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HYDROGRAPHIC AND ACOUSTIC DOPPLER CURRENT PROFILER (ADCP) DATA FROM THE FARALLONES SHELF AND SLOPE STUDY
13 - 18 February 1991

by
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This data report presents hydrographic (CTD) and Acoustic Doppler Current Profiler (ADCP) data from a cruise to the Continental Shelf and slope region near the Gulf of the Farallones National Marine Sanctuary during 13-18 February 1991. The study area encompassed a region from 75 km south of San Francisco (Pigeon Point) north to about 38° 0.0' N (Point Reyes) extending from the coast to about 90 km offshore. The sampling grid consisted of five across-shore transects 20 km apart, with nine or ten CTD stations from 5 to 15 km apart each transect. A total of forty-eight CTD's were made to within approximately 25 m of the bottom. ADCP data were collected during the occupation of the sampling grid as well during a separate ADCP survey conducted at the end of the cruise. The data are presented as vertical sections, property distributions on horizontal surfaces, and waterfall plots.

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INTRODUCTION

The data included in this report were collected as part of an Environmental Protection Agency (EPA) funded project to study oceanographic currents and hydrographic conditions in the area of the Gulf of the Farallones National Marine Sanctuary. The study area encompassed a region from 75 km south of San Francisco, California (Pigeon Point) north to about 38° 0.00' N (Point Reyes) extending from the coast to approximately 90 km offshore. This survey was carried out between February 13-18, 1991 aboard the research vessel POINT SUR and was the first of four EPA funded surveys conducted in this region during 1991. Each cruise produced a quasi-synoptic 3-dimensional map of the hydrographic structure and velocity fields in the study area with the purpose of improving our understanding of the currents in the area of the Farallon Islands off the California coast. A fifth cruise encompassing the same study area was conducted during February 1992. The planned sampling grid (Fig. 1) consisted of 5 across-shore transects 20 km apart, with 9 to 10 CTD stations from 5 to 15 km apart along each transect. Two CTD casts (stations 36 and 49, Fig. 1) were skipped because of bad weather. The actual hydrographic sampling grid is shown in Fig. 2. A total of 48 CTD casts were made to within approximately 25 m of the bottom. In addition to the hydrographic sampling grid an Acoustic Doppler Current Profiler (ADCP) survey was completed. The planned cruise track and waypoints for this survey are shown in Fig. 3.

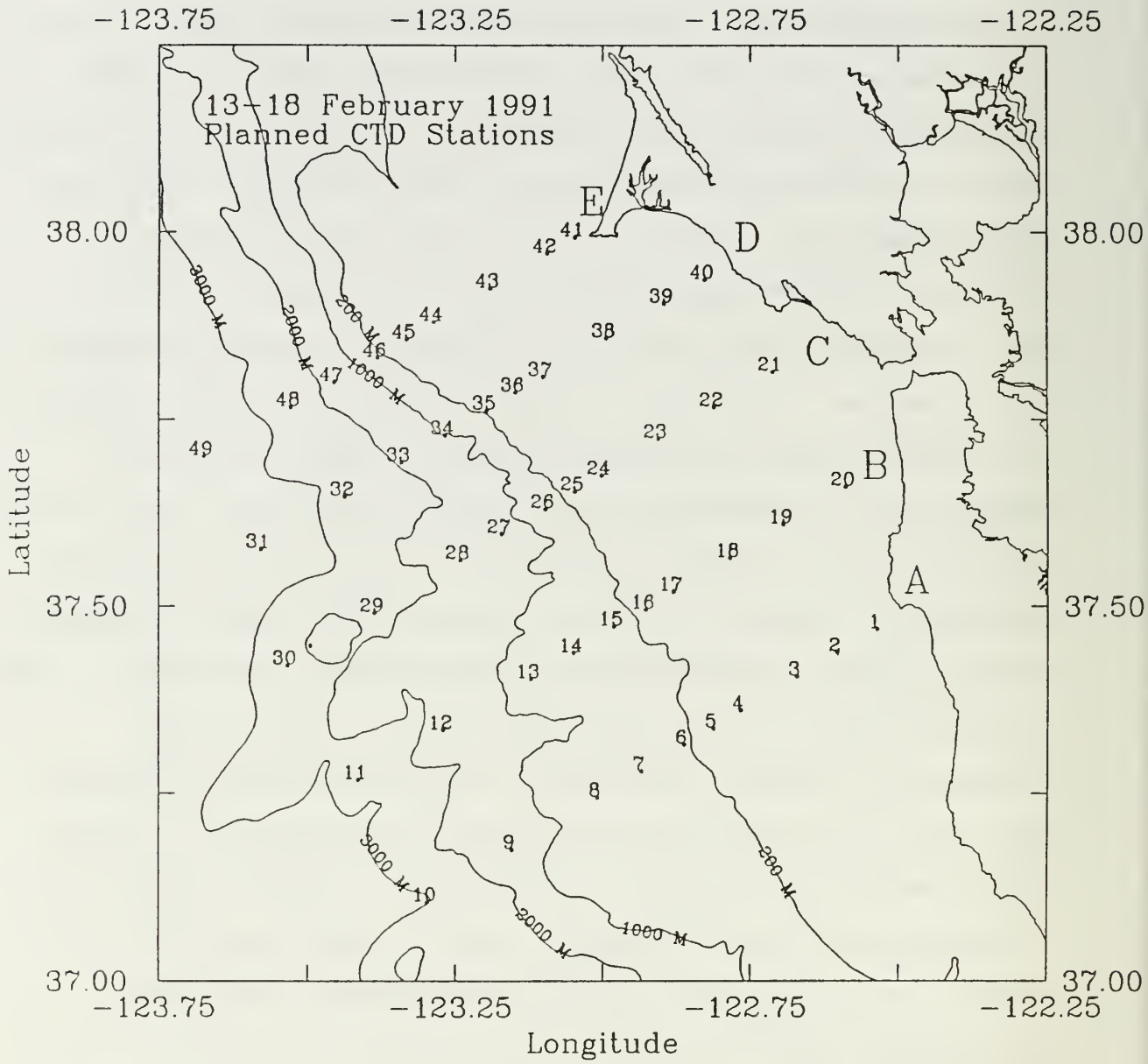

Figure 1. Planned CTD station grid and numbers for the Farallones Shelf and Slope study during February 13-18, 1991 aboard the R/V POINT SUR.

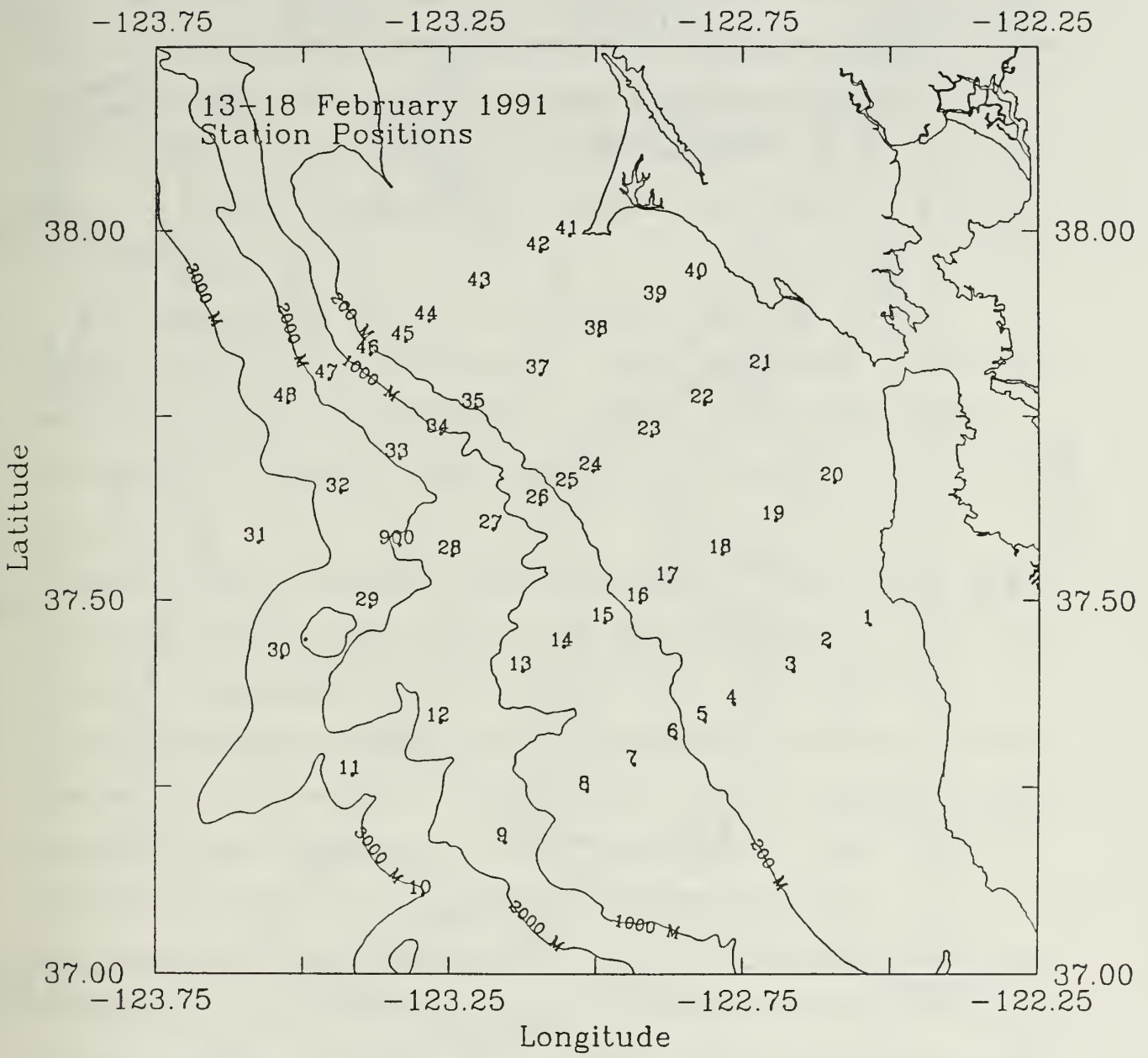

Figure 2. Actual CTD station grid and numbers for the Farallones Shelf and Slope study during February 13-18, 1991 aboard the R/V POINT SUR.

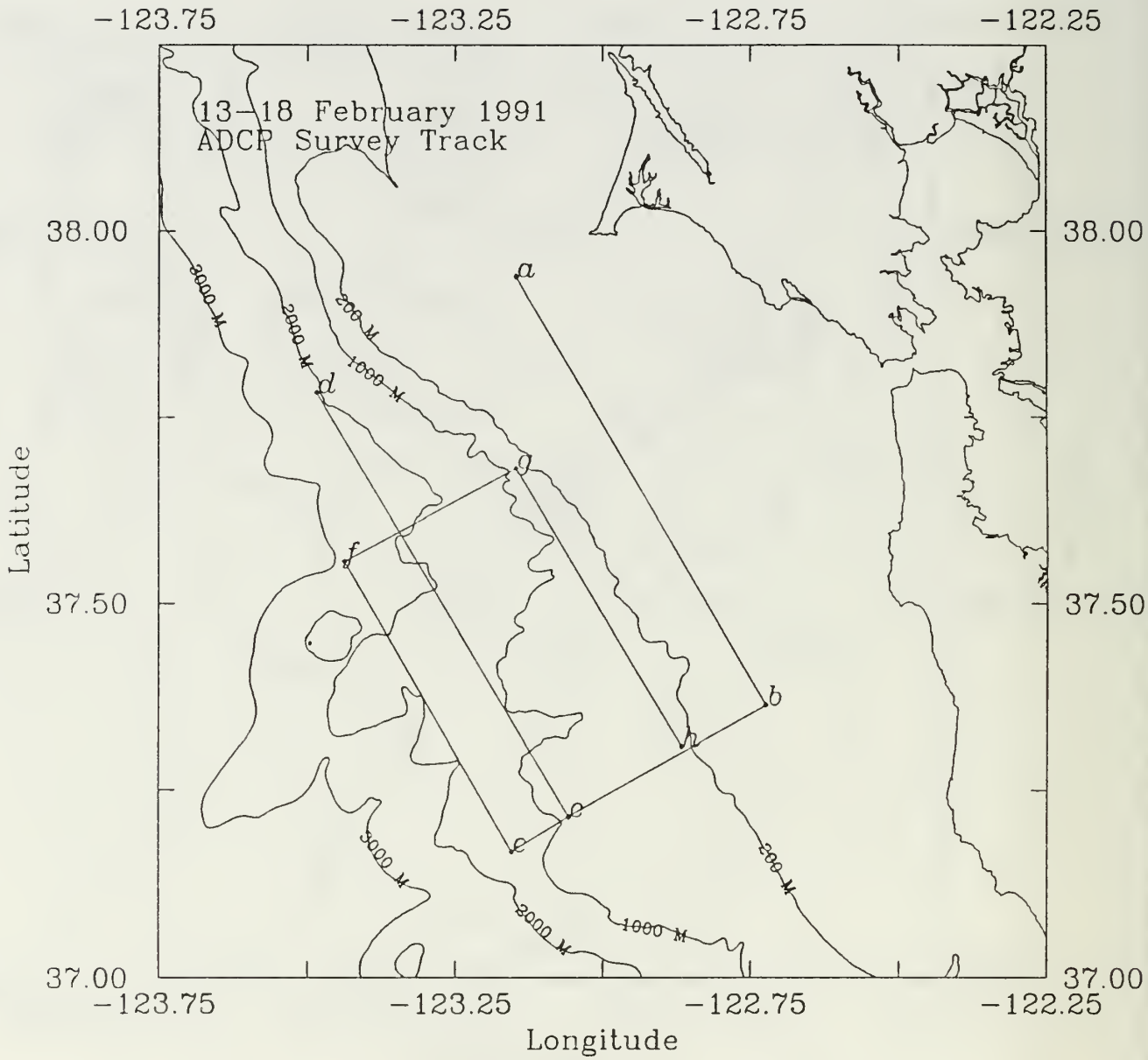

Figure 3. Cruise track and waypoints for the Acoustic Doppler Current Profiler (ADCP) survey during the Farallones Shelf and Slope study of February 13-18, 1991 aboard the R/V POINT SUR.

The R/V POINT SUR departed from Moss Landing, CA at 1936 Universal Time (UT) February 13, 1991 arriving at station 1 (Fig. 2) at 0254 UT on February 14 to begin hydrographic mapping of the grid. Following the completion of the CTD cast at this station the ship proceeded offshore occupying stations 2 - 10 (Fig. 2) of section A. The CTD casts of this section were completed at 1339 UT on February 14.

The first station of section B (station 11, Fig. 2) was occupied at 1450 UT on February 14. After completing this station the ship proceeded east-northeast completing the rest of the stations of this section (stations 12 - 20, Fig. 2) by 0207 UT on February 15.

Section C was started at the inshore edge of the section with the occupation of station 21 at 0325 UT on February 15 (Fig. 2). Following the completion of station 21 the ship proceeded offshore occupying stations 22 - 29 between 0410 and 1311 UT on February 15. Following the completion of station 29 hydrographic operations were suspended in order to rendezvous with the R/V DAVID STARR JORDAN for a comparison ADCP transect and simultaneous CTD cast (station 900, Fig. 2). The ship then proceeded back to station 30 (Fig. 2) occupying that station to complete section C by 1811 UT on February 15.

The first station of section D (station 31, Fig. 2) was started at 1916 UT on February 15. Following the completion of the CTD cast at this station the ship proceeded east-northeast (shoreward) occupying stations 32 - 35 by 0500 UT on February 16

(Fig. 2). During this time the weather continuously worsened with winds approaching 30 knots. Because of the deteriorating weather conditions station 36 (Fig. 1) was skipped. Continuing onshore we were able to complete the remainder of the stations of section D (stations 37 - 40, Fig. 2) by 0840 UT on February 16. Following the completion of section D operations were suspended due to bad weather and the ship steamed into Drake's Bay to await improved weather conditions.

On the morning of 16 February the sea state was still too high for hydrographic operations so it was decided that part of the ADCP survey should be conducted. The ship left Drake's Bay and proceeded to waypoint "*a*" (Fig. 3) arriving there at 1721 UT on February 16. From that point the ship steamed south-southeast to waypoint "*b*" (Fig. 3) then west-southwest to waypoint "*c*" (Fig. 3) arriving at 0058 on February 17. The ship then turned back to the north-northwest and proceeded towards waypoint "*d*" (Fig. 3) arriving at 0649 on February 17.

By this time weather conditions had improved enough to resume hydrographic operations so the ship steamed to the offshore end of section E arriving at station 48 (Fig. 2) at 0716 UT on February 17. Following the completion of station 48 the ship proceeded east-northeast along section E (Fig. 2) occupying stations 47, 46, 45, 44, 43, 42, and 41. CTD station 41 (Fig. 2) was finished at 1602 on February 17 completing the hydrographic operations of the cruise.

The ADCP survey then resumed with the ship steaming to waypoint

"*d*" (Fig. 3) arriving at 1852 UT on February 17. The ADCP survey proceeded with the ship steaming to waypoints "*c*", "*e*", "*f*", "*g*", and "*h*" arriving at the last waypoint at 0828 on February 18.

This completed all operations and the ship then steamed back to Moss Landing arriving at 1508 UT on February 18. A listing of all CTD stations occupied during the cruise is shown in Table 1.

The personnel on this cruise were; Dr. Newell Garfield, Naval Postgraduate School (NPS); Mr. Paul Jessen, NPS; Mr. Andy Anderson, NPS; Mr. Andy Heard, Moss Landing Marine Laboratory (MLML); Mr. Gary Davis, Scientific Applications International Corporation (SAIC); Ms. Jill Schoenherr (SAIC); Mr. David Browning (SAIC); Ms. Jill Erman (SAIC); Mr. Steve Bailey, California Academy of Sciences (CAS); Mr. Michael Newcomer, Environmental Protection Agency Consultant (EPAC); and Mr. Don Robertson (EPAC).

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. Additionally, water samples for micro-nutrient and dissolved oxygen analysis were collected from numerous pressures at stations 3, 5, 7, 9, 12, 14, 16, 18, 23, 25, 27, 29, 32, 34, 35, 38, 42, 45, 46, and 48. The CTD sampling rate was 32 Hz, and raw

Table 1. List of CTD stations occupied during the Farallones Shelf and Slope cruise of February 13-18, 1991 aboard the R/V POINT SUR showing date, time, station number, location, and weather.

Date	Time (UT)	Sta No.	Latitude	Longitude	Wind Dir	Wind (ms^{-1})	Air ($^{\circ}C$)
Feb. 14	0254	1	37 28.0	122 32.6	316	7.7	-
	0332	2	37 25.8	122 36.6	305	6.8	11.8
	0414	3	37 23.9	122 40.0	318	7.1	12.0
	0506	4	37 21.2	122 46.4	276	8.6	11.4
	0536	5	37 19.8	122 49.1	307	7.9	11.3
	0609	6	37 18.4	122 52.0	310	6.9	11.0
	0700	7	37 16.3	122 56.4	326	7.2	10.7
	0800	8	37 14.2	123 1.0	311	6.8	10.5
	0921	9	37 10.1	123 9.7	345	6.9	10.3
	1150	10	37 5.9	123 18.1	316	5.7	10.6
	1449	11	37 15.5	123 25.2	312	6.8	10.4
	1726	12	37 19.7	123 16.5	345	3.9	10.9
	1934	13	37 23.8	123 7.7	339	4.0	12.0
	2003	14	37 25.8	123 3.4	305	4.3	12.5
	2149	15	37 27.8	122 59.2	302	7.7	11.7
	2239	16	37 29.4	122 55.8	301	8.2	11.5
	2317	17	37 31.1	122 52.6	306	9.0	10.9
Feb. 15	0002	18	37 33.3	122 47.4	313	9.5	10.8
	0055	19	37 36.0	122 42.1	319	6.0	11.4
	0155	20	37 39.1	122 35.8	325	11.4	12.4
	0325	21	37 48.3	122 43.1	278	5.2	11.7
	0410	22	37 45.5	122 49.1	305	5.2	11.1
	0455	23	37 42.9	122 54.8	305	8.0	10.7
	0542	24	37 40.0	123 0.6	307	8.2	10.7
	0612	25	37 38.7	123 3.3	284	6.4	10.6
	0646	26	37 37.3	123 6.3	311	7.5	10.5
	0747	27	37 35.3	123 10.6	315	9.2	10.7
	0928	28	37 33.2	123 15.1	322	8.5	11.0
	1131	29	37 29.0	123 23.5	322	8.2	11.1
	1403	900	37 34.1	123 20.5	317	9.8	11.1
	1638	30	37 24.9	123 32.5	320	8.8	11.7
	1916	31	37 34.2	123 35.0	313	9.3	12.5
	1837	32	37 38.3	123 26.6	293	11.5	13.0
Feb. 16	0117	33	37 41.1	123 20.6	305	10.3	12.4
	0250	34	37 43.1	123 16.4	295	10.7	12.2
	0422	35	37 45.1	123 12.4	298	14.5	12.0
	0550	37	37 48.0	123 6.3	297	15.2	12.1
	0646	38	37 51.0	123 0.0	299	15.3	11.8
	0745	39	37 53.8	122 54.2	282	13.8	11.7
	0830	40	37 55.7	122 50.1	295	8.9	11.6
Feb. 17	0716	48	37 45.6	123 32.1	314	9.2	12.3
	0948	47	37 47.5	123 27.6	312	8.7	12.0
	1119	46	37 49.5	123 23.3	309	8.7	11.8

Table 1. (continued)

Date	Time (UT)	Sta No.	Latitude	Longitude	Wind Dir	Wind (ms^{-1})	Air ($^{\circ}C$)
Feb. 17	1245	45	37 50.6	123 19.9	299	10.8	11.7
	1321	44	37 52.2	123 17.6	302	12.1	11.6
	1412	43	37 54.9	123 11.9	303	11.5	11.1
	0706	42	37 57.8	123 6.1	303	11.2	11.3
	1552	41	37 59.1	123 3.2	302	12.4	11.8

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 pyronometers for the visible and infrared radiation. The underway data were acquired on an HP9816 computer and recorded on 3.5 inch diskettes. The underway data were transferred to 9-track tape upon return and processed on an Amdahl 500 mainframe computer.

The temperature, conductivity, and pressure sensors on the CTD and the temperature and conductivity sensors used with the underway sampling system were calibrated shortly before the cruise. 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

1.00086. The CTD pressure offset at the beginning of each cast was used as the intercept.

The temperature calibration was done using a Seabird temperature sensor as a standard. This standard sensor is recalibrated by the manufacturer approximately every six months. A temperature bath of 70 - 80 liters of fresh water in an insulated tub was used to compare the standard and CTD sensor at 1 °C increments from 0 - 20 °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 revealing a linear difference between the standard and the CTD temperature sensor. The coefficients were 0.999441 (slope) and +0.000210 (intercept). The same procedure was used to calibrate the Seabird temperature sensor used in the underway acquisition system. The regression for the Seabird sensor used to measure the 2 m temperature was linear with a slope of 1.0027 and an intercept of +0.0087.

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 (CTD and underway) with the standard sensor conductivities (Minisal). A linear correction was found for the CTD sensor with coefficients of 1.023828 (slope) and +0.005897 (intercept). The best fit for the Seabird conductivity sensor used in the underway system was a linear

correction with coefficients of 1.00585(slope) and +0.0000115 (intercept).

A total of 87 water samples were taken at 48 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 pre-cruise calibration coefficients, were used to calculate salinity and the results compared with the water sample salinities calculated using the AGE Minisal in the laboratory. The station, depth of sample, CTD salinity calculated using the pre-cruise calibrations, sample salinity from the minisal, and difference between CTD and minisal salinities are listed in Table 2. The mean and standard deviation of the differences between the CTD salinities and sample salinities were calculated. The mean difference was -0.010598 with a standard deviation of 0.004079. Points further than two standard deviations from the mean were discarded, eliminating the deep sample at station 35. A regression analysis was then run on the remaining 86 data points revealing a linear difference between the CTD salinity and the bottle sample salinity with a slope of 0.9946217 and an intercept of 0.1708693. 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 0.0021. This was the final adjustment to the CTD salinity.

Table 2. Differences between salinities (psu) calculated using the corrected CTD pressure, temperature, and conductivity readings and those of the water samples at the same depth measured by the AGE Minisal.

STA	P (dbar)	CTD SAL	BOTTLE SAL	DIFFERENCE
1	1.9	33.223	33.216	0.007
2	57.6	33.337	33.331	0.006
2	1.9	33.076	33.072	0.004
3	72.9	33.416	33.406	0.010
3	1.6	33.120	33.115	0.005
4	1.6	33.191	33.185	0.006
5	2.0	33.198	33.190	0.008
6	224.0	33.961	33.949	0.012
6	1.4	33.214	33.207	0.007
7	407.9	34.150	34.138	0.012
7	1.0	33.294	33.287	0.007
8	580.5	34.279	34.263	0.016
8	1.5	33.310	33.302	0.008
9	1567.3	34.553	34.539	0.014
9	1009.5	34.456	34.442	0.014
9	1.6	33.314	33.307	0.007
10	2837.1	34.677	34.662	0.015
10	2532.3	34.662	34.646	0.016
10	2017.5	34.621	34.606	0.015
10	1515.3	34.552	34.541	0.011
10	1.1	33.213	33.204	0.009
11	2773.8	34.674	34.658	0.016
11	1009.7	34.461	34.448	0.013
11	1.0	33.212	33.206	0.006
12	1434.8	34.535	34.520	0.015
12	1010.4	34.455	34.440	0.015
12	2.3	33.305	33.298	0.007
13	810.3	34.382	34.370	0.012
13	1.4	33.287	33.280	0.007
14	609.5	34.282	34.266	0.016
14	1.5	33.230	33.223	0.007
15	355.4	34.151	34.134	0.017
15	1.6	33.212	33.204	0.008
16	117.7	33.529	33.511	0.018
16	1.9	33.260	33.257	0.003
17	86.5	33.451	33.441	0.010
17	1.5	33.101	33.093	0.008
18	60.9	33.387	33.377	0.010
18	2.3	33.080	33.071	0.009
19	2.3	32.906	32.895	0.011
20	2.3	32.846	32.838	0.008
21	2.1	33.137	33.126	0.011
22	2.1	33.175	33.165	0.010
23	1.6	33.175	33.166	0.009
24	2.1	33.171	33.160	0.011

Table 2. (continued)

STA	P (dbar)	CTD SAL	BOTTLE SAL	DIFFERENCE
25	121.5	33.657	33.647	0.010
25	1.5	33.211	33.203	0.008
26	809.2	34.369	34.352	0.017
26	1.0	33.225	33.217	0.008
27	1220.8	34.509	34.493	0.016
27	2.4	33.293	33.287	0.006
28	1652.7	34.563	34.547	0.016
28	2.2	33.320	33.314	0.006
29	2217.6	34.642	34.625	0.017
29	1.7	33.311	33.304	0.007
900	510.1	34.218	34.202	0.016
900	2.7	33.277	33.270	0.007
30	2840.0	34.677	34.662	0.015
30	1.7	33.259	33.252	0.007
31	3305.9	34.689	34.675	0.014
31	3040.6	34.682	34.668	0.014
31	2020.3	34.621	34.608	0.013
31	1008.3	34.449	34.436	0.013
31	1.0	33.305	33.298	0.007
32	2666.0	34.673	34.657	0.016
32	1.1	33.286	33.280	0.006
33	1673.6	34.570	34.555	0.015
33	1.0	33.292	33.284	0.008
34	1251.5	34.505	34.493	0.012
34	1008.0	34.448	34.431	0.017
34	2.0	33.225	33.218	0.007
35	350.9	34.140	34.120	0.020
35	2.8	33.242	33.237	0.005
37	2.6	33.259	33.253	0.006
38	1.9	33.181	33.174	0.007
39	3.0	33.273	33.266	0.007
48	2461.5	34.660	34.645	0.015
48	1.6	33.283	33.276	0.007
47	1563.3	34.566	34.551	0.015
47	1.2	33.263	33.256	0.007
46	580.0	34.230	34.213	0.017
46	2.2	33.238	33.231	0.007
45	2.2	33.218	33.212	0.006
44	2.5	33.156	33.145	0.011
43	1.3	33.190	33.180	0.010
42	1.9	33.303	33.294	0.009
41	2.3	33.367	33.358	0.009

HYDROGRAPHIC DATA PROCESSING

The raw CTD data were processed on an PC compatible computer using an EG&G Marine Instruments software package called "CTDPOST." This software package was specifically designed for the processing of data collected with the Neil Brown MK-III CTD system. It automatically 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. 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) with 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 64 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 360K 5.25 inch floppy disks. Approximately 14 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 36° 8.6' N., 122° 44.2' W. to 36° 12.0' N., 122° 49.3' 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: $\alpha = -1.344$ and $1+\beta = 1.0052$. Raw doppler velocity data were rotated by α and multiplied by $1+\beta$ before any further processing of the data.

ADCP DATA PROCESSING

ADCP data were processed one disk (approximately 14 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 the correction of navigation data and the calculation of 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 corrected by interpolation if necessary. Once corrected 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 three bins wide (24m) 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 determined 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 CTD station positions and numbers for the cruise are shown in Fig. 2. The ADCP survey track and waypoints are shown in Fig. 3. Hourly averaged wind vectors during the cruise are shown in Fig. 4. Satellite images of sea surface temperature for the region during the cruise are shown in Figs. 5 and 6. 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 (psu), density anomaly (γ), spiciness (π), and ADCP velocity at selected pressures are presented in Figs. 7 - 26.

Density anomaly (γ) 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).

Maps of ADCP velocity at selected depths during the ADCP survey are shown in Figs. 27 - 30. Vertical sections of temperature, salinity, density anomaly, and spiciness from 0 - 500 dbar for sections A - E are shown in Figs. 31 - 35. 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. 36 - 40. Vertical sections of along-transect and across-transect ADCP velocity for selected alongshore transects of the ADCP survey are shown in Figs. 41 - 42. 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. 43 - 47. For stations deeper than 500 dbar, waterfall plots of temperature, salinity, and density anomaly from 500 - 3500 dbar are shown in Fig. 48. In all waterfall plots the leftmost profile is plotted as true values while the data values for each profile to the right are successively incremented by the amount indicated on the figure. Figure 49 is a T/S diagram which includes selected data from all CTD stations completed during the cruise. Selected data from each CTD cast are presented in Appendix A.

ACKNOWLEDGEMENTS

This work was funded by the Environmental Protection Agency. The able assistance of the officers and crew of the R/V POINT SUR are much appreciated.

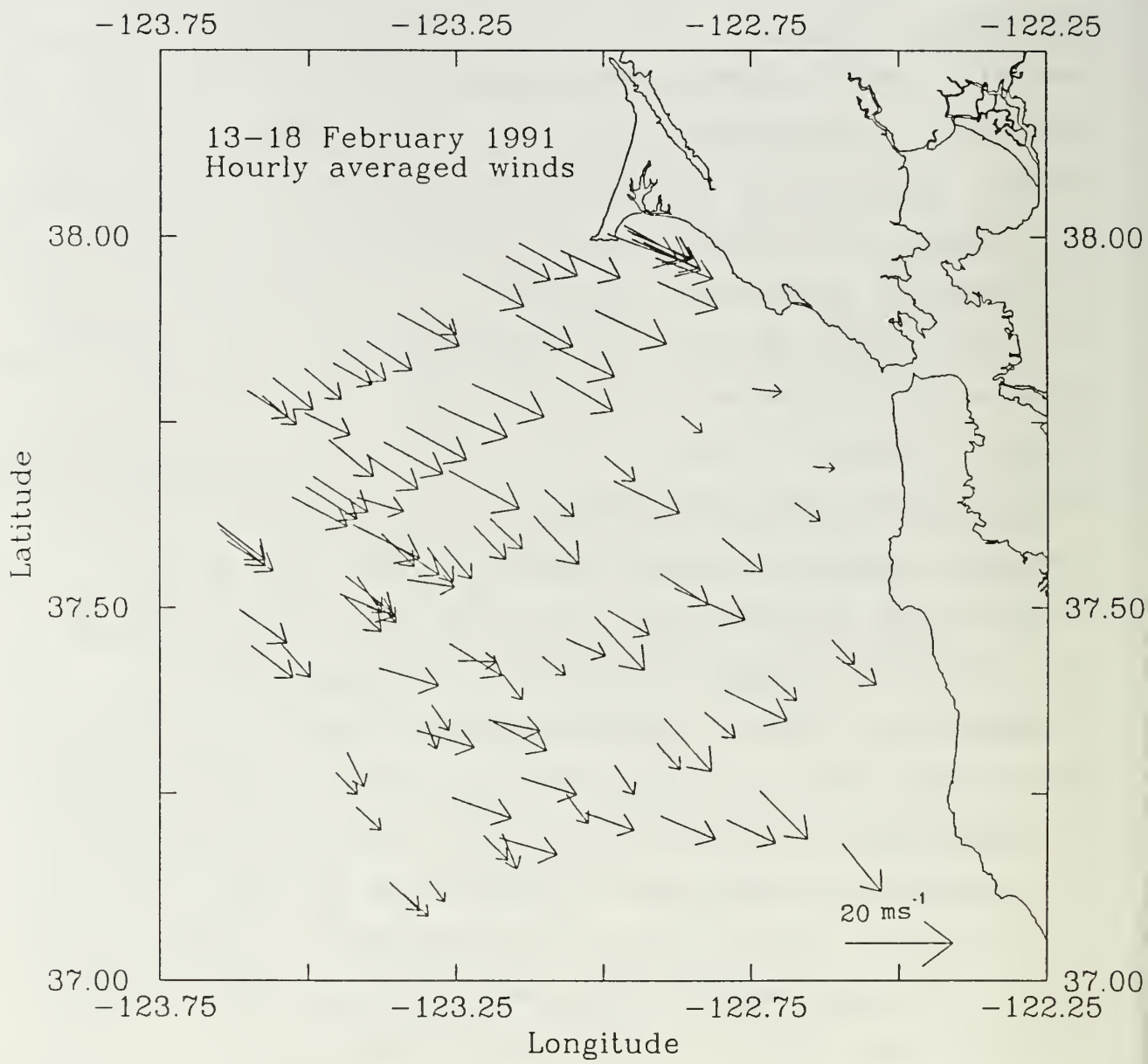

Figure 4. Hourly averaged wind vectors measured at 10 m height from the R/V POINT SUR during the Farallones Shelf and Slope cruise of February 13-18, 1991.

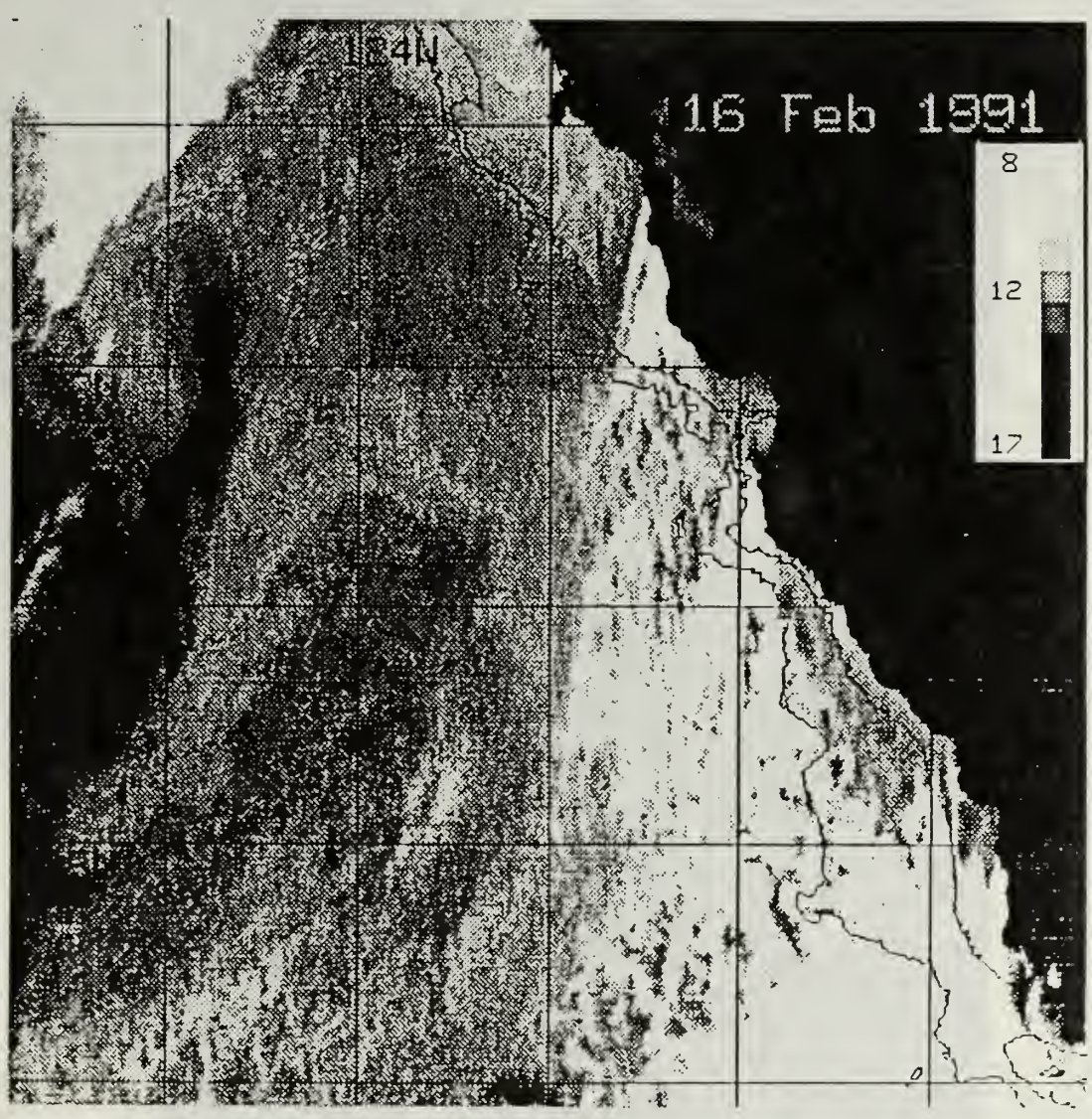

Figure 5. NOAA-11 AVHRR Sea Surface Temperature image of the central California region for 16 February 1991. Data processing for geophysical location and temperature determination using a two-channel (4/5) algorithm was done using the University of Miami DSP software. Clouds are white and oceanic temperatures are represented by the grey scale. The 200 and 1000 m isobaths and latitude and longitude grids have been superimposed on the image.

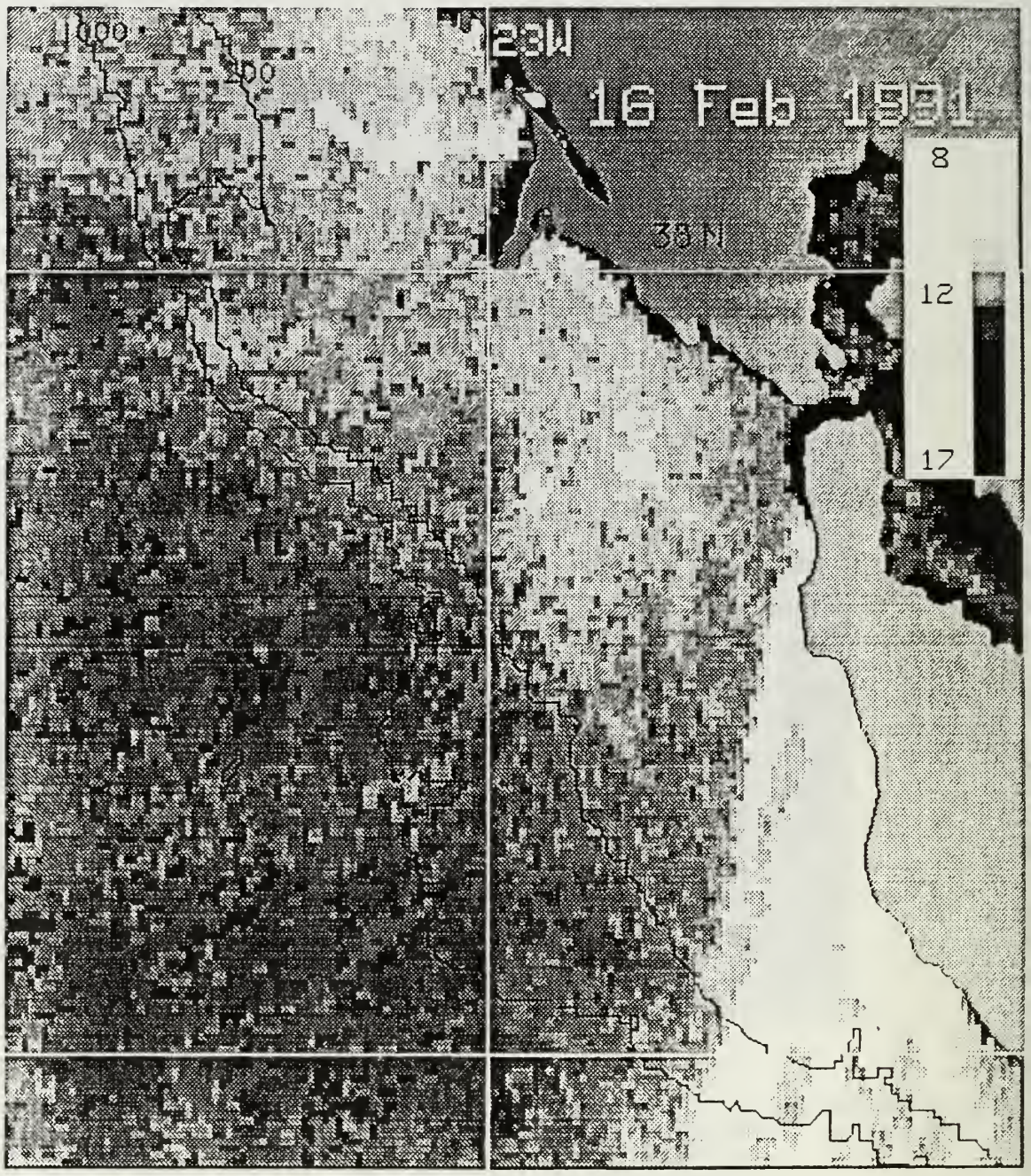

Figure 6. An enlargement of Figure 5 for the Farallones Shelf and Slope Study Region. Clouds are white and oceanic temperatures are represented by the grey scale. The 200 and 1000 m isobaths and the 37° and 38° N latitude and 123° W longitude lines have been superimposed on the image.

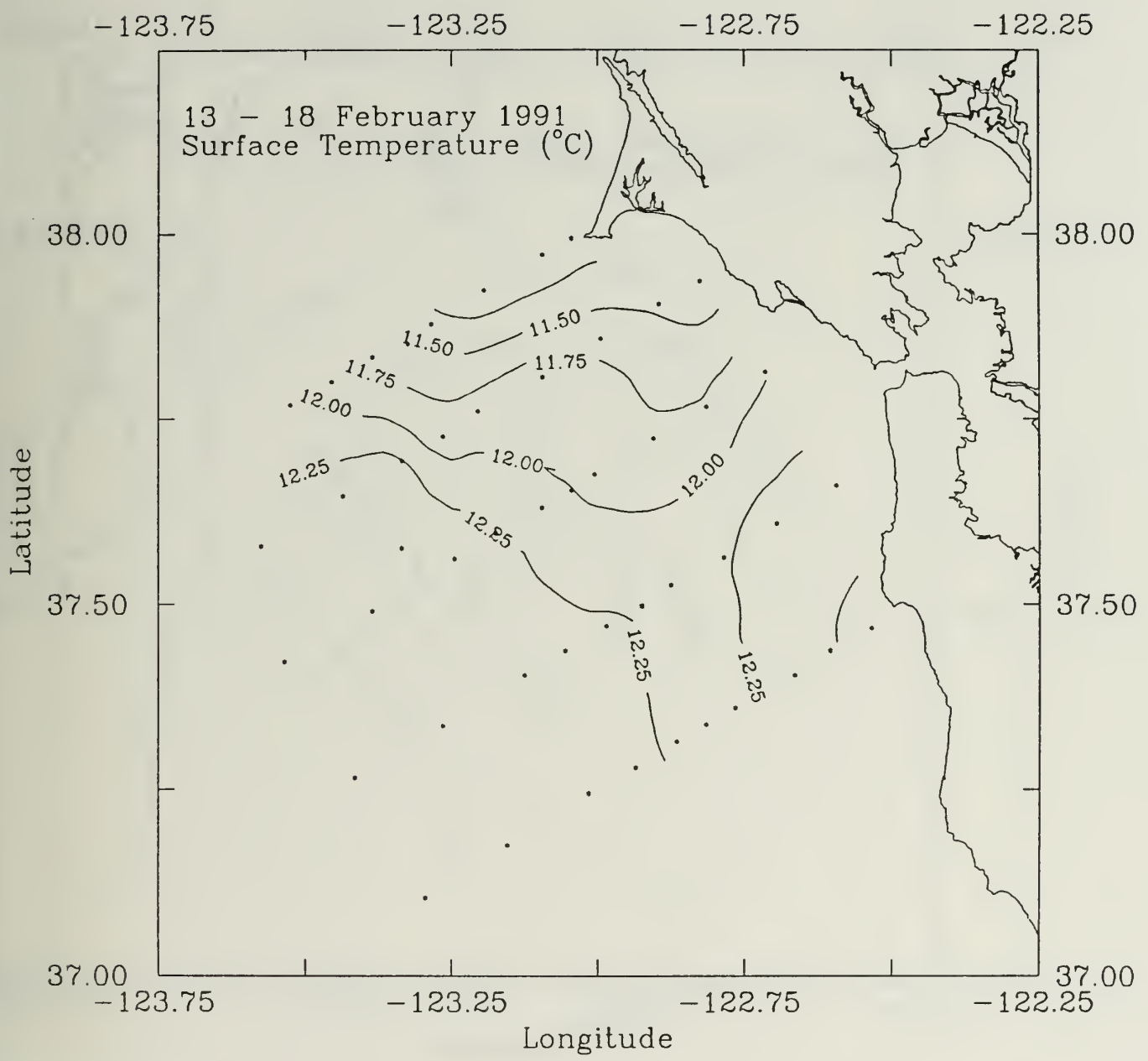

Figure 7. Map of surface temperature (°C) during the Farallones Shelf and Slope cruise, February 13-18, 1991.

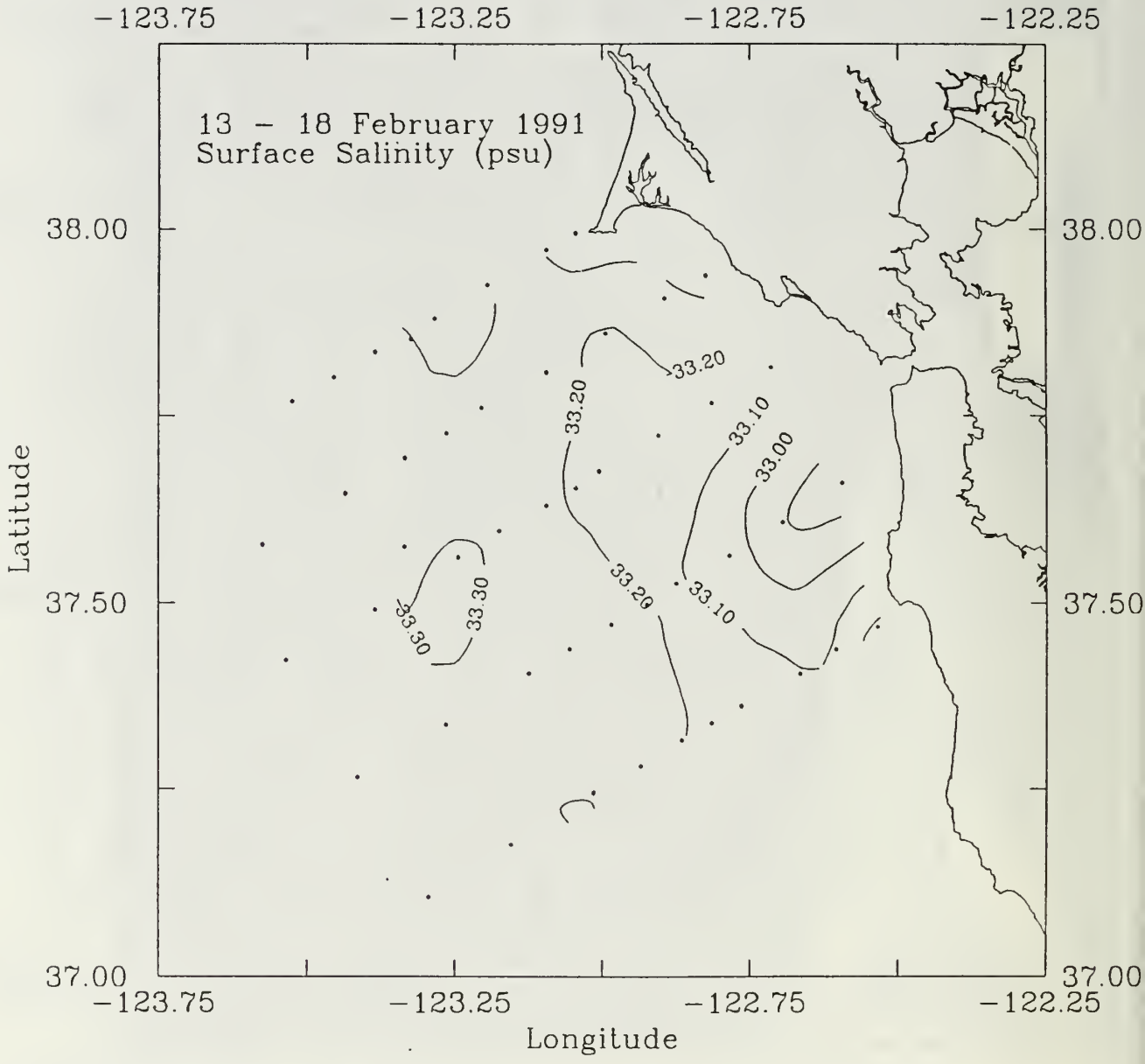

Figure 8. Map of surface salinity (psu) during the Farallones Shelf and Slope cruise, February 13-18, 1991.

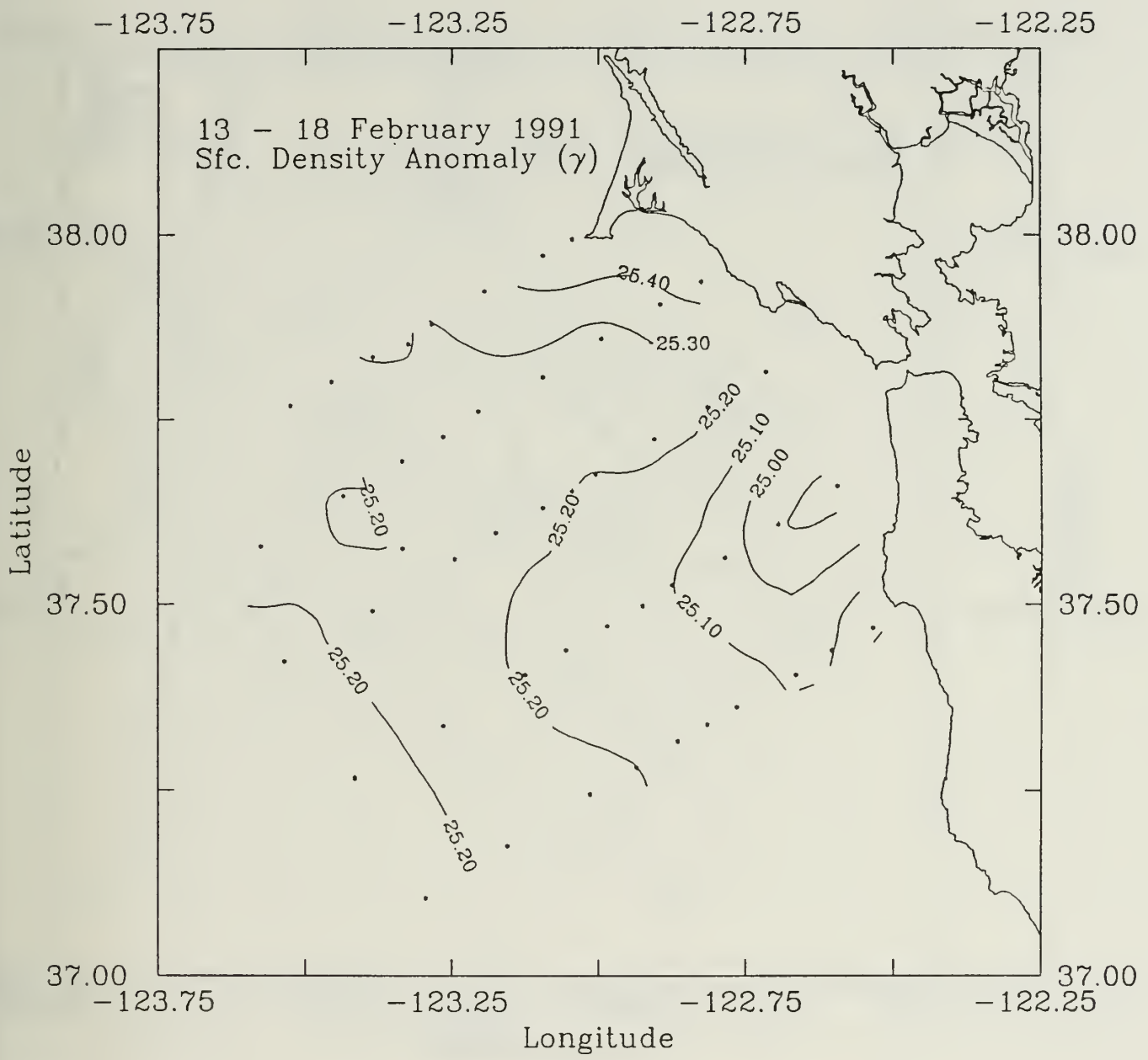

Figure 9. Map of surface density anomaly (γ) during the Farallones Shelf and Slope cruise, February 13-18, 1991.

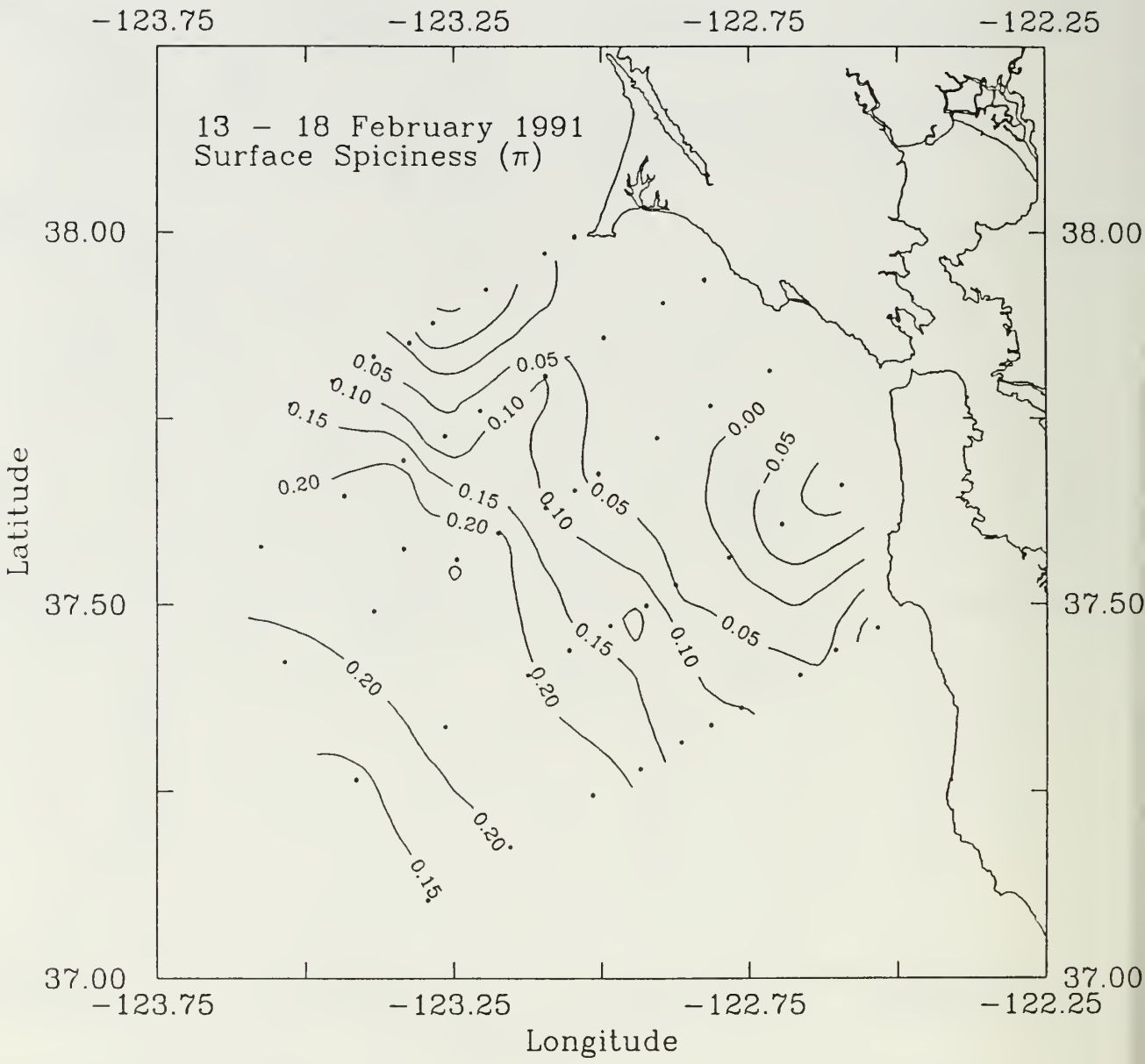

Figure 10. Map of surface spiciness (π) during the Farallones Shelf and Slope cruise, February 13-18, 1991.

