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HYDROGRAPHIC AND ACOUSTIC DOPPLER CURRENT PROFILER (ADCP) DATA FROM THE ONR EASTERN BOUNDARY CURRENT ACCELERATED RESEARCH INIATIVE - JUNE 9-16, 1992

by

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STRACT (Continue on reverse if necessary and identify by block number)

s data report presents hydrographic (CTD) and Acoustic Doppler Current filer (ADCP) data from a cruise to the continental slope region near nt Arena, California during 9-16 June 1992. The study area encompassed egion from about 38° 0.0' N. to 39° 0.0' N. from 20 to 90 km offshore. sampling grid consisted of five along-shore transects 15 km apart, with e CTD stations 15 km apart in each transect. A total of 28 CTD casts e made. ADCP data were collected throughout the cruise. The data are sented as vertical sections, property distributions on horizontal sur- es, and waterfall plots.

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DATA REPORT

Hydrographic and Acoustic Doppler Current Profiler (ADCP) Data from the ONR Eastern Boundary Current Accelerated Research Initiative

R/V POINT SUR, June 9 - 16, 1992

by

Paul F. Jessen
and
Steven R. Ramp

Chief Scientist:
Steven R. Ramp

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

The data included in this report were collected as part of the mesoscale variability in weakly nonlinear systems Accelerated Research Initiative (ARI) funded by the Office of Naval Research. The purpose of this ARI is to study the eddy-mean flow interactions in an Eastern Boundary Current along the Northern California coast.

The specific goals of this cruise were to; 1) deploy subsurface current meter moorings on the continental slope just south of Point Arena, 2) conduct a hydrographic (CTD) survey in the vicinity of the moorings, 3) collect Acoustic Doppler Current Meter (ADCP) data throughout the cruise, 4) deploy a moored sound source on the axis of the sound channel off Cape Mendocino, and 5) make CTD observations along the 2000 m isobath during the return trip from the Point Arena vicinity to Moss Landing as time permitted.

During this cruise a total of 19 Aanderaa RCM-8 current meters were deployed on 5 moorings, 28 CTD casts were made, and 2 subsurface sound sources were deployed, one on a current meter mooring and one on its own mooring.

The ship departed Moss Landing at 1807 Universal Time (UT) on June 9, 1992 enroute to site SS2 (Fig. 1) where the subsurface sound source was to be deployed. An ADCP calibration run was performed off Point Ano Nuevo during the steam to site SS2 between 2350 UT on June 9 and 0130 UT on June 10.

The ship arrived in the vicinity of the sound source deployment

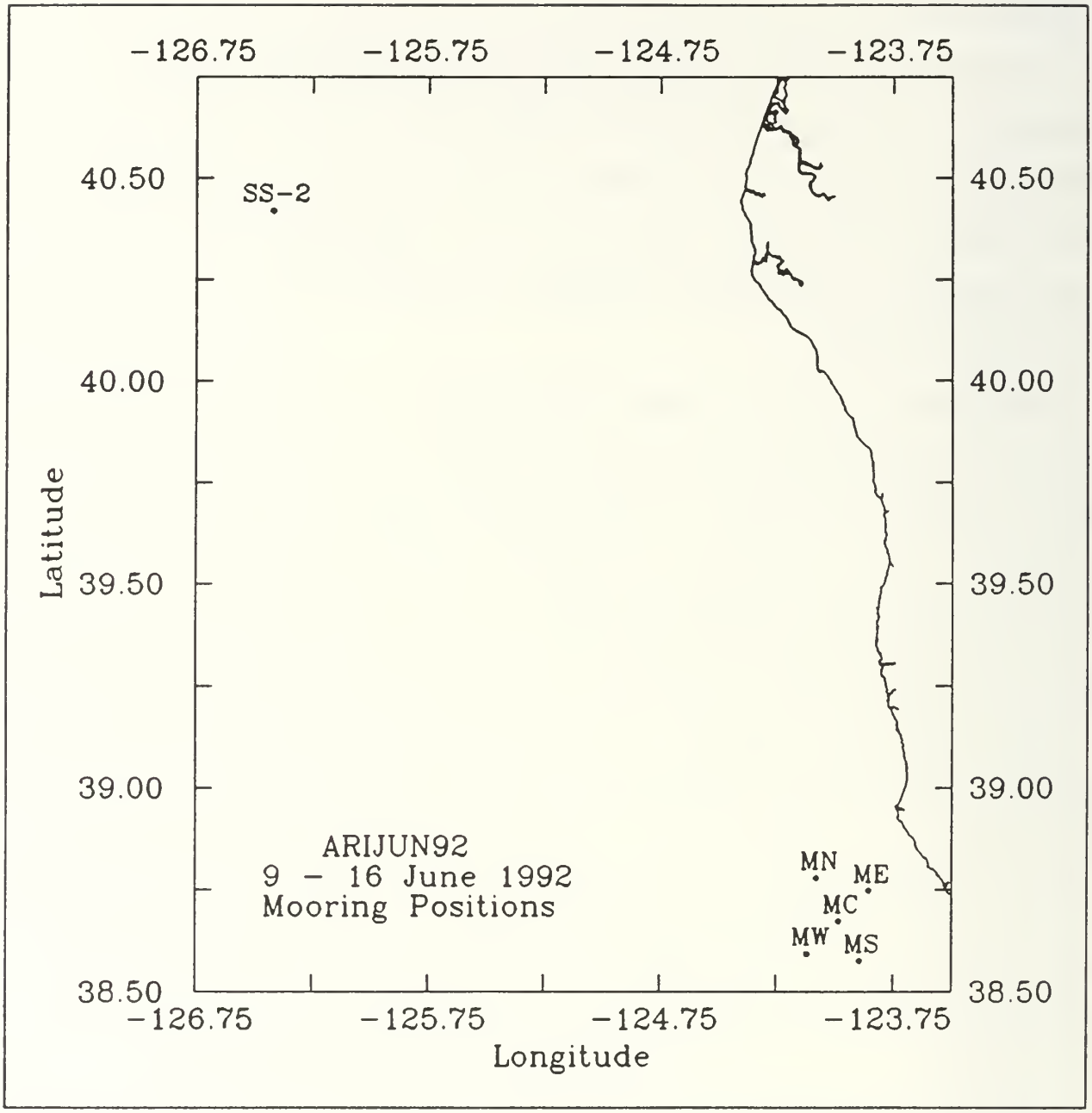

Figure 1. Locations for current meter moorings and sound sources deployed during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

site SS2 at approximately 1000 UT on June 11. Between 1000 UT and 1415 UT a detailed bathymetry survey was conducted for the purpose of finding a position with the correct depth. Following the bathymetry survey a CTD cast (station 101, not shown) was made at the deployment site between 1430 and 1520 UT on June 11. After the completion of the CTD cast, the sound source deployment was started. This operation was completed at 1653 UT on June 11 with the deployment of the sound source at 40° 24.67' N., 126° 23.37' W. in 1695 meters of water. The sound source itself was located at a depth of 516 meters.

Departing this area, the ship steamed southeast toward mooring site MS (Fig. 1) arriving there at 1100 UT on June 12. Following the completion of a bathymetry survey at 1330 UT, current meter mooring MS was deployed. This mooring consisted of three Aanderaa RCM-8 current meters at depths of 100, 150, and 300 meters. Additionally, there was a sound source placed in this mooring at a depth of 586 meters. Mooring work at this site was completed by 1615 UT.

The ship then proceeded to site MW (Fig. 1) arriving there to begin mooring work at 1840 UT on June 12. The mooring at this site consisted of four Aanderaa RCM-8 current meters at depths of 100, 150, 300, and 600 meters. Mooring operations were completed at this site by 2015 UT.

Mooring deployment operations continued with the ship next arriving at site MC (Fig. 1) at 2200 UT on June 12. Five Aanderaa RCM-8 current meters were placed in the mooring at this site at

depths of 100, 150, 300, 600, and 1800 meters. Deployment operations were completed at site MC by 2315 UT on June 12.

The ship next steamed to site MN where a mooring consisting of four Aanderaa RCM-8 current meters at depths of 100, 150, 300, and 600 meters was to be deployed. Mooring operations at this site commenced at 0145 UT on June 13 and were completed at approximately 0300 UT of that day. The ship then steamed to site ME (Fig. 1) where operations were suspended for the night.

A bathymetry survey at site ME (Fig. 1) was conducted between 1410 UT and 1530 UT on June 13. Subsequently mooring ME was deployed. This completed mooring operations for the cruise.

The remainder of the cruise was dedicated to hydrographic operations. CTD station 1 (Fig. 2) was started at 1800 UT on June 13. Following the completion of CTD station 1 the ship proceeded northwest occupying stations 2-5 between 1920 UT and 2345 UT on June 13. CTD stations 6-25 (Fig. 2) were occupied sequentially between 0050 UT on June 14 and 2230 UT on June 15. The ship then started the steam back toward Moss Landing occupying CTD stations 26-27 (Fig. 2) along the 2000 m isobath during the return trip. The ship arrived back at Moss Landing at 1950 UT on June 16, 1992. CTD stations 101, 1-13,18,and 23 were made to the bottom. Stations 14 and 15 were made to 2600 m, 16,17,19-22,24, and 25 were made to 1000 m. Listings of all mooring and CTD stations occupied during the cruise are presented in Tables 1 and 2 respectively. The personnel on this cruise included; Dr. Steven Ramp, Naval Postgraduate School (NPS); Mr. Paul Jessen, NPS; Mr.

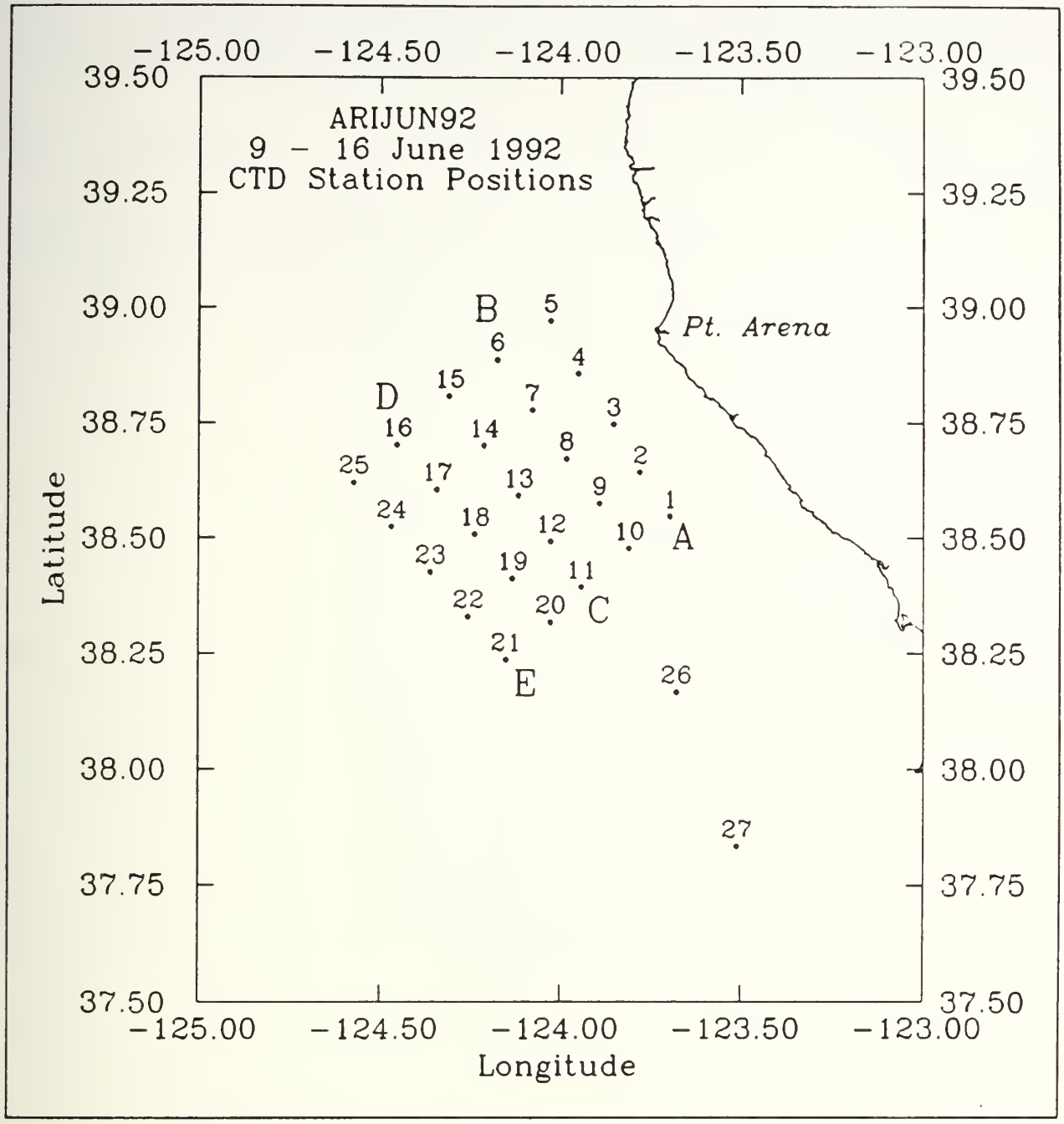

Figure 2. CTD station locations and and numbers for the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

Table 1. List of current meter moorings and sound sources deployed during the Eastern Boundary Current Accelerated Research Initiative Cruise of June 9-16, 1992 aboard the R/V POINT SUR.

Mooring number	Latitude	Longitude	Depth(m)
MS	38°35.122'N	123°54.543'W	1980
MC	38°40.191'N	123°59.088'W	1975
MN	38°46.571'N	124° 4.729'W	1972
MW	38°35.761'N	124° 6.252'W	2602
ME	38°44.634'N	123°51.354'W	410
SS-2	40°24.670'N	126°23.371'W	1695

Table 2. CTD station positions for the Eastern Boundary Current Accelerated Research Initiative Cruise of June 9-16, 1992 aboard the R/V POINT SUR. Wind speed and direction and air temperature are also shown.

Date	Time (UT)	Sta No.	Latitude	Longitude	Wind Dir	Wind (ms^{-1})	Air Temp ($^{\circ}C$)
June 11	1430	101	40 24.5	126 23.2	252	5.7	13.7
June 13	1800	1	38 32.8	123 41.7	324	7.4	13.3
	1923	2	38 38.6	123 46.9	288	3.4	13.3
	2046	3	38 44.9	123 52.8	299	7.9	13.8
	2208	4	38 51.4	123 57.0	298	7.5	14.1
	2324	5	38 58.3	124 1.6	296	7.8	14.1
June 14	0048	6	38 53.3	124 10.4	304	8.8	14.1
	0308	7	38 46.7	124 5.9	309	10.8	14.0
	0528	8	38 40.3	124 0.3	308	9.6	13.7
	0738	9	38 34.5	123 55.8	308	9.2	13.3
	0954	10	38 28.7	123 48.5	308	9.2	13.1
	1146	11	38 23.8	123 56.4	303	12.3	13.3
	1413	12	38 29.5	124 1.6	315	12.1	13.3
	1710	13	38 35.4	124 7.5	306	8.9	13.2
	1957	14	38 42.0	124 12.8	302	12.1	13.6
	2248	15	38 48.5	124 18.6	305	11.3	13.9
June 15	0245	16	38 42.2	124 27.3	308	10.8	13.9
	0440	17	38 36.4	124 20.6	306	8.8	13.5
	0629	18	38 30.6	124 14.3	301	9.9	13.5
	0939	19	38 24.8	124 8.0	304	9.9	13.6
	1106	20	38 19.1	124 1.7	309	10.6	13.4
	1327	21	38 14.4	124 8.8	311	8.9	13.4
	1519	22	38 19.8	124 15.3	322	9.8	13.4
	1657	23	38 25.5	124 21.5	295	9.4	13.6
	1955	24	38 31.5	124 28.1	318	10.2	13.9
	2147	25	38 37.2	124 34.3	323	9.1	13.9
June 16	0355	26	38 10.0	123 40.7	311	11.4	13.7
	0731	27	37 50.0	123 30.6	297	11.3	13.4

Todd Anderson, NPS; Ms. Marla Stone, NPS; Mr. Tarry Rago, NPS; Mr. Andy Anderson, NPS; and LT Kevin Hays, NPS.

HYDROGRAPHIC DATA ACQUISITION AND CALIBRATION

Hydrographic data were acquired using a Neil Brown Mark III-B CTD. A General Oceanics rosette sampler was attached to the CTD and was equipped with twelve 5-liter Niskin bottles for in situ water sampling. At most stations a minimum of two water samples were collected during the upcast for salinity calibration; one at the deepest depth of the cast and one near the surface. The CTD sampling rate was 32 Hz, and raw data were collected using a software package developed by EG&G Marine Instruments. CTD data were acquired only on the downcast with a winch speed of approximately 30 m min^{-1} to 150 m then 60 m min^{-1} to the bottom. The data were acquired using an HP Vectra computer and stored on the computer's hard disk as well as backed up to a rewritable optical disk.

In addition to the CTD data, an underway data acquisition loop recorded 30 second averages of 2 m temperature and salinity, wind speed and direction, air temperature, and visible and infrared radiation. The sensors used to acquire this data included Seabird temperature and conductivity sensors for the 2 m temperature and salinity, an R. M. Young anemometer for the wind speed and direction, and Epply pyranometers for the visible and infrared radiation. The underway data were acquired on an HP310 computer and recorded on the computer's hard disk. The underway data were transferred to 5.25 inch diskettes upon return and processed on

an IBM PC compatible computer.

The temperature, conductivity, and pressure sensors on the CTD were calibrated prior to the cruise in the NPS calibration laboratory. The pressure calibration was carried out using a Chandler Engineering dead weight tester as a standard. At 20 approximately equally spaced pressures from 50 to 6000 dbar, indicated pressures from the standard and the CTD sensor were recorded. A regression was then performed fitting the CTD pressures to the standard. The result yielded a linear fit with a slope of 0.9994735. The CTD pressure offset at the beginning of each cast was used as the intercept.

The temperature calibration was done using a model 162CE Rosemount Platinum Resistance Temperature Standard (PRTS) in conjunction with an EG&G Automatic Temperature Bridge (Model ATB-1250). The standard (PRTS) sensor was calibrated using a triple point cell. A temperature bath of 70 - 80 liters of fresh water in an insulated tub was used to compare the PRTS and the CTD sensor at 1 $^{\circ}$C increments from 0 - 20 $^{\circ}$C. Thirty data points were collected at each temperature and then averaged to yield a single value for each step. A regression was run on the 21 data points and a 2nd order polynomial ($y = ax^2 + bx + c$) was found to yield the best fit of the CTD sensor values to the temperature standard. The coefficients for correction were a = 1.0778572E-5, b = 0.9994981, and c = 0.0025016.

The conductivity calibration was carried out using an AGE Minisal as a standard. A constant conductivity bath was used to

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The conductivity calibration was carried out using an AGE Minisal as a standard. A constant conductivity bath was used to

compare the standard and sample sensor conductivities at five different conductivity levels. Regression analysis was used to compare the sample cell conductivities with the standard sensor conductivities (Minisal). A linear correction was found for the CTD sensor with coefficients of 1.0005409 (slope) and +0.0083415 (intercept).

The Seabird temperature and conductivity probes used in the underway sampling system were calibrated by the Seabird Corporation approximately four months prior to the cruise and the calibration coefficients were applied within the acquisition software.

A total of 59 water samples were taken at the 29 CTD stations for further calibration of the CTD salinity data. The CTD pressure, conductivity and temperature were recorded as each sample was taken. These numbers, after applying the appropriate calibration coefficients, were used to calculate CTD salinity and the results compared with the water sample salinities calculated using an AGE Minisal in the laboratory. The station, depth of sample, CTD salinity calculated using the appropriate calibrations, sample salinity from the minisal, and difference between CTD and minisal salinities are listed in Table 3.

Differences between CTD and sample salinities for stations 101, 1-7, and 13-28, were very consistent, but a significant and variable shift in the differences for stations 8 - 12 was observed. For this reason the data of Table 2 were divided into several groups for calculation of the final salinity

Table 3. Differences between salinities (psu) calculated using the corrected CTD pressure, temperature, and conductivity readings and those of the water samples from the same depth measured by the AGE Minisal laboratory salinometer.

STA	P (dbar)	CTD SAL	BOTTLE SAL	DIFFERENCE
101	1678.2	34.634	34.580	+0.054
101	2.1	32.693	32.642	+0.051
1	473.6	34.237	34.185	+0.052
1	1.8	33.149	33.103	+0.046
2	485.2	34.236	34.186	+0.050
2	1.8	33.309	33.256	+0.053
3	726.2	34.353	34.301	+0.052
3	2.4	33.184	33.131	+0.053
4	449.7	34.204	34.149	+0.055
4	2.2	33.124	33.071	+0.053
5	510.3	34.256	34.205	+0.051
5	2.0	33.453	33.402	+0.051
6	2453.8	34.696	34.644	+0.052
6	0.9	33.080	33.027	+0.053
7	2204.3	34.680	34.627	+0.053
7	1.6	33.105	33.052	+0.053
8	2086.8	34.668	34.615	+0.053
8	1.7	33.195	33.224	-0.029
9	2024.1	34.618	34.613	+0.002
9	2.2	33.099	33.080	+0.019
10	1618.0	34.602	34.567	+0.035
10	1.2	33.138	33.120	+0.018
11	2326.0	34.664	34.640	+0.024
11	0.9	33.130	33.114	+0.016
12	3150.0	34.699	34.667	+0.032
12	2.0	33.151	33.118	+0.033
13	2665.6	34.711	34.656	+0.055
13	1.8	33.110	33.055	+0.055
14	2642.0	34.707	34.654	+0.053
14	2.1	33.110	33.056	+0.054
15	2636.2	34.706	34.653	+0.053
15	2.5	33.061	33.007	+0.054
16	1013.9	34.501	34.444	+0.057
16	1.4	33.080	33.026	+0.054
17	1006.7	34.500	34.447	+0.053
17	2.3	33.045	32.991	+0.054
18	3457.9	34.728	34.672	+0.056
18	3.0	33.166	33.111	+0.055
19	1013.9	34.508	34.455	+0.053
19	3.3	33.185	33.130	+0.055
20	1012.4	34.512	34.457	+0.055
20	1.3	33.164	33.109	+0.055
21	1012.0	34.505	34.452	+0.053
21	2.1	33.067	33.013	+0.054

Table 2. (continued)

STA	P (dbar)	CTD SAL	BOTTLE SAL	DIFFERENCE
22	1025.6	34.502	34.448	+0.054
22	2.3	33.124	33.070	+0.054
23	3581.4	34.733	34.676	+0.057
23	2.8	33.062	33.005	+0.057
24	1010.9	34.502	34.446	+0.056
24	2.0	33.143	33.089	+0.054
25	1013.2	34.491	34.439	+0.052
25	1.9	33.044	32.990	+0.054
26	1765.6	34.641	34.587	+0.054
26	3.2	33.278	33.225	+0.053
27	1723.5	34.634	34.580	+0.054
27	2.5	33.360	33.306	+0.054

calibrations.

The data from stations 101, 1-7, and 13-28, consisting of 49 points, made up the main group of data. The mean and standard deviation of the differences between the CTD salinities and sample salinities of this group were calculated and points further than two standard deviations from the mean were discarded. A regression analysis was then run on the remaining data points to calculate final calibration coefficients. The mean and standard deviation of the original differences were 0.054 and 0.0021 respectively. Two data points were further than two standard deviations from the mean difference (the 1.8 dbar data point at station 1 and the 3043.8 dbar point at station 28), were assumed to be in error, and were eliminated from further consideration. Regression analysis of the remaining 47 points yielded a linear best fit with a slope of 1.0001012 and intercept of -0.05728. Following the application of this correction to the CTD salinities, the standard deviation of the difference between the bottle salinities and the corrected CTD salinity was reduced to 0.0016. This was the final adjustment to the CTD salinities of stations 101, 1-7, and 13-28.

For stations 8-12 differences between CTD and bottle salinities were inconsistent. Because these data were inconsistent both within this subgroup of stations as well as with the main group of data (stations 101, 1-7, and 13-28), it was decided that individual corrections for each station would be made. A simple linear correction was applied to the data of each station based

Table 4. Final calibration coefficients (slope and intercept) applied to stations 8-12 to adjust CTD salinity to the bottle sample salinities of each station.

STATION	SLOPE	INTERCEPT
8	0.9438379	1.8937158
9	1.0094691	-0.3325396
10	0.9885230	0.3620868
11	0.9947265	0.1591283
12	1.0009887	-0.0665075

on the two sample points at that station. These correction coefficients are listed in Table 4. The reasons for the shift in the differences and the inconsistent nature of these differences remains unclear, but is possibly due to sensor fouling that gradually cleared.

HYDROGRAPHIC DATA PROCESSING

The raw CTD data were processed on an PC compatible computer using an EG&G Marine Instruments software package specifically designed for the processing of data collected with EG&G CTD systems. It flags suspicious pressure, conductivity, and temperature points based on user specified first difference criteria, allowing the user to examine and interpolate across flagged points if necessary. Once any bad points were eliminated through interpolation, salinity was calculated from corrected values of temperature, pressure, and conductivity according to the algorithm of Lewis and Perkin (1981) and utilizing a dual time lag filter to remove time lag spikes. The data were then averaged to 2 dbar pressure intervals. The final salinity correction (as described above) was then applied.

ADCP DATA ACQUISITION AND CALIBRATION

The Acoustic Doppler Current Profiler (ADCP) data were collected using an RD Instruments vessel mounted ADCP (VM-ADCP) operating on a nominal frequency of 150 kHz. Data were collected using an 80286 based PC and the Data Acquisition Software (DAS) provided by RD Instruments in up to 60 eight meter bins over a three minute sampling ensemble. Navigation information was

supplied to the DAS from a Trimble Model 10X GPS receiver. The data were collected on 1.2M 5.25 inch floppy disks. Approximately 21 hours of data were collected on each disk.

A calibration run was made at the beginning of the cruise to quantify rotation and sensitivity errors in the ADCP data. Rotation error (α) is made up of two components. The first is any alignment error between the centerline of the ship and the mounting of the instrument and the second is gyro compass error. The sensitivity error (β) is generally very small and is due to errors in beam geometry. A thorough description of these errors and the methods used to quantify them may be found in Joyce, (1989). Our calibration run consisted of two transects; from 37° 8.5' N., 122° 43.9' W. to 37° 13.2' N., 122° 50.0' W. and back to the first point. The calibration run was made with the bottom tracking feature of the ADCP switched on. Following the methods of Joyce (1989) the resulting calibration coefficients were: α = 2.071 and $1+\beta$ = 1.000 (no correction). Raw doppler velocity data were rotated by α and multiplied by $1+\beta$ before further processing of the data.

ADCP DATA PROCESSING

ADCP data were processed one disk (approximately 21 hours) at a time. Once the raw ADCP data had been corrected for rotation and sensitivity errors as described above, the first step of processing the data was to quality control the navigation data and calculate ship's velocity. Geographic positions as recorded by the DAS at the end of each three-minute ensemble were checked

for obviously bad points and replaced using linear interpolation if necessary. Once edited these data were used to calculate the u (eastward) and v (northward) components of ship's velocity.

The next step in processing was the determination of the depth (bin number) to which the data remained reliable for each three minute ensemble. This depth is a function of either the bottom depth or the Percent Good Return (PGR). The PGR is the percentage of pings for a particular ensemble having good solutions based on a signal to noise threshold or on error velocity. If the PGR fell below 50% for a particular bin, the data of that bin and all deeper bins for that ensemble were eliminated from further consideration.

The bottom depth provided another limit for the deepest bin of good data if the bottom was shallower than about 500m. Bottom depth was determined directly when the bottom tracking option was turned on and by a sharp subsurface increase in the AGC signal when the bottom tracking was off. The shallowest bin as determined by PGR or bottom depth was defined as the bin to which data remained reliable for a particular ensemble.

The next step in processing the ADCP data was the calculation of a reference layer velocity. A reference layer two bins wide (16m) was used for these data. Choosing the depth of the reference layer is somewhat arbitrary, but the general criteria used was to choose one deep enough that the velocity within the reference layer was nearly constant but shallow enough that all or nearly all the ensembles being processed had good data down to

the depth of the reference layer. The bins used to define a reference layer were not necessarily the same for each disk of ADCP data.

An absolute reference layer velocity was calculated by subtracting the u and v components of ship's velocity from the u and v components of the raw reference layer velocity. The absolute reference layer velocity was then smoothed by applying a low pass filter with a cutoff period of 25 minutes.

Once a smoothed absolute reference layer velocity was obtained the raw velocity profiles of each ensemble were adjusted to the filtered reference layer velocity to yield the final (3 minute) absolute water velocity profiles. As a final check each ensemble was examined visually for any remaining bad profiles.

DATA PRESENTATION

The sound source and current meter mooring locations are shown in Fig. 1 and the CTD station positions and numbers are shown in Fig. 2. Hourly averaged wind vectors during the cruise are shown in Fig. 3. Hydrographic data are presented in the form of horizontal maps, vertical sections, waterfall plots, a T/S plot, and data listings. ADCP data are presented in the form of horizontal maps and vertical sections. Maps of temperature (T), salinity (S), density anomaly (γ_θ), spiciness (π), and ADCP velocity at selected pressures are presented in Figs. 4 - 27.

Density anomaly (γ_θ) was calculated according to the algorithms found in Volume 4 of the International Oceanographic Tables (UNESCO, 1987) using potential temperature, atmospheric pressure,

and in-situ salinity. Spiciness (π) was calculated according to the algorithm of Flament (unpublished manuscript, 1986).

Vertical sections of temperature, salinity, density anomaly, and spiciness from 0 - 500 dbar for sections A - E are shown in Figs. 28 - 32. In these sections station positions are indicated by diamond symbols along the top of the plot. Vertical sections of along-transect and across-transect ADCP velocity for sections A - E are presented in Figs. 33 - 37. In these vertical sections the ADCP velocities have been rotated 59° to correspond with section headings. Waterfall plots of temperature, salinity, density anomaly, and spiciness from 0 - 500 dbar are shown in Figs. 38 - 42. For stations deeper than 500 dbar, waterfall plots of temperature, salinity, density anomaly and spiciness from 500 - 3500 dbar are shown in Fig. 43. In all waterfall plots the leftmost profile is plotted as true values while the data values for each profile to the right are successively offset by the amount indicated on the figure. Figure 44 is a T/S diagram which includes data from all CTD stations completed during the cruise. Data from each CTD cast are presented in Appendix A. The data have been subsampled vertically to preserve the shape of the profile while minimizing the amount of data required for presentation.

ACKNOWLEDGEMENTS

This work was funded by the Office of Naval Research. The able assistance of the officers and crew of the R/V POINT SUR is much appreciated.

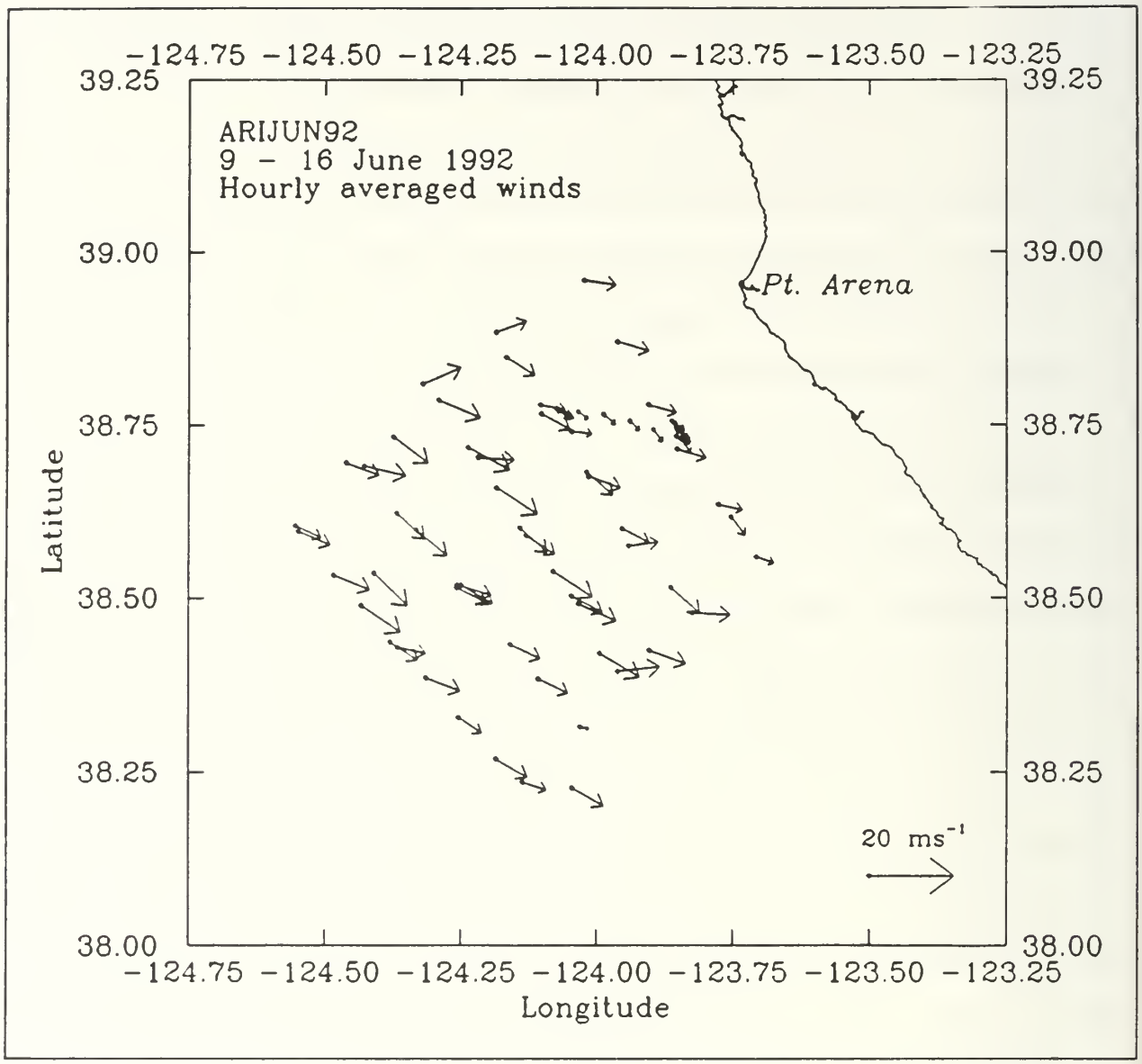

Figure 3. Hourly averaged wind vectors measured at 17 m height from the R/V POINT SUR during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992.

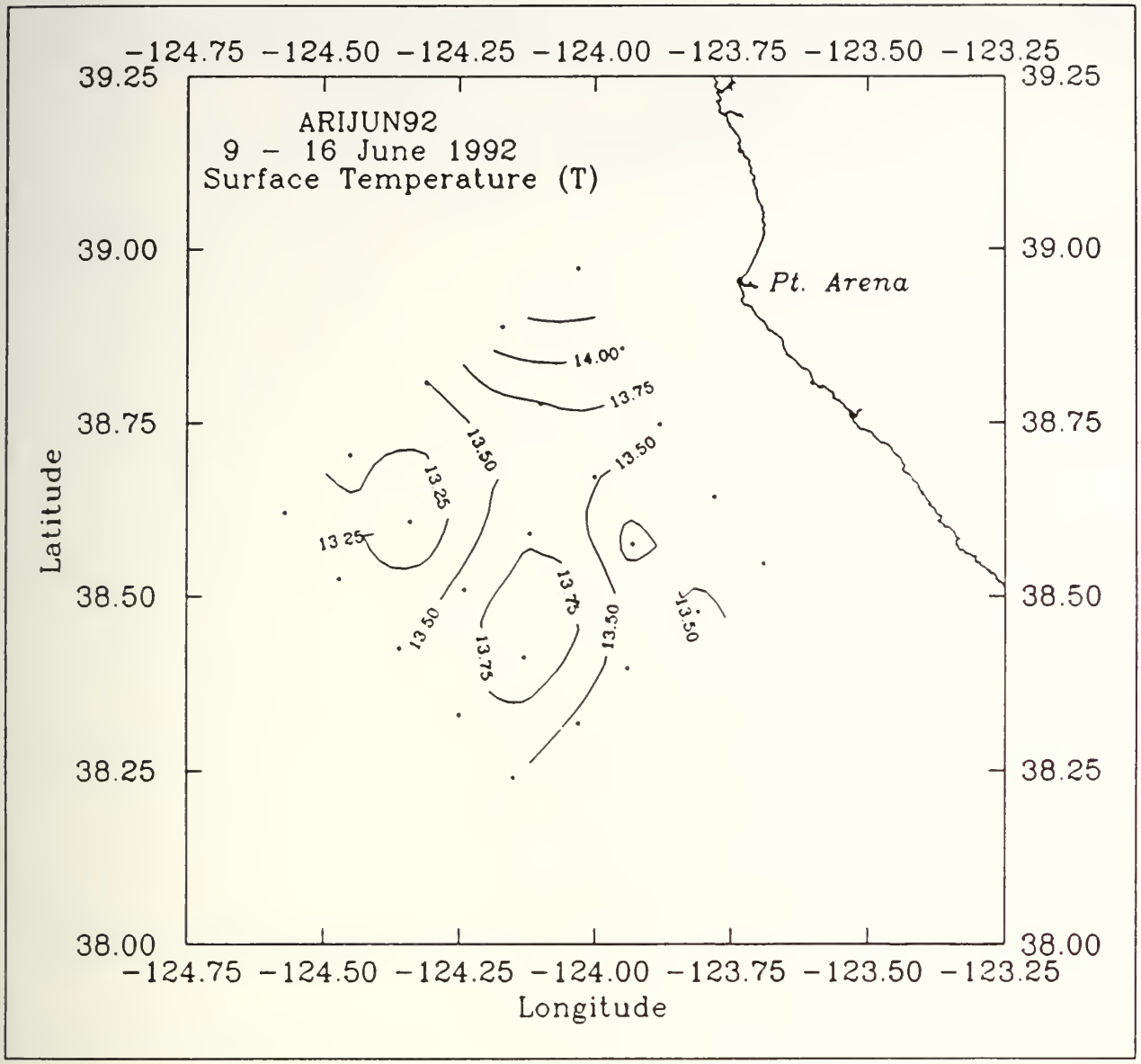

Figure 4. Map of sea surface temperature (T) during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

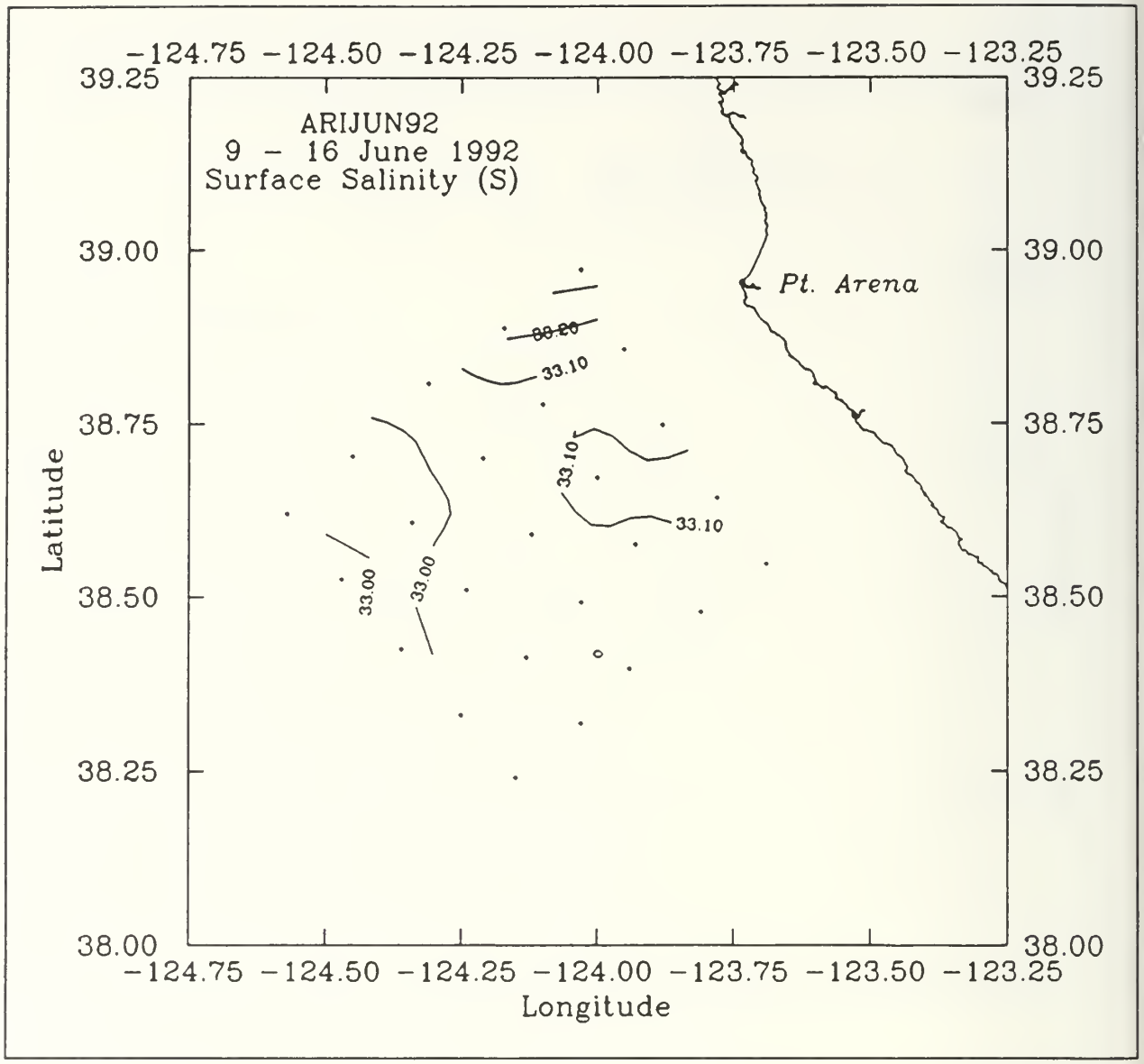

Figure 5. Map of sea surface salinity (S) during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

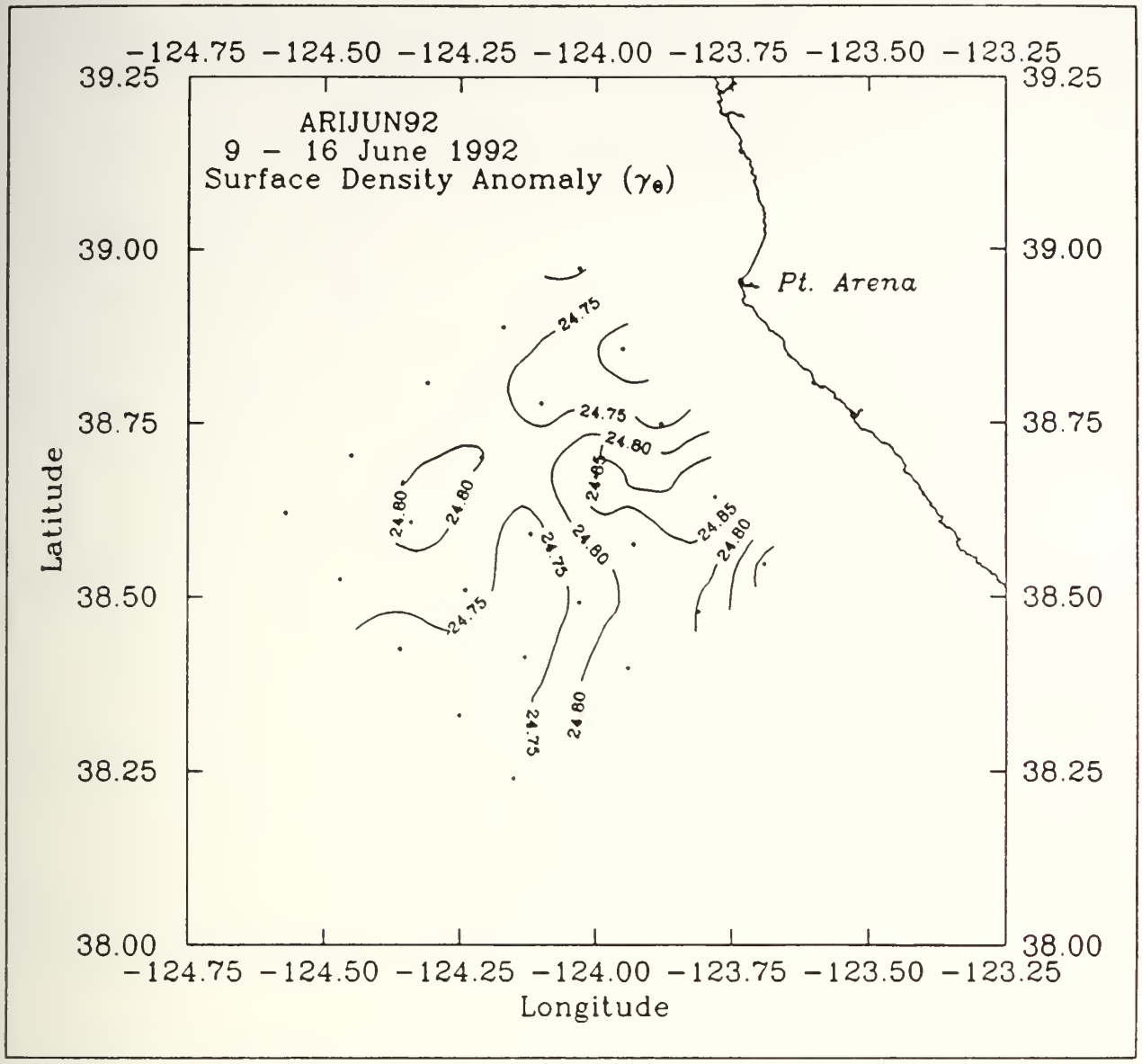

Figure 6. Map of sea surface density anomaly (γ_θ) during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

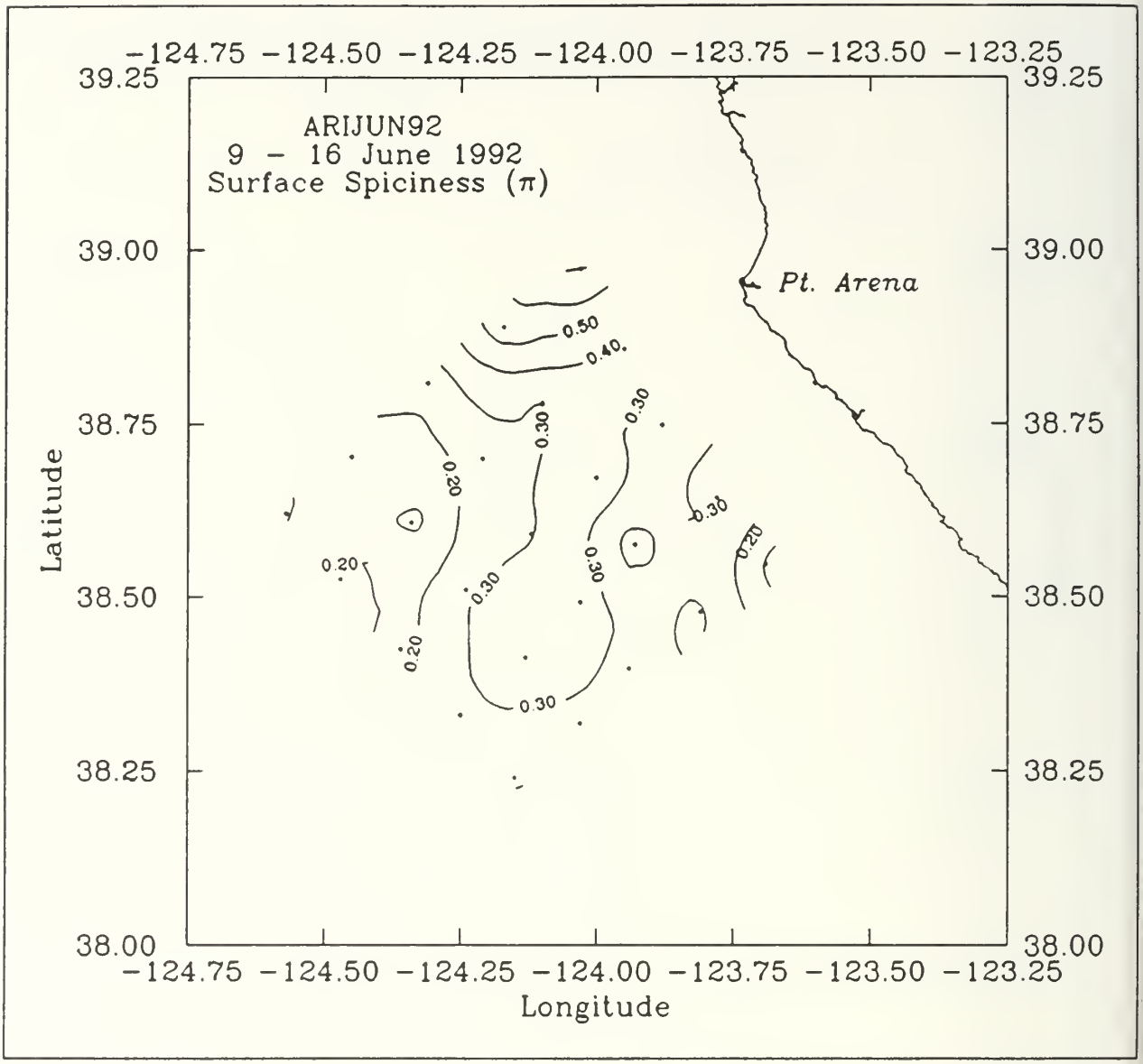

Figure 7. Map of sea surface spiciness (π) during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

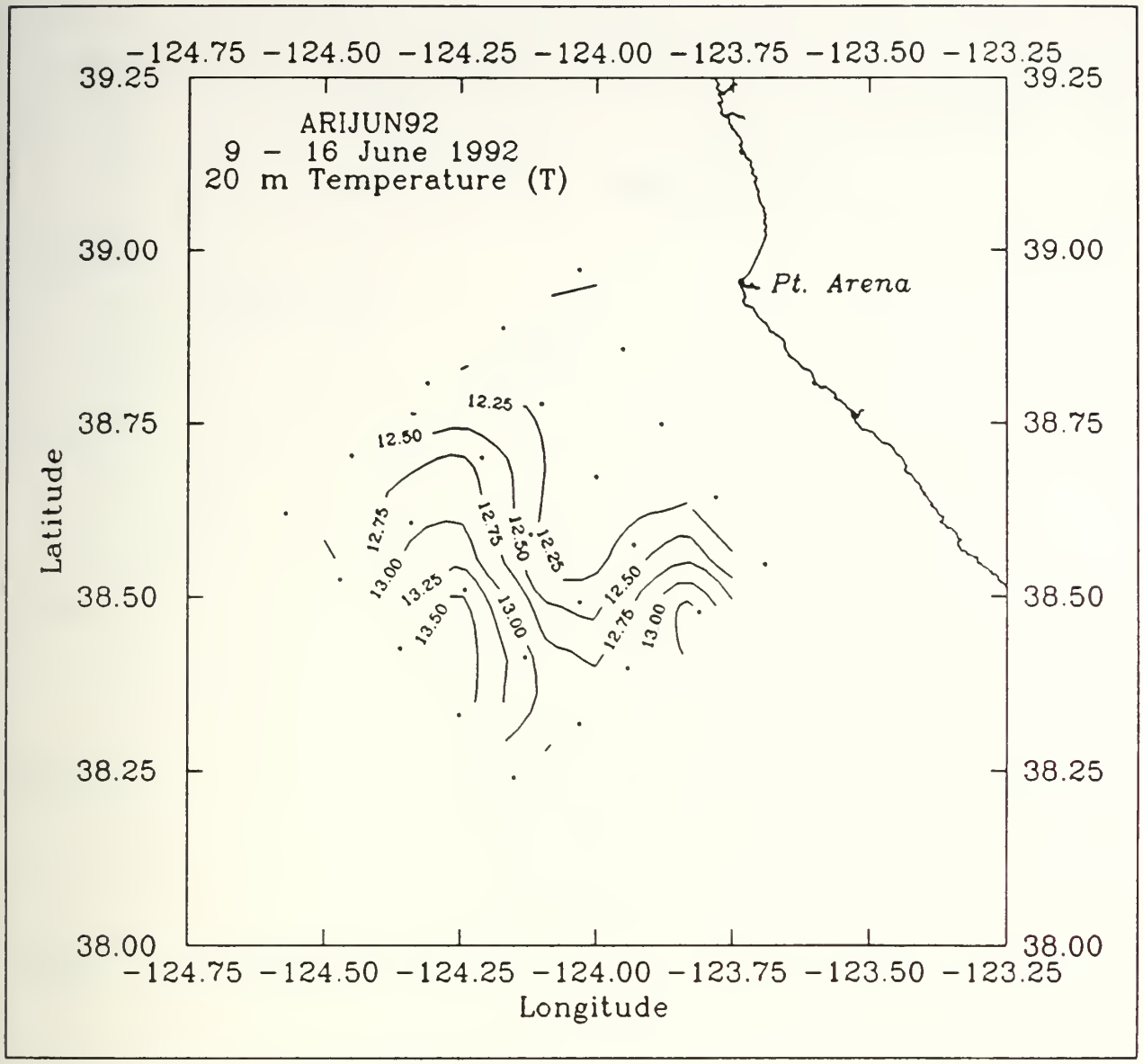

Figure 8. Map of temperature (T) at 20 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

