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**Ancillary Hydrographic Data From
The Coastal Ocean Dynamics
Experiments:
CODE-1 Legs 3 and 8
and CODE-2 Legs 10 and 13**

by

Jane Fleischbein
Rich Schramm
Adriana Huyer

Data Report 108
Reference 84-6
January 1984

Code Technical Report No. 24

National Science Foundation
OCE-8014940, OCE-8014941, OCE-8014943

College of Oceanography
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ABSTRACT

During some of the CODE mooring deployment and recovery cruises, CTD observations were made on an ancillary basis. In conjunction with the recovery of the CODE-2 array, CTD observations were made during 3-5 August (CODE-2 Leg 10) and 19 August (CODE-2 Leg 13). The CTD observations were made alongside current meter moorings and along the CODE Central section. Maximum sampling depth was 505 m. This report includes vertical sections and offshore profiles to summarize the Code Central line data, and vertical plots and standard depth listings for each of the 31 stations.

Ancillary CTD observations were also made during 20-21 April 1981 (CODE-1 Leg 3) and 19 July 1981 (CODE-1 Leg 8). These CTD observations were all made adjacent to the current meter mooring C-4 on the COC line. Vertical profile plots and listings of the data at standard depth are presented for these 17 stations.

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INTRODUCTION

The CTD data presented here was obtained on an ancillary basis during CODE mooring recovery or deployment cruises. The observations were made by personnel from Woods Hole Oceanographic Institution under the supervision of R. C. Beardsley, or by personnel from the University of New Hampshire under the supervision of W. S. Brown and J. D. Irish. Personnel from Oregon State University provided the CTD system and processed the data. Stations during CODE-1 Legs 3 and 8 and CODE-2 Leg 10 were all made alongside moorings (Figure 1, Table 1, 2); during CODE-2 Leg 13, CTD stations were also made at standard positions along the Central Line (Figure 1, Table 1).

A Neil Brown Instrument Mark IIIb conductivity-temperature depth probe (CTD) was used to obtain continuous profiles of temperature and salinity versus pressure at each station. Sampling procedures were identical with those described by Fleischbein, Gilbert, Schramm and Huyer (1981), except that the probe with a 1600 db pressure sensor rating (probe #2567) was used for all stations and in situ calibration data was not collected.

To process the CTD data from these cruises, we used in situ calibration data from preceding and succeeding cruises, and manufacturer's calibrations made in fall 1980 and November 1982. The manufacturer's post calibration showed that the temperature and pressure calibration was unchanged; in situ temperature calibration data from intervening cruises was also in agreement. Hence, no correction was applied to the temperature or pressure data. However, the manufacturer's calibration in November 1982 showed that the conductivity calibration had changed (Figure 2); again, this was in agreement with in situ calibration data from intervening

Table 1. List of CTD stations during Code 2 Legs 10, and 13 showing date, time, position, wind speeds and direction and atmospheric pressure.

Date	Time	Station		Lat (°N)	Long (°W)	Wind		Atm Pressure mbs
		No.	Name			Dir. (°T)	Spd. (Kts)	
<u>Leg 10</u>								
August 3	2000	1		38°33.4	123°31.3	-	-	-
	2040	2		33.4	31.6	-	-	-
August 4	1230	3		45.6	45.4	-	-	-
	1245	4		45.7	45.5	-	-	-
	1257	5		"	"	-	-	-
August 5	1215	6		20.9	22.8	-	-	-
	1225	7		20.9	22.9	-	-	-
	1235	8		21.0	22.9	-	-	-
	1245	9		"	"	-	-	-
<u>Leg 13</u>								
August 19	0348	1	C3	38°36.1	123°26.8	320	17	1013.5
	0357	2	C3	"	"	-	-	-
	0406	3	C3	"	"	-	-	-
	0411	4	C3	"	"	-	-	-
	0416	5	C3	"	"	-	-	-
	0424	6	C3	"	"	-	-	-
	0432	7	C3	"	"	-	-	-
	0535	9	COC-1	39.8	25.5	-	0	1014.3
	0602	10	COC-2	38.8	26.9	-	0	1014.5
	0638	11	COC-3	37.4	28.9	320	12	1014.5
	0712	12	COC-4	36.2	30.8	320	11	1014.5
	0749	13	COC-5	34.6	33.4	320	8	1014.8
	0837	14	COC-6	32.6	36.2	320	12	1014.8
	0957	16	COC-7	30.3	39.6	320	16	1014.8
	1139	17	COC-8A	28.2	42.7	340	20	1015.0
	1340	18	COC-8B	26.1	46.0	340	20	1015.0
	1529	19	COC-9	24.0	49.2	350	20	1016
	1714	20	COC-10	20.8	54.5	340	17	1015.2
	1845	21	COC-11	17.6	59.3	340	17	1016.8
	2152	22	C5	31.0	39.9	330	24	1016.0
	2156	23	C5	"	"	-	-	-
	2200	24	C5	"	"	-	-	-

Table 2. List of CTD Stations during 20-21 April 1981 (Code 1 Leg 3) and 19 July 1981 (Code 1 Leg 8) showing date, time and position.

Date	Time	Station No.	Lat. ($^{\circ}$ N)	Long. ($^{\circ}$ W)
<u>Leg 3</u>				
April 20	2145	1	38 $^{\circ}$ 34.3	123 $^{\circ}$ 32.5
	2152	2	34.4	32.1
	2258	3	34.3	32.2
	2356	4	34.3	32.1
April 21	0050	5	34.3	32.2
	0155	6	34.3	32.3
	0252	7	34.3	32.1
	0353	8	34.4	32.2
	0451	9	34.3	32.5
	0552	10	34.4	32.0
	0650	11	34.4	31.9
	0750	12	34.4	32.0
	0800	13	34.4	32.0
	0855	14	34.3	32.1
	0953	15	34.2	32.3
	1053	16	34.1	32.2
<u>Leg 8</u>				
July 19	0307	1	38 $^{\circ}$ 34.3	123 $^{\circ}$ 32.5

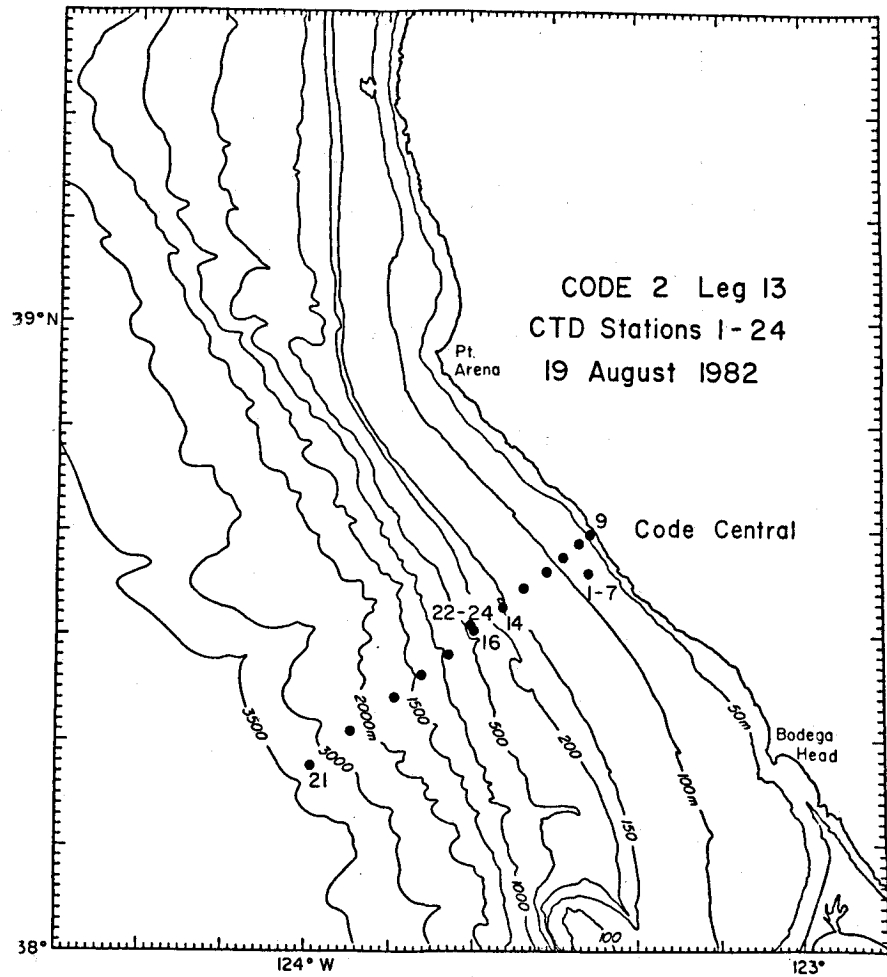
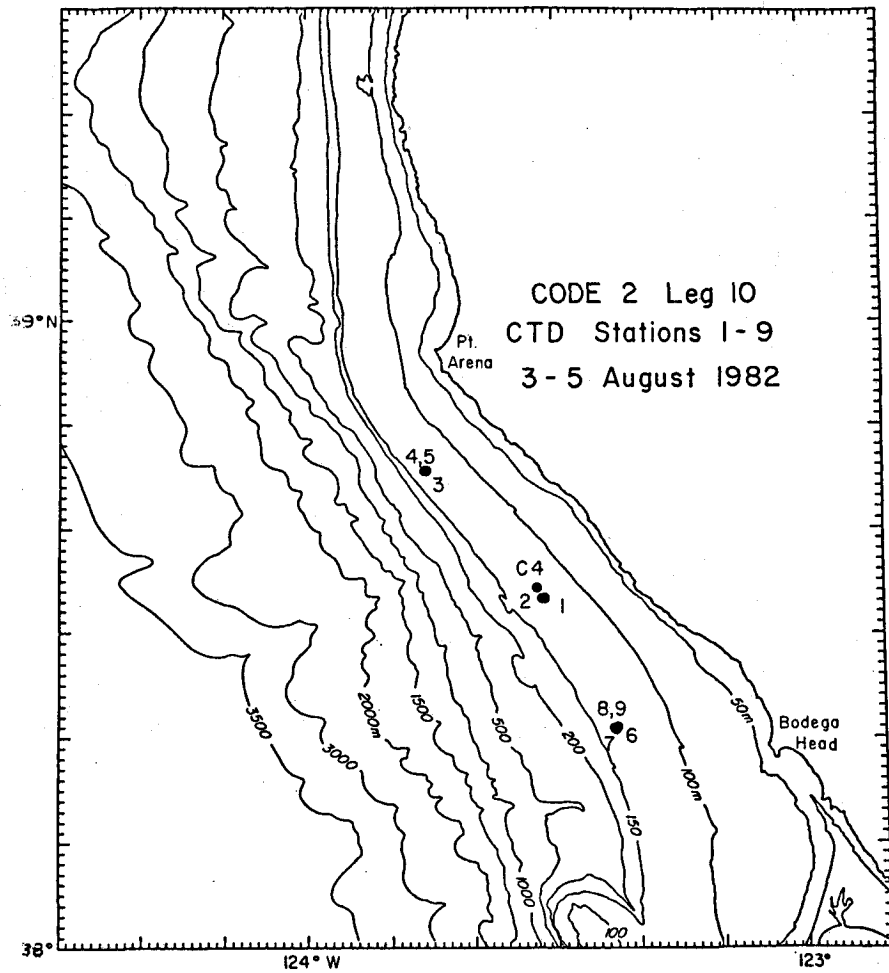


Figure 1. Location of CTD stations.

cruises. The conductivity differences between the CTD probe and the manufacturer's calibration standard (Figure 2) showed a mean offset of 0.022 mmhos/cm^2 within the range of conductivity ($30\text{--}40 \text{ mmhos/cm}^2$) during Legs 10 and 13. In situ calibration data from CODE 2 Leg 9 indicated the conductivity offset was $+0.019 \text{ mmhos/cm}^2$. Hence a correction of 0.022 mmhos/cm^2 was added to the CTD conductivity data prior to processing the data from CODE 2 Legs 10 and 13. In situ conductivity data from CODE-1 Leg 2 (Gilbert et al., 1981) and the first portion of CODE-1 Leg 4 (Fleischbein et al., 1982) showed no conductivity offset, so no correction was applied to the data from CODE-1 Leg 3. In situ calibration at the end of CODE-1 Leg 7 (Olivera et al., 1982) and during CODE-1 Leg 10 showed conductivity offsets of 0.011 and 0.012 mmhos/cm^2 respectively. Hence a conductivity correction of 0.011 mmhos/cm^2 was added to the CTD data from CODE-1 Leg 8 before processing.

The data was processed in the manner described by Gilbert, Huyer and Schramm (1981) using a value of 0.862 for the coefficient, α , of the conductivity filter throughout.

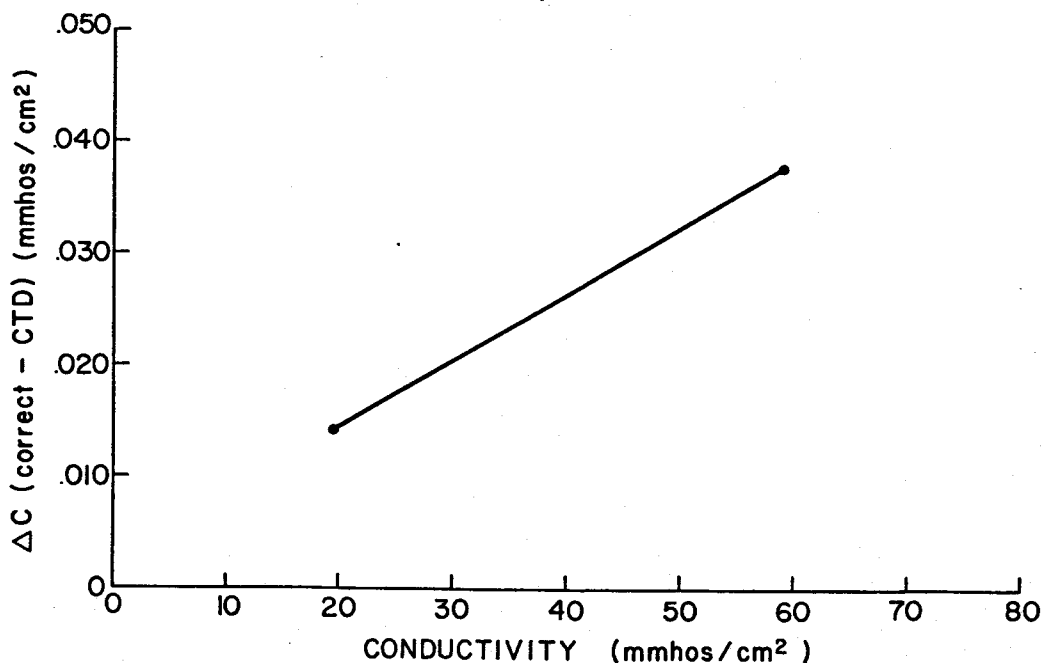


Figure 2. Summary of the conductivity differences between the Neil Brown calibration data and the CTD probe.

The data from the Code Central line are summarized in vertical sections of temperature, salinity and sigma-theta (Figure 3). 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. We also show offshore profiles of temperature, salinity, sigma-theta and dynamic height relative to 500 db (Figure 4). 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 versus pressure are shown for each station. Header information for each station is as follows:

STA NO	Consecutive station number
STATION	The CTD section name (initialed) and number of the station on the line (Refer to Figure 1).
LAT	latitude in degrees and minutes north of the equator.
LONG	Longitude in degrees and minutes west of Greenwich.
DATE	Day/Month/Year.
TIME	Time in Greenwich Mean time.
PROBE	CTD probe number.
DEPTH	Sonic depth in meters, corrected according to Mathews Tables appearing in Handbook of Oceanographic Tables, U.S. Naval Oceanographic Office Publication SP-68 (1966). During a few stations on Leg 13 bottom depth was not recorded and depth is left blank on the listings.

The data listing for each station gives values at standard pressure and 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.

ACKNOWLEDGMENTS

These observations were made possible through cooperation between three different components of the CODE program. The data were obtained in cruises run by the CODE Long-Term Current and Small-Scale Wind Component (R. C. Beardsley, principal investigator) and the CODE Pressure Program (Wendell S. Brown and James D. Irish, principal investigators). The Shipboard Hydrography component (A. Huyer, principal investigator) provided and installed the CTD system and processed the data. This work was supported by the National Science Foundation through Grants OCE-8014940 to the University of New Hampshire, OCE-8014941 to Woods Hole Oceanographic Institution, and OCE-8014943 to Oregon State University.

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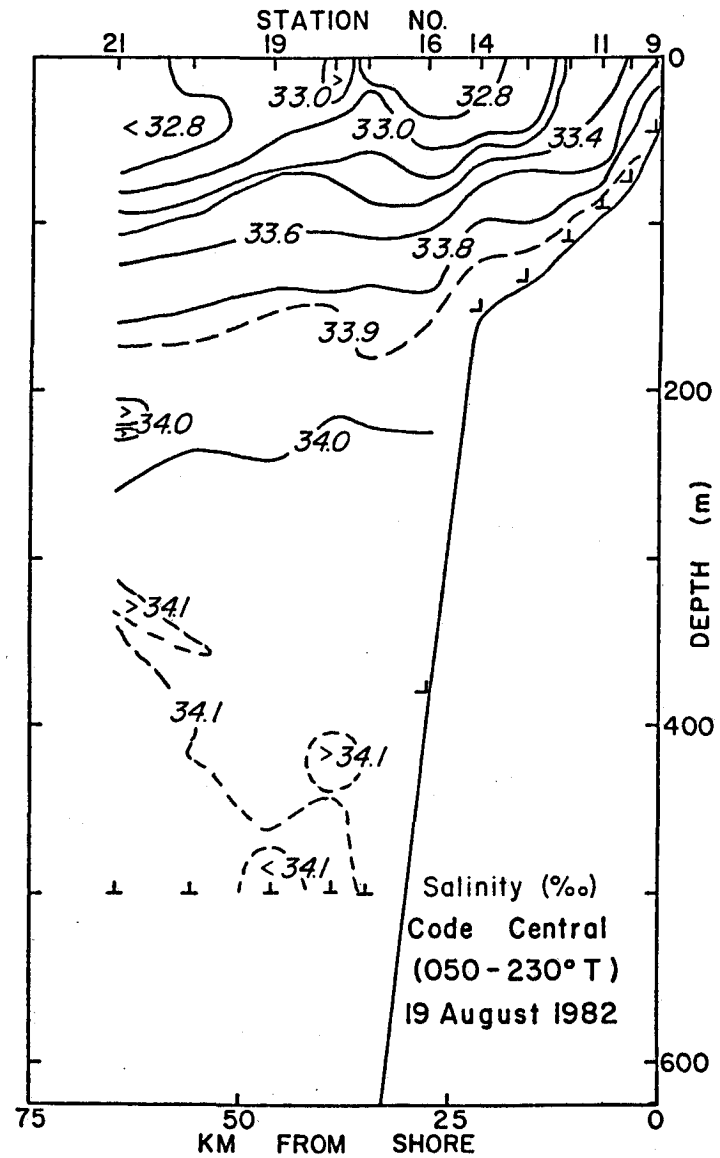
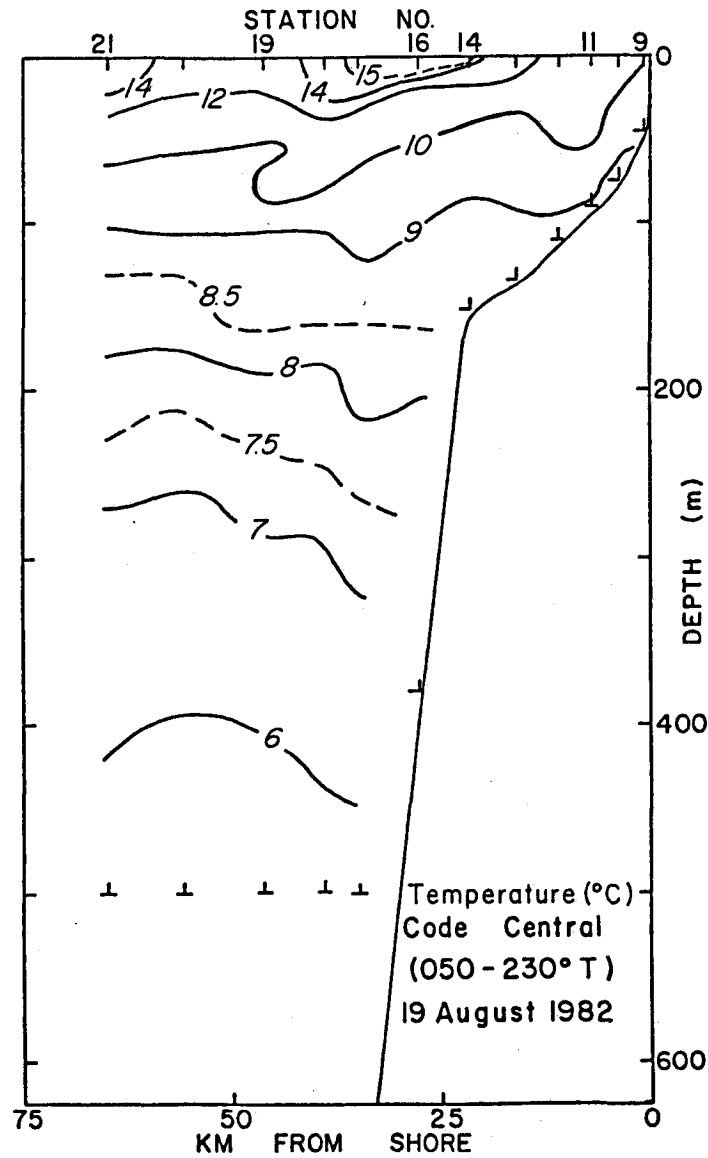


Figure 3. Vertical sections for the Code Central Line.