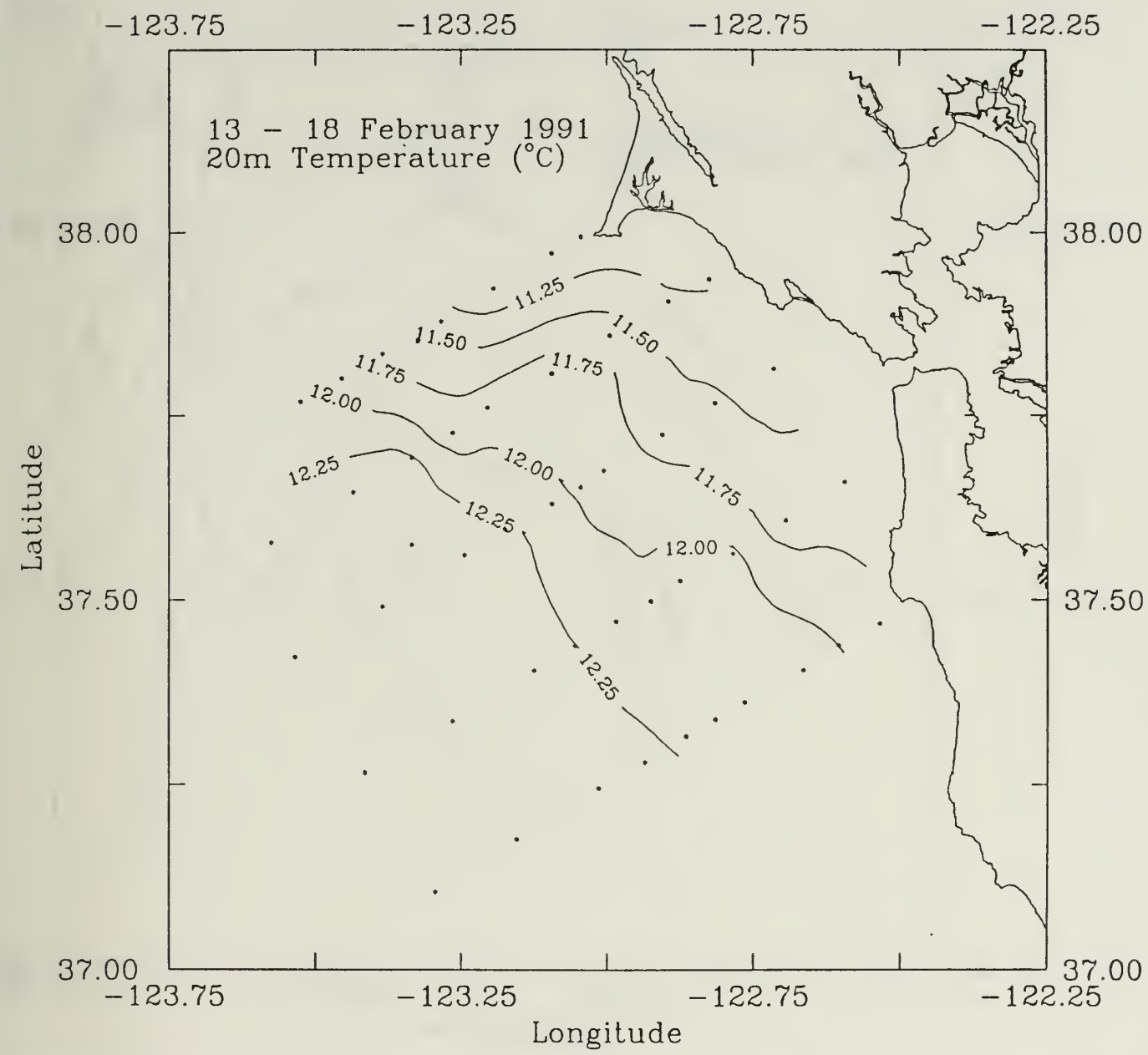

Figure 11. Map of temperature (°C) at 20m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

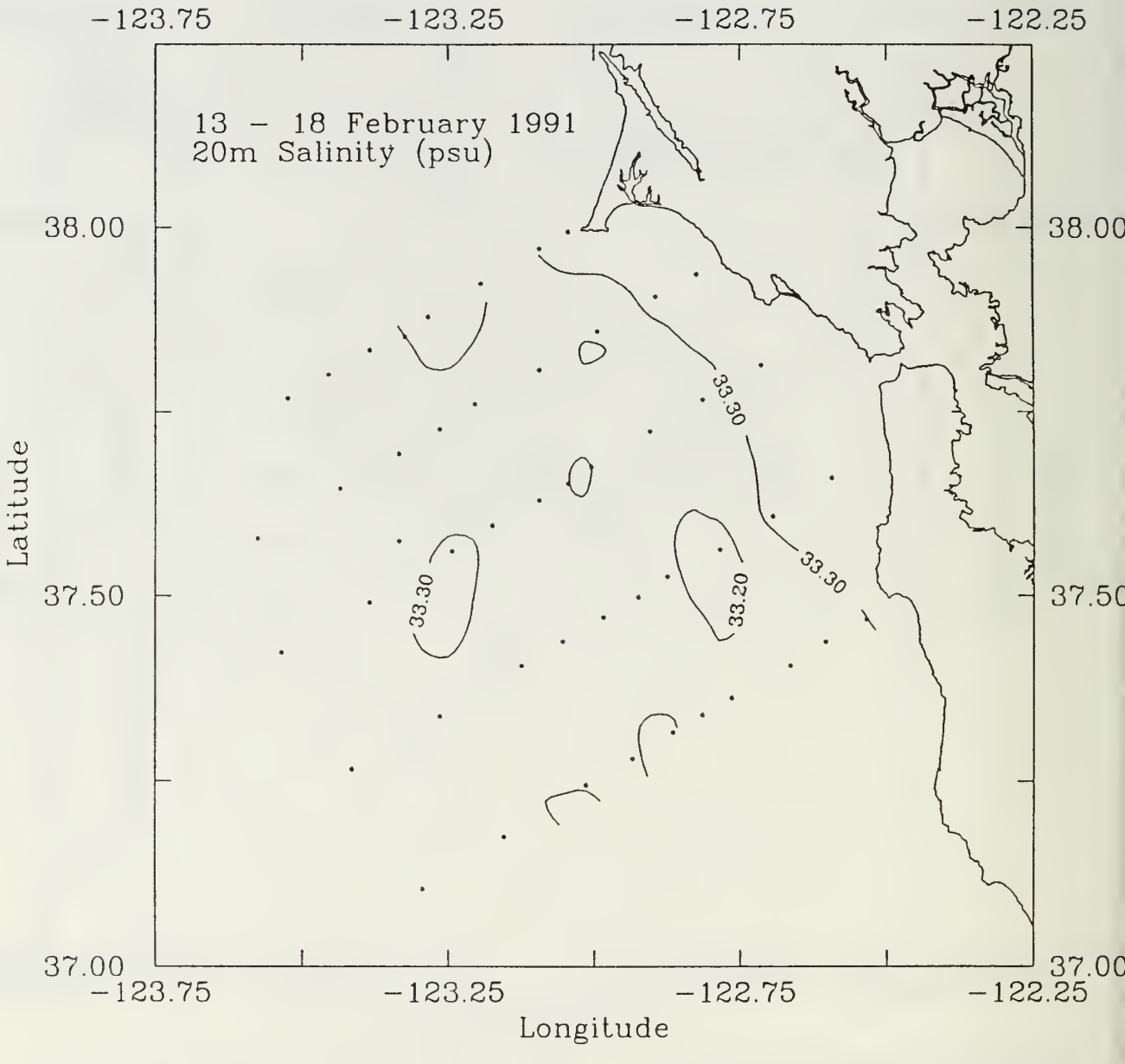

Figure 12. Map of salinity (psu) at 20m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

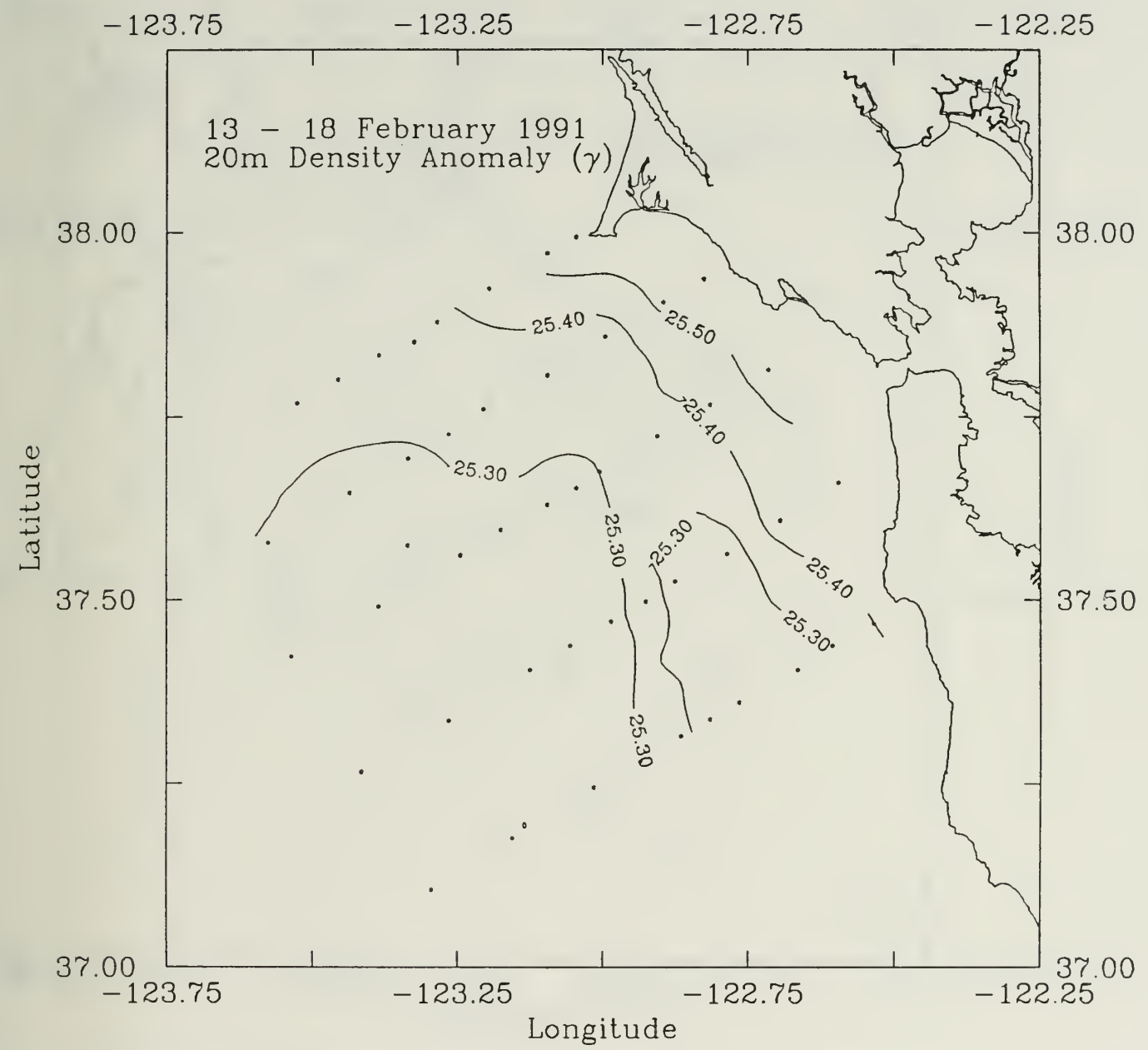

Figure 13. Map of density anomaly (γ) at 20m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

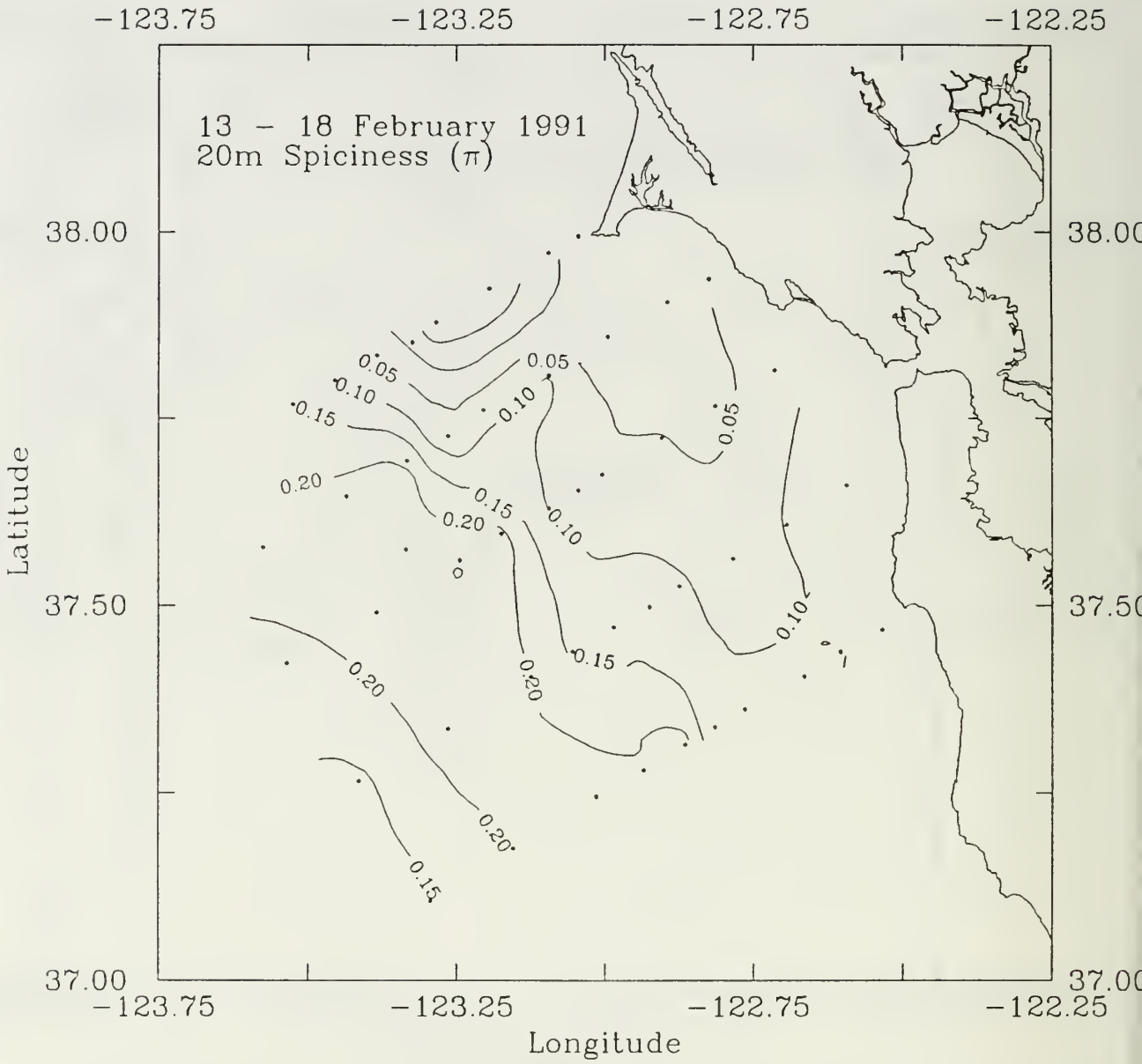

Figure 14. Map of spiciness (π) at 20m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

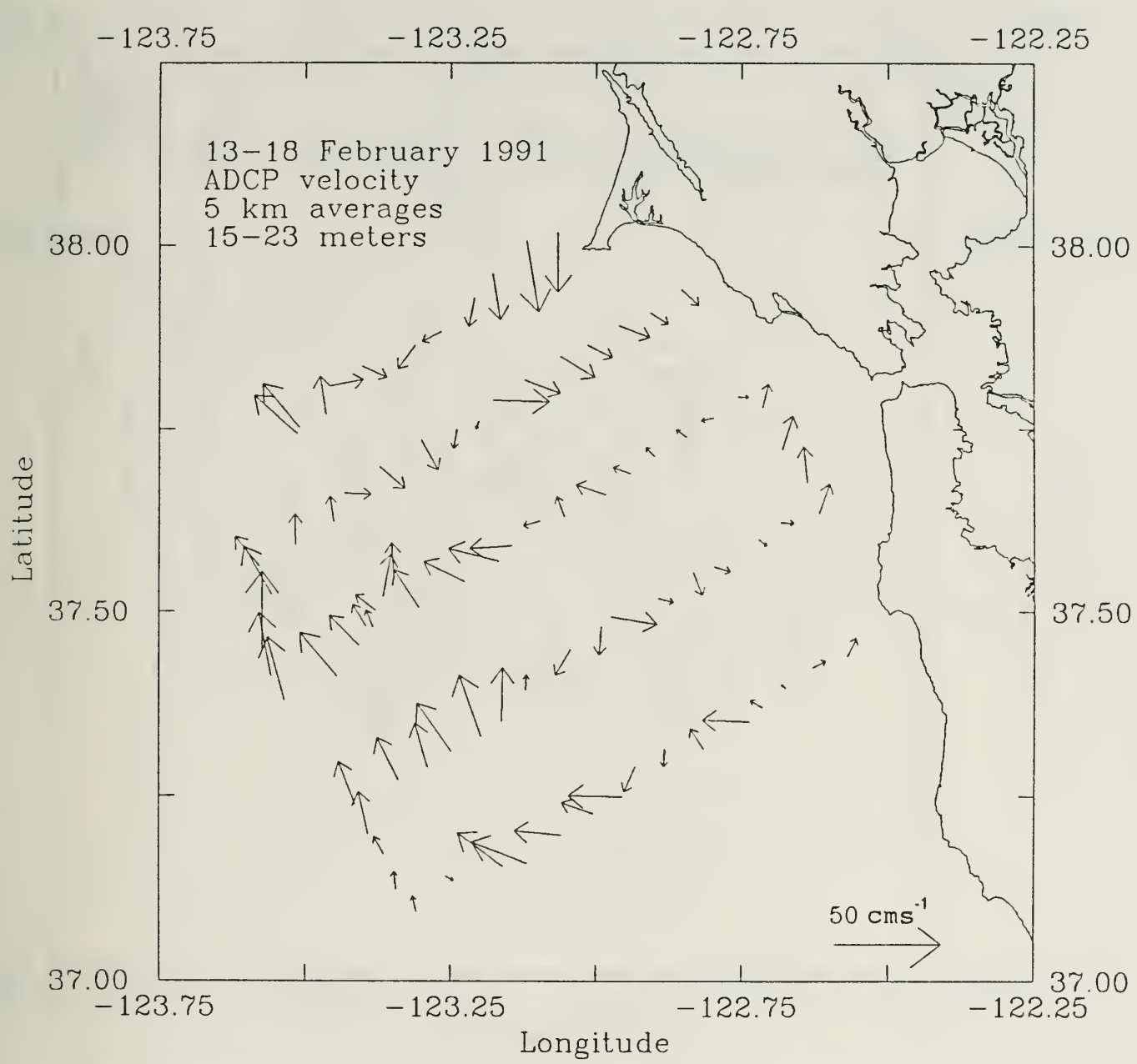

Figure 15. 5 km averaged ADCP current vectors (cm s^{-1}) from 15-23m during the occupation of the CTD stations of the Farallones Shelf and Slope cruise, February 13-18, 1991.

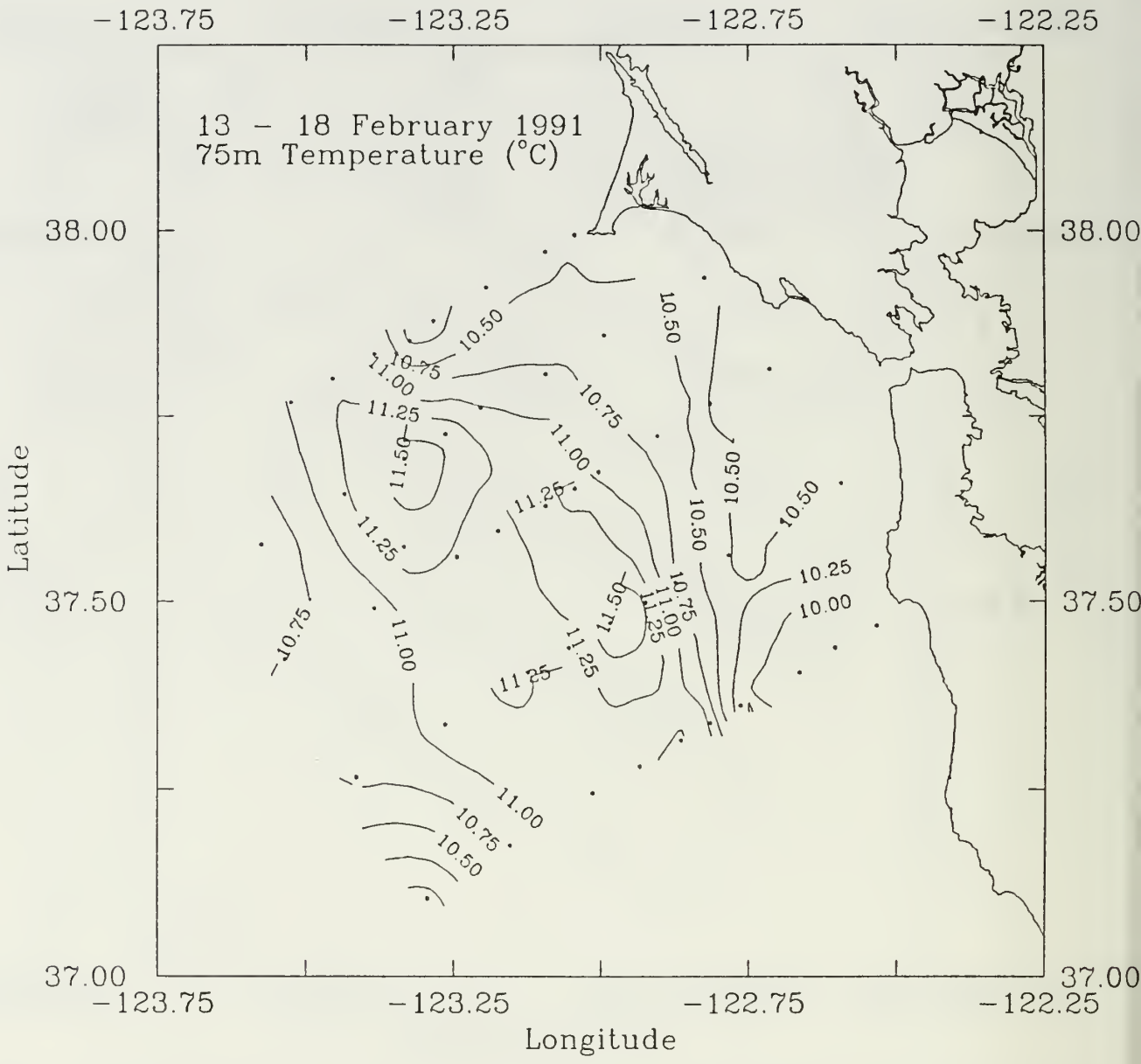

Figure 16. Map of temperature (°C) at 75m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

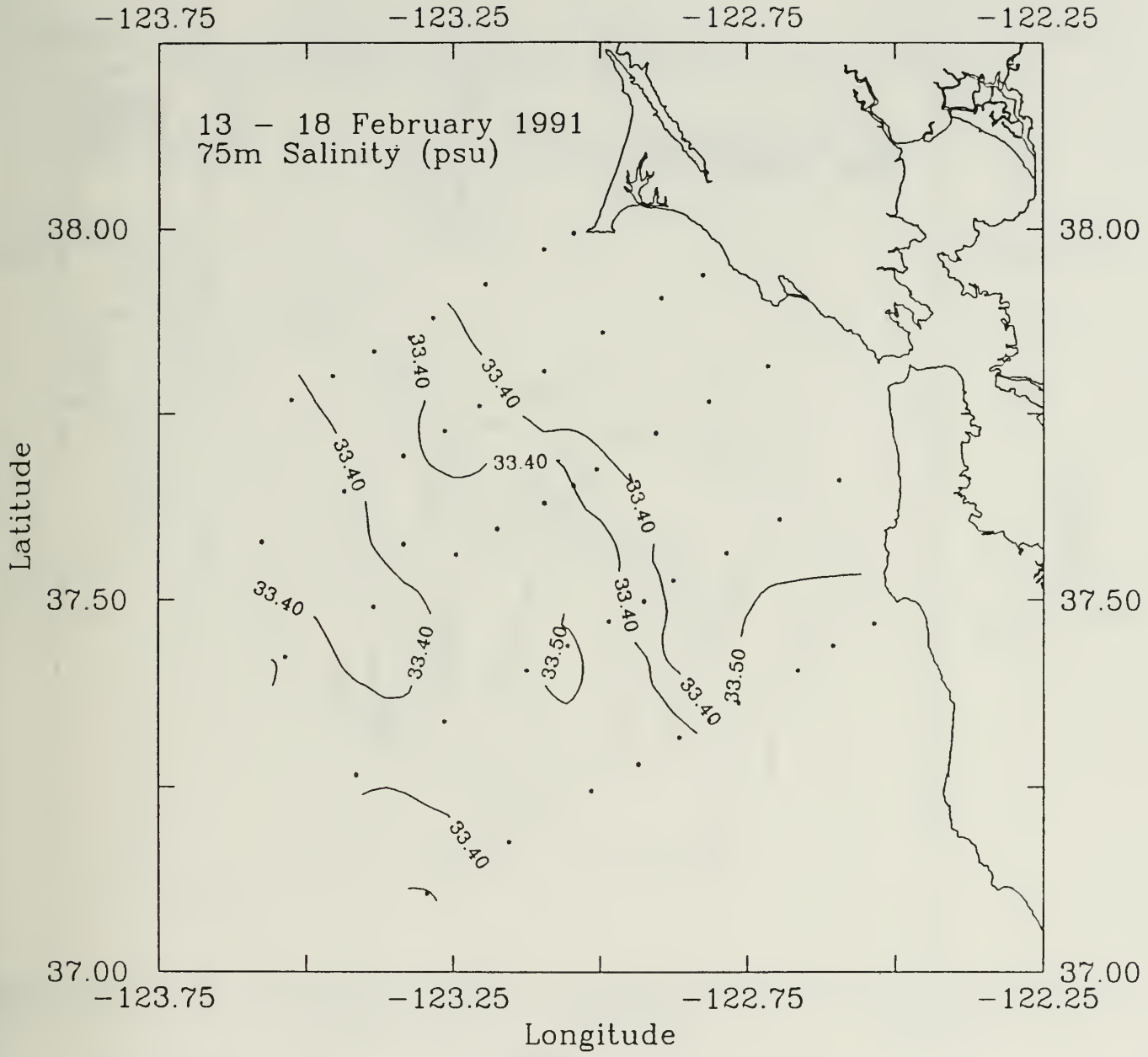

Figure 17. Map of salinity (psu) at 75m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

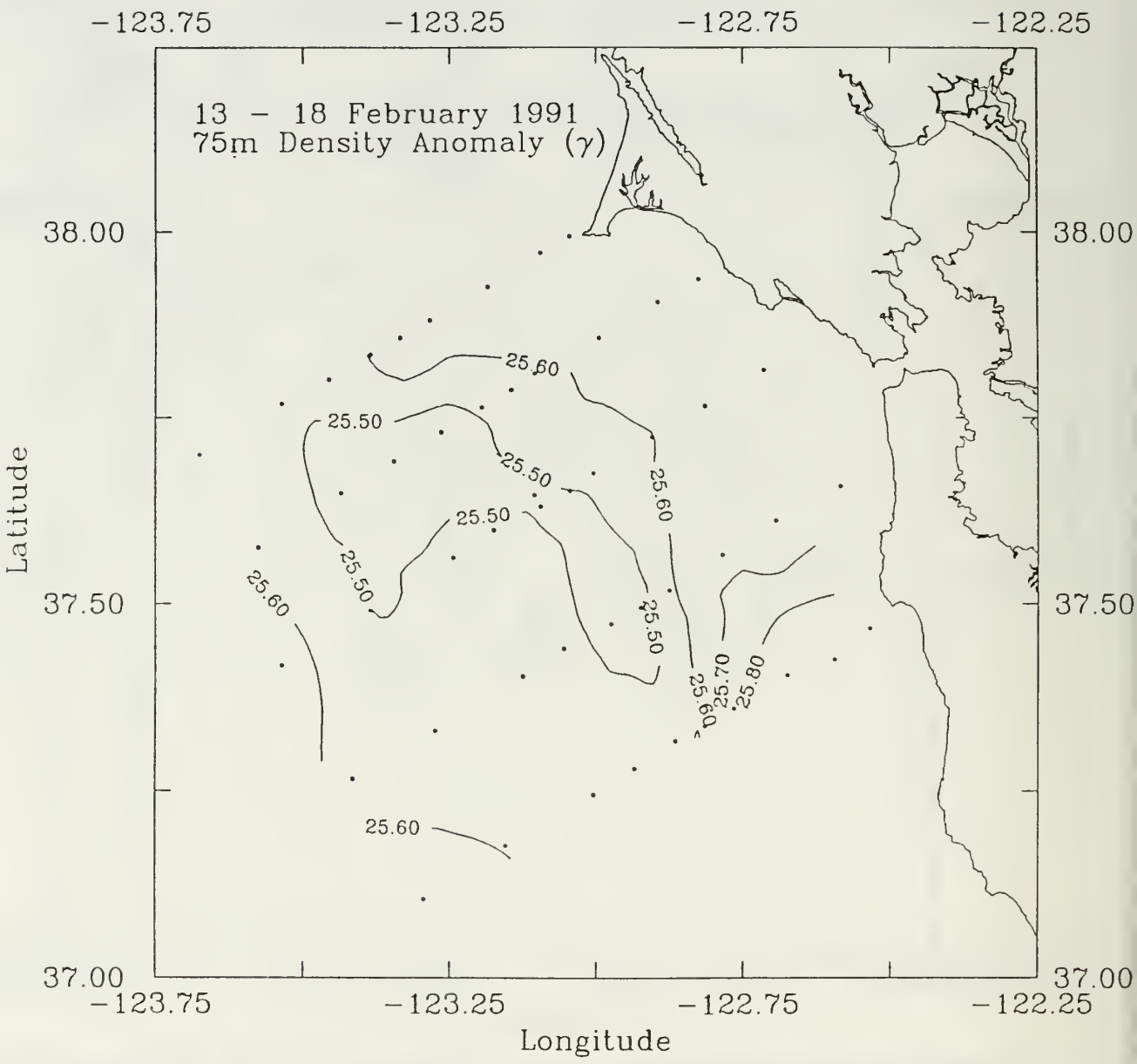

Figure 18. Map of density anomaly (γ) at 75m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

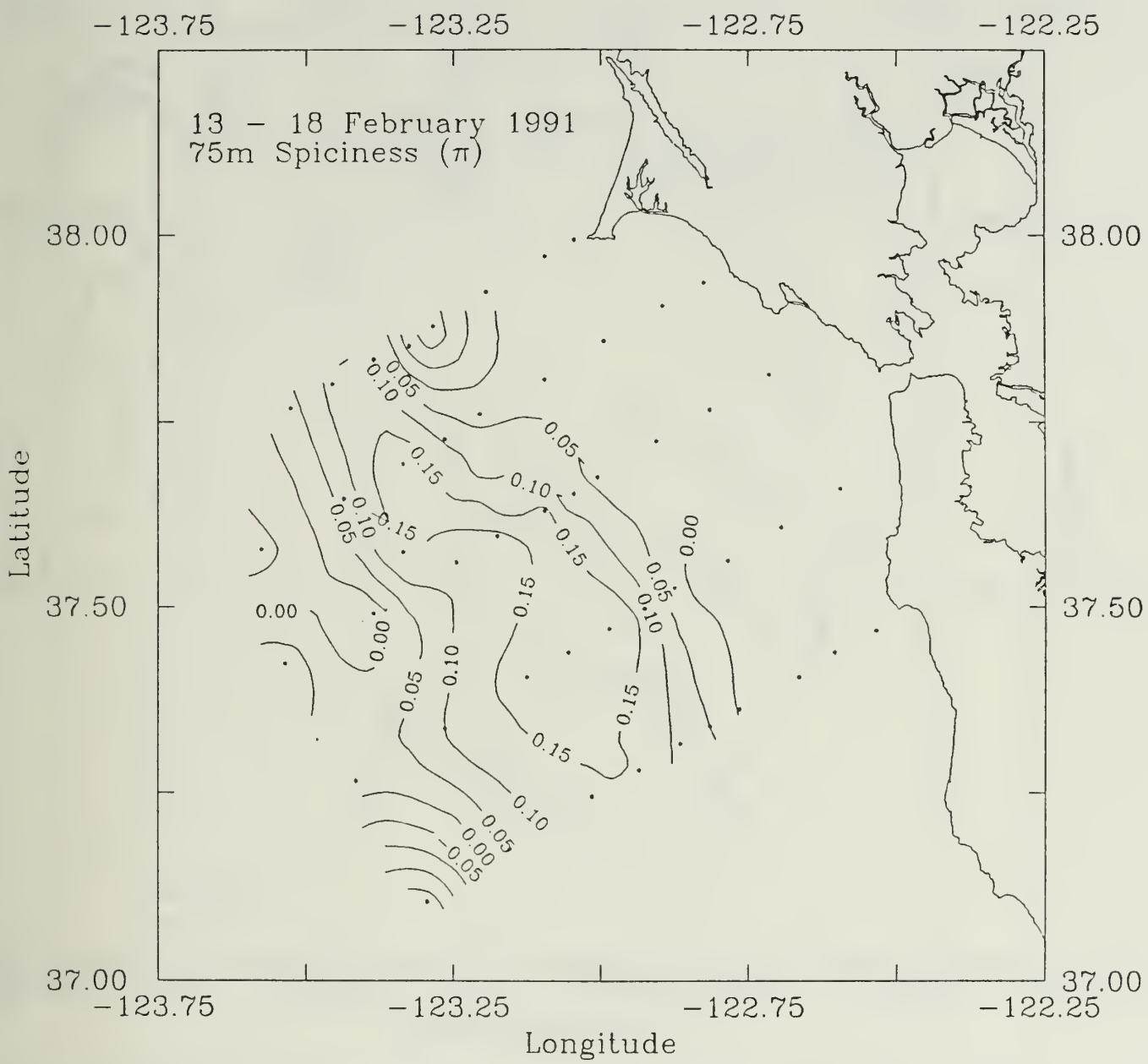

Figure 19. Map of spiciness (π) at 75m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

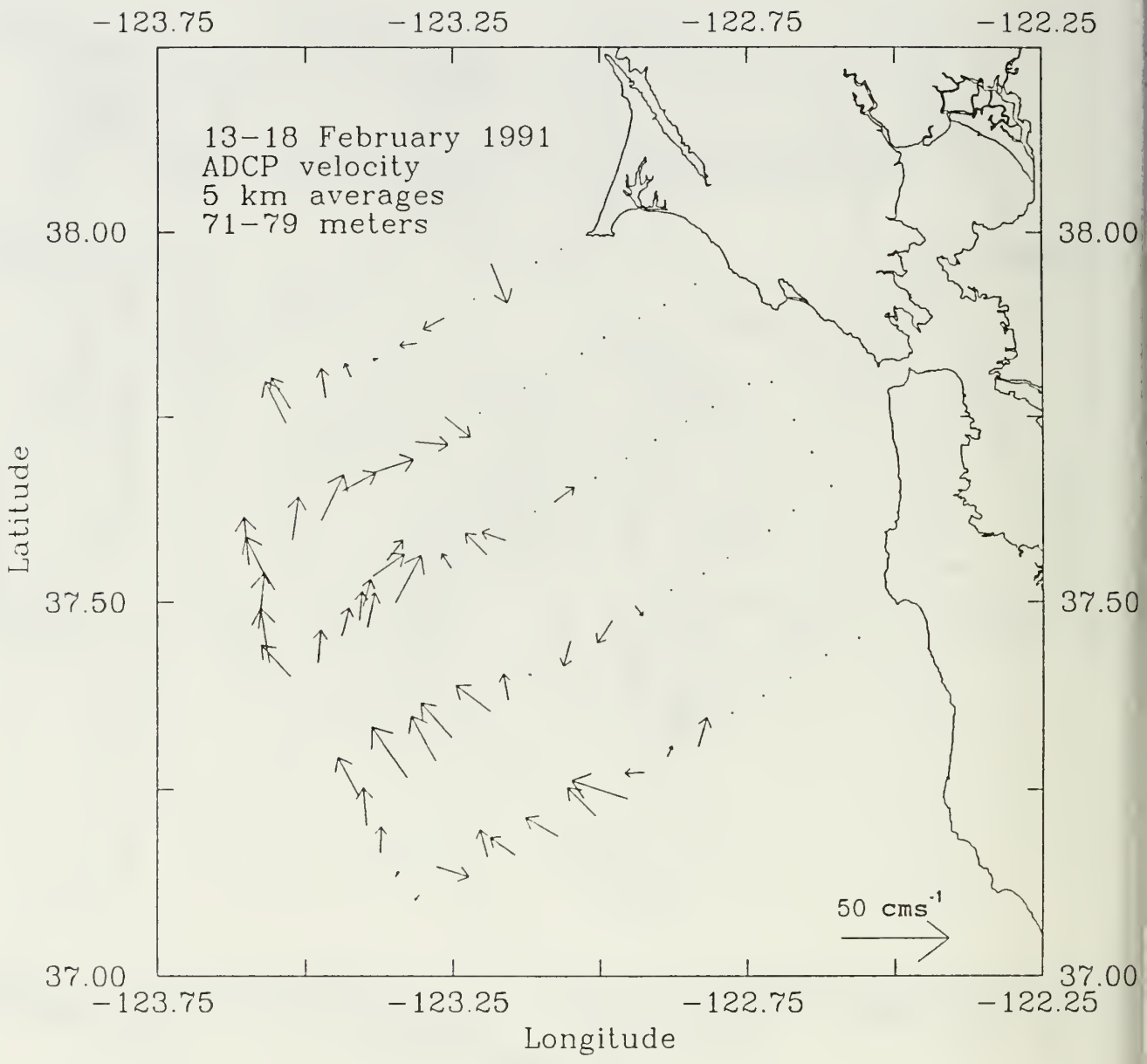

Figure 20. 5 km averaged ADCP current vectors (cm s^{-1}) from 71-79m during the occupation of the CTD stations of the Farallones Shelf and Slope cruise, February 13-18, 1991.

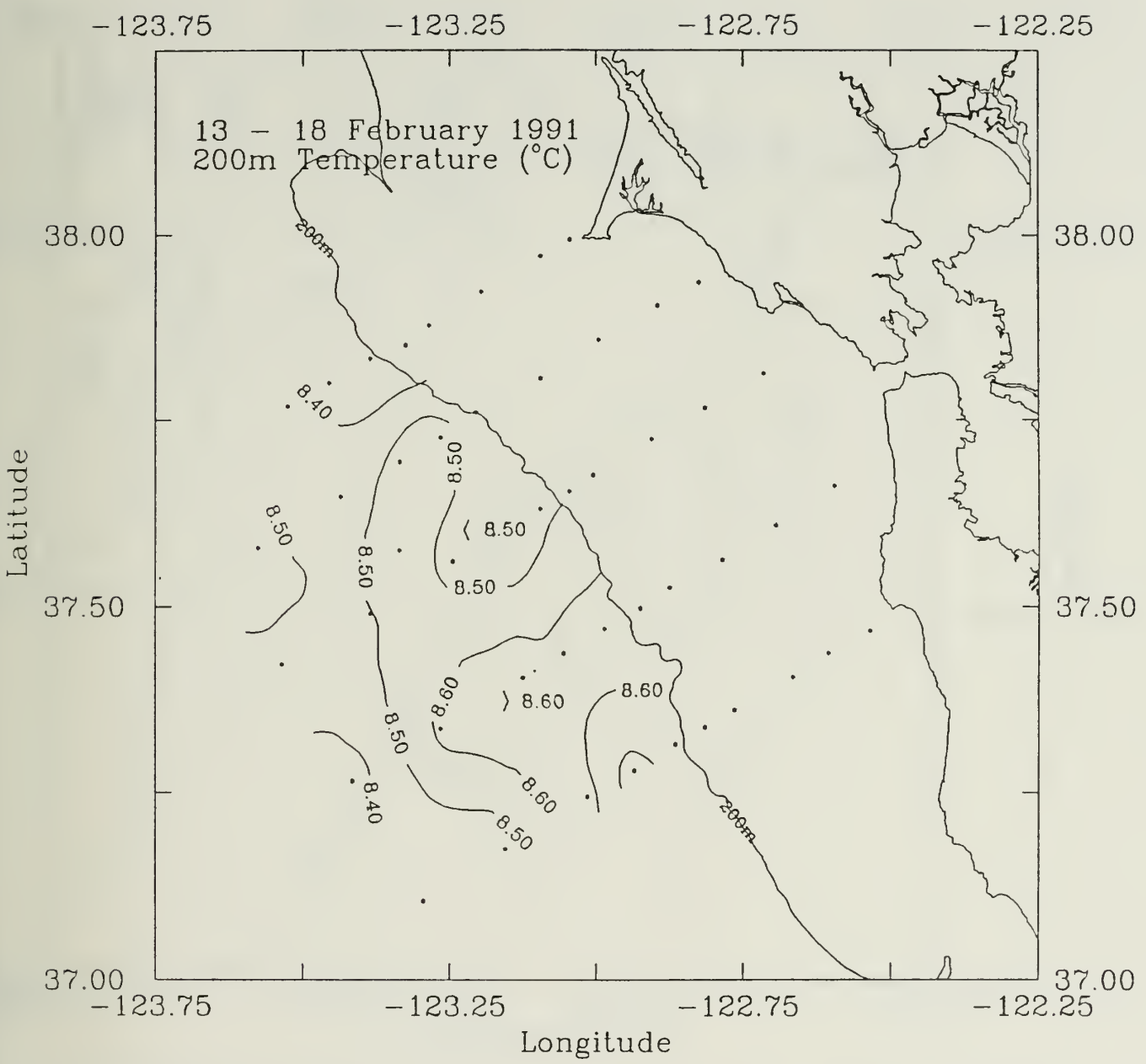

Figure 21. Map of temperature (°C) at 200m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

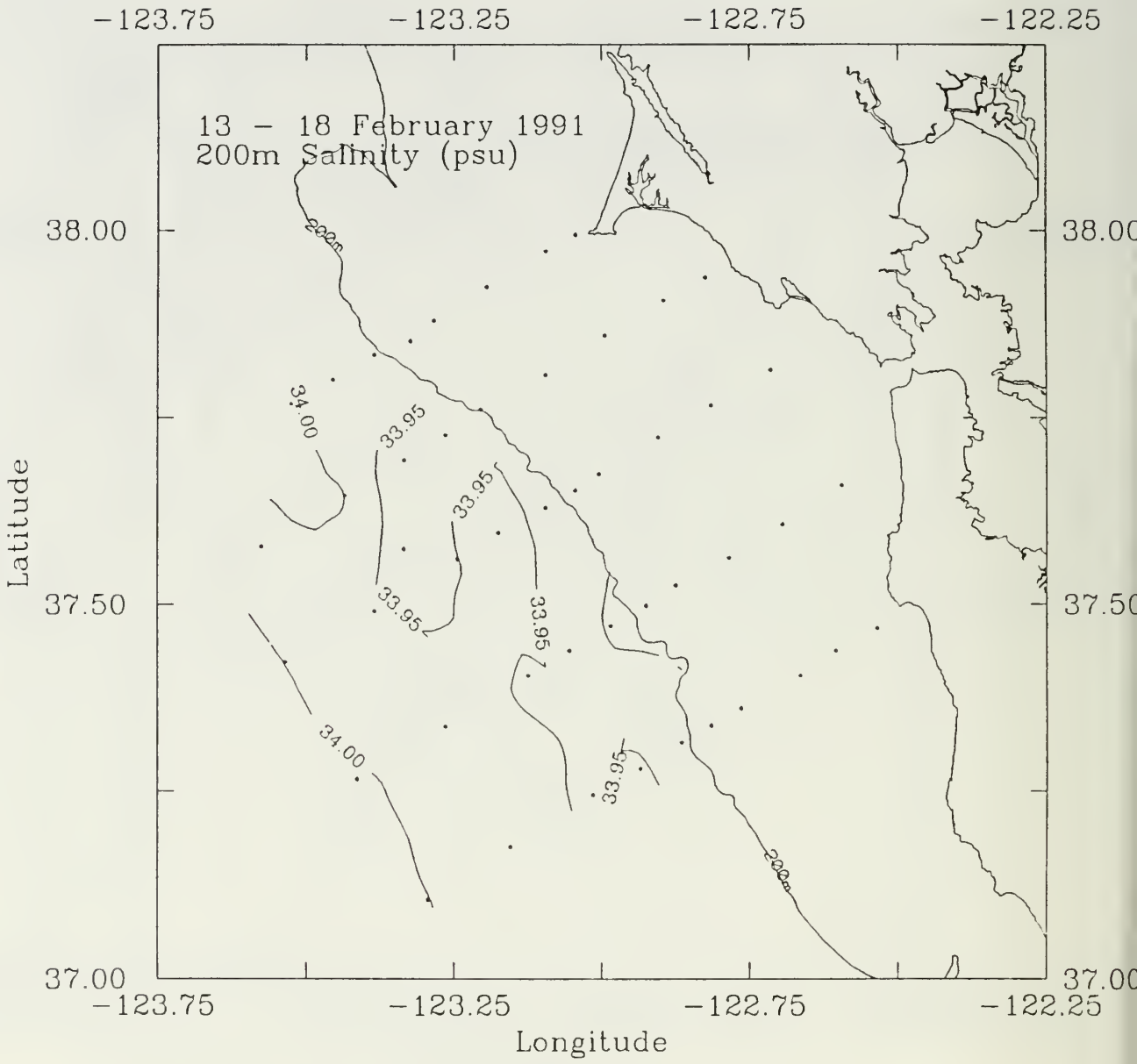

Figure 22. Map of salinity (psu) at 200m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

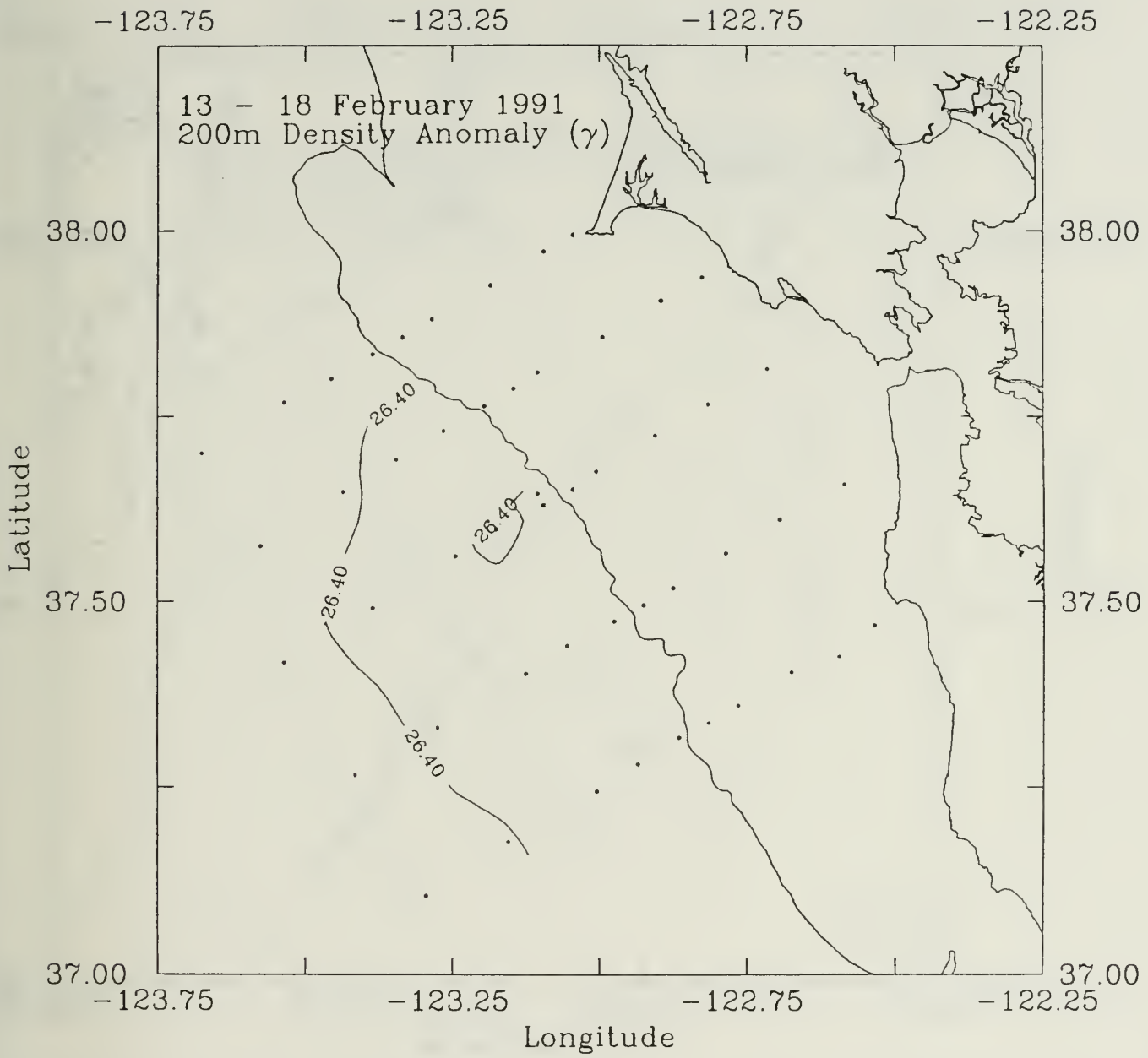

Figure 23. Map of density anomaly (γ) at 200m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

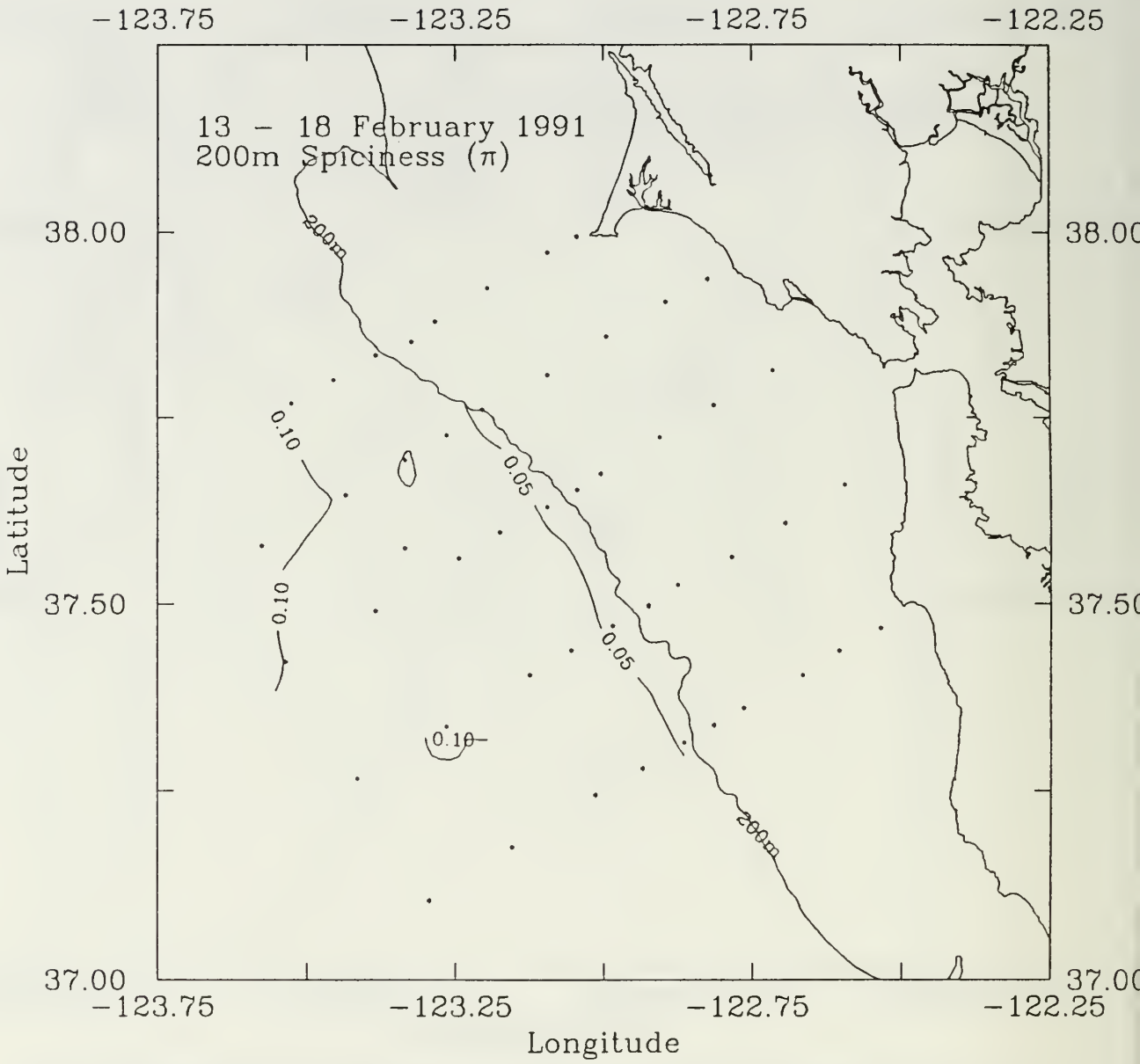

Figure 24. Map of spiciness (π) at 200m depth during the Farallones Shelf and Slope cruise, February 13-18, 1991.

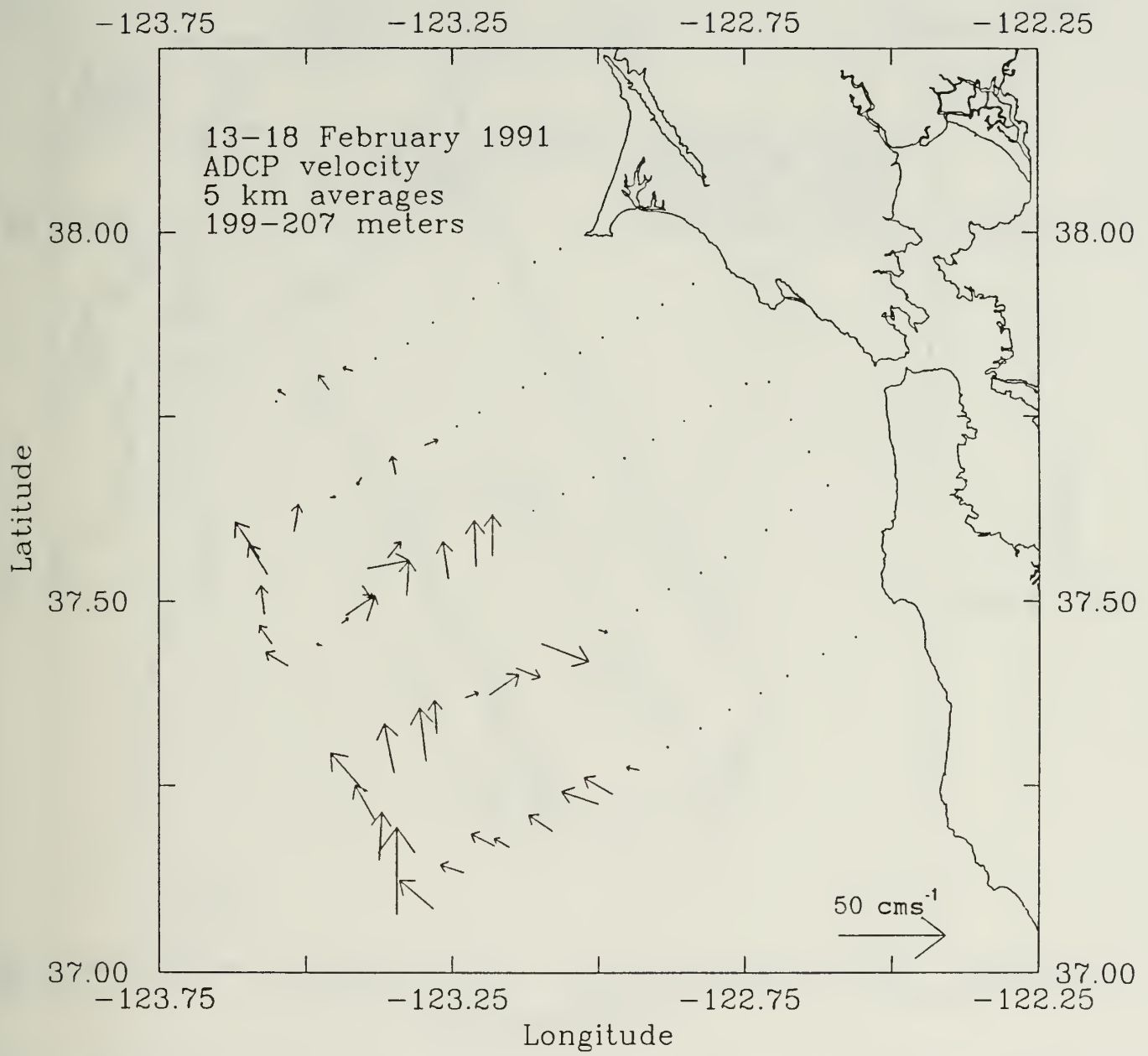

Figure 25. 5 km averaged ADCP current vectors (cm s^{-1}) from 199-207m during the occupation of the CTD stations of the Farallones Shelf and Slope cruise, February 13-18, 1991.

