32.475		0.29	25.686	0.013	1467.	0.1
10	10.0	4.890	32.474		0.29	25.685	0.017	1467.	0.1
12	12.0	4.889	32.474		0.29	25.686	0.022	1467.	-0.2
14	14.0	4.888	32.474		0.29	25.685	0.027	1467.	-0.2
16	16.0	4.889	32.474		0.29	25.685	0.031	1467.	-0.3
18	18.0	4.889	32.474		0.29	25.686	0.036	1467.	-0.2
20	19.9	4.889	32.474		0.28	25.685	0.040	1467.	0.4
22	21.8	4.889	32.474		0.30	25.685	0.045	1467.	0.6
24	24.0	4.890	32.474		0.30	25.685	0.050	1467.	0.6
26	26.1	4.889	32.474		0.30	25.685	0.055	1467.	0.8
28	27.8	4.893	32.477		0.29	25.687	0.058	1468.	0.9
30	29.9	4.896	32.478		0.29	25.688	0.063	1468.	0.9
32	32.1	4.895	32.477		0.30	25.687	0.068	1468.	0.9
34	33.9	4.897	32.479		0.29	25.688	0.072	1468.	0.8
36	36.2	4.898	32.479		0.29	25.689	0.078	1468.	0.7
38	37.8	4.899	32.480		0.29	25.689	0.081	1468.	0.6
40	40.1	4.899	32.480		0.30	25.689	0.087	1468.	0.6
42	42.0	4.899	32.480		0.28	25.689	0.091	1468.	0.4
43	43.8	4.900	32.481		0.28	25.689	0.095	1468.	0.5
46	46.1	4.900	32.480		0.29	25.689	0.101	1468.	0.6
48	47.9	4.900	32.480		0.29	25.689	0.105	1468.	0.6
50	50.1	4.901	32.481		0.29	25.689	0.110	1468.	0.7
52	52.0	4.902	32.482		0.28	25.690	0.114	1468.	0.7
53	53.9	4.904	32.482		0.28	25.690	0.118	1468.	0.7
56	56.2	4.904	32.483		0.29	25.691	0.124	1468.	0.7
57	57.2	4.905	32.483		0.29	25.691	0.126	1468.	0.6
58	58.0	4.905	32.483		0.29	25.691	0.128	1468.	0.5
59	59.0	4.905	32.483		0.29	25.691	0.130	1468.	0.3
60	60.1	4.905	32.483		0.28	25.691	0.132	1468.	-0.3
61	61.0	4.905	32.483		0.29	25.691	0.135	1468.	0.1
62	62.1	4.905	32.483		0.29	25.691	0.137	1468.	0.4
62	63.0	4.905	32.483		0.29	25.691	0.139	1468.	0.4
64	64.1	4.905	32.483		0.28	25.690	0.142	1468.	0.4
64	65.0	4.906	32.484		0.29	25.691	0.144	1468.	0.4
66	66.0	4.907	32.484		0.30	25.691	0.146	1468.	0.4

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	15	18 MAR 1984	0304	40°29.9'N	69°00.2'W	75

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	5.219	32.417		0.44	25.604	0.000	1468.	0.5
4	3.7	5.220	32.416		0.45	25.603	0.003	1468.	0.5
6	6.1	5.220	32.418		0.45	25.604	0.008	1468.	0.5
8	7.9	5.220	32.417		0.43	25.604	0.013	1468.	0.5
10	10.0	5.220	32.418		0.43	25.604	0.018	1468.	0.5
12	12.0	5.220	32.418		0.44	25.604	0.022	1469.	0.5
14	14.2	5.221	32.418		0.44	25.604	0.028	1469.	0.3
16	15.8	5.221	32.418		0.45	25.604	0.031	1469.	0.3
18	18.1	5.221	32.418		0.46	25.604	0.037	1469.	0.2
20	20.0	5.221	32.418		0.44	25.604	0.041	1469.	0.1
22	22.1	5.221	32.418		0.43	25.604	0.046	1469.	-0.1
24	23.9	5.221	32.418		0.44	25.604	0.051	1469.	0.1
26	26.1	5.222	32.418		0.45	25.604	0.056	1469.	0.2
28	27.8	5.222	32.418		0.43	25.604	0.060	1469.	0.3
30	30.2	5.222	32.418		0.44	25.604	0.066	1469.	0.4
31	31.7	5.222	32.418		0.44	25.604	0.069	1469.	0.5
34	34.1	5.225	32.419		0.50	25.604	0.075	1469.	0.4
36	36.1	5.226	32.420		0.56	25.605	0.080	1469.	0.4
38	38.0	5.225	32.420		0.51	25.605	0.084	1469.	0.3
40	39.9	5.225	32.419		0.51	25.605	0.089	1469.	0.1
42	42.0	5.225	32.419		0.57	25.604	0.094	1469.	-0.2
44	44.1	5.225	32.419		0.60	25.604	0.099	1469.	-0.3
45	45.8	5.225	32.419		0.61	25.605	0.103	1469.	-0.4
48	48.0	5.225	32.419		0.70	25.604	0.108	1469.	-0.4
50	50.1	5.226	32.419		0.65	25.605	0.113	1469.	-0.6
52	52.0	5.225	32.419		0.57	25.604	0.117	1469.	-1.1
54	54.0	5.224	32.418		0.64	25.604	0.122	1469.	-1.4
56	56.1	5.223	32.418		0.67	25.604	0.127	1469.	-1.4
57	57.8	5.223	32.415		0.75	25.602	0.131	1469.	-1.3
60	60.0	5.225	32.407		0.83	25.595	0.137	1469.	-1.0
61	61.3	5.223	32.407		0.81	25.595	0.139	1469.	-0.4
61	61.9	5.223	32.412		0.80	25.599	0.141	1469.	1.0
63	63.0	5.226	32.418		0.79	25.604	0.144	1469.	1.6
64	64.0	5.227	32.418		0.78	25.604	0.146	1469.	2.0
65	65.0	5.226	32.418		0.80	25.604	0.148	1469.	1.7
65	66.0	5.225	32.418		0.82	25.604	0.151	1469.	1.7
67	67.1	5.225	32.419		0.83	25.604	0.153	1469.	1.7
67	68.0	5.224	32.419		0.77	25.604	0.156	1469.	1.7
68	68.7	5.223	32.418		0.79	25.604	0.157	1469.	1.7

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	16	18 MAR 1984	0457	40°30.1'N	69°16.2'W	75

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	4.0	4.746	32.677		0.31	25.861	0.000	1467.	0.3
6	5.9	4.745	32.677		0.32	25.862	0.004	1467.	0.3
8	8.0	4.744	32.677		0.33	25.862	0.009	1467.	0.3
10	10.1	4.744	32.677		0.32	25.862	0.013	1467.	0.3
12	11.9	4.743	32.677		0.33	25.862	0.017	1467.	0.3
14	14.2	4.742	32.677		0.32	25.862	0.022	1467.	-0.2
16	15.7	4.743	32.677		0.32	25.862	0.025	1467.	-0.4
18	18.0	4.742	32.677		0.32	25.862	0.030	1467.	-0.5
20	20.1	4.744	32.677		0.32	25.862	0.034	1467.	-0.6
22	22.1	4.746	32.676		0.34	25.861	0.038	1467.	-0.6
24	24.1	4.745	32.676		0.33	25.861	0.043	1467.	-0.6
26	25.9	4.748	32.676		0.33	25.861	0.047	1467.	-0.6
28	28.0	4.752	32.676		0.35	25.860	0.051	1467.	-0.6
30	30.2	4.750	32.676		0.33	25.861	0.056	1467.	-0.5
32	32.1	4.754	32.676		0.34	25.860	0.060	1467.	-0.5
34	33.8	4.754	32.676		0.35	25.860	0.064	1467.	-0.4
36	36.0	4.755	32.676		0.36	25.860	0.068	1467.	-0.3
38	38.0	4.755	32.676		0.34	25.860	0.072	1467.	-0.3
40	39.9	4.754	32.676		0.36	25.860	0.076	1467.	0.2
42	42.0	4.754	32.676		0.36	25.860	0.081	1467.	0.1
43	43.8	4.754	32.676		0.35	25.860	0.085	1467.	-0.2
46	46.1	4.754	32.676		0.38	25.860	0.090	1468.	-0.2
48	48.4	4.754	32.676		0.34	25.860	0.095	1468.	-0.1
49	49.7	4.756	32.676		0.35	25.860	0.097	1468.	-0.2
52	52.0	4.757	32.675		0.37	25.859	0.102	1468.	-0.2
54	54.2	4.756	32.676		0.35	25.860	0.107	1468.	-0.3
55	55.9	4.755	32.676		0.37	25.860	0.111	1468.	-0.3
58	58.0	4.756	32.676		0.37	25.860	0.115	1468.	-0.2
59	59.9	4.757	32.676		0.35	25.860	0.119	1468.	-0.2
61	61.2	4.757	32.675		0.38	25.859	0.122	1468.	-0.3
61	62.0	4.756	32.675		0.38	25.859	0.124	1468.	-0.3
63	63.0	4.756	32.675		0.38	25.859	0.126	1468.	-0.3
64	64.1	4.757	32.675		0.37	25.859	0.128	1468.	0.1
64	64.9	4.757	32.676		0.37	25.860	0.130	1468.	0.2
66	66.0	4.758	32.676		0.42	25.859	0.132	1468.	-0.6
66	67.0	4.757	32.675		0.40	25.859	0.134	1468.	-0.6
67	68.0	4.757	32.676		0.40	25.859	0.137	1468.	-0.6
68	69.0	4.759	32.675		0.40	25.859	0.139	1468.	-0.6
69	69.7	4.766	32.675		0.37	25.858	0.140	1468.	-0.6

STA 17 DAY: 18 TIME: 0605

DEPTH (m)	TEMP (°C)
0.0	5.4
1.0	5.4
2.9	5.4
4.9	5.4
6.8	5.4
8.8	5.4
10.7	5.4
13.6	5.4
14.6	5.4
17.5	5.4
19.5	5.4
21.4	5.4
23.4	5.4
25.3	5.4
27.3	5.4
30.2	5.4
32.1	5.4
34.1	5.4
37.9	5.4
39.9	5.3
41.8	5.3
45.7	5.2
45.7	5.2
48.6	5.1
51.5	5.1
54.4	5.1
56.4	5.1
59.3	5.1
61.2	5.1
63.1	5.1
66.0	5.1
69.0	5.1
70.9	5.1
72.8	5.1
75.7	5.0
76.7	5.1

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	18	18 MAR 1984	0709	40°20.4'N	69°15.2'W	85

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	5.173	32.520		0.27	25.691	0.000	1468.	-0.2
4	4.0	5.174	32.520		0.27	25.691	0.003	1468.	-0.2
6	6.0	5.175	32.521		0.27	25.691	0.008	1468.	-0.2
8	7.9	5.175	32.521		0.27	25.691	0.012	1468.	-0.2
10	10.0	5.174	32.521		0.26	25.691	0.017	1468.	-0.2
12	12.1	5.174	32.521		0.27	25.691	0.022	1468.	0.1
14	14.1	5.174	32.521		0.26	25.691	0.026	1469.	0.2
16	15.9	5.174	32.521		0.27	25.691	0.030	1469.	0.3
18	18.1	5.174	32.519		0.27	25.690	0.035	1469.	0.5
20	20.1	5.174	32.521		0.27	25.691	0.040	1469.	0.7
22	22.2	5.174	32.521		0.26	25.691	0.045	1469.	1.0
24	23.7	5.174	32.521		0.26	25.691	0.048	1469.	1.2
26	26.1	5.174	32.523		0.27	25.693	0.054	1469.	1.4
27	27.7	5.174	32.523		0.26	25.693	0.057	1469.	1.4
30	30.0	5.180	32.529		0.27	25.697	0.063	1469.	1.3
32	31.9	5.181	32.530		0.27	25.698	0.067	1469.	1.1
34	34.3	5.183	32.532		0.26	25.699	0.072	1469.	0.8
36	35.9	5.184	32.533		0.25	25.699	0.076	1469.	0.7
38	38.0	5.177	32.529		0.26	25.697	0.081	1469.	0.6
40	39.9	5.173	32.527		0.26	25.696	0.085	1469.	0.7
42	42.2	5.177	32.528		0.26	25.697	0.091	1469.	0.9
44	44.0	5.182	32.532		0.26	25.699	0.095	1469.	1.6
46	46.0	5.185	32.535		0.25	25.701	0.099	1469.	2.0
48	48.1	5.187	32.536		0.26	25.701	0.104	1469.	2.4
49	49.8	5.188	32.537		0.25	25.702	0.108	1469.	2.7
52	52.1	5.211	32.556		0.26	25.715	0.113	1469.	2.8
54	54.2	5.214	32.558		0.25	25.716	0.118	1469.	2.8
56	56.0	5.234	32.573		0.25	25.726	0.122	1470.	2.8
58	58.1	5.249	32.586		0.26	25.734	0.127	1470.	2.8
59	59.9	5.250	32.585		0.25	25.733	0.131	1470.	2.7
62	62.0	5.243	32.581		0.25	25.731	0.136	1470.	2.7
63	63.9	5.267	32.597		0.25	25.741	0.140	1470.	2.6
66	66.2	5.284	32.609		0.25	25.748	0.145	1470.	2.7
67	68.0	5.305	32.619		0.26	25.754	0.149	1470.	2.8
70	70.1	5.315	32.623		0.26	25.756	0.154	1470.	2.9
71	71.2	5.322	32.627		0.26	25.759	0.156	1470.	2.5
71	72.0	5.334	32.636		0.27	25.764	0.158	1470.	2.3
72	73.0	5 335	32.633		0.28	25.762	0.160	1470.	2.2
73	74.0	5.337	32.635		0.27	25.763	0.163	1470.	2.0
74	75.0	5.336	32.634		0.26	25.762	0.165	1470.	1.8
75	76.0	5.353	32.643		0.29	25.767	0.167	1470.	1.6
76	77.0	5.354	32.643		0.29	25.767	0.169	1470.	1.7
77	78.1	5.357	32.644		0.29	25.768	0.172	1470.	1.5
78	79.1	5.357	32.644		0.28	25.768	0.174	1470.	1.5
79	79.9	5.358	32.644		0.28	25.768	0.176	1470.	1.5
80	81.0	5.361	32.646		0.30	25.769	0.178	1471.	1.5
81	81.9	5.360	32.645		0.29	25.768	0.180	1471.	1.5

STA 19 DAY: 18 TIME: 0827

DEPTH (m)	TEMP (°C)
0.0	6.0
1.9	6.0
4.9	6.0
6.8	6.0
8.8	6.0
11.7	6.0
13.6	6.0
16.6	6.0
18.5	6.0
21.4	6.0
23.4	6.0
25.3	6.1
27.3	6.1
30.2	6.1
32.1	6.1
35.0	6.1
37.0	6.1
39.9	6.1
39.9	6.2
41.8	6.2
43.8	6.2
46.7	6.2
48.6	6.4
51.5	6.5
52.5	6.6
54.4	6.6
56.4	6.8
58.3	7.0
59.3	7.1
61.2	7.3
63.1	7.3
65.1	7.5
66.0	7.5
66.0	7.9
68.0	8.0
69.9	8.3
70.9	8.3
72.8	8.4
74.8	8.6
77.7	8.7
78.6	8.8
79.6	8.8
81.5	8.9
84.4	8.9
86.4	8.9
88.3	9.0
91.2	9.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	20	18 MAR 1984	0858	40°10.0'N	69°13.9'W	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
2	2.0	8.453	33.810		0.17	26.272	0.000	1483.	0.4
4	4.0	8.465	33.818		0.17	26.276	0.003	1483.	0.4
6	5.9	8.454	33.812		0.16	26.273	0.007	1483.	0.4
8	8.3	8.435	33.802		0.16	26.268	0.011	1483.	0.4
10	10.0	8.449	33.811		0.16	26.273	0.014	1483.	0.4
12	12.0	8.474	33.818		0.16	26.274	0.017	1483.	0.5
14	13.9	8.471	33.816		0.16	26.273	0.021	1483.	0.9
16	16.0	8.454	33.810		0.16	26.272	0.024	1483.	1.0
18	17.9	8.483	33.820		0.16	26.275	0.028	1483.	0.6
20	20.0	8.494	33.823		0.16	26.276	0.031	1483.	0.4
22	22.0	8.494	33.823		0.16	26.275	0.035	1483.	0.7
24	24.1	8.493	33.822		0.16	26.275	0.038	1483.	0.8
26	26.0	8.485	33.819		0.16	26.274	0.042	1483.	0.8
28	27.9	8.476	33.817		0.16	26.273	0.045	1483.	1.1
30	29.9	8.497	33.826		0.16	26.277	0.048	1483.	1.3
31	31.7	8.518	33.829		0.16	26.277	0.052	1483.	1.8
34	34.3	8.535	33.836		0.16	26.279	0.056	1484.	2.2
35	35.7	8.549	33.841		0.16	26.281	0.059	1484.	2.6
38	38.0	8.581	33.851		0.16	26.284	0.063	1484.	2.9
40	39.8	8.669	33.878		0.16	26.292	0.066	1484.	3.3
42	42.0	8.776	33.912		0.16	26.302	0.069	1485.	3.7
44	44.1	8.862	33.941		0.16	26.311	0.073	1485.	3.9
46	46.1	8.951	33.965		0.16	26.316	0.076	1485.	4.1
47	47.8	9.099	34.022		0.15	26.337	0.079	1486.	4.0
50	50.0	9.285	34.075		0.15	26.348	0.083	1487.	3.9
52	52.3	9.346	34.098		0.15	26.356	0.087	1487.	3.6
54	54.0	9.418	34.128		0.15	26.368	0.090	1488.	3.3
56	56.2	9.457	34.139		0.14	26.371	0.093	1488.	2.9
57	57.7	9.463	34.139		0.14	26.370	0.096	1488.	2.6
60	60.4	9.476	34.150		0.14	26.376	0.100	1488.	2.4
61	61.7	9.477	34.153		0.13	26.378	0.102	1488.	2.2
64	64.1	9.480	34.159		0.13	26.383	0.106	1488.	2.2
65	66.0	9.481	34.162		0.13	26.385	0.110	1488.	2.2
67	68.0	9.492	34.169		0.12	26.388	0.113	1488.	2.5
70	70.1	9.500	34.173		0.12	26.390	0.116	1488.	3.5
71	71.8	9.503	34.175		0.12	26.391	0.119	1488.	4.7
73	74.0	9.529	34.188		0.12	26.397	0.123	1488.	5.5
75	75.9	9.624	34.228		0.10	26.413	0.126	1489.	5.8
77	77.8	10.064	34.387		0.09	26.463	0.129	1491.	5.8
79	80.0	11.058	34.686		0.11	26.521	0.132	1495.	5.7
81	82.0	11.641	34.843		0.16	26.535	0.135	1497.	5.2
83	83.9	11.720	34.843		0.16	26.521	0.138	1497.	4.4
85	85.9	11.862	34.883		0.18	26.525	0.141	1498.	3.3
87	88.0	12.070	34.950		0.20	26.537	0.144	1498.	2.1
89	89.9	12.120	34.962		0.21	26.537	0.147	1499.	2.1
90	91.2	12.156	34.971		0.22	26.538	0.149	1499.	2.5
91	92.0	12.177	34.983		0.22	26.542	0.150	1499.	2.2
92	93.1	12.185	34.986		0.21	26.543	0.152	1499.	1.7
93	94.0	12.194	34.989		0.21	26.544	0.153	1499.	1.7
94	94.9	12.194	34.988		0.21	26.543	0.155	1499.	1.7