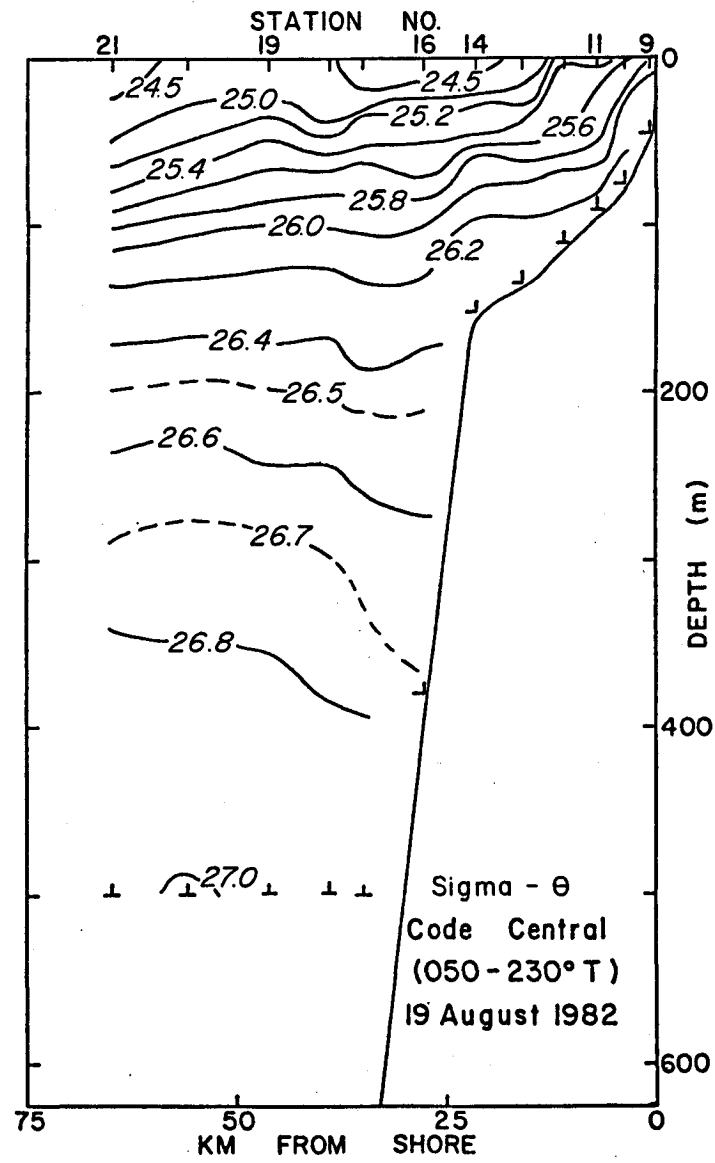


Figure 3 continued.

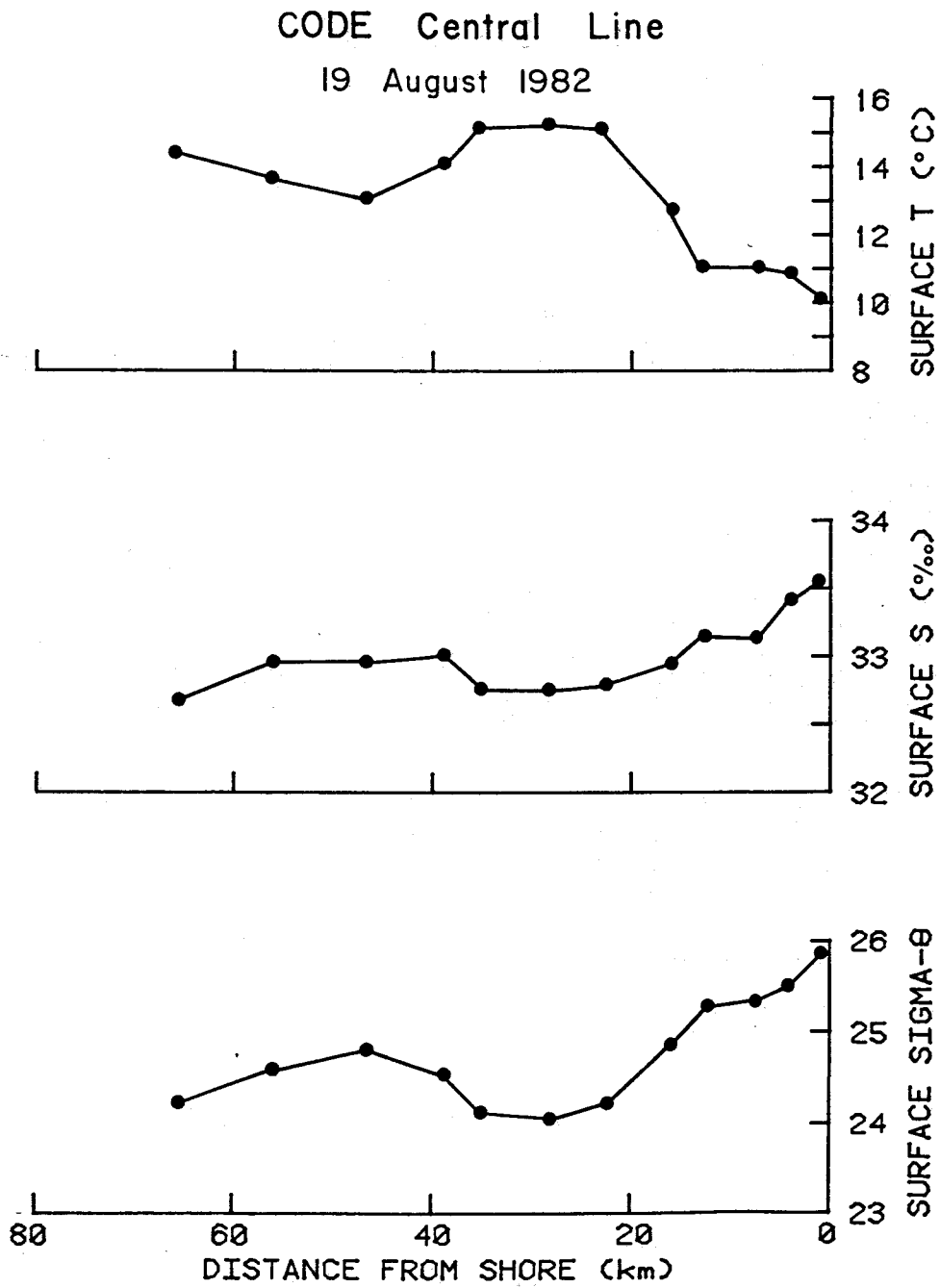


Figure 4. Offshore profiles for the Code Central Line.

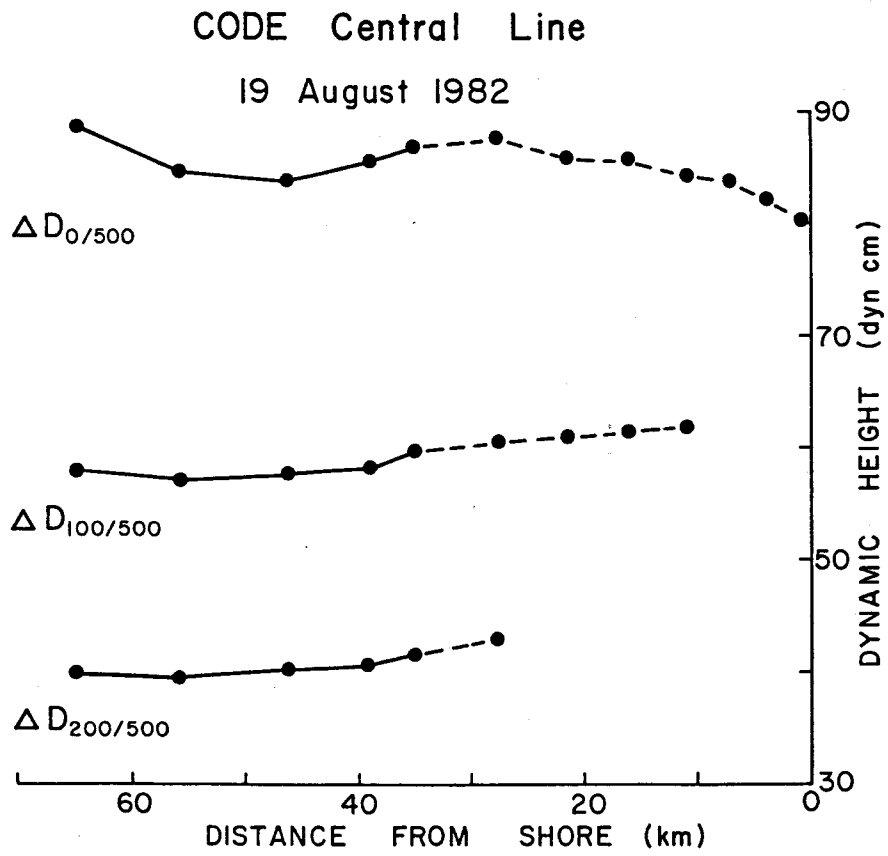
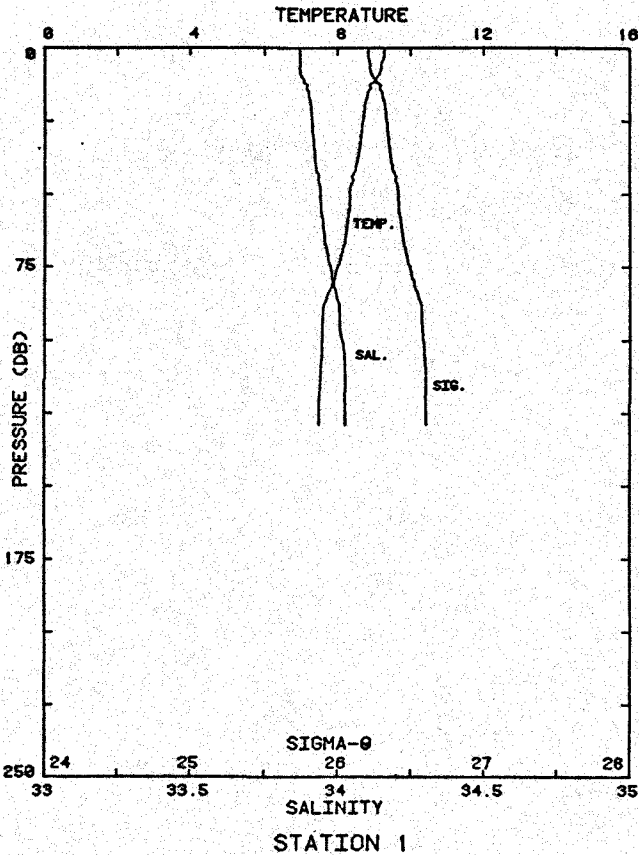


Figure 4 continued.

CTD Data from CODE-1 Legs 3 and 8

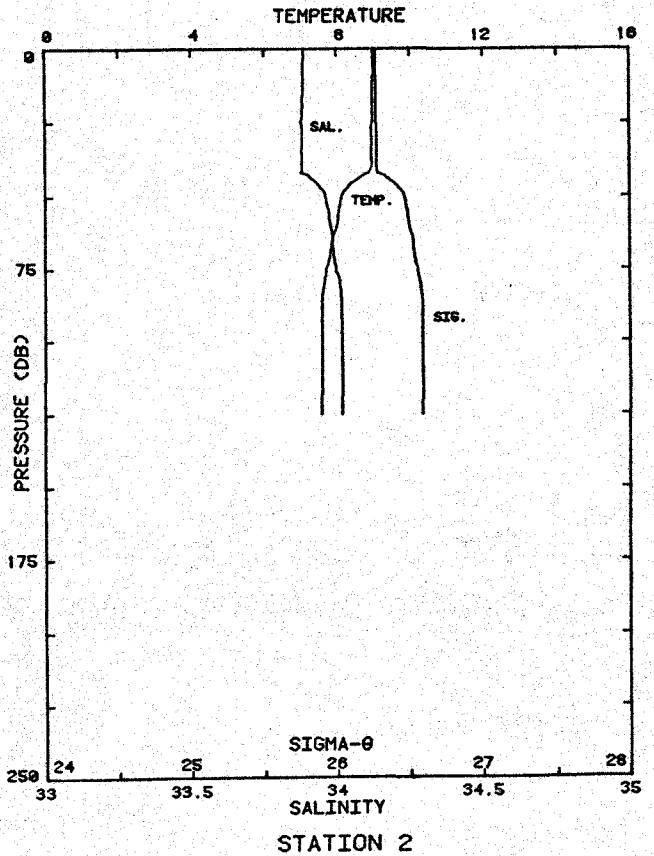


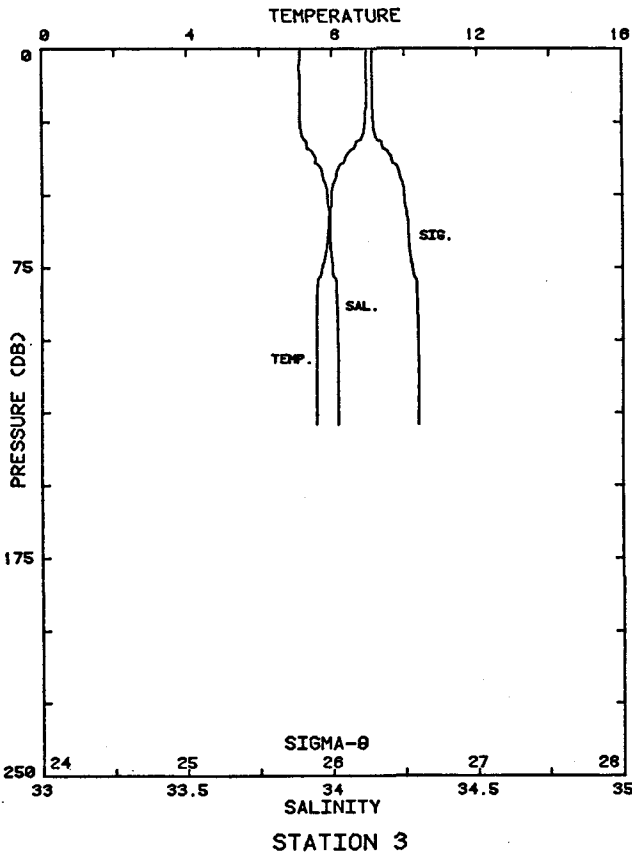
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 20 APR 1981 2145 GMT PROBE 2567 DEPTH 132M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	9.275	33.870	9.275	26.210	181.7	0.002
10	9.088	33.877	9.086	26.246	178.4	0.018
20	8.734	33.909	8.731	26.326	171.0	0.035
30	8.646	33.916	8.643	26.346	169.3	0.052
40	8.510	33.925	8.506	26.374	166.8	0.069
50	8.327	33.942	8.322	26.416	163.1	0.086
60	8.255	33.949	8.249	26.432	161.7	0.102
70	8.111	33.964	8.104	26.465	158.7	0.118
80	7.861	33.986	7.853	26.520	153.6	0.134
90	7.590	34.005	7.581	26.575	148.6	0.149
100	7.567	34.015	7.558	26.586	147.7	0.164
110	7.523	34.023	7.513	26.599	146.6	0.178
120	7.500	34.025	7.489	26.604	146.3	0.193
129	7.491	34.026	7.479	26.606	146.3	0.206

STA NO 2 , LAT: 38 34.4 N LONG:123 32.1 W
 20 APR 1981 2152 GMT PROBE 2567 DEPTH 130M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
0	8.995	33.886	8.995	26.267	176.2	0.000
10	8.984	33.884	8.983	26.267	176.4	0.018
20	8.979	33.882	8.977	26.267	176.6	0.035
30	8.944	33.880	8.941	26.271	176.4	0.053
40	8.940	33.879	8.936	26.271	176.6	0.071
50	8.117	33.959	8.112	26.461	158.8	0.087
60	7.987	33.976	7.981	26.493	155.9	0.103
70	7.803	33.988	7.796	26.530	152.5	0.118
80	7.641	34.010	7.633	26.571	148.8	0.134
90	7.576	34.016	7.567	26.586	147.6	0.148
100	7.576	34.017	7.566	26.586	147.7	0.163
110	7.575	34.017	7.564	26.586	147.8	0.178
120	7.573	34.017	7.561	26.587	147.9	0.193
125	7.573	34.017	7.561	26.587	148.0	0.200



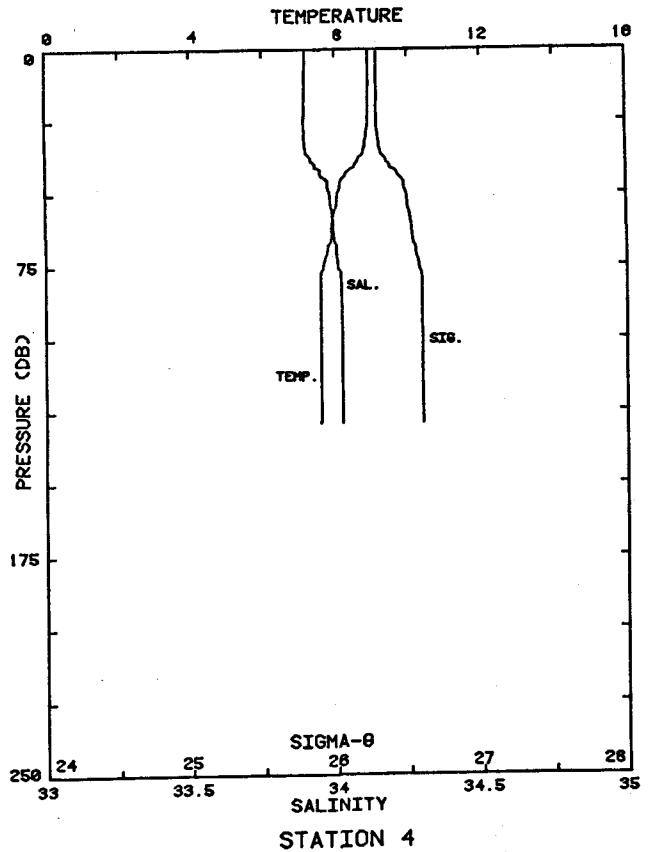


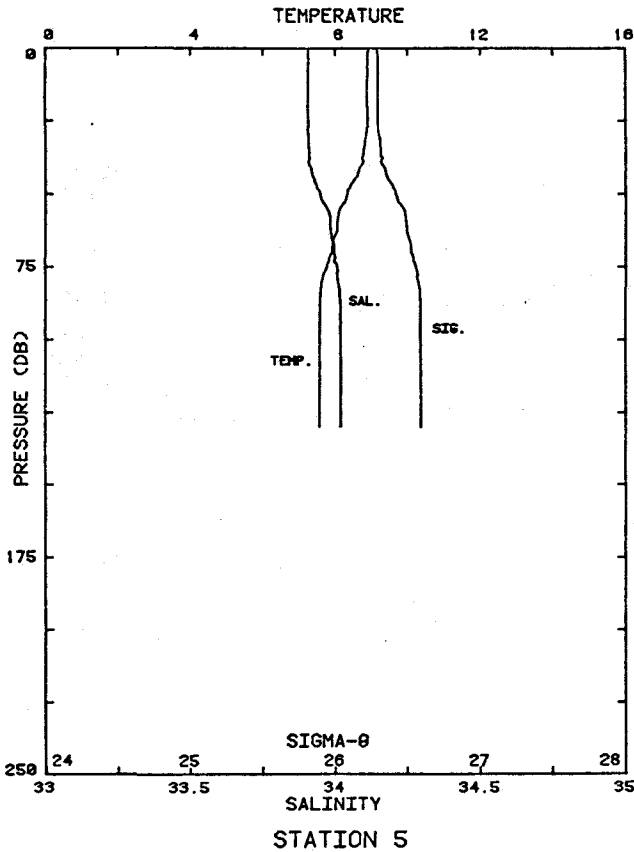
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PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
1	8.938	33.889	8.938	26.278	175.2	0.002
10	8.938	33.889	8.936	26.279	175.3	0.018
20	8.941	33.888	8.939	26.277	175.6	0.035
30	8.843	33.898	8.840	26.301	173.6	0.053
40	8.200	33.956	8.196	26.446	160.0	0.069
50	7.989	33.983	7.984	26.498	155.2	0.085
60	7.896	33.993	7.890	26.520	153.3	0.100
70	7.810	33.996	7.803	26.535	152.0	0.116
80	7.589	34.013	7.581	26.581	147.8	0.131
90	7.565	34.016	7.556	26.587	147.4	0.145
100	7.558	34.017	7.548	26.589	147.4	0.160
110	7.556	34.018	7.545	26.590	147.5	0.175
120	7.553	34.019	7.541	26.591	147.6	0.190
129	7.550	34.019	7.538	26.592	147.6	0.203