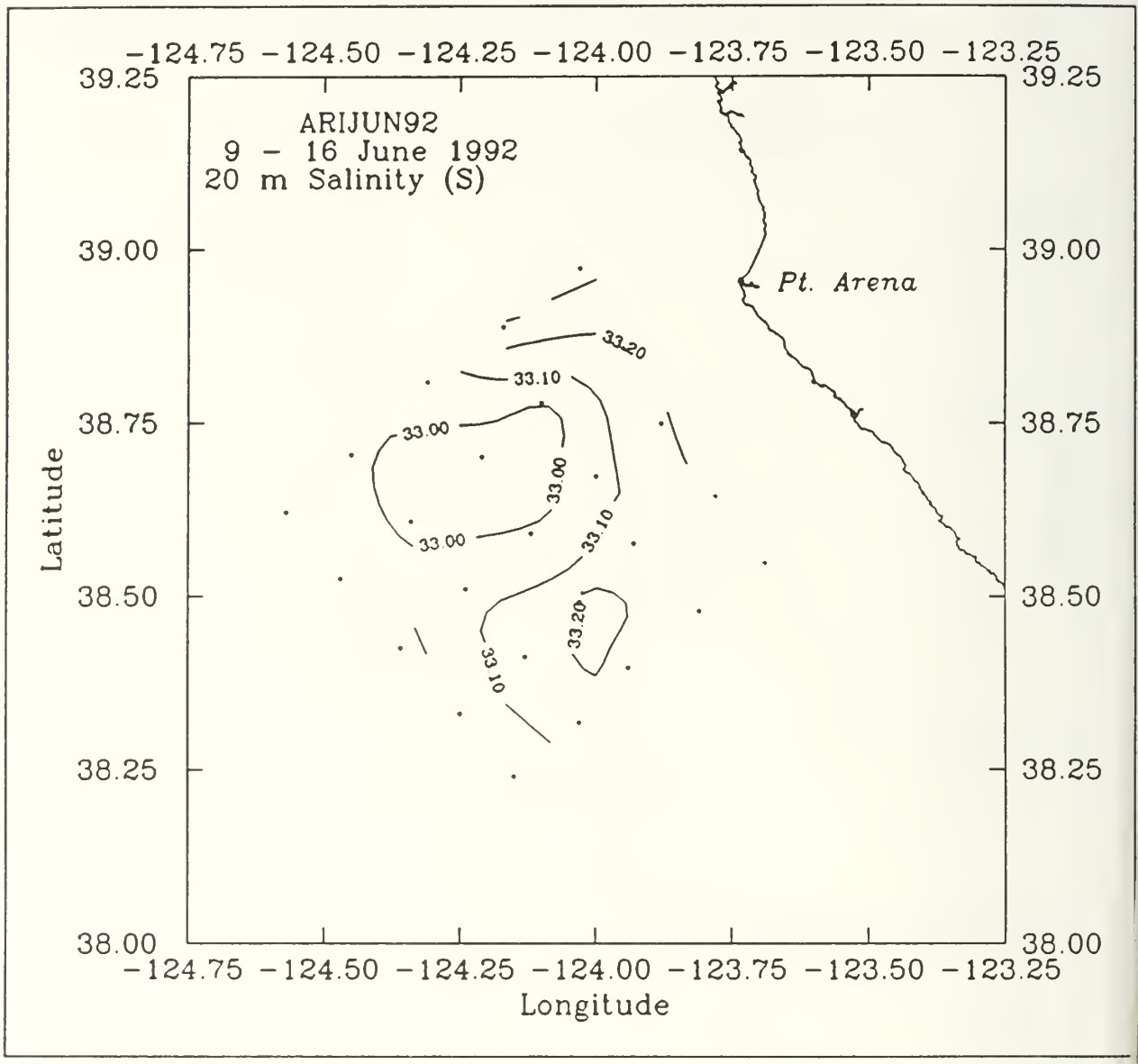

Figure 9. Map of salinity (S) at 20 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

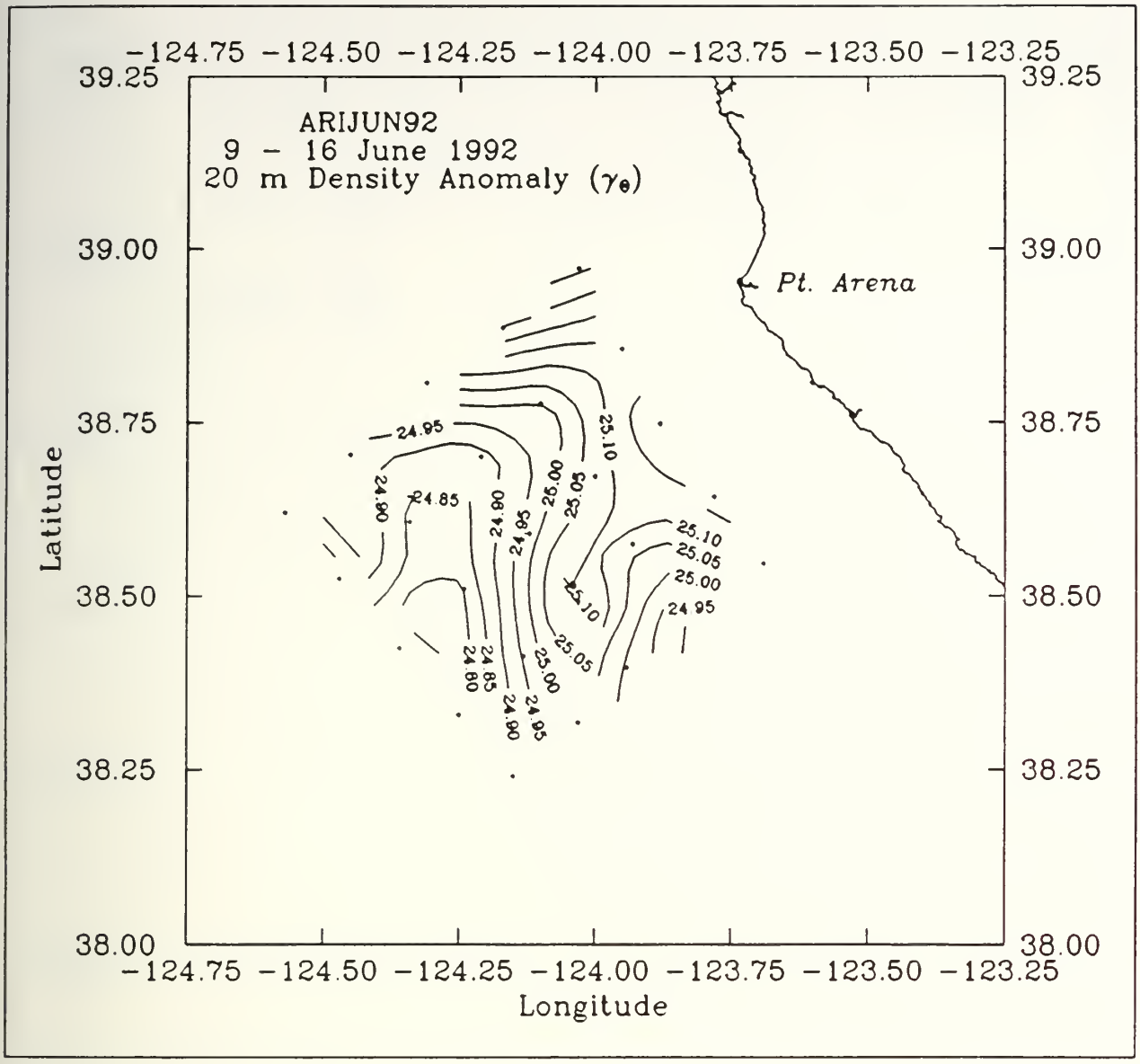

Figure 10. Map of density anomaly (γ_θ) at 20 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

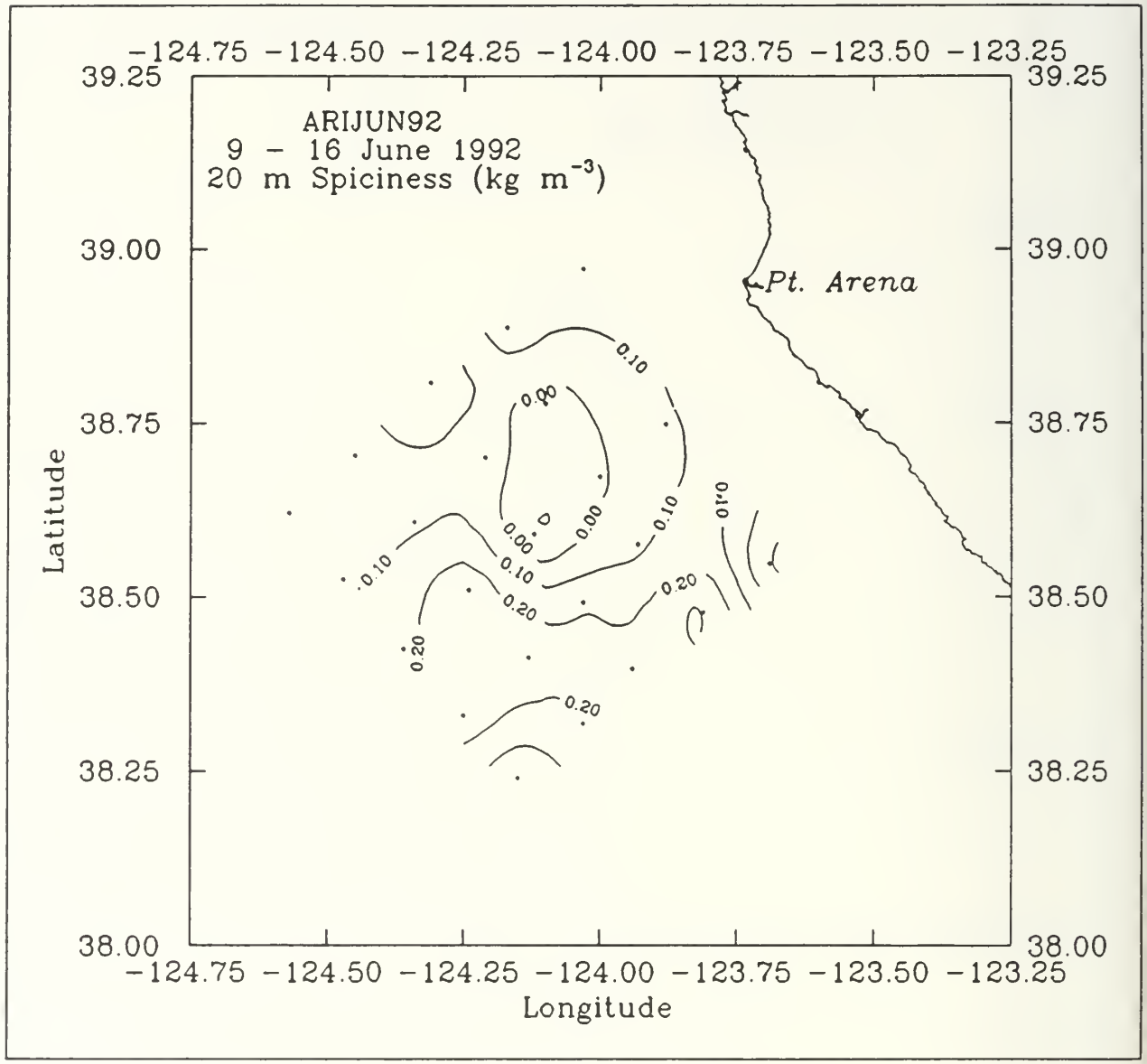

Figure 11. Map of spiciness (π) at 20 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

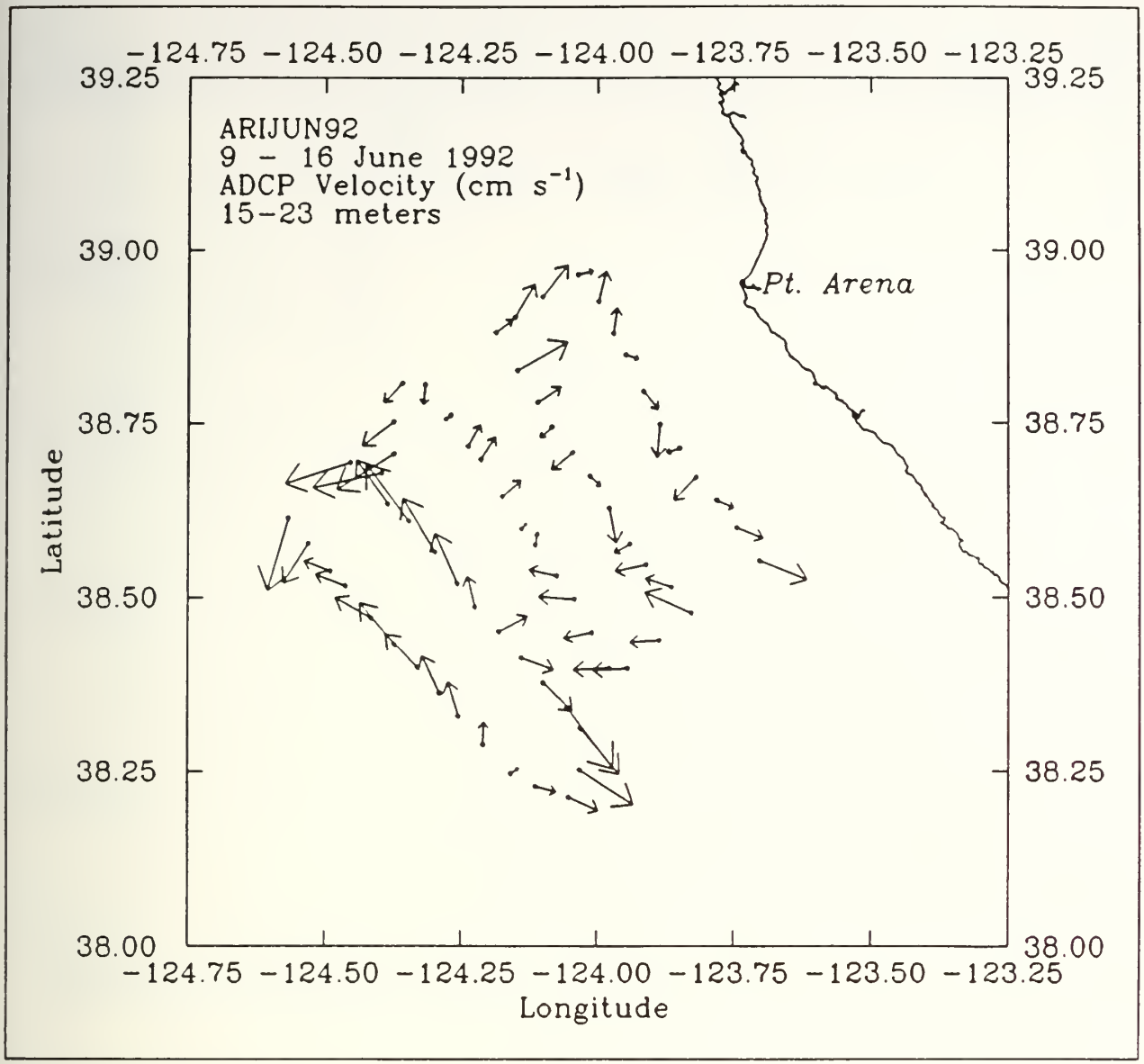

Figure 12. 5 km averaged ADCP current vectors (cm s^{-1}) from 15-23 m during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

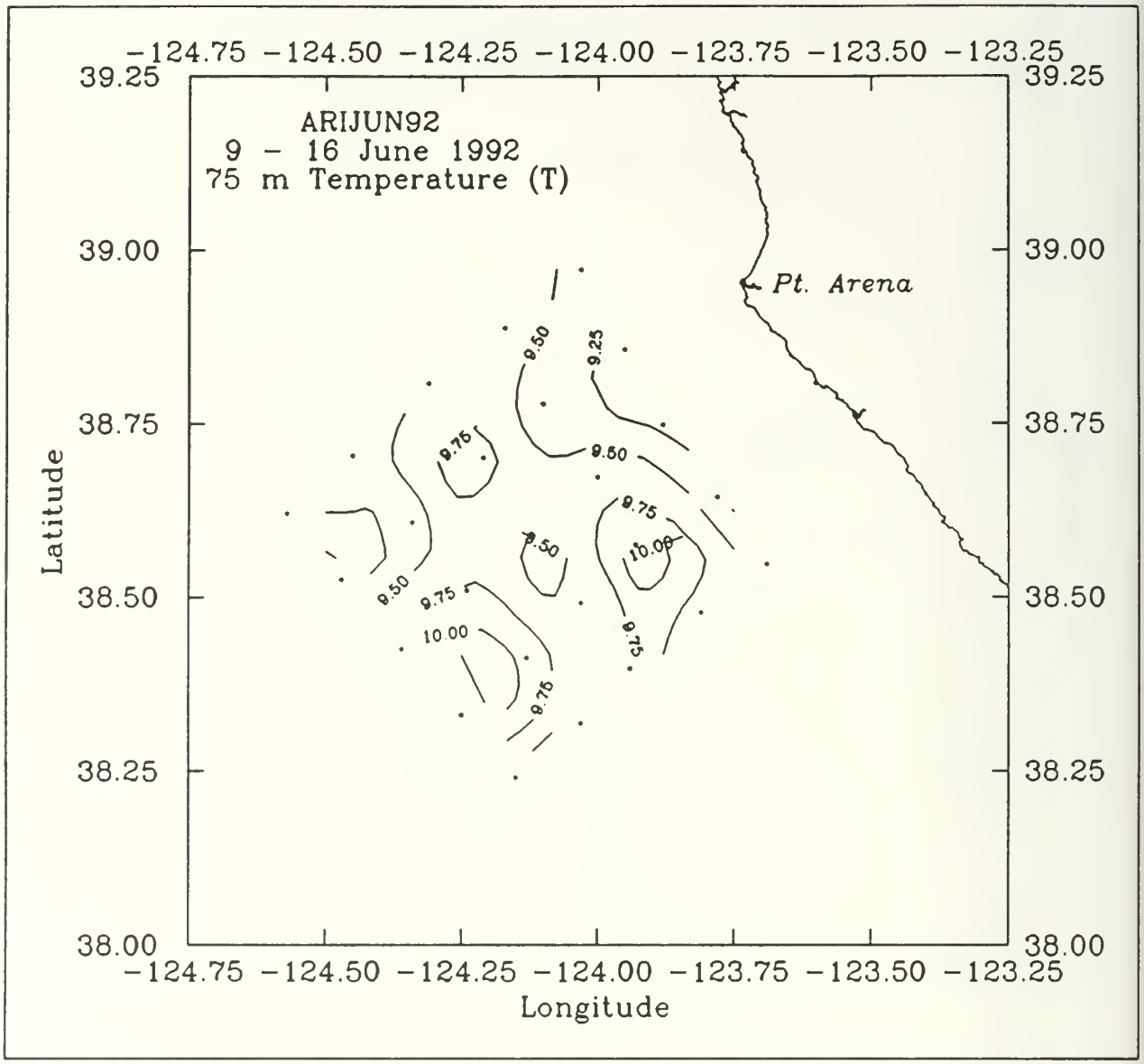

Figure 13. Map of temperature (T) at 75 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

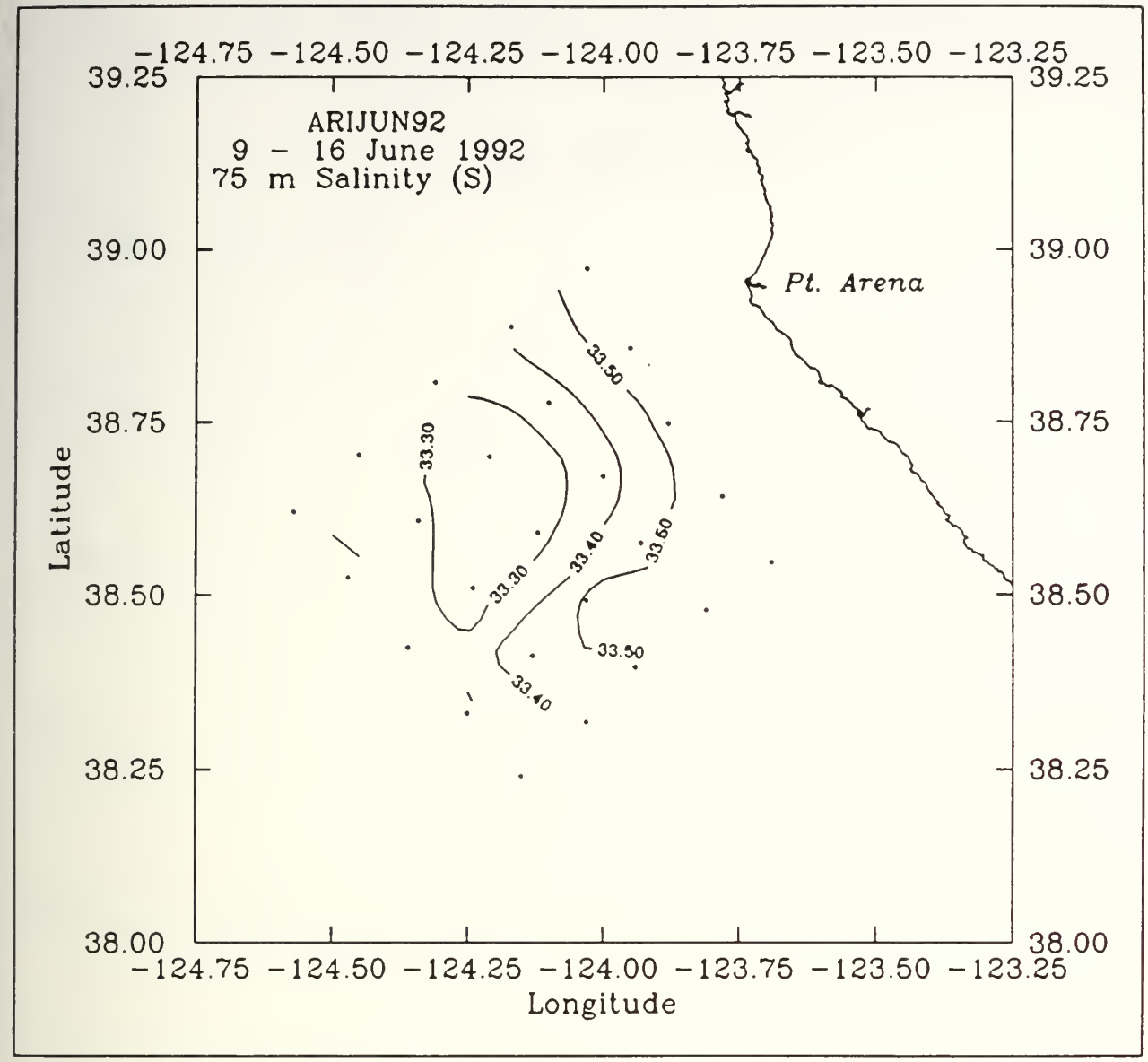

Figure 14. Map of salinity (S) at 75 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

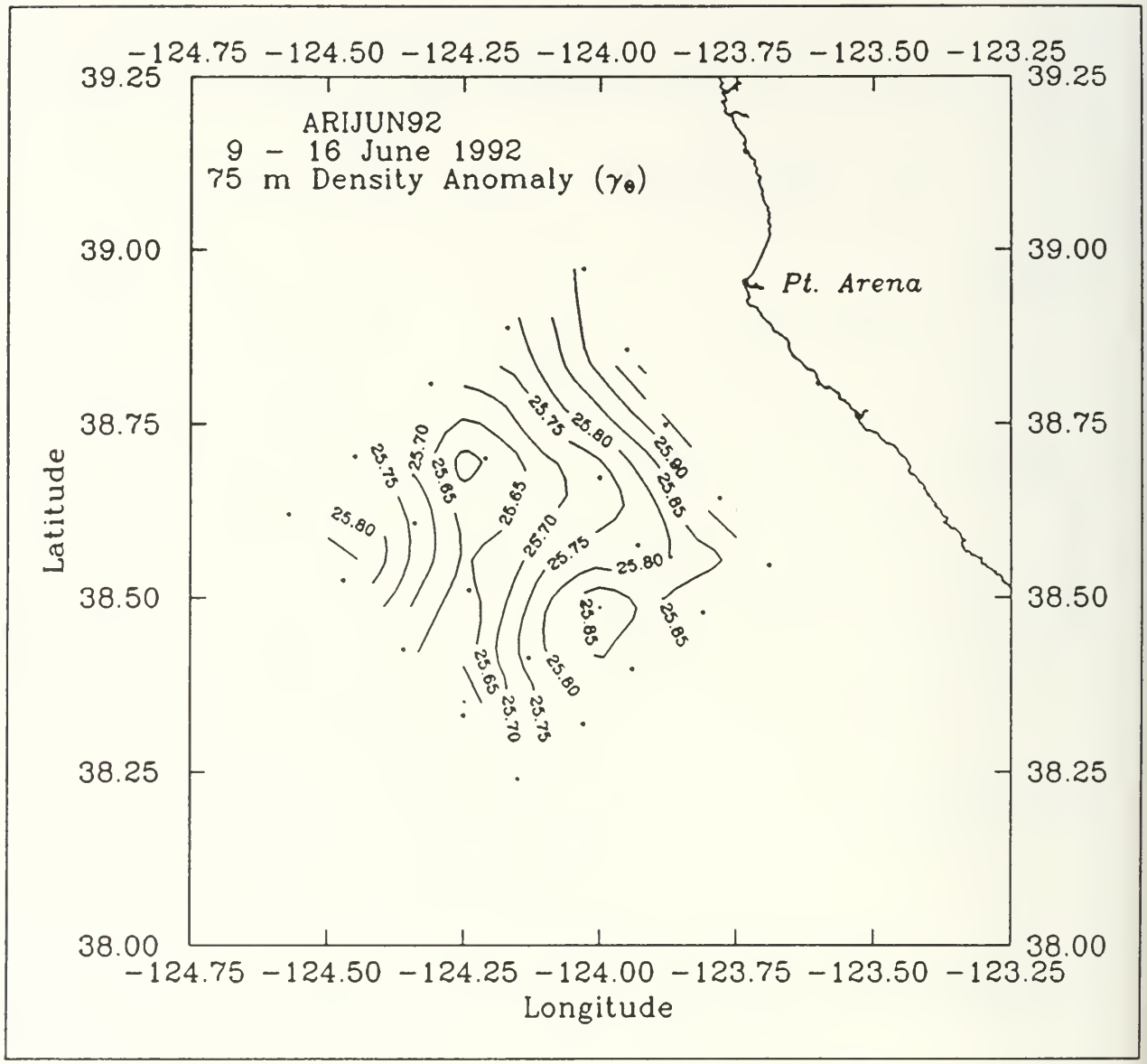

Figure 15. Map of density anomaly (γ_θ) at 75 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

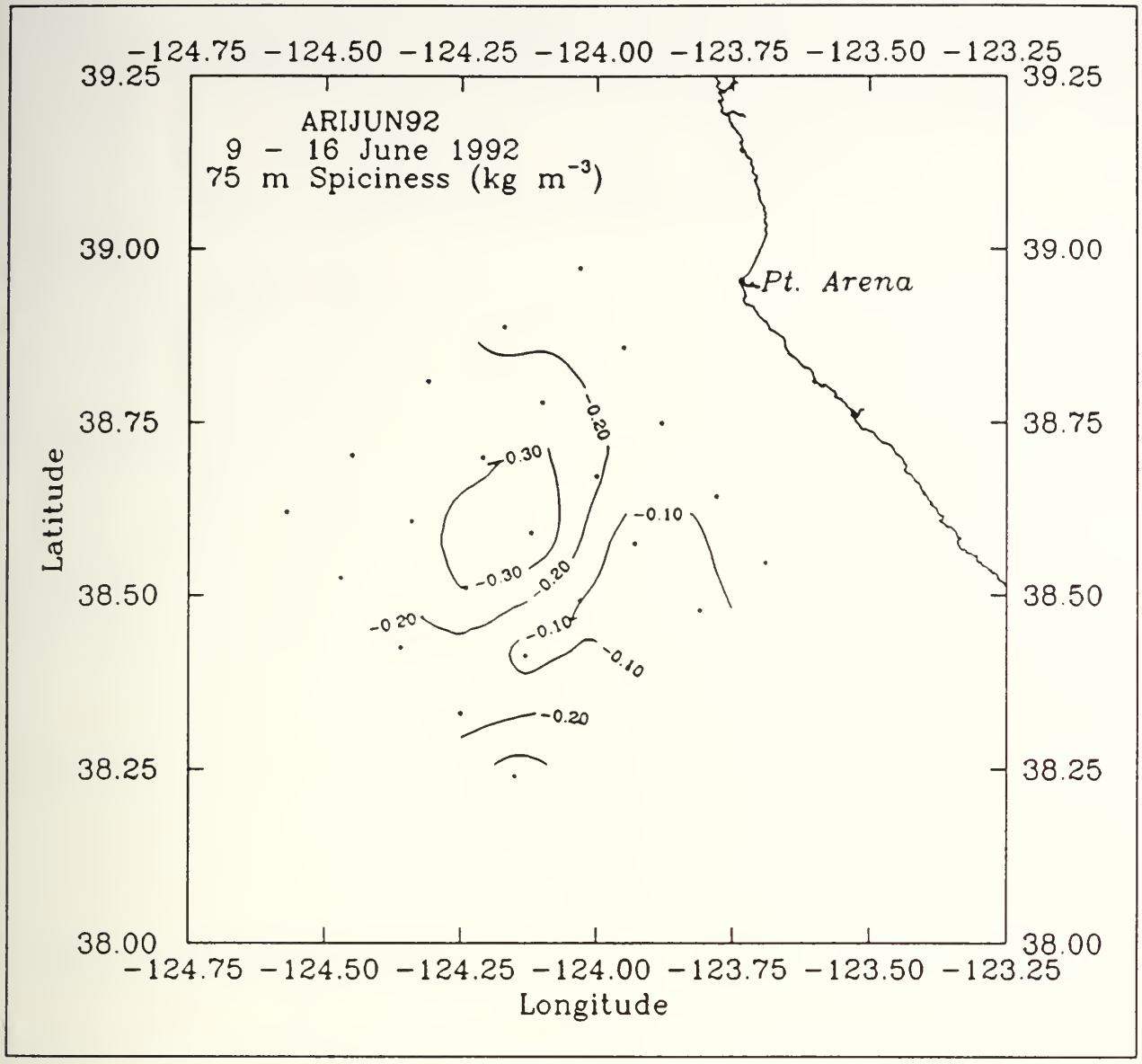

Figure 16. Map of spiciness (π) at 75 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

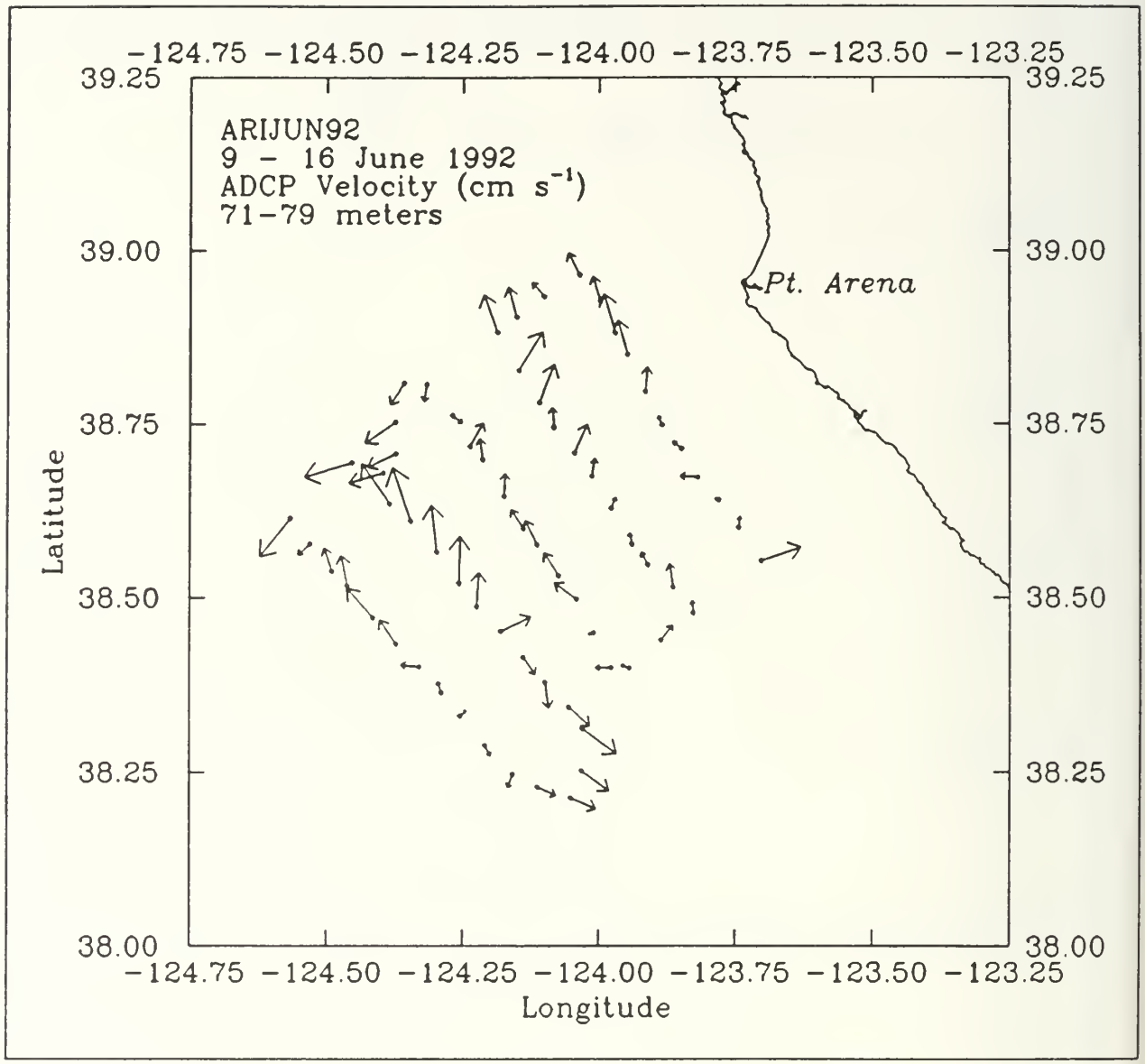

Figure 17. 5 km averaged ADCP current vectors (cm s^{-1}) from 71-79 m during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

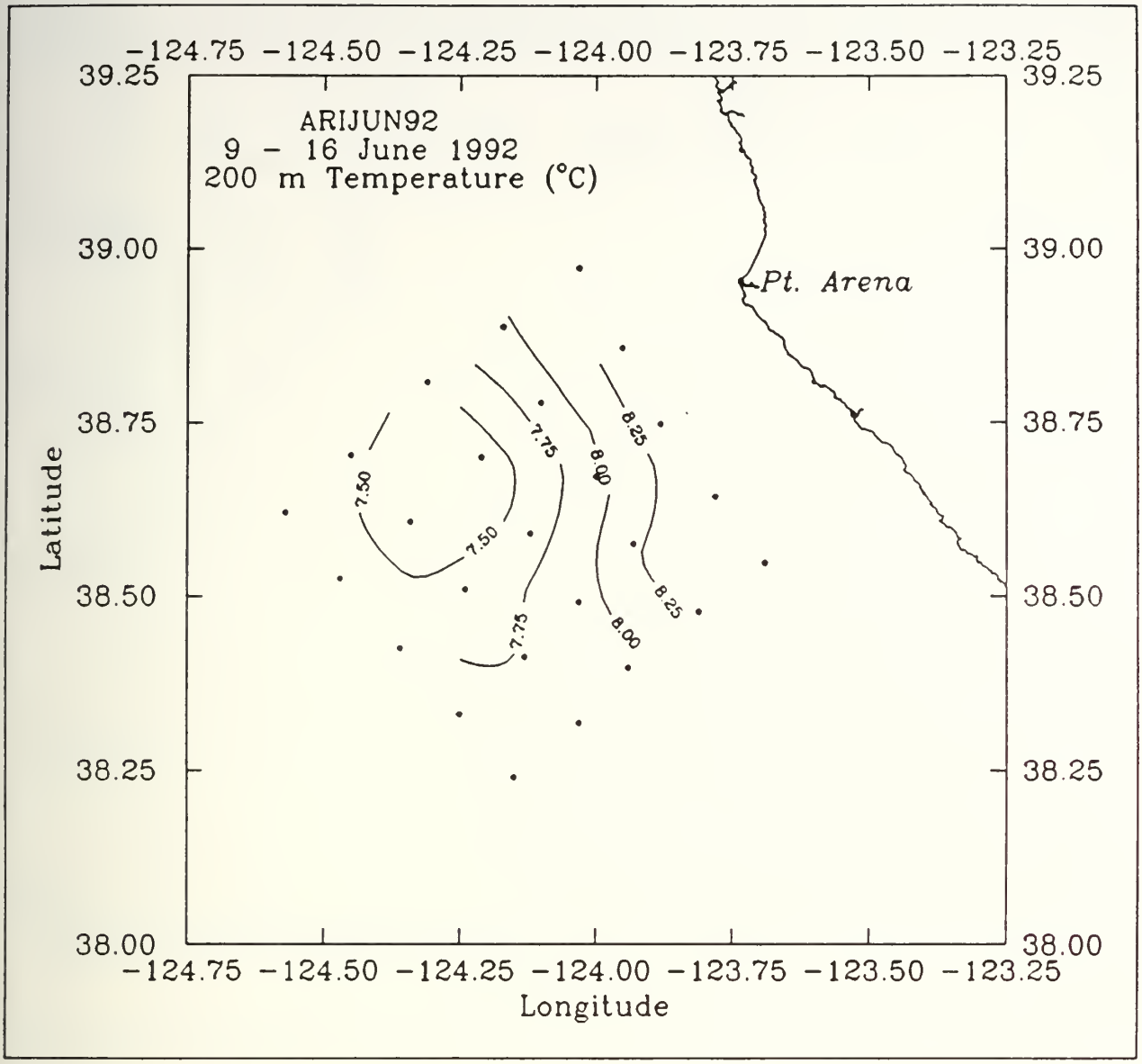

Figure 18. Map of temperature (T) at 200 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

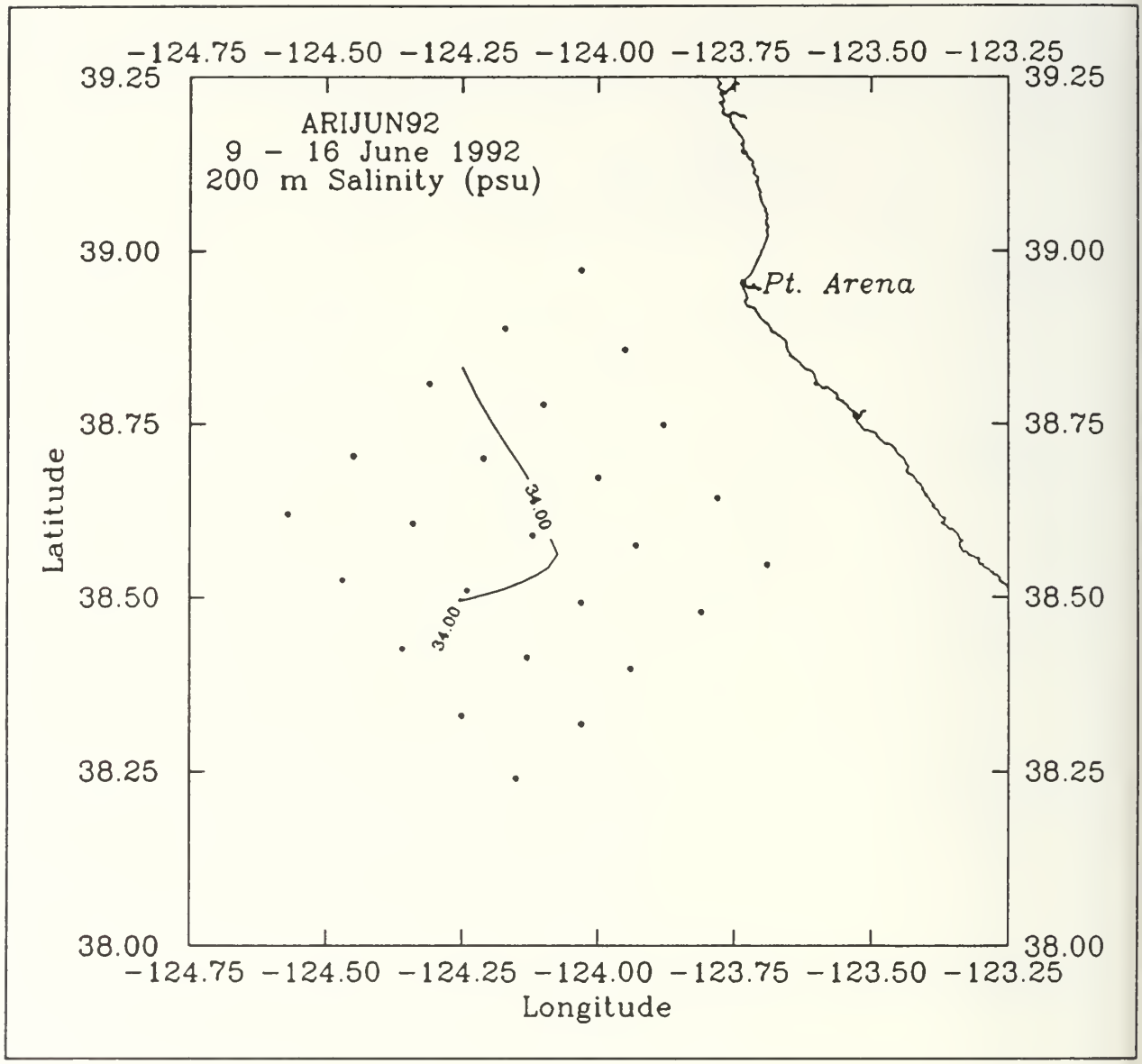

Figure 19. Map of salinity (S) at 200 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

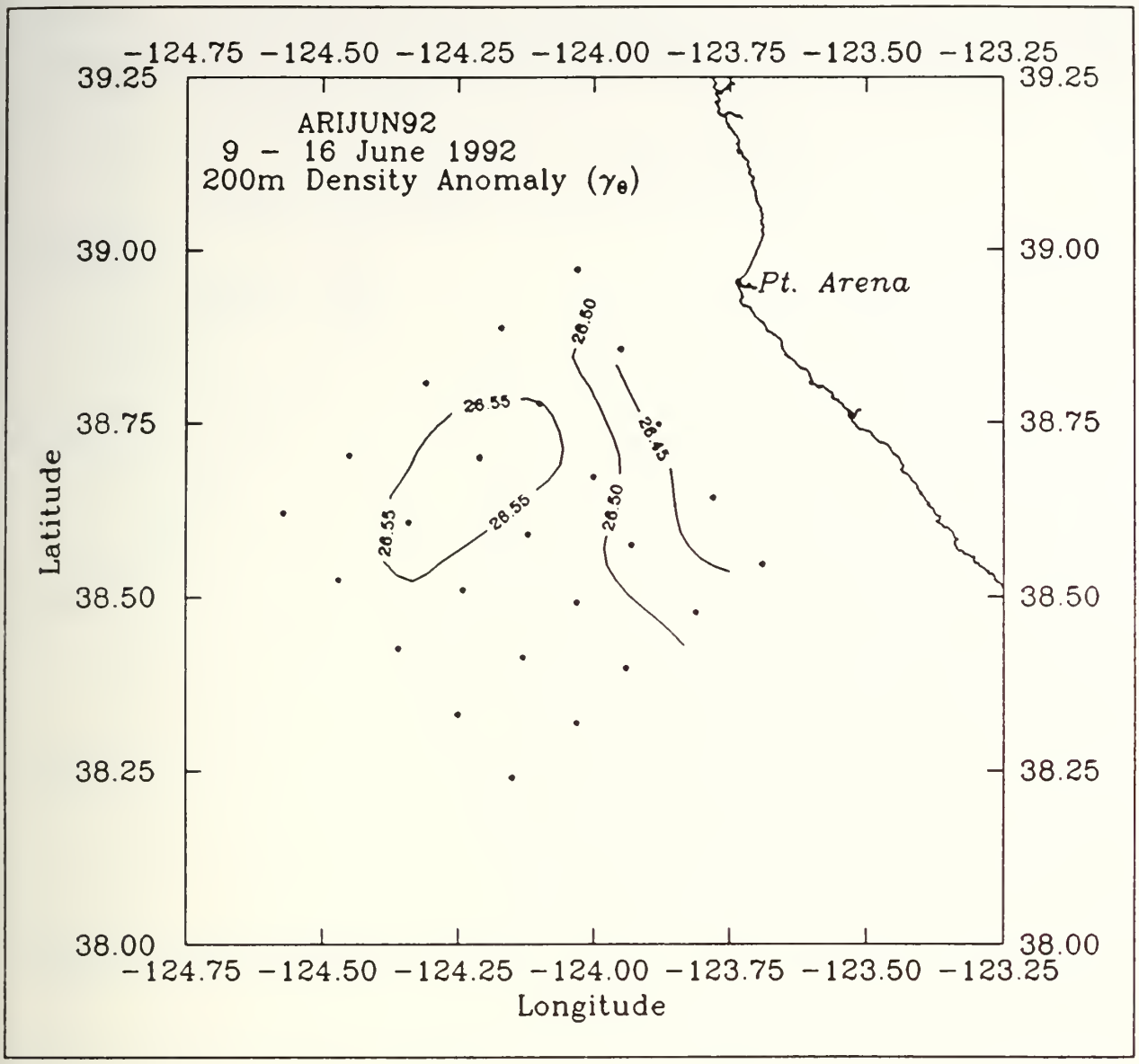

Figure 20. Map of density anomaly (γ_θ) at 200 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

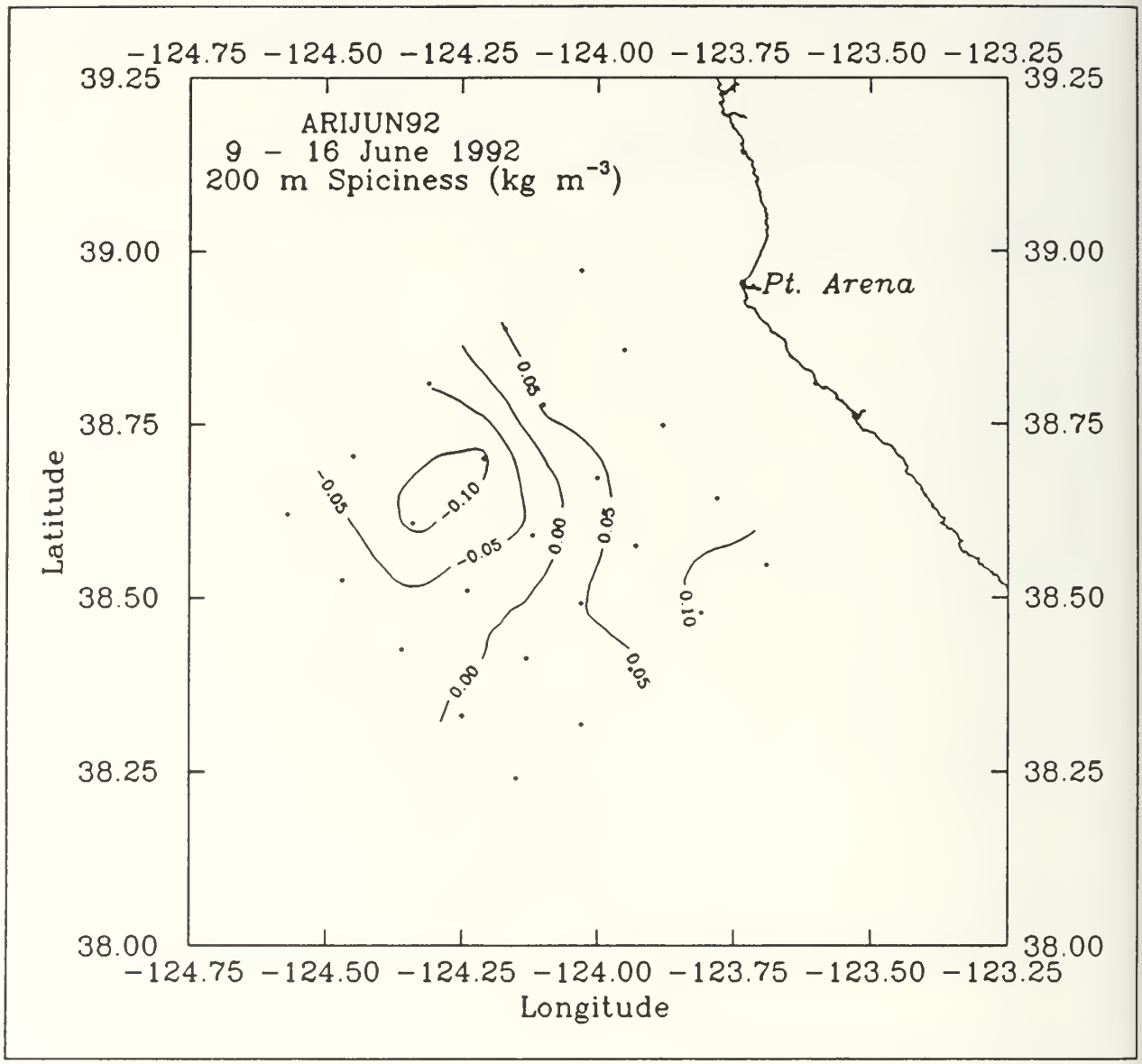

Figure 21. Map of spiciness (π) at 200 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

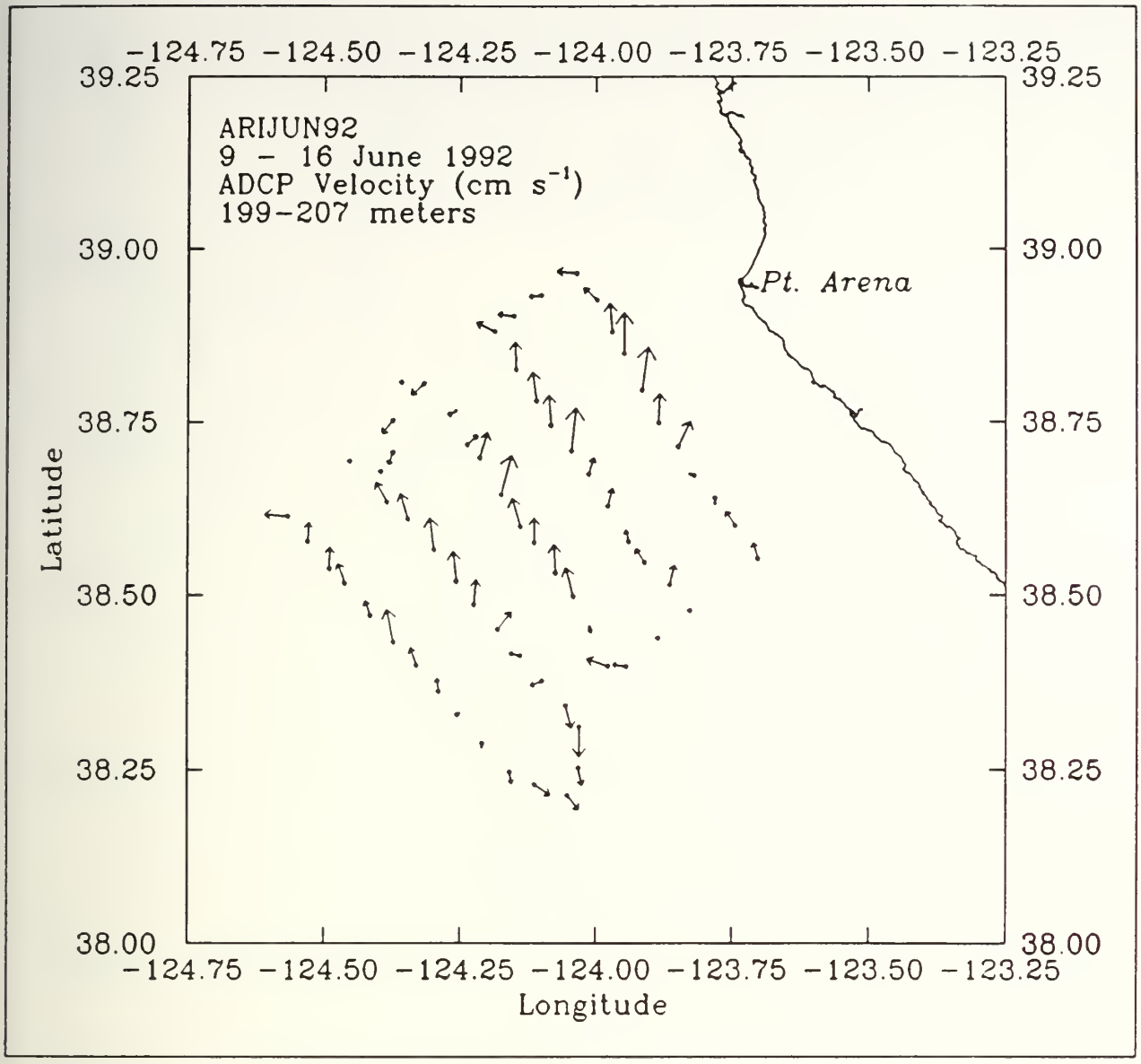

Figure 22. 5 km averaged ADCP current vectors (cm s^{-1}) from 199-207 m during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

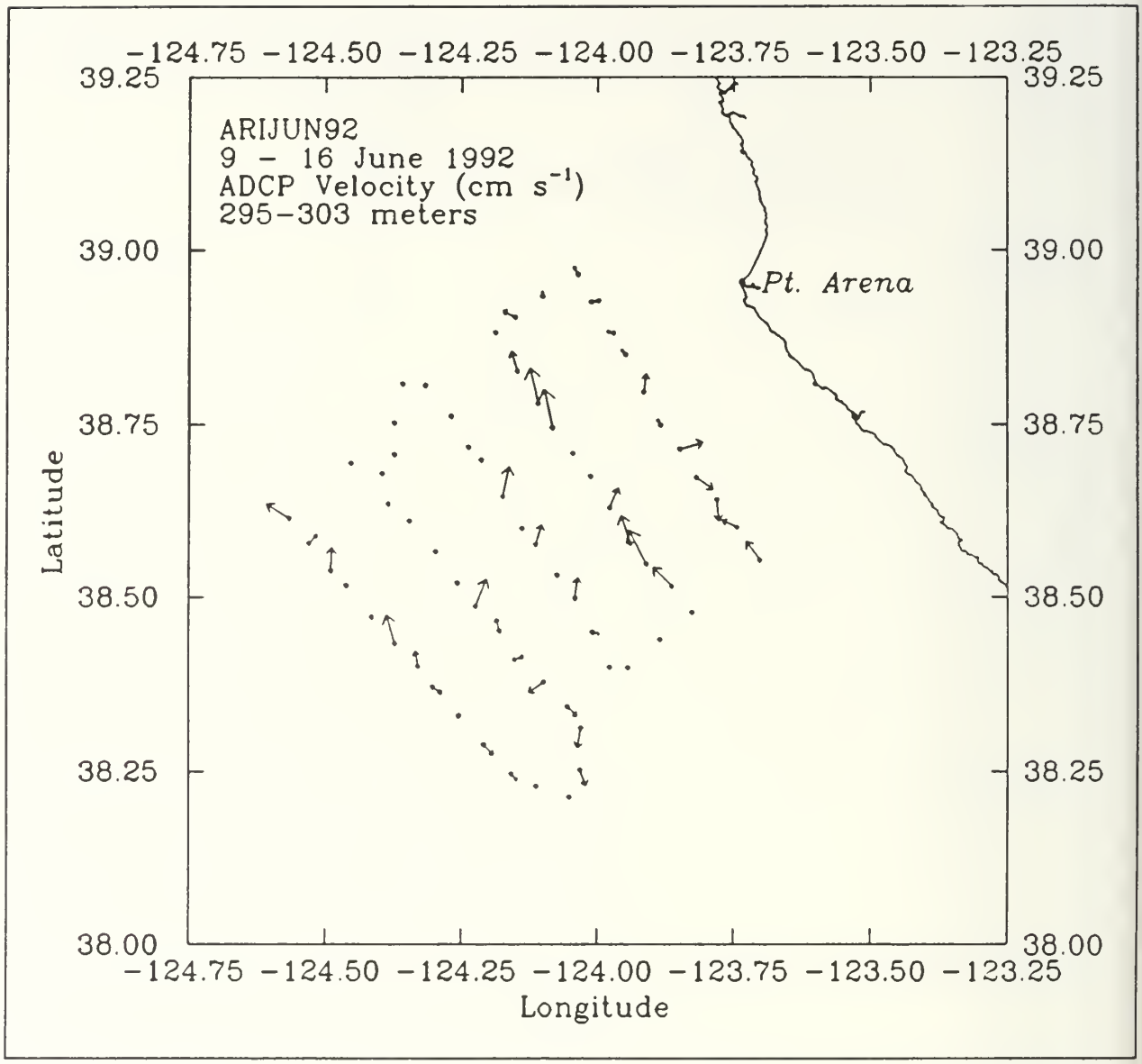

Figure 23. 5 km averaged ADCP current vectors (cm s^{-1}) from 295-303 m during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