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	20	18 MAR 1984	0858	40°10.0'N	69°13.9'W	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
95	96.0	12.200	34.989		0.21	26.543	0.156	1499.	1.7
96	96.9	12.207	34.991		0.22	26.543	0.158	1499.	1.7

STA 21 DAY: 18 TIME: 0950

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
1.0	9.0	107.6	12.4
2.9	9.0	109.5	12.4
5.8	9.0	111.4	12.4
7.8	9.0		
10.7	9.0		
13.6	9.0		
15.6	9.0		
16.6	9.2		
17.5	9.5		
18.5	9.7		
21.4	9.9		
23.4	10.0		
26.3	10.0		
28.2	10.1		
30.2	10.2		
32.1	10.2		
34.1	10.2		
36.0	10.2		
38.9	10.3		
39.9	10.4		
42.8	10.4		
46.7	10.4		
48.6	10.5		
50.6	10.7		
52.5	10.7		
53.5	10.9		
55.4	10.9		
59.3	11.0		
60.2	11.1		
62.2	11.3		
63.1	11.5		
65.1	11.6		
68.0	11.6		
70.9	11.6		
72.8	11.7		
75.7	11.7		
77.7	11.8		
79.6	11.8		
81.5	11.8		
84.4	11.8		
87.3	11.9		
89.2	12.0		
91.2	12.1		
92.1	12.2		
94.1	12.3		
96.0	12.3		
98.9	12.3		
100.8	12.3		
103.7	12.4		
105.6	12.4		

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	22	18 MAR 1984	1020	40°01.5'N	69°12.4'W	195

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
2	2.2	9.792	34.297		0.15	26.438	0.000	1488.	0.6
4	3.7	9.795	34.297		0.15	26.438	0.002	1488.	0.6
6	6.0	9.798	34.299		0.15	26.439	0.006	1488.	0.6
8	7.9	9.797	34.298		0.15	26.438	0.009	1488.	0.6
10	10.0	9.799	34.299		0.15	26.439	0.012	1488.	0.6
12	12.0	9.802	34.300		0.15	26.439	0.016	1488.	0.6
14	14.3	9.808	34.302		0.15	26.440	0.019	1489.	0.5
16	15.8	9.808	34.302		0.15	26.440	0.022	1489.	0.5
18	17.9	9.810	34.302		0.15	26.440	0.025	1489.	0.3
20	20.0	9.809	34.302		0.15	26.439	0.028	1489.	-0.1
22	21.9	9.810	34.302		0.17	26.439	0.031	1489.	-0.3
24	24.1	9.811	34.302		0.16	26.439	0.035	1489.	-0.3
26	26.0	9.812	34.302		0.15	26.439	0.038	1489.	-0.3
28	28.1	9.812	34.302		0.15	26.439	0.041	1489.	-0.4
30	30.0	9.811	34.302		0.15	26.439	0.044	1489.	-0.4
32	32.1	9.811	34.302		0.15	26.439	0.047	1489.	-0.4
34	33.9	9.812	34.302		0.15	26.439	0.050	1489.	-0.5
36	36.2	9.804	34.299		0.15	26.438	0.054	1489.	-0.5
38	38.0	9.806	34.300		0.15	26.438	0.057	1489.	-0.4
40	40.2	9.802	34.298		0.15	26.438	0.060	1489.	0.2
42	41.9	9.800	34.298		0.15	26.438	0.063	1489.	0.6
44	44.0	9.804	34.299		0.15	26.438	0.066	1489.	1.0
45	45.7	9.804	34.299		0.15	26.438	0.069	1489.	1.1
48	48.4	9.822	34.305		0.14	26.440	0.073	1489.	1.2
50	50.0	9.827	34.308		0.14	26.441	0.076	1489.	1.3
52	52.1	9.852	34.316		0.14	26.443	0.079	1489.	1.5
54	54.0	9.848	34.314		0.14	26.443	0.082	1489.	1.6
55	55.8	9.871	34.321		0.14	26.444	0.085	1489.	2.2
58	58.2	9.882	34.326		0.13	26.446	0.089	1490.	2.8
59	59.8	9.905	34.334		0.13	26.448	0.091	1490.	3.8
62	62.3	9.988	34.356		0.13	26.452	0.095	1490.	4.6
63	63.9	10.106	34.410		0.12	26.473	0.098	1491.	5.1
65	65.9	10.336	34.482		0.11	26.490	0.101	1491.	5.4
68	68.2	10.714	34.621		0.10	26.532	0.104	1493.	5.4
69	69.9	10.966	34.710		0.09	26.556	0.107	1494.	5.3
72	72.3	11.145	34.759		0.09	26.562	0.110	1495.	4.8
73	74.0	11.297	34.806		0.08	26.571	0.113	1495.	4.5
75	76.0	11.393	34.839		0.08	26.579	0.116	1496.	4.0
77	77.8	11.454	34.864		0.08	26.587	0.119	1496.	3.8
80	80.2	11.604	34.914		0.07	26.598	0.122	1497.	3.8
81	81.7	11.769	34.976		0.07	26.615	0.124	1497.	3.8
83	84.1	11.869	35.006		0.06	26.619	0.128	1498.	3.5
85	85.7	11.956	35.035		0.06	26.625	0.130	1498.	3.2
87	88.1	12.125	35.090		0.05	26.636	0.133	1499.	2.8
89	89.7	12.174	35.107		0.05	26.640	0.136	1499.	2.3
92	92.3	12.196	35.113		0.05	26.640	0.139	1499.	2.1
93	93.8	12.208	35.118		0.05	26.641	0.141	1499.	2.0
95	96.1	12.229	35.124		0.05	26.642	0.145	1499.	2.3
97	98.0	12.247	35.128		0.05	26.641	0.147	1499.	2.6
99	100.1	12.297	35.145		0.05	26.645	0.150	1500.	2.9

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	22	18 MAR 1984	1020	40°01.5'N	69°12.4'W	195

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
101	102.2	12.408	35.188		0.05	26.657	0.153	1500.	3.2
103	103.9	12.554	35.245		0.05	26.672	0.156	1501.	3.4
105	105.9	12.589	35.254		0.05	26.672	0.158	1501.	3.4
107	108.0	12.585	35.257		0.05	26.675	0.161	1501.	3.3
109	109.8	12.625	35.285		0.05	26.689	0.164	1501.	3.4
111	112.1	12.634	35.296		0.05	26.696	0.167	1501.	3.5
113	113.8	12.632	35.297		0.05	26.697	0.169	1501.	3.8
115	116.0	12.649	35.308		0.05	26.703	0.172	1501.	3.8
117	118.2	12.751	35.363		0.04	26.724	0.175	1502.	3.9
119	119.9	12.822	35.396		0.04	26.736	0.177	1502.	4.0
121	122.0	12.883	35.422		0.04	26.744	0.180	1502.	4.0
123	124.1	12.904	35.433		0.04	26.748	0.183	1502.	3.9
125	125.8	12.956	35.466		0.04	26.764	0.185	1503.	3.7
127	128.2	12.973	35.479		0.04	26.770	0.188	1503.	3.5
129	130.1	12.959	35.487		0.04	26.779	0.191	1503.	3.4
131	131.9	12.961	35.499		0.04	26.788	0.193	1503.	3.1
133	134.2	12.940	35.500		0.04	26.793	0.196	1503.	2.7
135	135.8	12.925	35.498		0.04	26.795	0.198	1503.	2.7
137	137.9	12.917	35.498		0.04	26.796	0.201	1503.	2.9
139	140.0	12.921	35.499		0.04	26.796	0.204	1503.	3.2
141	141.8	12.891	35.496		0.04	26.800	0.206	1503.	3.4
143	144.1	12.817	35.496		0.04	26.815	0.209	1503.	3.5
144	145.7	12.746	35.500		0.05	26.832	0.211	1502.	3.8
147	148.0	12.686	35.496		0.05	26.841	0.214	1502.	3.7
149	149.9	12.679	35.497		0.05	26.843	0.216	1502.	3.6
151	152.2	12.627	35.490		0.05	26.848	0.219	1502.	3.4
152	153.7	12.563	35.491		0.05	26.861	0.221	1502.	3.4
155	156.1	12.510	35.479		0.05	26.862	0.224	1502.	3.9
157	157.8	12.469	35.473		0.05	26.866	0.226	1502.	4.3
159	160.1	12.349	35.461		0.06	26.880	0.228	1501.	4.6
161	162.2	12.270	35.463		0.06	26.897	0.231	1501.	4.6
162	163.7	12.127	35.458		0.06	26.921	0.233	1500.	4.7
165	165.9	12.018	35.454		0.06	26.939	0.235	1500.	4.6
167	168.2	11.990	35.458		0.06	26.947	0.238	1500.	4.3
168	169.7	11.982	35.461		0.06	26.951	0.240	1500.	3.9
170	171.3	11.970	35.462		0.06	26.954	0.241	1500.	3.4
171	171.9	11.960	35.463		0.06	26.957	0.242	1500.	3.0
172	173.1	11.947	35.462		0.06	26.959	0.243	1500.	2.9
173	174.0	11.934	35.463		0.06	26.962	0.244	1500.	3.0
174	175.0	11.919	35.463		0.06	26.965	0.246	1500.	3.0
175	176.0	11.914	35.465		0.06	26.967	0.247	1500.	3.0
176	177.0	11.897	35.466		0.05	26.971	0.248	1500.	3.0
177	178.0	11.881	35.465		0.06	26.974	0.249	1500.	2.9
177	178.9	11.865	35.464		0.05	26.976	0.250	1500.	3.4
179	180.0	11.844	35.462		0.06	26.978	0.251	1500.	4.3
180	181.1	11.825	35.460		0.06	26.981	0.252	1500.	4.3
181	182.0	11.810	35.458		0.06	26.982	0.253	1500.	4.3
182	183.0	11.619	35.436		0.06	27.001	0.255	1499.	4.3
182	183.6	11.468	35.433		0.07	27.027	0.255	1499.	4.3

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	23	18 MAR 1984	1131	39°55.0'N	69°11.4'W	950

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	2.5	11.458	34.889		0.15	26.605	0.000	1495.	0.6
4	3.7	11.480	34.894		0.13	26.605	0.002	1495.	0.6
6	6.1	11.477	34.892		0.13	26.604	0.005	1495.	0.6
8	7.9	11.474	34.892		0.13	26.605	0.008	1495.	0.6
10	9.9	11.480	34.894		0.13	26.605	0.010	1495.	0.6
12	11.9	11.495	34.899		0.13	26.607	0.013	1495.	0.7
14	13.8	11.497	34.900		0.13	26.607	0.016	1495.	0.7
16	15.9	11.498	34.899		0.13	26.606	0.019	1495.	0.7
18	18.0	11.495	34.898		0.13	26.606	0.022	1495.	0.7
20	19.9	11.500	34.900		0.13	26.607	0.025	1495.	0.7
22	22.1	11.508	34.903		0.12	26.607	0.028	1495.	0.8
24	23.9	11.510	34.903		0.12	26.607	0.030	1495.	0.6
26	25.8	11.516	34.907		0.12	26.608	0.033	1495.	0.3
28	28.2	11.544	34.913		0.12	26.609	0.037	1496.	-0.5
30	29.9	11.535	34.912		0.12	26.609	0.039	1496.	-0.7
32	32.0	11.505	34.900		0.12	26.605	0.042	1496.	-0.8
34	34.2	11.497	34.898		0.12	26.605	0.045	1496.	-0.8
36	36.1	11.489	34.896		0.12	26.605	0.048	1496.	-0.7
38	38.2	11.489	34.896		0.12	26.605	0.051	1496.	-0.2
40	40.0	11.502	34.899		0.12	26.605	0.053	1496.	1.0
42	42.3	11.502	34.900		0.12	26.606	0.057	1496.	0.9
43	43.8	11.505	34.901		0.12	26.606	0.059	1496.	1.6
46	46.0	11.522	34.907		0.12	26.607	0.062	1496.	1.9
48	47.9	11.571	34.923		0.12	26.611	0.065	1496.	2.1
50	50.1	11.649	34.936		0.11	26.607	0.068	1496.	2.1
52	51.9	11.854	35.010		0.09	26.625	0.071	1497.	2.1
54	54.0	12.044	35.054		0.12	26.623	0.073	1498.	1.9
56	56.0	12.103	35.070		0.09	26.624	0.076	1498.	1.7
58	58.2	12.134	35.077		0.08	26.624	0.079	1498.	1.4
60	60.0	12.138	35.080		0.07	26.625	0.082	1498.	0.7
61	61.8	12.158	35.085		0.07	26.625	0.085	1498.	1.1
63	63.9	12.211	35.099		0.07	26.626	0.087	1499.	1.4
66	66.1	12.247	35.107		0.06	26.625	0.091	1499.	1.5
67	67.8	12.318	35.128		0.06	26.627	0.093	1499.	1.6
69	70.0	12.389	35.150		0.05	26.631	0.096	1499.	1.7
71	71.9	12.434	35.167		0.05	26.635	0.099	1500.	1.7
74	74.1	12.434	35.166		0.05	26.635	0.102	1500.	1.7
75	76.1	12.412	35.163		0.05	26.636	0.105	1500.	1.6
77	77.9	12.398	35.160		0.05	26.637	0.107	1500.	1.8
79	79.9	12.376	35.155		0.05	26.638	0.110	1500.	2.0
81	82.1	12.272	35.134		0.06	26.642	0.113	1499.	2.2
83	83.8	12.218	35.121		0.06	26.642	0.116	1499.	2.3
86	86.3	12.145	35.115		0.06	26.651	0.119	1499.	2.4
87	87.9	12.154	35.123		0.06	26.655	0.121	1499.	2.5
89	90.2	12.154	35.124		0.06	26.656	0.125	1499.	2.5
91	92.0	12.177	35.135		0.06	26.660	0.127	1499.	2.7
93	94.2	12.213	35.148		0.06	26.663	0.130	1499.	2.9
95	96.0	12.265	35.166		0.06	26.668	0.133	1499.	3.0
97	97.8	12.342	35.194		0.05	26.674	0.135	1500.	3.1
99	100.2	12.503	35.251		0.05	26.687	0.138	1500.	3.1

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	23	18 MAR 1984	1131	39°55.0'N	69°11.4'W	950