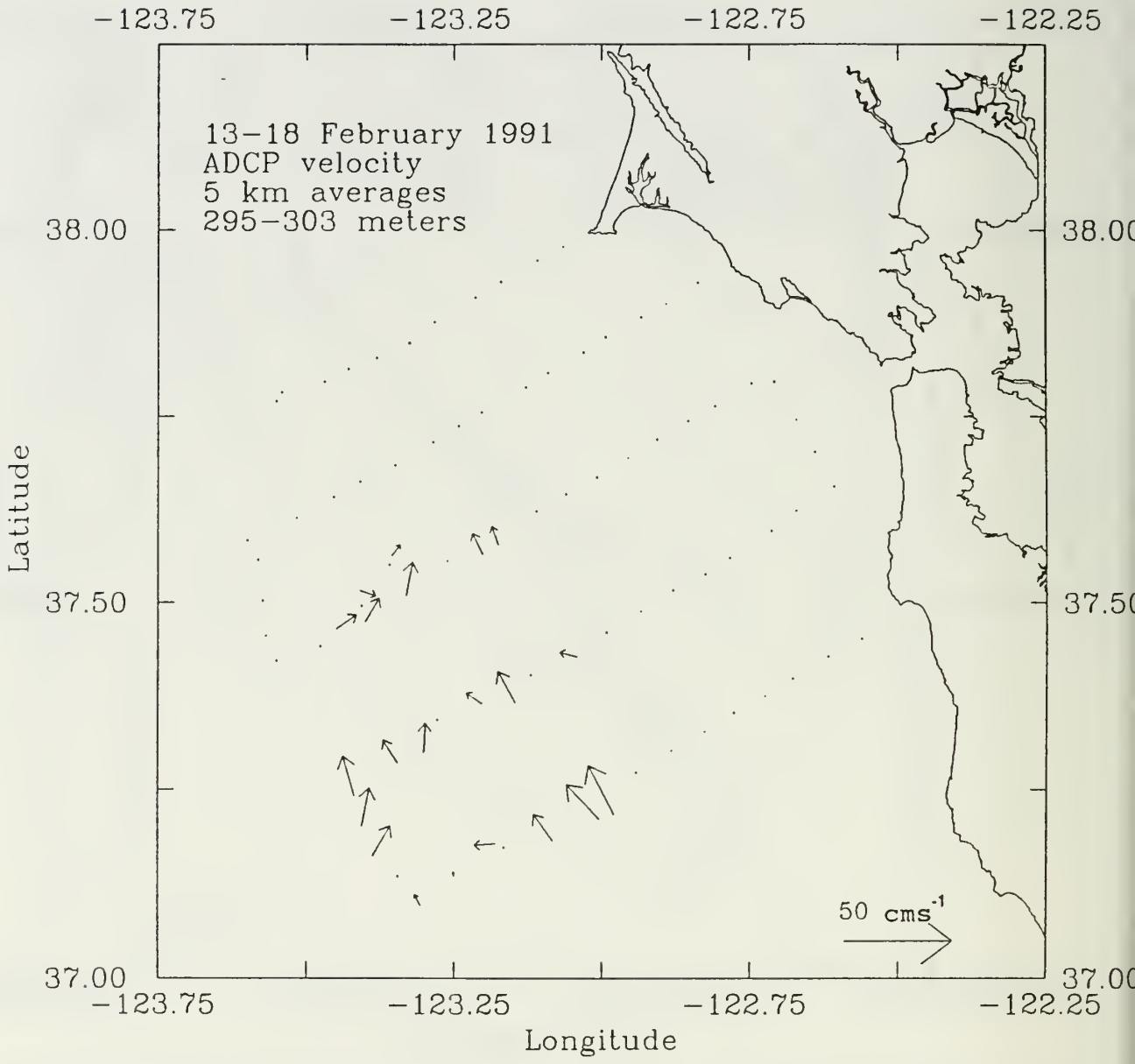

Figure 26. 5 km averaged ADCP current vectors (cm s^{-1}) from 295-303m during the occupation of the CTD stations of the Farallones Shelf and Slope cruise, February 13-18, 1991.

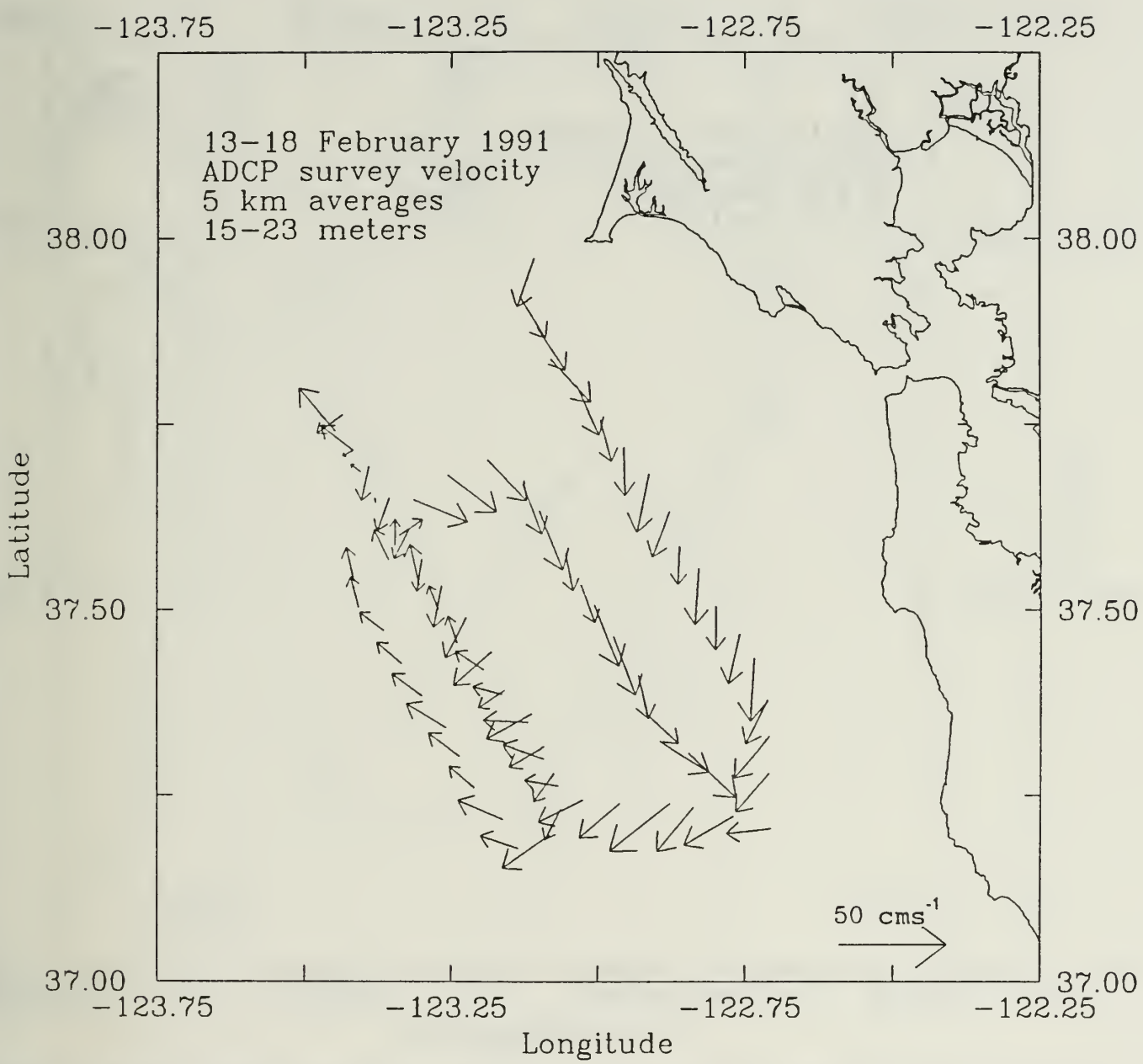

Figure 27. 5 km averaged ADCP current vectors (cm s^{-1}) from 15-23m during the ADCP survey of the Farallones Shelf and Slope cruise, February 13-18, 1991.

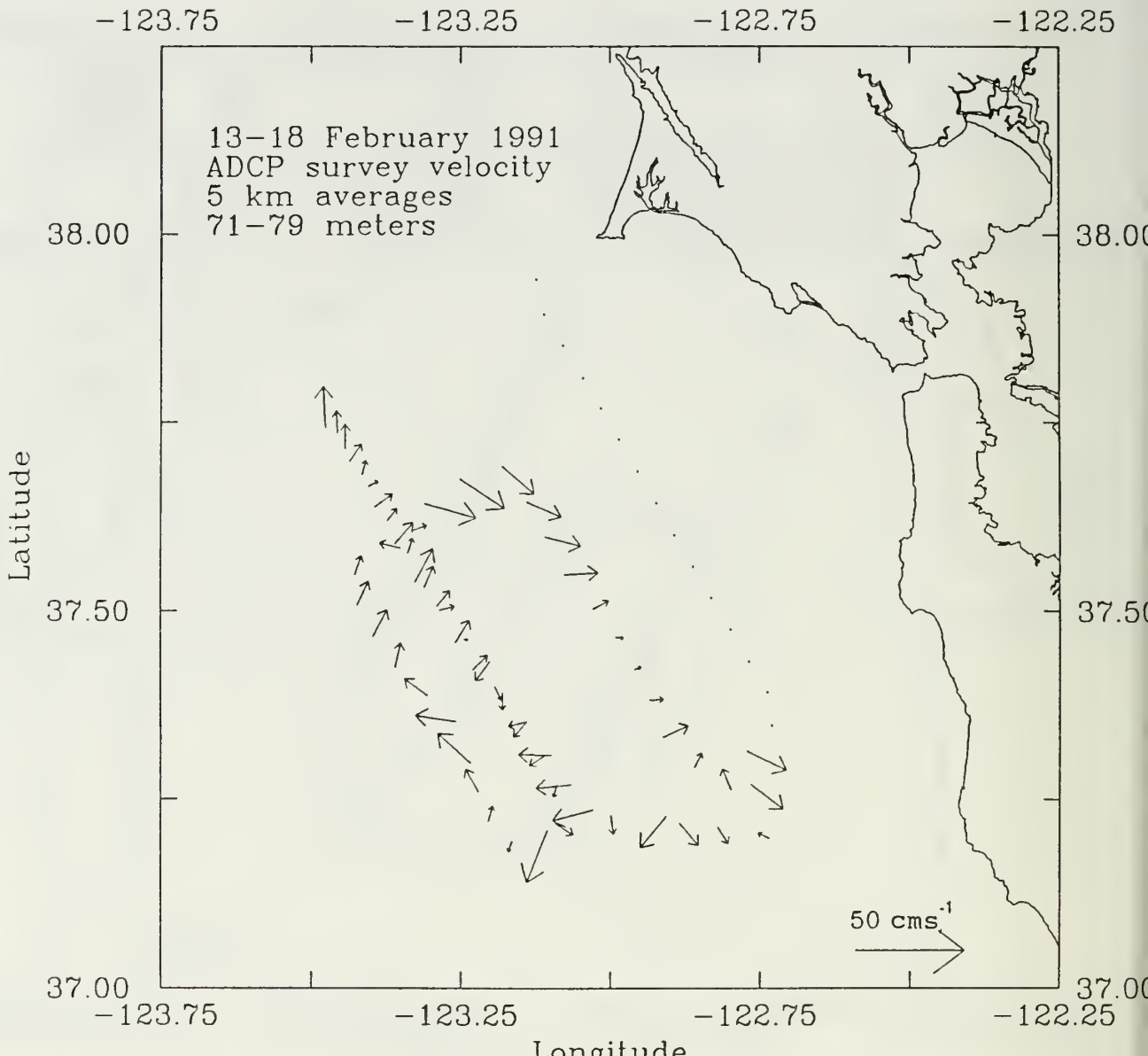

Figure 28. 5 km averaged ADCP current vectors (cm s^{-1}) from 71-79m during the ADCP survey of the Farallones Shelf and Slope cruise, February 13-18, 1991.

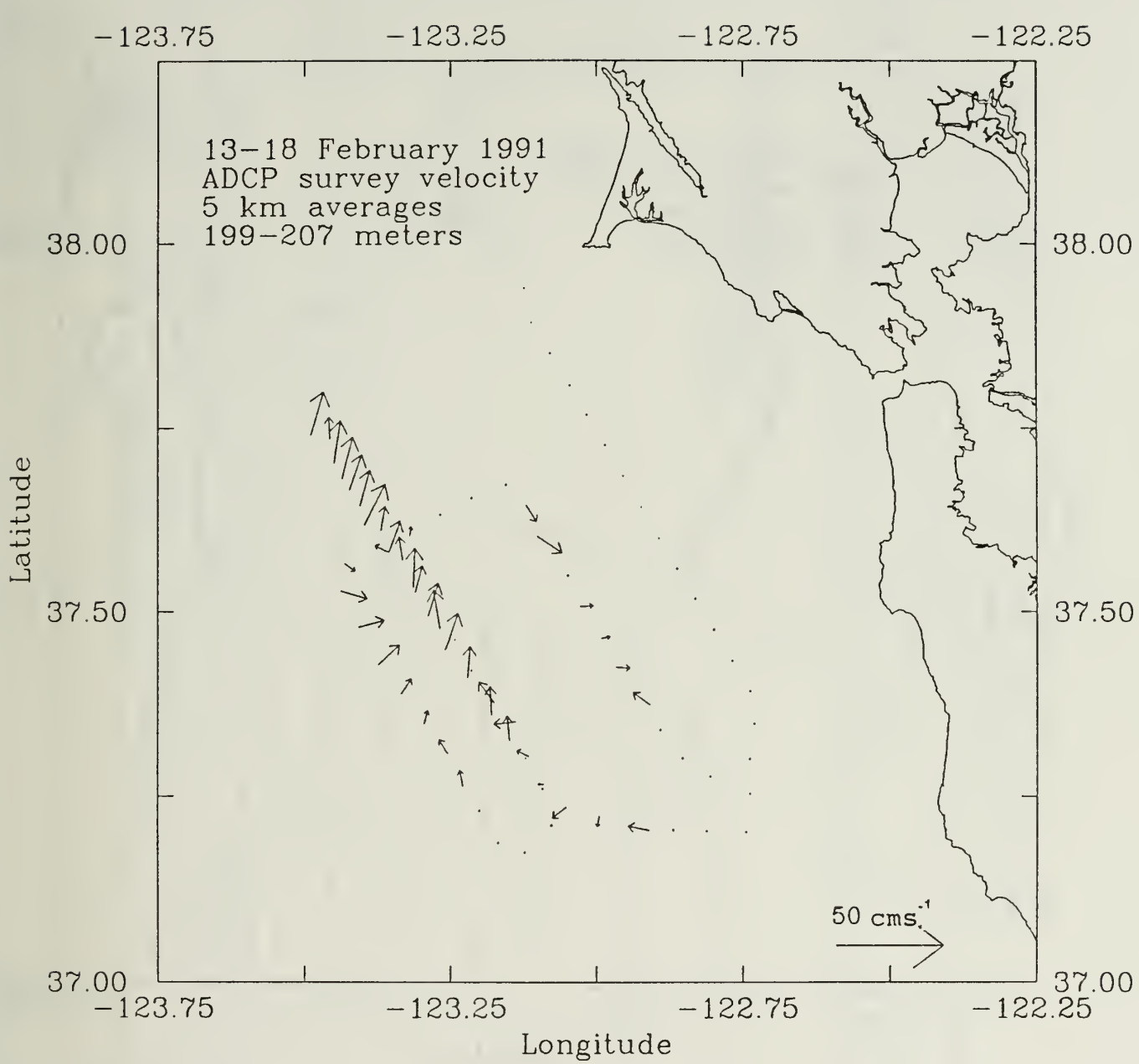

Figure 29. 5 km averaged ADCP current vectors (cm s^{-1}) from 199-207m during the ADCP survey of the Farallones Shelf and Slope cruise, February 13-18, 1991.

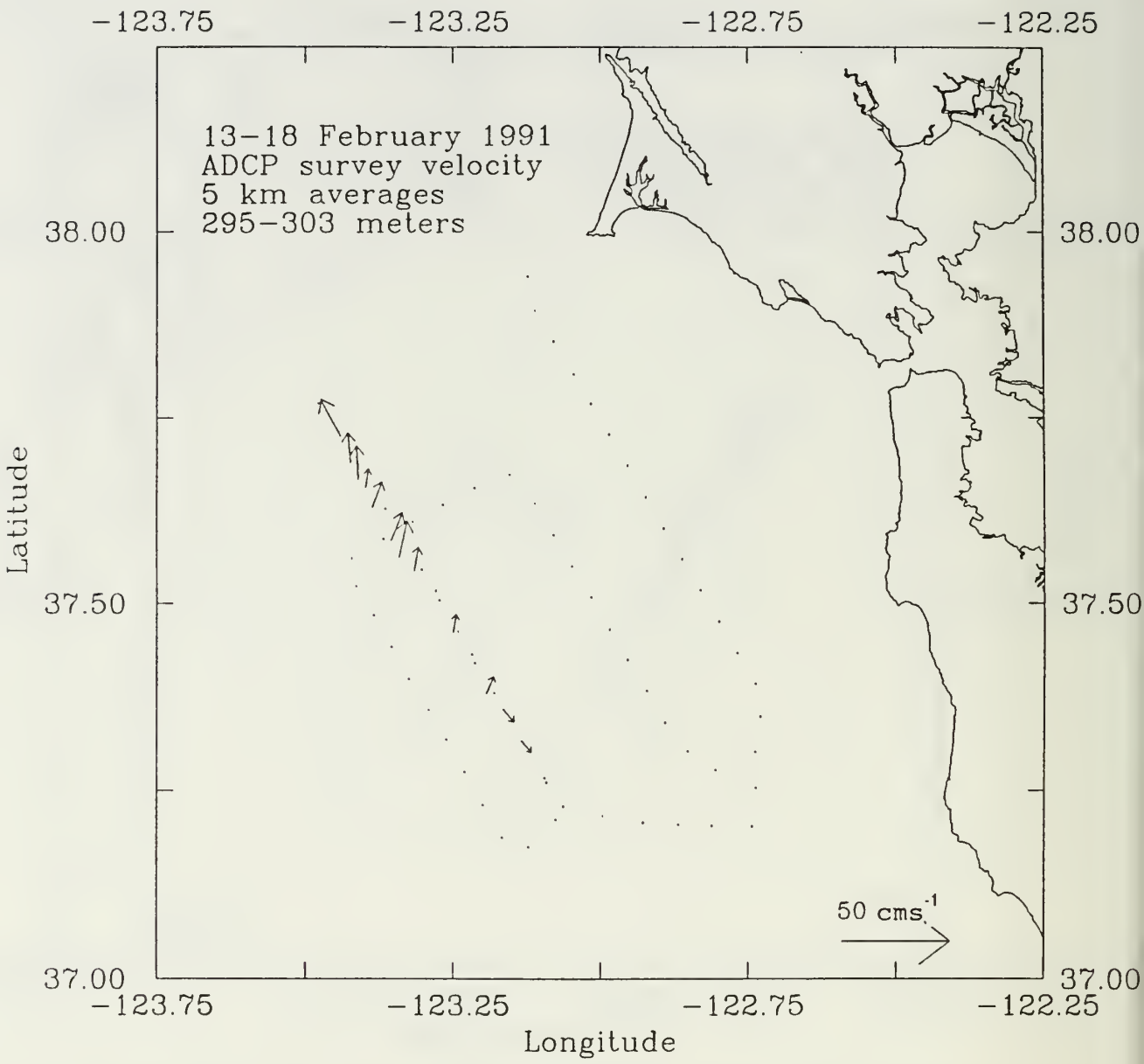

Figure 30. 5 km averaged ADCP current vectors (cm s^{-1}) from 295-303m during the ADCP survey of the Farallones Shelf and Slope cruise, February 13-18, 1991.

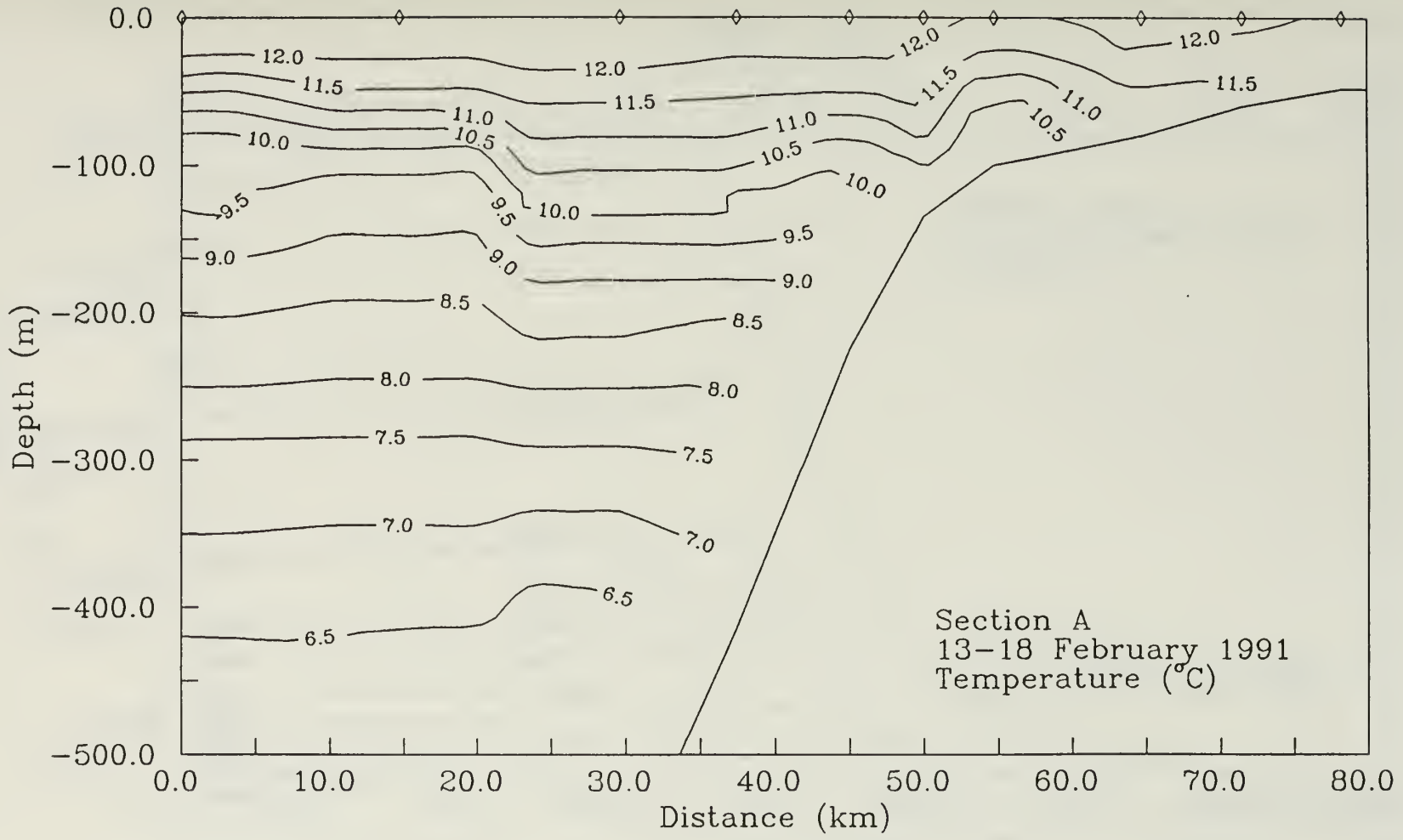

Figure 31. Vertical sections of a) temperature (°C), b) salinity (psu), c) density anomaly (kg m^{-3}), and d) spiciness (π) for section A (CTD stations 1 - 10) of the Farallones Shelf and Slope cruise, February 13-18, 1991.

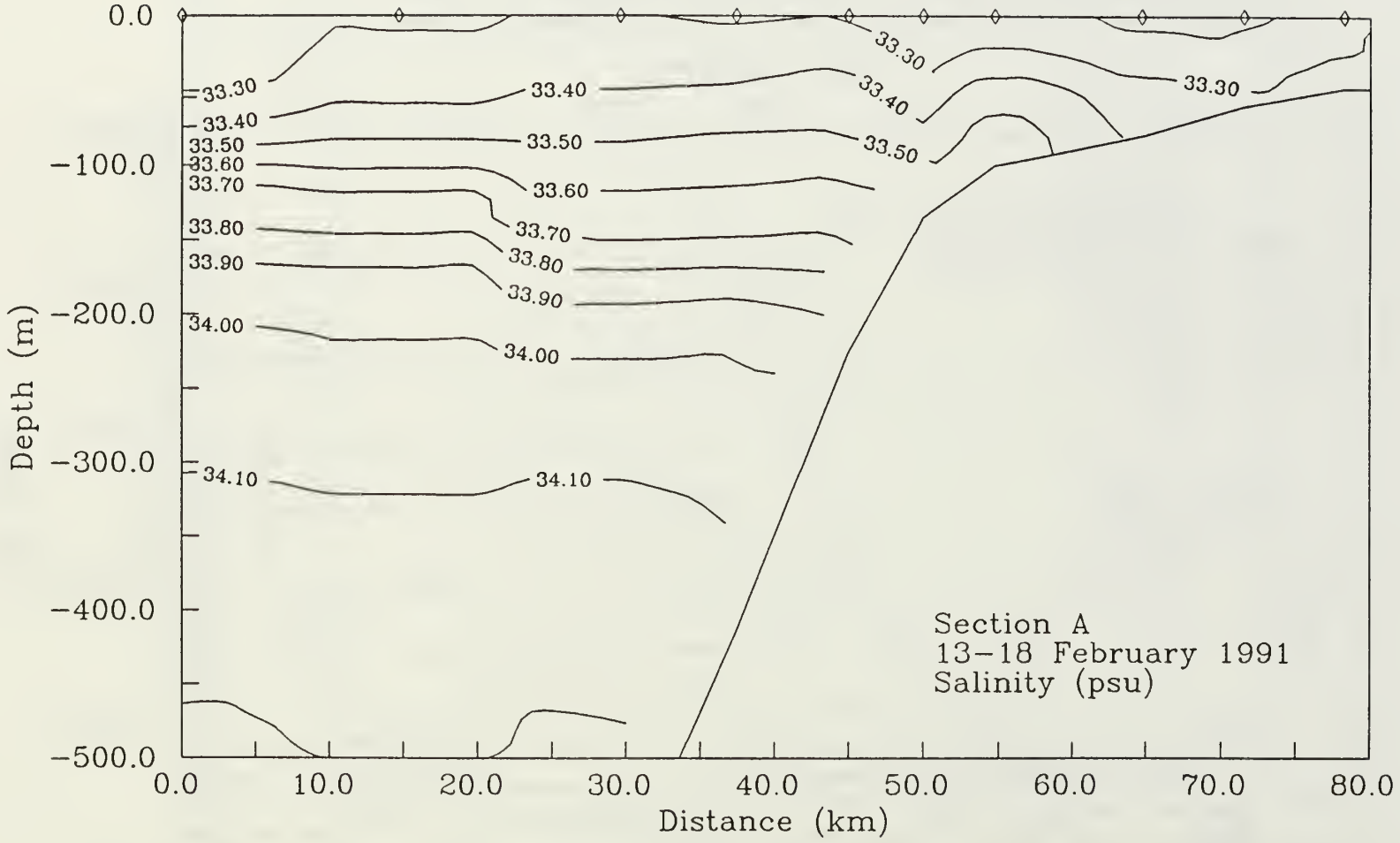
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
Section A
13-18 February 1991
Salinity (psu)

Figure 31b.

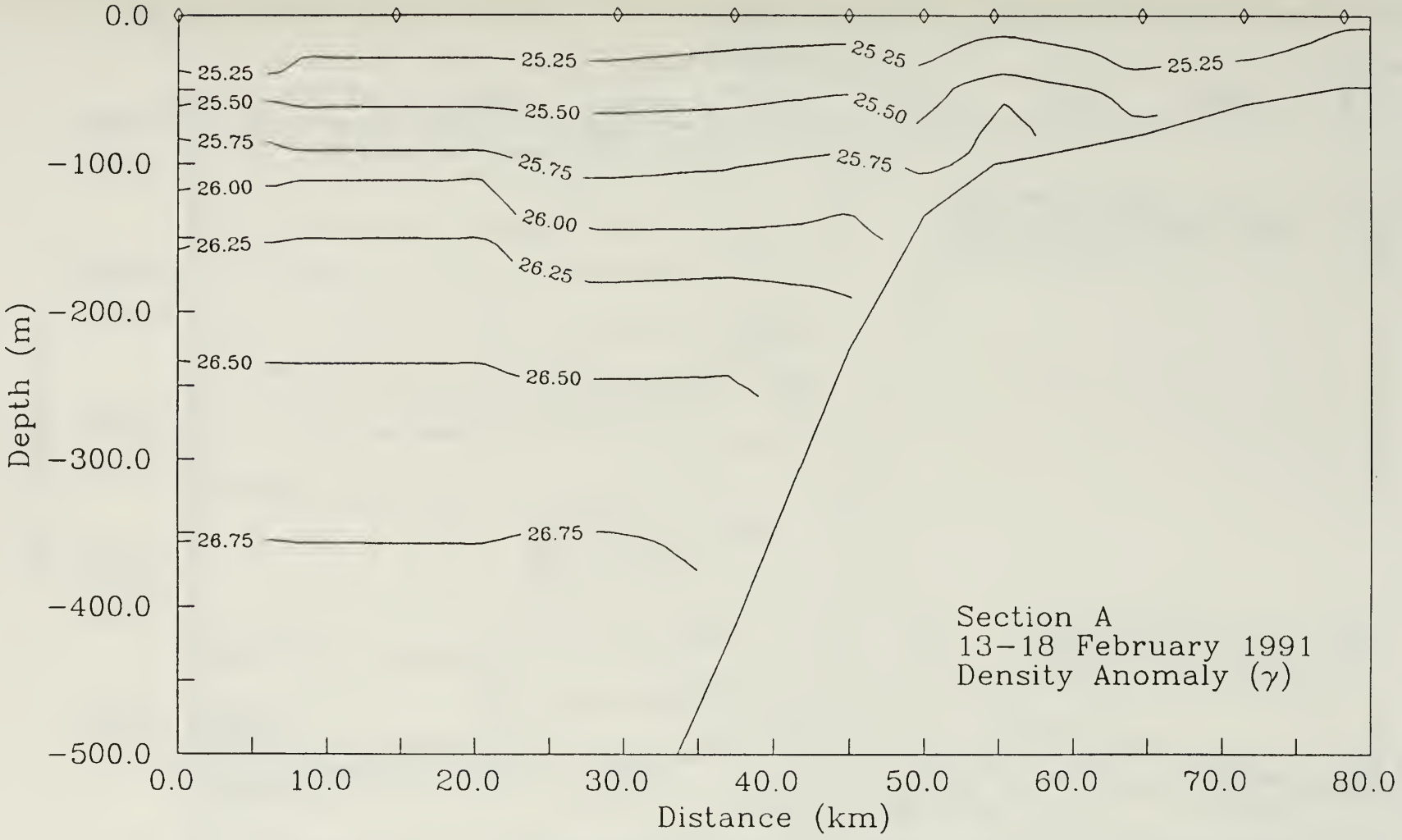
0.0
−100.0
−200.0
−300.0
−400.0
−500.0
Depth (m)
25.25
25.50
25.75
26.00
26.25
26.50
26.75
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
Section A
13−18 February 1991
Density Anomaly (γ)

Figure 31c.

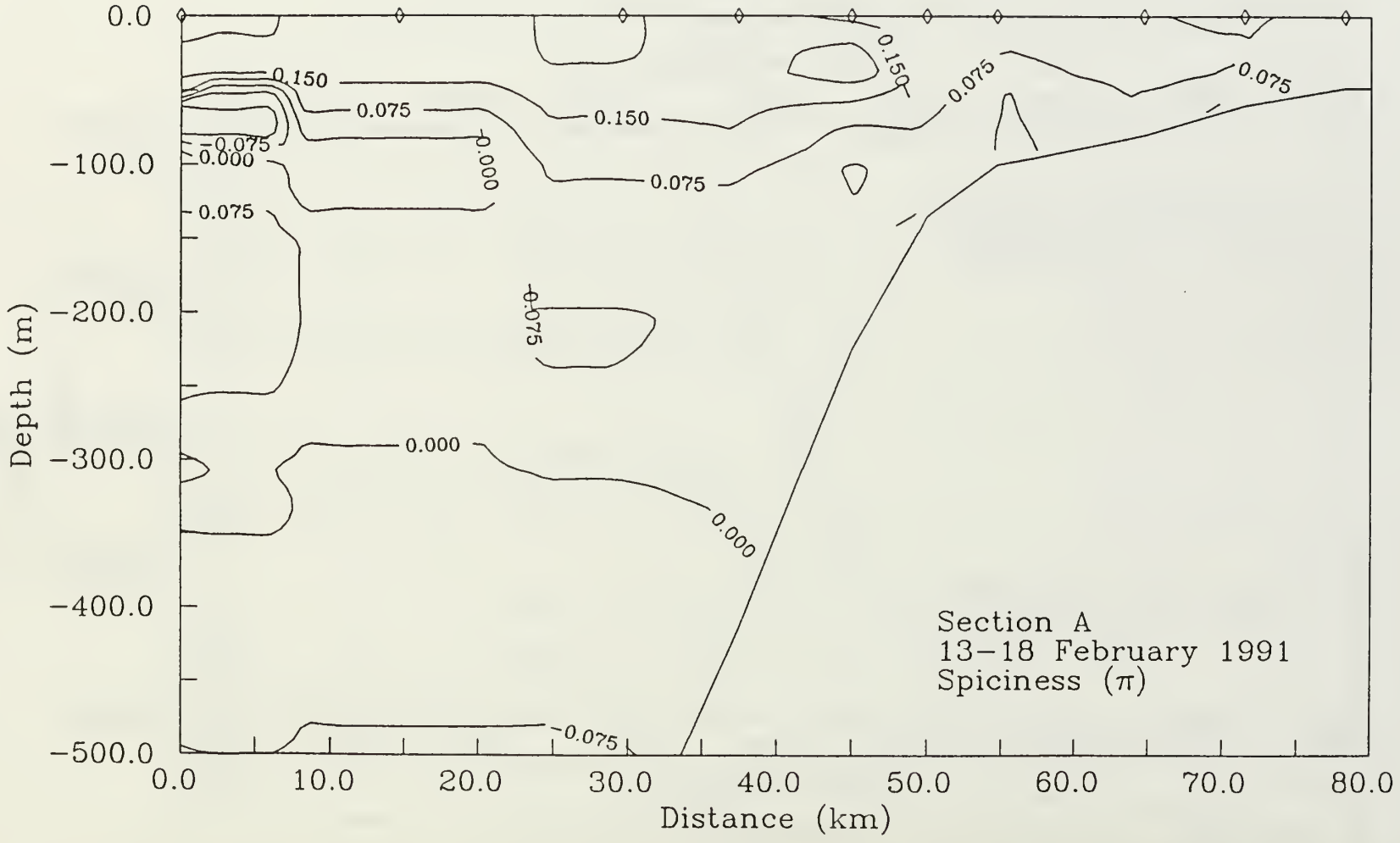
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
0.150
0.075
0.000
-0.075
Section A
13-18 February 1991
Spiciness (π)

Figure 31d.

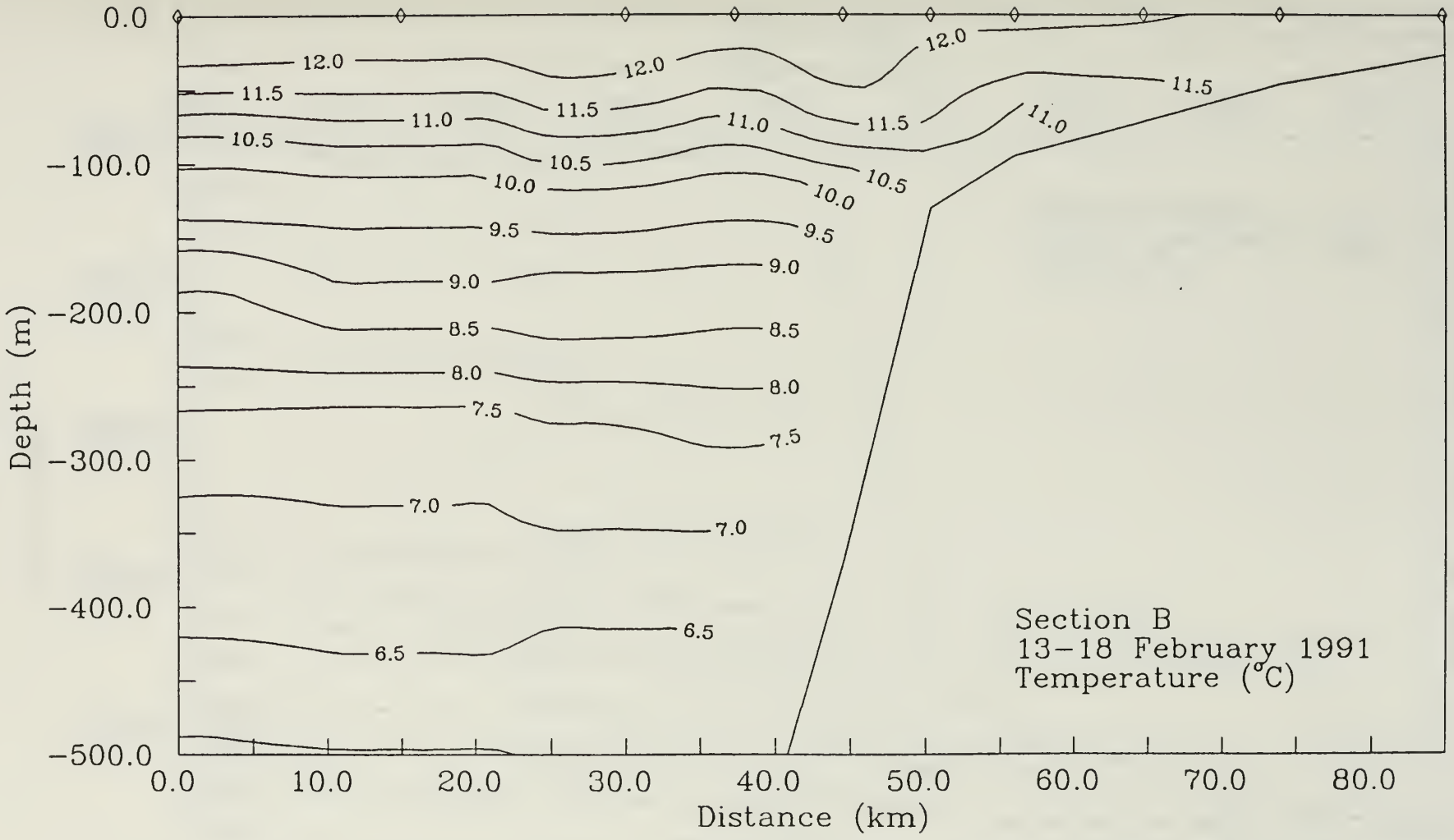

Figure 32. Vertical sections of a) temperature (°C), b) salinity (psu), c) density anomaly(kg m^{-3}), and d) spiciness(π) for section B (CTD stations 11 - 20) of the Farallones Shelf and Slope cruise, February 13-18, 1991.

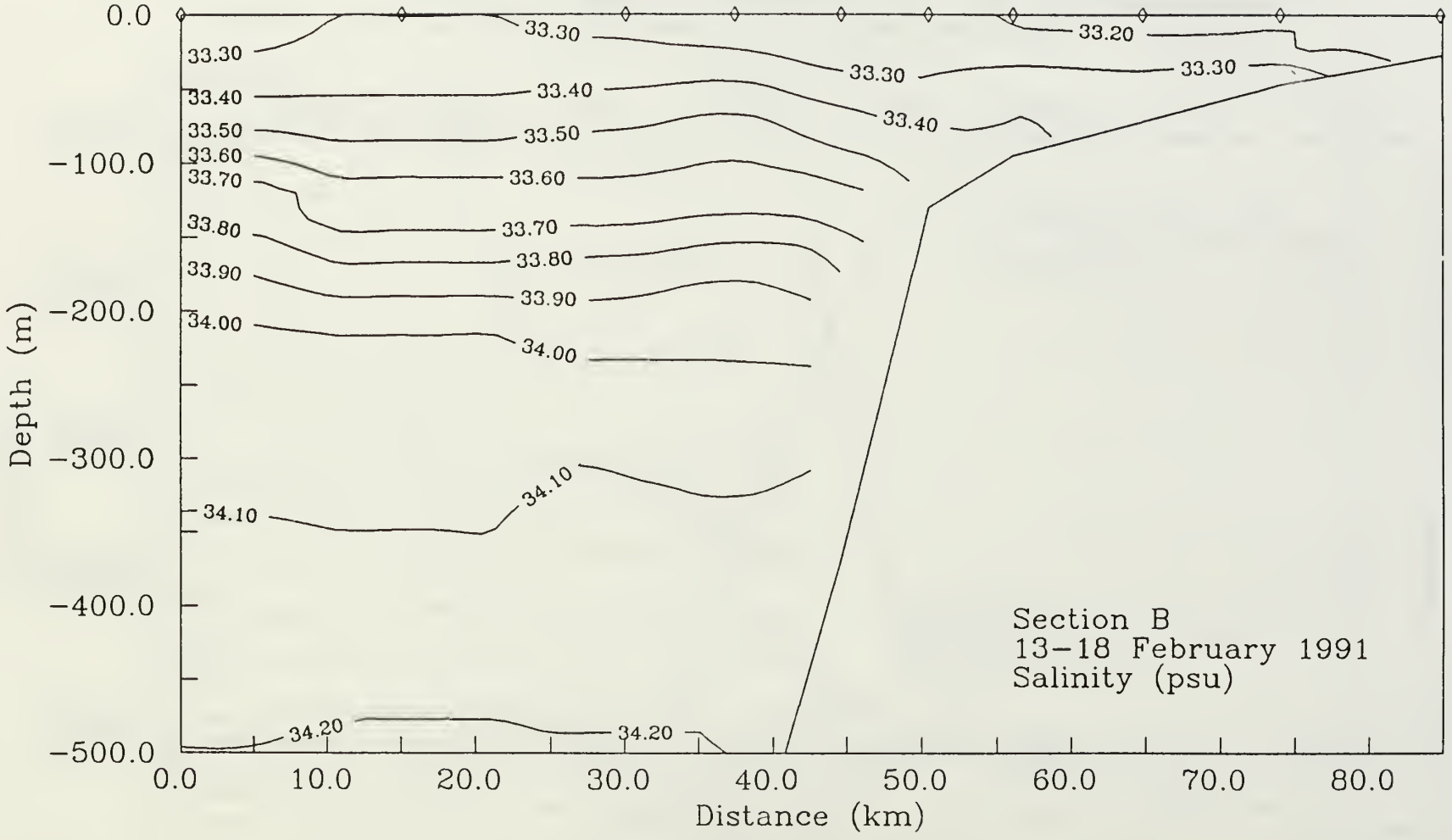
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
34.20
Section B
13-18 February 1991
Salinity (psu)

Figure 32b.

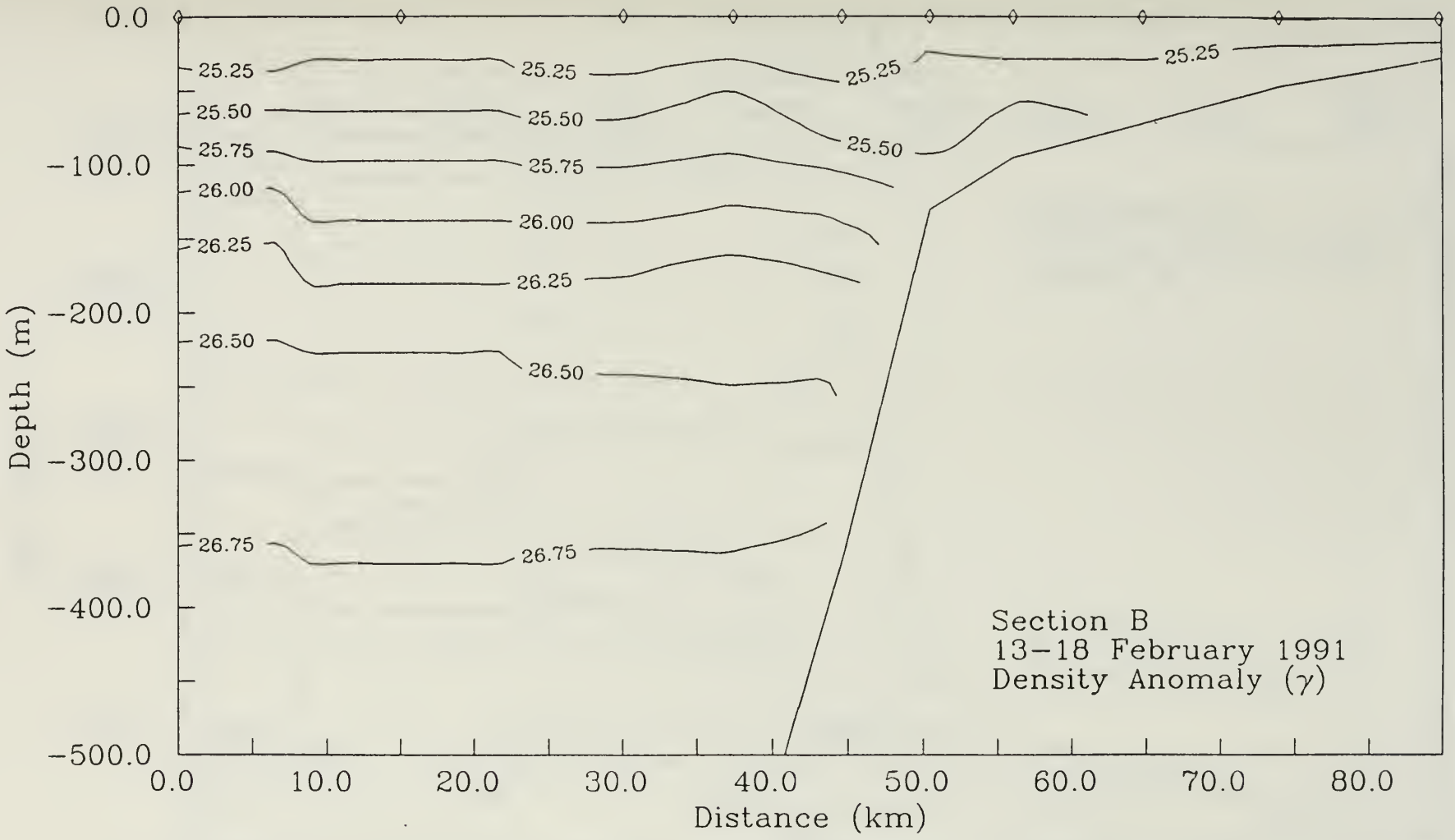
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
25.25
25.50
25.75
26.00
26.25
26.50
26.75
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
Section B
13-18 February 1991
Density Anomaly (γ)

Figure 32c.

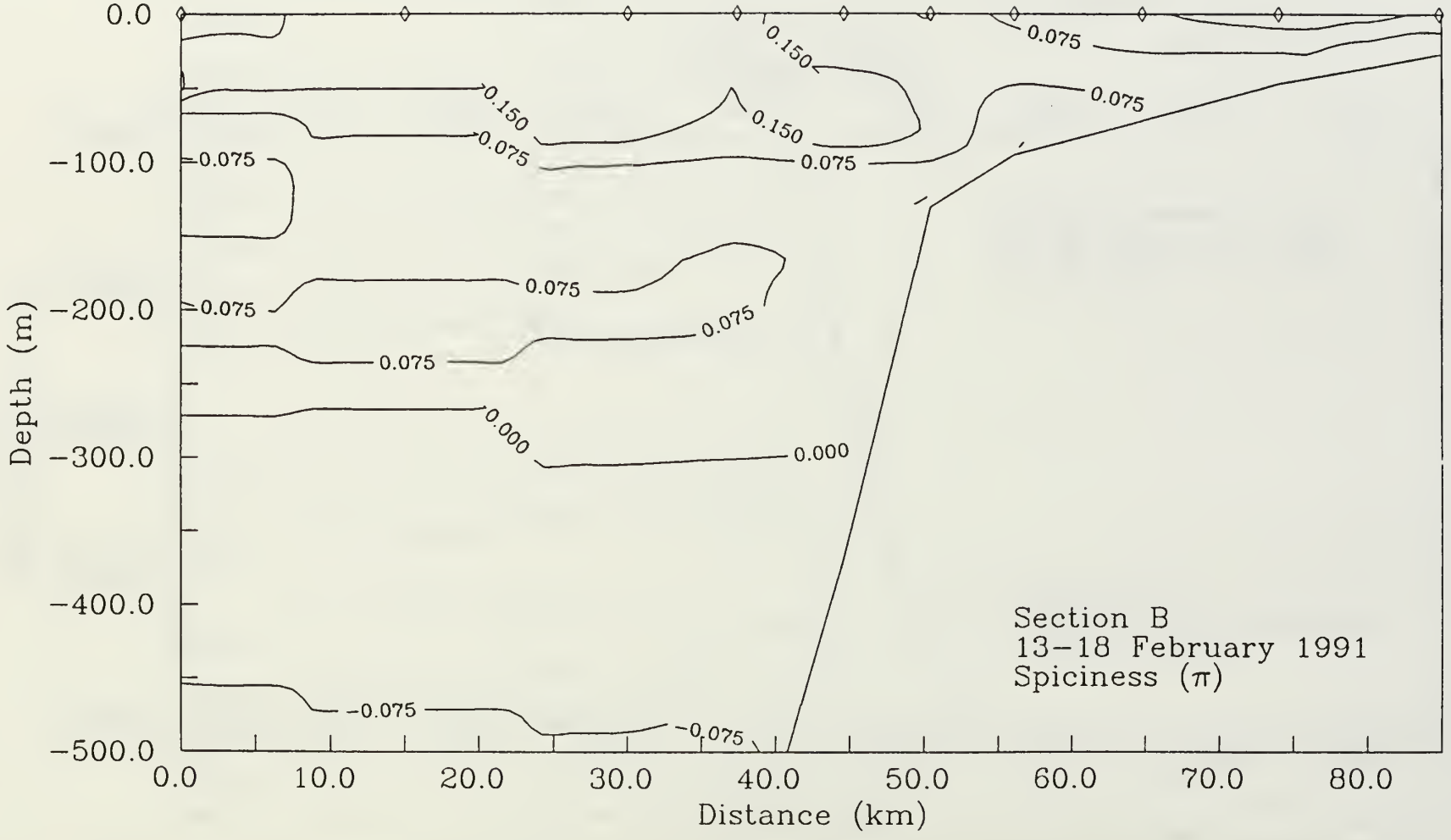
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
0.150
0.075
0.000
-0.075
Section B
13-18 February 1991
Spiciness (π)

Figure 32d.

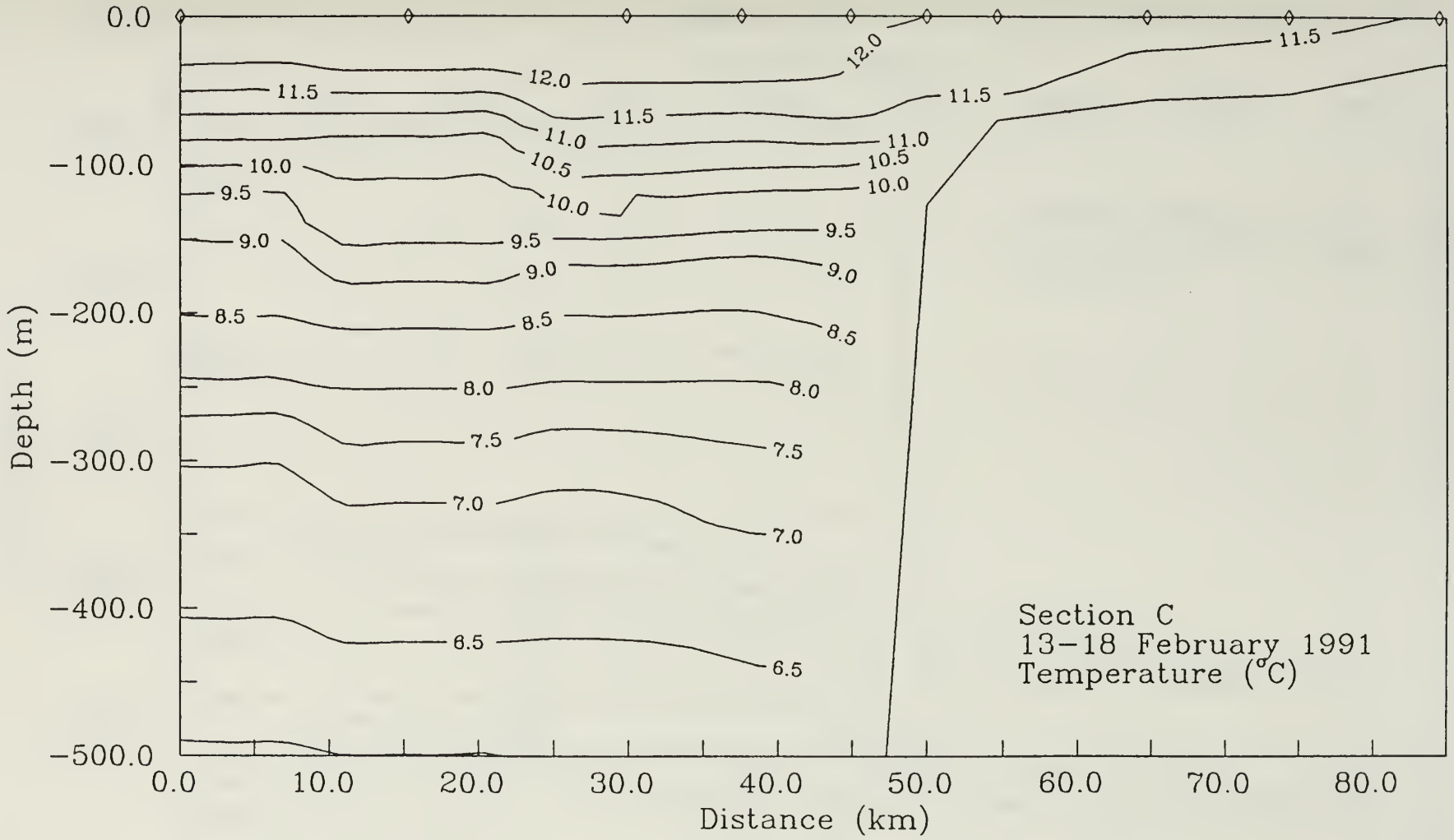

Figure 33. Vertical sections of a) temperature (°C), b) salinity (psu), c) density anomaly (kg m^{-3}), and d) spiciness (π) for section C (CTD stations 21 - 30) of the Farallones Shelf and Slope cruise, February 13-18, 1991.

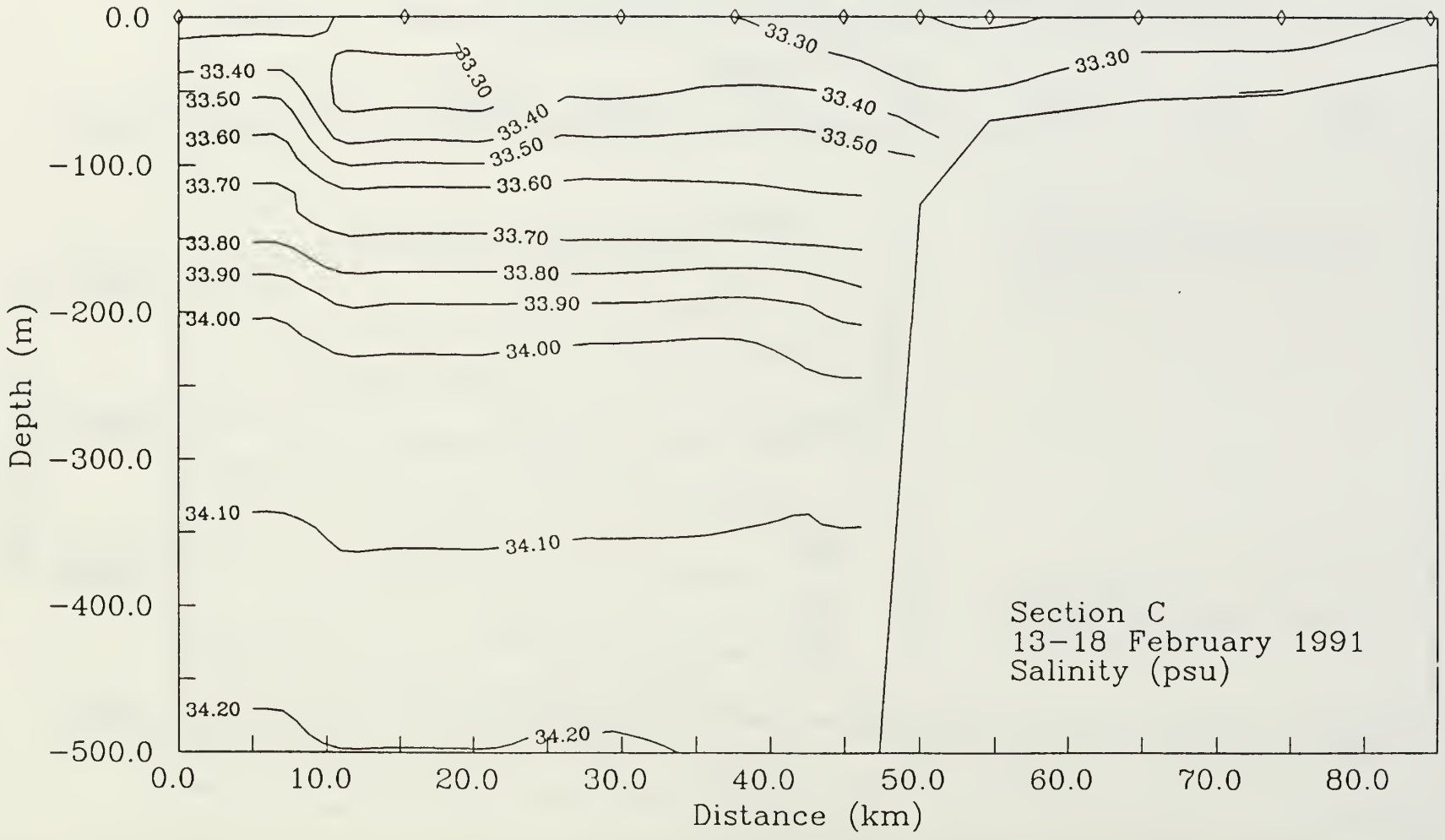
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
34.20
Section C
13-18 February 1991
Salinity (psu)

Figure 33b.