STA NO 4 , LAT: 38 34.3 N LONG:123 32.1 W
20 APR 1981 2356 GMT PROBE 2567 DEPTH 133M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
1	8.928	33.897	8.928	26.286	174.4	0.002
10	8.926	33.894	8.925	26.285	174.7	0.017
20	8.917	33.893	8.915	26.285	174.9	0.035
30	8.864	33.892	8.861	26.293	174.3	0.052
40	8.543	33.926	8.539	26.370	167.2	0.070
50	8.050	33.978	8.045	26.486	156.4	0.086
60	7.897	33.990	7.891	26.518	153.5	0.101
70	7.748	33.999	7.741	26.547	150.9	0.116
80	7.557	34.016	7.549	26.588	147.1	0.131
90	7.556	34.018	7.547	26.589	147.2	0.146
100	7.555	34.018	7.546	26.590	147.3	0.161
110	7.552	34.018	7.542	26.590	147.4	0.175
120	7.549	34.019	7.538	26.592	147.5	0.190
129	7.545	34.019	7.533	26.593	147.6	0.203



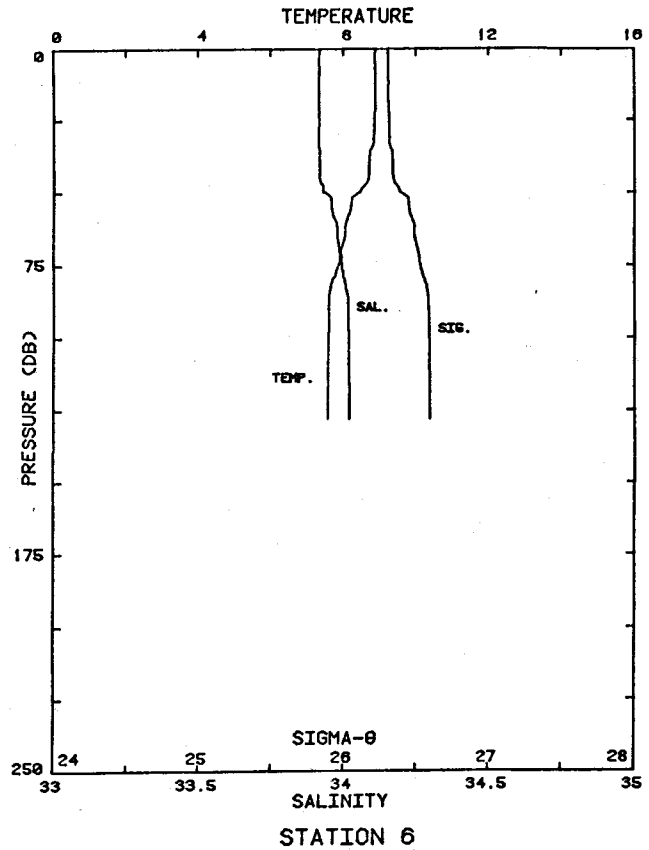


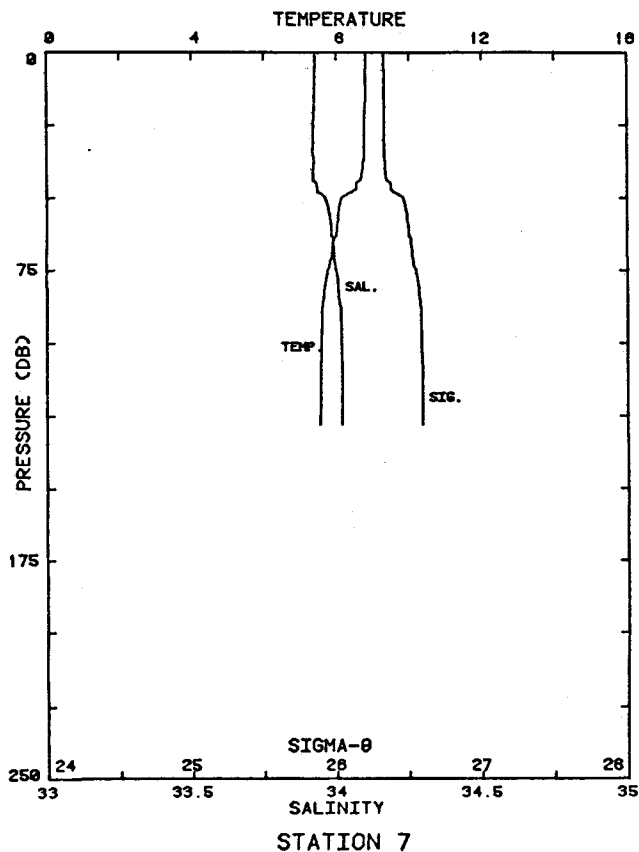
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 21 APR 1981 0050 GMT PROBE 2567 DEPTH 133M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
1	8.920	33.904	8.920	26.293	173.7	0.002
10	8.897	33.904	8.896	26.297	173.6	0.017
20	8.896	33.903	8.893	26.296	173.8	0.035
30	8.857	33.903	8.854	26.303	173.4	0.052
40	8.749	33.905	8.745	26.322	171.8	0.069
50	8.308	33.944	8.303	26.420	162.7	0.086
60	8.026	33.980	8.020	26.491	156.1	0.102
70	7.874	33.993	7.867	26.524	153.1	0.117
80	7.610	34.008	7.603	26.574	148.5	0.132
90	7.558	34.017	7.549	26.589	147.3	0.149
100	7.557	34.018	7.547	26.589	147.4	0.162
110	7.554	34.018	7.543	26.590	147.5	0.177
120	7.552	34.019	7.540	26.591	147.5	0.191
130	7.549	34.019	7.536	26.592	147.6	0.206

STA NO 6 , LAT: 38 34.3 N LONG:123 32.3 W
 21 APR 1981 0155 GMT PROBE 2567 DEPTH 133M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
0	8.885	33.918	8.884	26.310	172.2	0.000
10	8.883	33.916	8.881	26.308	172.5	0.017
20	8.871	33.914	8.869	26.309	172.6	0.034
30	8.827	33.912	8.824	26.315	172.3	0.052
40	8.704	33.917	8.700	26.338	170.3	0.069
50	8.438	33.927	8.433	26.387	165.8	0.086
60	8.057	33.974	8.051	26.482	157.0	0.102
70	7.908	33.985	7.901	26.512	154.2	0.117
80	7.684	34.001	7.676	26.558	150.0	0.133
90	7.572	34.014	7.563	26.584	147.7	0.147
100	7.562	34.016	7.552	26.587	147.6	0.162
110	7.555	34.017	7.545	26.589	147.6	0.177
120	7.547	34.018	7.535	26.591	147.5	0.192
128	7.546	34.019	7.534	26.592	147.6	0.204



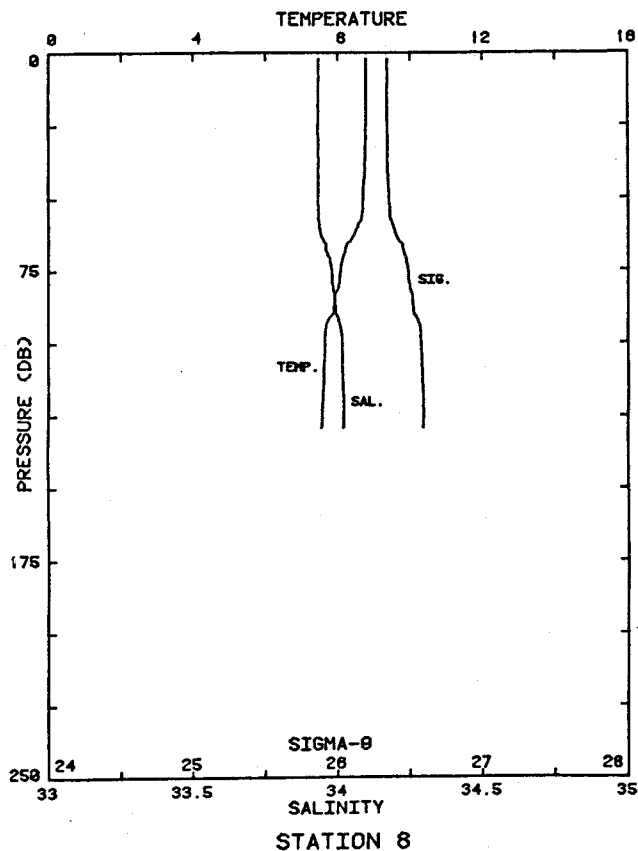


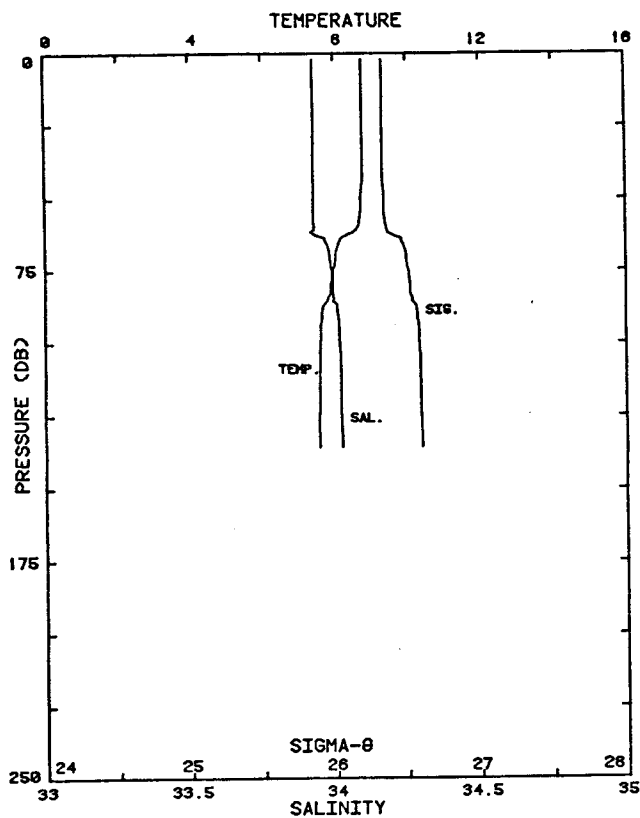
STA NO 7 , LAT: 38 34.3 N LONG:123 32.1 W
21 APR 1981 0252 GMT PROBE 2567 DEPTH 133M

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	8.817	33.925	8.816	26.326	170.6	0.002
10	8.798	33.925	8.797	26.329	170.6	0.017
20	8.788	33.923	8.786	26.329	170.7	0.034
30	8.779	33.921	8.776	26.329	170.9	0.051
40	8.741	33.922	8.736	26.336	170.5	0.068
50	8.139	33.963	8.134	26.460	158.8	0.085
60	8.001	33.981	7.995	26.495	155.7	0.101
70	7.870	33.992	7.863	26.523	153.2	0.116
80	7.669	34.004	7.661	26.562	149.6	0.131
90	7.582	34.014	7.574	26.583	147.8	0.146
100	7.571	34.016	7.562	26.586	147.6	0.161
110	7.557	34.018	7.547	26.590	147.5	0.176
120	7.551	34.018	7.539	26.591	147.6	0.190
128	7.544	34.019	7.532	26.593	147.5	0.202

STA NO 8 , LAT: 38 34.4 N LONG:123 32.2 W
21 APR 1981 0353 GMT PROBE 2567 DEPTH 133M

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	8.766	33.931	8.766	26.339	169.5	0.003
10	8.768	33.931	8.766	26.339	169.6	0.017
20	8.770	33.931	8.768	26.338	169.9	0.034
30	8.760	33.932	8.757	26.341	169.8	0.051
40	8.744	33.930	8.739	26.342	169.9	0.068
50	8.689	33.930	8.684	26.351	169.3	0.085
60	8.522	33.934	8.516	26.380	166.7	0.102
70	8.139	33.965	8.132	26.462	159.0	0.118
80	8.010	33.981	8.002	26.495	156.1	0.134
90	7.856	33.992	7.847	26.526	153.3	0.149
100	7.627	34.014	7.617	26.576	148.6	0.164
110	7.598	34.015	7.587	26.582	148.3	0.179
120	7.565	34.017	7.553	26.588	147.8	0.194
129	7.545	34.019	7.533	26.593	147.6	0.207





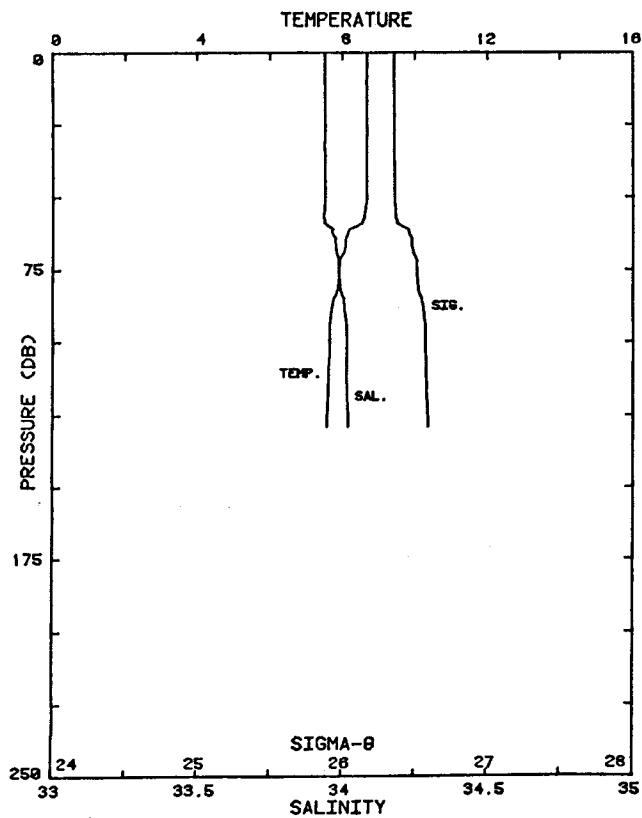
STATION 9

STA NO 9 , LAT: 38 34.3 N LONG:123 32.5 W
21 APR 1981 0451 GMT PROBE 2567 DEPTH 136M

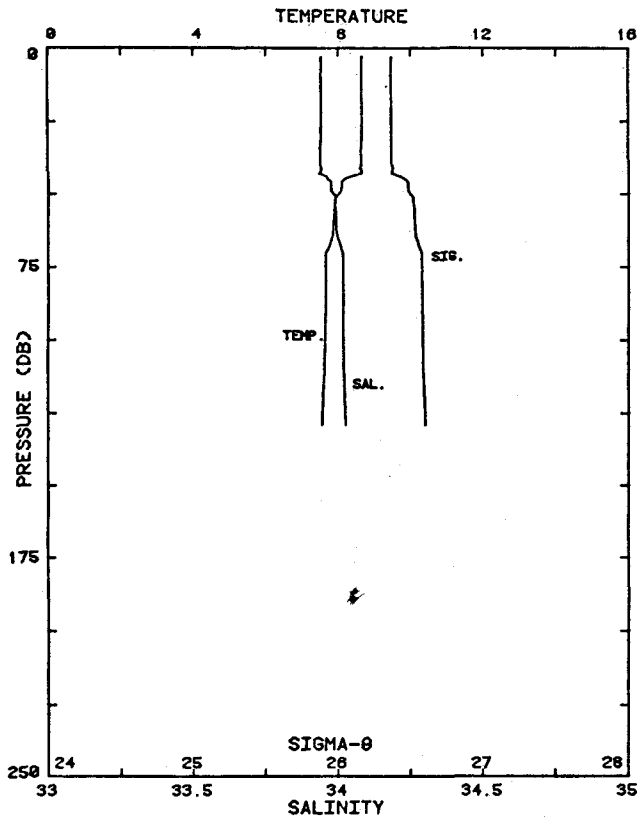
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
2	8.774	33.927	8.773	26.334	169.9	0.003
10	8.772	33.928	8.771	26.335	169.9	0.017
20	8.773	33.927	8.771	26.334	170.2	0.034
30	8.773	33.925	8.770	26.334	170.5	0.051
40	8.771	33.924	8.767	26.333	170.8	0.068
50	8.712	33.924	8.707	26.343	170.0	0.085
60	8.629	33.927	8.623	26.358	168.8	0.102
70	8.004	33.981	7.997	26.495	155.9	0.118
80	7.874	33.992	7.866	26.523	153.4	0.134
90	7.637	34.010	7.628	26.572	148.9	0.149
100	7.583	34.016	7.574	26.584	147.9	0.164
110	7.562	34.018	7.552	26.589	147.6	0.178
120	7.548	34.019	7.536	26.592	147.5	0.193
130	7.531	34.020	7.518	26.595	147.3	0.208
136	7.532	34.020	7.519	26.596	147.4	0.217

STA NO 10 , LAT: 38 34.4 N LONG:123 32.0 W
21 APR 1981 0552 GMT PROBE 2567 DEPTH 133M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
1	8.680	33.938	8.680	26.357	167.7	0.002
10	8.677	33.938	8.676	26.358	167.8	0.017
20	8.678	33.938	8.676	26.358	167.9	0.034
30	8.678	33.938	8.674	26.359	168.1	0.050
40	8.671	33.938	8.667	26.360	168.2	0.067
50	8.662	33.938	8.657	26.361	168.3	0.084
60	8.404	33.950	8.398	26.411	163.8	0.101
70	7.988	33.981	7.982	26.498	155.6	0.117
80	7.868	33.991	7.860	26.523	153.4	0.132
90	7.681	34.009	7.672	26.565	149.5	0.147
100	7.635	34.014	7.625	26.575	148.8	0.162
110	7.610	34.015	7.599	26.580	148.4	0.177
120	7.582	34.016	7.571	26.585	148.1	0.192
129	7.553	34.019	7.540	26.591	147.7	0.205