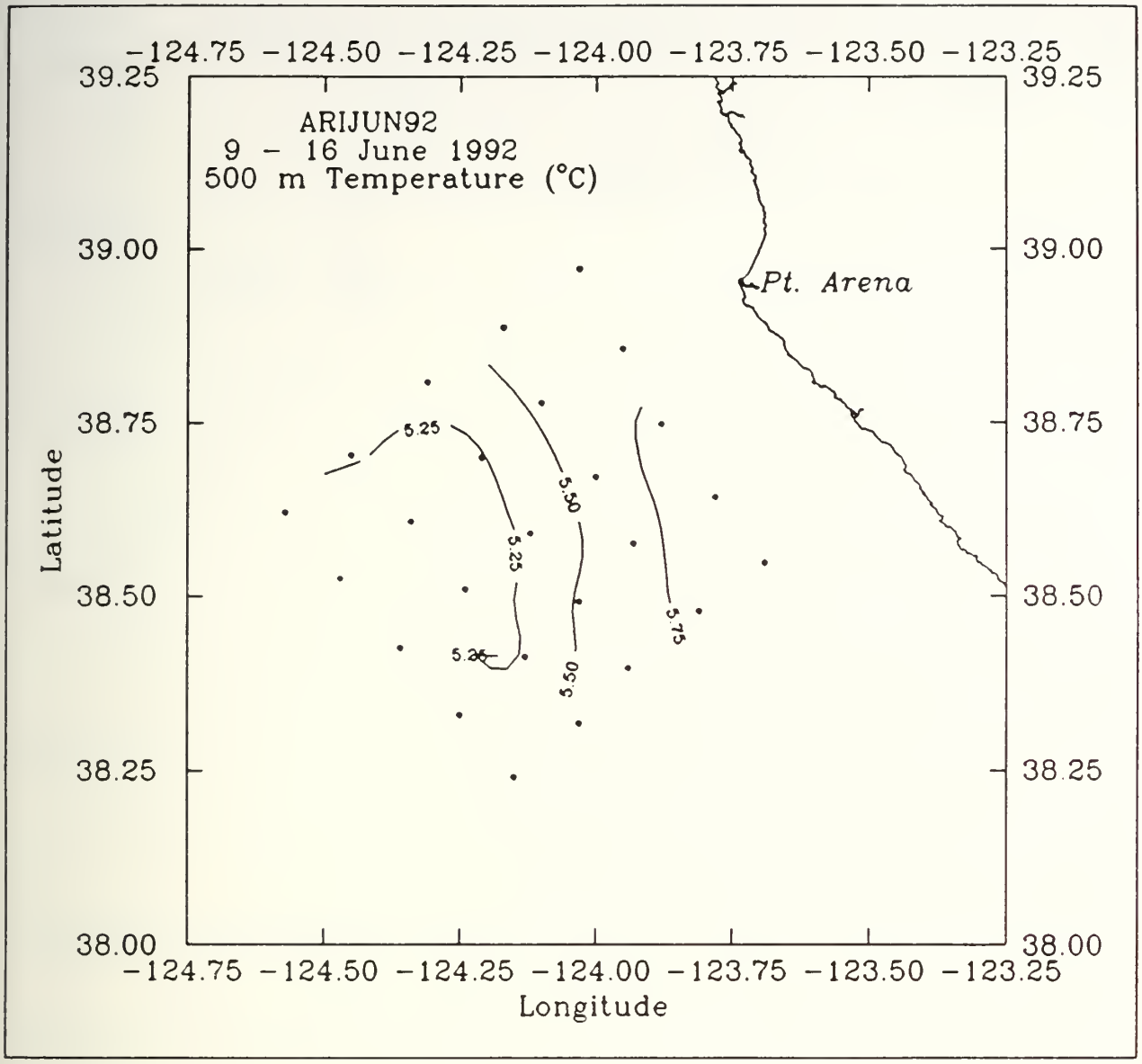

Figure 24. Map of temperature (T) at 500 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

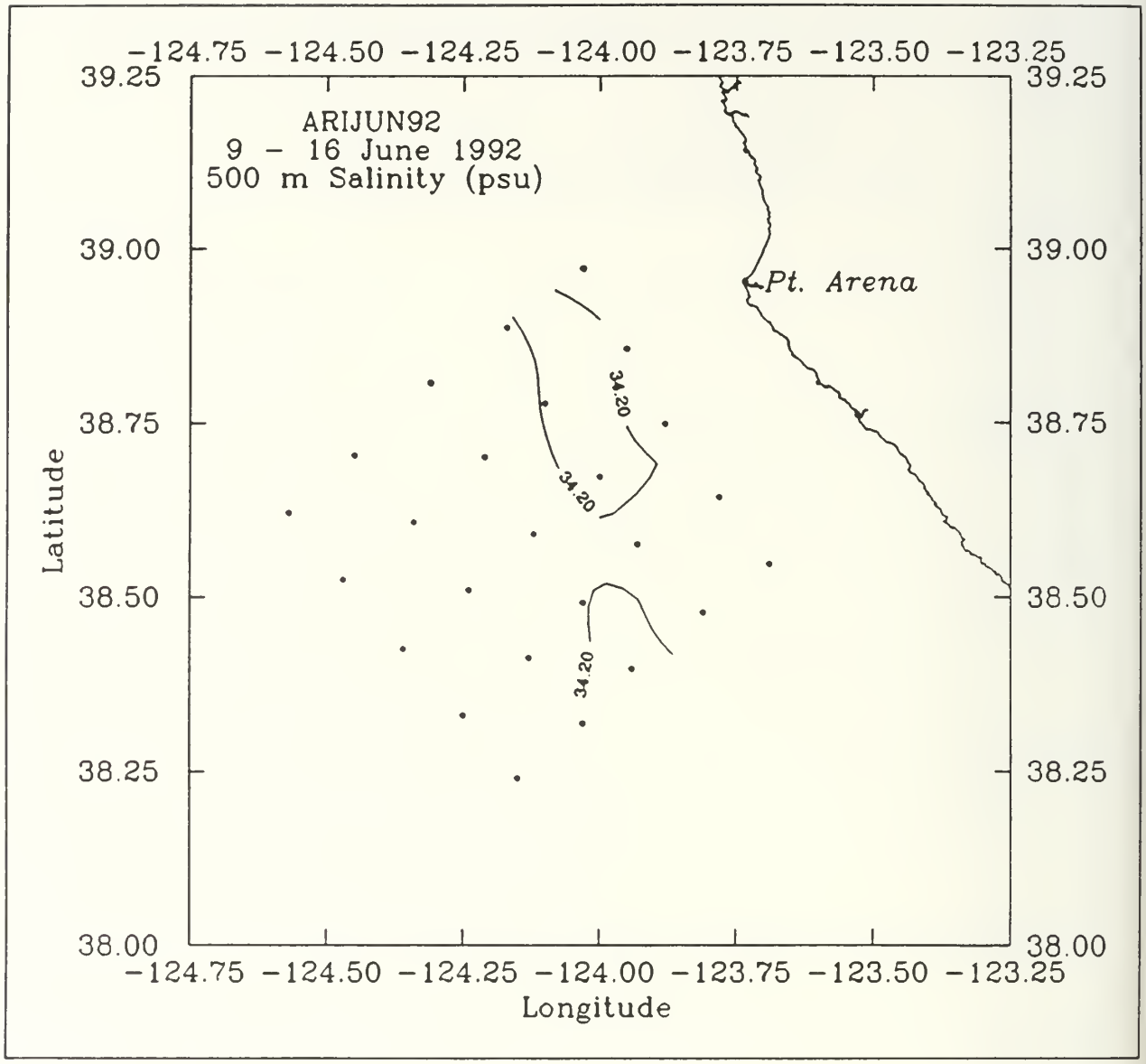

Figure 25. Map of salinity (S) at 500 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

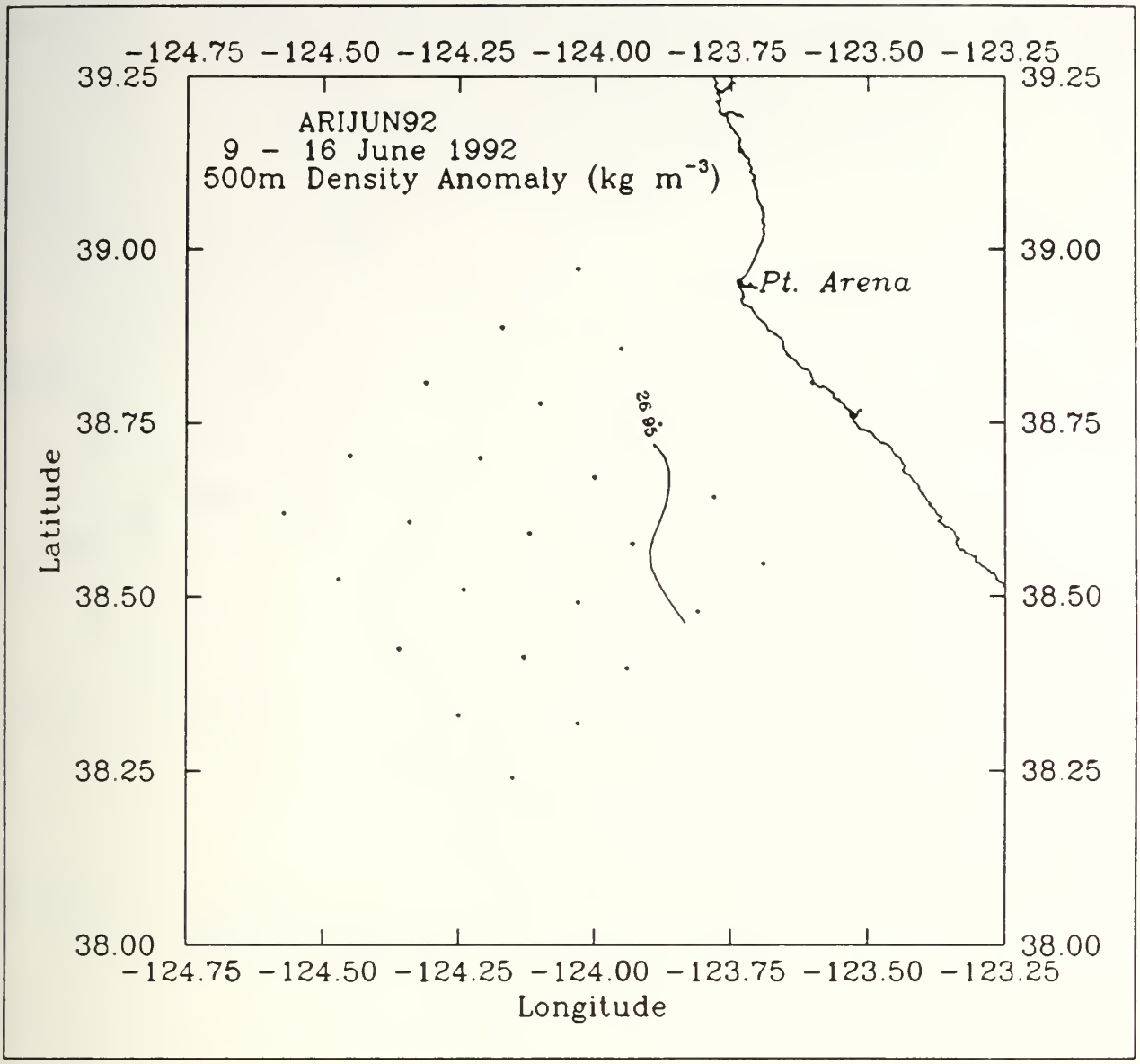

Figure 26. Map of density anomaly (γ_θ) at 500 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

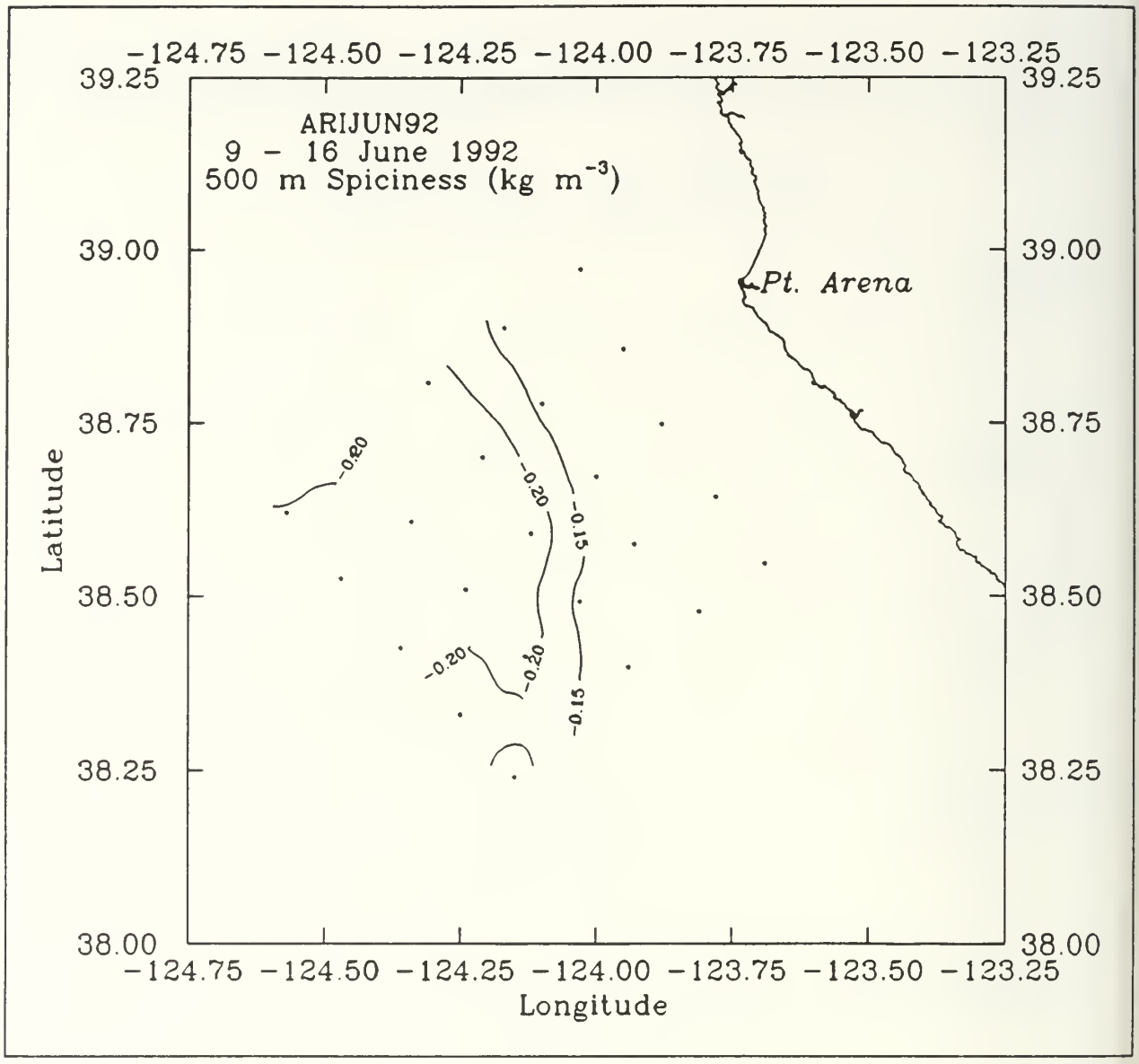

Figure 27. Map of spiciness (π) at 500 m depth during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

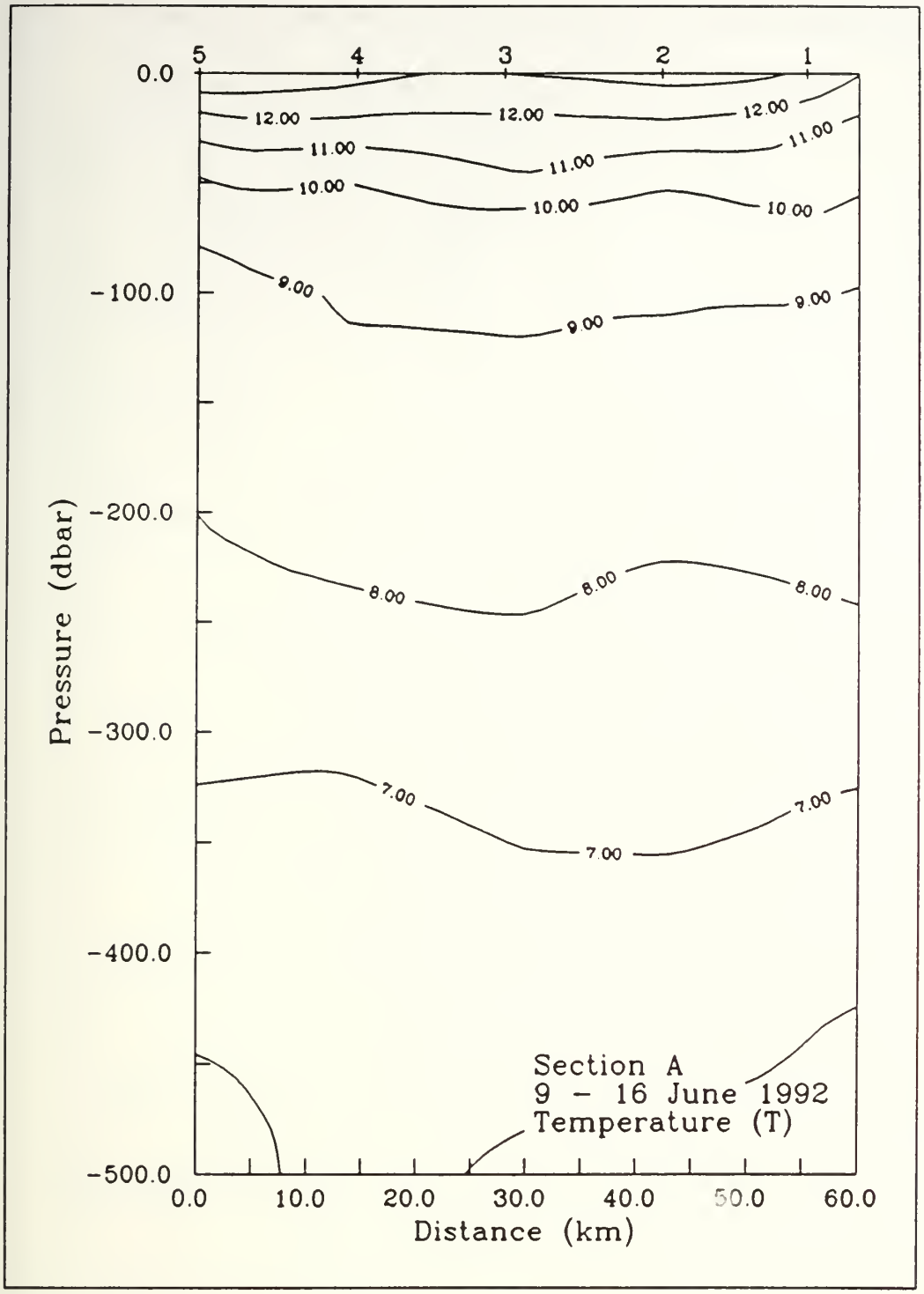

Figure 28. Vertical sections of a) temperature (T), b) salinity (S), c) density anomaly (γ_θ), and d) spiciness (π) for section A (CTD stations 1 - 5) of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

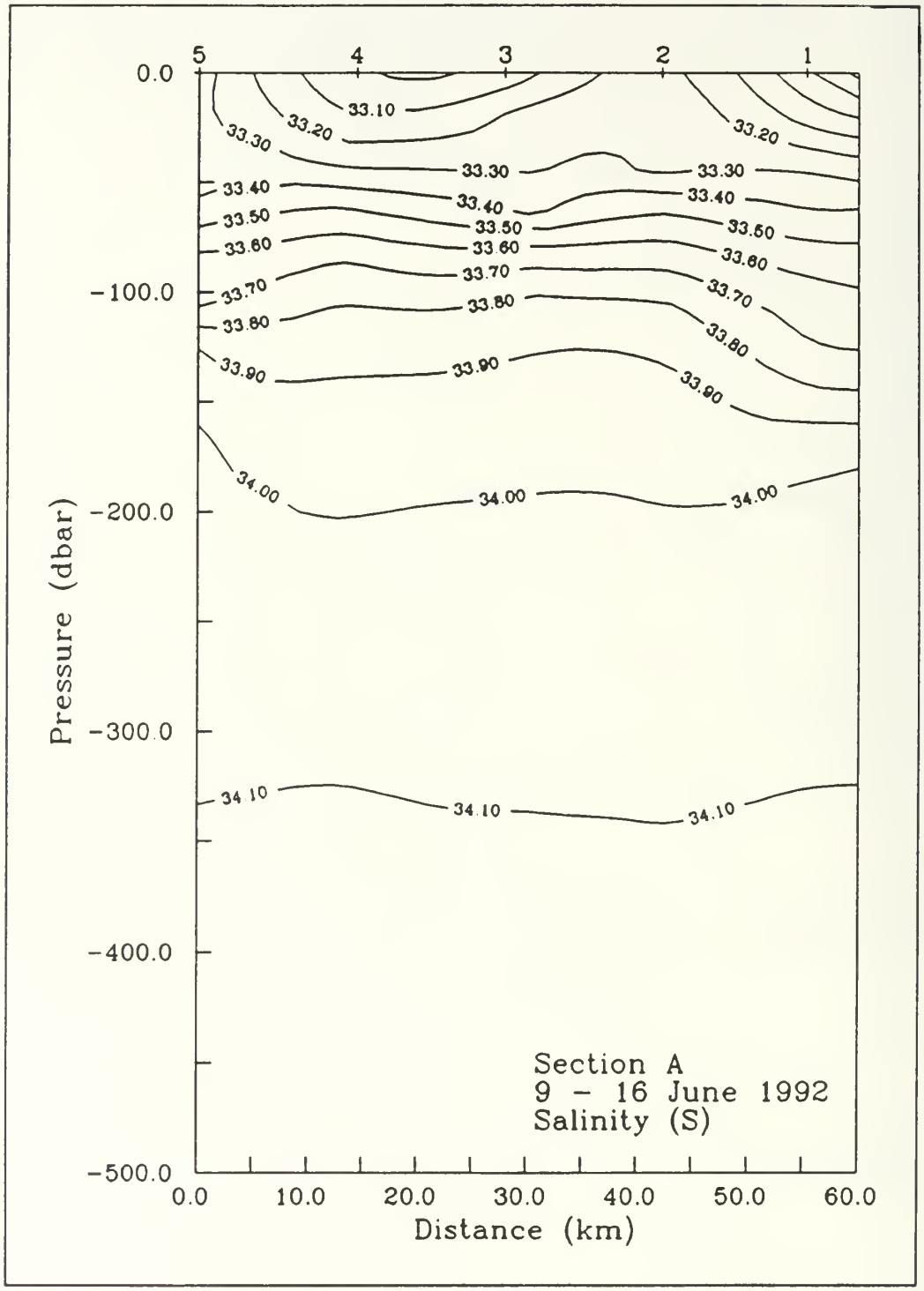
5
4
3
2
1
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
33.10
33.20
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
Pressure (dbar)
Section A
9 - 16 June 1992
Salinity (S)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 28b.

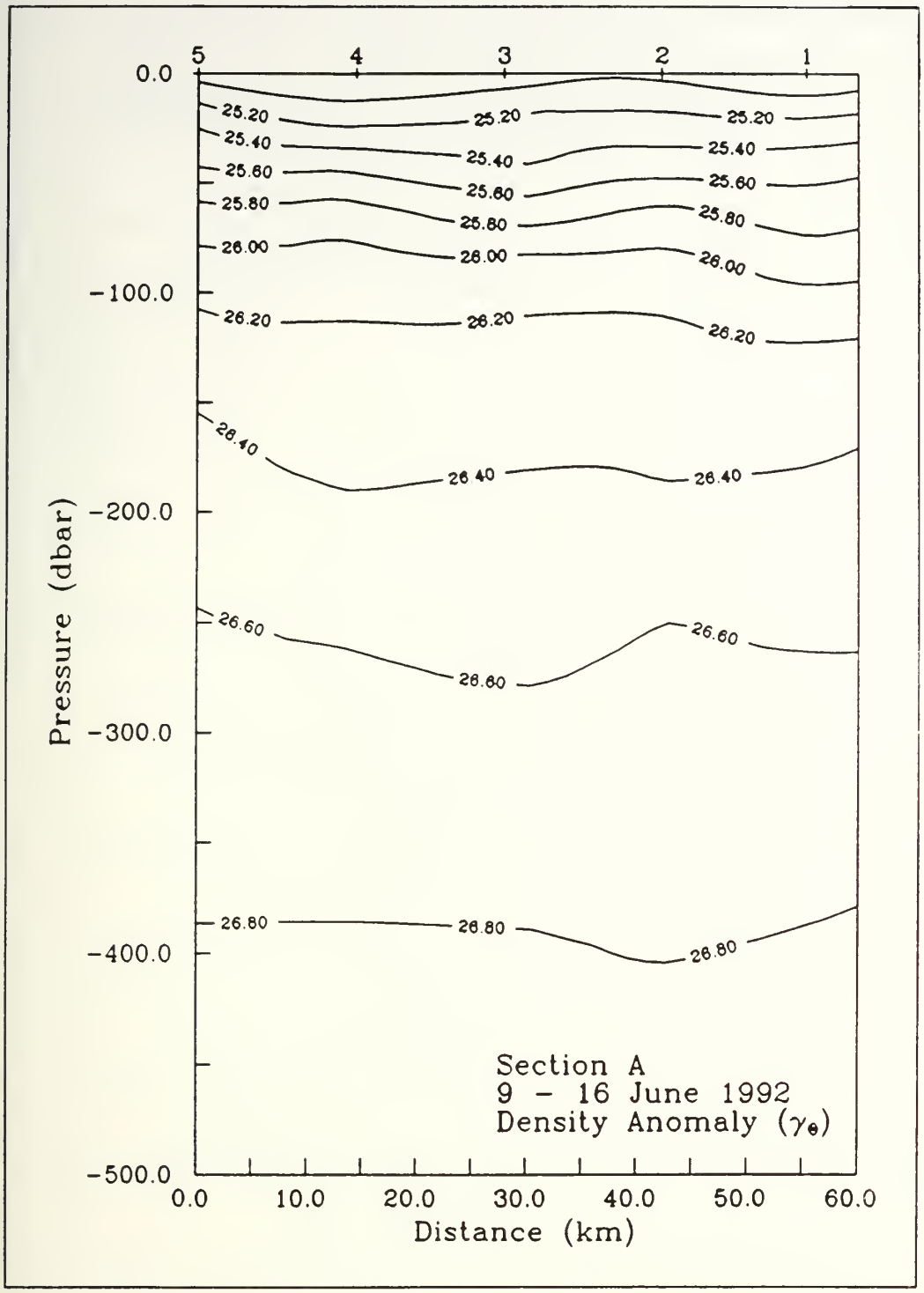
5
4
3
2
1
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
25.20
25.40
25.60
25.80
26.00
26.20
26.40
26.60
26.80
Section A
9 - 16 June 1992
Density Anomaly (γ_θ)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 28c.

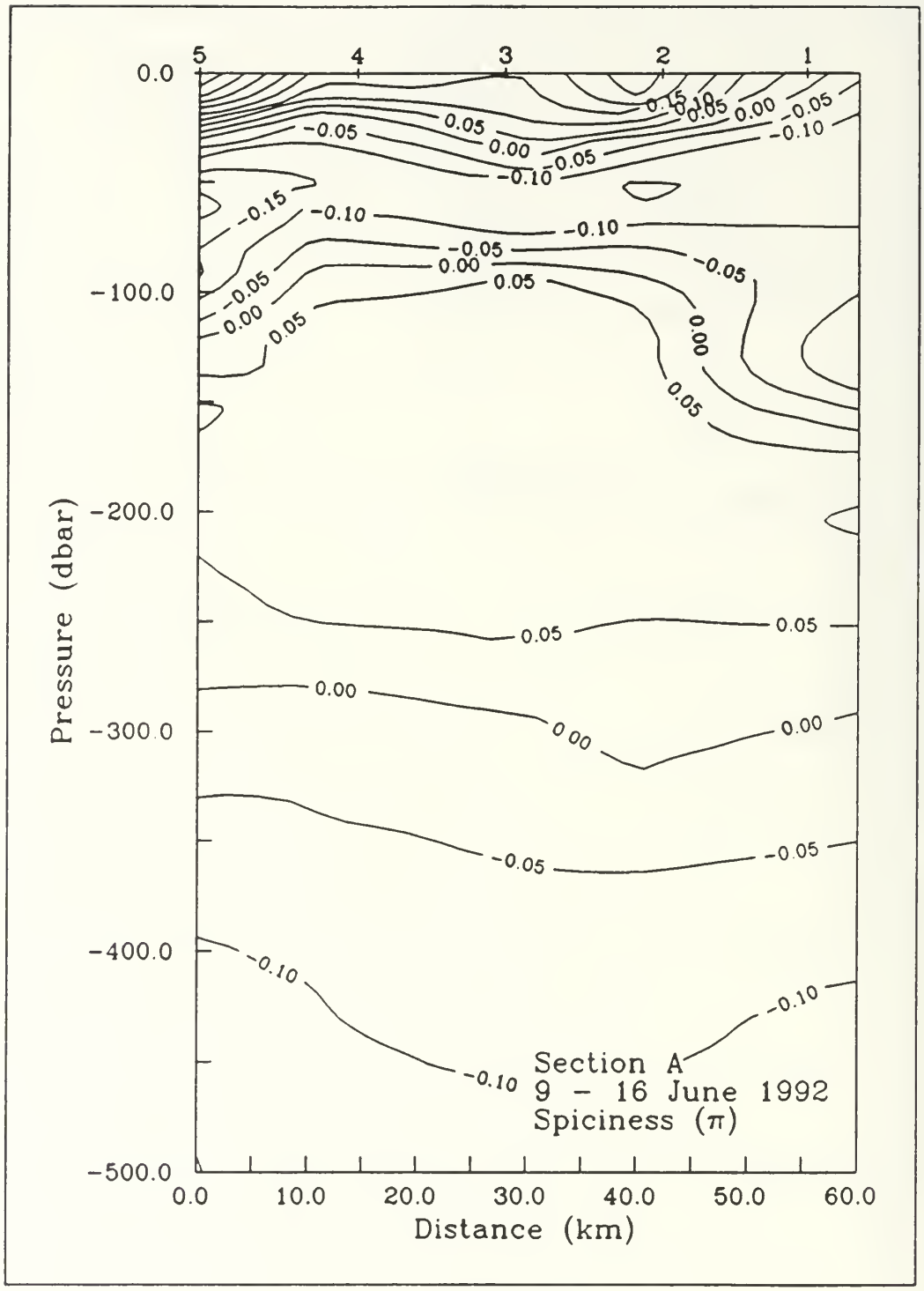
5
4
3
2
1
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section A
9 - 16 June 1992
Spiciness (π)

Figure 28d.

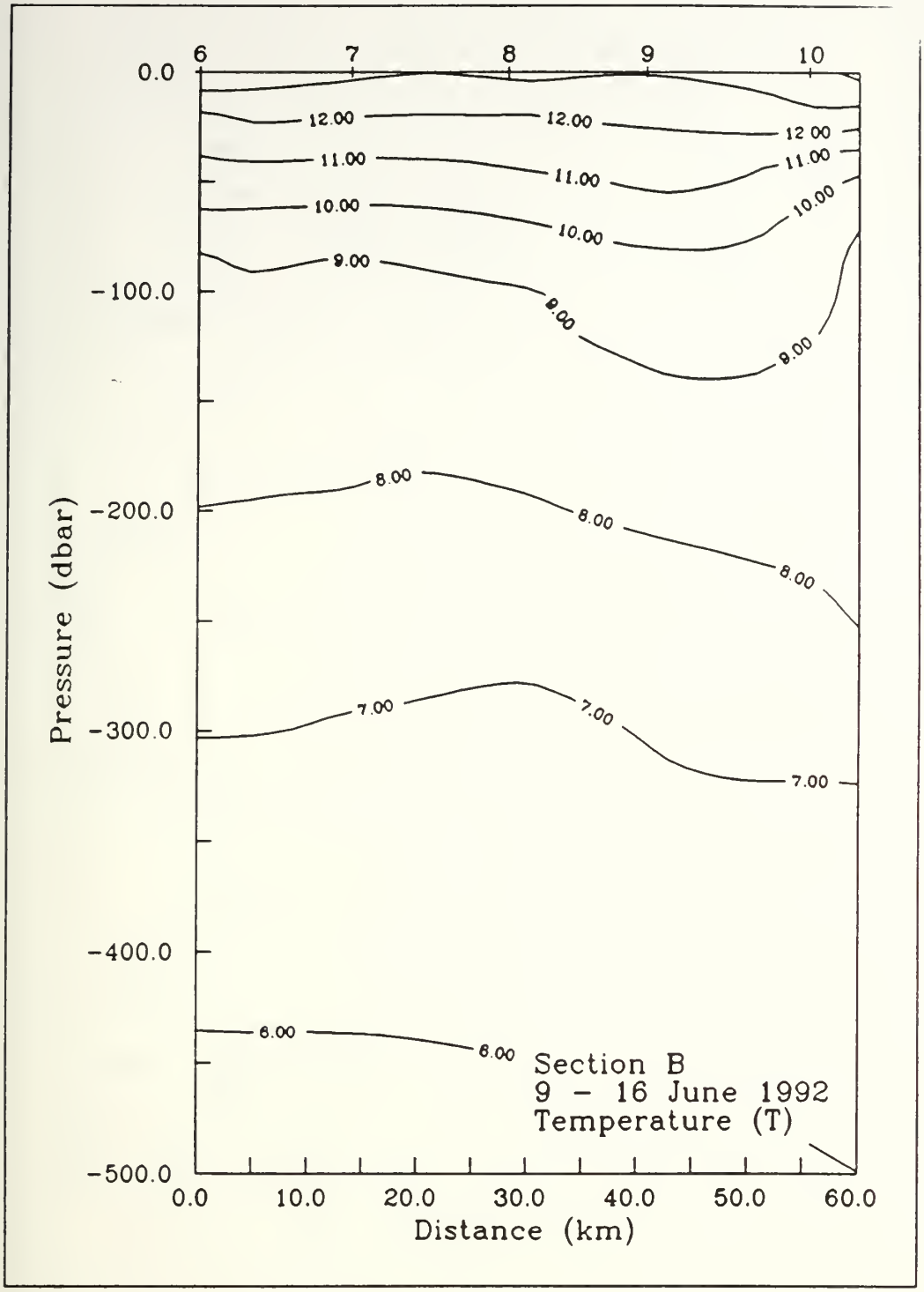

Figure 29. Vertical sections of a) temperature (T), b) salinity (S), c) density anomaly (γ_θ), and d) spiciness (π) for section B (CTD stations 6 - 10) of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

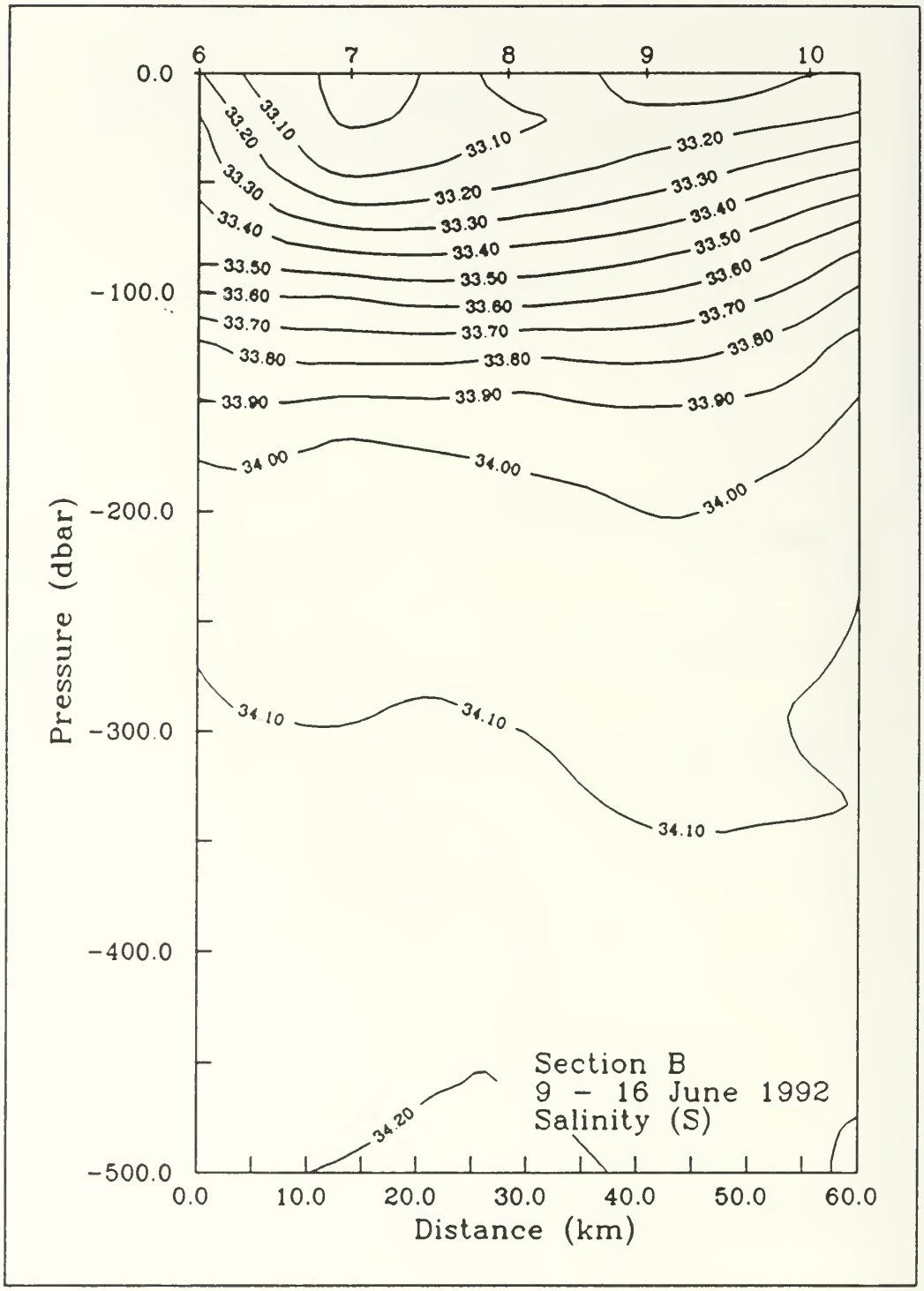
6
7
8
9
10
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
33.10
33.20
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
34.20
Section B
9 - 16 June 1992
Salinity (S)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 29b.

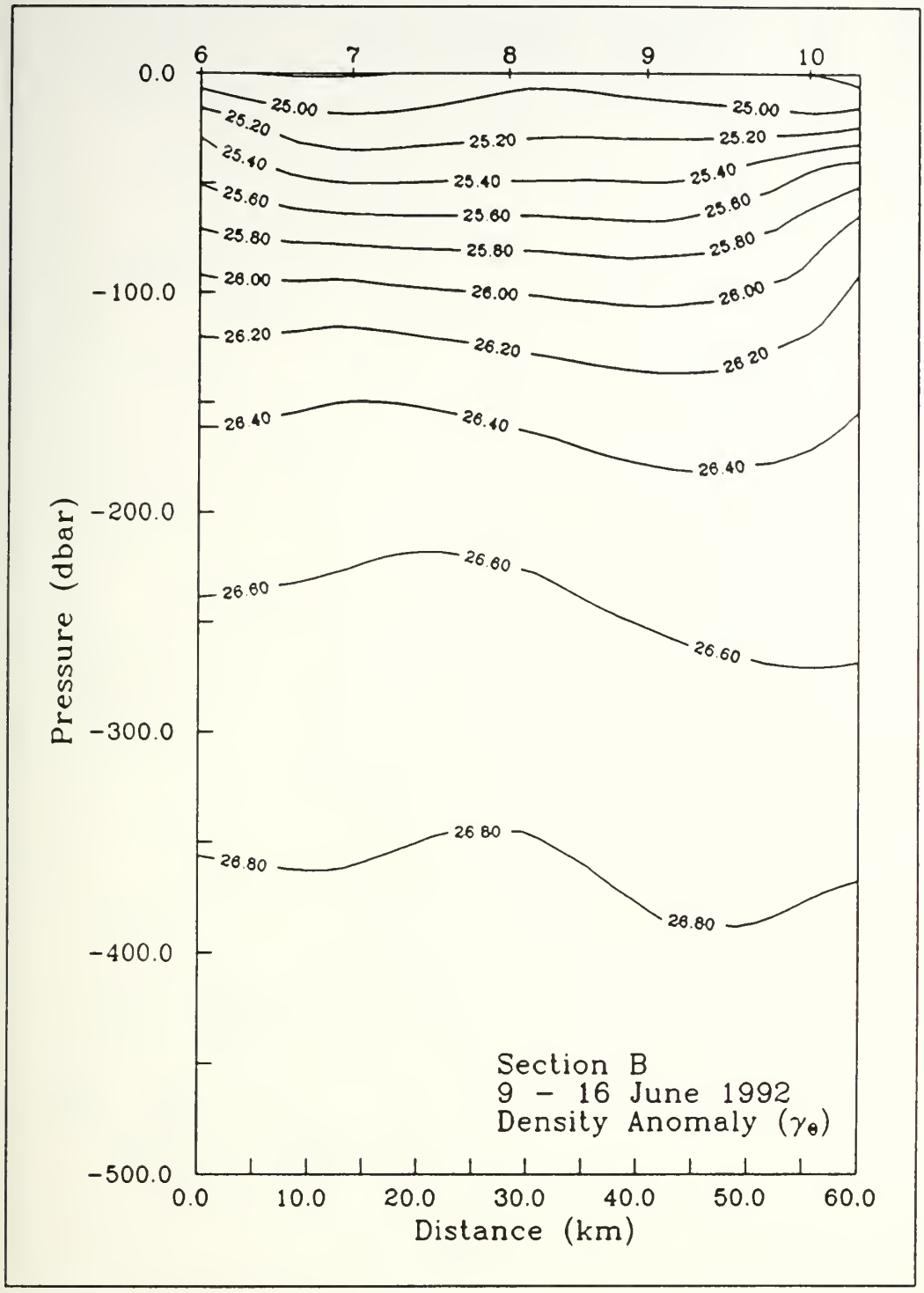
6
7
8
9
10
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
25.00
25.20
25.40
25.60
25.80
26.00
26.20
26.40
26.60
26.80
Section B
9 - 16 June 1992
Density Anomaly (γ_θ)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 29c.

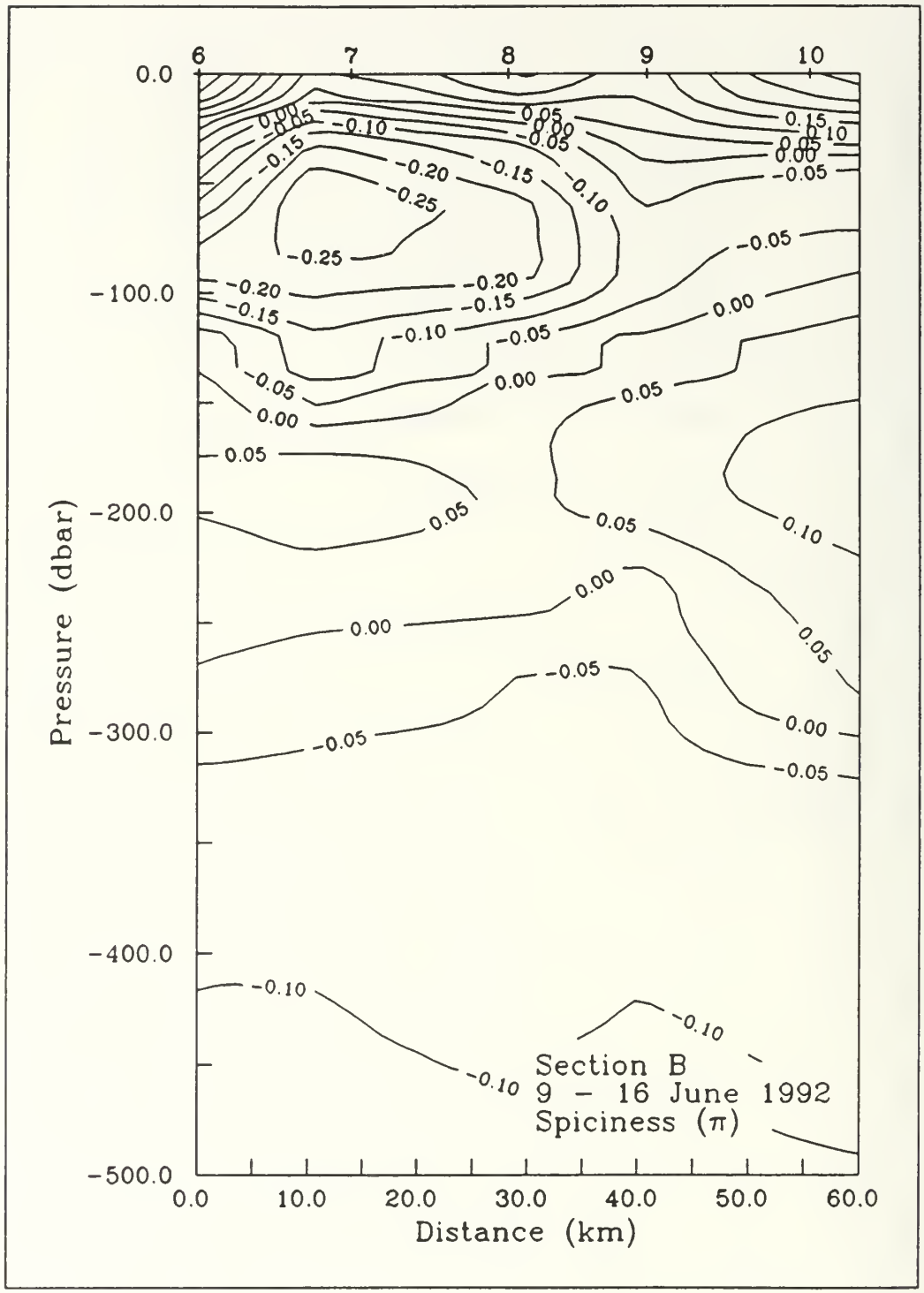
6
7
8
9
10
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section B
9 - 16 June 1992
Spiciness (π)

Figure 29d.

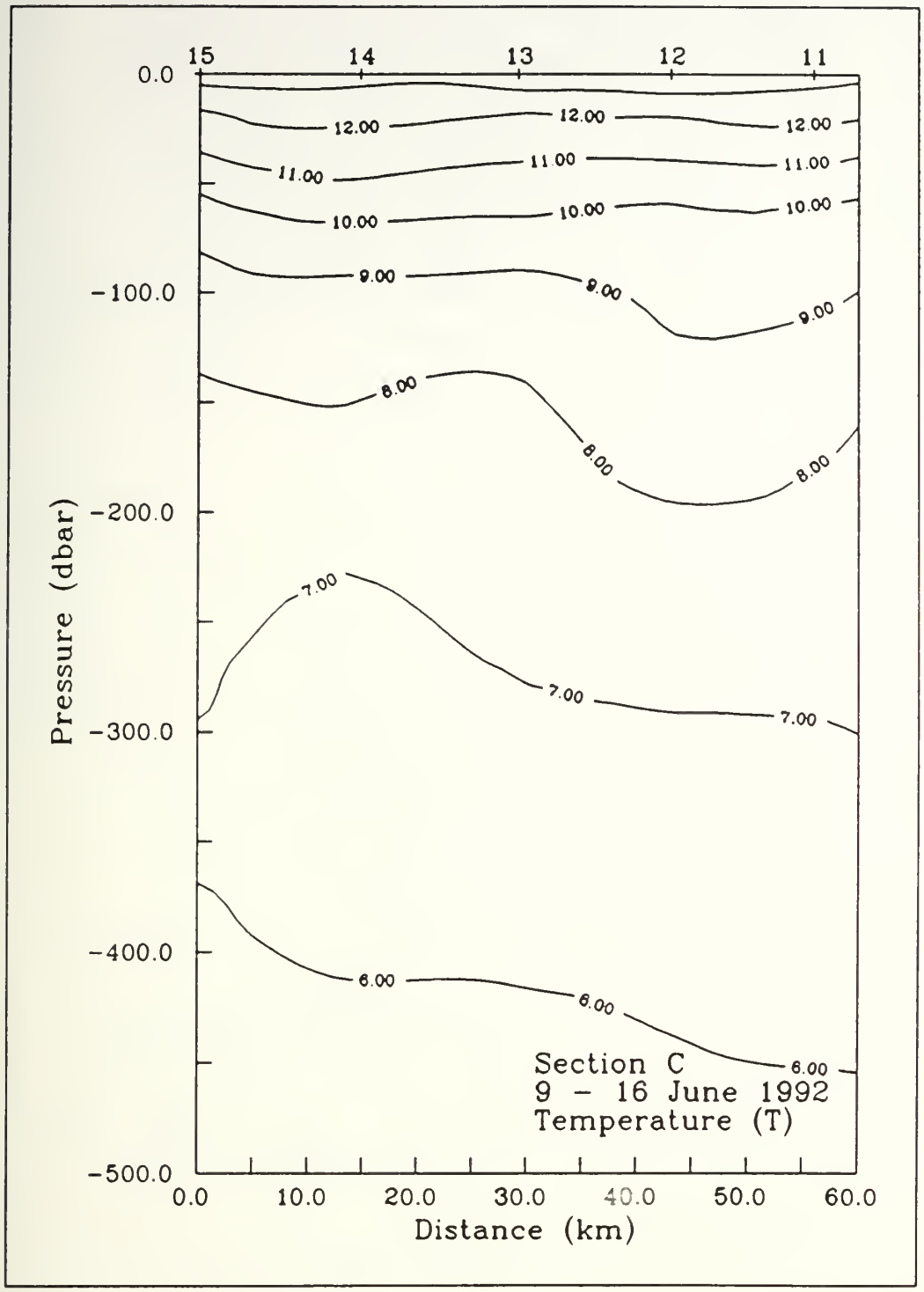

Figure 30. Vertical sections of a) temperature (T), b) salinity (S), c) density anomaly (γ_θ), and d) spiciness (π) for section C (CTD stations 11 - 15) of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

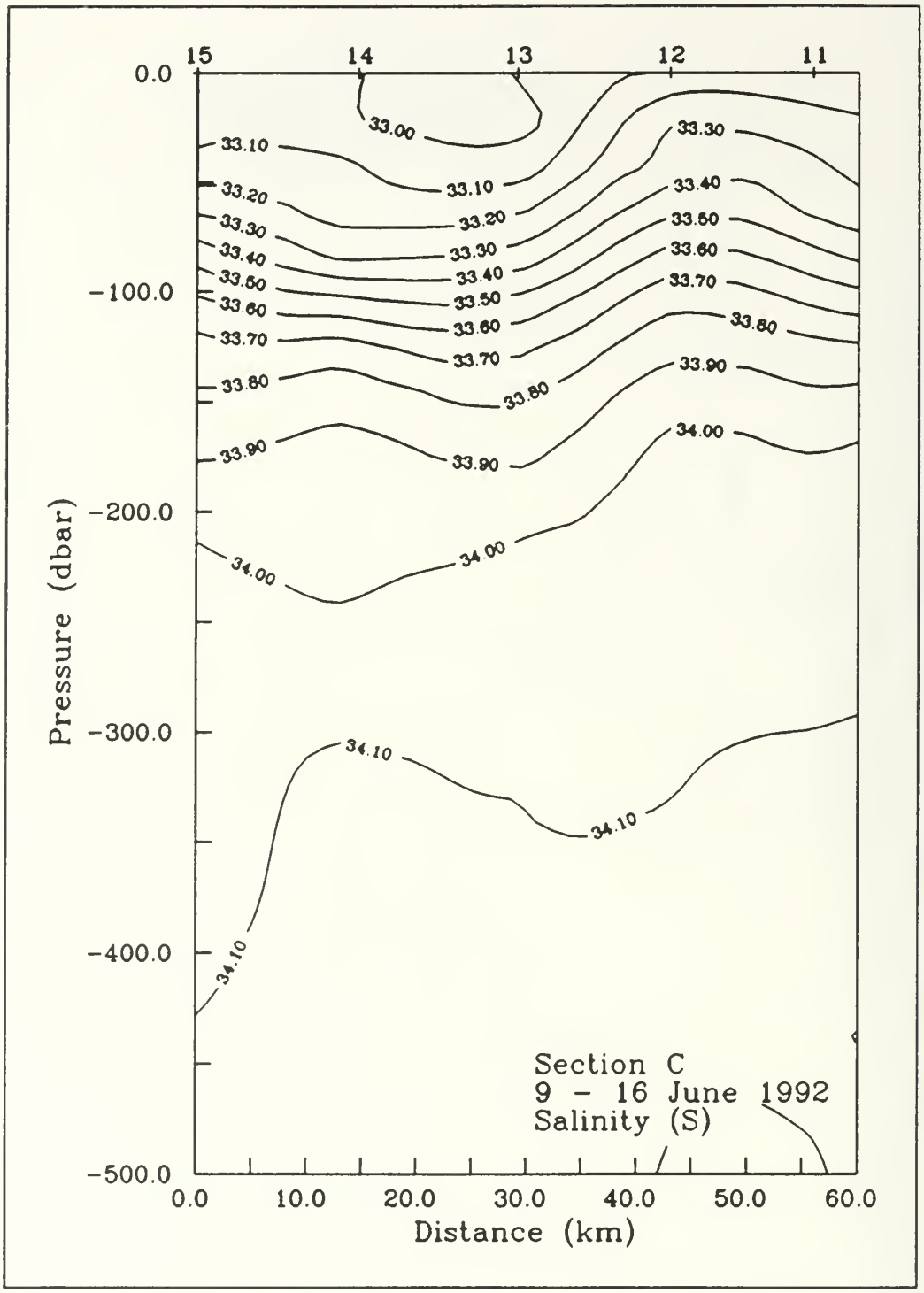
15
14
13
12
11
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
33.00
33.10
33.20
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
Section C
9 - 16 June 1992
Salinity (S)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 30b.