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
101	101.9	12.611	35.289		0.05	26.695	0.141	1501.	3.1
103	104.2	12.664	35.303		0.04	26.696	0.144	1501.	3.0
105	105.9	12.708	35.320		0.04	26.700	0.146	1501.	2.9
107	107.9	12.769	35.344		0.04	26.707	0.149	1502.	2.8
109	110.0	12.815	35.360		0.04	26.710	0.152	1502.	3.0
111	112.2	12.886	35.391		0.04	26.719	0.155	1502.	3.3
113	113.8	12.905	35.399		0.04	26.722	0.157	1502.	3.4
115	116.0	12.948	35.418		0.04	26.728	0.160	1502.	3.4
117	118.0	12.990	35.449		0.04	26.743	0.162	1503.	3.6
119	120.2	13.000	35.461		0.04	26.751	0.165	1503.	3.7
121	121.6	13.019	35.472		0.04	26.756	0.167	1503.	3.7
123	124.0	13.057	35.493		0.03	26.764	0.170	1503.	3.6
125	126.0	13.084	35.516		0.04	26.776	0.173	1503.	3.4
127	128.2	13.105	35.531		0.03	26.784	0.176	1503.	3.4
129	129.8	13.122	35.542		0.03	26.789	0.178	1503.	3.6
131	132.0	13.147	35.556		0.03	26.795	0.181	1504.	3.9
133	134.1	13.108	35.552		0.03	26.799	0.183	1503.	4.7
135	136.1	13.038	35.545		0.03	26.808	0.186	1503.	5.2
137	138.0	12.983	35.558		0.03	26.829	0.188	1503.	5.5
139	139.8	12.840	35.552		0.03	26.853	0.191	1503.	5.7
141	142.0	12.440	35.518		0.04	26.907	0.193	1501.	5.5
143	144.1	12.275	35.485		0.04	26.913	0.196	1501.	5.1
145	146.0	12.257	35.492		0.04	26.922	0.198	1501.	4.5
147	147.8	12.241	35.494		0.04	26.927	0.200	1501.	3.8
149	149.9	12.212	35.494		0.04	26.933	0.202	1501.	3.1
151	152.0	12.225	35.500		0.04	26.934	0.205	1501.	3.2
153	154.1	12.244	35.512		0.04	26.941	0.207	1501.	3.3
155	155.8	12.220	35.518		0.03	26.950	0.209	1501.	3.3
157	157.8	12.169	35.514		0.03	26.957	0.211	1501.	3.3
159	160.0	12.092	35.512		0.03	26.970	0.214	1500.	3.2
161	162.1	12.046	35.508		0.02	26.976	0.216	1500.	3.1
163	164.0	12.033	35.507		0.02	26.977	0.218	1500.	3.0
164	165.7	12.014	35.505		0.02	26.979	0.220	1500.	2.9
167	168.0	11.985	35.504		0.02	26.984	0.223	1500.	2.9
169	170.0	11.929	35.500		0.02	26.992	0.225	1500.	2.9
171	172.2	11.848	35.489		0.02	26.999	0.227	1500.	3.0
172	173.8	11.807	35.486		0.02	27.004	0.229	1500.	3.0
175	176.0	11.765	35.484		0.02	27.011	0.231	1499.	3.1
177	178.2	11.725	35.478		0.02	27.013	0.234	1499.	3.0
178	179.7	11.696	35.473		0.02	27.015	0.235	1499.	2.8
180	181.9	11.610	35.467		0.02	27.026	0.238	1499.	2.7
183	184.0	11.523	35.456		0.02	27.034	0.240	1499.	2.8
185	186.3	11.515	35.453		0.02	27.033	0.243	1499.	3.1
186	187.8	11.508	35.452		0.02	27.034	0.244	1499.	3.3
188	190.0	11.467	35.450		0.02	27.040	0.246	1499.	3.5
190	192.0	11.358	35.439		0.02	27.052	0.249	1498.	3.7
193	194.2	11.161	35.408		0.02	27.065	0.251	1498.	3.8
194	195.9	11.022	35.392		0.02	27.078	0.253	1497.	3.8
196	198.1	10.930	35.382		0.02	27.087	0.255	1497.	3.7
198	200.0	10.899	35.376		0.02	27.087	0.257	1497.	3.5

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	23	18 MAR 1984	1131	39°55.0'N	69°11.4'W	950

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
200	201.9	10.834	35.371		0.02	27.095	0.259	1497.	3.6
202	204.0	10.741	35.361		0.02	27.104	0.261	1496.	3.5
204	206.1	10.684	35.352		0.02	27.108	0.263	1496.	3.5
206	207.7	10.575	35.335		0.02	27.114	0.264	1496.	3.6
208	210.0	10.356	35.315		0.02	27.137	0.267	1495.	3.6
210	212.0	10.311	35.305		0.02	27.137	0.269	1495.	3.7
213	214.4	10.251	35.294		0.02	27.138	0.271	1495.	3.7
214	215.6	10.158	35.282		0.01	27.145	0.272	1494.	3.5
216	218.0	10.044	35.278		0.02	27.162	0.274	1494.	3.2
218	220.0	9.890	35.258		0.02	27.173	0.276	1493.	3.2
220	222.3	9.853	35.247		0.01	27.171	0.278	1493.	3.0
222	223.9	9.830	35.245		0.01	27.173	0.280	1493.	2.8
224	226.0	9.750	35.235		0.01	27.178	0.282	1493.	2.6
226	228.0	9.711	35.230		0.01	27.181	0.284	1493.	2.6
228	229.9	9.643	35.220		0.01	27.185	0.285	1493.	2.9
230	232.0	9.565	35.213		0.01	27.192	0.287	1492.	2.9
232	234.1	9.507	35.207		0.01	27.197	0.289	1492.	2.9
234	235.6	9.464	35.204		0.01	27.202	0.291	1492.	3.1
236	238.0	9.406	35.199		0.01	27.208	0.293	1492.	3.2
238	240.1	9.348	35.193		0.01	27.213	0.295	1492.	3.2
240	241.8	9.288	35.182		0.01	27.214	0.296	1491.	3.2
242	244.0	9.209	35.185		0.01	27.229	0.298	1491.	3.2
244	246.1	9.102	35.171		0.01	27.236	0.300	1491.	3.0
246	248.2	9.056	35.167		0.01	27.240	0.302	1491.	2.8
248	249.9	9.019	35.166		0.01	27.246	0.303	1491.	2.6
250	252.0	9.008	35.165		0.01	27.247	0.305	1491.	2.1
252	254.0	9.002	35.165		0.01	27.247	0.307	1491.	1.8
254	255.9	8.985	35.164		0.01	27.249	0.308	1491.	1.9
256	258.0	8.971	35.163		0.01	27.251	0.310	1491.	2.1
258	260.2	8.966	35.163		0.01	27.251	0.312	1491.	2.4
260	261.8	8.957	35.162		0.01	27.252	0.314	1491.	2.6
262	263.9	8.856	35.155		0.01	27.263	0.315	1490.	2.8
264	266.1	8.785	35.150		0.01	27.270	0.317	1490.	2.8
266	268.1	8.751	35.147		0.01	27.273	0.319	1490.	2.8
268	270.2	8.711	35.145		0.01	27.278	0.321	1490.	2.6
270	271.8	8.688	35.144		0.01	27.281	0.322	1490.	2.2
272	273.9	8.666	35.143		0.01	27.284	0.324	1490.	1.9
274	276.1	8.652	35.142		0.01	27.285	0.326	1490.	1.8
276	278.0	8.642	35.141		0.01	27.286	0.327	1490.	1.6
278	279.9	8.637	35.141		0.01	27.287	0.329	1490.	1.6
280	282.0	8.620	35.141		0.01	27.289	0.330	1490.	1.6
282	284.3	8.599	35.138		0.01	27.291	0.332	1490.	1.7
283	285.7	8.589	35.138		0.01	27.292	0.334	1490.	1.8
286	288.2	8.560	35.136		0.01	27.295	0.336	1489.	2.1
287	289.8	8.548	35.136		0.01	27.297	0.337	1489.	2.2
290	292.0	8.537	35.135		0.01	27.298	0.339	1489.	2.4
291	293.7	8.492	35.130		0.01	27.301	0.340	1489.	2.7
294	296.0	8.422	35.128		0.01	27.310	0.342	1489.	2.8
296	298.3	8.387	35.124		0.01	27.313	0.344	1489.	3.0
297	299.9	8.336	35.122		0.01	27.319	0.345	1489.	3.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	23	18 MAR 1984	1131	39°55.0'N	69°11.4'W	950

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
300	302.1	8.274	35.120		0.01	27.327	0.347	1489.	3.0
302	304.1	8.244	35.118		0.01	27.330	0.348	1489.	2.9
303	306.0	8.170	35.112		0.01	27.337	0.350	1488.	2.9
305	308.1	8.147	35.111		0.01	27.339	0.352	1488.	2.8
307	310.0	8.108	35.109		0.01	27.343	0.353	1488.	2.9
309	311.8	8.053	35.104		0.01	27.348	0.354	1488.	3.2
311	314.0	8.013	35.105		0.01	27.355	0.356	1488.	3.4
314	316.3	7.981	35.103		0.01	27.358	0.358	1488.	3.5
315	318.0	7.909	35.105		0.02	27.370	0.359	1487.	3.5
317	320.1	7.791	35.100		0.02	27.384	0.361	1487.	3.4
320	322.3	7.714	35.092		0.02	27.389	0.362	1487.	3.3
321	323.8	7.700	35.093		0.02	27.392	0.363	1487.	3.3
323	326.0	7.659	35.093		0.02	27.398	0.365	1487.	3.2
325	328.2	7.629	35.091		0.02	27.401	0.367	1487.	3.2
327	329.7	7.600	35.091		0.02	27.405	0.368	1486.	3.5
329	331.9	7.515	35.088		0.02	27.415	0.369	1486.	3.7
331	334.1	7.413	35.083		0.02	27.426	0.371	1486.	3.8
333	335.8	7.346	35.076		0.01	27.430	0.372	1486.	3.7
335	338.1	7.164	35.071		0.01	27.452	0.374	1485.	3.5
337	340.1	7.108	35.066		0.01	27.456	0.375	1485.	3.2
339	341.8	7.100	35.066		0.01	27.457	0.376	1485.	2.9
341	344.0	7.089	35.066		0.01	27.458	0.378	1485.	2.6
343	346.2	7.054	35.063		0.01	27.461	0.379	1485.	2.2
345	347.8	7.036	35.063		0.01	27.463	0.380	1485.	2.3
347	350.0	6.990	35.061		0.01	27.468	0.382	1484.	2.4
349	352.1	6.940	35.057		0.01	27.472	0.383	1484.	2.4
351	354.1	6.901	35.054		0.01	27.475	0.384	1484.	2.3
353	356.0	6.871	35.052		0.01	27.478	0.386	1484.	2.3
355	358.0	6.827	35.050		0.01	27.482	0.387	1484.	2.3
357	360.0	6.820	35.049		0.01	27.482	0.388	1484.	2.3
359	362.2	6.795	35.047		0.01	27.485	0.390	1484.	2.3
361	364.0	6.736	35.044		0.01	27.490	0.391	1484.	2.3
363	366.0	6.675	35.040		0.01	27.495	0.392	1483.	2.2
365	368.2	6.649	35.037		0.01	27.497	0.393	1483.	2.1
367	369.8	6.629	35.037		0.01	27.499	0.394	1483.	1.9
369	372.1	6.617	35.036		0.01	27.500	0.396	1483.	1.6
371	373.9	6.606	35.036		0.01	27.501	0.397	1483.	1.3
373	376.1	6.599	35.035		0.01	27.502	0.398	1483.	1.3
375	378.3	6.590	35.034		0.01	27.502	0.400	1483.	1.4
376	379.6	6.589	35.034		0.01	27.503	0.401	1483.	1.6
379	382.0	6.579	35.034		0.01	27.503	0.402	1483.	1.9
381	384.0	6.558	35.033		0.02	27.506	0.403	1483.	2.2
383	386.2	6.478	35.024		0.02	27.510	0.405	1483.	2.3
385	388.0	6.433	35.022		0.02	27.513	0.406	1483.	2.4
387	389.9	6.382	35.021		0.02	27.519	0.407	1483.	2.4
389	392.0	6.366	35.021		0.02	27.522	0.408	1483.	2.3
391	394.0	6.345	35.019		0.02	27.523	0.410	1483.	2.2
393	395.9	6.325	35.019		0.02	27.526	0.411	1483.	2.1
395	398.1	6.291	35.018		0.02	27.529	0.412	1482.	2.0
396	399.9	6.277	35.015		0.02	27.529	0.413	1482.	2.1

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	23	18 MAR 1984	1131	39°55.0'N	69°11.4'W	950

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
399	402.0	6.227	35.013		0.02	27.534	0.414	1482.	2.2
401	404.1	6.198	35.011		0.02	27.536	0.416	1482.	2.2
403	406.2	6.175	35.010		0.02	27.538	0.417	1482.	2.2
405	408.0	6.126	35.005		0.02	27.541	0.418	1482.	2.4
406	409.8	6.086	35.005		0.02	27.546	0.419	1482.	2.5
408	412.0	6.060	35.004		0.02	27.548	0.420	1482.	2.6
411	414.2	6.032	35.002		0.02	27.550	0.422	1482.	2.6
413	416.2	5.947	34.995		0.02	27.556	0.423	1481.	2.6
414	417.9	5.883	34.993		0.02	27.562	0.424	1481.	2.5
416	419.9	5.851	34.993		0.02	27.567	0.425	1481.	2.3
418	422.0	5.834	34.993		0.02	27.569	0.426	1481.	2.0
420	423.9	5.830	34.993		0.02	27.569	0.427	1481.	1.6
422	426.0	5.825	34.993		0.02	27.570	0.428	1481.	1.3
425	428.2	5.831	34.994		0.02	27.570	0.430	1481.	1.1
426	429.7	5.831	34.994		0.02	27.570	0.430	1481.	1.1
428	432.1	5.815	34.993		0.02	27.571	0.432	1481.	1.1
430	433.9	5.790	34.990		0.02	27.572	0.433	1481.	1.2
432	436.0	5.782	34.990		0.02	27.573	0.434	1481.	1.2
434	438.1	5.774	34.990		0.02	27.574	0.435	1481.	1.2
436	439.9	5.773	34.990		0.02	27.574	0.436	1481.	1.0
438	442.1	5.759	34.990		0.02	27.575	0.437	1481.	0.9
440	444.1	5.755	34.989		0.02	27.576	0.439	1481.	0.8
442	445.8	5.757	34.990		0.02	27.576	0.440	1481.	0.7
444	448.0	5.751	34.988		0.02	27.575	0.441	1481.	0.7
446	450.0	5.748	34.989		0.02	27.576	0.442	1481.	0.5
448	452.3	5.747	34.989		0.02	27.576	0.443	1481.	0.5
450	453.7	5.747	34.989		0.02	27.576	0.444	1481.	0.6
452	456.1	5.742	34.988		0.02	27.576	0.445	1481.	0.8
454	458.1	5.742	34.988		0.02	27.576	0.446	1481.	1.0
456	460.0	5.744	34.988		0.02	27.576	0.448	1481.	1.3
458	462.0	5.730	34.987		0.02	27.577	0.449	1481.	1.5
460	464.0	5.704	34.985		0.02	27.579	0.450	1481.	1.3
462	466.2	5.679	34.984		0.02	27.581	0.451	1481.	1.6
464	468.0	5.644	34.983		0.02	27.584	0.452	1481.	1.9
466	469.8	5.640	34.984		0.02	27.586	0.453	1481.	2.1
468	472.0	5.602	34.968		0.02	27.578	0.454	1481.	2.2
470	474.1	5.547	34.974		0.02	27.589	0.455	1481.	2.2
472	475.7	5.525	34.979		0.02	27.596	0.456	1481.	2.2
474	478.0	5.504	34.978		0.02	27.598	0.458	1481.	2.1
476	480.1	5.481	34.977		0.01	27.599	0.459	1481.	2.0
478	481.9	5.474	34.976		0.01	27.600	0.460	1481.	1.5
480	484.1	5.459	34.975		0.01	27.601	0.461	1480.	1.1
482	486.0	5.464	34.976		0.01	27.601	0.462	1481.	1.0
484	487.9	5.455	34.975		0.01	27.601	0.463	1481.	0.9
486	490.0	5.456	34.976		0.01	27.602	0.464	1481.	0.9
488	492.1	5.447	34.975		0.01	27.602	0.465	1481.	0.8
490	494.0	5.434	34.973		0.01	27.602	0.466	1481.	0.9
492	496.2	5.427	34.973		0.01	27.603	0.467	1481.	0.9
493	497.7	5.426	34.973		0.01	27.604	0.468	1481.	1.1
496	499.9	5.427	34.973		0.01	27.603	0.469	1481.	1.4

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	23	18 MAR 1984	1131	39°55.0'N	69°11.4'W	950

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
515	519.9	5.069	34.965		0.01	27.640	0.480	1479.	2.3
535	540.3	4.933	34.964		0.02	27.655	0.490	1479.	0.9