STATION 10



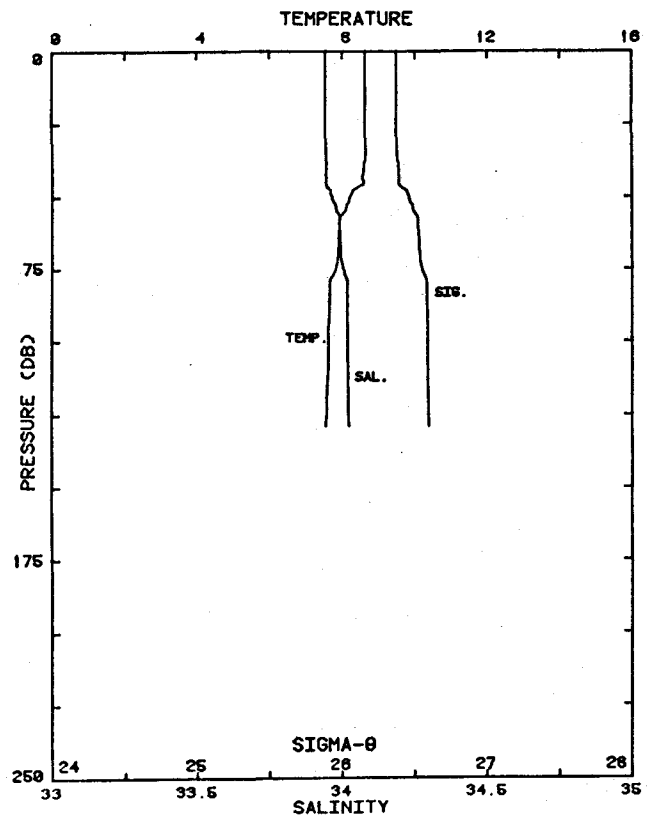
STATION 11

STA NO 11 , LAT: 38 34.4 N LONG:123 31.9 W
21 APR 1981 0650 GMT PROBE 2567 DEPTH 132M

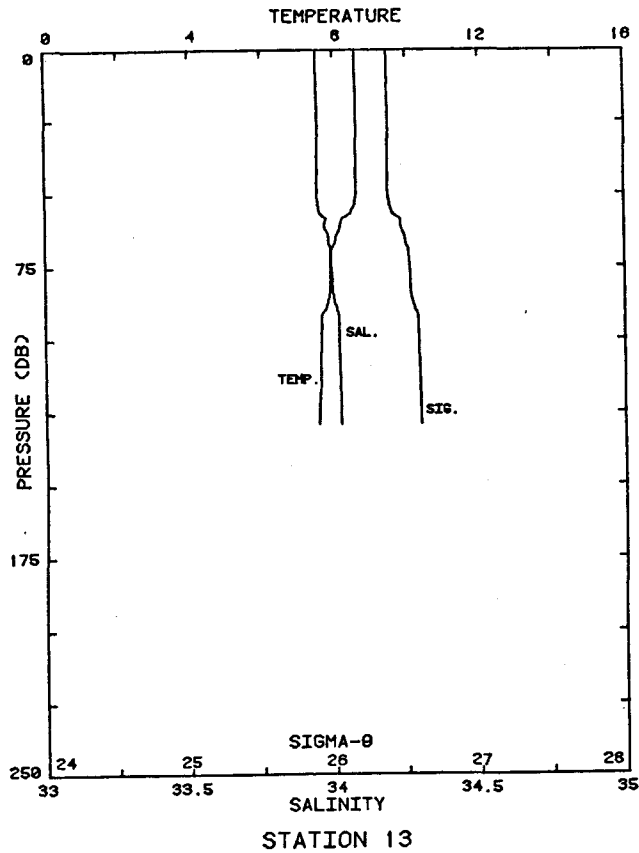
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
3	8.646	33.941	8.646	26.365	167.0	0.005
10	8.646	33.941	8.645	26.365	167.1	0.017
20	8.646	33.941	8.644	26.365	167.3	0.033
30	8.643	33.941	8.640	26.366	167.4	0.050
40	8.631	33.939	8.627	26.366	167.6	0.067
50	8.012	33.982	8.007	26.494	155.6	0.083
60	7.852	33.992	7.846	26.526	152.7	0.098
70	7.646	34.013	7.639	26.573	148.5	0.113
80	7.629	34.014	7.621	26.576	148.3	0.128
90	7.623	34.014	7.614	26.577	148.4	0.143
100	7.609	34.015	7.600	26.580	148.3	0.158
110	7.596	34.016	7.586	26.583	148.2	0.173
120	7.555	34.018	7.543	26.591	147.6	0.188
129	7.531	34.021	7.519	26.596	147.3	0.201

STA NO 12 , LAT: 38 34.4 N LONG:123 32.0 W
21 APR 1981 0750 GMT PROBE 2567 DEPTH 133M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		THETA			
0	8.620	33.942	8.620	26.370	166.5	0.000
10	8.616	33.942	8.615	26.371	166.6	0.017
20	8.621	33.942	8.618	26.370	166.8	0.033
30	8.619	33.942	8.616	26.371	167.0	0.050
40	8.570	33.941	8.566	26.378	166.5	0.067
50	8.181	33.963	8.176	26.454	159.4	0.083
60	7.899	33.988	7.893	26.515	153.7	0.099
70	7.853	33.993	7.846	26.527	152.9	0.114
80	7.624	34.013	7.617	26.576	148.3	0.129
90	7.620	34.014	7.611	26.578	148.3	0.144
100	7.594	34.016	7.584	26.583	148.0	0.159
110	7.584	34.016	7.574	26.585	148.0	0.174
120	7.561	34.018	7.550	26.590	147.7	0.188
129	7.531	34.021	7.519	26.596	147.3	0.202



STATION 12

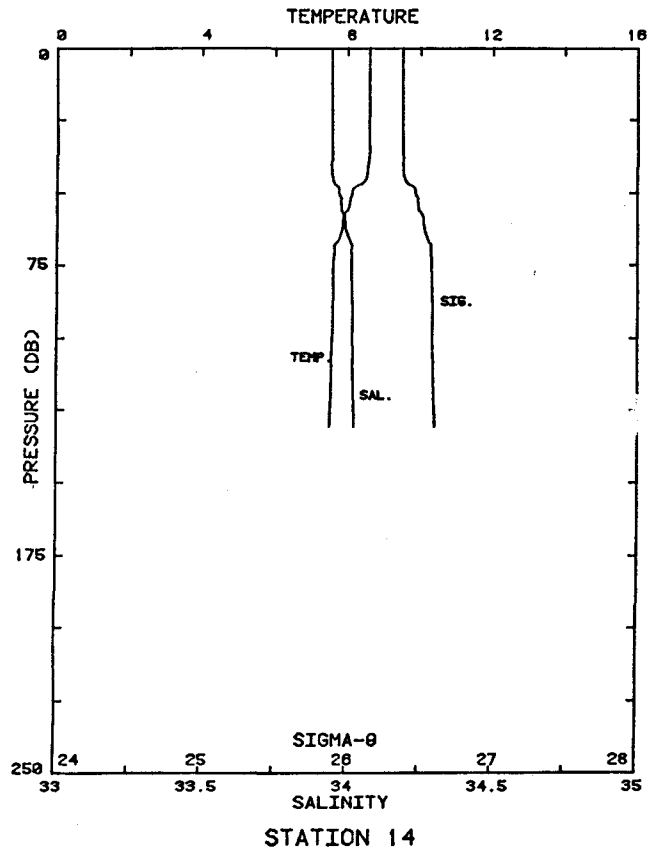


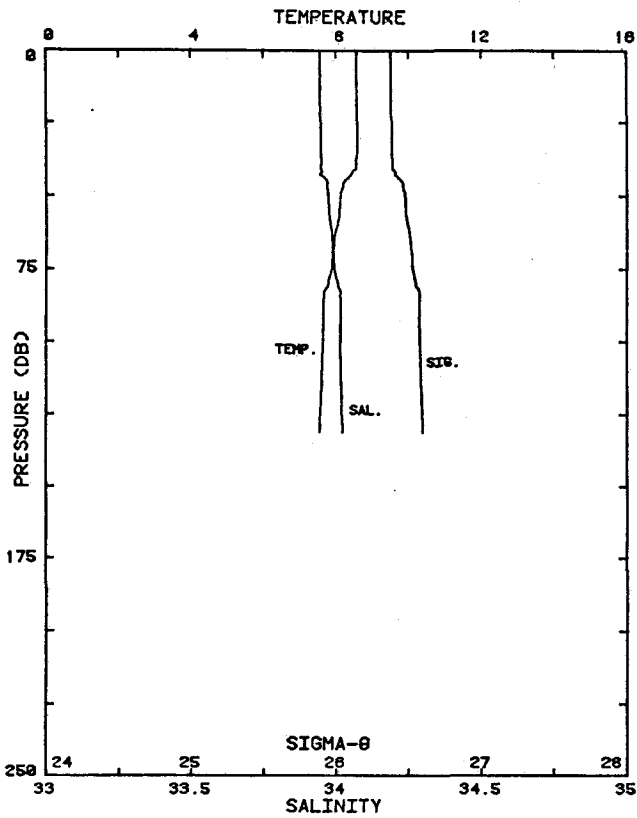
STA NO 13 , LAT: 38 34.4 N LONG:123 32.0 W
 21 APR 1981 0800 GMT PROBE 2567 DEPTH 133M

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	8.612	33.942	8.612	26.371	166.4	0.002
10	8.612	33.943	8.611	26.372	166.5	0.017
20	8.608	33.943	8.606	26.373	166.6	0.033
30	8.611	33.943	8.607	26.372	166.8	0.050
40	8.614	33.943	8.610	26.372	167.0	0.067
50	8.614	33.942	8.609	26.372	167.3	0.083
60	8.173	33.966	8.167	26.458	159.2	0.100
70	7.912	33.987	7.905	26.514	154.1	0.116
80	7.866	33.991	7.858	26.523	153.3	0.131
90	7.742	34.006	7.734	26.553	150.6	0.146
100	7.619	34.015	7.609	26.578	148.4	0.161
110	7.596	34.016	7.585	26.583	148.2	0.176
120	7.566	34.018	7.555	26.589	147.7	0.191
129	7.538	34.020	7.525	26.595	147.4	0.204

STA NO 14 , LAT: 38 34.3 N LONG:123 32.1 W
 21 APR 1981 0855 GMT PROBE 2567 DEPTH 134M

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
0	8.595	33.944	8.595	26.375	165.9	0.000
10	8.593	33.944	8.592	26.376	166.1	0.017
20	8.594	33.943	8.591	26.375	166.3	0.033
30	8.583	33.944	8.580	26.378	166.3	0.050
40	8.567	33.943	8.563	26.380	166.3	0.066
50	8.127	33.969	8.122	26.467	158.2	0.083
60	7.859	33.991	7.853	26.524	152.9	0.098
70	7.626	34.012	7.619	26.575	148.2	0.113
80	7.587	34.015	7.580	26.583	147.6	0.128
90	7.580	34.017	7.571	26.585	147.6	0.143
100	7.573	34.017	7.563	26.587	147.6	0.158
110	7.555	34.019	7.545	26.591	147.4	0.173
120	7.539	34.020	7.527	26.594	147.2	0.187
130	7.504	34.024	7.491	26.602	146.7	0.202
131	7.501	34.024	7.488	26.603	146.6	0.203





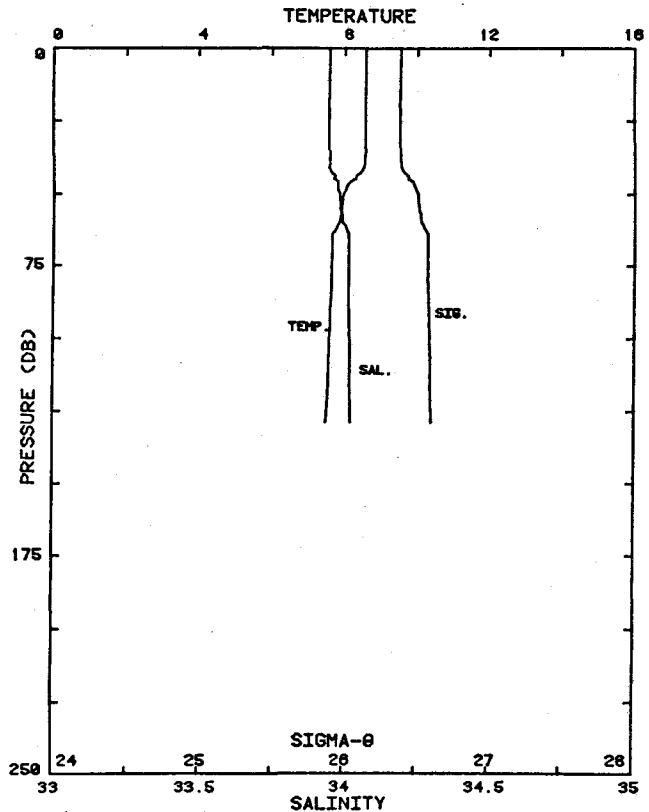
STATION 15

STA NO 15 , LAT: 38 34.2 N LONG:123 32.3 W
 21 APR 1981 0953 GMT PROBE 2567 DEPTH 134M

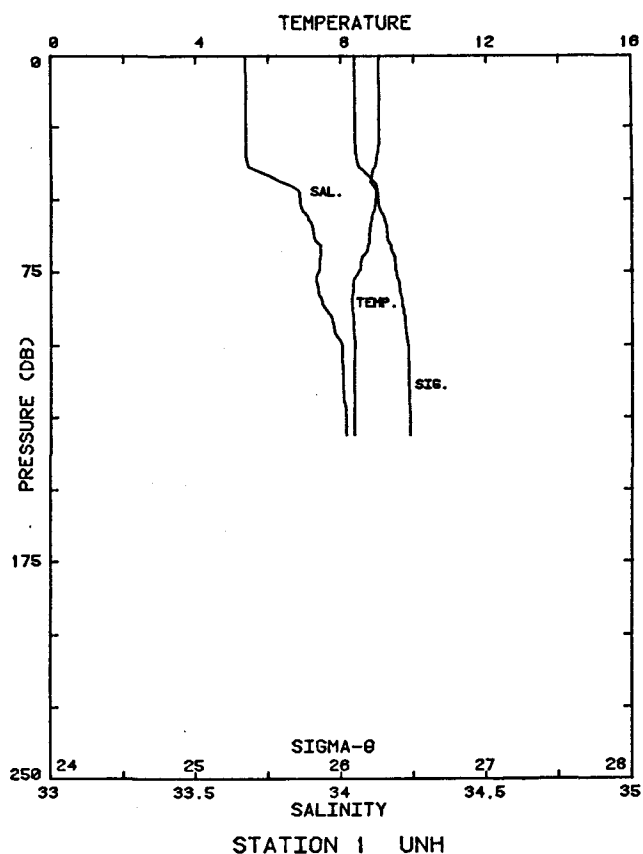
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP	THETA				
1	8.573	33.945	8.573	26.380	165.5	0.002
10	8.575	33.945	8.574	26.379	165.8	0.017
20	8.573	33.946	8.571	26.380	165.9	0.033
30	8.569	33.946	8.566	26.381	166.0	0.050
40	8.544	33.946	8.539	26.386	165.7	0.066
50	8.115	33.970	8.110	26.470	157.9	0.082
60	8.025	33.979	8.019	26.490	156.1	0.098
70	7.884	33.989	7.877	26.519	153.6	0.114
80	7.769	34.004	7.761	26.548	151.0	0.129
90	7.636	34.014	7.627	26.575	148.6	0.144
100	7.628	34.014	7.619	26.576	148.6	0.159
110	7.602	34.016	7.591	26.581	148.3	0.173
120	7.566	34.018	7.555	26.588	147.8	0.188
130	7.538	34.021	7.526	26.595	147.4	0.203
131	7.532	34.021	7.519	26.596	147.3	0.205

STA NO 16 , LAT: 38 34.1 N LONG:123 32.2 W
 21 APR 1981 1053 GMT PROBE 2567 DEPTH 134M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP	THETA				
0	8.564	33.947	8.564	26.382	165.3	0.000
10	8.568	33.945	8.567	26.381	165.6	0.017
20	8.571	33.945	8.568	26.380	165.8	0.033
30	8.561	33.946	8.558	26.382	165.9	0.050
40	8.537	33.947	8.533	26.388	165.6	0.066
50	7.956	33.982	7.951	26.503	154.8	0.082
60	7.849	33.993	7.843	26.527	152.6	0.098
70	7.641	34.013	7.634	26.573	148.4	0.113
80	7.633	34.014	7.626	26.575	148.4	0.127
90	7.599	34.016	7.590	26.582	147.9	0.142
100	7.574	34.017	7.564	26.587	147.6	0.157
110	7.556	34.018	7.545	26.590	147.5	0.172
120	7.541	34.020	7.530	26.594	147.3	0.187
129	7.499	34.024	7.486	26.603	146.6	0.200



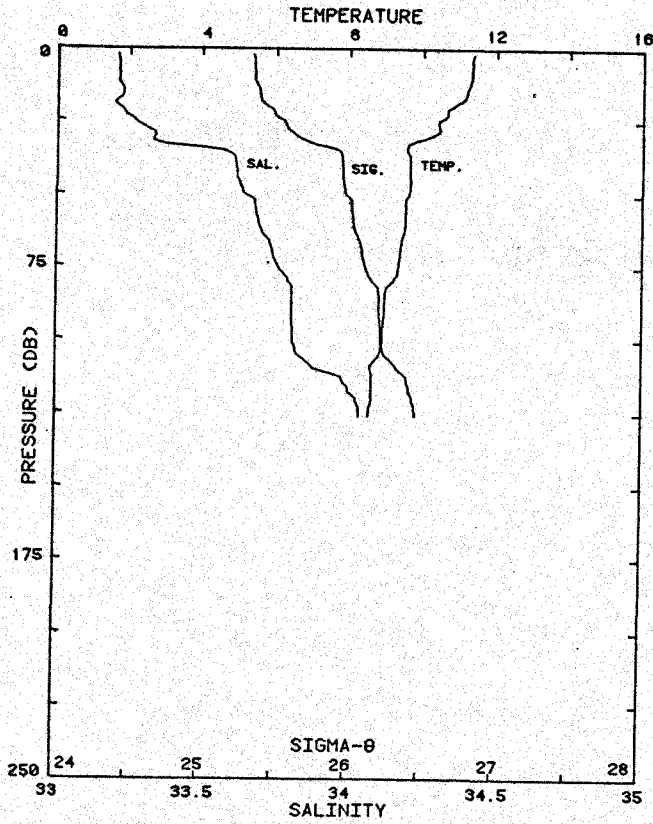
STATION 16



STA NO 1 ,UNH LAT: 38 34.3 N LONG:123 32.5 W
 19 JUL 1981 0307 GMT PROBE 2567 DEPTH 133M

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
0	9.048	33.669	9.048	26.089	193.1	0.000
10	9.041	33.673	9.039	26.094	192.8	0.019
20	9.035	33.672	9.033	26.094	193.1	0.039
30	9.036	33.672	9.033	26.094	193.3	0.058
40	8.866	33.699	8.862	26.142	188.9	0.077
50	8.936	33.855	8.931	26.253	178.5	0.095
60	8.783	33.900	8.777	26.312	173.1	0.113
70	8.563	33.925	8.556	26.367	168.1	0.130
80	8.311	33.917	8.303	26.399	165.2	0.147
90	8.321	33.962	8.312	26.433	162.2	0.163
100	8.366	34.000	8.356	26.456	160.2	0.179
110	8.341	34.004	8.330	26.463	159.8	0.195
120	8.348	34.008	8.335	26.465	159.7	0.211
130	8.361	34.016	8.347	26.470	159.5	0.227
131	8.361	34.016	8.347	26.470	159.5	0.229

CTD Data from CODE-2 Legs 10 and 13



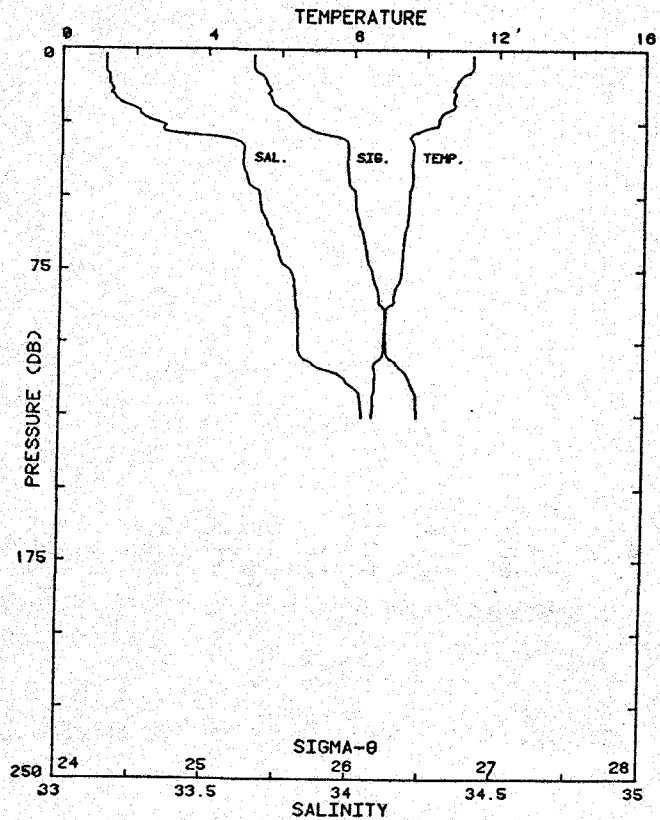
STATION 1

STA NO 1 , LAT: 38 33.4 N LONG:123 31.3 W
03 AUG 1982 2000 GMT PROBE 2567 DEPTH 130M

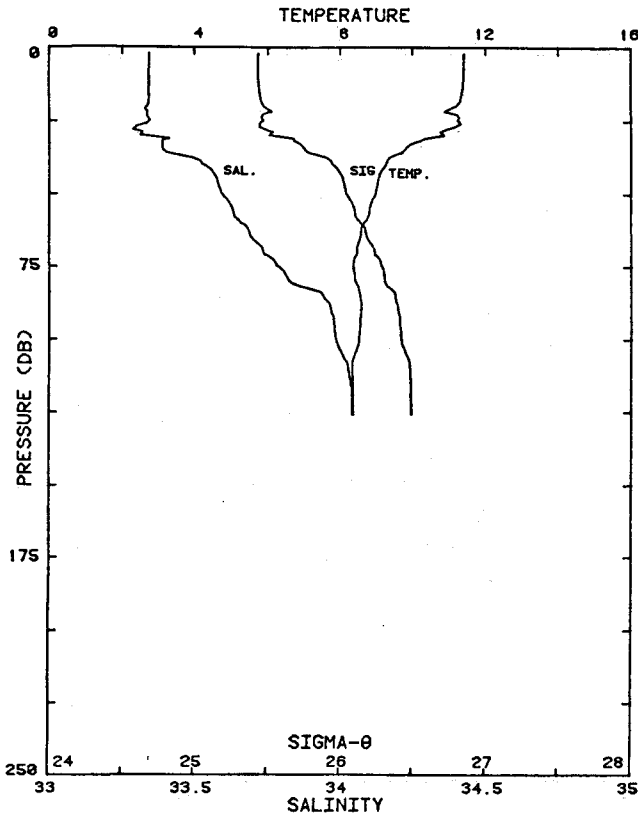
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP			THETA		
2	11.357	33.208	11.357	25.337	264.6	0.005
10	11.311	33.215	11.309	25.351	263.5	0.026
20	10.805	33.211	10.803	25.438	255.4	0.052
30	10.258	33.341	10.255	25.635	237.0	0.077
40	9.643	33.617	9.639	25.953	206.9	0.099
50	9.632	33.648	9.626	25.980	204.6	0.119
60	9.532	33.692	9.526	26.030	200.0	0.139
70	9.389	33.739	9.381	26.091	194.4	0.159
80	9.212	33.793	9.203	26.161	187.9	0.178
90	8.969	33.807	8.960	26.211	183.4	0.197
100	8.924	33.811	8.913	26.222	182.6	0.215
110	8.595	33.881	8.583	26.328	172.6	0.233
120	8.633	34.026	8.620	26.435	162.6	0.250
126	8.550	34.038	8.537	26.457	160.6	0.259