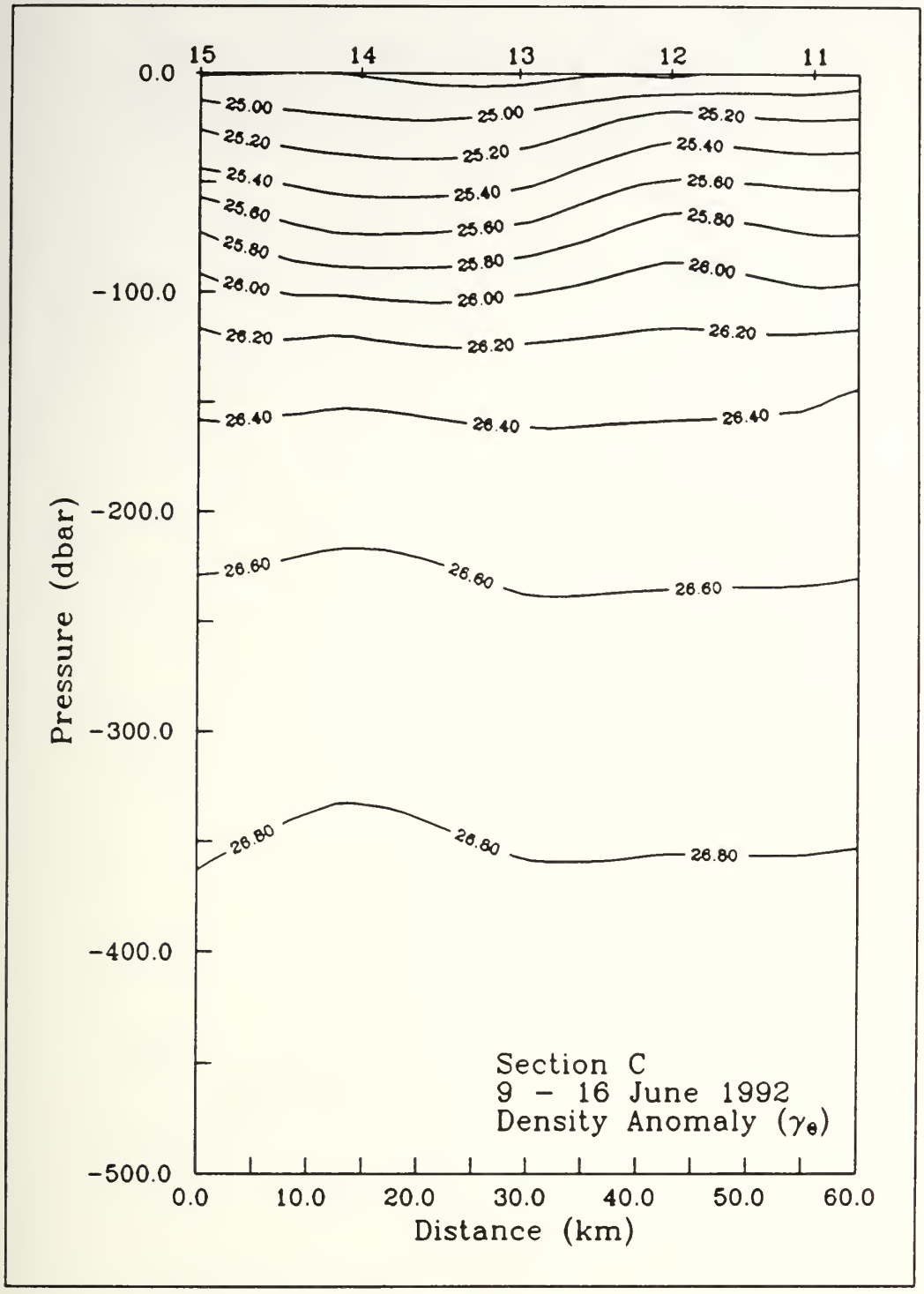
15
14
13
12
11
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
25.00
25.20
25.40
25.60
25.80
26.00
26.20
26.40
26.60
26.80
Section C
9 - 16 June 1992
Density Anomaly (γ_θ)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 30c.

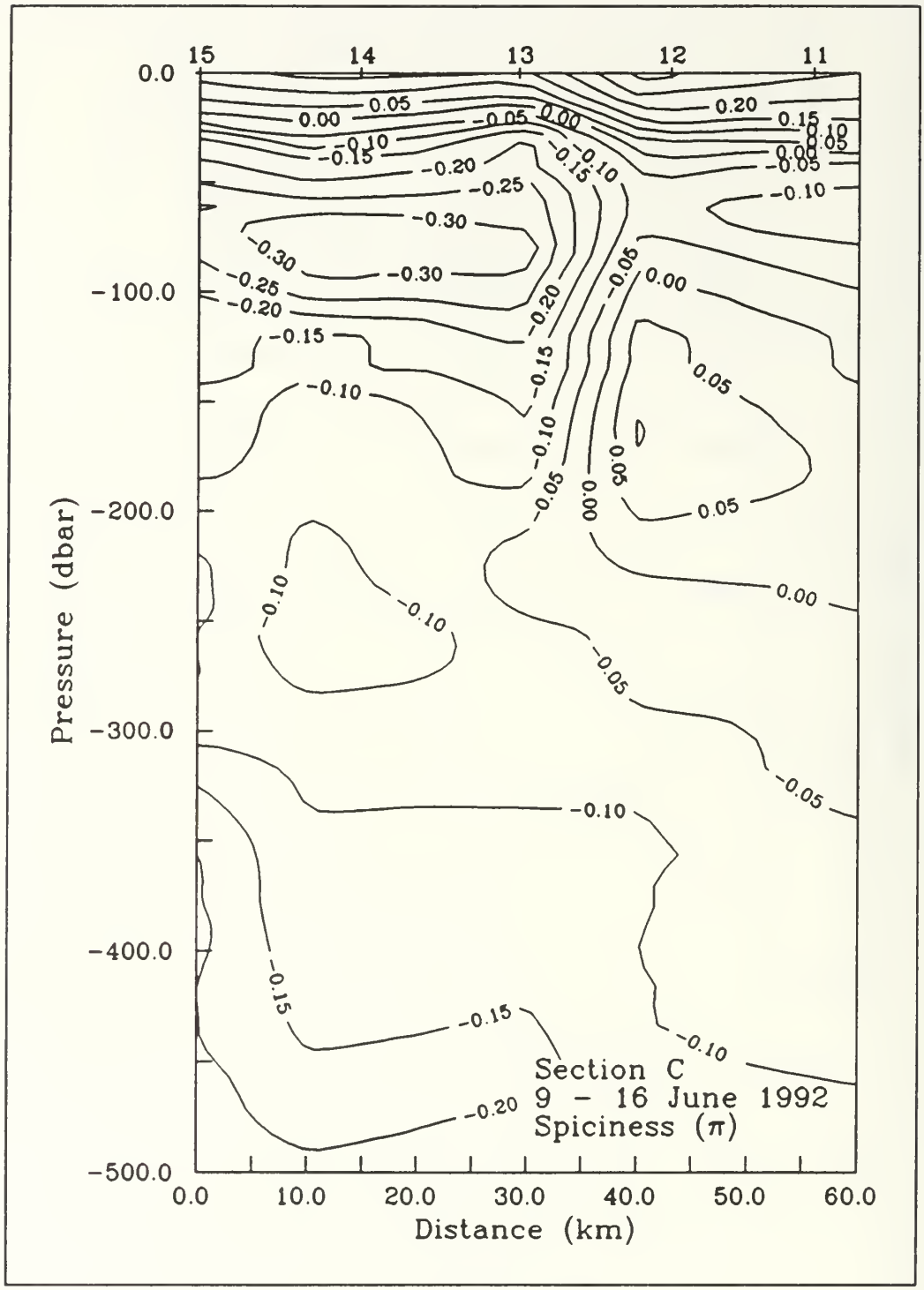
15
14
13
12
11
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section C
9 - 16 June 1992
Spiciness (π)

Figure 30d.

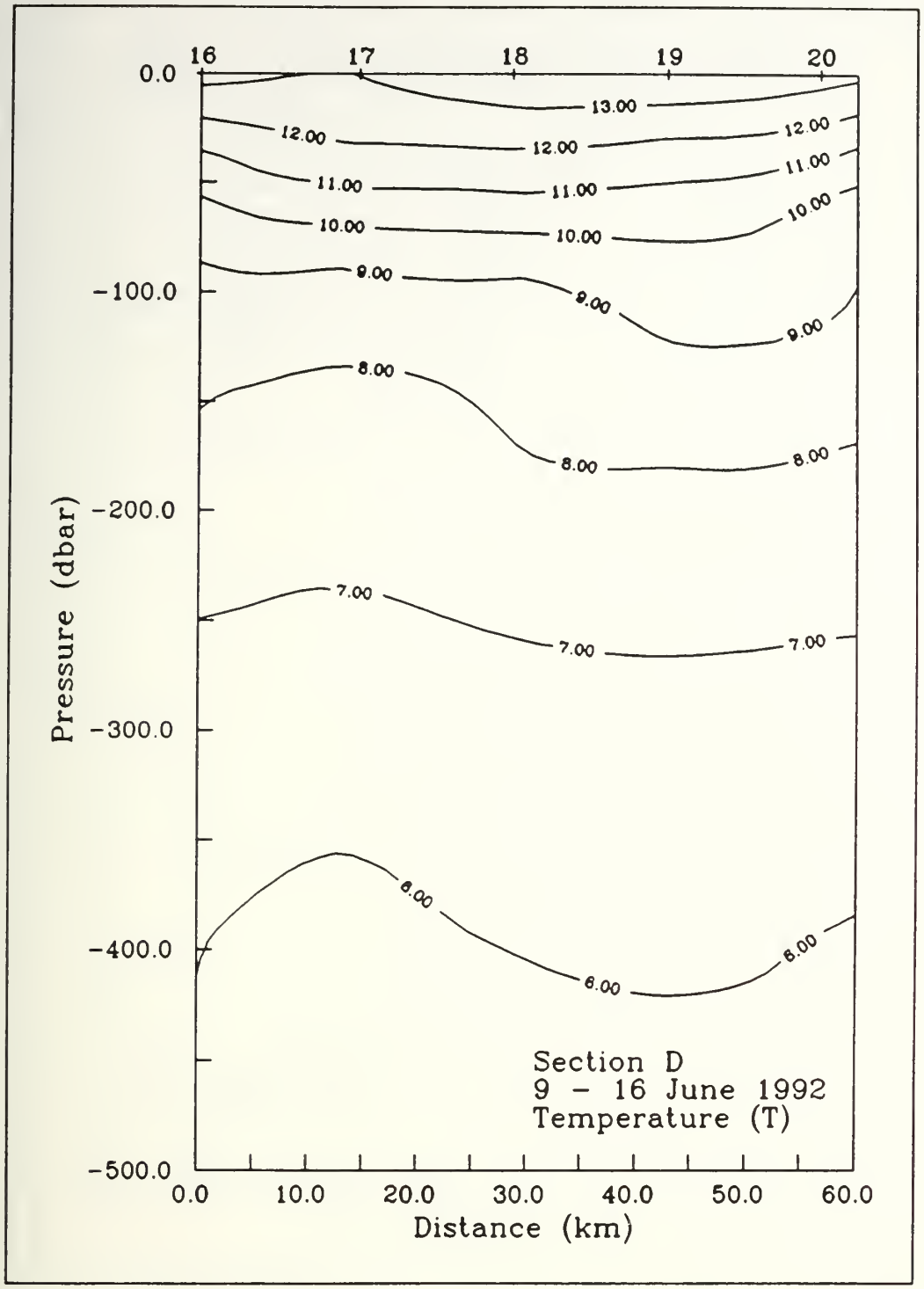

Figure 31. Vertical sections of a) temperature (T), b) salinity (S), and c) density anomaly (γ_θ), and d) spiciness (π) for section D (CTD stations 16 - 20) of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

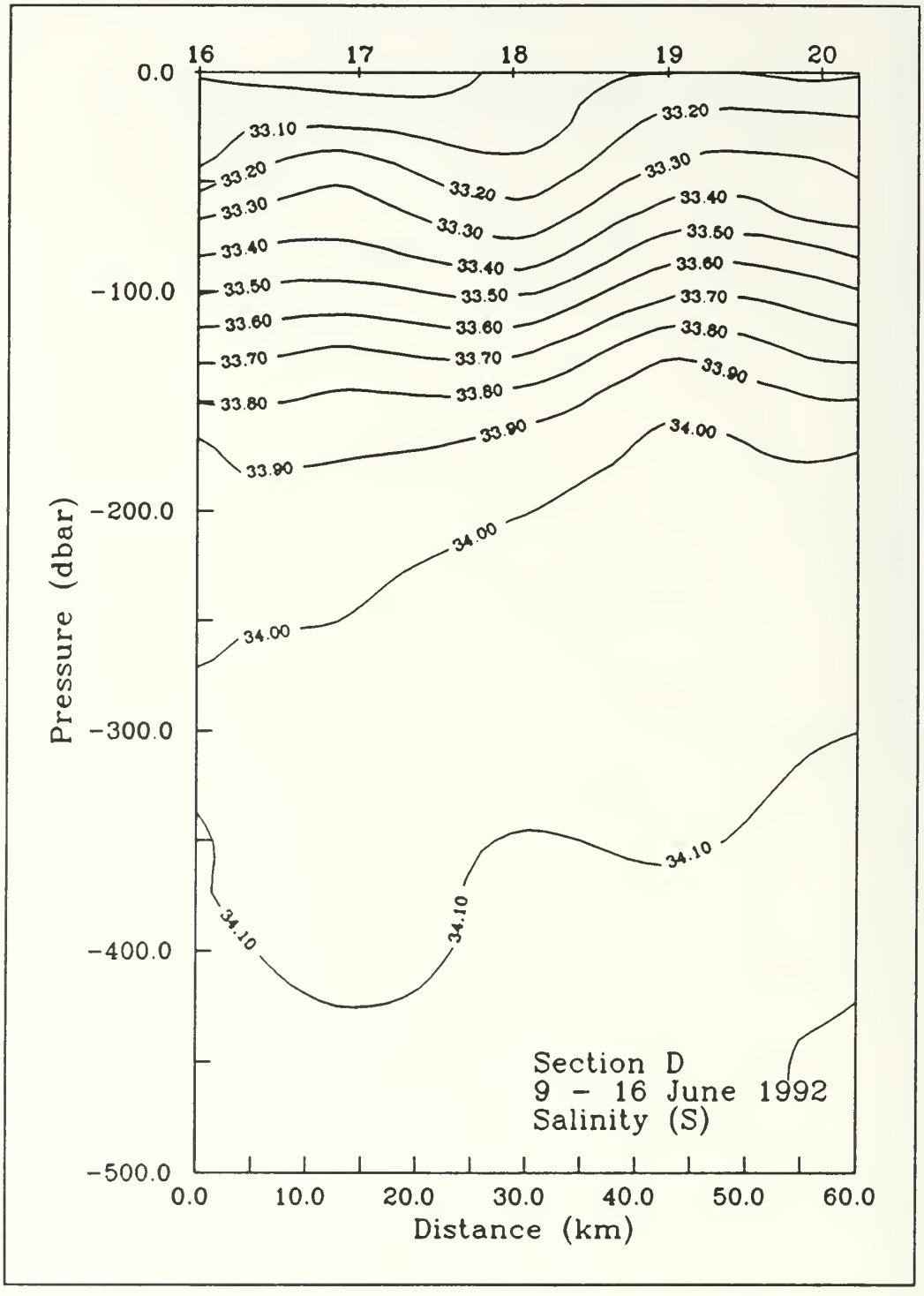
16
17
18
19
20
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
33.10
33.20
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
Section D
9 - 16 June 1992
Salinity (S)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 31b.

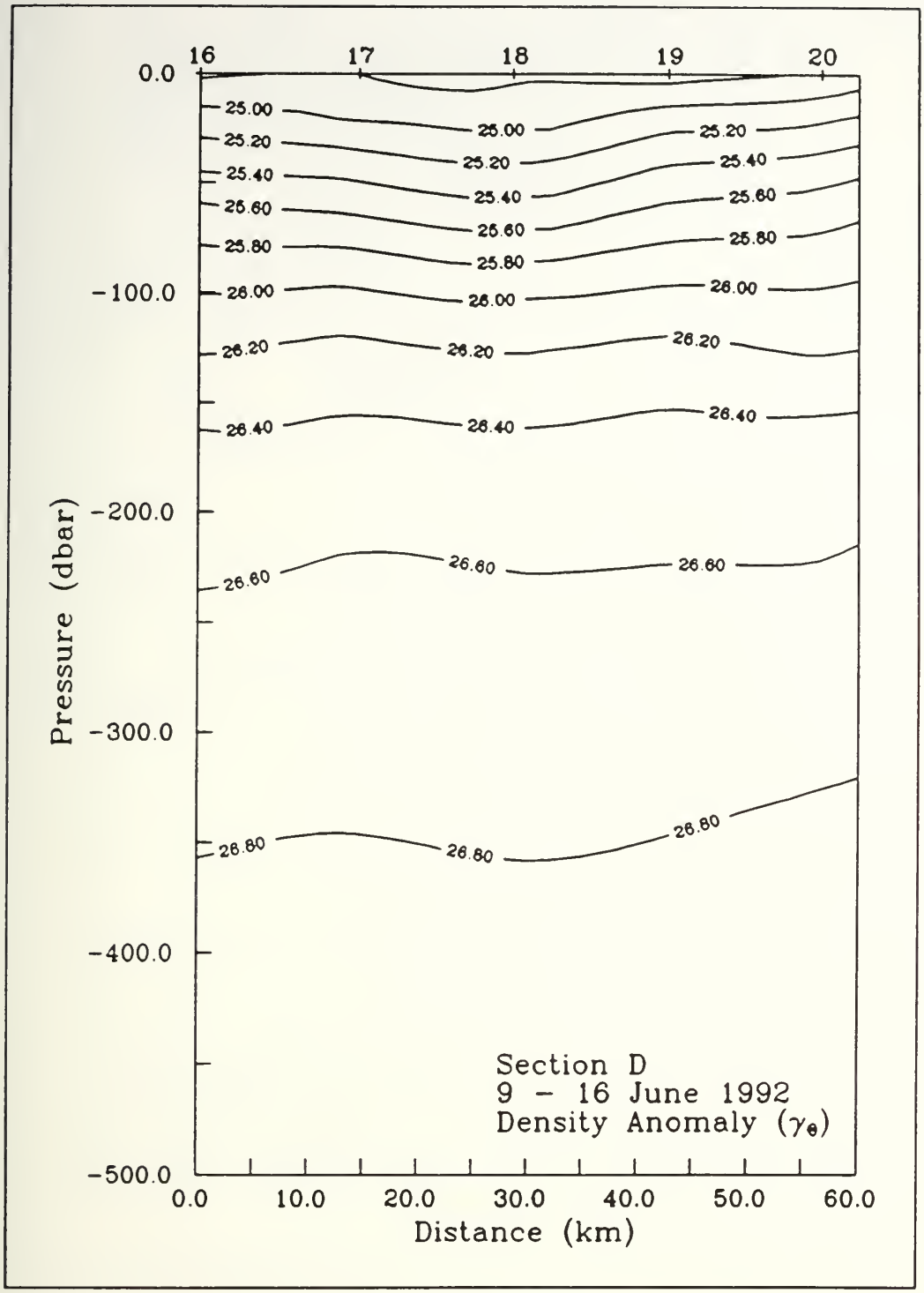
16
17
18
19
20
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
25.00
25.20
25.40
25.60
25.80
26.00
26.20
26.40
26.60
26.80
Section D
9 - 16 June 1992
Density Anomaly (γ_θ)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 31c.

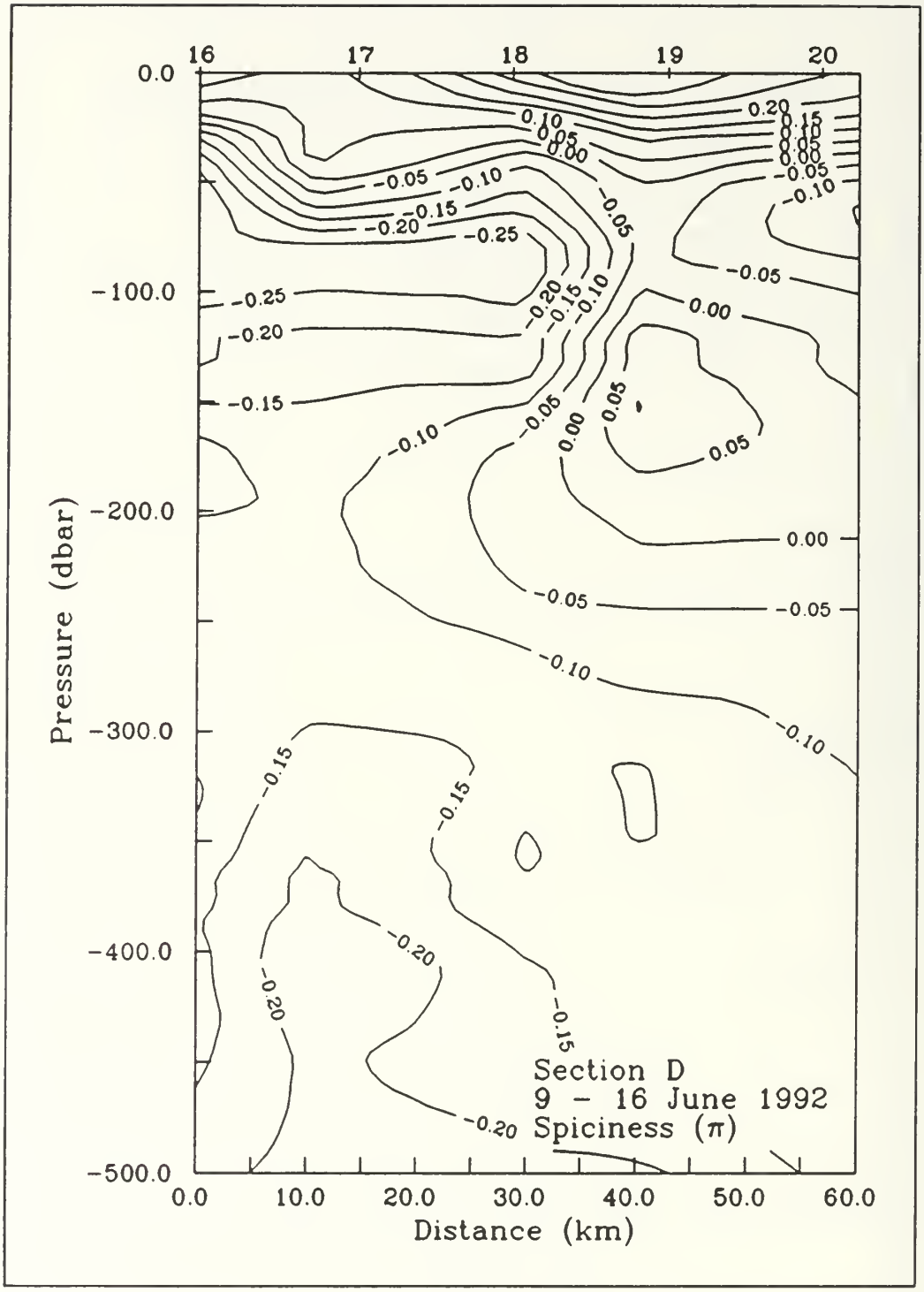
16
17
18
19
20
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section D
9 - 16 June 1992
Spiciness (π)

Figure 31d.

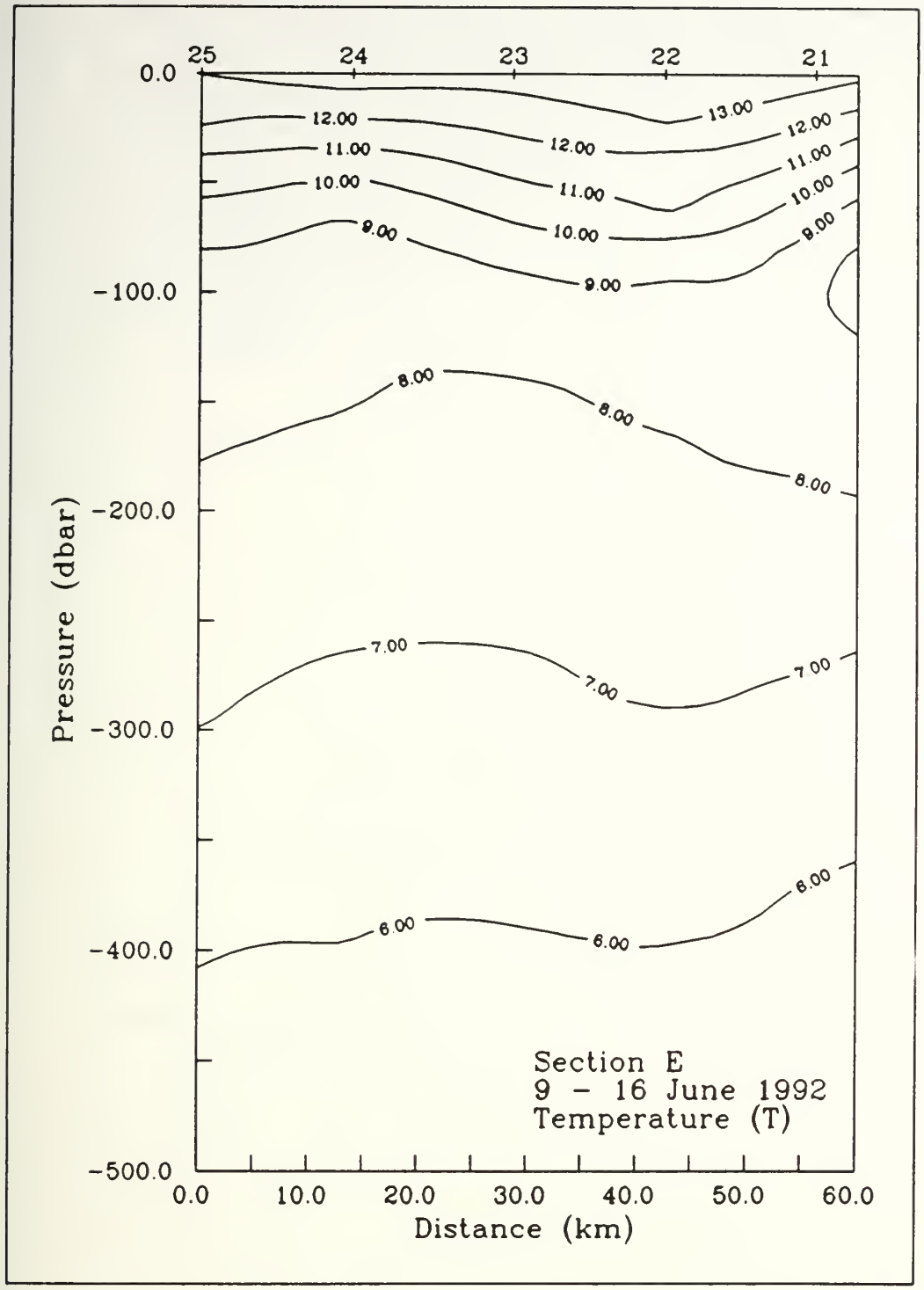

Figure 32. Vertical sections of a) temperature (T), b) salinity (S), and c) density anomaly (γ_θ), and d) spiciness (π) for section E (CTD stations 21 - 25) of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

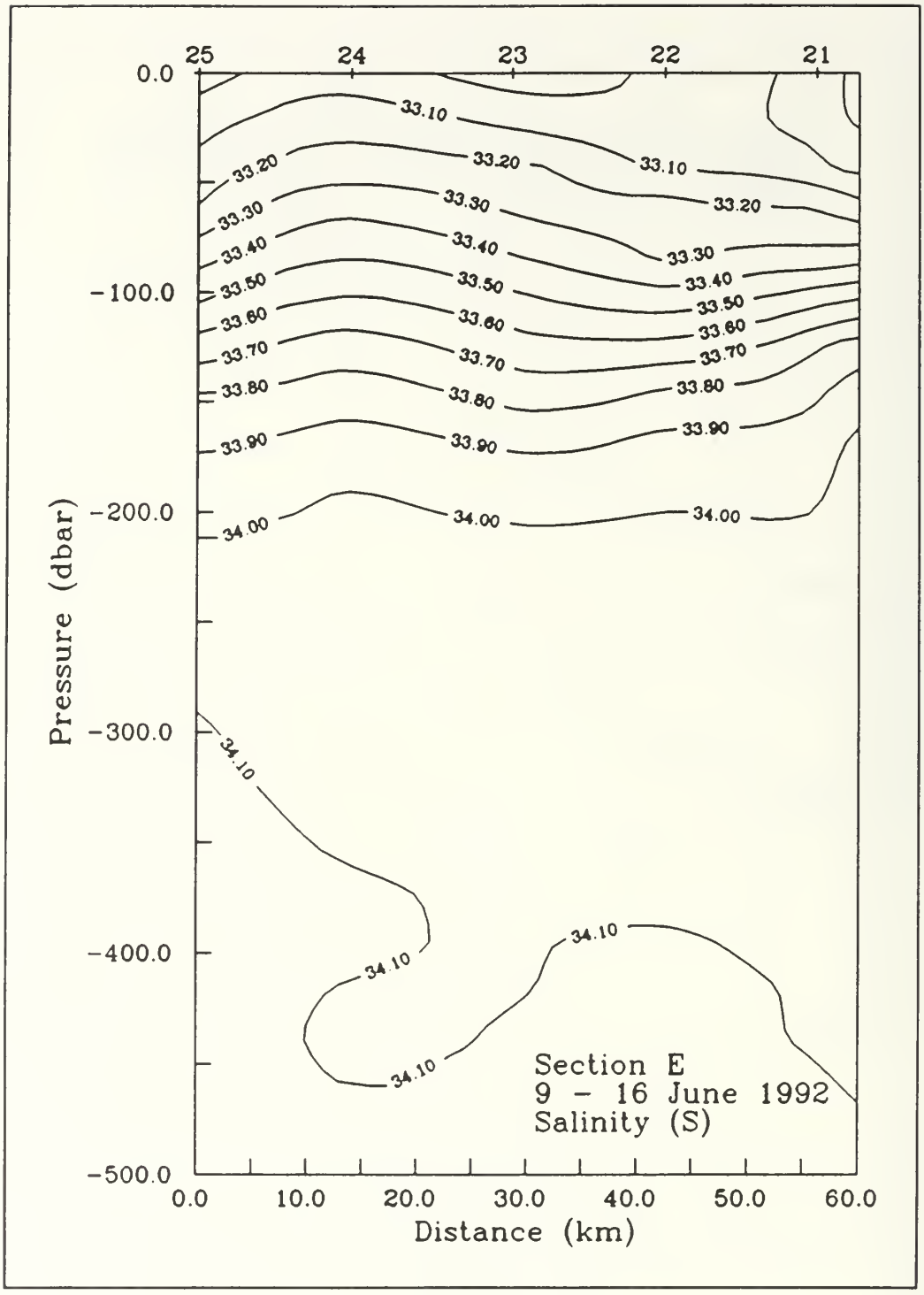
25
24
23
22
21
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
33.10
33.20
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
Section E
9 - 16 June 1992
Salinity (S)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 32b.

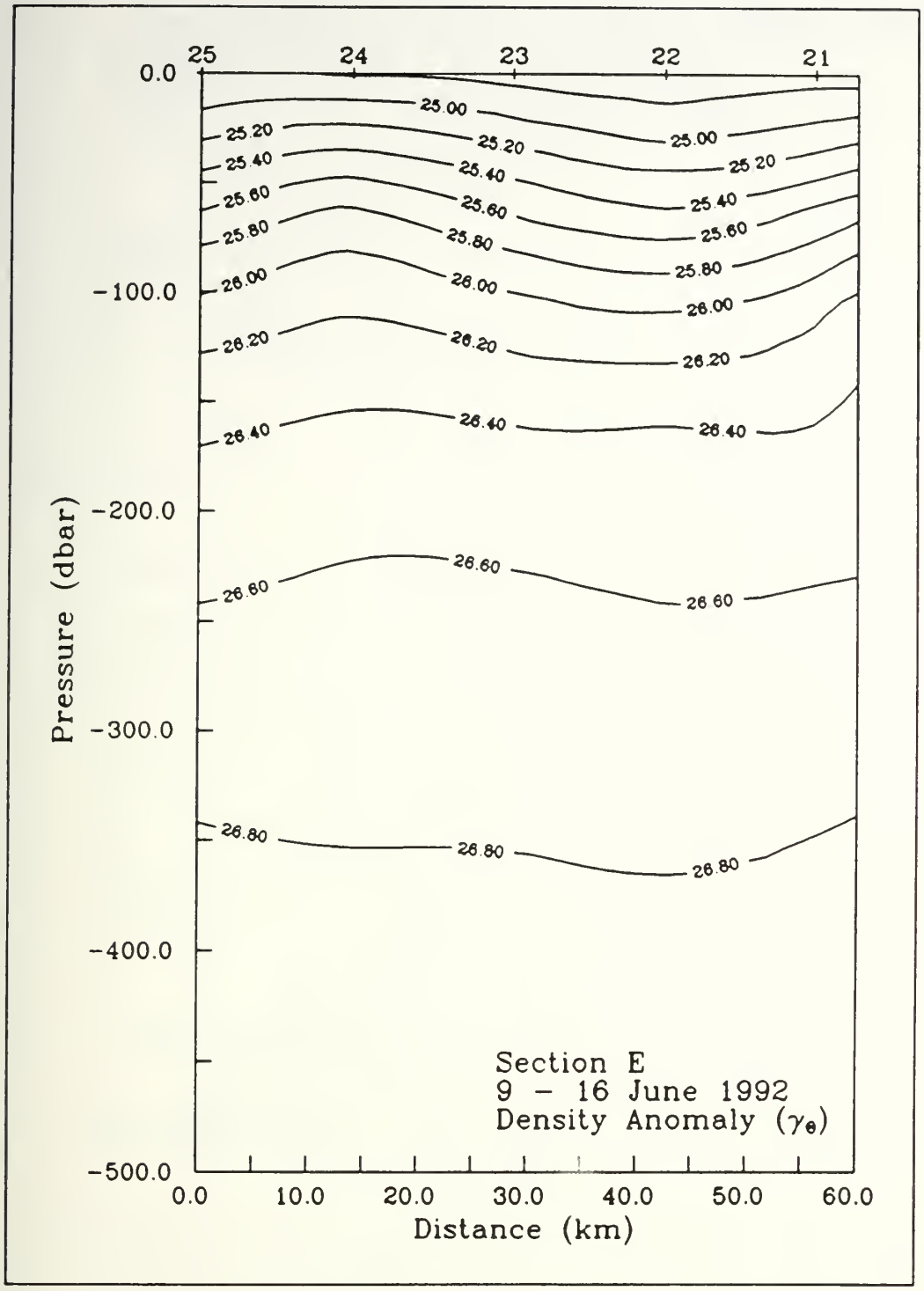
25
24
23
22
21
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
25.00
25.20
25.40
25.60
25.80
26.00
26.20
26.40
26.60
26.80
Section E
9 - 16 June 1992
Density Anomaly (γ_θ)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)

Figure 32c.

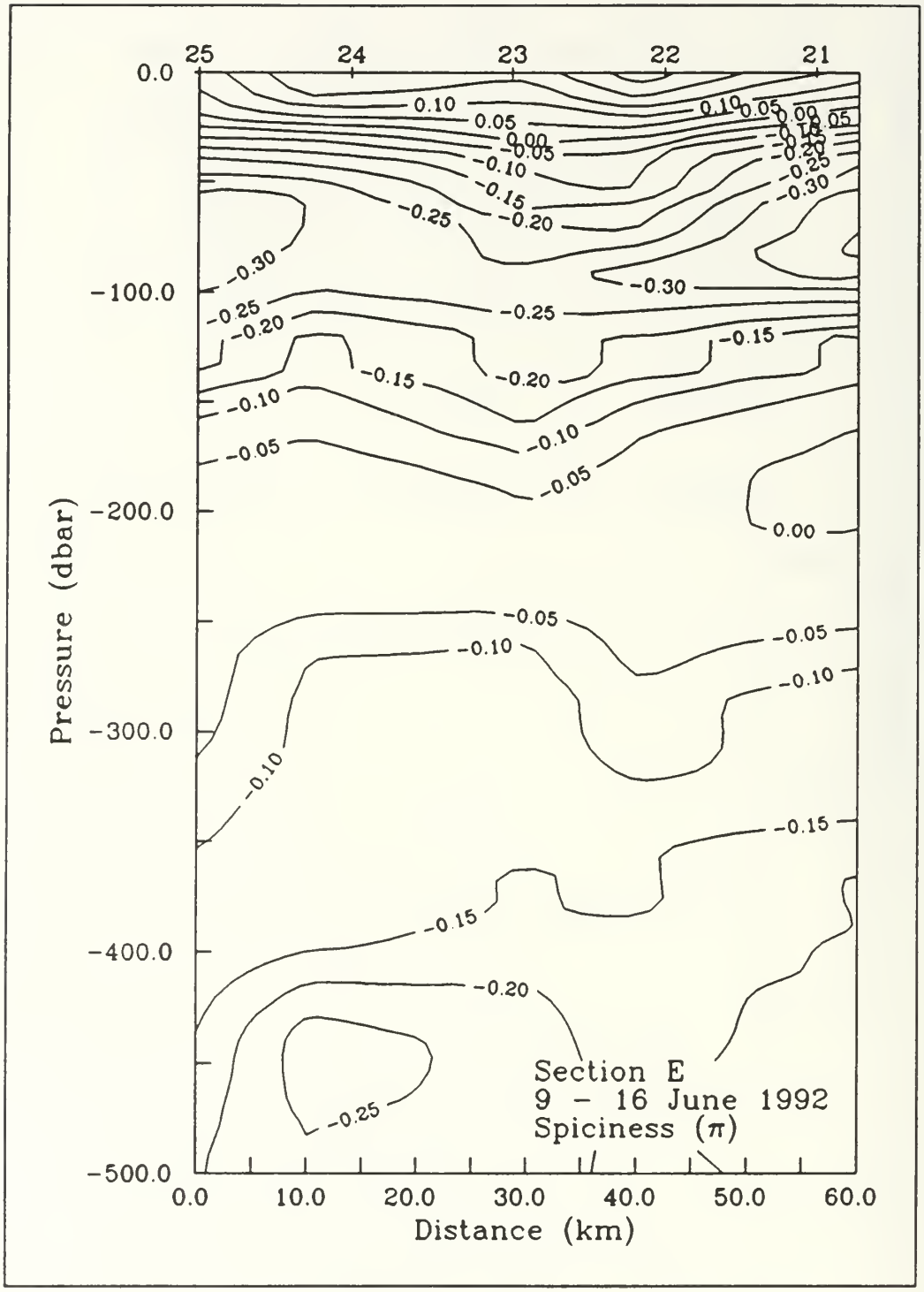
25
24
23
22
21
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Pressure (dbar)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section E
9 - 16 June 1992
Spiciness (π)

Figure 32d.

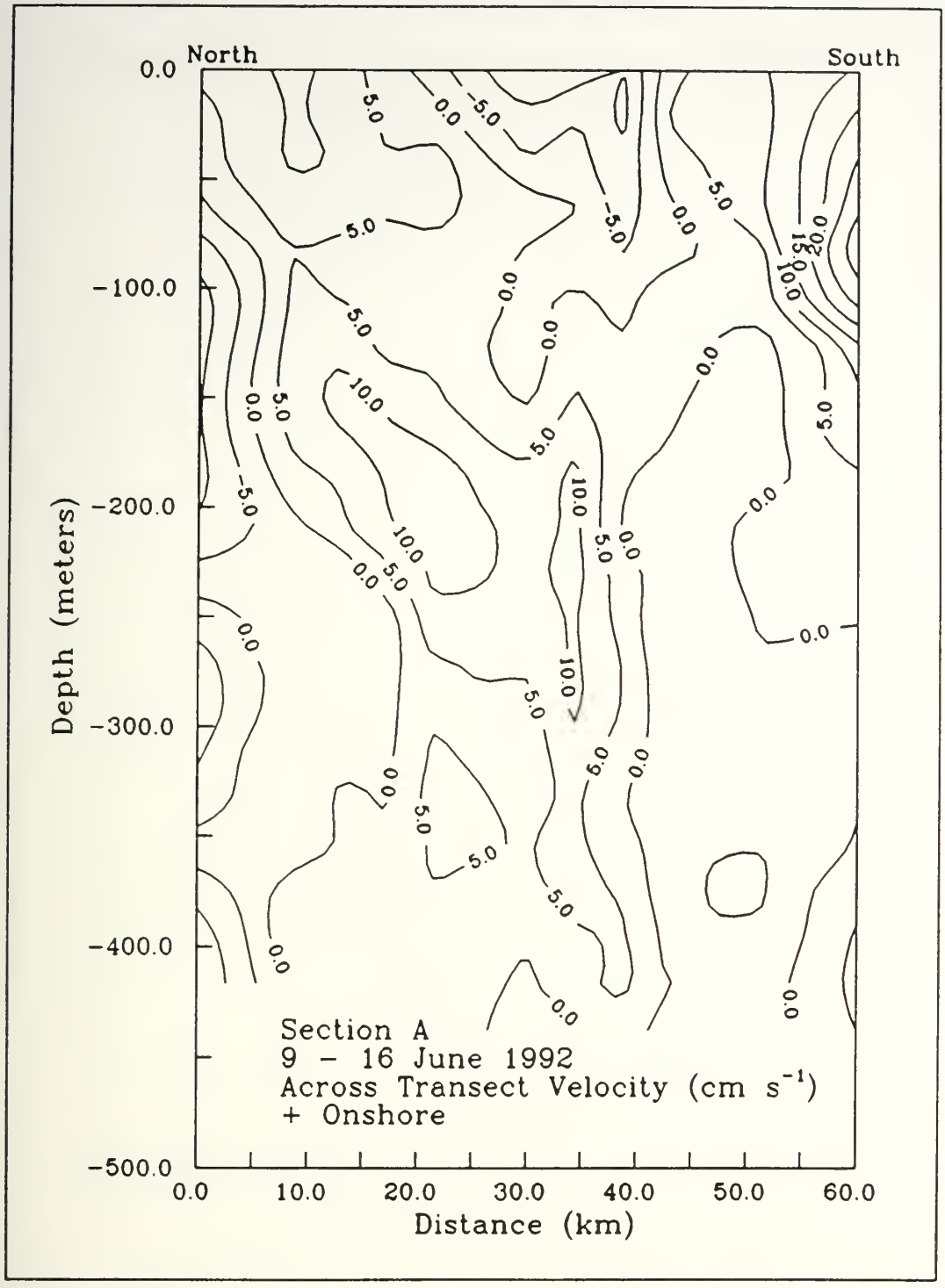

Figure 33. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section A of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

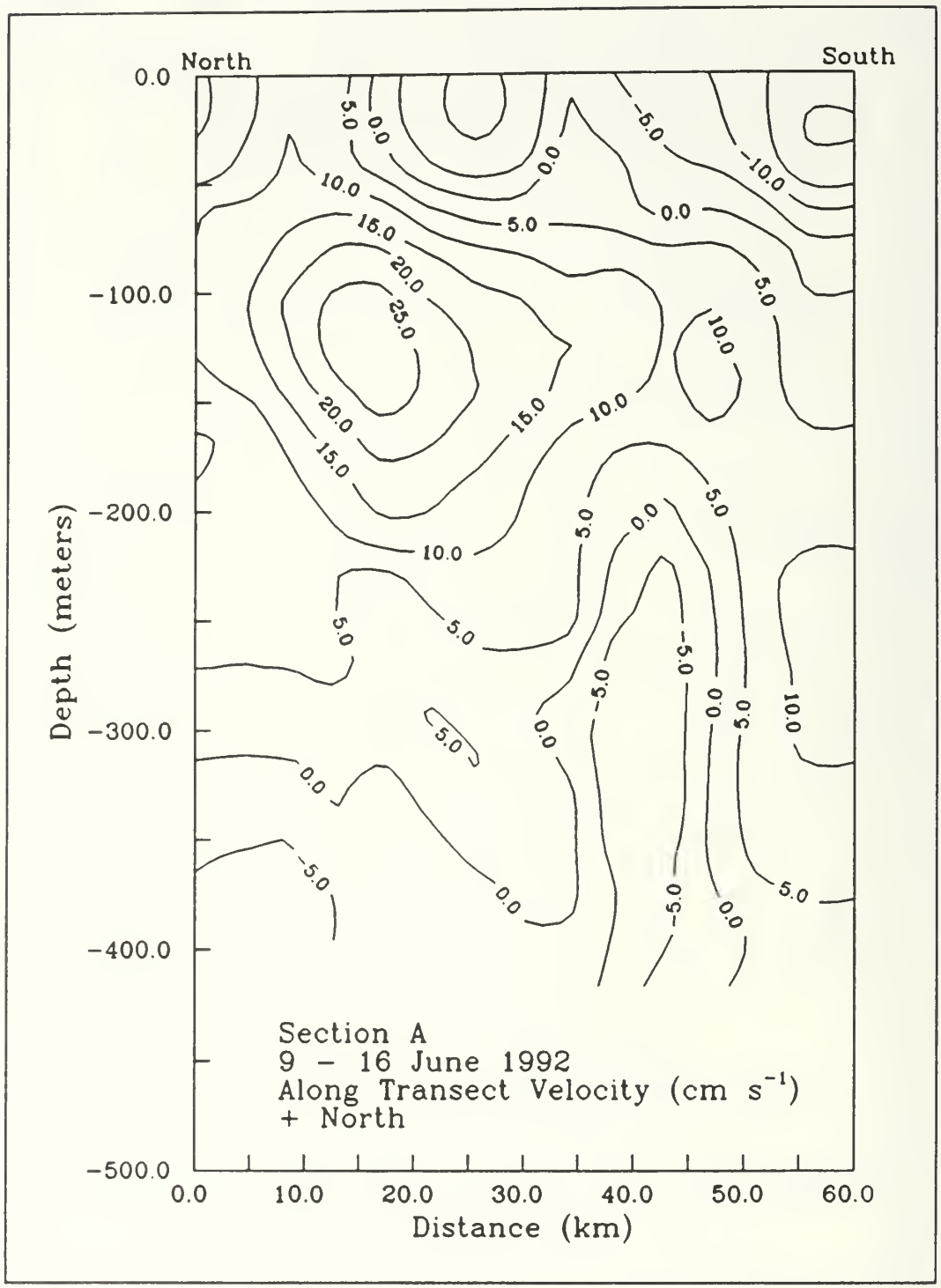
North
South
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (meters)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section A
9 - 16 June 1992
Along Transect Velocity (cm s-1)
+ North

Figure 33b.

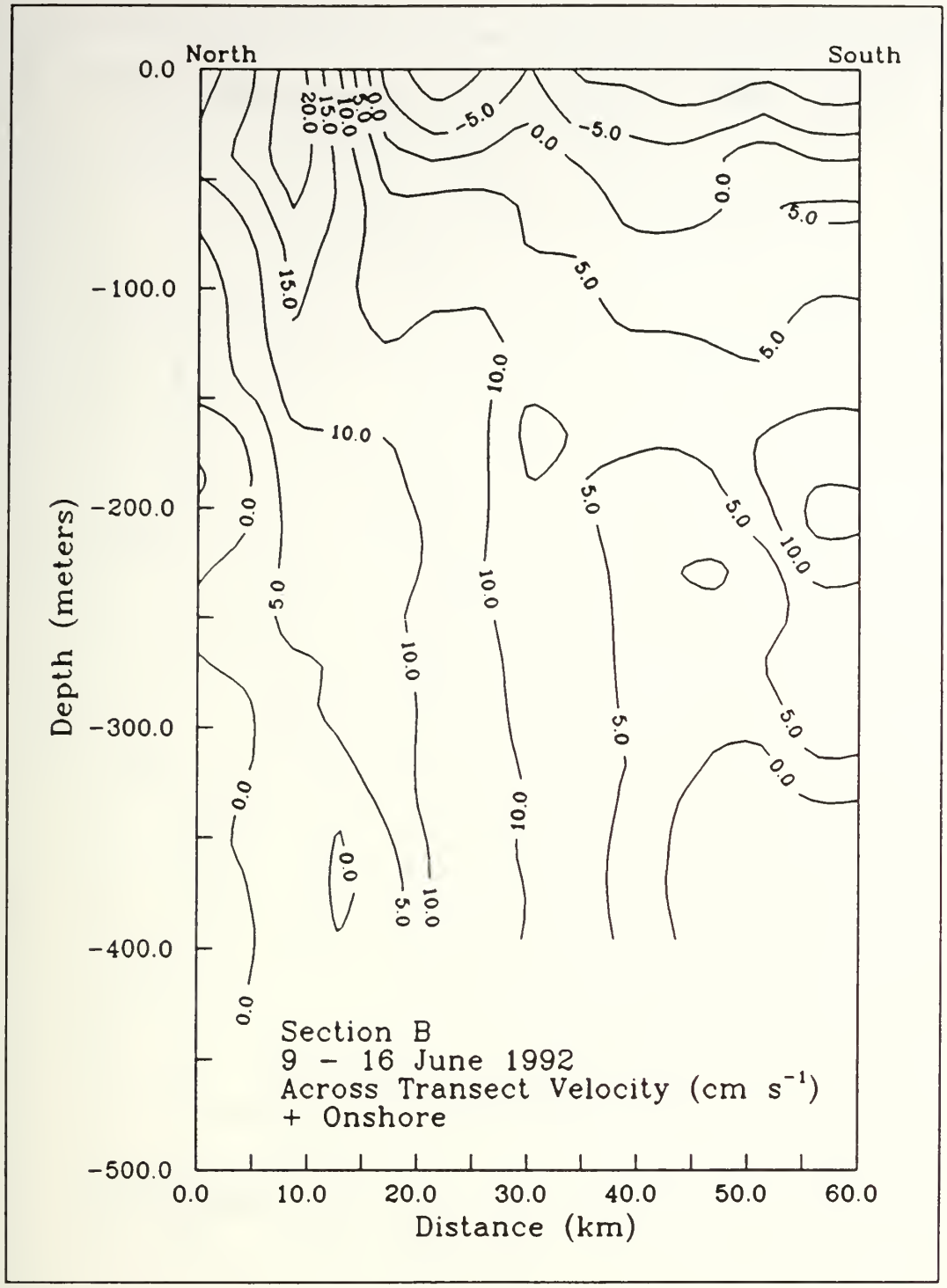

Figure 34. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section B of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

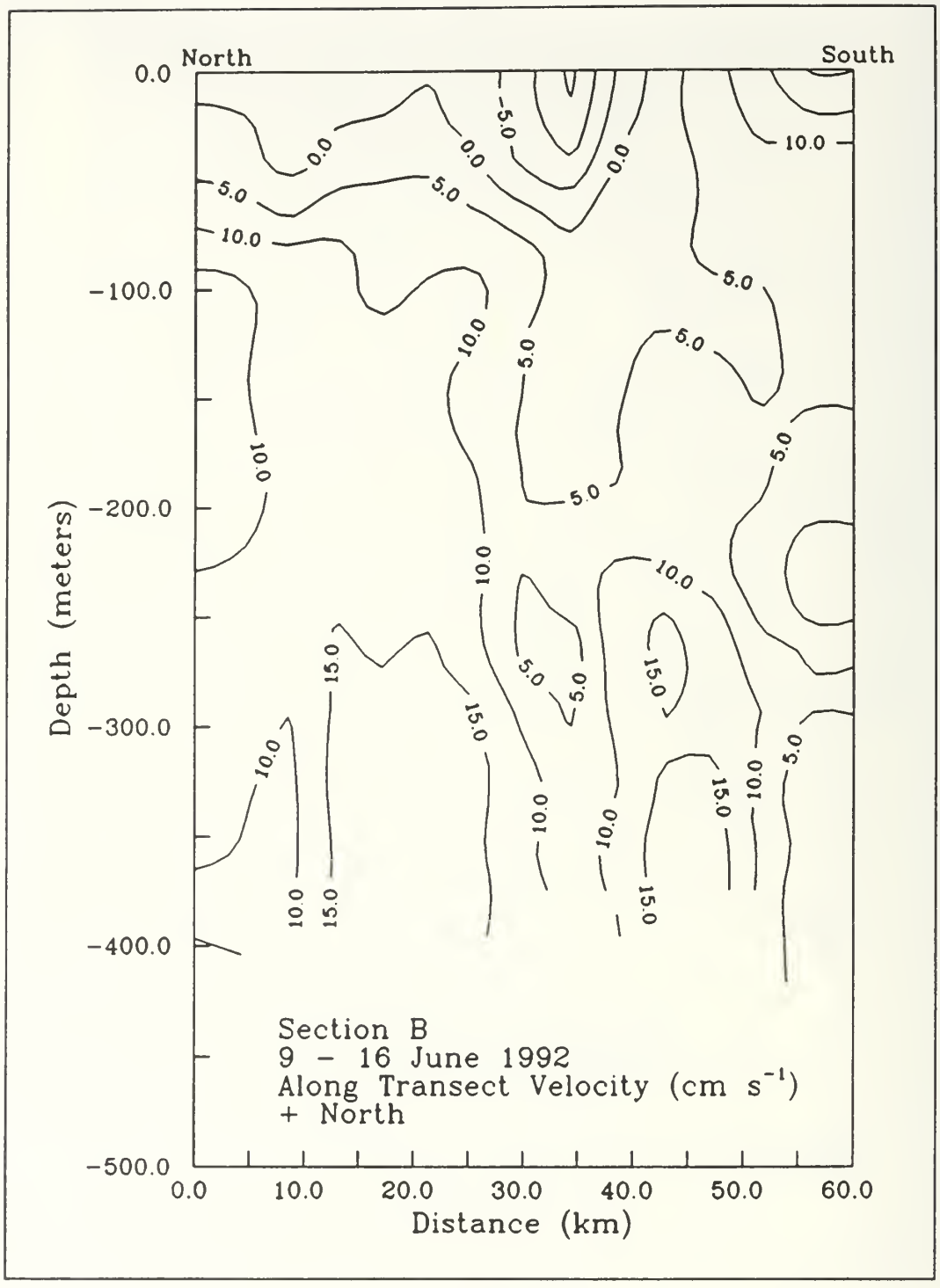
North
South
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (meters)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section B
9 - 16 June 1992
Along Transect Velocity (cm s-1)
+ North

Figure 34b.