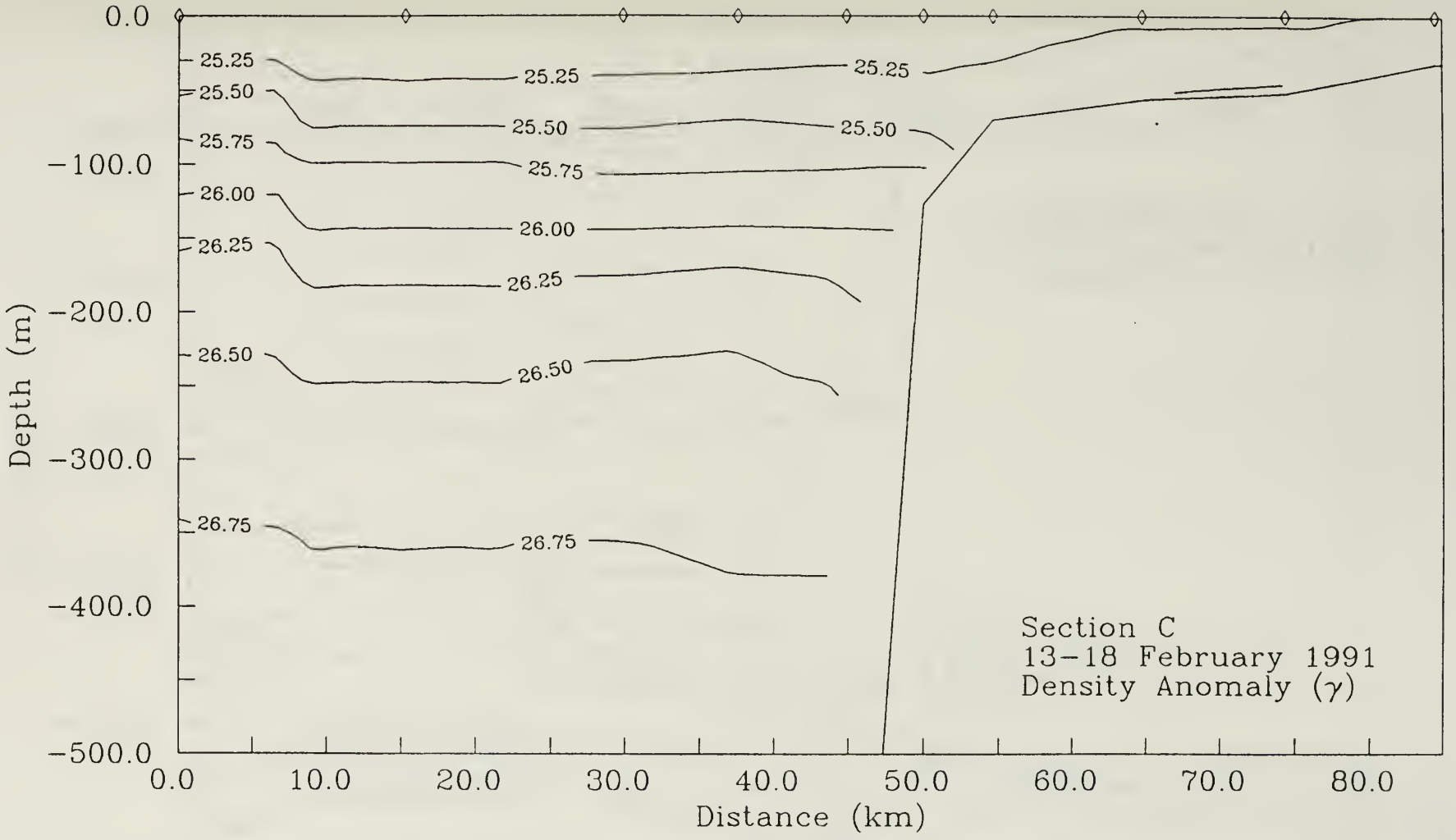
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
25.25
25.50
25.75
26.00
26.25
26.50
26.75
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
Section C
13-18 February 1991
Density Anomaly (γ)

Figure 33c.

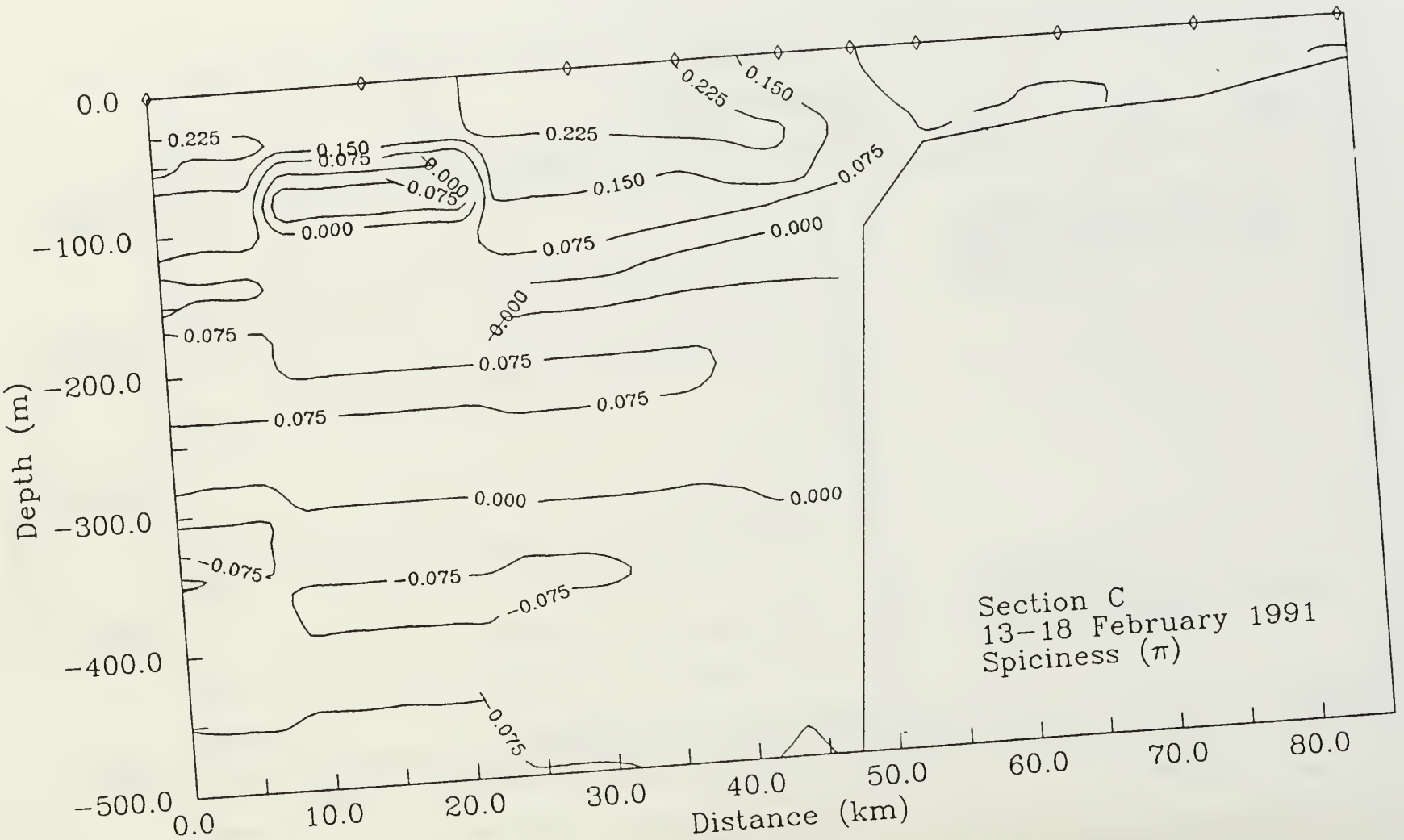
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.225
0.150
0.075
0.000
-0.075
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
Section C
13-18 February 1991
Spiciness (π)

Figure 33d.

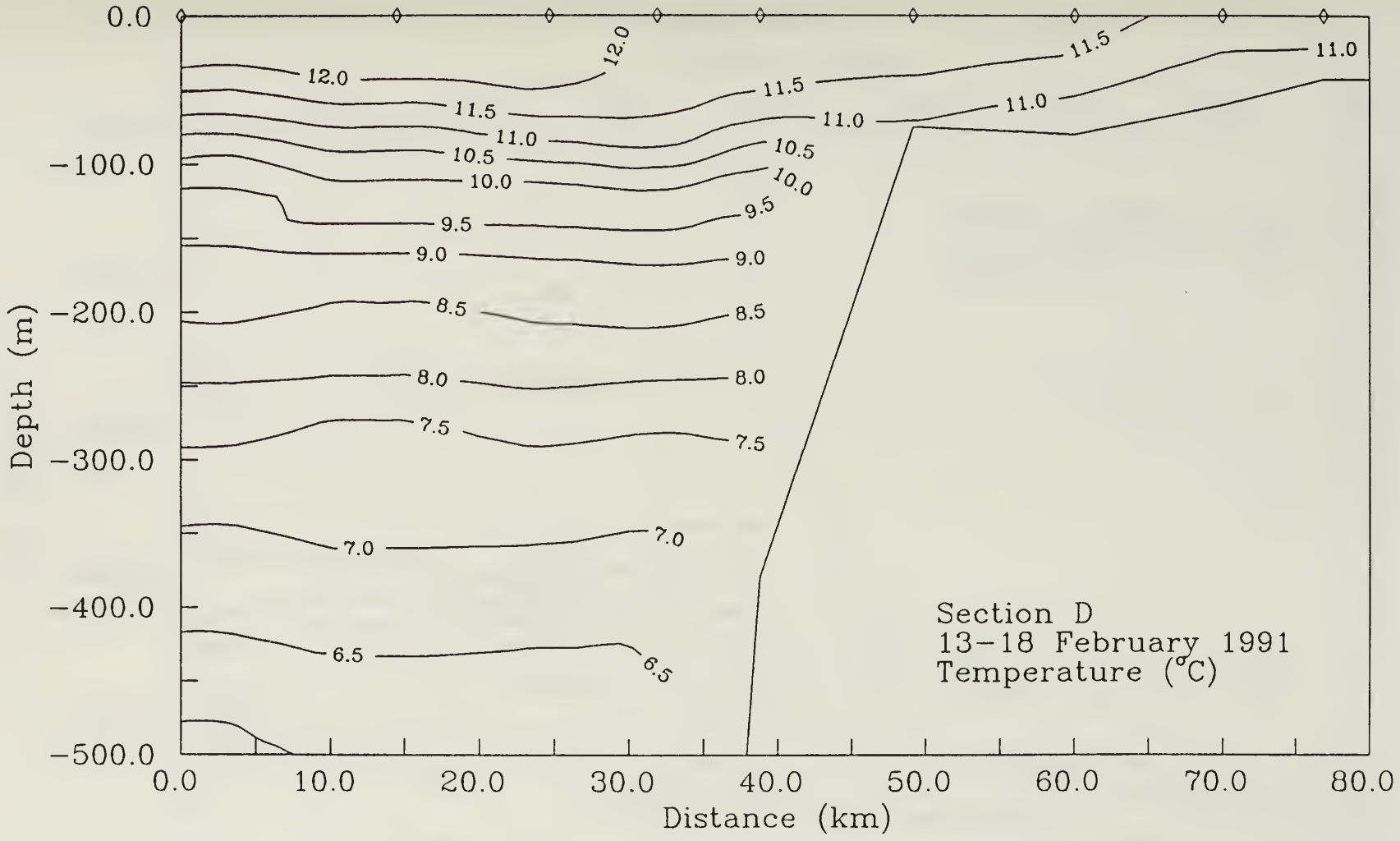

Figure 34. Vertical sections of a) temperature (°C), b) salinity (psu), c) density anomaly (kg m^{-3}), and d) spiciness (π) for section D (CTD stations 31 - 40) of the Farallones Shelf and Slope cruise, February 13-18, 1991.

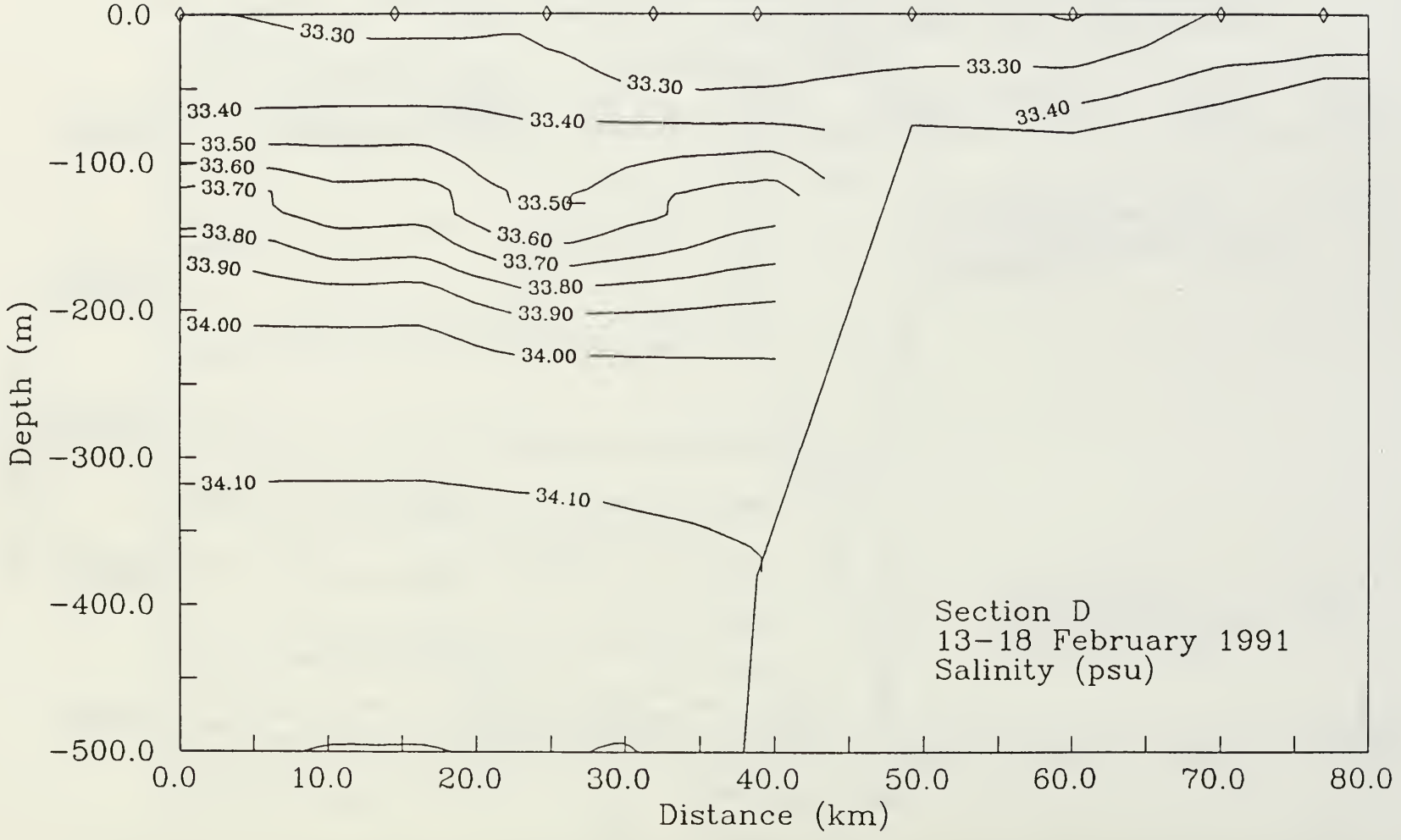
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
Section D
13-18 February 1991
Salinity (psu)

Figure 34b.

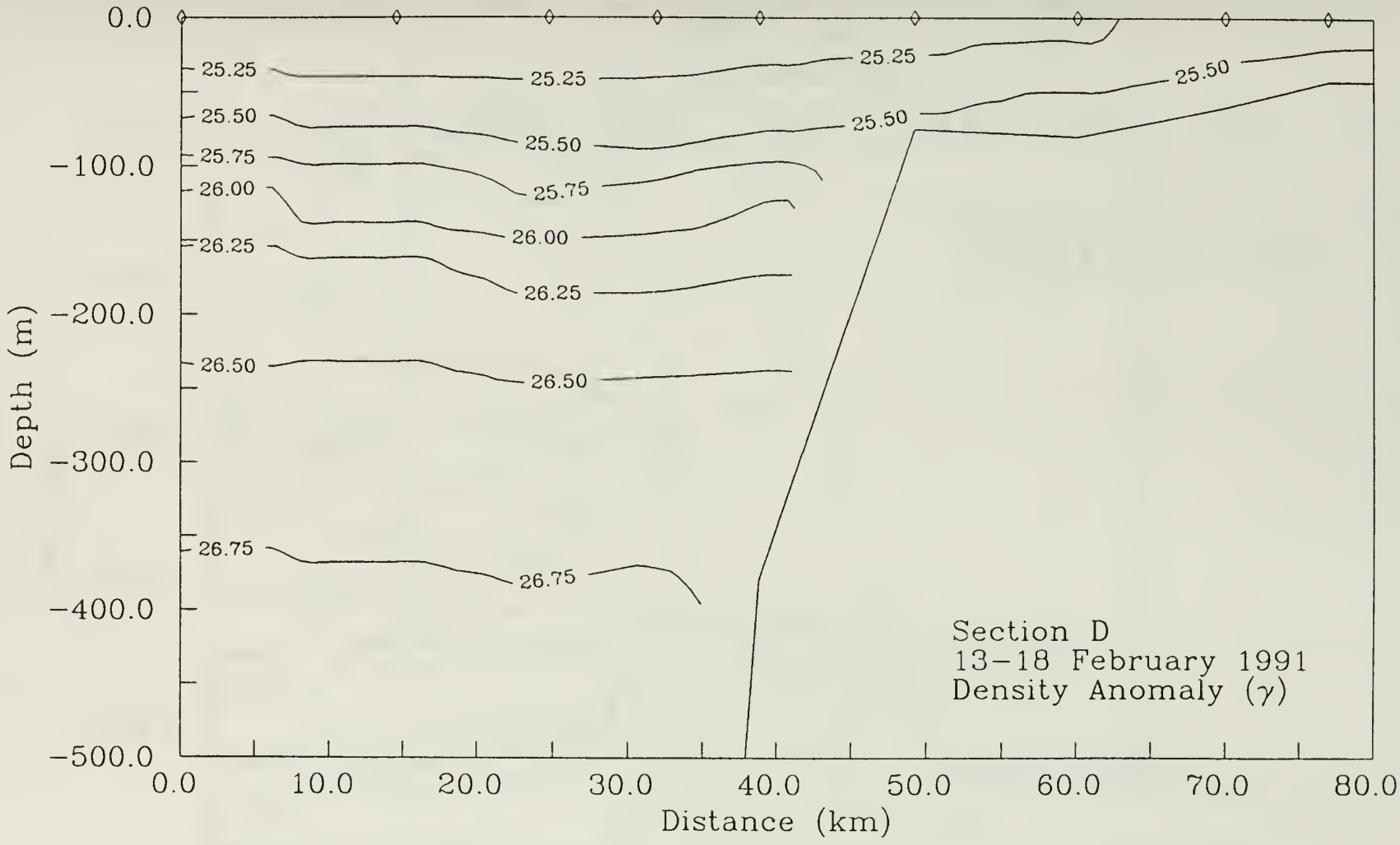
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
25.25
25.50
25.75
26.00
26.25
26.50
26.75
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
Section D
13-18 February 1991
Density Anomaly (γ)

Figure 34c.

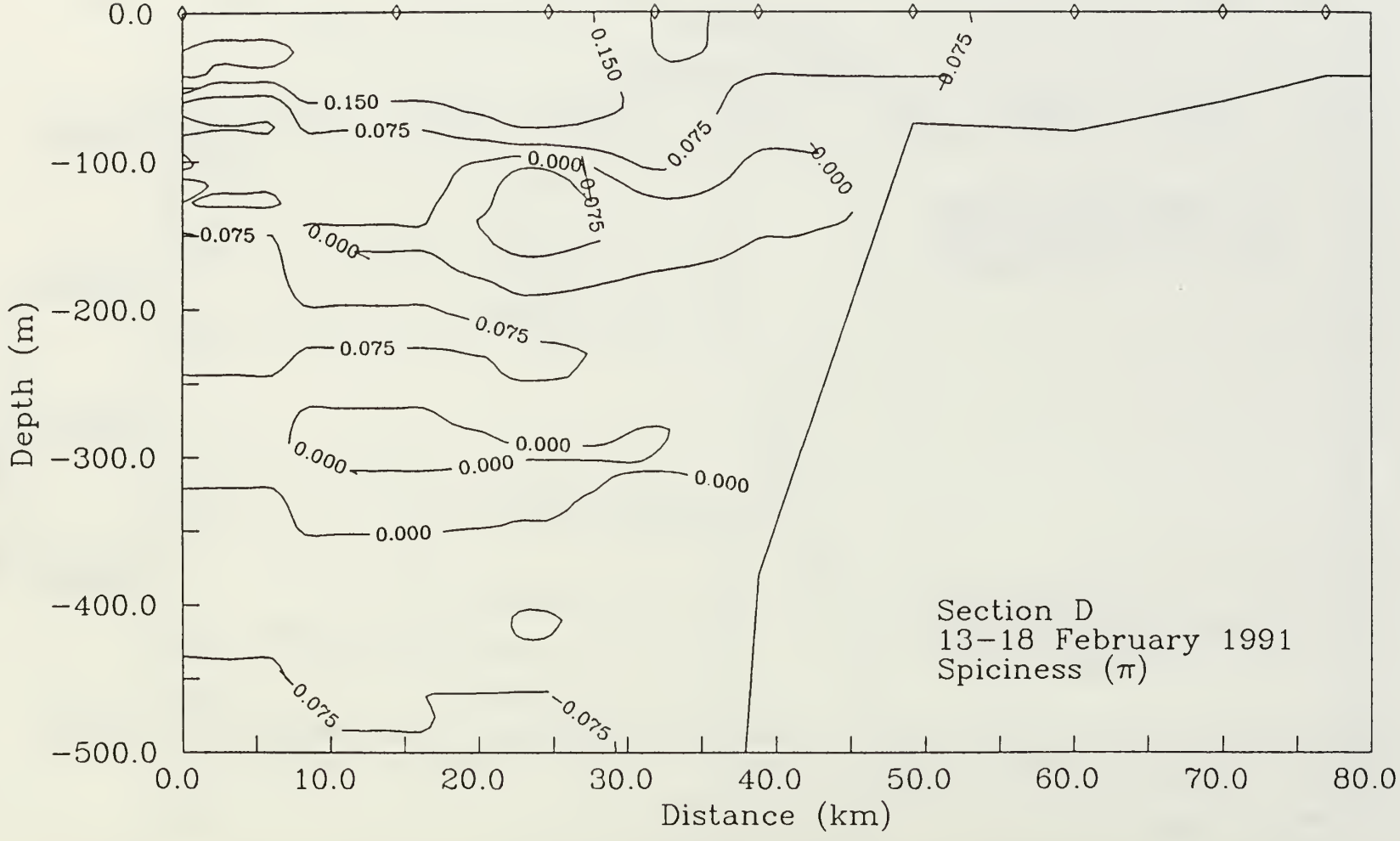
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
0.150
0.075
0.000
Section D
13-18 February 1991
Spiciness (π)

Figure 34d.

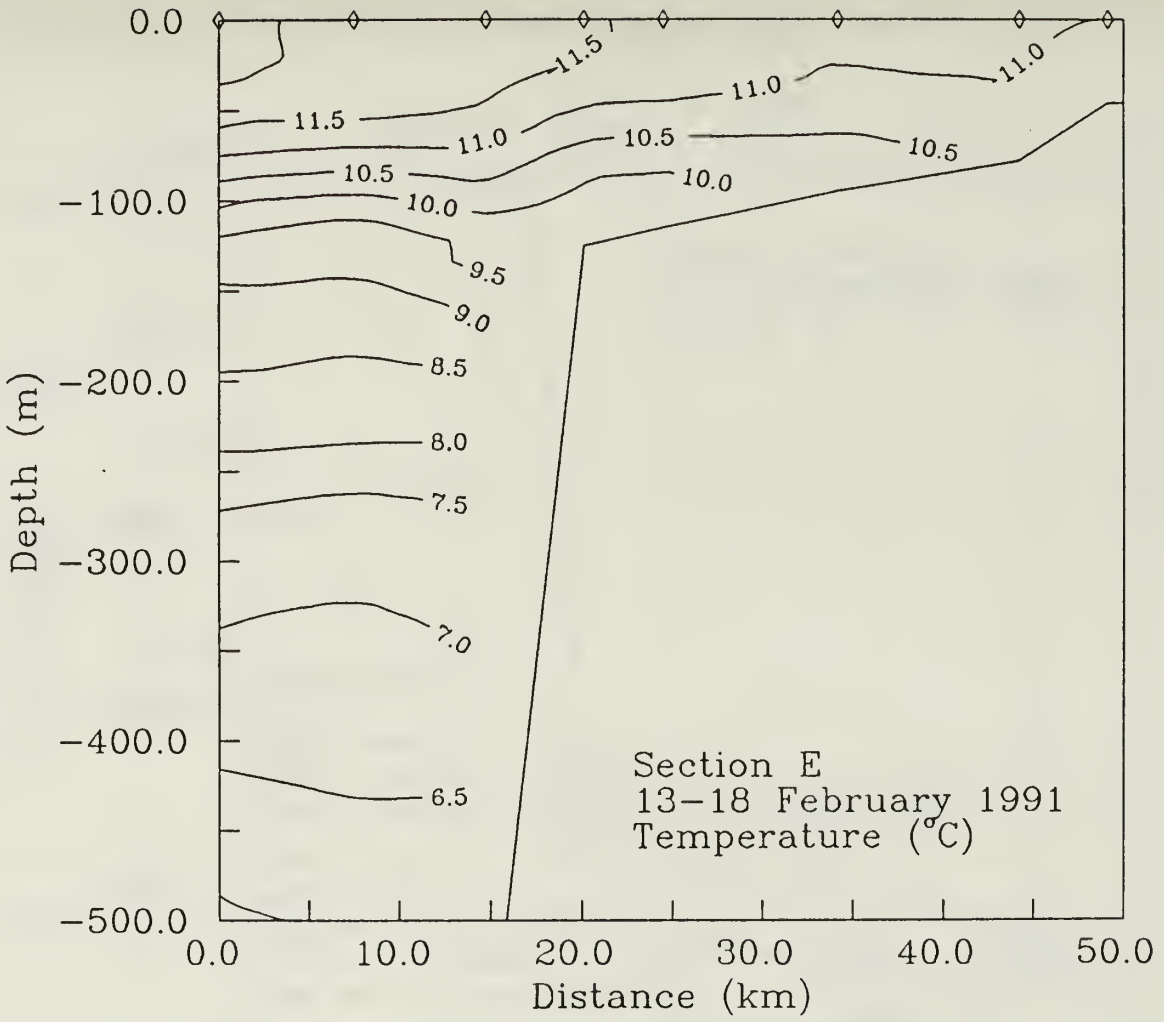

Figure 35. Vertical sections of a) temperature (°C), b) salinity (psu), c) density anomaly (kg m^{-3}), and d) spiciness (π) for section E (CTD stations 41 - 48) of the Farallones Shelf and Slope cruise, February 13-18, 1991.

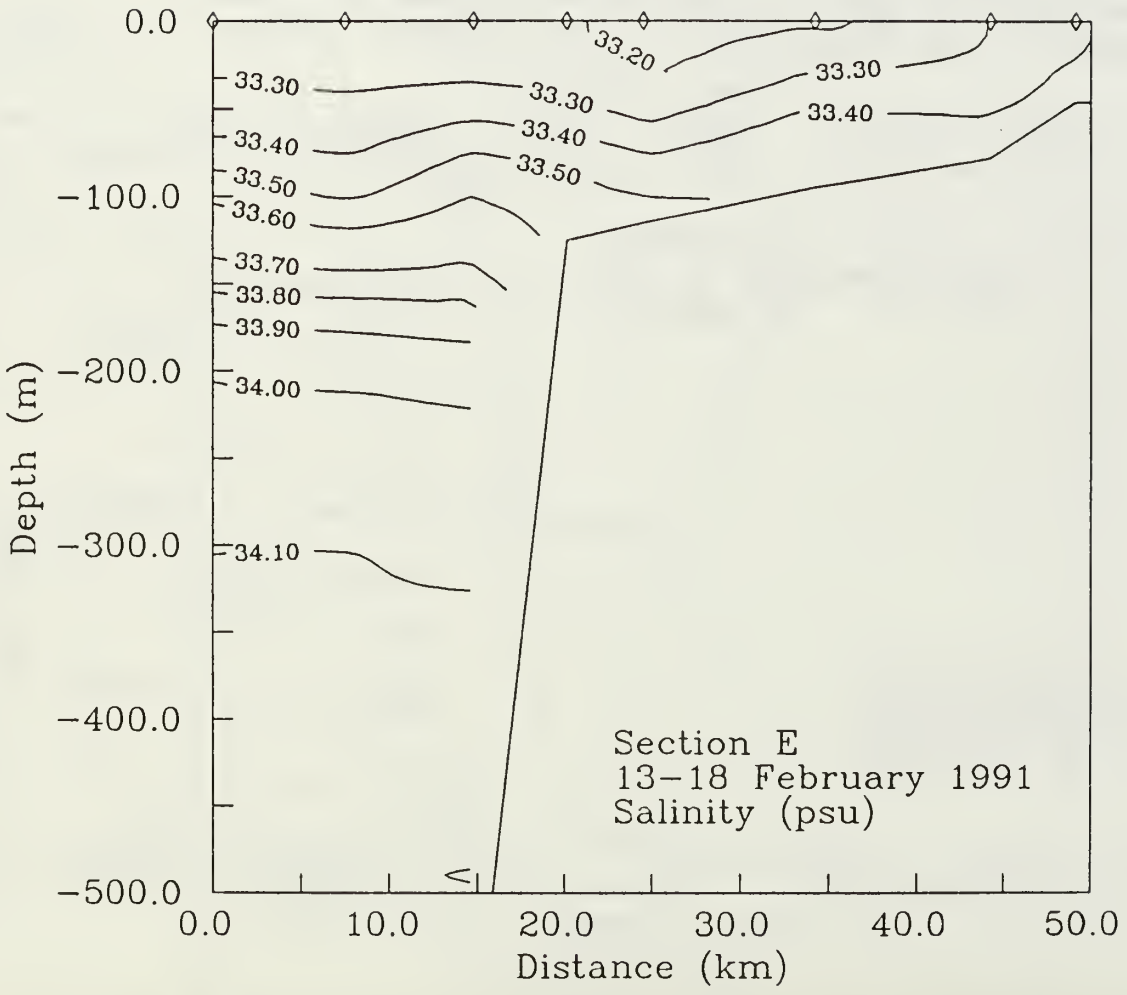
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
Distance (km)
33.20
33.30
33.40
33.50
33.60
33.70
33.80
33.90
34.00
34.10
Section E
13-18 February 1991
Salinity (psu)

Figure 35b.

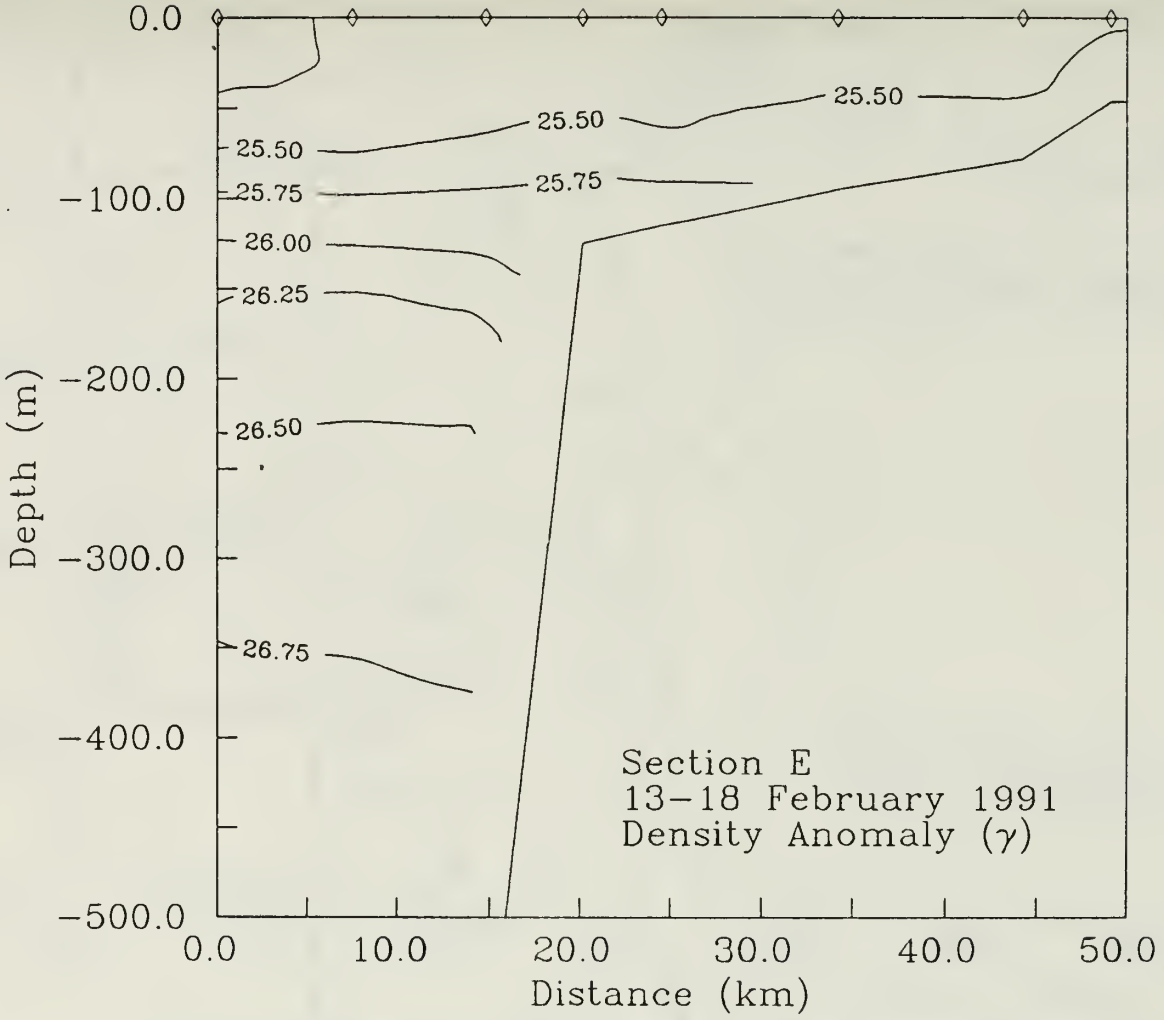
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
25.50
25.50
25.50
25.75
25.75
26.00
26.25
26.50
26.75
Section E
13-18 February 1991
Density Anomaly (γ)
0.0
10.0
20.0
30.0
40.0
50.0
Distance (km)

Figure 35c.

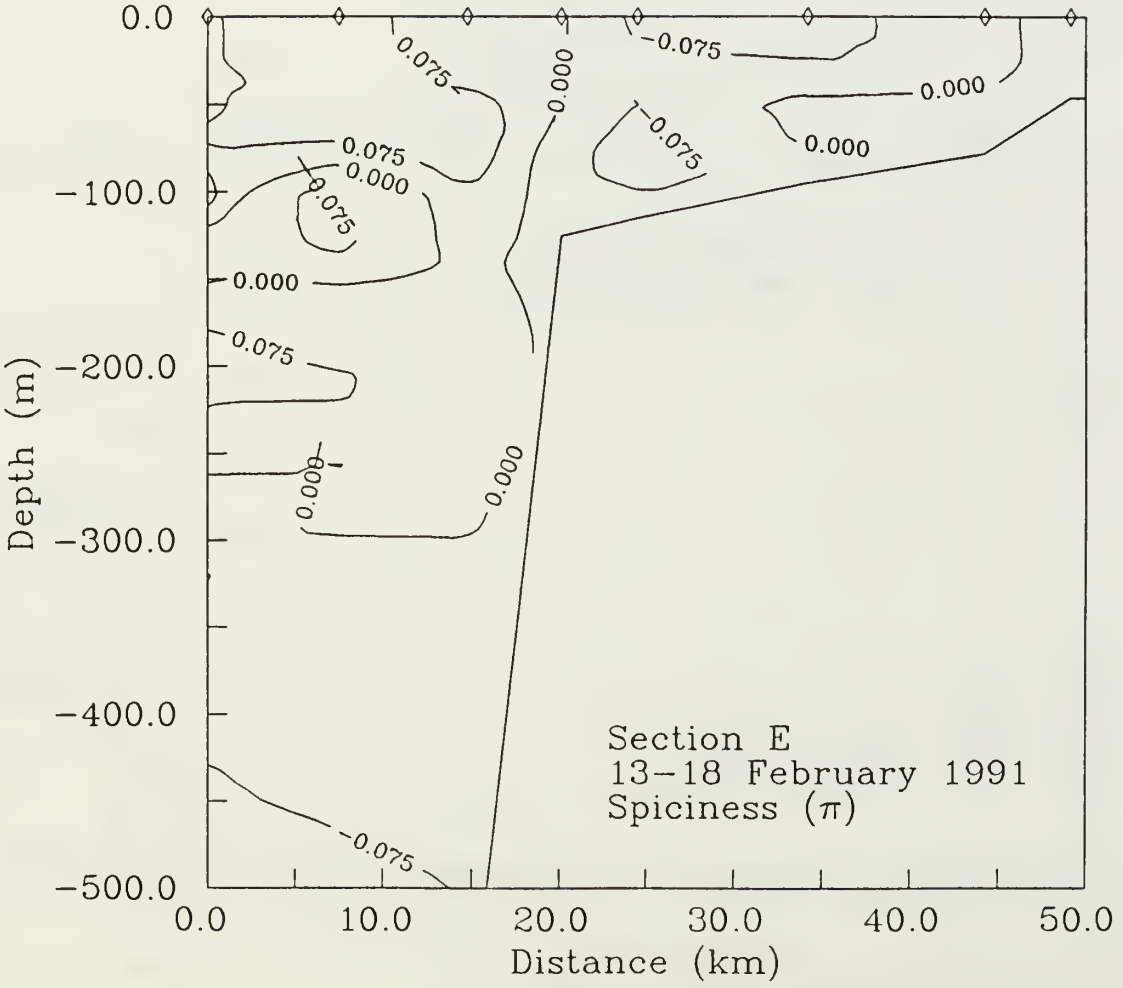
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
Distance (km)
0.075
0.000
-0.075
Section E
13-18 February 1991
Spiciness (π)

Figure 35d.

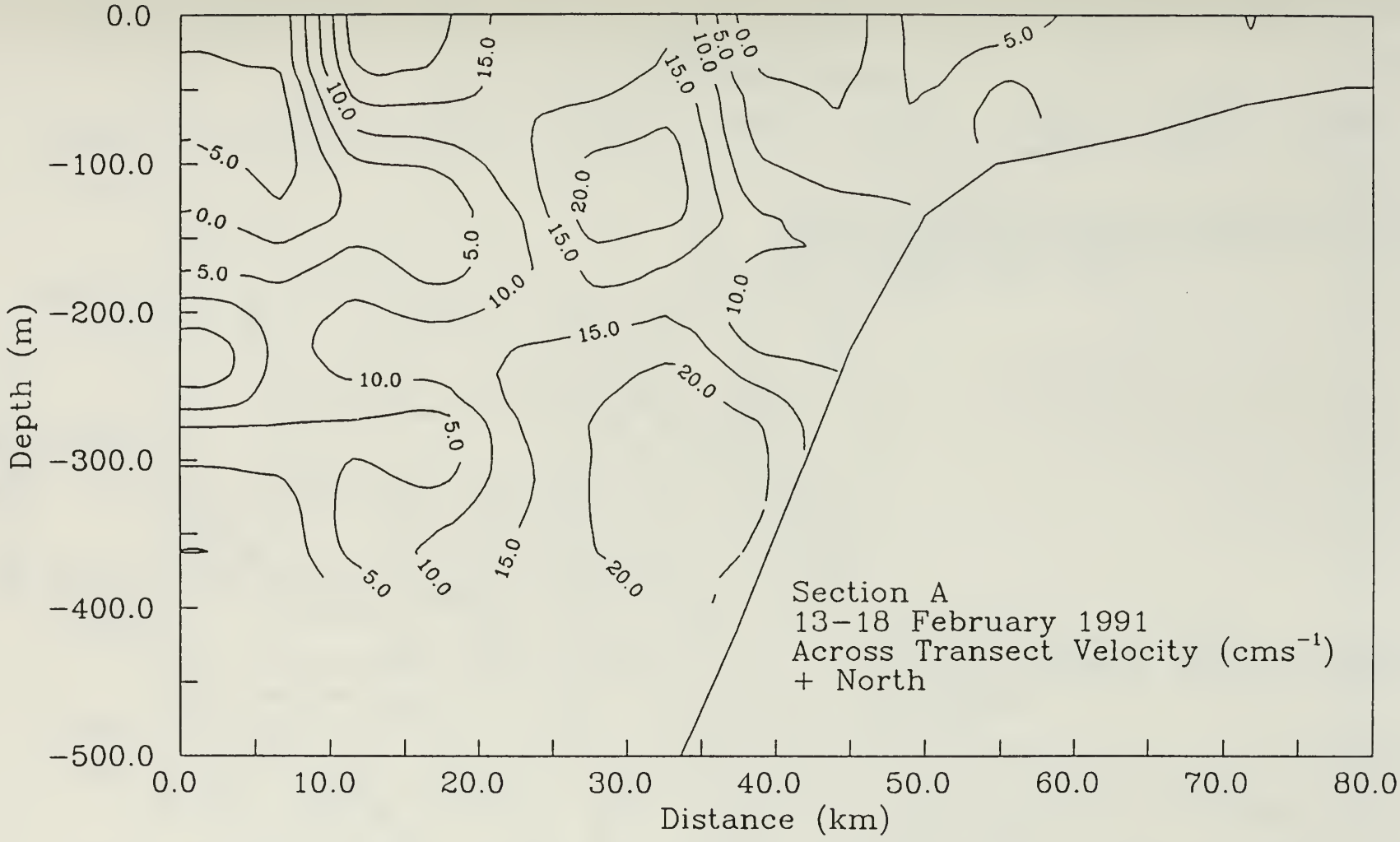

Figure 36. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section A of the Farallones Shelf and Slope cruise, February 13-18, 1991.

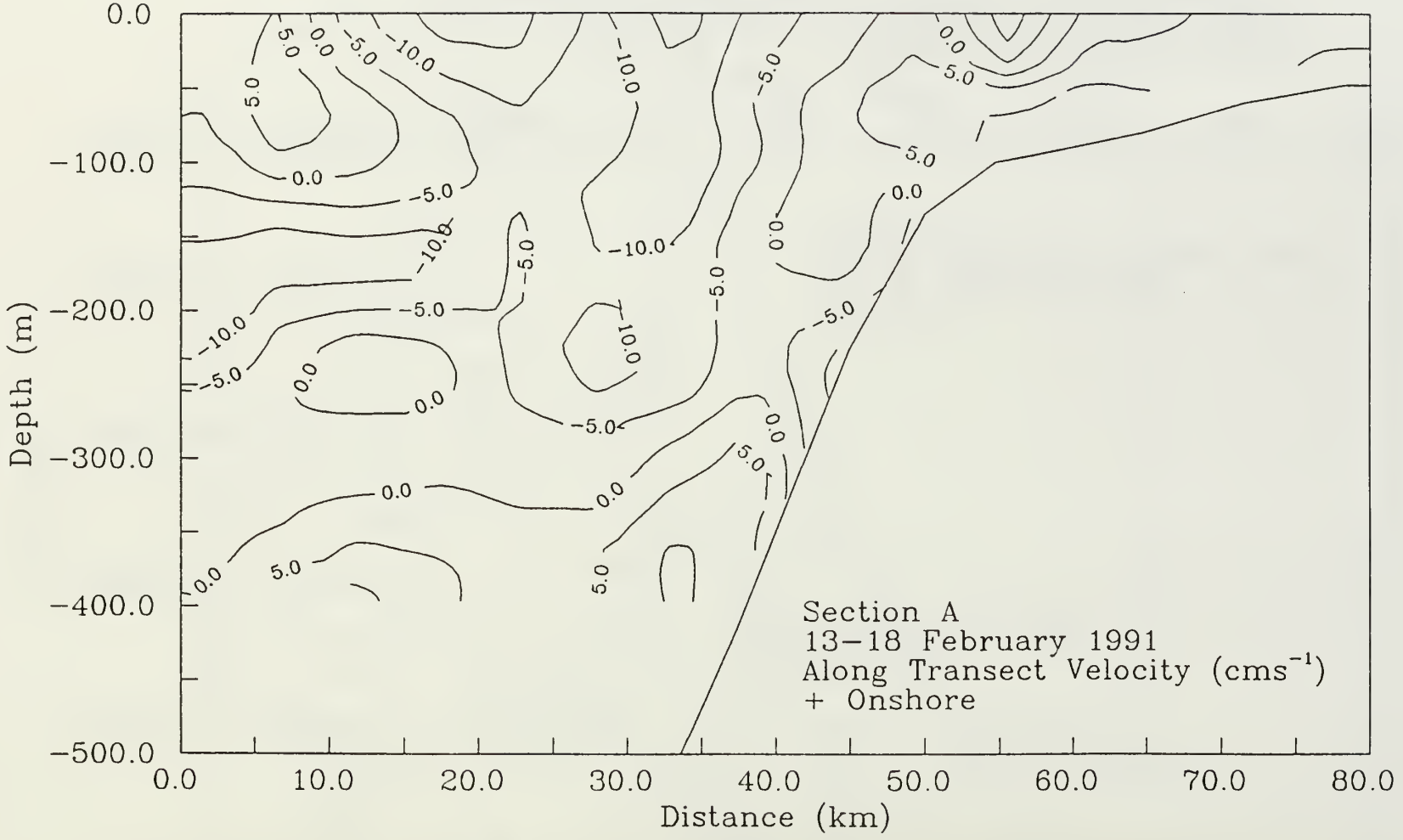
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
Section A
13-18 February 1991
Along Transect Velocity (cms^{-1})
+ Onshore

Figure 36b.

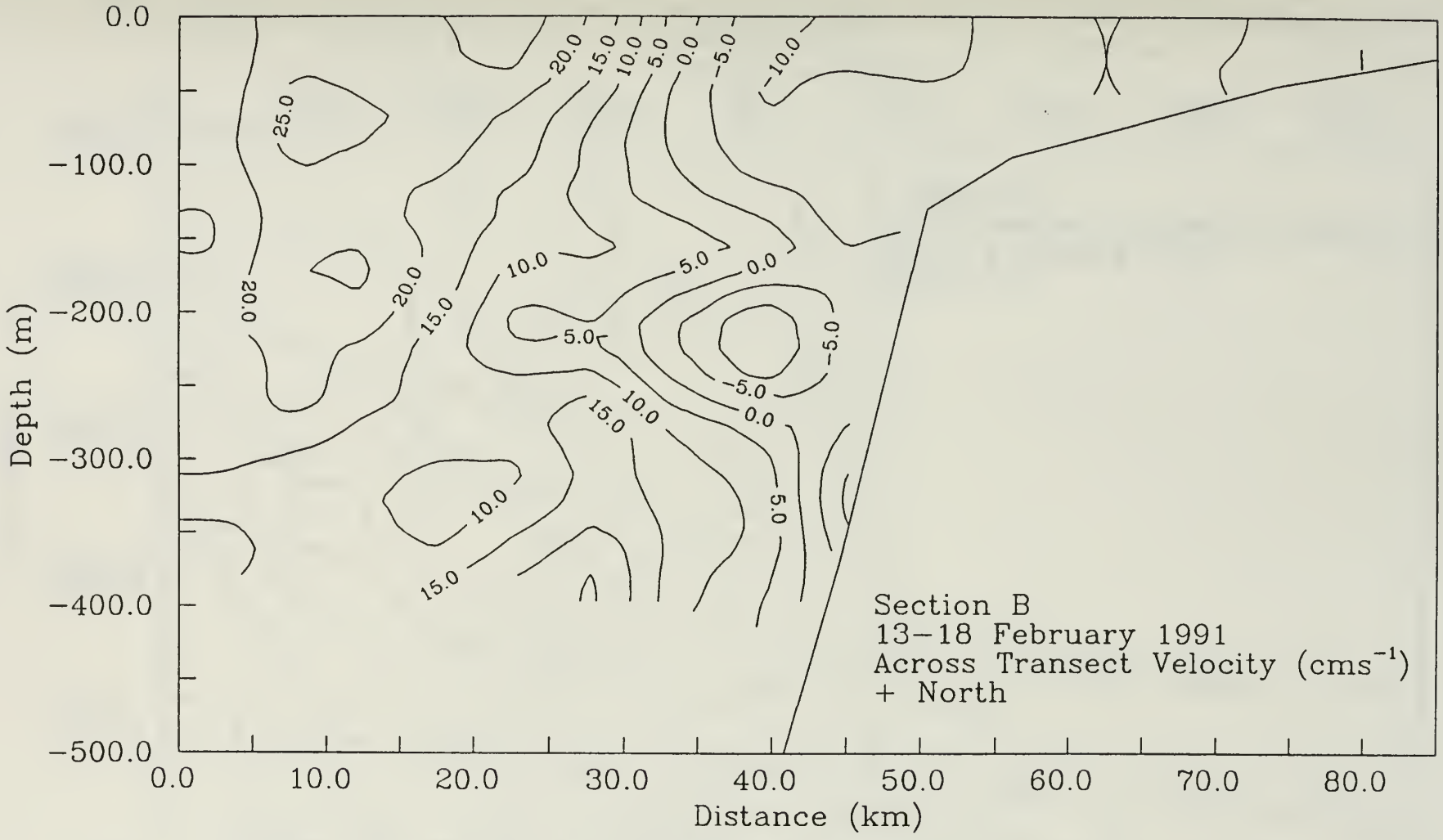

Figure 37. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section B of the Farallones Shelf and Slope cruise, February 13-18, 1991.

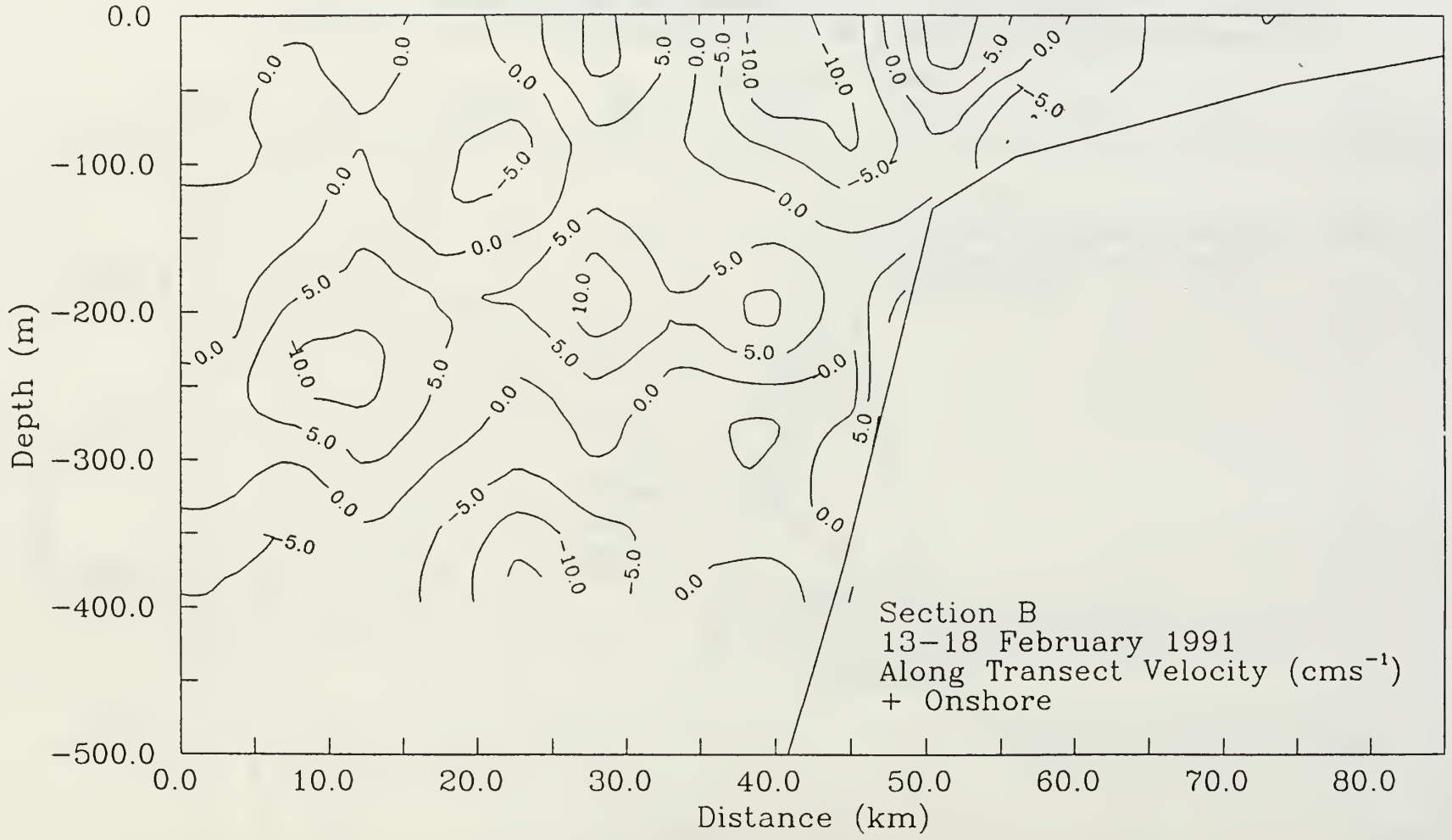
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
Section B
13-18 February 1991
Along Transect Velocity (cms^{-1})
+ Onshore

Figure 37b.

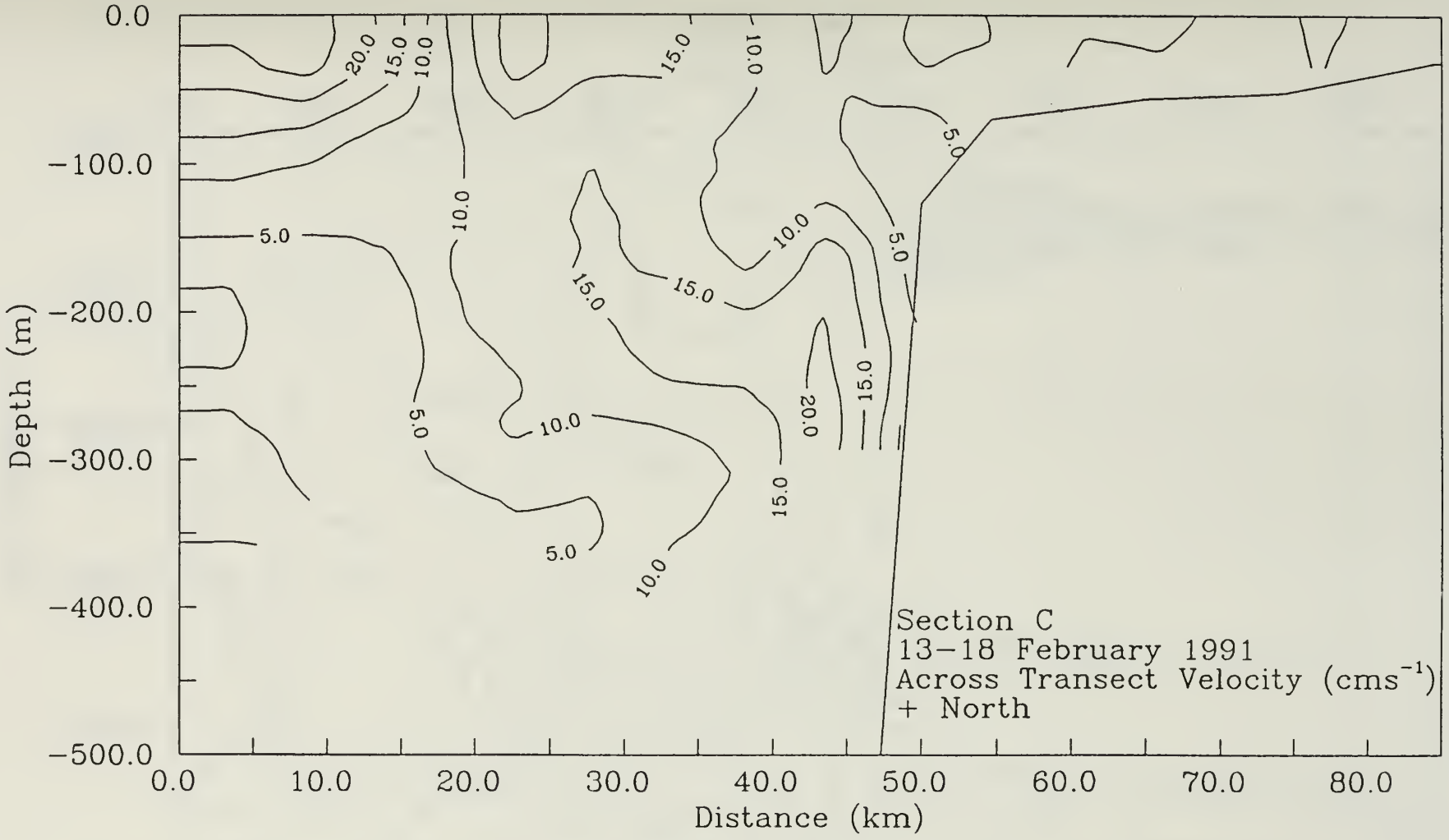

Figure 38. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section C of the Farallones Shelf and Slope cruise, February 13-18, 1991.

