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**CTD Observations
Off Oregon and California
5-17 February 1981**

by

Jane Fleischbein
William E. Gilbert
Richard Schramm
Adriana Huyer

Data Report 90
Reference 81-16
December 1981

OREGON STATE UNIVERSITY

National Science Foundation
OCE-7925019, OCE-8014939, OCE-8028131
and
Sandia Laboratories Contract
SAN 73-7808

School of Oceanography
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ABSTRACT

CTD observations of temperature and salinity were made off Oregon and California between 34°N and 44°N from the R/V Wecoma, 5 Feb. - 17 Feb. 1981. The stations were from 2 - 360 km off shore, in water depths ranging from 30 to 4,300 meters. The maximum sampling depth at most stations was about 1000 m, but at some of the offshore stations the casts extended nearly to the bottom. The stations were made along seven sections across the continental shelf and slope at 34°45'N, 36°10'N, 37°00'N, 38°40'N, 39°30'N, 41°54'N and 43°13'N. Three of these sections extended 360 km from shore. The data are summarized in vertical sections and offshore profiles of selected variables. Vertical profiles of temperature, salinity, and sigma-theta, and listings of the data at standard depths are presented for each station. Near-bottom profiles of potential temperature, salinity and sigma-theta are shown for stations deeper than 2500 m.

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INTRODUCTION

Through the cooperation of several projects and investigators, we were able to conduct a large-scale hydrographic survey (Fig. 1) in February 1981. The survey provides important background information for each of the four contributing projects: Shipboard Hydrography in the Coastal Ocean Dynamics Experiment (A. Huyer, principal investigator); A Large Scale West Coast Shelf Experiment (J. S. Allen, A. Huyer and R. L. Smith); Studies of the Physical Oceanography of the Oregon Continental Margin (A. Huyer and R. L. Smith); and the Low Level Waste Ocean Disposal Program (G. R. Heath). The choice of sections, station spacing, and maximum sampling depths reflects the combined interests of these four projects. Our goals were to obtain (1) closely spaced sampling to 1000 m over the continental shelf and slope at selected locations; (2) offshore sampling of the upper 1000 m with moderate spacing along the three sections between 37° and 42° N; and (3) to sample the deep and abyssal waters near the LLWODP site at $39^{\circ}30'$ N, $127^{\circ}40'$ W.

The R/V Wecoma departed from Newport, Oregon on 4 February 1981 and toward Crescent City. On 5 February, two current meter moorings were deployed over the continental shelf near Crescent City: in 50 fm of water at $41^{\circ}54.1'$ N, $124^{\circ}26.8'$ W, and in 90 fm of water at $41^{\circ}52.9'$ N, $124^{\circ}30.2'$ W; CTD casts (Stations 1 and 2) were made at both locations. The ship then proceeded toward Purisima Pt. On 7 February, current meter moorings were deployed in 50 fm of water at $34^{\circ}44.6'$ N, $120^{\circ}47.1'$ W and in 90 fm at $34^{\circ}47.1'$ N, $120^{\circ}50.7'$ W; a CTD cast (Station 4) was made at the offshore mooring site (Station 3 was aborted).

On 8 and 9 February, we completed hydrographic sections to 1000 db along $34^{\circ}45'$ N off Pt. Purisima (Stations 5-15, Table 1) and along

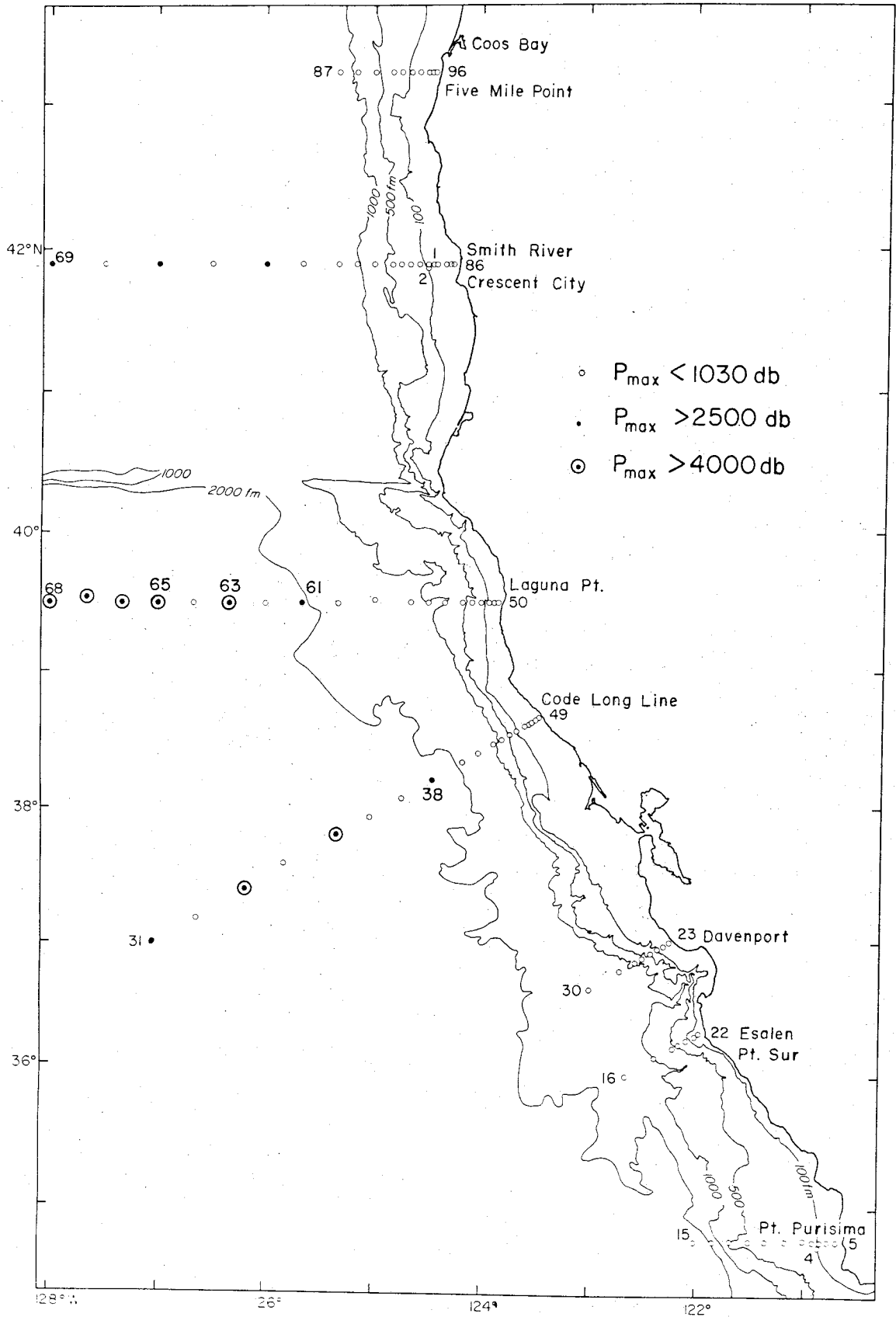


Figure 1. Location of CTD stations, W8102A, 5-17 February 1981, R/V Wecoma.

Table 1. List of CTD stations occupied during W8102A, showing date and time, location, atmospheric pressure, and wind speed and direction.

		Station		Location		Pressure	Wind		
		No.	Name			(mb)	Dir (°T)	Spd (kts)	
Feb.	5	1833Z	1	41°53.8'N	124°27.0'W	1020.0	Variable	6-8	
		2116	2	52.8'	30.0'	1020.0	Airs		
Feb.	7	2314	4	34°42.5'	120°52.0'	1017.4	170	6	
Feb.	8	0046	5	PUR-1	45.0'	42.0'	1017.2	210	9
		0138	6	PUR-2	45.0'	47.0'	1018.0	210	8
		0225	7	PUR-3	45.0'	51.0'	1017.9	-	0
		0310	8	PUR-4	45.0'	120°55.0'	1017.6	-	0
		0404	9	PUR-5	45.8'	121°00.0'	1017.0	150	4
		0540	10	PUR-6	45.0'	09.5'	1016.0	150	8
		0711	11	PUR-7	44.8'	21.0'	1015.0	150	6
		0846	12	PUR-8	45.0'	30.0'	1016.2	180	7
		1031	13	PUR-9	45.2'	40.1'	1015.0	160	12
		1227	14	PUR-10	45.0'	121°50.0'	1013.5	130	16
		1411	15	PUR-11	34°45.0'	122°00.5'	1014.0	140	16
		2142	16	ESA-7	36°00.0'	39.0'	1008.8	130	26
Feb.	9	0031	17	ESA-6	08.1'	22.6'	1008.5	140	30
		1307	18	ESA-5	12.8'	12.7'	1009.9	160	19
		0417	19	ESA-4	14.0'	09.0'	1009.0	160	18
		0533	20	ESA-3	16.0'	04.5'	1010.0	160	18
		0702	21	ESA-2	18.0'	122°00.0'	1010.0	150	18
		0756	22	ESA-1	36°19.3'	121°57.5'	1009.5	140	20
		1858	23	DAV-1	37°00.0'	122°14.0'	1014.0	Variable	2
		1930	24	DAV-2	36°58.5'	17.0'	1015.0	270	8
		2013	25	DAV-3	57.0'	20.4'	1013.9	300	5
		2113	26	DAV-4	55.0'	24.5'	1013.0	300	4
		2222	27	DAV-5	53.0'	29.0'	1013.1	320	6
		2341	28	DAV-6	51.0'	33.0'	1014.0	310	10
Feb.	10	0117	29	DAV-7	47.0'	42.0'	1014.1	300	12
		0343	30	DAV-8	36°39.0'	122°59.0'	1016.0	310	12
Feb.	11	0100	31	CLL-19	37°00.0'	127°03.0'	1015.0	280	17
		0751	32	CLL-18	10.7'	126°38.4'	1019.0	300	13

Table 1. Continued

	Station No.	Station Name	Location	Pressure (mb)	Wind				
					Dir (°T)	Spd (kts)			
Feb. 11	1105	33	CLL-17	37°24.0'	126°11.0'	1019.6	300	10	
	1518	34	CLL-16	35.7'	125°49.8'	1022.0	300	6	
	1839	35	CLL-15	48.1'	20.6'	1024.0	Variable	4	
	2223	36	CLL-14	37°56.0'	125°02.0'	1023.0	-	0	
Feb. 12	0053	37	CLL-13	38°04.1'	122°44.1'	1023.4	100	6	
	0327	38	CLL-12	12.0'	27.0'	1024.0	Airs	-	
	0722	39	CLL-11	20.0'	10.6'	1024.9	Variable	2	
	0900	40	CLL-10	24.0'	122°0.10'	1024.0	Airs	-	
	1057	41	CLL-9	28.0'	123°53.0'	1023.4	060	6	
	1250	42	CLL-8	30.0'	48.0'	1024.0	100	6	
	1522	43	CLL-7	32.3'	43.8'	1024.0	170	10	
	1824	44	CLL-6	33.9'	34.9'	1024.0	150	14	
	1914	45	CLL-5	36.0'	35.0'	1024.0	150	12-14	
	1945	46	CLL-4	37.0'	33.0'	1024.0	160	12	
	2025	47	CLL-3	37.6'	31.0'	1023.6	160	16	
	2107	48	CLL-2	38.5'	29.0'	1023.0	160	17	
	2149	49	CLL-1	38°39.5'	27.0'	1022.5	170	14	
	Feb. 13	0338	50	LAG-1	39°30.0'	50.0'	1022.5	130	6
		0415	51	LAG-2	30.1'	52.5'	1022.0	180	6
		0444	52	LAG-3	30.0'	55.2'	1022.0	180	6
0520		53	LAG-4	30.1'	123°59.5'	1022.0	180	6	
0608		54	LAG-5	30.1'	124°04.7'	1022.0	180	10	
0713		55	LAG-6	30.1'	10.0'	1021.5	130	16-18	
0853		56	LAG-7	30.0'	20.0'	1020.4	150	22	
1042		57	LAG-8	29.8'	29.0'	1018.5	150	22	
1315		58	LAG-9	29.8'	39.0'	1019.0	155	25	
1651		59	LAG-10	31.0'	124°59.0'	1018.0	160	20	
1916		60	LAG-11	30.1'	125°19.8'	1018.0	180	20	
2149		61	LAG-12	30.1'	125°40.0'	1014.9	180	19	
Feb. 14		0144	62	LAG-13	29.9'	126°00.2'	1014.8	230	18
	0143	63	LAG-14	30.0'	20.0'	1016.0	180	18	
	0743	64	LAG-15	30.0'	126°40.1'	1021.0	250	12	
	1015	65	LAG-16	30.0'	127°00.1'	1022.9	250	13	
	1427	66	LAG-17	30.2'	20.0'	1025.5	230	5	
	1747	67	LAG-18	32.2'	39.6'	1029.0	230	10	

Table 1. Continued

		Station		Location		Pressure	Wind	
		No.	Name			(mb)	Dir (°T)	Spd (kts)
Feb. 14	2055	68	LAG-19	39°30.0'	127°59.9'	1028.0	240	7
Feb. 15	1149	69	SR-18	41°54.0'	128°00.0'	1021.7	200	16
	1534	70	SR-17	54.0'	127°30.0'	1021.0	210	20
	1820	71	SR-16	54.0'	127°00.0'	1020.0	180	18
	2134	72	SR-15	54.0'	126°30.0'	1020.2	200	17
Feb. 16	0036	73	SR-14	53.8'	126°00.0'	1020.0	190	17
	0346	74	SR-13	54.0'	125°40.1'	1020.0	-	-
	0559	75	SR-12	54.0'	20.0'	1018.0	S	20
	0736	76	SR-11	54.2'	09.9'	1018.5	190	22
	0917	77	SR-10	54.0'	125°00.0'	1018.0	190	22
	1052	78	SR-9	53.9'	124°50.0'	1018.3	190	22
	1159	79	SR-8	54.0'	45.0'	1018.0	180	22
	1315	80	SR-7	54.0'	40.0'	1018.0	185	20
	1415	81	SR-6	54.0'	35.0'	1018.0	185	22
	1511	82	SR-5	54.0'	30.0'	1017.5	180	20
	1601	83	SR-4	54.0'	25.0'	1017.5	180	22
	1646	84	SR-3	54.0'	20.0'	1017.5	S'ly	20
	1715	85	SR-2	54.0'	17.5'	1017.5	S'ly	20
	1744	86	SR-1	41°54.0'	124°15.7'	1017.5	S'ly	20
Feb. 17	0229	87	FM-10	43°13.0'	125°20.0'	1019.0	220	15
	0411	88	FM-9	13.0'	10.0'	1019.5	-	18
	0530	89	FM-8	13.0'	125°00.0'	1020.0	S'ly	18
	0701	90	FM-7	13.0'	124°50.0'	1021.0	S'ly	18
	0746	91	FM-6	13.0'	45.0'	1021.0	SW'ly	16-18
	0843	92	FM-5	12.9'	40.0'	1021.2	240	13
	0930	93	FM-4	13.0'	35.0'	1021.3	240	11
	1015	94	FM-3	13.1'	30.0'	1022.0	240	10
	1048	95	FM-2	13.0'	28.0'	1022.0	270	10
	1126	96	FM-1	13.0'	26.0'	1021.0	240	10

240° - 060°T off Pt. Sur or Esalen (Stations 16-22). The Wecoma stopped briefly in Monterey to disembark mooring personnel (J. S. Allen, R. L. Smith and R. E. Still). Another short section to 1000 db along 240° - 060°T was completed on 10 February, off Davenport (Stations 23-30). The Code Long Line (Stations 31-49), toward 060°T and intersecting the coast at 38°40'N, was completed on 12 February; deep casts (>3000 db), were made at four stations along this line (Table 2). The Laguna Line along 39°30'N (Stations 50-68), including six deep stations to within 40 m of the bottom (Table 2), was completed on 14 February. The Smith River section along 41°54'N (Stations 69-86), with three deep stations to within 40 m of the bottom, was completed on 16 February. The Five Mile Point section to 1000 db (Stations 87-96) along 43°13'N was completed on 17 February, and the Wecoma returned to Newport later that day. Wind speeds during the cruise were moderate and winds were predominantly from the south (Figure 2).

Personnel participating in the hydrographic data collection were Adriana Huyer, Dennis Barstow, Rich Schramm, Henry Pittock, Jane Fleischbein, Arliss Thompson and Nancy Rouse.

Table 2. List of deep CTD stations, showing the bottom depth (Z_B), the maximum depth (Z_{max}) and pressure (P_{max}) sampled, and the distance to the bottom.

No.	Station Name	Z_B (m)	Z_{max} (m)	P_{max} (db)	$Z_B - Z_{max}$ (m)
31	CLL-19	4659	2960	3001	1699
33	CLL-17	4440	3937	4001	503
35	CLL-15	4074	3952	4017	122
38	CLL-12	3745	3450	3503	295
61	LAG-12	3697	3657	3715	40
63	LAG-14	4082	4051	4119	31
65	LAG-16	4291	4271	4345	20
66	LAG-17	4300	4267	4341	33
67	LAG-18	4264	4230	4303	34
68	LAG-19	4246	4222	4295	24
69	SR-18	3135	3103	3149	32
71	SR-16	2572	2553	2587	19
73	SR-14	3318	3287	3337	31

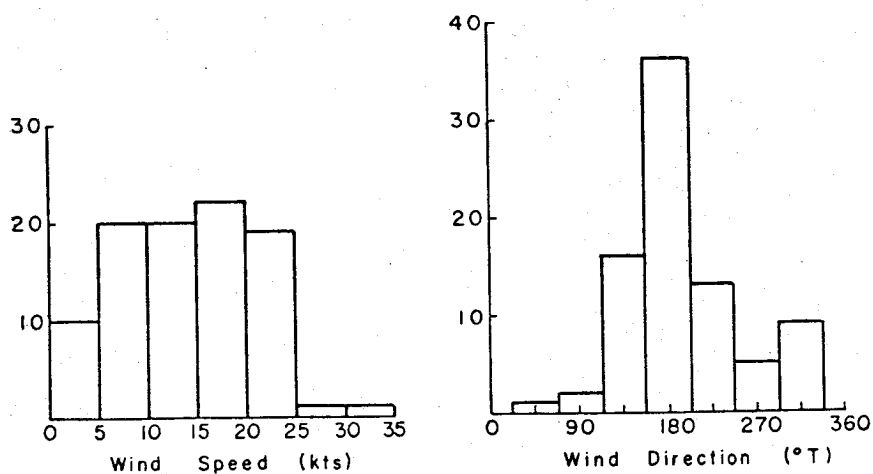


Figure 2. Histograms of wind speed and direction at each CTD station.

SAMPLING PROCEDURES

Continuous profiles of temperature and salinity versus pressure were obtained at each station using a Neil Brown Instruments Mark IIIb conductivity-temperature-depth probe (CTD). A station consisted of one CTD cast, recorded while lowering at about 45 m min^{-1} . On almost all casts a Niskin bottle equipped with 3 reversing thermometers was mounted about 1.5 m above the CTD sensor arm to obtain *in situ* calibration data. The bottle was tripped at the bottom of a cast or during retrieval after soaking for 5 minutes at the desired sample depth to allow the thermometers to equilibrate.

Two probes with different pressure sensor ratings were used (Table 3). Each probe measures pressure, temperature and conductivity sequentially using a sampling cycle of 32 milliseconds. The 1600 db probe was used for Stations 1-30 and 87-96 and the 6500 db probe was used for Stations 31-86. In each probe, the fast-response thermistor had been disabled and replaced in the circuitry with a precision 10 ohm resistor. The time constant (τ) of the platinum resistance thermometer of each probe was determined from the slope of the phase spectrum between the measured temperature and conductivity as suggested by Millard, Toole and Swartz (1980).

At several stations, there was a sudden downward jump in conductivity, apparently because some kind of detritus lodged in or slowly passed through the conductivity cell. In some cases, e.g. Stations 36 and 43 (Table 4) we noticed the problem during descent: the detritus seemed to flush out when the CTD was raised; we resumed sampling at a depth shallower than the observed jump. In other cases, when we did not notice the jump during sampling, we filled in the missing salinity data by linear interpolation (Table 4).

Table 3. Characteristics of the two CTD probes used.

Probe	Sample Interval	Temperature Time Constant	<u>Sensors</u>		
			P	T	C
2561	32 ms	280 ms	Range: 6500db Resolution: 0.1db Accuracy: <u>+6.5db</u>	-2 to 30°C .0005°C <u>+.005°C</u>	1 to 65 mmhos .005 mmhos <u>+.001 mmhos</u>
2567	32 ms	180 ms	Range: 1600db Resolution: 0.025db Accuracy: <u>+1.6db</u>	-3 to 32°C .0005°C <u>+.005°C</u>	1 to 65 mmhos .005 mmhos <u>+.001 mmhos</u>

Table 4. Stations with special data problems.

Station No.	Station Name	Nature of Problem	Cause	Remedy
17	ESA-6	Downward jump in conductivity at 476-478 db.	Probably detritus in cell.	Linear interpolation of salinity at 476-478 db in processed data file.
27		Small downward shift in conductivity from 181-298 db.	Probably detritus caught in cell at 181 db; flushed out at 299 db.	Added 0.03 o/oo to processed salinity data between 181 and 298 db.
36		Large downward conductivity jump at about 730 db.	Biological detritus visible on CTD after cast.	Raised CTD to ~700 db, resumed sampling; joined processed data files at 730 db; thus there is a ~15 min. time delay at 730 db.
40		Downward conductivity jump at 263 db, gradually increasing until 289 db.	Probably detritus in cell, slowly washed out.	Linear interpolation of processed salinity data, 263-289 db.
43		Large downward conductivity jump, 339-400 db.	Detritus in cell.	Repeated lower part of cast; joined processed files at 339 db; hence a 15 min. time delay at 339 db.
65		Eight minute delay at 2010 db.	Stopped to put new tape on data logger.	Processed data files from the two tapes were joined at 2010 db.
67		Three minute delay at 689 db.	Large wire angle; wire against ship.	Processed data files were joined at 689 db.

INSTRUMENT CALIBRATION

The CTD probes were calibrated for pressure, temperature and conductivity at the manufacturer prior to their delivery in September and November 1980. *In situ* calibration data were also collected for the temperature and conductivity sensors. A Niskin bottle mounted with 3 protected reversing thermometers provided samples. The thermometers have an accuracy of $\pm 0.02^{\circ}\text{C}$ and are corrected using the results of calibrations done once every 2 years. Water sample salinity is determined by a Guildline Model 8400 "Autosal" salinometer with a precision of better than ± 0.002 o/oo and accuracy of ± 0.003 o/oo.

CTD data are recorded at the actual sample depth after the bottle is tripped. Occasionally due to large wire angles the CTD and sample bottle do not remain at the same depth (and temperature) during soak time. Since the thermometers have a much longer response time than the CTD temperature sensor, this can result in relatively large differences between the sample and CTD temperature readings. These points are eliminated from the overall CTD-sample comparisons.

Results of the comparison between *in situ* sample data and the CTD output are summarized in Table 2. The sample conductivity was calculated using the CTD temperature data and sample salinity. CTD conductivity was corrected for the pressure and temperature effects on the cell prior to the comparison.

Since these temperature and conductivity differences are well within the sampling and instrument errors, no further corrections were applied prior to processing the data.

Table 5. Summary of the comparisons between the Neil Brown CTD probes and *in situ* calibration data.

CTD No.	Temperature $\Delta T(^{\circ}\text{C})$			Conductivity ΔC (mmhos cm^{-1})			Salinity ΔS (o/oo)		
	N	mean	s.d.	N	mean	s.d.	N	mean	s.d.
2561	50	-0.003	0.017	55	-0.001	0.003	55	-0.001	0.003
2567	42	0.001	0.014	46	-0.001	0.005	46	-0.001	0.005

DATA PROCESSING PROCEDURES

The time constant of the platinum resistance thermometer of the CTD was determined from the slope of the phase spectrum between the measured temperature and conductivity data (Millard, Toole, and Swartz, 1980). We obtained a time constant (τ) of 0.280 sec for Probe 2561 and 0.200 sec for Probe 2567. We then applied a simple recursive filter to the conductivity and pressure data of the form

$$C(n) = \alpha C(n - 1) + (1 - \alpha) C_0(n)$$

where $C_0(n)$ is the observed value and $C(n)$ is the filtered value of the n^{th} scan, and α is determined from τ and the time interval (Δt) between scans,

$$\alpha = \tau / (\tau + \Delta t).$$

We used values of α of 0.90 for Probe 2561 and 0.862 for Probe 2567.

The data are recorded at sea on a Kennedy 9-track data logger, with many stations on each tape. Data logging frequently begins as soon as the CTD is in the water, and continues until after the CTD has reached the maximum depth. The first step in data processing is to obtain a directory of the data tape which lists the header data, the block number in which the instrument descent begins, and the maximum pressure; conductivity data are corrected for cell variations due to pressure and temperature. The next step in data processing is to check for extraneous values and extreme gradients, apply the recursive filter to pressure and conductivity and compute salinity from the algorithm given by Fofonoff, Hayes and Millard (1974). The filtered pressure data are used to eliminate ascending data caused by wave action. Data collected during descent are sorted into 1 db or 2 db bins, and the extremes and averages computed for each bin.

(The 1 db resolution seems justified for Probe #2567 with a time constant of 200 msec, but not for Probe #2561 with a time constant of nearly 300 msec). Profiles of the extremes of temperature and salinity are plotted to determine whether the input data files need further editing. Usually no editing is needed, and the 1 db or 2 db mean temperatures and salinities constitute the processed data. When editing appears to be necessary, the original data files are examined, data points that are rejected are replaced by linearly interpolated values, and the files are reprocessed. Schematic flow charts of some of the data processing programs were presented by Gilbert, Huyer and Schramm (1981).

The processed data files containing integral pressure, average temperature, and average salinity are archived. These files are used to calculate other parameters of interest such as potential temperature (θ), potential density anomaly (σ_θ), specific volume anomaly, dynamic height, Brunt-Vaisala Frequency, and sound velocity (see Gilbert et al., 1981 for subroutines). Files including all of these variables are available on request. In this data report we show only profile plots of temperature, salinity and σ_θ versus pressure, and listings at selected pressures of temperature, salinity, potential temperature, σ_θ , specific volume anomaly and dynamic height.

DATA PRESENTATION

The hydrographic data is summarized in vertical sections of temperature, salinity, and sigma-theta. The distributions were contoured by hand. Tick marks at the top of each section indicate station positions at which a CTD cast was made, and an inverted "T" marks the maximum depth of each cast.

For each hydrographic section, we also show offshore profiles of temperature, salinity, sigma-theta and dynamic height relative to 500 db and 1000 db. Dynamic height at shallow stations was computed using the extrapolation method described by Reid and Mantyla (1976); the extrapolated portion of each profile is dashed.

Vertical profiles of temperature, salinity and sigma theta vs. pressure are shown for each station. Header information for each station is as follows:

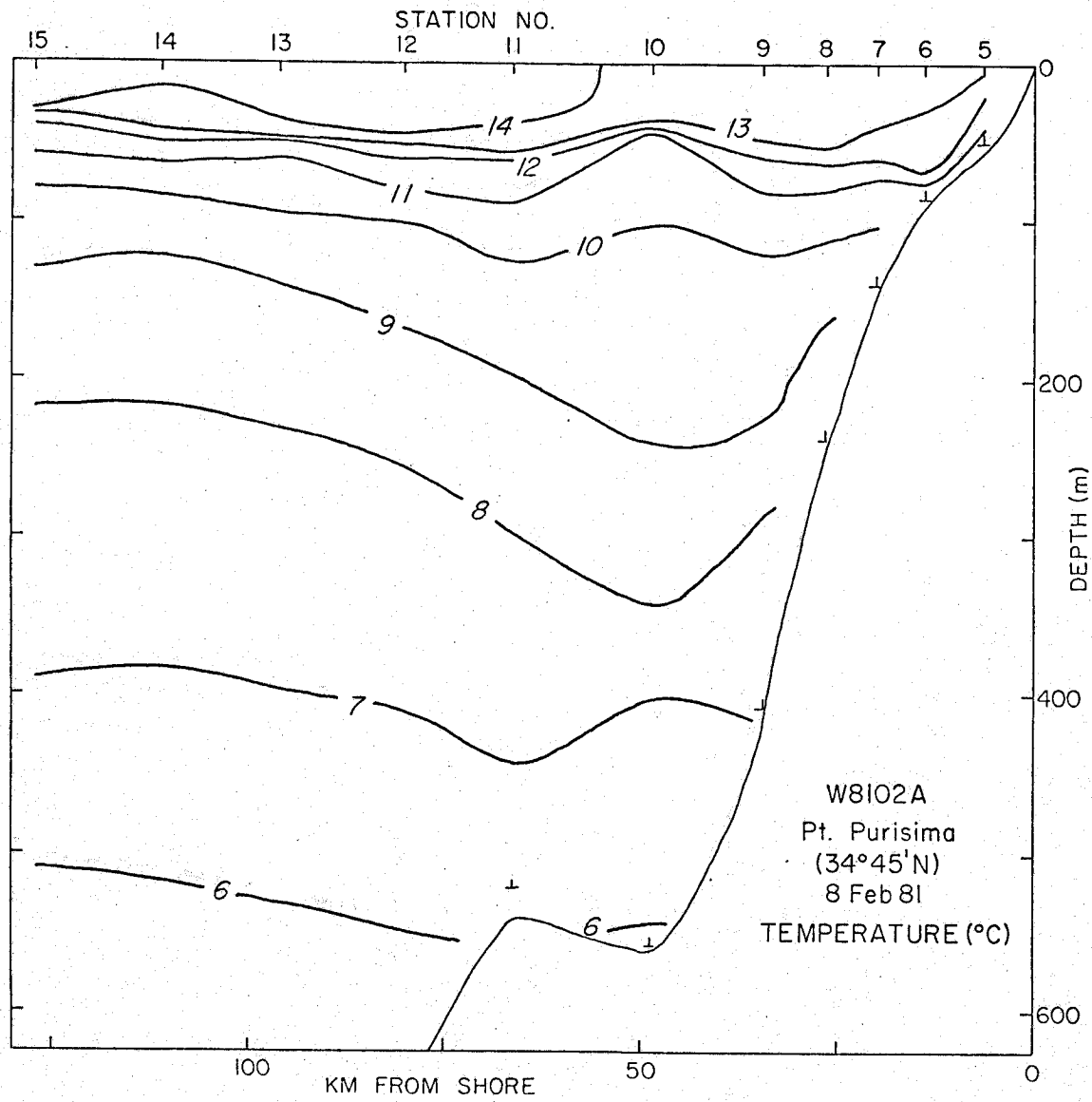
CAST NO	Consecutive cast number.
LAT	Latitude in degrees and minutes north of the equator.
DATE	Day/Month/Year.
TIME	Time in Greenwich Mean Time.
STATION	The CTD section name (initialed) and number of the station on the line (Refer to Figure 1).
LONG	Longitude in degrees and minutes west of Greenwich.
DEPTH	Sonic depth in meters, corrected according to Matthews Tables appearing in the Handbook of Oceanographic Tables, U.S. Naval Oceanographic Office Publication SP-68 (1966).
PROBE	CTD probe number.

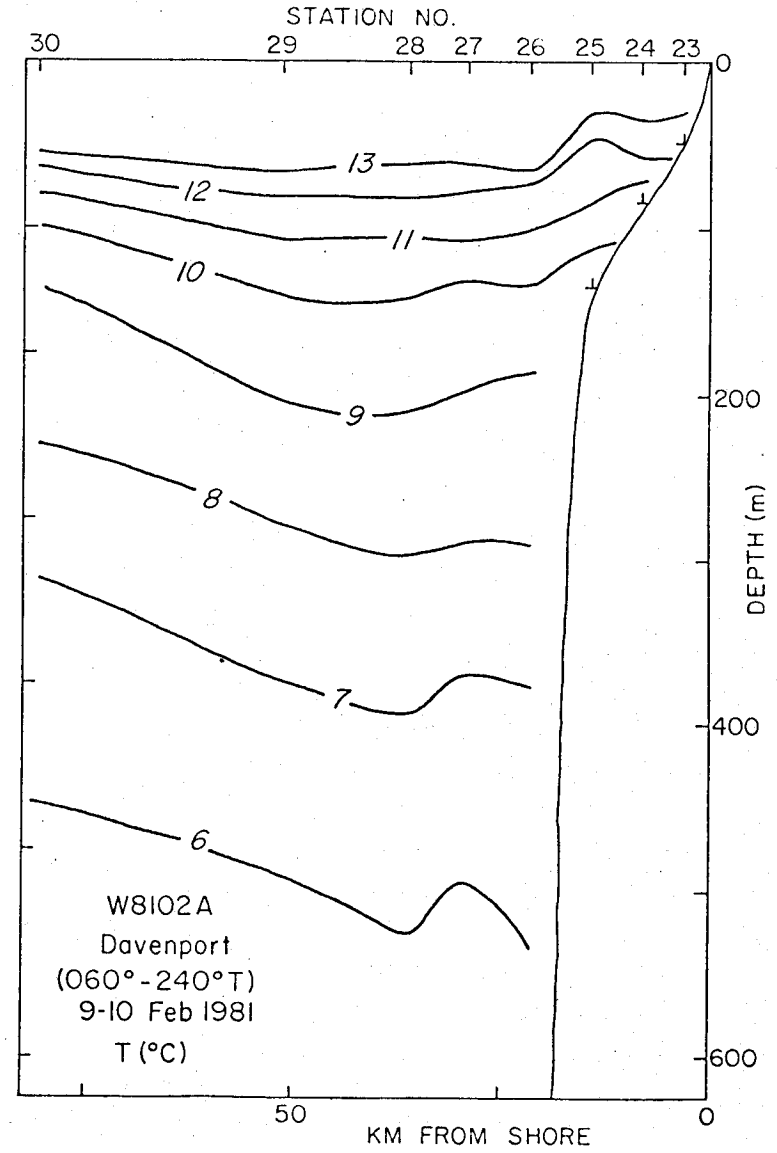
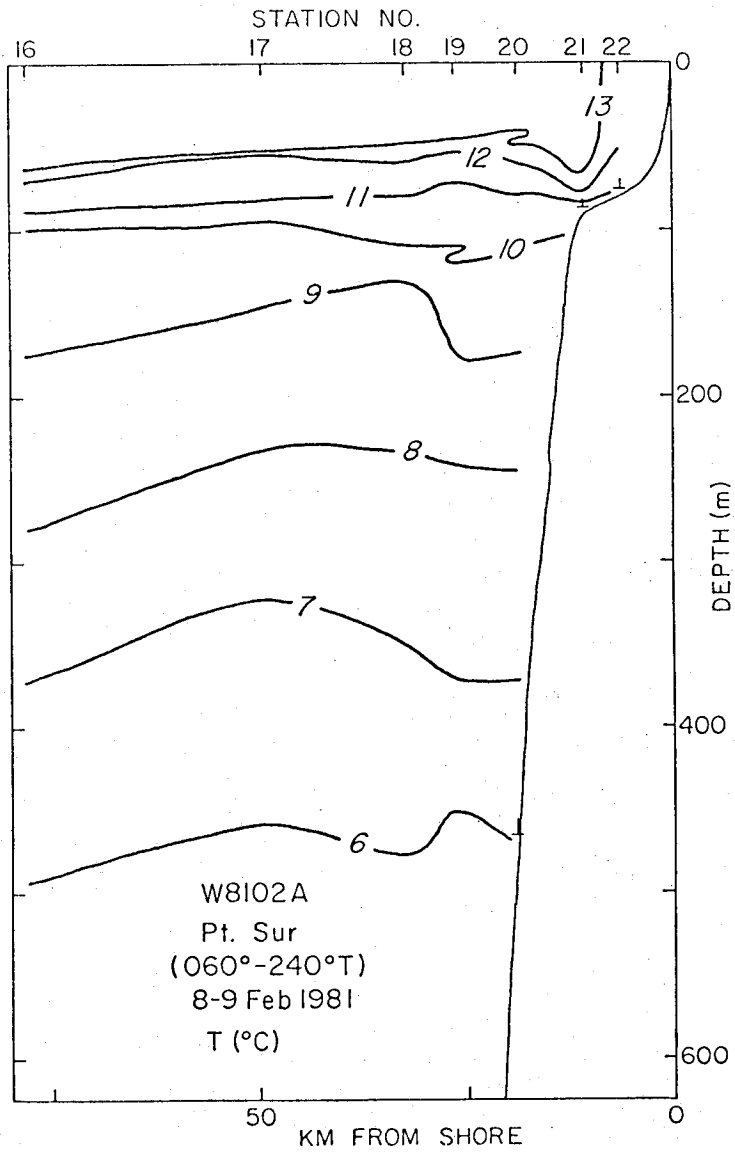
The data listing for each station gives values at standard pressures including observed and calculated parameters at the shallowest and deepest observation levels.

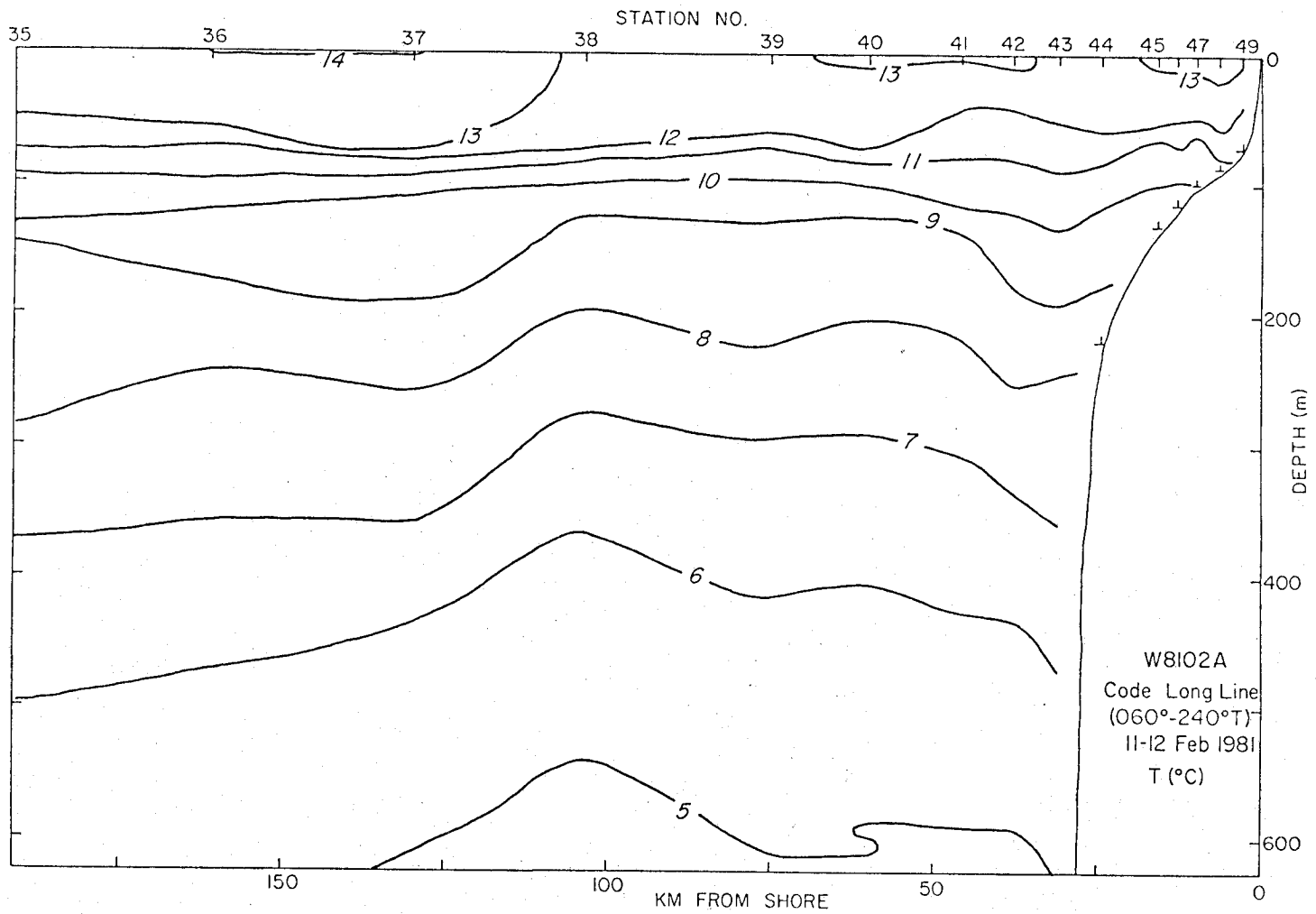
Temperature (TEMP), salinity (SAL), potential temperature (POTEN TEMP), sigma theta (SIGMA THETA), specific volume anomaly $\times 10^5$ (SVA) and dynamic height (DELD) in dynamic meters are given for each pressure (PRESS) in decibars. Computed parameters are calculated from the complete data array.

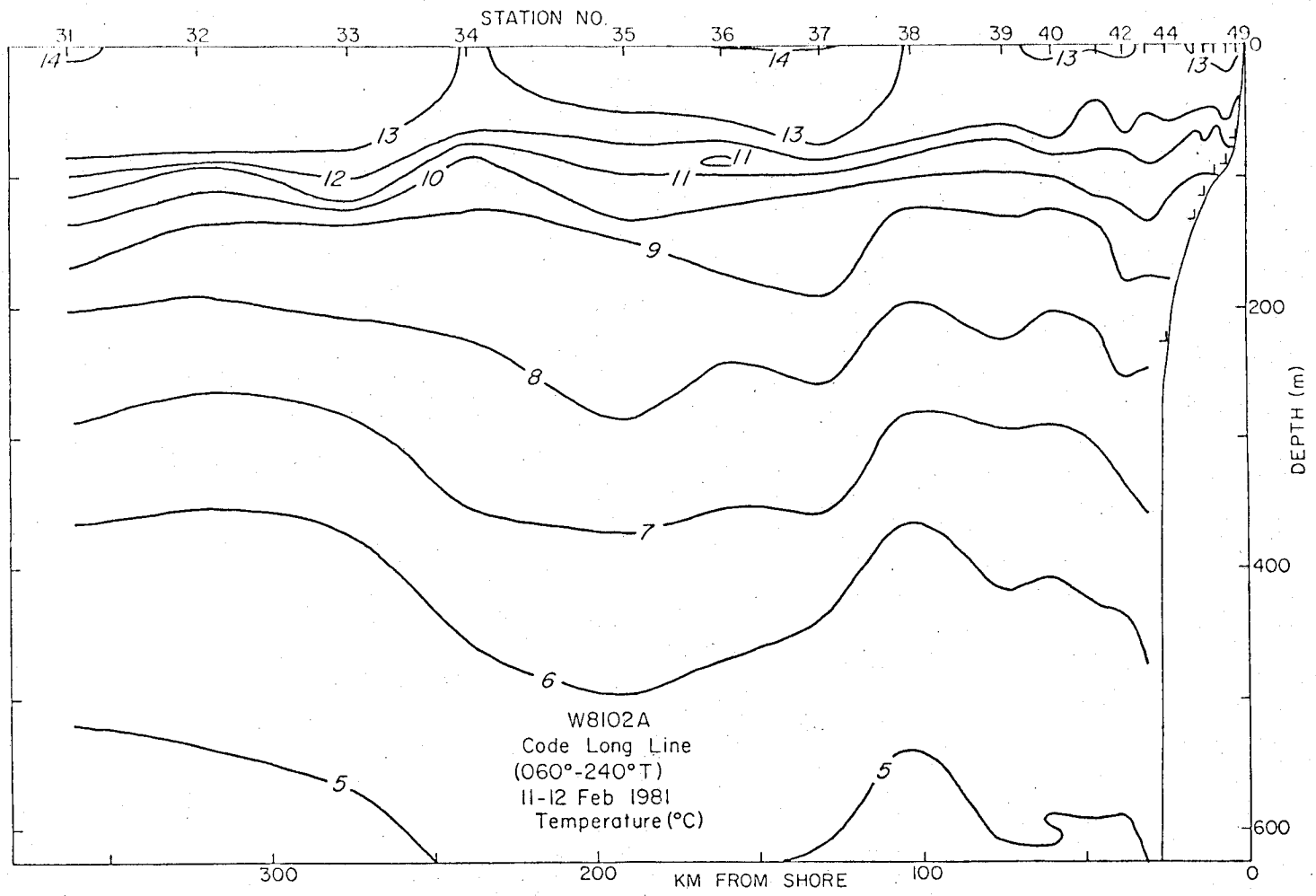
For each of the deep stations (Table 2), we also show near-bottom profiles of potential temperature, salinity and sigma-theta vs. depth; the bottom depth is indicated on each profile.

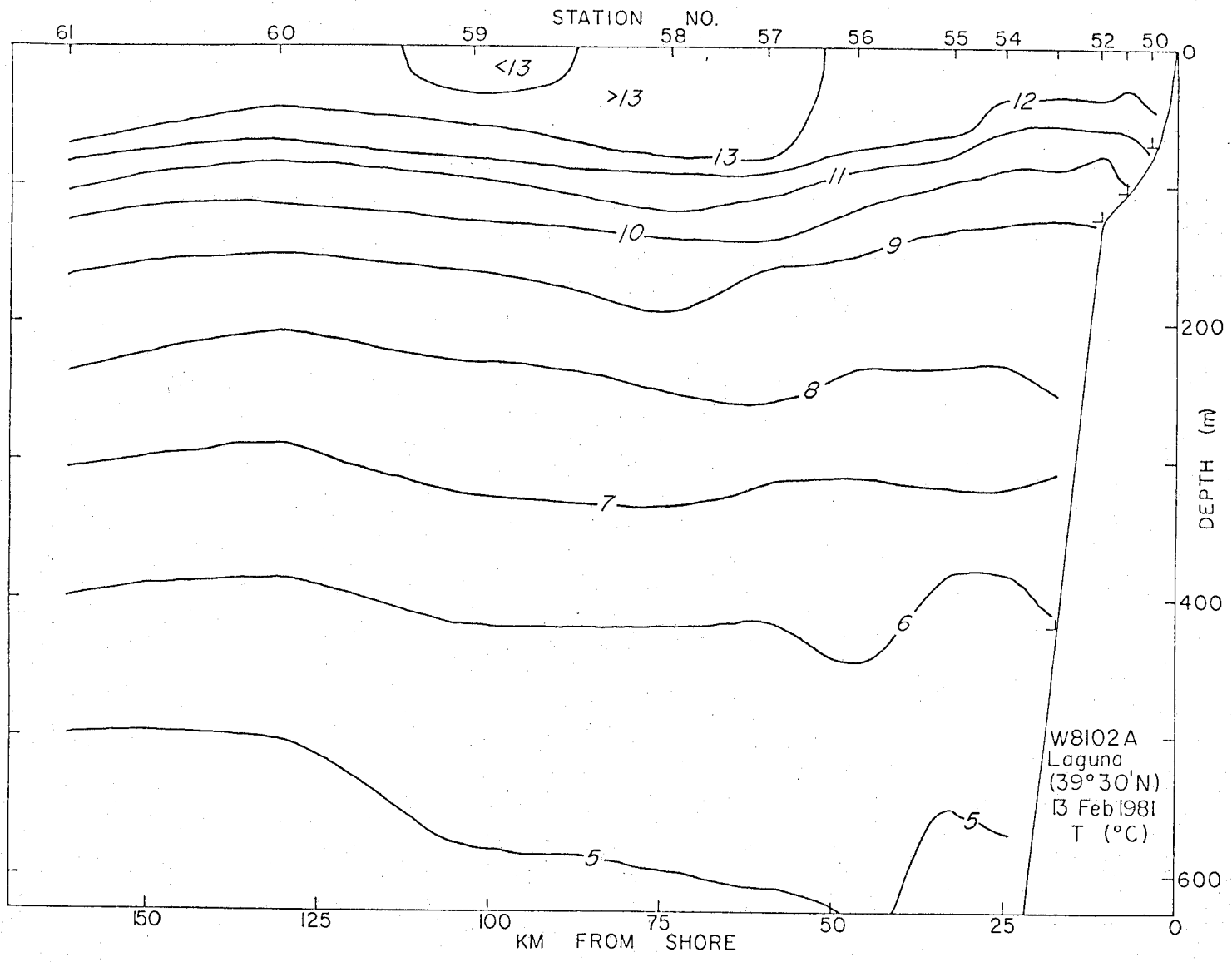
VERTICAL SECTIONS

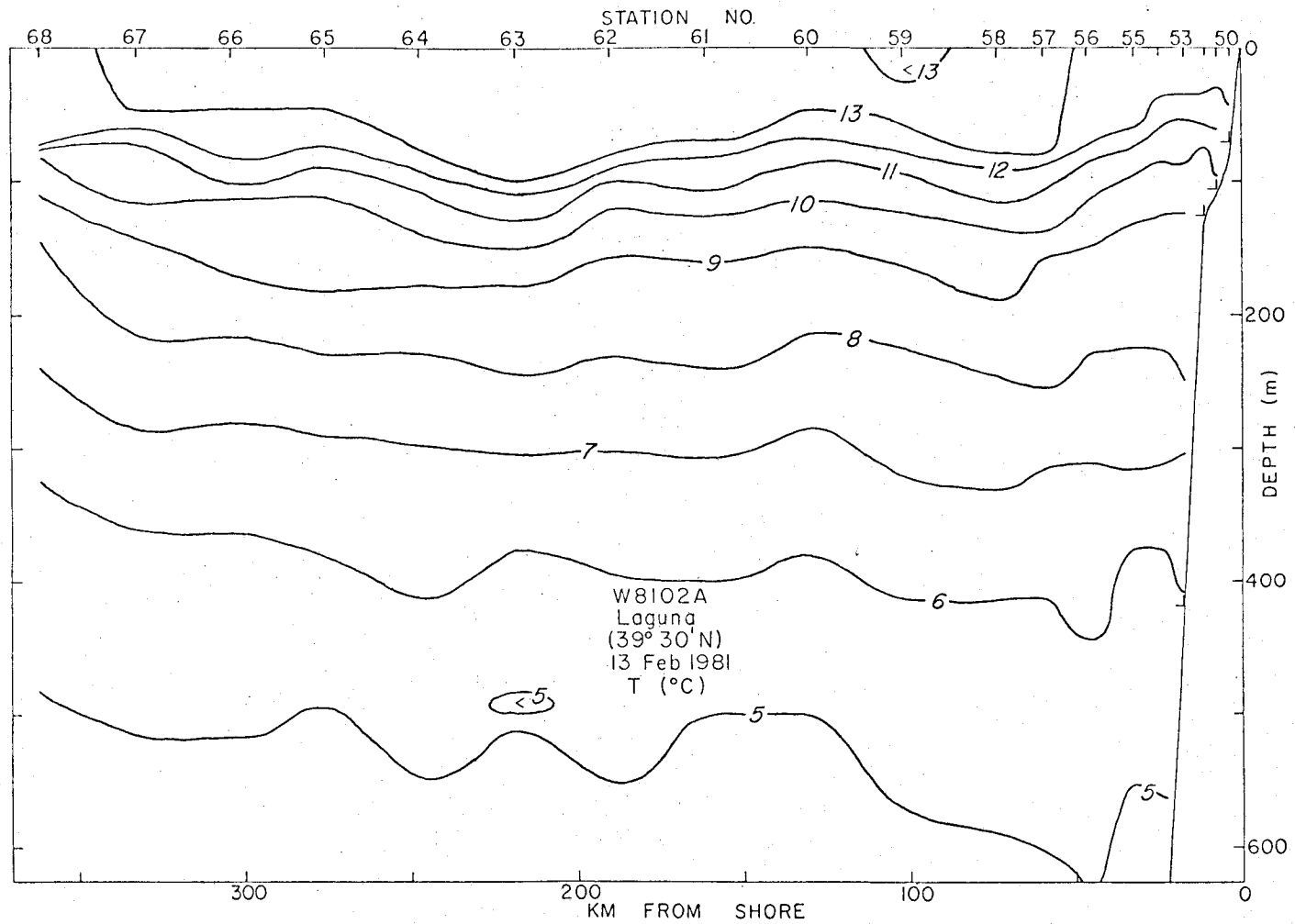


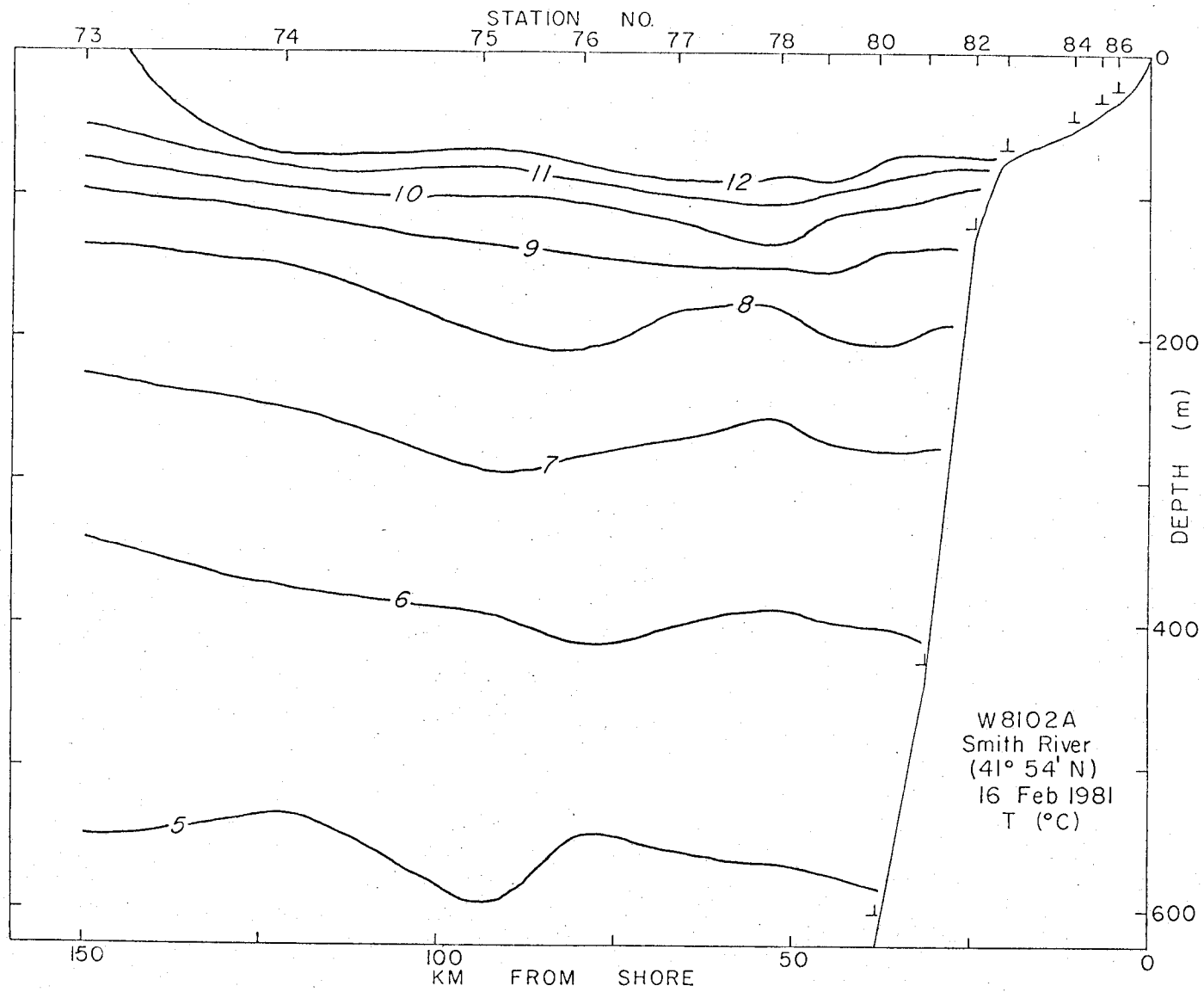


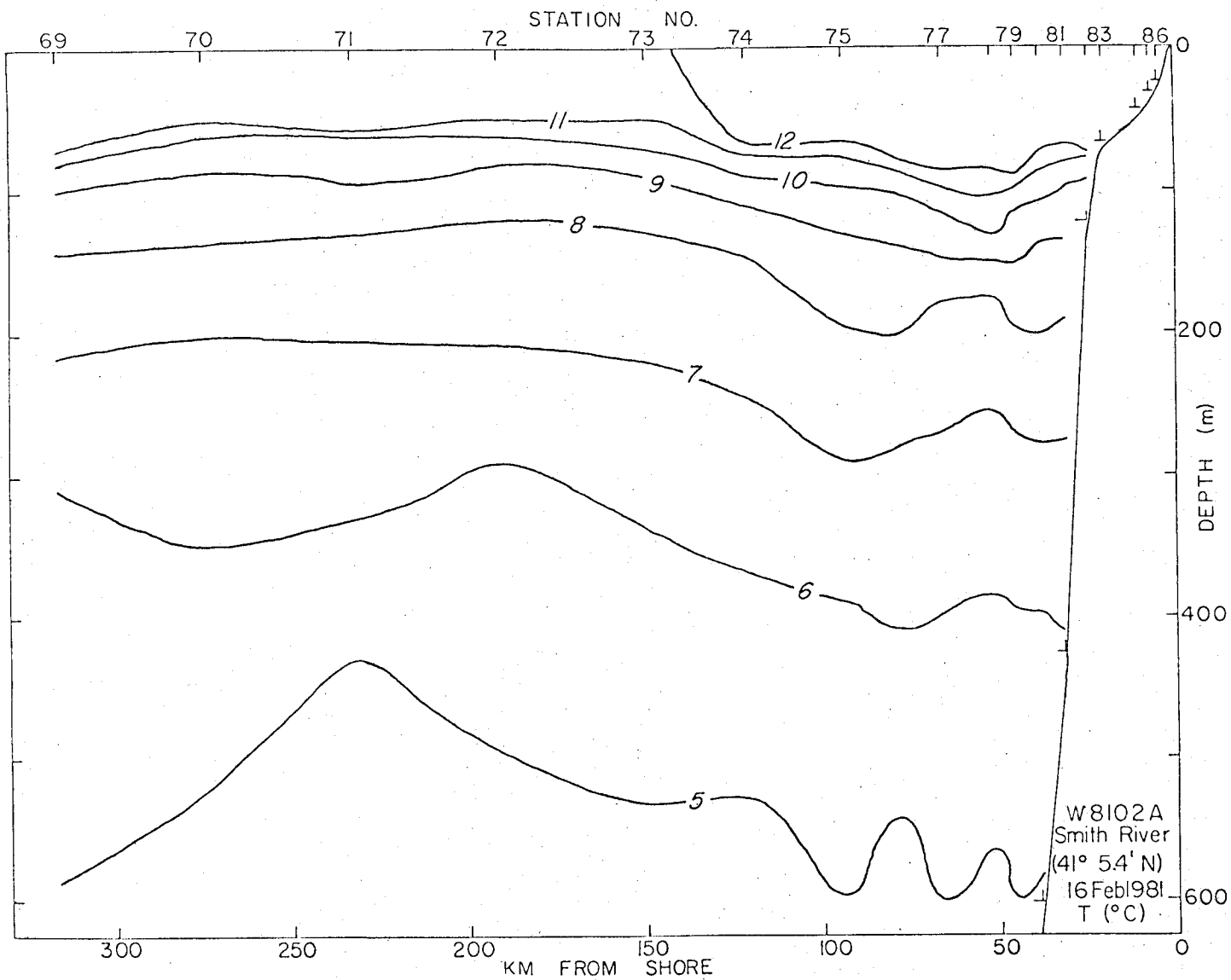


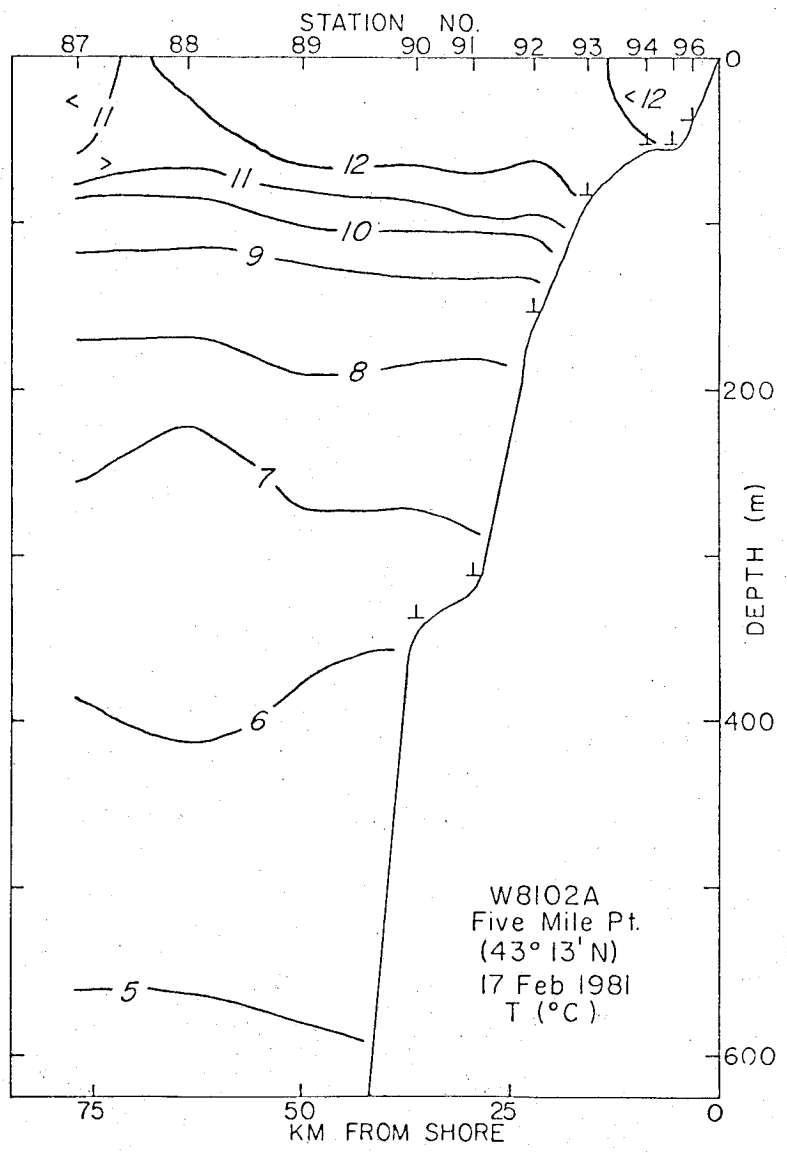


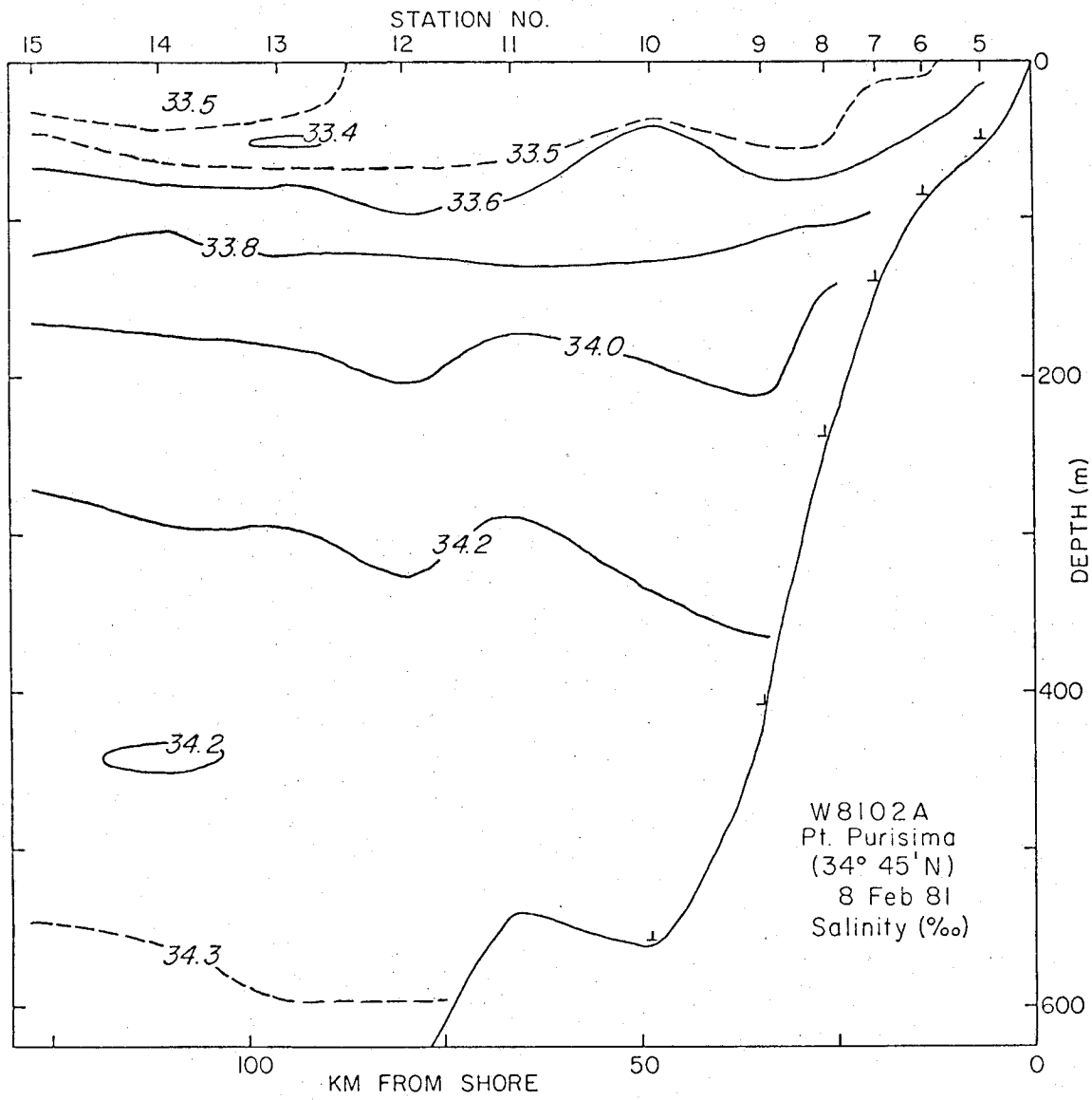


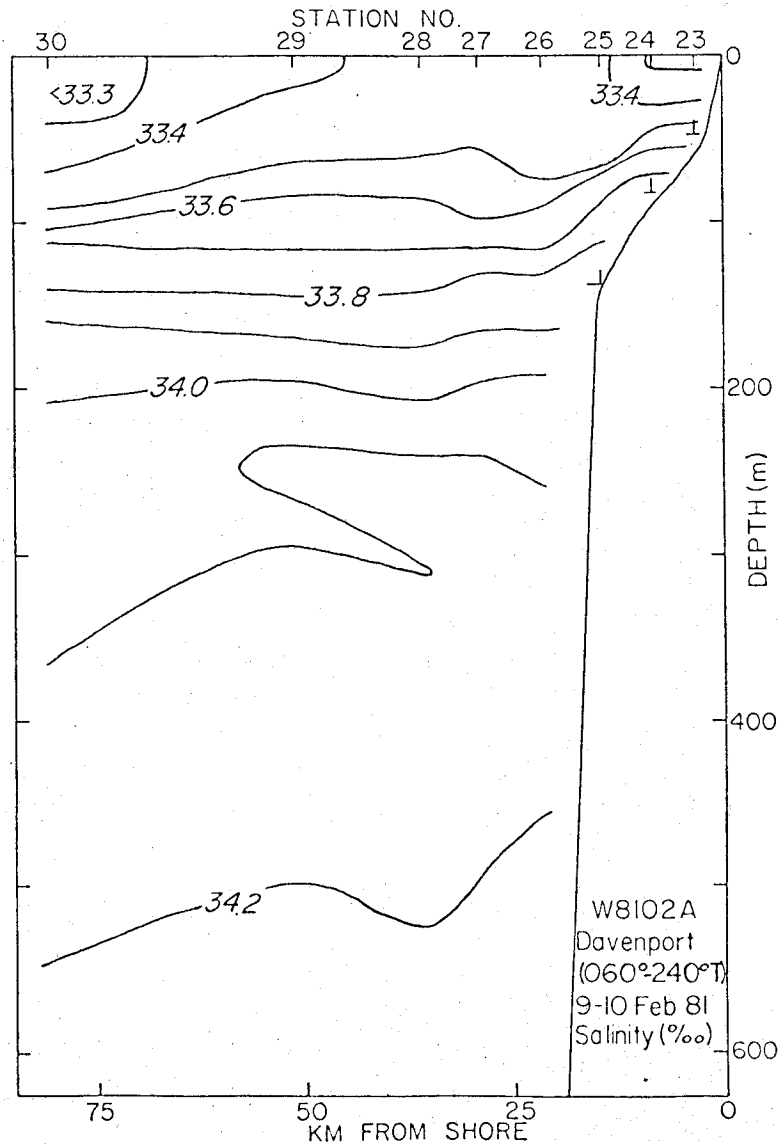
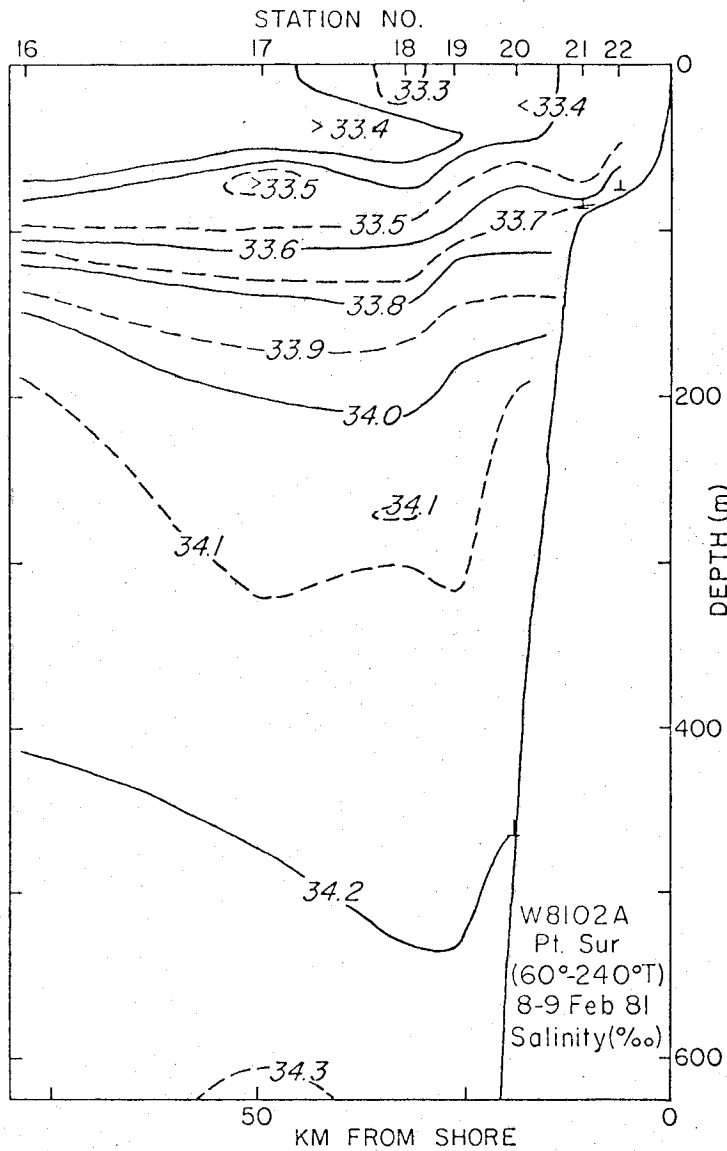