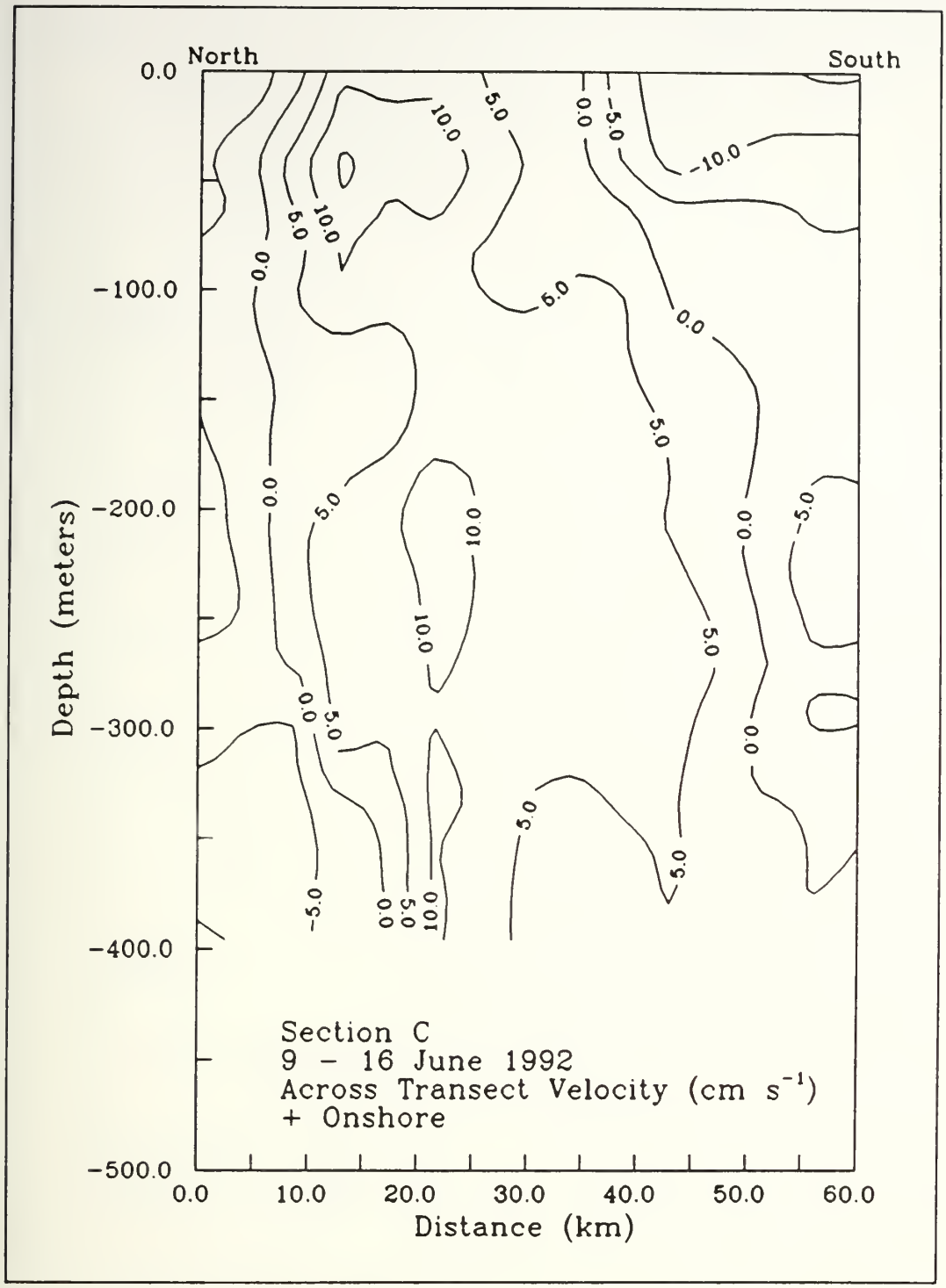

Figure 35. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section C of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

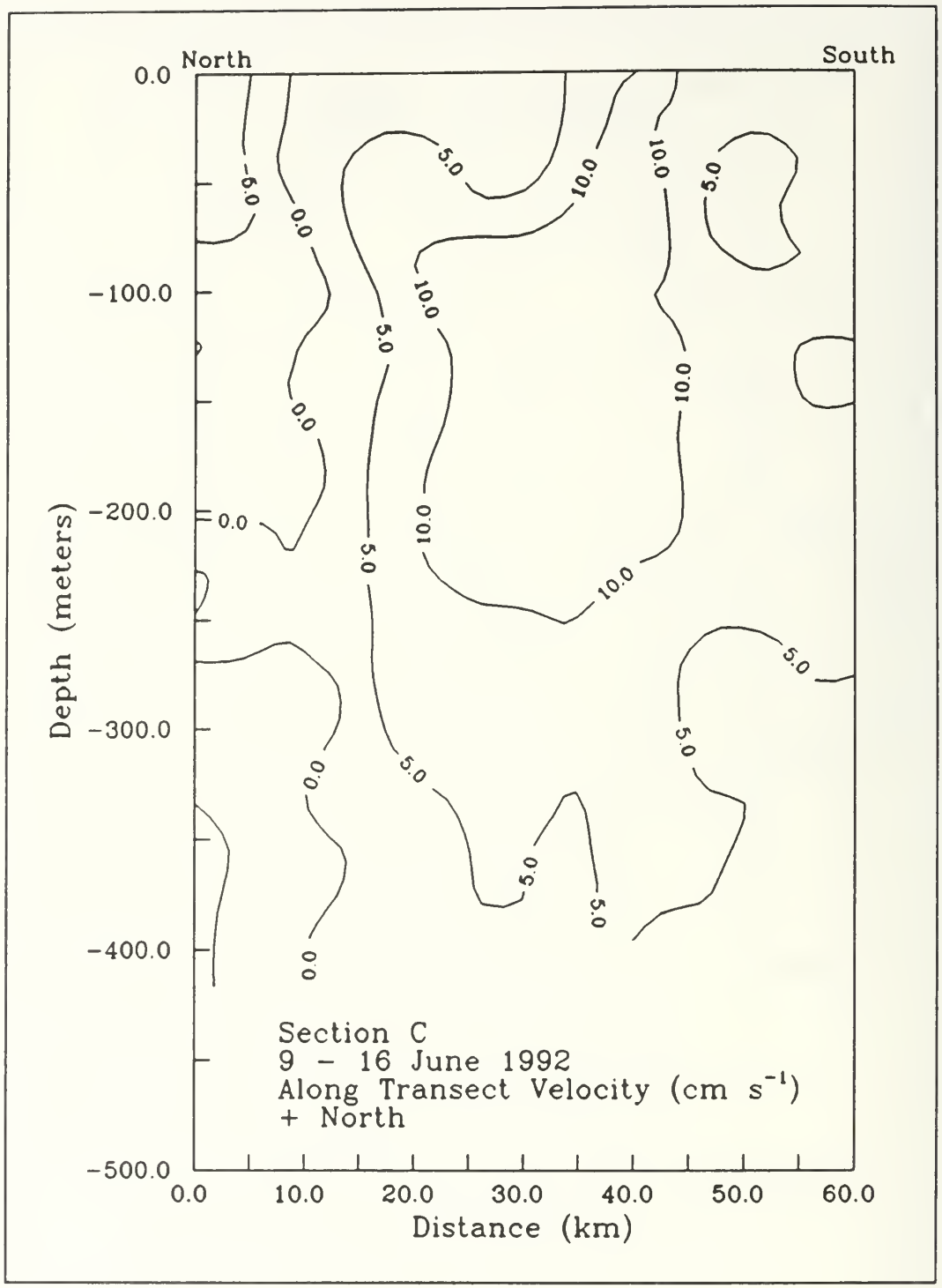
North
South
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (meters)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section C
9 - 16 June 1992
Along Transect Velocity (cm s-1)
+ North

Figure 35b.

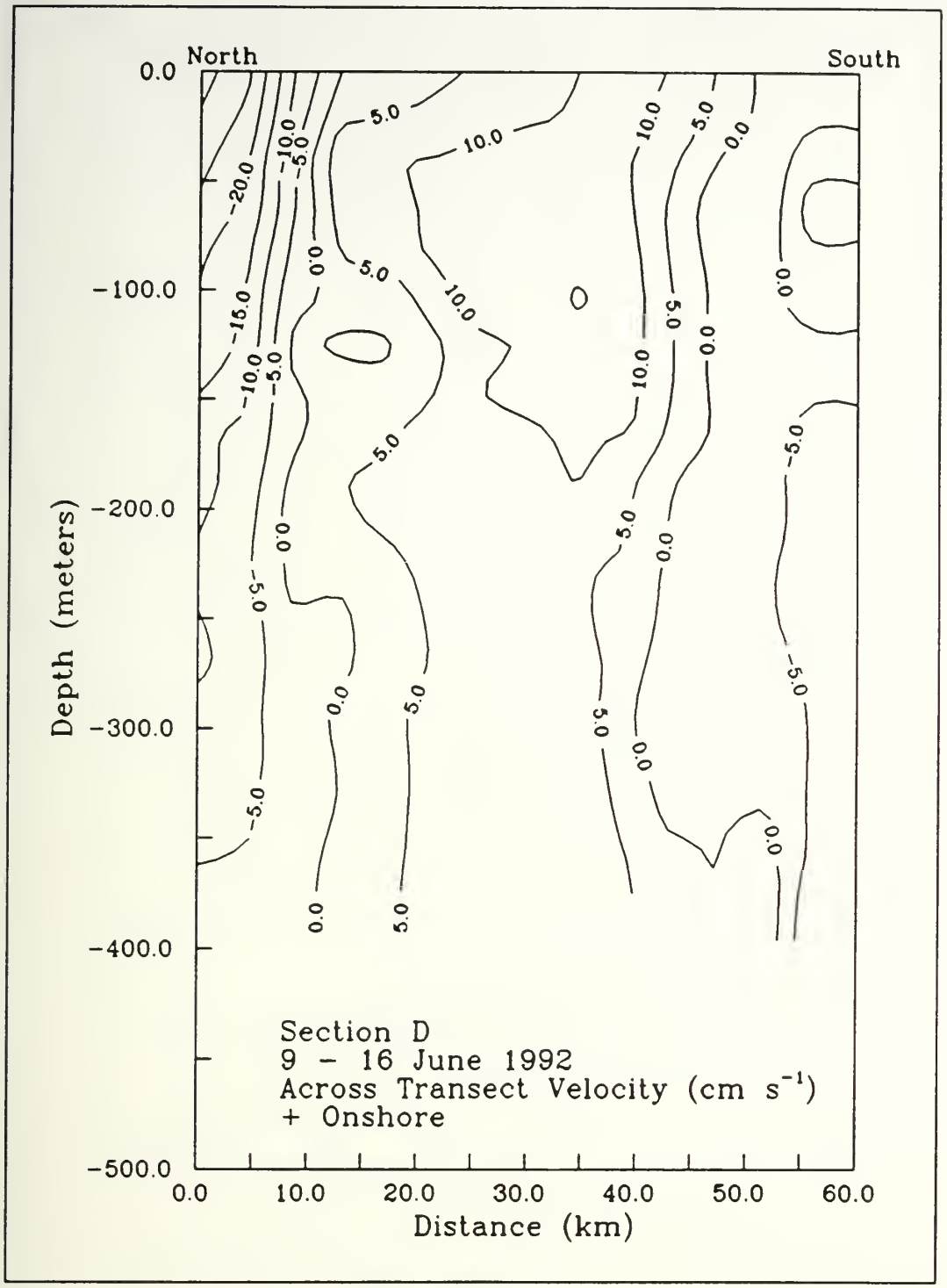

Figure 36. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section D of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

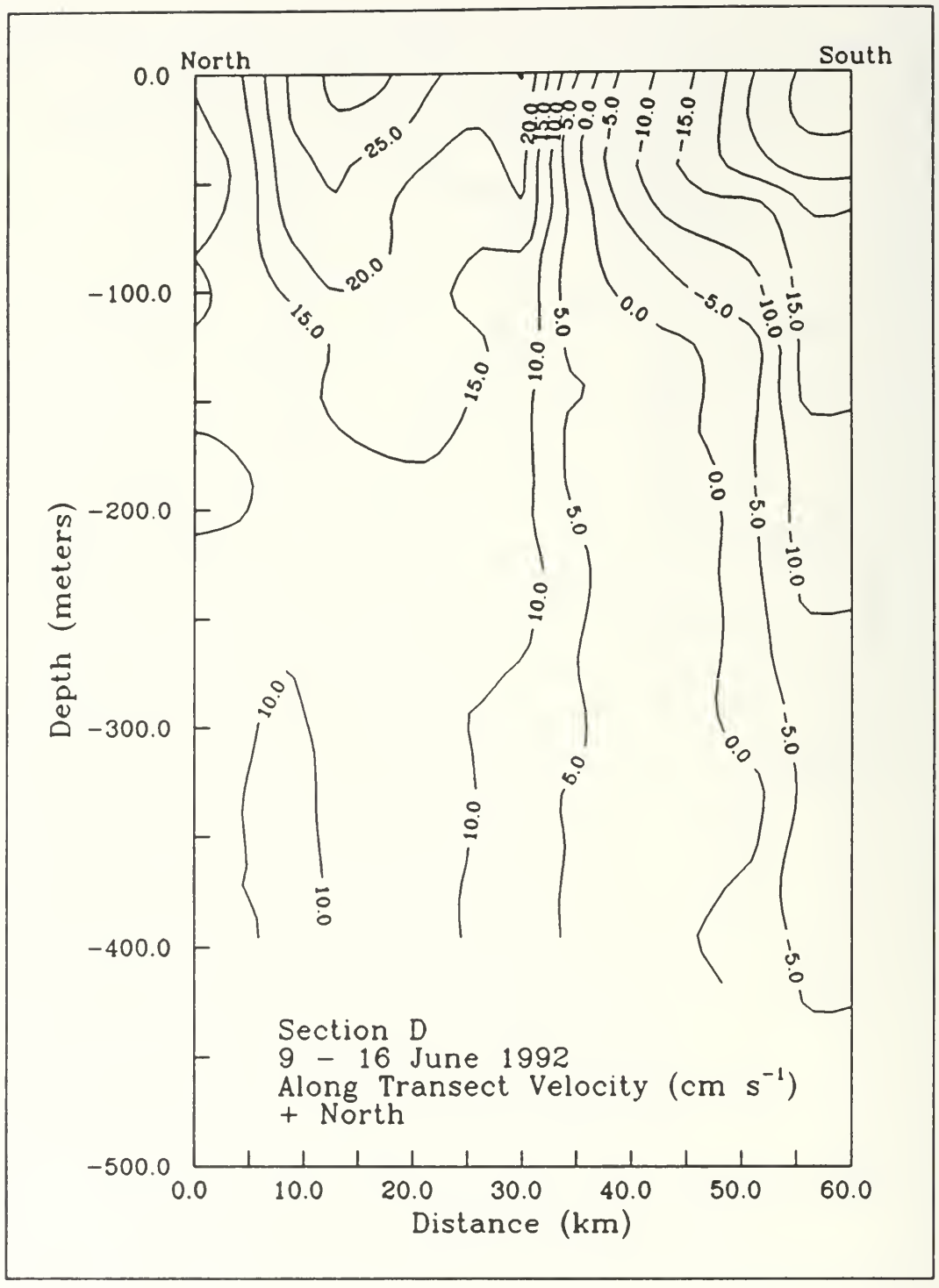
North
South
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (meters)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section D
9 - 16 June 1992
Along Transect Velocity (cm s-1)
+ North

Figure 36b.

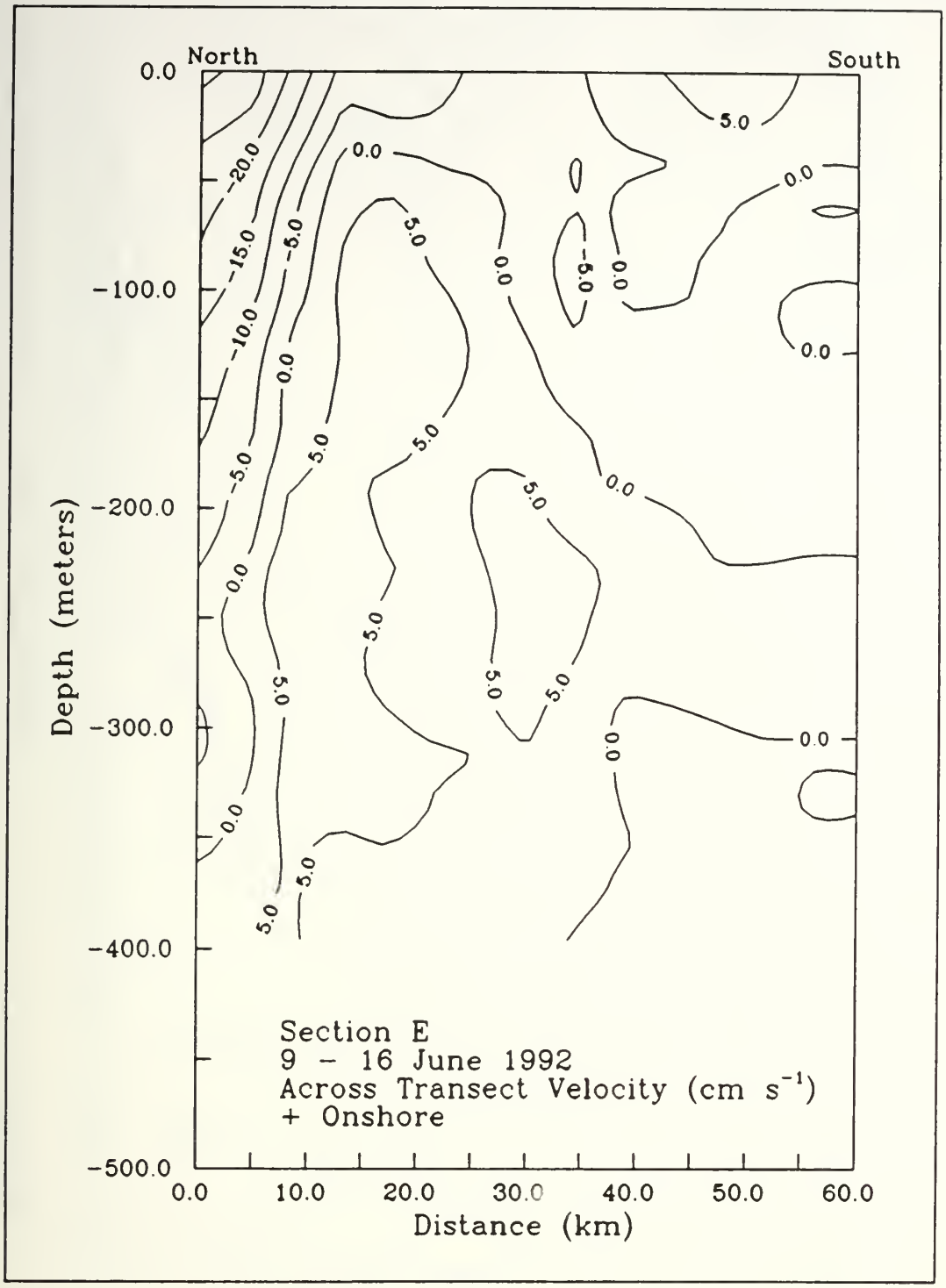

Figure 37. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section E of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

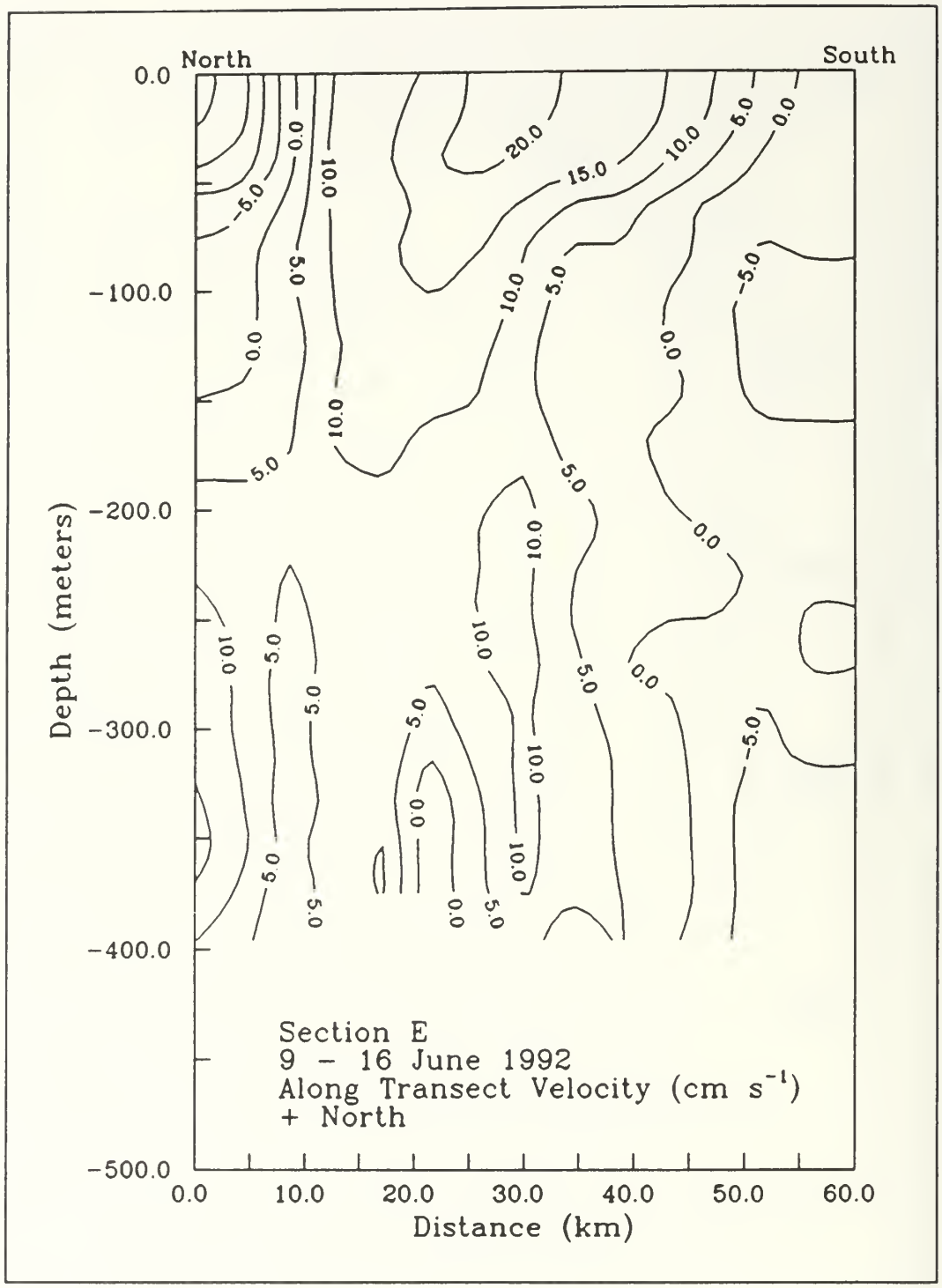
North
South
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (meters)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Distance (km)
Section E
9 - 16 June 1992
Along Transect Velocity (cm s-1)
+ North

Figure 37b.

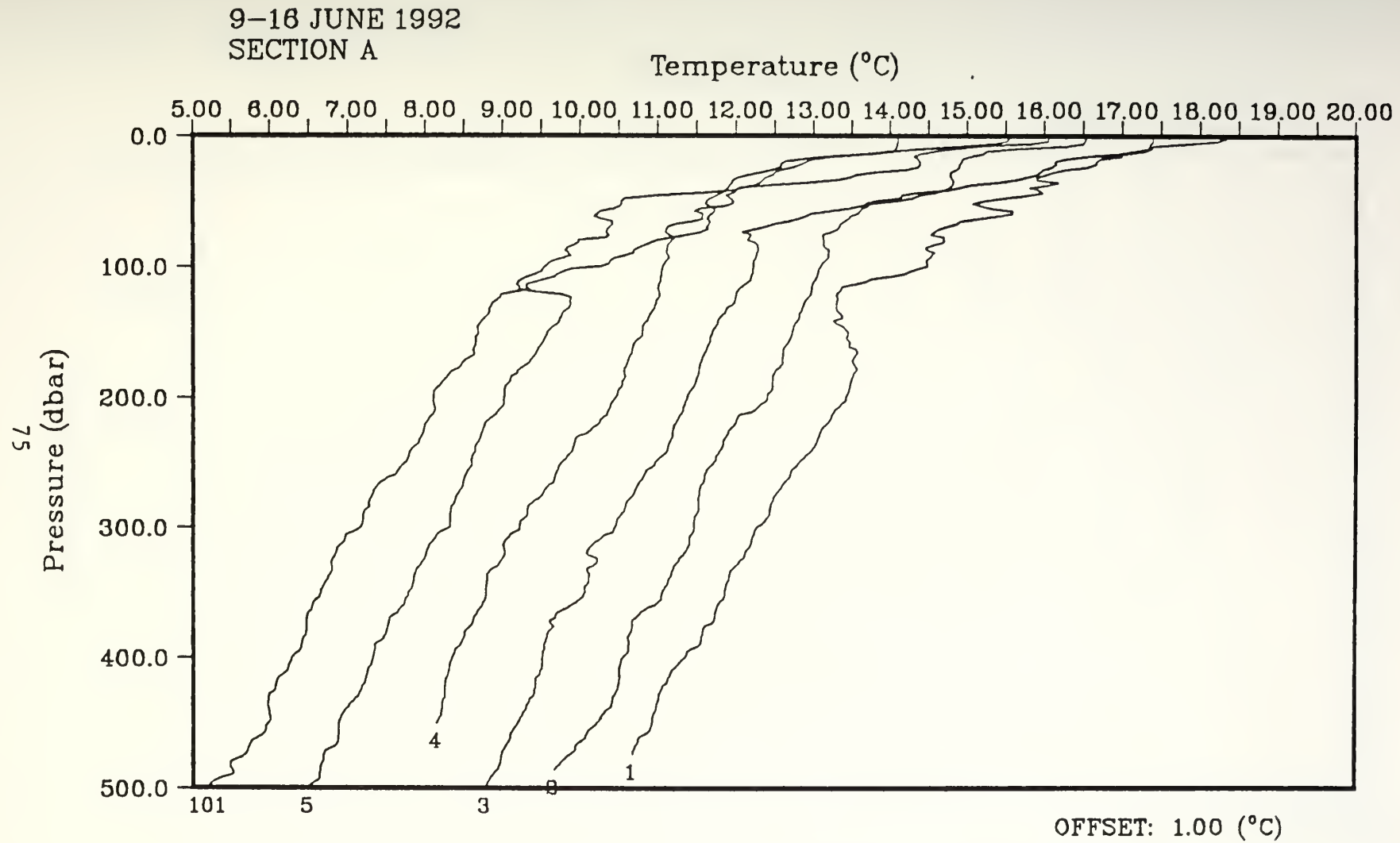

Figure 38. Waterfall plots from 0-500 m of a) temperature (T), b) salinity (S), c) density anomaly (γ_θ), and d) spiciness (π) from CTD stations 101, 1 - 5 of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

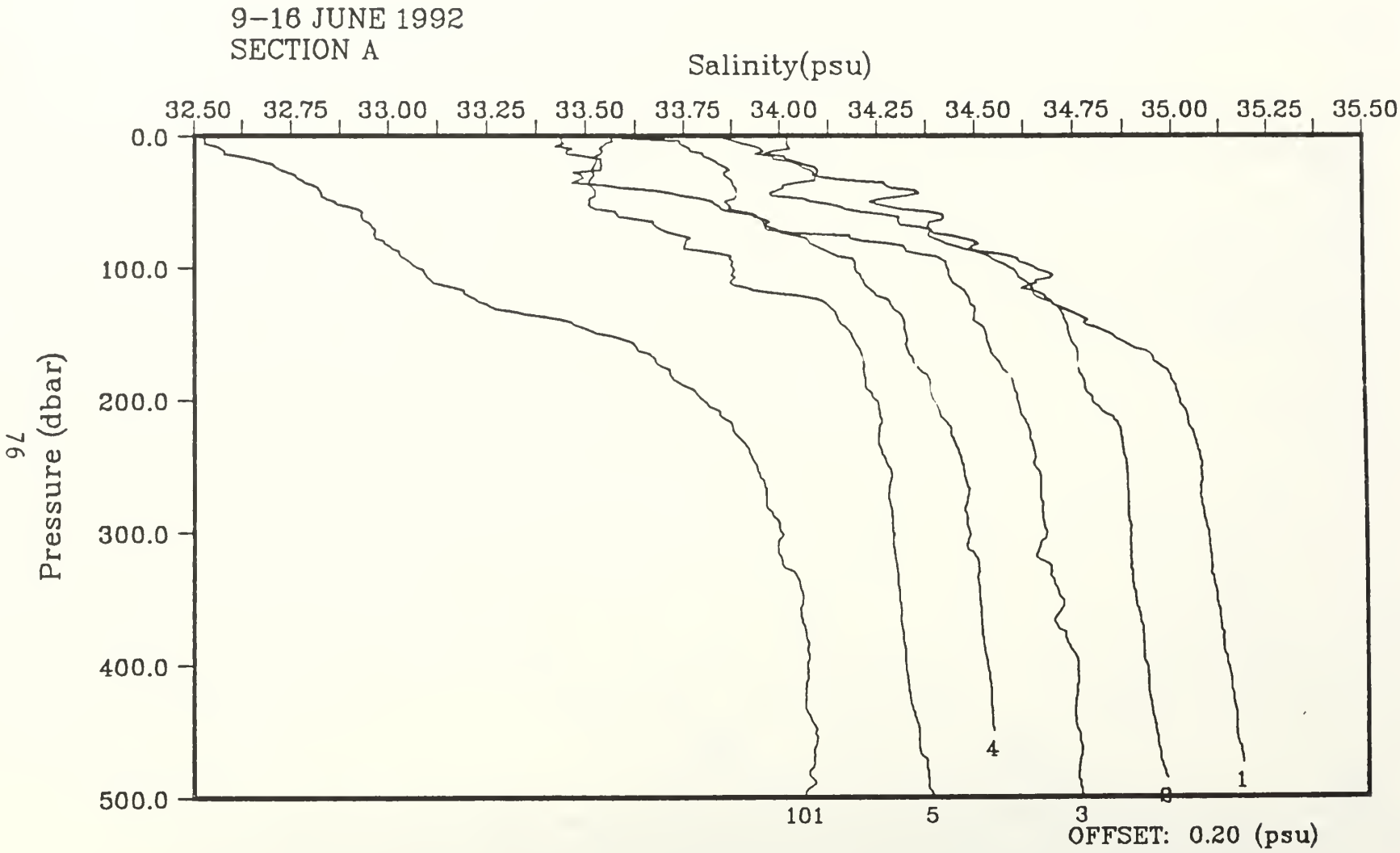
9–16 JUNE 1992
SECTION A
Salinity(psu)
32.50
32.75
33.00
33.25
33.50
33.75
34.00
34.25
34.50
34.75
35.00
35.25
35.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
101
5
4
3
2
1
OFFSET: 0.20 (psu)

Figure 38b.

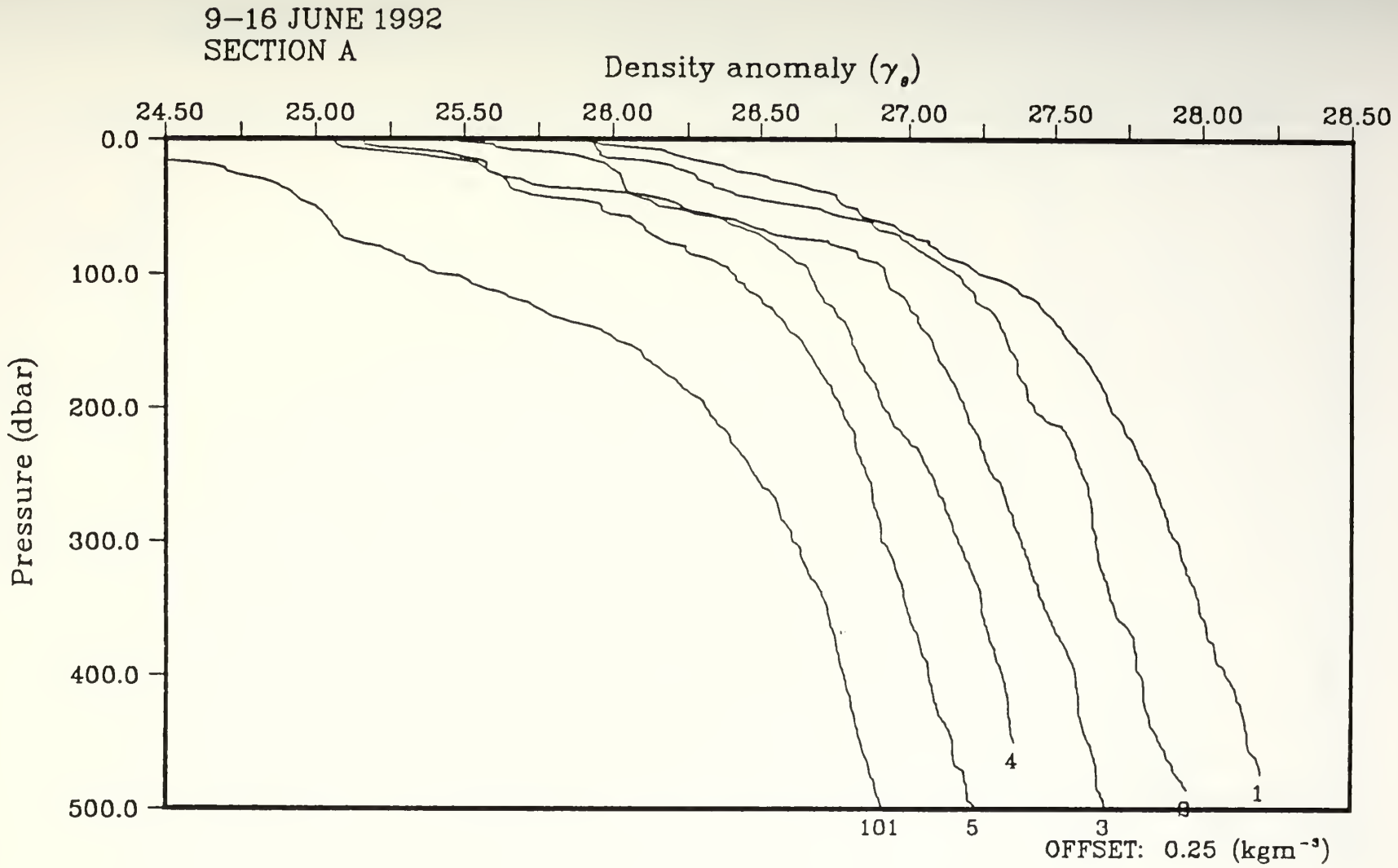
9–16 JUNE 1992
SECTION A
Density anomaly (γ_θ)
24.50
25.00
25.50
26.00
26.50
27.00
27.50
28.00
28.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
4
1
101
5
3
OFFSET: 0.25 (kgm^{-3})

Figure 38c.

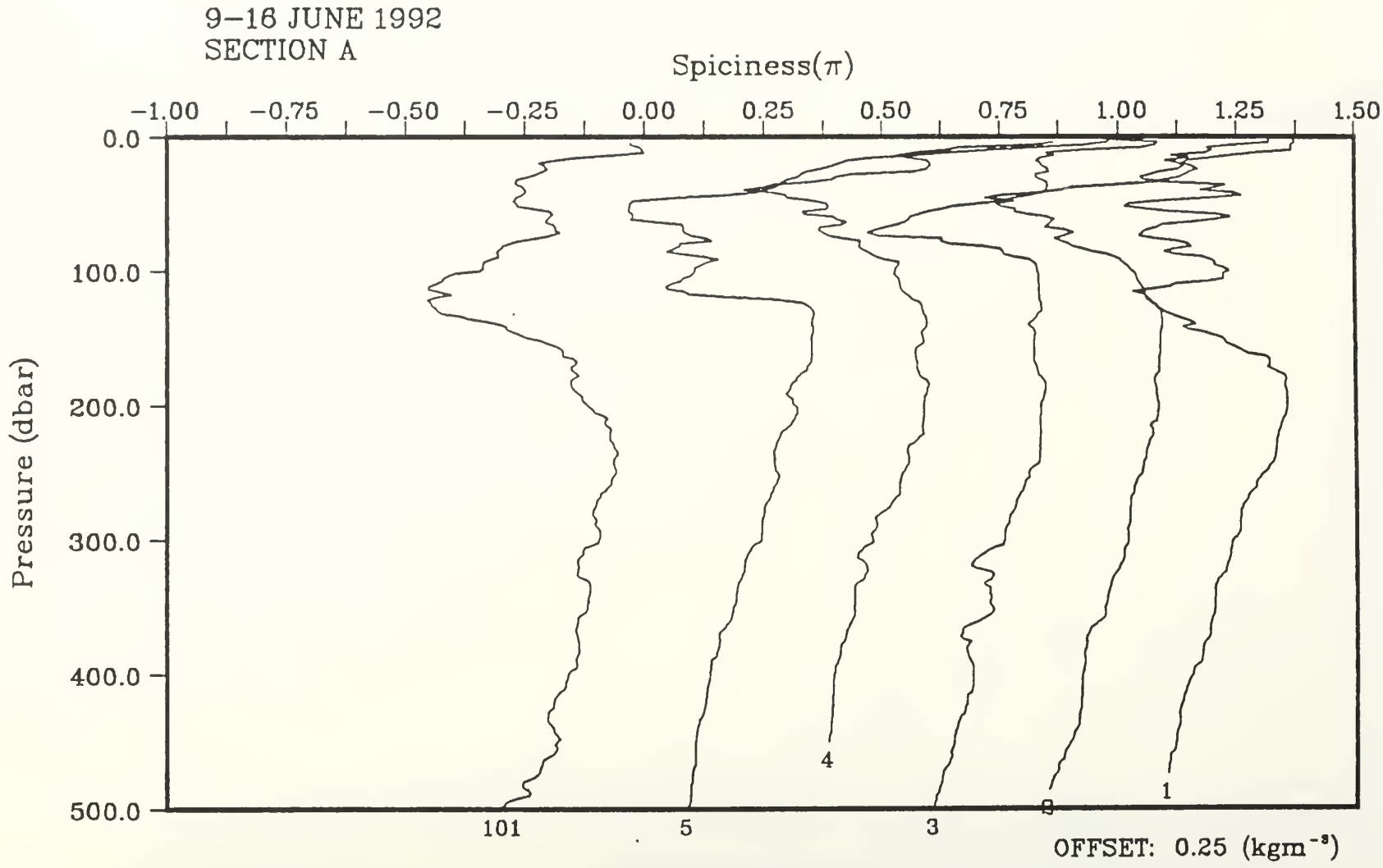
9–16 JUNE 1992
SECTION A
Spiciness(π)
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
1.25
1.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
101
5
4
3
2
1
OFFSET: 0.25 (kgm⁻³)

Figure 38d.

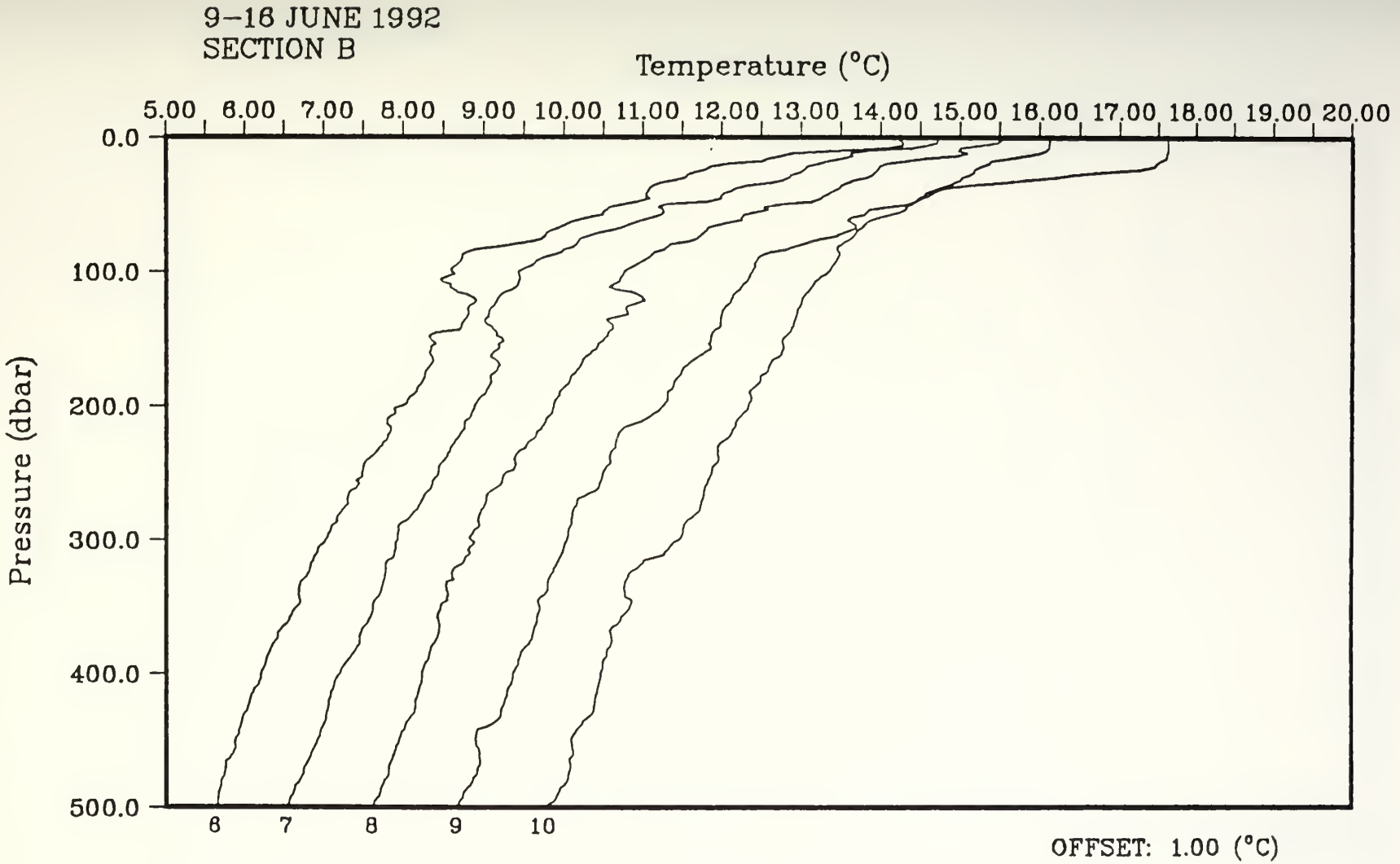

Figure 39. Waterfall plots from 0-500 m of a) temperature (T), b) salinity (S), c) density anomaly (γ_θ), and d) spiciness (π) from CTD stations 6 - 10 of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

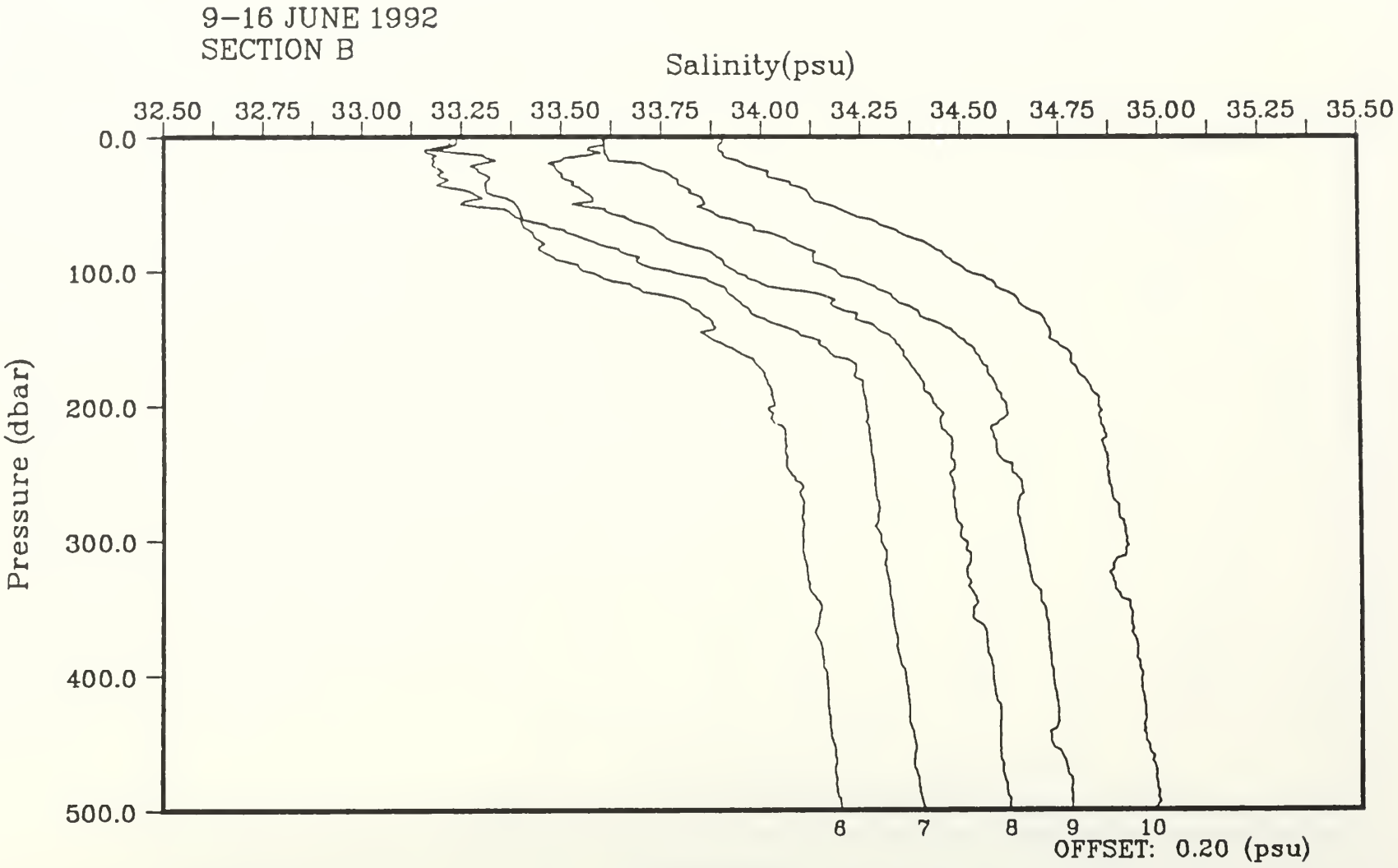
9–16 JUNE 1992
SECTION B
Salinity(psu)
32.50
32.75
33.00
33.25
33.50
33.75
34.00
34.25
34.50
34.75
35.00
35.25
35.50
Pressure (dbar)
0.0
100.0
200.0
300.0
400.0
500.0
6
7
8
9
10
OFFSET: 0.20 (psu)

Figure 39b.

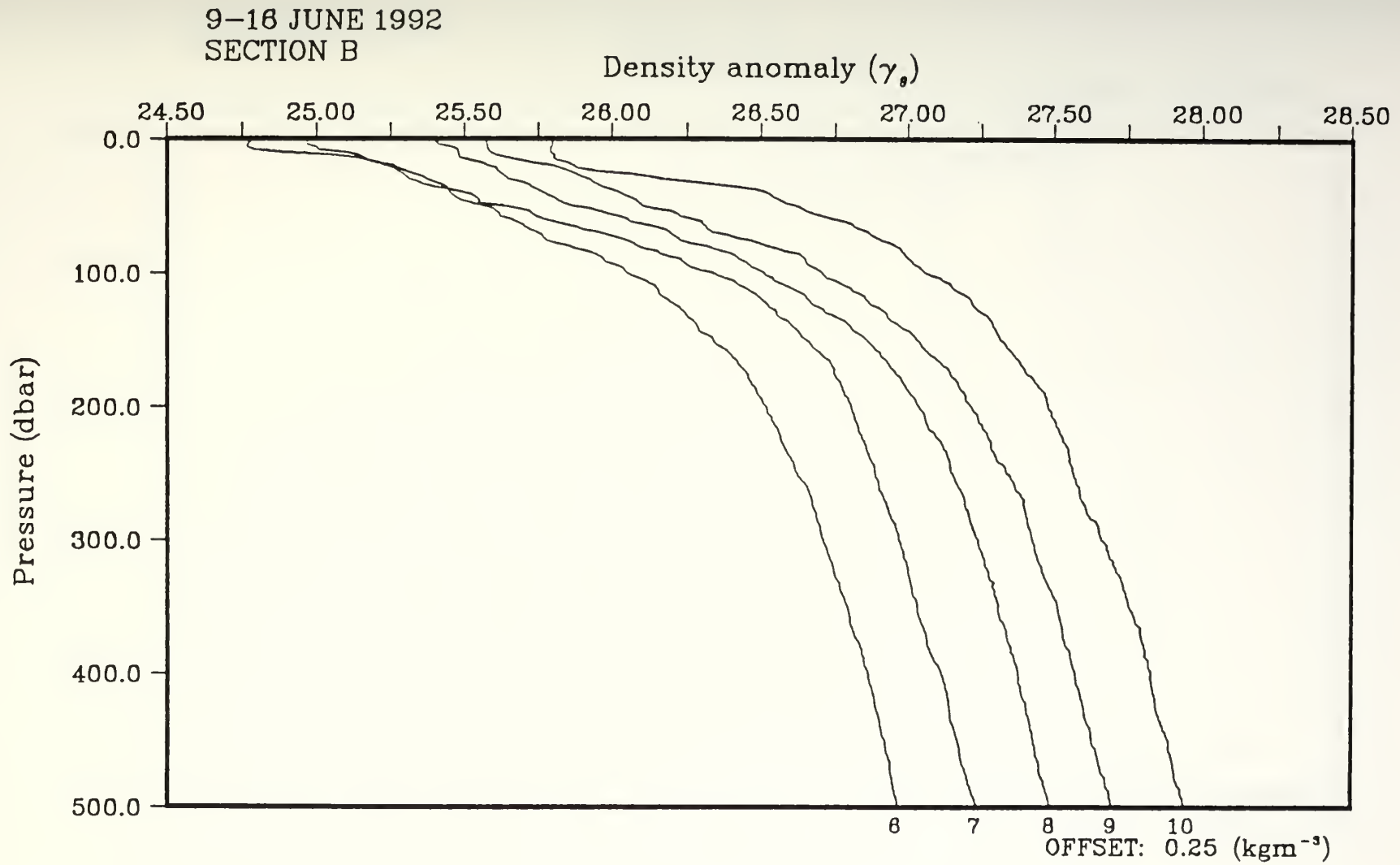
9–16 JUNE 1992
SECTION B
Density anomaly (γ_θ)
24.50
25.00
25.50
26.00
26.50
27.00
27.50
28.00
28.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
6
7
8
9
10
OFFSET: 0.25 (kgm^{-3})

Figure 39c.

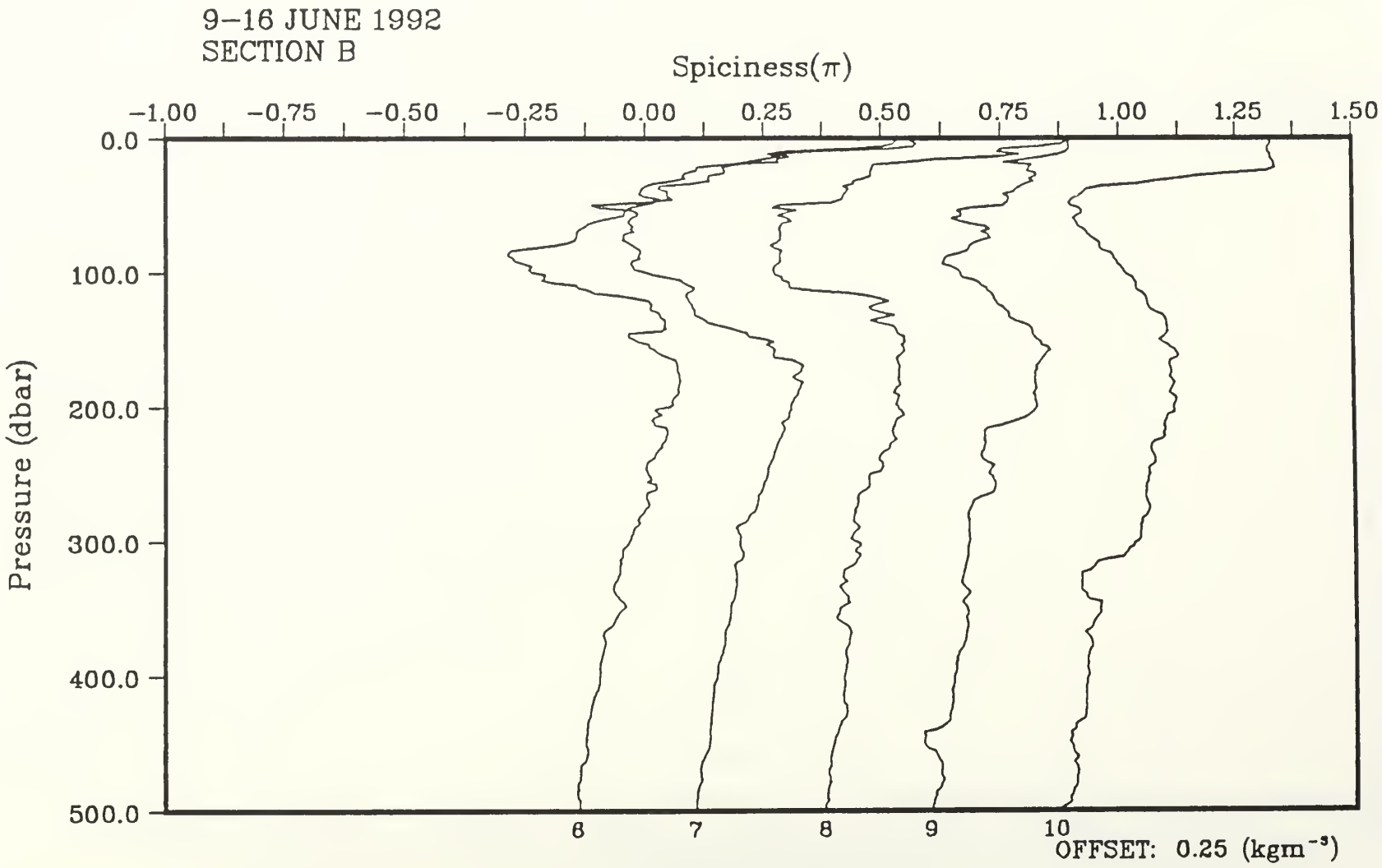
9–16 JUNE 1992
SECTION B
Spiciness(π)
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
1.25
1.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
6
7
8
9
10
OFFSET: 0.25 (kgm⁻³)

Figure 39d.