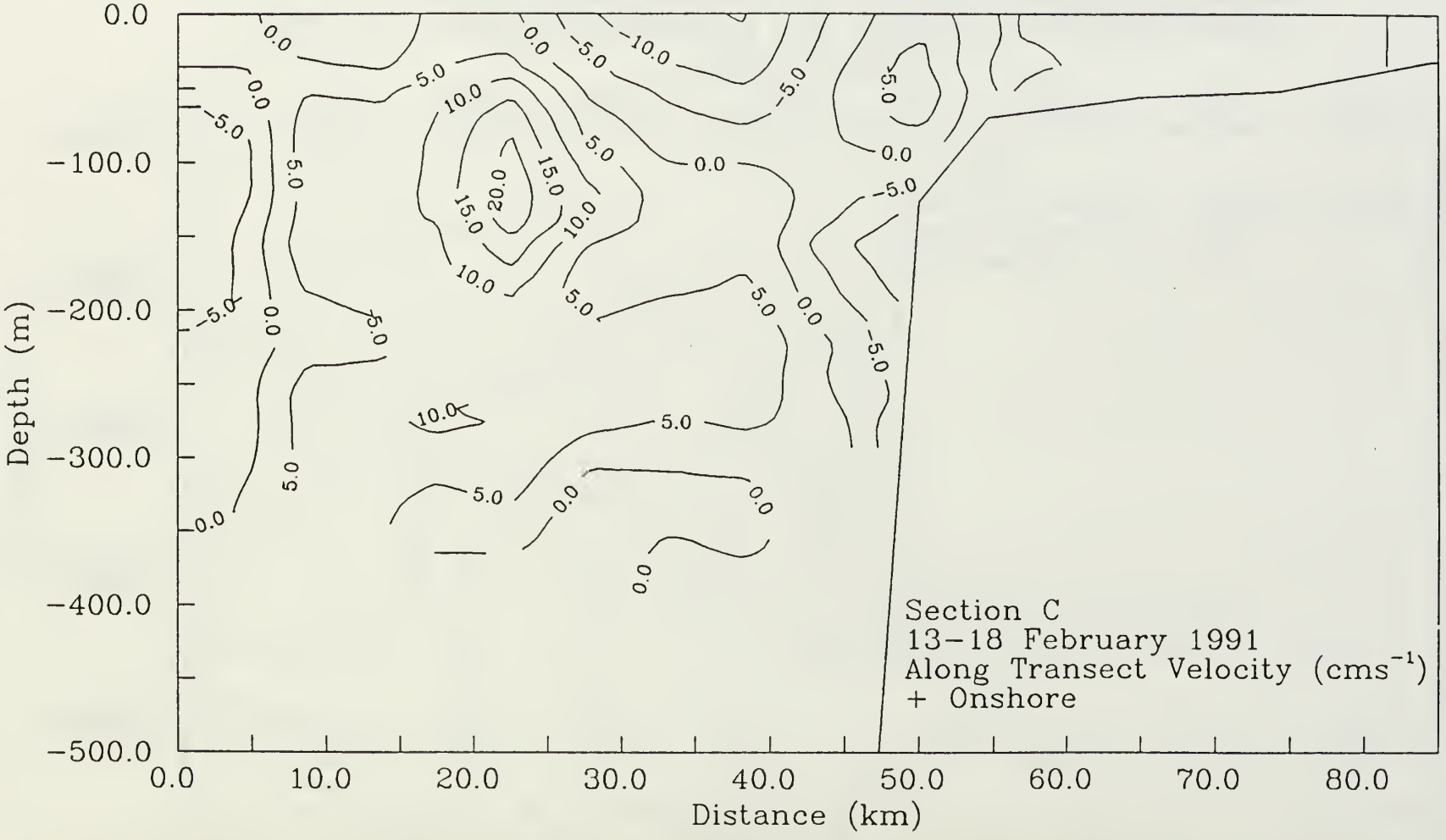
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
Section C
13-18 February 1991
Along Transect Velocity (cms^{-1})
+ Onshore

Figure 38b.

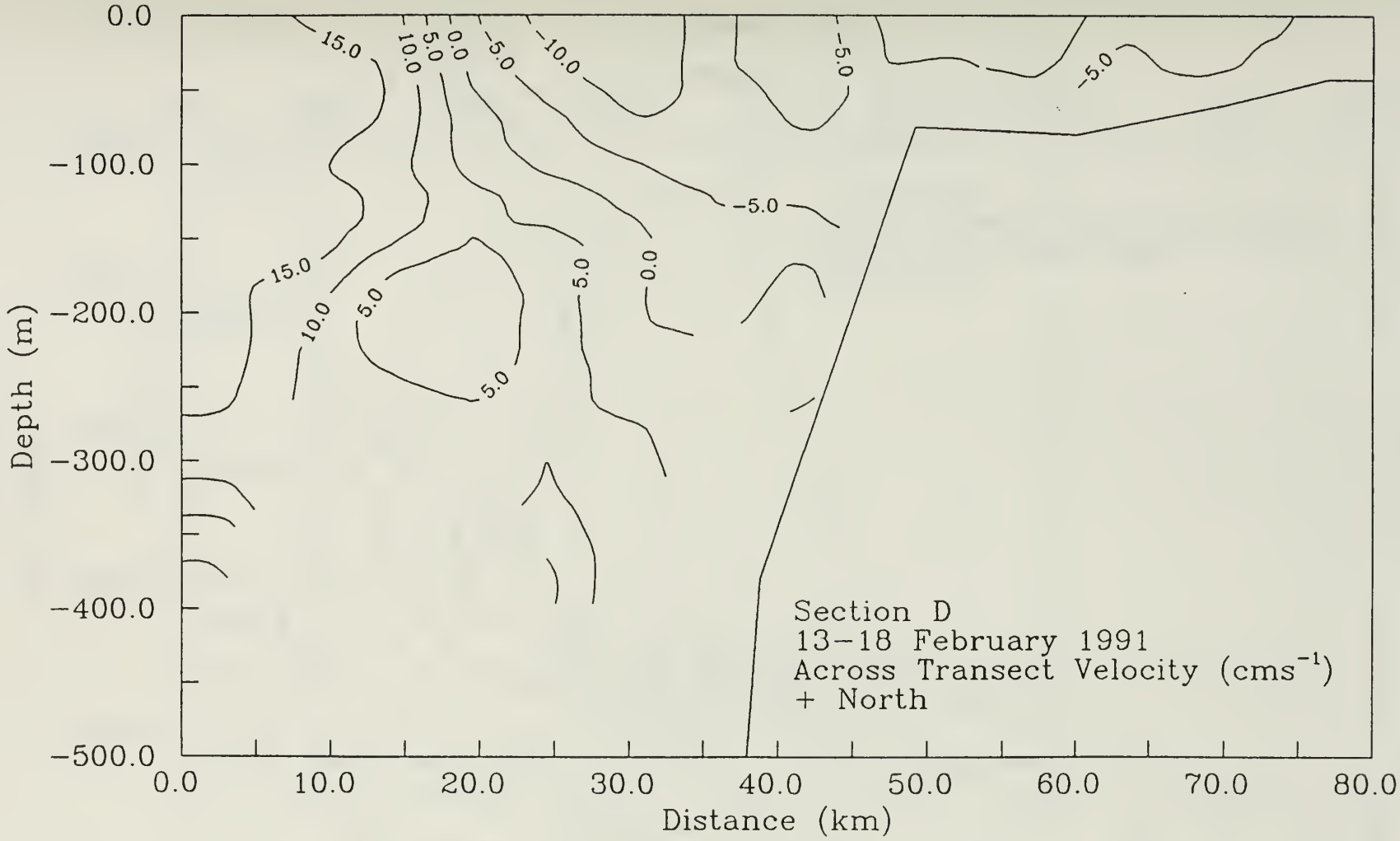

Figure 39. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section D of the Farallones Shelf and Slope cruise, February 13-18, 1991.

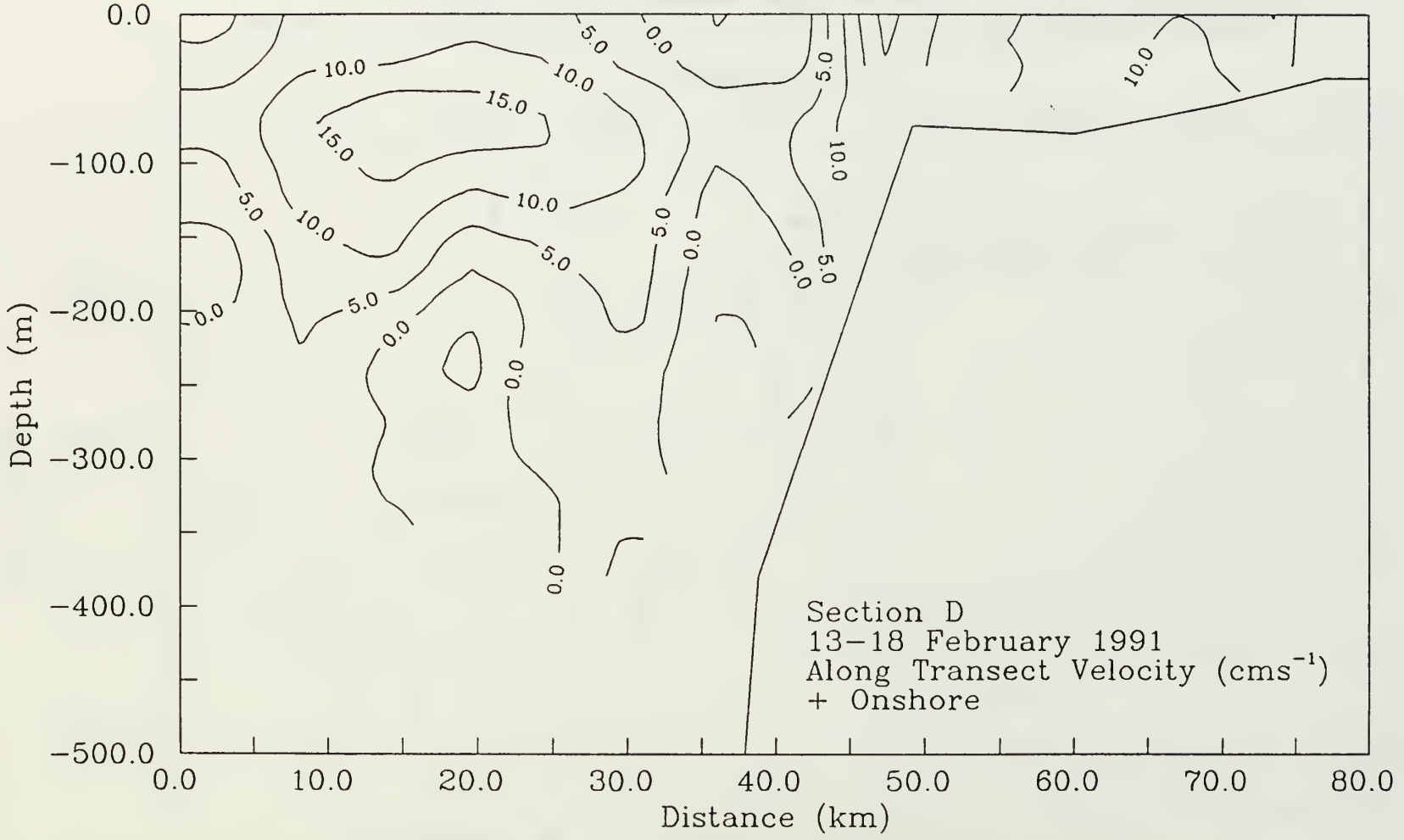
0.0
−100.0
−200.0
−300.0
−400.0
−500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Distance (km)
Section D
13−18 February 1991
Along Transect Velocity (cms^{-1})
+ Onshore

Figure 39b.

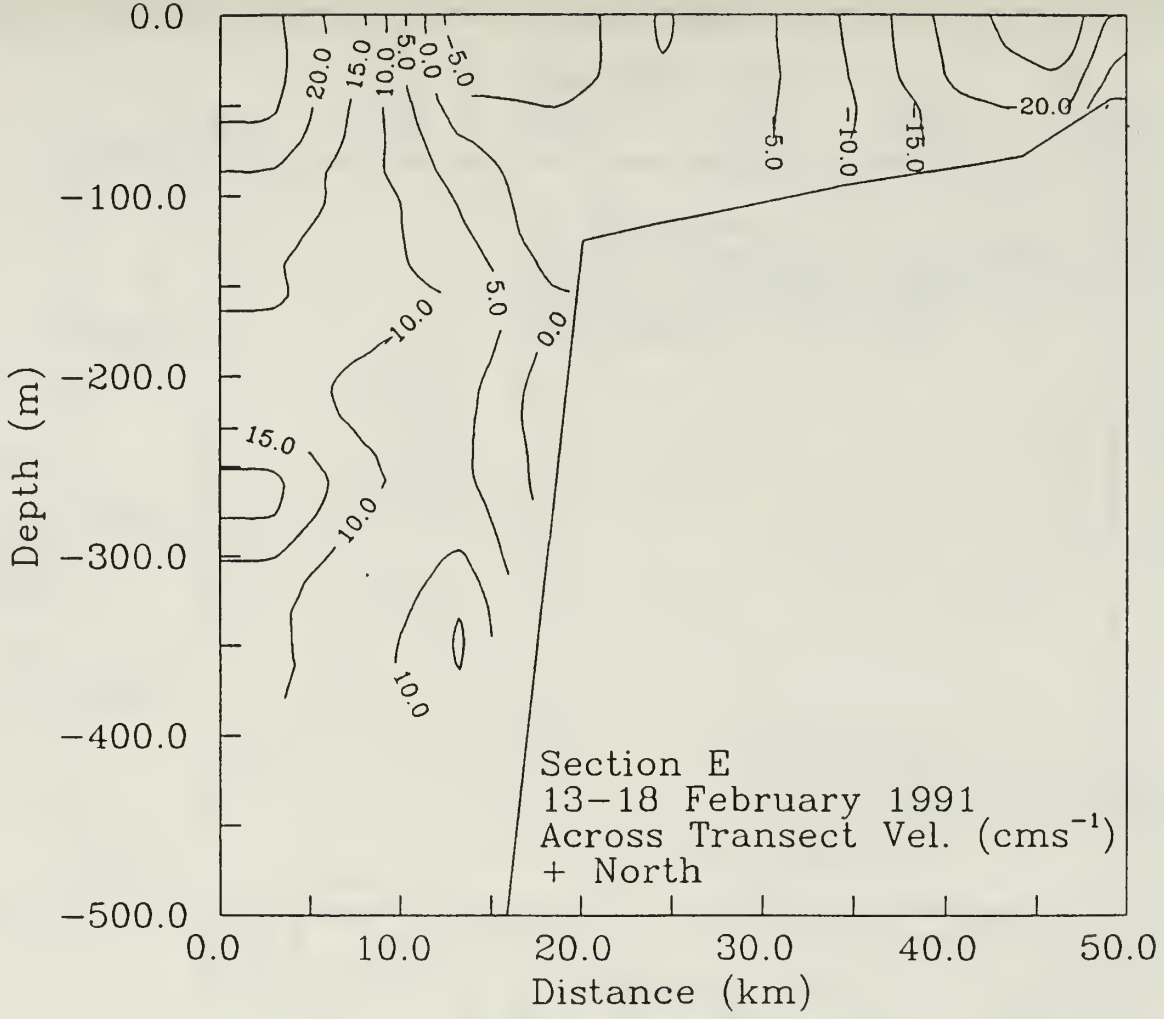

Figure 40. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) for section E of the Farallones Shelf and Slope cruise, February 13-18, 1991.

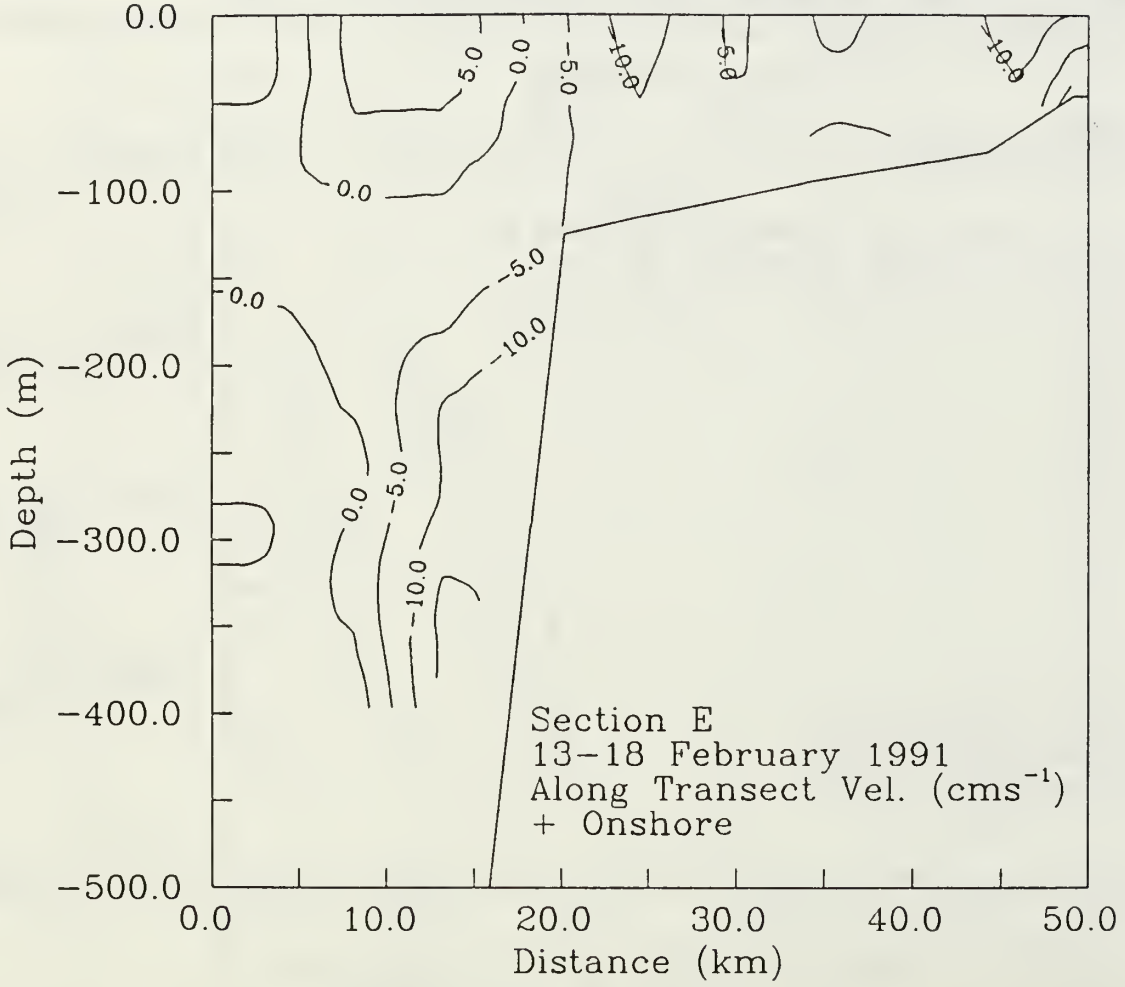
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
Distance (km)
5.0
0.0
-5.0
-10.0
Section E
13-18 February 1991
Along Transect Vel. (cms^{-1})
+ Onshore

Figure 40b.

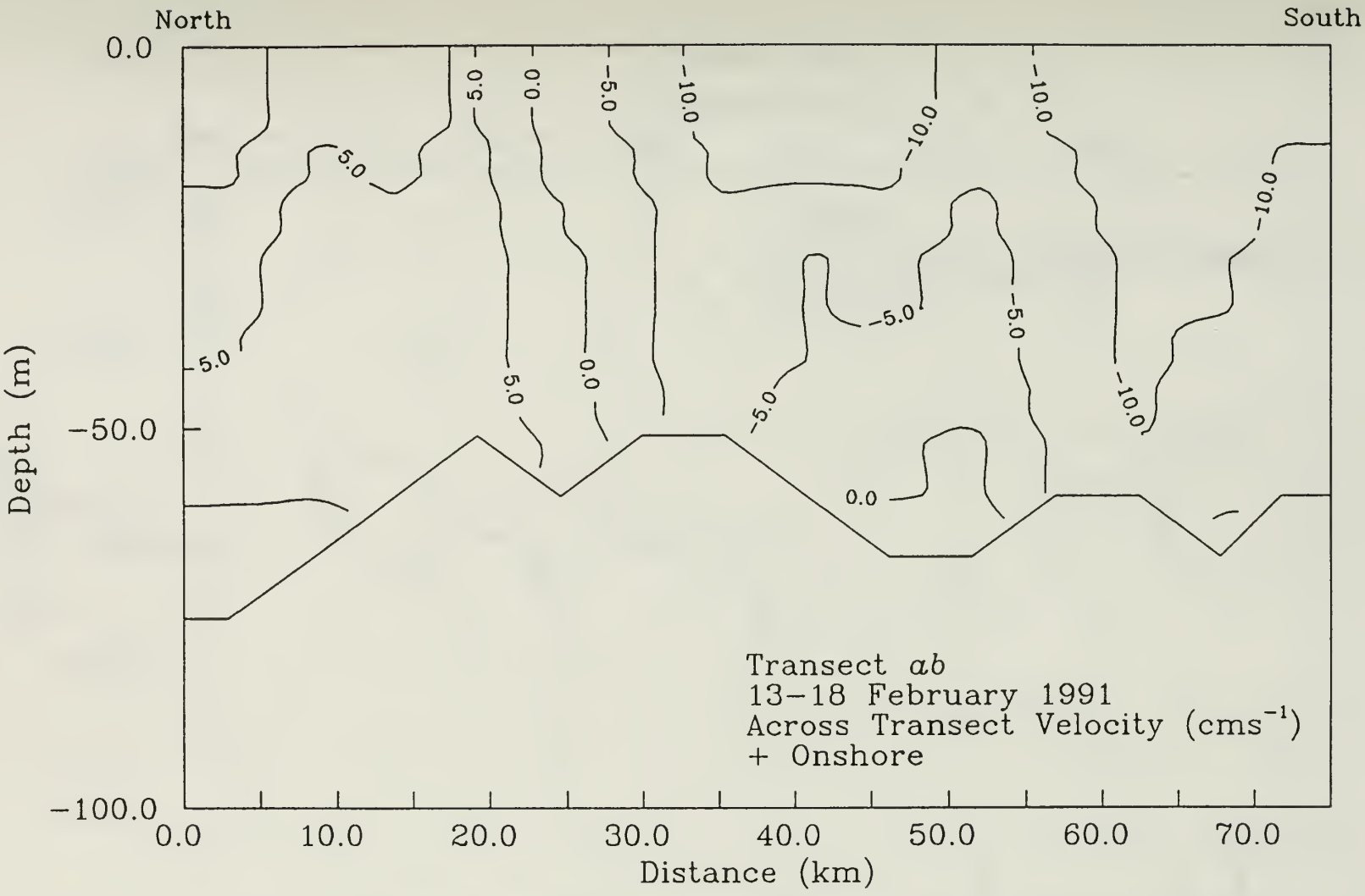

Figure 41. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) between waypoints *a* and *b* of the ADCP survey during the Farallones Shelf and Slope cruise, February 13-18, 1991.

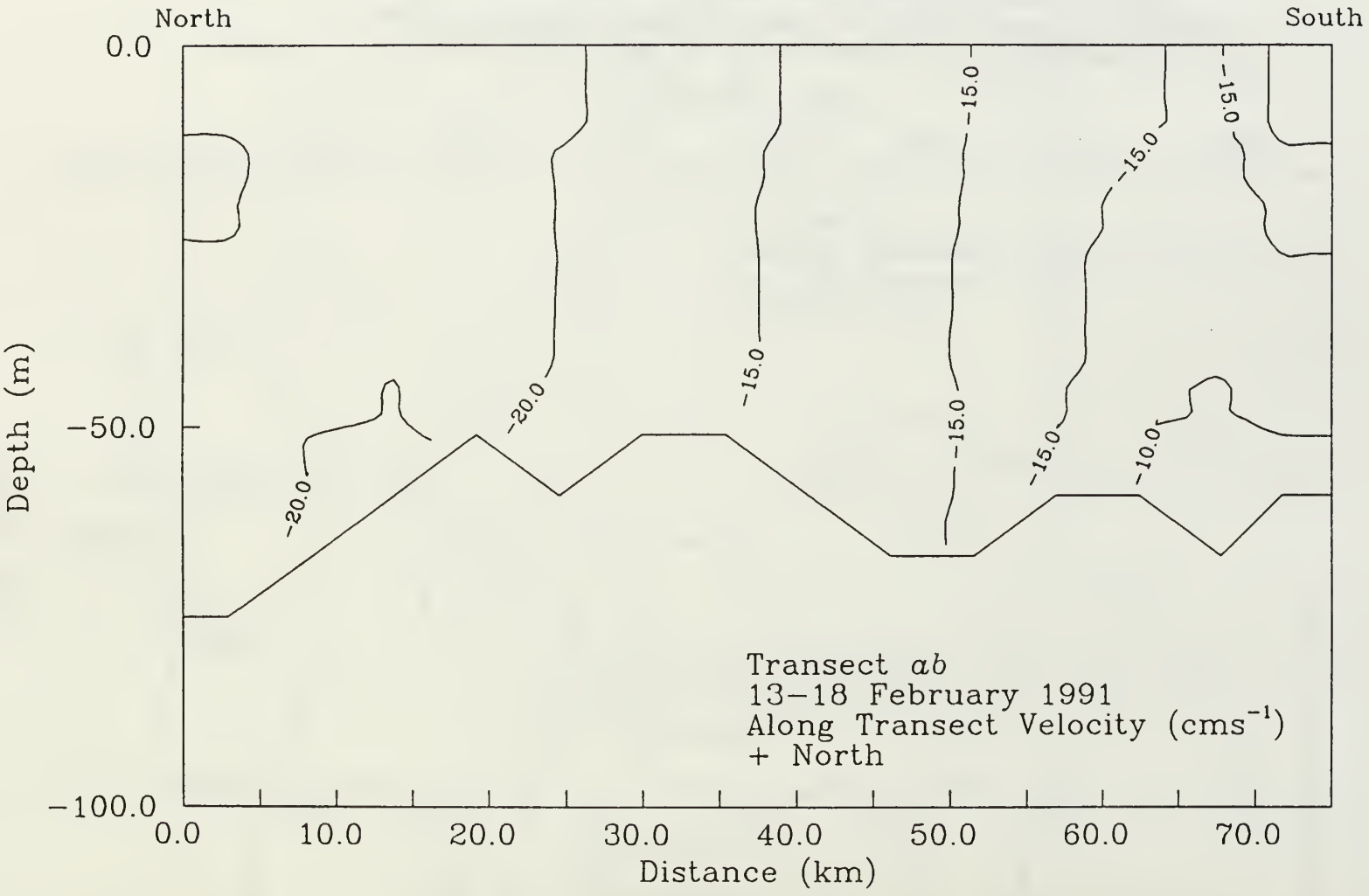
North
South
0.0
−50.0
−100.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
Distance (km)
-20.0
-20.0
-15.0
-15.0
-15.0
-15.0
-15.0
-10.0
Transect ab
13−18 February 1991
Along Transect Velocity (cms^{-1})
+ North

Figure 41b.

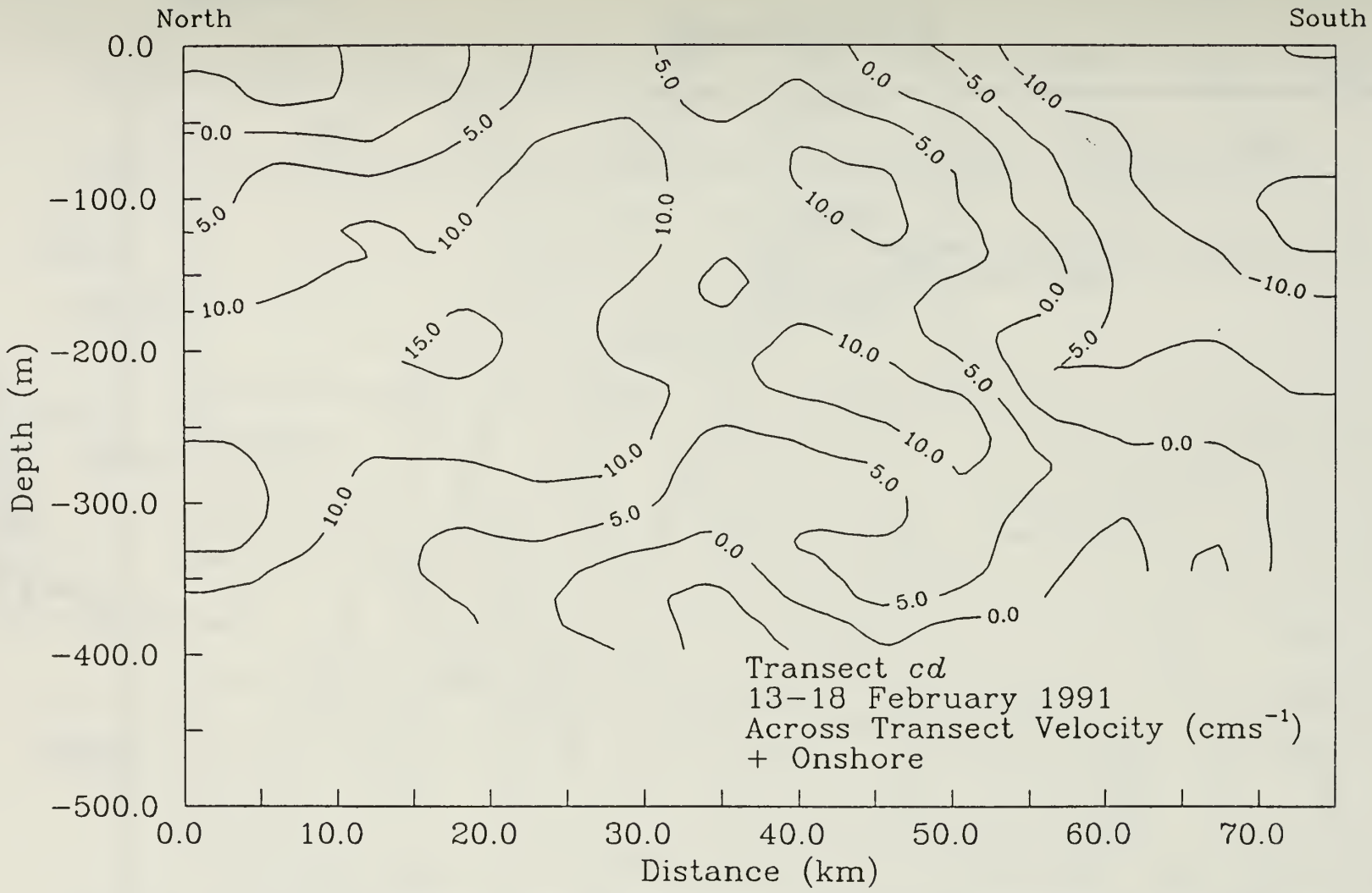

Figure 42. Vertical sections of 5 km averaged a) across-transect and b) along-transect ADCP velocity (cm s^{-1}) between waypoints *c* and *d* of the ADCP survey during the Farallones Shelf and Slope cruise, February 13-18, 1991.

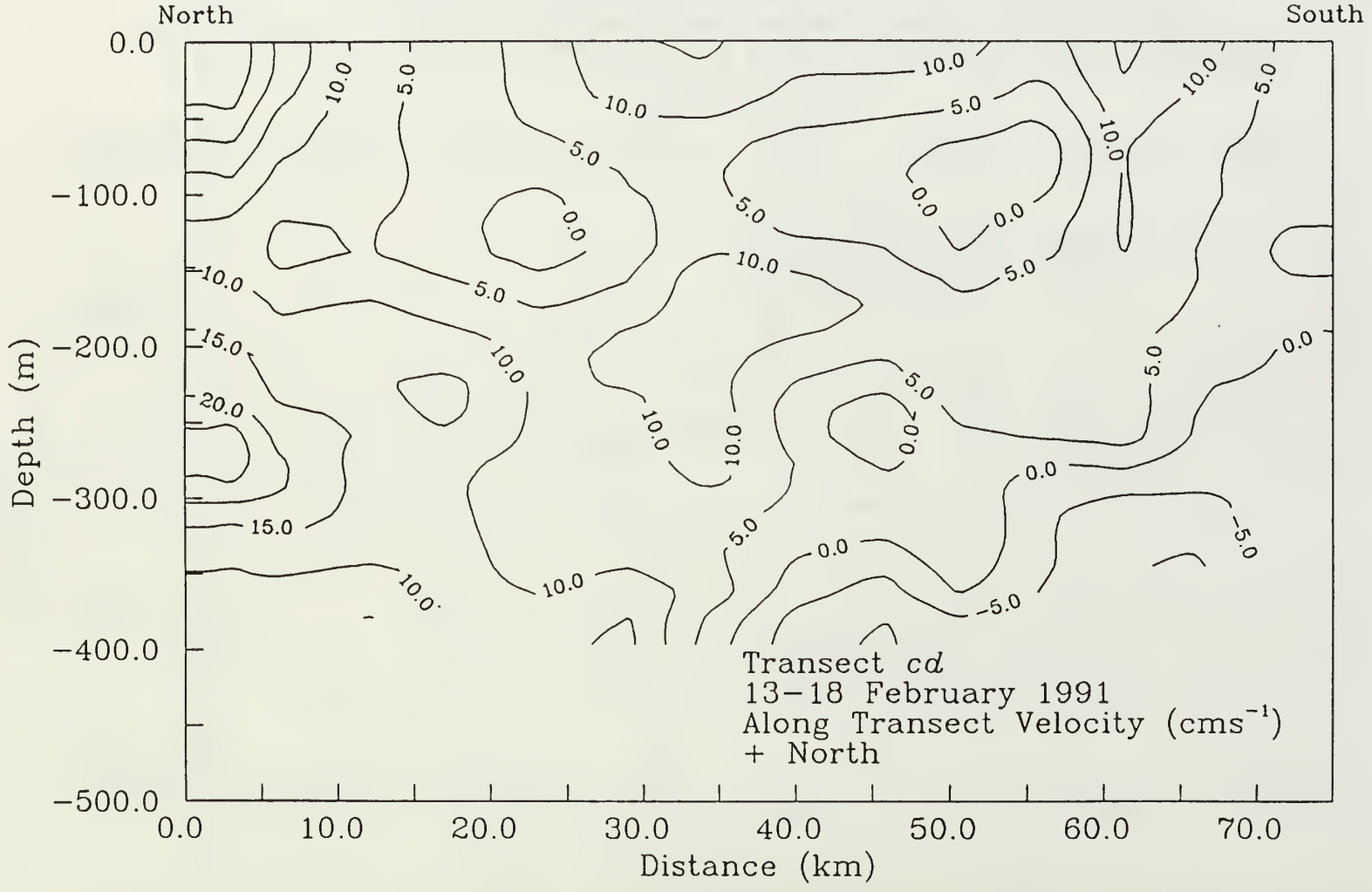
North
South
0.0
-100.0
-200.0
-300.0
-400.0
-500.0
Depth (m)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
Distance (km)
Transect cd
13-18 February 1991
Along Transect Velocity (cms^{-1})
+ North

Figure 42b.

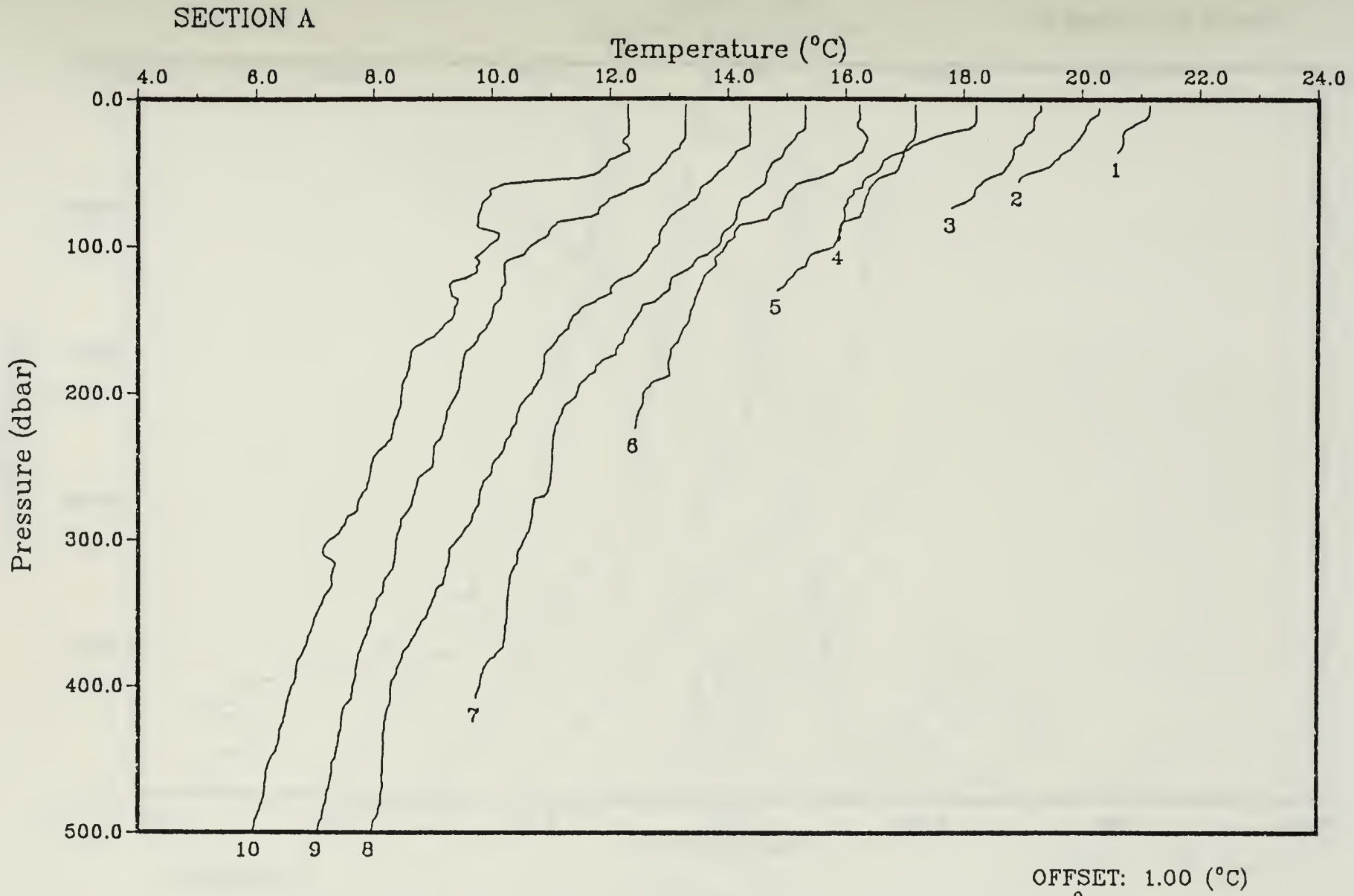

Figure 43. Waterfall plots from 0-500m of a) temperature (°C), b) salinity (psu), c) density anomaly (kg m^{-3}), and d) spiciness (π) from CTD stations 1 - 10 of the Farallones Shelf and Slope cruise, February 13-18, 1991.

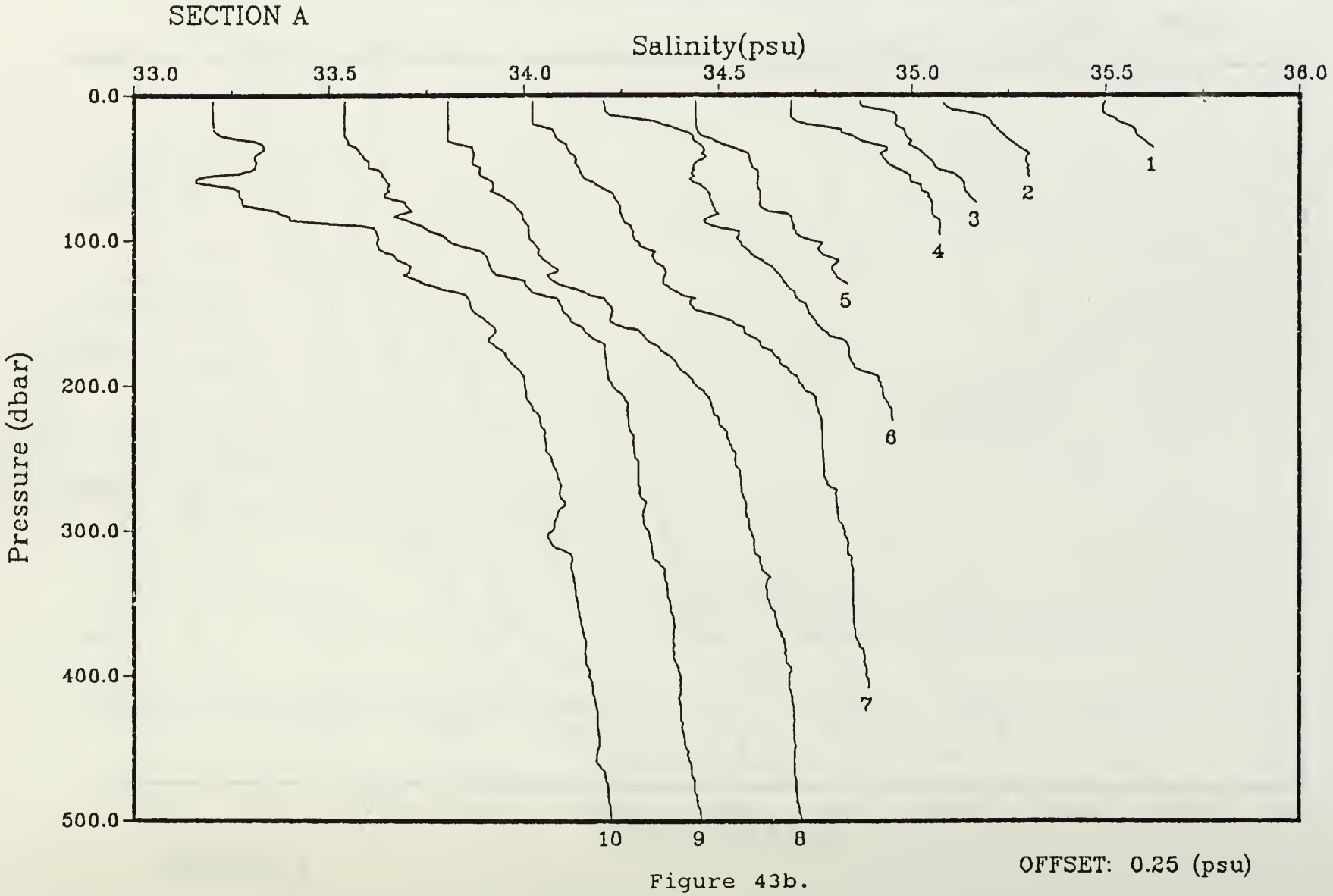
SECTION A
Salinity(psu)
33.0
33.5
34.0
34.5
35.0
35.5
36.0
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
1
2
3
4
5
6
7
8
9
10
OFFSET: 0.25 (psu)

Figure 43b.

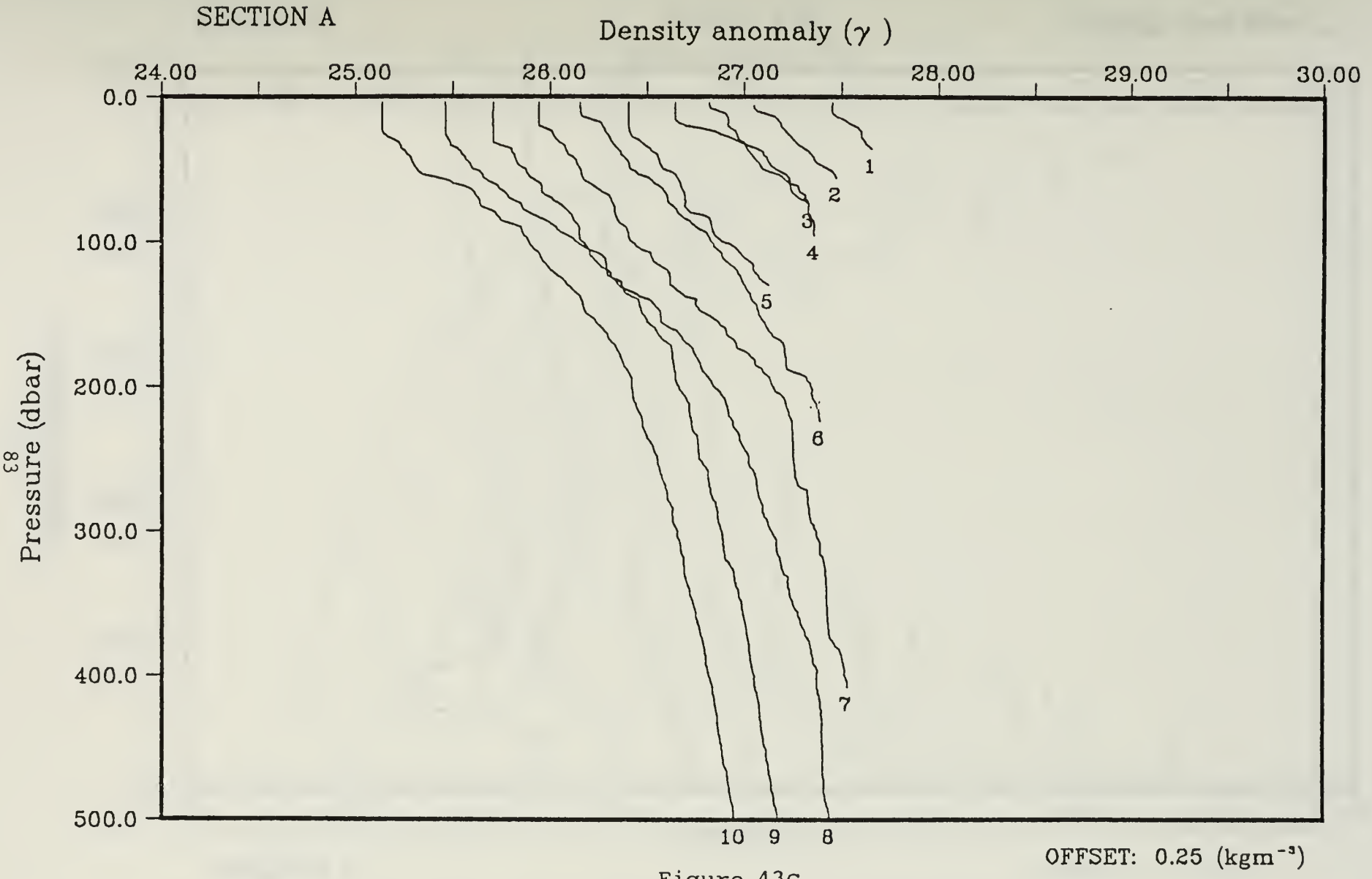
SECTION A
Density anomaly (γ)
24.00
25.00
26.00
27.00
28.00
29.00
30.00
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
1
2
3
4
5
6
7
8
9
10
OFFSET: 0.25 (kgm^{-3})

Figure 43c.

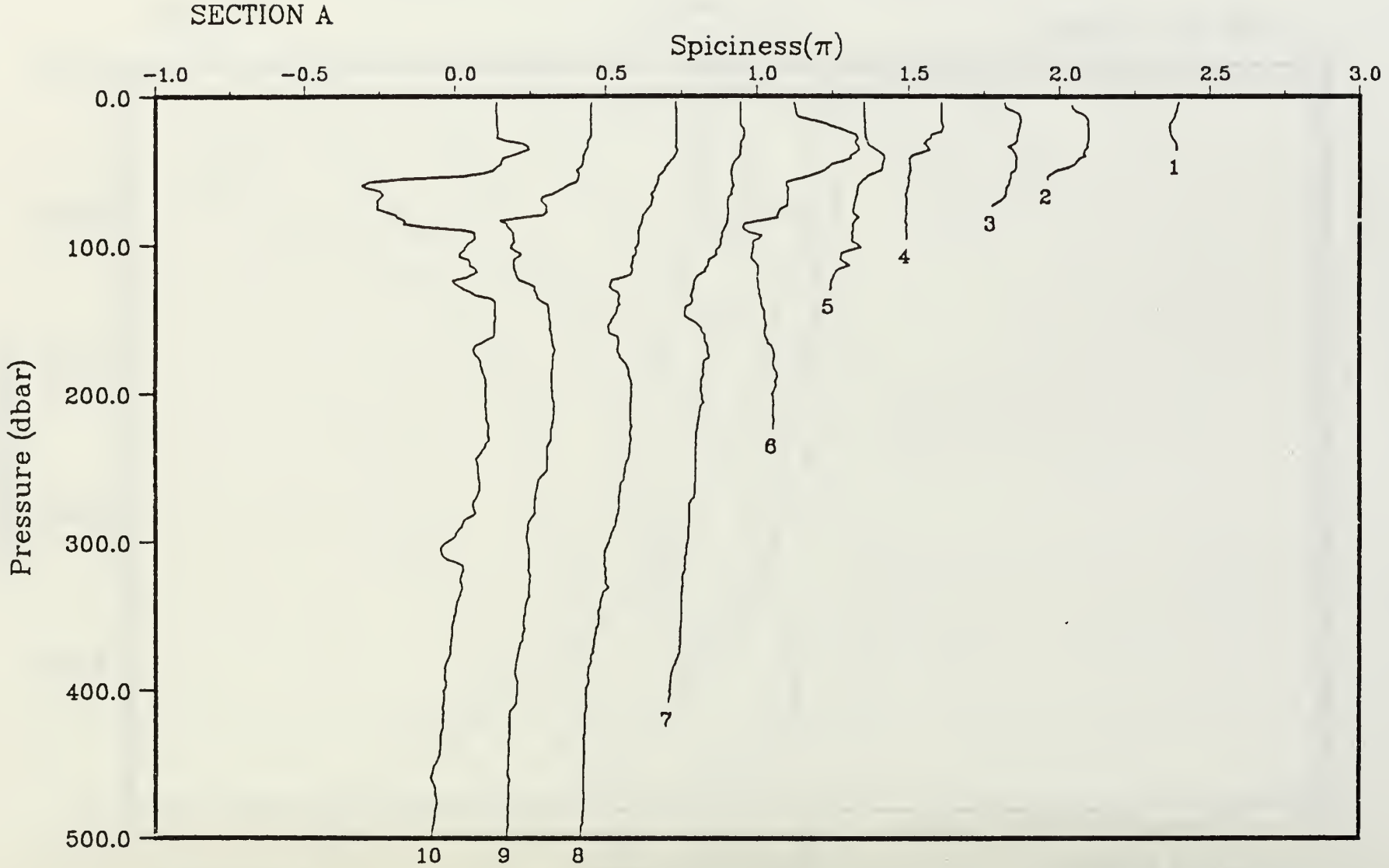

Figure 43d.

OFFSET: 0.25 (kgm^{-3})

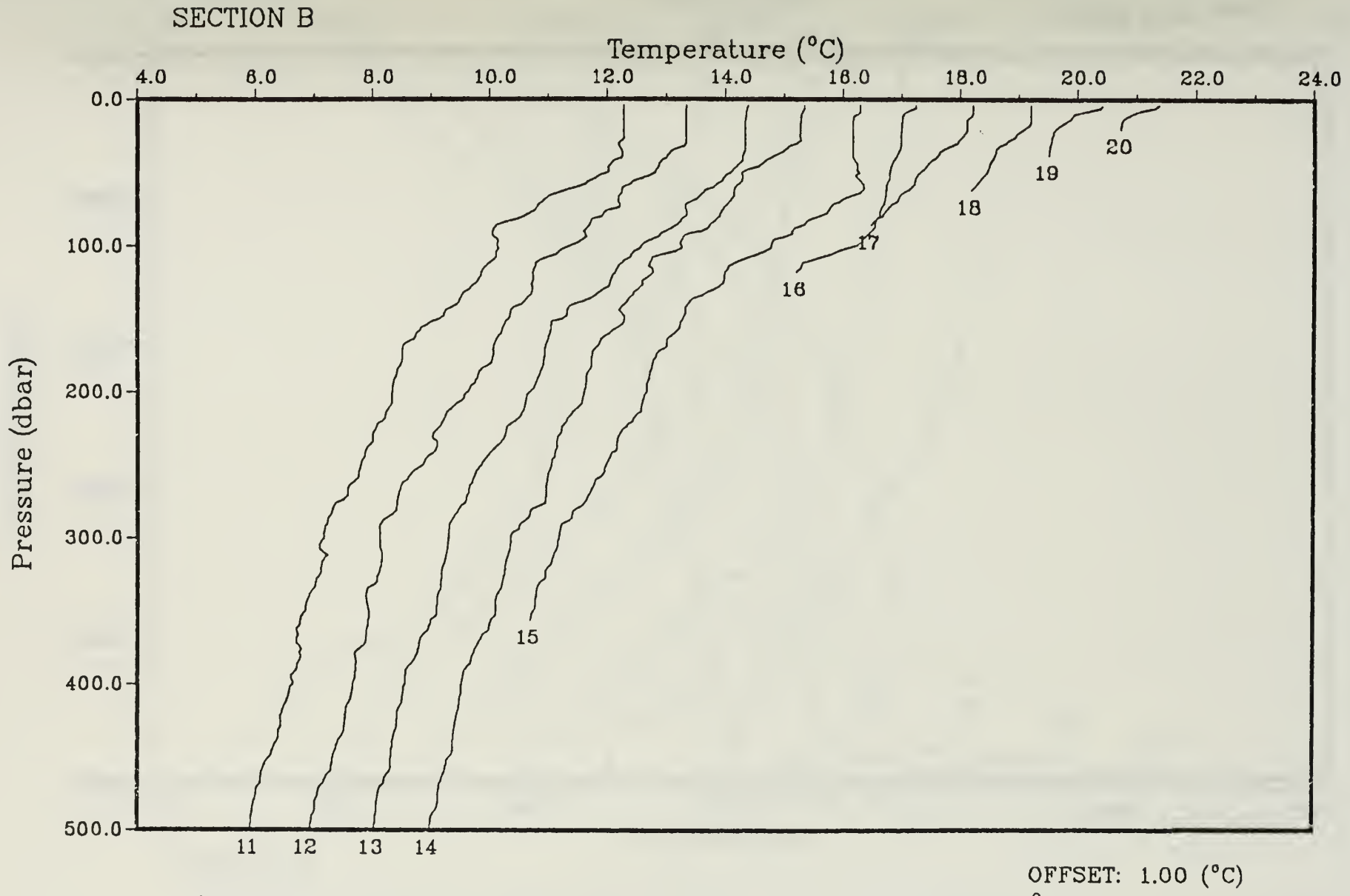

Figure 44. Waterfall plots from 0-500m of a) temperature (°C), b) salinity (psu), c) density anomaly(kg m^{-3}), and d) spiciness (π) from CTD stations 11 - 20 of the Farallones Shelf and Slope cruise, February 13-18, 1991.