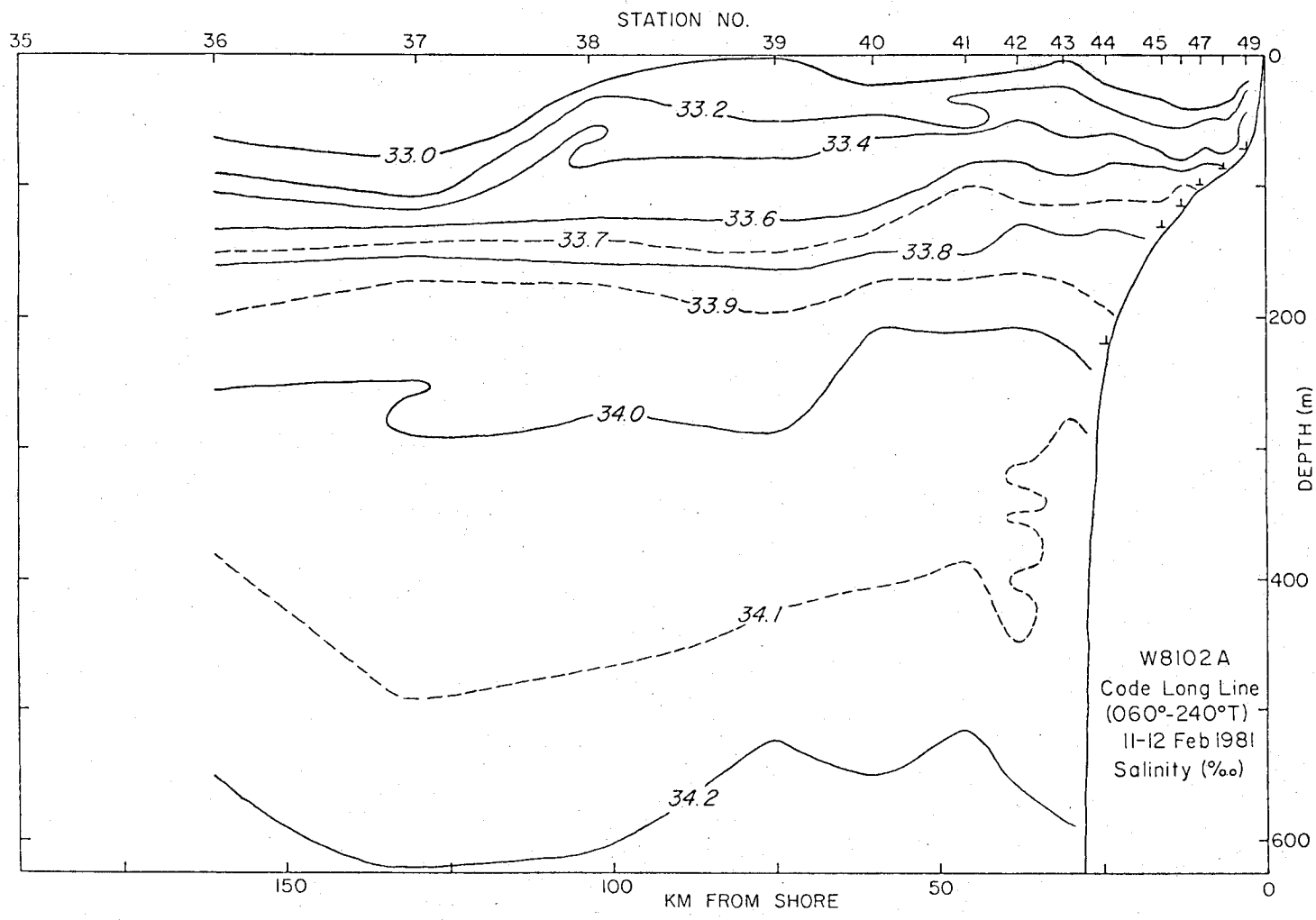


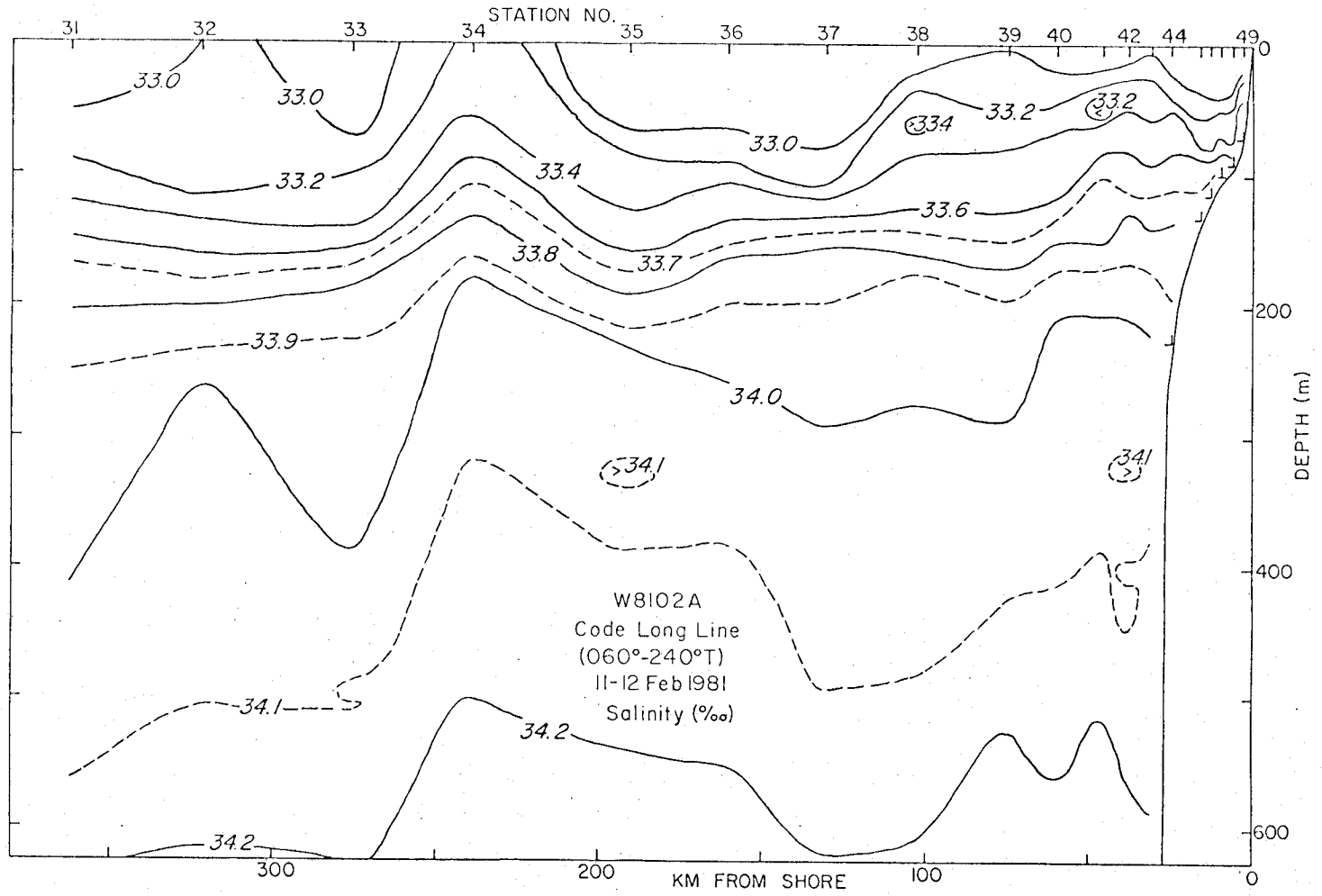


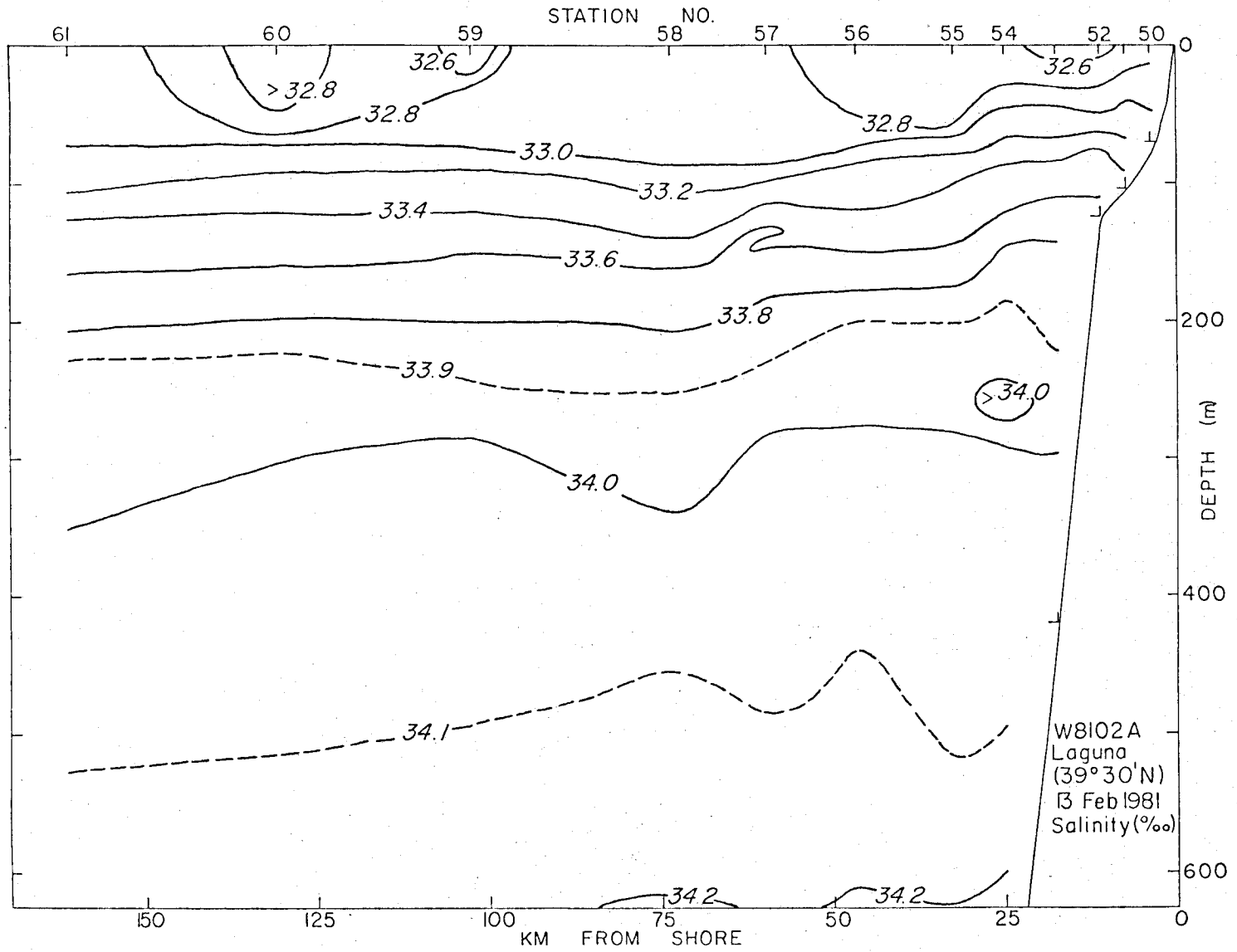


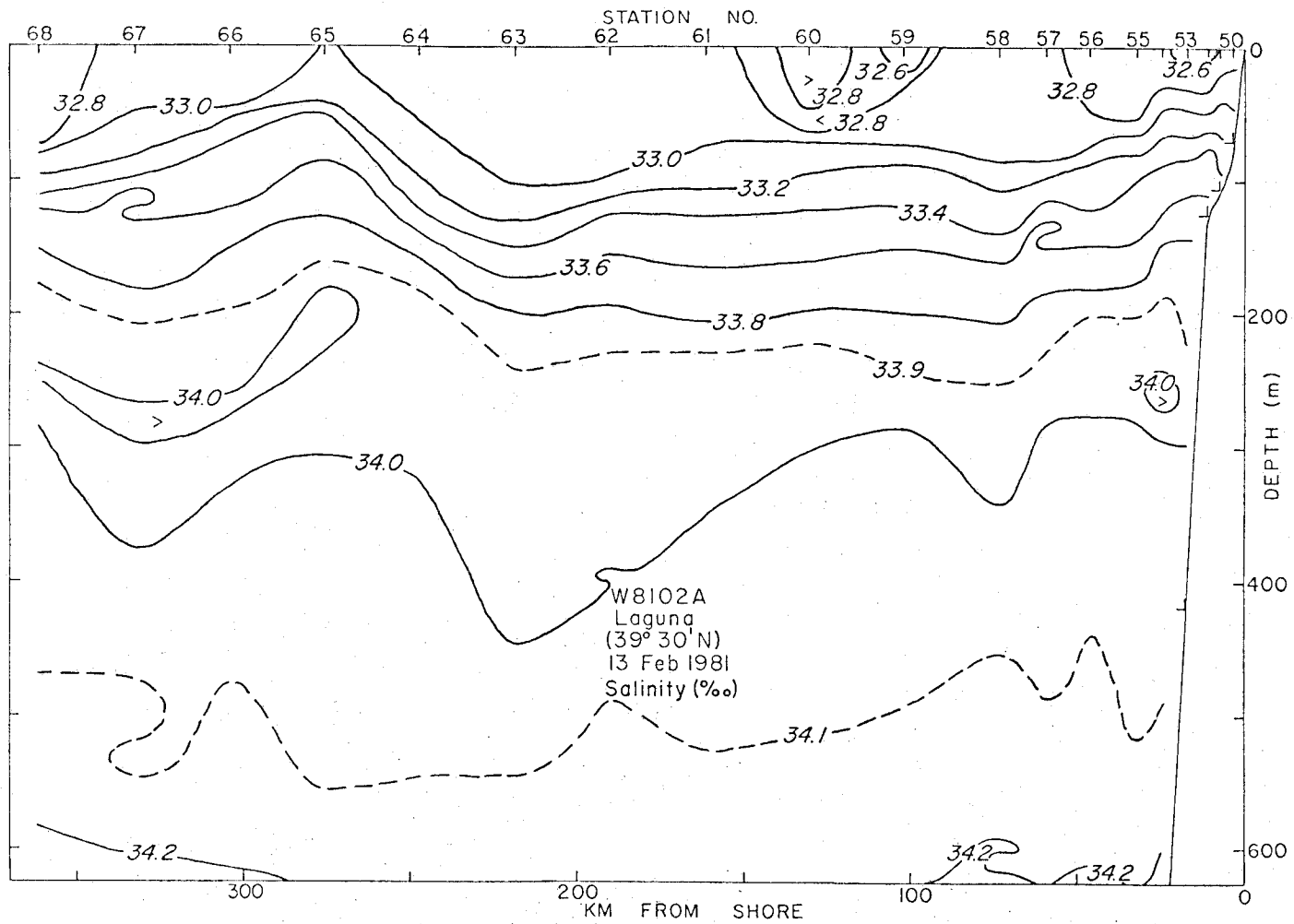


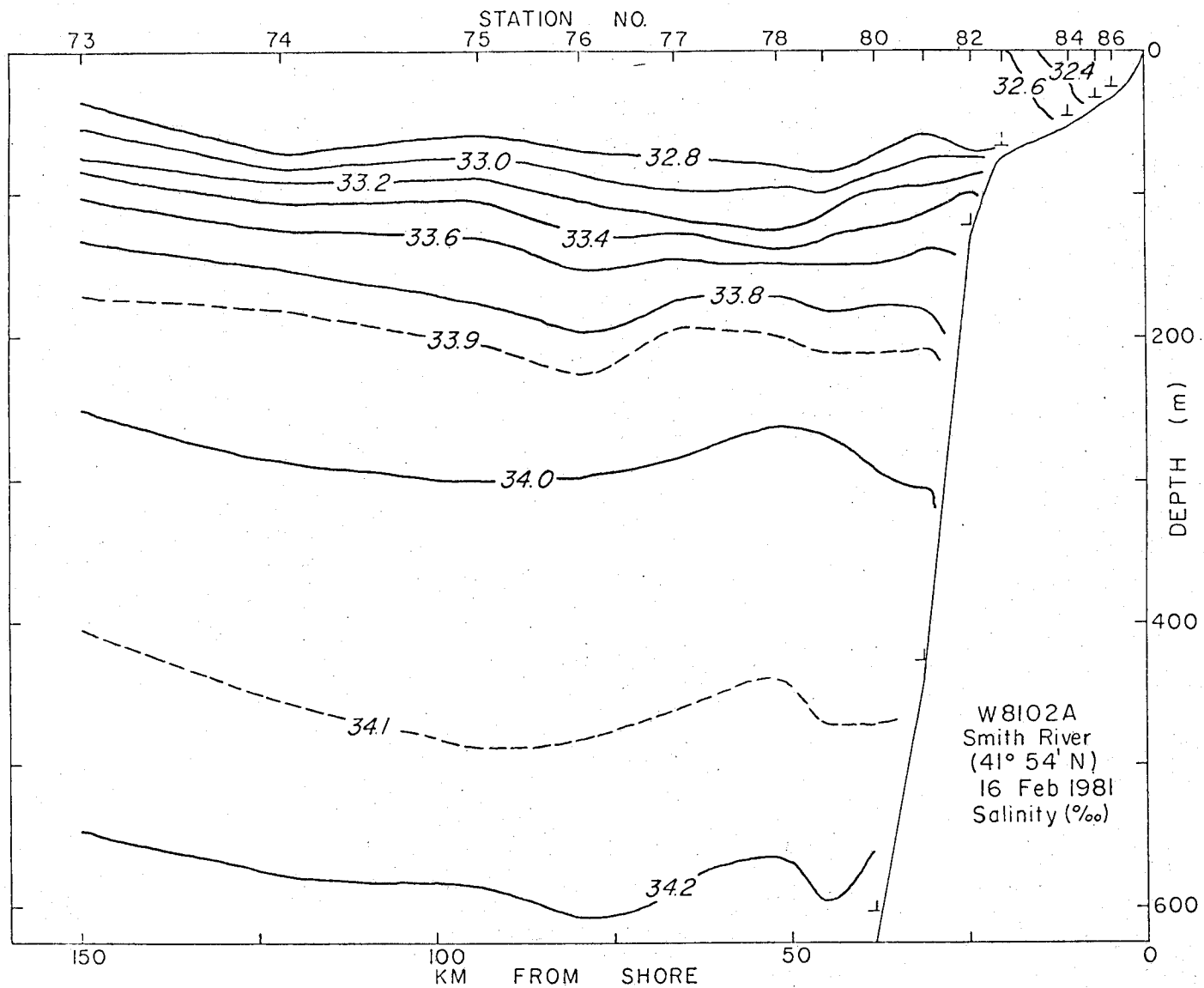


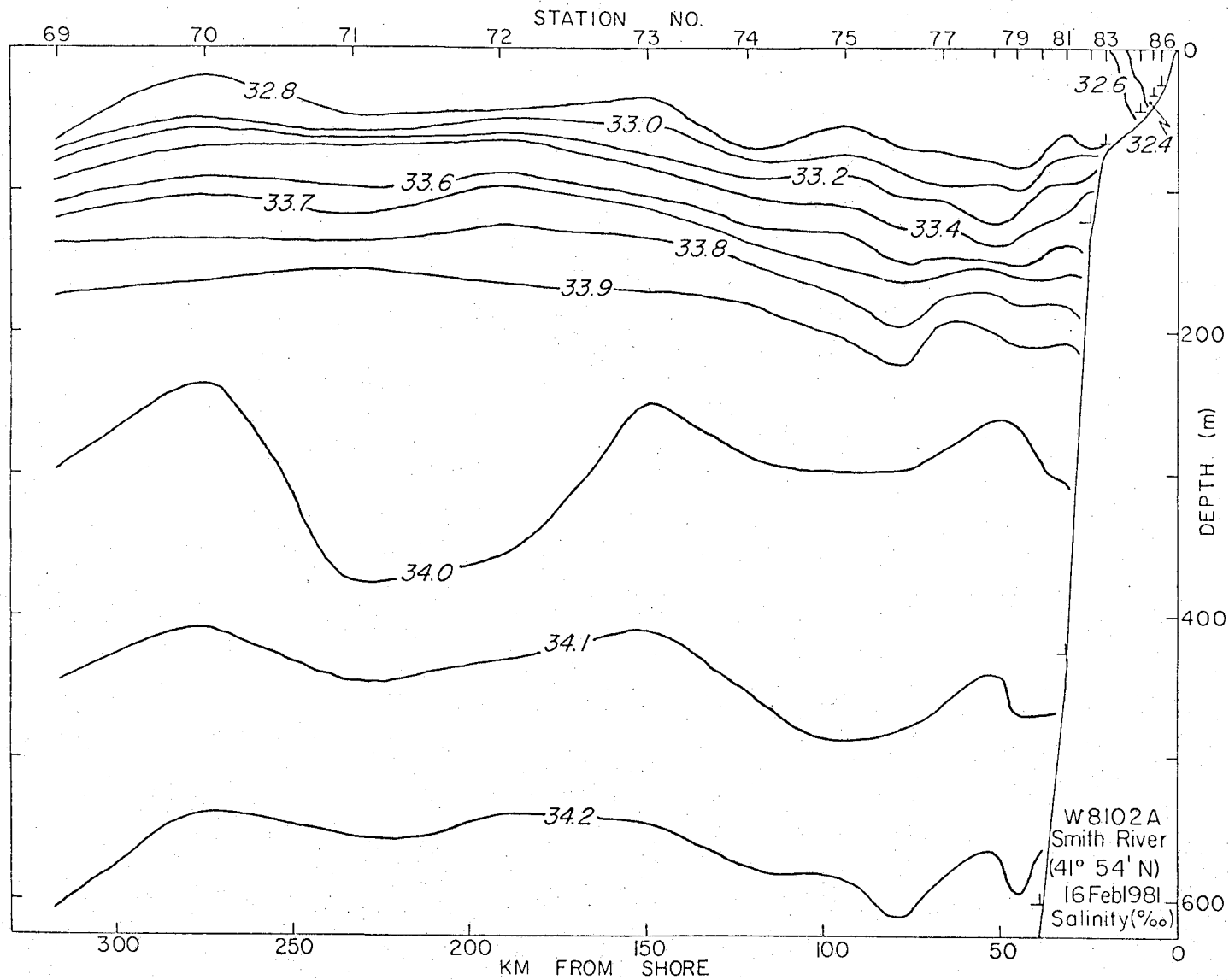


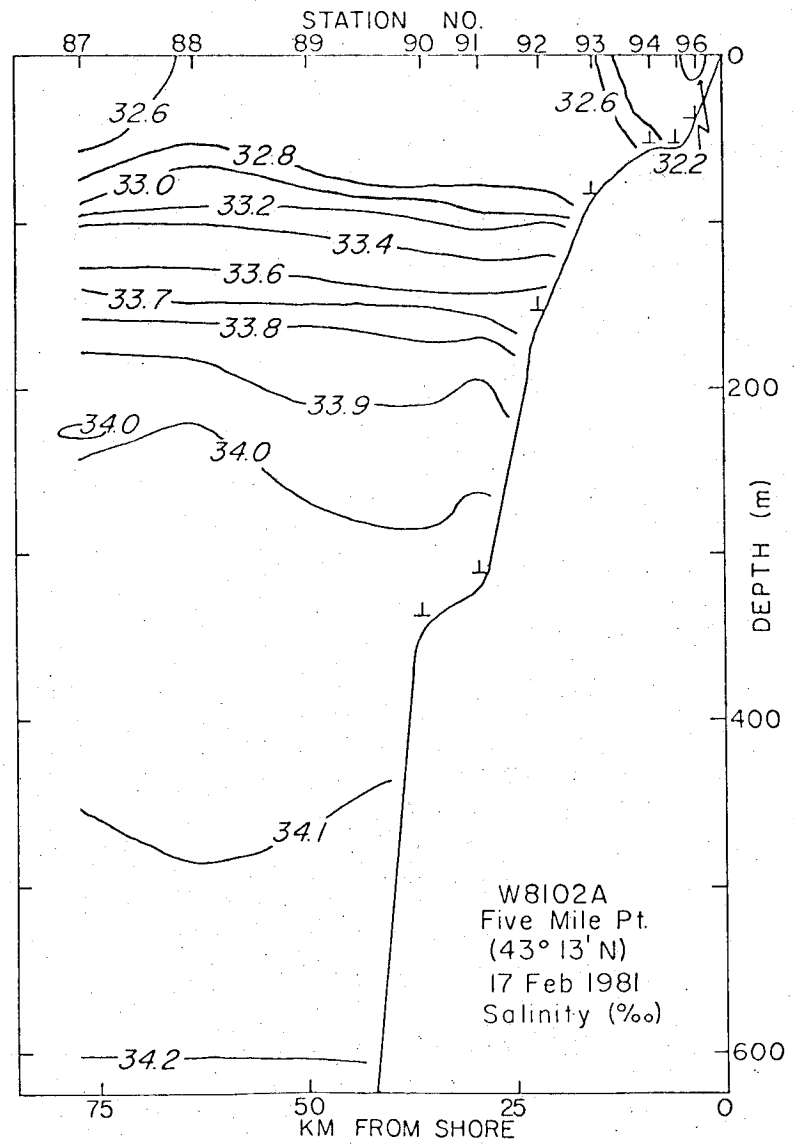


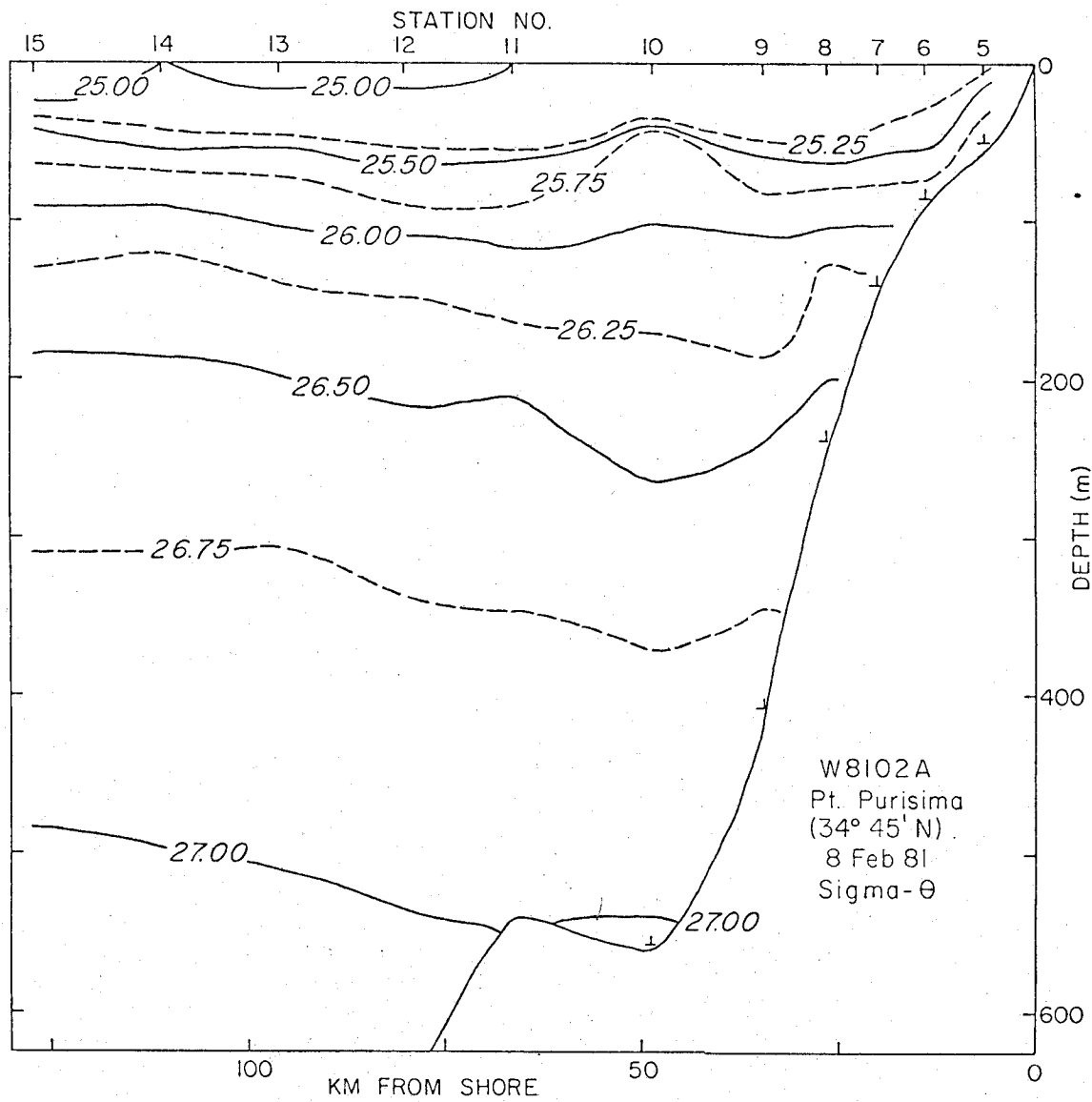


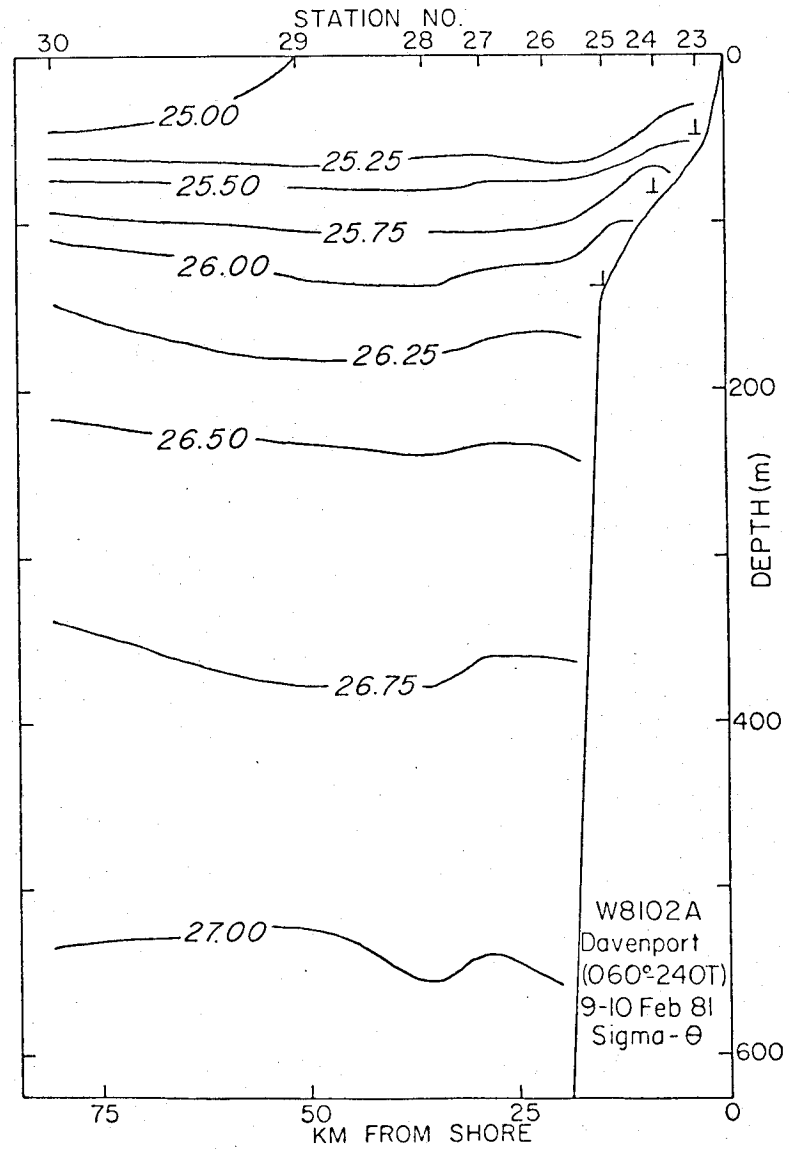
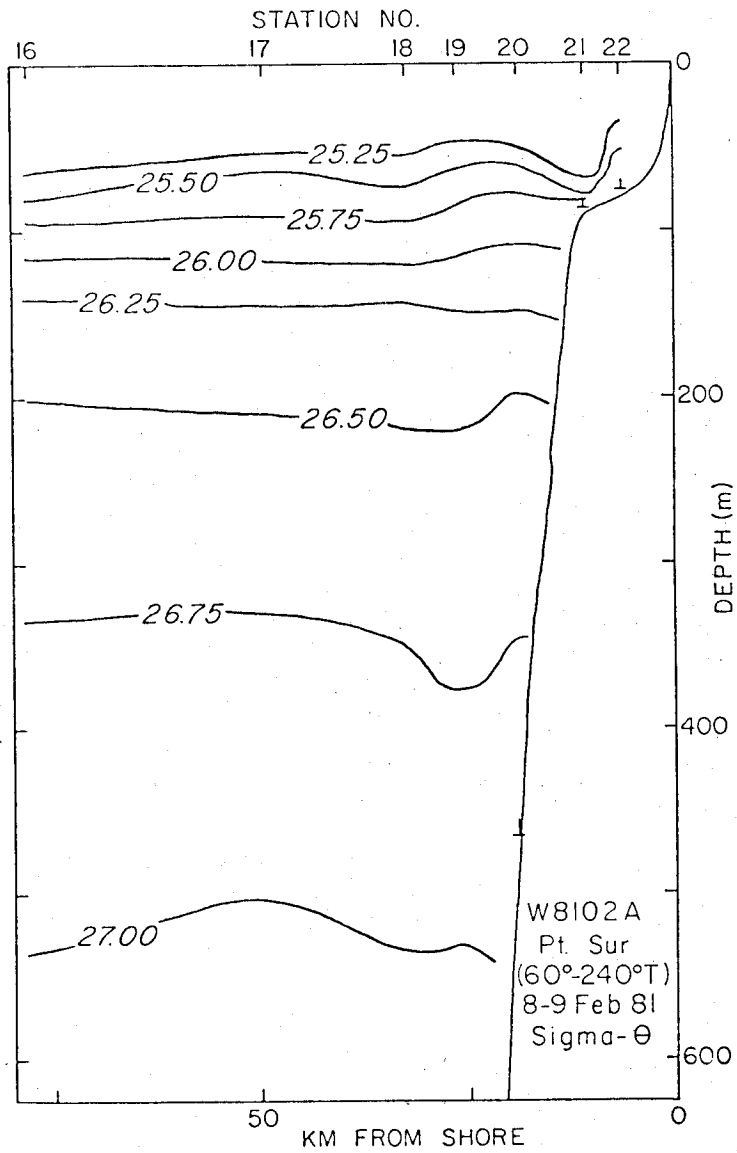