STA NO 2 , LAT: 38 33.4 N LONG:123 31.6 W
03 AUG 1982 2040 GMT PROBE 2567 DEPTH 130M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP			THETA		
2	11.268	33.148	11.268	25.306	267.6	0.005
10	10.906	33.160	10.905	25.381	260.6	0.027
20	10.734	33.247	10.732	25.479	251.5	0.052
30	9.537	33.539	9.534	25.910	210.8	0.076
40	9.620	33.623	9.615	25.962	206.0	0.097
50	9.553	33.680	9.548	26.017	201.0	0.117
60	9.502	33.706	9.495	26.046	198.5	0.137
70	9.379	33.747	9.371	26.098	193.7	0.157
80	9.261	33.799	9.253	26.158	188.2	0.176
90	8.904	33.812	8.895	26.225	182.0	0.194
100	8.875	33.815	8.865	26.232	181.5	0.213
110	8.630	33.914	8.618	26.348	170.7	0.230
120	8.584	34.030	8.571	26.446	161.6	0.247
126	8.567	34.037	8.554	26.454	160.9	0.257



STATION 2



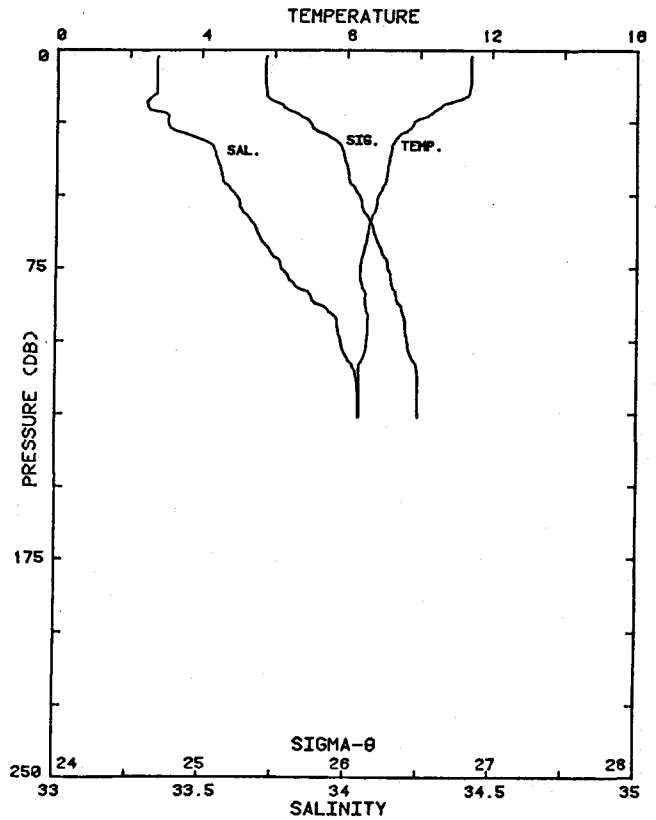
STATION 3

STA NO 3 , LAT: 38 45.6 N LONG:123 45.4 W
04 AUG 1982 1230 GMT PROBE 2567 DEPTH 131M

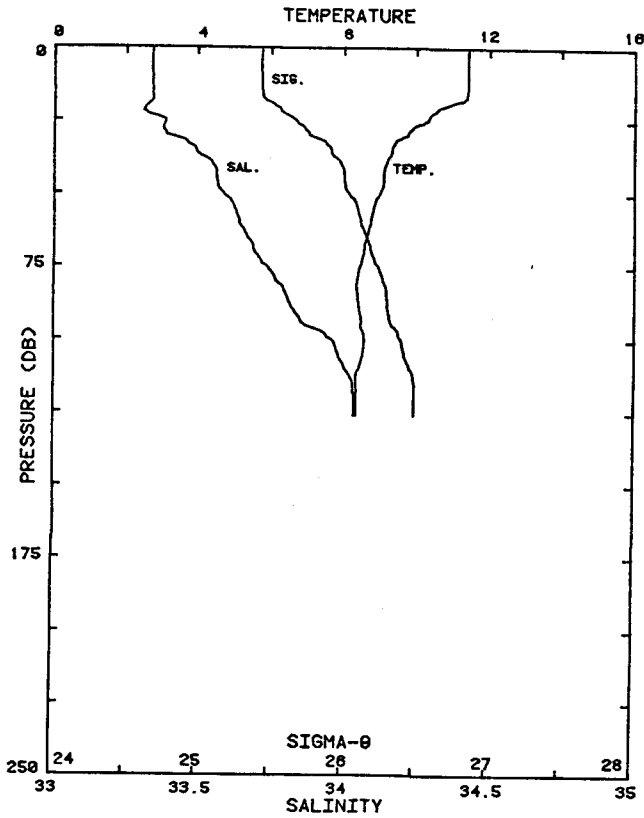
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
2	11.399	33.342	11.399	25.433	255.5	0.005
10	11.398	33.342	11.397	25.433	255.7	0.026
20	11.188	33.337	11.186	25.468	252.6	0.051
30	10.863	33.313	10.859	25.508	249.0	0.076
40	9.271	33.524	9.267	25.941	208.0	0.099
50	8.976	33.592	8.971	26.041	198.7	0.119
60	8.671	33.658	8.665	26.141	189.4	0.138
70	8.443	33.735	8.436	26.237	180.5	0.157
80	8.408	33.820	8.399	26.309	173.8	0.174
90	8.564	33.966	8.555	26.399	165.4	0.191
100	8.507	33.983	8.497	26.421	163.5	0.207
110	8.328	34.026	8.317	26.483	157.9	0.224
120	8.352	34.040	8.340	26.489	157.4	0.239
126	8.357	34.042	8.344	26.490	157.4	0.249

STA NO 4 , LAT: 38 45.7 N LONG:123 45.5 W
04 AUG 1982 1245 GMT PROBE 2567 DEPTH 130M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
2	11.400	33.346	11.399	25.437	255.2	0.005
10	11.403	33.344	11.402	25.434	255.6	0.026
20	10.540	33.311	10.538	25.563	243.6	0.051
30	9.375	33.472	9.372	25.884	213.3	0.074
40	9.104	33.563	9.100	25.998	202.5	0.094
50	8.854	33.617	8.848	26.080	195.0	0.114
60	8.589	33.681	8.583	26.171	186.5	0.133
70	8.429	33.738	8.422	26.241	180.0	0.152
80	8.396	33.814	8.388	26.306	174.1	0.169
90	8.544	33.938	8.535	26.380	167.3	0.186
100	8.539	33.979	8.529	26.413	164.3	0.203
110	8.328	34.026	8.317	26.482	157.9	0.219
120	8.350	34.039	8.338	26.489	157.4	0.235
126	8.352	34.040	8.340	26.490	157.5	0.244



STATION 4



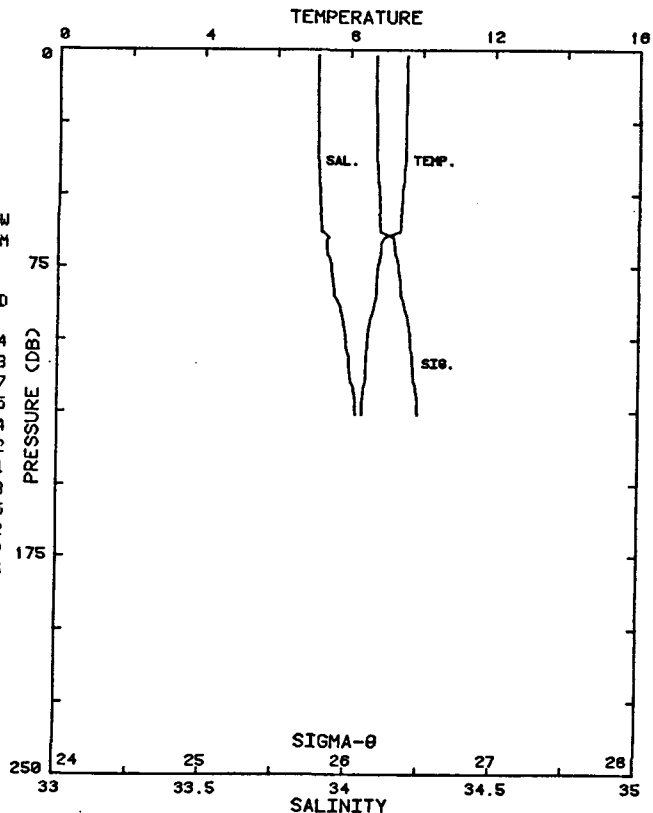
STATION 5

STA NO 5 , LAT: 38 45.7 N LONG:123 45.5 W
 04 AUG 1982 1257 GMT PROBE 2567 DEPTH 130M

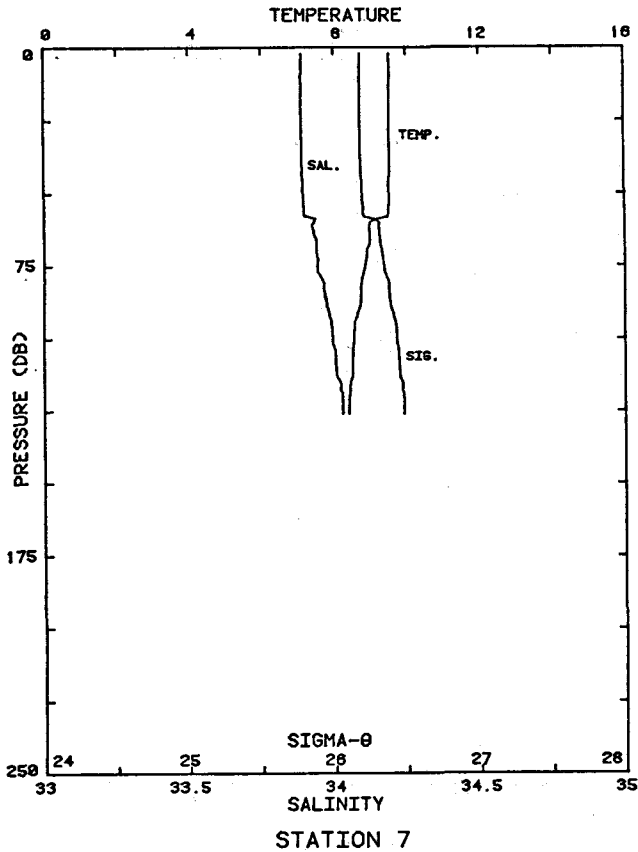
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP			THETA		
1	11.403	33.342	11.402	25.433	255.6	0.003
10	11.405	33.342	11.403	25.433	255.7	0.026
20	10.796	33.325	10.794	25.529	246.8	0.051
30	9.742	33.392	9.739	25.761	224.9	0.074
40	9.150	33.550	9.146	25.981	204.2	0.096
50	8.991	33.586	8.986	26.035	199.3	0.116
60	8.737	33.640	8.731	26.117	191.7	0.135
70	8.542	33.694	8.535	26.189	185.0	0.154
80	8.370	33.765	8.361	26.271	177.4	0.172
90	8.441	33.826	8.432	26.308	174.0	0.190
100	8.578	33.959	8.568	26.391	166.4	0.207
110	8.425	34.002	8.414	26.449	161.1	0.223
120	8.352	34.036	8.340	26.487	157.6	0.239
126	8.356	34.037	8.343	26.487	157.8	0.248

STA NO 6 , LAT: 38 20.9 N LONG:123 22.8 W
 05 AUG 1982 1215 GMT PROBE 2567 DEPTH 130M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP			THETA		
2	9.553	33.887	9.553	26.178	184.7	0.004
10	9.551	33.888	9.550	26.179	184.8	0.018
20	9.547	33.888	9.545	26.180	184.9	0.037
30	9.533	33.890	9.530	26.184	184.7	0.055
40	9.517	33.892	9.513	26.188	184.5	0.074
50	9.447	33.897	9.442	26.204	183.3	0.092
60	9.428	33.904	9.421	26.213	182.7	0.111
70	8.882	33.926	8.875	26.317	172.8	0.128
80	8.752	33.947	8.744	26.354	169.5	0.145
90	8.676	33.971	8.666	26.385	166.8	0.162
100	8.522	33.990	8.512	26.424	163.2	0.179
110	8.473	34.002	8.462	26.441	161.8	0.195
120	8.386	34.021	8.373	26.470	159.3	0.211
126	8.366	34.025	8.354	26.476	158.8	0.221



STATION 6

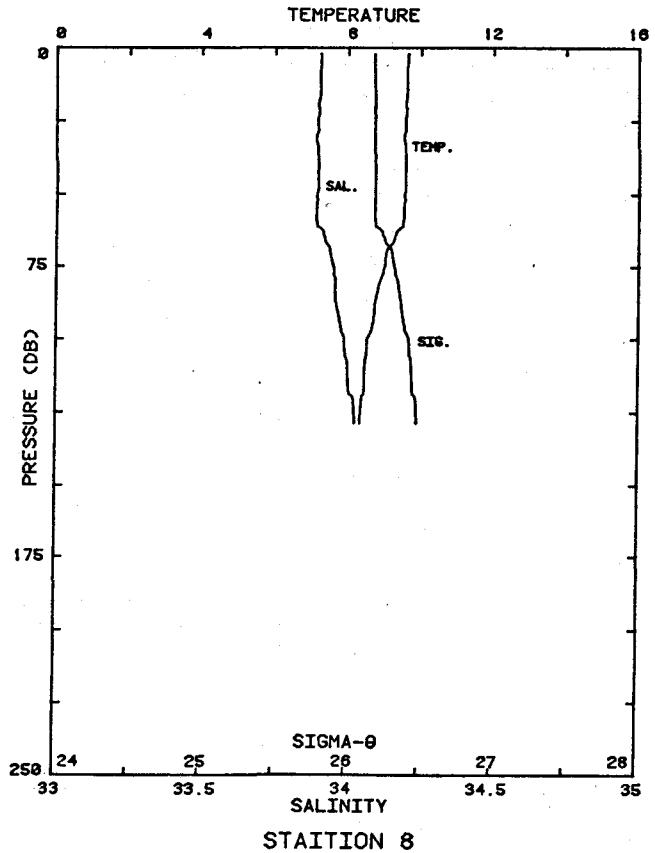


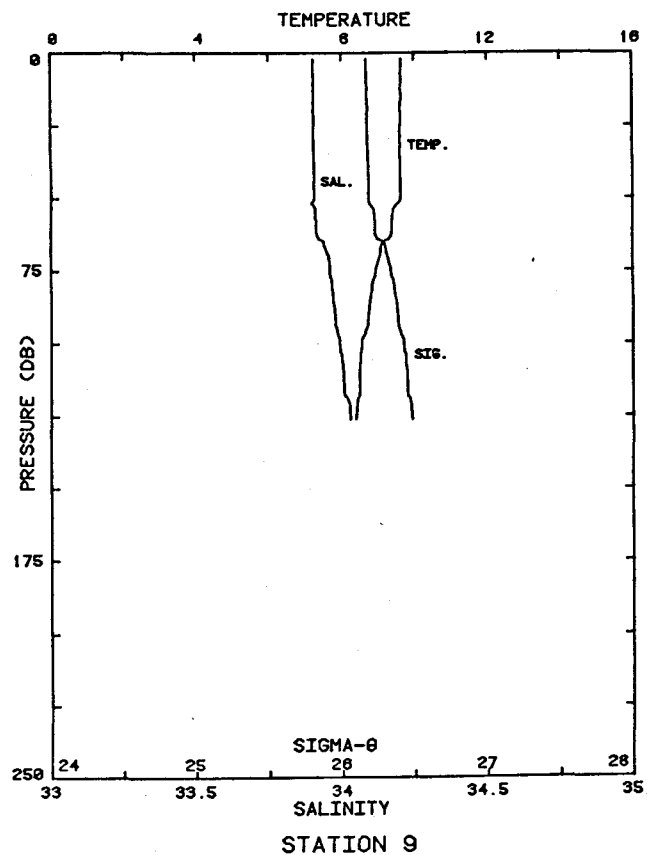
STA NO 7 , LAT: 38 20.9 N LONG:123 22.9 W
 05 AUG 1982 1225 GMT PROBE 2567 DEPTH 130M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
2	9.539	33.888	9.538	26.181	184.4	0.004
10	9.544	33.886	9.543	26.179	184.8	0.018
20	9.537	33.889	9.535	26.182	184.7	0.037
30	9.525	33.891	9.521	26.186	184.6	0.055
40	9.526	33.891	9.522	26.186	184.8	0.074
50	9.504	33.893	9.499	26.191	184.5	0.092
60	8.959	33.930	8.953	26.308	173.5	0.111
70	8.879	33.936	8.872	26.326	172.1	0.128
80	8.726	33.956	8.718	26.366	168.4	0.145
90	8.659	33.976	8.649	26.392	166.1	0.162
100	8.517	33.992	8.507	26.426	163.0	0.178
110	8.468	34.003	8.457	26.442	161.7	0.194
120	8.375	34.023	8.363	26.473	159.0	0.210
126	8.366	34.025	8.353	26.476	158.8	0.220

STA NO 8 , LAT: 38 21.0 N LONG:123 22.9 W
 05 AUG 1982 1235 GMT PROBE 2567 DEPTH 130M

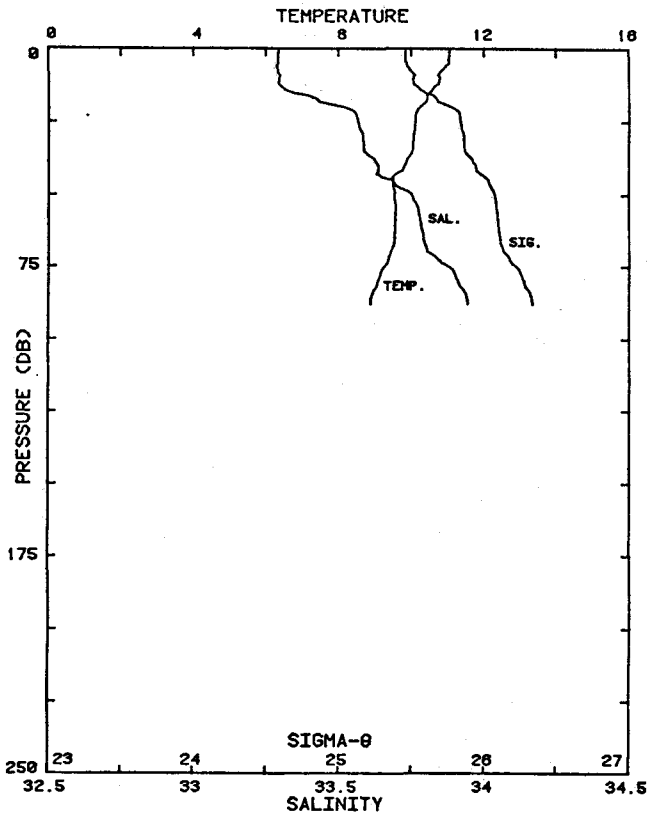
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
2	9.626	33.904	9.626	26.179	184.6	0.004
10	9.606	33.901	9.605	26.180	184.7	0.018
20	9.563	33.894	9.561	26.182	184.7	0.037
30	9.534	33.889	9.531	26.183	184.9	0.055
40	9.561	33.893	9.556	26.182	185.2	0.074
50	9.543	33.891	9.538	26.183	185.3	0.092
60	9.511	33.891	9.505	26.189	184.9	0.111
70	9.051	33.937	9.043	26.300	174.6	0.129
80	8.887	33.958	8.879	26.342	170.8	0.146
90	8.733	33.963	8.724	26.370	168.2	0.163
100	8.544	33.989	8.534	26.420	163.7	0.180
110	8.476	34.001	8.464	26.440	161.9	0.196
120	8.406	34.019	8.394	26.465	159.7	0.212
129	8.357	34.027	8.344	26.478	158.6	0.227