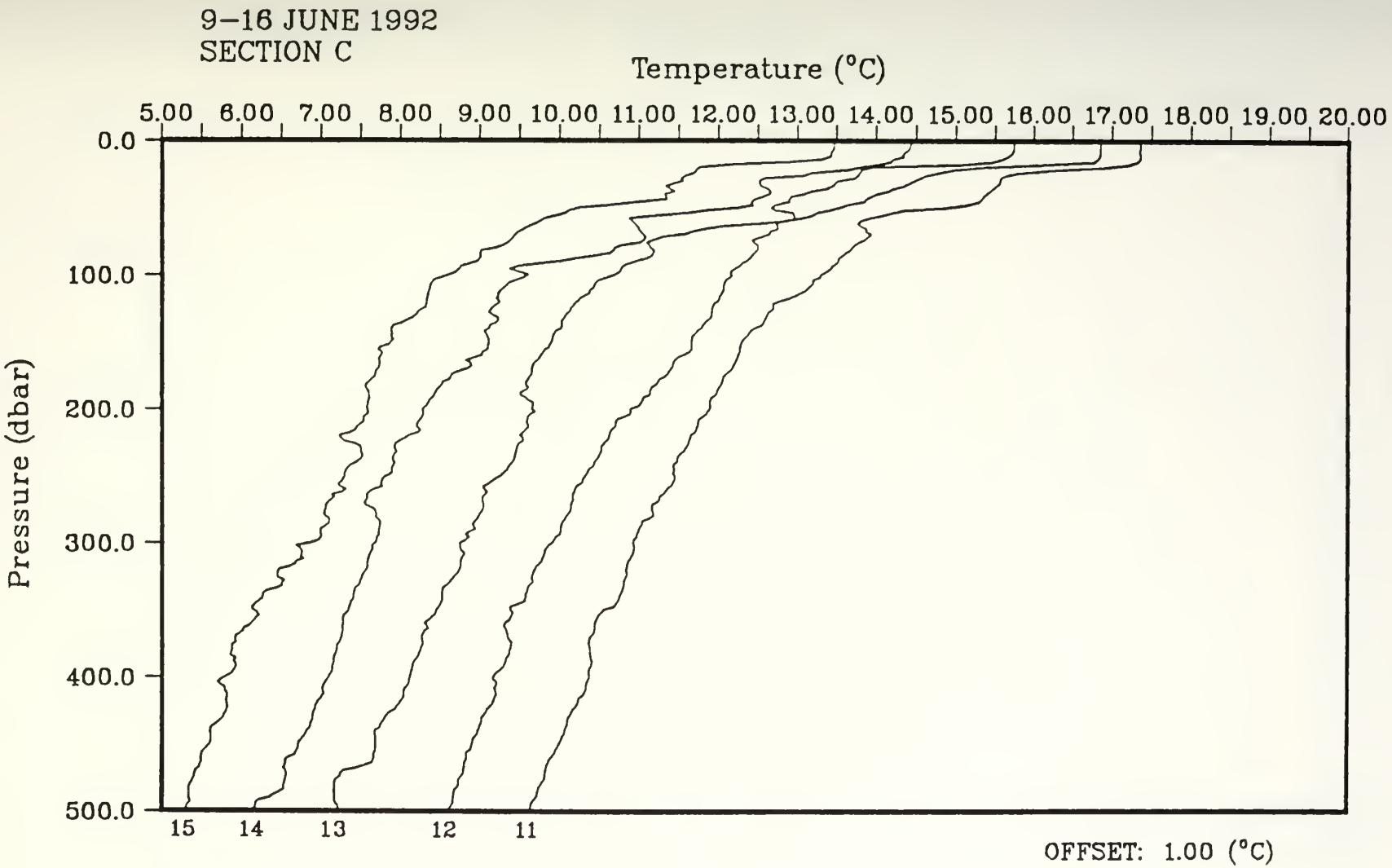

Figure 40. Waterfall plots from 0-500 m of a) temperature (T), b) salinity (S), c) density anomaly (γ_θ), and d) spiciness (π) from CTD stations 11 - 15 of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

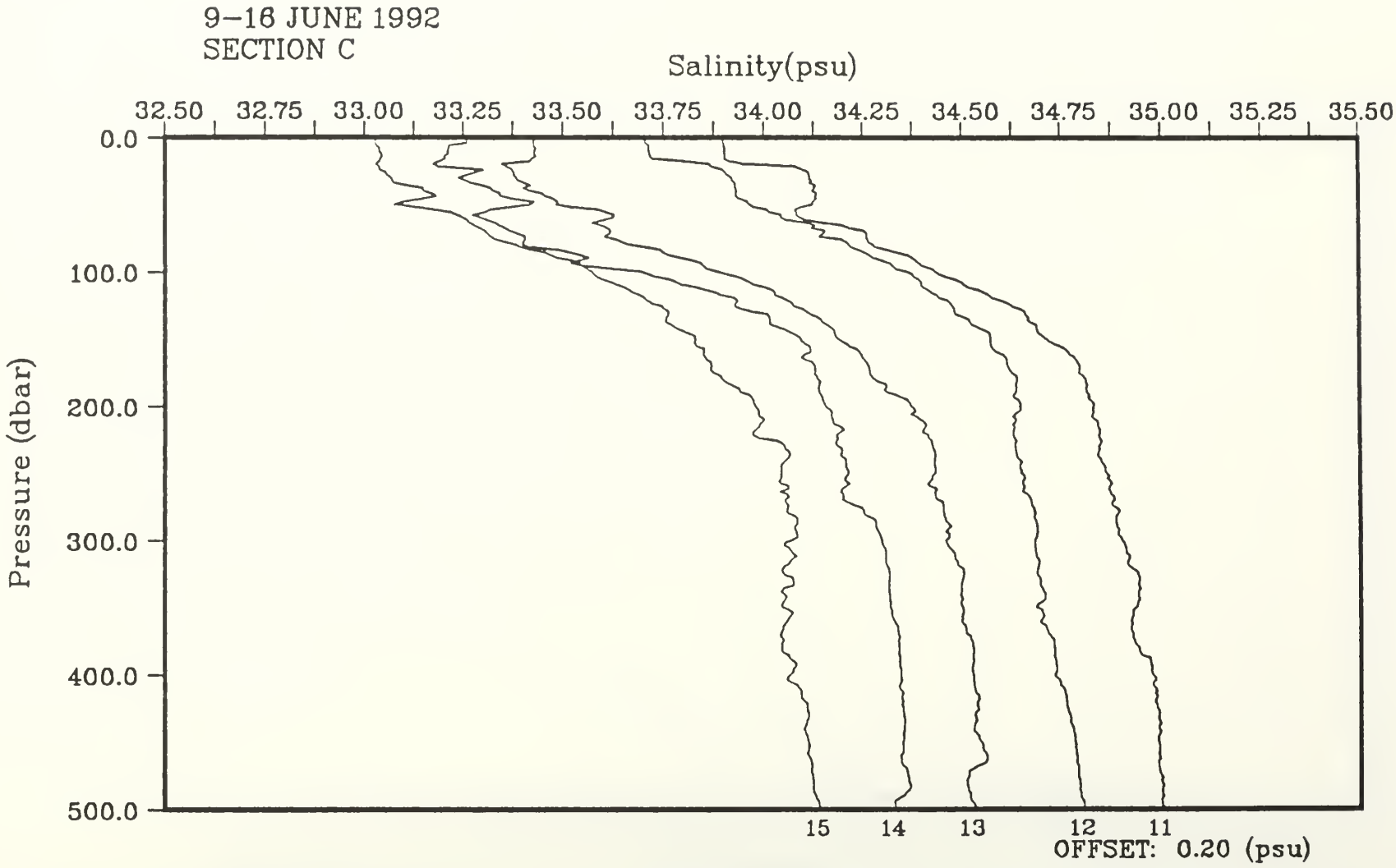
9–16 JUNE 1992
SECTION C
Salinity(psu)
32.50
32.75
33.00
33.25
33.50
33.75
34.00
34.25
34.50
34.75
35.00
35.25
35.50
Pressure (dbar)
0.0
100.0
200.0
300.0
400.0
500.0
15
14
13
12
11
OFFSET: 0.20 (psu)

Figure 40b.

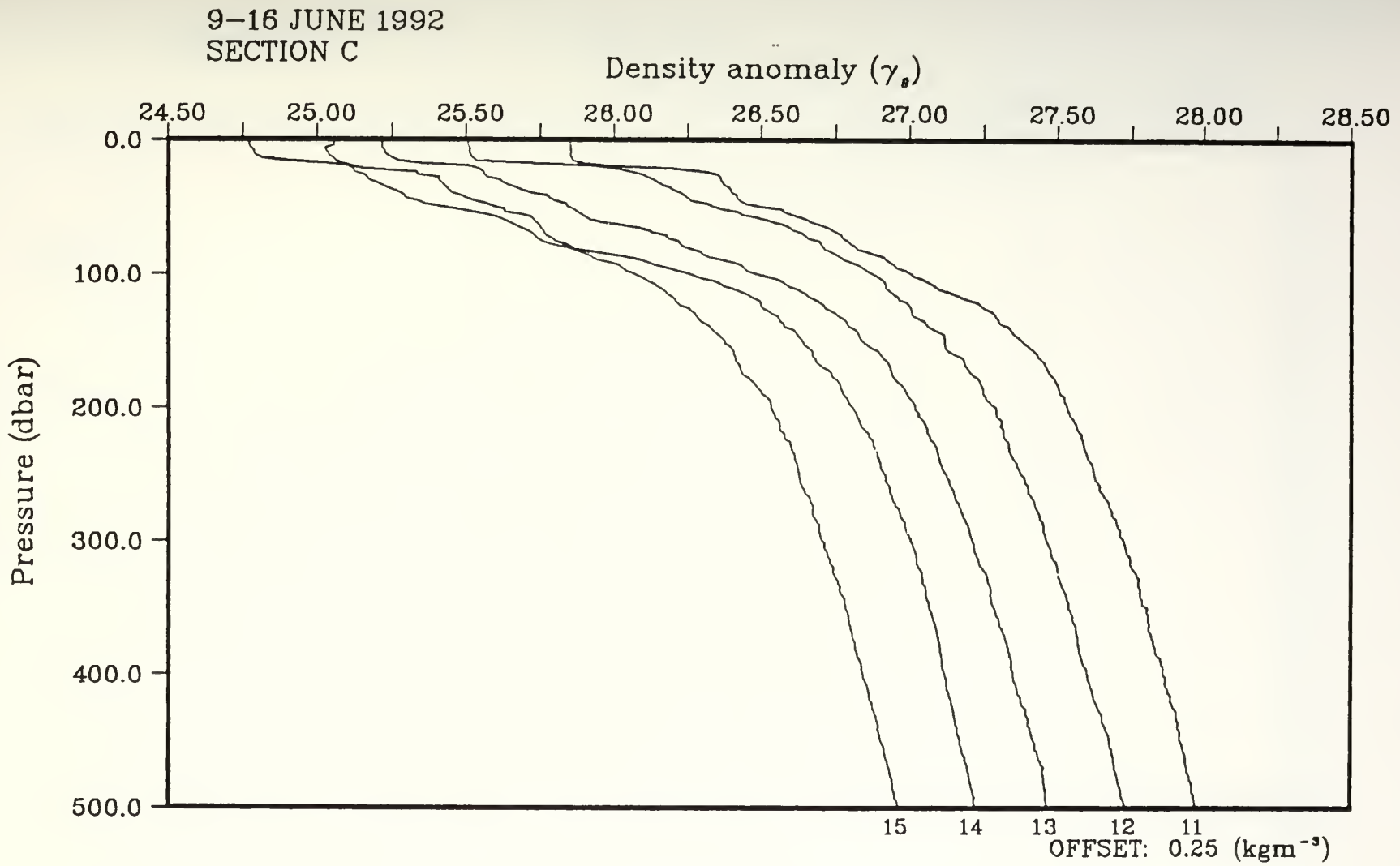
9–16 JUNE 1992
SECTION C
Density anomaly (γ_θ)
24.50
25.00
25.50
26.00
26.50
27.00
27.50
28.00
28.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
15
14
13
12
11
OFFSET: 0.25 (kgm^{-3})

Figure 40c.

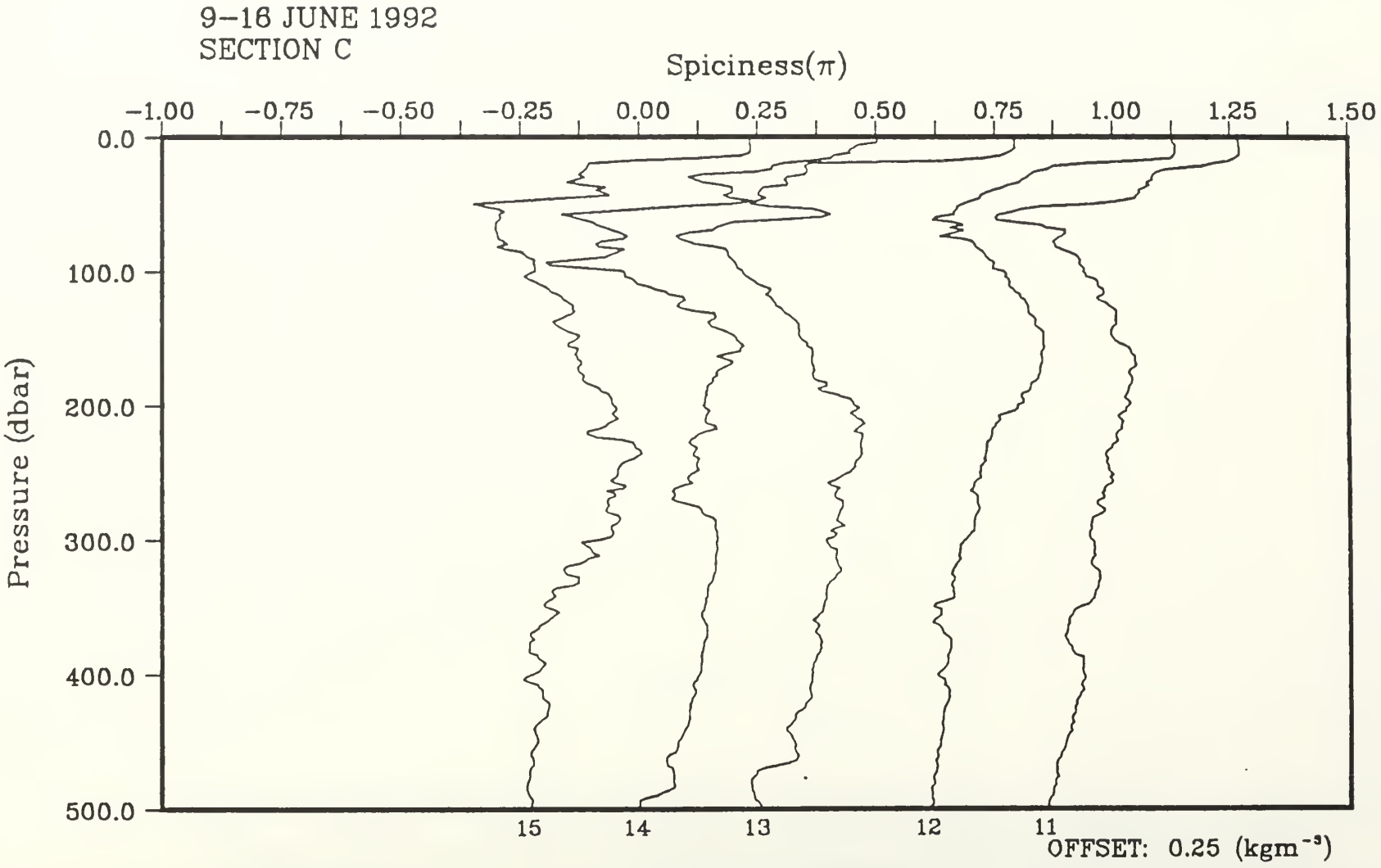
9–16 JUNE 1992
SECTION C
Spiciness(π)
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
1.25
1.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
15
14
13
12
11
OFFSET: 0.25 (kgm⁻³)

Figure 40d.

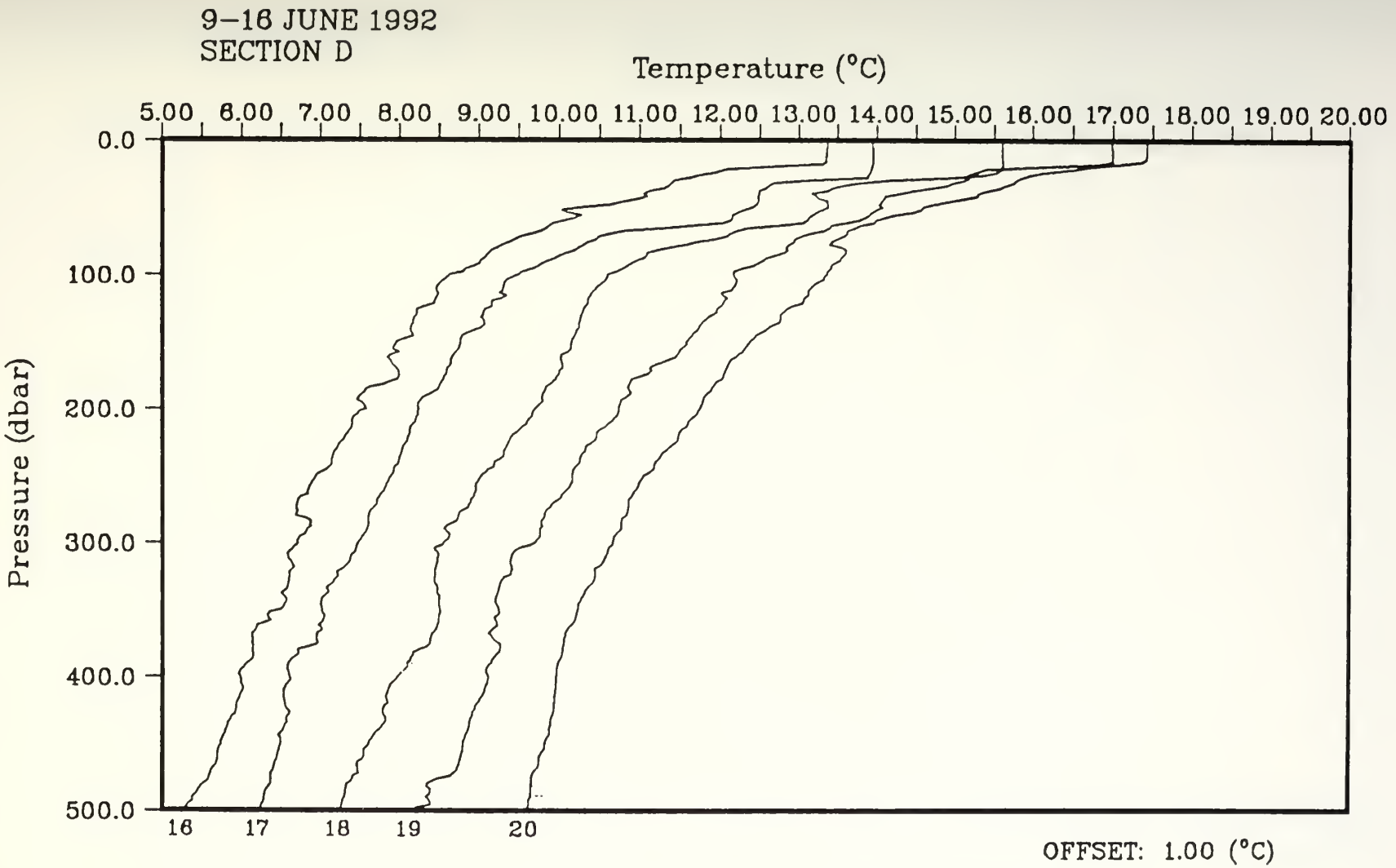

Figure 41. Waterfall plots from 0-500 m of a) temperature (T), b) salinity (S), c) density anomaly (γ_θ), and d) spiciness (π) from CTD stations 16 - 20 of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

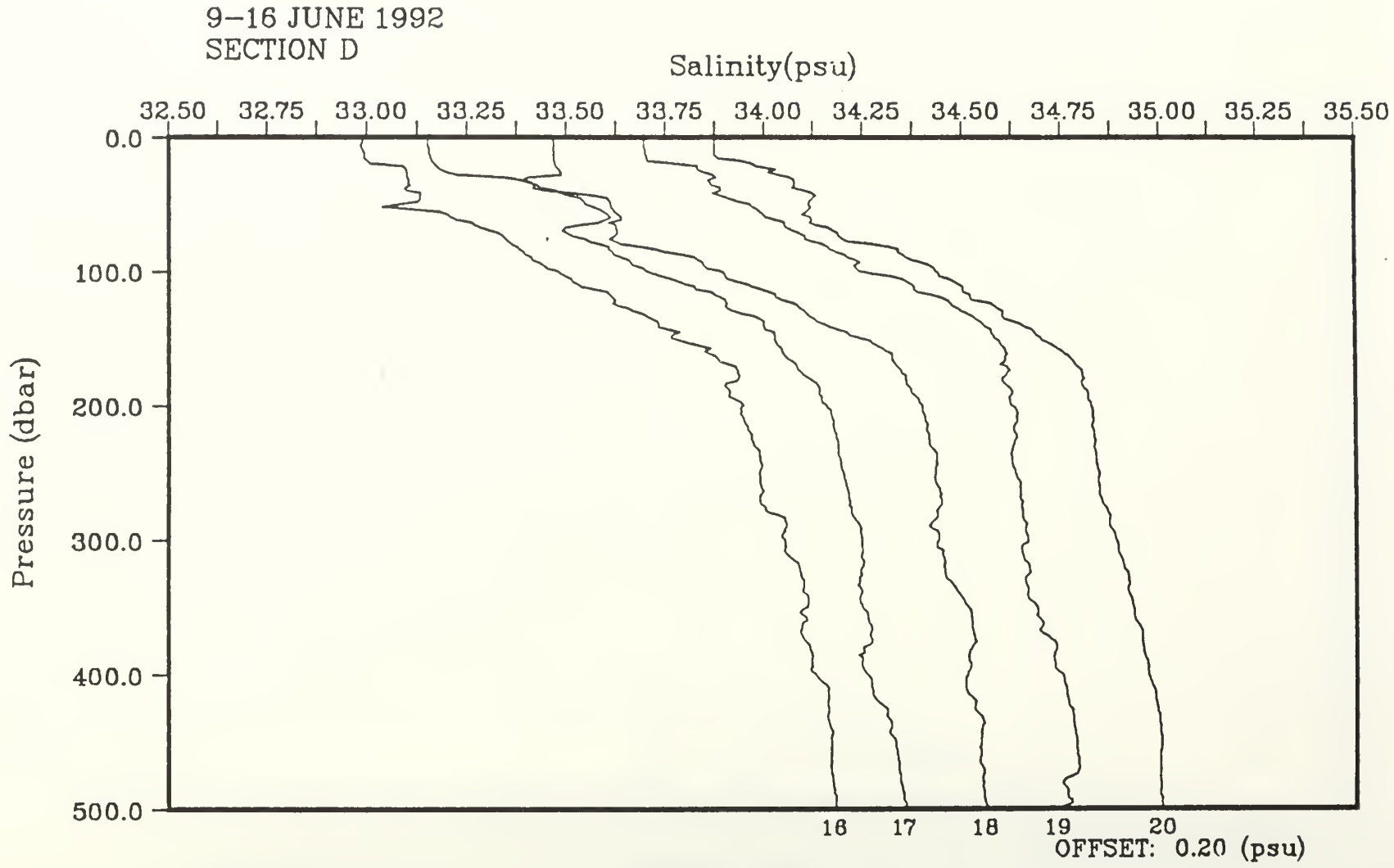
9–16 JUNE 1992
SECTION D
Salinity(psu)
32.50
32.75
33.00
33.25
33.50
33.75
34.00
34.25
34.50
34.75
35.00
35.25
35.50
Pressure (dbar)
0.0
100.0
200.0
300.0
400.0
500.0
16
17
18
19
20
OFFSET: 0.20 (psu)

Figure 41b.

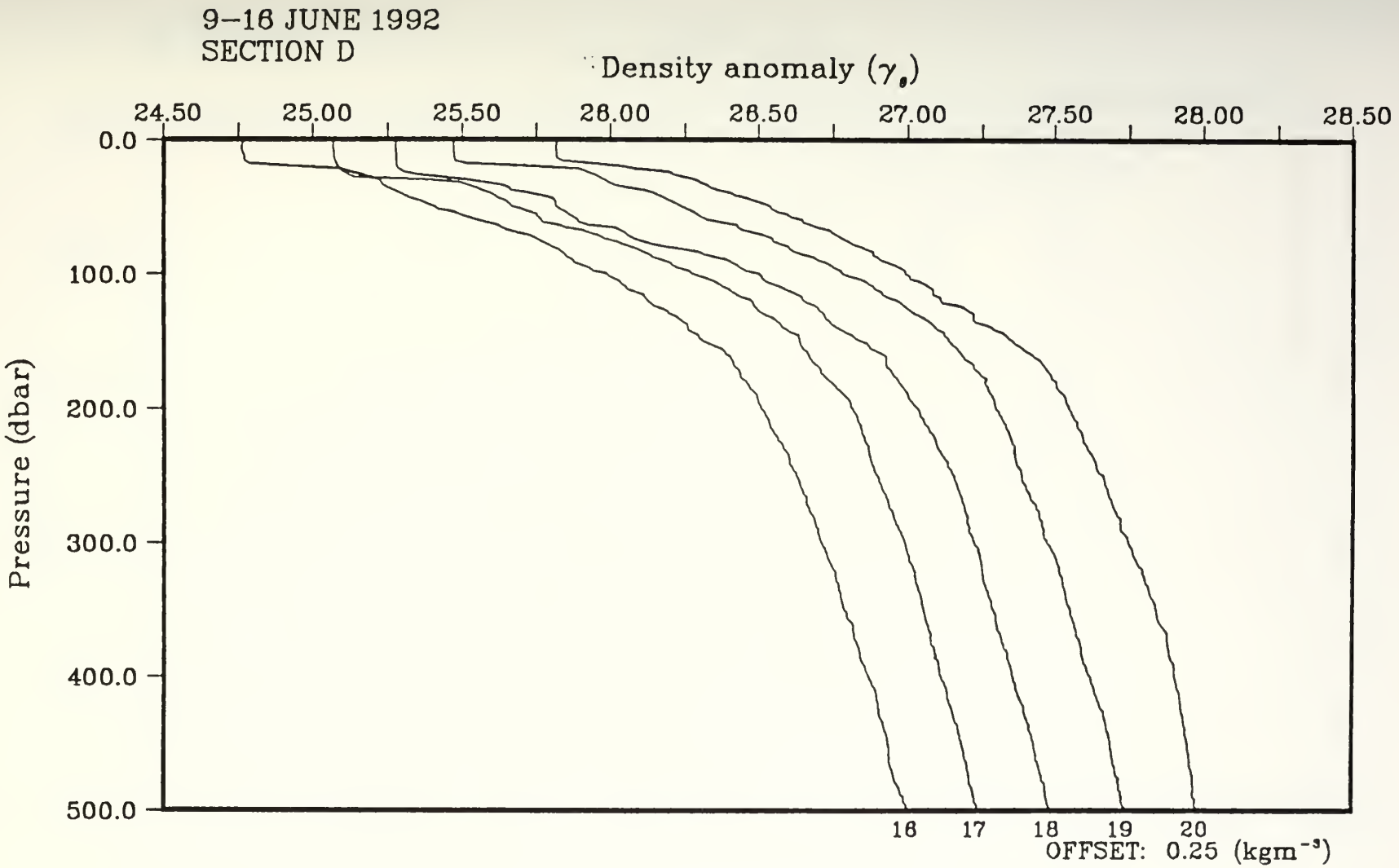
9–16 JUNE 1992
SECTION D
Density anomaly (γ_θ)
24.50
25.00
25.50
26.00
26.50
27.00
27.50
28.00
28.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
16
17
18
19
20
OFFSET: 0.25 (kgm^{-3})

Figure 41c.

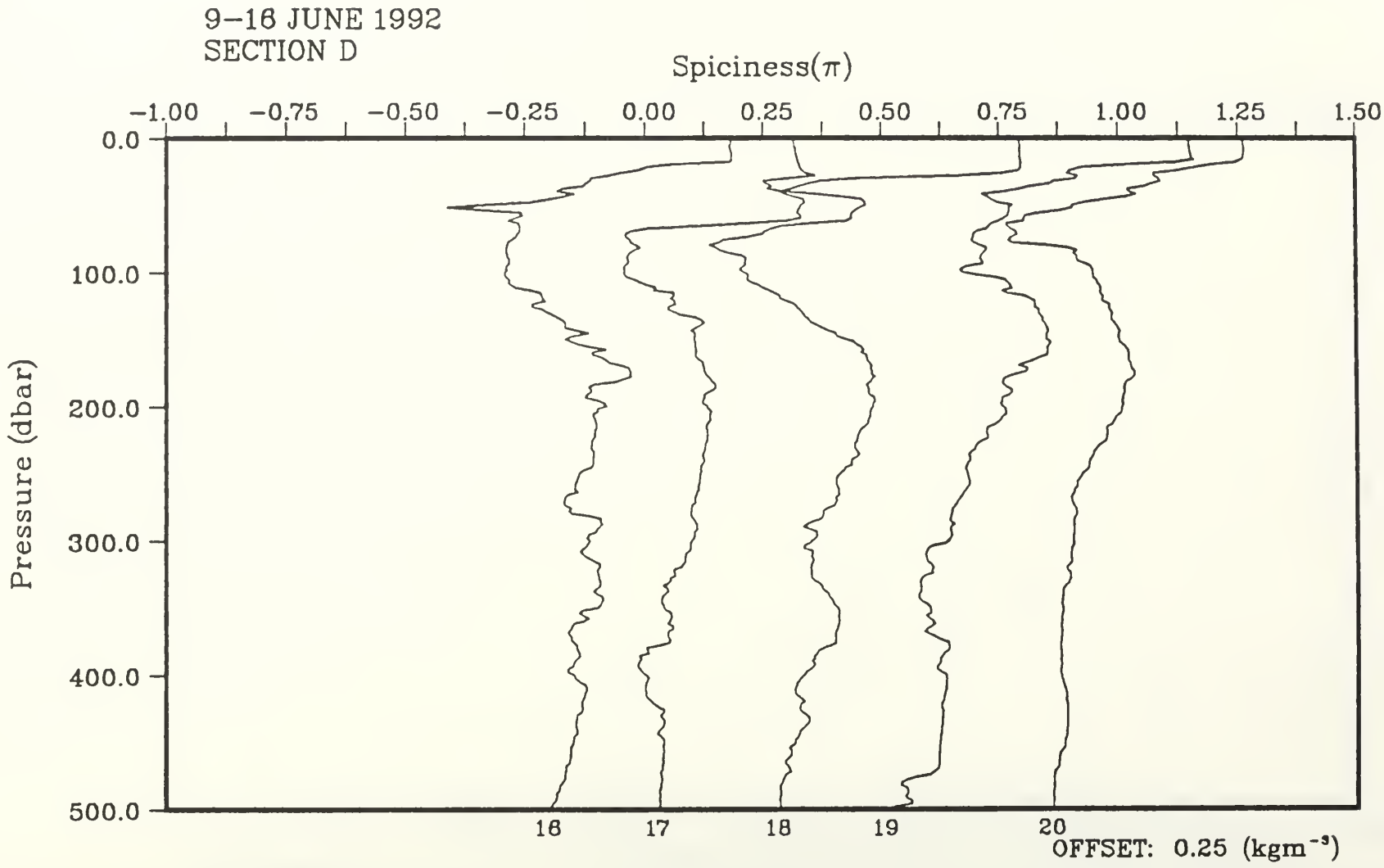
9–16 JUNE 1992
SECTION D
Spiciness(π)
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
1.25
1.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
16
17
18
19
20
OFFSET: 0.25 (kgm⁻³)

Figure 41d.

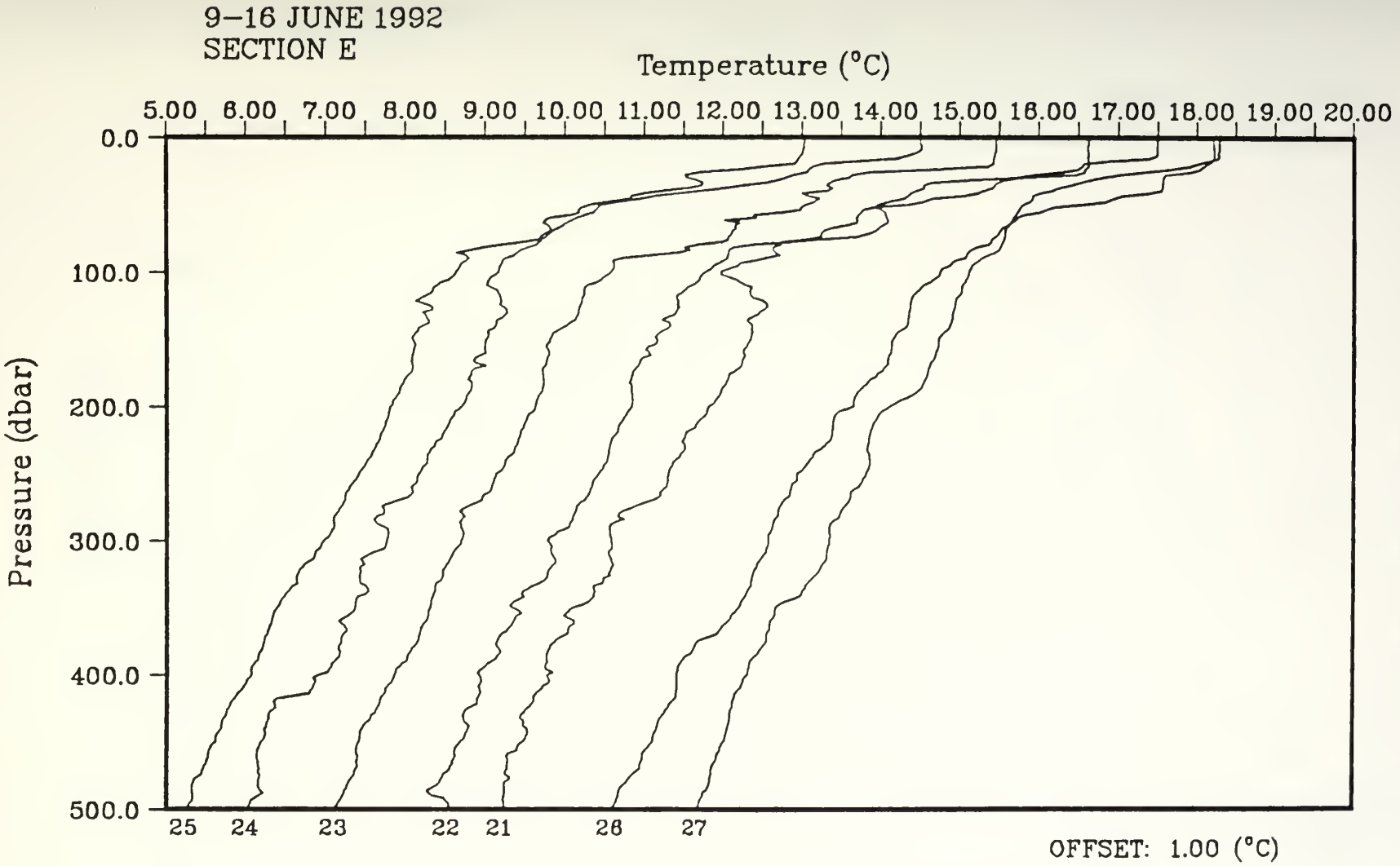

Figure 42. Waterfall plots from 0-500 m of a) temperature (T), b) salinity (S), c) density anomaly (γ_θ), and d) spiciness (π) from CTD stations 21 - 25, 26 and 27 of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

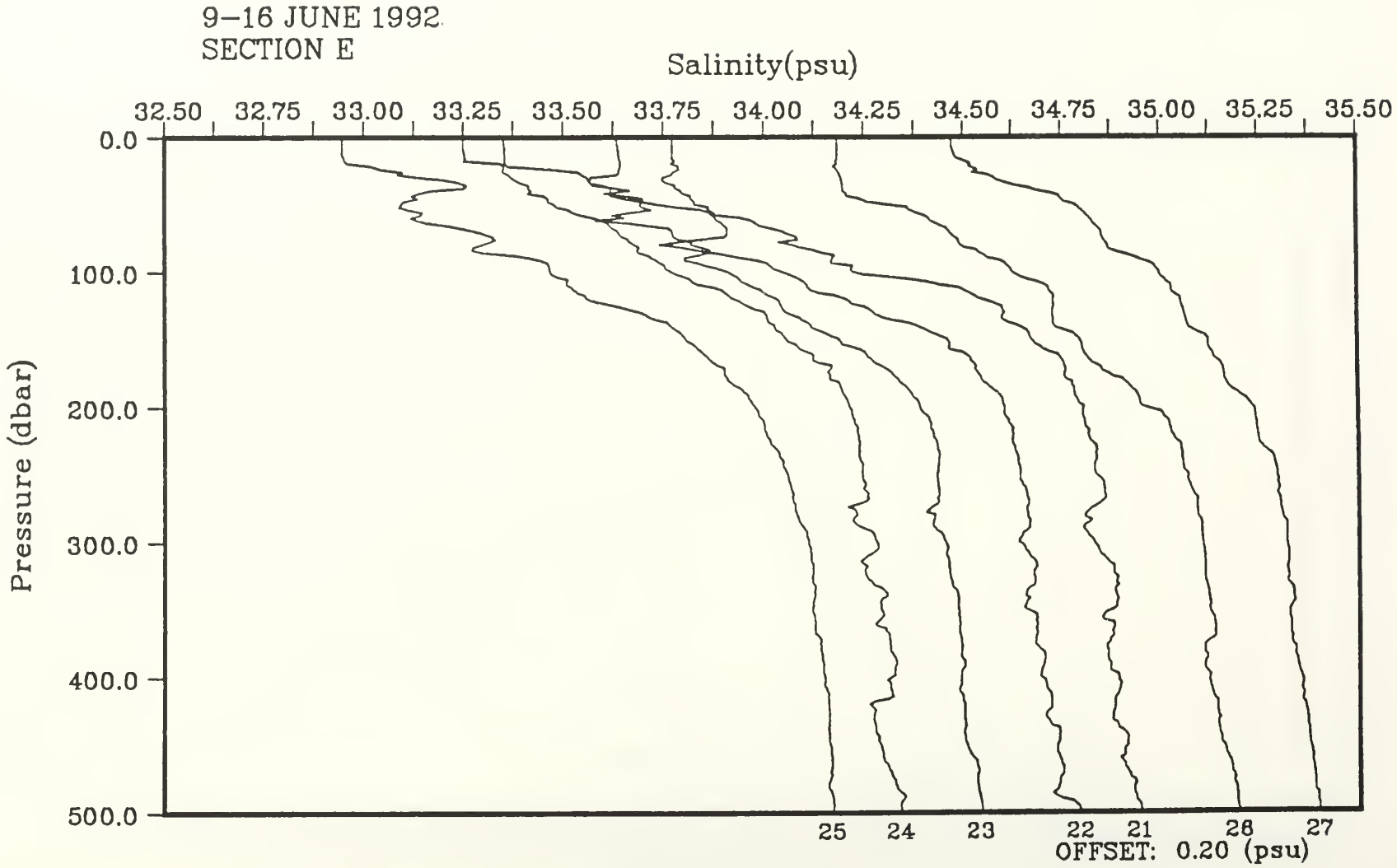
9–16 JUNE 1992
SECTION E
Salinity(psu)
32.50
32.75
33.00
33.25
33.50
33.75
34.00
34.25
34.50
34.75
35.00
35.25
35.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
25
24
23
22
21
28
27
OFFSET: 0.20 (psu)

Figure 42b.

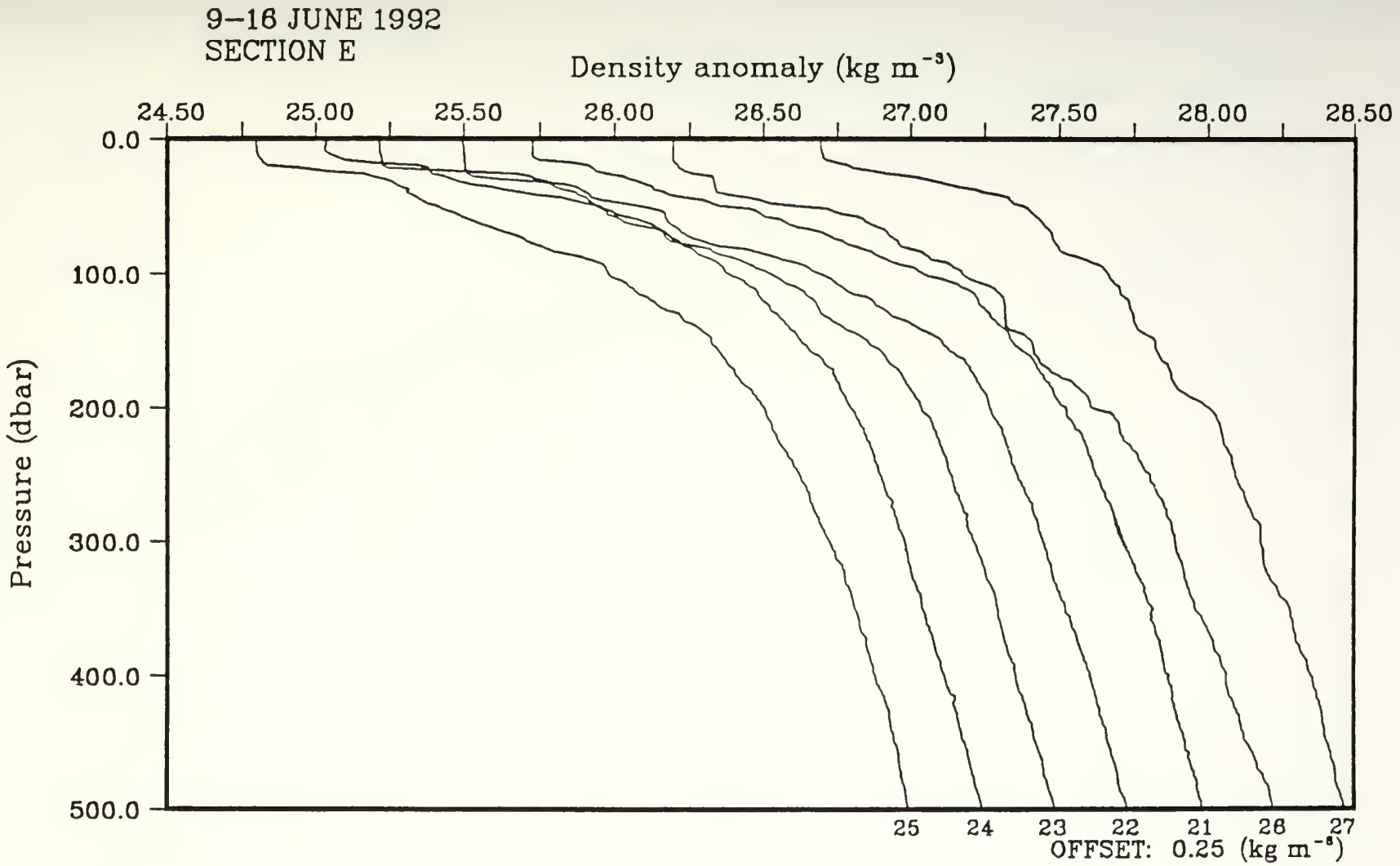
9–16 JUNE 1992
SECTION E
Density anomaly (kg m⁻³)
24.50
25.00
25.50
26.00
26.50
27.00
27.50
28.00
28.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
25
24
23
22
21
26
27
OFFSET: 0.25 (kg m⁻³)

Figure 42c.

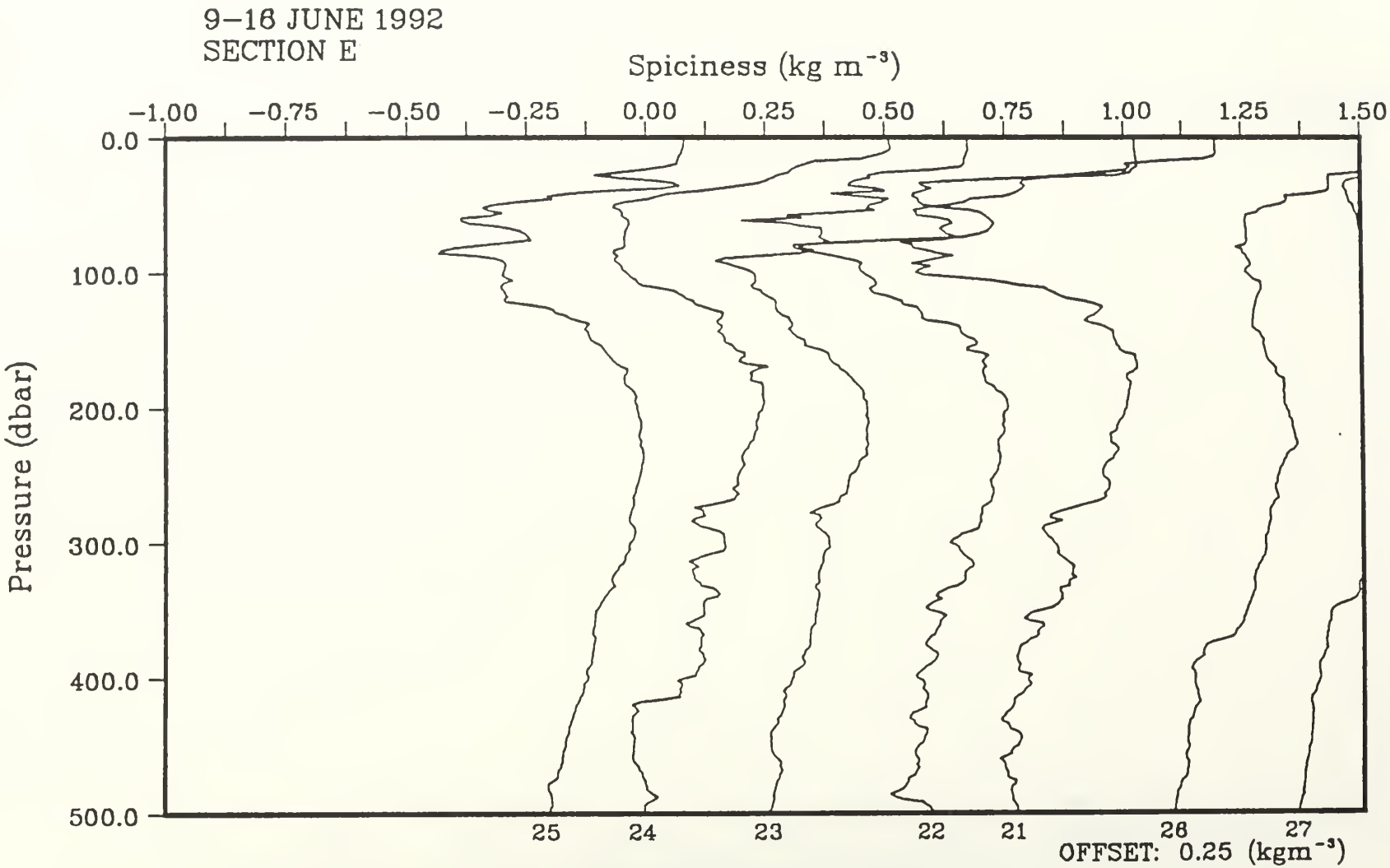
9–16 JUNE 1992
SECTION E
Spiciness (kg m⁻³)
−1.00
−0.75
−0.50
−0.25
0.00
0.25
0.50
0.75
1.00
1.25
1.50
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
25
24
23
22
21
26
27
OFFSET: 0.25 (kgm⁻³)

Figure 42d.

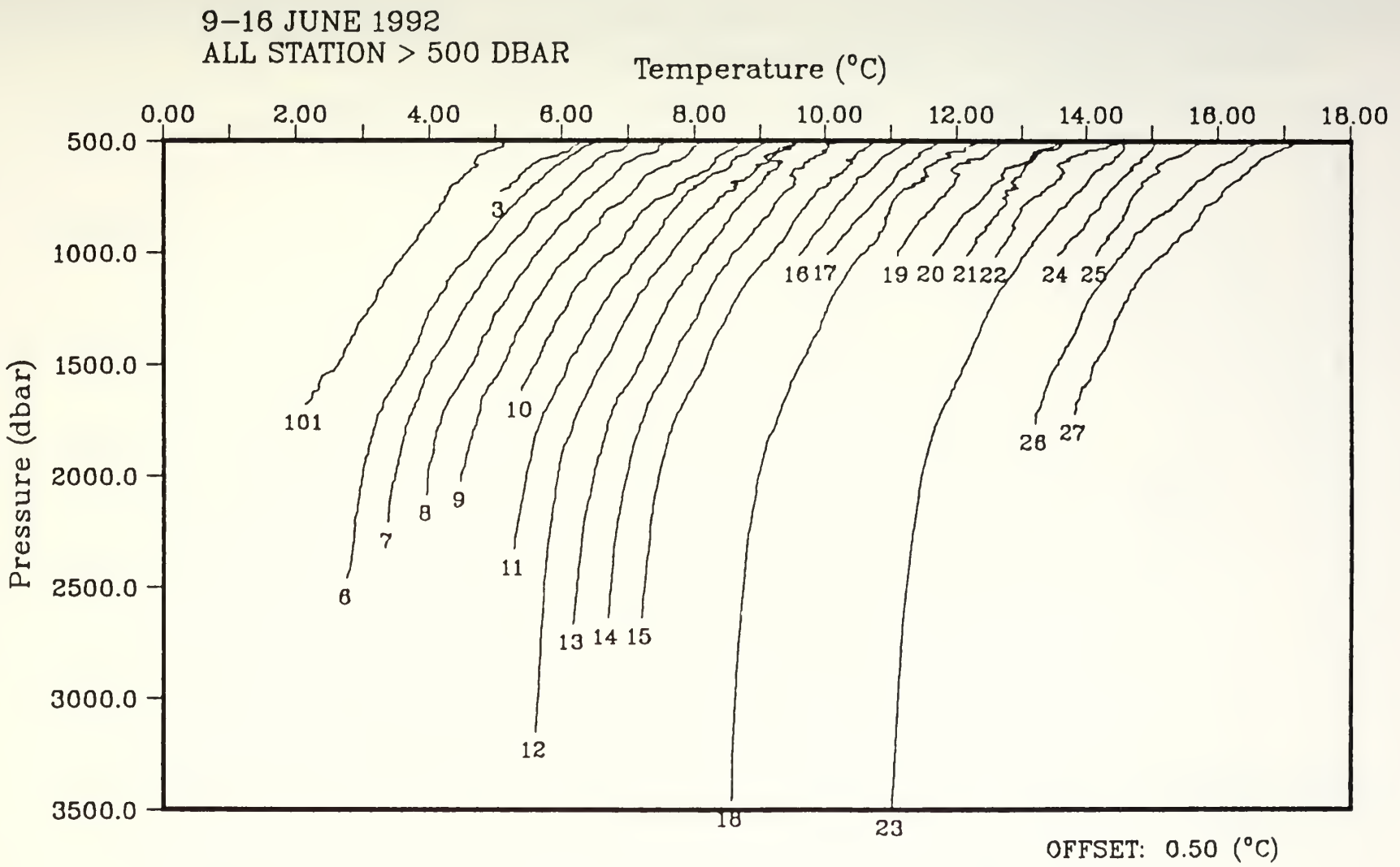

Figure 43. Waterfall plots from 500-3500 m of a) temperature (T), b) salinity (S), c) density anomaly (γ_θ), and d) spiciness (π) for all CTD stations deeper than 500 m of the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

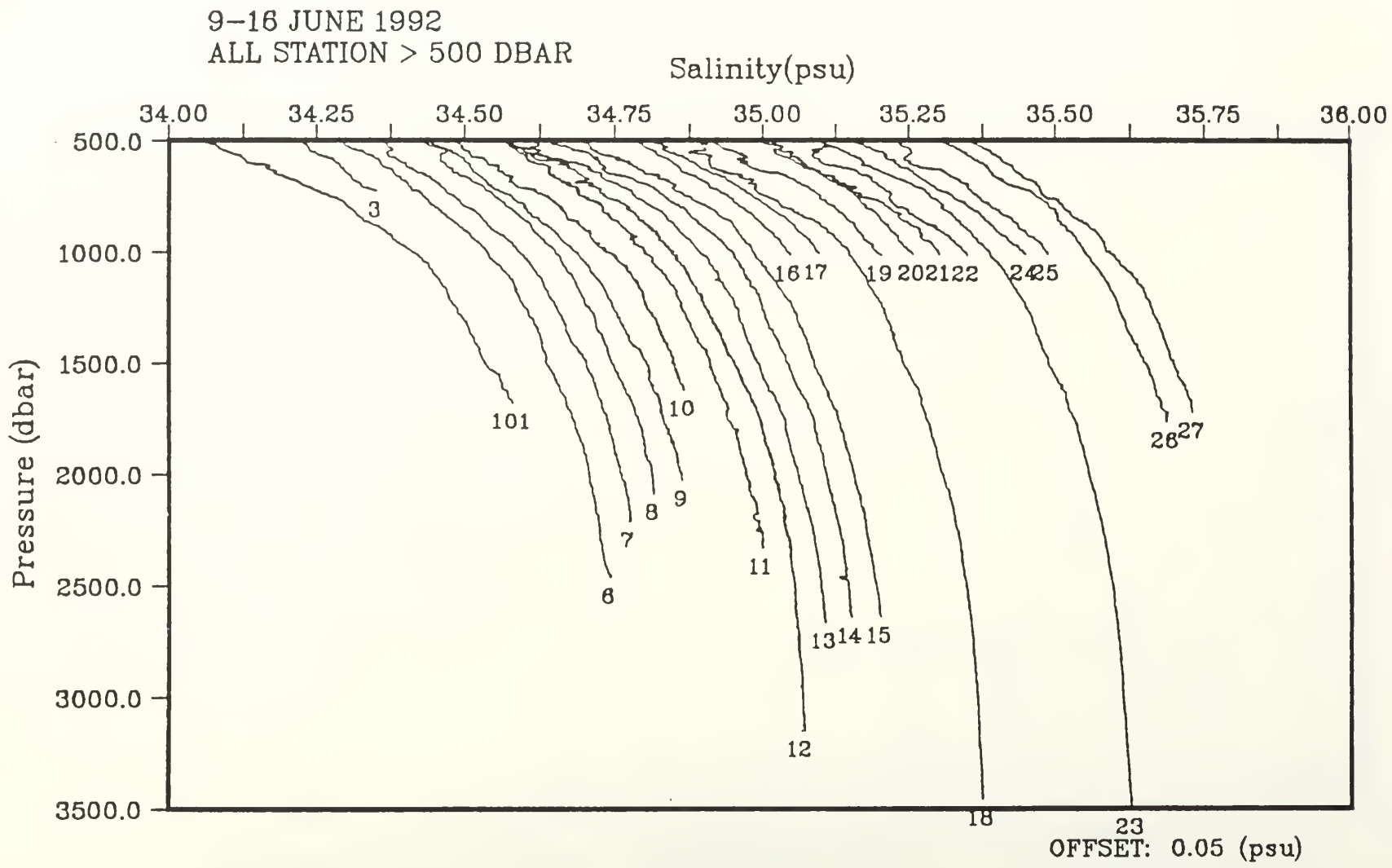
9–16 JUNE 1992
ALL STATION > 500 DBAR
Salinity(psu)
34.00
34.25
34.50
34.75
35.00
35.25
35.50
35.75
36.00
500.0
1000.0
1500.0
2000.0
2500.0
3000.0
3500.0
Pressure (dbar)
3
101
10
8
9
7
6
11
16
17
19
20
21
22
24
25
26
27
13
14
15
12
18
23
OFFSET: 0.05 (psu)

Figure 43b.