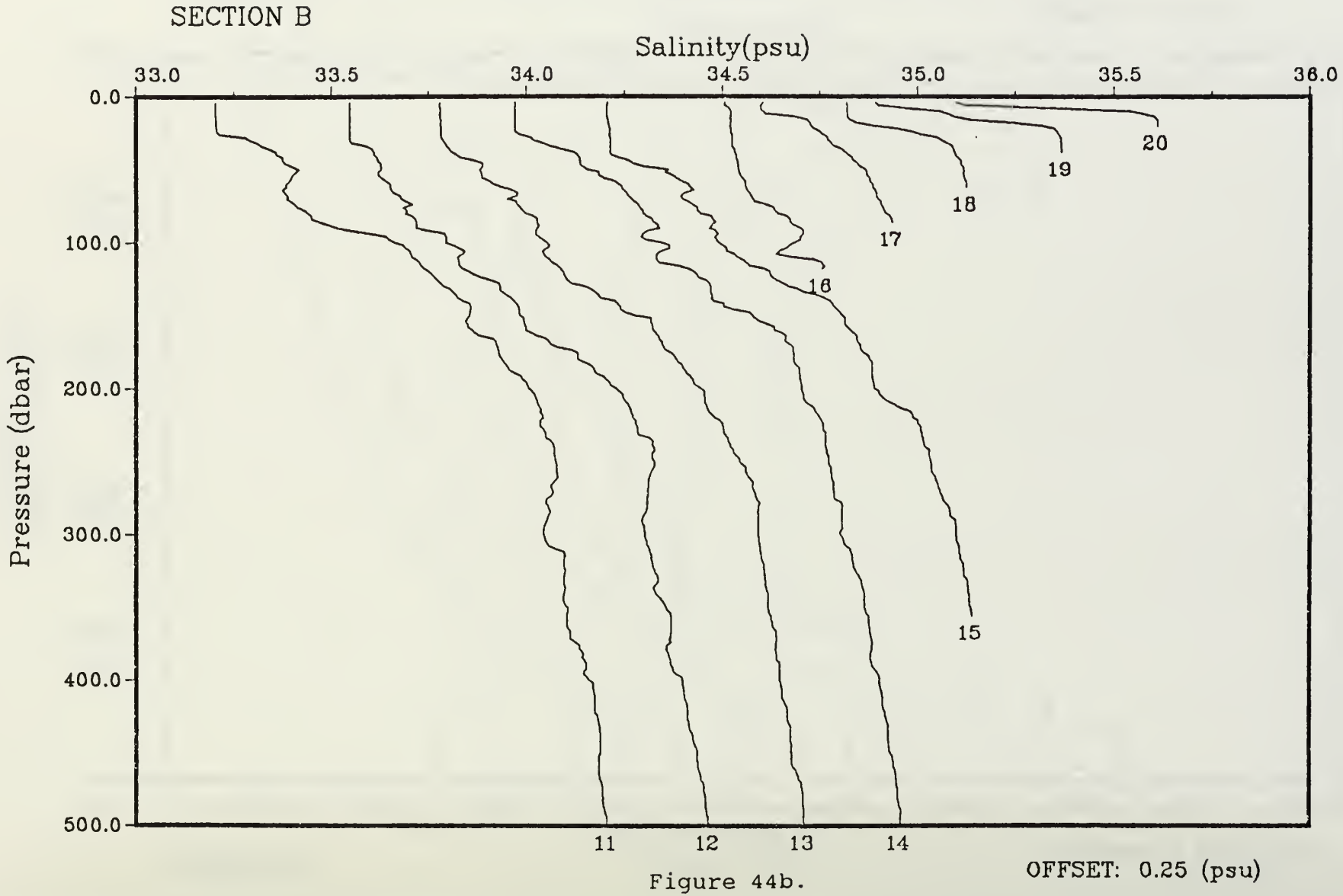
SECTION B
Salinity(psu)
33.0
33.5
34.0
34.5
35.0
35.5
36.0
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
20
19
18
17
16
15
11
12
13
14
OFFSET: 0.25 (psu)

Figure 44b.

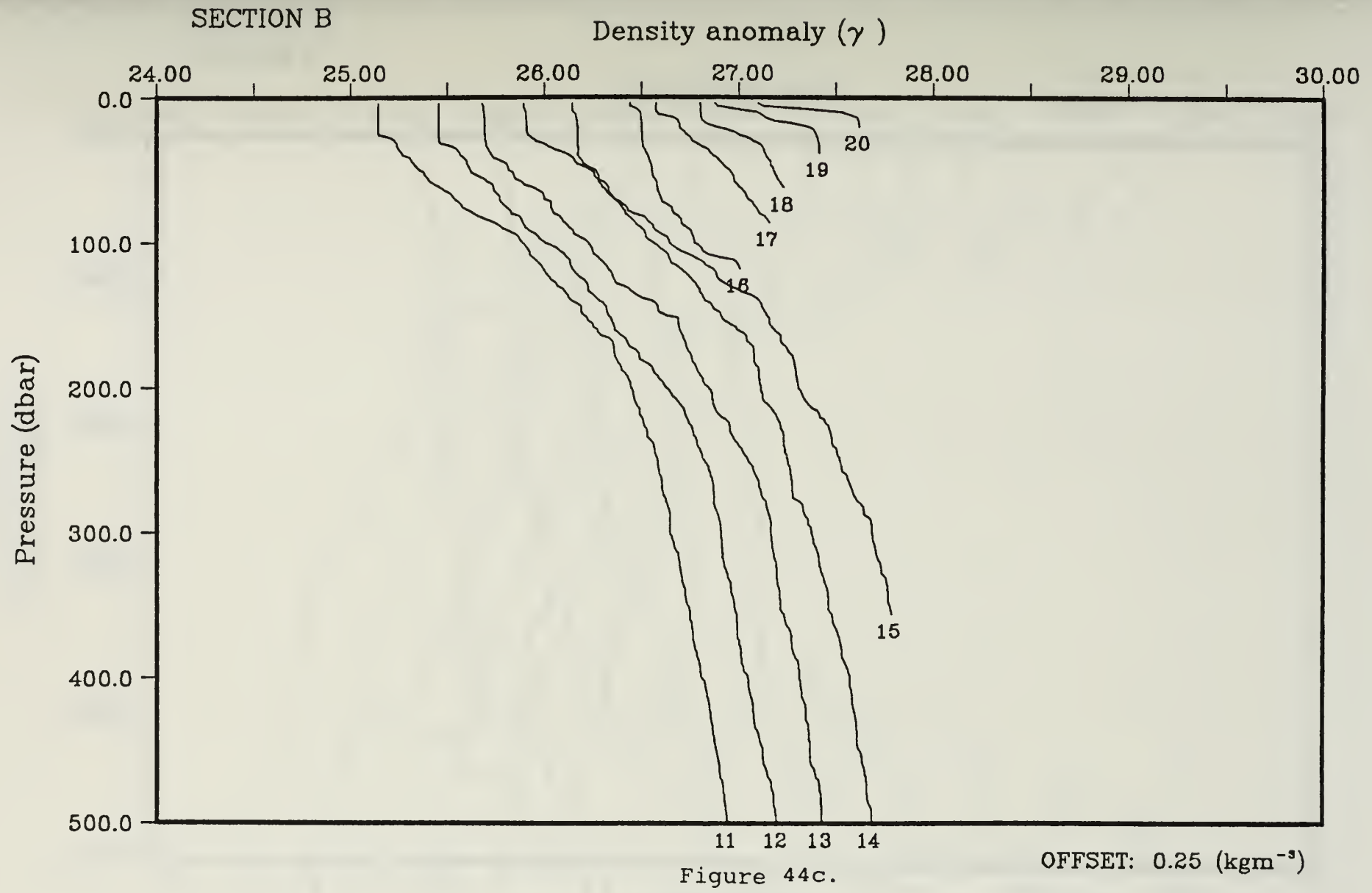
SECTION B
Density anomaly (γ)
24.00
25.00
26.00
27.00
28.00
29.00
30.00
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
20
19
18
17
16
15
11
12
13
14
OFFSET: 0.25 (kgm^{-3})

Figure 44c.

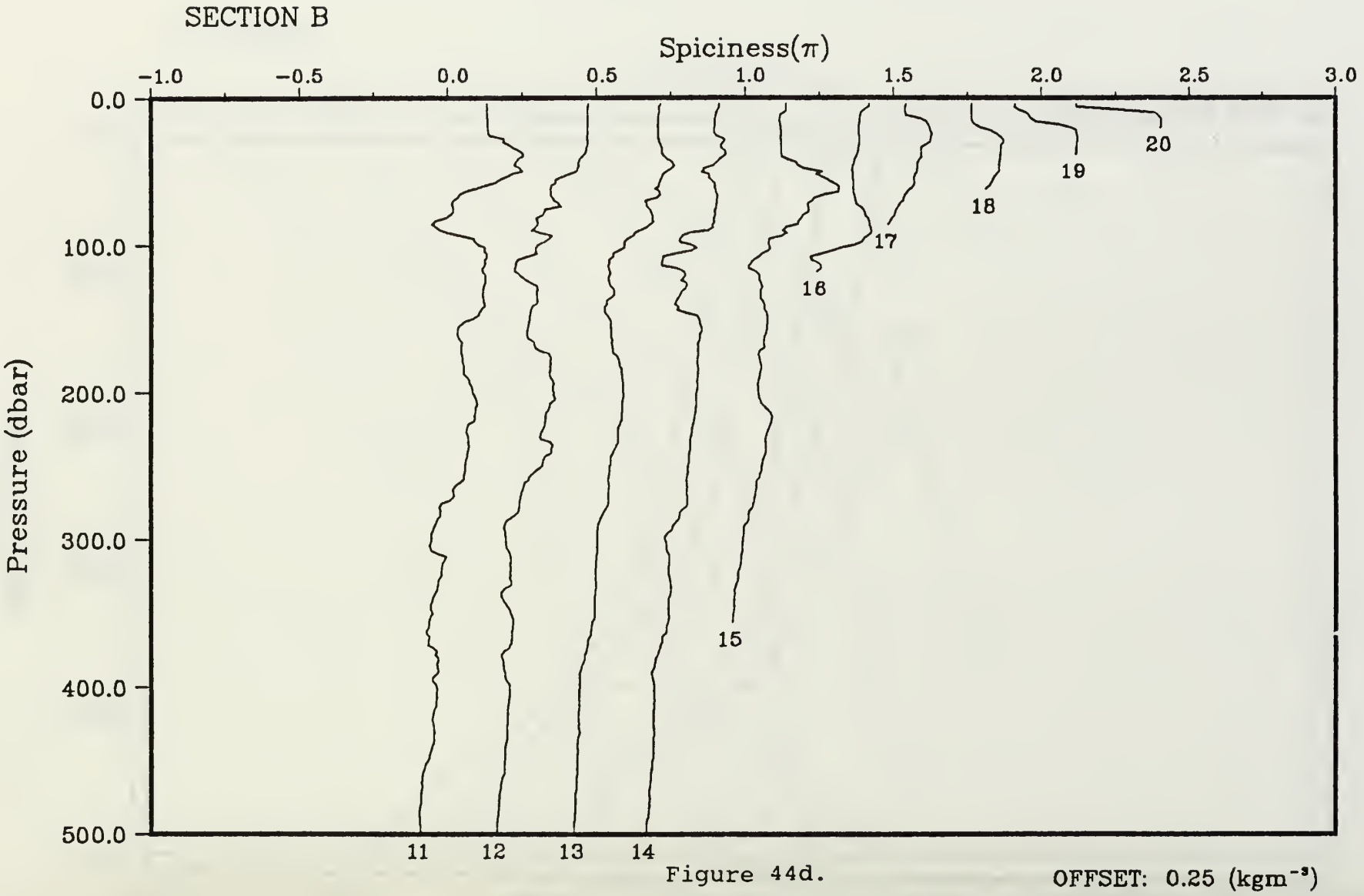
SECTION B
Spiciness(π)
−1.0
−0.5
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
11
12
13
14
15
16
17
18
19
20
OFFSET: 0.25 (kgm⁻³)

Figure 44d.

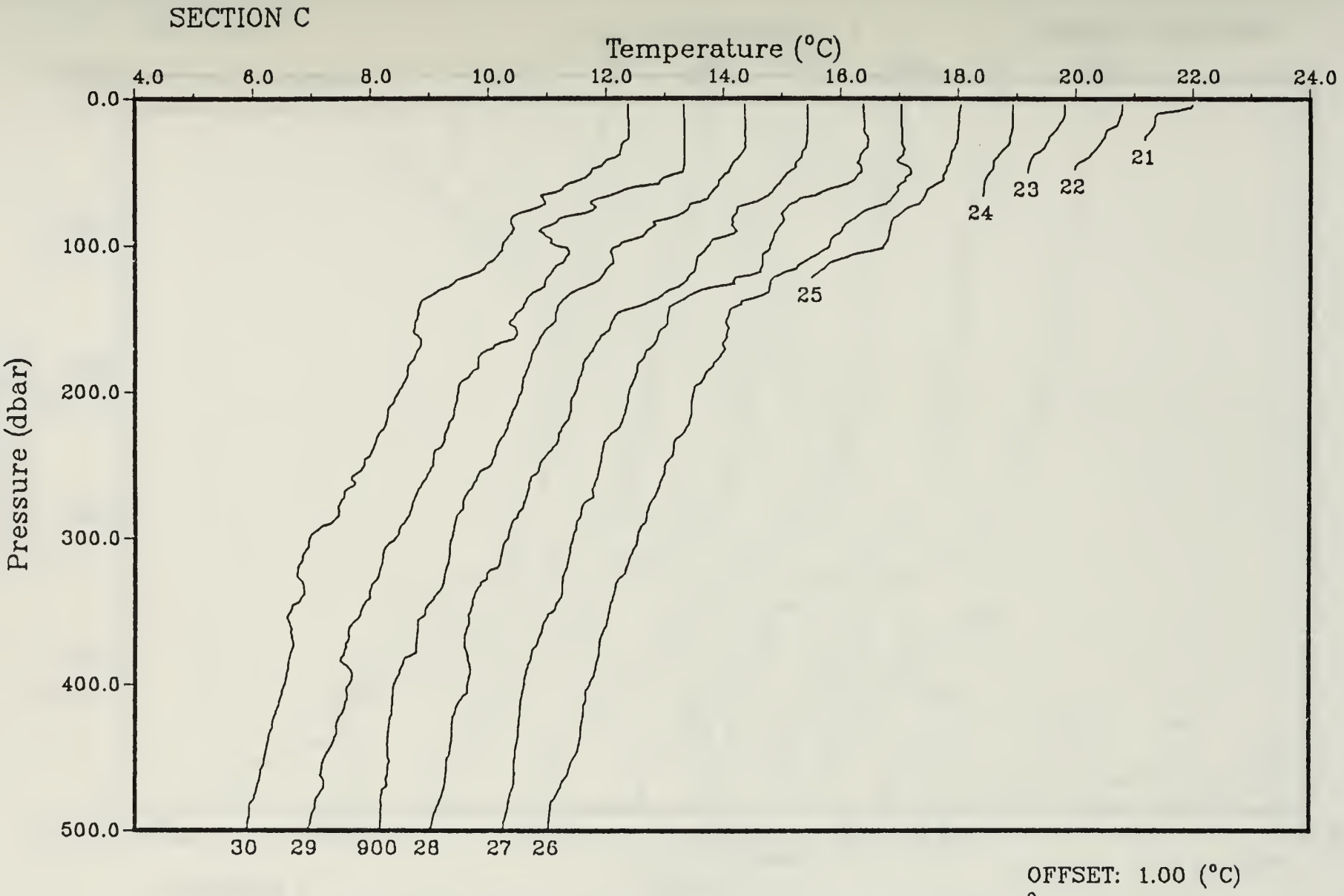

Figure 45. Waterfall plots from 0-500m of a) temperature (°C), b) salinity (psu), c) density anomaly(kg m^{-3}), and d) spiciness (π) from CTD stations 21 - 29, 900, and 30 of the Farallones Shelf and Slope cruise, February 13-18, 1991.

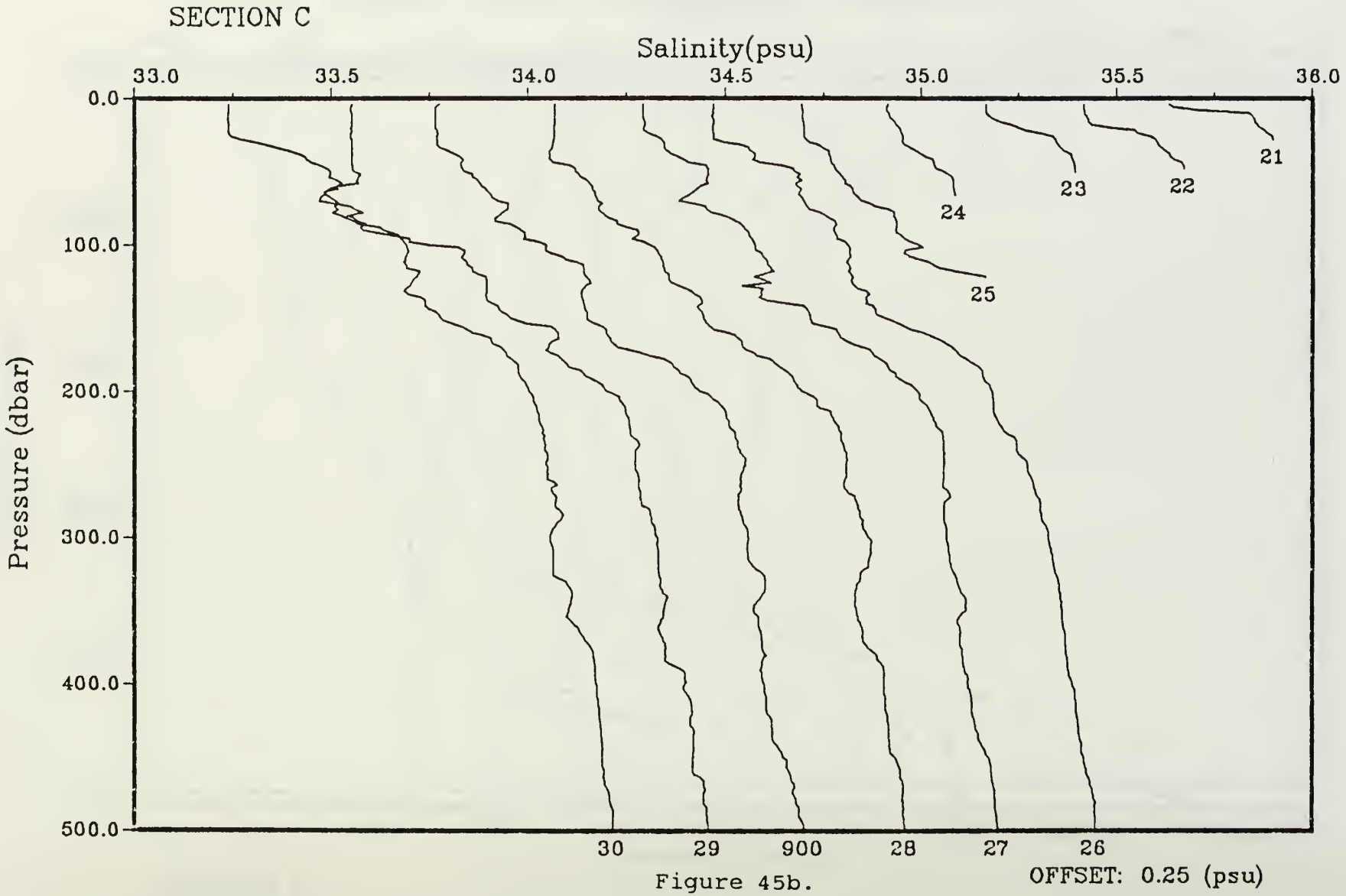
SECTION C
Salinity(psu)
33.0
33.5
34.0
34.5
35.0
35.5
36.0
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
21
22
23
24
25
30
29
900
28
27
26
OFFSET: 0.25 (psu)

Figure 45b.

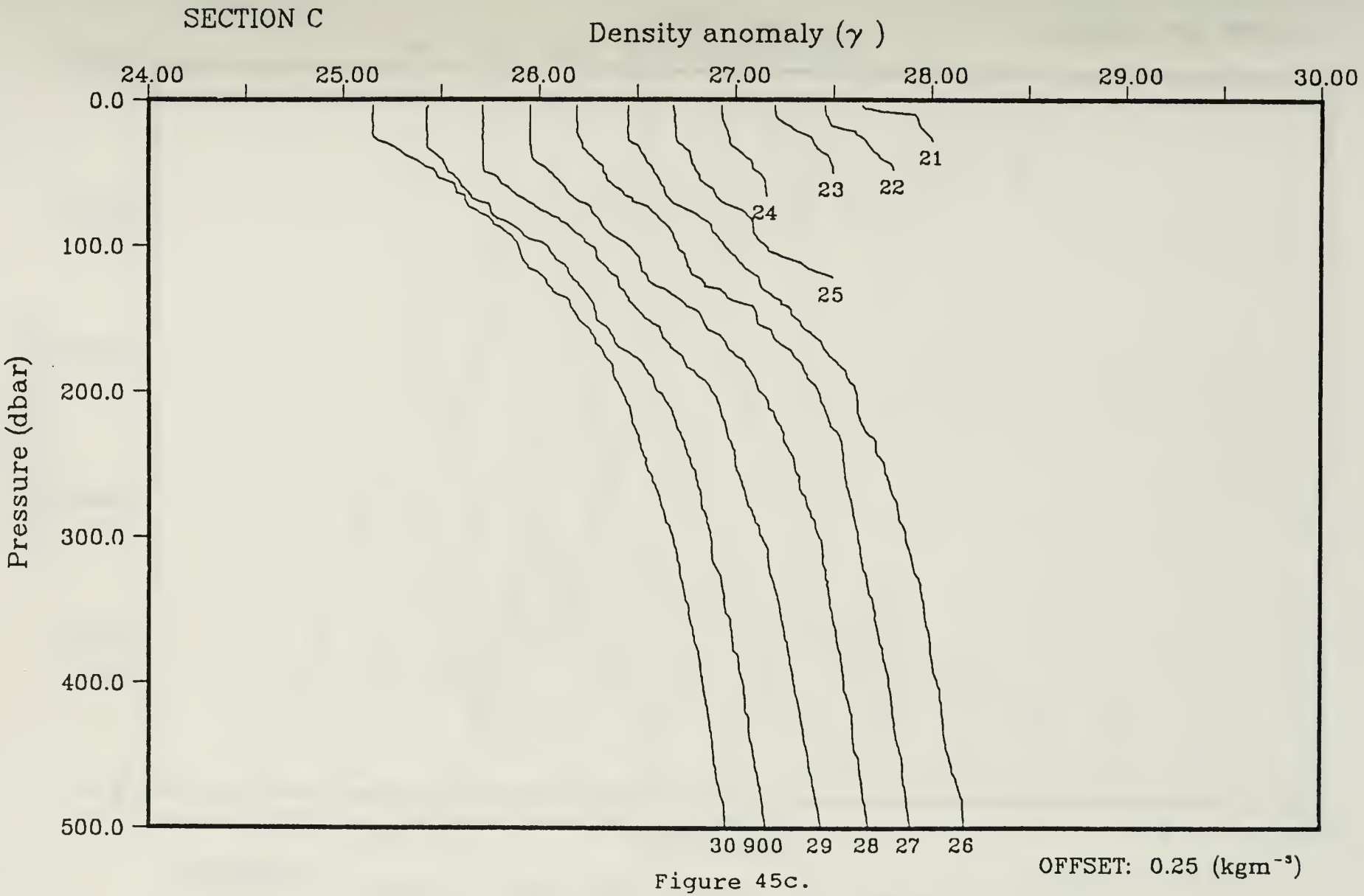
SECTION C
Density anomaly (γ)
24.00
25.00
26.00
27.00
28.00
29.00
30.00
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
21
23
22
24
25
30 900
29
28
27
26
OFFSET: 0.25 (kgm^{-3})

Figure 45c.

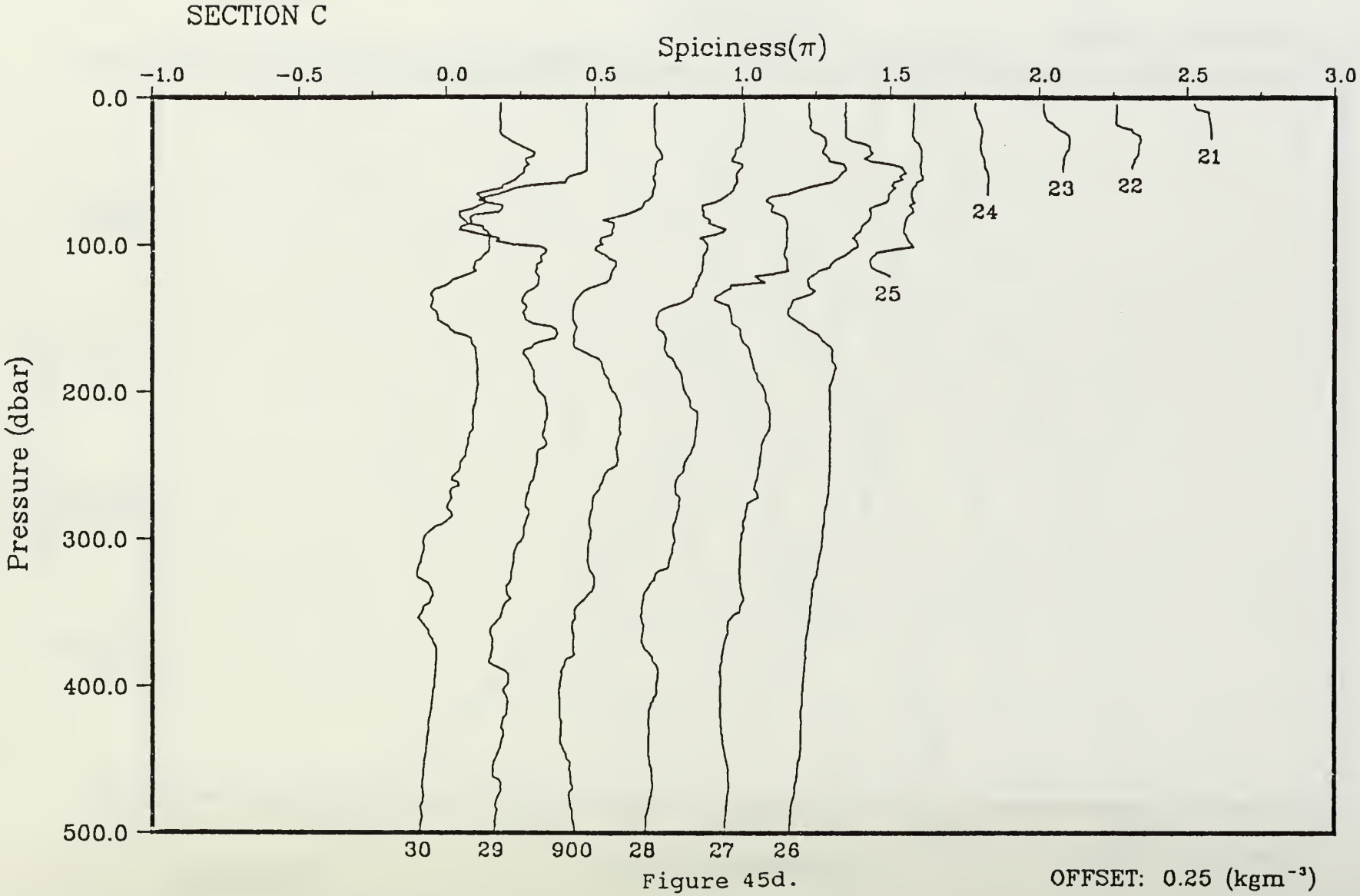
SECTION C
Spiciness(π)
−1.0
−0.5
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
21
22
23
24
25
30
29
900
28
27
26
OFFSET: 0.25 (kgm⁻³)

Figure 45d.

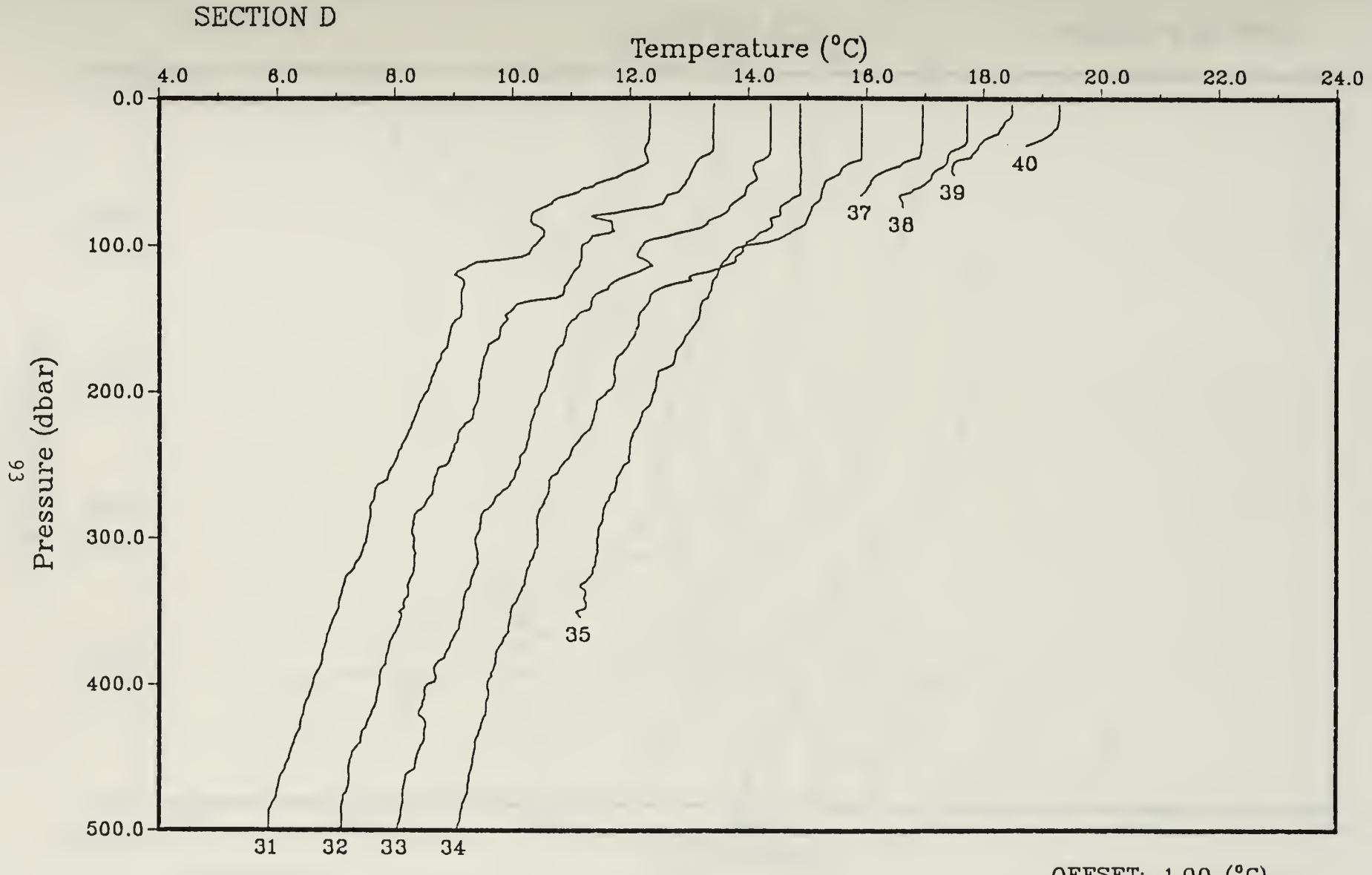

Figure 46. Waterfall plots from 0-500m of a) temperature (°C), b) salinity (psu), c) density anomaly (kg m^{-3}), and d) spiciness (π) from CTD stations 31 - 40 of the Farallones Shelf and Slope cruise, February 13-18, 1991.

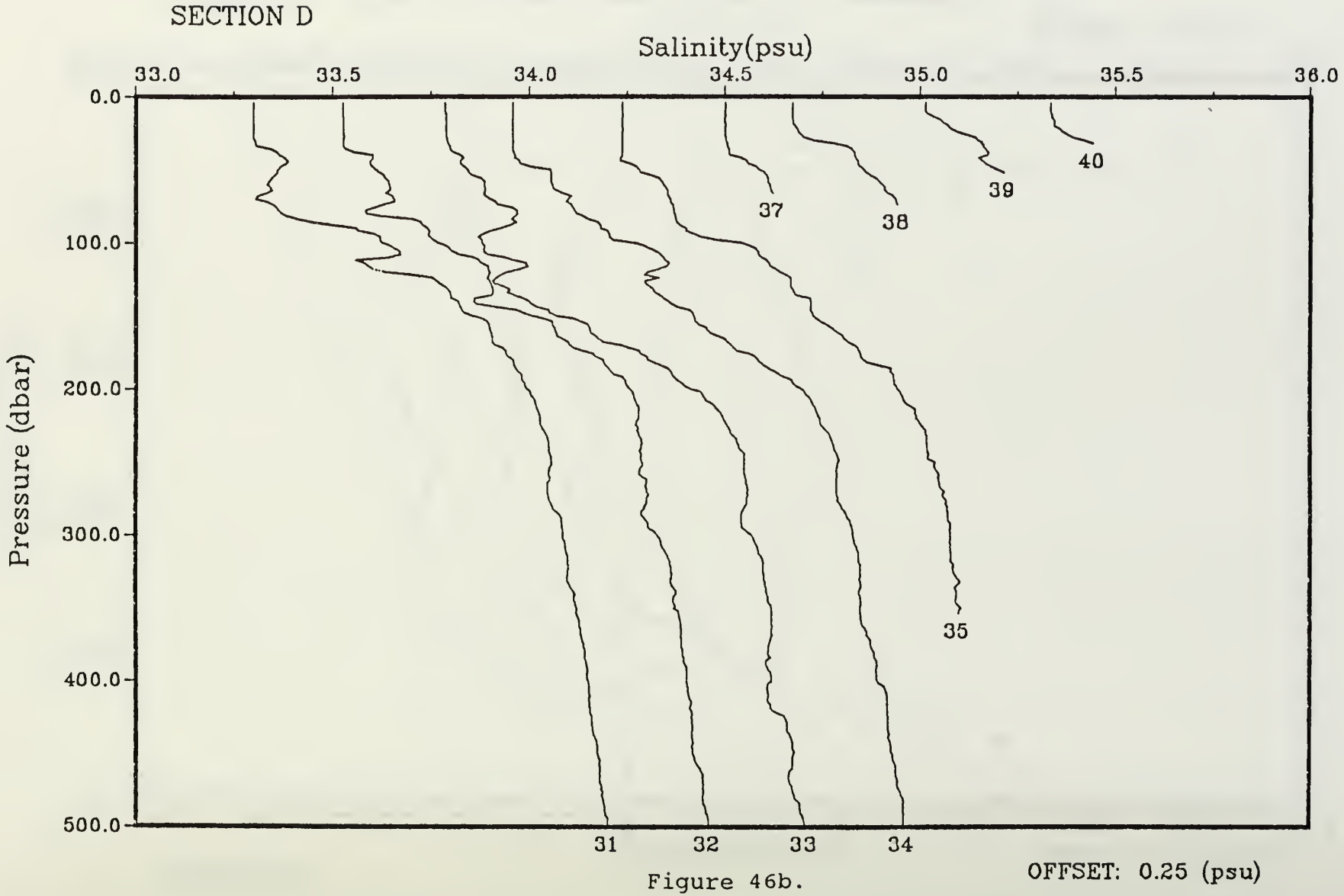
SECTION D
Salinity(psu)
33.0
33.5
34.0
34.5
35.0
35.5
36.0
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
40
39
37
38
35
31
32
33
34
OFFSET: 0.25 (psu)

Figure 46b.

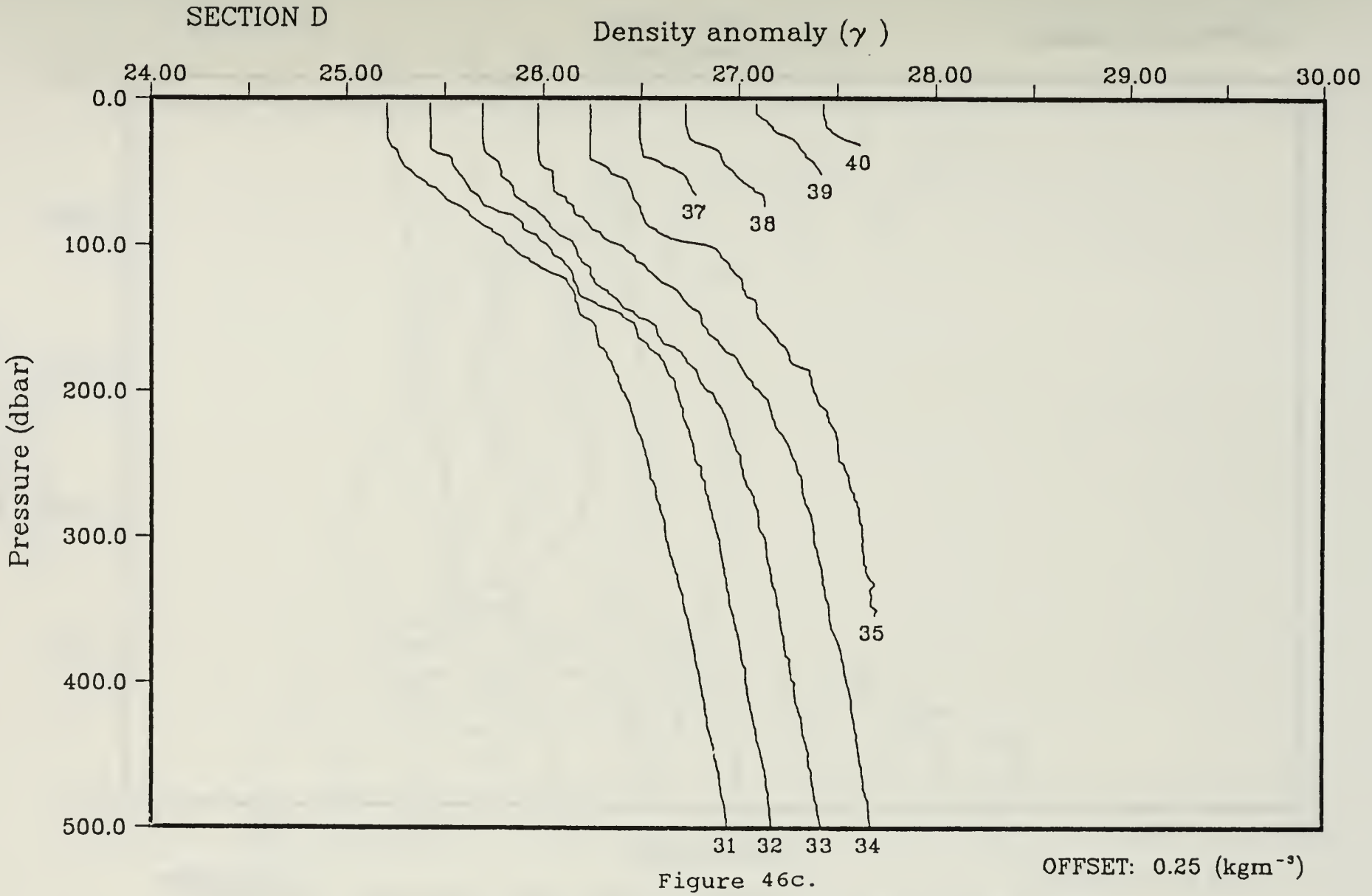
SECTION D
Density anomaly (γ)
24.00
25.00
26.00
27.00
28.00
29.00
30.00
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
40
39
37
38
35
31
32
33
34
OFFSET: 0.25 (kgm^{-3})

Figure 46c.

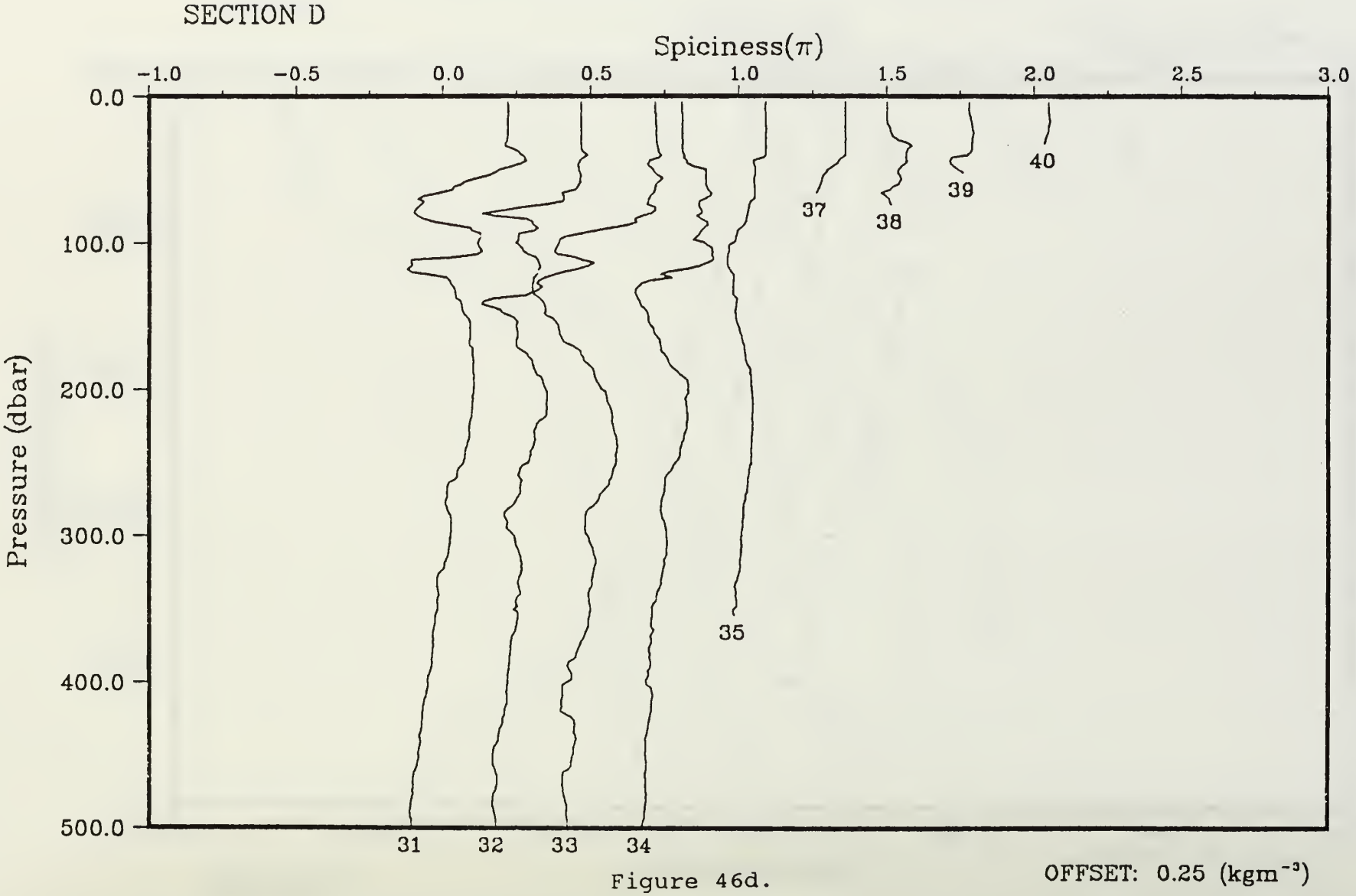
SECTION D
Spiciness(π)
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
31
32
33
34
35
37
38
39
40
OFFSET: 0.25 (kgm⁻³)

Figure 46d.

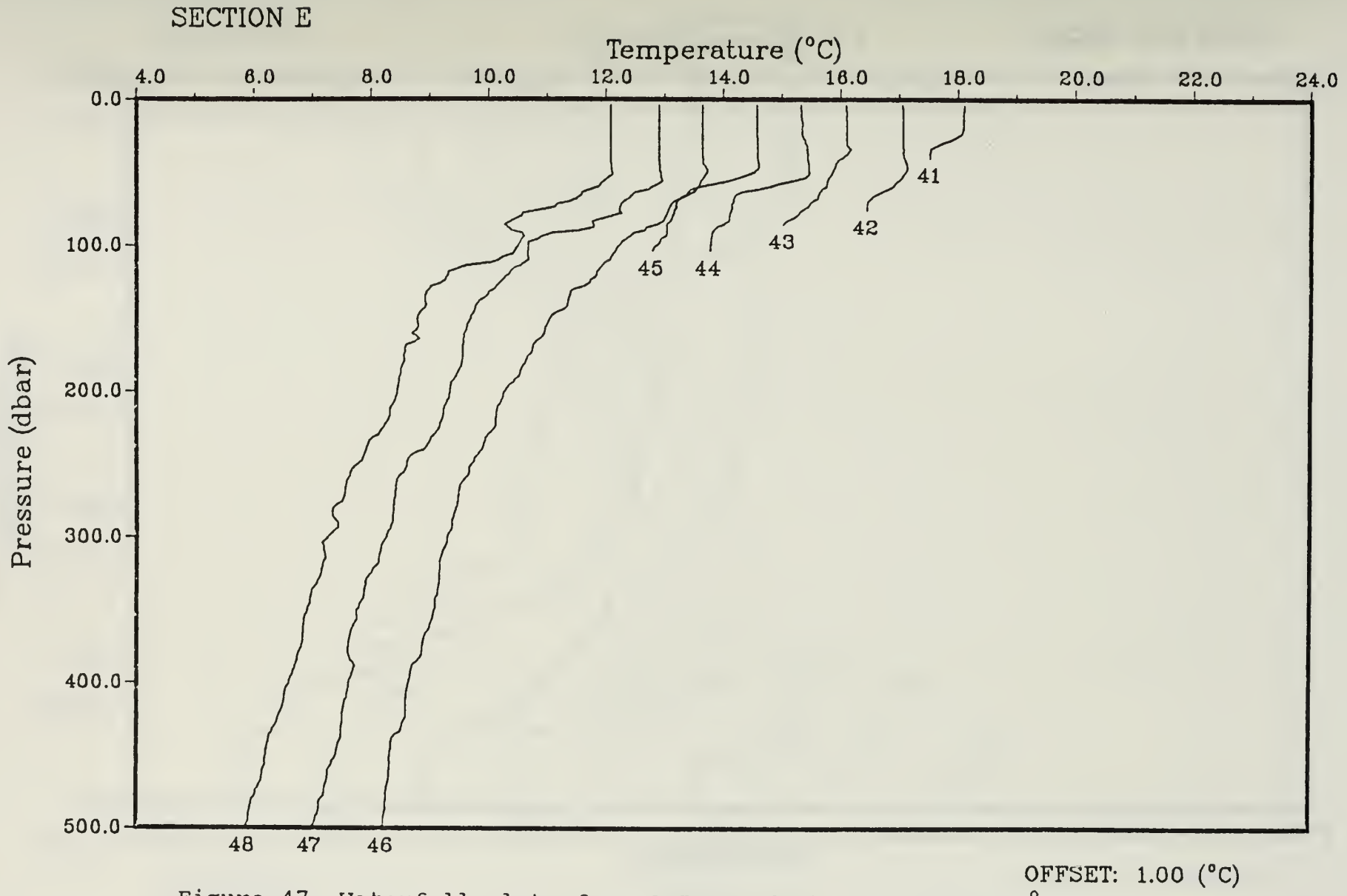

Figure 47. Waterfall plots from 0-500m of a) temperature (°C), b) salinity (psu), c) density anomaly(kg m^{-3}), and d) spiciness (π) from CTD stations 41 - 48 of the Farallones Shelf and Slope cruise, February 13-18, 1991.

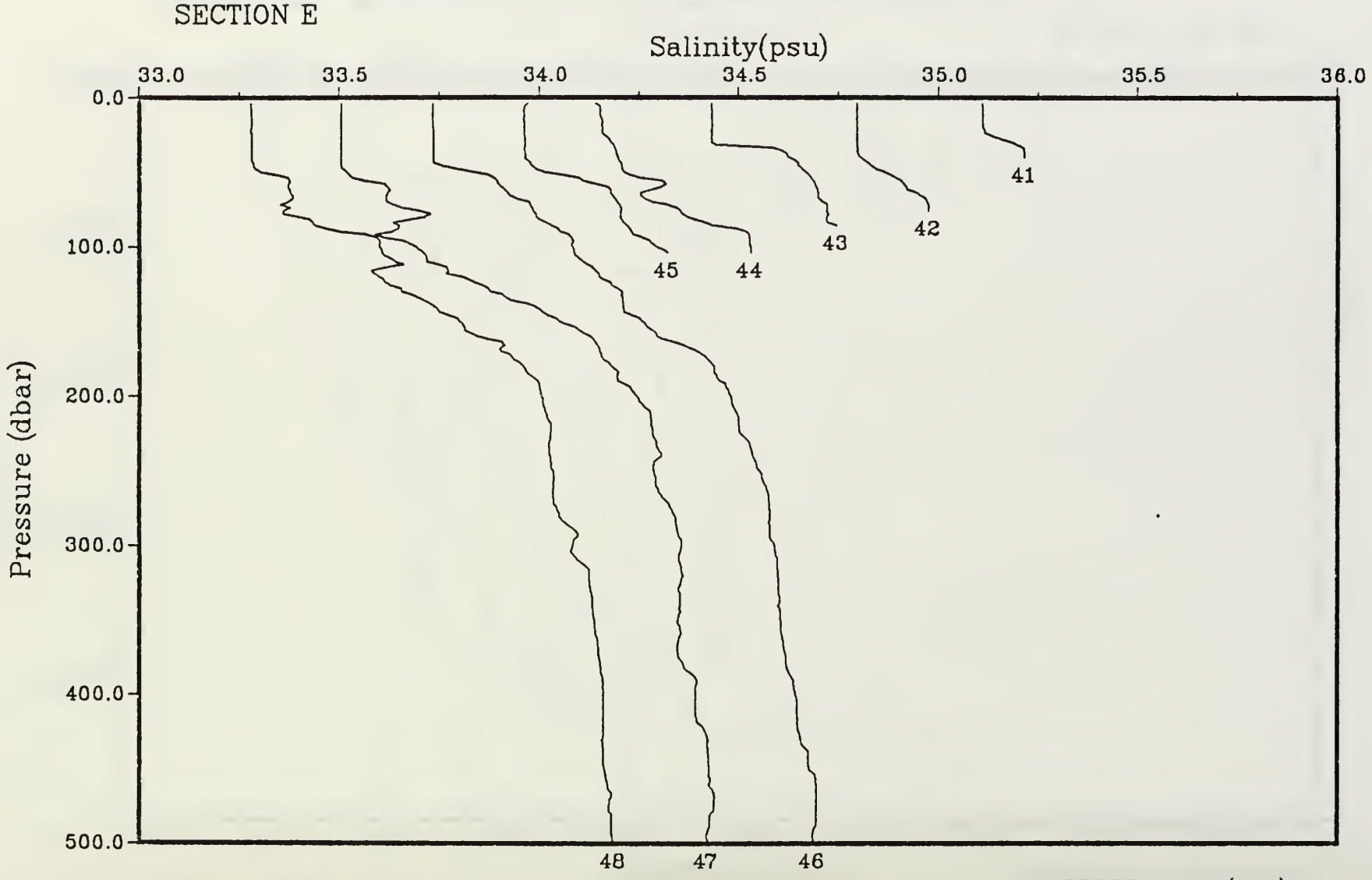
SECTION E
Salinity(psu)
33.0
33.5
34.0
34.5
35.0
35.5
36.0
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
41
42
43
44
45
46
47
48
OFFSET: 0.25 (psu)

Figure 47b.

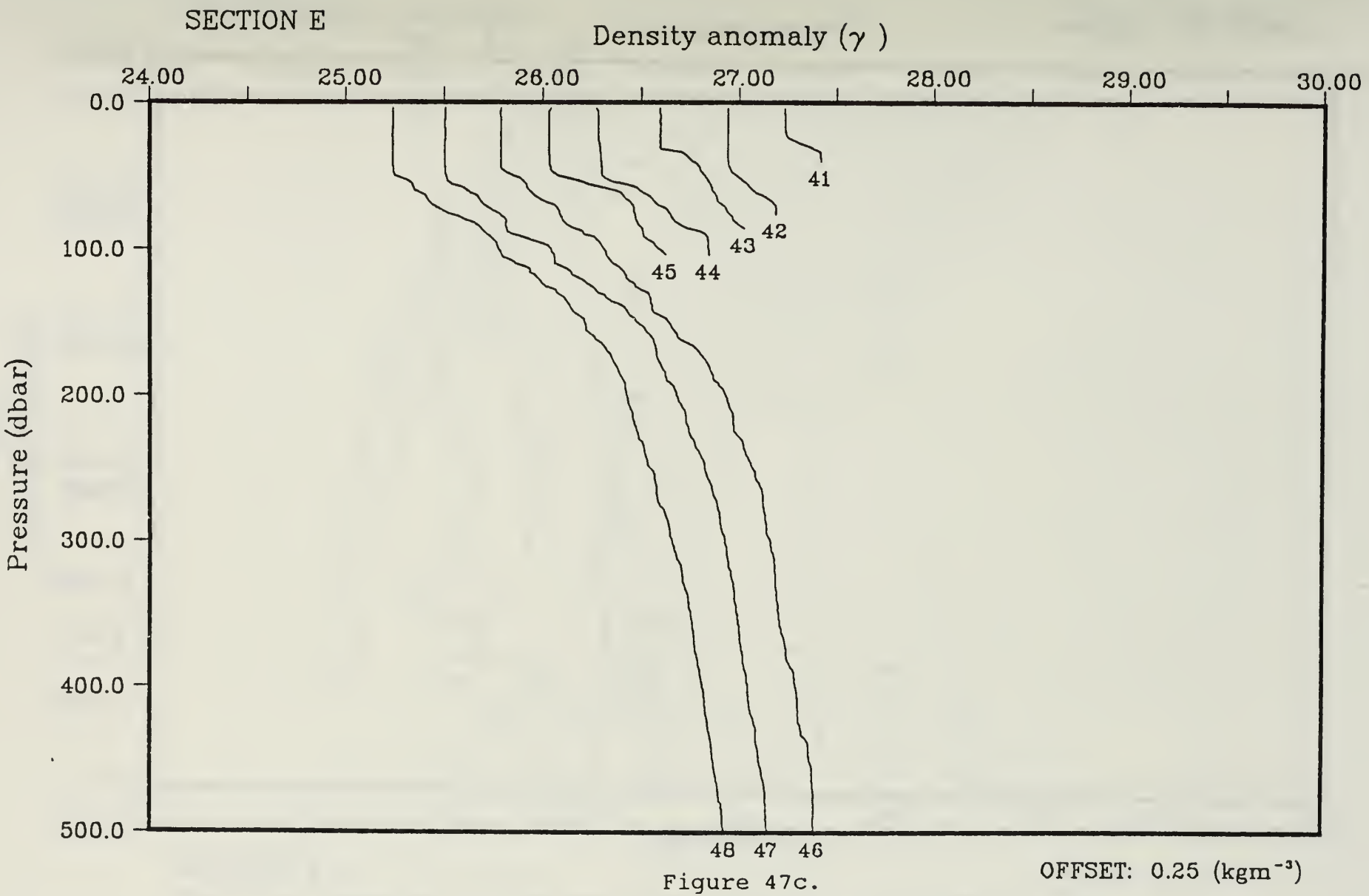
SECTION E
Density anomaly (γ)
24.00
25.00
26.00
27.00
28.00
29.00
30.00
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
41
42
43
44
45
48
47
46
OFFSET: 0.25 (kgm^{-3})

Figure 47c.

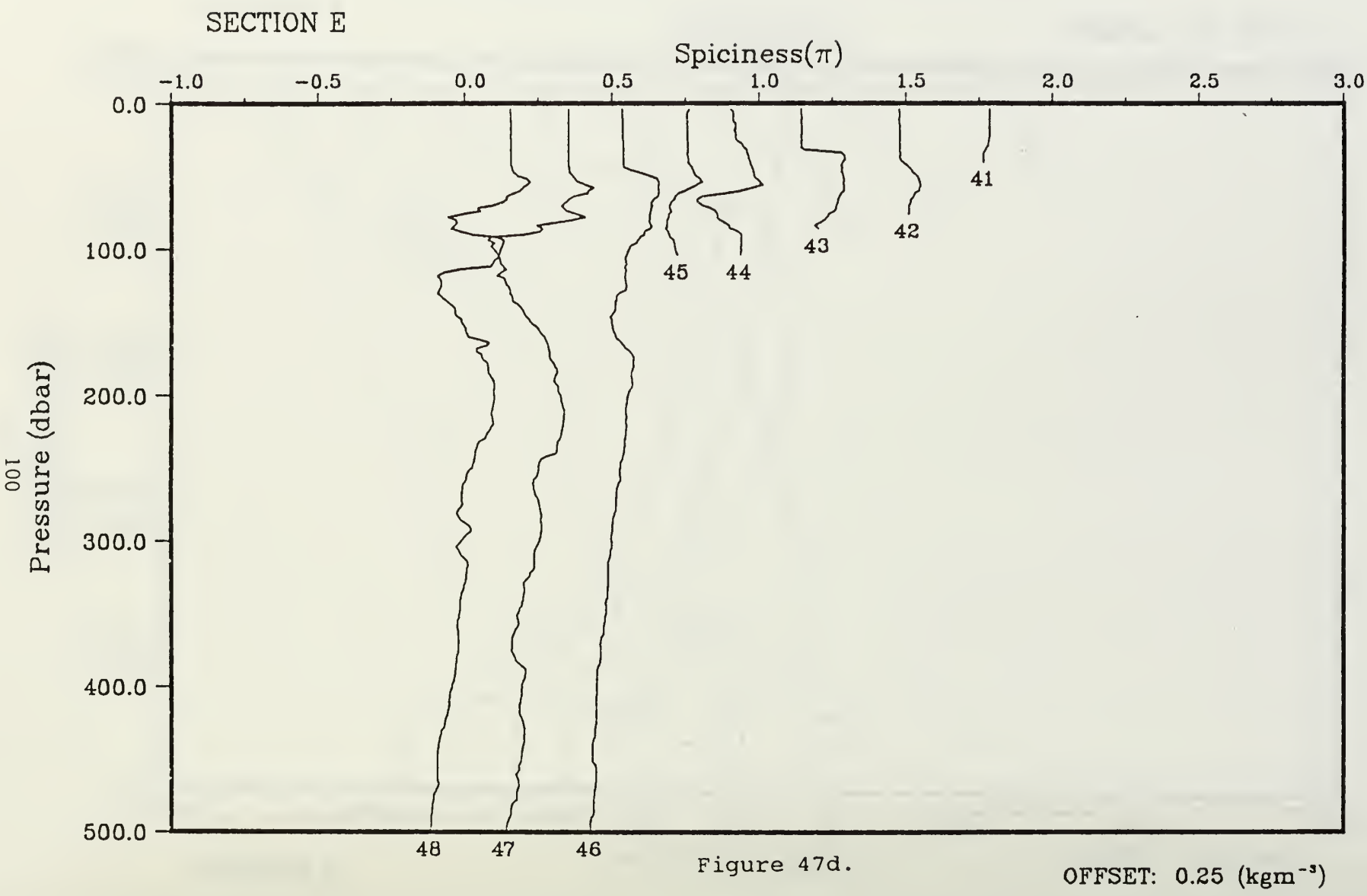
SECTION E
Spiciness(π)
-1.0
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0.0
100.0
200.0
300.0
400.0
500.0
Pressure (dbar)
100
41
42
43
44
45
46
47
48
OFFSET: 0.25 (kgm⁻³)

Figure 47d.