STA 24 DAY: 18 TIME: 1223

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
0.0	11.6	118.2	13.1	214.8	10.2	326.5	7.5	447.8	5.4
1.9	11.7	121.1	13.1	214.8	10.1	330.2	7.5	451.5	5.4
3.9	11.7	123.0	13.1	216.7	10.1	332.1	7.4	453.3	5.4
5.8	11.7	125.9	13.1	218.6	10.0	333.0	7.3	455.2	5.4
7.8	11.7	127.8	13.1	219.6	9.9	334.9	7.3	457.1	5.4
10.7	11.7	129.7	13.0	221.5	9.9	335.9	7.1	458.9	5.4
12.7	11.7	131.6	12.9	222.4	9.8	338.7	7.1	461.7	5.4
15.6	11.7	132.6	13.0	225.3	9.8	341.5	7.1	464.5	5.4
18.5	11.8	134.5	12.9	229.1	9.7	344.3	7.0	466.3	5.4
21.4	11.8	135.5	12.8	232.0	9.6	346.2	7.0	468.2	5.4
25.3	11.8	136.4	12.7	232.0	9.5	347.1	6.9	470.9	5.4
28.2	11.8	137.4	12.5	232.9	9.4	349.0	6.9	471.8	5.4
32.1	11.8	139.3	12.5	234.8	9.4	349.0	6.8	474.6	5.4
36.0	11.9	140.3	12.4	235.8	9.3	349.9	6.8	478.3	5.4
38.9	12.0	143.1	12.3	237.7	9.3	352.7	6.7	479.2	5.4
42.8	12.0	146.0	12.3	239.6	9.3	355.6	6.7	482.0	5.4
44.7	12.0	147.0	12.3	241.5	9.2	357.4	6.6	483.9	5.4
46.7	12.0	149.9	12.2	244.3	9.2	360.2	6.6	485.7	5.4
48.6	12.2	151.8	12.2	247.1	9.2	362.1	6.6	487.5	5.4
52.5	12.3	154.7	12.2	248.1	9.2	364.9	6.6	489.4	5.4
54.4	12.4	157.5	12.2	250.9	9.2	367.7	6.5	491.2	5.3
56.4	12.5	159.4	12.1	252.8	9.1	369.6	6.5	493.1	5.3
59.3	12.5	162.3	12.1	255.7	9.1	373.3	6.5	494.9	5.3
62.2	12.5	165.2	12.1	258.5	9.1	373.3	6.5	496.8	5.3
65.1	12.5	167.1	12.0	261.4	9.0	375.2	6.5	497.7	5.3
67.0	12.4	169.0	11.9	262.3	9.0	378.9	6.4	507.8	5.1
69.0	12.5	169.0	11.8	264.2	8.8	381.7	6.4	517.9	5.0
70.9	12.5	170.9	11.8	266.1	8.8	384.5	6.3	528.9	4.9
73.8	12.5	172.9	11.8	268.9	8.8	387.3	6.2	539.0	4.9
75.7	12.5	173.8	11.6	270.8	8.7	389.2	6.2	550.0	4.9
77.7	12.4	174.8	11.5	273.7	8.7	390.1	6.1	560.1	4.9
79.6	12.4	176.7	11.4	276.5	8.6	392.9	6.1	569.2	4.9
82.5	12.3	178.6	11.3	278.4	8.6	396.7	6.1	579.3	4.9
84.4	12.2	180.5	11.2	283.1	8.5	399.5	6.0	589.3	4.8
85.4	12.3	181.5	11.3	285.0	8.4	401.3	6.0	600.2	4.8
87.3	12.3	183.4	11.2	287.8	8.3	405.1	5.9	609.3	4.8
89.2	12.4	185.3	11.1	288.8	8.2	406.9	5.9	619.3	4.8
91.2	12.4	186.2	11.0	290.7	8.1	408.8	5.8	629.3	4.8
92.1	12.5	187.2	10.9	293.5	8.1	413.4	5.8	639.2	4.7
95.0	12.5	190.1	10.8	297.3	8.0	418.1	5.7	650.1	4.8
97.9	12.5	191.0	10.6	301.0	8.0	421.8	5.7	659.1	4.8
99.9	12.7	193.9	10.6	303.9	8.0	425.5	5.7	670.0	4.7
100.8	12.7	196.7	10.6	306.7	8.0	427.4	5.7	679.0	4.7
103.7	12.7	199.6	10.5	309.5	7.9	429.2	5.7	689.8	4.7
105.6	12.9	201.5	10.5	311.4	7.8	433.0	5.6	699.7	4.6
106.6	12.9	203.4	10.5	313.3	7.7	433.9	5.5	709.5	4.6
108.5	13.0	206.3	10.5	317.1	7.6	437.6	5.5	719.4	4.6
110.5	13.1	209.1	10.4	320.8	7.6	440.4	5.5	729.2	4.5
112.4	13.1	212.0	10.4	323.6	7.5	443.2	5.5	740.0	4.6
115.3	13.1	212.9	10.3	326.5	7.5	445.0	5.4	748.9	4.5

STA 25 DAY: 18 TIME: 1352

DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)	DEPTH (m)	TEMP (°C)
0.0	10.6	104.7	12.0	214.8	11.4	310.5	7.2	438.5	5.8
1.0	10.6	106.6	12.0	217.7	11.3	312.4	7.2	441.3	5.8
2.9	10.6	109.5	12.1	219.6	11.2	316.1	7.2	443.2	5.8
5.8	10.6	111.4	12.1	222.4	11.1	319.9	7.1	445.0	5.7
8.8	10.6	113.4	12.0	223.4	11.0	322.7	7.1	446.9	5.7
9.7	10.6	116.2	12.1	226.3	10.9	325.5	7.1	449.6	5.6
12.7	10.6	117.2	12.1	227.2	10.8	329.3	7.0	452.4	5.7
14.6	10.6	120.1	12.1	228.2	10.7	330.2	6.9	456.1	5.7
16.6	10.6	123.0	12.1	231.0	10.6	332.1	6.9	458.9	5.6
18.5	10.6	125.9	12.1	233.9	10.5	333.0	6.8	460.8	5.6
21.4	10.6	127.8	12.1	237.7	10.5	335.9	6.8	463.5	5.6
23.4	10.6	130.7	12.1	239.6	10.5	336.8	6.6	467.2	5.6
25.3	10.6	131.6	12.2	241.5	10.5	339.6	6.6	470.0	5.6
27.3	10.6	134.5	12.2	242.4	10.7	341.5	6.6	471.8	5.6
29.2	10.6	137.4	12.3	243.4	10.8	344.3	6.5	474.6	5.5
31.1	10.6	139.3	12.4	245.2	10.6	347.1	6.5	475.5	5.3
32.1	10.7	141.2	12.5	247.1	10.4	348.1	6.5		
34.1	10.7	143.1	12.5	250.0	10.1	352.7	6.4		
37.0	10.7	144.1	12.7	251.9	9.9	355.6	6.4		
38.9	10.7	146.0	12.7	253.8	9.5	356.5	6.3		
40.9	10.8	149.9	12.8	254.7	9.4	360.2	6.3		
41.8	10.9	151.8	12.8	256.6	9.4	363.0	6.3		
43.8	10.9	155.6	12.9	257.6	9.3	367.7	6.3		
46.7	11.0	158.5	12.9	258.5	9.1	370.5	6.2		
48.6	11.0	159.4	13.0	261.4	9.1	373.3	6.2		
51.5	11.1	162.3	13.0	262.3	9.0	375.2	6.2		
54.4	11.2	165.2	13.0	263.3	9.0	378.0	6.1		
57.3	11.2	168.1	13.0	265.1	8.9	380.8	6.1		
59.3	11.3	170.0	12.9	266.1	8.8	382.7	6.1		
61.2	11.4	172.9	12.9	268.9	8.7	385.5	6.1		
63.1	11.4	175.7	12.8	269.9	8.7	388.3	6.0		
67.0	11.5	176.7	12.8	272.7	8.6	390.1	6.0		
69.0	11.5	178.6	13.0	275.6	8.5	394.8	6.0		
70.9	11.5	179.5	12.7	275.6	8.4	397.6	6.0		
73.8	11.5	182.4	12.5	278.4	8.4	399.5	5.9		
75.7	11.6	184.3	12.4	279.3	8.2	403.2	6.0		
77.7	11.6	186.2	12.3	282.2	8.2	406.0	5.9		
77.7	11.8	188.1	12.2	283.1	8.1	407.8	5.9		
79.6	11.8	191.0	12.0	285.0	7.9	409.7	5.9		
80.6	11.9	192.9	12.0	287.8	7.9	412.5	5.9		
82.5	11.9	194.8	12.0	289.7	7.7	414.4	5.9		
84.4	12.0	197.7	12.0	290.7	7.6	417.2	5.9		
87.3	12.0	199.6	11.9	291.6	7.5	419.9	5.9		
89.2	12.1	201.5	11.9	293.5	7.4	421.8	5.9		
91.2	12.1	203.4	11.7	295.4	7.4	424.6	5.9		
93.1	12.0	204.4	11.6	297.3	7.3	427.4	5.8		
94.1	12.0	207.2	11.5	300.1	7.3	430.2	5.8		
95.0	12.0	210.1	11.5	302.9	7.3	432.0	5.8		
97.9	12.0	212.9	11.5	304.8	7.3	433.9	5.8		
99.9	12.0	214.8	11.5	307.6	7.2	435.7	5.8		

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	28	18 MAR 1984	1800	39°48.3'N	70°04.6'W	1200

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
5	4.8	12.120	35.106		0.09	26.649	0.000	1497.	-0.6
6	5.9	12.130	35.107		0.09	26.648	0.002	1497.	-0.6
8	8.0	12.133	35.109		0.09	26.649	0.004	1498.	-0.6
10	10.0	12.142	35.109		0.09	26.647	0.007	1498.	-0.6
12	12.0	12.137	35.108		0.09	26.647	0.010	1498.	-0.6
14	13.9	12.131	35.107		0.09	26.647	0.013	1498.	-0.5
16	16.0	12.123	35.104		0.09	26.647	0.015	1498.	-0.5
18	18.3	12.122	35.104		0.09	26.647	0.019	1498.	-0.4
20	20.0	12.121	35.103		0.09	26.647	0.021	1498.	-0.3
22	21.7	12.127	35.104		0.09	26.646	0.023	1498.	-0.2
24	24.4	12.136	35.107		0.09	26.647	0.027	1498.	0.2
26	25.7	12.133	35.106		0.09	26.646	0.029	1498.	0.2
28	27.9	12.132	35.106		0.09	26.647	0.032	1498.	0.1
30	30.1	12.130	35.106		0.09	26.647	0.035	1498.	-0.3
32	32.0	12.128	35.105		0.09	26.646	0.038	1498.	-0.3
34	34.1	12.128	35.104		0.09	26.646	0.041	1498.	-0.4
36	35.9	12.131	35.105		0.09	26.646	0.043	1498.	-0.4
38	38.0	12.140	35.107		0.09	26.646	0.046	1498.	-0.2
40	40.2	12.138	35.106		0.09	26.646	0.049	1498.	0.1
42	42.0	12.137	35.106		0.09	26.646	0.052	1498.	-0.1
44	43.9	12.134	35.106		0.09	26.646	0.054	1498.	0.2
46	46.0	12.134	35.106		0.09	26.646	0.057	1498.	0.3
48	48.0	12.136	35.106		0.09	26.646	0.060	1498.	0.2
50	50.1	12.139	35.106		0.09	26.645	0.063	1498.	0.2
52	52.1	12.140	35.107		0.09	26.646	0.066	1498.	0.0
54	54.1	12.138	35.106		0.09	26.646	0.069	1498.	0.1
55	55.8	12.140	35.107		0.08	26.646	0.071	1498.	0.2
57	57.9	12.141	35.107		0.09	26.646	0.074	1498.	0.1
60	60.0	12.138	35.106		0.09	26.645	0.077	1498.	-0.2
61	61.9	12.137	35.106		0.09	26.646	0.079	1498.	-0.3
63	63.9	12.142	35.107		0.09	26.645	0.082	1498.	-0.3
65	66.0	12.141	35.106		0.09	26.645	0.085	1499.	-0.2
68	68.1	12.136	35.105		0.09	26.645	0.088	1499.	0.7
69	69.7	12.138	35.105		0.09	26.645	0.090	1499.	1.1
71	72.0	12.140	35.106		0.09	26.645	0.094	1499.	1.6
74	74.3	12.139	35.106		0.09	26.645	0.097	1499.	2.1
75	75.9	12.140	35.113		0.09	26.650	0.099	1499.	2.4
77	78.1	12.164	35.122		0.08	26.653	0.102	1499.	2.5
79	79.8	12.273	35.161		0.07	26.662	0.105	1499.	2.4
81	82.0	12.330	35.183		0.07	26.668	0.108	1500.	2.4
83	84.0	12.364	35.195		0.07	26.671	0.110	1500.	2.5
85	86.1	12.394	35.201		0.06	26.670	0.113	1500.	2.5
87	88.2	12.400	35.202		0.06	26.669	0.116	1500.	2.5
89	89.7	12.449	35.224		0.06	26.676	0.118	1500.	2.6
91	91.9	12.557	35.269		0.06	26.691	0.121	1501.	2.7
93	94.0	12.713	35.308		0.05	26.690	0.124	1501.	2.8
95	95.8	12.799	35.337		0.05	26.695	0.127	1501.	3.3
97	97.9	12.834	35.353		0.05	26.700	0.129	1502.	3.0
99	100.1	12.857	35.360		0.05	26.701	0.132	1502.	2.7
101	101.7	12.848	35.364		0.04	26.706	0.135	1502.	2.6

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	28	18 MAR 1984	1800	39°48.3'N	70°04.6'W	1200

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
103	104.1	12.798	35.402		0.04	26.746	0.138	1502.	2.6
105	106.3	12.857	35.374		0.04	26.712	0.141	1502.	3.0
107	107.9	12.850	35.375		0.04	26.715	0.143	1502.	3.4
109	110.0	12.917	35.403		0.04	26.722	0.146	1502.	3.9
111	112.2	12.998	35.438		0.03	26.734	0.149	1503.	4.3
113	113.7	13.013	35.477		0.03	26.761	0.151	1503.	5.1
115	116.1	13.081	35.511		0.02	26.773	0.154	1503.	5.4
117	118.1	13.106	35.556		0.02	26.803	0.156	1503.	5.5
119	120.1	13.101	35.570		0.02	26.815	0.159	1503.	5.3
121	121.7	13.064	35.586		0.02	26.835	0.161	1503.	4.8
123	124.0	12.995	35.596		0.02	26.856	0.164	1503.	4.5
125	126.0	12.947	35.598		0.02	26.868	0.166	1503.	4.2
127	128.0	12.928	35.595		0.02	26.869	0.168	1503.	4.0
129	130.3	12.896	35.581		0.02	26.865	0.171	1503.	3.6
131	131.8	12.792	35.581		0.02	26.886	0.173	1502.	4.2
133	134.0	12.726	35.578		0.02	26.896	0.176	1502.	4.7
135	136.0	12.692	35.577		0.02	26.902	0.178	1502.	5.0
137	138.0	12.617	35.562		0.02	26.906	0.180	1502.	5.2
139	140.0	12.256	35.551		0.02	26.968	0.183	1501.	5.0
141	142.1	12.204	35.542		0.01	26.972	0.185	1501.	4.9
143	144.0	12.143	35.531		0.01	26.975	0.187	1500.	4.6
145	145.9	12.010	35.519		0.01	26.991	0.189	1500.	4.1
147	148.0	11.932	35.511		0.01	27.000	0.191	1500.	3.4
149	150.1	11.913	35.508		0.01	27.001	0.194	1500.	3.4
151	151.7	11.863	35.501		0.01	27.006	0.195	1499.	3.3
153	154.0	11.706	35.472		0.01	27.013	0.198	1499.	3.1
155	156.0	11.611	35.467		0.02	27.026	0.200	1499.	3.0
157	158.0	11.584	35.460		0.01	27.026	0.202	1499.	3.0
159	160.1	11.534	35.457		0.01	27.033	0.204	1498.	2.9
161	162.1	11.509	35.452		0.01	27.034	0.207	1498.	2.7
163	164.2	11.460	35.451		0.01	27.043	0.209	1498.	2.4
164	165.8	11.436	35.449		0.01	27.045	0.210	1498.	2.2
167	168.0	11.393	35.442		0.01	27.048	0.213	1498.	1.9
169	170.0	11.379	35.440		0.01	27.049	0.215	1498.	1.7
171	172.1	11.371	35.439		0.01	27.050	0.217	1498.	1.3
173	174.0	11.372	35.439		0.01	27.050	0.219	1498.	1.1
175	176.1	11.367	35.438		0.01	27.050	0.221	1498.	0.9
177	178.2	11.339	35.436		0.01	27.053	0.223	1498.	0.8
178	179.7	11.339	35.433		0.01	27.051	0.225	1498.	1.0
181	182.0	11.331	35.432		0.01	27.052	0.227	1498.	1.1
183	184.0	11.330	35.431		0.01	27.051	0.229	1498.	1.2
185	186.1	11.328	35.431		0.01	27.051	0.232	1498.	1.2
187	188.1	11.294	35.429		0.01	27.056	0.234	1498.	1.5
188	189.9	11.288	35.427		0.01	27.056	0.235	1498.	1.6
190	191.9	11.275	35.426		0.01	27.057	0.238	1498.	1.5
192	194.0	11.246	35.420		0.01	27.058	0.240	1498.	1.7
194	196.0	11.201	35.415		0.01	27.063	0.242	1498.	1.7
196	198.0	11.181	35.411		0.01	27.063	0.244	1498.	2.7
198	200.0	11.162	35.402		0.01	27.059	0.246	1498.	3.3
200	202.0	11.066	35.393		0.01	27.070	0.248	1497.	3.7