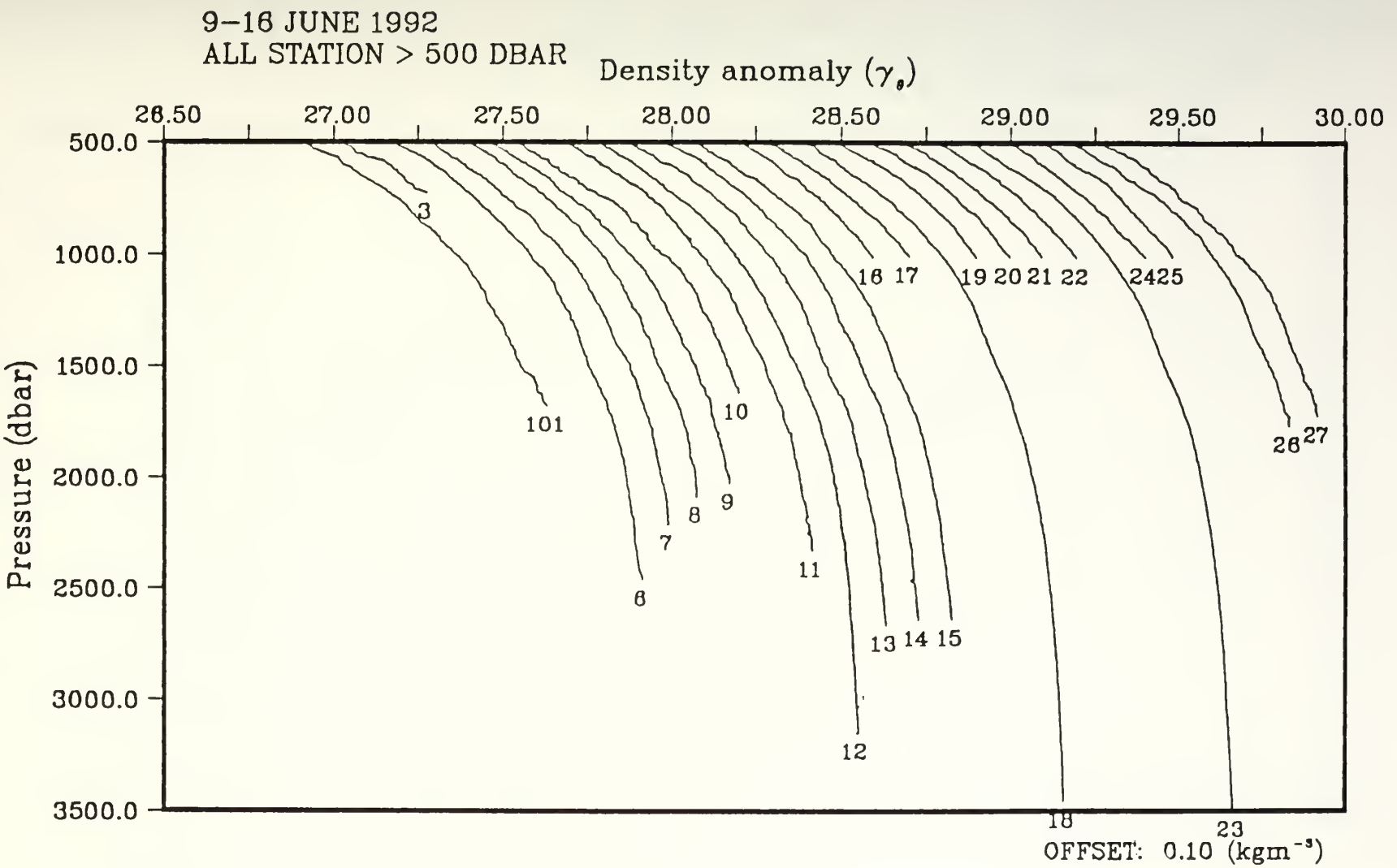
9–16 JUNE 1992
ALL STATION > 500 DBAR
Density anomaly (γ_θ)
26.50
27.00
27.50
28.00
28.50
29.00
29.50
30.00
500.0
1000.0
1500.0
2000.0
2500.0
3000.0
3500.0
Pressure (dbar)
3
101
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
OFFSET: 0.10 (kgm^{-3})

Figure 43c.

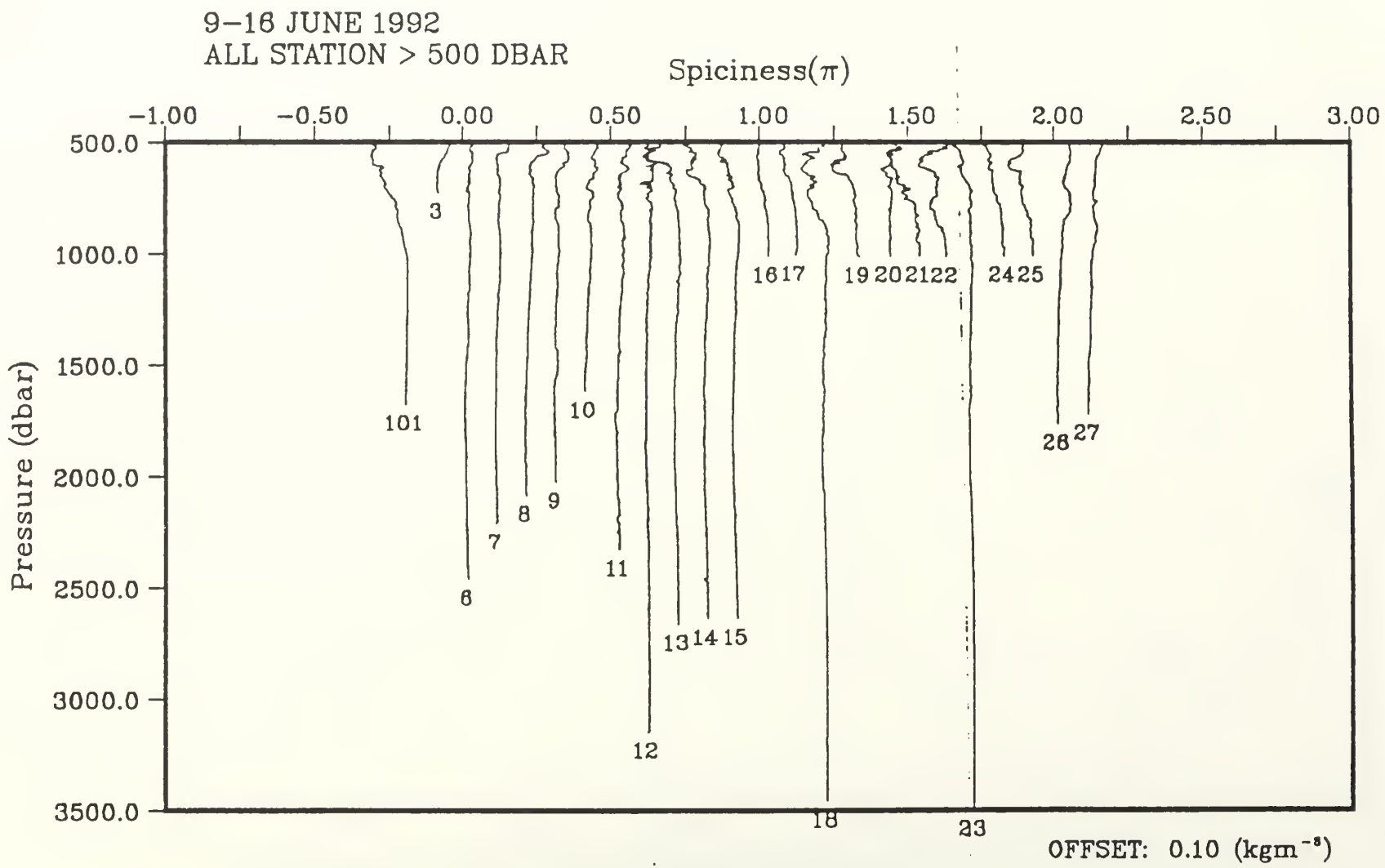
9–16 JUNE 1992
ALL STATION > 500 DBAR
Spiciness(π)
−1.00
−0.50
0.00
0.50
1.00
1.50
2.00
2.50
3.00
500.0
1000.0
1500.0
2000.0
2500.0
3000.0
3500.0
Pressure (dbar)
3
101
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
28
27
OFFSET: 0.10 (kgm⁻³)

Figure 43d.

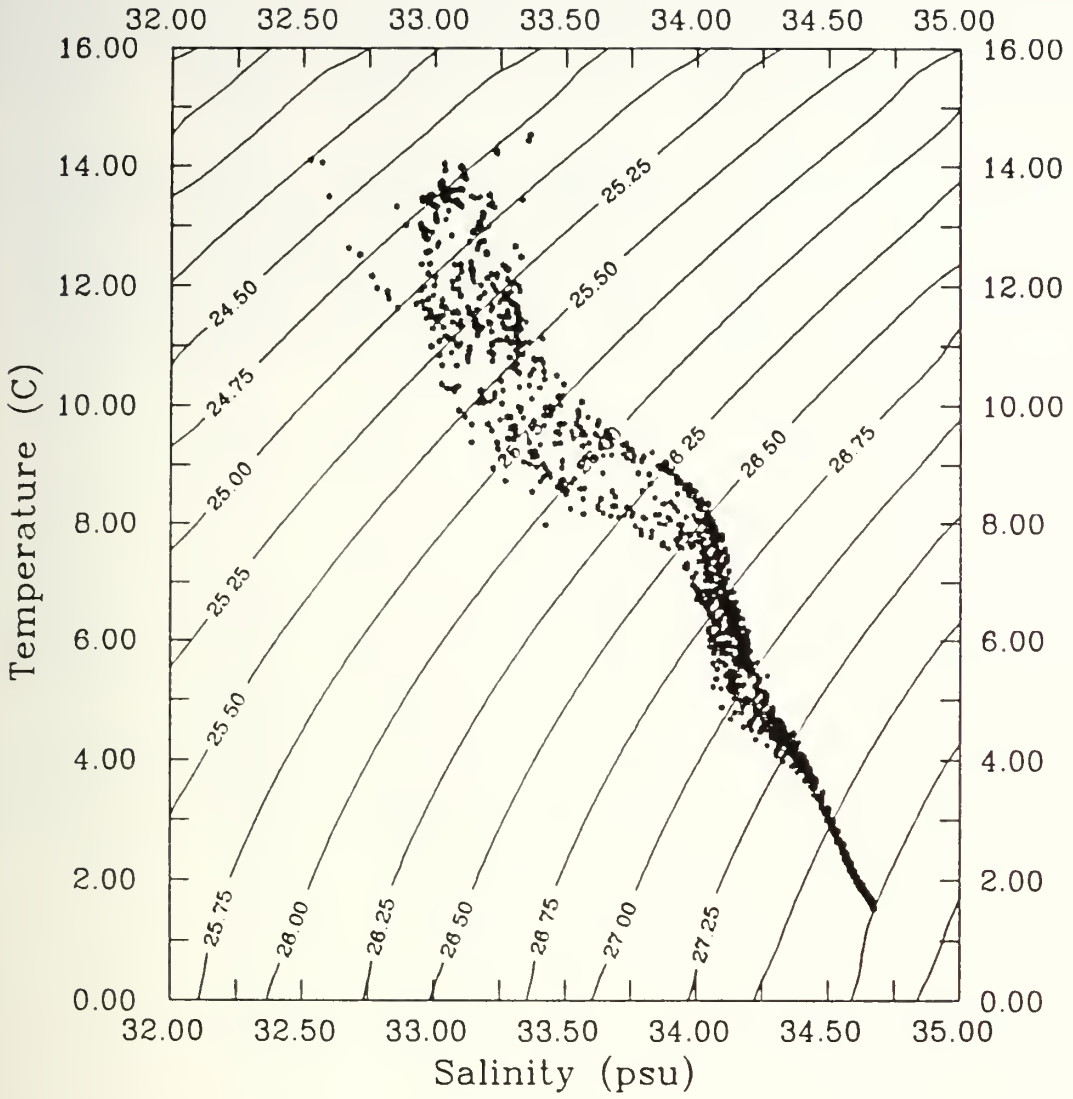

Figure 44. T/S diagram which includes data from all CTD stations completed during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR. The data included in this diagram consists of all data listed in Appendix A.

APPENDIX A

CTD DATA LISTINGS

In the following table, station data are listed in chronological order. The specific volume anomaly (δ) is calculated using the algorithms found in Volume 4 of the International Oceanographic Tables (UNESCO, 1987). The summations of dynamic height ($\Sigma\Delta D$) is made from the surface.

Table 3. Data listings at selected pressures of temperature (T), salinity (S), density anomaly (γ_θ), specific volume anomaly (δ), summation of dynamic height ($\Sigma\Delta D$), and spiciness (π), for CTD stations occupied during the Eastern Boundary Current Accelerated Research Initiative cruise of June 9-16, 1992 aboard the R/V POINT SUR.

STATION: 101 DATE: 6/11/92 1430 GMT

LAT: 40° 24.5' N. LON: 126° 23.3' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	14.101	32.528	24.257	365.57	0.007	-.03
5.0	14.095	32.528	24.259	365.52	0.018	-.03
10.0	14.062	32.570	24.298	361.91	0.036	0.00
15.0	13.484	32.597	24.437	348.82	0.054	-.10
20.0	12.620	32.673	24.666	327.10	0.071	-.22
25.0	12.511	32.716	24.720	322.02	0.087	-.21
30.0	12.155	32.761	24.823	312.38	0.103	-.24
35.0	11.949	32.781	24.877	307.30	0.119	-.27
40.0	11.887	32.819	24.918	303.53	0.134	-.25
45.0	11.780	32.826	24.944	301.20	0.149	-.26
50.0	11.625	32.860	24.998	296.10	0.164	-.27
60.0	11.690	32.929	25.040	292.36	0.193	-.20
70.0	11.625	32.959	25.076	289.22	0.223	-.19
80.0	10.986	32.989	25.214	276.17	0.251	-.28
90.0	10.678	33.030	25.301	268.16	0.278	-.31
100.0	10.276	33.072	25.403	258.61	0.305	-.34
125.0	8.941	33.225	25.740	226.73	0.365	-.45
150.0	8.692	33.526	26.015	201.11	0.418	-.25
175.0	8.472	33.691	26.178	186.02	0.466	-.15
200.0	8.113	33.796	26.315	173.39	0.511	-.12
225.0	7.988	33.881	26.400	165.68	0.553	-.07
250.0	7.757	33.939	26.480	158.46	0.594	-.06
275.0	7.319	33.964	26.562	150.85	0.632	-.10
300.0	7.172	34.000	26.611	146.51	0.670	-.10

STATION: 101 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
325.0	6.806	34.006	26.667	141.41	0.705	-.14
350.0	6.659	34.058	26.727	135.97	0.740	-.12
375.0	6.477	34.065	26.757	133.35	0.774	-.14
400.0	6.287	34.070	26.786	130.84	0.807	-.16
425.0	6.058	34.065	26.812	128.53	0.839	-.19
450.0	5.978	34.091	26.842	125.92	0.871	-.18
475.0	5.670	34.085	26.876	122.73	0.902	-.23
500.0	5.216	34.066	26.915	118.85	0.932	-.30
550.0	4.879	34.097	26.978	113.03	0.991	-.31
600.0	4.683	34.131	27.027	108.68	1.046	-.30
650.0	4.547	34.179	27.081	103.99	1.099	-.28
700.0	4.342	34.226	27.140	98.56	1.149	-.27
750.0	4.242	34.271	27.187	94.50	1.198	-.24
800.0	4.155	34.304	27.223	91.48	1.244	-.23
850.0	4.026	34.327	27.255	88.69	1.289	-.22
900.0	3.890	34.363	27.298	84.86	1.332	-.21
950.0	3.793	34.383	27.324	82.65	1.374	-.20
1000.0	3.652	34.412	27.361	79.26	1.415	-.19
1100.0	3.412	34.448	27.413	74.56	1.491	-.19
1200.0	3.207	34.473	27.453	71.03	1.564	-.19
1300.0	2.991	34.497	27.493	67.40	1.633	-.19
1400.0	2.813	34.516	27.524	64.54	1.699	-.19
1500.0	2.644	34.534	27.554	61.82	1.762	-.19
1600.0	2.347	34.563	27.602	56.74	1.821	-.19
1680.0	2.149	34.581	27.633	53.49	1.865	-.19

STATION: 1 DATE: 6/13/92 1800 GMT

LAT: 38° 32.8' N. LON: 123° 41.7' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.320	32.855	24.669	326.36	0.007	0.07
5.0	13.011	32.892	24.759	317.86	0.016	0.03
10.0	12.356	32.950	24.931	301.61	0.032	-.05
15.0	11.977	32.959	25.009	294.24	0.046	-.12
20.0	11.667	33.028	25.121	283.77	0.061	-.12
25.0	11.397	33.067	25.201	276.28	0.075	-.14
30.0	11.008	33.083	25.283	268.56	0.089	-.20
35.0	11.036	33.220	25.384	259.02	0.102	-.09
40.0	10.809	33.286	25.476	250.39	0.115	-.08
45.0	10.871	33.339	25.507	247.59	0.127	-.02
50.0	10.210	33.231	25.537	244.78	0.139	-.23
60.0	10.572	33.418	25.621	237.08	0.163	-.01
70.0	9.742	33.379	25.731	226.70	0.186	-.19
80.0	9.700	33.497	25.830	217.48	0.209	-.10
90.0	9.573	33.563	25.903	210.78	0.230	-.07
100.0	9.481	33.652	25.988	202.92	0.251	-.02
125.0	8.307	33.691	26.203	182.72	0.298	-.17
150.0	8.446	33.842	26.300	174.00	0.343	-.03
175.0	8.530	33.970	26.388	166.14	0.385	0.08
200.0	8.425	34.019	26.443	161.41	0.426	0.10
225.0	8.108	34.053	26.518	154.62	0.466	0.08
250.0	7.816	34.076	26.579	149.14	0.504	0.06
275.0	7.506	34.073	26.622	145.32	0.541	0.01
300.0	7.269	34.092	26.670	141.02	0.577	-.01
325.0	7.074	34.100	26.704	138.07	0.611	-.03
350.0	6.864	34.113	26.743	134.64	0.645	-.05
375.0	6.648	34.128	26.784	130.97	0.679	-.07
400.0	6.354	34.141	26.833	126.44	0.711	-.10
425.0	6.049	34.157	26.885	121.61	0.742	-.12
450.0	5.934	34.164	26.905	119.93	0.772	-.13
474.0	5.685	34.182	26.951	115.73	0.800	-.15

STATION: 2 DATE: 6/13/92 1918 GMT

LAT: 38° 38.6' N. LON: 123° 46.9' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ ($10^{-8} m^3 kg^{-1}$)	$\Sigma\Delta D$ ($m^2 s^{-2}$)	π (kg m^{-3})
2.0	13.386	33.219	24.937	300.81	0.006	0.37
5.0	13.374	33.218	24.939	300.70	0.015	0.37
10.0	13.322	33.227	24.956	299.20	0.030	0.36
15.0	12.749	33.186	25.038	291.53	0.045	0.21
20.0	12.139	33.238	25.196	276.66	0.059	0.13
25.0	12.031	33.295	25.260	270.63	0.073	0.16
30.0	11.894	33.291	25.283	268.58	0.086	0.13
35.0	11.501	33.267	25.337	263.51	0.100	0.04
40.0	10.901	33.210	25.401	257.56	0.113	-.12
45.0	10.248	33.176	25.488	249.35	0.125	-.26
50.0	9.811	33.279	25.641	234.83	0.137	-.26
60.0	9.565	33.466	25.828	217.28	0.160	-.15
70.0	9.327	33.564	25.943	206.50	0.181	-.11
80.0	9.127	33.614	26.014	199.90	0.201	-.10
90.0	9.189	33.721	26.088	193.09	0.221	-.01
100.0	9.089	33.789	26.158	186.70	0.240	0.03
125.0	8.907	33.883	26.261	177.41	0.286	0.07
150.0	8.724	33.940	26.334	170.86	0.329	0.09
175.0	8.588	33.962	26.373	167.60	0.371	0.08
200.0	8.405	33.998	26.429	162.67	0.412	0.08
225.0	7.923	34.068	26.557	150.86	0.452	0.07
250.0	7.726	34.083	26.598	147.33	0.489	0.05
275.0	7.534	34.086	26.628	144.75	0.525	0.02
300.0	7.472	34.092	26.642	143.85	0.561	0.02
325.0	7.277	34.093	26.670	141.43	0.597	-.01
350.0	7.062	34.104	26.709	138.01	0.632	-.03
375.0	6.679	34.121	26.775	131.87	0.666	-.07
400.0	6.556	34.132	26.800	129.79	0.699	-.08
425.0	6.480	34.139	26.816	128.56	0.731	-.08
450.0	6.220	34.156	26.863	124.23	0.763	-.10
475.0	5.858	34.171	26.921	118.72	0.793	-.13
486.0	5.676	34.184	26.953	115.61	0.806	-.15

STATION: 3 DATE: 6/13/92 2041 GMT

LAT: 38° 44.9' N. LON: 123° 52.8' W.

P (dbar)	T (°C)	S	γ_{θ} (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.527	32.991	24.732	320.31	0.006	0.22
5.0	13.500	33.139	24.852	308.97	0.016	0.33
10.0	12.618	33.164	25.046	290.62	0.031	0.17
15.0	12.125	33.200	25.169	279.11	0.045	0.10
20.0	11.921	33.233	25.233	273.12	0.059	0.09
25.0	11.873	33.265	25.267	270.01	0.072	0.10
30.0	11.768	33.256	25.279	268.93	0.086	0.08
35.0	11.814	33.276	25.286	268.39	0.099	0.10
40.0	11.764	33.286	25.304	266.86	0.113	0.10
45.0	11.476	33.287	25.357	261.84	0.126	0.05
50.0	11.095	33.256	25.402	257.66	0.139	-.05
60.0	9.959	33.331	25.657	233.52	0.164	-.19
70.0	9.386	33.361	25.775	222.47	0.186	-.26
80.0	9.138	33.611	26.010	200.29	0.207	-.11
90.0	9.264	33.754	26.102	191.80	0.227	0.03
100.0	9.220	33.829	26.168	185.74	0.246	0.08
125.0	8.984	33.887	26.252	178.25	0.291	0.09
150.0	8.697	33.927	26.328	171.42	0.335	0.07
175.0	8.540	33.968	26.385	166.48	0.377	0.08
200.0	8.381	34.008	26.441	161.58	0.418	0.09
225.0	8.204	34.041	26.494	156.95	0.458	0.09
250.0	7.974	34.053	26.538	153.12	0.497	0.06
275.0	7.690	34.068	26.591	148.33	0.535	0.03
300.0	7.455	34.083	26.637	144.28	0.571	0.01
325.0	7.228	34.089	26.674	141.05	0.607	-.02
350.0	7.070	34.118	26.719	137.08	0.642	-.02
375.0	6.653	34.121	26.778	131.52	0.675	-.07
400.0	6.525	34.160	26.826	127.29	0.707	-.06
425.0	6.422	34.155	26.836	126.61	0.739	-.08
450.0	6.201	34.162	26.870	123.54	0.771	-.10
475.0	5.994	34.163	26.898	121.06	0.801	-.12
500.0	5.793	34.172	26.930	118.16	0.831	-.14
550.0	5.585	34.190	26.970	114.78	0.889	-.15
600.0	5.101	34.233	27.061	106.12	0.944	-.18
650.0	4.893	34.253	27.101	102.62	0.996	-.19
700.0	4.724	34.275	27.138	99.45	1.047	-.19
728.0	4.574	34.301	27.175	95.99	1.074	-.18

STATION: 4 DATE: 6/13/92 2206 GMT

LAT: 38° 51.4' N. LON: 123° 57.0' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ ($10^{-8} m^3 kg^{-1}$)	$\Sigma\Delta D$ ($m^2 s^{-2}$)	π (kg m^{-3})
2.0	14.045	33.037	24.662	327.02	0.007	0.36
5.0	13.936	33.041	24.688	324.66	0.016	0.34
10.0	12.834	33.064	24.927	302.00	0.032	0.13
15.0	12.350	33.074	25.029	292.43	0.047	0.05
20.0	12.381	33.138	25.072	288.42	0.061	0.10
25.0	12.277	33.136	25.091	286.76	0.076	0.08
30.0	11.548	33.089	25.190	277.40	0.090	-.10
35.0	11.119	33.071	25.254	271.42	0.104	-.19
40.0	10.040	33.187	25.531	245.11	0.117	-.29
45.0	9.910	33.327	25.662	232.75	0.128	-.20
50.0	9.962	33.422	25.728	226.63	0.140	-.12
60.0	9.569	33.523	25.872	213.11	0.162	-.10
70.0	9.128	33.575	25.984	202.63	0.183	-.14
80.0	9.177	33.675	26.054	196.14	0.203	-.05
90.0	9.117	33.734	26.110	191.02	0.222	-.01
100.0	9.064	33.793	26.165	186.02	0.241	0.03
125.0	8.993	33.878	26.243	179.05	0.287	0.08
150.0	8.804	33.923	26.308	173.33	0.331	0.09
175.0	8.602	33.951	26.362	168.66	0.374	0.08
200.0	8.460	33.992	26.416	163.94	0.415	0.09
225.0	8.140	34.038	26.501	156.24	0.455	0.08
250.0	7.769	34.069	26.580	148.98	0.493	0.04
275.0	7.517	34.079	26.625	145.03	0.530	0.02
300.0	7.234	34.085	26.670	141.05	0.566	-.02
325.0	6.990	34.108	26.722	136.37	0.600	-.04
350.0	6.796	34.110	26.750	133.94	0.634	-.06
375.0	6.600	34.116	26.782	131.18	0.667	-.08
400.0	6.353	34.130	26.825	127.25	0.700	-.10
425.0	6.262	34.140	26.845	125.64	0.731	-.11
450.0	6.159	34.146	26.863	124.18	0.762	-.12

STATION: 5 DATE: 6/13/92 2323 GMT

LAT: 38° 58.3' N. LON: 124° 1.6' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	14.531	33.365	24.813	312.62	0.006	0.73
5.0	14.435	33.358	24.828	311.28	0.016	0.70
10.0	13.438	33.335	25.017	293.47	0.031	0.47
15.0	12.485	33.330	25.201	276.03	0.045	0.28
20.0	11.908	33.326	25.307	266.02	0.058	0.16
25.0	11.656	33.316	25.347	262.37	0.072	0.10
30.0	11.464	33.321	25.386	258.79	0.085	0.07
35.0	11.321	33.308	25.402	257.39	0.098	0.03
40.0	11.092	33.319	25.452	252.74	0.110	0.00
45.0	10.308	33.325	25.593	239.36	0.123	-.13
50.0	9.528	33.309	25.711	228.17	0.134	-.28
60.0	9.218	33.380	25.817	218.30	0.157	-.28
70.0	9.377	33.481	25.870	213.43	0.178	-.17
80.0	8.979	33.555	25.992	202.03	0.199	-.18
90.0	8.854	33.643	26.080	193.80	0.219	-.13
100.0	8.559	33.678	26.153	186.98	0.238	-.14
125.0	8.882	33.902	26.279	175.63	0.284	0.08
150.0	8.577	33.982	26.390	165.55	0.326	0.10
175.0	8.314	34.016	26.457	159.57	0.367	0.08
200.0	8.019	34.043	26.523	153.69	0.406	0.06
225.0	7.752	34.053	26.570	149.49	0.444	0.03
250.0	7.611	34.077	26.610	146.14	0.481	0.03
275.0	7.418	34.078	26.639	143.71	0.517	0.00
300.0	7.321	34.087	26.659	142.11	0.553	-.01
325.0	6.982	34.098	26.715	137.00	0.588	-.04
350.0	6.790	34.105	26.747	134.23	0.621	-.07
375.0	6.526	34.113	26.789	130.43	0.655	-.09
400.0	6.334	34.121	26.820	127.67	0.687	-.11
425.0	6.172	34.132	26.850	125.06	0.718	-.13
450.0	5.892	34.154	26.903	120.14	0.749	-.14
475.0	5.697	34.175	26.943	116.42	0.779	-.15
500.0	5.505	34.193	26.981	112.96	0.808	-.16
510.0	5.387	34.202	27.002	110.94	0.819	-.17

STATION: 6 DATE: 6/14/92 0048 GMT

LAT: 38° 53.3' N. LON: 124° 10.4' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	14.224	33.237	24.779	315.87	0.006	0.56
5.0	14.273	33.235	24.768	317.03	0.016	0.57
10.0	13.484	33.173	24.882	306.28	0.032	0.35
15.0	12.662	33.308	25.149	280.94	0.046	0.29
20.0	12.064	33.301	25.259	270.66	0.060	0.17
25.0	11.714	33.291	25.317	265.25	0.073	0.10
30.0	11.532	33.321	25.373	259.98	0.086	0.08
35.0	11.172	33.310	25.430	254.64	0.099	0.01
40.0	11.066	33.312	25.451	252.81	0.112	-.01
45.0	11.054	33.345	25.479	250.24	0.124	0.01
50.0	10.755	33.386	25.564	242.29	0.137	-.01
60.0	10.302	33.402	25.655	233.81	0.161	-.08
70.0	9.837	33.419	25.746	225.24	0.184	-.14
80.0	9.366	33.460	25.856	215.00	0.206	-.19
90.0	8.730	33.481	25.973	203.98	0.227	-.27
100.0	8.600	33.554	26.050	196.80	0.247	-.24
125.0	8.842	33.819	26.221	181.18	0.294	0.01
150.0	8.342	33.873	26.340	170.17	0.338	-.02
175.0	8.278	34.004	26.453	159.89	0.379	0.07
200.0	7.994	34.034	26.519	153.99	0.418	0.05
225.0	7.795	34.059	26.569	149.65	0.456	0.04
250.0	7.491	34.072	26.623	144.83	0.493	0.01
275.0	7.284	34.104	26.678	139.92	0.528	0.00
300.0	7.028	34.104	26.713	136.81	0.563	-.03
325.0	6.808	34.114	26.751	133.46	0.597	-.06
350.0	6.674	34.150	26.798	129.33	0.630	-.05
375.0	6.402	34.146	26.831	126.33	0.662	-.08
400.0	6.217	34.163	26.868	123.02	0.693	-.10
425.0	6.041	34.167	26.894	120.77	0.723	-.12
450.0	5.877	34.180	26.925	118.02	0.753	-.13
475.0	5.746	34.187	26.947	116.14	0.782	-.14
500.0	5.649	34.200	26.969	114.25	0.811	-.14
550.0	5.230	34.229	27.043	107.45	0.867	-.17
600.0	4.980	34.259	27.096	102.71	0.919	-.17
650.0	4.751	34.282	27.140	98.75	0.970	-.18
700.0	4.574	34.305	27.178	95.42	1.018	-.18
750.0	4.403	34.330	27.217	92.01	1.065	-.18
800.0	4.240	34.350	27.250	89.06	1.110	-.18
850.0	4.089	34.374	27.286	85.95	1.154	-.18
900.0	3.969	34.397	27.317	83.26	1.196	-.17
950.0	3.787	34.419	27.353	79.91	1.237	-.17
1000.0	3.655	34.436	27.380	77.51	1.276	-.17
1100.0	3.358	34.471	27.437	72.23	1.351	-.17
1200.0	3.147	34.490	27.472	69.08	1.422	-.18

STATION: 6 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.951	34.513	27.509	65.76	1.489	-.18
1400.0	2.843	34.528	27.531	64.01	1.554	-.18
1500.0	2.655	34.535	27.554	61.87	1.617	-.19
1600.0	2.451	34.556	27.588	58.47	1.677	-.19
1700.0	2.291	34.572	27.615	55.90	1.734	-.19
1800.0	2.157	34.586	27.637	53.75	1.789	-.19
1900.0	2.082	34.599	27.654	52.33	1.842	-.19
2000.0	2.001	34.607	27.667	51.18	1.893	-.19
2100.0	1.948	34.615	27.679	50.34	1.944	-.19
2200.0	1.883	34.623	27.690	49.34	1.994	-.18
2300.0	1.866	34.627	27.696	49.21	2.044	-.18
2400.0	1.824	34.633	27.704	48.60	2.092	-.18
2464.0	1.771	34.642	27.716	47.49	2.123	-.18

STATION: 7 DATE: 6/14/92 0306 GMT

LAT: 38° 46.7' N. LON: 124° 5.9' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.717	33.021	24.717	321.77	0.006	0.28
5.0	13.633	33.021	24.734	320.23	0.016	0.26
10.0	12.820	32.958	24.847	309.55	0.032	0.05
15.0	12.576	32.981	24.913	303.43	0.047	0.02
20.0	12.202	32.976	24.980	297.13	0.062	-.06
25.0	12.004	32.999	25.036	291.99	0.077	-.08
30.0	11.835	32.997	25.066	289.24	0.091	-.12
35.0	11.472	32.994	25.130	283.19	0.106	-.19
40.0	11.122	33.056	25.242	272.70	0.120	-.20
45.0	10.987	33.094	25.296	267.67	0.133	-.20
50.0	10.285	33.048	25.381	259.56	0.146	-.36
60.0	10.112	33.186	25.518	246.73	0.172	-.28
70.0	9.579	33.308	25.702	229.41	0.195	-.27
80.0	9.157	33.392	25.836	216.84	0.218	-.28
90.0	8.741	33.494	25.981	203.18	0.239	-.26
100.0	8.431	33.567	26.086	193.36	0.259	-.25
125.0	8.127	33.752	26.277	175.58	0.304	-.15
150.0	8.227	33.928	26.401	164.40	0.347	0.00
175.0	8.143	34.037	26.499	155.48	0.387	0.08
200.0	7.890	34.064	26.558	150.27	0.425	0.06
225.0	7.662	34.073	26.599	146.73	0.462	0.03
250.0	7.437	34.084	26.640	143.18	0.498	0.01
275.0	7.197	34.095	26.683	139.38	0.534	-.02
300.0	6.937	34.099	26.722	135.95	0.568	-.05
325.0	6.784	34.115	26.756	133.02	0.602	-.06
350.0	6.631	34.127	26.785	130.47	0.635	-.07
375.0	6.461	34.139	26.817	127.67	0.667	-.08
400.0	6.210	34.159	26.866	123.22	0.698	-.10
425.0	6.062	34.169	26.893	120.90	0.729	-.11
450.0	5.923	34.185	26.923	118.23	0.759	-.12
475.0	5.743	34.191	26.951	115.77	0.788	-.13
500.0	5.557	34.209	26.988	112.42	0.817	-.14
550.0	5.228	34.220	27.036	108.09	0.872	-.17
600.0	4.972	34.246	27.086	103.58	0.925	-.18
650.0	4.774	34.280	27.136	99.18	0.976	-.18
700.0	4.616	34.309	27.177	95.63	1.024	-.17
750.0	4.458	34.331	27.212	92.59	1.072	-.17
800.0	4.266	34.353	27.250	89.14	1.117	-.18
850.0	4.045	34.380	27.295	84.98	1.160	-.18
900.0	3.961	34.395	27.316	83.31	1.202	-.17
950.0	3.786	34.422	27.355	79.68	1.243	-.17
1000.0	3.661	34.439	27.382	77.36	1.282	-.17
1100.0	3.385	34.470	27.434	72.61	1.357	-.17
1200.0	3.164	34.491	27.472	69.20	1.428	-.18

STATION: 7 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.951	34.512	27.508	65.83	1.495	-.18
1400.0	2.772	34.526	27.536	63.33	1.560	-.19
1500.0	2.538	34.553	27.578	59.18	1.621	-.18
1600.0	2.404	34.566	27.600	57.18	1.679	-.19
1700.0	2.263	34.579	27.623	55.06	1.735	-.19
1800.0	2.140	34.592	27.643	53.10	1.789	-.19
1900.0	2.065	34.600	27.656	52.05	1.842	-.19
2000.0	1.983	34.611	27.672	50.67	1.893	-.19
2100.0	1.911	34.621	27.686	49.45	1.943	-.18
2200.0	1.885	34.626	27.693	49.14	1.992	-.18
2212.0	1.879	34.624	27.692	49.26	1.998	-.18

STATION: 8 DATE: 6/14/92 0523 GMT

LAT: 38° 40.3' N. LON: 124° 0.3' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.521	33.208	24.901	304.22	0.006	0.39
5.0	13.357	33.208	24.934	301.16	0.015	0.36
10.0	12.973	33.166	24.979	297.08	0.030	0.24
15.0	12.739	33.135	25.000	295.13	0.045	0.17
20.0	12.064	33.067	25.077	287.93	0.059	-.02
25.0	11.939	33.091	25.120	284.00	0.074	-.02
30.0	11.825	33.100	25.148	281.46	0.088	-.04
35.0	11.538	33.128	25.222	274.46	0.102	-.07
40.0	11.406	33.152	25.265	270.49	0.115	-.07
45.0	11.261	33.176	25.310	266.28	0.129	-.08
50.0	10.741	33.128	25.365	261.15	0.142	-.22
60.0	10.251	33.260	25.553	243.50	0.167	-.20
70.0	9.793	33.340	25.692	230.40	0.191	-.21
80.0	9.347	33.405	25.816	218.79	0.213	-.24
90.0	9.069	33.489	25.926	208.48	0.235	-.21
100.0	8.762	33.534	26.009	200.69	0.255	-.23
125.0	8.857	33.778	26.186	184.44	0.303	-.02
150.0	8.508	33.930	26.360	168.38	0.347	0.05
175.0	8.145	33.987	26.460	159.22	0.388	0.04
200.0	7.880	34.037	26.538	152.13	0.427	0.04
225.0	7.614	34.076	26.608	145.83	0.464	0.03
250.0	7.276	34.071	26.652	141.91	0.500	-.02
275.0	7.005	34.082	26.699	137.76	0.535	-.05
300.0	6.837	34.106	26.741	134.08	0.569	-.06
325.0	6.615	34.114	26.777	130.87	0.602	-.08
350.0	6.472	34.130	26.809	128.14	0.635	-.09
375.0	6.414	34.164	26.843	125.19	0.666	-.07
400.0	6.241	34.179	26.878	122.14	0.697	-.08
425.0	6.160	34.200	26.905	119.86	0.728	-.07
450.0	5.954	34.198	26.930	117.66	0.757	-.10
475.0	5.826	34.208	26.954	115.56	0.786	-.11
500.0	5.641	34.230	26.994	111.92	0.815	-.12
550.0	5.404	34.271	27.055	106.48	0.869	-.11
600.0	4.943	34.265	27.105	101.82	0.921	-.17
650.0	4.792	34.289	27.141	98.73	0.972	-.17
700.0	4.628	34.327	27.190	94.44	1.020	-.16
750.0	4.441	34.349	27.228	91.05	1.066	-.16
800.0	4.266	34.373	27.266	87.66	1.111	-.16
850.0	4.106	34.395	27.301	84.59	1.154	-.16
900.0	3.928	34.413	27.334	81.59	1.195	-.16
950.0	3.784	34.432	27.363	78.92	1.235	-.16
1000.0	3.639	34.451	27.393	76.22	1.274	-.16
1100.0	3.386	34.476	27.438	72.18	1.349	-.17
1200.0	3.197	34.495	27.472	69.29	1.419	-.17

STATION: 8 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.972	34.516	27.510	65.78	1.487	-.18
1400.0	2.795	34.532	27.539	63.15	1.551	-.18
1500.0	2.662	34.545	27.561	61.22	1.614	-.18
1600.0	2.447	34.564	27.595	57.83	1.673	-.18
1700.0	2.233	34.583	27.628	54.41	1.729	-.19
1800.0	2.113	34.595	27.648	52.57	1.783	-.19
1900.0	2.075	34.601	27.656	52.10	1.835	-.19
2000.0	1.985	34.613	27.673	50.55	1.886	-.18
2088.0	1.969	34.615	27.677	50.56	1.931	-.18

STATION: 9 DATE: 6/14/92 0736 GMT

LAT: 38° 34.5' N. LON: 123° 55.8' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.121	33.003	24.823	311.68	0.006	0.14
5.0	13.113	33.006	24.827	311.35	0.016	0.15
10.0	13.074	33.009	24.837	310.55	0.031	0.14
15.0	12.710	33.015	24.913	303.40	0.047	0.07
20.0	12.354	33.099	25.047	290.81	0.061	0.07
25.0	12.172	33.144	25.117	284.27	0.076	0.07
30.0	12.010	33.177	25.173	279.07	0.090	0.06
35.0	11.878	33.192	25.210	275.69	0.104	0.05
40.0	11.651	33.222	25.275	269.60	0.117	0.03
45.0	11.496	33.245	25.321	265.30	0.131	0.02
50.0	11.378	33.259	25.354	262.31	0.144	0.01
60.0	10.634	33.296	25.515	247.14	0.169	-.10
70.0	10.603	33.379	25.585	240.68	0.194	-.04
80.0	10.009	33.481	25.766	223.60	0.217	-.06
90.0	9.453	33.531	25.897	211.27	0.238	-.12
100.0	9.378	33.589	25.955	205.99	0.259	-.08
125.0	9.072	33.758	26.137	189.17	0.309	0.00
150.0	8.863	33.899	26.280	176.00	0.354	0.08
175.0	8.481	33.969	26.395	165.53	0.397	0.07
200.0	8.253	34.017	26.467	159.02	0.437	0.08
225.0	7.671	33.987	26.530	153.24	0.477	-.03
250.0	7.501	34.030	26.588	148.09	0.514	-.03
275.0	7.149	34.044	26.649	142.56	0.551	-.06
300.0	7.043	34.059	26.676	140.36	0.586	-.07
325.0	6.857	34.075	26.714	137.01	0.621	-.08
350.0	6.703	34.113	26.765	132.47	0.654	-.07
375.0	6.594	34.123	26.788	130.58	0.687	-.08
400.0	6.375	34.133	26.824	127.31	0.719	-.10
425.0	6.240	34.146	26.852	124.92	0.751	-.11
450.0	5.910	34.130	26.881	122.15	0.782	-.16
475.0	5.923	34.176	26.917	119.18	0.812	-.12
500.0	5.691	34.185	26.952	115.89	0.841	-.14
550.0	5.431	34.226	27.017	110.16	0.898	-.14
600.0	5.146	34.253	27.072	105.18	0.952	-.16
650.0	4.784	34.271	27.128	99.97	1.003	-.18
700.0	4.657	34.290	27.157	97.53	1.052	-.18
750.0	4.487	34.326	27.205	93.31	1.100	-.17
800.0	4.234	34.347	27.249	89.21	1.146	-.18
850.0	4.080	34.373	27.286	85.91	1.190	-.18
900.0	3.964	34.394	27.315	83.42	1.232	-.18
950.0	3.839	34.413	27.343	80.97	1.273	-.17
1000.0	3.690	34.434	27.375	78.07	1.313	-.17
1100.0	3.373	34.463	27.429	72.99	1.388	-.18
1200.0	3.162	34.487	27.469	69.47	1.459	-.18

STATION: 9 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.963	34.508	27.504	66.27	1.527	-.18
1400.0	2.790	34.524	27.533	63.69	1.592	-.19
1500.0	2.622	34.553	27.571	60.16	1.654	-.18
1600.0	2.399	34.564	27.599	57.27	1.713	-.19
1700.0	2.286	34.577	27.619	55.48	1.769	-.19
1800.0	2.164	34.591	27.641	53.46	1.824	-.19
1900.0	2.083	34.602	27.656	52.12	1.877	-.18
2000.0	1.988	34.612	27.672	50.66	1.928	-.18
2028.0	1.985	34.613	27.674	50.66	1.943	-.18

STATION: 10 DATE: 6/14/92 0948 GMT

LAT: 38° 28.7' N. LON: 123° 48.5' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.619	33.102	24.799	313.91	0.006	0.33
5.0	13.621	33.097	24.796	314.37	0.016	0.32
10.0	13.623	33.093	24.792	314.85	0.031	0.32
15.0	13.600	33.107	24.808	313.46	0.047	0.33
20.0	13.464	33.153	24.871	307.61	0.063	0.33
25.0	12.994	33.206	25.005	294.91	0.078	0.28
30.0	12.192	33.217	25.170	279.39	0.092	0.13
35.0	11.297	33.273	25.379	259.58	0.106	0.00
40.0	10.706	33.314	25.516	246.59	0.118	-.07
45.0	10.546	33.324	25.552	243.30	0.130	-.09
50.0	10.334	33.361	25.617	237.17	0.142	-.10
60.0	9.983	33.443	25.741	225.61	0.166	-.10
70.0	9.705	33.540	25.863	214.18	0.188	-.07
80.0	9.503	33.617	25.956	205.49	0.209	-.04
90.0	9.455	33.666	26.003	201.29	0.229	-.01
100.0	9.348	33.716	26.059	196.10	0.249	0.01
125.0	8.986	33.854	26.225	180.76	0.295	0.06
150.0	8.769	33.925	26.315	172.65	0.339	0.08
175.0	8.561	33.998	26.406	164.53	0.381	0.11
200.0	8.341	34.048	26.478	158.02	0.422	0.11
225.0	8.056	34.062	26.532	153.23	0.460	0.08
250.0	7.878	34.074	26.568	150.18	0.498	0.06
275.0	7.732	34.099	26.610	146.59	0.535	0.06
300.0	7.462	34.118	26.664	141.78	0.571	0.04
325.0	6.839	34.078	26.719	136.55	0.606	-.08
350.0	6.835	34.127	26.758	133.21	0.640	-.04
375.0	6.613	34.143	26.801	129.35	0.673	-.06
400.0	6.475	34.157	26.830	126.85	0.705	-.07
425.0	6.390	34.164	26.847	125.55	0.736	-.07
450.0	6.107	34.172	26.890	121.57	0.767	-.10
475.0	6.072	34.192	26.910	119.96	0.797	-.09
500.0	5.783	34.189	26.944	116.76	0.827	-.13
550.0	5.470	34.207	26.997	112.06	0.884	-.15
600.0	5.293	34.238	27.043	108.12	0.939	-.15
650.0	5.062	34.264	27.091	103.87	0.992	-.16
700.0	4.740	34.283	27.143	99.05	1.043	-.18
750.0	4.551	34.335	27.205	93.41	1.091	-.16
800.0	4.273	34.362	27.257	88.56	1.137	-.17
850.0	4.135	34.370	27.278	86.78	1.180	-.18
900.0	4.014	34.398	27.313	83.72	1.223	-.17
950.0	3.919	34.414	27.336	81.83	1.264	-.16
1000.0	3.760	34.434	27.368	78.89	1.304	-.16
1100.0	3.391	34.477	27.439	72.17	1.379	-.17
1200.0	3.145	34.496	27.477	68.61	1.449	-.18

STATION: 10 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.945	34.516	27.512	65.47	1.517	-.18
1400.0	2.761	34.531	27.541	62.83	1.581	-.18
1500.0	2.618	34.545	27.565	60.70	1.642	-.18
1600.0	2.414	34.564	27.598	57.45	1.701	-.19
1622.0	2.406	34.566	27.600	57.32	1.714	-.19

STATION: 11 DATE: 6/14/92 1141 GMT

LAT: 38° 23.8' N. LON: 123° 56.4' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.356	33.098	24.850	309.15	0.006	0.27
5.0	13.351	33.100	24.853	308.94	0.015	0.27
10.0	13.357	33.101	24.852	309.14	0.031	0.27
15.0	13.321	33.102	24.860	308.50	0.046	0.26
20.0	12.899	33.146	24.978	297.40	0.062	0.21
25.0	11.698	33.305	25.330	263.96	0.075	0.10
30.0	11.554	33.315	25.365	260.80	0.088	0.08
35.0	11.480	33.321	25.383	259.14	0.101	0.07
40.0	11.379	33.321	25.401	257.53	0.114	0.06
45.0	11.297	33.331	25.425	255.44	0.127	0.05
50.0	10.865	33.321	25.494	248.95	0.140	-.04
60.0	9.809	33.292	25.652	234.03	0.164	-.25
70.0	9.930	33.453	25.758	224.21	0.187	-.10
80.0	9.688	33.478	25.817	218.70	0.209	-.12
90.0	9.517	33.576	25.922	208.93	0.230	-.07
100.0	9.297	33.634	26.003	201.40	0.251	-.06
125.0	8.688	33.824	26.248	178.50	0.298	-.01
150.0	8.296	33.916	26.381	166.30	0.341	0.00
175.0	8.081	33.998	26.478	157.47	0.382	0.04
200.0	7.892	34.034	26.534	152.53	0.420	0.04
225.0	7.626	34.052	26.587	147.82	0.458	0.01
250.0	7.454	34.067	26.624	144.68	0.495	0.00
275.0	7.173	34.085	26.678	139.84	0.530	-.03
300.0	6.935	34.104	26.726	135.55	0.565	-.05
325.0	6.843	34.143	26.769	131.77	0.598	-.03
350.0	6.557	34.140	26.805	128.52	0.631	-.07
375.0	6.378	34.136	26.826	126.80	0.663	-.10
400.0	6.379	34.179	26.860	123.95	0.694	-.06
425.0	6.164	34.191	26.898	120.54	0.725	-.08
450.0	5.999	34.194	26.921	118.54	0.754	-.10
475.0	5.819	34.202	26.950	115.96	0.784	-.12
500.0	5.631	34.202	26.973	113.87	0.812	-.14
550.0	5.322	34.238	27.039	107.92	0.868	-.15
600.0	5.058	34.262	27.089	103.44	0.920	-.16
650.0	4.754	34.292	27.148	98.05	0.971	-.17
700.0	4.526	34.326	27.200	93.29	1.019	-.17
750.0	4.333	34.345	27.236	90.07	1.064	-.17
800.0	4.224	34.380	27.276	86.64	1.109	-.16
850.0	4.070	34.392	27.302	84.39	1.151	-.17
900.0	3.977	34.418	27.333	81.80	1.193	-.16
950.0	3.847	34.431	27.356	79.73	1.233	-.16
1000.0	3.707	34.449	27.385	77.16	1.273	-.16
1100.0	3.468	34.482	27.435	72.69	1.347	-.16
1200.0	3.203	34.504	27.478	68.69	1.418	-.16

STATION: 11 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.993	34.521	27.512	65.66	1.485	-.17
1400.0	2.812	34.539	27.543	62.84	1.549	-.17
1500.0	2.598	34.561	27.579	59.29	1.610	-.17
1600.0	2.441	34.574	27.604	57.03	1.669	-.18
1700.0	2.278	34.591	27.631	54.35	1.725	-.18
1800.0	2.139	34.603	27.652	52.29	1.778	-.18
1900.0	2.054	34.611	27.666	51.12	1.830	-.18
2000.0	1.976	34.621	27.681	49.85	1.880	-.18
2100.0	1.927	34.632	27.694	48.85	1.930	-.17
2200.0	1.861	34.634	27.701	48.26	1.978	-.18
2300.0	1.806	34.648	27.717	46.92	2.025	-.17
2332.0	1.795	34.648	27.718	46.89	2.040	-.17

STATION: 12 DATE: 6/14/92 1411 GMT

LAT: 38° 29.5' N. LON: 124° 1.6' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ ($10^{-8} m^3 kg^{-1}$)	$\Sigma\Delta D$ ($m^2 s^{-2}$)	π (kg m^{-3})
2.0	13.844	33.105	24.756	318.07	0.006	0.38
5.0	13.844	33.109	24.759	317.82	0.016	0.38
10.0	13.846	33.114	24.763	317.65	0.032	0.38
15.0	13.788	33.120	24.779	316.20	0.048	0.38
20.0	12.341	33.261	25.175	278.62	0.063	0.19
25.0	11.684	33.301	25.330	263.98	0.076	0.10
30.0	11.460	33.319	25.385	258.87	0.089	0.07
35.0	11.271	33.327	25.426	255.08	0.102	0.04
40.0	11.009	33.331	25.476	250.44	0.115	-.01
45.0	10.853	33.334	25.506	247.68	0.127	-.03
50.0	10.520	33.364	25.587	240.01	0.139	-.07
60.0	9.832	33.443	25.766	223.19	0.163	-.12
70.0	9.642	33.554	25.884	212.15	0.184	-.07
80.0	9.498	33.617	25.957	205.41	0.205	-.04
90.0	9.351	33.678	26.029	198.78	0.225	-.02
100.0	9.163	33.763	26.126	189.76	0.245	0.02
125.0	8.921	33.876	26.253	178.11	0.291	0.07
150.0	8.665	33.973	26.369	167.53	0.334	0.11
175.0	8.339	34.027	26.462	159.12	0.375	0.10
200.0	7.900	34.048	26.544	151.60	0.414	0.05
225.0	7.574	34.036	26.583	148.24	0.451	-.01
250.0	7.325	34.050	26.629	144.15	0.488	-.03
275.0	7.140	34.082	26.680	139.60	0.523	-.04
300.0	6.914	34.087	26.715	136.53	0.558	-.06
325.0	6.661	34.092	26.753	133.13	0.591	-.09
350.0	6.388	34.090	26.788	130.01	0.624	-.13
375.0	6.400	34.134	26.821	127.24	0.656	-.09
400.0	6.168	34.137	26.854	124.32	0.688	-.12
425.0	6.088	34.168	26.889	121.26	0.719	-.11
450.0	5.907	34.187	26.927	117.88	0.748	-.12
475.0	5.754	34.194	26.952	115.69	0.778	-.13
500.0	5.597	34.210	26.984	112.85	0.806	-.14
550.0	5.234	34.223	27.037	107.95	0.862	-.17
600.0	5.076	34.267	27.091	103.28	0.914	-.15
650.0	4.866	34.288	27.132	99.70	0.965	-.16
700.0	4.621	34.308	27.175	95.76	1.014	-.17
750.0	4.397	34.333	27.220	91.72	1.061	-.18
800.0	4.264	34.374	27.267	87.56	1.106	-.16
850.0	4.083	34.388	27.297	84.84	1.149	-.17
900.0	3.913	34.412	27.334	81.49	1.190	-.17
950.0	3.792	34.424	27.356	79.60	1.230	-.17
1000.0	3.663	34.448	27.389	76.72	1.269	-.16
1100.0	3.395	34.470	27.433	72.73	1.344	-.17
1200.0	3.152	34.495	27.476	68.77	1.415	-.18