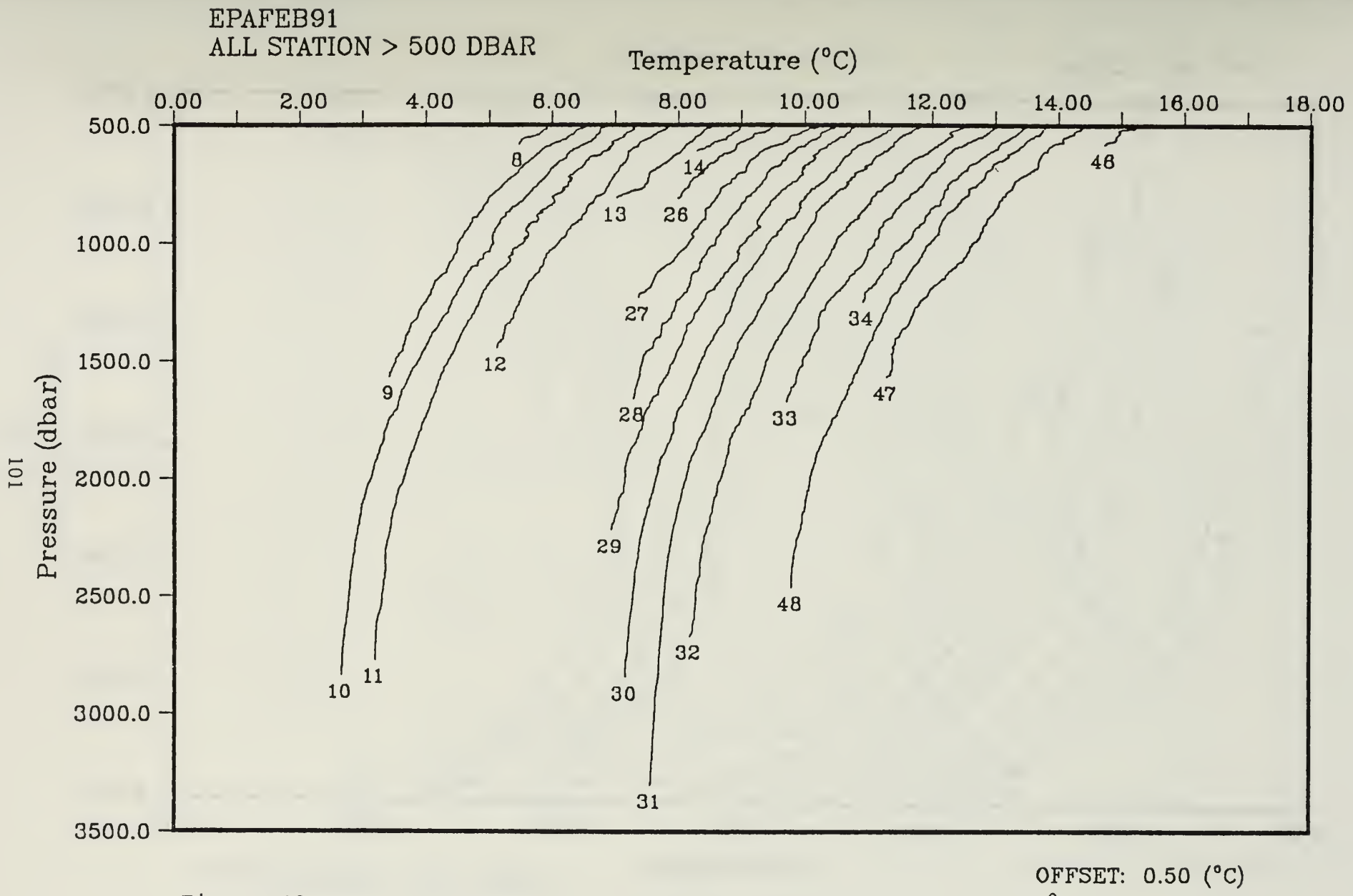

Figure 48. Waterfall plots from 500-3500m of a) temperature (°C), b) salinity (psu), and c) density anomaly (kg m^{-3}), for all CTD stations deeper than 500m of the Farallones Shelf and Slope cruise, February 13-18, 1991.

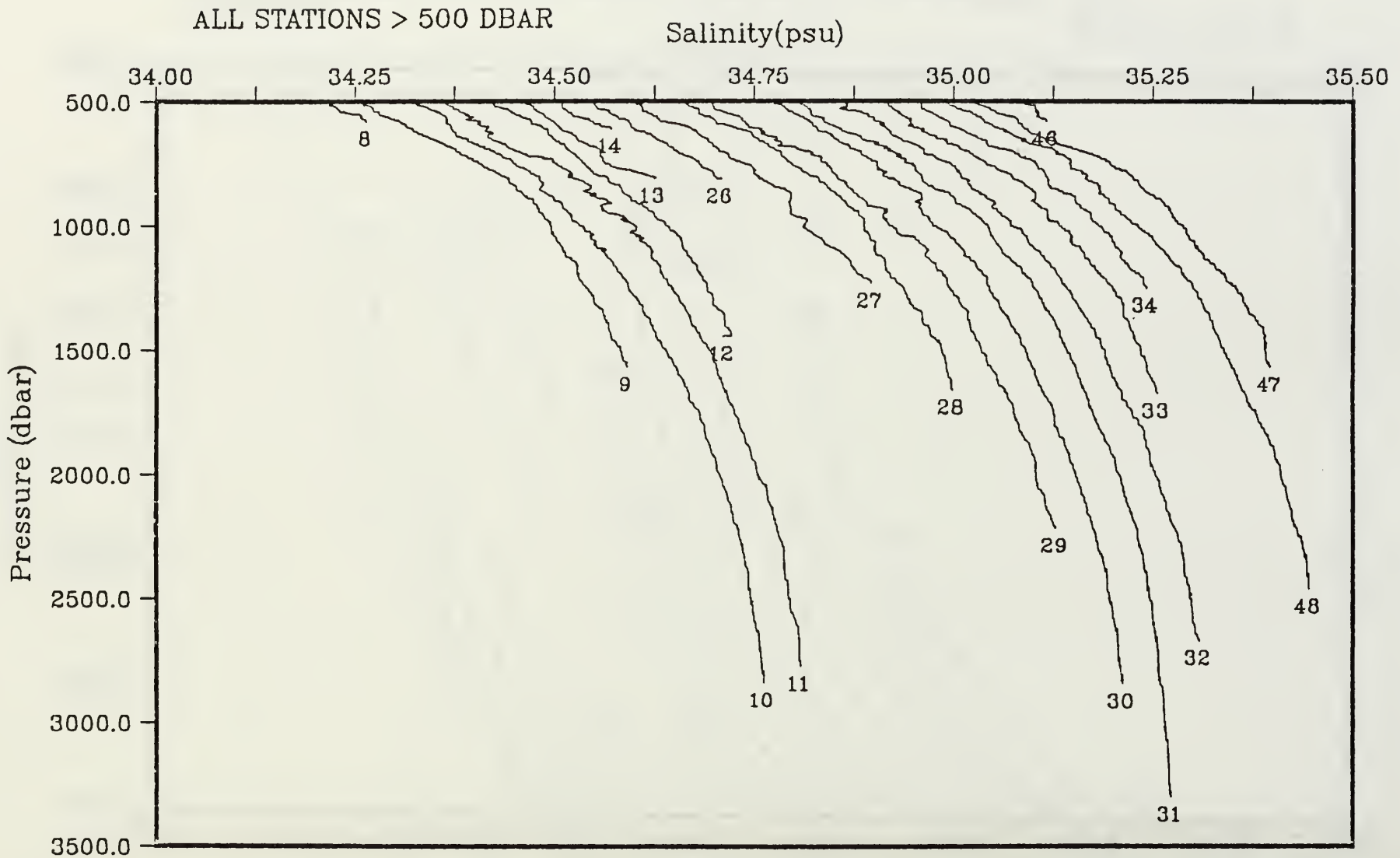

Figure 48b.

OFFSET: 0.05 (psu)

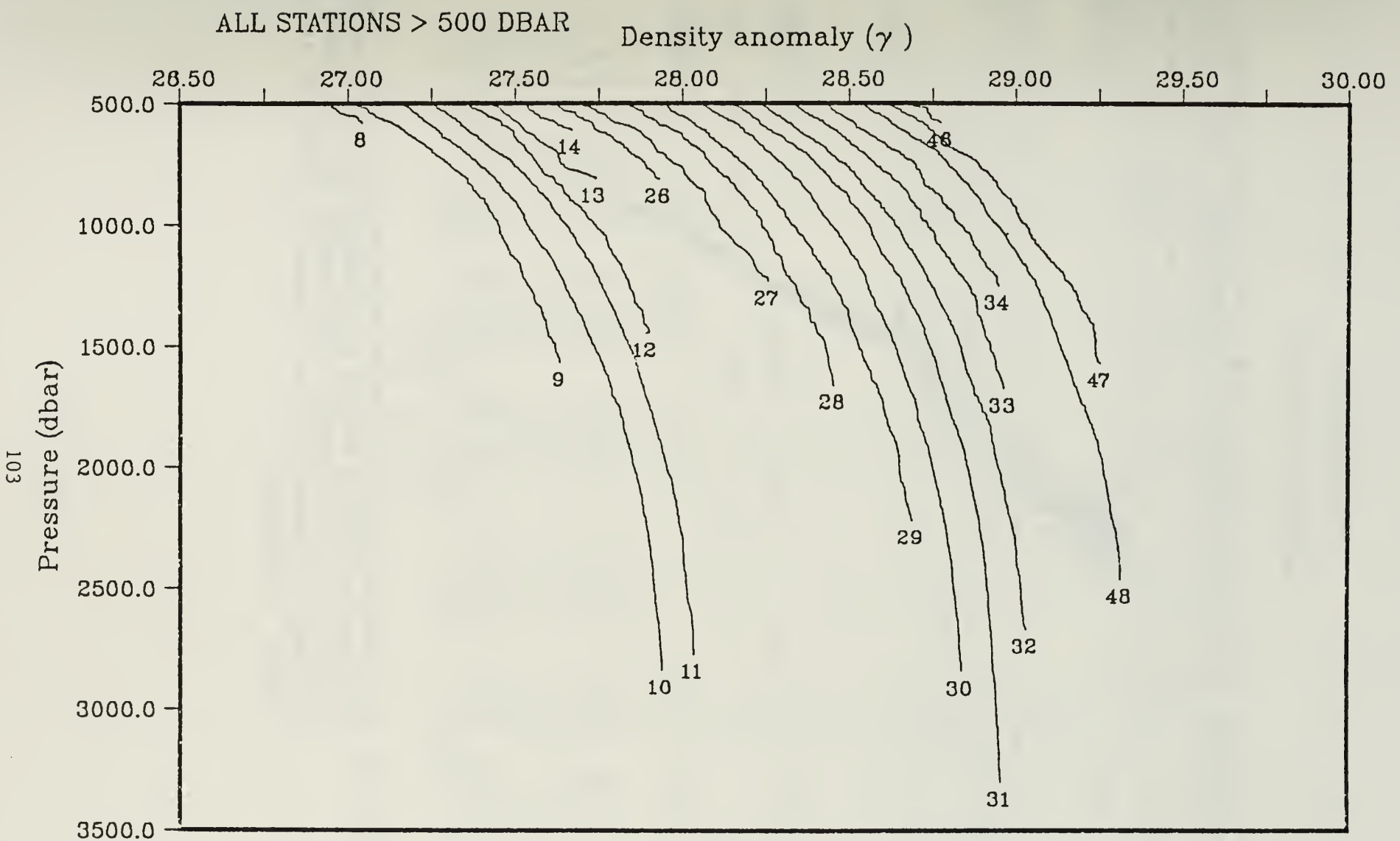

Figure 48c.

OFFSET: 0.10 (kgm^{-3})

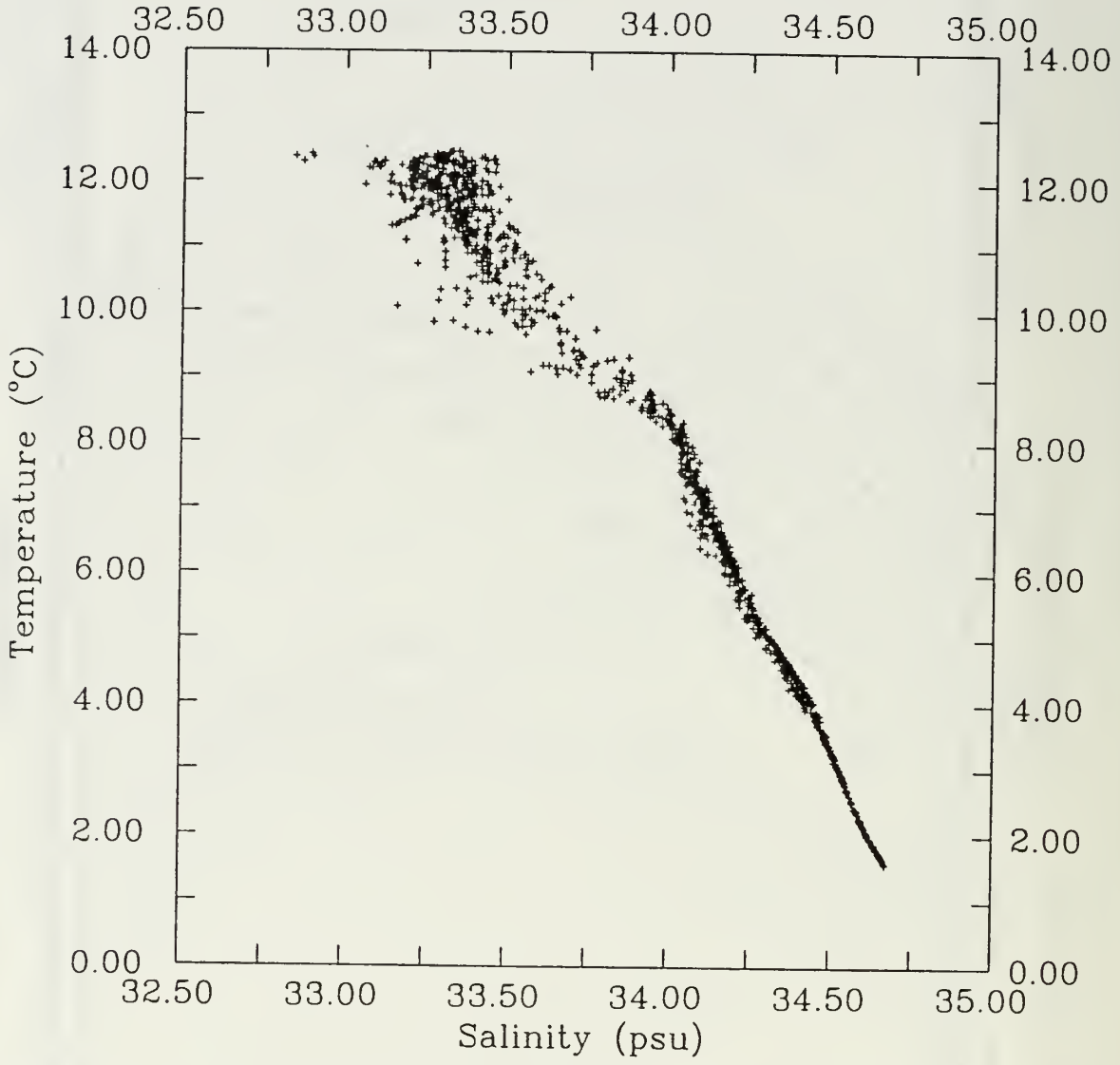

Figure 49. T/S diagram which includes selected data from all CTD stations completed during the Farallones Shelf and Slope cruise of 13-18 February 1991 aboard the R/V POINT SUR. The data included in this diagram consists of all data listed in Appendix A.

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 units for δ are 10^{-8} m^3kg^{-1}. The summation of dynamic height ($\Sigma\Delta D$) is made from the surface and the units are in dynamic meters (m^2s^{-2}).

Table 3. Data listings at selected pressures of temperature (T), salinity (psu), density anomaly (γ), specific volume anomaly (δ), summation of dynamic height ($\Sigma\Delta D$), and spiciness (π) for CTD stations occupied during the Farallones Shelf and Slope cruise of February 13-18, 1991 aboard the R/V POINT SUR.

STATION: 1 DATE: 2/14/91 0248 GMT

LAT: 37° 27.6' N. LON: 122° 32.6' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.145	33.248	25.202	275.66	0.011	0.14
6.0	12.145	33.244	25.199	276.00	0.017	0.14
10.0	12.133	33.241	25.199	276.10	0.028	0.14
16.0	11.933	33.274	25.262	270.22	0.044	0.12
20.0	11.762	33.302	25.316	265.20	0.055	0.11
26.0	11.691	33.327	25.349	262.24	0.071	0.12
30.0	11.684	33.344	25.363	260.95	0.081	0.13
36.0	11.597	33.372	25.401	257.48	0.097	0.14

STATION: 2 DATE: 2/14/91 0336 GMT

LAT: 37° 25.8' N. LON: 122° 36.6' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
6.0	12.285	33.083	25.047	290.42	0.017	0.04
8.0	12.283	33.090	25.053	289.91	0.023	0.05
10.0	12.271	33.106	25.068	288.56	0.029	0.06
16.0	12.090	33.200	25.175	278.49	0.046	0.10
20.0	12.049	33.209	25.190	277.18	0.057	0.09
26.0	11.954	33.232	25.226	273.92	0.074	0.09
30.0	11.872	33.250	25.255	271.22	0.085	0.09
36.0	11.701	33.279	25.310	266.18	0.101	0.08
40.0	11.603	33.304	25.347	262.70	0.111	0.08
46.0	11.432	33.297	25.373	260.36	0.127	0.05
50.0	11.122	33.297	25.429	255.09	0.137	-.01
56.0	10.922	33.305	25.471	251.22	0.152	-.04

STATION: 3 DATE: 2/14/91 0411 GMT

LAT: 37° 23.8' N. LON: 122° 40.5' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.303	33.115	25.069	288.33	0.012	0.07
6.0	12.302	33.117	25.070	288.21	0.017	0.07
10.0	12.238	33.167	25.122	283.46	0.029	0.10
16.0	12.183	33.211	25.166	279.35	0.046	0.12
20.0	12.179	33.207	25.164	279.67	0.057	0.12
26.0	12.029	33.233	25.213	275.18	0.073	0.11
30.0	11.983	33.241	25.228	273.86	0.084	0.11
36.0	11.856	33.256	25.263	270.62	0.101	0.09
40.0	11.816	33.279	25.288	268.30	0.111	0.11
46.0	11.718	33.304	25.326	264.85	0.127	0.11
50.0	11.642	33.313	25.347	262.94	0.138	0.10
60.0	11.209	33.386	25.483	250.22	0.164	0.08
70.0	11.017	33.401	25.529	246.03	0.188	0.05
74.0	10.788	33.416	25.582	241.13	0.198	0.02

STATION: 4 DATE: 2/14/91 0506 GMT

LAT: 37° 21.2' N. LON: 122° 46.4' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.208	33.187	25.143	281.30	0.011	0.11
6.0	12.209	33.187	25.142	281.36	0.017	0.11
10.0	12.209	33.187	25.143	281.46	0.028	0.11
16.0	12.198	33.190	25.147	281.17	0.045	0.11
20.0	12.078	33.227	25.199	276.37	0.056	0.11
26.0	11.482	33.318	25.380	259.24	0.072	0.07
30.0	11.220	33.358	25.459	251.84	0.082	0.06
36.0	10.961	33.434	25.564	241.92	0.097	0.07
40.0	10.701	33.417	25.597	238.89	0.107	0.01
46.0	10.587	33.436	25.632	235.71	0.121	0.00
50.0	10.512	33.457	25.661	232.99	0.130	0.01
60.0	10.267	33.499	25.736	226.05	0.153	0.00
70.0	10.035	33.542	25.809	219.30	0.175	-.01
80.0	9.974	33.552	25.828	217.77	0.197	-.01
90.0	9.884	33.573	25.859	214.97	0.219	-.01
96.0	9.886	33.573	25.859	215.12	0.232	-.01

STATION: 5 DATE: 2/14/91 0530 GMT

LAT: 37° 19.8' N. LON: 122° 49.1' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.175	33.190	25.151	280.48	0.011	0.10
6.0	12.176	33.190	25.151	280.55	0.017	0.10
10.0	12.175	33.190	25.151	280.62	0.028	0.10
16.0	12.179	33.191	25.151	280.76	0.045	0.11
20.0	12.177	33.192	25.153	280.74	0.056	0.11
26.0	12.151	33.200	25.164	279.81	0.073	0.11
30.0	12.057	33.232	25.207	275.85	0.084	0.11
36.0	11.975	33.286	25.264	270.53	0.100	0.14
40.0	11.944	33.326	25.301	267.11	0.111	0.17
46.0	11.894	33.332	25.315	265.91	0.127	0.16
50.0	11.824	33.339	25.334	264.24	0.138	0.15
60.0	11.401	33.350	25.420	256.20	0.164	0.08
70.0	11.309	33.357	25.443	254.31	0.189	0.07
80.0	11.232	33.377	25.472	251.71	0.215	0.07
90.0	10.902	33.444	25.584	241.32	0.239	0.07
100.0	10.799	33.489	25.637	236.46	0.263	0.08
126.0	9.975	33.556	25.831	218.40	0.321	-.01
130.0	9.839	33.582	25.875	214.36	0.330	-.01

STATION: 6 DATE: 2/14/91 0606 GMT

LAT: 37° 18.4' N. LON: 122° 52.0' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.225	33.202	25.151	280.50	0.011	0.12
6.0	12.229	33.205	25.153	280.40	0.017	0.13
10.0	12.232	33.207	25.154	280.40	0.028	0.13
16.0	12.196	33.279	25.217	274.57	0.045	0.18
20.0	12.229	33.354	25.269	269.72	0.056	0.24
26.0	12.363	33.423	25.297	267.21	0.072	0.33
30.0	12.320	33.433	25.313	265.78	0.082	0.33
36.0	12.264	33.461	25.345	262.84	0.098	0.34
40.0	12.138	33.456	25.365	261.01	0.109	0.31
46.0	11.866	33.442	25.406	257.29	0.124	0.24
50.0	11.781	33.434	25.416	256.46	0.135	0.22
60.0	11.107	33.435	25.540	244.85	0.160	0.10
70.0	10.934	33.478	25.604	238.93	0.184	0.10
80.0	10.690	33.491	25.657	234.06	0.207	0.07
90.0	10.116	33.484	25.751	225.30	0.230	-.04
100.0	9.957	33.553	25.832	217.82	0.252	-.01
126.0	9.534	33.663	25.988	203.43	0.307	0.00
150.0	9.336	33.732	26.075	195.67	0.355	0.02
176.0	9.003	33.836	26.209	183.28	0.404	0.05
200.0	8.561	33.918	26.343	170.93	0.447	0.05
224.0	8.420	33.950	26.390	166.87	0.488	0.05

STATION: 7 DATE: 2/14/91 0700 GMT

LAT: 37° 16.3' N. LON: 122° 56.4' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.309	33.271	25.189	276.93	0.011	0.19
6.0	12.310	33.271	25.188	276.99	0.017	0.19
10.0	12.310	33.271	25.189	277.09	0.028	0.19
16.0	12.312	33.271	25.188	277.26	0.044	0.20
20.0	12.307	33.275	25.192	276.97	0.055	0.20
26.0	12.138	33.327	25.265	270.21	0.072	0.21
30.0	12.055	33.336	25.288	268.14	0.083	0.20
36.0	11.940	33.360	25.328	264.44	0.099	0.19
40.0	11.889	33.368	25.344	263.03	0.109	0.19
46.0	11.720	33.381	25.386	259.20	0.125	0.17
50.0	11.656	33.391	25.405	257.42	0.135	0.16
60.0	11.541	33.428	25.455	252.89	0.161	0.17
70.0	11.199	33.483	25.561	243.10	0.185	0.15
80.0	11.138	33.497	25.583	241.23	0.210	0.15
90.0	10.938	33.524	25.640	236.02	0.234	0.14
100.0	10.832	33.535	25.667	233.61	0.257	0.13
126.0	10.010	33.608	25.866	215.11	0.315	0.04
150.0	9.401	33.721	26.055	197.50	0.365	0.03
176.0	8.969	33.887	26.255	178.98	0.414	0.09
200.0	8.433	33.966	26.400	165.46	0.455	0.07
226.0	8.057	34.015	26.495	156.75	0.496	0.05
250.0	8.017	34.020	26.506	156.19	0.534	0.05
276.0	7.700	34.052	26.577	149.68	0.574	0.02
300.0	7.534	34.076	26.620	145.92	0.610	0.02
326.0	7.310	34.096	26.668	141.69	0.647	0.00
350.0	7.268	34.097	26.675	141.39	0.681	0.00
376.0	7.126	34.110	26.705	138.84	0.718	-.01
400.0	6.796	34.132	26.768	133.02	0.750	-.04
408.0	6.734	34.137	26.780	131.92	0.761	-.04

STATION: 8 DATE: 2/14/91 0800 GMT

LAT: 37° 14.2' N. LON: 123° 1.0' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.363	33.304	25.204	275.48	0.011	0.23
6.0	12.362	33.304	25.204	275.51	0.017	0.23
10.0	12.366	33.304	25.203	275.67	0.028	0.23
16.0	12.366	33.304	25.204	275.81	0.044	0.23
20.0	12.366	33.305	25.204	275.83	0.055	0.23
26.0	12.367	33.304	25.204	276.06	0.072	0.23
30.0	12.365	33.304	25.204	276.12	0.083	0.23
36.0	12.130	33.367	25.298	267.34	0.099	0.24
40.0	12.066	33.371	25.313	265.98	0.110	0.23
46.0	11.961	33.367	25.330	264.53	0.126	0.20
50.0	11.817	33.389	25.374	260.42	0.136	0.19
60.0	11.541	33.420	25.449	253.48	0.162	0.17
70.0	11.342	33.449	25.508	248.08	0.187	0.15
80.0	11.010	33.490	25.600	239.55	0.212	0.12
90.0	10.836	33.512	25.648	235.17	0.235	0.11
100.0	10.777	33.518	25.664	233.94	0.259	0.10
126.0	10.061	33.566	25.825	219.05	0.318	0.01
150.0	9.337	33.725	26.069	196.20	0.367	0.02
176.0	8.894	33.851	26.238	180.50	0.417	0.05
200.0	8.671	33.943	26.346	170.73	0.459	0.09
226.0	8.333	34.001	26.443	161.83	0.502	0.08
250.0	8.010	34.042	26.524	154.46	0.540	0.06
276.0	7.773	34.063	26.576	149.90	0.579	0.04
300.0	7.416	34.084	26.643	143.66	0.614	0.01
326.0	7.196	34.111	26.696	138.99	0.651	0.00
350.0	6.919	34.133	26.752	133.90	0.684	-.02
376.0	6.507	34.170	26.836	125.98	0.717	-.05
400.0	6.291	34.183	26.875	122.50	0.747	-.07
426.0	6.188	34.194	26.897	120.68	0.779	-.07
450.0	6.152	34.196	26.903	120.37	0.808	-.07
476.0	6.117	34.201	26.912	119.88	0.839	-.07
500.0	5.952	34.216	26.945	116.93	0.868	-.08
550.0	5.662	34.246	27.005	111.59	0.925	-.10
580.0	5.467	34.264	27.043	108.14	0.958	-.10

STATION: 9 DATE: 2/14/91 0918 GMT

LAT: 37° 10.1' N. LON: 123° 9.7' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.275	33.290	25.210	274.91	0.011	0.20
6.0	12.269	33.290	25.211	274.85	0.016	0.20
10.0	12.267	33.290	25.211	274.90	0.027	0.20
16.0	12.267	33.290	25.212	275.04	0.044	0.20
20.0	12.267	33.290	25.212	275.13	0.055	0.20
26.0	12.266	33.290	25.212	275.25	0.072	0.20
30.0	12.193	33.296	25.231	273.58	0.082	0.19
36.0	12.061	33.320	25.274	269.56	0.099	0.19
40.0	11.976	33.330	25.298	267.39	0.110	0.18
46.0	11.861	33.352	25.337	263.85	0.126	0.17
50.0	11.764	33.353	25.356	262.14	0.136	0.15
60.0	11.409	33.400	25.458	252.65	0.162	0.12
70.0	10.942	33.395	25.538	245.20	0.187	0.03
80.0	10.675	33.463	25.638	235.88	0.211	0.04
90.0	9.966	33.489	25.780	222.51	0.234	-.06
100.0	9.655	33.556	25.884	212.78	0.255	-.06
126.0	9.210	33.719	26.084	194.23	0.308	-.01
150.0	8.980	33.854	26.227	181.12	0.353	0.06
176.0	8.527	33.958	26.379	167.04	0.398	0.07
200.0	8.409	33.978	26.413	164.22	0.438	0.07
226.0	8.173	34.018	26.481	158.22	0.479	0.07
250.0	7.996	34.037	26.522	154.63	0.517	0.06
276.0	7.638	34.050	26.585	148.94	0.556	0.01
300.0	7.380	34.069	26.637	144.27	0.591	-.01
326.0	7.206	34.110	26.694	139.20	0.628	0.00
350.0	6.963	34.125	26.739	135.10	0.661	-.02
376.0	6.764	34.133	26.773	132.17	0.696	-.04
400.0	6.640	34.152	26.805	129.43	0.727	-.04
426.0	6.440	34.153	26.832	127.04	0.761	-.07
450.0	6.314	34.169	26.861	124.50	0.791	-.07
476.0	6.194	34.188	26.892	121.86	0.823	-.07
500.0	6.049	34.204	26.923	119.08	0.852	-.08
550.0	5.747	34.230	26.982	113.87	0.910	-.10
600.0	5.352	34.264	27.057	106.93	0.965	-.12
650.0	5.143	34.296	27.107	102.50	1.018	-.12
700.0	4.960	34.326	27.152	98.55	1.068	-.11
750.0	4.731	34.355	27.201	94.10	1.116	-.12
800.0	4.532	34.384	27.246	90.03	1.162	-.12
850.0	4.404	34.402	27.275	87.62	1.206	-.12
900.0	4.231	34.423	27.310	84.45	1.249	-.12
950.0	4.125	34.434	27.331	82.80	1.291	-.12
1000.0	4.012	34.444	27.351	81.14	1.332	-.12
1100.0	3.853	34.461	27.381	78.81	1.413	-.13
1200.0	3.588	34.479	27.422	75.08	1.489	-.14
1300.0	3.385	34.499	27.458	71.91	1.563	-.14

STATION: 9 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1568.0	2.921	34.540	27.535	65.07	1.746	-.15
1400.0	3.179	34.517	27.492	68.80	1.633	-.15
1500.0	3.018	34.532	27.520	66.41	1.701	-.15

STATION: 10 DATE: 2/14/91 1153 GMT

LAT: 37° 5.9' N. LON: 123° 18.1' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.301	33.202	25.137	281.88	0.011	0.14
6.0	12.300	33.201	25.136	281.98	0.017	0.14
10.0	12.301	33.201	25.136	282.09	0.028	0.14
16.0	12.305	33.202	25.136	282.23	0.045	0.14
20.0	12.305	33.204	25.138	282.17	0.056	0.14
26.0	12.279	33.212	25.149	281.24	0.073	0.14
30.0	12.217	33.265	25.202	276.30	0.084	0.17
36.0	12.319	33.333	25.236	273.28	0.101	0.25
40.0	12.085	33.316	25.267	270.38	0.112	0.19
46.0	11.928	33.313	25.294	267.92	0.128	0.15
50.0	11.797	33.310	25.316	265.90	0.139	0.13
60.0	10.082	33.158	25.502	248.32	0.164	-.31
70.0	9.847	33.272	25.630	236.30	0.188	-.26
80.0	9.763	33.368	25.719	228.04	0.212	-.19
90.0	10.018	33.587	25.848	216.09	0.234	0.02
100.0	9.939	33.624	25.890	212.27	0.256	0.04
126.0	9.286	33.711	26.066	196.00	0.309	0.00
150.0	9.308	33.875	26.191	184.63	0.355	0.13
176.0	8.623	33.944	26.353	169.51	0.400	0.08
200.0	8.473	34.002	26.422	163.39	0.440	0.10
226.0	8.324	34.043	26.477	158.58	0.482	0.11
250.0	7.953	34.071	26.555	151.48	0.519	0.08
276.0	7.727	34.093	26.606	147.02	0.558	0.06
300.0	7.241	34.071	26.658	142.19	0.593	-.03
326.0	7.279	34.121	26.692	139.40	0.629	0.02
350.0	7.032	34.138	26.740	135.08	0.662	0.00
376.0	6.802	34.159	26.788	130.76	0.697	-.02
400.0	6.602	34.167	26.821	127.80	0.728	-.04
426.0	6.432	34.188	26.861	124.33	0.761	-.04
450.0	6.238	34.190	26.888	121.94	0.790	-.07
476.0	6.122	34.216	26.923	118.83	0.822	-.06
500.0	5.920	34.228	26.958	115.63	0.850	-.08
550.0	5.695	34.257	27.009	111.20	0.906	-.08
600.0	5.366	34.271	27.061	106.58	0.961	-.11
650.0	5.143	34.290	27.102	102.95	1.014	-.12
700.0	4.954	34.323	27.150	98.70	1.064	-.12
750.0	4.780	34.348	27.190	95.22	1.112	-.12
800.0	4.600	34.377	27.233	91.37	1.159	-.11
850.0	4.355	34.381	27.263	88.59	1.204	-.14
900.0	4.186	34.400	27.297	85.61	1.248	-.14
950.0	4.086	34.418	27.322	83.52	1.290	-.14
1000.0	4.060	34.431	27.335	82.68	1.331	-.13
1100.0	3.762	34.459	27.388	77.86	1.412	-.14
1200.0	3.513	34.483	27.433	73.89	1.487	-.14
1300.0	3.335	34.503	27.466	71.01	1.560	-.14

STATION: 10 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	3.071	34.521	27.505	67.21	1.629	-.15
1500.0	2.883	34.538	27.536	64.34	1.695	-.16
1600.0	2.683	34.555	27.568	61.29	1.757	-.16
1700.0	2.547	34.568	27.591	59.24	1.817	-.16
1800.0	2.343	34.587	27.623	55.90	1.875	-.17
1900.0	2.240	34.595	27.639	54.53	1.930	-.17
2000.0	2.129	34.607	27.658	52.74	1.984	-.17
2100.0	2.005	34.617	27.676	50.90	2.035	-.17
2200.0	1.937	34.626	27.689	49.79	2.086	-.17
2300.0	1.873	34.636	27.702	48.64	2.135	-.16
2400.0	1.817	34.643	27.713	47.78	2.183	-.16
2500.0	1.784	34.646	27.718	47.49	2.231	-.16
2600.0	1.742	34.652	27.727	46.85	2.278	-.16
2700.0	1.697	34.657	27.735	46.22	2.325	-.16
2800.0	1.673	34.660	27.739	46.01	2.371	-.16
2838.0	1.671	34.662	27.741	45.96	2.388	-.16

STATION: 11 DATE: 2/14/91 1448 GMT

LAT: 37° 15.5' N. LON: 123° 25.2' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.275	33.202	25.142	281.41	0.011	0.13
6.0	12.275	33.202	25.142	281.45	0.017	0.13
10.0	12.277	33.202	25.141	281.58	0.028	0.13
16.0	12.276	33.204	25.143	281.55	0.045	0.13
20.0	12.279	33.204	25.143	281.70	0.056	0.14
26.0	12.287	33.213	25.148	281.32	0.073	0.14
30.0	12.185	33.292	25.229	273.73	0.084	0.19
36.0	12.258	33.340	25.253	271.65	0.101	0.24
40.0	12.233	33.360	25.273	269.81	0.111	0.25
46.0	12.014	33.382	25.332	264.37	0.127	0.23
50.0	12.009	33.416	25.359	261.86	0.138	0.25
60.0	11.467	33.384	25.435	254.84	0.164	0.12
70.0	10.896	33.386	25.539	245.09	0.189	0.02
80.0	10.575	33.442	25.639	235.76	0.213	0.01
90.0	10.052	33.517	25.787	221.82	0.236	-.03
100.0	10.132	33.663	25.888	212.51	0.257	0.10
126.0	9.741	33.774	26.041	198.49	0.311	0.13
150.0	9.121	33.855	26.205	183.21	0.356	0.09
176.0	8.504	33.930	26.361	168.77	0.402	0.05
200.0	8.324	34.007	26.449	160.81	0.441	0.08
226.0	8.036	34.036	26.515	154.88	0.482	0.06
250.0	7.797	34.076	26.582	148.86	0.519	0.06
276.0	7.368	34.051	26.624	145.07	0.557	-.02
300.0	7.172	34.045	26.647	143.17	0.591	-.06
326.0	7.078	34.098	26.702	138.32	0.628	-.03
350.0	6.851	34.105	26.739	135.06	0.661	-.05
376.0	6.786	34.135	26.771	132.32	0.695	-.04
400.0	6.642	34.160	26.811	128.86	0.727	-.04
426.0	6.431	34.182	26.856	124.77	0.760	-.05
450.0	6.239	34.188	26.886	122.11	0.789	-.07
476.0	6.007	34.194	26.920	118.97	0.821	-.09
500.0	5.913	34.207	26.943	117.09	0.849	-.09
550.0	5.630	34.238	27.002	111.78	0.906	-.11
600.0	5.400	34.263	27.050	107.60	0.961	-.11
650.0	5.044	34.271	27.098	103.13	1.013	-.15
700.0	4.855	34.302	27.145	99.04	1.064	-.15
750.0	4.757	34.351	27.195	94.72	1.112	-.12
800.0	4.525	34.367	27.234	91.20	1.159	-.13
850.0	4.422	34.394	27.267	88.43	1.204	-.12
900.0	4.279	34.416	27.300	85.54	1.247	-.12
950.0	4.075	34.416	27.321	83.54	1.290	-.14
1000.0	4.040	34.450	27.352	81.03	1.331	-.12
1100.0	3.762	34.471	27.398	76.98	1.410	-.13
1200.0	3.420	34.485	27.443	72.64	1.484	-.15
1300.0	3.254	34.505	27.475	69.90	1.556	-.15

STATION: 11 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	3.034	34.522	27.510	66.70	1.624	-.16
1500.0	2.857	34.543	27.543	63.67	1.689	-.16
1600.0	2.687	34.555	27.568	61.33	1.751	-.16
1700.0	2.549	34.568	27.590	59.27	1.812	-.16
1800.0	2.400	34.582	27.615	56.95	1.870	-.16
1900.0	2.260	34.595	27.637	54.78	1.926	-.17
2000.0	2.152	34.604	27.653	53.25	1.980	-.17
2100.0	2.026	34.617	27.674	51.16	2.032	-.17
2200.0	1.945	34.626	27.688	49.89	2.082	-.17
2300.0	1.866	34.637	27.704	48.48	2.131	-.16
2400.0	1.857	34.639	27.707	48.59	2.180	-.16
2500.0	1.808	34.645	27.716	47.88	2.228	-.16
2600.0	1.735	34.653	27.728	46.68	2.276	-.16
2700.0	1.707	34.657	27.734	46.36	2.322	-.16
2772.0	1.701	34.658	27.736	46.44	2.355	-.16

STATION: 12 DATE: 2/14/91 1723 GMT

LAT: 37° 19.7' N. LON: 123° 16.5' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.336	33.298	25.204	275.43	0.011	0.22
6.0	12.334	33.298	25.205	275.44	0.017	0.22
10.0	12.334	33.298	25.205	275.53	0.028	0.22
16.0	12.328	33.298	25.206	275.56	0.044	0.22
20.0	12.329	33.298	25.206	275.67	0.055	0.22
26.0	12.328	33.297	25.206	275.87	0.072	0.22
30.0	12.323	33.299	25.208	275.72	0.083	0.22
36.0	12.061	33.355	25.302	266.98	0.099	0.21
40.0	11.985	33.360	25.320	265.34	0.110	0.20
46.0	11.861	33.377	25.356	262.00	0.125	0.19
50.0	11.801	33.379	25.369	260.88	0.136	0.18
60.0	11.254	33.402	25.487	249.81	0.161	0.10
70.0	11.195	33.432	25.522	246.79	0.186	0.11
80.0	10.903	33.442	25.582	241.27	0.211	0.06
90.0	10.599	33.470	25.657	234.29	0.234	0.03
100.0	10.372	33.545	25.755	225.18	0.257	0.05
126.0	9.711	33.661	25.957	206.38	0.313	0.03
150.0	9.315	33.736	26.081	195.04	0.361	0.02
176.0	9.047	33.880	26.237	180.70	0.410	0.09
200.0	8.624	33.979	26.381	167.35	0.452	0.11
226.0	8.089	34.032	26.504	155.95	0.494	0.07
250.0	7.855	34.076	26.573	149.70	0.531	0.07
276.0	7.420	34.057	26.621	145.35	0.569	-.01
300.0	7.128	34.051	26.658	142.12	0.603	-.06
326.0	7.076	34.078	26.686	139.78	0.640	-.04
350.0	6.943	34.106	26.727	136.23	0.673	-.04
376.0	6.770	34.107	26.751	134.18	0.708	-.06
400.0	6.660	34.148	26.799	129.99	0.740	-.04
426.0	6.529	34.161	26.827	127.63	0.774	-.05
450.0	6.321	34.185	26.873	123.41	0.804	-.06
476.0	6.063	34.203	26.920	119.03	0.835	-.08
500.0	5.906	34.217	26.951	116.26	0.864	-.09
550.0	5.573	34.250	27.019	110.17	0.920	-.10
600.0	5.275	34.283	27.081	104.55	0.974	-.11
650.0	5.177	34.297	27.104	102.85	1.026	-.11
700.0	5.026	34.319	27.139	99.88	1.076	-.11
750.0	4.899	34.337	27.168	97.50	1.125	-.11
800.0	4.750	34.356	27.200	94.77	1.174	-.11
850.0	4.549	34.383	27.244	90.79	1.220	-.12
900.0	4.461	34.395	27.264	89.31	1.265	-.12
950.0	4.235	34.423	27.310	84.95	1.308	-.12
1000.0	4.095	34.439	27.338	82.51	1.350	-.12
1100.0	3.835	34.463	27.384	78.45	1.430	-.13
1200.0	3.579	34.483	27.426	74.68	1.507	-.14
1300.0	3.394	34.498	27.457	72.09	1.580	-.14

STATION: 12 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	3.225	34.513	27.485	69.65	1.651	-.15
1446.0	3.127	34.511	27.493	68.92	1.682	-.16

STATION: 13 DATE: 2/14/91 1936 GMT

LAT: 37° 23.8' N. LON: 123° 7.7' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.384	33.279	25.180	277.70	0.011	0.22
6.0	12.358	33.278	25.185	277.35	0.017	0.21
10.0	12.350	33.281	25.189	277.08	0.028	0.21
16.0	12.330	33.282	25.193	276.78	0.044	0.21
20.0	12.327	33.282	25.194	276.81	0.055	0.21
26.0	12.327	33.283	25.195	276.88	0.072	0.21
30.0	12.332	33.288	25.198	276.69	0.083	0.21
36.0	12.306	33.304	25.216	275.18	0.100	0.22
40.0	12.286	33.323	25.234	273.51	0.111	0.23
46.0	12.169	33.389	25.308	266.65	0.127	0.26
50.0	12.081	33.380	25.318	265.82	0.138	0.24
60.0	11.792	33.416	25.400	258.21	0.164	0.21
70.0	11.393	33.453	25.502	248.67	0.189	0.16
80.0	11.323	33.500	25.552	244.20	0.214	0.19
90.0	10.988	33.527	25.633	236.65	0.238	0.15
100.0	10.565	33.553	25.728	227.79	0.261	0.09
126.0	10.037	33.606	25.860	215.70	0.318	0.04
150.0	9.231	33.778	26.127	190.62	0.367	0.04
176.0	8.931	33.871	26.248	179.59	0.415	0.07
200.0	8.681	33.945	26.346	170.73	0.457	0.09
226.0	8.283	34.001	26.451	161.09	0.500	0.07
250.0	7.860	34.044	26.548	152.14	0.538	0.04
276.0	7.582	34.089	26.623	145.25	0.577	0.04
300.0	7.303	34.092	26.666	141.49	0.611	0.00
326.0	7.180	34.107	26.695	139.06	0.647	-.01
350.0	7.102	34.117	26.714	137.60	0.680	-.01
376.0	6.779	34.137	26.774	132.08	0.715	-.04
400.0	6.552	34.147	26.812	128.62	0.746	-.06
426.0	6.414	34.167	26.846	125.65	0.780	-.06
450.0	6.313	34.178	26.868	123.82	0.809	-.07
476.0	6.091	34.206	26.919	119.17	0.841	-.07
500.0	6.028	34.210	26.931	118.36	0.870	-.08
550.0	5.775	34.235	26.982	113.86	0.928	-.09
600.0	5.574	34.255	27.023	110.40	0.984	-.10
650.0	5.352	34.277	27.067	106.53	1.038	-.11
700.0	5.052	34.307	27.127	101.10	1.090	-.12
750.0	4.995	34.312	27.137	100.55	1.141	-.12
800.0	4.591	34.367	27.227	92.01	1.189	-.12
810.0	4.530	34.374	27.239	90.84	1.198	-.12

STATION: 14 DATE: 2/14/91 2036 GMT

LAT: 37° 25.8' N. LON: 123° 3.4' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.344	33.221	25.143	281.26	0.011	0.16
6.0	12.342	33.221	25.144	281.27	0.017	0.16
10.0	12.290	33.221	25.154	280.41	0.028	0.15
16.0	12.272	33.221	25.157	280.22	0.045	0.15
20.0	12.265	33.221	25.159	280.19	0.056	0.15
26.0	12.264	33.232	25.167	279.50	0.073	0.15
30.0	12.209	33.270	25.207	275.79	0.084	0.17
36.0	11.969	33.338	25.306	266.59	0.100	0.18
40.0	11.756	33.381	25.379	259.71	0.111	0.17
46.0	11.548	33.387	25.422	255.73	0.126	0.14
50.0	11.272	33.405	25.486	249.69	0.136	0.10
60.0	11.153	33.485	25.570	241.94	0.161	0.14
70.0	11.056	33.518	25.614	238.05	0.185	0.15
80.0	10.890	33.548	25.667	233.22	0.209	0.15
90.0	10.590	33.588	25.751	225.41	0.231	0.12
100.0	10.258	33.594	25.813	219.68	0.254	0.07
126.0	9.603	33.709	26.013	201.11	0.308	0.05
150.0	9.285	33.828	26.158	187.76	0.355	0.09
176.0	8.740	33.932	26.326	172.16	0.402	0.09
200.0	8.611	33.953	26.363	169.09	0.443	0.08
226.0	8.232	34.007	26.463	159.90	0.485	0.07
250.0	8.056	34.022	26.501	156.61	0.523	0.05
276.0	7.951	34.039	26.531	154.25	0.564	0.05
300.0	7.369	34.052	26.625	145.38	0.599	-.02
326.0	7.250	34.094	26.675	141.00	0.637	-.01
350.0	7.111	34.114	26.710	137.95	0.670	-.01
376.0	6.745	34.133	26.775	131.92	0.705	-.05
400.0	6.519	34.153	26.821	127.74	0.736	-.06
426.0	6.409	34.170	26.849	125.37	0.769	-.06
450.0	6.300	34.181	26.872	123.43	0.799	-.07
476.0	6.125	34.199	26.909	120.14	0.831	-.07
500.0	5.981	34.208	26.935	117.90	0.859	-.09
550.0	5.773	34.221	26.971	114.87	0.918	-.10
600.0	5.403	34.258	27.046	108.01	0.973	-.12
610.0	5.294	34.271	27.069	105.79	0.984	-.12

STATION: 15 DATE: 2/14/91 2148 GMT

LAT: 37° 27.8' N. LON: 122° 59.2' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.285	33.205	25.142	281.36	0.011	0.14
6.0	12.285	33.204	25.141	281.48	0.017	0.14
10.0	12.244	33.204	25.149	280.83	0.028	0.13
16.0	12.166	33.207	25.166	279.34	0.045	0.12
20.0	12.166	33.211	25.170	279.14	0.056	0.12
26.0	12.159	33.211	25.171	279.15	0.073	0.12
30.0	12.163	33.213	25.172	279.16	0.084	0.12
36.0	12.163	33.214	25.173	279.22	0.101	0.12
40.0	12.171	33.216	25.173	279.31	0.112	0.12
46.0	12.232	33.271	25.204	276.50	0.129	0.18
50.0	12.281	33.361	25.265	270.84	0.140	0.26
60.0	12.354	33.414	25.292	268.50	0.167	0.32
70.0	11.925	33.400	25.363	261.99	0.193	0.22
80.0	11.571	33.444	25.463	252.68	0.219	0.19
90.0	11.124	33.467	25.562	243.41	0.243	0.13
100.0	10.764	33.490	25.644	235.79	0.267	0.08
126.0	9.941	33.638	25.901	211.78	0.325	0.05
150.0	9.262	33.807	26.145	188.95	0.372	0.07
176.0	8.816	33.864	26.261	178.35	0.420	0.05
200.0	8.663	33.890	26.305	174.54	0.462	0.04
226.0	8.253	34.007	26.460	160.21	0.506	0.07
250.0	7.985	34.034	26.521	154.69	0.544	0.05
276.0	7.608	34.065	26.601	147.40	0.583	0.02
300.0	7.194	34.098	26.686	139.53	0.617	-.01
326.0	6.960	34.118	26.734	135.22	0.653	-.03
350.0	6.741	34.135	26.777	131.34	0.685	-.04
356.0	6.705	34.139	26.785	130.65	0.693	-.05

STATION: 16 DATE: 2/14/91 2236 GMT

LAT: 37° 29.4' N. LON: 122° 55.8' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.239	33.255	25.189	276.84	0.011	0.17
6.0	12.231	33.254	25.190	276.82	0.017	0.17
10.0	12.024	33.271	25.243	271.93	0.028	0.14
16.0	11.999	33.271	25.248	271.62	0.044	0.13
20.0	11.993	33.270	25.248	271.67	0.055	0.13
26.0	11.987	33.274	25.252	271.41	0.071	0.13
30.0	11.984	33.275	25.254	271.37	0.082	0.13
36.0	11.935	33.281	25.268	270.18	0.098	0.13
40.0	11.880	33.286	25.282	268.92	0.109	0.12
46.0	11.804	33.290	25.299	267.41	0.125	0.11
50.0	11.791	33.292	25.303	267.12	0.136	0.11
60.0	11.732	33.309	25.328	265.04	0.162	0.11
70.0	11.693	33.329	25.351	263.10	0.189	0.12
80.0	11.606	33.393	25.417	257.06	0.215	0.16
90.0	11.466	33.449	25.486	250.68	0.240	0.17
100.0	11.213	33.436	25.522	247.45	0.265	0.12
118.0	10.195	33.505	25.754	225.59	0.308	-.01

STATION: 17 DATE: 2/14/91 2311 GMT

LAT: 37° 31.1' N. LON: 122° 52.6' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.220	33.103	25.075	287.72	0.012	0.04
6.0	12.217	33.098	25.072	288.08	0.017	0.04
10.0	12.209	33.102	25.077	287.73	0.029	0.04
16.0	12.107	33.218	25.186	277.47	0.046	0.11
20.0	12.111	33.228	25.193	276.89	0.057	0.12
26.0	12.018	33.258	25.234	273.14	0.073	0.13
30.0	11.935	33.271	25.260	270.79	0.084	0.12
36.0	11.640	33.306	25.342	263.11	0.100	0.09
40.0	11.573	33.323	25.368	260.77	0.111	0.09
46.0	11.399	33.346	25.417	256.16	0.126	0.08
50.0	11.298	33.367	25.452	252.95	0.136	0.08
60.0	11.156	33.385	25.492	249.38	0.162	0.07
70.0	10.901	33.399	25.548	244.21	0.186	0.03
80.0	10.648	33.420	25.609	238.60	0.210	0.00
86.0	10.463	33.436	25.654	234.46	0.224	-.02

STATION: 18 DATE: 2/14/91 0000 GMT

LAT: 37° 33.3' N. LON: 122° 47.4' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.208	33.068	25.050	290.09	0.012	0.01
6.0	12.207	33.069	25.051	290.04	0.017	0.01
10.0	12.209	33.069	25.051	290.17	0.029	0.01
16.0	12.192	33.077	25.061	289.40	0.046	0.02
20.0	12.089	33.137	25.127	283.21	0.058	0.04
26.0	11.922	33.258	25.252	271.43	0.074	0.11
30.0	11.769	33.312	25.323	264.81	0.085	0.12
36.0	11.602	33.341	25.376	259.86	0.101	0.11
40.0	11.560	33.348	25.389	258.69	0.111	0.11
46.0	11.484	33.360	25.413	256.61	0.127	0.11
50.0	11.448	33.368	25.426	255.48	0.137	0.11
60.0	11.229	33.375	25.471	251.38	0.162	0.07
62.0	11.183	33.375	25.479	250.63	0.167	0.06

STATION: 19 DATE: 2/15/91 0048 GMT

LAT: 37° 36.0' N. LON: 122° 42.1' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.412	32.892	24.875	306.77	0.012	-.09
6.0	12.372	32.899	24.888	305.57	0.018	-.09
10.0	11.939	33.057	25.092	286.21	0.030	-.05
16.0	11.783	33.134	25.181	277.89	0.047	-.02
20.0	11.630	33.320	25.354	261.55	0.058	0.10
26.0	11.563	33.360	25.398	257.55	0.074	0.12
30.0	11.534	33.365	25.407	256.76	0.084	0.12
36.0	11.513	33.367	25.413	256.38	0.099	0.12
38.0	11.508	33.367	25.414	256.33	0.104	0.12

STATION: 20 DATE: 2/15/91 0200 GMT

LAT: 37° 39.1' N. LON: 122° 35.8' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.375	32.845	24.846	309.57	0.012	-.13
6.0	12.300	32.867	24.877	306.63	0.019	-.13
10.0	11.910	33.291	25.280	268.42	0.030	0.13
16.0	11.736	33.360	25.366	260.37	0.046	0.15
20.0	11.724	33.360	25.368	260.25	0.056	0.15

STATION: 21 DATE: 2/15/91 0323 GMT

LAT: 37° 48.3' N. LON: 122° 43.1' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.989	33.132	25.141	281.43	0.011	0.02
6.0	11.959	33.145	25.157	279.98	0.017	0.03
10.0	11.386	33.339	25.413	255.67	0.028	0.07
16.0	11.342	33.354	25.433	253.93	0.043	0.08
20.0	11.300	33.367	25.451	252.33	0.053	0.08
26.0	11.178	33.398	25.497	248.07	0.068	0.08
28.0	11.169	33.400	25.501	247.81	0.073	0.08

STATION: 22 DATE: 2/15/91 0406 GMT

LAT: 37° 45.5' N. LON: 122° 49.1' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.787	33.167	25.206	275.26	0.011	0.01
6.0	11.786	33.167	25.206	275.29	0.017	0.01
10.0	11.779	33.168	25.208	275.18	0.028	0.01
16.0	11.717	33.180	25.229	273.33	0.044	0.01
20.0	11.594	33.235	25.295	267.20	0.055	0.03
26.0	11.487	33.336	25.393	258.00	0.071	0.09
30.0	11.409	33.354	25.421	255.40	0.081	0.09
36.0	11.300	33.374	25.457	252.16	0.096	0.08
40.0	11.202	33.389	25.486	249.45	0.106	0.08
46.0	10.984	33.421	25.550	243.49	0.121	0.06
48.0	10.974	33.422	25.553	243.28	0.126	0.06

STATION: 23 DATE: 2/15/91 0453 GMT

LAT: 37° 42.9' N. LON: 122° 54.8' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.813	33.166	25.200	275.79	0.011	0.01
6.0	11.813	33.166	25.200	275.84	0.017	0.01
10.0	11.810	33.168	25.203	275.73	0.028	0.02
16.0	11.740	33.202	25.242	272.11	0.044	0.03
20.0	11.673	33.251	25.293	267.40	0.055	0.06
26.0	11.536	33.339	25.386	258.63	0.071	0.10
30.0	11.501	33.348	25.400	257.44	0.081	0.10
36.0	11.383	33.367	25.436	254.11	0.096	0.09
40.0	11.242	33.386	25.477	250.36	0.106	0.08
46.0	11.192	33.393	25.491	249.11	0.121	0.08
50.0	11.185	33.395	25.494	248.93	0.131	0.08

STATION: 24 DATE: 2/15/91 0541 GMT

LAT: 37° 40.0' N. LON: 123° 0.6' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.926	33.164	25.178	277.95	0.011	0.03
6.0	11.926	33.161	25.176	278.21	0.017	0.03
10.0	11.927	33.166	25.179	277.95	0.028	0.04
16.0	11.927	33.180	25.190	277.05	0.044	0.05
20.0	11.916	33.193	25.203	275.98	0.056	0.06
26.0	11.874	33.202	25.218	274.71	0.072	0.06
30.0	11.863	33.202	25.220	274.60	0.083	0.05
36.0	11.729	33.235	25.270	269.92	0.099	0.05
40.0	11.652	33.262	25.306	266.66	0.110	0.06
46.0	11.592	33.284	25.334	264.11	0.126	0.07
50.0	11.529	33.308	25.364	261.32	0.137	0.07
60.0	11.436	33.333	25.401	258.07	0.162	0.08
66.0	11.412	33.337	25.408	257.49	0.178	0.08