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	28	18 MAR 1984	1800	39°48.3'N	70°04.6'W	1200

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
203	204.3	10.901	35.352		0.01	27.068	0.250	1497.	3.9
204	205.8	10.631	35.344		0.01	27.111	0.252	1496.	4.0
206	207.9	10.549	35.330		0.01	27.114	0.254	1496.	4.0
208	210.0	10.492	35.322		0.01	27.118	0.256	1495.	3.8
210	212.0	10.434	35.316		0.01	27.124	0.258	1495.	3.6
212	214.0	10.402	35.314		0.01	27.128	0.260	1495.	3.1
214	216.1	10.365	35.311		0.01	27.132	0.262	1495.	3.2
216	218.1	10.249	35.299		0.01	27.143	0.264	1495.	3.4
218	219.9	10.129	35.281		0.01	27.150	0.266	1494.	3.7
220	222.0	10.062	35.272		0.01	27.154	0.268	1494.	3.7
222	224.0	9.942	35.254		0.01	27.161	0.270	1494.	3.7
224	226.0	9.761	35.238		0.01	27.179	0.272	1493.	3.7
226	228.0	9.684	35.234		0.01	27.189	0.273	1493.	3.6
228	230.0	9.650	35.228		0.01	27.190	0.275	1493.	3.4
230	232.0	9.573	35.213		0.01	27.191	0.277	1492.	3.2
232	234.0	9.449	35.205		0.01	27.206	0.279	1492.	2.8
234	236.0	9.431	35.205		0.01	27.208	0.281	1492.	2.6
236	238.0	9.402	35.201		0.01	27.210	0.282	1492.	2.5
238	240.1	9.366	35.199		0.00	27.215	0.284	1492.	2.2
240	242.0	9.342	35.197		0.01	27.217	0.286	1492.	1.8
242	244.1	9.330	35.196		0.00	27.219	0.288	1492.	1.8
244	245.7	9.313	35.192		0.00	27.218	0.289	1492.	1.9
246	248.0	9.291	35.188		0.01	27.218	0.291	1492.	1.9
248	250.0	9.241	35.181		0.01	27.221	0.293	1491.	1.9
250	251.9	9.207	35.182		0.01	27.227	0.295	1491.	2.0
252	253.9	9.193	35.181		0.00	27.229	0.297	1491.	1.9
254	255.9	9.181	35.181		0.00	27.231	0.298	1491.	1.9
256	258.0	9.172	35.181		0.00	27.232	0.300	1491.	2.0
258	260.1	9.154	35.181		0.00	27.235	0.302	1491.	2.2
260	261.9	9.136	35.171		0.00	27.231	0.304	1491.	2.5
262	264.0	9.058	35.165		0.00	27.239	0.305	1491.	2.9
264	266.1	8.997	35.164		0.00	27.247	0.307	1491.	3.2
266	268.1	8.931	35.156		0.00	27.252	0.309	1491.	3.3
268	270.1	8.849	35.150		0.00	27.260	0.311	1490.	3.4
270	272.0	8.766	35.150		0.00	27.274	0.312	1490.	3.2
272	274.0	8.732	35.148		0.00	27.277	0.314	1490.	2.9
274	276.1	8.709	35.147		0.00	27.281	0.316	1490.	2.5
276	278.3	8.684	35.147		0.00	27.284	0.318	1490.	2.1
277	279.7	8.669	35.146		0.00	27.285	0.319	1490.	1.7
280	282.0	8.661	35.142		0.01	27.284	0.321	1490.	2.2
282	284.1	8.646	35.139		0.01	27.284	0.322	1490.	2.7
284	286.1	8.626	35.137		0.01	27.286	0.324	1490.	2.9
286	288.1	8.561	35.129		0.01	27.289	0.326	1489.	3.1
288	290.3	8.392	35.127		0.01	27.314	0.328	1489.	3.3
289	291.7	8.347	35.124		0.01	27.319	0.329	1489.	3.3
292	294.0	8.319	35.119		0.01	27.319	0.331	1489.	3.1
293	296.0	8.285	35.118		0.01	27.324	0.332	1489.	2.9
295	298.0	8.250	35.115		0.01	27.326	0.334	1488.	2.7
298	300.0	8.210	35.113		0.01	27.331	0.335	1488.	2.8
300	302.1	8.174	35.107		0.00	27.332	0.337	1488.	2.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	28	18 MAR 1984	1800	39°48.3'N	70°04.6'W	1200

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
301	303.9	8.073	35.103		0.00	27.344	0.338	1488.	2.6
303	306.0	8.035	35.105		0.00	27.352	0.340	1488.	2.4
305	308.0	8.032	35.105		0.00	27.352	0.342	1488.	2.1
307	310.0	8.030	35.105		0.00	27.352	0.343	1488.	1.7
309	312.0	8.027	35.104		0.00	27.352	0.345	1488.	1.0
311	314.1	8.020	35.101		0.00	27.351	0.346	1488.	1.2
313	315.9	8.015	35.103		0.00	27.353	0.348	1488.	1.4
315	318.0	8.008	35.101		0.00	27.352	0.349	1488.	1.8
317	320.1	7.996	35.098		0.00	27.352	0.351	1488.	2.2
319	322.1	7.964	35.107		0.00	27.363	0.352	1488.	2.7
321	323.9	7.919	35.094		0.00	27.360	0.354	1488.	3.0
323	325.9	7.855	35.091		0.00	27.367	0.355	1487.	3.3
325	328.0	7.782	35.085		0.00	27.373	0.357	1487.	3.3
327	330.0	7.692	35.092		0.00	27.392	0.358	1487.	3.2
329	332.1	7.676	35.091		0.00	27.394	0.360	1487.	3.1
331	334.0	7.643	35.094		0.00	27.401	0.361	1487.	2.7
333	336.1	7.643	35.093		0.00	27.400	0.363	1487.	2.3
335	337.8	7.633	35.093		0.00	27.402	0.364	1487.	1.8
337	340.0	7.619	35.092		0.00	27.403	0.366	1487.	1.7
339	342.0	7.608	35.091		0.00	27.404	0.367	1487.	1.6
341	344.0	7.593	35.090		0.00	27.405	0.369	1487.	1.7
343	346.0	7.569	35.092		0.00	27.410	0.370	1487.	1.8
345	348.0	7.563	35.090		0.00	27.410	0.371	1487.	1.9
347	350.0	7.546	35.089		0.00	27.411	0.373	1487.	1.9
349	352.0	7.521	35.089		0.00	27.415	0.374	1487.	1.7
351	354.2	7.504	35.090		0.00	27.418	0.376	1487.	1.5
353	355.8	7.500	35.091		0.00	27.419	0.377	1487.	1.5
355	357.9	7.496	35.090		0.00	27.419	0.378	1487.	1.5
357	360.0	7.493	35.088		0.00	27.419	0.380	1487.	1.4
359	362.0	7.486	35.088		0.00	27.419	0.381	1487.	1.7
361	364.1	7.464	35.087		0.00	27.422	0.383	1487.	2.5
363	366.1	7.431	35.087		0.00	27.426	0.384	1486.	3.0
365	368.1	7.403	35.078		0.00	27.423	0.386	1486.	3.3
367	369.9	7.299	35.076		0.00	27.436	0.387	1486.	3.4
369	372.1	7.190	35.082		0.00	27.457	0.388	1486.	3.4
371	374.0	7.168	35.082		0.00	27.460	0.390	1486.	3.2
373	376.0	7.140	35.082		0.00	27.464	0.391	1485.	2.9
375	377.9	7.115	35.080		0.00	27.466	0.392	1485.	2.5
377	379.9	7.097	35.078		0.00	27.467	0.394	1485.	2.2
379	382.0	7.078	35.076		0.00	27.468	0.395	1485.	2.4
381	384.1	7.052	35.072		0.00	27.469	0.397	1485.	2.6
383	386.1	6.994	35.074		0.00	27.478	0.398	1485.	2.9
385	388.4	6.955	35.076		0.00	27.485	0.399	1485.	3.2
387	389.9	6.894	35.072		0.00	27.491	0.400	1485.	3.4
389	392.0	6.818	35.063		0.00	27.494	0.402	1484.	3.5
391	394.0	6.738	35.062		0.00	27.504	0.403	1484.	3.5
393	396.1	6.662	35.065		0.00	27.517	0.404	1484.	3.5
395	398.1	6.625	35.065		0.00	27.522	0.405	1484.	3.4
397	400.1	6.596	35.062		0.00	27.523	0.407	1484.	3.3
399	402.2	6.506	35.062		0.00	27.536	0.408	1483.	3.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	28	18 MAR 1984	1800	39°48.3'N	70°04.6'W	1200

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
400	403.9	6.468	35.061		0.00	27.540	0.409	1483.	2.7
402	406.0	6.443	35.061		0.00	27.543	0.410	1483.	2.5
404	408.0	6.418	35.059		0.00	27.545	0.411	1483.	2.3
407	410.0	6.406	35.058		0.00	27.545	0.413	1483.	1.9
408	412.0	6.380	35.057		0.00	27.549	0.414	1483.	1.8
411	414.1	6.364	35.056		0.00	27.550	0.415	1483.	1.6
412	415.9	6.345	35.056		0.00	27.552	0.416	1483.	1.5
414	418.0	6.331	35.056		0.00	27.554	0.417	1483.	1.4
416	420.0	6.330	35.056		0.00	27.554	0.419	1483.	1.2
418	422.0	6.331	35.056		0.00	27.554	0.420	1483.	1.0
420	424.0	6.329	35.056		0.00	27.554	0.421	1483.	0.9
422	426.0	6.327	35.056		0.00	27.555	0.422	1483.	0.8
424	428.0	6.323	35.056		0.00	27.555	0.423	1483.	0.7
426	430.1	6.320	35.056		0.00	27.555	0.424	1483.	0.6
428	431.9	6.313	35.056		0.00	27.557	0.425	1483.	0.5
430	434.0	6.319	35.057		0.00	27.556	0.427	1483.	0.4
432	436.0	6.327	35.056		0.00	27.555	0.428	1483.	-0.3
434	438.0	6.324	35.057		0.00	27.555	0.429	1483.	-0.5
436	440.1	6.323	35.057		0.00	27.556	0.430	1483.	0.4
438	441.8	6.322	35.056		0.00	27.556	0.431	1483.	1.0
440	443.9	6.317	35.054		0.00	27.554	0.432	1483.	1.3
442	446.0	6.294	35.049		0.00	27.554	0.434	1483.	1.4
444	448.0	6.252	35.049		0.00	27.559	0.435	1483.	1.6
446	450.0	6.237	35.051		0.00	27.562	0.436	1483.	1.6
448	452.0	6.232	35.050		0.00	27.562	0.437	1483.	1.5
450	454.2	6.216	35.049		0.00	27.564	0.438	1483.	1.5
452	455.6	6.200	35.048		0.00	27.565	0.439	1483.	1.4
454	457.9	6.189	35.042		0.00	27.562	0.441	1483.	1.5
456	460.0	6.155	35.039		0.00	27.563	0.442	1483.	1.7
458	462.0	6.122	35.038		0.00	27.567	0.443	1483.	1.8
460	464.0	6.096	35.038		0.00	27.571	0.444	1483.	1.8
462	466.1	6.082	35.039		0.00	27.573	0.445	1483.	1.8
464	467.8	6.070	35.040		0.00	27.575	0.446	1483.	1.6
466	470.0	6.066	35.039		0.00	27.576	0.448	1483.	1.4
468	472.1	6.065	35.039		0.00	27.576	0.449	1483.	1.1
470	474.0	6.059	35.039		0.00	27.576	0.450	1483.	1.0
472	475.9	6.051	35.039		0.00	27.577	0.451	1483.	1.0
474	478.0	6.050	35.039		0.00	27.577	0.452	1483.	1.0
476	480.1	6.047	35.037		0.00	27.576	0.453	1483.	1.0
478	481.9	6.024	35.038		0.00	27.580	0.454	1483.	0.9
480	483.9	6.034	35.040		0.00	27.580	0.455	1483.	1.0
482	486.0	6.041	35.041		0.00	27.580	0.457	1483.	1.0
484	488.0	6.043	35.040		0.00	27.579	0.458	1483.	1.1
486	490.2	6.026	35.038		0.00	27.579	0.459	1483.	1.1
487	491.7	5.998	35.037		0.00	27.582	0.460	1483.	1.3
490	493.9	5.984	35.035		0.00	27.583	0.461	1483.	1.4
492	496.0	5.975	35.035		0.00	27.584	0.462	1483.	1.5
494	498.0	5.967	35.036		0.00	27.585	0.463	1483.	1.6
496	500.1	5.960	35.035		0.00	27.586	0.465	1483.	1.6
515	519.9	5.564	35.017		0.00	27.621	0.475	1482.	1.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	28	18 MAR 1984	1800	39°48.3'N	70°04.6'W	1200

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
535	540.0	5.389	35.003		0.00	27.632	0.486	1481.	0.7
555	559.9	5.166	34.983		0.00	27.642	0.496	1481.	1.6
575	580.0	4.968	34.977		0.00	27.661	0.506	1480.	1.5
595	600.0	4.891	34.974		0.00	27.667	0.516	1480.	1.0
614	620.0	4.740	34.968		0.00	27.680	0.526	1480.	1.7
634	640.0	4.724	34.968		0.00	27.682	0.535	1480.	0.8
654	660.0	4.699	34.967		0.00	27.684	0.545	1480.	-0.1
674	680.0	4.635	34.964		0.00	27.689	0.554	1480.	0.4
694	700.1	4.624	34.966		0.00	27.691	0.563	1481.	1.0
713	720.0	4.568	34.964		0.00	27.696	0.573	1481.	0.8
733	740.1	4.565	34.964		0.00	27.697	0.582	1481.	0.2
753	760.0	4.550	34.963		0.00	27.698	0.591	1481.	1.0
773	780.0	4.499	34.962		0.00	27.703	0.601	1481.	1.1
792	800.0	4.456	34.961		0.00	27.706	0.610	1482.	0.7
812	820.1	4.429	34.961		0.00	27.709	0.619	1482.	0.5
832	839.9	4.418	34.960		0.00	27.710	0.628	1482.	0.6
852	859.9	4.404	34.961		0.00	27.712	0.638	1482.	0.5
871	879.9	4.389	34.960		0.00	27.713	0.647	1483.	0.5
891	899.9	4.340	34.958		0.01	27.717	0.656	1483.	0.9
911	919.9	4.333	34.958		0.00	27.718	0.665	1483.	0.5
931	940.0	4.318	34.958		0.00	27.719	0.675	1483.	0.7
951	960.0	4.296	34.958		0.00	27.721	0.684	1484.	-0.2
970	980.0	4.241	34.956		0.00	27.726	0.693	1484.	1.0
990	1000.0	4.200	34.955		0.00	27.729	0.702	1484.	1.0
1010	1020.4	4.187	34.956		0.00	27.731	0.712	1484.	0.6
1029	1040.0	4.175	34.953		0.01	27.731	0.721	1484.	1.0
1049	1060.1	4.133	34.955		0.00	27.736	0.730	1485.	0.4
1069	1080.0	4.129	34.954		0.00	27.736	0.739	1485.	1.0
1089	1100.0	4.072	34.954		0.00	27.742	0.748	1485.	0.7
1109	1120.1	4.076	34.953		0.00	27.741	0.757	1485.	0.2
1128	1139.9	4.078	34.948		0.00	27.737	0.766	1486.	-0.6
1147	1159.0	4.072	34.949		0.00	27.738	0.775	1486.	1.4

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	29	18 MAR 1984	2030	39°53.5'N	70°03.9'W	590