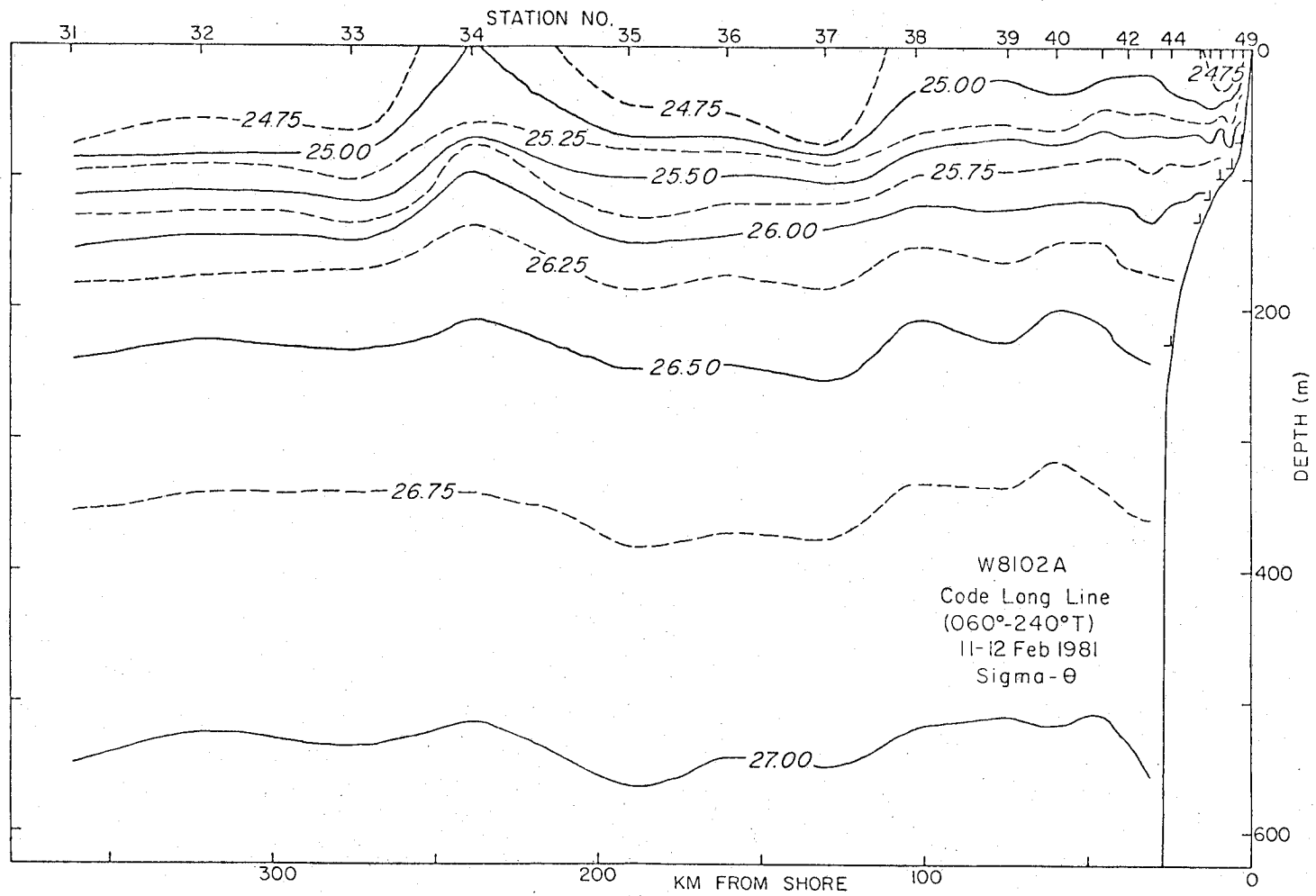


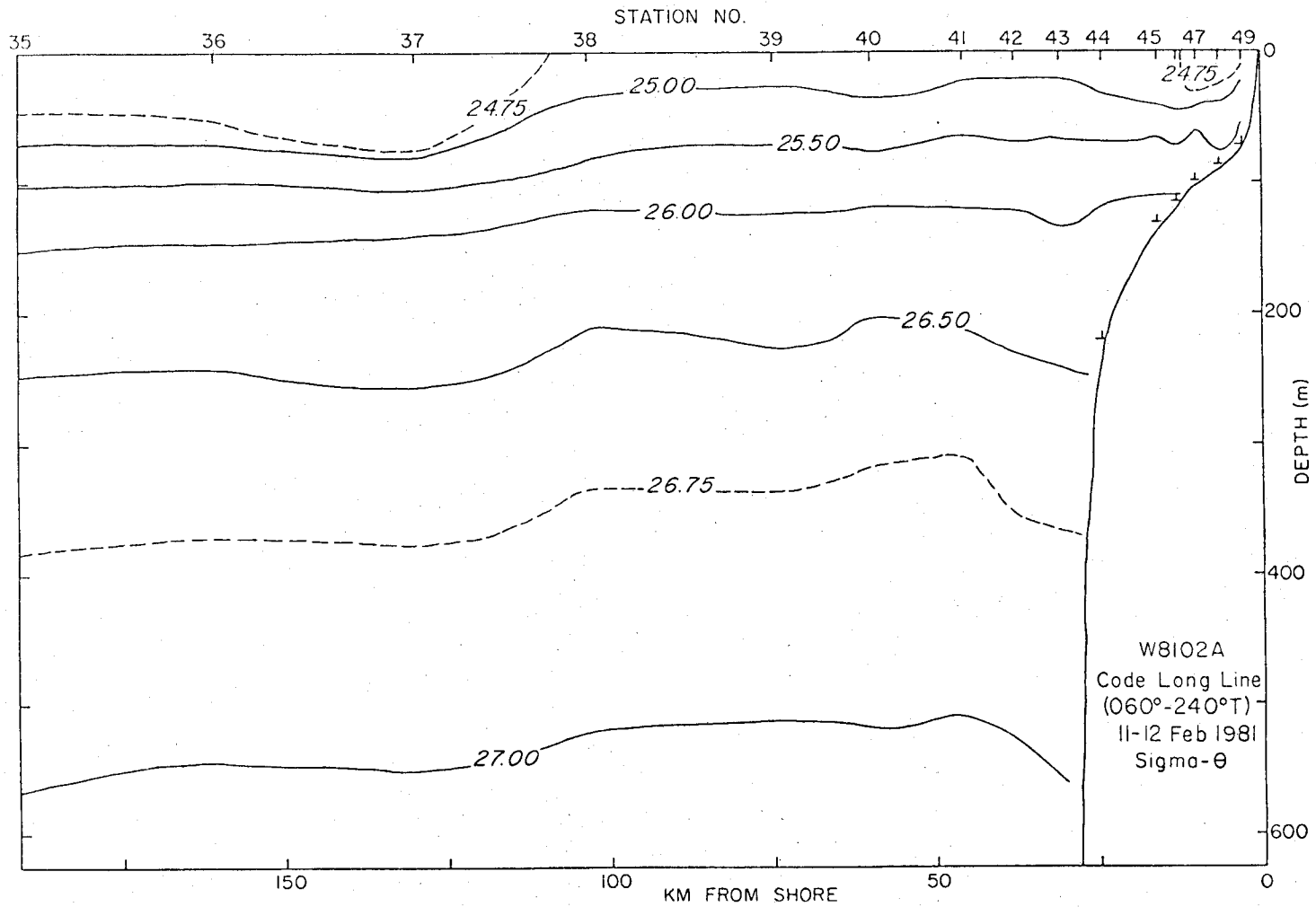


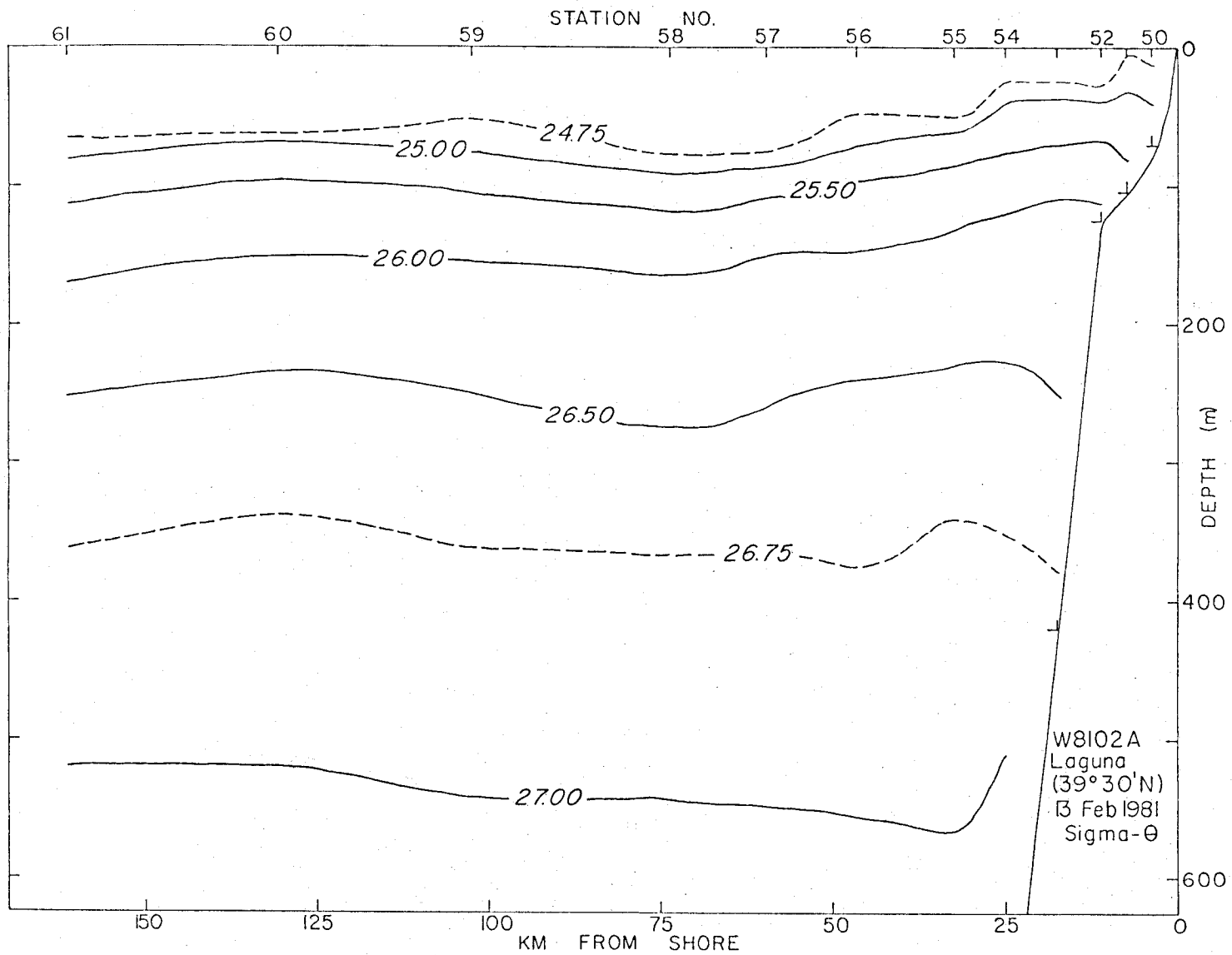


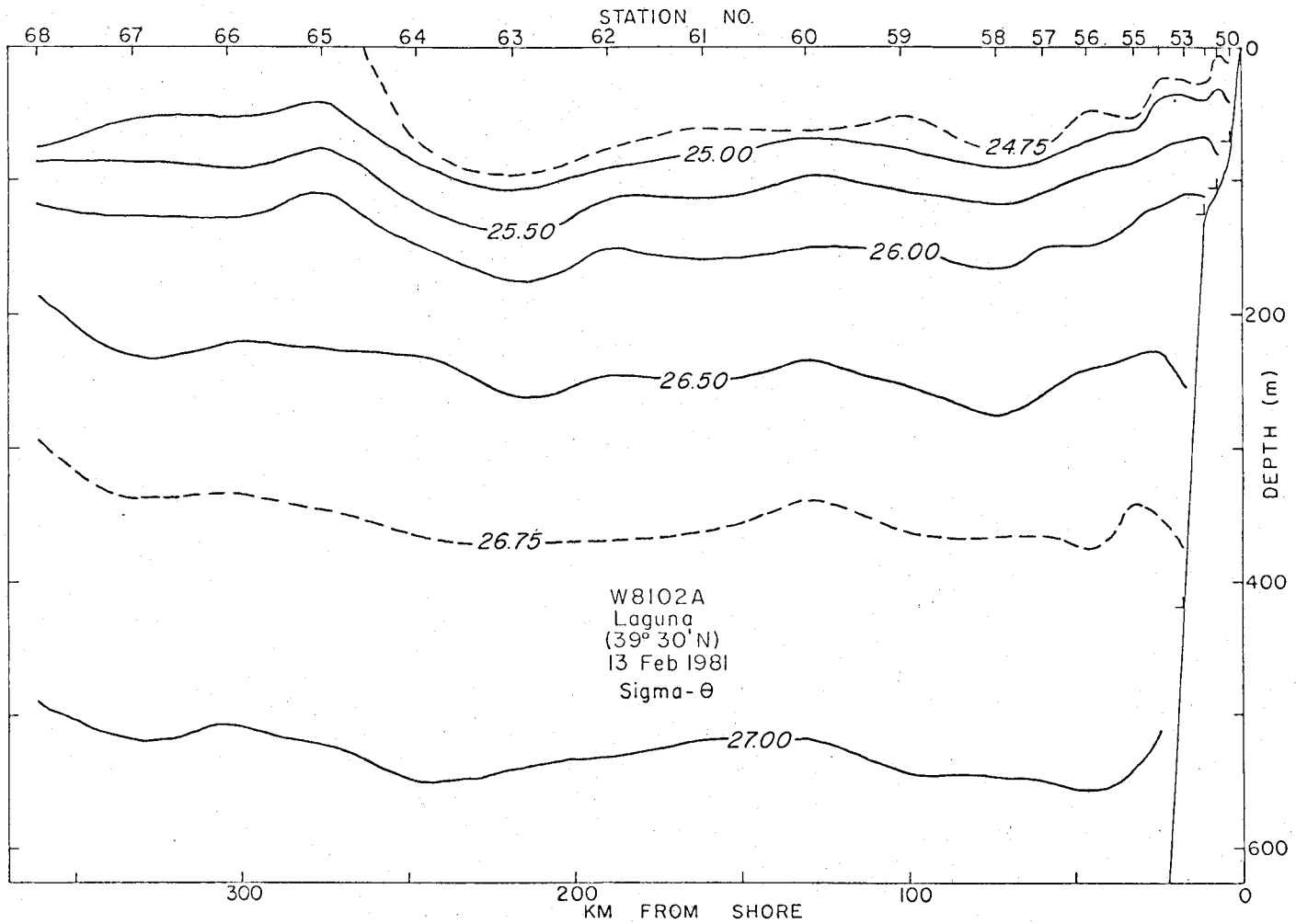


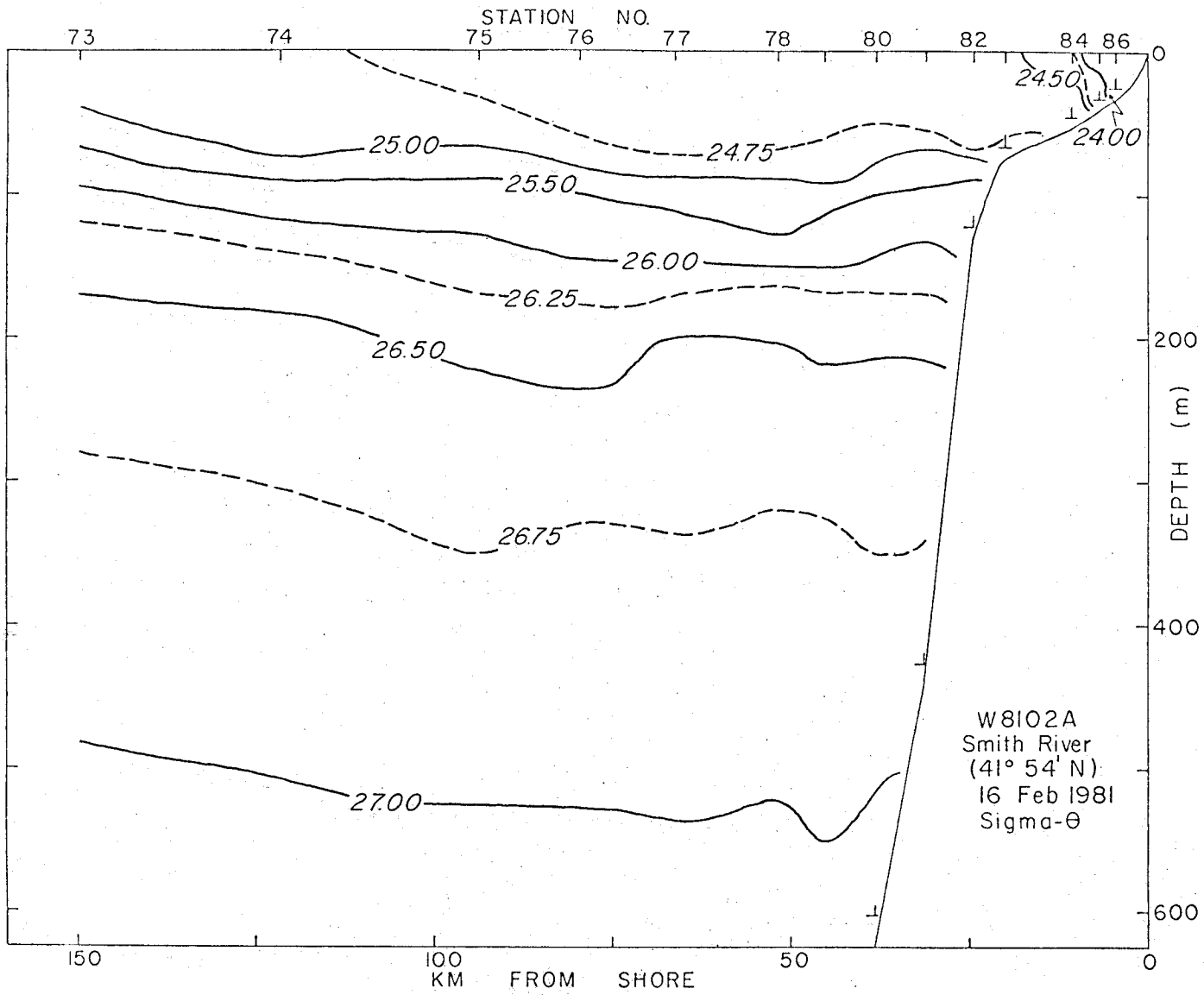


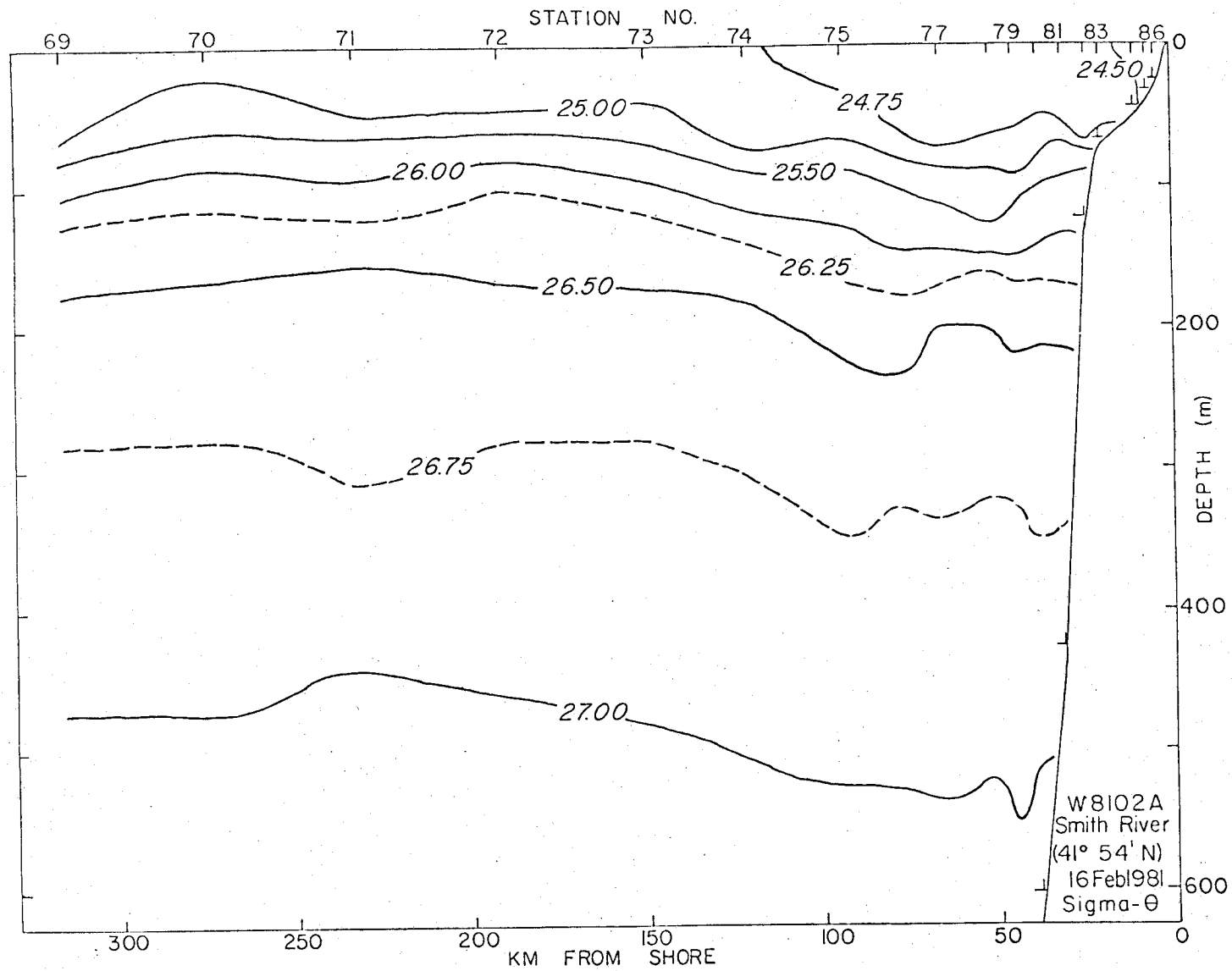


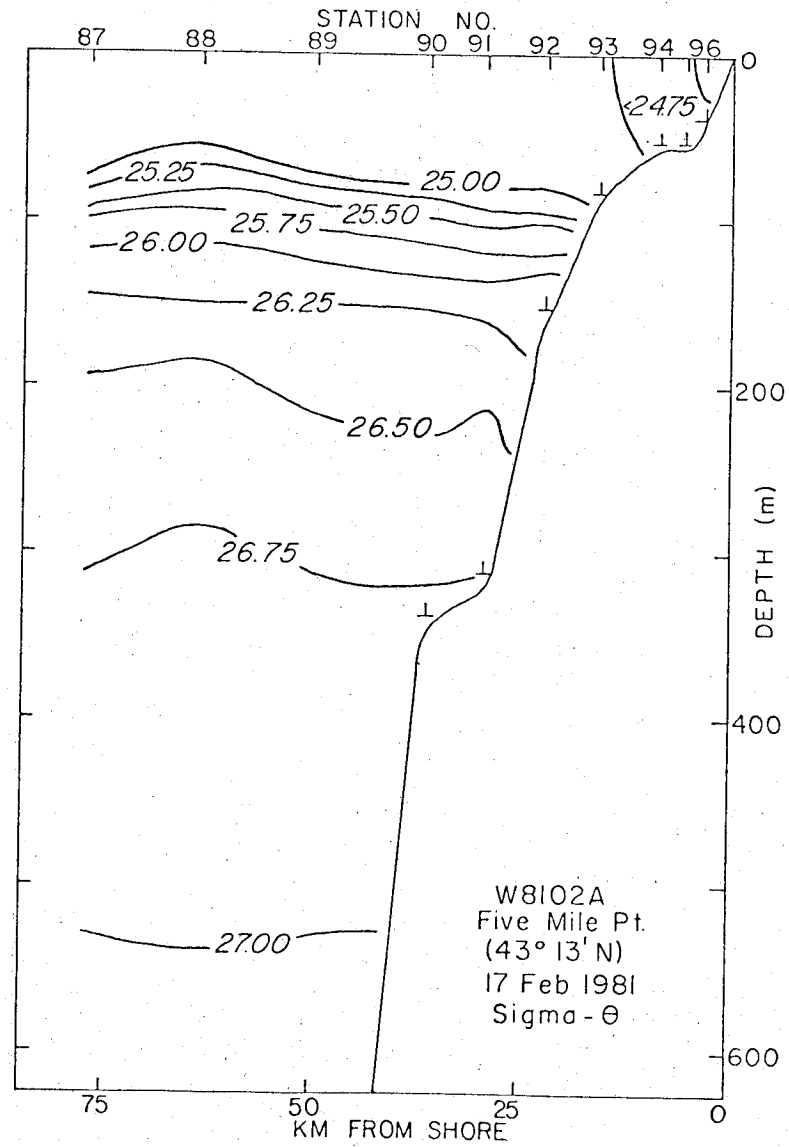




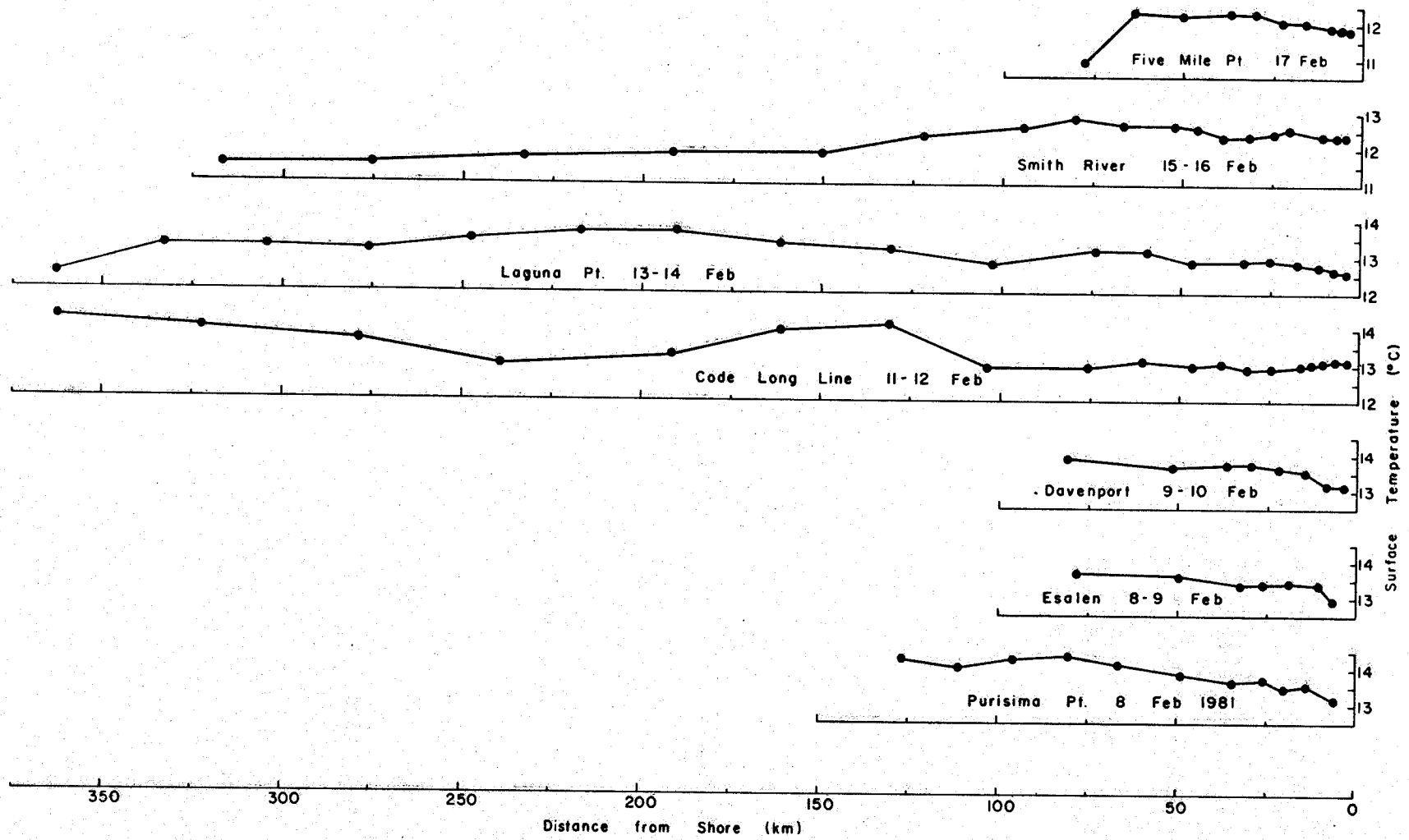


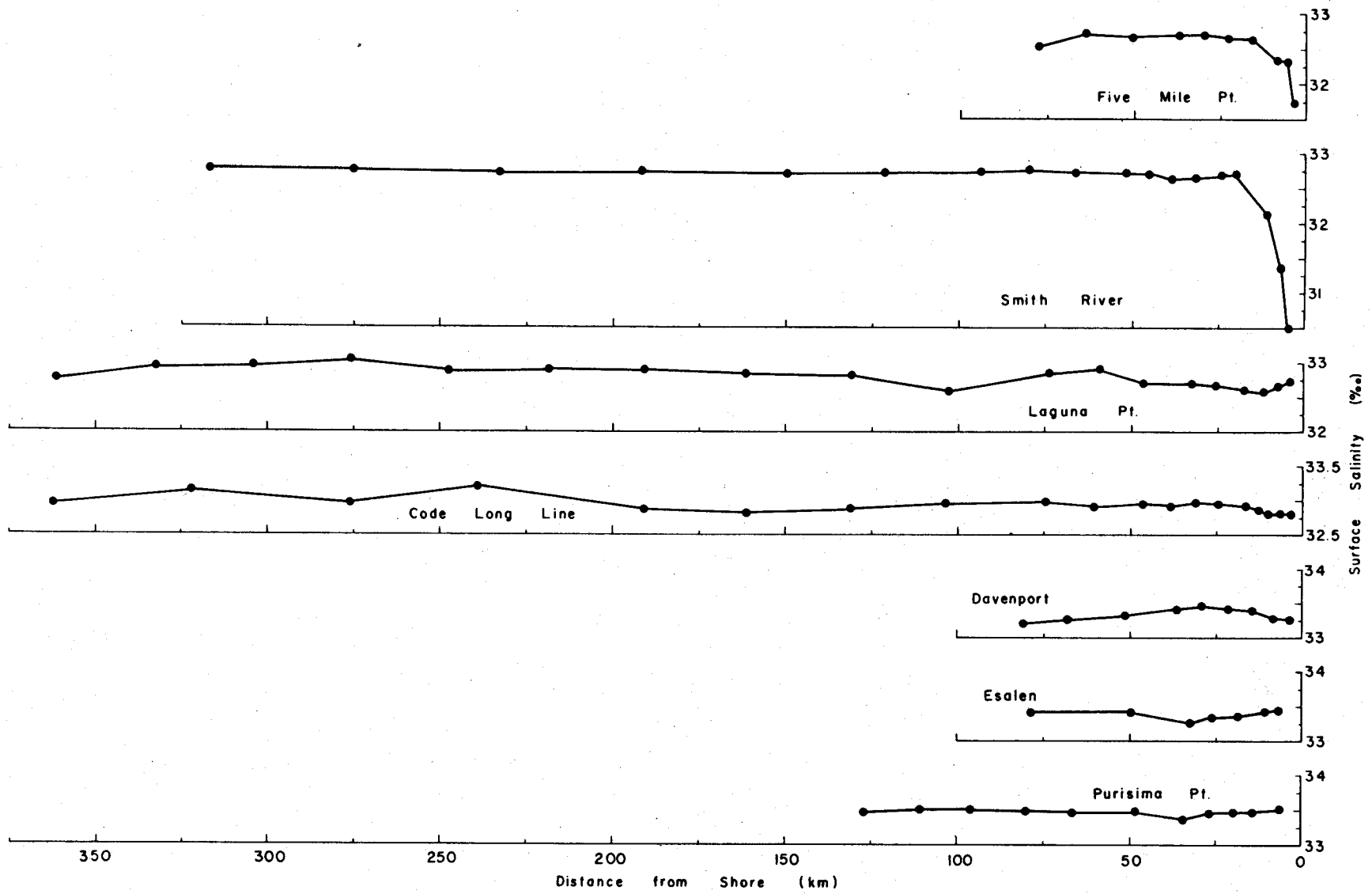


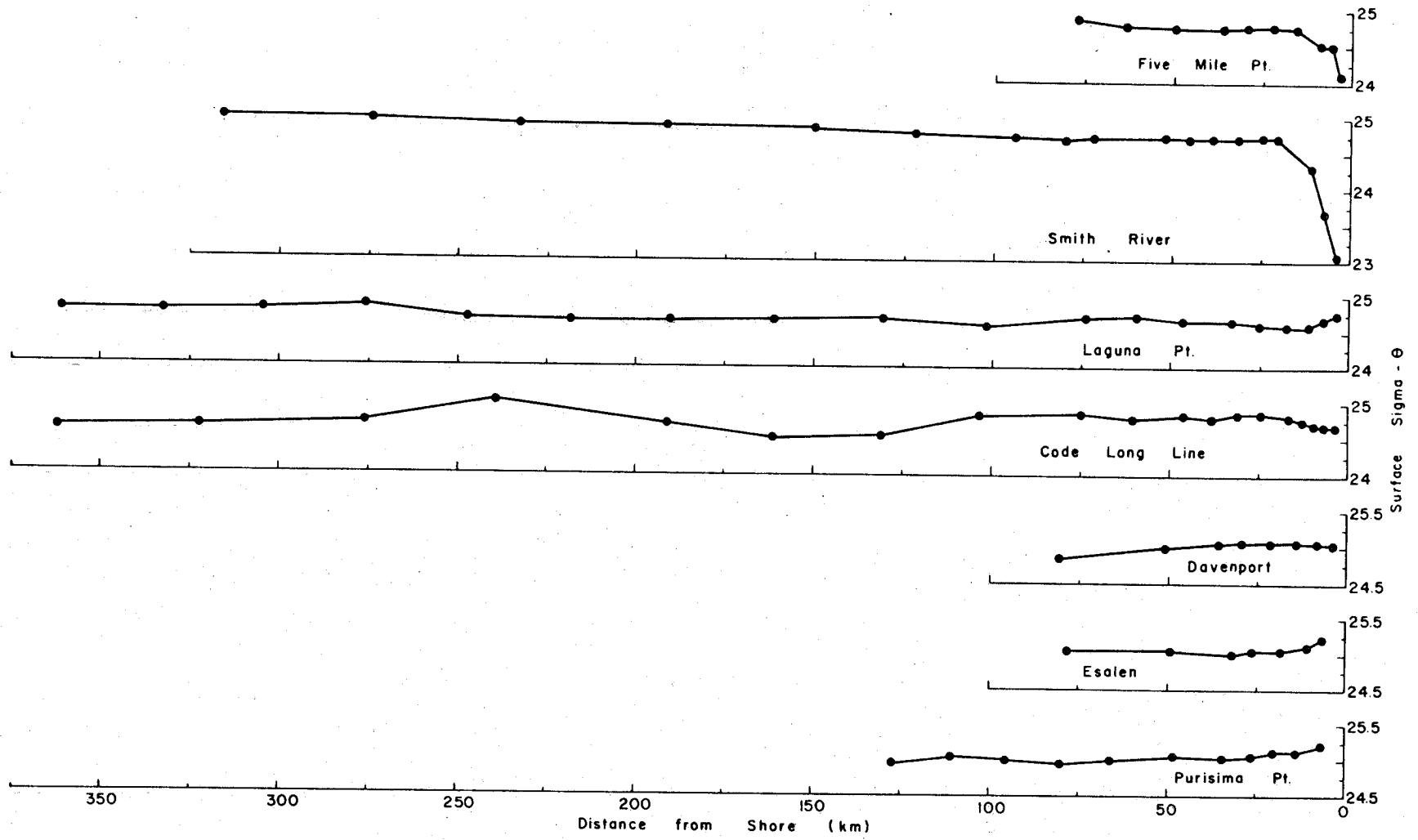


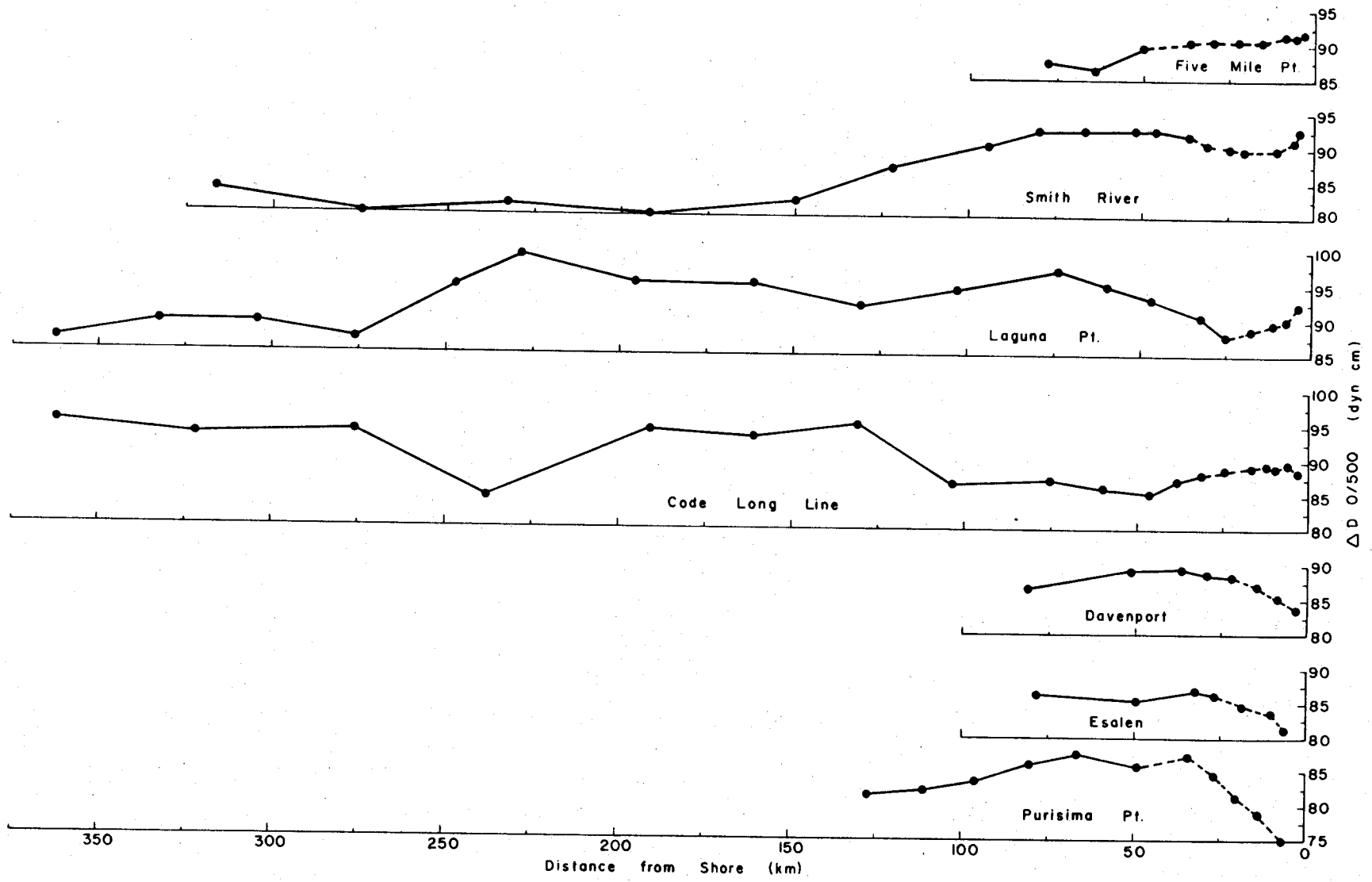


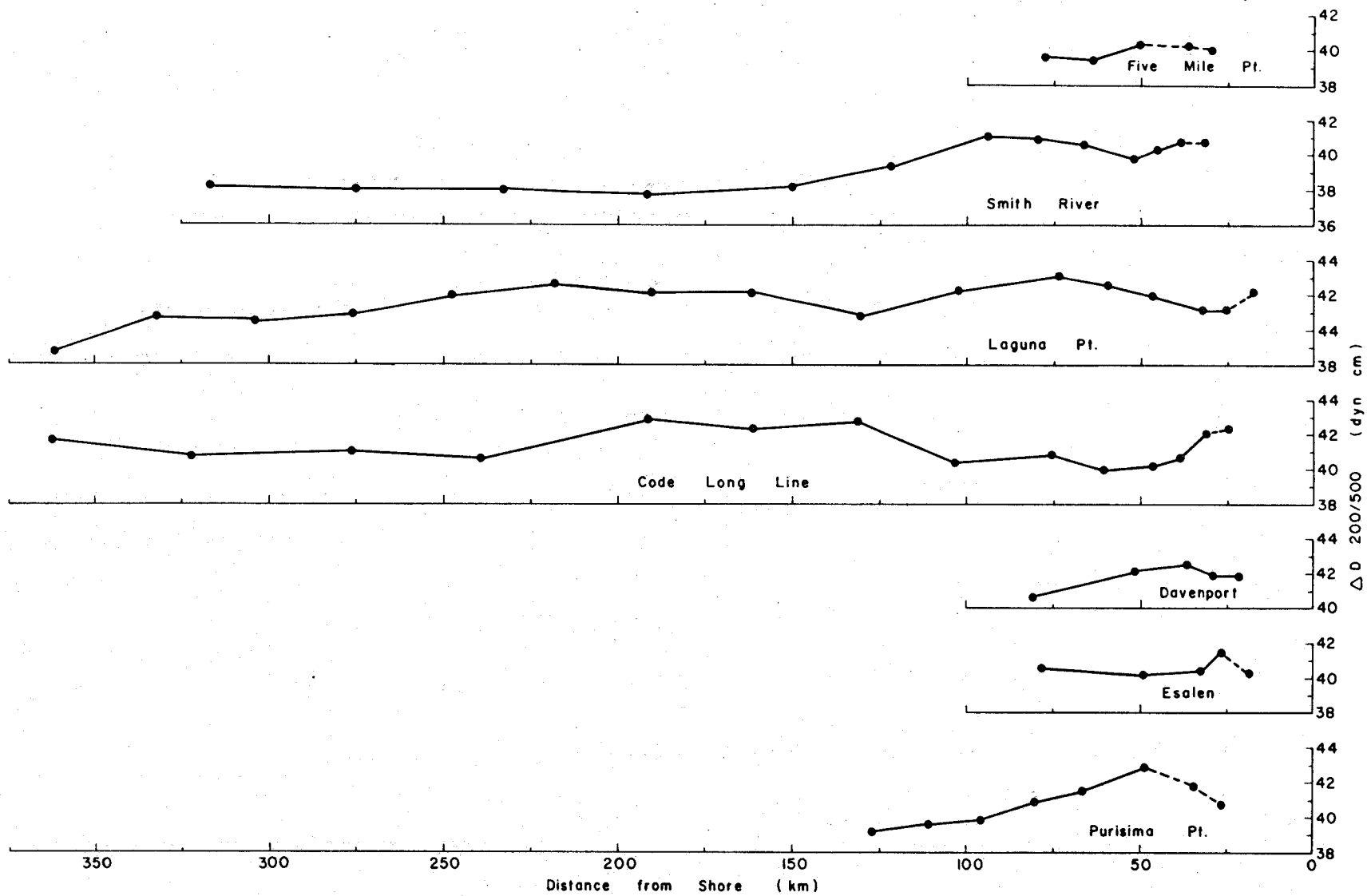
OFFSHORE PROFILES

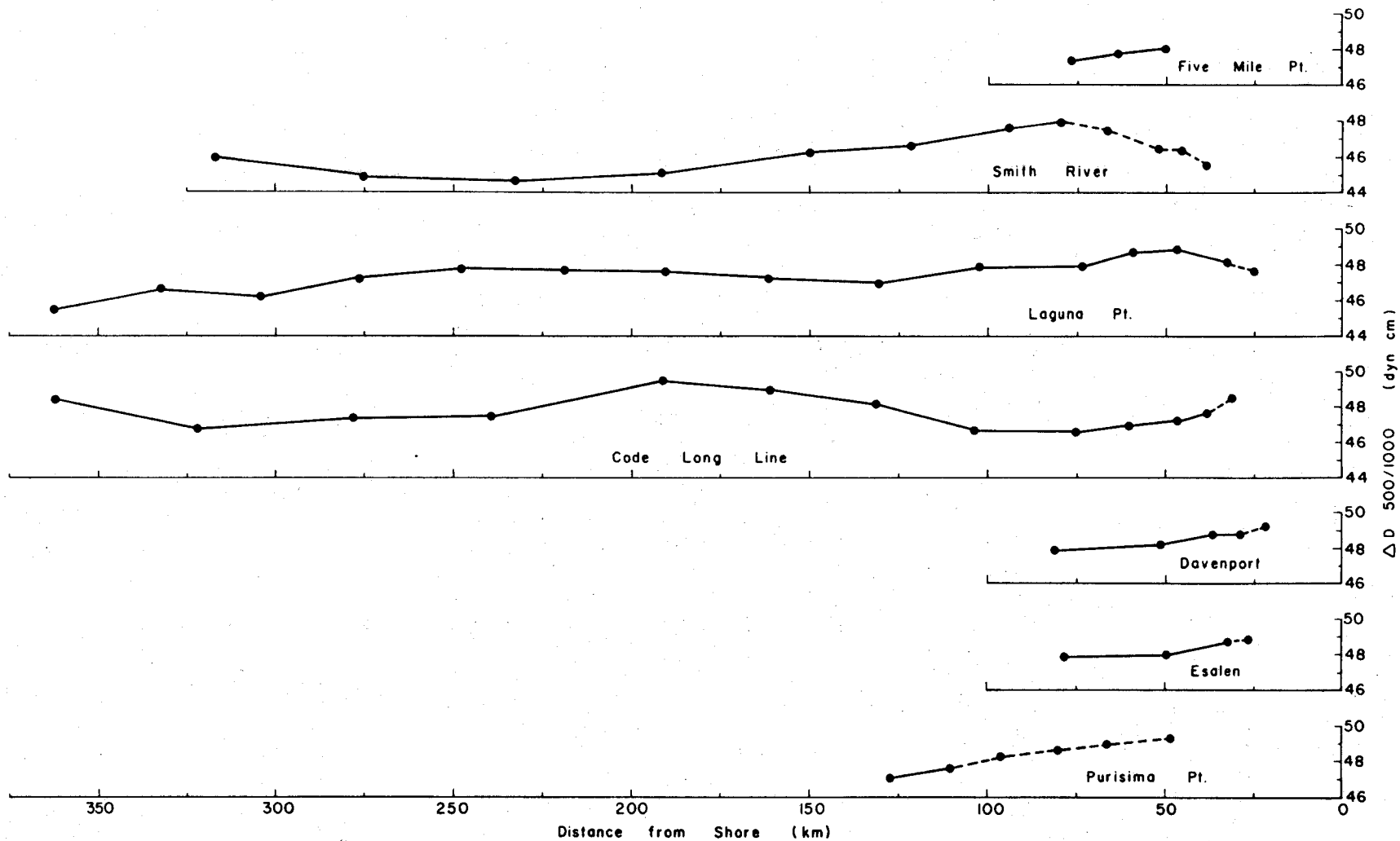




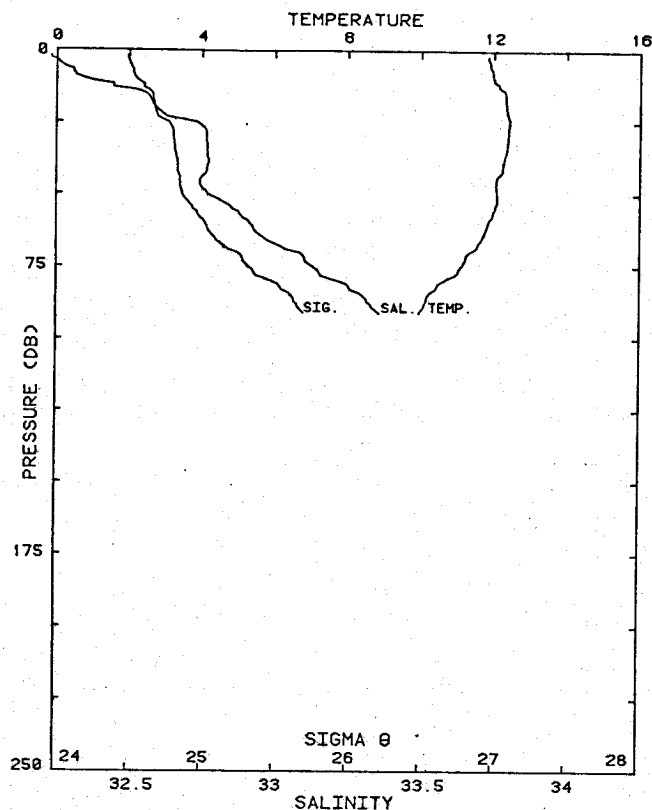








VERTICAL PROFILES
AND LISTINGS



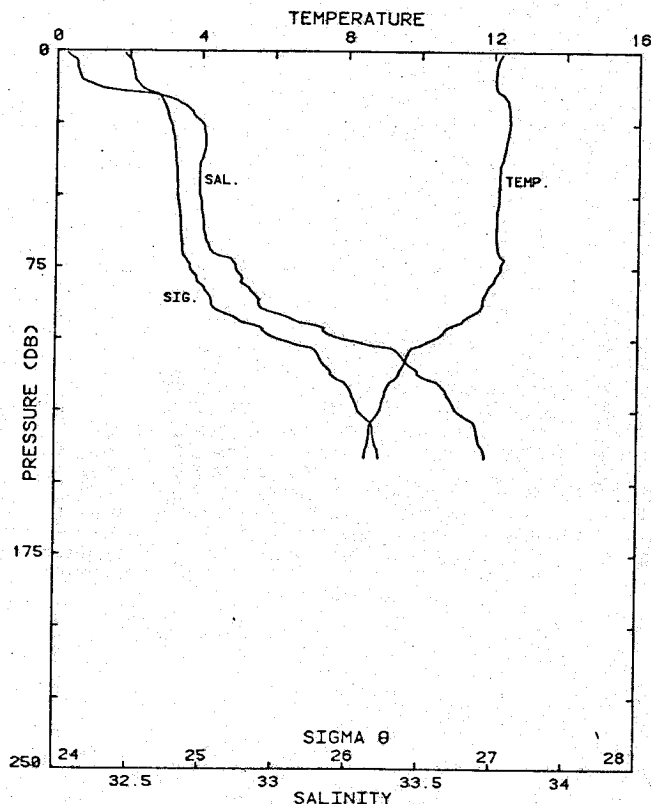
STATION 1 CC 1

CAST NO. 1 LAT: 41 53.8 N 5 FEB 1981 1833 GMT
 STATION: CC 1 LONG: 124 27.0 W DPTH: 95M PROBE 2567

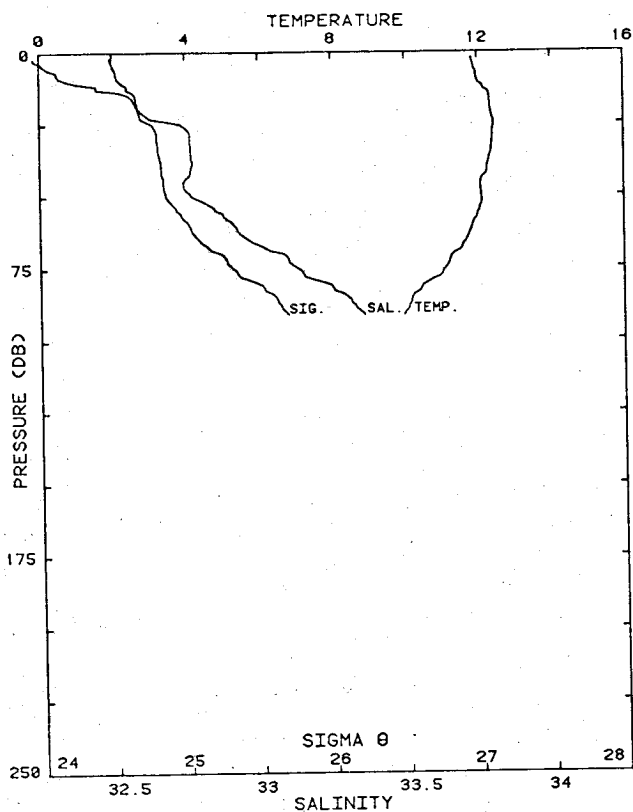
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	11.852	32.229	11.852	24.488	345.5	0.007
10	12.007	32.342	12.006	24.547	340.1	0.034
20	12.353	32.592	12.351	24.675	328.1	0.068
30	12.397	32.765	12.393	24.801	316.4	0.100
40	12.251	32.770	12.246	24.833	313.6	0.131
50	12.092	32.770	12.086	24.863	310.9	0.162
60	11.853	32.916	11.846	25.021	296.1	0.193
70	11.327	33.087	11.318	25.250	274.5	0.222
80	10.601	33.224	10.592	25.486	252.3	0.248
90	10.020	33.348	10.010	25.682	233.7	0.272
91	9.958	33.360	9.947	25.702	231.9	0.275

CAST NO. 2 LAT: 41 52.8 N 5 FEB 1981 2116 GMT
 STATION: CC 2 LONG: 124 30.0 W DPTH: 146M PROBE 2567

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.198	32.284	12.198	24.466	347.6	0.003
10	12.026	32.335	12.025	24.538	340.9	0.034
20	12.405	32.706	12.403	24.754	320.6	0.067
30	12.361	32.763	12.357	24.807	315.8	0.099
40	12.168	32.742	12.163	24.827	314.2	0.131
50	12.138	32.743	12.132	24.833	313.8	0.162
60	12.083	32.757	12.076	24.855	312.0	0.193
70	12.146	32.790	12.137	24.869	310.9	0.224
80	11.996	32.887	11.985	24.973	301.2	0.255
90	11.601	32.978	11.590	25.117	287.8	0.284
100	10.400	33.238	10.388	25.532	248.3	0.311
110	9.508	33.481	9.496	25.870	216.2	0.334
120	9.031	33.597	9.019	26.038	200.4	0.354
130	8.633	33.694	8.620	26.176	187.3	0.374
140	8.500	33.727	8.486	26.222	183.1	0.392
141	8.497	33.727	8.483	26.223	183.1	0.394



STATION 2 CC 2



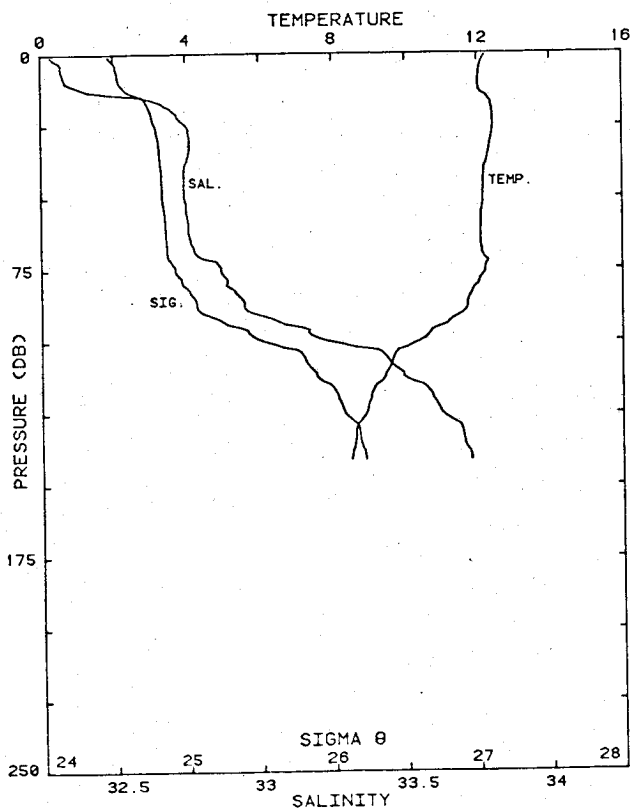
STATION 1 CC 1

CAST NO. 1 LAT: 41 53.8 N 5 FEB 1981 1833 GMT
 STATION: CC 1 LONG: 124 27.0 W DPTH: 95M PROBE 2567

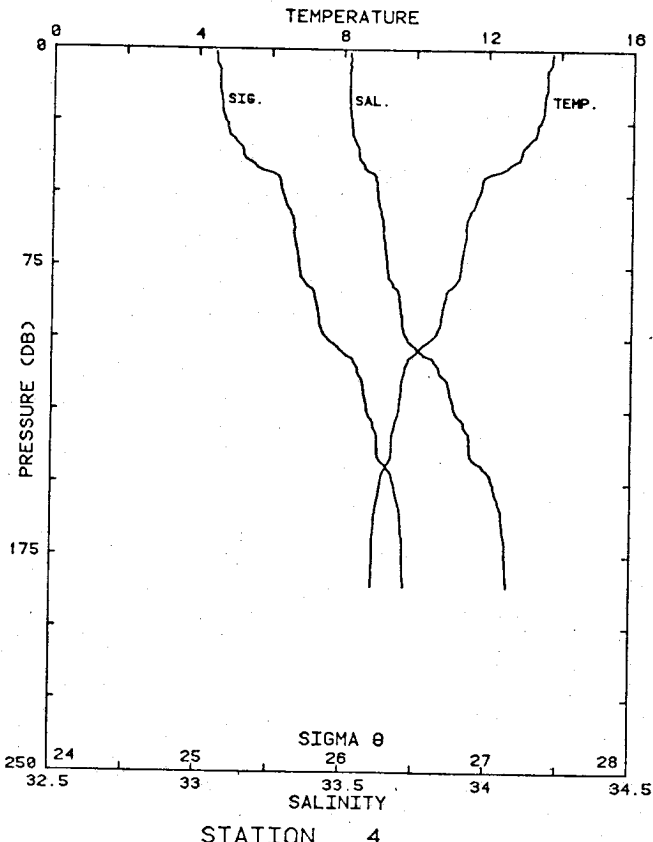
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
2	11.852	32.229	11.852	24.488	345.5	0.007
10	12.007	32.342	12.006	24.547	340.1	0.034
20	12.353	32.592	12.351	24.675	328.1	0.068
30	12.397	32.765	12.393	24.801	316.4	0.100
40	12.251	32.770	12.246	24.833	313.6	0.131
50	12.092	32.770	12.086	24.863	310.9	0.162
60	11.853	32.916	11.846	25.021	296.1	0.193
70	11.327	33.087	11.318	25.250	274.5	0.222
80	10.601	33.224	10.592	25.486	252.3	0.248
90	10.020	33.348	10.010	25.682	233.7	0.272
91	9.958	33.360	9.947	25.702	231.9	0.275

CAST NO. 2 LAT: 41 52.8 N 5 FEB 1981 2116 GMT
 STATION: CC 2 LONG: 124 30.0 W DPTH: 146M PROBE 2567

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
1	12.198	32.284	12.198	24.466	347.6	0.003
10	12.026	32.335	12.025	24.538	340.9	0.034
20	12.405	32.706	12.403	24.754	320.6	0.067
30	12.361	32.763	12.357	24.807	315.8	0.099
40	12.168	32.742	12.163	24.827	314.2	0.131
50	12.138	32.743	12.132	24.833	313.8	0.162
60	12.083	32.757	12.076	24.855	312.0	0.193
70	12.146	32.790	12.137	24.869	310.9	0.224
80	11.996	32.887	11.985	24.973	301.2	0.255
90	11.601	32.978	11.590	25.117	287.8	0.284
100	10.400	33.238	10.388	25.532	248.3	0.311
110	9.508	33.481	9.496	25.870	216.2	0.334
120	9.031	33.597	9.019	26.038	200.4	0.354
130	8.633	33.694	8.620	26.176	187.3	0.374
140	8.500	33.727	8.486	26.222	183.1	0.392
141	8.497	33.727	8.483	26.223	183.1	0.394



STATION 2 CC 2

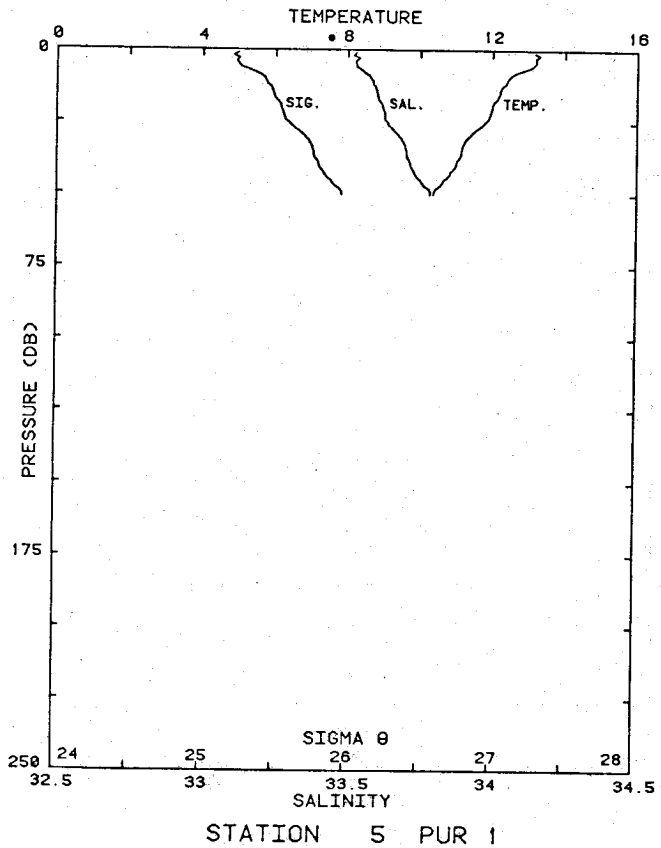


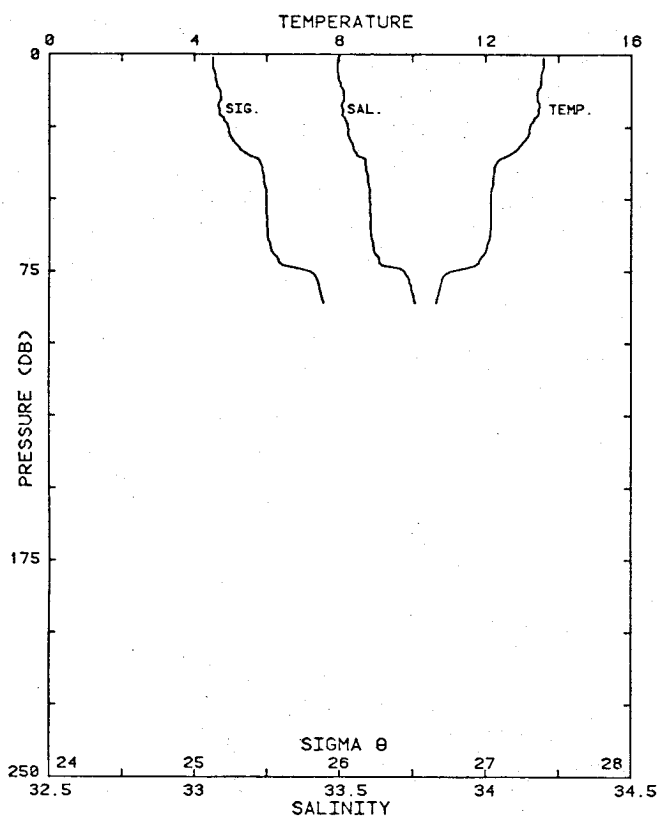
CAST NO. 4 LAT: 34 42.5 N 7 FEB 1981 2314 GMT
 STATION: LONG: 120 52.0 W DPTH: 187M PROBE 2567

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	13.757	33.521	13.756	25.115	285.8	0.003
10	13.611	33.520	13.609	25.143	283.3	0.028
20	13.522	33.521	13.519	25.163	281.7	0.057
30	13.295	33.531	13.290	25.217	276.9	0.085
40	12.580	33.573	12.575	25.391	260.5	0.112
50	11.762	33.620	11.755	25.583	242.4	0.136
60	11.426	33.639	11.419	25.660	235.4	0.160
70	11.333	33.650	11.325	25.686	233.2	0.184
80	11.176	33.667	11.166	25.728	229.4	0.207
90	10.764	33.704	10.753	25.830	219.8	0.229
100	10.481	33.725	10.469	25.897	213.7	0.251
110	9.750	33.835	9.737	26.107	193.8	0.271
120	9.635	33.876	9.622	26.158	189.2	0.290
130	9.474	33.923	9.460	26.221	183.4	0.309
140	9.393	33.946	9.378	26.252	180.6	0.327
150	9.081	34.024	9.065	26.364	170.1	0.345
175	8.882	34.069	8.863	26.431	164.2	0.386
186	8.857	34.076	8.837	26.441	163.5	0.404

CAST NO. 5 LAT: 34 45.0 N 8 FEB 1981 0046 GMT
 STATION: PUR 1 LONG: 120 42.0 W DPTH: 56M PROBE 2567
 6.5 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	13.167	33.527	13.167	25.238	274.0	0.003
10	12.427	33.579	12.426	25.425	256.5	0.027
20	11.993	33.620	11.990	25.540	245.9	0.052
30	11.344	33.680	11.340	25.706	230.2	0.076
40	10.988	33.718	10.983	25.800	221.5	0.099
50	10.369	33.786	10.363	25.962	206.3	0.120



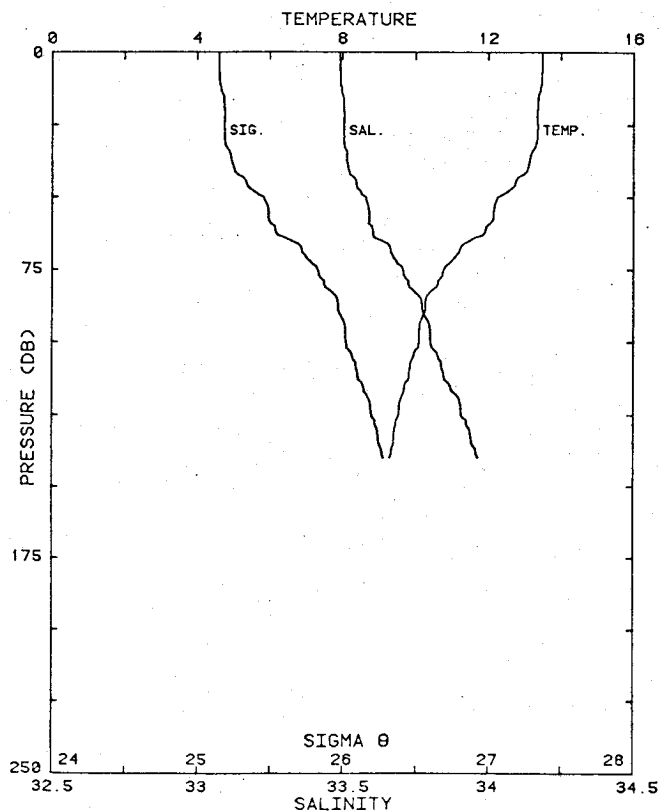


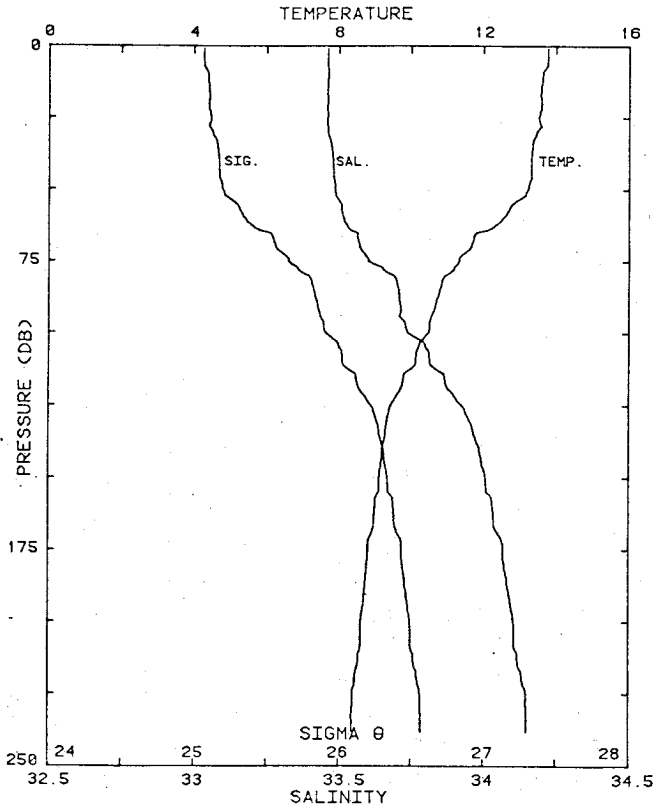
CAST NO. 6 LAT: 34 45.0 N 8 FEB 1981 0138 GMT
 STATION: PUR 2 LONG: 120 47.0 W DPTH: 91M PROBE 2567
 14.0 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.590	33.493	13.590	25.127	284.6	0.003
10	13.499	33.504	13.499	25.154	282.3	0.028
20	13.448	33.512	13.445	25.171	281.0	0.056
30	13.048	33.539	13.044	25.272	271.6	0.084
40	12.239	33.592	12.234	25.471	252.9	0.110
50	12.147	33.603	12.141	25.497	250.7	0.135
60	12.135	33.606	12.127	25.503	250.4	0.160
70	11.883	33.633	11.874	25.571	244.1	0.185
80	10.773	33.746	10.763	25.861	216.7	0.208
86	10.658	33.761	10.648	25.893	213.7	0.221

CAST NO. 7 LAT: 34 45.0 N 8 FEB 1981 0225 GMT
 STATION: PUR 3 LONG: 120 51.0 W DPTH: 146M PROBE 2567
 20.0 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
0	13.477	33.491	13.477	25.148	282.5	0.000
10	13.463	33.494	13.461	25.154	282.3	0.028
20	13.337	33.505	13.334	25.188	279.3	0.056
30	13.336	33.505	13.332	25.188	279.6	0.084
40	13.072	33.521	13.067	25.254	273.6	0.112
50	12.254	33.580	12.247	25.460	254.3	0.138
60	11.944	33.601	11.937	25.535	247.4	0.164
70	11.127	33.672	11.118	25.740	228.0	0.187
80	10.623	33.726	10.614	25.872	215.6	0.209
90	10.243	33.778	10.233	25.979	205.6	0.230
100	10.093	33.803	10.081	26.024	201.6	0.251
110	9.828	33.844	9.815	26.101	194.4	0.270
120	9.586	33.902	9.572	26.186	186.5	0.289
130	9.423	33.937	9.409	26.241	181.5	0.308
140	9.305	33.965	9.290	26.282	177.8	0.326





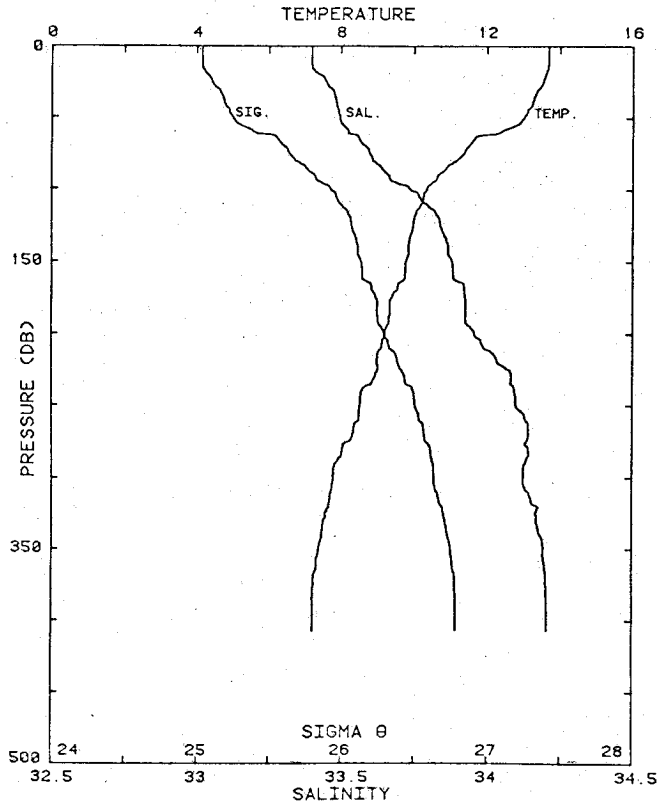
STATION 8 PUR 4

CAST NO. 8 LAT: 34 45.0 N 8 FEB 1981 0310 GMT
 STATION: PUR 4 LONG: 120 55.0 W DPTH: 248M PROBE 2567
 26.4 KM FROM SHORE

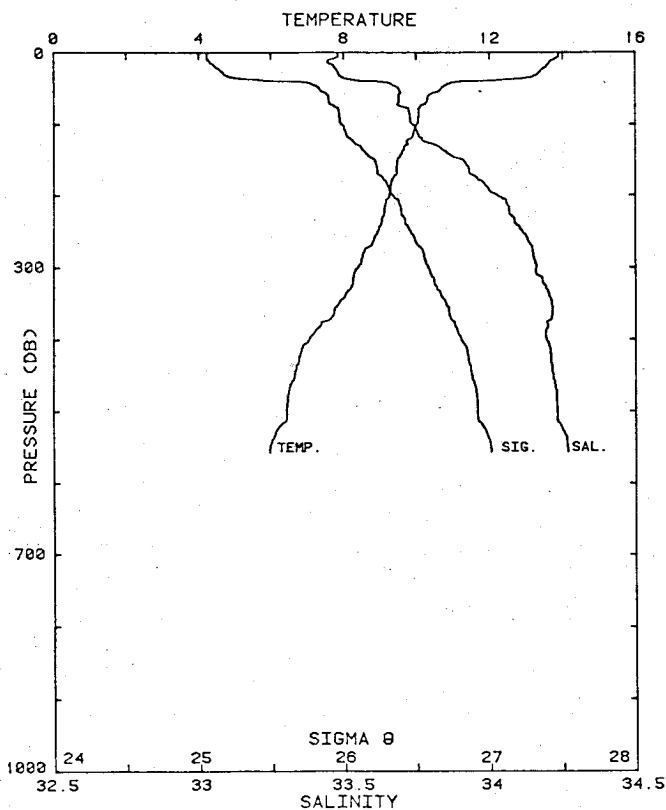
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.765	33.460	13.764	25.066	290.4	0.003
10	13.623	33.462	13.622	25.076	287.8	0.029
20	13.596	33.459	13.594	25.100	287.7	0.058
30	13.463	33.462	13.459	25.129	285.2	0.086
40	13.317	33.480	13.312	25.173	281.3	0.115
50	13.222	33.485	13.216	25.197	279.4	0.143
60	12.535	33.519	12.527	25.358	264.2	0.170
70	11.674	33.574	11.665	25.565	244.7	0.195
80	10.941	33.693	10.931	25.790	223.4	0.219
90	10.692	33.714	10.681	25.851	217.9	0.241
100	10.483	33.740	10.471	25.908	212.6	0.262
110	10.133	33.818	10.120	26.028	201.4	0.283
120	9.694	33.889	9.681	26.158	189.2	0.302
130	9.349	33.953	9.335	26.265	179.1	0.320
140	9.223	33.988	9.208	26.313	174.8	0.338
150	9.139	34.010	9.123	26.343	172.1	0.355
175	8.826	34.069	8.808	26.440	163.4	0.397
200	8.635	34.106	8.614	26.499	158.1	0.438
225	8.403	34.148	8.380	26.568	152.0	0.477
238	8.382	34.150	8.358	26.573	151.8	0.496

CAST NO. 9 LAT: 34 45.8 N 8 FEB 1981 0404 GMT
 STATION: PUR 5 LONG: 121 00.0 W DPTH: 422M PROBE 2567
 34.2 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.674	33.397	13.673	25.036	293.3	0.003
10	13.675	33.397	13.674	25.036	293.5	0.029
20	13.596	33.428	13.593	25.076	290.0	0.059
30	13.389	33.469	13.385	25.150	283.2	0.087
40	13.237	33.485	13.231	25.193	279.4	0.115
50	13.001	33.496	12.994	25.249	274.4	0.143
60	12.376	33.526	12.368	25.395	260.7	0.170
70	11.468	33.587	11.459	25.612	240.2	0.195
80	11.160	33.609	11.150	25.685	233.4	0.218
90	10.648	33.665	10.638	25.820	220.8	0.241
100	10.350	33.738	10.339	25.929	210.6	0.263
110	10.196	33.793	10.183	25.998	204.2	0.283
120	10.001	33.836	9.987	26.065	198.0	0.303
130	9.936	33.850	9.921	26.087	196.1	0.323
140	9.855	33.867	9.839	26.115	193.7	0.342
150	9.780	33.882	9.764	26.139	191.7	0.362
175	9.382	33.926	9.362	26.239	182.6	0.409
200	9.197	33.958	9.175	26.295	177.7	0.454
225	9.020	34.068	8.996	26.409	167.3	0.497
250	8.535	34.101	8.509	26.511	157.9	0.538
300	7.803	34.127	7.773	26.643	146.0	0.613
400	7.225	34.207	7.187	26.789	133.4	0.750
407	7.226	34.207	7.187	26.789	133.5	0.760



STATION 9 PUR 5



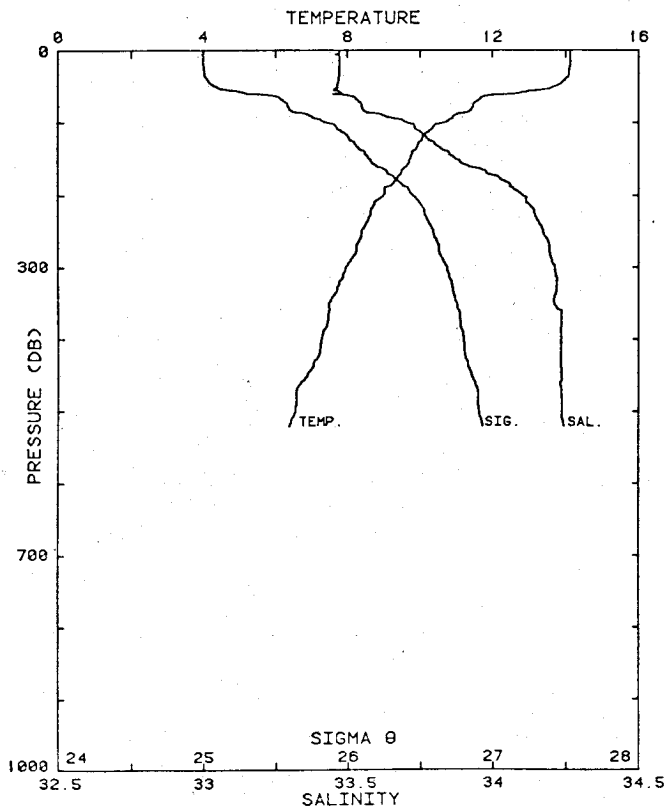
STATION 10 PUR 6

CAST NO. 10 LAT: 34 45.0 N 8 FEB 1981 0540 GMT
 STATION: PUR 6 LONG: 121 09.5 W DPTH: 570M PROBE 2567
 48.6 KM FROM SHORE

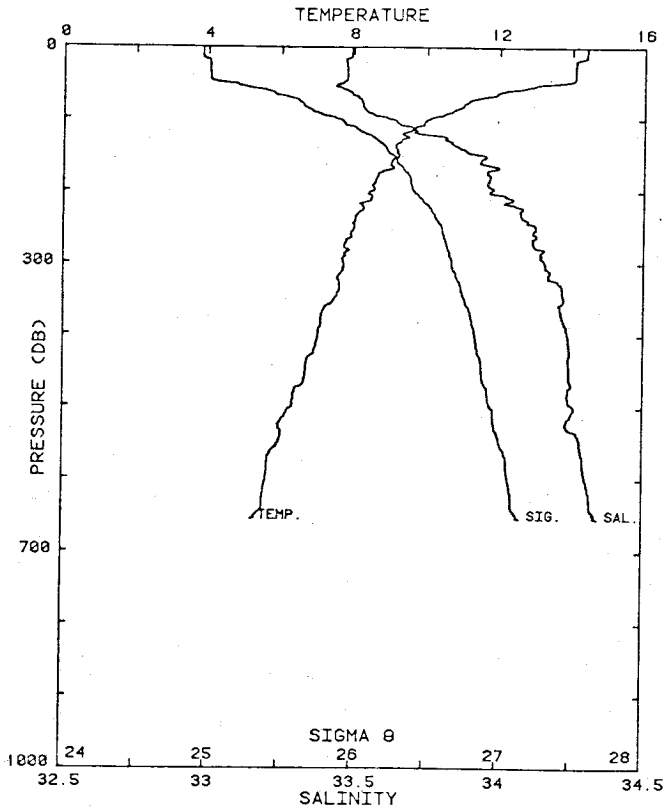
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
1	13.887	33.481	13.887	25.056	291.3	0.003
10	13.793	33.467	13.792	25.065	290.7	0.029
20	13.554	33.469	13.551	25.116	286.2	0.058
30	13.329	33.483	13.325	25.173	281.0	0.086
40	12.064	33.550	12.059	25.472	252.8	0.114
50	10.684	33.686	10.678	25.830	218.9	0.136
60	10.345	33.688	10.338	25.891	213.3	0.158
70	10.277	33.689	10.269	25.903	212.4	0.179
80	10.062	33.723	10.053	25.967	206.5	0.200
90	10.053	33.727	10.043	25.971	206.4	0.221
100	10.012	33.736	10.001	25.985	205.2	0.241
110	9.921	33.753	9.908	26.014	202.6	0.262
120	9.819	33.768	9.805	26.043	200.1	0.282
130	9.663	33.824	9.649	26.113	193.6	0.302
140	9.589	33.857	9.573	26.151	190.2	0.321
150	9.465	33.912	9.449	26.214	184.4	0.340
175	9.352	33.958	9.333	26.269	179.7	0.385
200	9.246	34.027	9.224	26.341	173.4	0.430
225	9.101	34.067	9.077	26.395	168.7	0.472
250	8.914	34.112	8.887	26.461	162.9	0.513
300	8.377	34.159	8.346	26.582	152.1	0.592
400	7.031	34.194	6.994	26.806	131.6	0.734
500	6.416	34.231	6.371	26.918	122.0	0.859
557	5.941	34.268	5.893	27.009	113.6	0.926

CAST NO. 11 LAT: 34 44.8 N 8 FEB 1981 0711 GMT
 STATION: PUR 7 LONG: 121 21.0 W DPTH: 541M PROBE 2567
 66.2 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
1	14.122	33.471	14.121	25.000	296.7	0.003
10	14.128	33.473	14.127	25.001	296.9	0.030
20	14.132	33.473	14.129	25.000	297.3	0.059
30	14.088	33.471	14.083	25.008	296.7	0.089
40	13.979	33.468	13.974	25.029	295.1	0.119
50	13.688	33.464	13.681	25.086	289.9	0.148
60	12.504	33.451	12.496	25.311	268.6	0.176
70	11.567	33.539	11.559	25.557	245.5	0.201
80	11.421	33.552	11.411	25.594	242.1	0.225
90	10.939	33.624	10.928	25.737	228.7	0.249
100	10.671	33.703	10.660	25.846	218.6	0.272
110	10.296	33.736	10.284	25.937	210.0	0.293
120	10.069	33.771	10.055	26.003	203.9	0.313
130	9.941	33.801	9.926	26.049	199.8	0.334
140	9.778	33.847	9.762	26.112	194.0	0.353
150	9.721	33.872	9.704	26.141	191.4	0.373
175	9.362	34.021	9.342	26.317	175.2	0.419
200	8.962	34.103	8.941	26.446	163.4	0.461
225	8.616	34.143	8.593	26.531	155.6	0.500
250	8.379	34.172	8.354	26.591	150.3	0.539
300	7.944	34.212	7.914	26.688	141.8	0.612
400	7.283	34.234	7.244	26.803	132.2	0.749
500	6.553	34.237	6.508	26.906	123.3	0.876
521	6.382	34.245	6.336	26.934	120.8	0.902



STATION 11 PUR 7



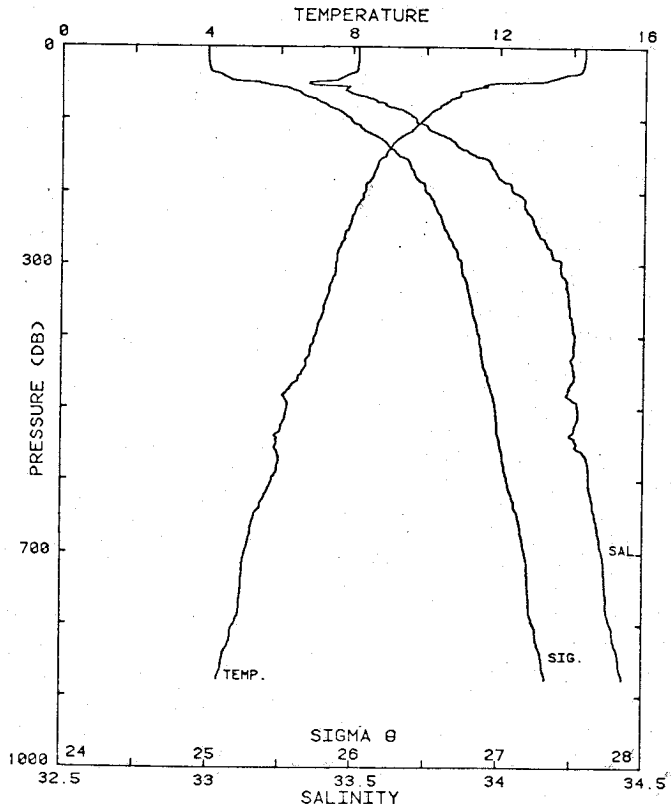
CAST NO. 12 LAT: 34 45.0 N 8 FEB 1981 0846 GMT
 STATION: PUR 8 LONG: 121 30.0 W DPTH: 677M PROBE 2567
 80.0 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
1	14.388	33.491	14.308	24.960	300.5	0.003
10	14.384	33.491	14.382	24.961	300.7	0.030
20	14.088	33.472	14.085	25.008	296.5	0.060
30	14.084	33.475	14.079	25.012	296.4	0.090
40	14.079	33.475	14.074	25.013	296.6	0.119
50	13.331	33.454	13.324	25.150	283.8	0.149
60	12.111	33.482	12.103	25.411	259.1	0.176
70	11.412	33.515	11.403	25.567	244.4	0.201
80	11.002	33.532	10.993	25.654	236.3	0.225
90	10.670	33.548	10.659	25.725	229.8	0.248
100	10.045	33.630	10.034	25.897	213.6	0.271
110	9.708	33.696	9.696	26.005	203.4	0.292
120	9.352	33.724	9.339	26.085	195.9	0.312
130	9.304	33.828	9.290	26.174	187.7	0.331
140	9.166	33.866	9.151	26.226	183.0	0.349
150	9.243	33.954	9.226	26.283	177.8	0.367
175	8.687	33.960	8.668	26.376	169.3	0.411
200	8.444	33.969	8.424	26.421	165.4	0.453
225	8.277	34.080	8.254	26.534	155.2	0.493
250	8.024	34.128	7.999	26.610	148.4	0.531
300	7.736	34.157	7.706	26.677	142.7	0.603
400	7.038	34.241	7.001	26.842	128.3	0.738
500	6.324	34.262	6.279	26.955	118.4	0.862
600	5.649	34.303	5.598	27.074	107.7	0.975
655	5.254	34.346	5.200	27.155	100.2	1.033

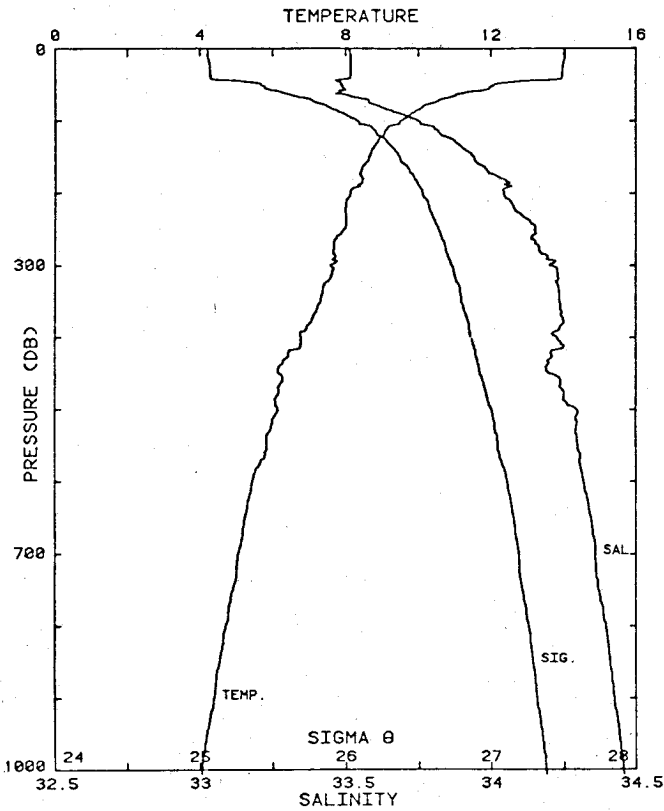
STATION 12 PUR 8

CAST NO. 13 LAT: 34 45.2 N 8 FEB 1981 1031 GMT
 STATION: PUR 9 LONG: 121 40.1 W DPTH: 887M PROBE 2567
 95.8 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
1	14.300	33.517	14.300	24.998	296.9	0.003
10	14.306	33.517	14.305	24.998	297.2	0.030
20	14.291	33.516	14.288	25.000	297.3	0.059
30	14.236	33.514	14.232	25.010	296.6	0.089
40	13.636	33.476	13.631	25.106	287.7	0.118
50	11.802	33.348	11.796	25.365	263.2	0.147
60	11.072	33.472	11.065	25.595	241.5	0.172
70	10.769	33.545	10.761	25.706	231.2	0.195
80	10.412	33.609	10.403	25.818	220.7	0.218
90	10.130	33.680	10.120	25.921	211.1	0.239
100	9.920	33.715	9.909	25.985	205.2	0.260
110	9.699	33.753	9.687	26.051	199.1	0.281
120	9.446	33.790	9.433	26.122	192.5	0.300
130	9.156	33.844	9.142	26.211	184.2	0.319
140	9.014	33.869	9.000	26.253	180.4	0.337
150	8.895	33.918	8.879	26.311	175.1	0.355
175	8.568	33.990	8.549	26.419	165.3	0.397
200	8.326	34.049	8.306	26.502	157.8	0.437
225	8.072	34.092	8.050	26.574	151.2	0.476
250	7.904	34.125	7.880	26.625	146.8	0.513
300	7.553	34.211	7.523	26.745	136.2	0.583
400	6.960	34.259	6.923	26.866	125.9	0.715
500	6.199	34.271	6.154	26.978	116.1	0.836
600	5.800	34.310	5.748	27.060	109.2	0.949
800	4.775	34.388	4.711	27.244	92.7	1.148
877	4.304	34.432	4.236	27.331	84.4	1.216