STATION: 25 DATE: 2/15/91 0611 GMT

LAT: 37° 38.7' N. LON: 123° 3.3' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.036	33.193	25.180	277.77	0.011	0.08
6.0	12.026	33.195	25.183	277.48	0.017	0.08
10.0	12.008	33.197	25.188	277.11	0.028	0.08
16.0	12.003	33.198	25.190	277.08	0.044	0.08
20.0	11.993	33.199	25.193	276.91	0.055	0.08
26.0	11.985	33.200	25.195	276.83	0.072	0.07
30.0	11.969	33.214	25.209	275.60	0.083	0.08
36.0	11.878	33.262	25.264	270.57	0.100	0.10
40.0	11.858	33.267	25.271	269.93	0.110	0.10
46.0	11.802	33.276	25.289	268.41	0.127	0.10
50.0	11.764	33.286	25.304	267.09	0.137	0.10
60.0	11.548	33.318	25.369	261.14	0.164	0.09
70.0	11.353	33.346	25.426	255.88	0.190	0.07
80.0	10.956	33.427	25.561	243.28	0.214	0.06
90.0	10.823	33.434	25.590	240.72	0.239	0.04
100.0	10.717	33.491	25.653	234.92	0.262	0.07
122.0	9.500	33.663	25.993	202.82	0.311	0.00

STATION: 26 DATE: 2/15/91 0648 GMT

LAT: 37° 37.3' N. LON: 123° 6.3' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.028	33.219	25.201	275.70	0.011	0.10
6.0	12.030	33.219	25.201	275.78	0.017	0.10
10.0	12.031	33.219	25.201	275.89	0.028	0.10
16.0	12.031	33.219	25.201	276.03	0.044	0.10
20.0	12.033	33.218	25.200	276.23	0.055	0.10
26.0	12.034	33.219	25.201	276.31	0.072	0.10
30.0	12.026	33.247	25.224	274.19	0.083	0.12
36.0	12.061	33.313	25.269	270.08	0.099	0.18
40.0	12.004	33.325	25.289	268.26	0.110	0.18
46.0	12.118	33.393	25.321	265.43	0.126	0.25
50.0	12.191	33.426	25.332	264.41	0.136	0.29
60.0	11.951	33.432	25.383	259.87	0.163	0.25
70.0	11.810	33.450	25.423	256.25	0.189	0.24
80.0	11.282	33.503	25.561	243.27	0.214	0.18
90.0	11.004	33.525	25.629	237.07	0.237	0.15
100.0	10.799	33.560	25.692	231.21	0.261	0.14
126.0	9.785	33.571	25.875	214.23	0.319	-.03
150.0	9.052	33.654	26.059	197.05	0.368	-.08
176.0	8.939	33.849	26.230	181.34	0.417	0.05
200.0	8.481	33.931	26.365	168.77	0.459	0.05
226.0	8.341	33.959	26.409	165.07	0.502	0.05
250.0	8.001	34.022	26.510	155.81	0.541	0.05
276.0	7.748	34.055	26.573	150.14	0.581	0.03
300.0	7.538	34.075	26.619	146.05	0.616	0.02
326.0	7.272	34.096	26.673	141.16	0.654	0.00
350.0	7.047	34.110	26.716	137.36	0.687	-.02
376.0	6.879	34.120	26.747	134.70	0.722	-.04
400.0	6.717	34.137	26.782	131.58	0.754	-.05
426.0	6.584	34.151	26.811	129.11	0.788	-.05
450.0	6.441	34.167	26.843	126.34	0.819	-.06
476.0	6.137	34.192	26.902	120.81	0.851	-.08
500.0	6.018	34.197	26.922	119.20	0.880	-.09
550.0	5.680	34.220	26.982	113.75	0.938	-.11
600.0	5.405	34.245	27.035	109.00	0.994	-.13
650.0	5.111	34.276	27.095	103.59	1.047	-.14
700.0	4.882	34.302	27.142	99.37	1.097	-.14
750.0	4.677	34.331	27.188	95.23	1.146	-.14
800.0	4.545	34.349	27.217	92.78	1.193	-.14
812.0	4.494	34.358	27.230	91.61	1.204	-.14

STATION: 27 DATE: 2/15/91 0748 GMT

LAT: 37° 35.3' N. LON: 123° 10.6' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.384	33.292	25.190	276.75	0.011	0.23
6.0	12.385	33.291	25.190	276.88	0.017	0.23
10.0	12.389	33.292	25.190	276.98	0.028	0.23
16.0	12.401	33.297	25.191	276.97	0.044	0.23
20.0	12.395	33.293	25.190	277.24	0.055	0.23
26.0	12.455	33.325	25.203	276.12	0.072	0.27
30.0	12.458	33.345	25.218	274.80	0.083	0.28
36.0	12.371	33.353	25.241	272.75	0.099	0.27
40.0	12.320	33.381	25.273	269.85	0.110	0.28
46.0	12.336	33.451	25.324	265.12	0.126	0.34
50.0	12.343	33.455	25.326	265.05	0.137	0.35
60.0	11.944	33.434	25.385	259.60	0.163	0.25
70.0	11.247	33.382	25.473	251.39	0.189	0.08
80.0	11.013	33.493	25.602	239.38	0.213	0.13
90.0	10.891	33.552	25.670	233.15	0.237	0.15
100.0	10.788	33.574	25.705	229.99	0.260	0.15
126.0	10.181	33.614	25.842	217.46	0.318	0.07
150.0	9.036	33.714	26.108	192.36	0.367	-.04
176.0	8.639	33.877	26.298	174.72	0.415	0.03
200.0	8.387	33.988	26.424	163.15	0.455	0.08
226.0	8.172	34.045	26.502	156.20	0.497	0.09
250.0	7.894	34.057	26.553	151.67	0.534	0.06
276.0	7.620	34.057	26.593	148.17	0.573	0.02
300.0	7.438	34.063	26.624	145.53	0.608	0.00
326.0	7.270	34.087	26.667	141.80	0.645	-.01
350.0	7.093	34.113	26.712	137.77	0.679	-.01
376.0	6.750	34.104	26.752	134.14	0.714	-.07
400.0	6.601	34.120	26.784	131.28	0.746	-.07
426.0	6.512	34.137	26.810	129.19	0.780	-.07
450.0	6.440	34.173	26.848	125.88	0.811	-.05
476.0	6.364	34.189	26.871	124.03	0.843	-.05
500.0	6.227	34.200	26.897	121.71	0.873	-.06
550.0	5.754	34.218	26.971	114.85	0.932	-.11
600.0	5.401	34.264	27.051	107.54	0.988	-.11
650.0	5.138	34.290	27.103	102.88	1.041	-.12
700.0	5.048	34.305	27.125	101.20	1.092	-.12
750.0	4.796	34.337	27.180	96.23	1.141	-.12
800.0	4.623	34.354	27.213	93.36	1.188	-.13
850.0	4.484	34.383	27.251	90.00	1.234	-.12
900.0	4.421	34.395	27.268	88.82	1.279	-.12
950.0	4.243	34.396	27.288	87.04	1.323	-.14
1000.0	4.169	34.412	27.309	85.41	1.366	-.13
1100.0	3.791	34.455	27.382	78.51	1.448	-.14
1200.0	3.500	34.484	27.435	73.66	1.524	-.14
1232.0	3.375	34.496	27.456	71.52	1.547	-.15

STATION: 28 DATE: 2/15/91 0930 GMT

LAT: 37° 33.2' N. LON: 123° 15.1' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.434	33.318	25.201	275.74	0.011	0.26
6.0	12.434	33.318	25.201	275.79	0.017	0.26
10.0	12.437	33.318	25.201	275.94	0.028	0.26
16.0	12.436	33.318	25.201	276.06	0.044	0.26
20.0	12.436	33.317	25.200	276.22	0.055	0.26
26.0	12.425	33.316	25.202	276.24	0.072	0.25
30.0	12.413	33.313	25.202	276.33	0.083	0.25
36.0	12.340	33.304	25.209	275.80	0.099	0.23
40.0	12.314	33.304	25.214	275.42	0.110	0.22
46.0	12.236	33.358	25.271	270.15	0.127	0.25
50.0	12.113	33.372	25.305	266.98	0.138	0.24
60.0	11.885	33.413	25.380	260.09	0.164	0.23
70.0	11.558	33.428	25.453	253.41	0.190	0.17
80.0	11.168	33.446	25.538	245.51	0.214	0.12
90.0	11.226	33.528	25.591	240.67	0.239	0.19
100.0	10.748	33.559	25.701	230.42	0.262	0.13
126.0	10.301	33.613	25.821	219.50	0.321	0.09
150.0	9.118	33.693	26.079	195.18	0.370	-.04
176.0	8.682	33.829	26.254	178.93	0.419	0.00
200.0	8.479	33.943	26.375	167.85	0.460	0.06
226.0	8.236	34.036	26.485	157.80	0.502	0.09
250.0	7.874	34.054	26.553	151.60	0.539	0.05
276.0	7.604	34.083	26.616	146.01	0.578	0.04
300.0	7.331	34.114	26.679	140.25	0.612	0.02
326.0	6.972	34.091	26.711	137.39	0.648	-.05
350.0	6.689	34.082	26.742	134.59	0.681	-.09
376.0	6.617	34.113	26.777	131.68	0.716	-.08
400.0	6.643	34.153	26.805	129.39	0.747	-.04
426.0	6.386	34.163	26.847	125.58	0.780	-.07
450.0	6.296	34.182	26.874	123.30	0.810	-.07
476.0	6.204	34.201	26.901	121.02	0.842	-.06
500.0	6.000	34.210	26.934	118.00	0.871	-.08
550.0	5.723	34.230	26.985	113.56	0.928	-.10
600.0	5.363	34.270	27.060	106.62	0.983	-.11
650.0	5.174	34.303	27.109	102.37	1.035	-.11
700.0	4.913	34.331	27.161	97.60	1.086	-.12
750.0	4.816	34.346	27.185	95.81	1.134	-.12
800.0	4.642	34.369	27.223	92.48	1.181	-.12
850.0	4.477	34.393	27.260	89.18	1.226	-.12
900.0	4.313	34.412	27.293	86.25	1.270	-.12
950.0	4.172	34.430	27.322	83.67	1.313	-.12
1000.0	4.089	34.437	27.337	82.59	1.354	-.12
1100.0	3.838	34.450	27.374	79.44	1.435	-.14
1200.0	3.643	34.470	27.410	76.41	1.512	-.14
1300.0	3.397	34.494	27.453	72.42	1.586	-.15

STATION: 28 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	3.212	34.512	27.485	69.56	1.657	-.15
1500.0	2.937	34.534	27.529	65.28	1.724	-.16
1600.0	2.847	34.543	27.544	64.14	1.789	-.16
1660.0	2.790	34.548	27.554	63.43	1.827	-.16

STATION: 29 DATE: 2/15/91 1130 GMT

LAT: 37° 29.0' N. LON: 123° 23.5' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.324	33.302	25.210	274.91	0.011	0.22
6.0	12.322	33.300	25.209	275.07	0.016	0.22
10.0	12.321	33.302	25.210	275.00	0.027	0.22
16.0	12.325	33.302	25.210	275.21	0.044	0.22
20.0	12.325	33.300	25.208	275.45	0.055	0.22
26.0	12.327	33.300	25.208	275.63	0.072	0.22
30.0	12.325	33.302	25.210	275.53	0.083	0.22
36.0	12.327	33.302	25.210	275.71	0.099	0.22
40.0	12.328	33.302	25.210	275.82	0.110	0.22
46.0	12.319	33.304	25.213	275.65	0.127	0.22
50.0	12.289	33.309	25.223	274.82	0.138	0.22
60.0	11.486	33.264	25.338	264.04	0.165	0.03
70.0	10.736	33.220	25.438	254.67	0.191	-.14
80.0	10.334	33.291	25.563	242.95	0.215	-.16
90.0	9.865	33.332	25.674	232.52	0.239	-.21
100.0	10.139	33.497	25.757	224.91	0.262	-.03
126.0	9.956	33.645	25.904	211.50	0.319	0.06
150.0	9.420	33.705	26.040	198.98	0.368	0.02
176.0	8.833	33.827	26.229	181.35	0.418	0.02
200.0	8.487	33.950	26.379	167.45	0.459	0.06
226.0	8.297	34.008	26.454	160.78	0.502	0.08
250.0	8.064	34.021	26.499	156.80	0.540	0.05
276.0	7.717	34.037	26.563	151.03	0.580	0.02
300.0	7.417	34.078	26.639	144.12	0.615	0.00
326.0	7.130	34.083	26.683	140.15	0.652	-.03
350.0	6.832	34.092	26.731	135.77	0.685	-.07
376.0	6.563	34.097	26.771	132.15	0.720	-.10
400.0	6.632	34.144	26.799	129.91	0.751	-.05
426.0	6.426	34.160	26.839	126.33	0.785	-.07
450.0	6.212	34.167	26.873	123.31	0.815	-.09
476.0	6.108	34.195	26.908	120.21	0.846	-.08
500.0	5.914	34.209	26.944	116.96	0.875	-.09
550.0	5.595	34.216	26.989	112.97	0.932	-.13
600.0	5.283	34.243	27.048	107.62	0.987	-.14
650.0	5.130	34.278	27.094	103.68	1.040	-.13
700.0	4.942	34.312	27.143	99.37	1.091	-.13
750.0	4.775	34.340	27.184	95.75	1.140	-.12
800.0	4.546	34.354	27.221	92.42	1.187	-.14
850.0	4.399	34.368	27.248	90.08	1.232	-.14
900.0	4.268	34.388	27.279	87.48	1.277	-.14
950.0	4.198	34.414	27.307	85.16	1.320	-.13
1000.0	4.053	34.419	27.326	83.48	1.362	-.14
1100.0	3.836	34.468	27.388	78.09	1.443	-.12
1200.0	3.539	34.489	27.435	73.76	1.519	-.14
1300.0	3.260	34.506	27.475	69.90	1.591	-.15

STATION: 29 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	3.086	34.520	27.503	67.47	1.659	-.15
1500.0	2.925	34.534	27.530	65.14	1.726	-.16
1600.0	2.718	34.554	27.564	61.78	1.790	-.16
1700.0	2.526	34.569	27.593	58.92	1.850	-.16
1800.0	2.388	34.582	27.616	56.81	1.908	-.17
1900.0	2.211	34.597	27.642	54.03	1.964	-.17
2000.0	2.156	34.603	27.652	53.37	2.017	-.17
2100.0	2.057	34.615	27.670	51.69	2.070	-.17
2200.0	1.955	34.625	27.687	50.09	2.121	-.17
2218.0	1.942	34.628	27.690	49.78	2.130	-.17

STATION: 900 DATE: 2/15/91 1400 GMT

LAT: 37° 34.0' N. LON: 123° 20.5' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.365	33.276	25.182	277.58	0.011	0.21
6.0	12.365	33.265	25.173	278.44	0.017	0.20
10.0	12.364	33.265	25.174	278.51	0.028	0.20
16.0	12.368	33.265	25.173	278.72	0.045	0.20
20.0	12.367	33.265	25.173	278.80	0.056	0.20
26.0	12.368	33.268	25.175	278.73	0.072	0.20
30.0	12.366	33.270	25.178	278.64	0.084	0.20
36.0	12.325	33.297	25.206	276.04	0.100	0.22
40.0	12.251	33.327	25.244	272.57	0.111	0.23
46.0	12.118	33.331	25.272	270.01	0.127	0.20
50.0	12.076	33.340	25.287	268.68	0.138	0.20
60.0	11.887	33.384	25.357	262.27	0.165	0.20
70.0	11.603	33.424	25.441	254.50	0.191	0.18
80.0	11.181	33.426	25.520	247.21	0.216	0.10
90.0	10.682	33.483	25.653	234.72	0.240	0.06
100.0	10.211	33.547	25.784	222.39	0.263	0.03
126.0	9.761	33.659	25.948	207.33	0.319	0.04
150.0	9.140	33.649	26.041	198.78	0.367	-.07
176.0	8.730	33.809	26.231	181.13	0.417	-.01
200.0	8.555	33.934	26.356	169.65	0.458	0.06
226.0	8.296	34.014	26.459	160.32	0.501	0.08
250.0	8.038	34.050	26.526	154.27	0.539	0.07
276.0	7.578	34.031	26.578	149.50	0.578	-.01
300.0	7.381	34.057	26.627	145.18	0.613	-.02
326.0	7.256	34.098	26.677	140.78	0.651	0.00
350.0	6.930	34.071	26.701	138.66	0.684	-.07
376.0	6.777	34.093	26.739	135.32	0.720	-.07
400.0	6.394	34.098	26.794	130.17	0.751	-.12
426.0	6.317	34.117	26.819	128.09	0.785	-.11
450.0	6.299	34.146	26.845	126.01	0.816	-.09
476.0	6.176	34.175	26.884	122.59	0.848	-.09
500.0	6.152	34.201	26.908	120.65	0.877	-.07
506.0	6.145	34.202	26.910	120.56	0.884	-.07

STATION: 30 DATE: 2/15/91 1641 GMT

LAT: 37° 24.9' N. LON: 123° 32.5' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.375	33.239	25.151	280.49	0.011	0.18
6.0	12.375	33.239	25.151	280.54	0.017	0.18
10.0	12.376	33.237	25.150	280.80	0.028	0.18
16.0	12.377	33.239	25.151	280.81	0.045	0.18
20.0	12.377	33.239	25.151	280.90	0.056	0.18
26.0	12.377	33.246	25.157	280.52	0.073	0.19
30.0	12.279	33.310	25.225	274.11	0.084	0.22
36.0	12.240	33.393	25.297	267.41	0.100	0.28
40.0	12.150	33.434	25.346	262.85	0.111	0.29
46.0	11.918	33.471	25.419	256.08	0.127	0.28
50.0	11.733	33.497	25.473	250.96	0.137	0.26
60.0	11.270	33.514	25.572	241.82	0.161	0.19
70.0	10.962	33.512	25.626	236.89	0.185	0.13
80.0	10.415	33.526	25.732	226.89	0.209	0.04
90.0	10.398	33.634	25.820	218.82	0.231	0.13
100.0	10.238	33.691	25.892	212.17	0.252	0.14
126.0	9.403	33.702	26.040	198.49	0.306	0.01
150.0	8.782	33.779	26.199	183.68	0.352	-.03
176.0	8.750	33.947	26.336	171.20	0.398	0.10
200.0	8.474	34.003	26.423	163.33	0.438	0.10
226.0	8.207	34.038	26.491	157.23	0.479	0.09
250.0	7.887	34.046	26.545	152.38	0.516	0.05
276.0	7.483	34.068	26.621	145.42	0.555	0.01
300.0	6.960	34.055	26.684	139.53	0.589	-.08
326.0	6.753	34.065	26.720	136.37	0.625	-.10
350.0	6.637	34.102	26.765	132.40	0.657	-.08
376.0	6.662	34.162	26.809	128.64	0.691	-.03
400.0	6.537	34.174	26.835	126.41	0.722	-.04
426.0	6.332	34.183	26.870	123.38	0.754	-.06
450.0	6.188	34.188	26.892	121.44	0.784	-.08
476.0	6.031	34.208	26.928	118.24	0.815	-.08
500.0	5.896	34.217	26.953	116.13	0.843	-.09
550.0	5.640	34.249	27.010	111.09	0.900	-.10
600.0	5.276	34.273	27.073	105.31	0.954	-.12
650.0	5.083	34.300	27.117	101.46	1.005	-.12
700.0	4.943	34.330	27.157	98.04	1.055	-.11
750.0	4.736	34.354	27.200	94.24	1.104	-.12
800.0	4.519	34.361	27.230	91.58	1.150	-.14
850.0	4.424	34.394	27.266	88.46	1.195	-.12
900.0	4.254	34.403	27.292	86.20	1.238	-.13
950.0	4.077	34.410	27.316	84.01	1.281	-.14
1000.0	3.922	34.424	27.344	81.55	1.322	-.15
1100.0	3.685	34.462	27.398	76.72	1.401	-.14
1200.0	3.432	34.487	27.443	72.63	1.476	-.15
1300.0	3.283	34.504	27.472	70.32	1.547	-.15

STATION: 30 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	3.062	34.522	27.507	67.03	1.616	-.15
1500.0	2.860	34.540	27.540	63.92	1.682	-.16
1600.0	2.710	34.551	27.563	61.90	1.745	-.16
1700.0	2.516	34.568	27.593	58.87	1.805	-.17
1800.0	2.425	34.576	27.608	57.70	1.863	-.17
1900.0	2.262	34.591	27.634	55.09	1.919	-.17
2000.0	2.148	34.603	27.653	53.27	1.974	-.17
2100.0	2.050	34.614	27.670	51.68	2.026	-.17
2200.0	1.949	34.623	27.686	50.16	2.077	-.17
2300.0	1.883	34.631	27.698	49.13	2.127	-.17
2400.0	1.822	34.642	27.712	47.92	2.175	-.16
2500.0	1.787	34.646	27.718	47.53	2.223	-.16
2600.0	1.746	34.651	27.726	46.97	2.270	-.16
2700.0	1.710	34.657	27.734	46.40	2.317	-.16
2800.0	1.676	34.660	27.739	46.05	2.363	-.16
2844.0	1.677	34.662	27.741	46.06	2.383	-.16

STATION: 31 DATE: 2/15/91 1918 GMT

LAT: 37° 34.2' N. LON: 123° 35.0' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.331	33.299	25.206	275.26	0.011	0.22
6.0	12.333	33.299	25.206	275.35	0.017	0.22
10.0	12.334	33.299	25.206	275.46	0.028	0.22
16.0	12.325	33.299	25.208	275.43	0.044	0.22
20.0	12.324	33.299	25.208	275.51	0.055	0.22
26.0	12.319	33.300	25.210	275.48	0.072	0.22
30.0	12.296	33.304	25.217	274.86	0.083	0.22
36.0	12.241	33.344	25.259	271.05	0.099	0.24
40.0	12.290	33.367	25.268	270.33	0.110	0.27
46.0	12.209	33.381	25.294	267.97	0.126	0.26
50.0	11.930	33.360	25.330	264.58	0.137	0.19
60.0	11.357	33.334	25.416	256.62	0.163	0.06
70.0	10.684	33.305	25.513	247.51	0.188	-.08
80.0	10.321	33.372	25.628	236.74	0.212	-.09
90.0	10.542	33.561	25.738	226.61	0.235	0.09
100.0	10.378	33.627	25.818	219.21	0.258	0.12
126.0	9.183	33.764	26.124	190.47	0.311	0.02
150.0	9.083	33.855	26.211	182.63	0.356	0.08
176.0	8.788	33.941	26.325	172.22	0.402	0.10
200.0	8.541	33.994	26.406	165.00	0.442	0.11
226.0	8.246	34.032	26.481	158.25	0.484	0.09
250.0	7.979	34.057	26.540	152.90	0.521	0.07
276.0	7.604	34.051	26.590	148.39	0.560	0.01
300.0	7.521	34.086	26.630	144.99	0.595	0.03
326.0	7.169	34.098	26.689	139.58	0.633	-.01
350.0	7.019	34.121	26.728	136.16	0.666	-.02
376.0	6.790	34.139	26.774	132.08	0.700	-.03
400.0	6.604	34.151	26.809	129.02	0.732	-.05
426.0	6.393	34.160	26.844	125.90	0.765	-.07
450.0	6.200	34.176	26.881	122.49	0.795	-.08
476.0	5.982	34.188	26.919	119.09	0.826	-.10
500.0	5.846	34.202	26.947	116.60	0.854	-.11
550.0	5.503	34.221	27.004	111.44	0.911	-.13
600.0	5.307	34.250	27.051	107.40	0.966	-.13
650.0	5.057	34.284	27.107	102.33	1.018	-.14
700.0	4.811	34.317	27.162	97.39	1.068	-.14
750.0	4.672	34.344	27.199	94.20	1.116	-.13
800.0	4.436	34.360	27.238	90.65	1.162	-.15
850.0	4.243	34.374	27.270	87.77	1.207	-.16
900.0	4.156	34.401	27.301	85.18	1.250	-.14
950.0	4.039	34.423	27.331	82.59	1.292	-.14
1000.0	3.904	34.442	27.360	80.00	1.333	-.14
1100.0	3.738	34.460	27.392	77.50	1.412	-.14
1200.0	3.473	34.490	27.442	72.90	1.487	-.14
1300.0	3.246	34.510	27.480	69.44	1.558	-.15

STATION: 31 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta$D	π
1400.0	3.003	34.528	27.517	65.89	1.626	-.16
1500.0	2.834	34.541	27.543	63.54	1.690	-.16
1600.0	2.694	34.555	27.567	61.42	1.753	-.16
1700.0	2.533	34.569	27.593	59.00	1.813	-.16
1800.0	2.414	34.581	27.613	57.20	1.871	-.16
1900.0	2.227	34.596	27.640	54.30	1.927	-.17
2000.0	2.123	34.607	27.658	52.67	1.980	-.17
2100.0	2.025	34.616	27.673	51.22	2.032	-.17
2200.0	1.935	34.628	27.691	49.62	2.083	-.17
2300.0	1.871	34.635	27.702	48.69	2.132	-.16
2400.0	1.815	34.642	27.712	47.83	2.180	-.16
2500.0	1.784	34.646	27.718	47.49	2.228	-.16
2600.0	1.760	34.650	27.724	47.23	2.275	-.16
2700.0	1.725	34.656	27.732	46.67	2.322	-.16
2800.0	1.706	34.658	27.735	46.60	2.369	-.16
2900.0	1.656	34.664	27.745	45.80	2.415	-.16
3000.0	1.639	34.665	27.747	45.81	2.461	-.16
3100.0	1.613	34.669	27.753	45.46	2.507	-.16
3200.0	1.593	34.671	27.757	45.33	2.552	-.16
3300.0	1.573	34.673	27.760	45.19	2.597	-.16
3302.0	1.572	34.673	27.760	45.19	2.598	-.16

STATION: 32 DATE: 2/15/91 2236 GMT

LAT: 37° 38.3' N. LON: 123° 26.6' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.408	33.276	25.173	278.36	0.011	0.22
6.0	12.407	33.276	25.174	278.39	0.017	0.22
10.0	12.407	33.276	25.174	278.48	0.028	0.22
16.0	12.401	33.277	25.176	278.44	0.045	0.22
20.0	12.399	33.278	25.177	278.42	0.056	0.22
26.0	12.396	33.279	25.179	278.43	0.072	0.22
30.0	12.399	33.278	25.177	278.66	0.084	0.22
36.0	12.380	33.286	25.187	277.86	0.100	0.22
40.0	12.201	33.353	25.274	269.75	0.111	0.24
46.0	12.074	33.346	25.292	268.11	0.127	0.21
50.0	12.022	33.361	25.314	266.16	0.138	0.21
60.0	11.883	33.395	25.367	261.38	0.164	0.21
70.0	11.570	33.407	25.434	255.17	0.190	0.16
80.0	10.353	33.339	25.597	239.71	0.215	-.12
90.0	10.730	33.491	25.651	234.94	0.239	0.07
100.0	10.179	33.518	25.767	224.01	0.262	0.00
126.0	9.927	33.649	25.912	210.74	0.318	0.06
150.0	8.927	33.759	26.161	187.36	0.367	-.02
176.0	8.512	33.914	26.347	170.08	0.413	0.04
200.0	8.437	34.007	26.432	162.48	0.453	0.10
226.0	8.109	34.027	26.497	156.61	0.495	0.07
250.0	7.868	34.039	26.542	152.63	0.532	0.04
276.0	7.523	34.050	26.601	147.32	0.571	0.00
300.0	7.337	34.077	26.649	143.08	0.605	-.01
326.0	7.288	34.113	26.685	140.12	0.642	0.01
350.0	7.082	34.118	26.717	137.25	0.676	-.01
376.0	6.895	34.139	26.760	133.51	0.711	-.02
400.0	6.743	34.152	26.791	130.82	0.742	-.03
426.0	6.532	34.167	26.831	127.23	0.776	-.05
450.0	6.259	34.170	26.869	123.71	0.806	-.08
476.0	6.121	34.196	26.907	120.31	0.838	-.08
500.0	6.030	34.209	26.929	118.46	0.867	-.08
550.0	5.783	34.237	26.983	113.81	0.925	-.09
600.0	5.505	34.260	27.035	109.15	0.980	-.10
650.0	5.180	34.282	27.091	104.00	1.034	-.12
700.0	5.003	34.312	27.136	100.12	1.085	-.12
750.0	4.793	34.345	27.186	95.60	1.134	-.12
800.0	4.590	34.358	27.219	92.66	1.181	-.13
850.0	4.443	34.372	27.247	90.32	1.226	-.14
900.0	4.301	34.398	27.283	87.14	1.271	-.13
950.0	4.123	34.408	27.310	84.70	1.314	-.14
1000.0	3.983	34.421	27.335	82.50	1.355	-.15
1100.0	3.766	34.455	27.385	78.21	1.436	-.14
1200.0	3.536	34.480	27.428	74.39	1.512	-.14
1300.0	3.316	34.501	27.466	70.93	1.584	-.15

STATION: 32 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	3.078	34.522	27.506	67.22	1.653	-.15
1500.0	2.890	34.539	27.537	64.35	1.719	-.16
1600.0	2.779	34.548	27.554	62.95	1.783	-.16
1700.0	2.618	34.562	27.580	60.54	1.844	-.16
1800.0	2.396	34.582	27.615	56.90	1.903	-.17
1900.0	2.276	34.594	27.635	55.05	1.959	-.17
2000.0	2.177	34.602	27.650	53.70	2.013	-.17
2100.0	2.064	34.614	27.669	51.85	2.066	-.17
2200.0	1.976	34.623	27.683	50.50	2.117	-.17
2300.0	1.883	34.636	27.702	48.77	2.167	-.16
2400.0	1.851	34.639	27.707	48.51	2.215	-.16
2500.0	1.784	34.646	27.718	47.49	2.263	-.16
2600.0	1.760	34.651	27.725	47.16	2.310	-.16
2670.0	1.692	34.658	27.736	45.98	2.343	-.16

STATION: 33 DATE: 2/16/91 0118 GMT

LAT: 37° 41.1' N. LON: 123° 20.6' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.368	33.286	25.189	276.90	0.011	0.22
6.0	12.368	33.286	25.189	276.94	0.017	0.22
10.0	12.368	33.285	25.188	277.11	0.028	0.22
16.0	12.372	33.288	25.190	277.10	0.044	0.22
20.0	12.373	33.289	25.191	277.14	0.055	0.22
26.0	12.374	33.289	25.191	277.29	0.072	0.22
30.0	12.373	33.291	25.192	277.22	0.083	0.22
36.0	12.363	33.300	25.202	276.51	0.100	0.23
40.0	12.314	33.325	25.230	273.87	0.111	0.24
46.0	12.080	33.326	25.276	269.69	0.127	0.19
50.0	12.102	33.343	25.285	268.93	0.138	0.21
60.0	11.974	33.386	25.343	263.68	0.165	0.22
70.0	11.790	33.399	25.387	259.65	0.191	0.20
80.0	11.529	33.470	25.491	250.02	0.216	0.20
90.0	10.992	33.424	25.552	244.33	0.241	0.07
100.0	10.204	33.381	25.656	234.56	0.265	-.11
126.0	9.690	33.407	25.762	224.86	0.325	-.18
150.0	9.074	33.570	25.990	203.62	0.376	-.15
176.0	8.711	33.786	26.216	182.55	0.426	-.03
200.0	8.531	33.913	26.344	170.85	0.469	0.04
226.0	8.294	34.009	26.455	160.66	0.511	0.08
250.0	8.113	34.050	26.515	155.37	0.549	0.08
276.0	7.675	34.056	26.584	149.02	0.589	0.02
300.0	7.375	34.069	26.637	144.20	0.624	-.01
326.0	7.314	34.100	26.671	141.45	0.661	0.01
350.0	7.141	34.120	26.711	137.92	0.695	0.00
376.0	6.905	34.112	26.737	135.65	0.731	-.04
400.0	6.552	34.120	26.791	130.63	0.763	-.08
426.0	6.526	34.158	26.825	127.81	0.796	-.05
450.0	6.371	34.176	26.859	124.74	0.827	-.06
476.0	6.141	34.176	26.889	122.05	0.859	-.09
500.0	6.034	34.208	26.928	118.59	0.888	-.08
550.0	5.789	34.230	26.977	114.41	0.946	-.09
600.0	5.333	34.243	27.042	108.25	1.001	-.14
650.0	5.183	34.278	27.088	104.33	1.054	-.13
700.0	5.011	34.316	27.138	99.92	1.105	-.12
750.0	4.852	34.340	27.176	96.70	1.154	-.12
800.0	4.645	34.372	27.225	92.29	1.202	-.11
850.0	4.463	34.395	27.263	88.86	1.247	-.12
900.0	4.286	34.397	27.284	87.03	1.291	-.13
950.0	4.157	34.417	27.314	84.45	1.334	-.13
1000.0	4.083	34.432	27.334	82.88	1.376	-.13
1100.0	3.876	34.460	27.378	79.16	1.457	-.13
1200.0	3.550	34.484	27.430	74.26	1.533	-.14
1300.0	3.238	34.510	27.481	69.34	1.605	-.15

STATION: 33 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	3.123	34.520	27.500	67.91	1.674	-.15
1500.0	2.964	34.534	27.526	65.61	1.740	-.15
1600.0	2.836	34.545	27.547	63.86	1.805	-.16
1674.0	2.710	34.555	27.566	62.03	1.852	-.16

STATION: 34 DATE: 2/16/91 0248 GMT

LAT: 37° 43.1' N. LON: 123° 16.4' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.868	33.207	25.222	273.74	0.011	0.06
6.0	11.868	33.207	25.222	273.78	0.016	0.06
10.0	11.871	33.207	25.222	273.93	0.027	0.06
16.0	11.873	33.207	25.221	274.10	0.044	0.06
20.0	11.874	33.207	25.221	274.20	0.055	0.06
26.0	11.875	33.208	25.222	274.28	0.071	0.06
30.0	11.875	33.209	25.223	274.30	0.082	0.06
36.0	11.876	33.207	25.221	274.60	0.099	0.06
40.0	11.877	33.214	25.227	274.19	0.110	0.07
46.0	11.883	33.227	25.236	273.47	0.126	0.08
50.0	11.887	33.304	25.295	267.94	0.137	0.14
60.0	11.875	33.308	25.300	267.66	0.164	0.14
70.0	11.683	33.348	25.367	261.52	0.190	0.13
80.0	11.516	33.372	25.417	257.03	0.216	0.12
90.0	11.299	33.432	25.503	249.02	0.241	0.13
100.0	10.951	33.519	25.634	236.82	0.266	0.13
126.0	9.782	33.545	25.855	216.11	0.325	-.05
150.0	9.142	33.671	26.058	197.18	0.374	-.06
176.0	8.784	33.813	26.226	181.65	0.424	0.00
200.0	8.601	33.946	26.359	169.45	0.466	0.08
226.0	8.305	34.001	26.447	161.42	0.509	0.07
250.0	7.842	34.038	26.545	152.33	0.546	0.03
276.0	7.538	34.037	26.589	148.49	0.585	-.01
300.0	7.431	34.078	26.637	144.32	0.620	0.01
326.0	7.225	34.096	26.680	140.50	0.657	-.01
350.0	6.977	34.097	26.715	137.37	0.690	-.04
376.0	6.745	34.124	26.768	132.58	0.726	-.05
400.0	6.576	34.142	26.805	129.31	0.757	-.06
426.0	6.479	34.168	26.839	126.44	0.790	-.05
450.0	6.329	34.180	26.868	123.89	0.820	-.06
476.0	6.210	34.201	26.900	121.10	0.852	-.06
500.0	6.045	34.209	26.928	118.66	0.881	-.08
550.0	5.751	34.224	26.977	114.37	0.939	-.10
600.0	5.528	34.246	27.021	110.48	0.995	-.11
650.0	5.237	34.280	27.083	104.86	1.049	-.12
700.0	4.971	34.323	27.148	98.91	1.100	-.12
750.0	4.755	34.354	27.198	94.47	1.148	-.12
800.0	4.677	34.365	27.216	93.20	1.195	-.12
850.0	4.511	34.372	27.240	91.15	1.242	-.13
900.0	4.381	34.402	27.278	87.81	1.286	-.12
950.0	4.199	34.421	27.313	84.66	1.329	-.12
1000.0	4.078	34.432	27.334	82.82	1.371	-.13
1100.0	3.795	34.458	27.384	78.33	1.452	-.14
1200.0	3.483	34.483	27.435	73.53	1.528	-.15
1250.0	3.408	34.491	27.449	72.41	1.564	-.15

STATION: 35 DATE: 2/16/91 0423 GMT

LAT: 37° 45.1' N. LON: 123° 12.4' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.910	33.237	25.238	272.27	0.011	0.09
6.0	11.909	33.237	25.238	272.30	0.016	0.09
10.0	11.910	33.237	25.238	272.40	0.027	0.09
16.0	11.913	33.237	25.237	272.59	0.044	0.09
20.0	11.913	33.237	25.237	272.68	0.054	0.09
26.0	11.914	33.237	25.237	272.83	0.071	0.09
30.0	11.916	33.237	25.237	272.96	0.082	0.09
36.0	11.916	33.237	25.237	273.09	0.098	0.09
40.0	11.916	33.237	25.237	273.18	0.109	0.09
46.0	11.627	33.257	25.306	266.72	0.125	0.05
50.0	11.547	33.281	25.340	263.63	0.136	0.06
60.0	11.269	33.343	25.439	254.43	0.162	0.05
70.0	11.184	33.361	25.468	251.85	0.187	0.05
80.0	11.013	33.371	25.507	248.39	0.212	0.03
90.0	10.758	33.401	25.576	242.06	0.237	0.01
100.0	9.968	33.544	25.823	218.66	0.260	-.02
126.0	9.380	33.668	26.017	200.65	0.314	-.02
150.0	9.153	33.726	26.099	193.27	0.361	-.01
176.0	8.753	33.847	26.257	178.66	0.410	0.02
200.0	8.407	33.941	26.384	166.93	0.451	0.04
226.0	8.083	34.008	26.486	157.64	0.493	0.05
250.0	7.895	34.038	26.538	153.09	0.530	0.04
276.0	7.587	34.066	26.605	147.03	0.569	0.02
300.0	7.447	34.078	26.634	144.54	0.604	0.01
326.0	7.328	34.087	26.659	142.61	0.642	0.00
350.0	7.091	34.105	26.706	138.34	0.676	-.02
354.0	7.161	34.099	26.692	139.81	0.681	-.02

STATION: 37 DATE: 2/16/91 0548 GMT

LAT: 37° 47.9' N. LON: 123° 6.3' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.952	33.251	25.241	271.98	0.011	0.11
6.0	11.952	33.251	25.241	272.03	0.016	0.11
10.0	11.955	33.250	25.239	272.25	0.027	0.11
16.0	11.956	33.250	25.239	272.40	0.044	0.11
20.0	11.956	33.251	25.240	272.41	0.054	0.11
26.0	11.957	33.250	25.239	272.64	0.071	0.11
30.0	11.951	33.253	25.243	272.40	0.082	0.11
36.0	11.920	33.260	25.254	271.47	0.098	0.11
40.0	11.896	33.264	25.262	270.83	0.109	0.11
46.0	11.555	33.310	25.361	261.54	0.125	0.08
50.0	11.267	33.339	25.436	254.48	0.135	0.05
60.0	11.016	33.365	25.501	248.47	0.160	0.02
66.0	10.908	33.373	25.527	246.17	0.175	0.01

STATION: 38 DATE: 2/16/91 0641 GMT

LAT: 37° 51.0' N. LON: 123° 0.0' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.712	33.173	25.225	273.50	0.011	0.00
6.0	11.712	33.173	25.225	273.54	0.016	0.00
10.0	11.713	33.173	25.225	273.65	0.027	0.00
16.0	11.715	33.174	25.225	273.74	0.044	0.00
20.0	11.714	33.180	25.230	273.37	0.055	0.01
26.0	11.713	33.195	25.242	272.37	0.071	0.02
30.0	11.697	33.228	25.271	269.74	0.082	0.04
36.0	11.438	33.325	25.394	258.17	0.098	0.07
40.0	11.382	33.332	25.409	256.77	0.108	0.07
46.0	11.324	33.340	25.426	255.30	0.123	0.06
50.0	11.140	33.355	25.471	251.11	0.134	0.04
60.0	10.920	33.403	25.548	244.03	0.158	0.04
70.0	10.607	33.437	25.630	236.46	0.182	0.01
74.0	10.621	33.441	25.630	236.48	0.192	0.01

STATION: 39 DATE: 2/16/91 0748 GMT

LAT: 37° 53.8' N. LON: 122° 54.2' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.482	33.264	25.338	262.75	0.011	0.03
6.0	11.481	33.264	25.338	262.78	0.016	0.03
10.0	11.483	33.264	25.337	262.90	0.026	0.03
16.0	11.348	33.303	25.393	257.81	0.042	0.04
20.0	11.284	33.323	25.420	255.31	0.052	0.04
26.0	11.112	33.367	25.485	249.23	0.067	0.04
30.0	10.954	33.400	25.539	244.19	0.077	0.04
36.0	10.855	33.419	25.571	241.24	0.092	0.04
40.0	10.764	33.420	25.588	239.72	0.101	0.02
46.0	10.466	33.419	25.640	234.96	0.116	-.03
50.0	10.466	33.449	25.663	232.82	0.125	-.01
52.0	10.495	33.463	25.669	232.30	0.130	0.01

STATION: 40 DATE: 2/16/91 0830 GMT

LAT: 37° 55.7' N. LON: 122° 50.1' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.290	33.334	25.427	254.25	0.010	0.05
6.0	11.290	33.334	25.427	254.30	0.015	0.05
10.0	11.291	33.334	25.427	254.40	0.025	0.05
16.0	11.267	33.343	25.438	253.45	0.041	0.05
20.0	11.237	33.345	25.445	252.87	0.051	0.05
26.0	11.067	33.378	25.502	247.65	0.066	0.04
30.0	10.836	33.423	25.578	240.50	0.076	0.04
32.0	10.731	33.442	25.611	237.37	0.080	0.03

STATION: 48 DATE: 2/17/91 0723 GMT

LAT: 37° 45.6' N. LON: 123° 32.1' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	12.078	33.279	25.239	272.17	0.011	0.16
6.0	12.079	33.279	25.238	272.23	0.016	0.16
10.0	12.080	33.279	25.238	272.34	0.027	0.16
16.0	12.081	33.281	25.240	272.35	0.044	0.16
20.0	12.081	33.281	25.240	272.44	0.054	0.16
26.0	12.080	33.281	25.240	272.56	0.071	0.16
30.0	12.081	33.281	25.240	272.67	0.082	0.16
36.0	12.081	33.281	25.240	272.80	0.098	0.16
40.0	12.082	33.281	25.240	272.91	0.109	0.16
46.0	12.090	33.286	25.243	272.82	0.125	0.16
50.0	12.109	33.304	25.253	271.93	0.136	0.18
60.0	11.859	33.372	25.353	262.65	0.163	0.19
70.0	11.367	33.371	25.443	254.28	0.189	0.09
80.0	10.558	33.400	25.609	238.58	0.213	-.03
90.0	10.403	33.506	25.719	228.37	0.237	0.03
100.0	10.510	33.602	25.776	223.25	0.259	0.12
126.0	9.182	33.629	26.018	200.47	0.314	-.08
150.0	8.790	33.801	26.215	182.17	0.360	-.01
176.0	8.565	33.939	26.358	169.01	0.405	0.07
200.0	8.451	34.006	26.429	162.76	0.445	0.10
226.0	8.182	34.028	26.487	157.61	0.487	0.08
250.0	7.778	34.036	26.553	151.56	0.524	0.02
276.0	7.502	34.044	26.599	147.47	0.563	-.01
300.0	7.267	34.082	26.663	141.73	0.597	-.01
326.0	7.146	34.126	26.715	137.18	0.633	0.00
350.0	6.912	34.138	26.756	133.43	0.666	-.02
376.0	6.811	34.151	26.781	131.47	0.700	-.02
400.0	6.608	34.160	26.815	128.40	0.731	-.04
426.0	6.397	34.160	26.843	125.95	0.764	-.07
450.0	6.205	34.163	26.870	123.52	0.794	-.09
476.0	6.034	34.174	26.901	120.81	0.826	-.11
500.0	5.850	34.188	26.935	117.70	0.855	-.12
550.0	5.604	34.223	26.994	112.56	0.912	-.12
600.0	5.361	34.249	27.044	108.15	0.967	-.13
650.0	5.105	34.286	27.103	102.77	1.020	-.13
700.0	4.847	34.328	27.166	97.01	1.070	-.13
750.0	4.710	34.345	27.196	94.59	1.118	-.13
800.0	4.542	34.367	27.232	91.41	1.164	-.13
850.0	4.356	34.383	27.265	88.45	1.209	-.14
900.0	4.158	34.394	27.295	85.72	1.253	-.15
950.0	4.101	34.409	27.313	84.37	1.295	-.14
1000.0	3.965	34.430	27.344	81.61	1.337	-.14
1100.0	3.704	34.463	27.397	76.88	1.416	-.14
1200.0	3.467	34.487	27.440	73.05	1.491	-.14
1300.0	3.224	34.510	27.482	69.18	1.562	-.15

STATION: 48 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	3.062	34.525	27.509	66.81	1.630	-.15
1500.0	2.895	34.538	27.535	64.49	1.696	-.16
1600.0	2.710	34.554	27.565	61.68	1.759	-.16
1700.0	2.545	34.568	27.591	59.22	1.819	-.16
1800.0	2.345	34.586	27.622	55.99	1.877	-.17
1900.0	2.183	34.601	27.648	53.40	1.931	-.17
2000.0	2.082	34.610	27.664	51.95	1.984	-.17
2100.0	2.014	34.618	27.676	50.94	2.036	-.17
2200.0	1.944	34.626	27.688	49.88	2.086	-.17
2300.0	1.850	34.637	27.705	48.28	2.135	-.17
2400.0	1.800	34.643	27.714	47.56	2.183	-.16
2462.0	1.793	34.645	27.716	47.55	2.212	-.16

STATION: 47 DATE: 2/17/91 0948 GMT

LAT: 37° 47.5' N. LON: 123° 27.6' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.898	33.256	25.255	270.65	0.011	0.10
6.0	11.900	33.256	25.254	270.73	0.016	0.10
10.0	11.901	33.256	25.254	270.84	0.027	0.10
16.0	11.902	33.255	25.253	271.07	0.043	0.10
20.0	11.904	33.256	25.254	271.12	0.054	0.10
26.0	11.904	33.255	25.253	271.33	0.070	0.10
30.0	11.905	33.255	25.253	271.43	0.081	0.10
36.0	11.906	33.255	25.253	271.59	0.098	0.10
40.0	11.907	33.255	25.253	271.69	0.108	0.10
46.0	11.909	33.256	25.253	271.79	0.125	0.10
50.0	11.929	33.269	25.260	271.28	0.136	0.12
60.0	11.772	33.371	25.369	261.18	0.162	0.17
70.0	11.295	33.371	25.456	253.03	0.188	0.08
80.0	11.092	33.464	25.565	242.87	0.213	0.12
90.0	10.536	33.381	25.599	239.83	0.237	-.05
100.0	9.682	33.443	25.791	221.58	0.260	-.15
126.0	9.181	33.609	26.003	201.94	0.316	-.10
150.0	8.693	33.801	26.230	180.71	0.361	-.02
176.0	8.565	33.914	26.339	170.87	0.407	0.05
200.0	8.351	33.994	26.435	162.17	0.447	0.08
226.0	8.153	34.036	26.498	156.59	0.488	0.08
250.0	7.623	34.037	26.576	149.28	0.525	0.00
276.0	7.402	34.082	26.644	143.24	0.563	0.01
300.0	7.265	34.105	26.681	140.00	0.597	0.00
326.0	6.976	34.102	26.719	136.63	0.633	-.04
350.0	6.756	34.097	26.745	134.37	0.665	-.07
376.0	6.609	34.103	26.770	132.32	0.700	-.09
400.0	6.623	34.141	26.798	130.02	0.731	-.06
426.0	6.515	34.168	26.834	126.92	0.765	-.05
450.0	6.397	34.176	26.856	125.08	0.795	-.06
476.0	6.209	34.188	26.890	122.05	0.827	-.07
500.0	5.998	34.172	26.904	120.79	0.856	-.11
550.0	5.619	34.207	26.979	113.94	0.915	-.13
600.0	5.333	34.236	27.037	108.77	0.970	-.14
650.0	5.181	34.264	27.077	105.35	1.024	-.14
700.0	5.043	34.309	27.129	100.84	1.076	-.12
750.0	4.790	34.346	27.187	95.49	1.125	-.12
800.0	4.638	34.373	27.226	92.13	1.171	-.11
850.0	4.523	34.387	27.250	90.18	1.217	-.12
900.0	4.366	34.411	27.287	86.97	1.261	-.11
950.0	4.286	34.423	27.305	85.57	1.304	-.11
1000.0	4.136	34.437	27.332	83.16	1.347	-.12
1100.0	3.867	34.457	27.376	79.27	1.428	-.13
1200.0	3.457	34.490	27.443	72.71	1.504	-.14
1300.0	3.200	34.512	27.486	68.75	1.575	-.15

STATION: 47 (cont)

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
1400.0	2.953	34.534	27.526	64.86	1.642	-.15
1500.0	2.874	34.540	27.539	64.09	1.706	-.16
1568.0	2.772	34.547	27.554	62.76	1.750	-.16

STATION: 46 DATE: 2/17/91 1118 GMT

LAT: 37° 49.5' N. LON: 123° 23.3' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.638	33.233	25.285	267.76	0.011	0.03
6.0	11.639	33.233	25.285	267.83	0.016	0.03
10.0	11.641	33.234	25.285	267.87	0.027	0.04
16.0	11.642	33.234	25.285	268.02	0.043	0.04
20.0	11.644	33.235	25.286	268.07	0.054	0.04
26.0	11.646	33.235	25.285	268.24	0.070	0.04
30.0	11.646	33.235	25.286	268.33	0.080	0.04
36.0	11.647	33.235	25.285	268.48	0.097	0.04
40.0	11.648	33.235	25.285	268.58	0.107	0.04
46.0	11.694	33.258	25.295	267.83	0.123	0.07
50.0	11.720	33.337	25.352	262.54	0.134	0.13
60.0	11.568	33.406	25.433	254.99	0.160	0.16
70.0	11.152	33.474	25.562	242.95	0.185	0.14
80.0	11.018	33.493	25.601	239.46	0.209	0.13
90.0	10.657	33.554	25.712	229.05	0.232	0.11
100.0	10.226	33.584	25.810	219.89	0.255	0.06
126.0	9.710	33.682	25.974	204.81	0.310	0.05
150.0	9.051	33.759	26.141	189.25	0.357	0.00
176.0	8.675	33.925	26.330	171.70	0.404	0.07
200.0	8.277	33.980	26.435	162.12	0.445	0.05
226.0	8.085	34.009	26.487	157.60	0.486	0.05
250.0	7.718	34.052	26.574	149.52	0.523	0.03
276.0	7.489	34.077	26.627	144.83	0.561	0.01
300.0	7.310	34.090	26.663	141.74	0.595	0.00
326.0	7.176	34.099	26.689	139.60	0.632	-.01
350.0	7.082	34.105	26.707	138.21	0.665	-.02
376.0	6.879	34.118	26.745	134.85	0.701	-.04
400.0	6.646	34.142	26.796	130.25	0.733	-.05
426.0	6.558	34.153	26.816	128.61	0.766	-.05
450.0	6.331	34.176	26.865	124.21	0.796	-.07
476.0	6.267	34.194	26.887	122.37	0.828	-.06
500.0	6.211	34.188	26.890	122.39	0.858	-.07
550.0	5.907	34.204	26.941	117.86	0.918	-.10
580.0	5.722	34.216	26.974	114.95	0.953	-.11

STATION: 45 DATE: 2/17/91 1241 GMT

LAT: 37° 50.6' N. LON: 123° 19.9' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.569	33.221	25.288	267.44	0.011	0.01
6.0	11.569	33.212	25.281	268.15	0.016	0.00
10.0	11.569	33.212	25.281	268.24	0.027	0.00
16.0	11.571	33.212	25.281	268.41	0.043	0.01
20.0	11.573	33.212	25.281	268.53	0.054	0.01
26.0	11.577	33.213	25.281	268.66	0.070	0.01
30.0	11.577	33.213	25.281	268.74	0.080	0.01
36.0	11.578	33.214	25.282	268.82	0.097	0.01
40.0	11.579	33.214	25.282	268.92	0.107	0.01
46.0	11.597	33.232	25.293	268.04	0.123	0.03
50.0	11.520	33.264	25.332	264.42	0.134	0.04
60.0	10.603	33.422	25.618	237.29	0.159	-.01
70.0	10.203	33.447	25.707	229.06	0.183	-.06
80.0	10.129	33.453	25.724	227.61	0.205	-.06
90.0	10.040	33.483	25.763	224.15	0.228	-.06
100.0	9.876	33.544	25.838	217.18	0.250	-.03
104.0	9.789	33.572	25.875	213.80	0.259	-.03

STATION: 44 DATE: 2/17/91 1318 GMT

LAT: 37° 52.2' N. LON: 123° 17.6' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.321	33.140	25.270	269.14	0.011	-.10
6.0	11.322	33.152	25.280	268.31	0.016	-.09
10.0	11.324	33.152	25.279	268.43	0.027	-.09
16.0	11.346	33.159	25.281	268.42	0.043	-.08
20.0	11.345	33.159	25.281	268.49	0.054	-.08
26.0	11.361	33.166	25.284	268.37	0.070	-.07
30.0	11.403	33.181	25.288	268.08	0.081	-.05
36.0	11.432	33.193	25.292	267.82	0.097	-.04
40.0	11.438	33.198	25.295	267.65	0.107	-.03
46.0	11.455	33.207	25.299	267.41	0.123	-.02
50.0	11.460	33.213	25.303	267.14	0.134	-.01
60.0	10.789	33.304	25.494	249.14	0.160	-.07
70.0	10.169	33.284	25.585	240.58	0.184	-.19
80.0	10.105	33.371	25.664	233.30	0.208	-.13
90.0	9.831	33.520	25.827	218.05	0.231	-.06
100.0	9.780	33.530	25.843	216.69	0.252	-.06
104.0	9.765	33.531	25.846	216.45	0.261	-.06

STATION: 43 DATE: 2/17/91 1411 GMT

LAT: 37° 54.9' N. LON: 123° 11.9' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.092	33.182	25.344	262.11	0.010	-.11
6.0	11.092	33.182	25.344	262.16	0.016	-.11
10.0	11.096	33.184	25.345	262.16	0.026	-.11
16.0	11.100	33.184	25.345	262.36	0.042	-.10
20.0	11.099	33.184	25.345	262.42	0.052	-.10
26.0	11.098	33.182	25.344	262.68	0.068	-.11
30.0	11.098	33.182	25.344	262.76	0.079	-.11
36.0	11.133	33.360	25.476	250.32	0.094	0.04
40.0	11.026	33.375	25.507	247.47	0.104	0.03
46.0	10.898	33.401	25.550	243.51	0.119	0.03
50.0	10.850	33.419	25.573	241.45	0.128	0.04
60.0	10.744	33.444	25.611	238.02	0.152	0.04
70.0	10.518	33.461	25.664	233.20	0.176	0.01
80.0	10.247	33.470	25.717	228.27	0.199	-.03
86.0	10.021	33.495	25.775	222.87	0.213	-.05

STATION: 42 DATE: 2/17/91 1506 GMT

LAT: 37° 57.8' N. LON: 123° 6.1' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.053	33.297	25.441	252.94	0.010	-.02
6.0	11.057	33.297	25.440	253.05	0.015	-.02
10.0	11.056	33.297	25.440	253.12	0.025	-.02
16.0	11.060	33.297	25.440	253.31	0.040	-.02
20.0	11.061	33.297	25.440	253.42	0.051	-.02
26.0	11.064	33.297	25.439	253.59	0.066	-.02
30.0	11.061	33.297	25.440	253.63	0.076	-.02
36.0	11.064	33.297	25.439	253.81	0.091	-.02
40.0	11.082	33.304	25.442	253.68	0.101	-.01
46.0	11.135	33.332	25.454	252.64	0.117	0.02
50.0	11.095	33.365	25.487	249.60	0.127	0.04
60.0	10.875	33.420	25.569	242.01	0.151	0.04
70.0	10.459	33.472	25.683	231.41	0.175	0.01
76.0	10.443	33.474	25.687	231.12	0.189	0.01

STATION: 41 DATE: 2/17/91 1548 GMT

LAT: 37° 59.1' N. LON: 123° 3.2' W.

P(dbar)	T(°C)	S(psu)	γ(kgm^{-1})	δ	$\Sigma\Delta D$	π
4.0	11.100	33.359	25.480	249.15	0.010	0.03
6.0	11.098	33.360	25.482	249.09	0.015	0.04
10.0	11.090	33.361	25.484	248.96	0.025	0.03
16.0	11.089	33.361	25.484	249.07	0.040	0.03
20.0	11.084	33.362	25.486	249.00	0.050	0.03
26.0	10.961	33.385	25.526	245.34	0.065	0.03
30.0	10.714	33.435	25.609	237.56	0.074	0.03
36.0	10.519	33.465	25.666	232.23	0.088	0.01
40.0	10.518	33.465	25.666	232.29	0.098	0.01

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