STA NO 9 , LAT: 38 21.0 N LONG: 123 22.9 W
 05 AUG 1982 1245 GMT PROBE 2567 DEPTH 130M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
			TEMP	THETA		
2	9.647	33.904	9.647	26.175	185.0	0.004
10	9.642	33.904	9.641	26.176	185.0	0.019
20	9.617	33.903	9.615	26.180	184.9	0.037
30	9.613	33.903	9.610	26.181	185.0	0.056
40	9.611	33.903	9.606	26.182	185.2	0.074
50	9.606	33.903	9.600	26.182	185.3	0.093
60	9.367	33.909	9.360	26.226	181.4	0.111
70	9.033	33.953	9.025	26.315	173.2	0.129
80	8.815	33.964	8.807	26.358	169.2	0.146
90	8.713	33.972	8.704	26.381	167.2	0.162
100	8.527	33.990	8.516	26.423	163.4	0.179
110	8.467	34.003	8.456	26.443	161.6	0.195
120	8.401	34.018	8.389	26.465	159.7	0.211
126	8.363	34.025	8.350	26.477	158.8	0.221



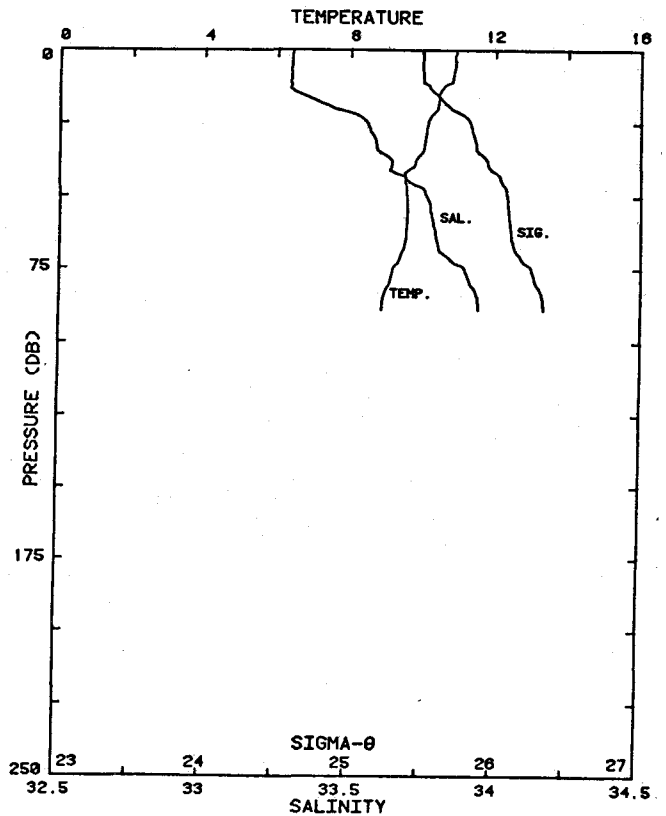
STATION 1 C3

STA NO 1 ,C3 LAT: 38 36.1 N LONG:123 26.8 W
 19 AUG 1982 0348 GMT PROBE 2567 DEPTH 93M

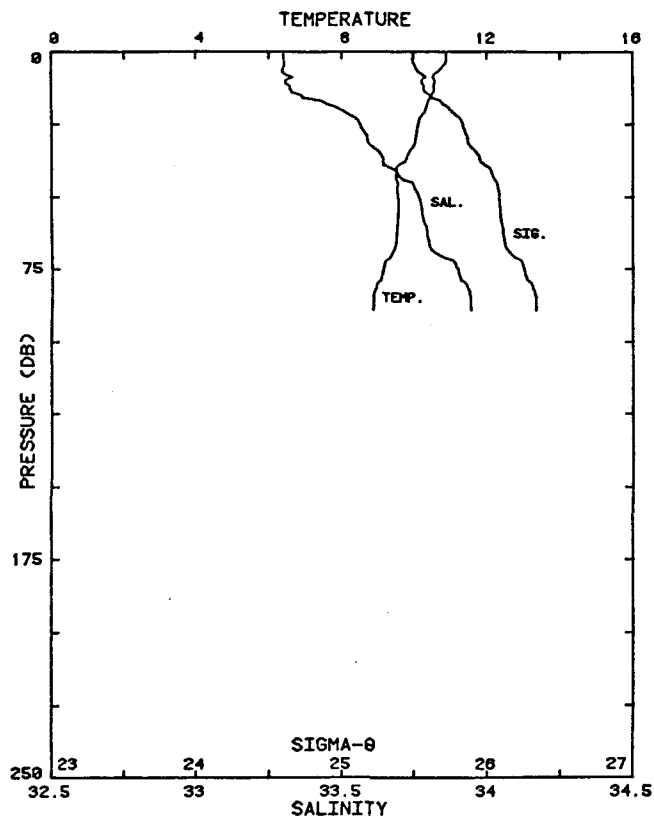
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	11.047	33.292	11.047	25.458	253.1	0.003
10	10.775	33.294	10.774	25.508	248.5	0.025
20	10.246	33.517	10.244	25.774	223.5	0.049
30	10.052	33.584	10.049	25.859	215.6	0.071
40	9.825	33.636	9.821	25.938	208.3	0.092
50	9.547	33.752	9.542	26.074	195.6	0.112
60	9.551	33.783	9.544	26.098	193.6	0.132
70	9.436	33.805	9.428	26.134	190.3	0.151
80	9.074	33.909	9.066	26.274	177.2	0.169
88	8.864	33.943	8.855	26.334	171.6	0.183

STA NO 2 ,C3 LAT: 38 36.1 N LONG:123 26.8 W
 19 AUG 1982 0357 GMT PROBE 2567 DEPTH 93M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	10.898	33.299	10.898	25.490	250.1	0.003
10	10.805	33.297	10.804	25.505	248.8	0.025
20	10.386	33.446	10.383	25.695	231.1	0.049
30	10.062	33.581	10.058	25.855	216.0	0.071
40	9.751	33.642	9.747	25.955	206.8	0.092
50	9.554	33.763	9.548	26.082	194.9	0.112
60	9.549	33.788	9.542	26.102	193.2	0.132
70	9.389	33.823	9.381	26.156	188.2	0.151
80	9.072	33.911	9.064	26.275	177.1	0.169
89	8.865	33.944	8.856	26.334	171.6	0.184



STATION 2 C3



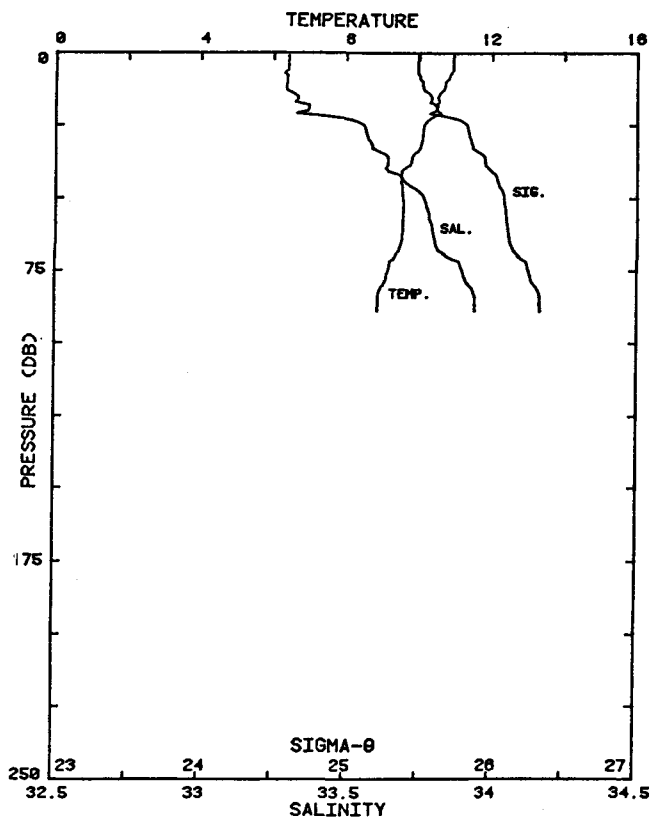
STATION 3 C3-3

STA NO 3 ,C3-3 LAT: 38 36.1 N LONG:123 26.8 W
19 AUG 1982 0406 GMT PROBE 2567 DEPTH 93M

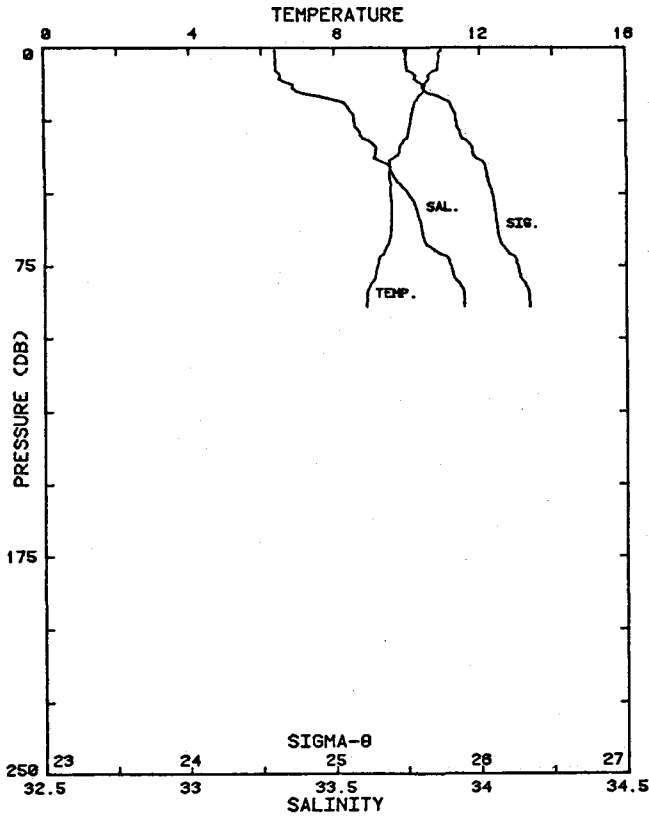
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP			THETA		
1	10.884	33.299	10.884	25.493	249.8	0.002
10	10.568	33.304	10.567	25.552	244.3	0.025
20	10.315	33.495	10.313	25.745	226.3	0.049
30	10.035	33.589	10.031	25.866	215.0	0.070
40	9.506	33.670	9.502	26.017	200.9	0.091
50	9.552	33.767	9.547	26.085	194.5	0.111
60	9.540	33.792	9.533	26.107	192.7	0.130
70	9.359	33.835	9.351	26.170	186.9	0.150
80	8.994	33.926	8.985	26.300	174.7	0.168
89	8.863	33.944	8.853	26.335	171.5	0.183

STA NO 4 ,C3-4 LAT: 38 36.1 N LONG:123 26.8 W
19 AUG 1982 0411 GMT PROBE 2567 DEPTH 93M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP			THETA		
1	10.914	33.299	10.914	25.487	250.3	0.003
10	10.704	33.296	10.703	25.522	247.2	0.025
20	10.509	33.366	10.507	25.610	239.1	0.049
30	10.072	33.576	10.068	25.849	216.5	0.072
40	9.604	33.634	9.599	25.973	205.0	0.093
50	9.544	33.765	9.538	26.085	194.6	0.113
60	9.533	33.793	9.526	26.109	192.6	0.132
70	9.339	33.843	9.331	26.180	186.0	0.151
80	9.010	33.921	9.001	26.294	175.3	0.169
89	8.861	33.944	8.851	26.335	171.6	0.184



STATION 4 C3-4

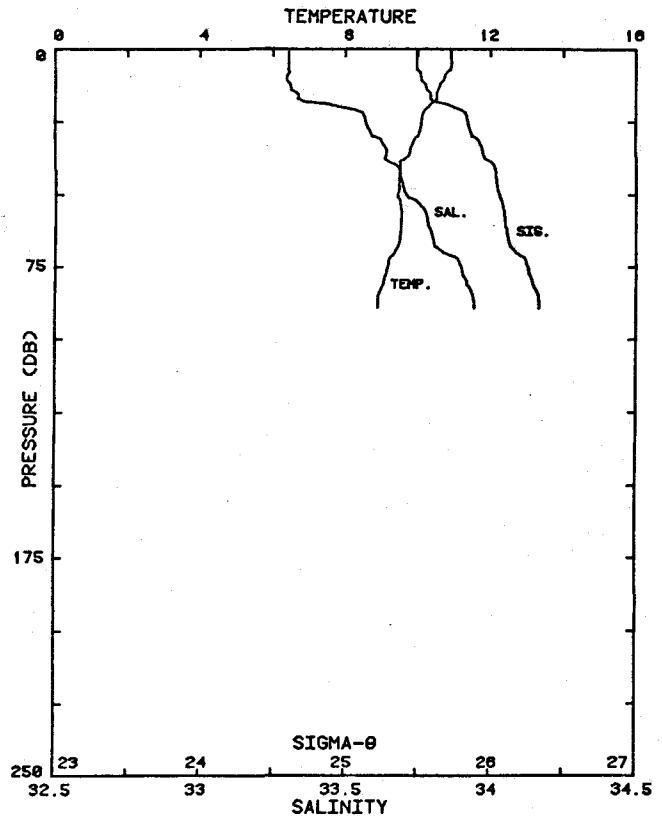


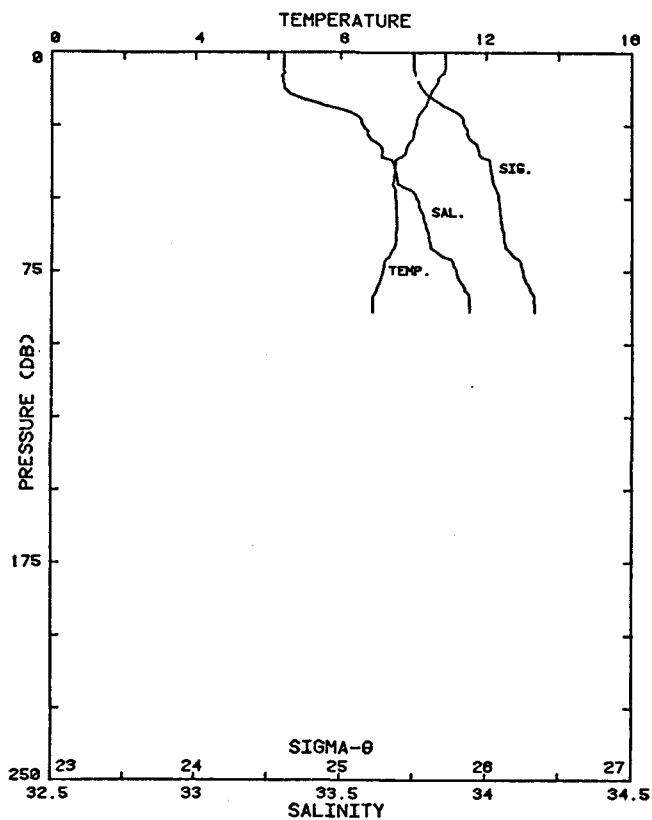
STA NO 5 ,C3-5 LAT: 38 36.1 N LONG:123 26.8 W
19 AUG 1982 0416 GMT PROBE 2567 DEPTH 93M

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	10.942	33.296	10.942	25.480	251.0	0.003
10	10.569	33.315	10.568	25.561	243.6	0.025
20	10.188	33.542	10.186	25.803	220.8	0.048
30	10.029	33.589	10.026	25.867	214.9	0.070
40	9.507	33.679	9.502	26.024	200.2	0.091
50	9.517	33.750	9.511	26.078	195.3	0.111
60	9.531	33.793	9.525	26.109	192.5	0.130
70	9.343	33.841	9.336	26.178	186.2	0.149
80	9.045	33.916	9.036	26.284	176.2	0.167
89	8.862	33.943	8.853	26.334	171.6	0.183

STA NO 6 ,C3-6 LAT: 38 36.1 N LONG:123 26.8 W
19 AUG 1982 0424 GMT PROBE 2567 DEPTH 93M

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
1	10.902	33.302	10.902	25.491	250.0	0.002
10	10.709	33.294	10.708	25.520	247.4	0.025
20	10.282	33.486	10.280	25.743	226.4	0.049
30	10.013	33.591	10.010	25.871	214.5	0.071
40	9.503	33.674	9.499	26.020	200.5	0.092
50	9.429	33.709	9.424	26.060	196.9	0.111
60	9.536	33.785	9.529	26.102	193.2	0.131
70	9.352	33.836	9.344	26.172	186.7	0.150
80	9.035	33.916	9.027	26.286	176.1	0.168
89	8.865	33.943	8.855	26.334	171.7	0.184





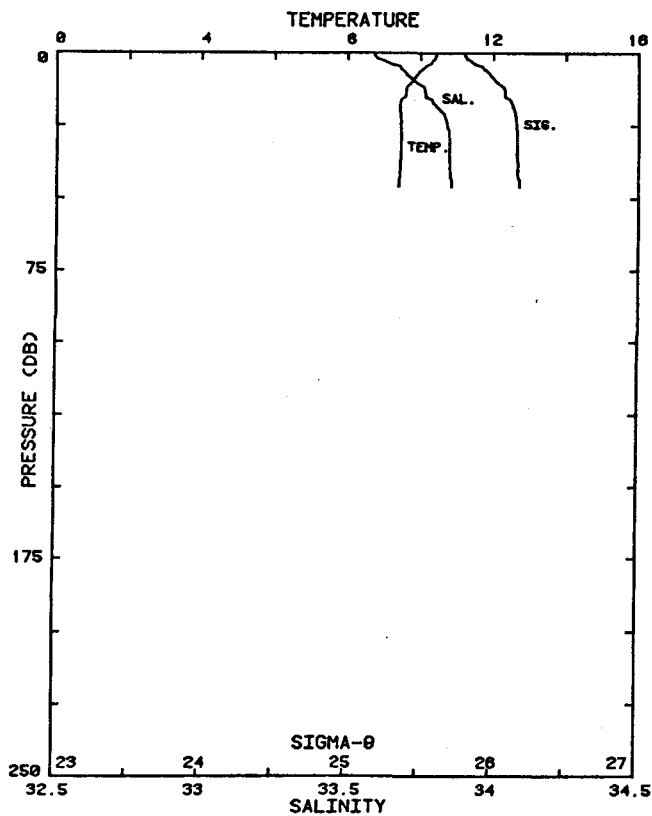
STATION 7 C3-7

STA NO 7 ,C3-7 LAT: 38 36.1 N LONG:123 26.8 W
19 AUG 1982 0432 GMT PROBE 2567 DEPTH 93M

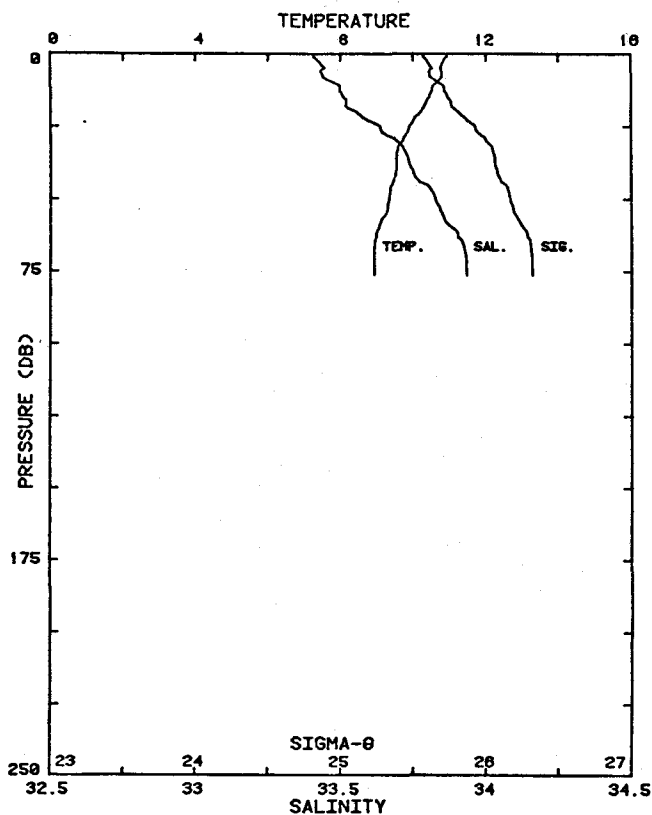
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	10.862	33.304	10.862	25.500	249.1	0.002
10	10.668	33.300	10.666	25.531	246.4	0.025
20	10.223	33.519	10.220	25.779	223.0	0.049
30	9.969	33.604	9.965	25.888	212.8	0.070
40	9.493	33.686	9.489	26.031	199.5	0.091
50	9.517	33.762	9.512	26.087	194.4	0.110
60	9.540	33.793	9.534	26.108	192.6	0.130
70	9.322	33.850	9.315	26.188	185.2	0.149
80	9.024	33.920	9.015	26.291	175.6	0.167
89	8.866	33.943	8.856	26.333	171.7	0.182