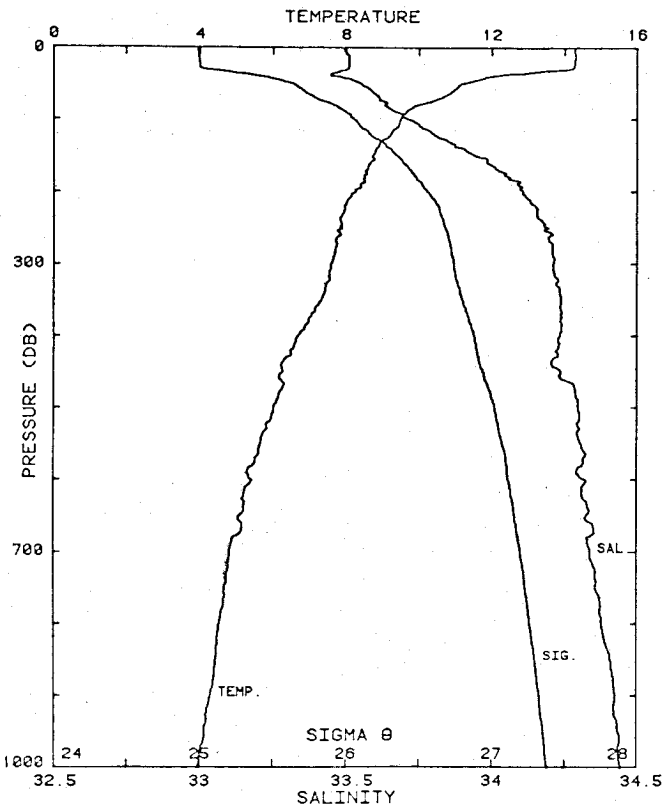


STATION 13 PUR 9



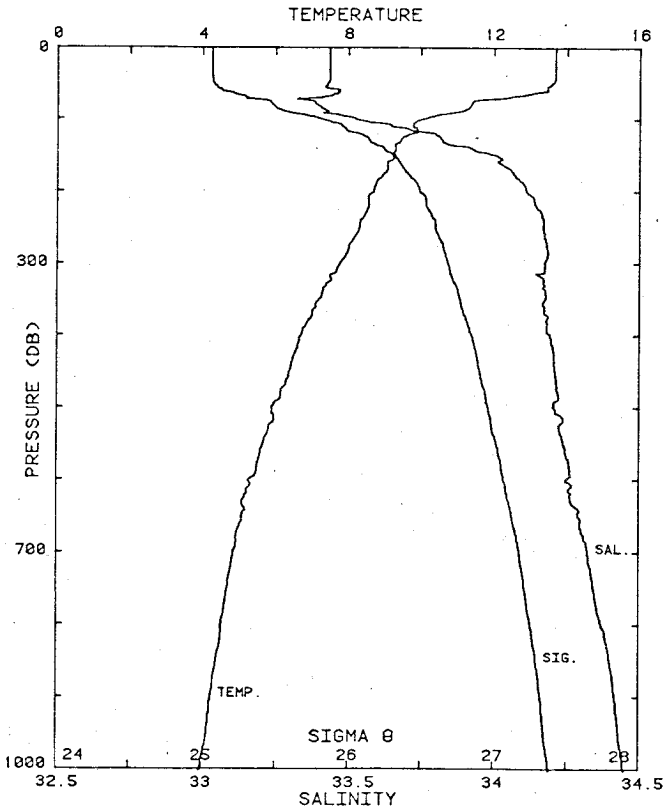
CAST NO. 14 LAT: 34 45.0 N 8 FEB 1981 1227 GMT
 STATION: PUR10 LONG: 121 50.0 W DPTH: 2834M PROBE 2567
 110.9 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	14.031	33.512	14.031	25.051	291.9	0.006
10	14.038	33.516	14.037	25.053	291.9	0.029
20	13.990	33.517	13.987	25.064	291.2	0.058
30	13.960	33.516	13.956	25.069	290.9	0.087
40	13.952	33.514	13.946	25.070	291.1	0.117
50	12.074	33.488	12.067	25.422	257.8	0.144
60	11.263	33.482	11.256	25.568	244.1	0.169
70	10.580	33.575	10.572	25.762	225.9	0.193
80	10.115	33.620	10.106	25.877	215.0	0.215
90	9.783	33.693	9.773	25.990	204.5	0.236
100	9.496	33.752	9.486	26.083	195.8	0.256
110	9.150	33.807	9.138	26.183	186.4	0.275
120	9.029	33.834	9.016	26.223	182.8	0.293
130	8.858	33.883	8.844	26.289	176.8	0.311
140	8.709	33.915	8.694	26.337	172.3	0.329
150	8.635	33.943	8.617	26.371	169.3	0.346
175	8.408	34.017	8.390	26.464	160.9	0.387
200	8.120	34.043	8.100	26.529	155.1	0.427
225	7.981	34.085	7.959	26.582	150.4	0.465
250	7.947	34.153	7.922	26.641	145.3	0.502
300	7.580	34.203	7.551	26.734	137.2	0.572
400	6.783	34.226	6.746	26.865	125.8	0.703
500	6.150	34.296	6.106	27.004	113.6	0.823
600	5.431	34.317	5.381	27.111	103.9	0.933
800	4.701	34.395	4.638	27.259	91.2	1.128
1000	4.053	34.456	3.977	27.378	80.7	1.299
1006	4.037	34.458	3.960	27.381	80.4	1.304



CAST NO. 15 LAT: 34 45.0 N 8 FEB 1981 1411 GMT
 STATION: PUR11 LONG: 122 00.5 W DPTH: 4031M PROBE 2567
 127.0 KM FROM SHORE

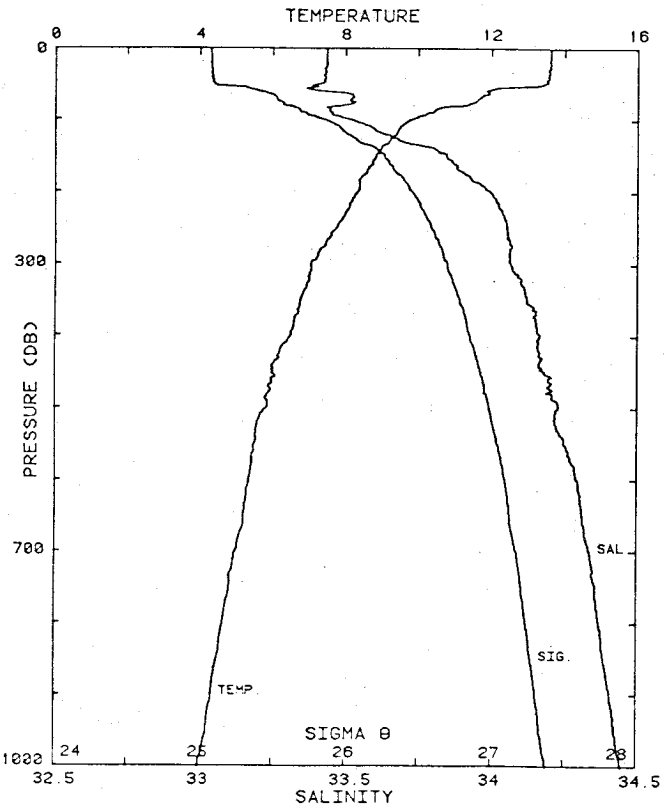
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	14.277	33.492	14.277	24.984	298.2	0.003
10	14.294	33.505	14.293	24.990	297.9	0.030
20	14.278	33.509	14.275	24.997	297.5	0.060
30	14.187	33.507	14.182	25.015	296.1	0.089
40	12.039	33.448	12.034	25.398	259.8	0.117
50	11.239	33.544	11.233	25.620	238.9	0.142
60	10.943	33.584	10.935	25.705	231.0	0.165
70	10.640	33.612	10.632	25.780	224.1	0.188
80	10.004	33.635	9.995	25.907	212.1	0.210
90	9.648	33.669	9.638	25.993	204.1	0.231
100	9.505	33.709	9.494	26.048	199.1	0.251
110	9.434	33.753	9.422	26.095	194.9	0.270
120	9.244	33.797	9.231	26.160	188.8	0.289
130	8.971	33.848	8.957	26.244	181.1	0.308
140	8.845	33.899	8.831	26.303	175.6	0.326
150	8.748	33.938	8.733	26.349	171.4	0.343
175	8.582	34.049	8.563	26.462	161.2	0.385
200	8.262	34.106	8.242	26.556	152.6	0.424
225	7.975	34.159	7.952	26.641	144.9	0.461
250	7.895	34.192	7.870	26.679	141.7	0.497
300	7.592	34.212	7.563	26.740	136.7	0.566
400	6.715	34.234	6.678	26.880	124.4	0.698
500	6.031	34.298	5.988	27.021	111.9	0.816
600	5.429	34.320	5.379	27.113	103.7	0.924
800	4.555	34.379	4.493	27.262	90.6	1.116
1000	3.939	34.445	3.864	27.391	80.1	1.287
1001	3.937	34.445	3.862	27.380	80.2	1.288



STATION 16 ESA 7

CAST NO. 16 LAT: 36 0.0 N 8 FEB 1981 2142 GMT
 STATION: ESA 7 LONG: 122 39.0 W DPTH: 3411M PROBE 2567
 78.1 KM FROM SHORE

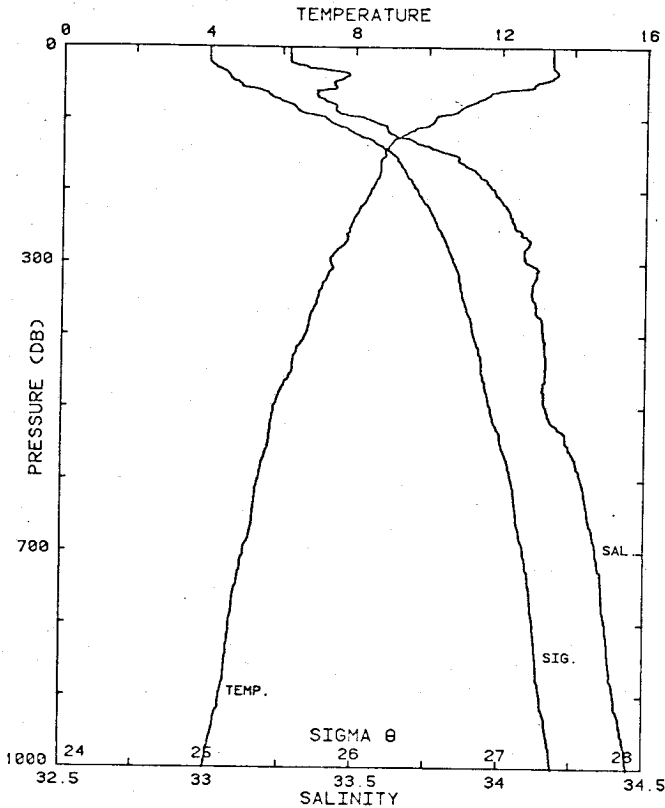
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	13.681	33.435	13.680	25.064	290.7	0.006
10	13.677	33.434	13.675	25.064	290.9	0.029
20	13.677	33.435	13.674	25.065	291.0	0.058
30	13.677	33.435	13.673	25.065	291.3	0.087
40	13.673	33.435	13.668	25.067	291.5	0.116
50	13.571	33.428	13.564	25.082	290.3	0.146
60	13.443	33.468	13.435	25.139	285.2	0.174
70	12.309	33.399	12.300	25.309	269.1	0.202
80	11.352	33.394	11.342	25.484	252.6	0.228
90	10.869	33.427	10.858	25.597	242.0	0.253
100	10.016	33.529	10.005	25.823	220.6	0.276
110	9.787	33.655	9.774	25.960	207.7	0.297
120	9.722	33.801	9.709	26.085	196.1	0.317
130	9.431	33.825	9.416	26.152	189.9	0.336
140	9.311	33.924	9.296	26.248	180.9	0.355
150	9.241	34.010	9.224	26.327	173.7	0.373
175	8.981	34.065	8.963	26.412	166.0	0.415
200	8.700	34.112	8.679	26.494	158.7	0.456
225	8.528	34.151	8.504	26.551	153.6	0.495
250	8.303	34.171	8.278	26.601	149.3	0.532
300	7.766	34.175	7.736	26.686	141.9	0.605
400	6.703	34.193	6.667	26.849	127.3	0.740
500	5.918	34.206	5.875	26.963	117.2	0.862
600	5.297	34.249	5.247	27.073	107.3	0.974
800	4.543	34.372	4.480	27.258	91.0	1.171
1000	3.951	34.449	3.876	27.382	80.0	1.341
1002	3.943	34.450	3.868	27.384	79.8	1.343



STATION 17 ESA 6

CAST NO. 17 LAT: 36 8.1 N 9 FEB 1981 0031 GMT
 STATION: ESA 6 LONG: 122 22.6 W DPTH: 1632M PROBE 2567
 49.4 KM FROM SHORE NO COND 476- 478 DR.

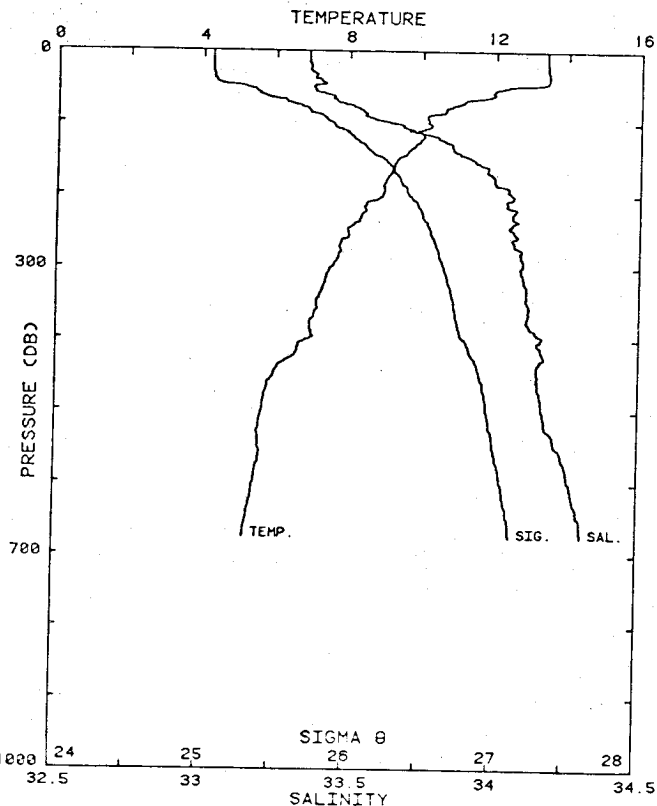
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	13.618	33.434	13.617	25.076	289.5	0.006
10	13.603	33.433	13.602	25.079	289.5	0.029
20	13.598	33.433	13.595	25.080	289.6	0.058
30	13.557	33.429	13.553	25.085	289.4	0.087
40	13.567	33.428	13.561	25.083	289.9	0.116
50	13.397	33.405	13.390	25.100	288.6	0.145
60	11.873	33.417	11.865	25.406	259.6	0.172
70	11.653	33.520	11.644	25.526	248.3	0.197
80	11.172	33.483	11.162	25.586	242.8	0.222
90	10.271	33.454	10.260	25.722	230.0	0.245
100	9.752	33.525	9.740	25.864	216.6	0.268
110	9.489	33.589	9.477	25.958	207.9	0.289
120	9.403	33.635	9.390	26.008	203.3	0.309
130	9.178	33.698	9.164	26.094	195.3	0.329
140	8.961	33.808	8.946	26.214	184.1	0.348
150	8.827	33.847	8.811	26.266	179.3	0.366
175	8.520	33.913	8.502	26.365	170.3	0.410
200	8.312	34.000	8.292	26.465	161.2	0.452
225	8.038	34.037	8.015	26.536	154.9	0.491
250	7.726	34.055	7.702	26.597	149.4	0.529
300	7.050	34.068	7.022	26.703	139.8	0.601
400	6.487	34.147	6.451	26.858	126.2	0.734
500	5.841	34.228	5.798	26.990	114.6	0.854
600	5.366	34.297	5.316	27.102	104.7	0.963
800	4.662	34.372	4.599	27.245	92.4	1.160
1000	3.972	34.448	3.897	27.379	80.3	1.334
1001	3.970	34.448	3.894	27.380	80.3	1.334



STATION 18 ESA 5

CAST NO. 18 LAT: 36 12.8 N 9 FEB 1981 0307 GMT
 STATION: ESA 5 LONG: 122 12.7 W DPTH: 1061M PROBE 2567
 32.2 KM FROM SHORE

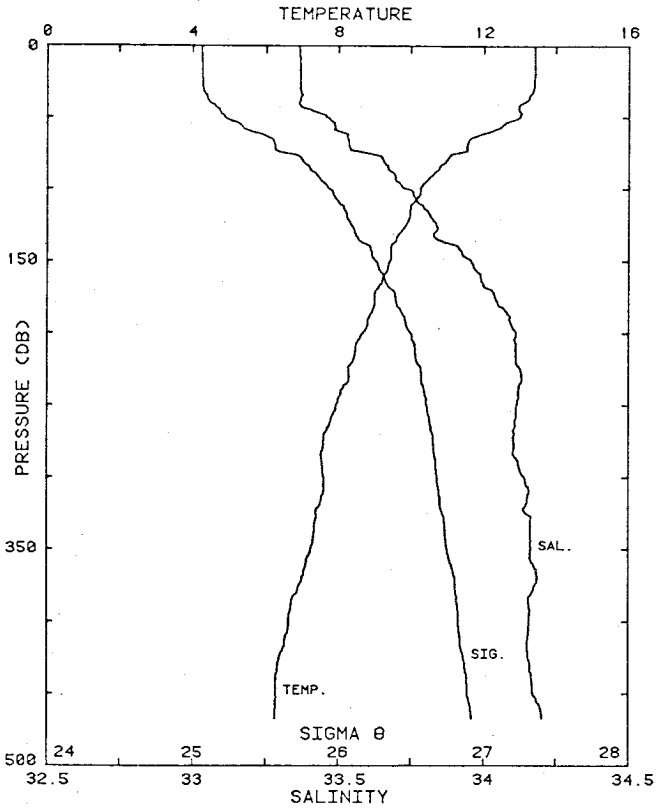
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	13.384	33.276	13.384	25.001	296.6	0.006
10	13.387	33.276	13.386	25.001	296.8	0.030
20	13.390	33.276	13.387	25.001	297.1	0.059
30	13.451	33.383	13.446	25.071	290.8	0.089
40	13.449	33.468	13.443	25.137	284.7	0.118
50	12.930	33.427	12.923	25.210	278.1	0.146
60	11.916	33.366	11.909	25.358	264.2	0.173
70	11.495	33.377	11.486	25.444	256.1	0.199
80	11.017	33.433	11.007	25.575	243.9	0.224
90	10.721	33.442	10.710	25.634	238.4	0.248
100	10.179	33.547	10.168	25.810	221.8	0.271
110	9.935	33.606	9.923	25.897	213.7	0.293
120	9.412	33.619	9.398	25.994	204.6	0.314
130	9.013	33.700	8.999	26.122	192.6	0.333
140	8.888	33.763	8.873	26.191	186.2	0.352
150	8.825	33.850	8.810	26.268	179.1	0.371
175	8.667	33.922	8.649	26.350	171.8	0.414
200	8.424	33.979	8.403	26.432	164.4	0.457
225	8.123	34.026	8.101	26.514	156.9	0.497
250	7.867	34.050	7.842	26.572	151.8	0.535
300	7.371	34.102	7.342	26.685	141.7	0.608
400	6.679	34.147	6.643	26.816	130.3	0.744
500	5.825	34.159	5.782	26.937	119.5	0.869
600	5.413	34.281	5.363	27.085	106.4	0.982
800	4.658	34.370	4.595	27.243	92.6	1.180
1000	3.995	34.449	3.920	27.378	80.6	1.356
1001	3.992	34.449	3.916	27.378	80.5	1.356



STATION 19 ESA 4

CAST NO. 19 LAT: 36 14.0 N 9 FEB 1981 0417 GMT
 STATION: ESA 4 LONG: 122 09.0 W DPTH: 707M PROBE 2567
 26.3 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.399	33.362	13.399	25.064	290.6	0.003
10	13.400	33.362	13.398	25.064	290.8	0.029
20	13.418	33.367	13.416	25.065	291.0	0.058
30	13.443	33.376	13.438	25.068	291.1	0.087
40	13.448	33.402	13.442	25.087	289.5	0.116
50	12.303	33.377	12.296	25.293	270.1	0.145
60	11.973	33.426	11.966	25.394	260.7	0.171
70	11.125	33.460	11.116	25.576	243.5	0.196
80	10.643	33.536	10.633	25.721	229.9	0.220
90	10.140	33.555	10.129	25.822	220.4	0.242
100	10.182	33.656	10.170	25.894	213.9	0.264
110	9.879	33.706	9.867	25.984	205.5	0.285
120	10.041	33.806	10.027	26.036	200.9	0.306
130	9.809	33.853	9.794	26.111	193.8	0.325
140	9.603	33.875	9.588	26.163	189.1	0.345
150	9.305	33.930	9.289	26.255	180.5	0.363
175	9.048	33.998	9.029	26.350	172.0	0.407
200	8.931	34.061	8.910	26.417	166.0	0.449
225	8.373	34.065	8.350	26.507	157.7	0.490
250	7.998	34.066	7.973	26.565	152.6	0.528
300	7.506	34.092	7.477	26.658	144.3	0.603
400	6.864	34.162	6.827	26.804	131.7	0.742
500	5.701	34.169	5.658	26.960	117.2	0.864
600	5.489	34.268	5.439	27.065	108.3	0.977
675	5.249	34.311	5.193	27.129	102.9	1.056



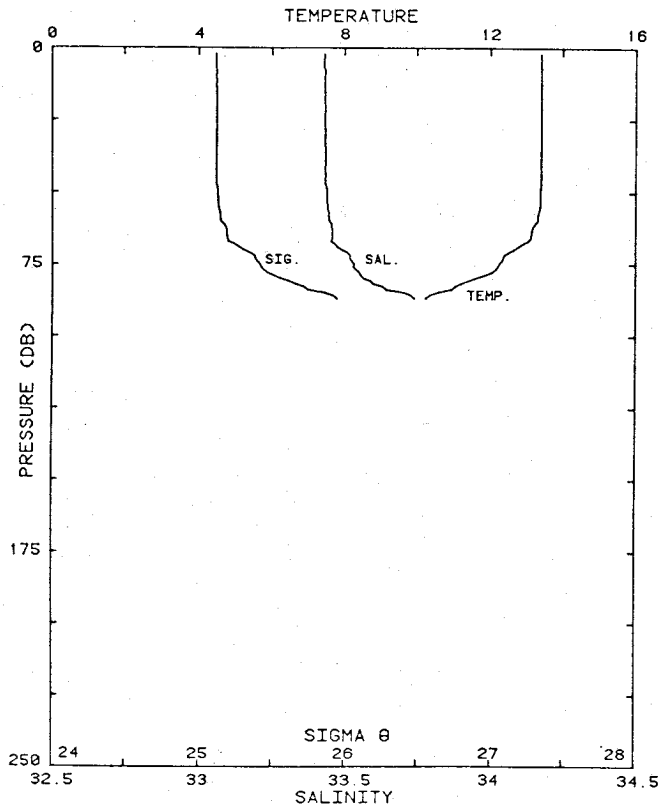
STATION 20 ESA 3

CAST NO. 20 LAT: 36 16.0 N 9 FEB 1981 0533 GMT
 STATION: ESA 3 LONG: 122 04.5 W DPTH: 481M PROBE 2567
 18.7 KM FROM SHORE

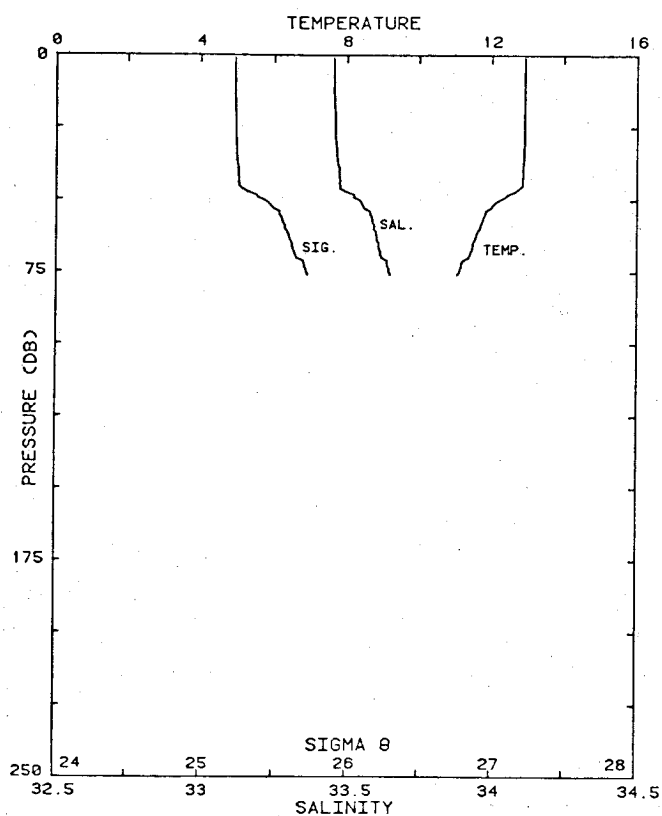
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.413	33.362	13.413	25.062	290.8	0.003
10	13.412	33.365	13.410	25.065	290.8	0.029
20	13.410	33.366	13.408	25.066	290.9	0.058
30	13.374	33.365	13.370	25.073	290.6	0.087
40	13.064	33.361	13.059	25.132	285.2	0.116
50	13.003	33.467	12.996	25.226	276.5	0.144
60	12.149	33.512	12.141	25.427	257.6	0.171
70	11.535	33.537	11.527	25.562	245.0	0.196
80	10.973	33.656	10.963	25.756	226.7	0.219
90	10.594	33.695	10.583	25.853	217.6	0.241
100	10.265	33.744	10.253	25.948	208.7	0.263
110	10.035	33.780	10.022	26.016	202.5	0.283
120	9.959	33.822	9.945	26.062	198.4	0.303
130	9.696	33.831	9.682	26.113	193.7	0.323
140	9.449	33.913	9.434	26.218	183.9	0.342
150	9.393	33.958	9.376	26.262	179.9	0.360
175	8.990	34.039	8.971	26.391	168.0	0.404
200	8.655	34.114	8.634	26.502	157.9	0.444
225	8.276	34.128	8.253	26.572	151.6	0.483
250	7.936	34.115	7.911	26.613	148.0	0.521
300	7.600	34.143	7.571	26.685	141.9	0.593
400	6.636	34.158	6.600	26.831	128.9	0.728
467	6.254	34.204	6.213	26.918	121.3	0.812

CAST NO. 21 LAT: 36 18.0 N 9 FEB 1981 0702 GMT
 STATION: ESA 2 LONG: 122 00.0 W DPTH: 91M PROBE 2567
 10.7 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	13.395	33.430	13.394	25.118	285.5	0.006
10	13.397	33.431	13.396	25.118	285.7	0.029
20	13.400	33.433	13.397	25.120	285.8	0.057
30	13.401	33.433	13.397	25.120	286.1	0.086
40	13.403	33.434	13.398	25.120	286.4	0.114
50	13.381	33.440	13.374	25.130	285.7	0.143
60	13.306	33.447	13.298	25.151	284.0	0.171
70	12.663	33.491	12.654	25.312	268.8	0.199
80	11.627	33.564	11.617	25.565	244.9	0.225
87	10.254	33.742	10.244	25.949	208.4	0.241



STATION 21 ESA 2

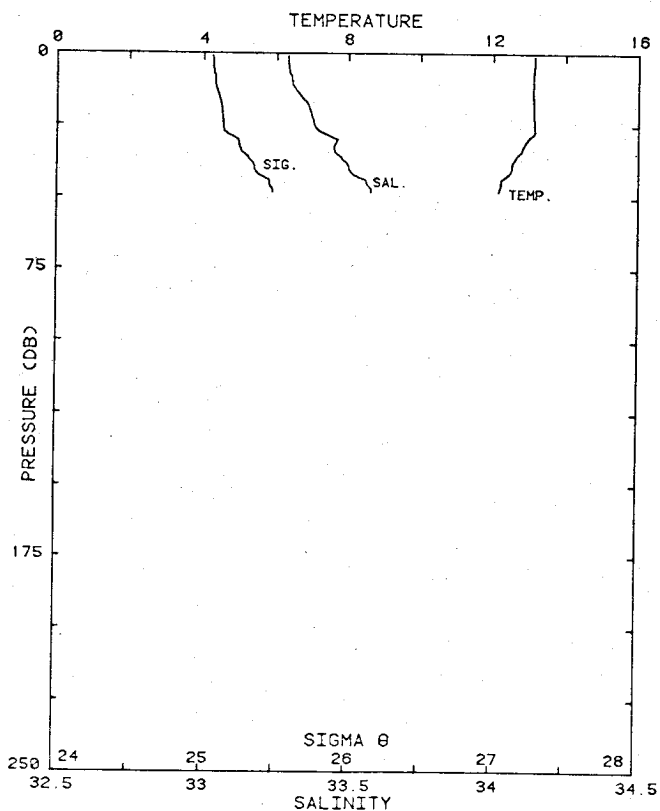


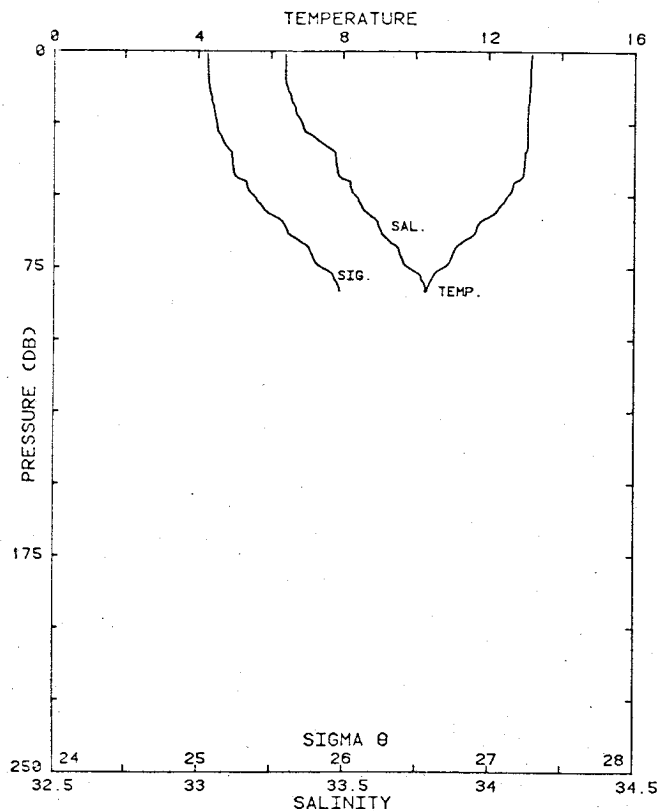
CAST NO. 22 LAT: 36 19.3 N 9 FEB 1981 0756 GMT
 STATION: ESA 1 LONG: 121 57.5 W DPTH: 80M PROBE 2567
 6.5 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.910	33.452	12.910	25.232	274.6	0.003
10	12.909	33.455	12.908	25.234	274.7	0.027
20	12.903	33.458	12.900	25.238	274.5	0.055
30	12.896	33.461	12.892	25.242	274.4	0.082
40	12.860	33.473	12.855	25.259	273.1	0.110
50	12.222	33.545	12.215	25.438	256.3	0.137
60	11.684	33.593	11.676	25.577	243.3	0.161
70	11.368	33.620	11.360	25.656	236.0	0.185
76	11.075	33.650	11.066	25.732	228.9	0.199

CAST NO. 23 LAT: 37 0.0 N 9 FEB 1981 1858 GMT
 STATION: DAV 1 LONG: 122 14.0 W DPTH: 59M PROBE 2567
 3.3 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.139	33.290	13.139	25.061	290.9	0.003
10	13.104	33.305	13.103	25.080	289.3	0.029
20	13.126	33.368	13.123	25.125	285.4	0.058
30	12.942	33.463	12.938	25.235	275.2	0.086
40	12.518	33.501	12.513	25.347	264.7	0.113
48	12.157	33.578	12.151	25.476	252.6	0.134





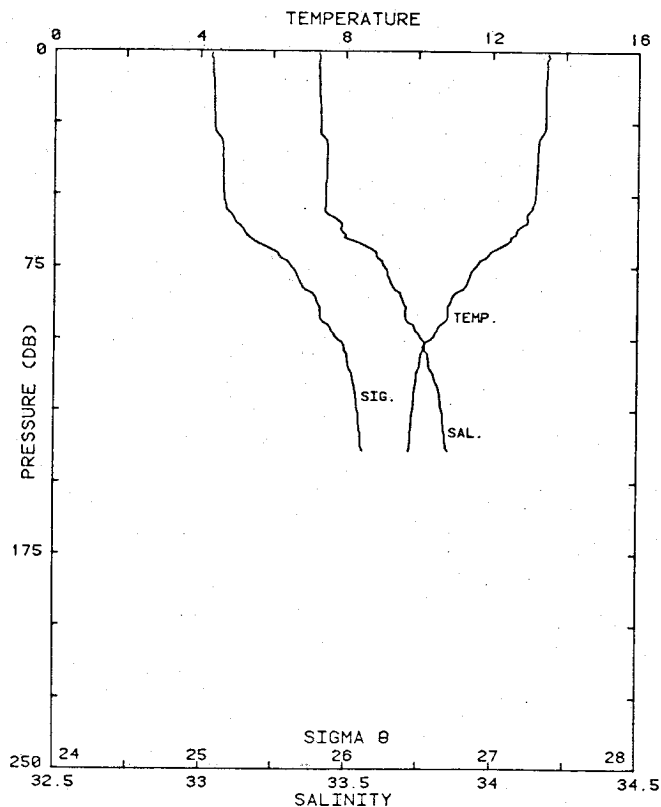
STATION 24 DAV 2

CAST NO. 24 LAT: 36 58.5 N 9 FEB 1981 1930 GMT
 STATION: DAV 2 LONG: 122 17.0 W DPTH: 89M PROBE 2567
 8.3 KM FROM SHORE

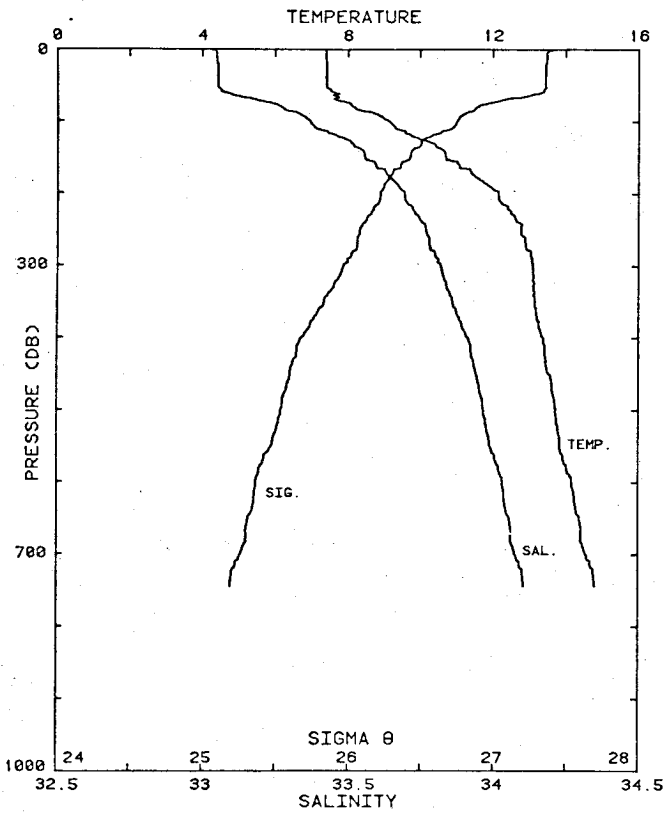
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.170	33.299	13.170	25.062	290.6	0.003
10	13.132	33.300	13.131	25.071	290.2	0.029
20	13.070	33.335	13.067	25.110	286.8	0.058
30	13.062	33.401	13.058	25.163	282.0	0.086
40	12.960	33.477	12.955	25.242	274.7	0.114
50	12.502	33.544	12.495	25.384	261.5	0.141
60	11.703	33.620	11.695	25.595	241.6	0.166
70	11.011	33.694	11.002	25.779	224.3	0.190
80	10.381	33.778	10.372	25.955	207.7	0.211
83	10.284	33.781	10.275	25.974	206.0	0.217

CAST NO. 25 LAT: 36 57.0 N 9 FEB 1981 2013 GMT
 STATION: DAV 3 LONG: 122 20.4 W DPTH: 142M PROBE 2567
 14.4 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.503	33.407	13.502	25.078	289.2	0.003
10	13.449	33.408	13.448	25.090	288.3	0.029
20	13.444	33.412	13.441	25.094	288.2	0.058
30	13.298	33.424	13.294	25.133	284.8	0.086
40	13.221	33.434	13.216	25.157	282.8	0.115
50	13.177	33.431	13.170	25.164	282.5	0.143
60	12.951	33.487	12.943	25.252	274.4	0.171
70	11.961	33.606	11.952	25.536	247.5	0.197
80	11.353	33.656	11.343	25.688	233.2	0.221
90	10.815	33.707	10.805	25.823	220.5	0.244
100	10.365	33.764	10.354	25.947	208.9	0.265
110	10.031	33.790	10.019	26.024	201.7	0.286
120	9.898	33.826	9.884	26.075	197.1	0.306
130	9.825	33.838	9.810	26.097	195.2	0.325
139	9.753	33.854	9.738	26.122	193.1	0.343



STATION 25 DAV 3



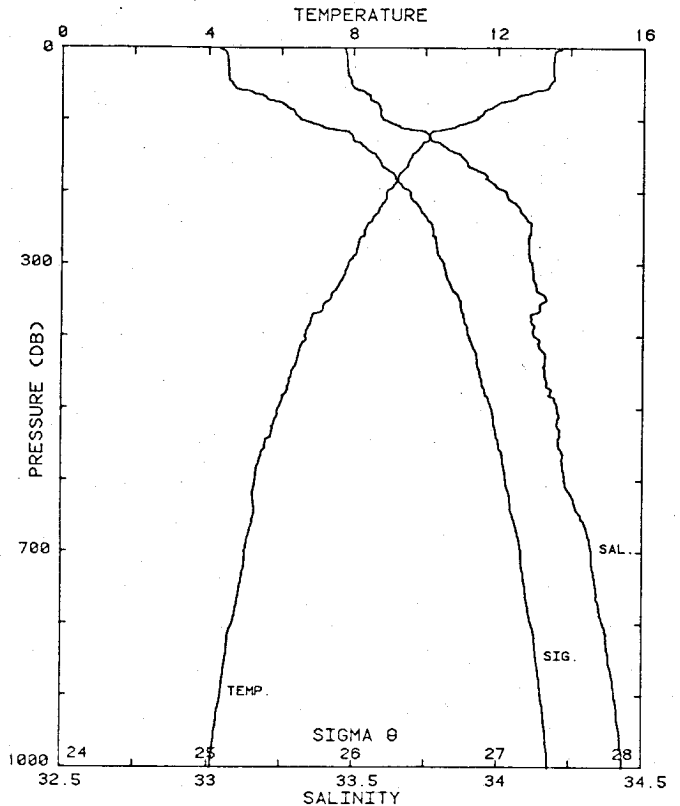
STATION 26 DAV 4

CAST NO. 26 LAT: 36 55.0 N 9 FEB 1981 2113 GMT
 STATION: DAV 4 LONG: 122 24.5 W DPTH: 763M PROBE 2567
 21.6 KM FROM SHORE

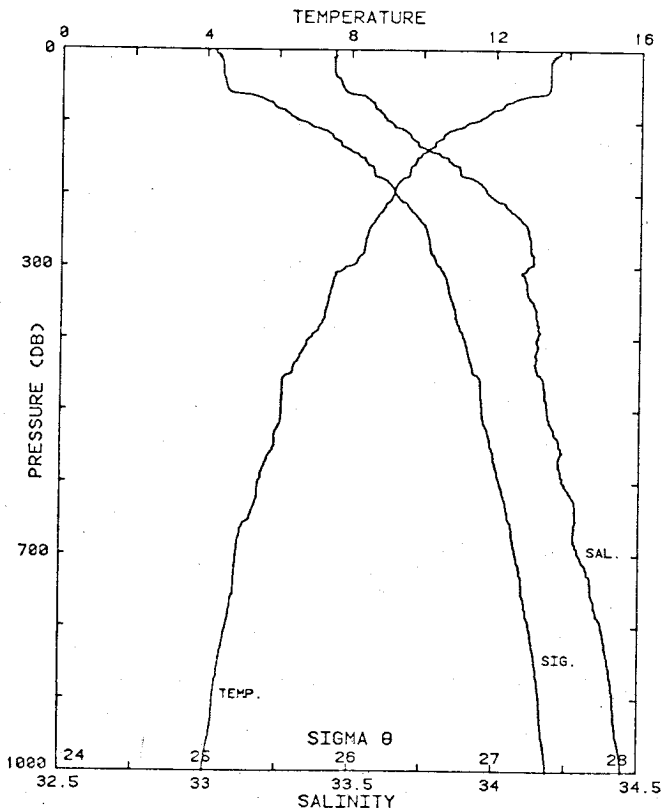
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.627	33.423	13.627	25.065	290.5	0.003
10	13.467	33.424	13.465	25.099	287.5	0.029
20	13.445	33.427	13.442	25.106	287.2	0.058
30	13.436	33.426	13.432	25.107	287.3	0.086
40	13.433	33.426	13.428	25.108	287.5	0.115
50	13.433	33.425	13.426	25.108	287.8	0.144
60	13.287	33.460	13.279	25.165	282.7	0.172
70	12.218	33.461	12.209	25.374	262.9	0.200
80	11.534	33.525	11.524	25.552	246.1	0.225
90	11.172	33.604	11.161	25.680	234.2	0.249
100	10.995	33.646	10.983	25.744	228.3	0.272
110	10.842	33.669	10.829	25.790	224.2	0.295
120	10.303	33.721	10.289	25.924	211.5	0.317
130	10.041	33.796	10.027	26.028	201.8	0.337
140	9.763	33.831	9.748	26.102	195.0	0.357
150	9.705	33.839	9.689	26.118	193.7	0.376
175	9.176	33.939	9.158	26.282	178.4	0.423
200	8.885	34.020	8.864	26.393	168.3	0.466
225	8.639	34.062	8.615	26.464	161.9	0.507
250	8.315	34.096	8.289	26.541	155.0	0.547
300	7.858	34.136	7.829	26.641	146.1	0.623
400	6.717	34.173	6.680	26.832	128.9	0.761
500	6.166	34.216	6.122	26.939	119.8	0.885
600	5.486	34.272	5.436	27.069	108.0	1.000
744	4.794	34.351	4.735	27.212	95.1	1.147

CAST NO. 27 LAT: 36 53.0 N 9 FEB 1981 2222 GMT
 STATION: DAV 5 LONG: 122 29.0 W DPTH: 1579M PROBE 2567
 29.2 KM FROM SHORE S=50+0.03 AT 181-298 DB.

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.748	33.470	13.748	25.077	289.4	0.003
10	13.539	33.475	13.538	25.123	285.2	0.029
20	13.521	33.477	13.518	25.129	285.0	0.057
30	13.519	33.478	13.515	25.131	285.1	0.086
40	13.523	33.482	13.518	25.133	285.1	0.114
50	13.435	33.491	13.428	25.159	283.0	0.143
60	13.057	33.528	13.049	25.263	273.3	0.171
70	12.506	33.558	12.497	25.394	261.0	0.197
80	11.948	33.588	11.937	25.525	248.8	0.223
90	11.605	33.593	11.594	25.592	242.6	0.247
100	11.404	33.602	11.391	25.637	238.6	0.271
110	10.819	33.662	10.806	25.789	224.3	0.295
120	10.126	33.759	10.112	25.984	205.8	0.316
130	10.054	33.774	10.039	26.008	203.7	0.336
140	9.818	33.826	9.802	26.089	196.2	0.356
150	9.624	33.874	9.607	26.159	189.7	0.375
175	9.281	33.955	9.262	26.279	178.8	0.422
200	8.923	34.028	8.901	26.393	168.3	0.466
225	8.708	34.078	8.684	26.466	161.8	0.507
250	8.342	34.113	8.316	26.551	154.1	0.547
300	7.859	34.119	7.829	26.628	147.4	0.622
400	6.664	34.125	6.627	26.801	131.7	0.761
500	5.937	34.205	5.893	26.960	117.5	0.886
600	5.305	34.232	5.255	27.059	108.7	0.999
800	4.678	34.367	4.615	27.239	93.0	1.200
1000	4.092	34.434	4.016	27.356	82.8	1.374
1001	4.078	34.434	4.002	27.357	82.6	1.375



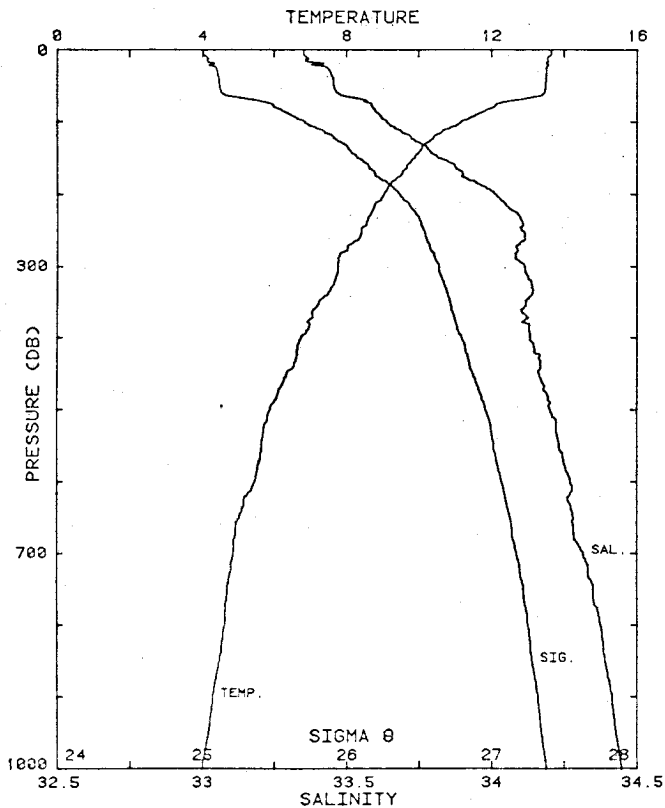
STATION 27 DAV 5



STATION 28 DAV 6

CAST NO. 28 LAT: 36 51.0 N 9 FEB 1981 2341 GMT
 STATION: DAV 6 LONG: 122 33.0 W DPTH: 1553M PROBE 2567
 36.1 KM FROM SHORE

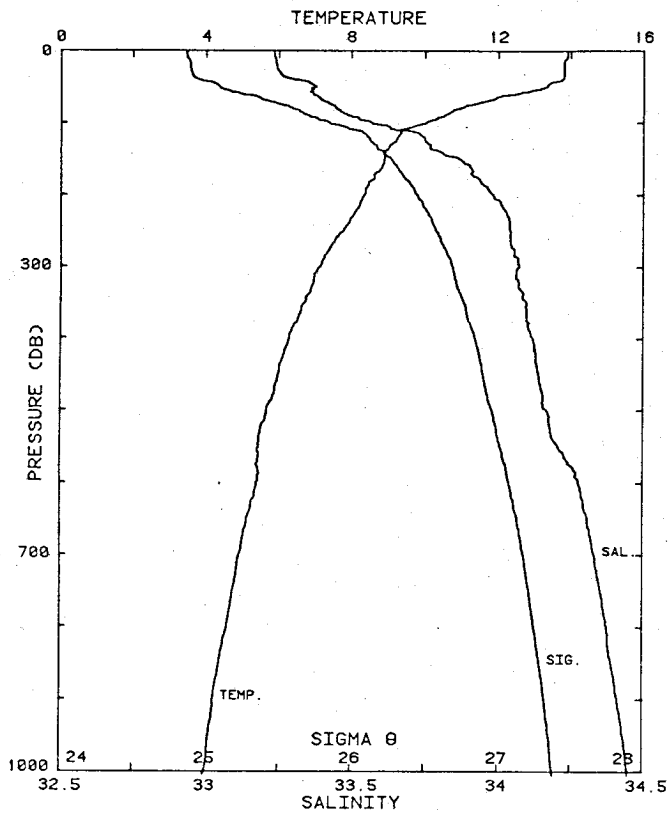
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.745	33.442	13.745	25.056	291.4	0.003
10	13.590	33.440	13.588	25.086	288.7	0.029
20	13.481	33.440	13.478	25.108	286.9	0.058
30	13.475	33.440	13.470	25.111	287.0	0.086
40	13.483	33.460	13.478	25.125	286.0	0.115
50	13.467	33.470	13.460	25.136	285.2	0.144
60	13.280	33.501	13.272	25.198	279.5	0.172
70	12.454	33.568	12.445	25.412	259.4	0.199
80	12.136	33.585	12.126	25.487	252.5	0.224
90	11.750	33.612	11.739	25.580	243.8	0.249
100	11.275	33.639	11.263	25.689	233.6	0.273
110	10.830	33.680	10.817	25.800	223.1	0.296
120	10.546	33.708	10.532	25.872	216.5	0.318
130	10.327	33.733	10.312	25.930	211.2	0.339
140	10.082	33.778	10.066	26.008	203.9	0.360
150	9.829	33.837	9.812	26.096	195.7	0.380
175	9.503	33.906	9.484	26.204	186.0	0.427
200	9.175	33.980	9.153	26.316	175.7	0.472
225	8.818	34.061	8.794	26.436	164.7	0.515
250	8.487	34.113	8.461	26.528	156.3	0.555
300	7.858	34.114	7.828	26.624	147.7	0.632
400	6.856	34.146	6.819	26.792	132.8	0.772
500	6.110	34.182	6.067	26.920	121.5	0.898
600	5.483	34.237	5.433	27.041	110.6	1.014
800	4.619	34.375	4.556	27.251	91.7	1.215
1000	4.002	34.446	3.926	27.375	80.8	1.386
1001	4.001	34.446	3.925	27.375	80.8	1.387



STATION 29 DAV 7

CAST NO. 29 LAT: 36 47.0 N 10 FEB 1981 0117 GMT
 STATION: DAV 7 LONG: 122 42.0 W DPTH: 2281M PROBE 2567
 51.4 KM FROM SHORE

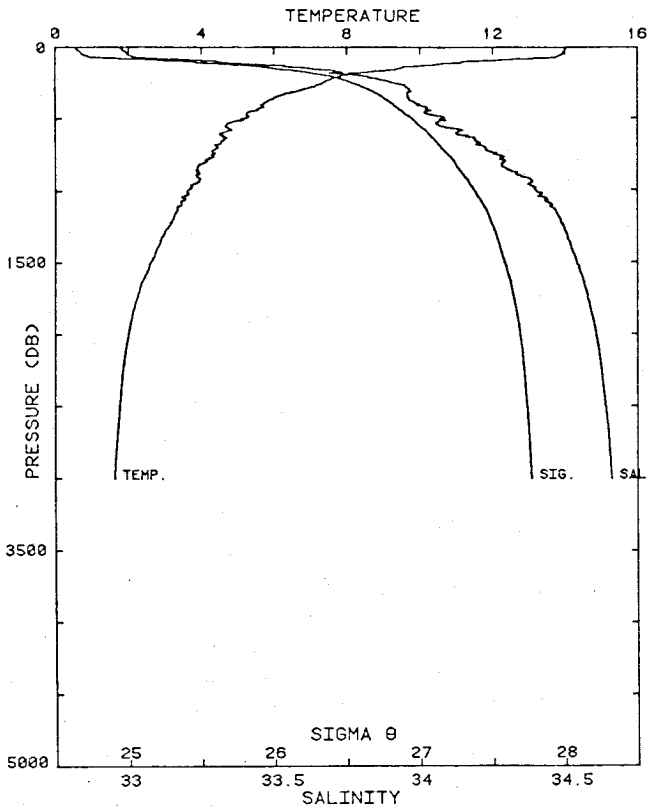
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.637	33.352	13.637	25.009	295.9	0.003
10	13.545	33.360	13.543	25.034	293.7	0.030
20	13.517	33.412	13.515	25.079	289.7	0.059
30	13.506	33.442	13.501	25.106	287.5	0.088
40	13.493	33.452	13.487	25.117	286.7	0.116
50	13.480	33.456	13.473	25.122	286.5	0.145
60	13.434	33.471	13.426	25.143	284.7	0.174
70	12.554	33.570	12.545	25.394	261.0	0.201
80	12.014	33.592	12.004	25.515	249.7	0.227
90	11.568	33.615	11.557	25.616	240.3	0.251
100	11.152	33.639	11.140	25.711	231.5	0.275
110	10.748	33.677	10.735	25.813	222.0	0.297
120	10.420	33.721	10.406	25.905	213.4	0.319
130	10.166	33.760	10.151	25.979	206.5	0.340
140	10.019	33.790	10.003	26.027	202.1	0.361
150	9.851	33.827	9.834	26.084	196.8	0.381
175	9.455	33.898	9.436	26.206	185.8	0.428
200	9.020	34.016	8.998	26.368	170.7	0.472
225	8.694	34.085	8.671	26.474	161.1	0.514
250	8.400	34.103	8.374	26.534	155.7	0.553
300	7.759	34.115	7.729	26.639	146.3	0.629
400	6.739	34.134	6.703	26.798	132.1	0.769
500	5.894	34.202	5.851	26.963	117.2	0.894
600	5.462	34.272	5.412	27.072	107.7	1.006
800	4.624	34.374	4.561	27.250	91.8	1.203
1000	3.990	34.447	3.915	27.377	80.6	1.376
1001	3.989	34.446	3.914	27.377	80.6	1.376



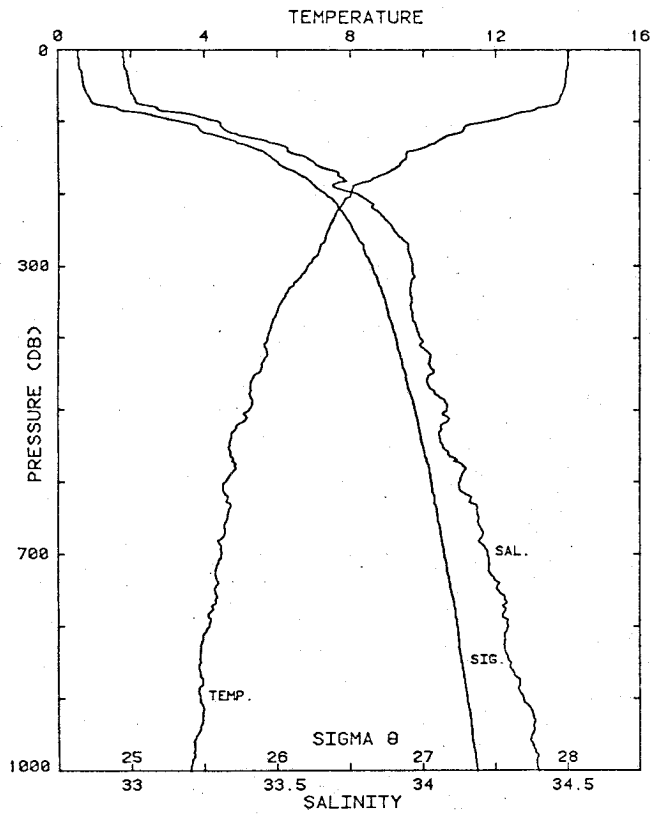
STATION 30 DAV 8

CAST NO. 30 LAT: 36 39.0 N 10 FEB 1981 0343 GMT
 STATION: DAV 8 LONG: 122 59.0 W DPTH: 3017M PROBE 2567
 80.8 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.899	33.234	13.898	24.864	309.7	0.003
10	13.898	33.235	13.897	24.865	309.8	0.031
20	13.807	33.242	13.804	24.870	307.7	0.062
30	13.801	33.253	13.797	24.899	307.1	0.093
40	13.769	33.304	13.763	24.946	303.0	0.123
50	13.343	33.379	13.336	25.090	289.5	0.153
60	12.521	33.368	12.513	25.245	275.0	0.181
70	11.668	33.406	11.660	25.435	257.0	0.207
80	10.954	33.448	10.944	25.597	241.7	0.232
90	10.523	33.497	10.513	25.711	231.1	0.256
100	10.024	33.570	10.012	25.854	217.6	0.278
110	9.290	33.655	9.278	26.042	199.9	0.299
120	9.251	33.749	9.238	26.121	192.5	0.319
130	9.055	33.770	9.041	26.169	188.1	0.338
140	8.868	33.802	8.853	26.224	183.1	0.356
150	8.898	33.869	8.882	26.272	178.8	0.375
175	8.616	33.920	8.598	26.356	171.2	0.418
200	8.338	33.985	8.317	26.450	162.6	0.460
225	8.083	34.031	8.061	26.525	155.9	0.500
250	7.779	34.043	7.755	26.579	151.1	0.538
300	7.133	34.074	7.104	26.696	140.5	0.611
400	6.298	34.122	6.263	26.847	127.1	0.745
500	5.687	34.169	5.644	26.962	117.0	0.867
600	5.414	34.278	5.364	27.082	106.6	0.979
800	4.603	34.378	4.540	27.256	91.3	1.176
1000	3.959	34.450	3.884	27.383	80.0	1.346
1004	3.951	34.450	3.875	27.384	79.9	1.349



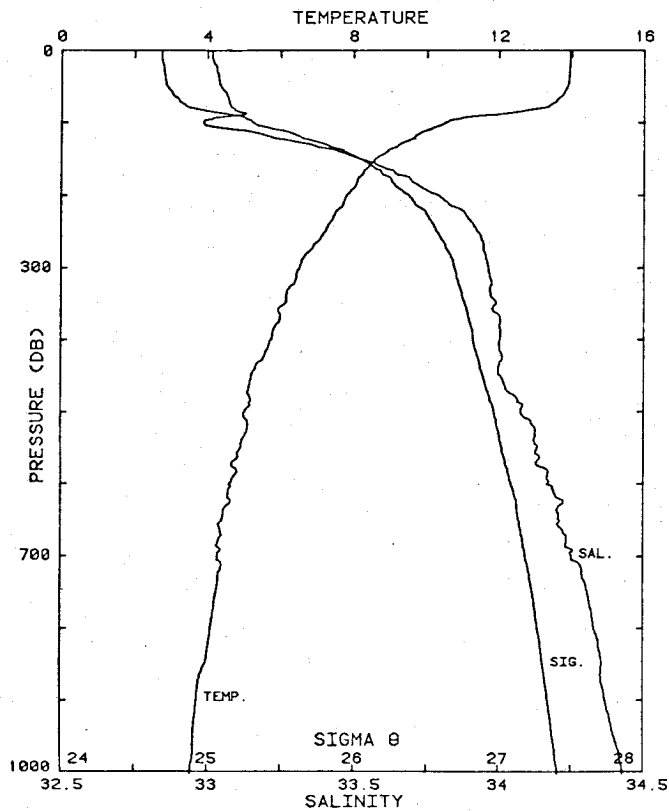
STATION 31 CLL19



STATION 31 CLL19

CAST NO. 31 LAT: 37 0.0 N 11 FEB 1981 0100 GMT
 STATION: CLL19 LONG: 127 03.0 W DPTH: 4659M PROBE 2561
 362. KM FROM SHORE

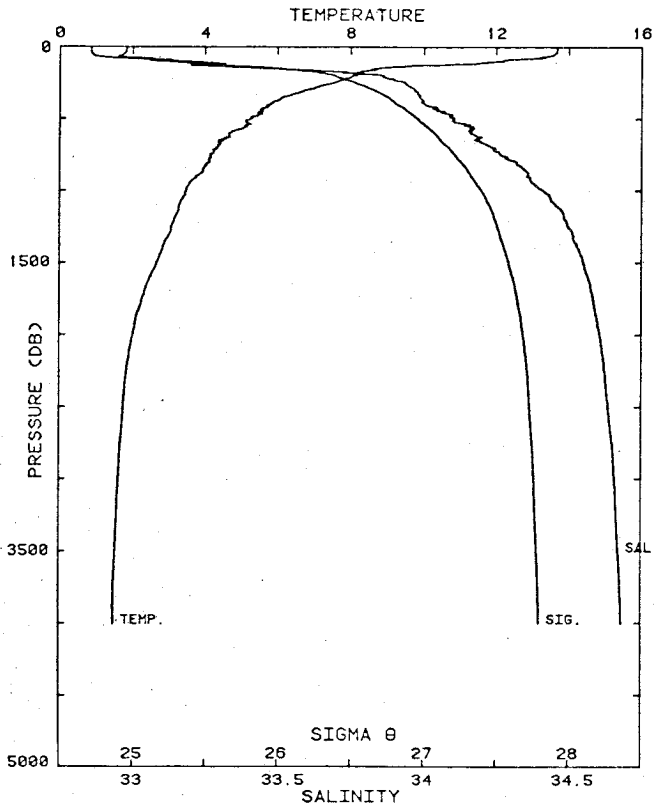
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	14.022	32.973	14.022	24.637	331.3	0.003
10	14.017	32.973	14.016	24.639	331.3	0.033
20	14.000	32.977	13.998	24.645	331.1	0.067
30	13.950	32.988	13.945	24.665	329.5	0.100
40	13.937	32.992	13.932	24.670	329.2	0.133
50	13.910	32.995	13.903	24.679	328.7	0.165
60	13.853	33.001	13.844	24.696	327.3	0.198
70	13.764	33.015	13.753	24.726	324.7	0.230
80	13.291	33.083	13.280	24.874	310.9	0.263
90	12.496	33.208	12.484	25.126	287.0	0.293
100	11.686	33.302	11.674	25.352	265.7	0.321
110	11.118	33.317	11.105	25.468	254.9	0.347
120	10.628	33.383	10.614	25.605	241.8	0.372
130	10.255	33.489	10.241	25.752	228.0	0.395
140	9.671	33.538	9.656	25.888	215.2	0.417
150	9.519	33.605	9.502	25.967	207.9	0.438
175	8.740	33.716	8.722	26.177	188.1	0.488
200	8.010	33.781	7.991	26.339	173.0	0.533
225	7.612	33.847	7.590	26.449	162.8	0.575
250	7.389	33.900	7.365	26.523	156.1	0.614
300	6.826	33.963	6.799	26.650	144.6	0.690
400	5.736	33.992	5.703	26.815	129.6	0.826
500	5.241	34.083	5.201	26.947	117.9	0.950
600	4.559	34.125	4.513	27.059	107.5	1.063
800	4.139	34.294	4.079	27.239	91.9	1.263
1000	3.618	34.400	3.546	27.377	79.6	1.434
1500	2.602	34.540	2.499	27.583	60.8	1.779
2000	1.988	34.606	1.851	27.690	51.0	2.055
2500	1.742	34.640	1.566	27.738	47.3	2.298
3000	1.605	34.661	1.386	27.768	45.5	2.530



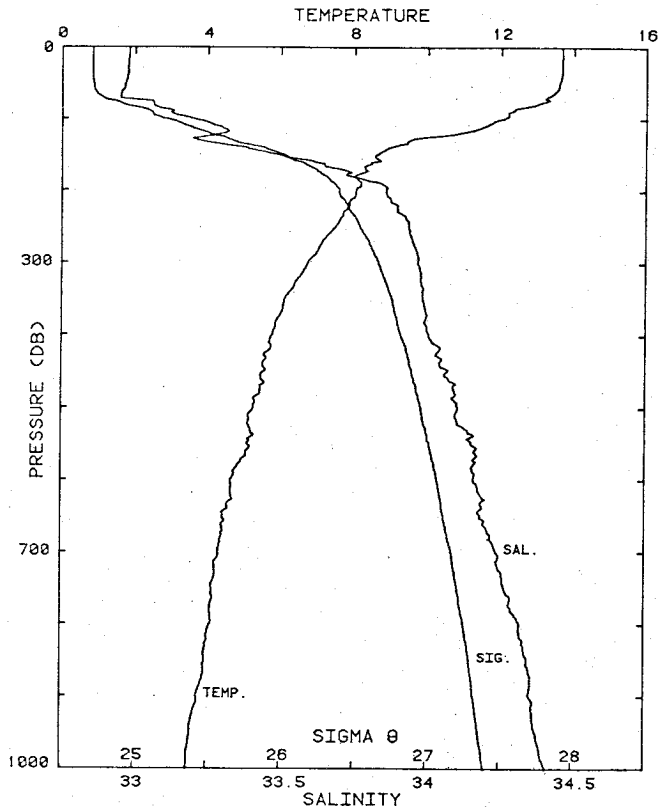
STATION 32 CLL18

CAST NO. 32 LAT: 37 10.7 N 11 FEB 1981 0751 GMT
 STATION: CLL18 LONG: 126 38.4 W DPTH: 4548M PROBE 2561
 322. KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.946	33.015	13.946	24.686	326.6	0.003
10	13.951	33.015	13.949	24.686	326.9	0.032
20	13.942	33.027	13.939	24.696	326.2	0.065
30	13.933	33.034	13.929	24.704	325.7	0.098
40	13.919	33.039	13.914	24.711	325.4	0.131
50	13.875	33.047	13.867	24.726	324.1	0.163
60	13.769	33.066	13.760	24.763	321.0	0.195
70	13.562	33.074	13.552	24.811	316.6	0.227
80	13.163	33.088	13.151	24.902	308.1	0.259
90	11.646	33.097	11.635	25.200	279.8	0.288
100	10.508	32.986	10.497	25.317	268.7	0.315
110	10.045	33.107	10.032	25.490	252.4	0.342
120	9.653	33.223	9.639	25.646	237.7	0.366
130	9.230	33.358	9.216	25.820	221.3	0.389
140	8.897	33.456	8.882	25.950	209.2	0.410
150	8.583	33.532	8.567	26.057	199.0	0.431
175	8.137	33.689	8.119	26.248	181.2	0.478
200	7.802	33.787	7.782	26.375	169.6	0.523
225	7.481	33.882	7.459	26.495	158.4	0.563
250	7.197	33.925	7.174	26.569	151.6	0.603
300	6.516	33.964	6.489	26.693	140.3	0.674
400	5.746	34.004	5.712	26.824	128.8	0.808
500	5.026	34.076	4.986	26.967	115.7	0.931
600	4.613	34.169	4.567	27.087	104.9	1.042
800	4.100	34.331	4.040	27.272	88.7	1.234
1000	3.540	34.430	3.469	27.408	76.6	1.399
1003	3.538	34.430	3.465	27.408	76.6	1.401