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	1.0	12.393	35.182		0.09	26.655	0.000	1498.	-0.4
2	1.9	12.391	35.182		0.10	26.656	0.001	1498.	-0.4
4	4.1	12.393	35.181		0.09	26.654	0.004	1498.	-0.4
6	5.8	12.394	35.182		0.09	26.654	0.007	1498.	-0.4
8	8.3	12.393	35.181		0.09	26.655	0.010	1499.	-0.4
10	9.9	12.391	35.181		0.09	26.654	0.012	1499.	-0.4
12	12.1	12.392	35.181		0.09	26.654	0.015	1499.	-0.3
14	13.9	12.393	35.180		0.09	26.654	0.018	1499.	-0.2
16	16.2	12.390	35.180		0.09	26.654	0.021	1499.	0.1
18	17.7	12.391	35.180		0.09	26.654	0.023	1499.	0.3
20	20.0	12.393	35.180		0.09	26.653	0.026	1499.	0.3
22	22.2	12.391	35.180		0.09	26.654	0.029	1499.	0.4
24	24.0	12.391	35.181		0.09	26.654	0.032	1499.	0.4
26	25.9	12.390	35.180		0.09	26.654	0.034	1499.	0.3
28	28.0	12.392	35.181		0.09	26.654	0.037	1499.	0.1
30	30.1	12.393	35.181		0.09	26.655	0.040	1499.	-0.4
32	31.9	12.396	35.181		0.09	26.654	0.043	1499.	-0.4
34	34.0	12.398	35.181		0.09	26.653	0.046	1499.	-0.4
36	36.0	12.400	35.181		0.09	26.653	0.048	1499.	-0.4
38	38.1	12.397	35.181		0.09	26.653	0.051	1499.	-0.4
40	39.9	12.397	35.180		0.09	26.653	0.054	1499.	-0.2
42	42.0	12.398	35.181		0.09	26.653	0.057	1499.	0.2
44	44.2	12.399	35.181		0.09	26.653	0.060	1499.	0.2
46	45.9	12.399	35.181		0.09	26.653	0.062	1499.	-0.1
48	48.0	12.400	35.181		0.09	26.653	0.065	1499.	0.1
50	50.1	12.403	35.182		0.09	26.653	0.068	1499.	0.2
51	51.7	12.406	35.183		0.09	26.653	0.070	1499.	0.2
54	54.0	12.406	35.182		0.09	26.653	0.073	1499.	0.2
56	56.1	12.409	35.183		0.09	26.653	0.076	1499.	0.2
57	57.8	12.411	35.185		0.09	26.653	0.079	1499.	-0.2
60	60.0	12.411	35.184		0.09	26.653	0.082	1499.	-0.3
62	62.1	12.411	35.184		0.09	26.653	0.085	1499.	-0.2
63	63.9	12.410	35.184		0.09	26.653	0.087	1499.	-0.3
65	66.0	12.406	35.181		0.09	26.652	0.090	1499.	-0.3
68	68.1	12.405	35.181		0.09	26.652	0.093	1500.	-0.7
70	70.1	12.410	35.184		0.09	26.653	0.096	1500.	-0.6
71	71.9	12.416	35.185		0.09	26.653	0.098	1500.	-0.4
73	74.0	12.412	35.183		0.09	26.652	0.101	1500.	0.4
75	76.0	12.418	35.179		0.09	26.648	0.104	1500.	0.5
77	77.7	12.419	35.186		0.09	26.653	0.106	1500.	0.6
79	80.0	12.430	35.188		0.09	26.652	0.110	1500.	0.7
82	82.3	12.430	35.189		0.09	26.653	0.113	1500.	0.8
83	84.0	12.432	35.190		0.09	26.653	0.115	1500.	0.9
85	86.0	12.432	35.189		0.09	26.653	0.118	1500.	0.7
88	88.2	12.435	35.191		0.09	26.654	0.121	1500.	1.0
89	90.0	12.437	35.191		0.09	26.654	0.124	1500.	1.1
91	91.9	12.437	35.192		0.09	26.654	0.126	1500.	1.1
93	94.2	12.447	35.196		0.09	26.656	0.129	1500.	1.3
95	96.1	12.464	35.205		0.08	26.659	0.132	1500.	1.5
97	98.1	12.485	35.210		0.08	26.659	0.135	1500.	2.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	29	18 MAR 1984	2030	39°53.5'N	70°03.9'W	590

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
99	99.8	12.485	35.209		0.08	26.658	0.137	1500.	3.1
101	102.0	12.518	35.221		0.08	26.660	0.140	1501.	4.3
103	104.1	12.600	35.250		0.07	26.667	0.143	1501.	5.4
105	105.8	12.671	35.285		0.07	26.680	0.146	1501.	6.3
107	108.0	12.976	35.413		0.05	26.719	0.149	1502.	6.8
109	110.1	13.124	35.520		0.03	26.771	0.151	1503.	7.0
111	111.8	13.155	35.591		0.02	26.820	0.154	1503.	6.9
113	114.0	13.103	35.613		0.02	26.848	0.156	1503.	6.5
115	116.1	13.048	35.622		0.02	26.866	0.159	1503.	5.7
117	118.0	13.011	35.620		0.01	26.872	0.161	1503.	4.9
119	120.0	12.934	35.619		0.01	26.887	0.164	1503.	4.3
121	122.0	12.900	35.618		0.01	26.893	0.166	1503.	3.9
123	124.1	12.816	35.603		0.01	26.898	0.168	1502.	3.5
125	126.0	12.720	35.602		0.01	26.916	0.171	1502.	3.3
127	128.0	12.685	35.598		0.01	26.920	0.173	1502.	2.8
129	130.1	12.668	35.595		0.01	26.921	0.175	1502.	2.4
131	132.0	12.661	35.595		0.01	26.923	0.178	1502.	1.9
133	134.2	12.650	35.594		0.01	26.924	0.180	1502.	1.9
135	135.9	12.651	35.593		0.01	26.923	0.182	1502.	2.8
137	138.0	12.646	35.592		0.01	26.923	0.184	1502.	3.5
139	140.0	12.641	35.591		0.01	26.924	0.187	1502.	4.0
141	142.0	12.453	35.570		0.01	26.944	0.189	1501.	4.3
143	144.1	12.115	35.519		0.01	26.971	0.191	1500.	4.4
145	145.8	12.034	35.518		0.01	26.986	0.193	1500.	4.3
147	148.1	11.968	35.512		0.01	26.994	0.196	1500.	3.9
149	149.9	11.934	35.506		0.01	26.996	0.198	1500.	3.4
151	151.9	11.897	35.502		0.01	26.999	0.200	1500.	2.9
153	154.1	11.865	35.498		0.01	27.003	0.202	1499.	2.7
155	156.1	11.793	35.486		0.01	27.007	0.205	1499.	2.8
157	157.9	11.753	35.484		0.01	27.013	0.206	1499.	2.9
159	160.2	11.698	35.477		0.01	27.018	0.209	1499.	2.9
161	161.8	11.653	35.472		0.01	27.023	0.211	1499.	2.9
163	164.0	11.557	35.461		0.01	27.032	0.213	1499.	2.8
165	166.1	11.496	35.451		0.01	27.036	0.215	1498.	2.8
167	168.0	11.477	35.450		0.01	27.039	0.217	1498.	2.9
169	170.1	11.437	35.443		0.01	27.040	0.219	1498.	3.1
171	171.9	11.380	35.434		0.01	27.044	0.221	1498.	3.1
173	174.1	11.292	35.425		0.01	27.053	0.224	1498.	3.4
175	175.9	11.161	35.411		0.01	27.067	0.226	1497.	3.5
177	178.0	11.074	35.402		0.01	27.075	0.228	1497.	3.5
179	180.1	11.042	35.394		0.01	27.075	0.230	1497.	3.4
181	182.0	10.937	35.385		0.01	27.088	0.232	1497.	3.1
182	183.8	10.845	35.370		0.01	27.092	0.234	1496.	2.9
184	186.0	10.825	35.370		0.01	27.096	0.236	1496.	2.8
187	188.0	10.774	35.365		0.01	27.101	0.238	1496.	2.8
189	190.1	10.725	35.356		0.01	27.103	0.240	1496.	2.6
191	192.1	10.682	35.352		0.01	27.108	0.242	1496.	2.6
192	194.1	10.600	35.339		0.01	27.113	0.244	1496.	2.6
194	195.9	10.551	35.335		0.01	27.118	0.246	1495.	2.7
196	198.1	10.535	35.334		0.01	27.120	0.248	1495.	2.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	29	18 MAR 1984	2030	39°53.5'N	70°03.9'W	590

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
198	199.9	10.452	35.321		0.01	27.125	0.249	1495.	2.7
200	202.0	10.413	35.319		0.01	27.129	0.251	1495.	2.8
202	204.1	10.321	35.309		0.01	27.138	0.253	1495.	2.8
204	206.0	10.307	35.307		0.01	27.139	0.255	1495.	2.8
206	207.9	10.254	35.300		0.01	27.143	0.257	1495.	2.7
208	210.0	10.172	35.292		0.01	27.151	0.259	1494.	2.6
210	212.2	10.108	35.283		0.01	27.155	0.261	1494.	2.5
212	213.9	10.090	35.283		0.01	27.158	0.263	1494.	2.5
214	216.0	10.074	35.282		0.01	27.160	0.265	1494.	2.5
216	218.0	10.047	35.280		0.01	27.163	0.267	1494.	2.6
218	220.1	9.997	35.273		0.01	27.166	0.269	1494.	2.8
220	222.0	9.974	35.272		0.01	27.169	0.270	1494.	2.9
222	224.0	9.851	35.259		0.01	27.180	0.272	1493.	3.1
224	226.2	9.768	35.248		0.01	27.186	0.274	1493.	3.1
226	228.1	9.695	35.239		0.01	27.191	0.276	1493.	3.1
228	230.1	9.602	35.226		0.01	27.196	0.278	1492.	2.9
230	232.1	9.534	35.219		0.01	27.202	0.280	1492.	2.7
232	234.0	9.500	35.218		0.01	27.208	0.281	1492.	2.5
234	235.9	9.486	35.217		0.01	27.209	0.283	1492.	2.4
236	238.2	9.471	35.215		0.01	27.210	0.285	1492.	2.2
238	239.8	9.456	35.215		0.01	27.212	0.287	1492.	2.2
240	242.0	9.419	35.212		0.01	27.216	0.289	1492.	2.3
242	244.1	9.377	35.209		0.01	27.220	0.291	1492.	2.5
244	245.9	9.357	35.207		0.01	27.222	0.292	1492.	2.6
246	247.9	9.304	35.202		0.01	27.227	0.294	1492.	2.7
248	250.0	9.242	35.196		0.01	27.233	0.296	1491.	2.6
250	252.0	9.196	35.191		0.01	27.236	0.297	1491.	2.6
252	254.0	9.146	35.189		0.01	27.243	0.299	1491.	2.5
254	256.0	9.107	35.184		0.01	27.245	0.301	1491.	2.2
256	258.2	9.080	35.181		0.01	27.248	0.303	1491.	1.8
258	259.7	9.074	35.181		0.01	27.249	0.304	1491.	1.7
260	262.0	9.057	35.180		0.01	27.250	0.306	1491.	1.7
262	264.1	9.059	35.180		0.01	27.250	0.308	1491.	1.8
264	266.3	9.028	35.170		0.01	27.247	0.310	1491.	1.8
265	267.6	8.975	35.170		0.01	27.256	0.311	1491.	1.9
268	270.0	8.943	35.169		0.01	27.260	0.313	1491.	2.1
270	272.1	8.940	35.169		0.01	27.260	0.315	1491.	2.1
272	274.3	8.899	35.161		0.01	27.261	0.317	1491.	2.1
274	275.9	8.884	35.164		0.01	27.265	0.318	1491.	2.1
276	278.0	8.847	35.160		0.01	27.268	0.320	1490.	2.5
278	280.1	8.837	35.158		0.01	27.269	0.322	1490.	2.8
279	281.8	8.784	35.148		0.01	27.269	0.323	1490.	2.9
282	284.0	8.636	35.136		0.01	27.283	0.325	1490.	2.9
283	285.9	8.548	35.131		0.01	27.293	0.326	1489.	2.8
286	288.0	8.523	35.128		0.01	27.295	0.328	1489.	2.7
288	290.2	8.504	35.127		0.01	27.296	0.330	1489.	2.5
289	291.7	8.501	35.127		0.01	27.297	0.331	1489.	2.3
291	294.0	8.473	35.125		0.01	27.300	0.333	1489.	2.5
294	296.1	8.452	35.123		0.01	27.302	0.335	1489.	2.8
295	297.9	8.375	35.115		0.01	27.308	0.336	1489.	3.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	29	18 MAR 1984	2030	39°53.5'N	70°03.9'W	590

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
297	299.9	8.326	35.114		0.01	27.314	0.338	1489.	3.1
299	301.9	8.242	35.111		0.01	27.325	0.340	1488.	3.1
301	304.0	8.181	35.109		0.01	27.333	0.341	1488.	3.0
303	306.0	8.137	35.106		0.01	27.337	0.343	1488.	2.8
305	308.0	8.117	35.106		0.01	27.339	0.344	1488.	2.5
308	310.1	8.100	35.105		0.01	27.342	0.346	1488.	2.2
309	311.8	8.085	35.103		0.01	27.343	0.347	1488.	2.3
311	314.1	8.060	35.103		0.01	27.346	0.349	1488.	2.5
313	316.0	8.044	35.103		0.01	27.348	0.351	1488.	2.6
315	317.9	8.006	35.101		0.01	27.353	0.352	1488.	2.8
318	320.3	7.908	35.093		0.01	27.361	0.354	1488.	2.9
319	321.7	7.871	35.095		0.01	27.368	0.355	1487.	3.0
321	324.0	7.849	35.095		0.01	27.372	0.357	1487.	3.3
323	326.1	7.807	35.093		0.01	27.376	0.358	1487.	3.5
325	327.7	7.780	35.092		0.01	27.379	0.360	1487.	3.6
327	330.0	7.707	35.090		0.01	27.388	0.361	1487.	3.7
329	332.0	7.586	35.088		0.01	27.405	0.363	1486.	3.8
331	334.2	7.499	35.084		0.01	27.414	0.364	1486.	3.8
333	335.9	7.477	35.086		0.01	27.419	0.365	1486.	3.7
335	338.0	7.410	35.084		0.01	27.427	0.367	1486.	3.5
337	340.2	7.271	35.072		0.01	27.437	0.368	1485.	3.2
339	341.8	7.232	35.068		0.01	27.440	0.370	1485.	3.1
341	344.1	7.212	35.073		0.01	27.447	0.371	1485.	3.2
343	346.0	7.192	35.072		0.01	27.449	0.372	1485.	3.2
345	348.3	7.136	35.069		0.01	27.454	0.374	1485.	3.4
347	349.8	7.045	35.062		0.01	27.462	0.375	1485.	3.6
349	352.0	6.987	35.064		0.01	27.471	0.376	1484.	3.7
351	354.0	6.908	35.061		0.01	27.480	0.378	1484.	3.7
353	356.0	6.771	35.052		0.01	27.492	0.379	1484.	3.6
355	357.8	6.686	35.046		0.01	27.498	0.380	1483.	3.5
357	360.0	6.640	35.045		0.02	27.504	0.382	1483.	3.4
359	362.0	6.572	35.040		0.02	27.509	0.383	1483.	3.2
361	364.0	6.507	35.035		0.02	27.514	0.384	1483.	2.9
363	365.8	6.429	35.029		0.02	27.520	0.385	1482.	2.8
365	368.0	6.322	35.022		0.02	27.528	0.387	1482.	2.6
367	370.1	6.318	35.021		0.03	27.528	0.388	1482.	2.4
369	372.2	6.301	35.019		0.02	27.529	0.389	1482.	2.1
371	373.9	6.248	35.017		0.02	27.534	0.390	1482.	1.8
373	375.9	6.244	35.017		0.02	27.535	0.391	1482.	1.6
375	378.0	6.240	35.017		0.02	27.535	0.392	1482.	1.6
377	380.2	6.229	35.016		0.02	27.536	0.394	1482.	1.5
379	382.0	6.219	35.017		0.02	27.538	0.395	1482.	1.5
381	384.1	6.205	35.016		0.02	27.539	0.396	1482.	1.6
383	386.2	6.189	35.016		0.02	27.541	0.397	1482.	1.7
385	388.0	6.177	35.015		0.02	27.542	0.398	1482.	1.7
387	389.9	6.145	35.015		0.02	27.546	0.400	1482.	1.6
389	392.2	6.138	35.015		0.02	27.547	0.401	1482.	1.6
390	393.8	6.136	35.015		0.02	27.547	0.402	1482.	1.5
393	396.0	6.131	35.015		0.02	27.548	0.403	1482.	1.5
395	398.1	6.121	35.014		0.02	27.548	0.404	1482.	1.5