STA NO 9 ,COC-1 LAT: 38 39.8 N LONG:123 25.5 W
19 AUG 1982 0535 GMT PROBE 2567 DEPTH 50M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	10.414	33.592	10.414	25.803	220.3	0.002
10	9.767	33.727	9.766	26.018	200.1	0.021
20	9.420	33.819	9.418	26.147	188.0	0.040
30	9.452	33.847	9.448	26.164	186.7	0.059
40	9.440	33.850	9.435	26.168	186.5	0.078
46	9.397	33.857	9.392	26.181	185.4	0.089



STATION 9 COC-1



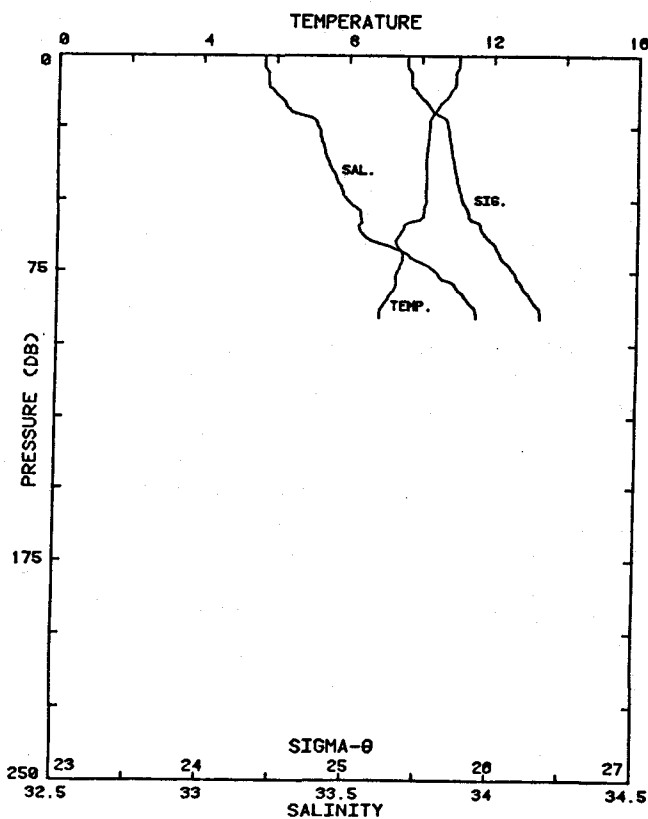
STATION 10 COC-2

STA NO 10 ,COC-2 LAT: 38 38.8 N LONG:123 26.9 W
19 AUG 1982 0602 GMT PROBE 2567 DEPTH 80M

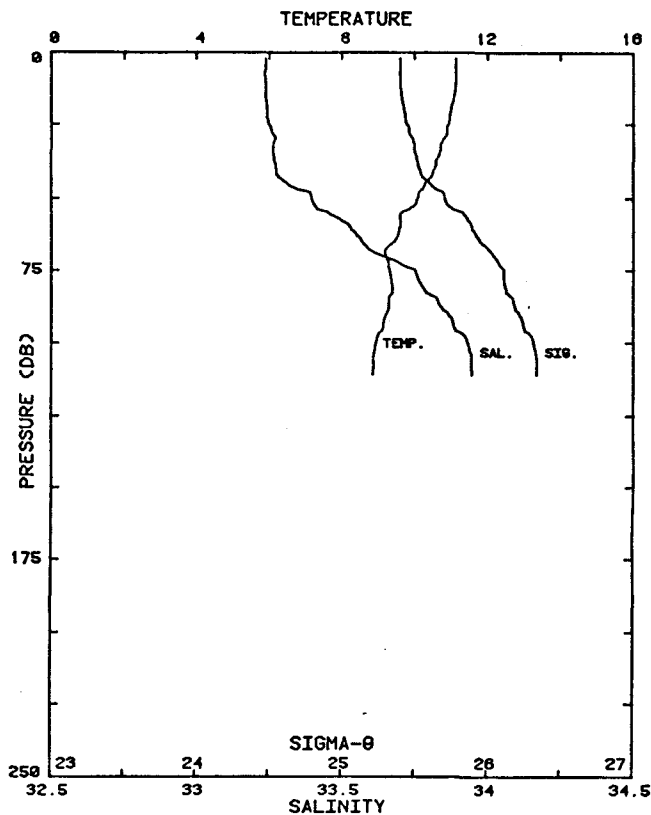
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	10.916	33.406	10.916	25.570	242.5	0.002
10	10.636	33.476	10.634	25.674	232.8	0.024
20	10.215	33.553	10.213	25.807	220.4	0.047
30	9.706	33.693	9.703	26.002	202.0	0.068
40	9.523	33.748	9.519	26.075	195.3	0.087
50	9.328	33.826	9.323	26.167	186.7	0.106
60	9.031	33.885	9.025	26.262	178.0	0.125
70	8.911	33.930	8.903	26.316	173.0	0.142
76	8.910	33.932	8.902	26.318	172.9	0.153

STA NO 11 ,COC-3 LAT: 38 37.4 N LONG:123 28.9 W
19 AUG 1982 0638 GMT PROBE 2567 DEPTH 95M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	11.013	33.208	11.012	25.399	258.8	0.003
10	10.919	33.222	10.918	25.427	256.3	0.026
20	10.374	33.301	10.372	25.584	241.6	0.051
30	10.196	33.407	10.193	25.697	231.0	0.074
40	10.147	33.444	10.142	25.734	227.7	0.097
50	10.119	33.493	10.113	25.777	223.8	0.120
60	9.517	33.537	9.510	25.912	211.2	0.141
70	9.488	33.715	9.480	26.055	197.8	0.162
80	9.316	33.867	9.308	26.202	184.1	0.181
90	8.867	33.943	8.858	26.333	171.7	0.199
91	8.868	33.943	8.859	26.333	171.8	0.200



STATION 11 COC-3

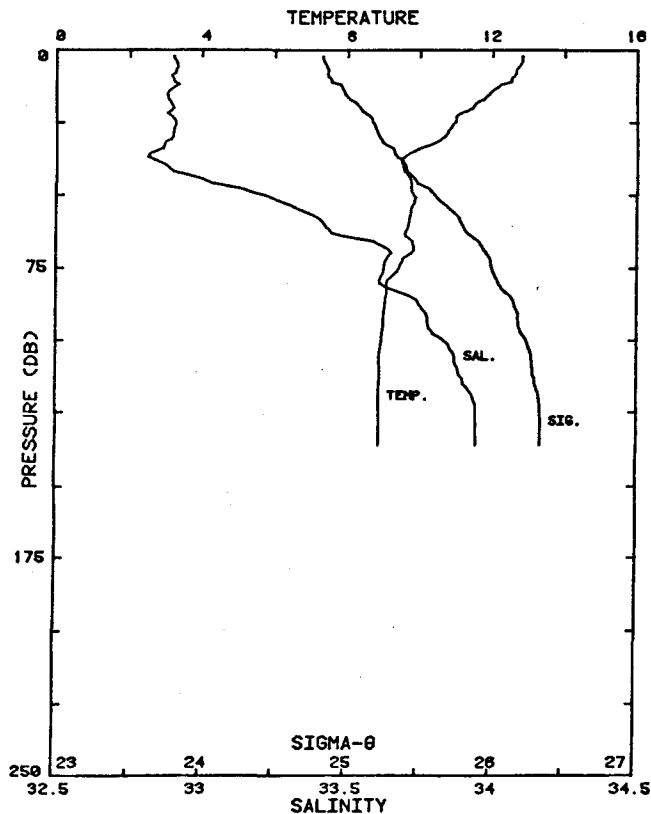


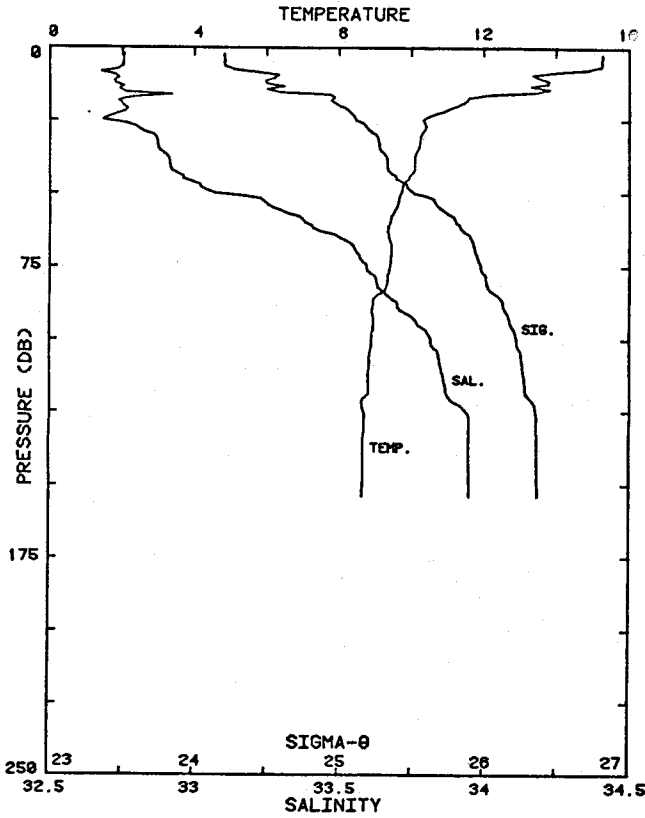
STA NO 12 ,COC-4 LAT: 38 36.2 N LONG:123 30.8 W
19 AUG 1982 0712 GMT PROBE 2567 DEPTH 115M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP	THETA				
2	11.131	33.235	11.130	25.399	258.8	0.005
10	11.131	33.236	11.129	25.400	258.9	0.026
20	11.000	33.241	10.997	25.427	256.5	0.052
30	10.799	33.271	10.796	25.486	251.1	0.077
40	10.561	33.274	10.556	25.530	247.1	0.102
50	10.080	33.395	10.074	25.708	230.5	0.126
60	9.589	33.526	9.583	25.891	213.2	0.148
70	9.201	33.640	9.194	26.043	198.9	0.169
80	9.378	33.771	9.369	26.117	192.1	0.188
90	9.236	33.863	9.226	26.212	183.3	0.207
100	8.930	33.931	8.920	26.314	173.8	0.225
110	8.851	33.946	8.840	26.339	171.6	0.242
111	8.851	33.946	8.839	26.339	171.6	0.244

STA NO 13 ,COC-5 LAT: 38 34.6 N LONG:123 33.4 W
19 AUG 1982 0749 GMT PROBE 2567 DEPTH 140M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP	THETA				
2	12.822	32.901	12.822	24.823	313.5	0.006
10	12.516	32.901	12.515	24.883	308.1	0.031
20	11.436	32.902	11.433	25.086	288.9	0.061
30	10.687	32.900	10.683	25.218	276.6	0.089
40	9.516	32.877	9.512	25.397	259.7	0.116
50	9.824	33.202	9.819	25.600	240.7	0.141
60	9.689	33.417	9.683	25.790	222.8	0.164
70	9.769	33.651	9.761	25.959	207.0	0.186
80	9.080	33.612	9.071	26.041	199.3	0.206
90	9.008	33.768	8.999	26.174	186.9	0.225
100	8.945	33.831	8.934	26.234	181.4	0.244
110	8.874	33.881	8.882	26.281	177.1	0.262
120	8.872	33.935	8.859	26.327	173.0	0.279
130	8.871	33.944	8.857	26.334	172.4	0.296
136	8.872	33.944	8.857	26.335	172.5	0.307





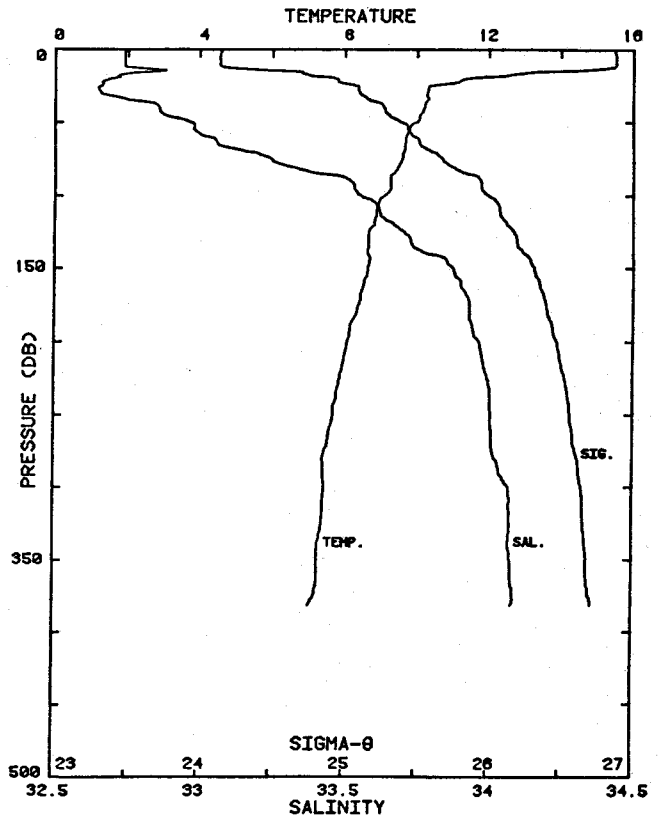
STATION 14 COC-6

STA NO 14 ,COC-6 LAT: 38 32.6 N LONG:123 36.2 W
 19 AUG 1982 0837 GMT PROBE 2567 DEPTH 157M

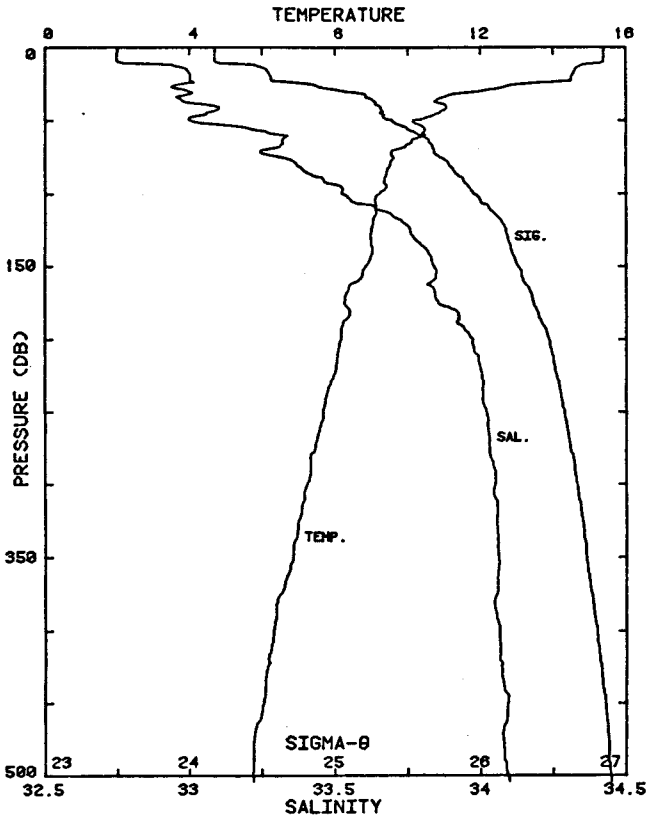
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
2	15.270	32.755	15.270	24.204	372.5	0.007
10	13.553	32.739	13.551	24.554	339.4	0.036
20	11.260	32.754	11.258	25.003	296.9	0.069
30	10.269	32.861	10.266	25.259	272.6	0.097
40	10.090	32.916	10.085	25.333	265.8	0.124
50	9.707	33.073	9.701	25.519	248.4	0.150
60	9.396	33.382	9.390	25.810	220.8	0.173
70	9.446	33.560	9.438	25.941	208.6	0.194
80	9.320	33.629	9.311	26.016	201.7	0.215
90	8.901	33.708	8.891	26.145	189.6	0.234
100	8.900	33.817	8.890	26.230	181.7	0.253
110	8.821	33.852	8.809	26.270	178.1	0.271
120	8.724	33.876	8.712	26.304	175.1	0.289
130	8.702	33.950	8.688	26.365	169.5	0.306
140	8.675	33.950	8.660	26.370	169.2	0.323
150	8.656	33.950	8.640	26.373	169.1	0.340
154	8.648	33.950	8.632	26.375	169.0	0.346

STA NO 16 ,COC-7 LAT: 38 30.3 N LONG:123 39.6 W
 19 AUG 1982 0957 GMT PROBE 2567 DEPTH 395M

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	15.484	32.740	15.484	24.146	378.1	0.004
10	15.518	32.737	15.517	24.137	379.2	0.038
20	11.271	32.686	11.268	24.948	302.1	0.072
30	10.273	32.658	10.269	25.101	287.7	0.101
40	10.181	32.859	10.177	25.273	271.6	0.129
50	10.014	32.961	10.008	25.381	261.5	0.156
60	9.685	33.021	9.678	25.482	252.1	0.182
70	9.631	33.158	9.623	25.598	241.2	0.206
80	9.476	33.300	9.467	25.734	228.5	0.230
90	9.250	33.519	9.240	25.942	208.9	0.252
100	9.077	33.557	9.067	25.999	203.7	0.272
110	8.883	33.620	8.871	26.079	196.2	0.292
120	8.819	33.673	8.806	26.130	191.6	0.312
130	8.658	33.729	8.644	26.200	185.1	0.330
140	8.638	33.788	8.624	26.249	180.7	0.349
150	8.634	33.875	8.618	26.318	174.3	0.366
175	8.389	33.934	8.371	26.402	166.7	0.409
200	8.070	33.967	8.050	26.476	160.1	0.450
225	7.862	33.996	7.840	26.530	155.3	0.489
250	7.678	34.008	7.654	26.566	152.2	0.528
300	7.453	34.071	7.424	26.649	145.1	0.602
382	7.028	34.085	6.993	26.720	139.5	0.720