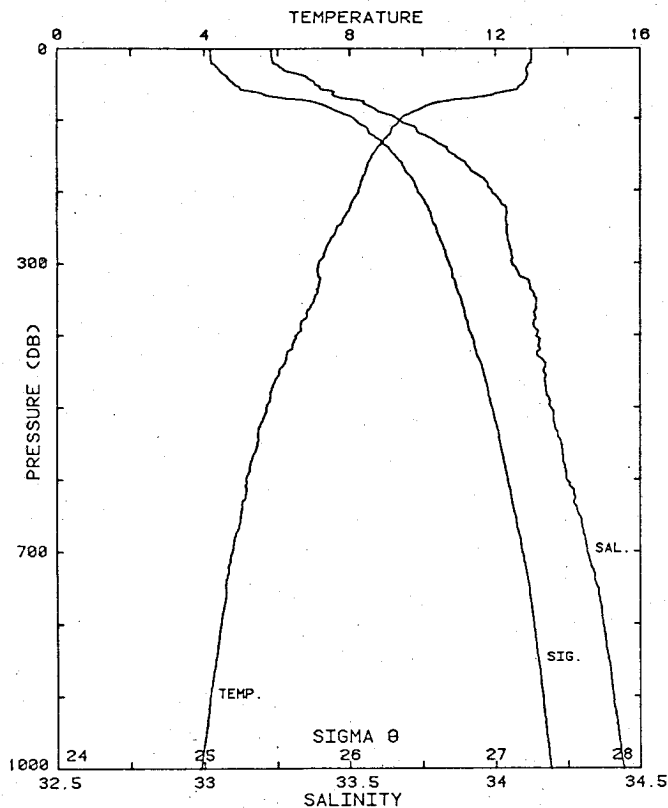
STATION 33 CLL17



STATION 33 CLL17

CAST NO. 33 LAT: 37 24.0 N 11 FEB 1981 1105 GMT
 STATION: CLL17 LONG: 126 11.0 W DPTH: 4440M PROBE 2561
 276. KM FROM SHORE

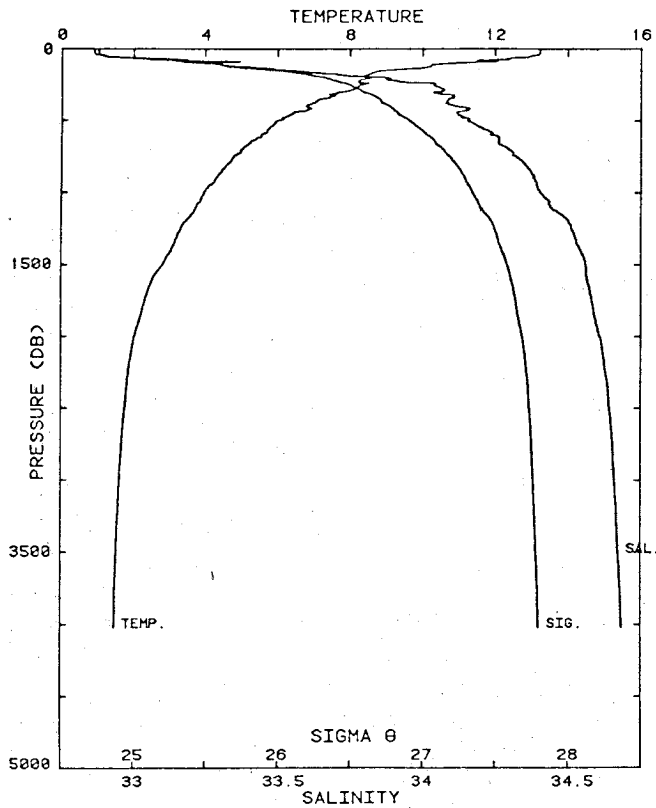
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.668	32.979	13.668	24.715	323.9	0.003
10	13.680	32.979	13.678	24.712	324.3	0.032
20	13.672	32.977	13.668	24.713	324.6	0.065
30	13.665	32.976	13.661	24.714	324.8	0.098
40	13.654	32.974	13.649	24.715	325.0	0.130
50	13.597	32.967	13.590	24.721	324.6	0.162
60	13.517	32.958	13.509	24.730	324.0	0.195
70	13.236	32.950	13.227	24.781	319.4	0.227
80	12.953	33.063	12.942	24.925	306.0	0.258
90	12.251	33.128	12.239	25.111	288.4	0.288
100	12.005	33.203	11.993	25.215	278.7	0.317
110	11.560	33.283	11.546	25.360	265.1	0.343
120	10.801	33.299	10.787	25.510	251.0	0.370
130	9.474	33.229	9.460	25.680	234.7	0.394
140	8.916	33.386	8.902	25.891	214.6	0.416
150	8.576	33.499	8.561	26.032	201.4	0.437
175	8.146	33.723	8.128	26.273	178.8	0.484
200	8.030	33.858	8.010	26.396	167.6	0.527
225	7.777	33.899	7.755	26.466	161.3	0.568
250	7.454	33.937	7.430	26.543	154.3	0.608
300	6.727	33.969	6.700	26.669	142.8	0.682
400	5.770	34.007	5.737	26.823	128.9	0.817
500	5.266	34.108	5.225	26.964	116.2	0.938
600	4.653	34.162	4.606	27.077	105.9	1.050
800	4.110	34.321	4.050	27.263	89.6	1.245
1000	3.469	34.413	3.398	27.402	77.0	1.412
1500	2.668	34.551	2.564	27.507	60.7	1.752
2000	2.013	34.608	1.876	27.689	51.2	2.028
2500	1.758	34.637	1.582	27.734	47.7	2.273
3000	1.623	34.660	1.405	27.766	45.9	2.506
3500	1.541	34.673	1.274	27.785	45.2	2.734
4000	1.491	34.683	1.173	27.801	45.0	2.959



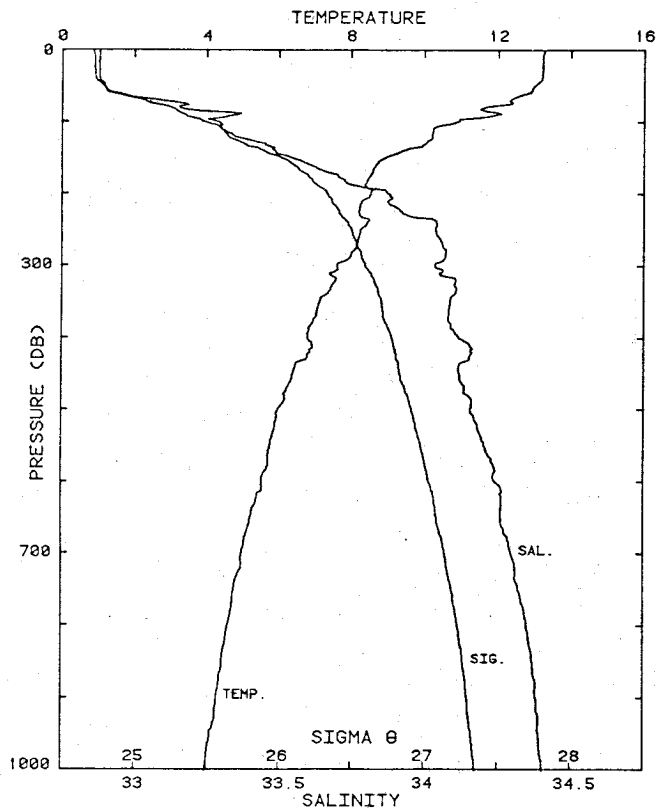
STATION 34 CLL16

CAST NO. 34 LAT: 37 35.7 N 11 FEB 1981 1518 GHT
 STATION: CLL16 LONG: 125 49.8 W DPTH: 4317M PROBE 2561
 239. KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
			TEMP	THETA		
1	13.000	33.228	12.999	25.041	292.8	0.003
10	12.998	33.229	12.998	25.042	292.9	0.029
20	12.983	33.235	12.981	25.050	292.5	0.059
30	12.861	33.271	12.857	25.103	287.7	0.088
40	12.885	33.346	12.880	25.156	282.9	0.116
50	12.783	33.380	12.776	25.202	278.8	0.144
60	12.503	33.420	12.495	25.287	270.9	0.171
70	11.498	33.461	11.488	25.509	250.0	0.198
80	10.223	33.555	10.214	25.808	221.6	0.221
90	9.742	33.604	9.732	25.927	210.4	0.243
100	9.377	33.665	9.366	26.035	200.3	0.263
110	9.187	33.716	9.175	26.106	193.8	0.283
120	9.094	33.743	9.081	26.141	190.6	0.302
130	8.898	33.795	8.884	26.213	183.9	0.321
140	8.740	33.834	8.726	26.270	178.7	0.339
150	8.602	33.861	8.587	26.312	174.9	0.356
175	8.416	33.927	8.398	26.393	167.7	0.399
200	8.238	33.987	8.218	26.467	161.0	0.441
225	8.001	34.038	7.979	26.542	154.2	0.480
250	7.647	34.039	7.622	26.595	149.5	0.517
300	7.148	34.058	7.120	26.682	141.8	0.590
400	6.512	34.143	6.476	26.836	128.4	0.725
500	5.712	34.192	5.668	26.977	115.6	0.847
600	5.153	34.247	5.104	27.088	105.7	0.958
800	4.466	34.373	4.404	27.267	90.0	1.152
1000	3.890	34.443	3.815	27.384	79.7	1.322



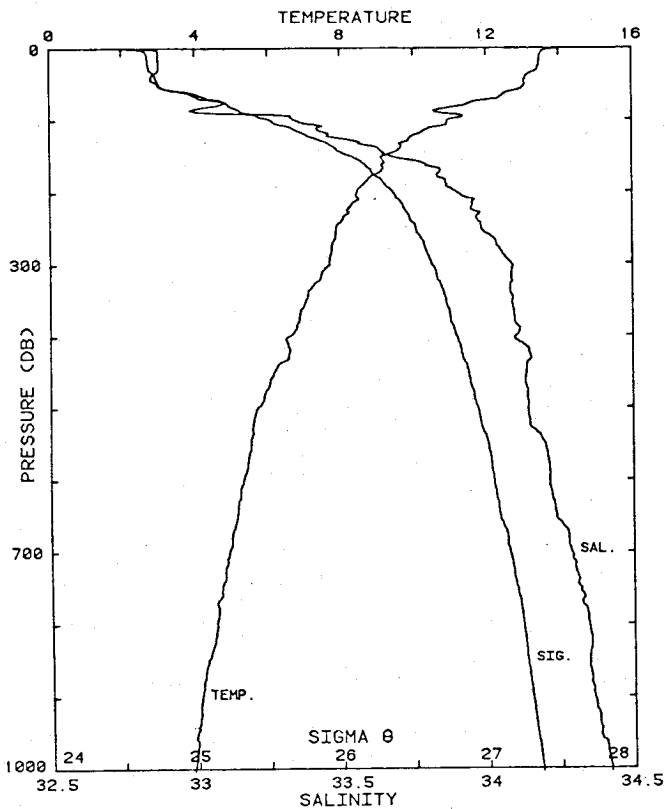
STATION 35 CLL15



STATION 35 CLL15

CAST NO. 35 LAT: 37 48.1 N 11 FEB 1981 1839 GMT
 STATION: CLL15 LONG: 125 20.6 W DPTH: 4074M PROBE 2561
 191. KM FROM SHORE

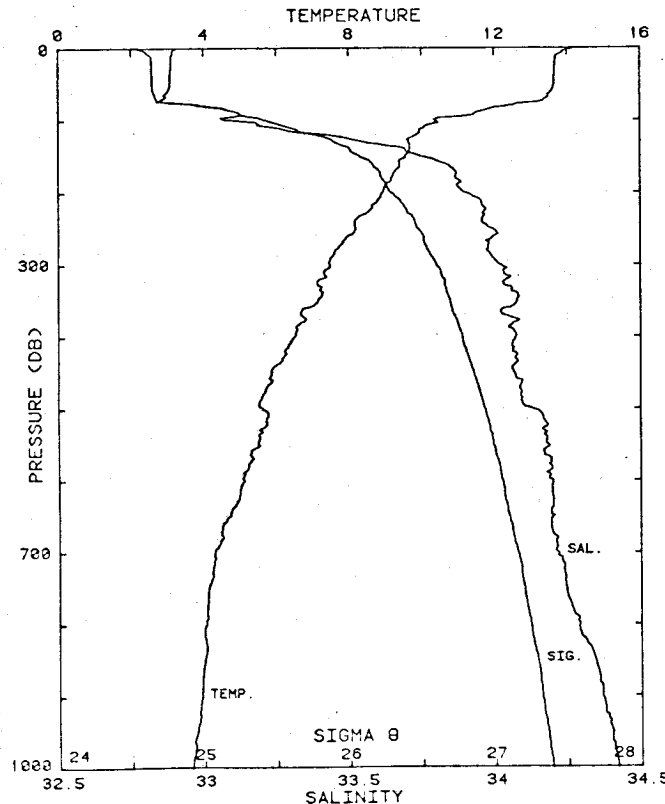
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.280	32.878	13.280	24.715	323.9	0.003
10	13.232	32.878	13.231	24.725	323.1	0.032
20	13.226	32.877	13.222	24.726	323.3	0.065
30	13.220	32.878	13.216	24.728	323.4	0.097
40	13.202	32.880	13.197	24.733	323.1	0.130
50	13.012	32.897	13.006	24.784	318.5	0.162
60	12.845	32.930	12.837	24.843	313.2	0.193
70	12.335	33.076	12.326	25.055	293.2	0.223
80	11.657	33.155	11.648	25.243	275.5	0.252
90	11.982	33.363	11.970	25.344	266.2	0.279
100	10.898	33.288	10.886	25.483	253.0	0.306
110	10.255	33.299	10.241	25.605	241.6	0.329
120	10.217	33.346	10.203	25.648	237.8	0.354
130	10.041	33.442	10.027	25.752	228.0	0.377
140	9.430	33.483	9.415	25.885	215.4	0.399
150	8.923	33.541	8.907	26.012	203.4	0.420
175	8.524	33.705	8.506	26.202	185.7	0.469
200	8.538	33.880	8.517	26.337	173.5	0.514
225	8.218	33.923	8.195	26.420	165.9	0.556
250	8.257	34.039	8.232	26.506	158.3	0.597
300	7.622	34.039	7.593	26.599	150.0	0.674
400	6.803	34.119	6.766	26.778	134.1	0.815
500	5.974	34.157	5.931	26.917	121.6	0.943
600	5.549	34.242	5.499	27.038	111.0	1.059
800	4.611	34.353	4.548	27.236	93.2	1.262
1000	3.956	34.405	3.881	27.347	83.3	1.438
1500	2.811	34.561	2.706	27.583	61.7	1.794
2000	2.034	34.610	1.897	27.689	51.3	2.072
2500	1.772	34.643	1.595	27.738	47.5	2.318
3000	1.628	34.661	1.409	27.767	45.8	2.549
3500	1.543	34.674	1.276	27.786	45.1	2.776
4000	1.491	34.684	1.172	27.801	45.0	3.002
4017	1.489	34.686	1.168	27.803	44.9	3.009



STATION 36 CLL14

CAST NO. 36 LAT: 37 56.0 N 11 FEB 1981 2223 GMT
 STATION: CLL14 LONG: 125 02.0 W DPTH: 4031M PROBE 2561
 161. KM FROM SHORE 15 MIN GAP 730DB (BIO)

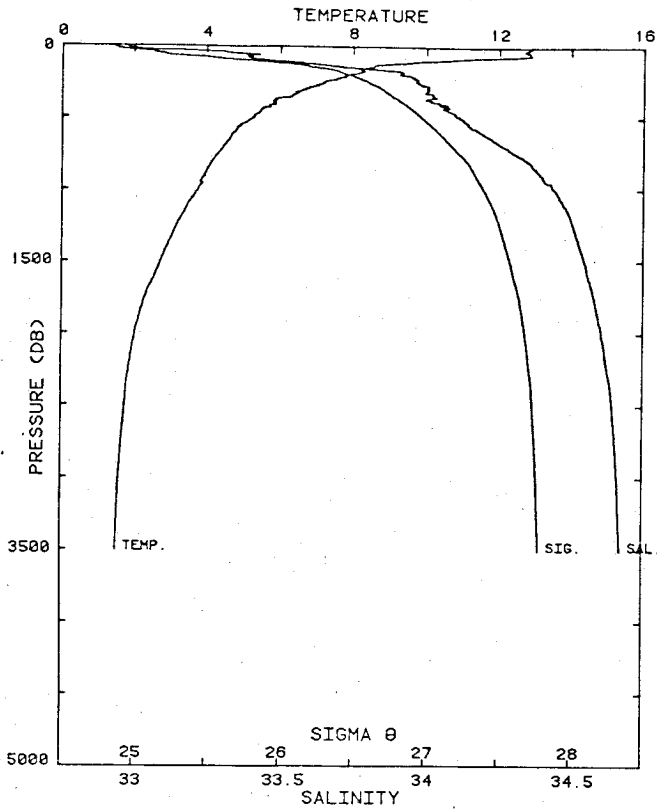
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.954	32.824	13.954	24.537	340.8	0.003
10	13.479	32.876	13.477	24.675	328.0	0.033
20	13.453	32.877	13.451	24.681	327.7	0.066
30	13.401	32.877	13.397	24.691	326.9	0.098
40	13.097	32.854	13.092	24.734	323.1	0.131
50	13.056	32.871	13.049	24.755	321.3	0.163
60	12.771	32.944	12.762	24.868	310.8	0.195
70	12.350	33.039	12.340	25.023	296.3	0.225
80	11.422	33.082	11.412	25.229	276.7	0.254
90	10.705	33.044	10.694	25.328	267.5	0.281
100	10.957	33.344	10.944	25.516	249.9	0.306
110	10.591	33.429	10.578	25.646	237.7	0.331
120	10.097	33.458	10.083	25.755	227.5	0.354
130	9.786	33.559	9.771	25.886	215.2	0.377
140	9.636	33.633	9.620	25.969	207.5	0.398
150	9.197	33.673	9.181	26.071	197.9	0.418
175	8.967	33.831	8.948	26.232	183.1	0.466
200	8.458	33.900	8.437	26.366	170.7	0.510
225	8.184	33.948	8.162	26.444	163.6	0.551
250	7.878	33.983	7.853	26.517	157.0	0.591
300	7.680	34.084	7.650	26.627	147.4	0.668
400	6.570	34.101	6.534	26.795	132.2	0.807
500	5.696	34.139	5.654	26.937	119.4	0.933
600	5.292	34.213	5.242	27.045	110.0	1.046
800	4.527	34.346	4.464	27.239	92.7	1.248
1000	3.878	34.418	3.803	27.365	81.4	1.423
1003	3.874	34.419	3.799	27.367	81.3	1.425



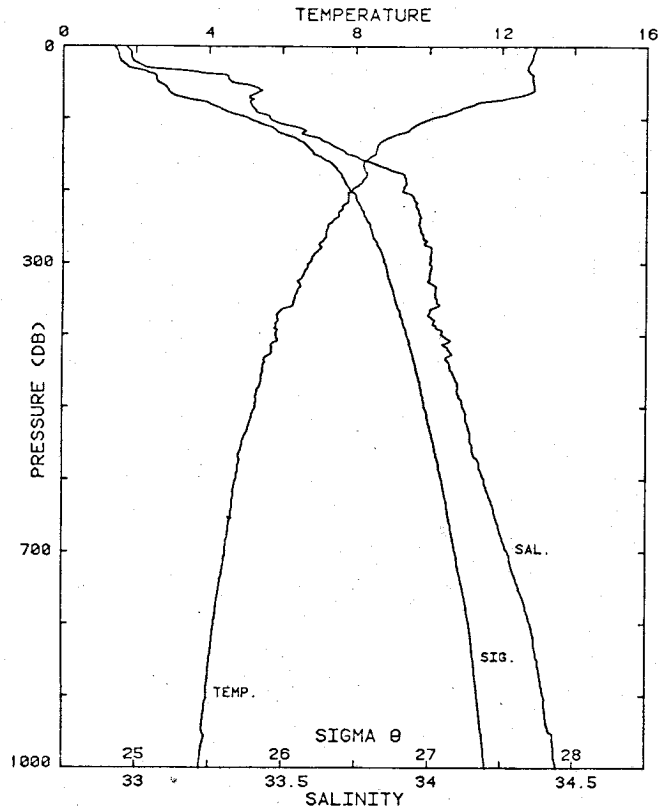
STATION 37 CLL13

CAST NO. 37 LAT: 38 4.1 N 12 FEB 1981 0053 GMT
 STATION: CLL13 LONG: 124 44.1 W DPTH: 3937M PROBE 2561
 131. KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	14.148	32.900	14.147	24.555	339.1	0.003
10	13.742	32.890	13.741	24.632	332.0	0.034
20	13.668	32.888	13.665	24.645	331.0	0.067
30	13.657	32.887	13.653	24.646	331.2	0.100
40	13.646	32.885	13.640	24.648	331.3	0.133
50	13.637	32.885	13.630	24.649	331.4	0.166
60	13.567	32.875	13.559	24.657	331.0	0.199
70	13.407	32.859	13.397	24.677	329.4	0.232
80	12.410	33.007	12.399	24.988	299.9	0.264
90	11.491	33.123	11.481	25.248	275.2	0.292
100	10.378	33.102	10.367	25.430	258.0	0.319
110	10.067	33.234	10.055	25.586	243.4	0.345
120	9.861	33.417	9.848	25.762	226.8	0.368
130	9.651	33.553	9.636	25.904	213.5	0.390
140	9.677	33.694	9.662	26.010	203.7	0.411
150	9.553	33.757	9.537	26.079	197.3	0.431
175	9.218	33.869	9.199	26.222	184.2	0.478
200	8.925	33.905	8.904	26.297	177.5	0.524
225	8.580	33.969	8.557	26.401	167.9	0.566
250	8.196	33.992	8.171	26.478	160.9	0.608
300	7.478	34.020	7.450	26.605	149.3	0.685
400	6.500	34.073	6.464	26.782	133.4	0.826
500	5.645	34.126	5.604	26.933	119.6	0.952
600	5.109	34.199	5.061	27.055	108.7	1.066
800	4.041	34.290	3.982	27.246	91.1	1.266
1000	3.647	34.420	3.573	27.390	78.5	1.434



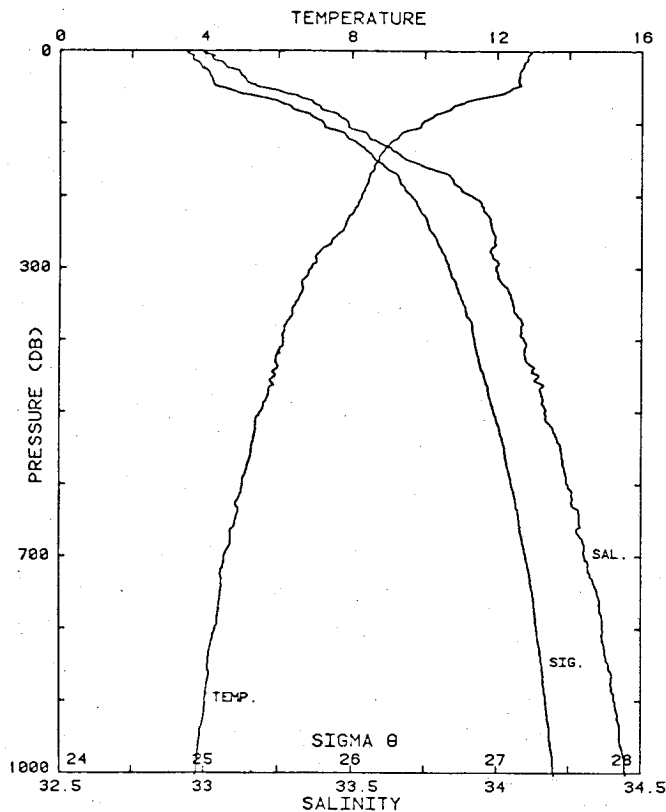
STATION 38 CLL12



STATION 38 CLL12

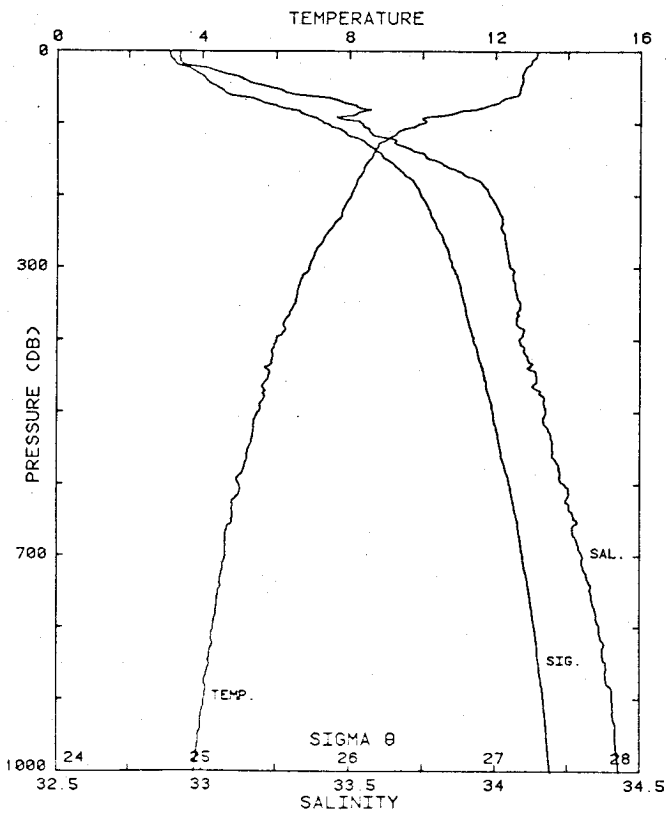
CAST NO. 38 LAT: 38 12.0 N 12 FEB 1981 0327 GMT
 STATION: CLL12 LONG: 124 27.0 W DPTH: 3745M PROBE 2561
 103.4 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELTD
	TEMP		TEMP	THETA		
1	12.927	32.969	12.927	24.855	310.5	0.003
10	12.857	32.984	12.856	24.880	308.3	0.031
20	12.807	32.990	12.805	24.895	307.2	0.062
30	12.704	33.049	12.700	24.962	301.1	0.092
40	12.848	33.307	12.843	25.133	285.1	0.122
50	12.850	33.336	12.843	25.155	283.3	0.150
60	12.873	33.426	12.865	25.221	277.3	0.178
70	12.299	33.386	12.290	25.301	269.9	0.206
80	11.238	33.392	11.229	25.503	250.7	0.231
90	10.691	33.410	10.680	25.615	240.3	0.255
100	10.015	33.458	10.003	25.768	225.7	0.279
110	9.597	33.521	9.585	25.888	214.6	0.301
120	9.228	33.566	9.215	25.982	205.8	0.322
130	8.740	33.635	8.726	26.113	193.4	0.342
140	8.574	33.683	8.560	26.176	187.5	0.361
150	8.498	33.730	8.483	26.225	183.1	0.380
175	8.300	33.906	8.282	26.394	167.5	0.423
200	7.885	33.910	7.865	26.459	161.6	0.464
225	7.632	33.959	7.611	26.534	154.8	0.503
250	7.220	33.969	7.197	26.601	148.7	0.542
300	6.698	34.001	6.670	26.698	140.0	0.613
400	5.820	34.045	5.786	26.847	126.7	0.747
500	5.266	34.118	5.226	26.972	115.5	0.868
600	4.741	34.174	4.694	27.092	104.6	0.977
800	4.144	34.354	4.083	27.285	87.6	1.170
1000	3.755	34.444	3.681	27.398	78.0	1.335
1500	2.713	34.548	2.609	27.581	61.5	1.679
2000	2.043	34.606	1.906	27.686	51.6	1.959
2500	1.780	34.646	1.604	27.740	47.4	2.204
3000	1.631	34.664	1.411	27.768	45.7	2.437
3500	1.547	34.675	1.280	27.788	45.0	2.663
3503	1.546	34.676	1.278	27.788	45.0	2.664



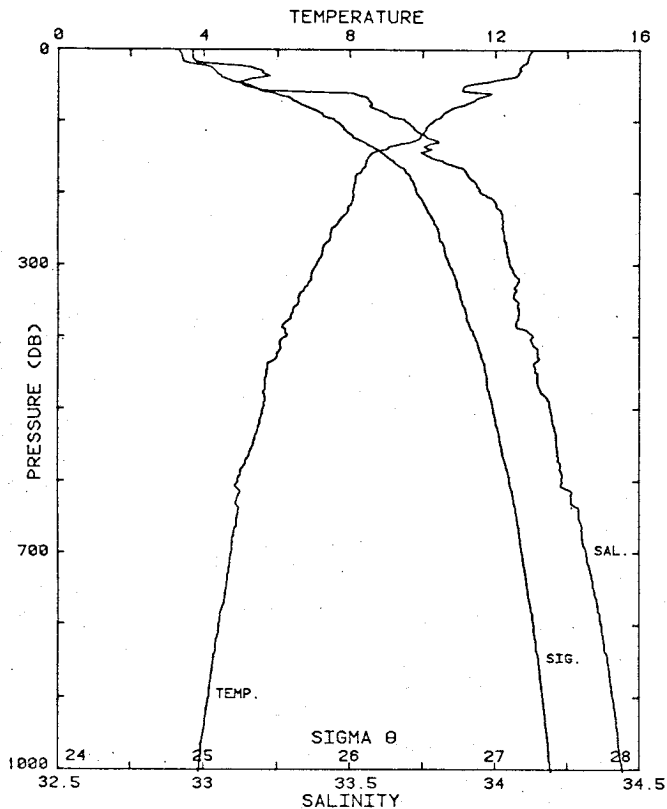
CAST NO. 39 LAT: 38 20.0 N 12 FEB 1981 0722 GMT
 STATION: CLL11 LONG: 124 10.0 W DPTH: 3552M PROBE 2561
 75.2 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.928	32.994	12.927	24.875	308.6	0.003
10	12.840	33.025	12.838	24.916	304.9	0.031
20	12.719	33.070	12.716	24.975	299.6	0.061
30	12.619	33.121	12.615	25.034	294.3	0.091
40	12.589	33.140	12.583	25.055	292.5	0.120
50	12.474	33.189	12.467	25.115	287.0	0.149
60	11.992	33.296	11.984	25.290	270.7	0.177
70	11.121	33.366	11.112	25.504	250.4	0.203
80	10.719	33.395	10.710	25.598	241.6	0.228
90	10.236	33.456	10.226	25.729	229.4	0.251
100	9.919	33.487	9.908	25.807	222.1	0.273
110	9.521	33.523	9.509	25.901	213.3	0.296
120	9.249	33.559	9.236	25.974	206.6	0.316
130	8.976	33.615	8.962	26.061	198.5	0.336
140	8.807	33.657	8.792	26.120	192.9	0.356
150	8.717	33.692	8.701	26.162	189.1	0.375
175	8.449	33.846	8.432	26.323	174.2	0.420
200	8.249	33.916	8.229	26.409	166.5	0.463
225	7.990	33.965	7.968	26.487	159.5	0.504
250	7.678	33.987	7.654	26.550	153.8	0.543
300	6.879	33.997	6.852	26.670	142.7	0.617
400	6.131	34.094	6.096	26.846	127.0	0.751
500	5.515	34.166	5.472	26.981	115.0	0.872
600	5.040	34.247	4.991	27.101	104.3	0.981
800	4.302	34.366	4.241	27.278	88.6	1.172
1000	3.779	34.449	3.704	27.399	77.9	1.338
1003	3.770	34.449	3.696	27.401	77.8	1.340



CAST NO. 40 LAT: 38 24.0 N 12 FEB 1981 0900 GMT
 STATION: CLL10 LONG: 124 01.0 W DPTH: 2397M PROBE 2561
 60.1 KM FROM SHORE LIN INT SAL. AT 263-289DB

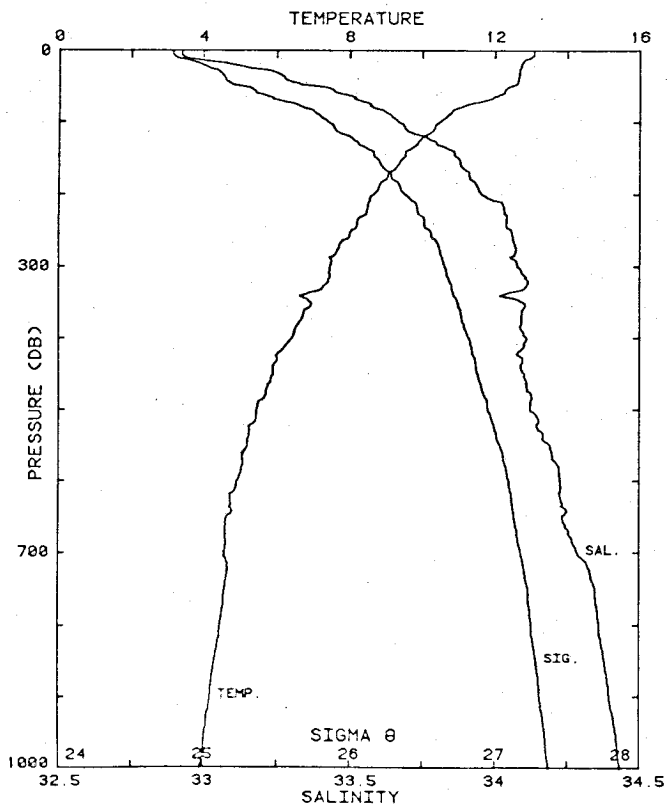
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.143	32.923	13.143	24.777	317.9	0.003
10	13.083	32.923	13.082	24.789	317.0	0.032
20	12.896	32.958	12.894	24.853	311.2	0.063
30	12.756	33.072	12.752	24.969	300.4	0.094
40	12.745	33.146	12.740	25.030	294.9	0.123
50	12.677	33.231	12.670	25.108	287.8	0.153
60	12.621	33.318	12.613	25.186	280.6	0.181
70	12.117	33.475	12.108	25.404	260.0	0.207
80	11.512	33.555	11.503	25.580	243.5	0.234
90	10.345	33.483	10.333	25.731	229.2	0.257
100	9.974	33.544	9.963	25.842	218.8	0.279
110	9.406	33.568	9.394	25.955	208.1	0.300
120	9.092	33.630	9.080	26.054	198.9	0.321
130	8.785	33.674	8.771	26.136	191.2	0.340
140	8.670	33.738	8.656	26.205	184.8	0.359
150	8.547	33.786	8.531	26.261	179.7	0.377
175	8.252	33.923	8.235	26.414	165.5	0.420
200	8.038	33.980	8.018	26.492	158.6	0.461
225	7.796	34.016	7.774	26.555	152.9	0.500
250	7.424	34.026	7.401	26.617	147.3	0.538
300	6.908	34.054	6.881	26.711	138.9	0.609
400	6.021	34.084	5.987	26.852	126.3	0.741
500	5.536	34.176	5.494	26.986	114.5	0.861
600	5.003	34.240	4.955	27.100	104.3	0.971
800	4.306	34.361	4.246	27.274	89.0	1.163
1000	3.793	34.430	3.719	27.383	79.5	1.331



STATION 41 CLL 9

CAST NO. 41 LAT: 38 28.0 N 12 FEB 1981 1057 GMT
 STATION: CLL 9 LONG: 123 53.0 W DPTH: 2299M PROBE 2561
 46.2 KM FROM SHORE

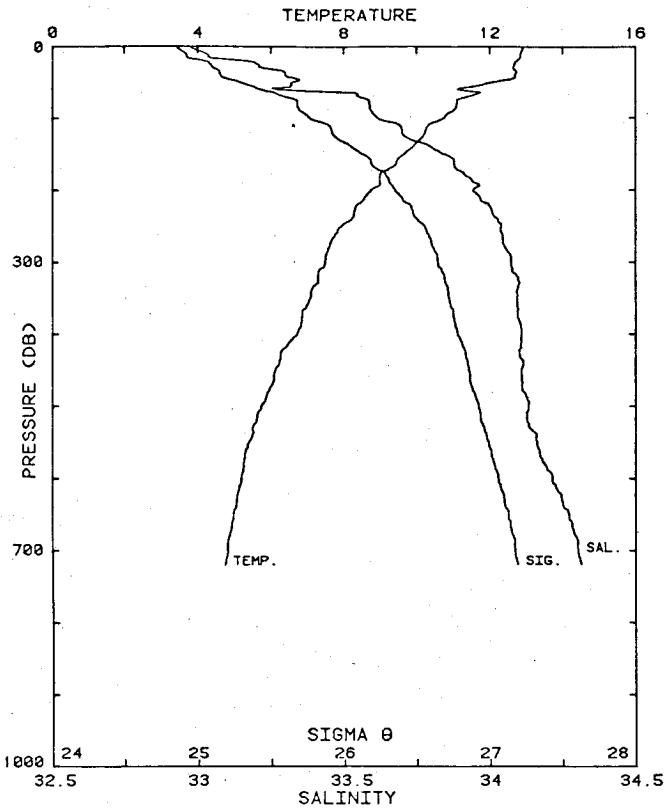
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.008	32.961	13.008	24.833	312.6	0.003
10	12.914	32.962	12.913	24.852	311.0	0.031
20	12.802	33.031	12.800	24.927	304.1	0.062
30	12.687	33.199	12.682	25.080	289.8	0.091
40	12.358	33.184	12.352	25.133	285.1	0.120
50	11.215	33.134	11.209	25.306	268.7	0.148
60	11.654	33.415	11.646	25.444	255.9	0.175
70	11.440	33.564	11.432	25.600	241.3	0.200
80	10.904	33.572	10.894	25.702	231.8	0.223
90	10.552	33.631	10.542	25.810	221.7	0.245
100	10.284	33.695	10.272	25.907	212.7	0.267
110	10.096	33.721	10.083	25.959	207.9	0.288
120	9.943	33.762	9.929	26.017	202.6	0.309
130	9.517	33.790	9.503	26.110	193.9	0.329
140	8.907	33.774	8.892	26.197	185.7	0.348
150	8.517	33.779	8.502	26.260	179.8	0.366
175	8.176	33.907	8.158	26.413	165.7	0.409
200	8.098	33.954	8.078	26.462	161.5	0.450
225	7.950	34.021	7.928	26.537	154.7	0.489
250	7.498	34.026	7.474	26.606	148.4	0.528
300	7.074	34.052	7.046	26.687	141.3	0.600
400	6.222	34.131	6.187	26.864	125.4	0.733
500	5.615	34.192	5.573	26.989	114.4	0.852
600	4.942	34.232	4.893	27.101	104.2	0.962
800	4.411	34.370	4.350	27.271	89.6	1.155
1000	3.865	34.443	3.790	27.386	79.4	1.324
1003	3.858	34.443	3.784	27.387	79.4	1.326



STATION 42 CLL 8

CAST NO. 42 LAT: 38 30.0 N 12 FEB 1981 1250 GMT
 STATION: CLL 8 LONG: 123 48.0 W DPTH: 1461M PROBE 2561
 38.1 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.091	32.924	13.091	24.788	316.9	0.003
10	13.019	32.939	13.018	24.815	314.6	0.032
20	12.742	33.108	12.740	25.000	297.3	0.062
30	12.677	33.245	12.672	25.119	286.2	0.091
40	12.646	33.281	12.640	25.152	283.3	0.120
50	12.421	33.402	12.415	25.289	270.4	0.148
60	12.203	33.474	12.196	25.387	261.4	0.175
70	11.696	33.538	11.687	25.533	247.8	0.200
80	11.014	33.583	11.004	25.692	232.8	0.223
90	10.710	33.641	10.699	25.791	223.6	0.246
100	10.471	33.670	10.460	25.856	217.6	0.269
110	10.328	33.693	10.316	25.898	213.8	0.290
120	10.023	33.760	10.009	26.003	204.0	0.311
130	9.858	33.801	9.843	26.062	198.5	0.331
140	9.554	33.857	9.539	26.156	189.7	0.350
150	9.453	33.875	9.437	26.188	186.9	0.369
175	9.032	33.913	9.013	26.285	178.1	0.415
200	8.641	33.956	8.620	26.381	169.4	0.458
225	8.456	34.033	8.433	26.470	161.3	0.499
250	8.033	34.056	8.009	26.552	153.8	0.539
300	7.455	34.078	7.426	26.654	144.7	0.613
400	6.416	34.109	6.380	26.820	129.7	0.750
500	5.457	34.123	5.416	26.953	117.5	0.874
600	4.919	34.227	4.872	27.099	104.3	0.984
800	4.462	34.361	4.399	27.257	90.8	1.178
1000	3.912	34.432	3.837	27.374	80.7	1.350



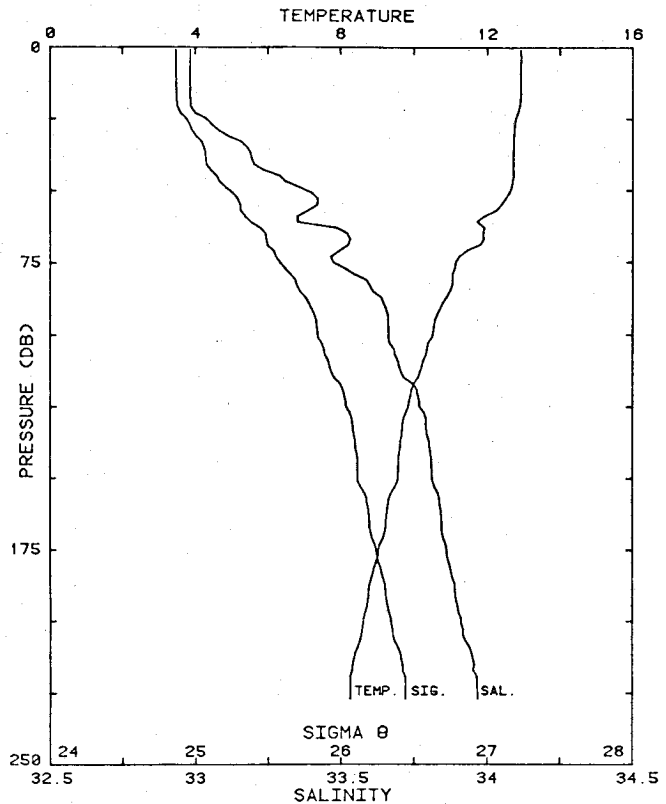
STATION 43 CLL 7

CAST NO. 43 LAT: 38 32.3 N 12 FEB 1981 1522 GMT
 STATION: CLL 7 LONG: 123 43.8 W DPTH: 747M PROBE 2561
 31.0 KM FROM SHORE 15 MIN GAP A 339DR (BIO)

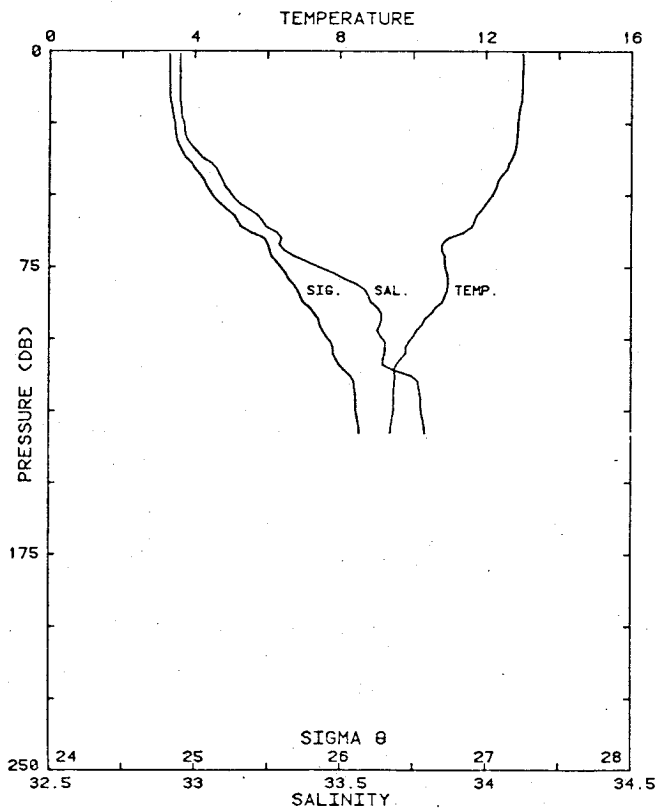
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.914	32.977	12.913	24.864	309.6	0.003
10	12.847	33.025	12.845	24.915	305.1	0.031
20	12.762	33.141	12.760	25.021	295.2	0.061
30	12.643	33.218	12.639	25.104	287.6	0.090
40	12.703	33.299	12.698	25.155	283.0	0.119
50	12.218	33.334	12.211	25.276	271.7	0.147
60	11.164	33.269	11.156	25.420	258.1	0.172
70	11.468	33.552	11.459	25.585	242.7	0.198
80	11.104	33.589	11.094	25.681	233.9	0.222
90	11.007	33.595	10.996	25.703	232.0	0.244
100	10.739	33.619	10.727	25.769	225.9	0.268
110	10.323	33.694	10.310	25.899	213.6	0.289
120	10.236	33.701	10.222	25.920	211.9	0.311
130	10.077	33.735	10.062	25.974	206.9	0.332
140	9.891	33.801	9.875	26.057	199.2	0.352
150	9.639	33.848	9.623	26.136	191.9	0.372
175	9.016	33.911	8.997	26.287	177.9	0.418
200	8.743	33.944	8.723	26.356	171.8	0.462
225	8.313	34.003	8.290	26.468	161.4	0.504
250	7.926	34.039	7.901	26.555	153.5	0.544
300	7.482	34.073	7.452	26.646	145.4	0.618
400	6.712	34.107	6.675	26.781	133.7	0.757
500	5.737	34.131	5.695	26.926	120.4	0.883
600	5.187	34.215	5.138	27.059	108.5	0.998
719	4.733	34.314	4.676	27.190	96.8	1.119

CAST NO. 44 LAT: 38 33.9 N 12 FEB 1981 1824 GMT
 STATION: CLL 6 LONG: 123 39.9 W DPTH: 232M PROBE 2561
 24.4 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.915	32.982	12.915	24.868	309.3	0.003
10	12.913	32.983	12.912	24.868	309.4	0.031
20	12.883	32.985	12.880	24.877	308.9	0.062
30	12.730	33.095	12.726	24.992	298.3	0.092
40	12.712	33.199	12.707	25.076	290.5	0.122
50	12.626	33.381	12.620	25.234	275.7	0.150
60	11.821	33.352	11.814	25.365	263.5	0.177
70	11.646	33.512	11.637	25.521	248.8	0.203
80	11.056	33.568	11.046	25.673	234.6	0.227
90	10.753	33.652	10.742	25.792	223.5	0.250
100	10.510	33.665	10.498	25.845	218.7	0.271
110	10.238	33.700	10.225	25.919	211.8	0.293
120	9.934	33.764	9.921	26.021	202.3	0.314
130	9.720	33.792	9.706	26.079	197.0	0.334
140	9.623	33.806	9.608	26.105	194.6	0.353
150	9.576	33.814	9.560	26.120	193.4	0.373
175	9.033	33.863	9.015	26.246	181.7	0.419
200	8.628	33.912	8.607	26.349	172.4	0.464
225	8.268	33.968	8.246	26.447	163.4	0.505
227	8.268	33.968	8.245	26.447	163.4	0.509



STATION 44 CLL 6



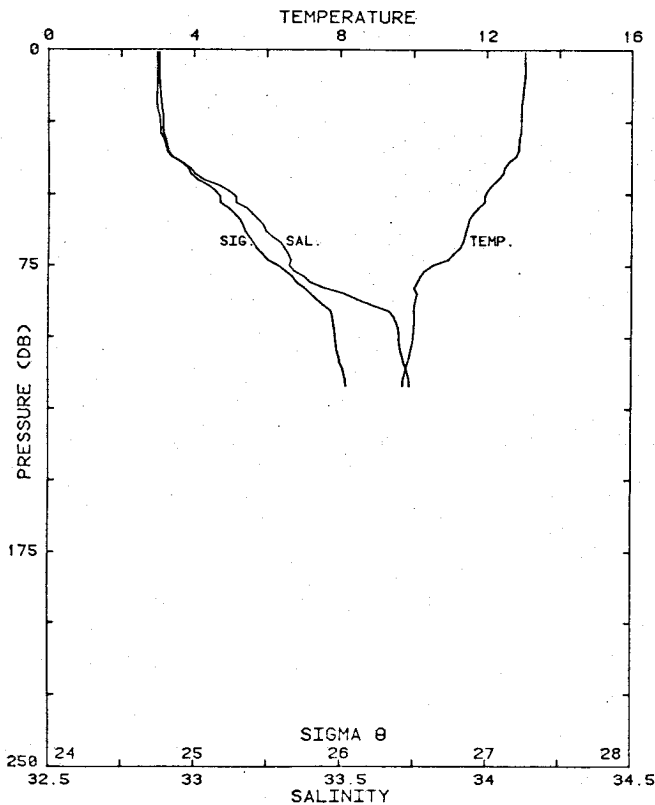
STATION 45 CLL 5

CAST NO. 45 LAT: 38 36.0 N 12 FEB 1981 1914 GMT
 STATION: CLL 5 LONG: 123 35.0 W DPTH: 137M PROBE 2561
 16.3 KM FROM SHORE

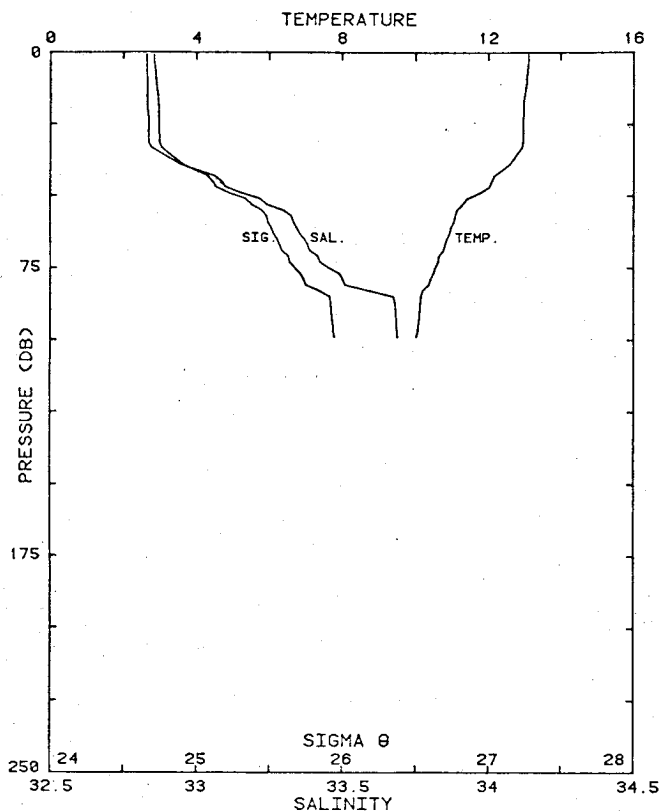
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.015	32.947	13.015	24.821	313.7	0.003
10	13.001	32.948	13.000	24.825	313.7	0.032
20	12.930	32.951	12.927	24.841	312.3	0.063
30	12.855	32.971	12.852	24.871	309.7	0.094
40	12.621	33.069	12.616	24.993	298.4	0.124
50	12.182	33.129	12.176	25.124	286.1	0.154
60	11.651	33.241	11.644	25.310	268.6	0.182
70	10.828	33.324	10.820	25.523	248.5	0.207
80	10.969	33.538	10.959	25.665	235.3	0.231
90	10.575	33.634	10.564	25.809	221.7	0.254
100	9.956	33.646	9.944	25.925	210.9	0.275
110	9.509	33.665	9.496	26.014	202.6	0.296
120	9.466	33.776	9.453	26.108	193.9	0.316
130	9.399	33.789	9.385	26.128	192.1	0.335
133	9.376	33.792	9.362	26.135	191.6	0.341

CAST NO. 46 LAT: 38 37.0 N 12 FEB 1981 1945 GMT
 STATION: CLL 4 LONG: 123 33.0 W DPTH: 120M PROBE 2561
 12.8 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.037	32.872	13.037	24.758	319.7	0.003
10	13.030	32.873	13.029	24.762	319.7	0.032
20	12.941	32.873	12.939	24.779	318.2	0.064
30	12.907	32.890	12.903	24.799	316.6	0.095
40	12.538	32.974	12.532	24.936	303.8	0.127
50	11.988	33.132	11.982	25.163	282.4	0.156
60	11.515	33.230	11.508	25.320	267.0	0.184
70	11.192	33.317	11.184	25.453	255.2	0.210
80	10.148	33.387	10.139	25.690	232.8	0.235
90	10.014	33.637	10.003	25.907	212.4	0.257
100	9.984	33.701	9.973	25.963	207.4	0.278
110	9.821	33.722	9.809	26.006	203.4	0.298
117	9.702	33.736	9.689	26.038	200.5	0.312



STATION 46 CLL 4

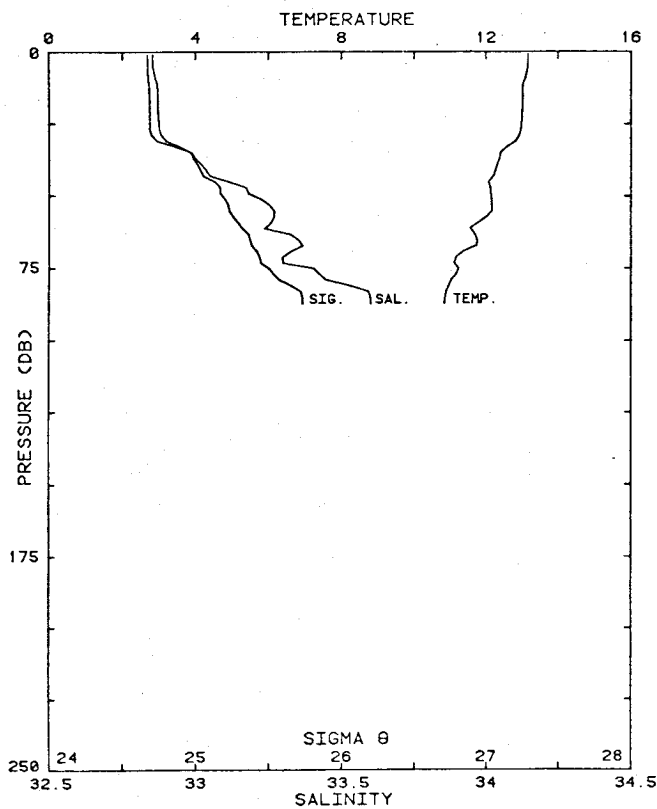


CAST NO. 47 LAT: 38 37.6 N 12 FEB 1981 2025 GMT
 STATION: CLL 3 LONG: 123 31.0 W DPTH: 102M PROBE 2561
 9.9 KM FROM SHORE

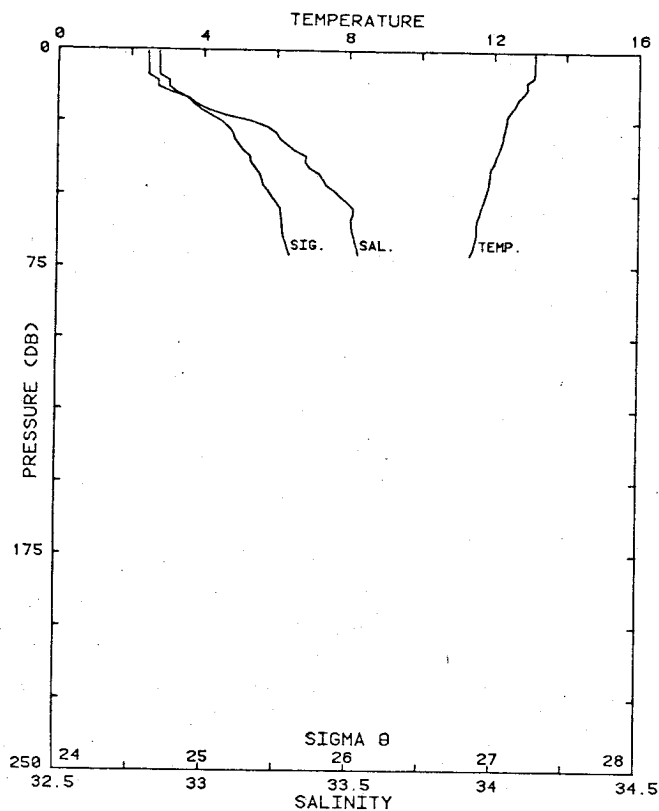
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.109	32.831	13.108	24.713	324.0	0.003
10	13.047	32.832	13.045	24.726	323.0	0.032
20	12.968	32.834	12.965	24.744	321.6	0.065
30	12.954	32.837	12.950	24.749	321.4	0.097
40	12.462	32.976	12.457	24.952	302.3	0.128
50	11.578	33.186	11.573	25.281	271.2	0.157
60	11.005	33.338	10.998	25.503	250.3	0.183
70	10.698	33.402	10.690	25.608	240.5	0.207
80	10.385	33.506	10.375	25.743	227.9	0.230
90	10.115	33.682	10.104	25.926	210.6	0.252
99	10.024	33.688	10.013	25.946	208.9	0.271

CAST NO. 48 LAT: 38 38.5 N 12 FEB 1981 2107 GMT
 STATION: CLL 2 LONG: 123 29.0 W DPTH: 89M PROBE 2561
 6.4 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.164	32.836	13.164	24.706	324.7	0.003
10	13.054	32.840	13.053	24.731	322.6	0.032
20	13.004	32.843	13.002	24.743	321.7	0.065
30	12.868	32.859	12.864	24.783	318.1	0.097
40	12.290	33.029	12.284	25.027	295.2	0.127
50	12.156	33.206	12.149	25.188	280.0	0.156
60	11.688	33.251	11.681	25.310	268.6	0.184
70	11.285	33.314	11.276	25.434	257.1	0.209
80	11.003	33.491	10.995	25.622	239.4	0.235
87	10.852	33.602	10.841	25.735	228.8	0.251



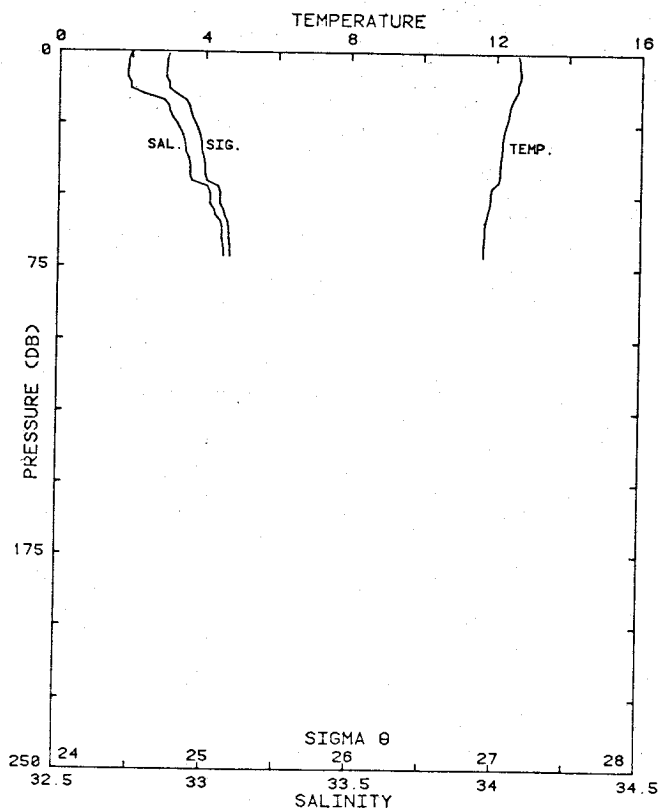
STATION 48 CLL 2



STATION 49 CLL 1

CAST NO. 49 LAT: 38 39.5 N 12 FEB 1981 2149 GMT
 STATION: CLL 1 LONG: 123 27.0 W DPTH: 73M PROBE 2561
 3.1 KM FROM SHORE

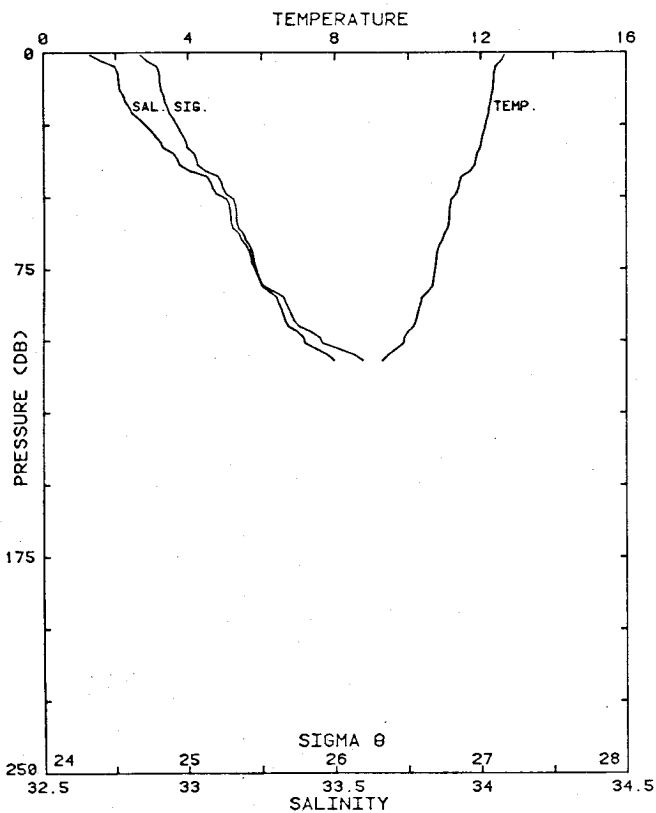
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.129	32.809	13.129	24.692	326.0	0.003
10	12.997	32.828	12.996	24.733	322.4	0.032
20	12.537	32.993	12.535	24.950	301.9	0.064
30	12.254	33.256	12.250	25.208	277.7	0.093
40	11.947	33.356	11.941	25.344	265.0	0.120
50	11.772	33.462	11.766	25.458	254.3	0.146
60	11.526	33.508	11.519	25.541	246.7	0.170
70	11.381	33.532	11.372	25.585	242.7	0.196



STATION 50 LAG 1

CAST NO. 50 LAT: 39 30.0 N 13 FEB 1981 0338 GMT
 STATION: LAG 1 LONG: 123 50.0 W DPTH: 78M PROBE 2561
 3.7 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.600	32.746	12.600	24.746	320.8	0.003
10	12.614	32.740	12.612	24.739	321.7	0.032
20	12.353	32.876	12.351	24.895	307.2	0.064
30	12.181	32.926	12.177	24.967	300.6	0.094
40	12.109	32.947	12.104	24.997	298.0	0.124
50	11.845	33.016	11.839	25.100	288.4	0.154
60	11.707	33.054	11.699	25.155	283.4	0.182
70	11.672	33.062	11.663	25.169	282.4	0.211



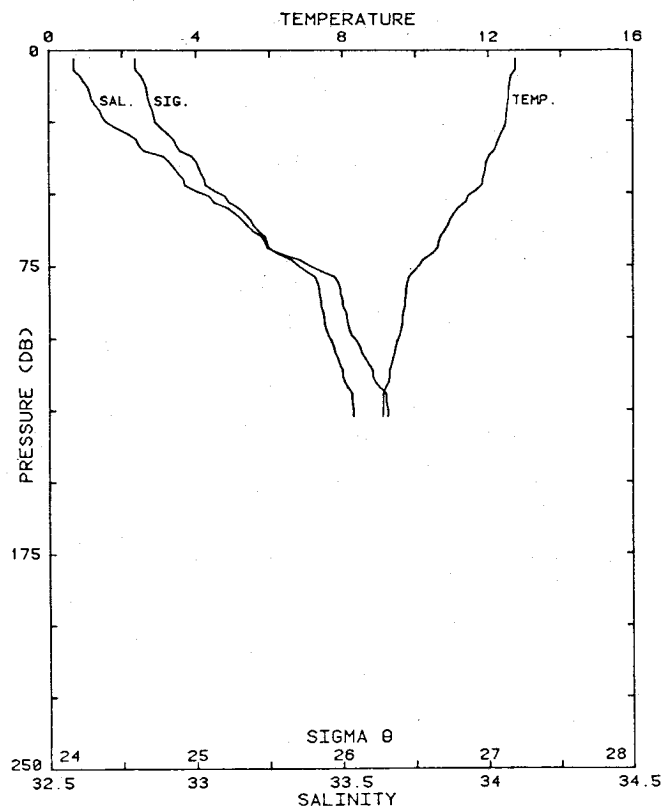
STATION 51 LAG 2

CAST NO. 51 LAT: 39 30.1 N 13 FEB 1981 0415 GMT
 STATION: LAG 2 LONG: 123 52.5 W DPTH: 107M PROBE 2561
 7.4 KM FROM SHORE