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	29	18 MAR 1984	2030	39°53.5'N	70°03.9'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
397	400.1	6.086	35.012		0.02	27.551	0.406	1482.	1.5
398	401.9	6.073	35.011		0.02	27.553	0.407	1482.	1.8
400	404.0	6.063	35.012		0.02	27.554	0.408	1482.	2.0
403	406.1	6.051	35.011		0.02	27.555	0.409	1482.	2.2
404	408.0	6.040	35.011		0.02	27.557	0.410	1482.	2.3
407	410.0	5.991	35.012		0.02	27.563	0.411	1481.	2.3
409	412.4	5.907	35.006		0.02	27.569	0.413	1481.	2.3
410	413.9	5.891	35.004		0.02	27.570	0.413	1481.	2.2
412	416.0	5.873	35.004		0.02	27.572	0.415	1481.	2.0
415	418.1	5.856	35.004		0.02	27.574	0.416	1481.	1.6
416	420.0	5.850	35.004		0.02	27.575	0.417	1481.	1.4
418	422.0	5.843	35.003		0.02	27.576	0.418	1481.	1.4
420	424.0	5.833	35.003		0.02	27.577	0.419	1481.	1.4
422	426.0	5.825	35.002		0.02	27.577	0.420	1481.	1.5
424	427.9	5.824	35.002		0.02	27.577	0.421	1481.	1.5
426	430.0	5.794	35.002		0.02	27.580	0.422	1481.	1.5
428	432.0	5.753	34.999		0.02	27.584	0.424	1481.	1.4
431	434.3	5.749	34.999		0.02	27.584	0.425	1481.	1.4
432	435.7	5.748	34.999		0.02	27.584	0.426	1481.	1.2
434	438.0	5.744	34.998		0.02	27.584	0.427	1481.	1.0
436	440.0	5.740	34.998		0.02	27.585	0.428	1481.	0.8
438	442.0	5.733	34.999		0.02	27.586	0.429	1481.	0.9
440	443.8	5.735	34.999		0.02	27.585	0.430	1481.	0.8
442	446.0	5.732	34.998		0.02	27.585	0.431	1481.	0.9
444	448.1	5.721	34.998		0.02	27.587	0.432	1481.	1.2
446	450.0	5.702	34.996		0.02	27.588	0.434	1481.	1.4
448	452.0	5.703	34.993		0.02	27.585	0.435	1481.	1.7
450	454.1	5.673	34.993		0.02	27.589	0.436	1481.	1.8
452	456.1	5.646	34.994		0.02	27.593	0.437	1481.	1.9
454	457.7	5.620	34.992		0.02	27.595	0.438	1481.	2.0
456	460.0	5.588	34.992		0.02	27.599	0.439	1481.	2.0
458	462.2	5.581	34.992		0.02	27.599	0.440	1481.	1.8
460	463.8	5.574	34.992		0.02	27.600	0.441	1481.	1.6
462	466.0	5.551	34.991		0.02	27.602	0.442	1481.	1.3
464	467.9	5.540	34.990		0.02	27.603	0.443	1481.	1.1
466	470.1	5.539	34.991		0.02	27.604	0.444	1481.	1.1
468	471.9	5.539	34.991		0.02	27.604	0.445	1481.	1.0
470	474.0	5.538	34.990		0.02	27.603	0.447	1481.	1.0
472	476.2	5.534	34.990		0.02	27.604	0.448	1481.	1.0
474	478.0	5.520	34.990		0.02	27.605	0.449	1481.	0.9
476	480.0	5.507	34.989		0.02	27.606	0.450	1481.	1.0
478	482.0	5.501	34.989		0.02	27.607	0.451	1481.	1.0
480	484.1	5.497	34.989		0.02	27.607	0.452	1481.	1.2
482	485.9	5.537	34.993		0.02	27.605	0.453	1481.	0.9
484	488.1	5.490	34.988		0.02	27.607	0.454	1481.	1.2
485	489.8	5.472	34.987		0.02	27.609	0.455	1481.	1.3
488	492.2	5.449	34.987		0.02	27.612	0.456	1481.	1.5
489	493.8	5.443	34.979		0.02	27.606	0.457	1481.	1.5
492	496.3	5.428	34.987		0.02	27.614	0.458	1481.	1.4
494	497.9	5.421	34.986		0.02	27.614	0.459	1481.	1.4

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH	
OC	149	29	18 MAR 1984	2030	39°53.5'N	70°03.9'WH@*Jj$(■*U$		PRESS
m	dbar	°C	psu	ml/L	m^{-1}	gm/cm^3	$10m^2/s^2$	m/s	cph
496	499.9	5.415	34.986		0.02	27.615	0.460	1481.	1.4
515	520.0	5.374	34.984		0.02	27.618	0.471	1481.	0.4
535	540.0	5.353	34.983		0.02	27.620	0.482	1481.	0.8
555	560.2	5.313	34.980		0.03	27.623	0.492	1481.	1.4
575	580.0	4.932	34.974		0.03	27.663	0.502	1480.	4.1

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	30	18 MAR 1984	2158	39°58.1'N	70°01.9'W	190

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
2	2.2	11.919	35.083		0.08	26.670	0.000	1497.	0.5
4	4.2	11.899	35.080		0.08	26.671	0.003	1497.	0.5
6	6.0	11.896	35.078		0.07	26.670	0.005	1497.	0.5
8	8.0	11.894	35.078		0.07	26.670	0.008	1497.	0.5
10	10.0	11.895	35.077		0.07	26.669	0.011	1497.	0.5
12	11.9	11.896	35.079		0.07	26.671	0.013	1497.	0.4
14	14.0	11.896	35.079		0.07	26.671	0.016	1497.	0.4
16	16.0	11.898	35.080		0.07	26.671	0.019	1497.	-0.2
18	18.0	11.900	35.080		0.07	26.671	0.022	1497.	-0.5
20	20.0	11.898	35.079		0.07	26.670	0.024	1497.	-0.7
22	22.2	11.897	35.078		0.07	26.670	0.027	1497.	-0.8
24	23.9	11.898	35.077		0.07	26.669	0.030	1497.	-0.8
26	26.1	11.899	35.076		0.07	26.668	0.033	1497.	-0.7
28	28.0	11.900	35.076		0.07	26.668	0.035	1497.	-0.6
30	29.8	11.900	35.077		0.07	26.668	0.038	1497.	-0.5
32	32.1	11.900	35.077		0.08	26.668	0.041	1497.	-0.2
34	34.2	11.900	35.076		0.07	26.668	0.044	1497.	0.2
36	36.0	11.900	35.076		0.07	26.668	0.046	1497.	0.2
38	38.1	11.900	35.076		0.07	26.668	0.049	1497.	0.1
40	40.0	11.901	35.077		0.07	26.668	0.052	1497.	0.3
42	42.2	11.902	35.077		0.07	26.668	0.055	1497.	0.4
44	44.0	11.902	35.076		0.07	26.668	0.057	1497.	0.4
46	45.9	11.902	35.077		0.07	26.668	0.060	1497.	0.3
48	47.9	11.908	35.078		0.07	26.668	0.063	1497.	0.1
50	50.1	11.911	35.079		0.07	26.668	0.066	1497.	0.2
51	51.9	11.912	35.079		0.07	26.668	0.068	1497.	0.3
54	54.1	11.914	35.079		0.07	26.668	0.071	1498.	0.2
55	55.8	11.914	35.079		0.07	26.668	0.073	1498.	-0.2
58	58.2	11.914	35.080		0.07	26.668	0.077	1498.	-0.3
59	59.9	11.913	35.079		0.07	26.668	0.079	1498.	-0.2
61	61.7	11.913	35.079		0.07	26.668	0.082	1498.	-0.3
64	64.0	11.915	35.079		0.07	26.667	0.085	1498.	-0.3
65	65.9	11.924	35.081		0.07	26.667	0.087	1498.	-0.3
68	68.1	11.933	35.084		0.07	26.668	0.090	1498.	-0.2
69	69.9	11.924	35.081		0.07	26.667	0.093	1498.	-0.5
71	72.0	11.922	35.081		0.07	26.667	0.096	1498.	0.2
73	73.9	11.928	35.083		0.07	26.668	0.098	1498.	0.6
76	76.1	11.921	35.080		0.07	26.667	0.101	1498.	0.7
77	78.0	11.960	35.087		0.07	26.665	0.104	1498.	0.8
79	80.1	11.970	35.094		0.07	26.669	0.107	1498.	1.0
81	82.1	11.944	35.089		0.07	26.670	0.110	1498.	1.1
83	83.9	11.975	35.096		0.07	26.670	0.112	1498.	1.3
85	86.0	11.966	35.094		0.07	26.669	0.115	1498.	1.4
87	87.9	12.059	35.122		0.07	26.673	0.118	1499.	1.3
89	90.0	12.137	35.140		0.07	26.672	0.121	1499.	1.3
91	92.0	12.169	35.151		0.06	26.674	0.123	1499.	1.5
93	93.9	12.198	35.161		0.06	26.677	0.126	1499.	2.2
95	96.0	12.213	35.164		0.06	26.676	0.129	1499.	2.5
97	97.9	12.231	35.172		0.06	26.678	0.131	1499.	3.0
99	100.1	12.318	35.200		0.06	26.683	0.135	1500.	3.5

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	30	18 MAR 1984	2158	39°58.1'N	70°01.9'W	190

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
101	102.0	12.551	35.286		0.05	26.704	0.137	1501.	3.9
103	104.0	12.696	35.321		0.04	26.703	0.140	1501.	4.2
105	106.2	12.854	35.389		0.04	26.725	0.143	1502.	4.3
107	108.1	12.982	35.440		0.03	26.738	0.145	1502.	4.4
109	110.0	12.971	35.456		0.03	26.753	0.148	1502.	4.3
111	112.0	12.920	35.449		0.04	26.758	0.150	1502.	4.5
113	113.9	12.878	35.449		0.04	26.766	0.153	1502.	4.4
115	116.0	12.807	35.455		0.05	26.785	0.156	1502.	4.4
117	118.2	12.790	35.464		0.05	26.796	0.159	1502.	4.3
119	120.1	12.797	35.489		0.04	26.813	0.161	1502.	4.1
121	122.2	12.714	35.479		0.04	26.823	0.163	1502.	3.8
123	123.9	12,623	35.471		0.05	26.834	0.166	1502.	3.2
125	126.0	12.624	35.473		0.05	26.835	0.168	1502.	2.7
127	128.0	12.632	35.474		0.05	26.835	0.171	1502.	2.1
129	130.0	12.626	35.473		0.05	26.835	0.173	1502.	1.6
131	132.2	12.611	35.472		0.05	26.837	0.176	1502.	1.3
133	133.8	12.602	35.473		0.05	26.840	0.178	1502.	1.6
135	136.1	12.603	35.472		0.05	26.839	0.181	1502.	1.9
137	137.8	12.602	35.473		0.05	26.840	0.183	1502.	2.2
139	140.0	12.594	35.476		0.05	26.843	0.186	1502.	2.4
141	142.0	12.576	35.479		0.05	26.849	0.188	1502.	2.5
143	143.8	12.555	35.481		0.05	26.855	0.190	1502.	2.7
145	146.2	12.537	35.485		0.05	26.862	0.193	1502.	2.7
147	147.8	12.520	35.485		0.04	26.865	0.195	1502.	2.8
149	150.2	12.511	35.486		0.04	26.867	0.198	1502.	2.8
151	151.8	12.495	35.486		0.05	26.871	0.200	1502.	2.7
153	154.2	12.460	35.486		0.04	26.878	0.203	1502.	2.7
155	156.0	12.415	35.485		0.04	26.886	0.205	1501.	2.7
157	158.1	12.401	35.485		0.04	26.889	0.208	1501.	2.6
159	159.8	12.390	35.485		0.04	26.891	0.210	1501.	2.8
161	162.1	12.365	35.485		0.04	26.895	0.212	1501.	3.1
162	163.8	12.361	35.484		0.04	26.896	0.214	1501.	3.3
165	166.1	12.318	35.482		0.04	26.903	0.217	1501.	3.9
167	168.1	12.254	35.486		0.04	26.918	0.219	1501.	4.3
169	170.0	12.185	35.486		0.04	26.932	0.222	1501.	4.6
171	172.0	12.154	35.492		0.03	26.942	0.224	1501.	4.9
172	173.8	12.054	35.498		0.03	26.966	0.226	1500.	5.2
175	176.0	11.965	35.498		0.02	26.983	0.228	1500.	5.3
176	177.9	11.883	35.489		0.02	26.992	0.231	1500.	5.3
178	179.8	11.667	35.463		0.02	27.013	0.233	1499.	5.4
180	181.3	11.485	35.444		0.02	27.032	0.234	1499.	5.3
181	182.0	11.466	35.443		0.02	27.035	0.235	1499.	5.5
182	183.0	11.432	35.446		0.02	27.044	0.236	1498.	5.8
183	184.0	11.321	35.432		0.02	27.053	0.237	1498.	5.7
184	185.1	11.213	35.414		0.02	27.060	0.238	1498.	5.6
184	185.9	11.122	35.411		0.02	27.074	0.239	1497.	5.4
185	187.0	10.864	35.376		0.02	27.093	0.240	1496.	5.0
187	188.1	10.826	35.369		0.02	27.095	0.241	1496.	5.0
187	189.0	10.817	35.370		0.02	27.098	0.242	1496.	5.0
189	190.1	10.811	35.370		0.02	27.098	0.243	1496.	5.0
189	190.6	10.813	35.370		0.02	27.098	0.244	1496.	5.0

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	31	18 MAR 1984	2320	40°05.0'N	69°59.9'W	145

DEPTH m	PRESS dbsr	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	2.7	7.602	33.505		0.19	26.158	0.000	1479.	-1.8
4	4.0	7.594	33.501		0.19	26.156	0.002	1479.	-1.8
6	5.8	7.574	33.494		0.19	26.153	0.006	1479.	-1.8
8	8.2	7.562	33.490		0.19	26.152	0.010	1479.	-1.8
10	10.3	7.564	33.491		0.19	26.152	0.014	1479.	-1.8
12	11.9	7.530	33.478		0.19	26.146	0.017	1479.	-1.4
14	13.9	7.550	33.488		0.19	26.151	0.021	1479.	-0.8
16	16.0	7.493	33.463		0.19	26.140	0.025	1479.	0.6
18	17.9	7.491	33.465		0.19	26.142	0.028	1479.	1.1
20	20.2	7.561	33.490		0.19	26.152	0.032	1479.	1.3
22	21.9	7.580	33.495		0.19	26.153	0.036	1479.	1.3
24	23.8	7.579	33.495		0.19	26.153	0.039	1479.	2.0
26	25.9	7.588	33.498		0.19	26.154	0.043	1479.	2.9
28	28.1	7.572	33.491		0.19	26.151	0.047	1479.	3.3
30	29.9	7.578	33.494		0.19	26.152	0.051	1479.	4.2
32	31.9	7.654	33.532		0.19	26.171	0.054	1480.	5.1
34	34.1	7.878	33.618		0.19	26.206	0.058	1481.	5.8
36	35.8	7.944	33.630		0.19	26.206	0.061	1481.	6.2
38	38.3	8.114	33.723		0.19	26.255	0.066	1482.	6.4
40	39.9	8.458	33.834		0.18	26.290	0.069	1483.	6.2
41	41.8	8.643	33.893		0.18	26.308	0.072	1484.	6.1
44	44.2	8.845	33.970		0.17	26.337	0.076	1485.	6.0
46	45.9	8.939	34.003		0.16	26.348	0.079	1485.	5.6
48	48.1	8.998	34.023		0.16	26.354	0.082	1486.	5.4
50	50.0	9.248	34.118		0.14	26.388	0.086	1487.	5.6
52	52.1	9.506	34.201		0.12	26.411	0.089	1488.	5.7
54	54.1	9.722	34.258		0.11	26.419	0.092	1489.	5.7
55	55.9	9.922	34.323		0.10	26.437	0.095	1490.	5.5
57	57.9	10.372	34.479		0.09	26.482	0.098	1491.	5.1
60	60.0	10.652	34.555		0.07	26.492	0.102	1493.	4.7
62	62.0	10.724	34.581		0.07	26.499	0.105	1493.	4.2
64	64.2	10.690	34.580		0.07	26.505	0.108	1493.	3.6
65	65.9	10.700	34.592		0.07	26.512	0.110	1493.	2.8
68	68.3	10.744	34.606		0.07	26.515	0.114	1493.	2.6
69	69.7	10.761	34.609		0.07	26.515	0.116	1493.	2.5
72	72.3	10.823	34.630		0.06	26.520	0.120	1493.	2.4
73	74.1	10.909	34.657		0.06	26.525	0.123	1494.	2.3
75	75.9	10.981	34.677		0.06	26.528	0.126	1494.	2.4
77	78.1	11.107	34.712		0.06	26.532	0.129	1495.	2.6
79	79.8	11.164	34.730		0.06	26.536	0.132	1495.	2.7
82	82.2	11.147	34.728		0.06	26.537	0.135	1495.	2.8
83	83.9	11.200	34.749		0.06	26.544	0.138	1495.	2.8
85	85.6	11.343	34.797		0.06	26.555	0.140	1496.	2.8
87	88.1	11.556	34.852		0.06	26.558	0.144	1497.	3.1
89	89.8	11.593	34.867		0.05	26.563	0.147	1497.	3.4
92	92.3	11.668	34.891		0.05	26.568	0.150	1497.	3.4
93	94.0	11.852	34.939		0.06	26.570	0.153	1498.	3.2
95	96.0	12.237	35.064		0.13	26.594	0.156	1499.	3.1
97	98.1	12.609	35.171		0.18	26.604	0.159	1501.	2.9
99	99.7	12.609	35.169		0.18	26.602	0.161	1501.	2.5

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	31	18 MAR 1984	2320	40°05.0'N	69°59.9'W	145