STATION: 12 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.965	34.514	27.509	65.85	1.483	-.18
1400.0	2.801	34.532	27.538	63.22	1.547	-.18
1500.0	2.611	34.551	27.570	60.18	1.609	-.18
1600.0	2.448	34.566	27.597	57.70	1.668	-.18
1700.0	2.270	34.586	27.628	54.63	1.724	-.18
1800.0	2.159	34.598	27.647	52.89	1.778	-.18
1900.0	2.017	34.609	27.667	50.82	1.829	-.18
2000.0	1.954	34.620	27.681	49.66	1.880	-.18
2100.0	1.911	34.629	27.693	48.87	1.929	-.18
2200.0	1.861	34.637	27.703	48.04	1.977	-.18
2300.0	1.808	34.645	27.714	47.16	2.025	-.17
2400.0	1.777	34.648	27.720	46.90	2.072	-.17
2500.0	1.745	34.654	27.727	46.40	2.119	-.17
2600.0	1.734	34.655	27.730	46.53	2.165	-.17
2700.0	1.704	34.661	27.737	46.03	2.211	-.17
2800.0	1.692	34.663	27.740	46.05	2.257	-.17
2900.0	1.671	34.666	27.745	45.87	2.303	-.17
3000.0	1.661	34.667	27.747	45.97	2.349	-.17
3100.0	1.633	34.671	27.753	45.60	2.395	-.17
3150.0	1.625	34.665	27.749	46.07	2.418	-.18

STATION: 13 DATE: 6/14/92 1706 GMT

LAT: 38° 35.4' N. LON: 124° 7.5' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.741	33.027	24.717	321.80	0.006	0.29
5.0	13.741	33.027	24.717	321.87	0.016	0.29
10.0	13.709	33.029	24.725	321.23	0.032	0.29
15.0	13.514	33.027	24.763	317.73	0.048	0.24
20.0	11.928	32.948	25.010	294.29	0.064	-.14
25.0	11.772	32.976	25.061	289.58	0.078	-.15
30.0	11.513	32.984	25.115	284.55	0.093	-.19
35.0	11.404	33.011	25.156	280.73	0.107	-.19
40.0	11.076	33.017	25.219	274.81	0.121	-.24
45.0	10.887	33.065	25.291	268.12	0.134	-.24
50.0	10.666	33.085	25.345	263.08	0.147	-.26
60.0	10.865	33.225	25.419	256.26	0.173	-.12
70.0	9.582	33.219	25.632	236.06	0.198	-.34
80.0	9.149	33.262	25.735	226.37	0.221	-.38
90.0	8.966	33.390	25.865	214.27	0.243	-.31
100.0	8.689	33.481	25.979	203.54	0.264	-.28
125.0	8.140	33.674	26.214	181.58	0.311	-.21
150.0	7.896	33.788	26.340	170.06	0.355	-.16
175.0	7.636	33.869	26.442	160.73	0.396	-.13
200.0	7.659	33.973	26.520	153.75	0.435	-.05
225.0	7.519	34.020	26.578	148.65	0.473	-.03
250.0	7.263	34.034	26.625	144.48	0.510	-.06
275.0	7.036	34.054	26.673	140.24	0.545	-.07
300.0	6.757	34.059	26.714	136.50	0.580	-.11
325.0	6.677	34.105	26.762	132.33	0.614	-.08
350.0	6.457	34.103	26.789	129.95	0.646	-.11
375.0	6.283	34.126	26.831	126.27	0.679	-.12
400.0	6.120	34.129	26.854	124.29	0.710	-.13
425.0	5.898	34.142	26.892	120.80	0.741	-.15
450.0	5.688	34.149	26.924	117.93	0.770	-.17
475.0	5.216	34.117	26.955	114.75	0.800	-.25
500.0	5.198	34.132	26.969	113.72	0.828	-.25
550.0	4.792	34.147	27.027	108.27	0.884	-.28
600.0	4.824	34.235	27.094	102.61	0.936	-.21
650.0	4.636	34.278	27.150	97.68	0.987	-.19
700.0	4.479	34.306	27.189	94.22	1.035	-.19
750.0	4.316	34.334	27.229	90.69	1.081	-.19
800.0	4.165	34.363	27.269	87.21	1.125	-.18
850.0	4.037	34.386	27.301	84.45	1.168	-.17
900.0	3.923	34.405	27.328	82.13	1.210	-.17
950.0	3.785	34.426	27.359	79.37	1.250	-.17
1000.0	3.662	34.442	27.384	77.15	1.289	-.17
1100.0	3.400	34.473	27.435	72.57	1.364	-.17
1200.0	3.170	34.495	27.474	68.97	1.435	-.17

STATION: 13 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.988	34.510	27.503	66.41	1.502	-.18
1400.0	2.838	34.523	27.528	64.32	1.568	-.18
1500.0	2.680	34.542	27.557	61.65	1.631	-.18
1600.0	2.481	34.557	27.587	58.75	1.691	-.19
1700.0	2.276	34.578	27.621	55.28	1.748	-.19
1800.0	2.191	34.588	27.636	54.00	1.802	-.19
1900.0	2.098	34.597	27.651	52.67	1.856	-.19
2000.0	2.000	34.610	27.670	50.95	1.907	-.19
2100.0	1.932	34.620	27.684	49.78	1.958	-.18
2200.0	1.853	34.631	27.699	48.38	2.007	-.18
2300.0	1.816	34.639	27.709	47.70	2.055	-.18
2400.0	1.776	34.645	27.717	47.11	2.102	-.18
2500.0	1.748	34.650	27.724	46.73	2.149	-.18
2600.0	1.720	34.654	27.730	46.41	2.196	-.17
2666.0	1.691	34.657	27.735	46.03	2.226	-.17

STATION: 14 DATE: 6/14/92 1953 GMT

LAT: 38° 42.0' N. LON: 124° 12.8' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.429	33.060	24.805	313.35	0.006	0.25
5.0	13.410	33.037	24.792	314.72	0.016	0.23
10.0	13.330	33.011	24.788	315.26	0.031	0.19
15.0	13.191	33.003	24.809	313.32	0.047	0.16
20.0	12.799	32.974	24.864	308.21	0.063	0.05
25.0	12.119	33.089	25.084	287.38	0.078	0.01
30.0	11.511	33.037	25.156	280.60	0.092	-.15
35.0	11.578	33.083	25.180	278.49	0.106	-.10
40.0	11.637	33.126	25.203	276.44	0.120	-.05
45.0	11.435	33.157	25.264	270.70	0.133	-.06
50.0	11.241	33.217	25.346	263.05	0.147	-.05
60.0	9.917	33.094	25.479	250.42	0.172	-.39
70.0	10.044	33.168	25.516	247.16	0.197	-.31
80.0	9.691	33.203	25.602	239.14	0.222	-.34
90.0	9.019	33.364	25.836	217.00	0.244	-.32
100.0	8.603	33.493	26.002	201.38	0.265	-.28
125.0	8.149	33.727	26.255	177.76	0.312	-.17
150.0	8.115	33.892	26.389	165.45	0.355	-.04
175.0	7.638	33.929	26.488	156.34	0.395	-.08
200.0	7.277	33.956	26.561	149.72	0.434	-.11
225.0	6.964	33.985	26.627	143.71	0.470	-.14
250.0	6.823	34.014	26.669	140.02	0.506	-.13
275.0	6.671	34.039	26.710	136.46	0.541	-.13
300.0	6.685	34.099	26.756	132.57	0.574	-.08
325.0	6.517	34.119	26.794	129.21	0.607	-.09
350.0	6.346	34.122	26.819	127.08	0.639	-.11
375.0	6.218	34.142	26.852	124.23	0.670	-.11
400.0	6.095	34.148	26.872	122.56	0.701	-.12
425.0	5.914	34.153	26.899	120.18	0.732	-.14
450.0	5.714	34.151	26.922	118.11	0.761	-.17
475.0	5.551	34.165	26.954	115.29	0.791	-.18
500.0	5.169	34.133	26.973	113.30	0.819	-.25
550.0	5.003	34.196	27.043	107.14	0.874	-.22
600.0	4.686	34.223	27.100	101.87	0.926	-.23
650.0	4.476	34.242	27.138	98.47	0.976	-.24
700.0	4.521	34.305	27.184	94.79	1.025	-.19
750.0	4.318	34.332	27.228	90.86	1.071	-.19
800.0	4.208	34.359	27.261	88.01	1.116	-.18
850.0	4.061	34.380	27.293	85.17	1.159	-.18
900.0	3.905	34.404	27.329	81.99	1.201	-.17
950.0	3.783	34.427	27.360	79.27	1.241	-.17
1000.0	3.600	34.446	27.393	76.14	1.280	-.17
1100.0	3.356	34.467	27.434	72.50	1.354	-.18
1200.0	3.172	34.493	27.472	69.15	1.425	-.18

STATION: 14 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	3.027	34.504	27.495	67.31	1.493	-.18
1400.0	2.783	34.524	27.533	63.60	1.559	-.19
1500.0	2.645	34.541	27.559	61.31	1.621	-.19
1600.0	2.451	34.557	27.589	58.39	1.681	-.19
1700.0	2.287	34.576	27.618	55.56	1.738	-.19
1800.0	2.180	34.589	27.638	53.80	1.793	-.19
1900.0	2.069	34.600	27.656	52.10	1.845	-.19
2000.0	1.994	34.608	27.669	51.02	1.897	-.19
2100.0	1.918	34.618	27.683	49.76	1.947	-.19
2200.0	1.857	34.626	27.695	48.80	1.997	-.18
2300.0	1.809	34.636	27.707	47.83	2.045	-.18
2400.0	1.788	34.641	27.713	47.55	2.093	-.18
2500.0	1.754	34.646	27.720	47.10	2.140	-.18
2600.0	1.726	34.650	27.726	46.78	2.187	-.18
2642.0	1.711	34.653	27.730	46.51	2.206	-.18

STATION: 15 DATE: 6/14/92 2248 GMT

LAT: 38° 48.5' N. LON: 124° 18.6' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.462	33.027	24.773	316.41	0.006	0.23
5.0	13.459	33.029	24.776	316.28	0.016	0.23
10.0	13.433	33.037	24.787	315.31	0.032	0.24
15.0	13.109	33.042	24.855	308.92	0.047	0.17
20.0	11.762	33.030	25.105	285.30	0.062	-.10
25.0	11.632	33.047	25.142	281.87	0.076	-.12
30.0	11.548	33.068	25.174	278.95	0.090	-.11
35.0	11.356	33.090	25.226	274.06	0.104	-.13
40.0	11.325	33.150	25.278	269.24	0.118	-.09
45.0	11.169	33.164	25.317	265.65	0.131	-.11
50.0	10.232	33.076	25.412	256.62	0.144	-.35
60.0	9.756	33.250	25.628	236.30	0.169	-.29
70.0	9.443	33.304	25.721	227.59	0.192	-.30
80.0	9.197	33.383	25.823	218.12	0.214	-.28
90.0	8.960	33.486	25.941	207.05	0.235	-.23
100.0	8.605	33.575	26.066	195.31	0.255	-.22
125.0	8.284	33.735	26.241	179.11	0.302	-.14
150.0	7.873	33.830	26.376	166.61	0.345	-.13
175.0	7.672	33.873	26.440	160.95	0.386	-.12
200.0	7.590	33.980	26.536	152.27	0.425	-.05
225.0	7.359	34.010	26.592	147.21	0.462	-.06
250.0	7.293	34.044	26.629	144.16	0.499	-.04
275.0	7.053	34.061	26.676	139.95	0.534	-.06
300.0	6.875	34.071	26.708	137.19	0.569	-.08
325.0	6.460	34.052	26.748	133.45	0.603	-.15
350.0	6.143	34.048	26.786	129.97	0.636	-.20
375.0	5.903	34.049	26.817	127.16	0.668	-.23
400.0	5.796	34.067	26.845	124.78	0.699	-.22
425.0	5.803	34.110	26.879	121.98	0.730	-.19
450.0	5.599	34.113	26.906	119.50	0.760	-.21
475.0	5.396	34.122	26.938	116.57	0.790	-.23
500.0	5.302	34.141	26.964	114.32	0.819	-.23
550.0	4.996	34.166	27.020	109.29	0.874	-.24
600.0	4.903	34.223	27.076	104.45	0.928	-.21
650.0	4.686	34.250	27.122	100.35	0.979	-.21
700.0	4.545	34.302	27.179	95.30	1.028	-.19
750.0	4.328	34.319	27.216	91.94	1.075	-.20
800.0	4.187	34.356	27.261	87.99	1.120	-.18
850.0	4.049	34.382	27.296	84.88	1.163	-.18
900.0	3.952	34.405	27.325	82.47	1.204	-.17
950.0	3.855	34.417	27.344	80.86	1.245	-.17
1000.0	3.717	34.432	27.370	78.53	1.285	-.17
1100.0	3.391	34.460	27.425	73.42	1.361	-.18
1200.0	3.160	34.487	27.469	69.45	1.432	-.18

STATION: 15 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.979	34.508	27.503	66.45	1.500	-.18
1400.0	2.783	34.525	27.534	63.53	1.565	-.19
1500.0	2.662	34.538	27.556	61.73	1.628	-.19
1600.0	2.480	34.555	27.585	58.88	1.688	-.19
1700.0	2.294	34.571	27.614	56.01	1.745	-.19
1800.0	2.155	34.584	27.636	53.87	1.800	-.19
1900.0	2.070	34.596	27.653	52.41	1.853	-.19
2000.0	1.976	34.606	27.669	50.95	1.905	-.19
2100.0	1.905	34.617	27.683	49.67	1.955	-.19
2200.0	1.854	34.624	27.693	48.90	2.004	-.19
2300.0	1.834	34.632	27.702	48.44	2.053	-.18
2400.0	1.794	34.639	27.711	47.78	2.101	-.18
2500.0	1.759	34.645	27.719	47.24	2.149	-.18
2600.0	1.733	34.650	27.726	46.87	2.196	-.18
2640.0	1.718	34.653	27.730	46.59	2.215	-.18

STATION: 16 DATE: 6/15/92 0241 GMT

LAT: 38° 42.2' N. LON: 124° 27.3' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.361	32.990	24.765	317.20	0.006	0.18
5.0	13.361	32.986	24.762	317.57	0.016	0.18
10.0	13.358	32.991	24.767	317.26	0.032	0.18
15.0	13.350	32.994	24.771	317.01	0.048	0.18
20.0	12.655	33.010	24.920	302.89	0.063	0.05
25.0	11.833	33.099	25.145	281.58	0.078	-.04
30.0	11.419	33.101	25.223	274.27	0.092	-.11
35.0	11.326	33.105	25.243	272.47	0.105	-.13
40.0	11.045	33.100	25.290	268.14	0.119	-.18
45.0	10.894	33.132	25.341	263.32	0.132	-.18
50.0	10.283	33.080	25.407	257.16	0.145	-.34
60.0	10.067	33.210	25.545	244.22	0.170	-.27
70.0	9.661	33.308	25.689	230.69	0.194	-.26
80.0	9.229	33.365	25.803	219.94	0.216	-.29
90.0	9.016	33.414	25.876	213.24	0.238	-.28
100.0	8.630	33.480	25.987	202.74	0.259	-.29
125.0	8.257	33.624	26.158	186.98	0.308	-.23
150.0	7.963	33.766	26.313	172.64	0.352	-.17
175.0	7.991	33.932	26.439	161.12	0.394	-.03
200.0	7.578	33.947	26.511	154.55	0.433	-.08
225.0	7.255	33.968	26.574	148.91	0.471	-.11
250.0	6.948	33.987	26.631	143.70	0.507	-.14
275.0	6.709	33.999	26.673	139.94	0.543	-.16
300.0	6.724	34.054	26.715	136.43	0.577	-.11
325.0	6.609	34.095	26.763	132.21	0.611	-.10
350.0	6.496	34.112	26.791	129.79	0.644	-.10
375.0	6.136	34.106	26.834	125.85	0.676	-.15
400.0	5.988	34.133	26.874	122.30	0.707	-.15
425.0	5.928	34.165	26.907	119.48	0.737	-.13
450.0	5.735	34.172	26.936	116.81	0.766	-.15
475.0	5.582	34.174	26.957	115.04	0.795	-.17
500.0	5.264	34.184	27.003	110.66	0.824	-.20
550.0	5.002	34.217	27.059	105.57	0.878	-.20
600.0	4.785	34.246	27.107	101.33	0.929	-.20
650.0	4.611	34.272	27.148	97.83	0.979	-.20
700.0	4.438	34.307	27.194	93.66	1.027	-.19
750.0	4.302	34.341	27.236	90.00	1.073	-.18
800.0	4.158	34.363	27.269	87.13	1.117	-.18
850.0	4.048	34.386	27.299	84.57	1.160	-.17
900.0	3.911	34.407	27.330	81.84	1.202	-.17
950.0	3.770	34.429	27.362	78.98	1.242	-.17
1000.0	3.651	34.442	27.385	77.02	1.281	-.17
1016.0	3.606	34.446	27.393	76.33	1.293	-.17

STATION: 17 DATE: 6/15/92 0436 GMT

LAT: 38° 36.4' N. LON: 124° 20.6' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	12.939	32.951	24.819	312.10	0.006	0.07
5.0	12.941	32.951	24.818	312.22	0.016	0.07
10.0	12.946	32.954	24.820	312.20	0.031	0.07
15.0	12.945	32.958	24.823	312.00	0.047	0.07
20.0	12.932	32.968	24.834	311.14	0.062	0.08
25.0	12.892	32.990	24.859	308.89	0.078	0.09
30.0	12.126	33.143	25.125	283.66	0.093	0.06
35.0	11.594	33.217	25.282	268.82	0.107	0.01
40.0	11.492	33.272	25.343	263.12	0.120	0.04
45.0	11.478	33.322	25.384	259.30	0.133	0.07
50.0	11.395	33.349	25.421	255.96	0.146	0.08
60.0	11.122	33.412	25.519	246.80	0.171	0.08
70.0	9.628	33.291	25.681	231.43	0.195	-.28
80.0	9.238	33.386	25.818	218.52	0.217	-.27
90.0	8.863	33.440	25.920	209.01	0.239	-.29
100.0	8.500	33.502	26.025	199.20	0.259	-.29
125.0	8.112	33.703	26.241	179.02	0.306	-.19
150.0	7.773	33.827	26.388	165.42	0.349	-.15
175.0	7.578	33.893	26.469	158.14	0.390	-.12
200.0	7.243	33.959	26.568	149.03	0.428	-.12
225.0	7.087	33.986	26.611	145.25	0.465	-.12
250.0	6.893	34.002	26.651	141.84	0.501	-.13
275.0	6.657	34.019	26.696	137.76	0.535	-.15
300.0	6.480	34.049	26.743	133.59	0.569	-.15
325.0	6.220	34.048	26.776	130.64	0.602	-.19
350.0	6.023	34.051	26.804	128.22	0.635	-.21
375.0	5.960	34.074	26.831	125.98	0.667	-.20
400.0	5.614	34.063	26.864	122.82	0.698	-.25
425.0	5.599	34.108	26.902	119.58	0.728	-.22
450.0	5.493	34.132	26.934	116.77	0.757	-.21
475.0	5.371	34.144	26.958	114.63	0.786	-.21
500.0	5.235	34.159	26.986	112.16	0.815	-.22
550.0	4.938	34.189	27.044	106.88	0.869	-.23
600.0	4.795	34.233	27.096	102.42	0.922	-.21
650.0	4.581	34.264	27.144	98.07	0.972	-.21
700.0	4.475	34.303	27.187	94.40	1.020	-.19
750.0	4.304	34.332	27.229	90.69	1.066	-.19
800.0	4.179	34.359	27.264	87.67	1.111	-.18
850.0	3.995	34.389	27.307	83.73	1.154	-.18
900.0	3.866	34.407	27.335	81.32	1.195	-.17
950.0	3.706	34.431	27.370	78.08	1.235	-.17
1000.0	3.554	34.441	27.394	75.97	1.273	-.18
1010.0	3.538	34.445	27.398	75.57	1.281	-.18

STATION: 18 DATE: 6/15/92 0623 GMT

LAT: 38° 30.6' N. LON: 124° 14.3' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.600	33.067	24.776	316.12	0.006	0.29
5.0	13.600	33.069	24.778	316.05	0.016	0.30
10.0	13.599	33.069	24.778	316.15	0.032	0.30
15.0	13.601	33.069	24.778	316.28	0.047	0.30
20.0	13.597	33.072	24.781	316.14	0.063	0.30
25.0	13.432	33.085	24.825	312.10	0.079	0.27
30.0	12.140	33.005	25.015	294.10	0.094	-.05
35.0	11.496	33.018	25.144	281.86	0.109	-.16
40.0	11.160	33.041	25.223	274.46	0.123	-.21
45.0	11.310	33.186	25.309	266.39	0.136	-.06
50.0	11.370	33.212	25.319	265.65	0.149	-.03
60.0	11.096	33.240	25.390	259.07	0.176	-.06
70.0	10.124	33.229	25.550	243.93	0.201	-.24
80.0	9.378	33.239	25.681	231.59	0.225	-.36
90.0	8.954	33.422	25.892	211.71	0.247	-.29
100.0	8.599	33.487	25.998	201.77	0.267	-.29
125.0	8.304	33.681	26.195	183.42	0.316	-.18
150.0	8.155	33.842	26.344	169.75	0.360	-.08
175.0	7.983	33.947	26.452	159.88	0.401	-.02
200.0	7.707	34.002	26.536	152.27	0.440	-.02
225.0	7.379	34.018	26.596	146.86	0.478	-.05
250.0	7.038	34.035	26.657	141.34	0.514	-.09
275.0	6.828	34.045	26.693	138.13	0.549	-.11
300.0	6.563	34.042	26.727	135.20	0.583	-.15
325.0	6.452	34.058	26.755	132.85	0.616	-.15
350.0	6.524	34.116	26.791	129.86	0.649	-.09
375.0	6.384	34.134	26.824	126.99	0.681	-.10
400.0	5.982	34.115	26.860	123.56	0.712	-.16
425.0	5.795	34.132	26.897	120.21	0.743	-.17
450.0	5.614	34.148	26.932	117.08	0.773	-.18
475.0	5.408	34.152	26.960	114.53	0.802	-.20
500.0	5.260	34.163	26.986	112.17	0.830	-.21
550.0	4.872	34.176	27.042	107.06	0.884	-.25
600.0	4.629	34.209	27.095	102.24	0.937	-.25
650.0	4.529	34.245	27.135	98.87	0.987	-.23
700.0	4.359	34.288	27.188	94.15	1.035	-.22
750.0	4.077	34.304	27.230	90.13	1.081	-.23
800.0	3.973	34.332	27.264	87.28	1.126	-.22
850.0	3.911	34.374	27.304	83.87	1.168	-.20
900.0	3.878	34.410	27.336	81.23	1.210	-.17
950.0	3.766	34.429	27.363	78.93	1.250	-.17
1000.0	3.611	34.448	27.394	76.11	1.288	-.17
1100.0	3.332	34.473	27.441	71.78	1.362	-.18
1200.0	3.120	34.494	27.478	68.47	1.432	-.18

STATION: 18 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.973	34.512	27.506	66.09	1.499	-.18
1400.0	2.805	34.525	27.532	63.79	1.564	-.18
1500.0	2.634	34.541	27.560	61.18	1.627	-.19
1600.0	2.478	34.561	27.590	58.42	1.687	-.18
1700.0	2.340	34.574	27.612	56.33	1.744	-.19
1800.0	2.212	34.586	27.633	54.40	1.799	-.19
1900.0	2.072	34.597	27.653	52.36	1.852	-.19
2000.0	1.987	34.606	27.668	51.08	1.904	-.19
2100.0	1.940	34.619	27.682	49.95	1.955	-.18
2200.0	1.879	34.627	27.694	49.00	2.004	-.18
2300.0	1.815	34.636	27.707	47.91	2.052	-.18
2400.0	1.786	34.641	27.713	47.53	2.100	-.18
2500.0	1.757	34.647	27.721	47.07	2.147	-.18
2600.0	1.725	34.652	27.728	46.62	2.194	-.18
2700.0	1.699	34.656	27.734	46.32	2.241	-.18
2800.0	1.668	34.659	27.739	46.01	2.287	-.18
2900.0	1.646	34.663	27.744	45.74	2.333	-.17
3000.0	1.632	34.665	27.748	45.71	2.378	-.17
3100.0	1.616	34.668	27.752	45.57	2.424	-.17
3200.0	1.600	34.669	27.755	45.58	2.470	-.18
3300.0	1.587	34.672	27.759	45.47	2.515	-.17
3400.0	1.585	34.674	27.761	45.59	2.561	-.17
3458.0	1.579	34.674	27.762	45.67	2.587	-.17

STATION: 19 DATE: 6/15/92 0936 GMT

LAT: 38° 24.8' N. LON: 124° 8.0' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.983	33.096	24.720	321.46	0.006	0.40
5.0	13.984	33.096	24.720	321.56	0.016	0.40
10.0	13.986	33.099	24.722	321.50	0.032	0.40
15.0	13.989	33.104	24.725	321.33	0.048	0.41
20.0	13.062	33.171	24.965	298.63	0.064	0.27
25.0	12.199	33.239	25.185	277.79	0.078	0.15
30.0	12.116	33.277	25.230	273.59	0.092	0.16
35.0	11.779	33.266	25.285	268.50	0.106	0.09
40.0	11.295	33.290	25.393	258.37	0.119	0.01
45.0	11.071	33.298	25.439	254.00	0.131	-.02
50.0	11.067	33.361	25.489	249.42	0.144	0.03
60.0	10.773	33.405	25.575	241.40	0.169	0.01
70.0	10.148	33.471	25.735	226.39	0.192	-.05
80.0	9.832	33.550	25.850	215.65	0.214	-.04
90.0	9.538	33.612	25.947	206.59	0.235	-.04
100.0	9.166	33.643	26.031	198.71	0.255	-.08
125.0	8.975	33.875	26.244	179.00	0.302	0.08
150.0	8.583	33.983	26.390	165.56	0.345	0.10
175.0	8.059	34.019	26.497	155.64	0.385	0.05
200.0	7.743	34.026	26.550	151.00	0.424	0.01
225.0	7.418	34.037	26.606	145.98	0.461	-.03
250.0	7.170	34.037	26.640	142.99	0.497	-.07
275.0	6.869	34.052	26.693	138.17	0.532	-.10
300.0	6.710	34.067	26.727	135.28	0.566	-.11
325.0	6.364	34.070	26.775	130.82	0.599	-.15
350.0	6.265	34.091	26.805	128.34	0.632	-.15
375.0	6.253	34.131	26.838	125.51	0.664	-.12
400.0	6.127	34.155	26.873	122.45	0.695	-.11
425.0	5.942	34.175	26.913	118.87	0.725	-.12
450.0	5.810	34.189	26.940	116.49	0.754	-.13
475.0	5.561	34.181	26.965	114.23	0.783	-.16
500.0	5.161	34.147	26.985	112.16	0.811	-.24
550.0	4.998	34.200	27.046	106.78	0.866	-.21
600.0	4.502	34.211	27.110	100.60	0.918	-.26
650.0	4.536	34.279	27.161	96.42	0.967	-.20
700.0	4.443	34.316	27.201	93.05	1.015	-.19
750.0	4.271	34.349	27.246	89.04	1.060	-.18
800.0	4.147	34.374	27.279	86.19	1.104	-.17
850.0	3.943	34.393	27.316	82.83	1.146	-.18
900.0	3.830	34.412	27.343	80.53	1.187	-.17
950.0	3.718	34.428	27.367	78.45	1.227	-.17
1000.0	3.609	34.444	27.391	76.39	1.266	-.17
1016.0	3.607	34.454	27.399	75.75	1.278	-.16

STATION: 20 DATE: 6/15/92 1106 GMT

LAT: 38° 19.1' N. LON: 124° 1.7' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.420	33.074	24.818	312.14	0.006	0.26
5.0	13.422	33.074	24.818	312.26	0.016	0.26
10.0	13.421	33.075	24.819	312.28	0.031	0.26
15.0	13.386	33.080	24.830	311.34	0.047	0.26
20.0	12.710	33.167	25.031	292.33	0.062	0.19
25.0	12.027	33.219	25.202	276.13	0.076	0.10
30.0	11.775	33.266	25.286	268.31	0.090	0.09
35.0	11.591	33.279	25.330	264.22	0.103	0.06
40.0	11.286	33.303	25.404	257.25	0.116	0.02
45.0	11.016	33.327	25.472	250.93	0.129	-.01
50.0	10.583	33.315	25.538	244.68	0.141	-.09
60.0	9.980	33.320	25.645	234.67	0.165	-.20
70.0	9.622	33.375	25.748	225.11	0.188	-.21
80.0	9.533	33.477	25.842	216.34	0.211	-.15
90.0	9.519	33.559	25.908	210.23	0.232	-.08
100.0	9.357	33.634	25.994	202.33	0.252	-.05
125.0	8.865	33.777	26.184	184.61	0.301	-.02
150.0	8.376	33.901	26.357	168.58	0.345	0.00
175.0	8.044	34.005	26.489	156.46	0.386	0.04
200.0	7.745	34.028	26.551	150.88	0.424	0.01
225.0	7.457	34.038	26.601	146.45	0.461	-.02
250.0	7.056	34.049	26.665	140.54	0.497	-.07
275.0	6.862	34.063	26.703	137.25	0.532	-.09
300.0	6.669	34.091	26.751	132.95	0.566	-.09
325.0	6.452	34.120	26.803	128.28	0.598	-.10
350.0	6.239	34.135	26.843	124.73	0.630	-.11
375.0	6.069	34.156	26.882	121.27	0.661	-.12
400.0	5.976	34.172	26.906	119.25	0.691	-.12
425.0	5.942	34.194	26.928	117.46	0.720	-.11
450.0	5.833	34.204	26.949	115.67	0.750	-.11
475.0	5.675	34.202	26.968	114.13	0.778	-.13
500.0	5.607	34.211	26.983	112.90	0.807	-.13
550.0	5.170	34.234	27.054	106.34	0.862	-.17
600.0	5.008	34.268	27.100	102.38	0.914	-.16
650.0	4.681	34.299	27.161	96.65	0.963	-.17
700.0	4.535	34.329	27.201	93.18	1.011	-.17
750.0	4.411	34.361	27.241	89.81	1.057	-.15
800.0	4.243	34.377	27.272	87.09	1.101	-.16
850.0	4.038	34.402	27.313	83.27	1.143	-.16
900.0	3.912	34.418	27.339	81.04	1.184	-.16
950.0	3.808	34.433	27.362	79.12	1.224	-.16
1000.0	3.674	34.452	27.391	76.55	1.263	-.16
1014.0	3.639	34.457	27.398	75.88	1.274	-.16

STATION: 21 DATE: 6/15/92 1323 GMT

LAT: 38° 14.4' N. LON: 124° 8.8' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.487	32.973	24.727	320.86	0.006	0.20
5.0	13.487	32.973	24.726	320.95	0.016	0.20
10.0	13.489	32.973	24.726	321.10	0.032	0.20
15.0	13.423	32.971	24.738	320.07	0.048	0.18
20.0	12.555	32.969	24.908	304.07	0.064	0.00
25.0	12.363	32.982	24.954	299.73	0.079	-.03
30.0	11.729	32.950	25.049	290.84	0.094	-.17
35.0	11.453	32.968	25.114	284.77	0.108	-.21
40.0	11.294	32.994	25.163	280.23	0.122	-.22
45.0	10.840	33.018	25.262	270.87	0.136	-.29
50.0	10.358	33.027	25.353	262.30	0.149	-.36
60.0	9.686	33.141	25.554	243.29	0.174	-.39
70.0	9.272	33.242	25.700	229.55	0.198	-.38
80.0	8.724	33.271	25.809	219.33	0.221	-.44
90.0	8.542	33.373	25.917	209.23	0.242	-.39
100.0	7.976	33.424	26.041	197.47	0.262	-.44
125.0	8.559	33.793	26.244	178.88	0.309	-.05
150.0	8.349	33.876	26.341	170.05	0.352	-.02
175.0	8.116	33.961	26.443	160.76	0.393	0.01
200.0	7.824	34.009	26.525	153.41	0.433	0.01
225.0	7.494	34.026	26.586	147.86	0.470	-.03
250.0	7.311	34.040	26.623	144.70	0.507	-.04
275.0	6.858	34.031	26.678	139.58	0.543	-.11
300.0	6.588	34.034	26.717	136.12	0.577	-.15
325.0	6.564	34.091	26.765	131.91	0.611	-.11
350.0	6.105	34.081	26.817	127.03	0.643	-.17
375.0	5.876	34.070	26.837	125.26	0.675	-.21
400.0	5.784	34.097	26.870	122.40	0.706	-.20
425.0	5.524	34.082	26.891	120.55	0.736	-.25
450.0	5.466	34.119	26.927	117.40	0.766	-.22
475.0	5.288	34.131	26.957	114.62	0.795	-.24
500.0	5.210	34.151	26.983	112.45	0.823	-.23
550.0	4.787	34.173	27.049	106.28	0.878	-.26
600.0	4.591	34.206	27.097	102.01	0.930	-.26
650.0	4.474	34.247	27.142	98.07	0.980	-.24
700.0	4.389	34.293	27.189	94.13	1.028	-.21
750.0	4.231	34.315	27.223	91.10	1.074	-.21
800.0	4.193	34.365	27.267	87.39	1.119	-.17
850.0	4.051	34.385	27.298	84.68	1.162	-.17
900.0	3.947	34.419	27.336	81.37	1.203	-.16
950.0	3.795	34.427	27.358	79.41	1.243	-.17
1000.0	3.687	34.449	27.387	76.92	1.282	-.16
1014.0	3.660	34.452	27.392	76.50	1.293	-.16

STATION: 22 DATE: 6/15/92 1518 GMT

LAT: 38° 19.8' N. LON: 124° 15.3' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.626	33.034	24.746	319.05	0.006	0.27
5.0	13.620	33.035	24.748	318.90	0.016	0.27
10.0	13.618	33.037	24.750	318.88	0.032	0.27
15.0	13.618	33.039	24.752	318.82	0.048	0.28
20.0	13.622	33.043	24.754	318.76	0.064	0.28
25.0	13.567	33.039	24.762	318.11	0.080	0.26
30.0	12.778	32.970	24.865	308.35	0.095	0.05
35.0	11.588	32.984	25.102	285.93	0.110	-.17
40.0	11.451	33.020	25.154	281.03	0.124	-.17
45.0	11.316	33.033	25.189	277.81	0.138	-.19
50.0	10.970	33.134	25.329	264.56	0.152	-.17
60.0	11.075	33.279	25.424	255.83	0.178	-.03
70.0	10.932	33.310	25.474	251.31	0.203	-.04
80.0	9.385	33.141	25.603	238.97	0.228	-.44
90.0	9.053	33.340	25.812	219.30	0.250	-.34
100.0	8.778	33.444	25.936	207.61	0.272	-.30
125.0	8.427	33.637	26.142	188.52	0.321	-.20
150.0	8.161	33.859	26.356	168.57	0.366	-.06
175.0	7.855	33.940	26.465	158.58	0.407	-.04
200.0	7.839	34.007	26.521	153.78	0.446	0.01
225.0	7.583	34.028	26.575	149.00	0.483	-.01
250.0	7.420	34.047	26.613	145.69	0.520	-.02
275.0	7.152	34.064	26.665	141.08	0.556	-.05
300.0	6.791	34.043	26.697	138.14	0.591	-.11
325.0	6.788	34.083	26.730	135.45	0.625	-.08
350.0	6.348	34.063	26.772	131.50	0.659	-.16
375.0	6.154	34.085	26.814	127.68	0.691	-.17
400.0	5.935	34.099	26.853	124.15	0.722	-.18
425.0	5.781	34.117	26.887	121.15	0.753	-.19
450.0	5.684	34.139	26.916	118.62	0.783	-.18
475.0	5.466	34.147	26.949	115.61	0.812	-.20
500.0	5.543	34.201	26.983	112.84	0.841	-.15
550.0	5.006	34.194	27.041	107.33	0.896	-.22
600.0	4.572	34.201	27.095	102.16	0.948	-.26
650.0	4.595	34.265	27.144	98.16	0.998	-.21
700.0	4.435	34.297	27.187	94.37	1.047	-.20
750.0	4.190	34.318	27.230	90.40	1.093	-.21
800.0	3.979	34.331	27.262	87.43	1.137	-.22
850.0	3.909	34.364	27.296	84.59	1.180	-.20
900.0	3.856	34.396	27.327	82.01	1.222	-.18
950.0	3.764	34.423	27.358	79.35	1.262	-.17
1000.0	3.640	34.444	27.388	76.75	1.301	-.17
1018.0	3.596	34.449	27.396	76.01	1.315	-.17

STATION: 23 DATE: 6/15/92 1653 GMT

LAT: 38° 25.5' N. LON: 124° 21.5' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.459	32.951	24.715	321.95	0.006	0.17
5.0	13.455	32.953	24.718	321.80	0.016	0.17
10.0	13.458	32.953	24.717	321.98	0.032	0.17
15.0	13.425	32.954	24.725	321.40	0.048	0.17
20.0	13.413	32.955	24.728	321.21	0.064	0.17
25.0	12.236	33.105	25.073	288.42	0.080	0.05
30.0	11.598	33.161	25.237	272.95	0.094	-.03
35.0	11.327	33.171	25.294	267.57	0.107	-.07
40.0	11.320	33.265	25.369	260.65	0.120	0.00
45.0	11.142	33.276	25.410	256.85	0.133	-.02
50.0	11.046	33.291	25.438	254.24	0.146	-.03
60.0	10.417	33.253	25.519	246.73	0.171	-.17
70.0	10.117	33.372	25.663	233.22	0.195	-.13
80.0	9.672	33.419	25.774	222.82	0.218	-.17
90.0	8.721	33.404	25.914	209.57	0.240	-.34
100.0	8.573	33.509	26.019	199.75	0.260	-.28
125.0	8.187	33.645	26.184	184.44	0.308	-.23
150.0	7.813	33.790	26.353	168.73	0.353	-.17
175.0	7.727	33.921	26.469	158.18	0.393	-.08
200.0	7.629	33.991	26.539	151.99	0.432	-.04
225.0	7.418	34.031	26.600	146.47	0.469	-.04
250.0	7.149	34.033	26.640	143.00	0.506	-.07
275.0	6.766	34.017	26.680	139.40	0.541	-.14
300.0	6.702	34.054	26.718	136.14	0.575	-.12
325.0	6.474	34.066	26.758	132.55	0.609	-.14
350.0	6.310	34.088	26.797	129.14	0.642	-.14
375.0	6.154	34.095	26.823	126.90	0.674	-.16
400.0	5.867	34.095	26.859	123.59	0.705	-.19
425.0	5.636	34.103	26.893	120.41	0.735	-.22
450.0	5.410	34.110	26.926	117.39	0.765	-.24
475.0	5.342	34.136	26.955	114.90	0.794	-.23
500.0	5.130	34.148	26.990	111.71	0.822	-.24
550.0	5.031	34.189	27.034	108.00	0.877	-.22
600.0	4.844	34.223	27.082	103.75	0.930	-.21
650.0	4.584	34.261	27.142	98.33	0.981	-.21
700.0	4.478	34.306	27.189	94.21	1.029	-.19
750.0	4.284	34.336	27.234	90.16	1.075	-.19
800.0	4.105	34.355	27.268	87.11	1.119	-.19
850.0	3.973	34.379	27.301	84.22	1.162	-.19
900.0	3.823	34.399	27.333	81.41	1.203	-.19
950.0	3.672	34.416	27.362	78.80	1.243	-.19
1000.0	3.568	34.436	27.388	76.51	1.282	-.18
1100.0	3.349	34.465	27.433	72.57	1.357	-.18
1200.0	3.102	34.490	27.476	68.56	1.427	-.18

STATION: 23 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.932	34.511	27.509	65.69	1.494	-.18
1400.0	2.778	34.523	27.533	63.62	1.559	-.19
1500.0	2.631	34.537	27.557	61.44	1.622	-.19
1600.0	2.478	34.561	27.590	58.42	1.682	-.18
1700.0	2.289	34.572	27.615	55.88	1.739	-.19
1800.0	2.160	34.587	27.638	53.71	1.793	-.19
1900.0	2.062	34.598	27.655	52.16	1.846	-.19
2000.0	1.976	34.606	27.669	50.95	1.898	-.19
2100.0	1.931	34.617	27.681	49.99	1.948	-.19
2200.0	1.879	34.625	27.692	49.14	1.998	-.18
2300.0	1.825	34.633	27.703	48.25	2.047	-.18
2400.0	1.791	34.639	27.711	47.74	2.095	-.18
2500.0	1.750	34.645	27.720	47.12	2.142	-.18
2600.0	1.713	34.650	27.727	46.61	2.189	-.18
2700.0	1.686	34.654	27.733	46.29	2.235	-.18
2800.0	1.664	34.659	27.739	45.96	2.281	-.18
2900.0	1.642	34.661	27.743	45.83	2.327	-.18
3000.0	1.624	34.663	27.747	45.74	2.373	-.18
3100.0	1.608	34.667	27.752	45.53	2.419	-.18
3200.0	1.590	34.669	27.755	45.43	2.464	-.18
3300.0	1.569	34.672	27.760	45.21	2.509	-.18
3400.0	1.550	34.674	27.763	45.07	2.555	-.18
3500.0	1.531	34.676	27.767	44.93	2.600	-.18
3588.0	1.522	34.679	27.771	44.83	2.639	-.18

STATION: 24 DATE: 6/15/92 1953 GMT

LAT: 38° 31.5' N. LON: 124° 28.1' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.499	33.050	24.784	315.43	0.006	0.26
5.0	13.506	33.050	24.782	315.63	0.016	0.26
10.0	13.485	33.051	24.787	315.28	0.032	0.26
15.0	13.255	33.054	24.836	310.75	0.047	0.21
20.0	12.265	33.144	25.099	285.87	0.062	0.08
25.0	12.066	33.150	25.142	281.92	0.076	0.05
30.0	11.796	33.171	25.208	275.70	0.090	0.01
35.0	11.397	33.205	25.308	266.32	0.104	-.03
40.0	10.749	33.221	25.436	254.20	0.117	-.14
45.0	10.036	33.257	25.587	239.92	0.129	-.24
50.0	9.454	33.279	25.699	229.24	0.141	-.32
60.0	9.137	33.375	25.825	217.44	0.164	-.29
70.0	8.831	33.436	25.921	208.48	0.185	-.29
80.0	8.629	33.477	25.985	202.61	0.205	-.29
90.0	8.253	33.521	26.076	194.03	0.225	-.32
100.0	8.170	33.569	26.127	189.44	0.244	-.29
125.0	8.204	33.757	26.270	176.32	0.290	-.14
150.0	8.012	33.857	26.377	166.58	0.333	-.09
175.0	7.830	33.964	26.488	156.44	0.373	-.03
200.0	7.709	34.016	26.547	151.26	0.411	-.01
225.0	7.418	34.039	26.607	145.84	0.448	-.03
250.0	7.176	34.048	26.648	142.25	0.484	-.06
275.0	6.725	34.020	26.688	138.59	0.520	-.14
300.0	6.773	34.083	26.731	134.93	0.554	-.08
325.0	6.436	34.058	26.757	132.65	0.587	-.15
350.0	6.374	34.094	26.793	129.53	0.620	-.13
375.0	6.197	34.115	26.833	125.97	0.652	-.14
400.0	5.916	34.117	26.870	122.57	0.683	-.17
425.0	5.357	34.077	26.906	118.88	0.713	-.27
450.0	5.192	34.093	26.938	116.01	0.743	-.28
475.0	5.172	34.125	26.967	113.63	0.771	-.25
500.0	5.032	34.146	26.999	110.68	0.799	-.25
550.0	4.947	34.200	27.052	106.17	0.854	-.22
600.0	4.765	34.226	27.094	102.58	0.906	-.22
650.0	4.602	34.259	27.138	98.69	0.956	-.21
700.0	4.436	34.286	27.178	95.20	1.005	-.21
750.0	4.283	34.323	27.224	91.12	1.051	-.20
800.0	4.201	34.351	27.255	88.53	1.096	-.18
850.0	4.032	34.377	27.294	85.05	1.139	-.18
900.0	3.923	34.397	27.321	82.72	1.181	-.18
950.0	3.735	34.420	27.359	79.24	1.222	-.18
1000.0	3.595	34.445	27.393	76.15	1.260	-.17
1014.0	3.553	34.450	27.401	75.40	1.271	-.17

STATION: 25 DATE: 6/15/92 2141 GMT

LAT: 38° 37.2' N. LON: 124° 34.3' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.030	32.946	24.797	314.17	0.006	0.08
5.0	13.022	32.946	24.798	314.10	0.016	0.08
10.0	13.004	32.946	24.802	313.87	0.031	0.07
15.0	12.962	32.949	24.813	312.99	0.047	0.07
20.0	12.894	32.960	24.835	311.02	0.063	0.06
25.0	11.953	33.069	25.099	285.95	0.078	-.04
30.0	11.534	33.139	25.231	273.46	0.092	-.06
35.0	11.729	33.248	25.281	268.90	0.105	0.06
40.0	11.247	33.166	25.305	266.71	0.118	-.09
45.0	10.823	33.127	25.350	262.47	0.132	-.20
50.0	10.315	33.092	25.411	256.79	0.145	-.32
60.0	9.809	33.118	25.516	246.93	0.170	-.39
70.0	9.804	33.275	25.639	235.40	0.194	-.26
80.0	9.201	33.296	25.754	224.64	0.217	-.35
90.0	8.797	33.418	25.913	209.66	0.239	-.31
100.0	8.633	33.470	25.979	203.53	0.259	-.30
125.0	8.301	33.624	26.151	187.65	0.308	-.23
150.0	8.096	33.806	26.324	171.57	0.353	-.11
175.0	8.063	33.903	26.406	164.27	0.395	-.04
200.0	7.810	33.979	26.503	155.44	0.435	-.02
225.0	7.671	34.016	26.553	151.09	0.473	-.01
250.0	7.418	34.061	26.624	144.62	0.510	-.01
275.0	7.192	34.080	26.671	140.47	0.546	-.03
300.0	6.981	34.112	26.726	135.58	0.580	-.03
325.0	6.653	34.122	26.779	130.75	0.613	-.07
350.0	6.398	34.122	26.812	127.76	0.646	-.10
375.0	6.233	34.143	26.850	124.35	0.677	-.11
400.0	6.069	34.155	26.881	121.70	0.708	-.12
425.0	5.777	34.164	26.925	117.59	0.738	-.15
450.0	5.610	34.167	26.947	115.62	0.767	-.17
475.0	5.412	34.167	26.971	113.46	0.796	-.19
500.0	5.248	34.176	26.998	111.06	0.824	-.20
550.0	5.002	34.204	27.049	106.54	0.878	-.21
600.0	4.616	34.202	27.091	102.60	0.930	-.26
650.0	4.505	34.264	27.153	97.17	0.981	-.22
700.0	4.352	34.301	27.199	93.10	1.028	-.21
750.0	4.197	34.316	27.227	90.63	1.074	-.21
800.0	4.130	34.341	27.255	88.44	1.119	-.20
850.0	4.068	34.374	27.288	85.70	1.162	-.18
900.0	3.915	34.391	27.317	83.07	1.205	-.18
950.0	3.798	34.419	27.352	80.04	1.245	-.17
1000.0	3.673	34.434	27.376	77.87	1.285	-.17
1014.0	3.652	34.437	27.381	77.51	1.296	-.17

STATION: 26 DATE: 6/16/92 0353 GMT

LAT: 38° 10.0' N. LON: 123° 40.7' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	13.217	33.185	24.945	300.09	0.006	0.31
5.0	13.217	33.184	24.944	300.21	0.015	0.31
10.0	13.220	33.185	24.944	300.35	0.030	0.31
15.0	13.220	33.185	24.944	300.47	0.045	0.31
20.0	13.135	33.184	24.961	299.05	0.060	0.29
25.0	12.954	33.185	24.998	295.65	0.075	0.25
30.0	12.562	33.194	25.081	287.84	0.089	0.18
35.0	12.556	33.198	25.085	287.56	0.104	0.18
40.0	12.530	33.198	25.090	287.19	0.118	0.18
45.0	11.986	33.224	25.214	275.51	0.132	0.09
50.0	11.558	33.307	25.358	261.90	0.146	0.08
60.0	10.725	33.413	25.590	240.00	0.171	0.01
70.0	10.503	33.464	25.669	232.73	0.194	0.01
80.0	10.360	33.493	25.716	228.42	0.217	0.01
90.0	10.065	33.563	25.821	218.63	0.240	0.01
100.0	9.745	33.626	25.924	209.02	0.261	0.01
125.0	9.370	33.731	26.068	195.77	0.311	0.03
150.0	9.157	33.798	26.155	187.99	0.359	0.04
175.0	8.985	33.866	26.236	180.74	0.406	0.07
200.0	8.652	33.958	26.360	169.33	0.449	0.09
225.0	8.361	34.042	26.471	159.16	0.490	0.11
250.0	7.951	34.073	26.557	151.30	0.528	0.07
275.0	7.722	34.095	26.608	146.78	0.566	0.06
300.0	7.577	34.109	26.640	144.08	0.602	0.05
325.0	7.385	34.114	26.672	141.39	0.638	0.02
350.0	7.206	34.126	26.707	138.37	0.673	0.01
375.0	6.687	34.116	26.770	132.35	0.706	-.07
400.0	6.413	34.125	26.813	128.41	0.739	-.10
425.0	6.278	34.145	26.847	125.48	0.771	-.10
450.0	6.099	34.161	26.882	122.28	0.802	-.11
475.0	5.829	34.188	26.938	117.09	0.832	-.13
500.0	5.601	34.203	26.978	113.42	0.861	-.14
550.0	5.368	34.241	27.036	108.26	0.916	-.14
600.0	5.095	34.270	27.091	103.29	0.969	-.15
650.0	4.856	34.293	27.137	99.20	1.019	-.16
700.0	4.617	34.321	27.186	94.75	1.068	-.16
750.0	4.457	34.368	27.241	89.83	1.114	-.14
800.0	4.293	34.390	27.277	86.72	1.158	-.14
850.0	4.002	34.403	27.318	82.78	1.200	-.16
900.0	3.853	34.419	27.346	80.27	1.241	-.17
950.0	3.691	34.436	27.376	77.54	1.280	-.17
1000.0	3.566	34.450	27.400	75.45	1.319	-.17
1100.0	3.299	34.476	27.446	71.18	1.392	-.18
1200.0	3.070	34.499	27.486	67.53	1.461	-.18

STATION: 26 (cont)

P (dbar)	T ($^{\circ}$C)	S	γ_{θ} (kg m^{-3})	δ (10^{-8} m^{3} kg^{-1})	$\Sigma\Delta D$ (m^{2} s^{-2})	π (kg m^{-3})
1300.0	2.911	34.514	27.513	65.22	1.528	-.18
1400.0	2.746	34.530	27.541	62.73	1.592	-.18
1500.0	2.566	34.549	27.572	59.80	1.653	-.19
1600.0	2.393	34.566	27.601	57.05	1.711	-.19
1700.0	2.277	34.576	27.619	55.44	1.767	-.19
1770.0	2.219	34.586	27.632	54.35	1.806	-.19

STATION: 27 DATE: 6/16/92 0730 GMT

LAT: 37° 50.0' N. LON: 123° 30.6' W.

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
2.0	12.292	33.272	25.193	276.50	0.006	0.19
5.0	12.289	33.272	25.193	276.52	0.014	0.19
10.0	12.278	33.275	25.198	276.21	0.028	0.19
15.0	12.271	33.282	25.205	275.65	0.041	0.20
20.0	12.000	33.320	25.285	268.11	0.055	0.17
25.0	11.443	33.331	25.397	257.60	0.068	0.08
30.0	10.793	33.379	25.551	243.03	0.081	-.01
35.0	10.441	33.421	25.645	234.15	0.093	-.03
40.0	10.165	33.490	25.746	224.66	0.104	-.03
45.0	9.918	33.548	25.834	216.46	0.115	-.02
50.0	9.804	33.584	25.880	212.10	0.126	-.02
60.0	9.674	33.623	25.933	207.35	0.147	-.01
70.0	9.571	33.653	25.973	203.69	0.167	0.00
80.0	9.519	33.669	25.994	201.88	0.188	0.00
90.0	9.280	33.739	26.088	193.16	0.208	0.02
100.0	9.115	33.799	26.161	186.35	0.226	0.04
125.0	8.940	33.859	26.236	179.70	0.272	0.06
150.0	8.731	33.924	26.321	172.16	0.317	0.08
175.0	8.593	33.965	26.375	167.46	0.359	0.09
200.0	8.126	34.037	26.502	155.68	0.400	0.07
225.0	7.856	34.051	26.553	151.17	0.438	0.04
250.0	7.825	34.096	26.594	147.78	0.475	0.07
275.0	7.540	34.106	26.643	143.38	0.512	0.04
300.0	7.358	34.120	26.680	140.18	0.547	0.03
325.0	7.189	34.124	26.707	137.91	0.582	0.00
350.0	6.676	34.127	26.779	131.07	0.616	-.06
375.0	6.548	34.133	26.802	129.23	0.648	-.08
400.0	6.303	34.157	26.853	124.59	0.680	-.09
425.0	6.106	34.169	26.887	121.46	0.711	-.11
450.0	6.000	34.178	26.908	119.74	0.741	-.11
475.0	5.843	34.189	26.937	117.23	0.770	-.12
500.0	5.676	34.203	26.968	114.36	0.799	-.13
550.0	5.336	34.239	27.038	108.02	0.855	-.15
600.0	5.078	34.263	27.088	103.61	0.908	-.16
650.0	4.864	34.289	27.133	99.60	0.959	-.16
700.0	4.659	34.317	27.178	95.55	1.007	-.16
750.0	4.519	34.332	27.206	93.25	1.055	-.17
800.0	4.291	34.363	27.255	88.70	1.100	-.17
850.0	4.211	34.383	27.280	86.72	1.144	-.16
900.0	4.058	34.411	27.319	83.27	1.186	-.15
950.0	3.880	34.429	27.352	80.26	1.227	-.16
1000.0	3.727	34.435	27.372	78.43	1.267	-.17
1100.0	3.343	34.477	27.443	71.61	1.341	-.17
1200.0	3.142	34.502	27.482	68.13	1.411	-.17

STATION: 27 (cont)

P (dbar)	T (°C)	S	γ_θ (kg m^{-3})	δ (10^{-8} m^3 kg^{-1})	$\Sigma\Delta D$ (m^2 s^{-2})	π (kg m^{-3})
1300.0	2.952	34.518	27.513	65.40	1.478	-.18
1400.0	2.836	34.533	27.536	63.56	1.542	-.17
1500.0	2.625	34.548	27.567	60.56	1.604	-.18
1600.0	2.485	34.563	27.591	58.35	1.664	-.18
1700.0	2.353	34.577	27.614	56.27	1.721	-.18
1726.0	2.324	34.580	27.619	55.83	1.736	-.18

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