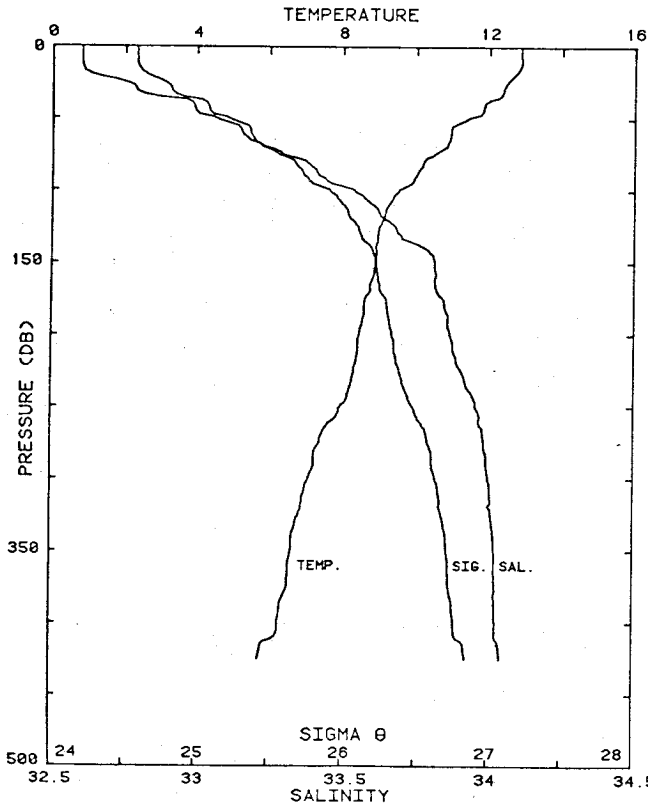
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.655	32.662	12.655	24.671	328.0	0.003
10	12.345	32.760	12.344	24.807	315.4	0.032
20	12.222	32.803	12.219	24.864	310.2	0.063
30	12.020	32.896	12.017	24.975	299.9	0.094
40	11.766	32.988	11.760	25.092	288.9	0.123
50	11.248	33.116	11.241	25.287	270.6	0.151
60	11.099	33.152	11.092	25.341	265.6	0.178
70	10.793	33.211	10.784	25.442	256.2	0.204
80	10.671	33.250	10.662	25.493	251.5	0.229
90	10.264	33.347	10.254	25.639	237.8	0.254
100	9.871	33.454	9.859	25.789	223.8	0.277
107	9.290	33.595	9.279	25.994	204.3	0.292

CAST NO. 52 LAT: 39 30.0 N 13 FEB 1981 0444 GMT
 STATION: LAG 3 LONG: 123 55.2 W DPTH: 129M PROBE 2561
 11.1 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
3	12.763	32.584	12.763	24.590	335.8	0.010
10	12.618	32.612	12.618	24.640	331.2	0.034
20	12.531	32.665	12.528	24.698	326.0	0.067
30	12.330	32.782	12.326	24.827	313.9	0.098
40	11.928	32.919	11.923	25.010	296.8	0.129
50	11.538	33.023	11.531	25.162	282.5	0.158
60	10.923	33.166	10.916	25.384	261.6	0.185
70	10.533	33.270	10.525	25.533	247.6	0.211
80	9.786	33.480	9.778	25.824	220.1	0.234
90	9.675	33.507	9.666	25.863	216.5	0.256
100	9.516	33.540	9.504	25.915	211.7	0.277
110	9.300	33.596	9.288	25.994	204.4	0.298
120	9.101	33.648	9.088	26.066	197.7	0.318
127	9.079	33.653	9.065	26.074	197.1	0.332



STATION 52 LAG 3



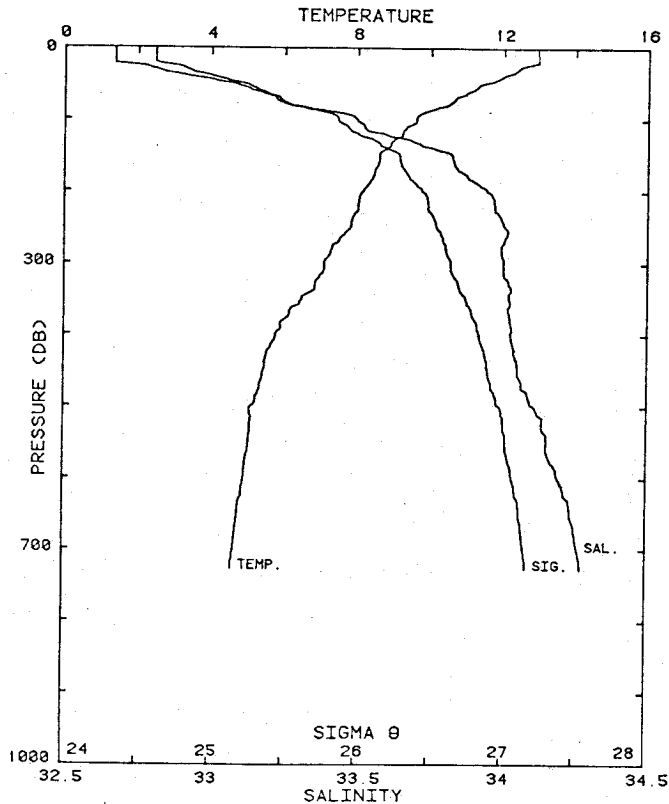
STATION 53 LAG 4

CAST NO. 53 LAT: 39 30.1 N 13 FEB 1981 0520 GMT
 STATION:LAG 4 LONG:123 59.5 W DPTH: 431M PROBE 2561
 17.4 KM FROM SHORE

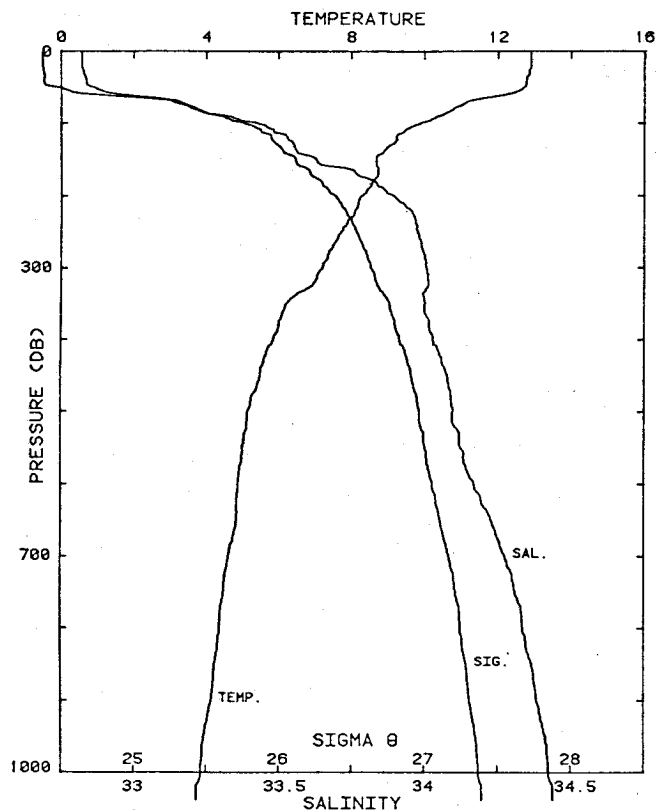
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.876	32.600	12.876	24.580	336.7	0.003
10	12.879	32.600	12.878	24.580	336.9	0.034
20	12.653	32.650	12.650	24.663	329.3	0.067
30	12.384	32.788	12.380	24.822	314.4	0.099
40	11.869	32.988	11.864	25.073	290.7	0.130
50	11.394	33.067	11.389	25.221	276.8	0.158
60	10.946	33.158	10.939	25.374	262.6	0.185
70	10.764	33.253	10.756	25.479	252.6	0.211
80	10.195	33.378	10.186	25.675	234.2	0.235
90	9.977	33.428	9.967	25.751	227.2	0.258
100	9.523	33.542	9.512	25.916	211.7	0.280
110	9.243	33.605	9.231	26.010	202.9	0.301
120	9.100	33.648	9.087	26.067	197.7	0.321
130	8.964	33.694	8.950	26.125	192.3	0.340
140	8.923	33.785	8.908	26.202	185.2	0.359
150	8.900	33.816	8.885	26.229	182.7	0.377
175	8.616	33.846	8.598	26.298	176.7	0.423
200	8.462	33.868	8.441	26.340	173.1	0.467
225	8.321	33.907	8.298	26.392	168.6	0.509
250	7.957	33.957	7.933	26.486	160.0	0.551
300	7.106	34.001	7.078	26.642	145.5	0.627
400	6.297	34.030	6.262	26.774	133.9	0.765
425	5.759	34.047	5.723	26.856	126.0	0.797

CAST NO. 54 LAT: 39 30.1 N 13 FEB 1981 0608 GMT
 STATION:LAG 5 LONG:124 04.7 W DPTH: 741M PROBE 2561
 25.0 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.948	32.670	12.947	24.620	332.9	0.003
10	12.954	32.672	12.952	24.621	333.1	0.034
20	12.956	32.672	12.953	24.621	333.3	0.067
30	12.394	32.805	12.390	24.832	313.4	0.099
40	11.977	32.918	11.972	24.999	297.7	0.130
50	11.442	33.063	11.436	25.211	277.8	0.159
60	11.112	33.144	11.105	25.333	266.4	0.185
70	10.699	33.220	10.691	25.465	254.0	0.212
80	10.467	33.266	10.458	25.542	247.0	0.236
90	9.778	33.431	9.768	25.787	223.8	0.260
100	9.595	33.499	9.585	25.870	216.1	0.282
110	9.325	33.524	9.312	25.934	210.1	0.303
120	9.213	33.594	9.200	26.007	203.4	0.324
130	8.934	33.690	8.920	26.126	192.2	0.344
140	8.809	33.758	8.794	26.198	185.5	0.363
150	8.590	33.825	8.575	26.285	177.4	0.381
175	8.455	33.864	8.437	26.337	172.9	0.425
200	8.147	33.948	8.127	26.450	162.6	0.467
225	8.021	33.971	7.998	26.487	159.5	0.507
250	7.820	34.009	7.796	26.546	154.2	0.547
300	7.102	34.001	7.074	26.643	145.4	0.621
400	5.775	34.028	5.742	26.839	127.3	0.757
500	5.113	34.112	5.073	26.985	114.1	0.879
600	4.931	34.195	4.884	27.073	106.7	0.989
727	4.599	34.276	4.542	27.174	98.1	1.118



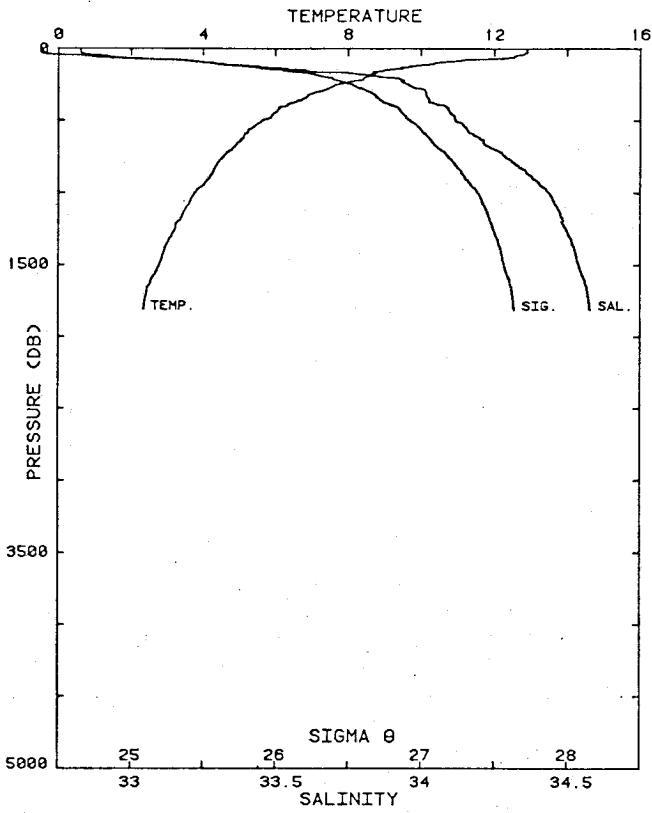
STATION 54 LAG 5



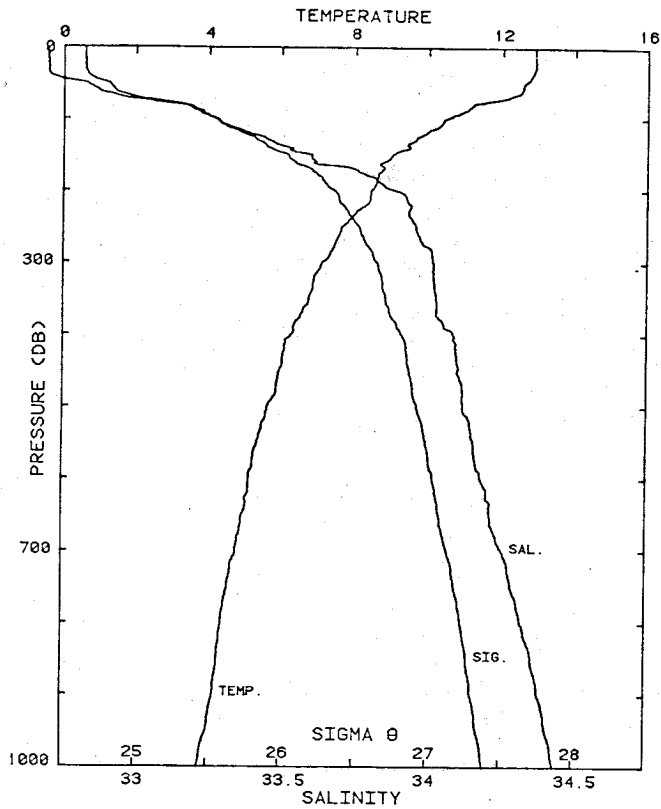
STATION 55 LAG 6

CAST NO. 55 LAT: 39 30.1 N 13 FEB 1981 0713 GMT
 STATION: LAG 6 LONG: 124 10.0 W DPTH: 1034M PROBE 2561
 32.4 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	12.891	32.684	12.891	24.642	330.8	0.003
10	12.894	32.686	12.892	24.643	330.9	0.033
20	12.899	32.687	12.896	24.644	331.1	0.066
30	12.851	32.689	12.847	24.655	330.3	0.100
40	12.774	32.691	12.769	24.672	329.0	0.132
50	12.708	32.736	12.701	24.719	324.7	0.165
60	12.208	32.860	12.200	24.911	306.6	0.197
70	11.174	33.132	11.166	25.313	268.5	0.226
80	10.804	33.201	10.795	25.432	257.4	0.252
90	10.403	33.323	10.392	25.597	241.9	0.277
100	9.896	33.429	9.885	25.766	226.0	0.301
110	9.465	33.484	9.453	25.880	215.3	0.322
120	9.242	33.531	9.229	25.952	208.5	0.343
130	9.050	33.554	9.036	26.000	204.1	0.364
140	8.864	33.564	8.849	26.038	200.6	0.384
150	8.681	33.630	8.665	26.118	193.2	0.404
175	8.673	33.797	8.655	26.251	181.2	0.451
200	8.283	33.894	8.262	26.387	168.6	0.495
225	8.073	33.962	8.050	26.472	160.9	0.536
250	7.711	33.979	7.687	26.539	154.9	0.576
300	7.200	34.007	7.172	26.635	146.3	0.650
400	5.851	34.029	5.817	26.830	128.2	0.787
500	5.143	34.097	5.103	26.969	115.6	0.907
600	4.883	34.171	4.834	27.058	108.0	1.020
800	4.367	34.337	4.306	27.249	91.5	1.217
1000	3.861	34.426	3.787	27.373	80.6	1.388
1037	3.746	34.441	3.669	27.397	78.4	1.417



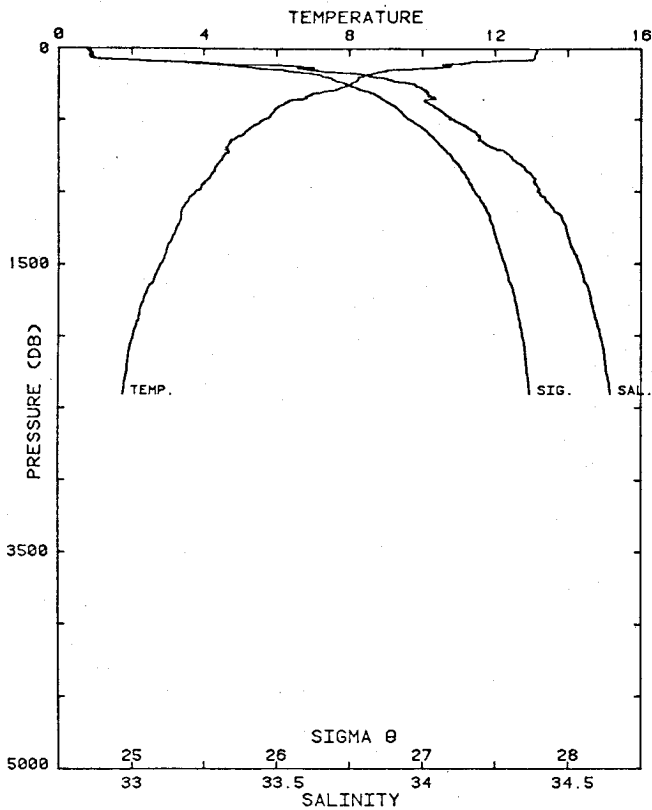
STATION 56 LAG 7



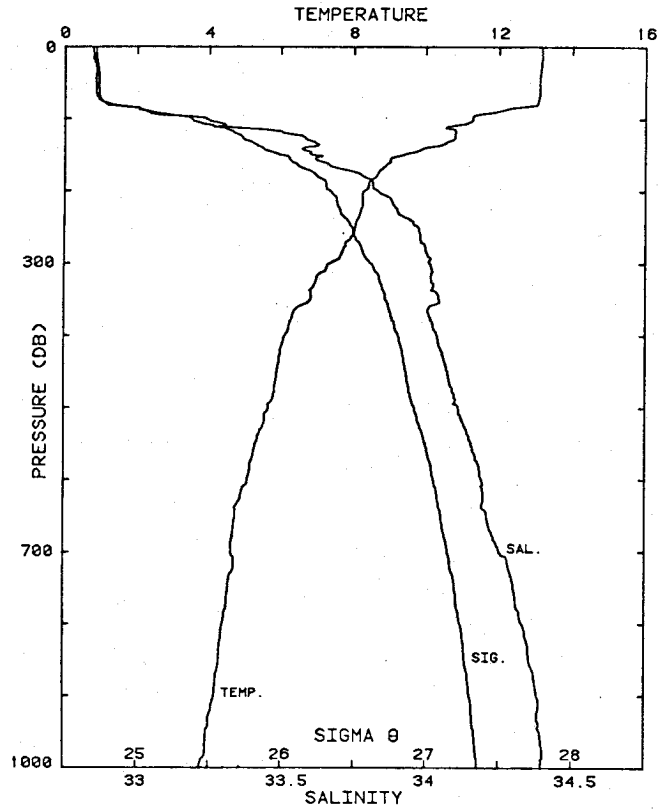
STATION 56 LAG 7

CAST NO. 56 LAT: 39 30.0 N 13 FEB 1981 0853 GMT
 STATION: LAG 7 LONG: 124 20.0 W DPTH: 1812M PROBE 2561
 46.6 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELTD
			TEMP	THETA		
1	12.888	32.694	12.888	24.650	330.0	0.003
10	12.895	32.695	12.894	24.650	330.3	0.033
20	12.899	32.698	12.896	24.652	330.4	0.066
30	12.888	32.698	12.884	24.654	330.4	0.099
40	12.803	32.708	12.798	24.679	328.3	0.132
50	12.615	32.818	12.608	24.801	316.9	0.164
60	12.536	32.871	12.528	24.858	311.8	0.196
70	12.200	32.945	12.191	24.979	300.4	0.227
80	11.213	33.136	11.203	25.309	269.1	0.255
90	10.913	33.229	10.901	25.435	257.4	0.282
100	10.469	33.272	10.457	25.547	247.0	0.306
110	10.276	33.319	10.264	25.617	240.5	0.331
120	9.887	33.393	9.873	25.740	228.9	0.354
130	9.592	33.461	9.578	25.842	219.3	0.377
140	9.465	33.530	9.449	25.916	212.5	0.398
150	8.998	33.604	8.982	26.049	199.9	0.419
175	8.635	33.774	8.617	26.239	182.3	0.467
200	8.438	33.892	8.418	26.361	171.1	0.512
225	8.150	33.938	8.127	26.442	163.8	0.553
250	7.651	33.958	7.627	26.531	155.5	0.594
300	7.113	34.017	7.085	26.654	144.5	0.669
400	6.289	34.086	6.253	26.820	129.6	0.807
500	5.648	34.119	5.606	26.927	120.2	0.932
600	5.141	34.182	5.093	27.038	110.3	1.046
800	4.387	34.323	4.326	27.235	92.8	1.249
1000	3.759	34.438	3.685	27.393	78.5	1.421
1500	2.772	34.539	2.667	27.569	62.8	1.770
1813	2.339	34.578	2.213	27.638	56.5	1.954



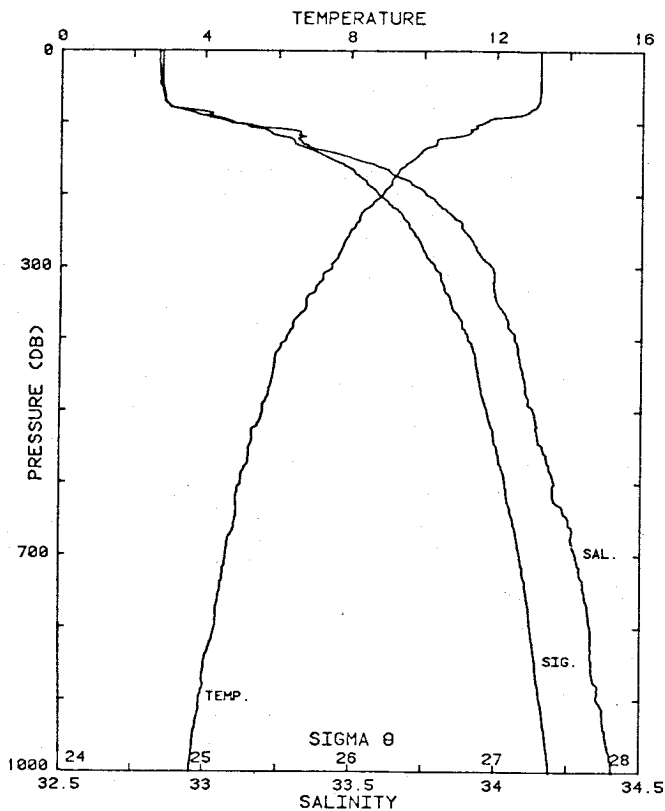
STATION 57 LAG 8



STATION 57 LAG 8

CAST NO. 57 LAT: 39 29.8 N 13 FEB 1981 1042 GMT
 STATION: LAG 8 LONG: 124 29.0 W DPTH: 2413M PROBE 2561
 59.6 KM FROM SHORE

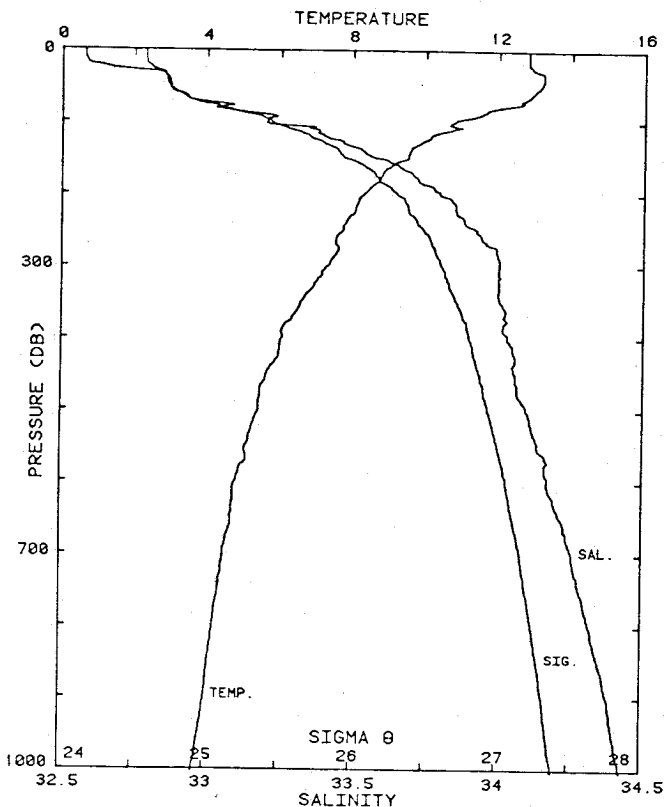
PRESS	TEMP.	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	13.168	32.846	13.168	24.713	324.0	0.003
10	13.167	32.848	13.165	24.715	324.1	0.032
20	13.159	32.852	13.156	24.719	323.9	0.065
30	13.137	32.858	13.134	24.729	323.3	0.097
40	13.116	32.855	13.111	24.732	323.3	0.130
50	13.104	32.855	13.097	24.734	323.3	0.162
60	13.106	32.856	13.097	24.735	323.5	0.194
70	13.092	32.863	13.083	24.742	323.1	0.227
80	13.042	32.910	13.032	24.788	318.9	0.259
90	11.918	33.035	11.906	25.101	289.2	0.289
100	11.295	33.240	11.283	25.375	263.3	0.317
110	10.697	33.296	10.684	25.526	249.2	0.343
120	10.800	33.522	10.786	25.684	234.5	0.366
130	10.675	33.602	10.660	25.767	226.7	0.389
140	9.968	33.577	9.953	25.870	217.0	0.412
150	9.288	33.623	9.272	26.017	203.0	0.433
175	8.656	33.771	8.638	26.233	182.8	0.481
200	8.279	33.833	8.258	26.340	173.1	0.525
225	8.197	33.898	8.174	26.403	167.5	0.568
250	8.027	33.972	8.002	26.487	159.9	0.609
300	7.330	34.012	7.301	26.620	147.8	0.687
400	6.106	34.038	6.072	26.805	130.8	0.825
500	5.650	34.111	5.607	26.922	120.8	0.951
600	5.067	34.193	5.018	27.056	108.6	1.065
800	4.390	34.331	4.328	27.241	92.2	1.265
1000	3.761	34.397	3.687	27.361	81.5	1.438
1500	2.785	34.540	2.679	27.569	62.9	1.791
2000	2.023	34.610	1.887	27.690	51.1	2.072
2405	1.755	34.645	1.587	27.741	46.7	2.270



STATION 58 LAG 9

CAST NO. 58 LAT: 39 29.8 N 13 FEB 1981 1315 GMT
 STATION: LAG 9 LONG: 124 39.0 W DPTH: 2161M PROBE 2561
 73.6 KM FROM SHORE

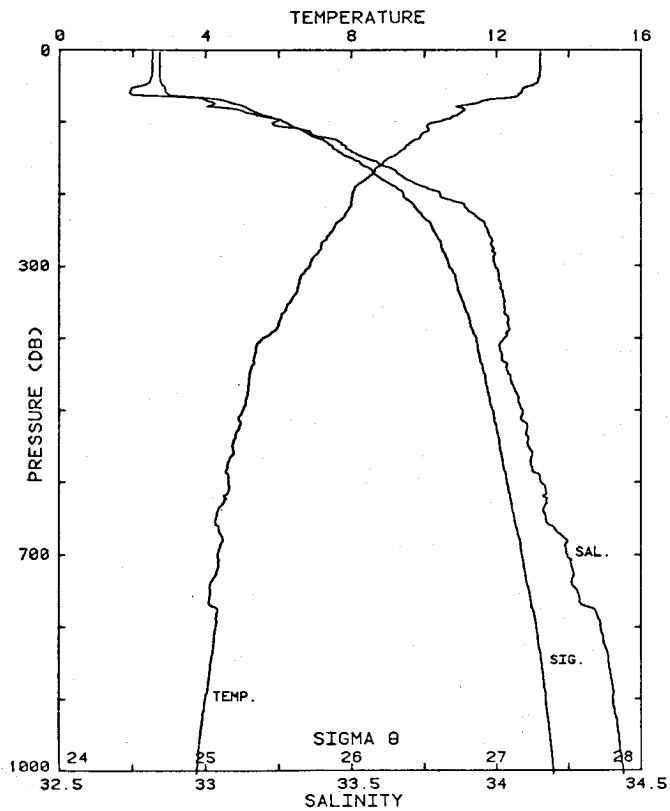
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.195	32.840	13.195	24.702	325.0	0.003
10	13.197	32.839	13.196	24.701	325.4	0.032
20	13.199	32.840	13.196	24.702	325.6	0.065
30	13.202	32.841	13.198	24.703	325.7	0.098
40	13.204	32.841	13.198	24.704	326.0	0.130
50	13.201	32.847	13.194	24.708	325.8	0.163
60	13.188	32.854	13.180	24.716	325.3	0.196
70	13.170	32.859	13.161	24.724	324.9	0.228
80	13.020	32.890	13.010	24.778	319.9	0.260
90	12.517	33.013	12.505	24.971	301.7	0.291
100	11.624	33.086	11.612	25.197	280.4	0.320
110	11.309	33.290	11.295	25.412	260.1	0.347
120	10.667	33.330	10.653	25.558	246.4	0.373
130	10.319	33.344	10.305	25.628	239.8	0.396
140	9.933	33.419	9.917	25.752	228.2	0.421
150	9.730	33.510	9.713	25.857	218.4	0.442
175	9.192	33.664	9.173	26.065	198.9	0.494
200	8.859	33.764	8.838	26.198	186.8	0.543
225	8.287	33.843	8.264	26.347	172.9	0.587
250	7.982	33.891	7.957	26.430	165.2	0.630
300	7.475	33.989	7.446	26.581	151.5	0.710
400	6.235	34.067	6.201	26.812	130.3	0.850
500	5.595	34.131	5.553	26.943	118.6	0.974
600	4.990	34.202	4.942	27.072	106.9	1.086
800	4.311	34.331	4.250	27.250	91.3	1.283
1000	3.641	34.408	3.568	27.381	79.4	1.453



STATION 59 LAG10

CAST NO. 59 LAT: 39 31.0 N 13 FEB 1981 1651 GMT
 STATION: LAG10 LONG: 124 59.0 W DPTH: 2916M PROBE 2561
 102.5 KM FROM SHORE

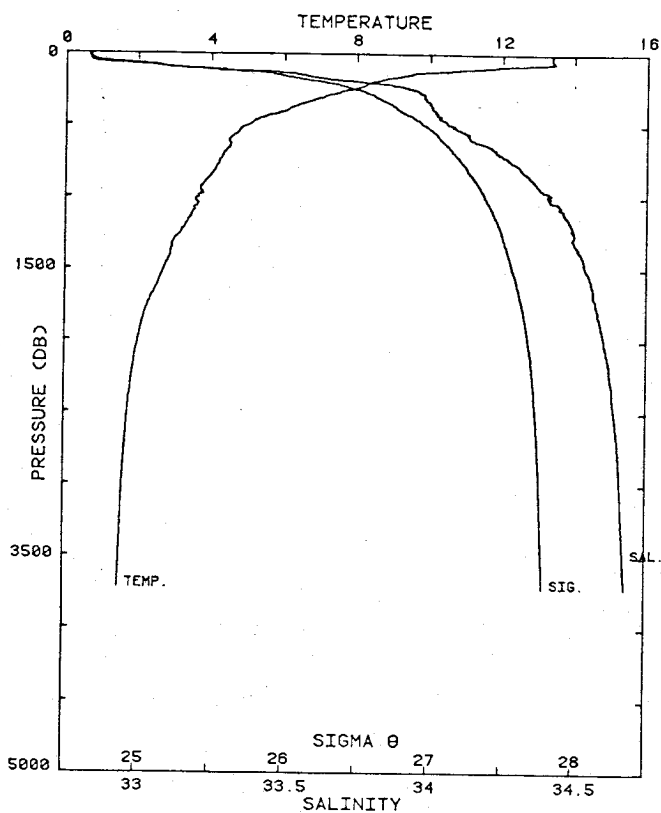
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.804	32.578	12.804	24.578	336.9	0.003
10	12.806	32.580	12.804	24.579	337.0	0.034
20	12.821	32.595	12.819	24.587	336.5	0.068
30	13.135	32.797	13.131	24.682	327.7	0.101
40	13.215	32.868	13.211	24.722	324.3	0.133
50	13.135	32.874	13.129	24.742	322.6	0.166
60	12.937	32.904	12.930	24.805	316.8	0.198
70	12.665	32.951	12.656	24.895	308.5	0.229
80	11.978	33.042	11.968	25.096	289.6	0.259
90	11.456	33.213	11.445	25.325	268.0	0.287
100	10.741	33.203	10.729	25.445	256.6	0.312
110	10.733	33.367	10.720	25.574	244.6	0.338
120	10.132	33.406	10.118	25.708	231.9	0.361
130	9.798	33.474	9.784	25.818	221.7	0.384
140	9.579	33.537	9.563	25.904	213.7	0.406
150	9.512	33.595	9.496	25.959	208.6	0.427
175	8.800	33.714	8.782	26.166	189.2	0.476
200	8.305	33.802	8.285	26.312	175.7	0.522
225	8.066	33.857	8.044	26.391	168.6	0.565
250	7.733	33.928	7.708	26.495	159.0	0.605
300	7.316	34.006	7.287	26.617	148.0	0.682
400	6.073	34.036	6.039	26.808	130.6	0.821
500	5.440	34.102	5.399	26.939	118.9	0.945
600	4.824	34.174	4.777	27.068	107.1	1.058
800	4.260	34.325	4.200	27.250	91.1	1.255
1000	3.707	34.431	3.634	27.392	78.4	1.424
1003	3.703	34.432	3.630	27.394	78.3	1.427



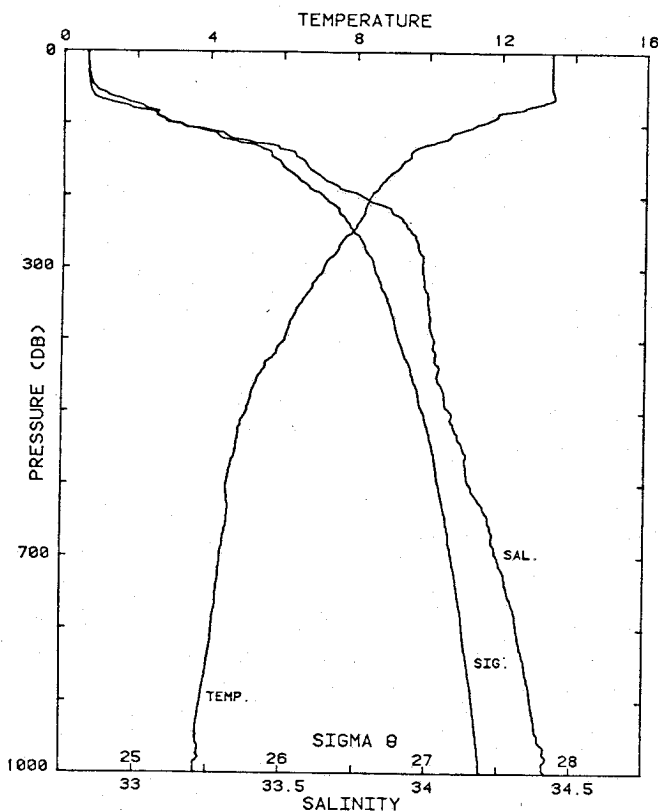
STATION 60 LAG11

CAST NO. 60 LAT: 39 30.1 N 13 FEB 1981 1916 GMT
 STATION: LAG11 LONG: 125 19.8 W DPTH: 3455M PROBE 2561
 130.7 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
3	13.207	32.816	13.207	24.682	327.1	0.010
10	13.210	32.817	13.208	24.682	327.2	0.032
20	13.208	32.817	13.205	24.683	327.4	0.065
30	13.204	32.816	13.200	24.683	327.6	0.098
40	13.165	32.811	13.159	24.687	327.5	0.131
50	12.911	32.776	12.904	24.711	325.6	0.163
60	12.659	32.741	12.651	24.733	323.7	0.196
70	11.694	33.000	11.686	25.115	287.4	0.227
80	10.972	33.038	10.962	25.276	272.3	0.255
90	10.932	33.172	10.922	25.387	261.9	0.282
100	10.317	33.236	10.306	25.544	247.1	0.308
110	10.125	33.327	10.112	25.648	237.4	0.331
120	9.896	33.391	9.882	25.737	229.2	0.354
130	9.591	33.469	9.577	25.847	218.8	0.377
140	9.361	33.500	9.346	25.909	213.1	0.398
150	9.021	33.550	9.005	26.003	204.2	0.419
175	8.497	33.673	8.479	26.181	187.7	0.468
200	8.030	33.806	8.010	26.355	171.5	0.513
225	7.670	33.904	7.648	26.457	162.2	0.555
250	7.492	33.969	7.468	26.562	152.5	0.594
300	6.860	33.998	6.832	26.674	142.4	0.668
400	5.572	34.028	5.539	26.864	124.8	0.801
500	5.025	34.091	4.986	26.979	114.6	0.921
600	4.625	34.154	4.579	27.074	106.2	1.031
800	4.272	34.360	4.211	27.277	88.7	1.225
1000	3.742	34.437	3.669	27.395	78.3	1.391
1005	3.734	34.439	3.660	27.396	78.2	1.396



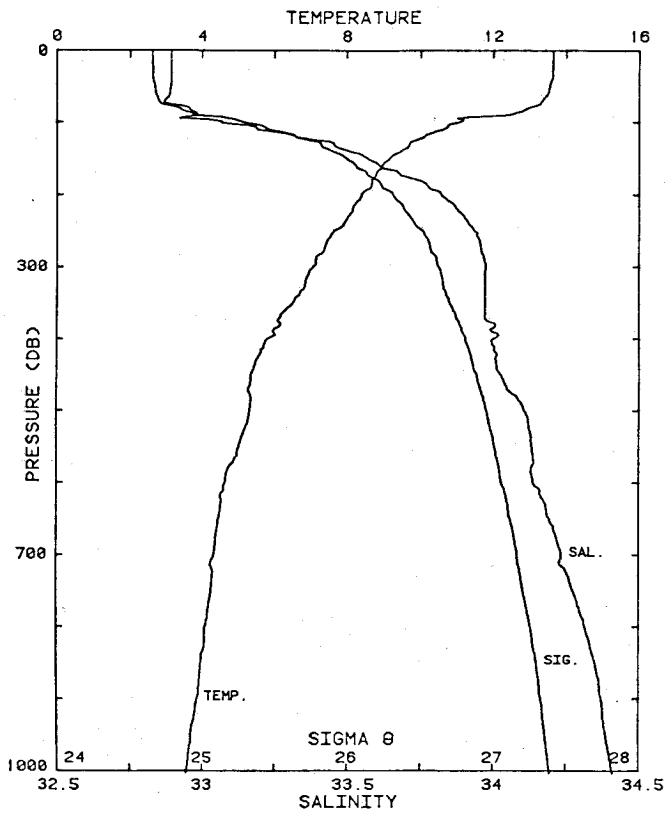
STATION 61 LAG12



STATION 61 LAG12

CAST NO. 61 LAT: 39 30.1 N 13 FEB 1981 2149 GMT
 STATION: LAG12 LONG: 125 40.0 W DPTH: 3697M PROBE 2561
 161.4 KM FROM SHORE

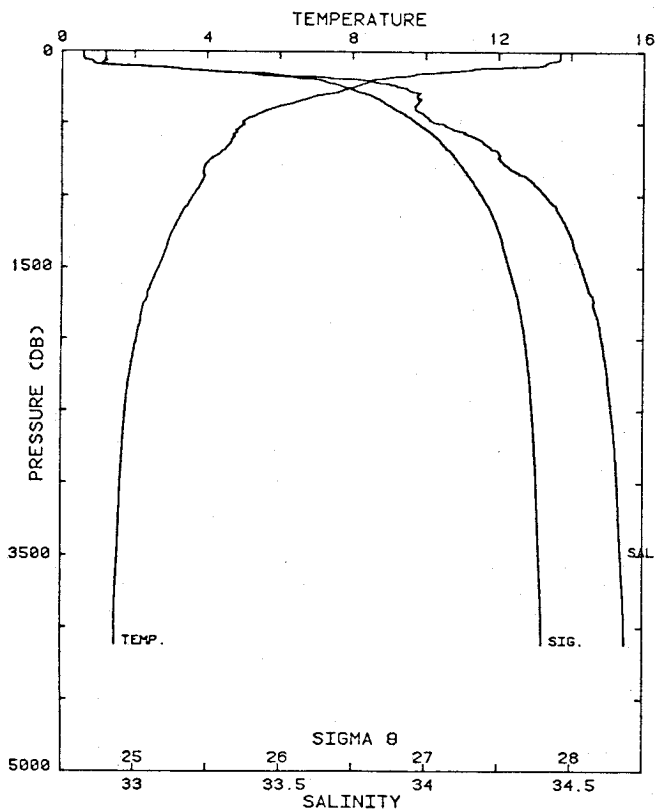
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.374	32.834	13.374	24.662	328.8	0.003
10	13.373	32.833	13.372	24.662	329.1	0.033
20	13.365	32.837	13.362	24.667	328.9	0.066
30	13.367	32.838	13.363	24.668	329.1	0.098
40	13.366	32.845	13.362	24.673	328.9	0.132
50	13.374	32.859	13.367	24.683	328.2	0.164
60	13.433	32.902	13.425	24.705	326.4	0.198
70	13.160	32.971	13.151	24.812	316.4	0.229
80	12.514	33.042	12.504	24.993	299.4	0.260
90	11.847	33.076	11.836	25.147	284.9	0.289
100	11.377	33.130	11.365	25.275	272.9	0.317
110	10.852	33.251	10.839	25.464	255.1	0.343
120	10.514	33.320	10.500	25.576	244.6	0.368
130	9.849	33.465	9.834	25.803	223.1	0.392
140	9.503	33.538	9.489	25.916	212.5	0.414
150	9.359	33.568	9.342	25.963	208.2	0.435
175	8.816	33.636	8.798	26.103	195.2	0.485
200	8.404	33.768	8.383	26.271	179.7	0.532
225	8.207	33.879	8.184	26.387	169.0	0.576
250	7.865	33.941	7.840	26.486	159.9	0.617
300	7.100	33.980	7.072	26.627	147.0	0.692
400	6.063	34.021	6.030	26.798	131.5	0.831
500	5.032	34.081	4.993	26.970	115.4	0.954
600	4.501	34.146	4.455	27.081	105.3	1.064
800	4.132	34.314	4.072	27.255	90.4	1.258
1000	3.678	34.417	3.605	27.384	79.1	1.427
1500	2.731	34.541	2.627	27.574	62.2	1.776
2000	2.032	34.606	1.895	27.686	51.5	2.056
2500	1.764	34.641	1.588	27.738	47.5	2.302
3000	1.631	34.663	1.411	27.767	45.7	2.533
3500	1.553	34.675	1.286	27.787	45.2	2.762
3715	1.521	34.682	1.232	27.795	44.8	2.858



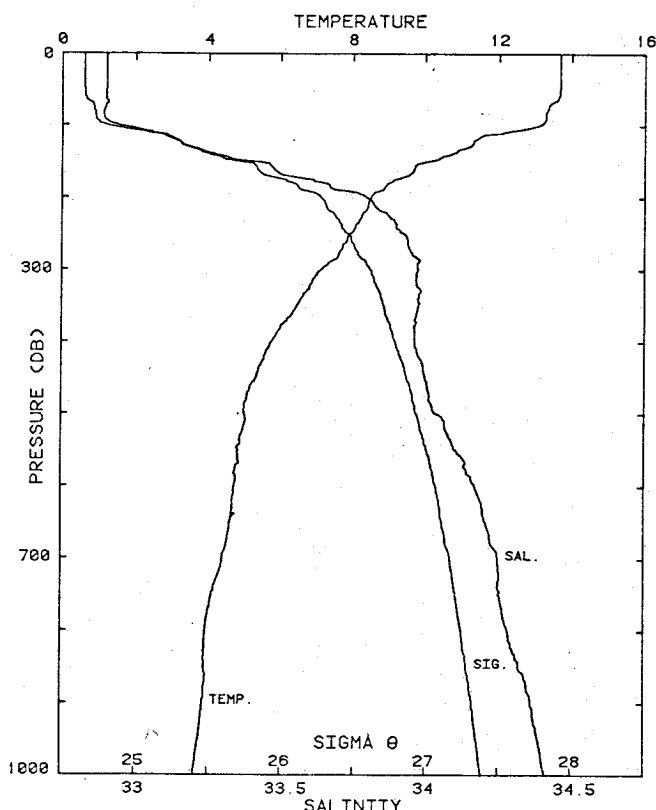
STATION 62 LAG13

CAST NO. 62 LAT: 39 29.9 N 14 FEB 1981 0144 GMT
 STATION: LAG13 LONG: 126 00.2 W DPTH: 3916M PROBE 2561
 190.2 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DEL.D
1	13.634	32.892	13.634	24.654	329.6	0.003
10	13.635	32.891	13.634	24.654	329.9	0.033
20	13.629	32.893	13.626	24.656	329.9	0.066
30	13.619	32.893	13.615	24.659	330.0	0.099
40	13.612	32.892	13.607	24.660	330.1	0.132
50	13.543	32.890	13.536	24.673	329.2	0.165
60	13.501	32.888	13.493	24.680	328.8	0.198
70	13.340	32.869	13.331	24.698	327.4	0.230
80	12.999	32.953	12.989	24.831	314.9	0.263
90	12.418	32.978	12.406	24.963	302.5	0.294
100	11.052	33.069	11.040	25.286	271.8	0.322
110	10.636	33.192	10.623	25.455	255.9	0.349
120	10.110	33.324	10.097	25.648	237.7	0.373
130	9.698	33.457	9.684	25.821	221.4	0.396
140	9.463	33.508	9.447	25.900	214.0	0.418
150	9.152	33.571	9.135	25.999	204.7	0.439
175	8.752	33.703	8.734	26.165	189.3	0.488
200	8.401	33.823	8.380	26.313	175.6	0.534
225	8.117	33.890	8.094	26.409	166.9	0.576
250	7.639	33.938	7.615	26.517	156.8	0.617
300	7.075	33.975	7.047	26.626	147.0	0.692
400	5.823	34.002	5.788	26.812	129.9	0.831
500	5.329	34.109	5.287	26.957	116.9	0.955
600	4.644	34.139	4.598	27.059	107.6	1.067
800	4.094	34.316	4.034	27.260	89.8	1.263
1000	3.556	34.411	3.484	27.392	78.1	1.431
1003	3.551	34.412	3.479	27.393	78.0	1.433



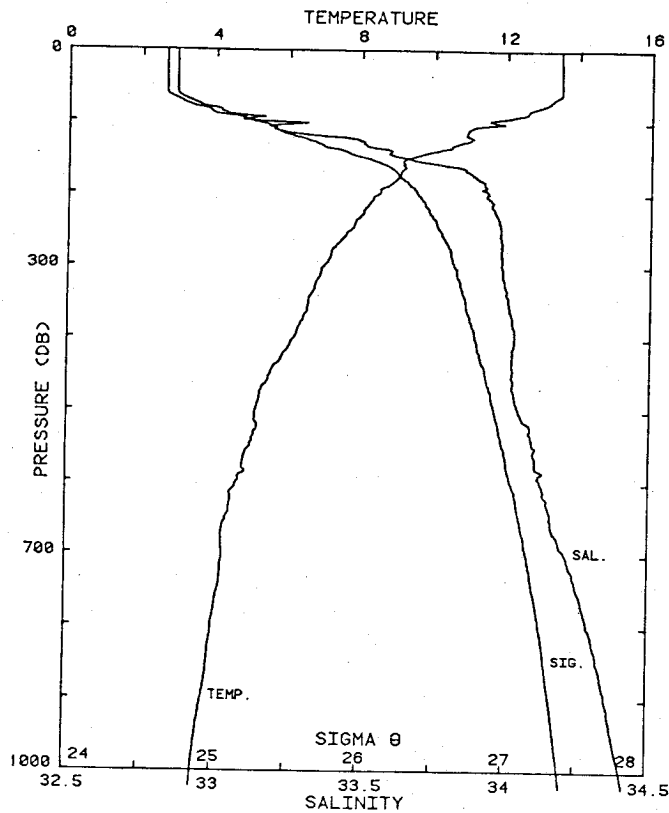
STATION 63 LAG14



STATION 63 LAG14

CAST NO. 63 LAT: 39 30.0 N 14 FEB 1981 0413 GMT
 STATION: LAG14 LONG: 126 20.0 W DPTH: 4082M PROBE 2561
 218.3 KM FROM SHORE

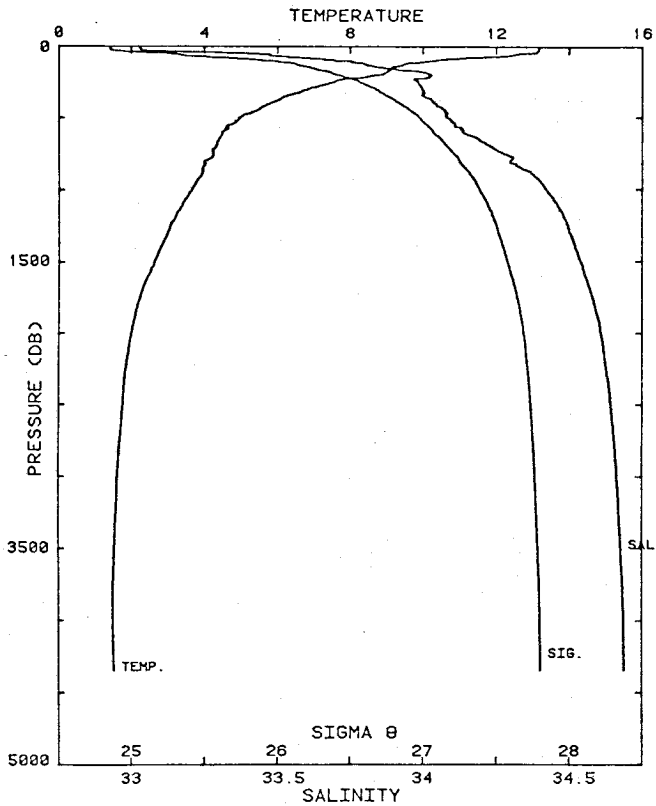
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
			TEMP	THETA		
1	13.687	32.900	13.687	24.650	330.0	0.003
10	13.684	32.900	13.685	24.650	330.3	0.033
20	13.687	32.900	13.685	24.650	330.5	0.066
30	13.691	32.900	13.687	24.650	330.9	0.099
40	13.685	32.900	13.679	24.651	331.0	0.133
50	13.678	32.899	13.671	24.653	331.1	0.166
60	13.648	32.898	13.639	24.659	330.8	0.199
70	13.410	32.901	13.400	24.709	326.3	0.231
80	13.314	32.890	13.302	24.720	325.5	0.264
90	13.290	32.892	13.278	24.726	325.2	0.297
100	13.113	32.941	13.100	24.799	318.5	0.329
110	12.127	33.060	12.113	25.082	291.6	0.359
120	11.357	33.133	11.342	25.282	272.7	0.387
130	11.158	33.189	11.142	25.361	265.4	0.414
140	10.712	33.272	10.695	25.505	251.9	0.440
150	10.080	33.403	10.062	25.715	231.9	0.465
175	9.111	33.615	9.092	26.040	201.3	0.519
200	8.489	33.797	8.469	26.280	178.9	0.567
225	8.244	33.872	8.221	26.376	170.0	0.610
250	7.931	33.924	7.906	26.464	162.0	0.651
300	7.134	33.976	7.106	26.618	147.8	0.729
400	5.749	33.965	5.716	26.792	131.7	0.869
500	4.992	34.036	4.954	26.939	118.3	0.993
600	4.723	34.171	4.676	27.076	106.1	1.105
800	3.928	34.285	3.869	27.253	90.2	1.301
1000	3.609	34.413	3.536	27.388	78.6	1.470
1500	2.663	34.535	2.559	27.576	61.8	1.814
2000	2.054	34.606	1.917	27.684	51.8	2.094
2500	1.764	34.641	1.588	27.737	47.5	2.339
3000	1.634	34.661	1.414	27.766	45.9	2.572
3500	1.552	34.674	1.284	27.785	45.3	2.801
4000	1.484	34.687	1.166	27.804	44.7	3.025
4119	1.492	34.688	1.160	27.805	45.0	3.078



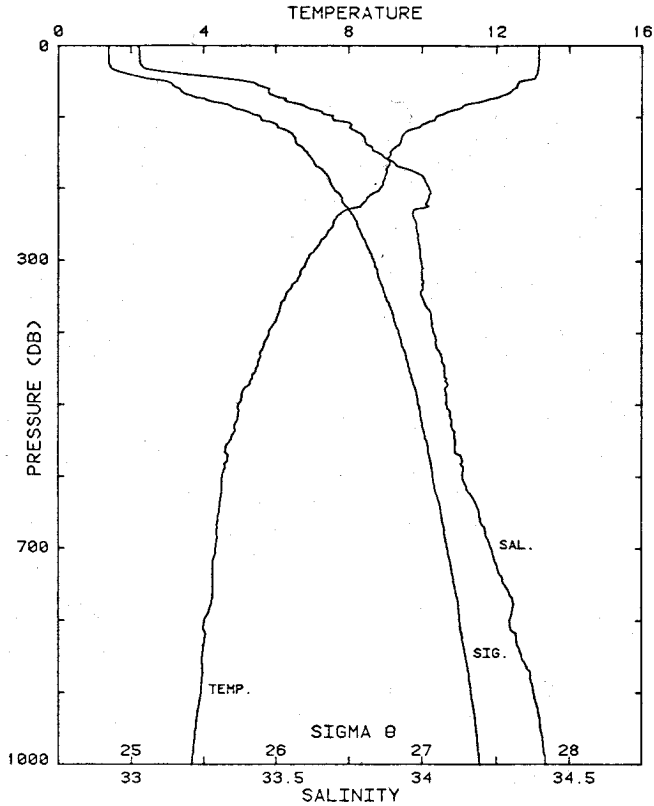
STATION 64 LAG15

CAST NO. 64 LAT: 39 30.0 N 14 FEB 1981 0743 GMT
 STATION: LAG15 LONG: 126 40.1 W DPTH: 4188M PROBE 2561
 247.5 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	13.489	32.867	13.489	24.664	328.6	0.003
10	13.495	32.867	13.494	24.663	329.0	0.033
20	13.497	32.867	13.494	24.663	329.3	0.065
30	13.498	32.867	13.494	24.663	329.6	0.098
40	13.500	32.867	13.494	24.663	329.8	0.132
50	13.501	32.867	13.494	24.663	330.1	0.164
60	13.494	32.868	13.485	24.666	330.1	0.198
70	13.229	32.908	13.220	24.750	322.4	0.230
80	12.811	32.977	12.800	24.886	309.7	0.262
90	12.349	33.062	12.337	25.042	295.0	0.292
100	11.802	33.247	11.790	25.288	271.8	0.321
110	10.936	33.202	10.922	25.411	260.1	0.347
120	11.023	33.408	11.009	25.556	246.7	0.373
130	10.564	33.514	10.549	25.718	231.4	0.396
140	9.988	33.603	9.972	25.886	215.4	0.419
150	9.289	33.660	9.273	26.047	200.2	0.440
175	9.054	33.893	9.035	26.266	179.9	0.486
200	8.471	33.937	8.451	26.392	168.2	0.530
225	8.087	33.962	8.064	26.470	161.1	0.571
250	7.698	33.982	7.674	26.544	154.4	0.611
300	6.984	33.987	6.956	26.648	144.9	0.685
400	6.161	34.032	6.126	26.793	132.0	0.823
500	5.138	34.048	5.098	26.931	119.2	0.949
600	4.638	34.126	4.591	27.051	108.4	1.062
800	3.997	34.294	3.938	27.253	90.3	1.260
1000	3.502	34.410	3.431	27.396	77.5	1.427
1021	3.465	34.422	3.392	27.409	76.5	1.443



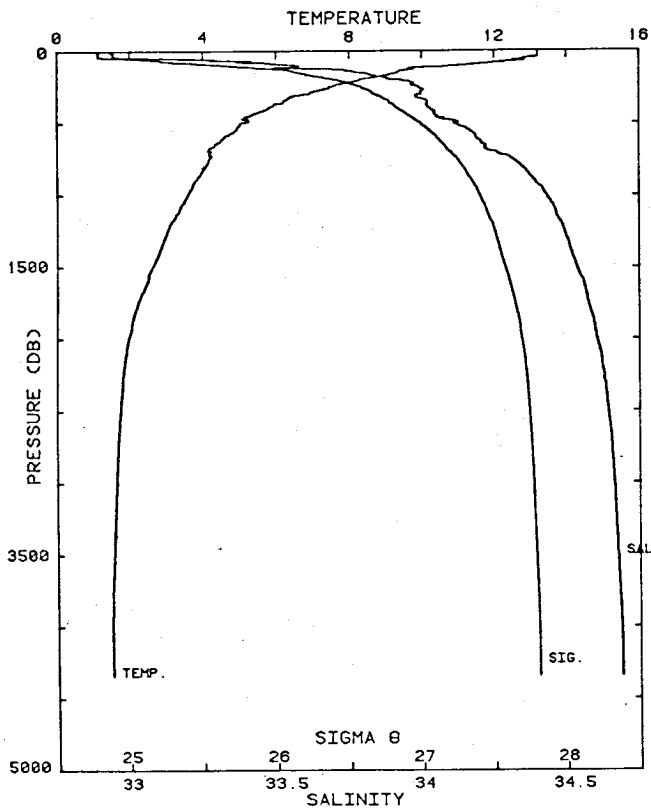
STATION 65 LAG16



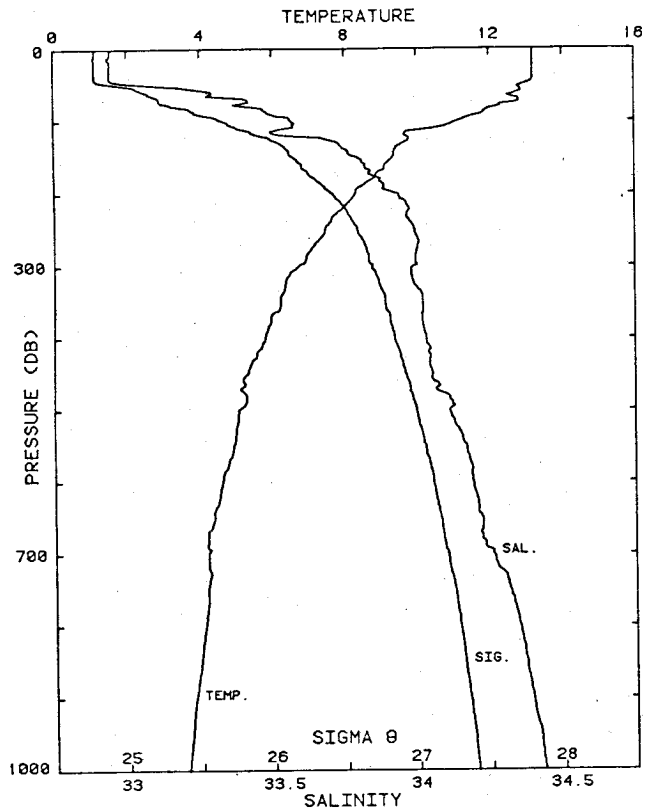
STATION 65 LAG16

CAST NO. 65 LAT: 39 30.0 N 14 FER 1981 1015 GMT
 STATION: LAG16 LONG: 127 00.1 W DPTH: 4291M PRORE 2561
 275.8 KM FROM SHORE BMIN GAP AT 2010DB MT

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
			TEMP	THETA		
1	13.164	33.023	13.164	24.850	311.0	0.003
10	13.170	33.029	13.169	24.854	310.9	0.031
20	13.174	33.030	13.171	24.854	311.1	0.062
30	13.156	33.041	13.152	24.867	310.2	0.093
40	13.118	33.168	13.112	24.972	300.4	0.124
50	12.707	33.388	12.700	25.224	276.7	0.153
60	12.516	33.470	12.508	25.323	267.5	0.180
70	12.205	33.486	12.196	25.397	260.7	0.207
80	11.470	33.550	11.460	25.583	243.1	0.231
90	10.887	33.632	10.877	25.753	227.2	0.255
100	10.385	33.695	10.373	25.890	214.3	0.277
110	10.047	33.759	10.034	25.998	204.3	0.298
120	9.587	33.777	9.574	26.088	195.8	0.318
130	9.446	33.806	9.432	26.134	191.6	0.338
140	9.338	33.820	9.323	26.164	189.0	0.357
150	9.151	33.854	9.135	26.220	183.8	0.376
175	9.044	33.968	9.025	26.326	174.2	0.420
200	8.868	34.023	8.847	26.399	167.8	0.463
225	8.326	34.023	8.303	26.482	160.1	0.504
250	7.578	33.982	7.554	26.561	152.7	0.543
300	6.860	33.997	6.833	26.673	142.5	0.617
400	5.806	34.039	5.773	26.844	126.9	0.752
500	4.959	34.080	4.919	26.977	114.6	0.872
600	4.503	34.136	4.457	27.073	106.1	0.982
800	4.020	34.297	3.961	27.253	90.4	1.178
1000	3.668	34.421	3.595	27.389	78.7	1.345
1500	2.638	34.539	2.533	27.580	61.3	1.690
2000	1.985	34.608	1.848	27.691	50.8	1.965
2500	1.749	34.642	1.573	27.740	47.2	2.210
3000	1.612	34.663	1.391	27.769	45.5	2.441
3500	1.532	34.676	1.265	27.789	44.8	2.667
4000	1.489	34.687	1.171	27.803	44.8	2.890
4345	1.514	34.687	1.156	27.805	46.0	3.046



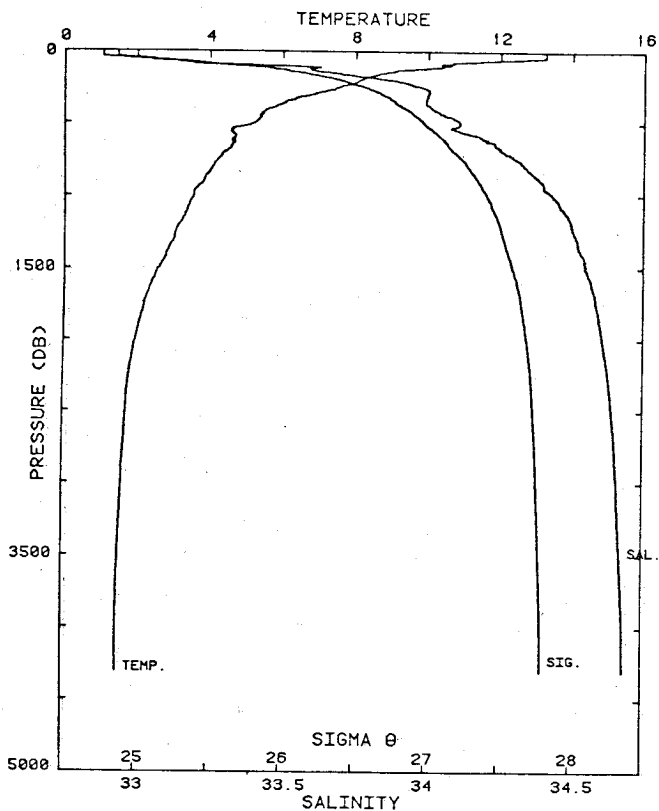
STATION 66 LAG17



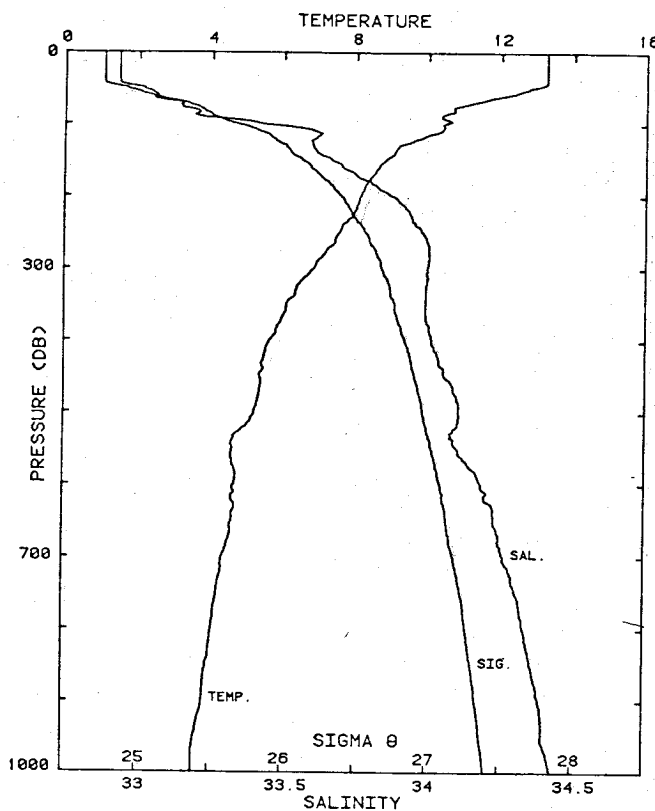
STATION 66 LAG17

CAST NO. 66 LAT: 39 30.2 N 14 FEB 1981 1427 GMT
 STATION: LAG17 LONG: 127 20.0 W DPTH: 4300M PROBE 2561
 304.0 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELTD
	TEMP			THETA		
1	13.202	32.943	13.202	24.781	317.6	0.003
10	13.203	32.942	13.201	24.780	317.9	0.032
20	13.201	32.943	13.199	24.781	318.1	0.064
30	13.201	32.942	13.198	24.781	318.3	0.095
40	13.204	32.942	13.198	24.781	318.6	0.127
50	12.928	33.082	12.921	24.944	303.4	0.159
60	12.802	33.291	12.794	25.130	285.9	0.188
70	12.813	33.410	12.804	25.221	277.6	0.216
80	12.257	33.415	12.245	25.332	267.2	0.244
90	11.797	33.490	11.785	25.477	253.6	0.270
100	11.194	33.564	11.182	25.645	237.7	0.294
110	10.545	33.556	10.532	25.754	227.5	0.317
120	9.671	33.551	9.658	25.899	213.8	0.339
130	9.634	33.727	9.619	26.042	200.4	0.360
140	9.374	33.758	9.359	26.109	194.2	0.379
150	9.316	33.794	9.300	26.146	190.8	0.399
175	8.850	33.846	8.832	26.262	180.2	0.445
200	8.289	33.927	8.269	26.412	166.2	0.488
225	7.806	33.967	7.784	26.516	156.6	0.529
250	7.447	33.990	7.423	26.586	150.3	0.567
300	6.730	33.992	6.703	26.687	141.1	0.640
400	5.780	34.030	5.746	26.840	127.3	0.773
500	5.061	34.111	5.022	26.991	113.5	0.893
600	4.584	34.188	4.538	27.106	103.1	1.001
800	4.080	34.346	4.020	27.286	87.4	1.191
1000	3.589	34.431	3.516	27.404	77.0	1.355
1500	2.648	34.537	2.544	27.577	61.6	1.697
2000	1.969	34.605	1.833	27.691	50.8	1.975
2500	1.745	34.643	1.569	27.740	47.1	2.217
3000	1.626	34.663	1.406	27.768	45.7	2.447
3500	1.549	34.674	1.282	27.785	45.2	2.675
4000	1.497	34.685	1.178	27.802	45.0	2.900
4341	1.515	34.688	1.158	27.805	46.0	3.055