STATION 16 COC-7



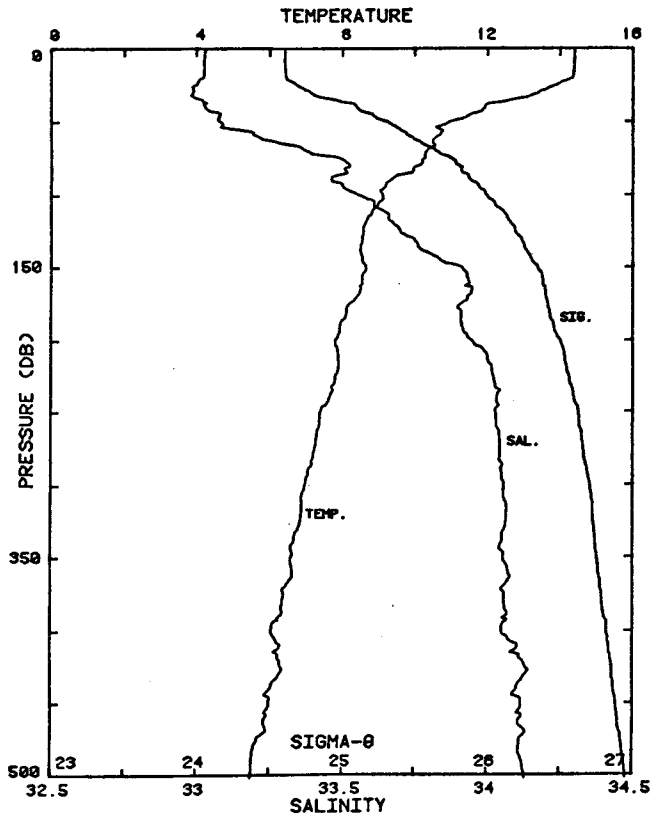
STATION 17 COC8A

STA NO 17 ,COC8A LAT: 38 28.2 N LONG:123 42.7 W
19 AUG 1982 1139 GMT PROBE 2567

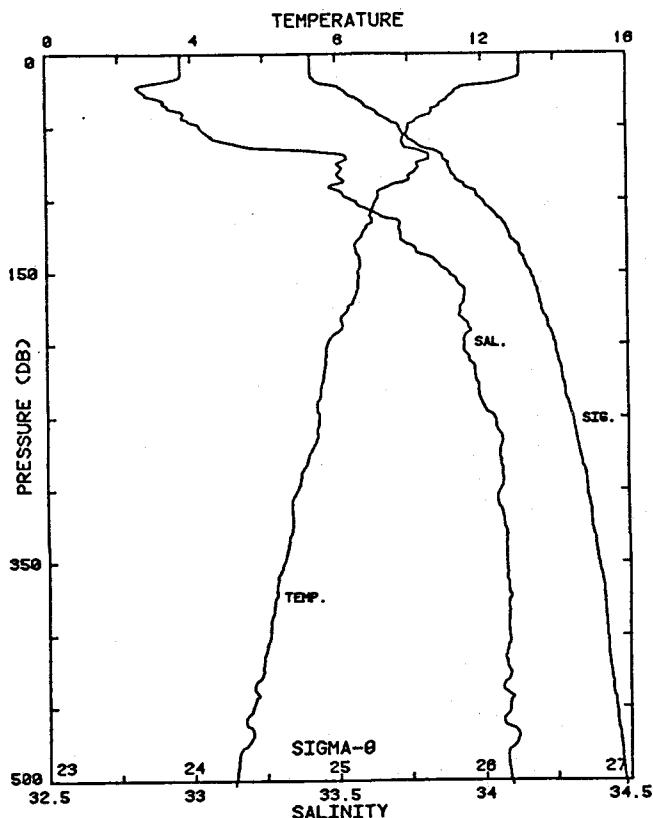
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
2	15.394	32.750	15.393	24.174	375.4	0.008
10	15.385	32.750	15.384	24.176	375.5	0.038
20	14.500	33.002	14.497	24.560	339.1	0.072
30	11.923	32.999	11.919	25.072	290.6	0.104
40	11.043	33.087	11.038	25.300	269.0	0.132
50	10.128	32.999	10.123	25.391	260.6	0.159
60	10.464	33.306	10.458	25.573	243.5	0.184
70	9.652	33.265	9.644	25.678	233.7	0.207
80	9.500	33.368	9.492	25.783	223.9	0.230
90	9.343	33.459	9.333	25.880	214.9	0.252
100	9.214	33.521	9.203	25.949	208.5	0.274
110	9.100	33.634	9.088	26.056	198.5	0.294
120	9.027	33.729	9.015	26.142	190.6	0.313
130	8.948	33.765	8.935	26.182	186.9	0.332
140	9.013	33.818	8.998	26.214	184.1	0.351
150	8.837	33.837	8.822	26.257	180.2	0.369
175	8.238	33.852	8.220	26.361	170.6	0.413
200	8.156	33.972	8.136	26.467	160.9	0.454
225	7.950	34.004	7.928	26.523	156.0	0.494
250	7.654	34.019	7.630	26.579	151.1	0.532
300	7.227	34.051	7.199	26.665	143.5	0.606
400	6.303	34.065	6.267	26.801	131.4	0.743
500	5.742	34.092	5.700	26.895	123.4	0.870
504	5.756	34.100	5.713	26.899	123.1	0.875

STA NO 18 ,COC8B LAT: 38 26.1 N LONG:123 46.0 W
19 AUG 1982 1340 GMT PROBE 2567

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
2	14.398	33.027	14.398	24.601	334.7	0.007
10	14.400	33.025	14.399	24.599	335.1	0.033
20	14.340	33.022	14.337	24.609	334.5	0.067
30	13.398	32.986	13.394	24.776	318.8	0.100
40	11.911	33.030	11.906	25.098	288.3	0.130
50	10.990	33.076	10.984	25.302	269.1	0.158
60	10.644	33.203	10.637	25.461	254.1	0.184
70	10.337	33.372	10.329	25.646	236.8	0.209
80	10.129	33.523	10.120	25.800	222.4	0.231
90	9.317	33.459	9.307	25.884	214.5	0.253
100	9.106	33.555	9.096	25.992	204.3	0.274
110	8.862	33.629	8.851	26.089	195.3	0.294
120	8.621	33.676	8.608	26.164	188.3	0.313
130	8.532	33.741	8.519	26.228	182.4	0.332
140	8.498	33.797	8.484	26.277	177.9	0.350
150	8.637	33.910	8.621	26.345	171.8	0.368
175	8.174	33.907	8.156	26.414	165.6	0.410
200	7.776	33.942	7.757	26.500	157.7	0.450
225	7.775	34.019	7.753	26.561	152.4	0.489
250	7.376	34.026	7.352	26.623	146.7	0.526
300	6.949	34.055	6.921	26.707	139.3	0.598
400	6.029	34.050	5.995	26.825	128.9	0.733
500	5.496	34.130	5.454	26.954	117.4	0.857
502	5.495	34.131	5.453	26.955	117.4	0.859



STATION 18 COC8B



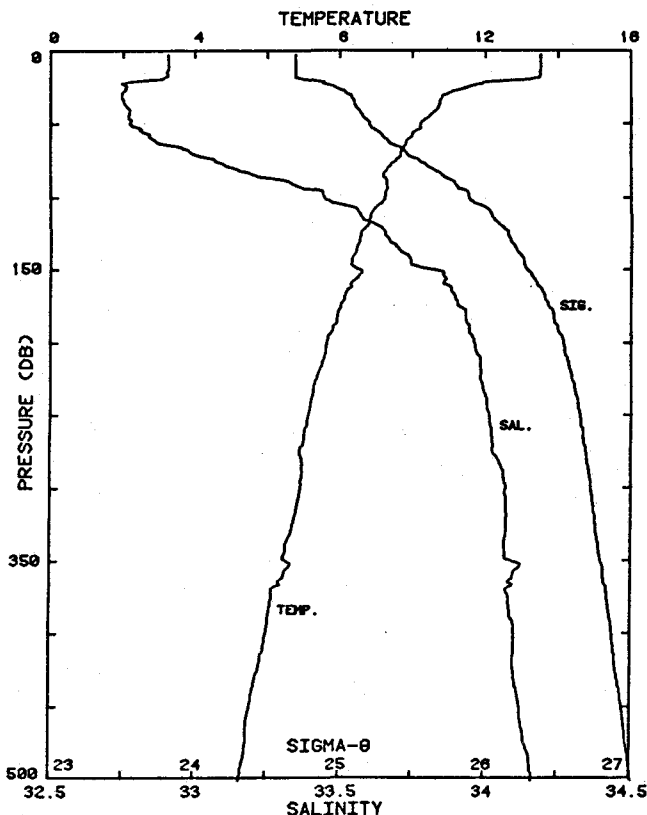
STATION 19 COC-9

STA NO 19 ,COC-9 LAT: 38 24.0 N LONG:123 49.2 W
19 AUG 1982 1529 GMT PROBE 2567

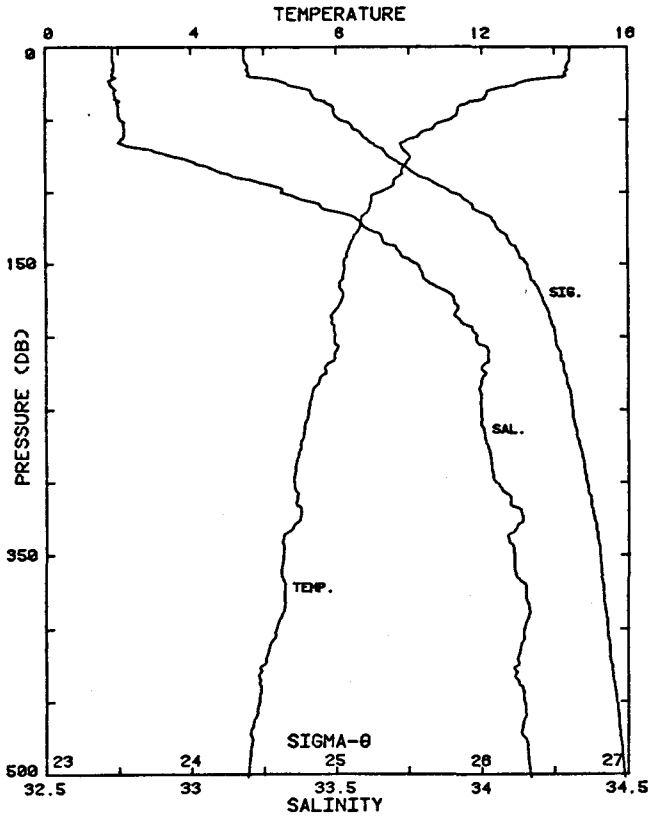
PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELΔ
1	13.067	32.966	13.067	24.826	313.3	0.003
10	13.063	32.965	13.062	24.826	313.5	0.031
20	12.240	32.850	12.238	24.896	307.1	0.063
30	11.049	32.891	11.045	25.147	283.3	0.092
40	10.618	32.976	10.613	25.289	270.1	0.119
50	10.000	33.031	9.995	25.437	256.2	0.146
60	9.814	33.103	9.807	25.525	248.0	0.171
70	10.556	33.531	10.548	25.732	228.7	0.195
80	10.206	33.516	10.197	25.781	224.2	0.218
90	9.500	33.482	9.490	25.873	215.6	0.240
100	9.102	33.555	9.091	25.993	204.2	0.261
110	8.931	33.640	8.919	26.087	195.5	0.281
120	8.802	33.714	8.789	26.165	188.2	0.300
130	8.509	33.734	8.496	26.227	182.5	0.318
140	8.613	33.827	8.598	26.283	177.4	0.335
150	8.576	33.884	8.560	26.333	172.8	0.354
175	8.289	33.920	8.272	26.406	166.4	0.396
200	7.718	33.934	7.699	26.502	157.5	0.437
225	7.595	33.975	7.573	26.552	153.1	0.476
250	7.471	34.036	7.447	26.618	147.2	0.513
300	6.870	34.057	6.843	26.719	138.1	0.584
400	6.086	34.084	6.052	26.844	127.2	0.716
500	5.130	34.090	5.090	26.965	116.0	0.838
503	5.109	34.093	5.069	26.970	115.5	0.842

STA NO 20 ,COC-1 LAT: 38 20.8 N LONG:123 54.5 W
19 AUG 1982 1714 GMT PROBE 2567

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELΔ
3	13.517	32.906	13.517	24.689	326.3	0.010
10	13.515	32.907	13.514	24.690	326.4	0.033
20	13.150	32.885	13.147	24.747	321.3	0.065
30	10.927	32.745	10.923	25.055	292.1	0.096
40	10.665	32.770	10.661	25.121	286.1	0.124
50	10.210	32.772	10.204	25.200	278.7	0.153
60	9.913	32.846	9.906	25.308	268.6	0.180
70	9.660	32.987	9.653	25.460	254.4	0.206
80	9.309	33.128	9.300	25.627	238.6	0.231
90	9.277	33.328	9.267	25.788	223.5	0.254
100	9.233	33.444	9.222	25.886	214.5	0.276
110	8.893	33.563	8.882	26.033	200.6	0.297
120	8.749	33.632	8.737	26.109	193.5	0.316
130	8.520	33.668	8.506	26.173	187.6	0.335
140	8.376	33.731	8.362	26.244	181.0	0.354
150	8.469	33.800	8.454	26.285	177.4	0.372
175	8.011	33.905	7.994	26.436	163.4	0.414
200	7.619	33.961	7.599	26.538	154.0	0.454
225	7.330	33.982	7.309	26.596	148.8	0.492
250	7.107	34.014	7.084	26.652	143.8	0.528
300	6.896	34.072	6.868	26.727	137.3	0.598
400	5.972	34.102	5.938	26.873	124.3	0.729
500	5.269	34.165	5.228	27.009	112.1	0.848
502	5.267	34.166	5.226	27.010	112.0	0.850



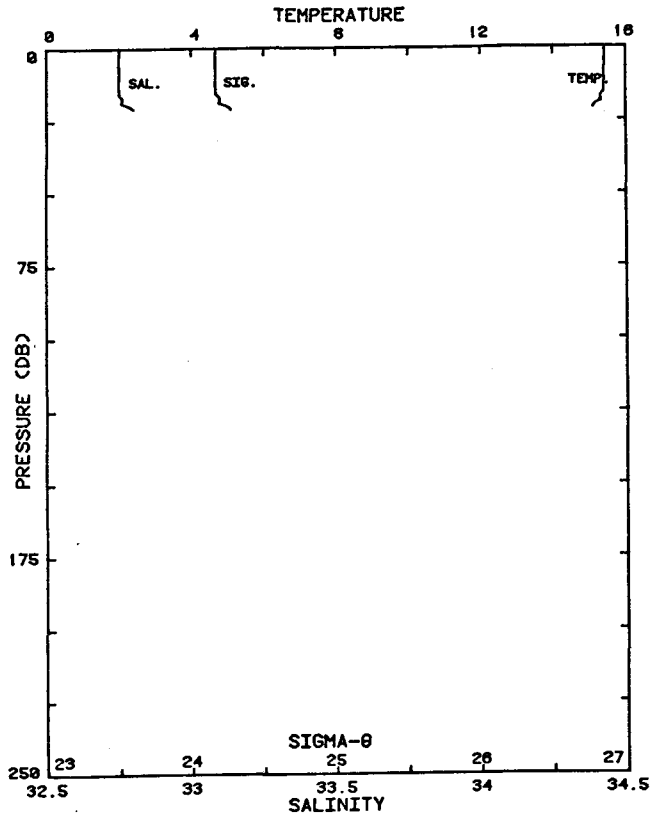
STATION 20 COC-10



STATION 21 COC-11

STA NO 21 ,COC-1 LAT: 38 17.6 N LONG:123 59.3 W
 19 AUG 1982 1845 GMT PROBE 2567

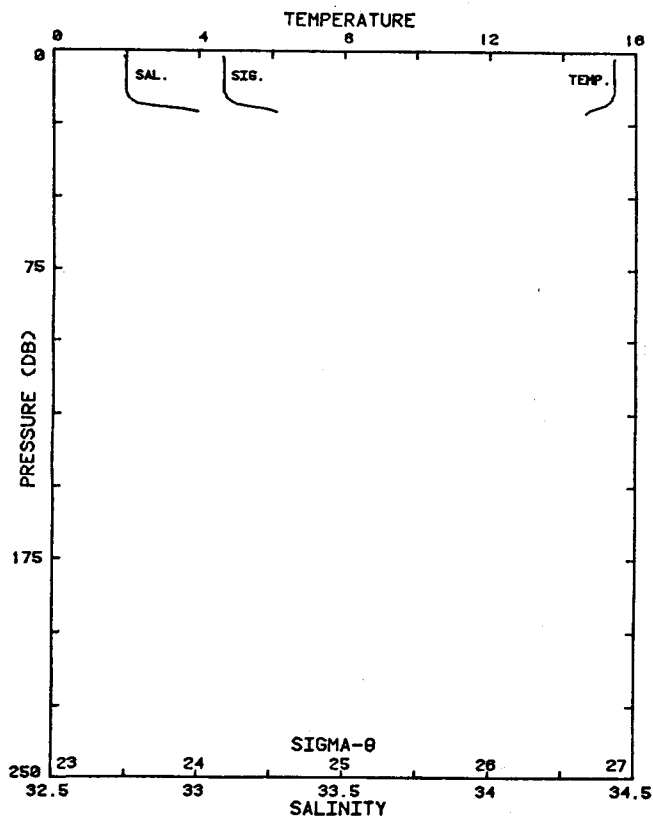
PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	THETA		
1	14.432	32.731	14.432	24.365	357.2	0.004
10	14.427	32.730	14.425	24.367	357.3	0.036
20	14.310	32.726	14.307	24.388	355.5	0.071
30	12.223	32.741	12.219	24.815	315.0	0.105
40	11.537	32.748	11.532	24.949	302.5	0.136
50	11.163	32.755	11.157	25.021	295.8	0.166
60	10.345	32.768	10.338	25.175	281.3	0.194
70	9.833	32.837	9.826	25.314	268.2	0.222
80	9.962	33.012	9.953	25.430	257.5	0.248
90	9.732	33.147	9.722	25.573	244.0	0.273
100	9.269	33.312	9.258	25.777	224.8	0.297
110	8.942	33.446	8.930	25.934	210.0	0.318
120	8.696	33.579	8.684	26.076	196.6	0.339
130	8.513	33.658	8.500	26.166	188.3	0.358
140	8.347	33.711	8.332	26.233	182.1	0.377
150	8.210	33.769	8.195	26.299	176.0	0.395
175	8.134	33.902	8.117	26.416	165.4	0.437
200	7.947	33.981	7.927	26.505	157.2	0.478
225	7.704	34.007	7.682	26.561	152.3	0.516
250	7.232	33.996	7.208	26.621	146.8	0.553
300	6.830	34.043	6.802	26.713	138.7	0.625
400	6.343	34.145	6.307	26.859	126.0	0.756
500	5.558	34.165	5.517	26.974	115.6	0.877
502	5.541	34.167	5.499	26.978	115.3	0.879



STATION 22 C5

STA NO 22 ,C5 LAT: 38 31.0 N LONG:123 39.9 W
 19 AUG 1982 2152 GMT PROBE 2567

PRESS	TEMP	SAL	POTEN	SIGMA	SVA	DELD
	TEMP		TEMP	JHETA		
1	15.415	32.749	15.415	24.168	376.0	0.004
10	15.402	32.750	15.400	24.172	375.9	0.038
20	15.163	32.786	15.160	24.252	368.5	0.075
21	15.103	32.800	15.100	24.276	366.2	0.079

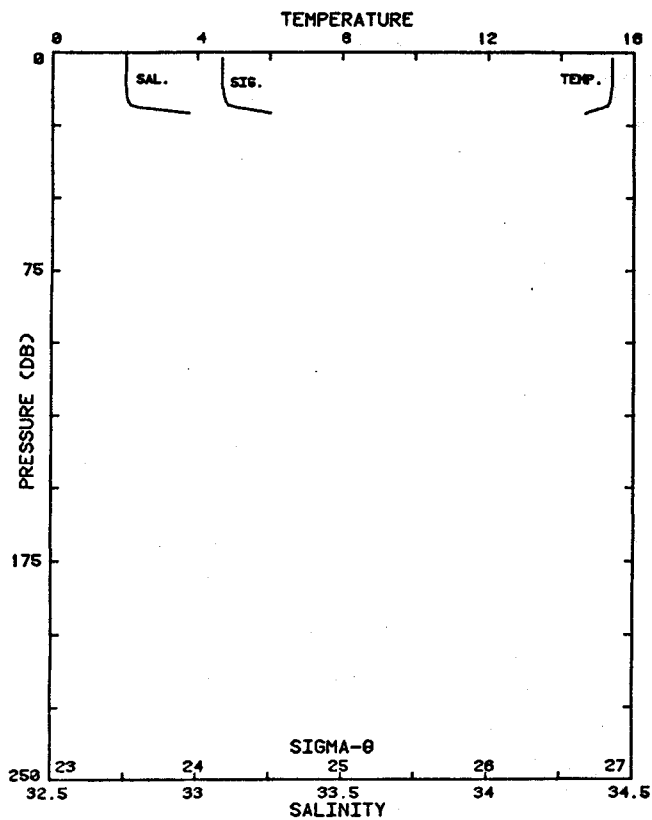


STA NO 23 ,C5-2 LAT: 38 31.0 N LONG:123 39.9 W
19 AUG 1982 2156 GMT PROBE 2567

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	15.416	32.741	15.416	24.162	376.6	0.008
10	15.414	32.749	15.413	24.168	376.2	0.038
20	14.723	32.947	14.720	24.470	347.7	0.075
21	14.629	32.995	14.626	24.528	342.3	0.078

STA NO 24 ,C5-3 LAT: 38 31.0 N LONG:123 39.9 W
19 AUG 1982 2200 GMT PROBE 2567

PRESS	TEMP	SAL	POTEN TEMP	SIGMA THETA	SVA	DELD
2	15.406	32.750	15.406	24.171	375.7	0.008
10	15.412	32.749	15.411	24.169	376.1	0.038
20	14.852	32.889	14.849	24.399	354.5	0.075
21	14.665	32.969	14.662	24.500	344.9	0.078



STATION 24 C5-3