DEPTH m	PRESS dbsr	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
101	102.0	12.605	35.166		0.19	26.601	0.164	1501.	2.0
103	104.2	12.628	35.174		0.19	26.602	0.168	1501.	1.3
105	106.0	12.645	35.177		0.20	26.602	0.170	1501.	1.3
107	108.2	12.644	35.178		0.20	26.603	0.173	1501.	1.8
109	110.0	12.636	35.179		0.20	26.605	0.176	1501.	2.1
111	112.1	12.661	35.191		0.19	26.609	0.179	1501.	2.3
113	113.9	12.676	35.200		0.19	26.613	0.182	1501.	2.5
115	116.2	12.686	35.210		0.19	26.619	0.185	1501.	2.7
117	118.0	12.689	35.214		0.20	26.621	0.188	1501.	2.9
119	120.2	12.698	35.223		0.18	26.626	0.191	1501.	3.0
121	122.0	12.699	35.232		0.20	26.633	0.193	1501.	3.1
123	124.1	12.723	35.248		0.19	26.641	0.196	1502.	3.2
125	125.9	12.748	35.264		0.17	26.648	0.199	1502.	3.2
127	128.0	12.729	35.267		0.16	26.655	0.202	1502.	3.2
129	130.1	12.727	35.273		0.15	26.659	0.205	1502.	3.2
130	131.3	12.731	35.279		0.15	26.664	0.206	1502.	3.3
131	132.0	12.734	35.283		0.14	26.666	0.208	1502.	3.8
132	132.9	12.743	35.288		0.12	26.668	0.209	1502.	4.8
133	134.0	12.715	35.287		0.12	26.673	0.210	1502.	5.4
134	135.0	12.655	35.288		0.10	26.686	0.212	1502.	5.5
135	136.1	12.631	35.302		0.09	26.701	0.213	1502.	5.4
136	137.1	12.717	35.359		0.10	26.728	0.214	1502.	5.1
137	138.0	12.739	35.362		0.11	26.727	0.216	1502.	5.1
138	139.1	12.743	35.362		0.12	26.725	0.217	1502.	5.1
139	140.0	12.743	35.362		0.12	26.725	0.218	1502.	5.1
140	140.7	12.743	35.362		0.12	26.725	0.219	1502.	5.1

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	32	19 MAR 1984	0037	40°11.2'N	69°57.9'W	102

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	4.3	5.911	32.890		0.20	25.896	0.000	1472.	0.7
6	6.0	5.911	32.889		0.20	25.896	0.003	1472.	0.7
8	8.0	5.911	32.889		0.20	25.896	0.008	1472.	0.7
10	9.9	5.912	32.890		0.20	25.897	0.012	1472.	0.7
12	12.0	5.916	32.892		0.20	25.898	0.016	1472.	0.7
14	14.3	5.916	32.892		0.20	25.897	0.021	1472.	0.7
16	15.9	5.918	32.892		0.20	25.898	0.024	1472.	0.6
18	18.1	5.919	32.893		0.20	25.898	0.029	1472.	0.4
20	20.0	5.921	32.894		0.20	25.898	0.033	1472.	0.0
22	21.9	5.920	32.893		0.20	25.898	0.037	1472.	-0.2
24	24.0	5.918	32.892		0.20	25.898	0.041	1472.	-0.1
26	26.0	5.916	32.892		0.20	25.898	0.045	1472.	0.3
28	28.0	5.914	32.891		0.20	25.897	0.050	1472.	0.7
30	30.3	5.917	32.892		0.20	25.897	0.054	1472.	0.8
32	31.9	5.923	32.894		0.20	25.898	0.058	1472.	0.8
34	34.0	5.930	32.896		0.20	25.899	0.062	1472.	1.4
36	36.1	5.940	32.900		0.20	25.901	0.067	1472.	2.0
37	37.7	5.939	32.899		0.19	25.900	0.070	1472.	2.3
40	40.1	5.935	32.897		0.20	25.899	0.075	1472.	2.6
42	42.1	5.998	32.923		0.20	25.912	0.079	1473.	3.3
44	44.0	6.080	32.948		0.19	25.921	0.083	1473.	3.9
46	46.1	6.089	32.950		0.19	25.922	0.087	1473.	4.2
48	48.0	6.182	32.980		0.19	25.934	0.091	1474.	4.4
50	50.2	6.378	33.050		0.18	25.964	0.096	1475.	4.7
52	52.2	6.554	33.097		0.16	25.979	0.100	1475.	5.2
54	54.0	6.637	33.120		0.15	25.986	0.104	1476.	5.5
55	55.8	6.674	33.132		0.15	25.991	0.107	1476.	5.4
58	58.2	6.869	33.205		0.13	26.023	0.112	1477.	5.3
59	59.8	7.218	33.319		0.12	26.065	0.115	1478.	5.4
62	62.1	7.431	33.370		0.12	26.076	0.120	1479.	5.4
64	64.2	7.549	33.398		0.12	26.081	0.124	1480.	5.2
65	65.9	7.705	33.442		0.12	26.093	0.127	1480.	5.0
68	68.3	7.988	33.535		0.12	26.125	0.131	1482.	4.9
69	69.8	8.049	33.551		0.12	26.129	0.134	1482.	5.3
71	71.9	8.073	33.566		0.12	26.137	0.138	1482.	5.5
74	74.2	8.063	33.607		0.12	26.171	0.142	1482.	5.6
75	76.0	8.066	33.627		0.12	26.186	0.146	1482.	5.7
78	78.2	8.380	33.730		0.13	26.220	0.150	1484.	5.7
79	80.1	8.747	33.824		0.16	26.237	0.153	1485.	5.3
81	82.0	9.152	33.931		0.19	26.257	0.157	1487.	4.7
83	83.9	9.475	34.027		0.24	26.280	0.160	1488.	4.1
85	86.0	9.506	34.028		0.26	26.276	0.164	1488.	3.4
87	88.0	9.511	34.029		0.27	26.276	0.167	1488.	2.8
89	90.0	9.534	34.036		0.29	26.277	0.171	1488.	2.1
90	91.2	9.548	34.038		0.29	26.277	0.173	1489.	1.3
91	92.1	9.583	34.052		0.30	26.282	0.174	1489.	1.8
92	93.1	9.634	34.064		0.33	26.283	0.176	1489.	1.9
93	93.9	9.640	34.066		0.33	26.283	0.177	1489.	1.8
94	95.1	9.645	34.067		0.34	26.283	0.180	1489.	1.8
95	96.0	9.674	34.076		0.35	26.286	0.181	1489.	1.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	32	19 MAR 1984	0037	40°11.2'N	69°57.9'W	102

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
96	96.9	9.678	34.077		0.35	26.285	0.183	1489.	1.8
97	98.0	9.688	34.079		0.39	26.285	0.185	1489.	1.8

STA 33 DAY: 19 TIME: 0140

DEPTH (m)	TEMP (°C)
1.0	5.7
2.9	5.7
3.9	5.7
5.8	5.7
7.8	5.7
9.7	5.7
11.7	5.7
13.6	5.7
14.6	5.7
15.6	5.8
17.5	5.8
19.5	5.8
20.4	5.8
21.4	5.9
23.4	5.9
26.3	5.9
27.3	5.9
29.2	5.9
31.1	5.8
34.1	5.8
36.0	5.8
38.9	5.8
40.9	5.8
41.8	5.8
43.8	5.8
45.7	5.8
47.6	5.8
48.6	5.8
50.6	5.8
52.5	5.9
54.4	5.8
56.4	5.8
58.3	5.9
60.2	5.8
62.2	5.8
63.1	5.8
65.1	5.8
67.0	5.8
69.0	5.8
69.9	5.8
71.9	5.8
73.8	5.8
74.8	5.8
76.7	5.8
77.7	5.8
79.6	5.8
81.5	5.8
82.5	5.8
84.4	5.8
86.4	5.8

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	34	19 MAR 1984	0223	40°23.0'N	69°58.0'W	80

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	2.7	5.104	32.624		0.29	25.781	0.000	1468.	-0.2
4	3.9	5.105	32.625		0.27	25.781	0.003	1468.	-0.2
6	5.7	5.105	32.625		0.26	25.781	0.007	1468.	-0.2
8	8.1	5.105	32.625		0.26	25.781	0.012	1468.	-0.2
10	10.0	5.105	32.624		0.27	25.781	0.016	1468.	-0.2
12	12.2	5.105	32.624		0.25	25.781	0.021	1468.	-0.2
14	13.9	5.106	32.624		0.25	25.780	0.025	1468.	0.4
16	16.0	5.106	32.625		0.26	25.781	0.029	1468.	0.7
18	17.9	5.106	32.624		0.25	25.781	0.034	1468.	0.8
20	20.1	5.106	32.625		0.26	25.781	0.038	1468.	0.8
22	21.9	5.105	32.627		0.26	25.783	0.042	1468.	0.9
24	23.9	5.104	32.628		0.27	25.783	0.047	1469.	1.0
26	26.0	5.105	32.627		0.27	25.783	0.051	1469.	1.0
28	27.9	5.105	32.627		0.26	25.783	0.056	1469.	0.9
30	29.9	5.102	32.629		0.27	25.785	0.060	1469.	0.9
32	32.1	5.102	32.630		0.27	25.786	0.065	1469.	0.9
34	34.1	5.103	32.629		0.29	25.784	0.069	1469.	0.9
36	36.1	5.101	32.631		0.27	25.786	0.074	1469.	0.7
37	37.8	5.100	32.631		0.27	25.787	0.077	1469.	0.4
40	40.2	5.100	32.632		0.29	25.787	0.083	1469.	0.1
42	41.9	5.101	32.631		0.27	25.786	0.086	1469.	-0.2
44	44.0	5.103	32.630		0.29	25.785	0.091	1469.	-0.5
46	46.1	5.102	32.630		0.29	25.786	0.096	1469.	-0.4
48	48.1	5.103	32.630		0.29	25.785	0.100	1469.	-0.2
50	50.1	5.103	32.630		0.28	25.785	0.105	1469.	0.5
52	52.0	5.103	32.630		0.29	25.785	0.109	1469.	0.7
54	54.3	5.102	32.631		0.28	25.786	0.114	1469.	0.6
56	56.0	5.102	32.631		0.27	25.786	0.117	1469.	0.8
58	58.1	5.101	32.632		0.28	25.787	0.122	1469.	1.0
60	60.1	5.101	32.632		0.28	25.787	0.127	1469.	1.2
61	62.0	5.103	32.631		0.28	25.786	0.131	1469.	1.3
64	64.2	5.098	32.634		0.29	25.789	0.135	1469.	1.3
65	65.9	5.093	32.637		0.29	25.792	0.139	1469.	1.4
68	68.1	5.093	32.638		0.30	25.793	0.144	1469.	1.4
69	69.9	5.093	32.638		0.31	25.793	0.148	1469.	1.4
71	71.3	5.093	32.639		0.32	25.794	0.151	1469.	1.1
72	72.1	5.092	32.639		0.31	25.794	0.153	1469.	0.8
72	72.9	5.092	32.639		0.31	25.794	0.155	1469.	0.5
73	73.9	5.092	32.639		0.33	25.794	0.157	1469.	-0.1
74	75.0	5.092	32.639		0.32	25.794	0.159	1469.	-0.1
75	75.9	5.092	32.639		0.31	25.794	0.161	1469.	-0.1
77	77.1	5.094	32.639		0.34	25.793	0.164	1469.	-0.1
77	78.0	5.094	32.639		0.36	25.793	0.166	1469.	-0.1

STA 35 DAY: 19 TIME: 0330

DEPTH (m)	TEMP (°C)
1.0	4.8
1.9	4.8
3.9	4.7
6.8	4.8
8.8	4.7
11.7	4.7
13.6	4.7
15.6	4.8
17.5	4.8
19.5	4.8
21.4	4.7
23.4	4.7
25.3	4.7
27.3	4.7
30.2	4.7
32.1	4.7
34.1	4.7
36.0	4.7
37.9	4.7
40.9	4.7
41.8	4.6
44.7	4.6
46.7	4.6
48.6	4.5
50.6	4.4
52.5	4.4
55.4	4.4
57.3	4.3
60.2	4.3
63.1	4.4
64.1	4.3

SHIP	CRUISE	STATION	DATE	EST	LATITUDE	LONGITUDE	DEPTH
OC	149	36	19 MAR 1984	0425	40°37.1'N	69°58.1'W	58

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
2	2.5	3.619	32.421		1.14	25.772	0.000	1462.	0.9
4	3.8	3.612	32.418		1.12	25.770	0.003	1462.	0.9
6	6.0	3.613	32.418		1.11	25.770	0.008	1462.	0.9
8	8.0	3.607	32.416		1.14	25.768	0.012	1462.	0.9
10	9.9	3.606	32.416		1.10	25.769	0.016	1462.	0.9
12	12.1	3.613	32.419		1.12	25.771	0.021	1462.	1.1
14	14.1	3.630	32.426		1.13	25.774	0.026	1462.	1.3
16	16.0	3.629	32.425		1.17	25.773	0.030	1462.	1.2
18	18.1	3.632	32.425		1.17	25.774	0.034	1462.	1.0
20	20.1	3.640	32.429		1.13	25.776	0.039	1462.	1.0
22	22.0	3.642	32.430		1.11	25.776	0.043	1462.	0.9
24	23.9	3.642	32.428		1.14	25.775	0.047	1462.	1.0
26	26.1	3.642	32.427		1.13	25.774	0.052	1462.	1.0
28	27.9	3.651	32.433		1.15	25.778	0.056	1462.	1.0
30	29.8	3.657	32.434		1.18	25.779	0.060	1462.	0.9
32	32.2	3.658	32.435		1.21	25.779	0.066	1462.	0.9
34	34.0	3.657	32.434		1.22	25.778	0.070	1462.	0.6
36	36.0	3.661	32.436		1.24	25.780	0.074	1462.	-0.3
38	38.1	3.659	32.435		1.20	25.779	0.079	1463.	-0.3
40	39.9	3.657	32.433		1.21	25.778	0.083	1463.	0.2
41	41.3	3.654	32.432		1.19	25.777	0.086	1463.	0.4
42	41.9	3.659	32.435		1.21	25.779	0.087	1463.	0.4
43	43.0	3.662	32.436		1.28	25.779	0.090	1463.	0.7
44	44.1	3.662	32.436		1.27	25.780	0.092	1463.	0.7
45	45.0	3.664	32.436		1.31	25.779	0.094	1463.	0.2
46	46.0	3.664	32.436		1.35	25.779	0.096	1463.	-0.6
47	47.0	3.662	32.435		1.35	25.779	0.098	1463.	-0.7
48	48.0	3.660	32.435		1.30	25.779	0.101	1463.	-0.5
49	49.0	3.659	32.434		1.33	25.778	0.103	1463.	-0.3
50	50.0	3.660	32.434		1.31	25.778	0.105	1463.	0.3
51	51.1	3.662	32.435		1.36	25.779	0.107	1463.	0.5
51	51.9	3.662	32.436		1.39	25.779	0.109	1463.	0.6
53	53.0	3.663	32.435		1.35	25.779	0.112	1463.	0.6
54	54.0	3.663	32.436		1.45	25.779	0.114	1463.	0.6
55	55.0	3.664	32.436		1.46	25.779	0.116	1463.	0.6
55	55.7	3.664	32.436		1.47	25.779	0.118	1463.	0.6

Appendix II

Manufacturers' specifications for instruments used on R/V OCEANUS Cruise 149. See text for calibration of CTD.

Instrument	Sensor	Range	Accuracy	Resolution
CTD	Conductivity	1 to 65 mmho	±0.005 mmhos	0.001 mmhos
	Temperature	-32 to +32°C	±0.005°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	±0.1°C, ±2% depth	0.01°C, 0.65 m
	T-5	0-1830 m	±0.1°C, ±2% depth	0.01°C, 0.65 m
	T-6	0-460 m	±0.1°C, ±2% depth	0.01°C, 0.65 m
	T-7	0-760 m	±0.1°C, ±2% depth	0.01°C, 0.65 m
	T-10	0-200 m	±0.1°C, ±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.

Appendix III.- NBIS CTD 9-track tape format

The NBIS CTD tape recorder interface writes two types of records; data records and header records. The records are 512 bytes (8 bits/byte) long. The usual sequence in a CTD cast will be one header record, followed by data records, followed by an End-Of-File.

Data records

A single scan of CTD data is 13 bytes long, 1 byte of frame sync and 12 bytes of data (table 1). An integer number of data scans is packed into 512 byte data records. For the USGS CTD, a data record contains 39 scans of data, and the remaining 5 bytes in the data record are filled with zeros.

Header records

A scan of header information consists of 8 bytes. The first byte is frame sync, which is either 00 (all "0"s) or FF (all "1"s). The remaining 7 bytes represent 14 BCD digits (4 bits each) which may be set on the CTD front panel. The 8 byte scan of header information is padded with zeros. One header record is written on the 9-T tape when "enter CTD header" data button is pushed.

Appendix Table III-1. - Bit assignments for USGS NBIS CTD

Byte	Variable	Range	Conversion
1	Frame sync	15 or 240	
2	Pressure LSB	0-65535	÷ 20 = P (dbars)
3	Pressure MSB		
4	Temperature LSB	0-65535	÷ 2000 = T (°C)
5	Temperature MSB		
6	Conductivity LSB	0-65535	÷ 1000 C (mmho)
7	Conductivity MSB		
8	Sign		LSB = pressure negative 2nd = temperature negative 3rd = oxygen temperature negative 4th-8th = zero
9	Oxygen current	0-4096	÷ 2000 = current (μA)
10	(12 bits only)		
11	Oxygen temperature	0-255	x 256 ÷ 2000 T (°C)
12,13	Transmission	0-4096	x 32 ÷ 4096 = TR (volts)

Appendix IV. Methods for nutrient analysis

Automated methods for nutrients were based on Wood, Armstrong and Richards (1967) for nitrate, Bendschneider and Robinson (1952) for nitrite, Murphy and Riley (1962) for phosphate, Koroleff (1976) for silicate, Soloranzo (1969) for ammonia, and described in Technicon Corp. Industrial method papers (1973). During analytical work with water samples some minor and major method changes have been made.

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