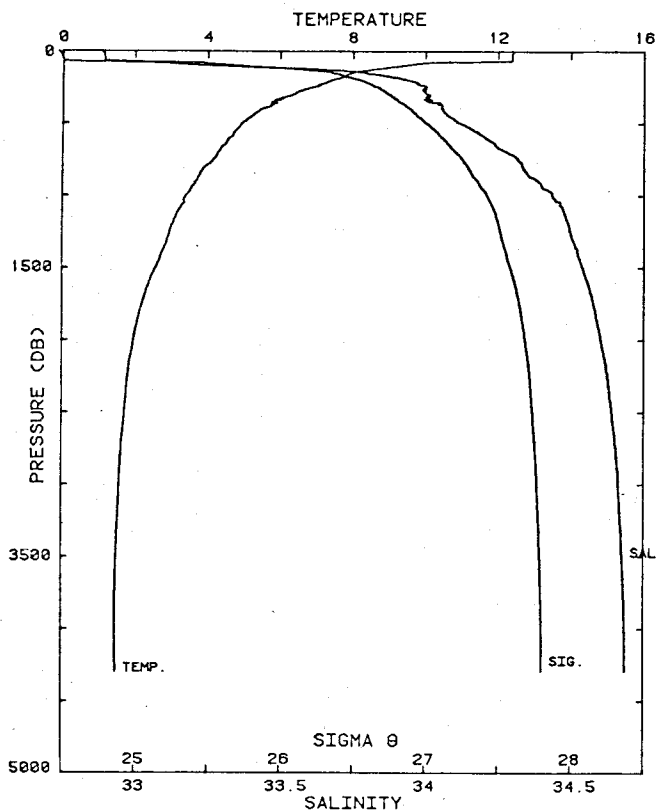
STATION 67 LAG18



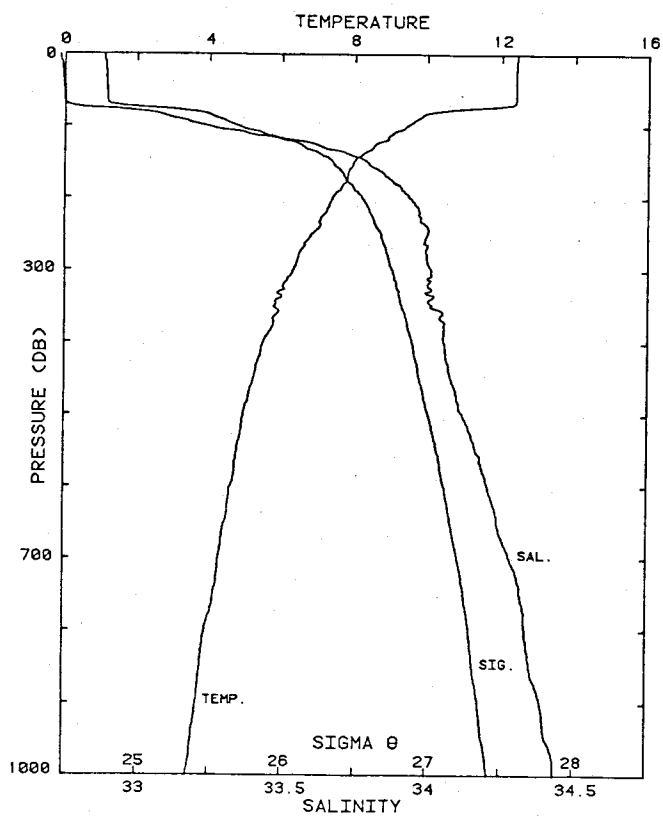
STATION 67 LAG18

CAST NO. 67 LAT: 39 32.2 N 14 FEB 1981 1747 GMT
 STATION: LAG18 LONG: 127 39.6 W DPTH: 4264M PROBE 2561
 332.3 KM FROM SHORE 3MIN GAP AT 689DB ANGLE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP			THETA		
1	13.254	32.932	13.254	24.762	319.4	0.003
10	13.252	32.933	13.251	24.763	319.5	0.032
20	13.253	32.932	13.250	24.763	319.8	0.064
30	13.252	32.933	13.248	24.764	320.0	0.096
40	13.251	32.934	13.245	24.765	320.1	0.128
50	12.768	33.019	12.762	24.926	305.0	0.159
60	12.034	33.061	12.026	25.099	288.7	0.189
70	11.232	33.145	11.224	25.312	268.6	0.217
80	10.705	33.186	10.695	25.438	256.8	0.244
90	10.356	33.217	10.347	25.523	248.9	0.269
100	10.444	33.421	10.432	25.667	235.5	0.292
110	10.340	33.608	10.328	25.830	220.2	0.315
120	9.729	33.604	9.716	25.931	210.8	0.337
130	9.170	33.599	9.156	26.017	202.6	0.358
140	9.043	33.618	9.028	26.053	199.4	0.378
150	8.790	33.670	8.774	26.133	191.9	0.397
175	8.378	33.765	8.360	26.272	179.1	0.444
200	8.118	33.873	8.098	26.395	167.7	0.487
225	7.928	33.936	7.906	26.473	160.7	0.528
250	7.521	33.981	7.497	26.568	152.0	0.567
300	6.833	33.999	6.806	26.678	142.0	0.640
400	5.633	34.014	5.600	26.845	126.6	0.774
500	5.212	34.109	5.171	26.971	115.5	0.894
600	4.679	34.188	4.632	27.095	104.3	1.004
800	4.073	34.339	4.013	27.281	87.9	1.196
1000	3.548	34.433	3.475	27.410	76.4	1.360
1500	2.575	34.548	2.472	27.593	59.8	1.697
2000	1.971	34.610	1.835	27.694	50.5	1.968
2500	1.736	34.644	1.561	27.741	46.9	2.210
3000	1.628	34.662	1.408	27.767	45.8	2.441
3500	1.548	34.674	1.280	27.786	45.2	2.668
4000	1.496	34.685	1.177	27.802	45.0	2.892
4303	1.510	34.688	1.157	27.805	45.8	3.030



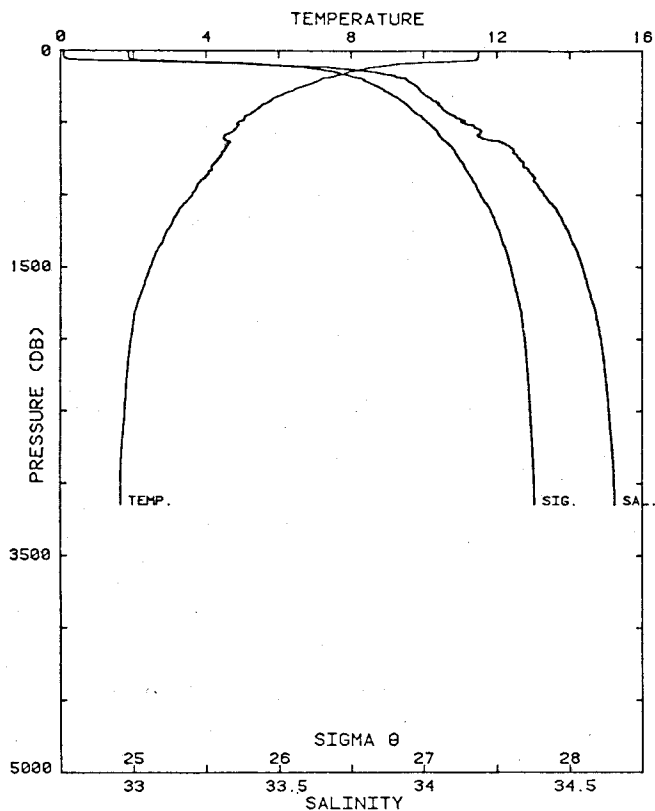
STATION 68 LAG19



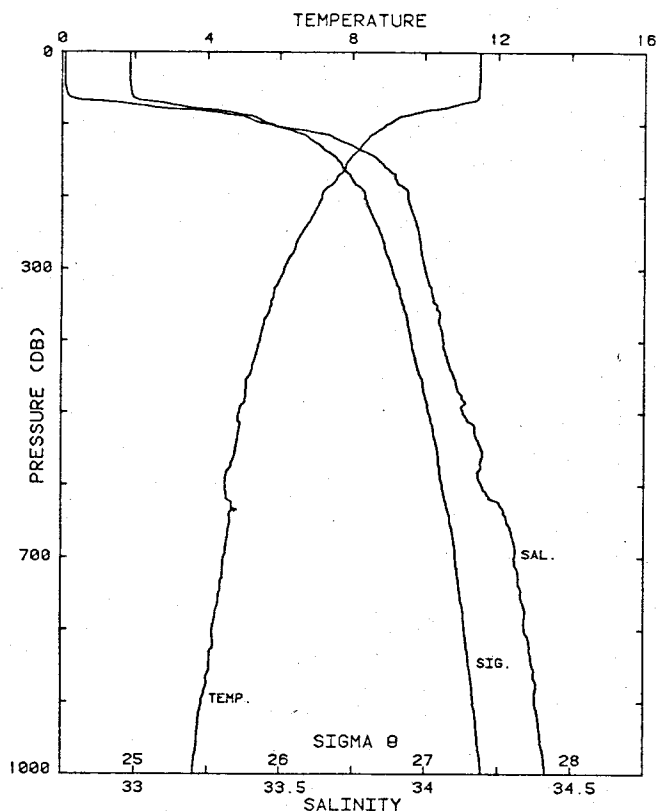
STATION 68 LAG19

CAST NO. 68 LAT: 39 30.0 N 14 FEB 1981 2055 GMT
 STATION: LAG19 LONG: 127 59.9 W DPTH: 4246M PROBE 2561
 361.1 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	12.426	32.734	12.426	24.771	318.5	0.003
10	12.407	32.737	12.405	24.777	318.2	0.032
20	12.392	32.742	12.390	24.784	317.7	0.064
30	12.386	32.744	12.382	24.788	317.7	0.095
40	12.390	32.746	12.385	24.788	317.9	0.127
50	12.387	32.748	12.381	24.791	317.9	0.159
60	12.386	32.750	12.378	24.792	318.0	0.191
70	12.318	32.755	12.309	24.809	316.6	0.222
80	10.291	33.007	10.282	25.370	263.2	0.252
90	9.733	33.139	9.723	25.566	244.7	0.277
100	9.439	33.237	9.428	25.691	233.0	0.301
110	9.038	33.379	9.027	25.867	216.4	0.323
120	8.799	33.559	8.786	26.045	199.7	0.344
130	8.477	33.649	8.465	26.165	188.4	0.363
140	8.181	33.740	8.167	26.281	177.5	0.382
150	7.962	33.794	7.947	26.356	170.5	0.399
175	7.791	33.876	7.774	26.446	162.4	0.440
200	7.393	33.938	7.374	26.551	152.6	0.479
225	7.115	33.971	7.094	26.617	146.7	0.517
250	6.829	34.001	6.806	26.681	141.0	0.553
300	6.318	34.014	6.291	26.757	134.1	0.622
400	5.488	34.057	5.455	26.897	121.6	0.750
500	4.947	34.120	4.907	27.010	111.5	0.867
600	4.600	34.208	4.553	27.120	101.8	0.973
800	3.915	34.337	3.857	27.295	86.2	1.161
1000	3.401	34.436	3.331	27.427	74.5	1.322
1500	2.589	34.542	2.486	27.587	60.5	1.656
2000	1.986	34.604	1.850	27.688	51.1	1.931
2500	1.739	34.641	1.564	27.739	47.1	2.174
3000	1.604	34.663	1.385	27.770	45.3	2.404
3500	1.518	34.677	1.251	27.790	44.5	2.628
4000	1.488	34.685	1.170	27.802	44.8	2.852
4295	1.511	34.687	1.159	27.805	45.8	2.985



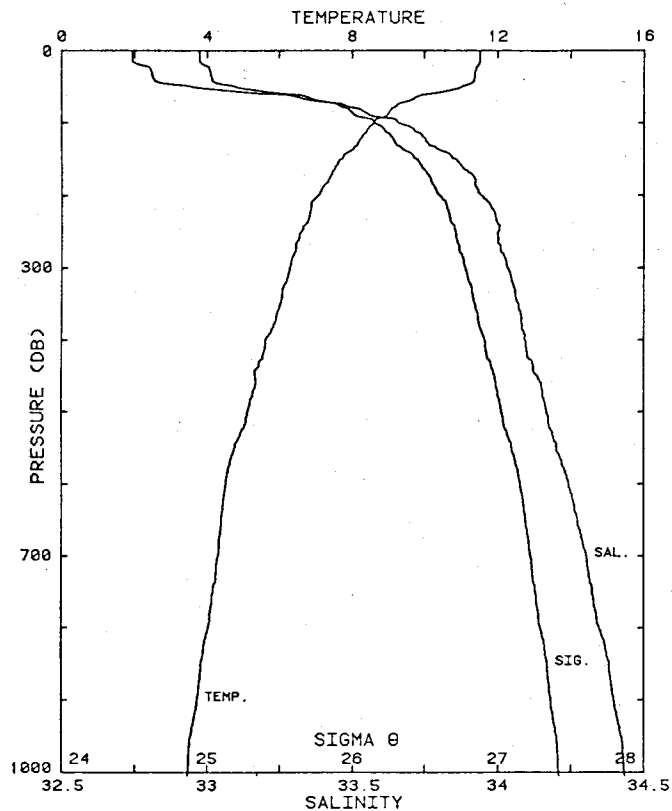
STATION 69 SR18



STATION 69 SR18

CAST NO. 69 LAT: 41 54.0 N 15 FEB 1981 1149 GMT
 STATION:SR18 LONG:128 00.0 W DPTH: 3135M PROBE 2561
 316.5 KM FROM SHORE

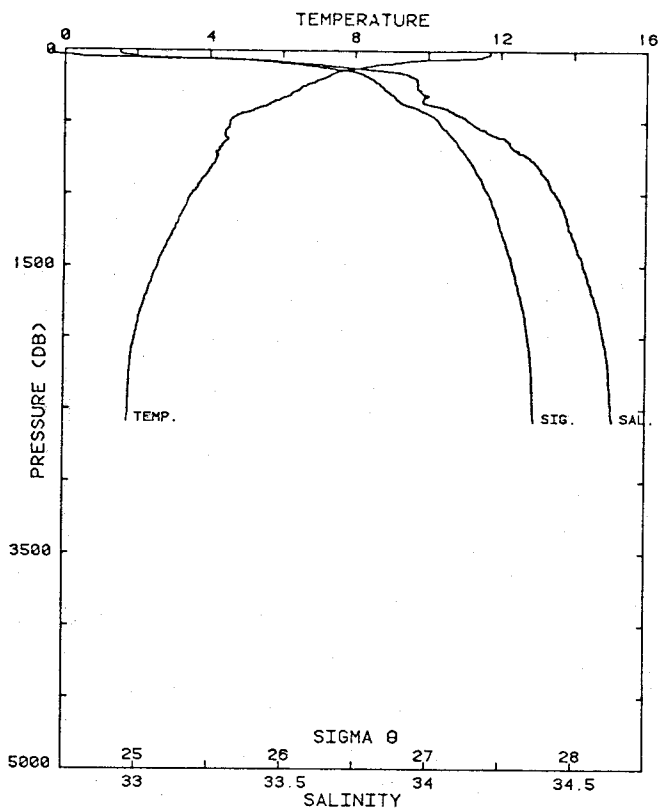
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
1	11.484	32.760	11.484	24.967	299.8	0.003
10	11.484	32.761	11.484	24.967	300.0	0.030
20	11.485	32.761	11.483	24.967	300.2	0.060
30	11.487	32.760	11.483	24.967	300.5	0.090
40	11.488	32.760	11.483	24.967	300.8	0.120
50	11.471	32.764	11.465	24.973	300.4	0.150
60	11.460	32.772	11.453	24.982	299.8	0.180
70	11.101	32.920	11.092	25.161	283.0	0.210
80	10.218	33.169	10.209	25.508	250.1	0.236
90	9.289	33.376	9.280	25.824	220.1	0.260
100	8.977	33.453	8.966	25.934	209.9	0.282
110	8.680	33.603	8.668	26.097	194.5	0.302
120	8.428	33.693	8.416	26.207	184.2	0.321
130	8.247	33.751	8.234	26.280	177.4	0.339
140	8.076	33.804	8.061	26.346	171.3	0.356
150	7.894	33.843	7.879	26.403	165.9	0.373
175	7.555	33.898	7.538	26.497	157.4	0.413
200	7.154	33.942	7.135	26.588	149.0	0.451
225	6.910	33.960	6.889	26.636	144.8	0.488
250	6.600	33.977	6.577	26.691	139.7	0.524
300	6.107	34.000	6.081	26.775	132.3	0.591
400	5.451	34.065	5.418	26.907	120.6	0.718
500	4.884	34.132	4.845	27.027	109.8	0.832
600	4.494	34.195	4.448	27.121	101.6	0.938
800	4.142	34.344	4.082	27.278	88.3	1.126
1000	3.614	34.414	3.542	27.389	78.6	1.292
1500	2.455	34.546	2.354	27.601	58.7	1.628
2000	1.926	34.609	1.791	27.697	50.0	1.896
2500	1.755	34.636	1.579	27.734	47.7	2.138
3000	1.651	34.654	1.431	27.759	46.7	2.374
3149	1.650	34.656	1.415	27.762	46.9	2.444



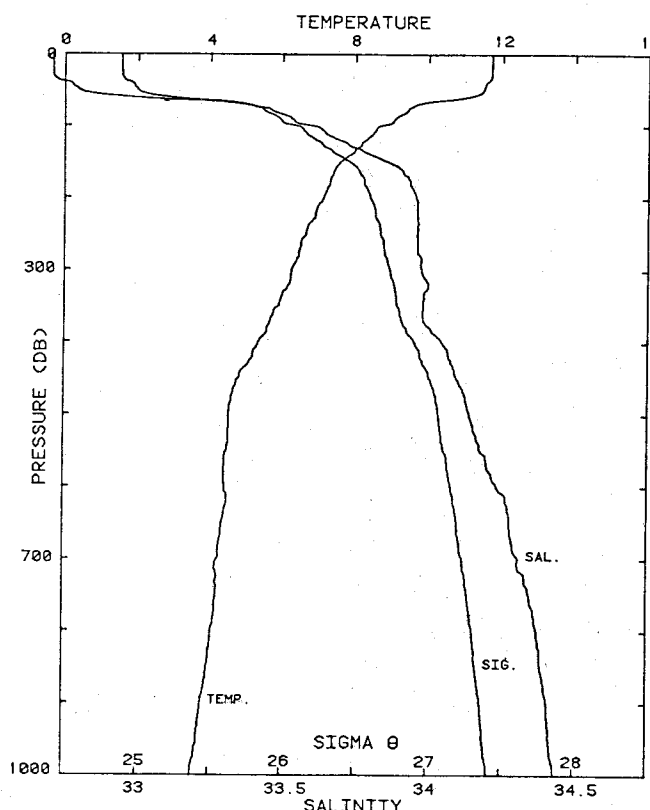
STATION 70 SR17

CAST NO. 70 LAT: 41 54.0 N 15 FEB 1981 1534 GMT
 STATION: SR17 LONG: 127 30.0 W DPTH: 1078M PROBE 2561
 274.9 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELTA
1	11.518	32.741	11.518	24.946	301.9	0.003
10	11.518	32.742	11.517	24.947	302.0	0.030
20	11.474	32.771	11.472	24.977	299.3	0.060
30	11.386	32.809	11.382	25.023	295.2	0.090
40	11.360	32.817	11.355	25.034	294.4	0.120
50	11.026	32.944	11.020	25.193	279.5	0.148
60	10.106	33.224	10.099	25.570	243.7	0.175
70	9.559	33.377	9.552	25.781	223.9	0.198
80	9.114	33.515	9.105	25.960	207.0	0.220
90	8.955	33.565	8.946	26.024	201.1	0.240
100	8.606	33.659	8.595	26.152	189.1	0.259
110	8.417	33.714	8.406	26.225	182.4	0.278
120	8.259	33.748	8.247	26.274	177.8	0.296
130	8.137	33.766	8.124	26.308	174.8	0.314
140	7.903	33.819	7.890	26.384	167.7	0.331
150	7.697	33.855	7.681	26.443	162.2	0.347
175	7.390	33.918	7.374	26.536	153.7	0.386
200	7.082	33.942	7.064	26.597	148.1	0.425
225	6.845	33.991	6.825	26.669	141.6	0.460
250	6.600	34.005	6.577	26.714	137.7	0.495
300	6.277	34.034	6.251	26.779	132.1	0.562
400	5.611	34.095	5.578	26.911	120.4	0.689
500	5.120	34.168	5.080	27.028	110.0	0.804
600	4.513	34.244	4.468	27.158	98.2	0.908
800	4.023	34.347	3.963	27.293	86.7	1.093
1000	3.465	34.434	3.394	27.419	75.4	1.253
1005	3.454	34.435	3.382	27.421	75.2	1.256



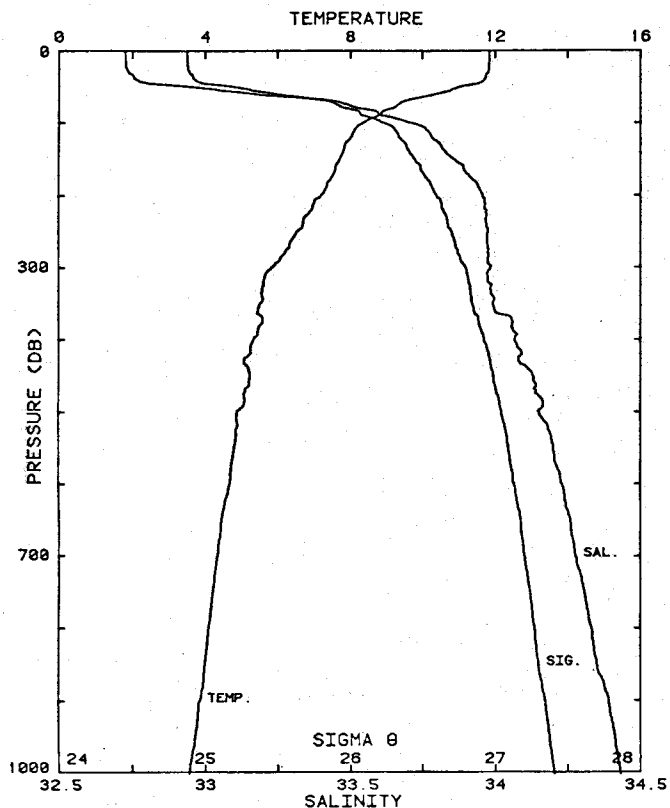
STATION 71 SR16



STATION 71 SR16

CAST NO. 71 LAT: 41 54.0 N 15 FEB 1981 1820 GHT
 STATION:SR16 LONG:127 00.0 W DPTH: 2572M PROBE 2561
 232.9 KM FROM SHORE

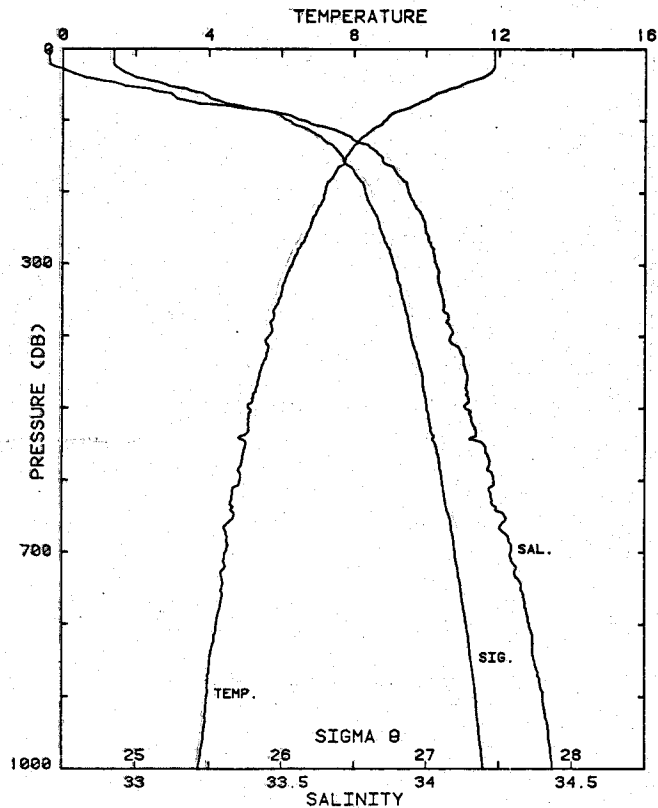
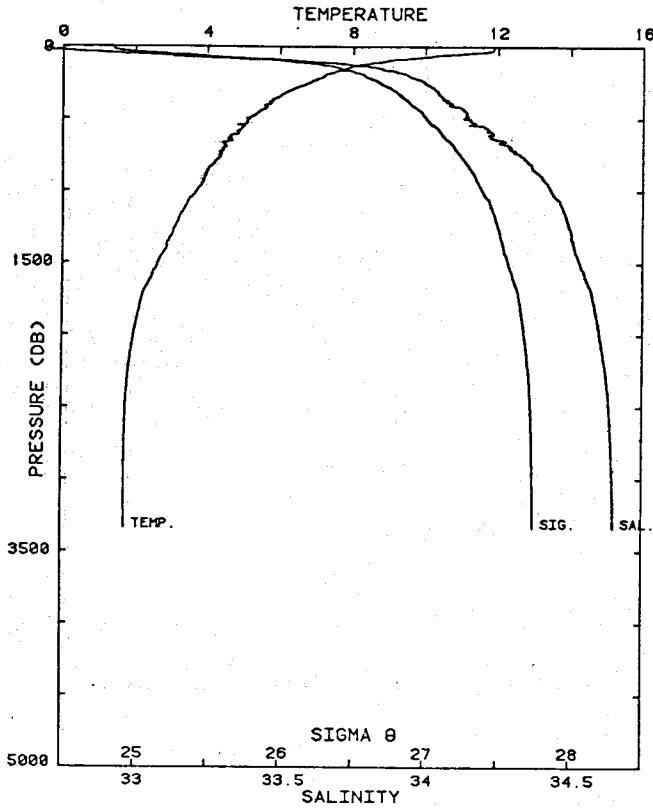
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	11.703	32.707	11.703	24.886	307.6	0.003
10	11.700	32.707	11.699	24.886	307.7	0.031
20	11.698	32.708	11.695	24.888	307.9	0.061
30	11.689	32.709	11.685	24.891	307.8	0.092
40	11.550	32.768	11.545	24.962	301.3	0.123
50	11.473	32.802	11.466	25.002	297.7	0.153
60	10.952	32.993	10.944	25.245	274.8	0.182
70	9.679	33.369	9.671	25.755	226.4	0.207
80	9.384	33.471	9.375	25.883	214.4	0.229
90	9.072	33.533	9.062	25.981	205.2	0.249
100	8.689	33.607	8.679	26.098	194.1	0.270
110	8.491	33.647	8.479	26.161	188.4	0.289
120	8.260	33.701	8.248	26.237	181.2	0.307
130	8.068	33.750	8.055	26.306	174.9	0.325
140	7.840	33.807	7.827	26.383	167.6	0.342
150	7.569	33.866	7.554	26.469	159.6	0.359
175	7.291	33.936	7.275	26.564	151.0	0.397
200	7.117	33.958	7.098	26.606	147.4	0.435
225	6.887	33.961	6.866	26.640	144.4	0.471
250	6.635	33.962	6.612	26.676	141.3	0.507
300	6.248	33.977	6.222	26.738	135.9	0.576
400	5.352	34.048	5.320	26.905	120.6	0.706
500	4.534	34.143	4.497	27.073	105.0	0.817
600	4.422	34.236	4.377	27.162	97.7	0.919
800	4.058	34.376	3.998	27.312	84.9	1.101
1000	3.510	34.437	3.437	27.417	75.7	1.262
1500	2.575	34.535	2.472	27.583	60.8	1.601
2000	1.954	34.605	1.818	27.691	50.6	1.877
2500	1.786	34.632	1.609	27.729	48.4	2.122
2587	1.762	34.637	1.578	27.735	48.0	2.163



STATION 72 SR15

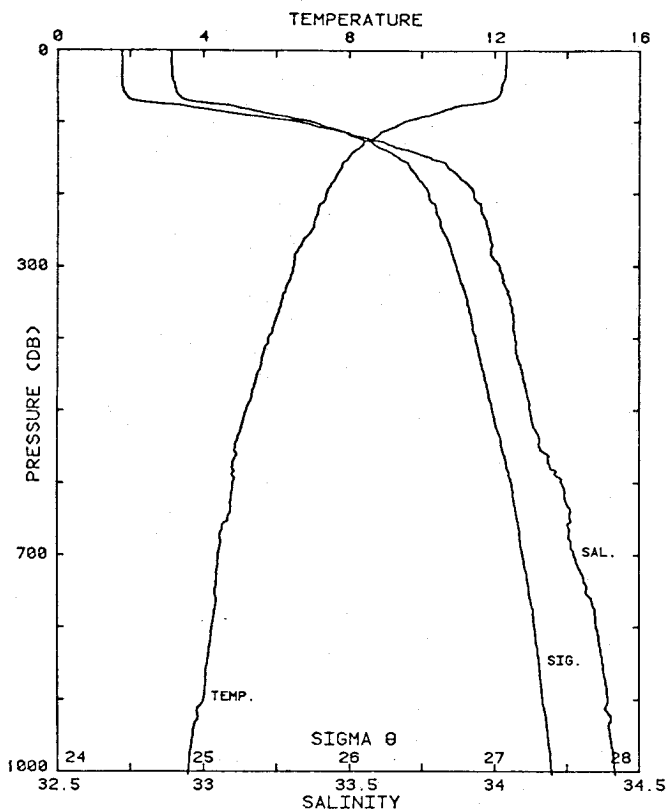
CAST NO. 72 LAT: 41 54.0 N 15 FEB 1981 2134 GMT
 STATION: SR15 LONG: 126 30.0 W DPTH: 3306M PROBE 2561
 191.7 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	11.842	32.725	11.842	24.874	308.7	0.003
10	11.842	32.726	11.841	24.875	308.9	0.031
20	11.835	32.729	11.833	24.878	308.7	0.062
30	11.807	32.738	11.804	24.891	307.8	0.093
40	11.708	32.763	11.704	24.929	304.4	0.123
50	10.998	32.959	10.991	25.209	277.9	0.153
60	10.316	33.183	10.309	25.502	250.2	0.179
70	9.466	33.451	9.458	25.853	217.0	0.203
80	9.111	33.539	9.103	25.979	205.2	0.223
90	8.762	33.617	8.753	26.095	194.3	0.243
100	8.358	33.708	8.347	26.228	181.8	0.262
110	8.108	33.765	8.097	26.310	174.1	0.280
120	8.010	33.783	7.998	26.340	171.5	0.297
130	7.847	33.812	7.835	26.387	167.2	0.314
140	7.790	33.830	7.777	26.409	165.2	0.331
150	7.697	33.860	7.682	26.446	161.9	0.347
175	7.475	33.917	7.458	26.523	154.9	0.386
200	7.191	33.957	7.172	26.594	148.4	0.425
225	6.851	33.968	6.831	26.650	143.4	0.461
250	6.536	33.974	6.513	26.698	139.1	0.496
300	5.854	33.985	5.829	26.794	130.3	0.563
400	5.333	34.068	5.301	26.923	119.0	0.689
500	4.879	34.151	4.840	27.043	108.4	0.802
600	4.673	34.229	4.627	27.128	101.2	0.907
800	4.088	34.331	4.028	27.273	88.6	1.095
1000	3.563	34.431	3.490	27.406	76.7	1.261
1003	3.553	34.431	3.481	27.408	76.6	1.263



CAST NO. 73 LAT: 41 53.8 N 16 FEB 1981 0036 GNT
 STATION: SR14 LONG: 126 00.0 W DPTH: 3318M PROBE 2561
 149.9 KM FROM SHORE

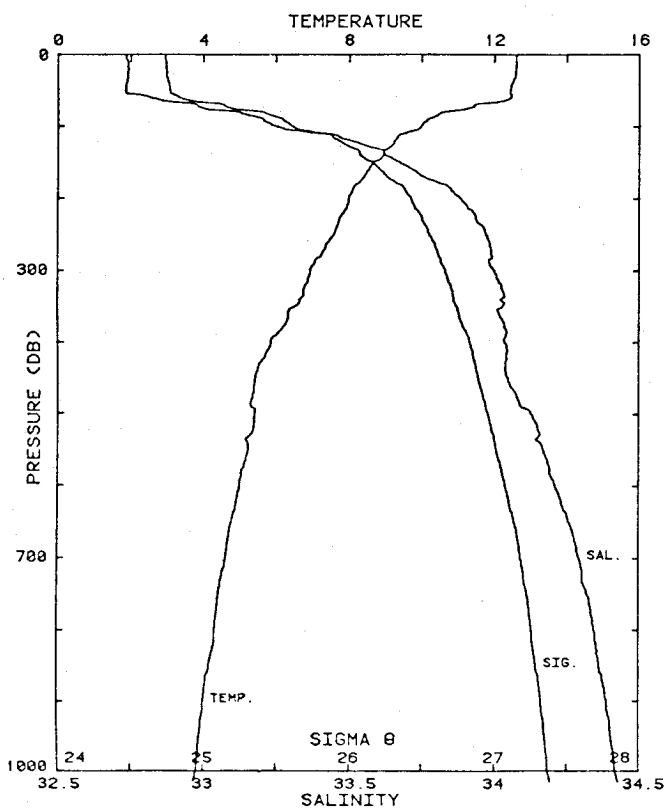
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	11.875	32.701	11.875	24.849	311.1	0.003
10	11.875	32.703	11.874	24.851	311.1	0.031
20	11.875	32.706	11.873	24.854	311.1	0.062
30	11.831	32.758	11.827	24.903	306.7	0.093
40	11.582	32.823	11.576	24.999	297.8	0.123
50	11.013	32.947	11.008	25.197	279.1	0.152
60	10.488	33.075	10.481	25.389	261.0	0.179
70	10.096	33.139	10.088	25.506	250.1	0.205
80	9.641	33.300	9.632	25.707	231.1	0.229
90	9.090	33.496	9.081	25.950	208.2	0.251
100	8.878	33.570	8.868	26.041	199.7	0.271
110	8.588	33.659	8.576	26.156	188.9	0.291
120	8.321	33.726	8.309	26.249	180.2	0.309
130	8.113	33.766	8.100	26.312	174.4	0.327
140	7.931	33.818	7.918	26.379	168.2	0.344
150	7.791	33.847	7.777	26.422	164.2	0.361
175	7.459	33.902	7.442	26.513	155.8	0.401
200	7.207	33.940	7.189	26.580	149.9	0.439
225	6.995	33.976	6.974	26.637	144.8	0.476
250	6.786	33.999	6.763	26.683	140.6	0.511
300	6.300	34.035	6.274	26.778	132.2	0.579
400	5.658	34.086	5.625	26.899	121.6	0.706
500	5.099	34.137	5.059	27.006	112.1	0.821
600	4.848	34.235	4.801	27.114	102.9	0.928
800	4.204	34.356	4.143	27.281	88.1	1.119
1000	3.704	34.435	3.632	27.396	78.1	1.284
1500	2.618	34.535	2.515	27.578	61.4	1.628
2000	1.970	34.602	1.834	27.687	51.1	1.903
2500	1.765	34.636	1.589	27.733	47.9	2.148
3000	1.726	34.648	1.504	27.749	48.2	2.388
3337	1.741	34.651	1.486	27.753	49.2	2.552



STATION 74 SR13

CAST NO. 74 LAT: 41 54.0 N 16 FEB 1981 0346 GHT
 STATION:SR13 LONG:125 40.1 W DPTH: 2928M PROBE 2561
 121.7 KM FROM SHORE

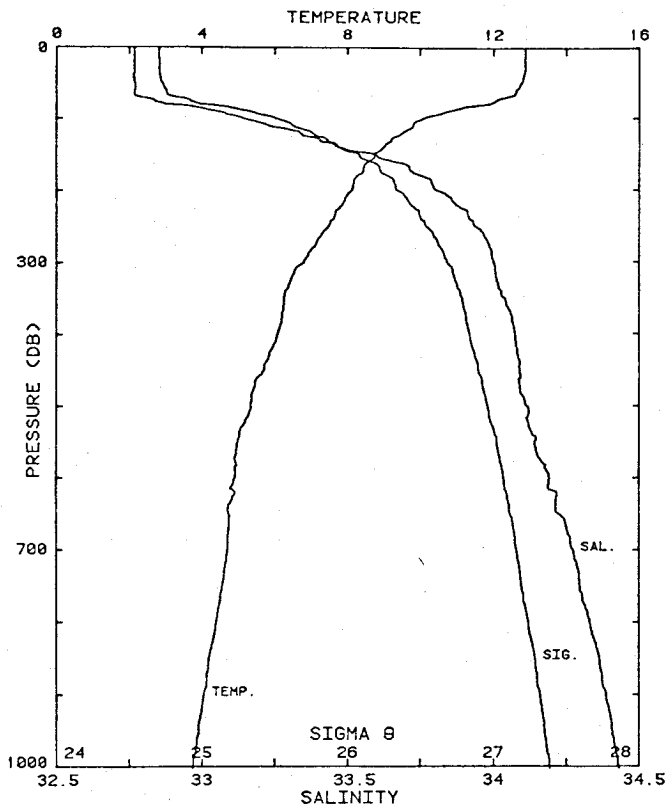
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.318	32.722	12.318	24.782	317.5	0.003
10	12.319	32.722	12.317	24.783	317.6	0.032
20	12.309	32.723	12.307	24.785	317.7	0.064
30	12.291	32.722	12.286	24.788	317.6	0.095
40	12.279	32.722	12.274	24.791	317.6	0.127
50	12.199	32.723	12.193	24.807	316.3	0.159
60	12.159	32.732	12.151	24.821	315.2	0.190
70	11.958	32.756	11.950	24.878	310.1	0.222
80	10.862	32.958	10.852	25.233	276.3	0.251
90	10.264	33.134	10.253	25.474	253.6	0.278
100	9.524	33.322	9.514	25.744	228.0	0.301
110	9.107	33.439	9.095	25.902	213.1	0.324
120	8.751	33.533	8.739	26.032	200.9	0.344
130	8.376	33.631	8.363	26.166	188.3	0.363
140	8.143	33.712	8.129	26.265	179.0	0.382
150	7.974	33.784	7.959	26.347	171.4	0.400
175	7.641	33.879	7.624	26.470	160.0	0.441
200	7.364	33.930	7.345	26.549	152.8	0.479
225	7.136	33.957	7.115	26.603	148.0	0.517
250	6.961	33.980	6.937	26.645	144.3	0.553
300	6.473	34.019	6.447	26.742	135.7	0.623
400	5.783	34.071	5.750	26.872	124.2	0.753
500	5.176	34.123	5.136	26.986	114.1	0.872
600	4.798	34.232	4.751	27.116	102.5	0.981
800	4.220	34.352	4.159	27.275	88.6	1.172
1000	3.579	34.417	3.506	27.393	78.0	1.338
1005	3.574	34.417	3.502	27.395	77.9	1.342



STATION 75 SR12

CAST NO. 75 LAT: 41 54.0 N 16 FEB 1981 0559 GHT
 STATION:SR12 LONG:125 20.0 W DPTH: 3087M PROBE 2561
 94.0 KM FROM SHORE 6MIN GAP AT 675DB ANGLE

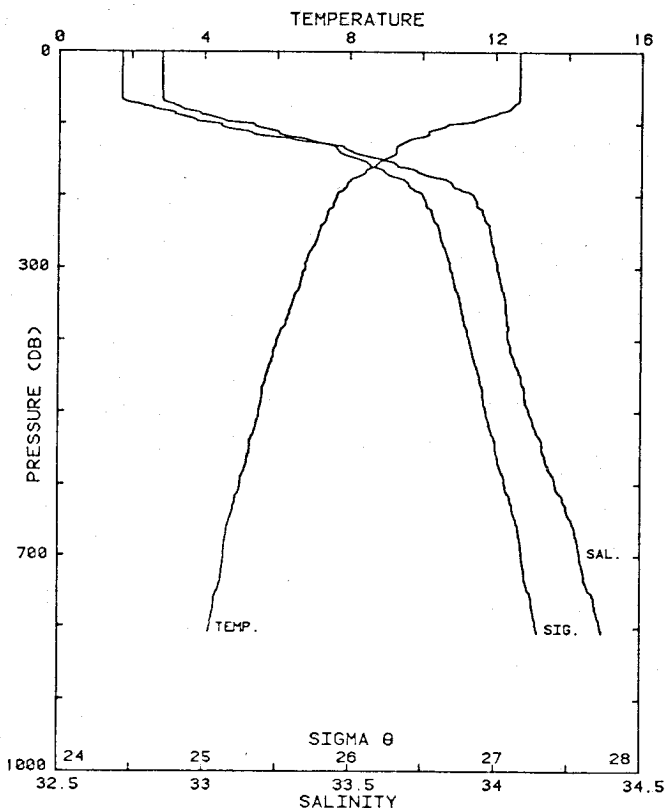
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.598	32.734	12.598	24.738	321.6	0.003
10	12.599	32.740	12.597	24.743	321.4	0.032
20	12.600	32.742	12.597	24.744	321.6	0.065
30	12.571	32.740	12.567	24.748	321.4	0.097
40	12.493	32.736	12.487	24.761	320.5	0.128
50	12.432	32.733	12.425	24.770	319.8	0.161
60	12.448	32.814	12.440	24.830	314.3	0.192
70	11.519	32.970	11.510	25.125	286.5	0.223
80	10.687	33.106	10.679	25.378	262.5	0.250
90	10.182	33.205	10.171	25.543	247.0	0.277
100	9.988	33.245	9.976	25.607	241.0	0.301
110	9.501	33.402	9.489	25.809	221.9	0.324
120	9.241	33.507	9.228	25.934	210.3	0.345
130	9.074	33.587	9.060	26.023	202.0	0.366
140	8.927	33.625	8.912	26.076	197.1	0.386
150	8.630	33.674	8.615	26.161	189.2	0.405
175	8.309	33.789	8.291	26.300	176.3	0.451
200	7.983	33.884	7.964	26.424	165.0	0.494
225	7.759	33.937	7.737	26.499	158.2	0.534
250	7.581	33.972	7.557	26.552	153.5	0.572
300	6.931	34.000	6.904	26.665	143.2	0.646
400	5.863	34.035	5.829	26.833	127.9	0.783
500	5.429	34.128	5.387	26.960	116.8	0.905
600	5.001	34.212	4.952	27.077	106.4	1.017
800	4.329	34.346	4.268	27.260	90.3	1.211
1000	3.816	34.419	3.741	27.372	80.6	1.381
1015	3.746	34.428	3.671	27.387	79.2	1.393



STATION 76 SR11

CAST NO. 76 LAT: 41 54.2 N 16 FEB 1981 0736 GMT
 STATION:SR11 LONG:125 09.9 W DPTH: 2132M PROBE 2561
 79.7 KM FROM SHORE

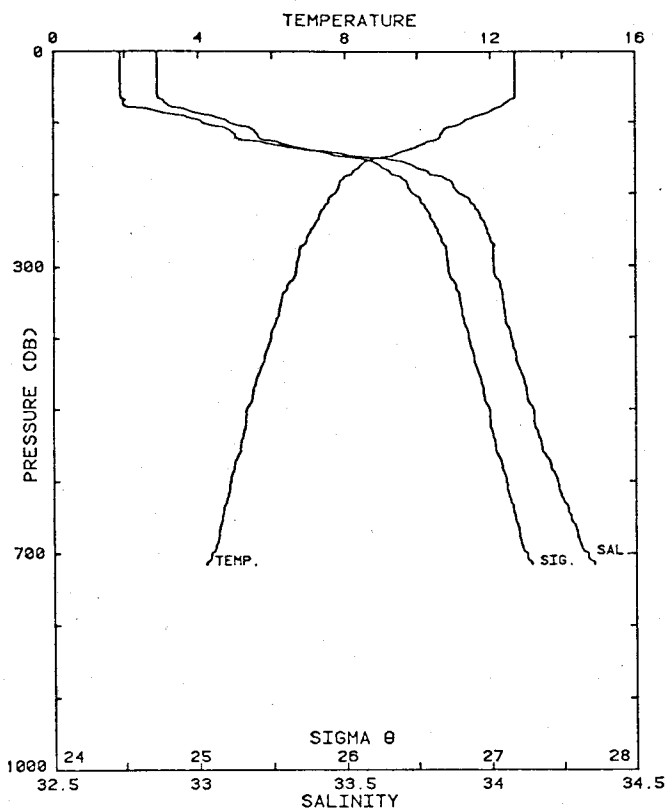
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.876	32.768	12.875	24.710	324.3	0.003
10	12.876	32.768	12.875	24.710	324.5	0.032
20	12.871	32.768	12.868	24.712	324.7	0.065
30	12.875	32.768	12.871	24.711	325.0	0.098
40	12.840	32.766	12.834	24.717	324.7	0.130
50	12.790	32.769	12.783	24.729	323.8	0.162
60	12.661	32.771	12.653	24.755	321.5	0.194
70	12.496	32.777	12.486	24.792	318.2	0.227
80	11.925	32.870	11.916	24.972	301.3	0.257
90	10.839	33.042	10.828	25.303	269.9	0.286
100	10.148	33.137	10.136	25.496	251.7	0.312
110	9.810	33.223	9.797	25.620	240.0	0.336
120	9.534	33.335	9.521	25.752	227.6	0.360
130	9.206	33.403	9.192	25.859	217.7	0.382
140	9.010	33.464	8.996	25.937	210.3	0.403
150	8.751	33.585	8.735	26.073	197.6	0.424
175	8.423	33.724	8.405	26.232	182.8	0.471
200	8.133	33.803	8.113	26.337	173.2	0.516
225	7.782	33.888	7.760	26.457	162.2	0.557
250	7.474	33.938	7.450	26.541	154.5	0.597
300	6.800	34.000	6.773	26.684	141.4	0.670
400	6.077	34.075	6.043	26.838	127.7	0.803
500	5.348	34.116	5.306	26.961	116.7	0.925
600	4.906	34.193	4.859	27.074	106.7	1.036
800	4.385	34.331	4.323	27.242	92.1	1.235
1000	3.751	34.429	3.677	27.387	79.1	1.405
1003	3.741	34.431	3.667	27.390	78.8	1.407



STATION 77 SR10

CAST NO. 77 LAT: 41 54.0 N 16 FEB 1981 0917 GMT
 STATION:SR10 LONG:125 00.0 W DPTH: 824M PROBE 2561
 66.2 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.665	32.716	12.665	24.711	324.2	0.003
10	12.663	32.715	12.661	24.711	324.5	0.032
20	12.661	32.715	12.659	24.711	324.7	0.065
30	12.661	32.715	12.658	24.711	325.0	0.098
40	12.660	32.714	12.655	24.712	325.2	0.130
50	12.655	32.714	12.648	24.713	325.3	0.162
60	12.651	32.715	12.643	24.715	325.4	0.195
70	12.632	32.733	12.623	24.732	324.0	0.228
80	12.409	32.837	12.398	24.856	312.5	0.259
90	11.769	32.931	11.759	25.049	294.2	0.289
100	10.911	33.044	10.899	25.291	271.3	0.318
110	10.211	33.134	10.198	25.483	253.1	0.345
120	9.763	33.278	9.750	25.671	235.4	0.369
130	9.333	33.455	9.319	25.878	215.8	0.391
140	9.275	33.513	9.259	25.934	210.7	0.413
150	8.917	33.617	8.901	26.073	197.7	0.433
175	8.158	33.804	8.140	26.335	173.0	0.480
200	7.658	33.924	7.639	26.503	157.3	0.521
225	7.406	33.958	7.385	26.566	151.7	0.560
250	7.166	33.984	7.143	26.620	146.9	0.597
300	6.787	34.008	6.760	26.691	140.7	0.669
400	6.003	34.048	5.969	26.826	128.8	0.803
500	5.531	34.118	5.490	26.941	118.7	0.927
600	5.019	34.208	4.971	27.073	106.9	1.039
800	4.185	34.364	4.124	27.290	87.3	1.232
807	4.152	34.369	4.091	27.297	86.6	1.238



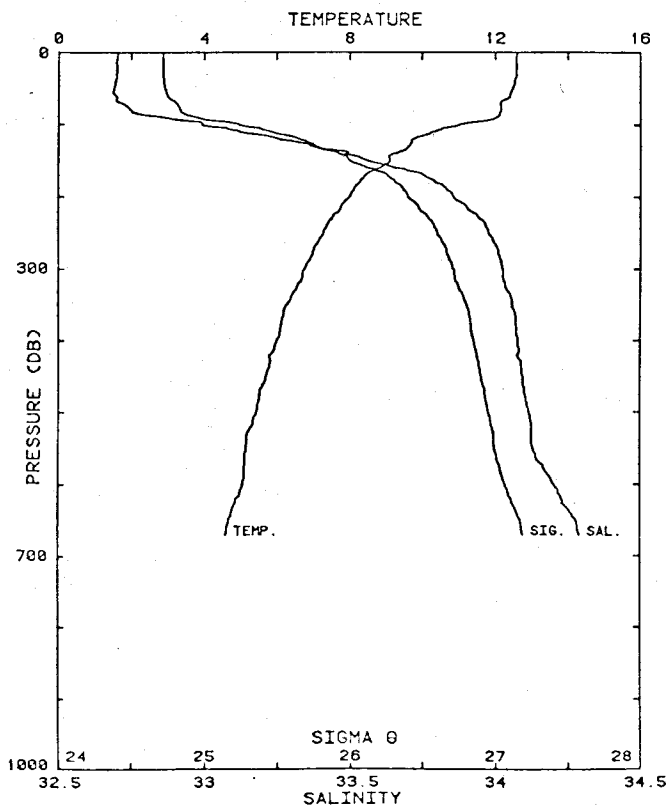
CAST NO. 78 LAT: 41 53.9 N 16 FEB 1981 1052 GMT
 STATION:SR 9 LONG:124 50.0 W DPTH: 729M PROBE 2561
 52.0 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.688	32.729	12.688	24.717	323.7	0.003
10	12.687	32.736	12.686	24.722	323.4	0.032
20	12.687	32.736	12.684	24.723	323.6	0.065
30	12.687	32.736	12.684	24.723	323.9	0.097
40	12.687	32.736	12.682	24.723	324.1	0.130
50	12.689	32.736	12.682	24.723	324.3	0.162
60	12.684	32.736	12.676	24.725	324.4	0.194
70	12.520	32.750	12.510	24.767	320.7	0.227
80	12.212	32.793	12.201	24.860	312.1	0.259
90	11.703	32.938	11.692	25.067	292.5	0.289
100	11.247	33.017	11.235	25.211	279.0	0.317
110	10.727	33.102	10.714	25.370	264.0	0.345
120	10.616	33.129	10.602	25.410	260.4	0.370
130	10.154	33.243	10.139	25.578	244.5	0.396
140	9.650	33.399	9.635	25.784	225.1	0.419
150	8.913	33.607	8.896	26.065	198.4	0.441
175	8.037	33.831	8.020	26.374	169.2	0.486
200	7.707	33.899	7.687	26.476	159.9	0.528
225	7.340	33.959	7.319	26.576	150.7	0.566
250	7.063	33.988	7.040	26.638	145.1	0.603
300	6.664	34.011	6.637	26.709	138.8	0.674
400	5.957	34.071	5.923	26.851	126.4	0.806
500	5.298	34.147	5.257	26.992	113.7	0.926
600	4.860	34.230	4.812	27.108	103.3	1.036
715	4.203	34.357	4.150	27.281	87.2	1.147

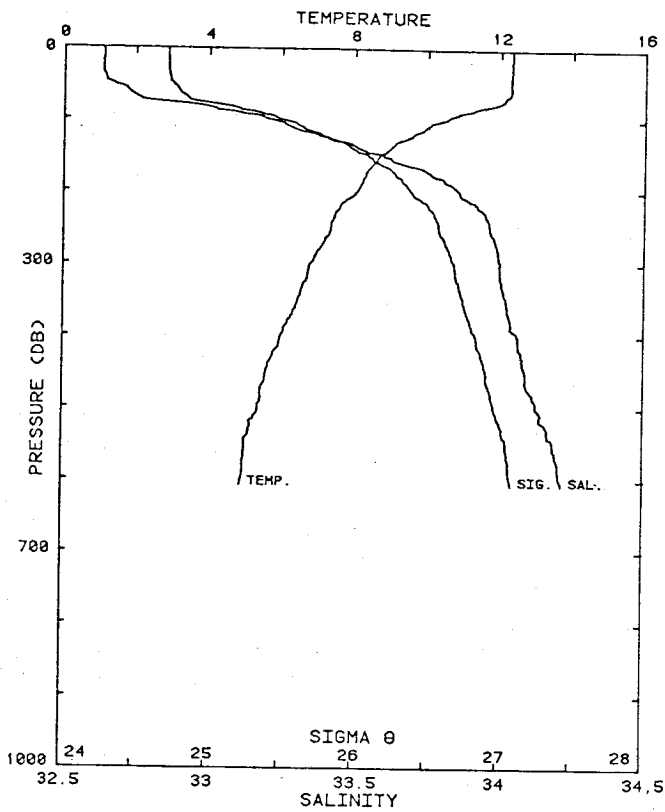
STATION 78 SR 9

CAST NO. 79 LAT: 41 54.0 N 16 FEB 1981 1159 GMT
 STATION:SR 8 LONG:124 45.0 W DPTH: 690M PROBE 2561
 45.5 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.591	32.704	12.591	24.716	323.8	0.003
10	12.570	32.702	12.569	24.719	323.7	0.032
20	12.580	32.702	12.577	24.717	324.1	0.065
30	12.570	32.701	12.566	24.719	324.2	0.097
40	12.523	32.696	12.517	24.725	323.9	0.130
50	12.467	32.692	12.460	24.732	323.5	0.162
60	12.394	32.699	12.386	24.751	321.9	0.194
70	12.146	32.715	12.137	24.811	316.4	0.226
80	12.145	32.748	12.134	24.837	314.2	0.258
90	12.026	32.861	12.014	24.948	303.9	0.289
100	11.014	32.993	11.002	25.235	276.7	0.318
110	10.297	33.118	10.284	25.456	255.7	0.345
120	9.756	33.255	9.743	25.654	237.0	0.369
130	9.619	33.375	9.605	25.770	226.2	0.392
140	9.229	33.490	9.214	25.923	211.7	0.414
150	9.104	33.562	9.088	26.000	204.6	0.435
175	8.312	33.781	8.294	26.294	176.9	0.482
200	7.973	33.856	7.953	26.403	166.9	0.525
225	7.544	33.936	7.522	26.529	155.2	0.565
250	7.263	33.977	7.240	26.601	148.7	0.604
300	6.750	34.025	6.723	26.709	138.9	0.674
400	5.977	34.076	5.943	26.852	126.3	0.807
500	5.413	34.115	5.372	26.951	117.6	0.928
600	5.036	34.200	4.988	27.065	107.7	1.041
671	4.575	34.290	4.523	27.188	96.2	1.113



STATION 79 SR 8



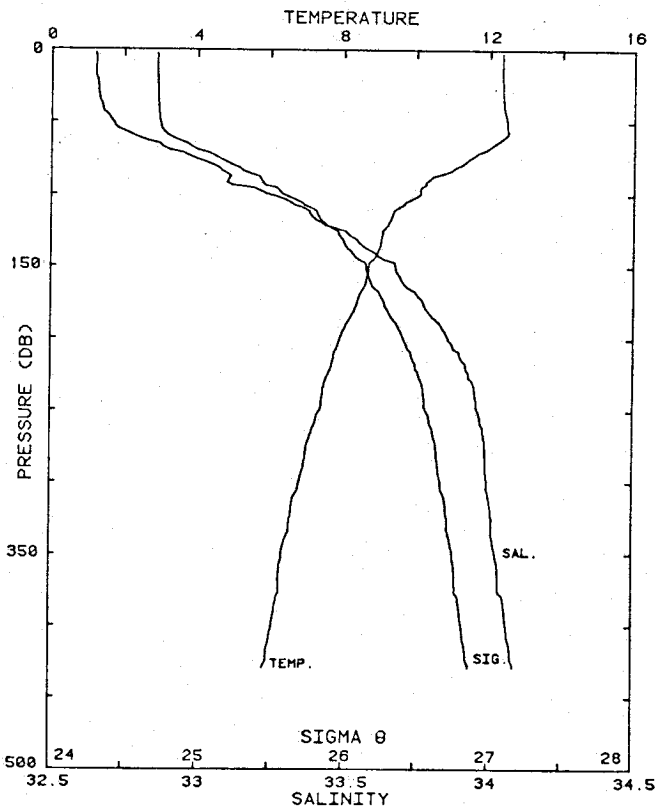
CAST NO. 80 LAT: 41 54.0 N 16 FEB 1981 1315 GMT
 STATION: SR 7 LONG: 124 40.0 W DPTH: 627M PROBE 2561
 38.3 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.325	32.638	12.325	24.716	323.7	0.003
10	12.321	32.639	12.321	24.718	323.8	0.032
20	12.298	32.638	12.295	24.721	323.7	0.065
30	12.301	32.637	12.297	24.720	324.0	0.097
40	12.286	32.644	12.281	24.729	323.5	0.130
50	12.272	32.668	12.265	24.751	321.6	0.162
60	12.281	32.725	12.273	24.793	317.9	0.194
70	12.118	32.760	12.109	24.851	312.6	0.225
80	11.724	32.950	11.714	25.071	291.8	0.256
90	10.920	33.090	10.909	25.326	267.7	0.284
100	10.457	33.209	10.445	25.500	251.4	0.310
110	9.983	33.277	9.970	25.633	238.8	0.334
120	9.626	33.366	9.613	25.761	226.7	0.358
130	9.194	33.446	9.180	25.895	214.2	0.380
140	8.978	33.516	8.964	25.984	205.9	0.400
150	8.685	33.601	8.669	26.096	195.4	0.421
175	8.304	33.763	8.286	26.281	178.2	0.467
200	8.052	33.861	8.033	26.395	167.7	0.511
225	7.554	33.937	7.532	26.528	155.3	0.551
250	7.352	33.966	7.329	26.580	150.7	0.589
300	6.768	34.003	6.740	26.690	140.8	0.662
400	6.003	34.065	5.970	26.839	127.5	0.798
500	5.393	34.131	5.352	26.967	116.1	0.919
600	4.958	34.215	4.911	27.084	105.7	1.028
607	4.931	34.219	4.883	27.091	105.1	1.036

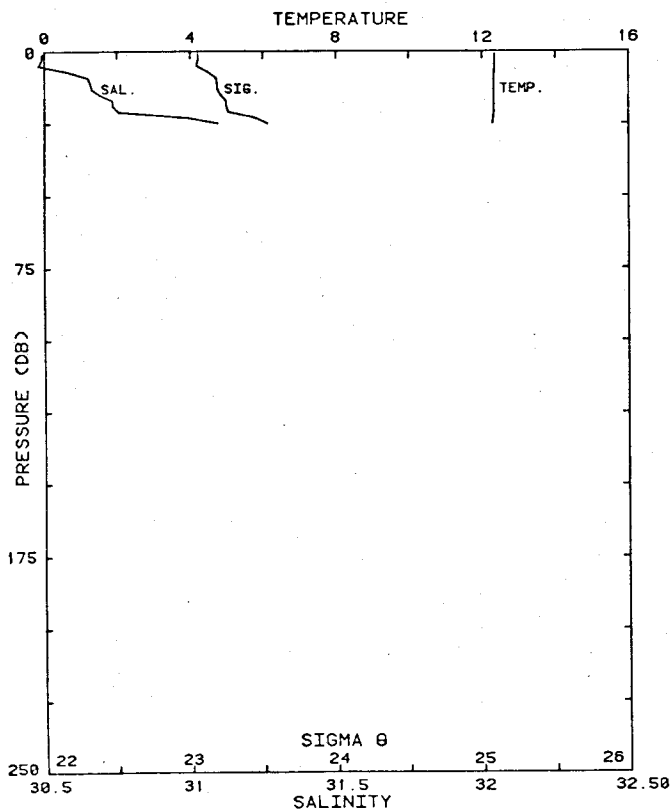
STATION 80 SR 7

CAST NO. 81 LAT: 41 54.0 N 16 FEB 1981 1415 GMT
 STATION: SR 6 LONG: 124 35.0 W DPTH: 440M PROBE 2561
 31.3 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
3	12.339	32.652	12.339	24.724	323.0	0.010
10	12.341	32.653	12.340	24.724	323.2	0.032
20	12.346	32.658	12.344	24.727	323.2	0.065
30	12.358	32.663	12.354	24.730	323.2	0.097
40	12.390	32.677	12.385	24.735	323.0	0.129
50	12.470	32.711	12.464	24.746	322.2	0.162
60	12.426	32.789	12.419	24.815	315.8	0.193
70	11.801	32.927	11.792	25.040	294.6	0.224
80	11.154	33.062	11.144	25.263	273.6	0.252
90	10.314	33.104	10.304	25.443	256.5	0.278
100	10.078	33.253	10.068	25.598	242.0	0.303
110	9.448	33.373	9.436	25.796	223.2	0.327
120	9.239	33.431	9.226	25.876	215.8	0.349
130	9.049	33.535	9.035	25.987	205.4	0.370
140	8.931	33.605	8.917	26.060	198.6	0.390
150	8.694	33.680	8.677	26.156	189.7	0.410
175	8.374	33.777	8.356	26.281	178.2	0.456
200	7.911	33.862	7.892	26.418	165.5	0.499
225	7.580	33.933	7.559	26.521	156.0	0.539
250	7.360	33.965	7.336	26.578	150.9	0.577
300	6.824	33.999	6.795	26.679	141.9	0.650
400	6.103	34.067	6.068	26.828	128.7	0.785
429	5.866	34.091	5.829	26.878	124.1	0.821



STATION 81 SR 6



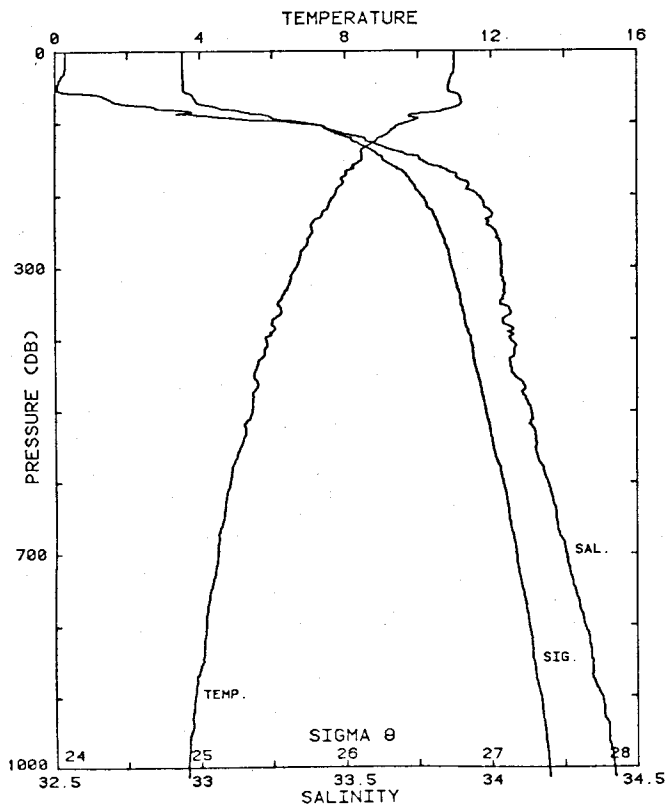
STATION 86 SR 1

CAST NO. 86 LAT: 41 54.0 N 16 FEB 1981 1744 GMT
 STATION:SR 1 LONG:124 15.7 W DPTH: 32M PROBE 2561
 4.6 KM FROM SHORE

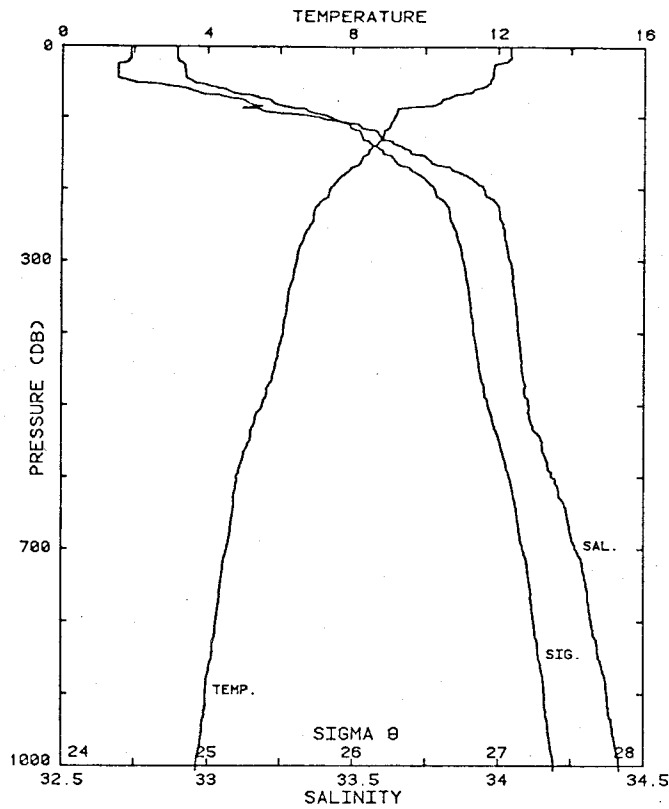
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.340	30.493	12.340	23.055	482.1	0.005
10	12.325	30.655	12.324	23.184	470.1	0.048
20	12.319	30.748	12.317	23.257	463.4	0.095
25	12.285	31.096	12.282	23.532	437.2	0.117

CAST NO. 87 LAT: 43 13.0 N 17 FEB 1981 0229 GMT
 STATION:FM10 LONG:125 20.0 W DPTH: 3017M PROBE 2567
 77.2 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	10.989	32.536	10.989	24.882	308.0	0.006
10	10.992	32.536	10.991	24.881	308.2	0.031
20	10.990	32.537	10.988	24.882	308.3	0.062
30	10.978	32.534	10.974	24.882	308.5	0.092
40	10.874	32.515	10.870	24.887	308.4	0.123
50	10.832	32.508	10.826	24.888	308.4	0.154
60	11.109	32.646	11.102	24.947	303.1	0.185
70	11.190	32.702	11.181	24.976	300.6	0.215
80	10.898	32.848	10.889	25.142	285.0	0.244
90	9.733	33.023	9.723	25.476	253.2	0.271
100	9.626	33.338	9.615	25.739	228.4	0.296
110	9.259	33.460	9.247	25.895	213.8	0.318
120	8.961	33.555	8.949	26.016	202.4	0.338
130	8.666	33.609	8.653	26.105	194.1	0.358
140	8.426	33.687	8.412	26.202	185.0	0.377
150	8.442	33.755	8.427	26.254	180.4	0.395
175	7.895	33.882	7.877	26.435	163.4	0.438
200	7.713	33.953	7.694	26.518	156.0	0.478
225	7.374	34.002	7.353	26.605	148.0	0.516
250	7.106	34.015	7.083	26.653	143.7	0.553
300	6.644	34.036	6.617	26.733	136.6	0.622
400	5.838	34.066	5.804	26.861	125.3	0.754
500	5.446	34.136	5.405	26.965	116.4	0.875
600	4.825	34.194	4.777	27.084	105.6	0.986
800	4.170	34.320	4.109	27.256	90.3	1.181
1000	3.645	34.420	3.572	27.390	78.5	1.349
1013	3.636	34.425	3.562	27.395	78.1	1.359



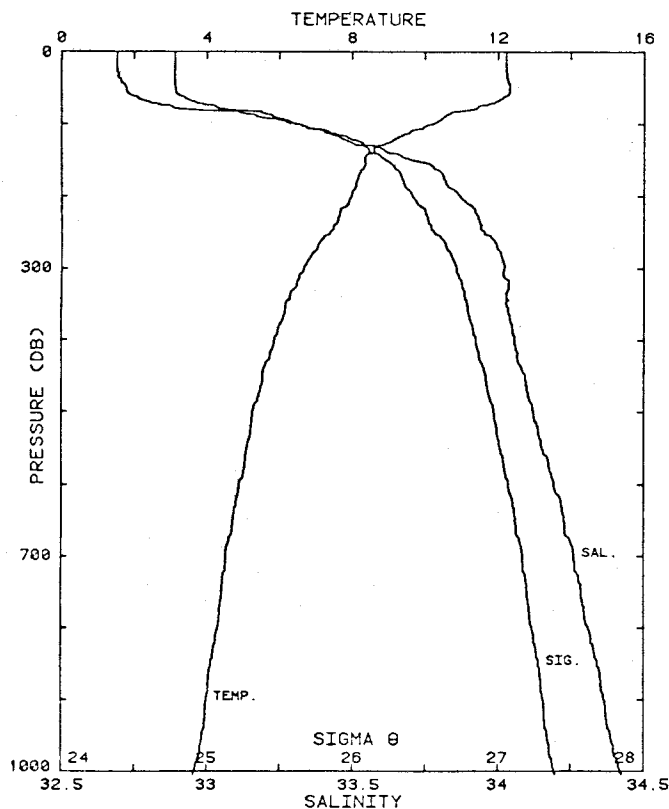
STATION 87 FM10



STATION 88 FM 9

STA NO 88 FM 9 LAT: 43 13.0 N LONG:125 10.0 W
 17 FEB 1981 0411 GMT PROBE 2567 DEPTH 1726H
 63.8 KM FROM SHORE

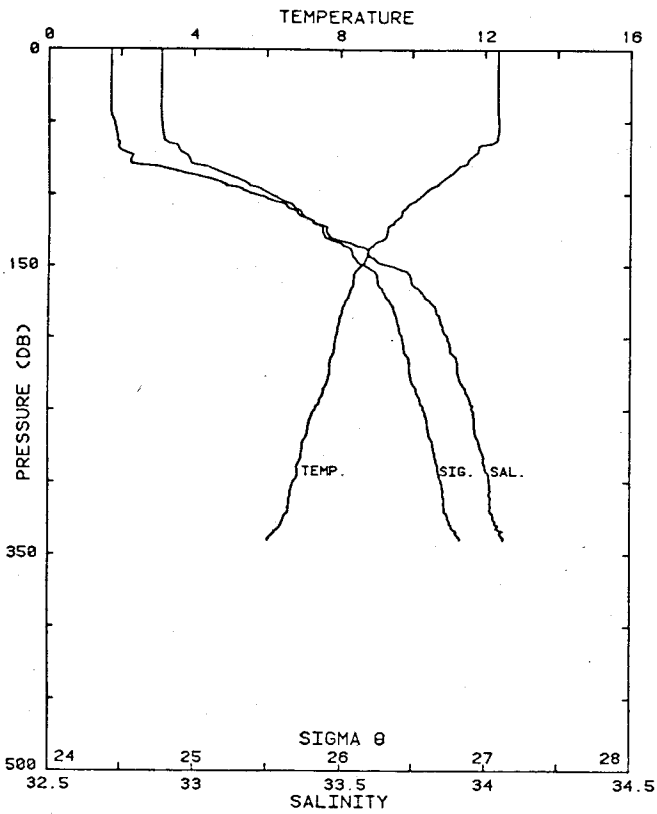
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	12.345	32.739	12.345	24.790	316.7	0.003
10	12.348	32.738	12.347	24.789	317.0	0.032
20	12.269	32.730	12.267	24.798	316.4	0.063
30	11.872	32.694	11.868	24.845	312.2	0.095
40	11.851	32.694	11.846	24.849	312.0	0.126
50	11.774	32.742	11.768	24.901	307.3	0.157
60	11.468	32.931	11.461	25.103	288.3	0.187
70	10.791	33.048	10.783	25.315	268.3	0.215
80	10.415	33.139	10.406	25.451	255.5	0.241
90	9.229	33.183	9.219	25.682	233.6	0.266
100	9.152	33.386	9.141	25.854	217.4	0.288
110	9.052	33.523	9.040	25.977	206.0	0.309
120	8.866	33.587	8.853	26.056	198.6	0.330
130	8.829	33.602	8.816	26.073	197.2	0.349
140	8.570	33.667	8.556	26.164	188.6	0.369
150	8.439	33.700	8.424	26.211	184.4	0.387
175	7.884	33.852	7.866	26.413	165.5	0.431
200	7.374	33.950	7.355	26.564	151.5	0.470
225	6.971	34.004	6.950	26.662	142.4	0.507
250	6.823	34.017	6.800	26.693	139.7	0.542
300	6.459	34.041	6.432	26.761	133.9	0.611
400	6.082	34.070	6.047	26.833	128.2	0.741
500	5.506	34.107	5.465	26.935	119.3	0.865
600	4.803	34.186	4.756	27.080	105.9	0.978
800	4.249	34.323	4.188	27.250	91.1	1.173
1000	3.689	34.417	3.616	27.384	79.2	1.343
1006	3.685	34.418	3.611	27.385	79.2	1.348



STATION 89 FM 8

CAST NO. 89 LAT: 43 13.0 N 17 FEB 1981 0530 GMT
 STATION:FM 8 LONG:125 00.0 W DPTH: 1068M PROBE 2567
 50.0 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	12.226	32.692	12.226	24.777	318.0	0.003
10	12.229	32.692	12.228	24.776	318.2	0.032
20	12.227	32.691	12.224	24.776	318.5	0.064
30	12.255	32.698	12.252	24.776	318.7	0.096
40	12.281	32.706	12.276	24.778	318.8	0.127
50	12.326	32.724	12.319	24.784	318.5	0.159
60	12.272	32.741	12.264	24.807	316.6	0.191
70	11.919	32.804	11.910	24.922	305.8	0.222
80	11.266	32.953	11.257	25.158	283.5	0.252
90	10.527	33.174	10.516	25.460	254.9	0.278
100	10.190	33.305	10.178	25.620	239.9	0.303
110	9.594	33.416	9.582	25.805	222.4	0.326
120	9.196	33.488	9.184	25.927	211.0	0.348
130	8.698	33.573	8.684	26.072	197.3	0.368
140	8.596	33.629	8.582	26.131	191.9	0.388
150	8.340	33.710	8.325	26.234	182.2	0.406
175	8.158	33.815	8.141	26.344	172.2	0.450
200	7.979	33.871	7.959	26.414	165.9	0.492
225	7.653	33.928	7.631	26.507	157.4	0.533
250	7.388	33.955	7.364	26.566	152.1	0.572
300	6.667	34.022	6.640	26.719	138.0	0.643
400	5.856	34.057	5.822	26.852	126.2	0.775
500	5.260	34.122	5.220	26.976	115.1	0.896
600	4.905	34.193	4.857	27.074	106.7	1.007
800	4.305	34.311	4.244	27.235	92.6	1.205
1000	3.650	34.420	3.577	27.390	78.5	1.377
1004	3.623	34.425	3.550	27.396	77.9	1.380



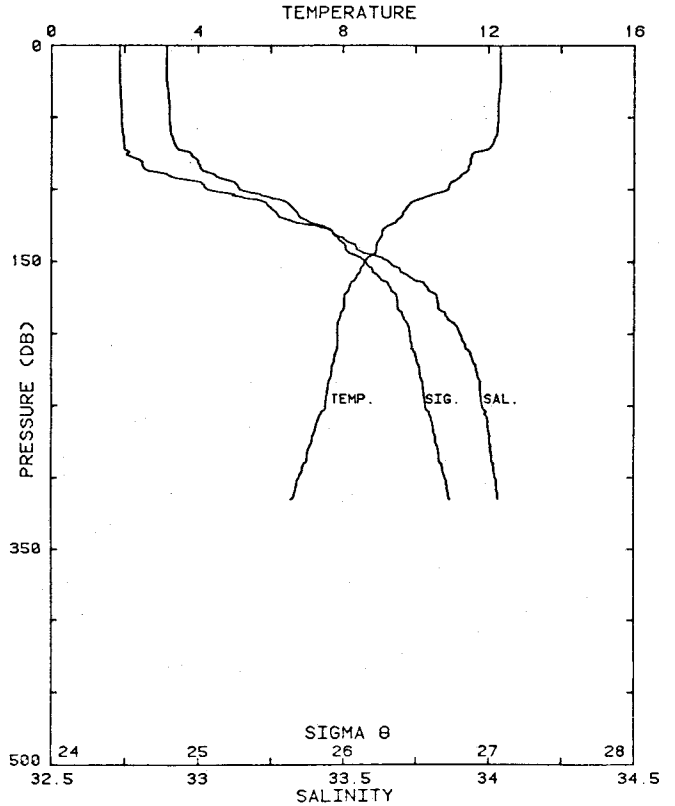
CAST NO. 90 LAT: 43 13.0 N 17 FEB 1981 0701 GMT
 STATION: FM 7 LONG: 124 50.0 W DPTH: 347M PROBE 2567
 36.4 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVL	DELD
	TEMP		TEMP	THETA		
0	12.340	32.716	12.340	24.773	318.3	0.000
10	12.341	32.716	12.340	24.773	318.5	0.032
20	12.342	32.716	12.340	24.773	318.8	0.064
30	12.344	32.716	12.340	24.773	319.0	0.096
40	12.346	32.715	12.341	24.772	319.4	0.128
50	12.349	32.726	12.362	24.777	319.2	0.159
60	12.337	32.737	12.329	24.791	318.1	0.191
70	11.807	32.753	11.798	24.904	307.5	0.223
80	11.434	32.818	11.425	25.023	296.4	0.253
90	10.874	33.068	10.863	25.317	268.5	0.281
100	10.314	33.207	10.302	25.522	249.2	0.307
110	9.825	33.329	9.813	25.700	232.5	0.331
120	9.497	33.410	9.484	25.817	221.4	0.353
130	9.279	33.463	9.265	25.894	214.3	0.375
140	8.758	33.597	8.743	26.081	196.6	0.395
150	8.572	33.673	8.556	26.170	188.3	0.415
175	8.131	33.813	8.114	26.346	171.9	0.460
200	7.868	33.872	7.848	26.431	164.2	0.502
225	7.698	33.909	7.676	26.486	159.4	0.542
250	7.321	33.958	7.298	26.578	150.9	0.581
300	6.741	34.018	6.713	26.705	139.3	0.653
340	6.032	34.064	6.003	26.835	127.1	0.707

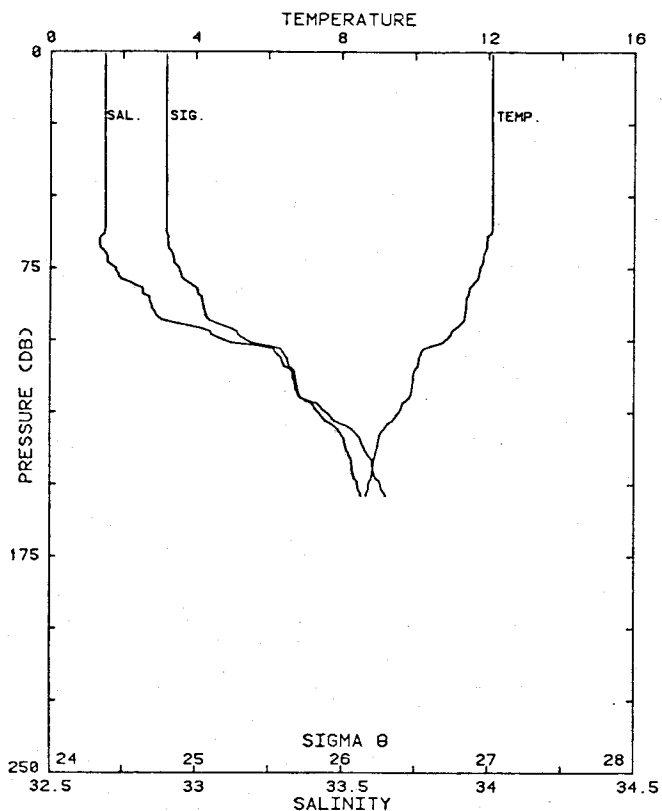
STATION 90 FM 7

CAST NO. 91 LAT: 43 13.0 N 17 FEB 1981 0746 GMT
 STATION: FM 6 LONG: 124 45.0 W DPTH: 320M PROBE 2567
 29.6 KM FROM SHORE

PRESS	TEMP	SAL	POTEN	SIGMA	SVL	DELD
	TEMP		TEMP	THETA		
1	12.333	32.733	12.333	24.787	316.9	0.003
10	12.336	32.733	12.335	24.787	317.2	0.032
20	12.337	32.733	12.334	24.787	317.4	0.063
30	12.317	32.734	12.313	24.793	317.2	0.095
40	12.273	32.738	12.268	24.804	316.3	0.127
50	12.264	32.739	12.257	24.807	316.3	0.158
60	12.241	32.742	12.233	24.814	315.9	0.190
70	12.065	32.749	12.056	24.852	312.5	0.222
80	11.510	32.807	11.500	25.000	298.6	0.252
90	11.245	32.899	11.235	25.119	287.4	0.282
100	10.889	33.032	10.877	25.286	271.7	0.309
110	9.826	33.237	9.814	25.628	239.3	0.335
120	9.535	33.300	9.522	25.725	230.2	0.358
130	9.059	33.468	9.046	25.933	210.5	0.380
140	8.907	33.546	8.892	26.018	202.6	0.401
150	8.578	33.659	8.563	26.157	189.5	0.420
175	8.035	33.826	8.017	26.370	169.6	0.465
200	7.845	33.904	7.825	26.460	161.4	0.507
225	7.683	33.960	7.661	26.528	155.4	0.546
250	7.518	33.979	7.494	26.567	152.1	0.585
300	6.776	34.024	6.749	26.706	139.3	0.657
315	6.572	34.033	6.544	26.740	136.1	0.678



STATION 91 FM 6

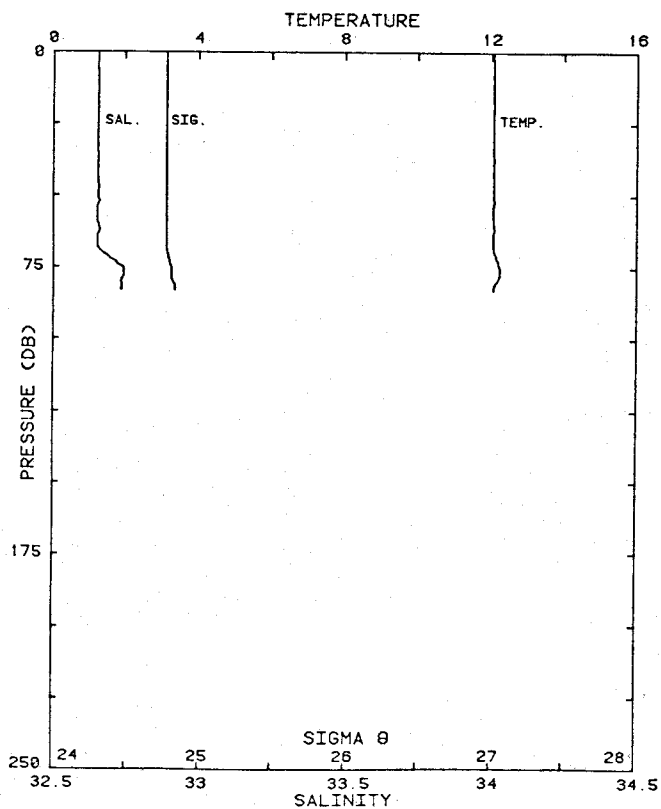


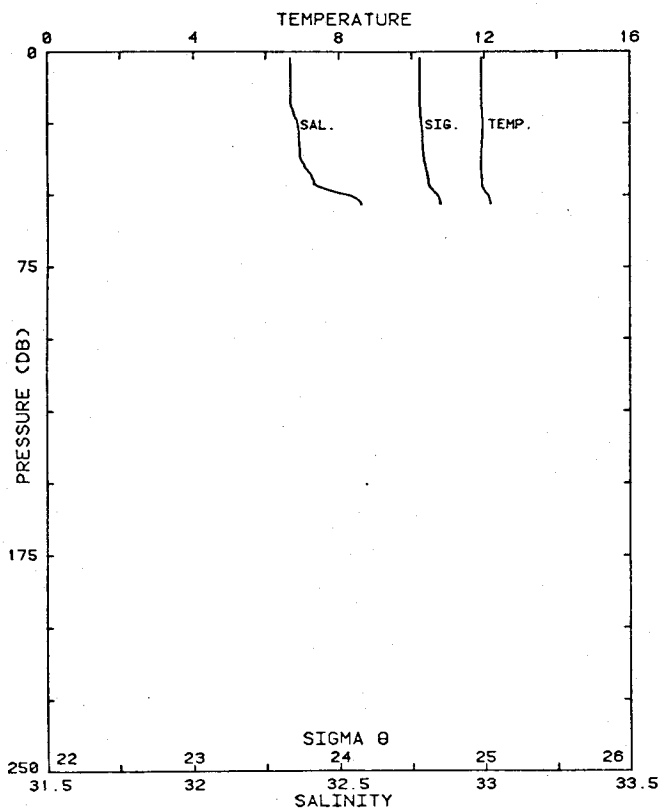
CAST NO. 92 LAT: 43 12.9 N 17 FEB 1981 0843 GMT
 STATION: FM 5 LONG: 124 40.0 W DPTH: 162M PROBE 2567
 22.4 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	12.101	32.687	12.101	24.796	316.1	0.003
10	12.108	32.689	12.107	24.796	316.3	0.032
20	12.110	32.689	12.108	24.797	316.5	0.063
30	12.111	32.689	12.107	24.797	316.8	0.095
40	12.115	32.689	12.110	24.796	317.1	0.127
50	12.114	32.689	12.108	24.796	317.3	0.158
60	12.116	32.689	12.108	24.796	317.6	0.190
70	11.894	32.691	11.885	24.840	313.7	0.222
80	11.616	32.776	11.607	24.957	302.7	0.253
90	11.371	32.858	11.360	25.065	292.6	0.282
100	10.822	33.097	10.810	25.349	265.8	0.310
110	10.013	33.322	10.001	25.663	236.0	0.335
120	9.837	33.359	9.823	25.721	230.6	0.358
130	9.189	33.525	9.175	25.957	208.3	0.380
140	8.911	33.590	8.897	26.052	199.4	0.400
150	8.741	33.633	8.726	26.112	193.9	0.420
154	8.678	33.650	8.662	26.135	191.7	0.428

CAST NO. 93 LAT: 43 13.0 N 17 FEB 1981 0930 GMT
 STATION: FM 4 LONG: 124 35.0 W DPTH: 87M PROBE 2567
 15.9 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
0	12.065	32.659	12.065	24.781	317.5	0.000
10	12.072	32.658	12.071	24.779	317.9	0.032
20	12.072	32.658	12.070	24.779	318.1	0.064
30	12.073	32.657	12.069	24.779	318.4	0.095
40	12.075	32.658	12.070	24.779	318.7	0.127
50	12.083	32.659	12.076	24.779	318.9	0.159
60	12.084	32.660	12.077	24.780	319.1	0.191
70	12.106	32.676	12.097	24.788	318.5	0.223
80	12.162	32.736	12.151	24.825	315.4	0.255
83	12.074	32.737	12.063	24.842	313.8	0.264





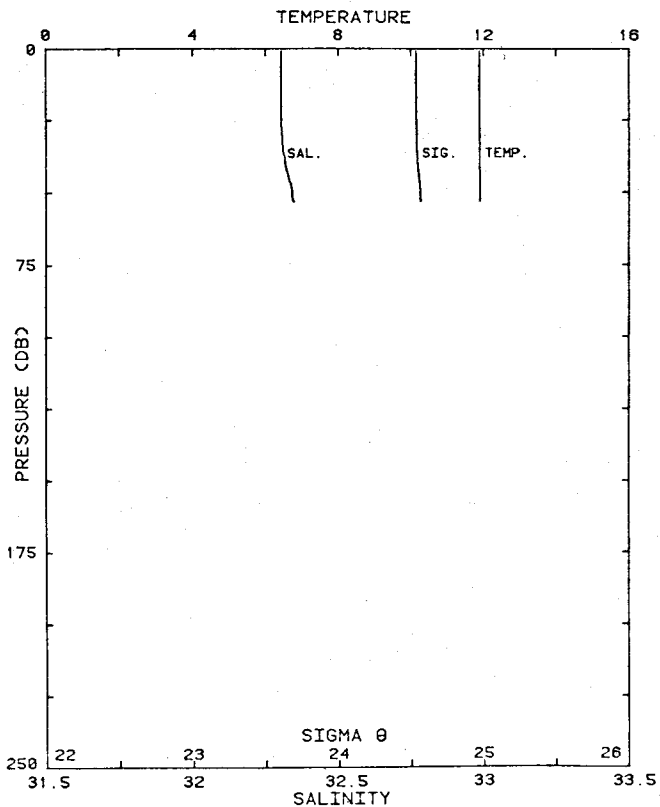
STATION 94 FM 3

CAST NO. 94 LAT: 43 13.1 N 17 FEB 1981 1015 GMT
 STATION: FM 3 LONG: 124 30.0 W DPTH: 56M PROBE 2567
 8.9 KM FROM SHORE

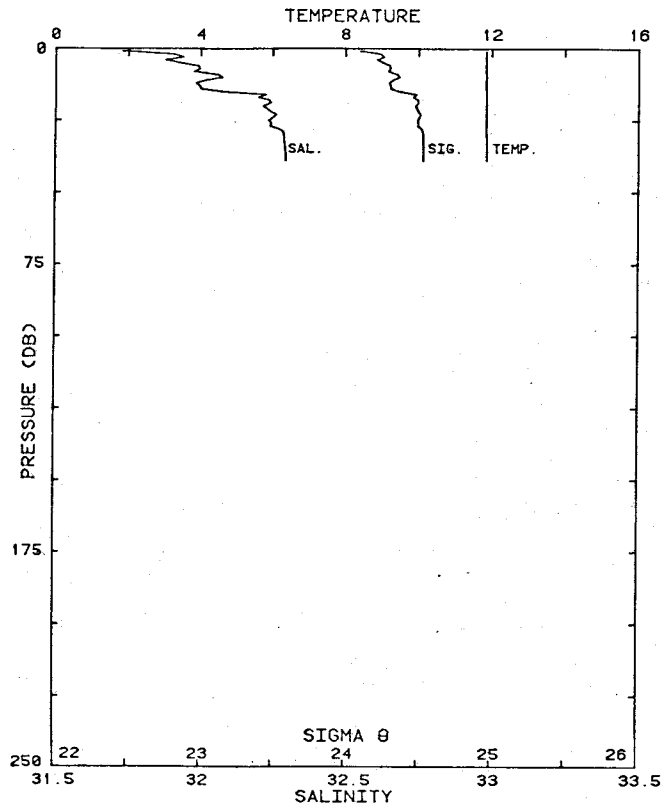
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	11.923	32.334	11.923	24.556	339.0	0.007
10	11.924	32.335	11.923	24.557	339.1	0.034
20	11.942	32.341	11.939	24.559	339.2	0.068
30	11.948	32.364	11.945	24.575	337.9	0.102
40	11.916	32.383	11.911	24.596	336.0	0.135
50	12.120	32.539	12.114	24.679	328.4	0.169
53	12.176	32.577	12.169	24.698	326.7	0.179

CAST NO. 95 LAT: 43 13.0 N 17 FEB 1981 1048 GMT
 STATION: FM 2 LONG: 124 28.0 W DPTH: 56M PROBE 2567
 5.7 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	11.891	32.303	11.891	24.538	340.7	0.003
10	11.894	32.303	11.893	24.538	340.9	0.034
20	11.895	32.303	11.892	24.538	341.1	0.068
30	11.898	32.307	11.894	24.541	341.1	0.102
40	11.908	32.318	11.903	24.548	340.7	0.136
50	11.911	32.343	11.905	24.566	339.2	0.170
53	11.908	32.347	11.901	24.570	338.9	0.181



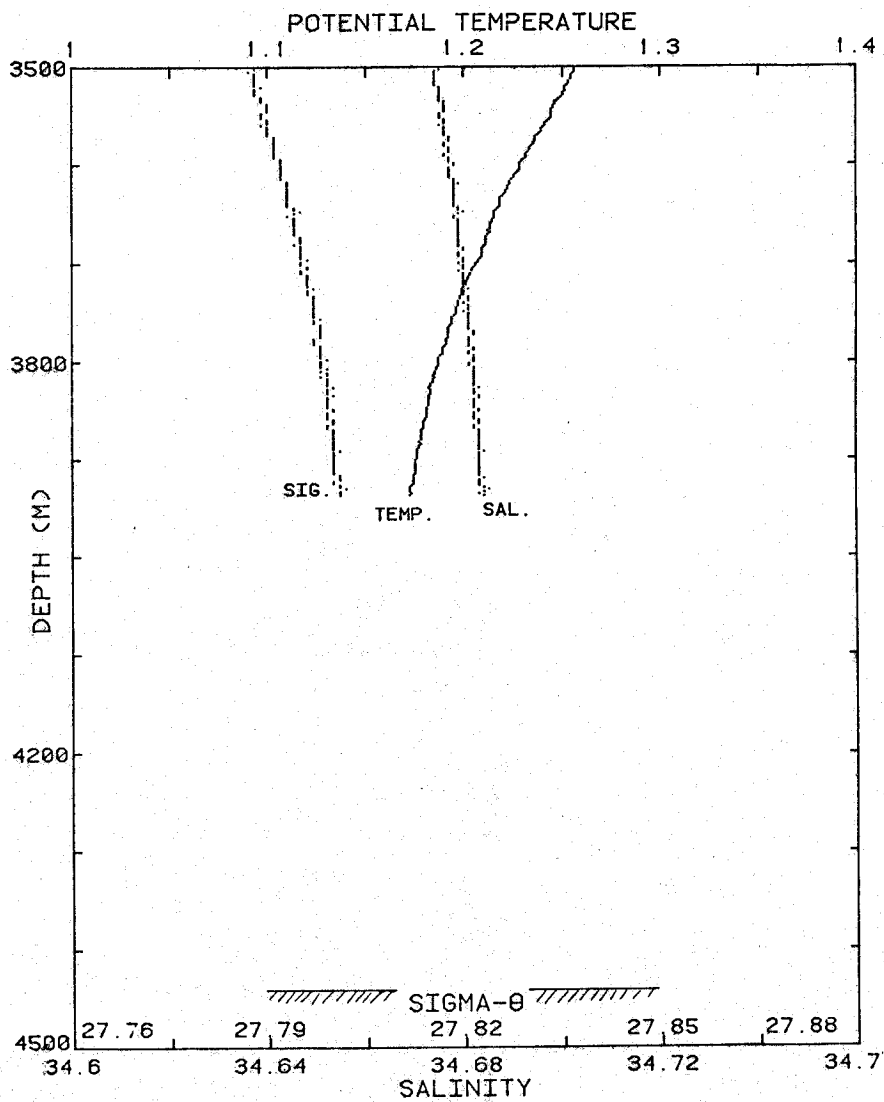
STATION 95 FM 2



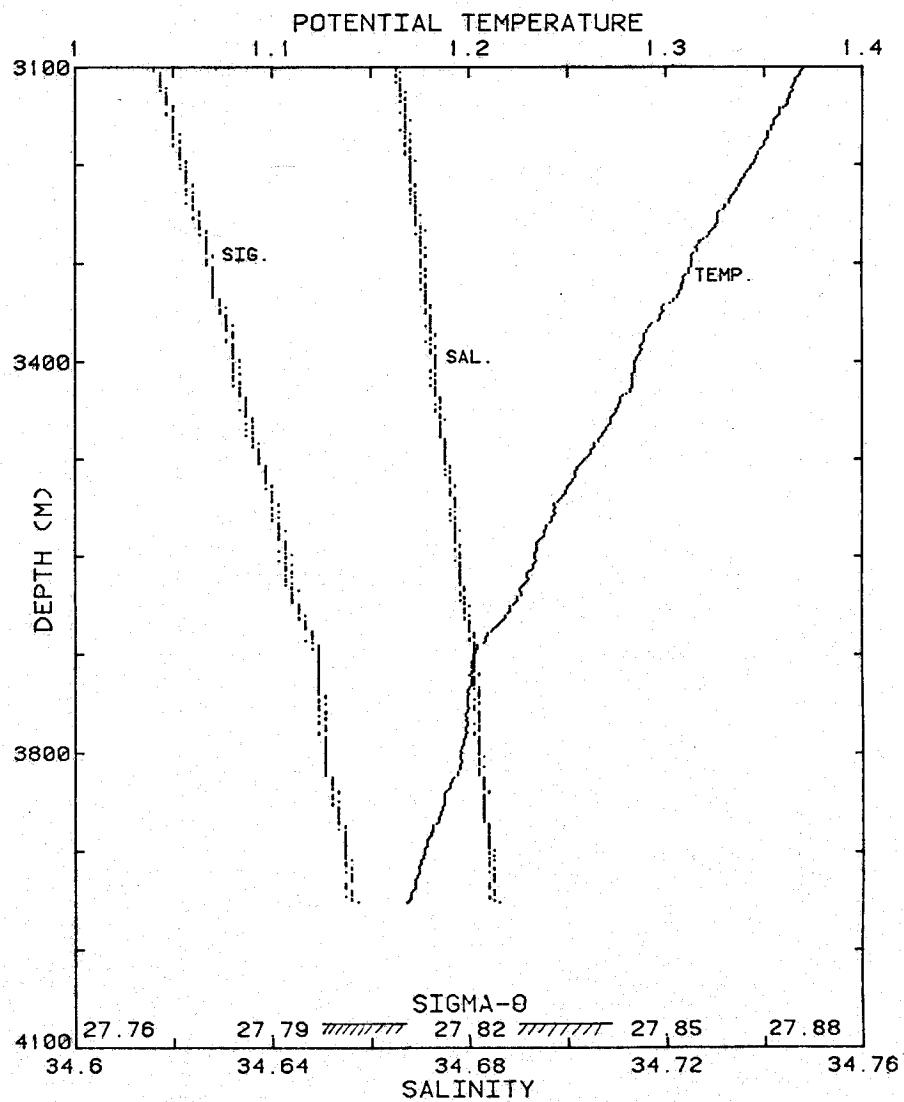
CAST NO. 96 LAT: 43 13.0 N 17 FEB 1981 1126 GHT
 STATION: FM 1 LONG: 124 26.0 W DPTH: 40M PROBE 2567
 3.5 KM FROM SHORE

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	11.848	31.728	11.848	24.101	382.4	0.004
10	11.859	32.075	11.858	24.368	357.1	0.037
20	11.864	32.217	11.862	24.477	347.0	0.072
30	11.871	32.288	11.867	24.531	342.0	0.107
39	11.884	32.295	11.879	24.534	342.0	0.137

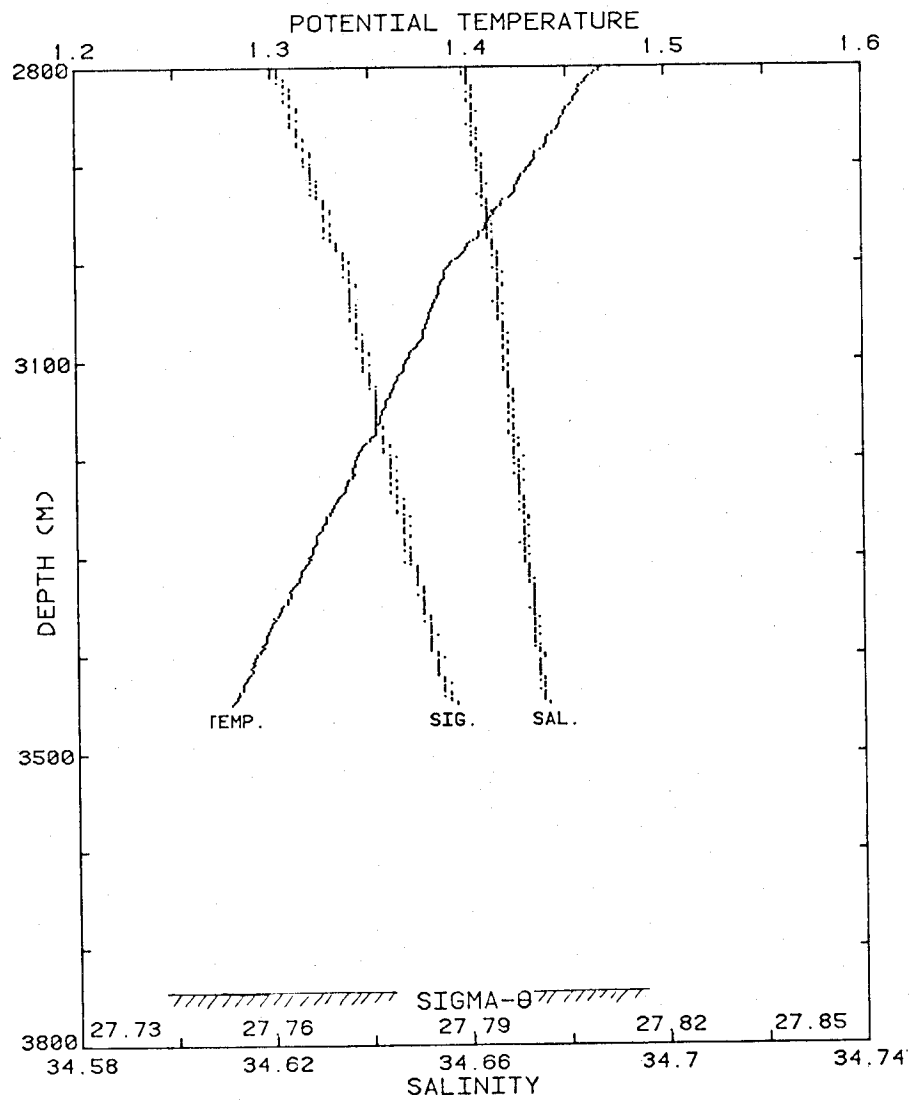
NEAR-BOTTOM PROFILES
FOR DEEP STATIONS



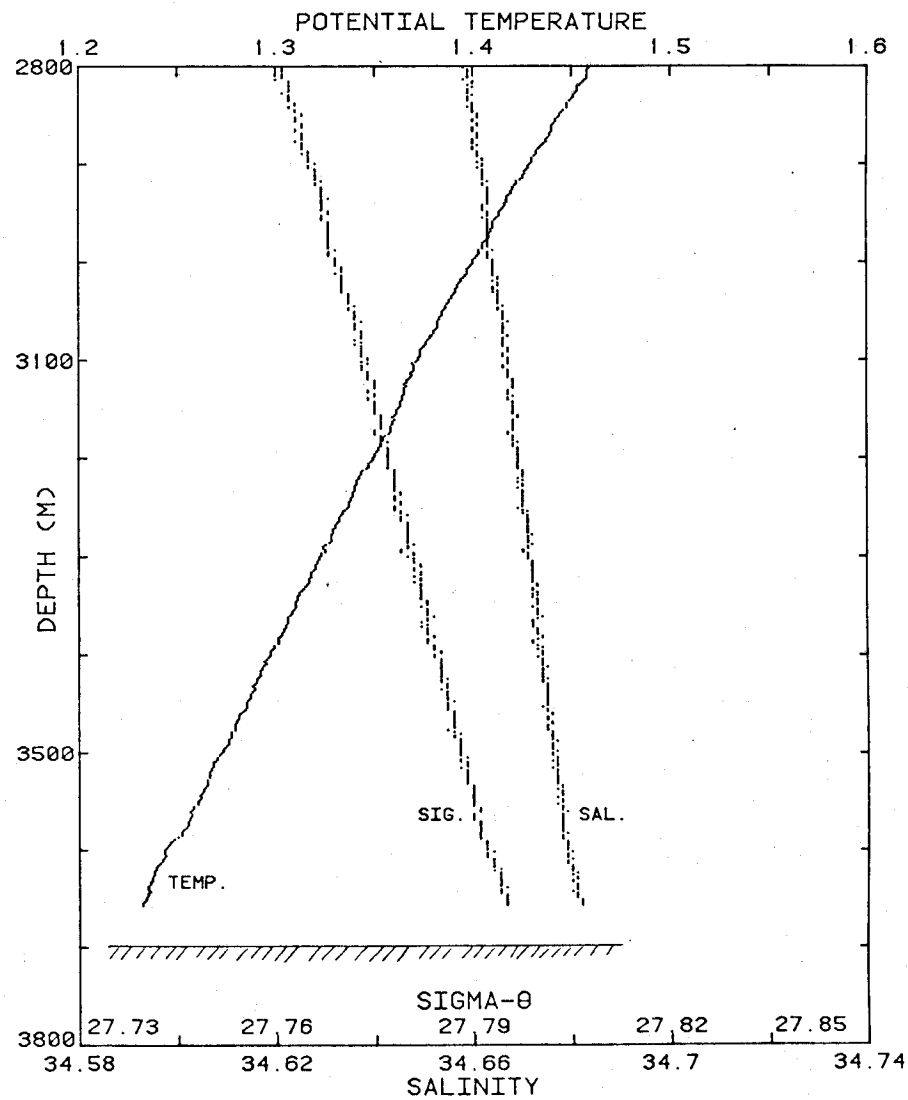
STA 33, CLL-17



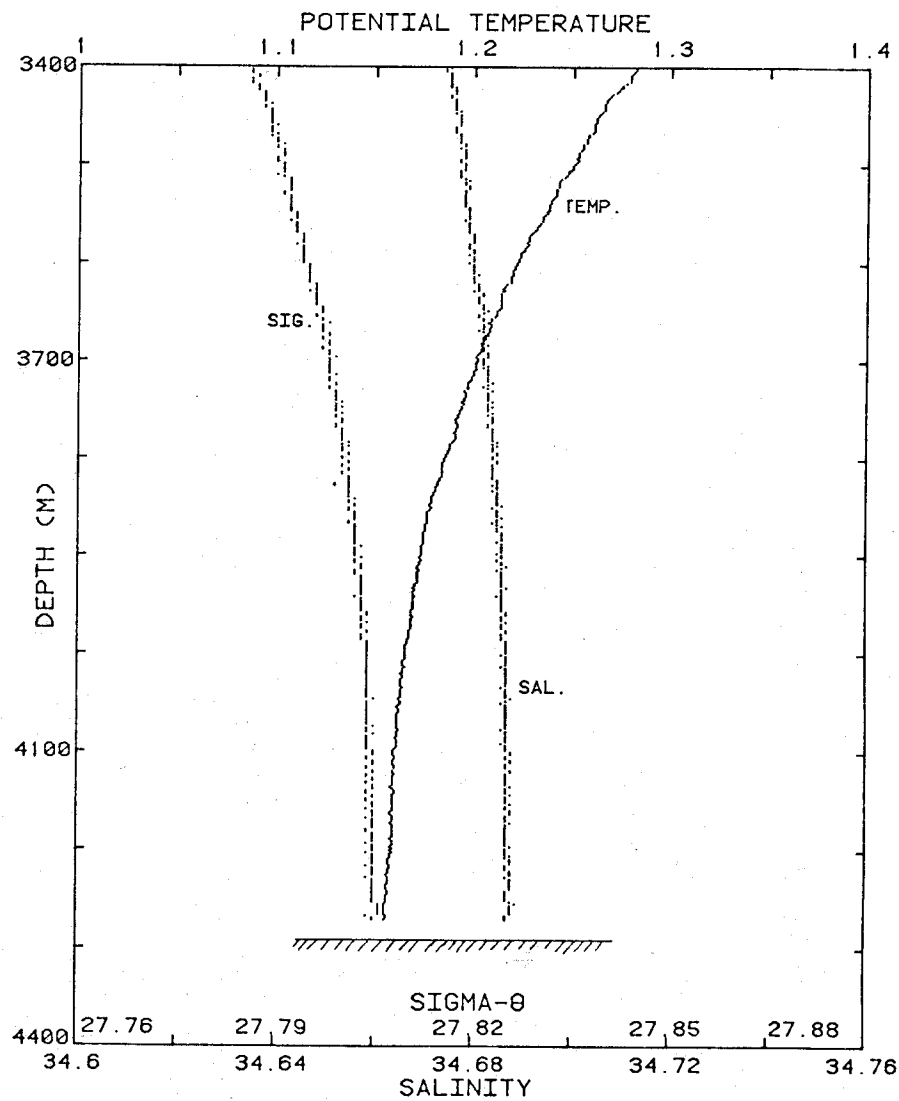
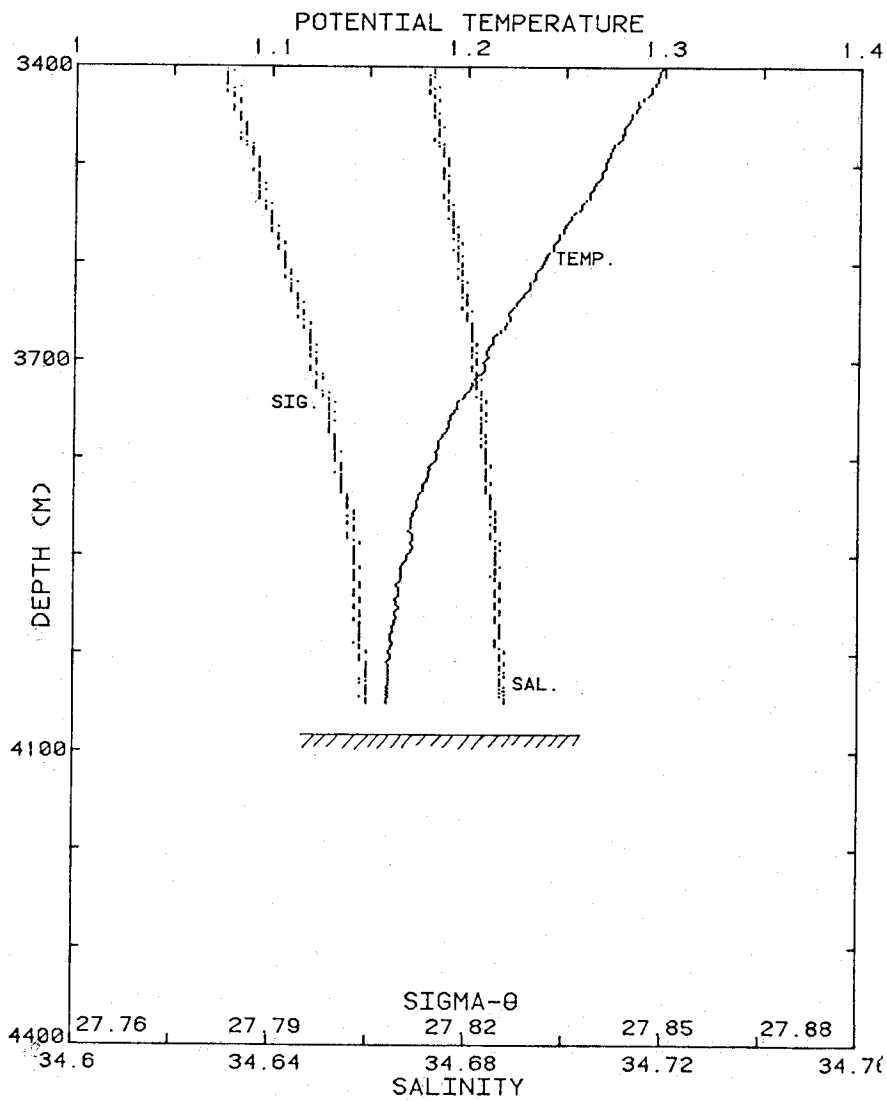
STA 35, CLL-15

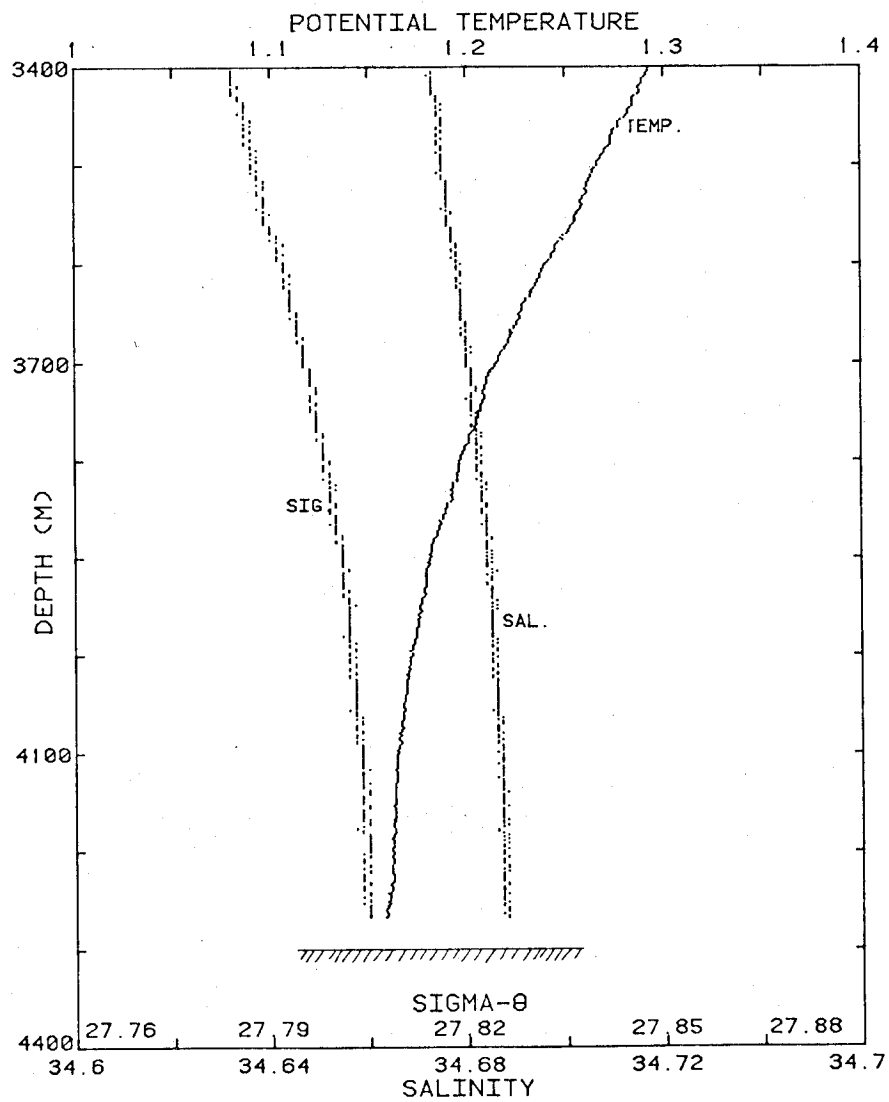


STA 38, CLL-12

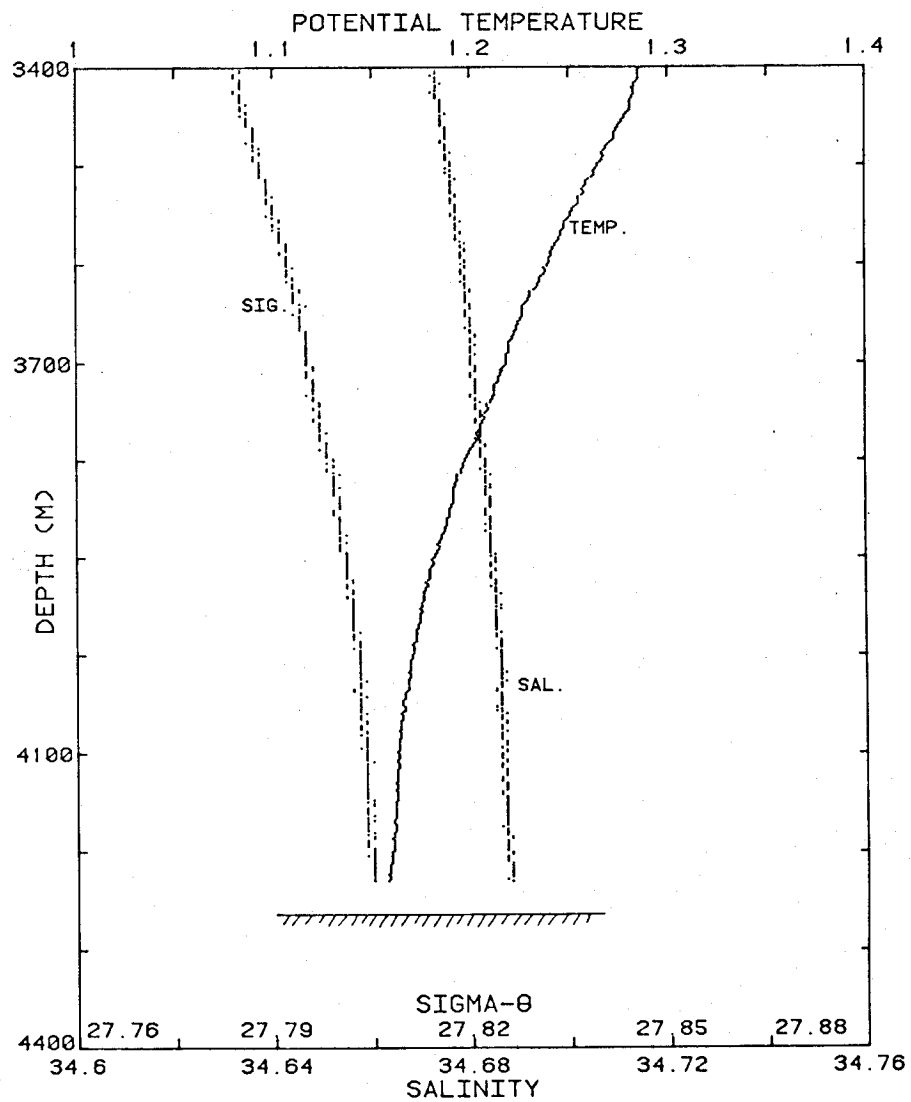


STA 61, LAG-12

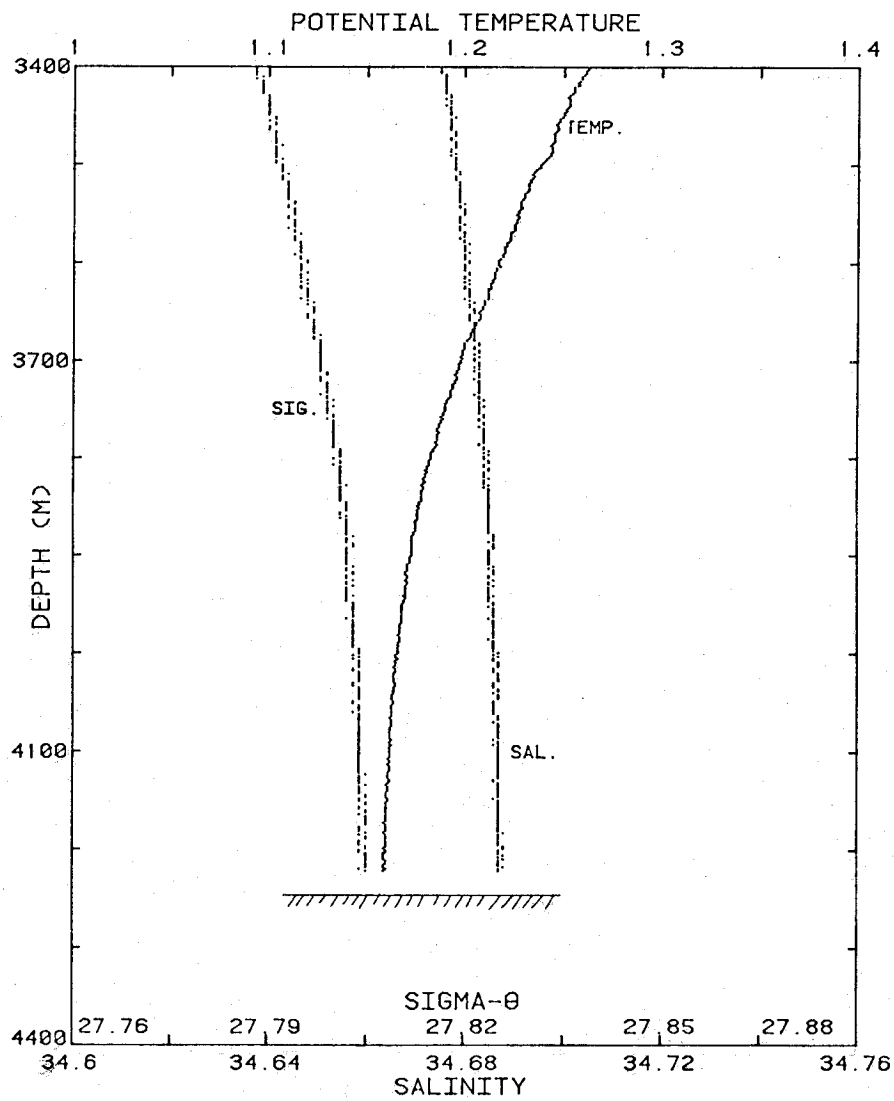




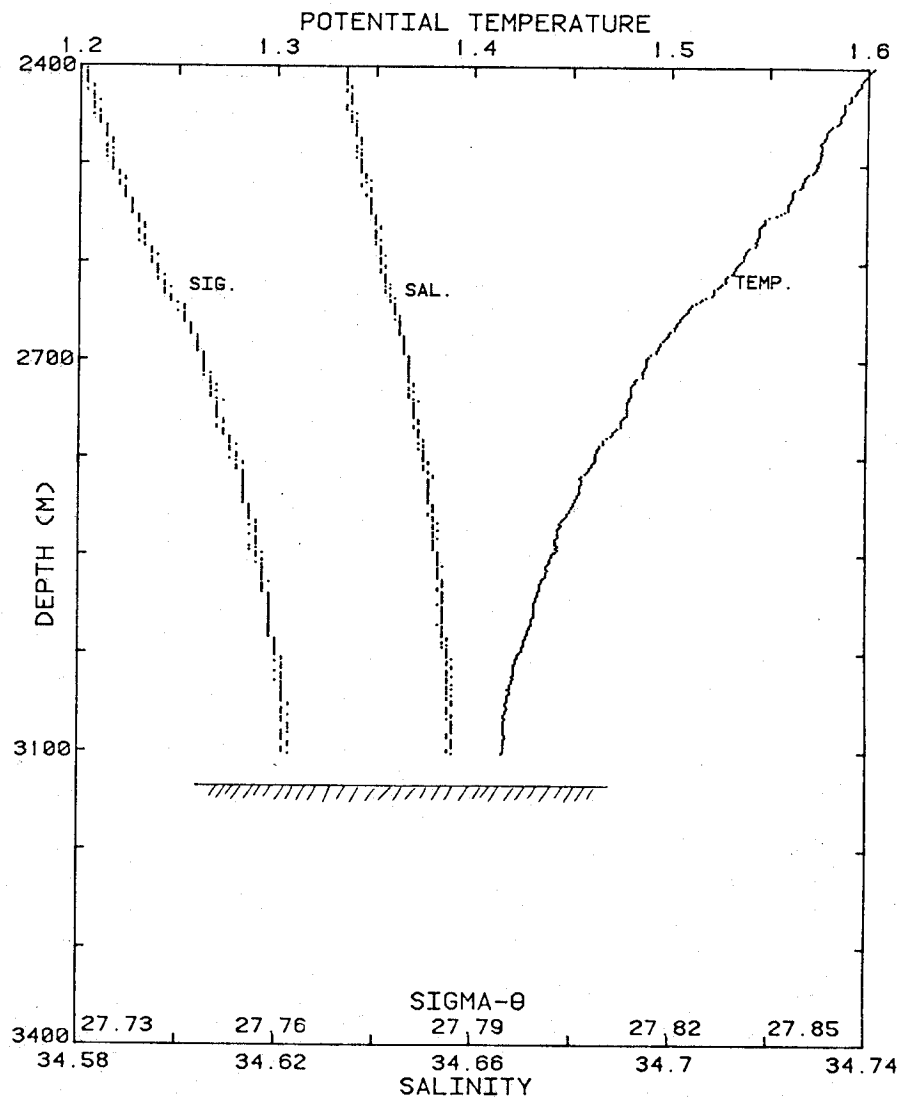
STA 66, LAG-17



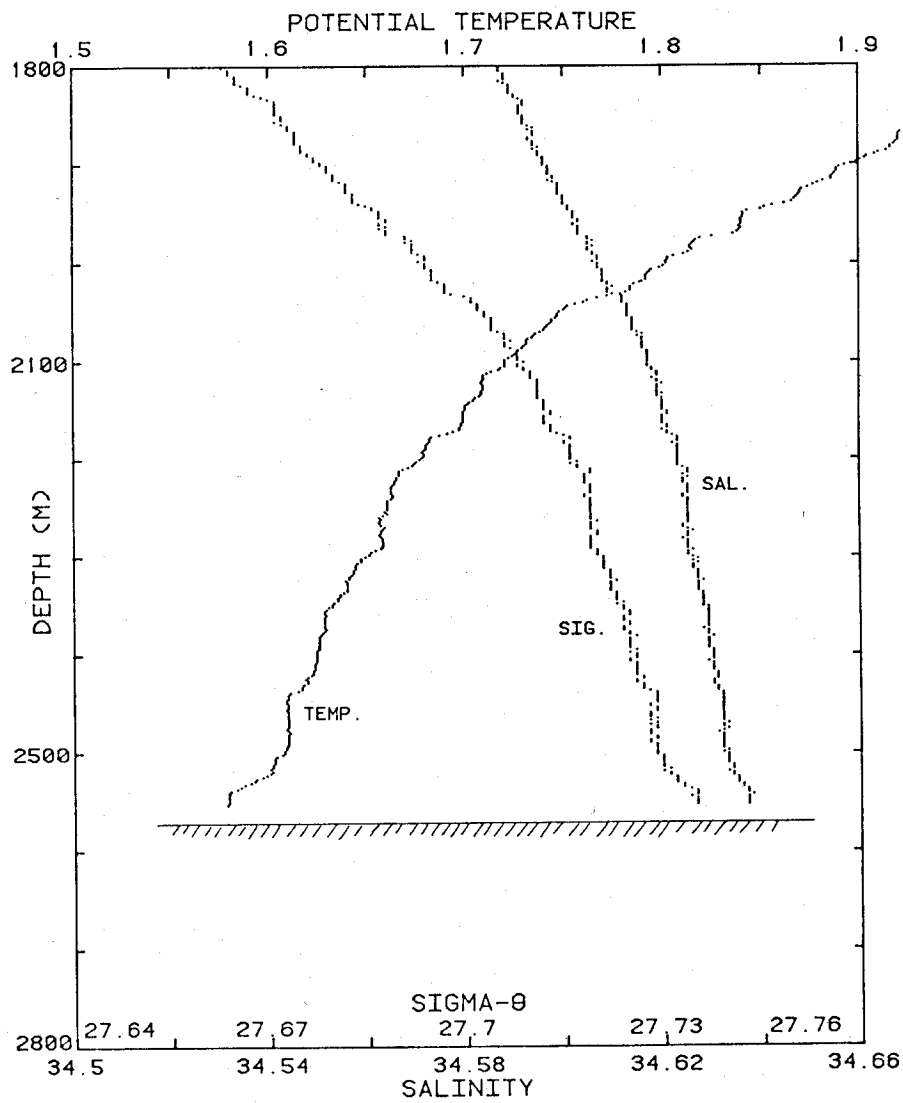
STA 67, LAG-18



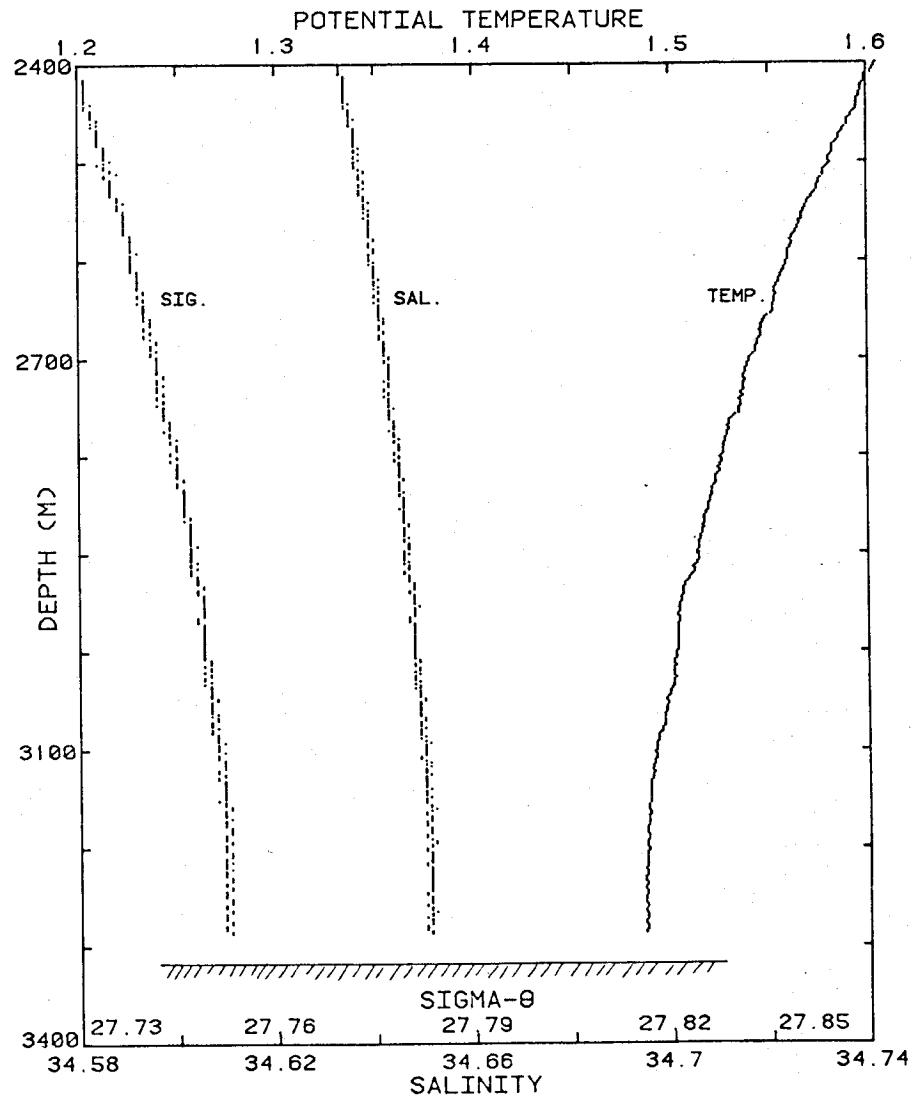
STA 68, LAG 19



STA 69, SR-18



STA 71, SR-16



STA 73, SR-14

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REFERENCES

- Fofonoff, N. P., S. P. Hayes and R. C. Millard, Jr. 1974. W.H.O.I./ Brown CTD microprofiler: methods of calibration and data handling. Woods Hole Oceanographic Institution. WHOI-74-89, pp. 66.
- Gilbert, W. E., A. Huyer and R. Schramm. 1981. Hydrographic data from the first Coastal Ocean Dynamics Experiment: R/V Wecoma, Leg 2, 10-14 April 1981. Oregon State University, School of Oceanography. Ref. 81-12. 34 pp.
- Millard, R., J. Toole and M. Swartz. 1980. A fast responding temperature measurement system for CTD applications. Ocean. Engr. 7:413-427.
- Reid, J. L. and A. W. Mantyla. 1976. The effect of geostrophic flow upon coastal sea elevations in the northern North Pacific Ocean. J. Geophys. Res. 81(18):3100-3110.