

NOAA Data Report ERL PMEL-24



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CTD/O<sub>2</sub> MEASUREMENTS DURING 1986 AS PART OF THE EQUATORIAL PACIFIC  
OCEAN CLIMATE STUDIES (EPOCS)

J. M. Lynch  
L. J. Mangum  
S. P. Hayes

Pacific Marine Environmental Laboratory  
Seattle, Washington  
August 1988



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# **CTD/O<sub>2</sub> Measurements During 1986 as Part of the Equatorial Pacific Ocean Climate Studies (EPOCS)**

J.M. Lynch, L.J. Mangum, and S.P. Hayes

**ABSTRACT.** During 1986, CTD data were collected in the eastern equatorial Pacific as part of the Equatorial Pacific Ocean Climate Studies (EPOCS) program, which began its field program in 1979. Summaries of CTD data from three cruises in 1986 are presented. Station locations, meteorological conditions and profiles of temperature, salinity, sigma-T, and oxygen are shown for each cast. Additionally, T-S diagrams and section plots along 110°W, 140°W, 15°S and the equator are presented.

## **1. INTRODUCTION**

Oceanographic observations in the eastern equatorial Pacific have been collected since 1979 as part of the Equatorial Pacific Ocean Climate Studies (EPOCS) program. One of the objectives of the EPOCS program is to investigate the processes that cause sea surface temperature (SST) fluctuations on annual and interannual time scales in this area. Summaries of CTD measurements collected on three cruises during 1986 as part of PMEL's EPOCS contribution are presented here. CTD data from 1979 through 1985 can be found in four previous data reports (Mangum *et al.*, 1980; Mangum and Hayes, 1983; Mangum and Hayes, 1985; Mangum *et al.*, 1987).

Data collected in 1986 included both meridional sections across the equator along 110°W and 140°W and zonal sections along the equator and 15°S. Figures 1-3 show the cruise tracks and CTD cast locations for each cruise. The cruise label notation is EPx-yy-zz, where x is the sequential EPOCS cruise number during the year (2-4), yy is the year (86), and zz is the ship code (OC for the NOAA Ship *Oceanographer*).

Neil Brown Instrument Systems (NBIS) Mark III CTD's equipped with Beckman dissolved oxygen probes were used to collect the data. Pressure, temperature, conductivity and dissolved oxygen are sampled at a rate of 28 hz or 25 hz, as described by Brown (1974) and the data are recorded on an LSI 11/03 online computer system. Typical lowering rates were 45 m/min for the first 200 meters after which the speed was increased to 60 m/min. The CTD data were recorded on the downtrace, and water samples were collected on the upcast for calibration purposes using an electronically fired Rosette sampler.

## **2. NBIS CTD DATA PROCESSING**

The NBIS CTD acquisition, processing and calibration system is described in Mangum *et al.* (1980). Briefly, the digitized signal from the CTD deck unit is recorded in real time on a 9-track magnetic tape using the LSI 11/03 computer system. The data are edited and one-decibar averages are computed, after corrections for response time differences between the temperature and conductivity probes have been made. No lag correction has been applied to the oxygen data. Laboratory calibration information from pre- and post-cruise calibrations (if available) are compared with bottle calibration information and historical data to determine corrections to pressure, temperature and conductivity. Dissolved oxygen samples were titrated by shipboard personnel and these were used to determine the oxygen calibration for each cruise.

## **3. DATA PRESENTATION**

After calibrations were applied to the 1-decibar averaged data, summary plots with listings and T-S diagrams were produced using computer programs described by Holbrook and Halpern (1974). Tables 1-6 describe the abbreviations and meteorological information contained in the heading for each cast. Salinity, sigma-T, and dynamic height were calculated from WHOI subroutines supplied by R.C. Millard, Jr. Two meridional CTD sections of temperature, salinity, sigma-T and dissolved oxygen along 110°W are shown in Figures 4-7. These were taken in May and November 1986. Figures 8-11 show 140°W sections occupied in June and October 1986. The zonal sections along the equator in June and November 1986 are presented in Figures 12-15. The zonal section along 15°S in November 1986 is presented in Figures 16-18.

## **4. ACKNOWLEDGMENTS**

The assistance of the officers and crew of the NOAA Ship *Oceanographer* is gratefully acknowledged. M. Stapp provided excellent technical support. This research was supported in part by the Equatorial Pacific Ocean Climate Studies (EPOCS) Project of NOAA. Contribution No. 1063 from NOAA's Pacific Marine Environmental Laboratory.

## 5. REFERENCES

- Brown, N.L., 1974. A precision CTD microprofiler. *Ocean* 74, 2, 270-278.
- Holbrook, J.R. and D. Halpern, 1974. STD measurements off the Oregon Coast, July/August 1973, CUEA Data Report #12, Ref. M74-17, Department of Oceanography, University of Washington, 397 pp.
- Mangum, L.J., N.N. Soreide, B.D. Davies, B.D. Spell, S.P. Hayes, 1980. CTD/O<sub>2</sub> measurements during the Equatorial Pacific Ocean Climate Study (EPOCS) in 1979. NOAA Data Report ERL PMEL-1, 645 pp.
- Mangum, L.J., and S.P. Hayes, 1983. CTD/O<sub>2</sub> measurements during 1980 and 1981 as part of the Equatorial Pacific Ocean Climate Studies (EPOCS). NOAA Data Report ERL PMEL-9, 621 pp.
- Mangum, L.J., and S.P. Hayes, 1985. CTD/O<sub>2</sub> measurements during 1982 and 1983 as part of the Equatorial Pacific Ocean Climate Studies (EPOCS). NOAA Data Report ERL PMEL-13, 421 pp.
- Mangum, L.J., J.M. Lynch, and S.P. Hayes, 1987. CTD/O<sub>2</sub> measurements during 1984 and 1985 as part of the Equatorial Pacific Ocean Climate Studies (EPOCS). NOAA Data Report ERL PMEL-18, 341 pp.

## **FIGURES AND TABLES**

EP2-86-OC  
21 May - 20 June 1986  
Panama - Honolulu

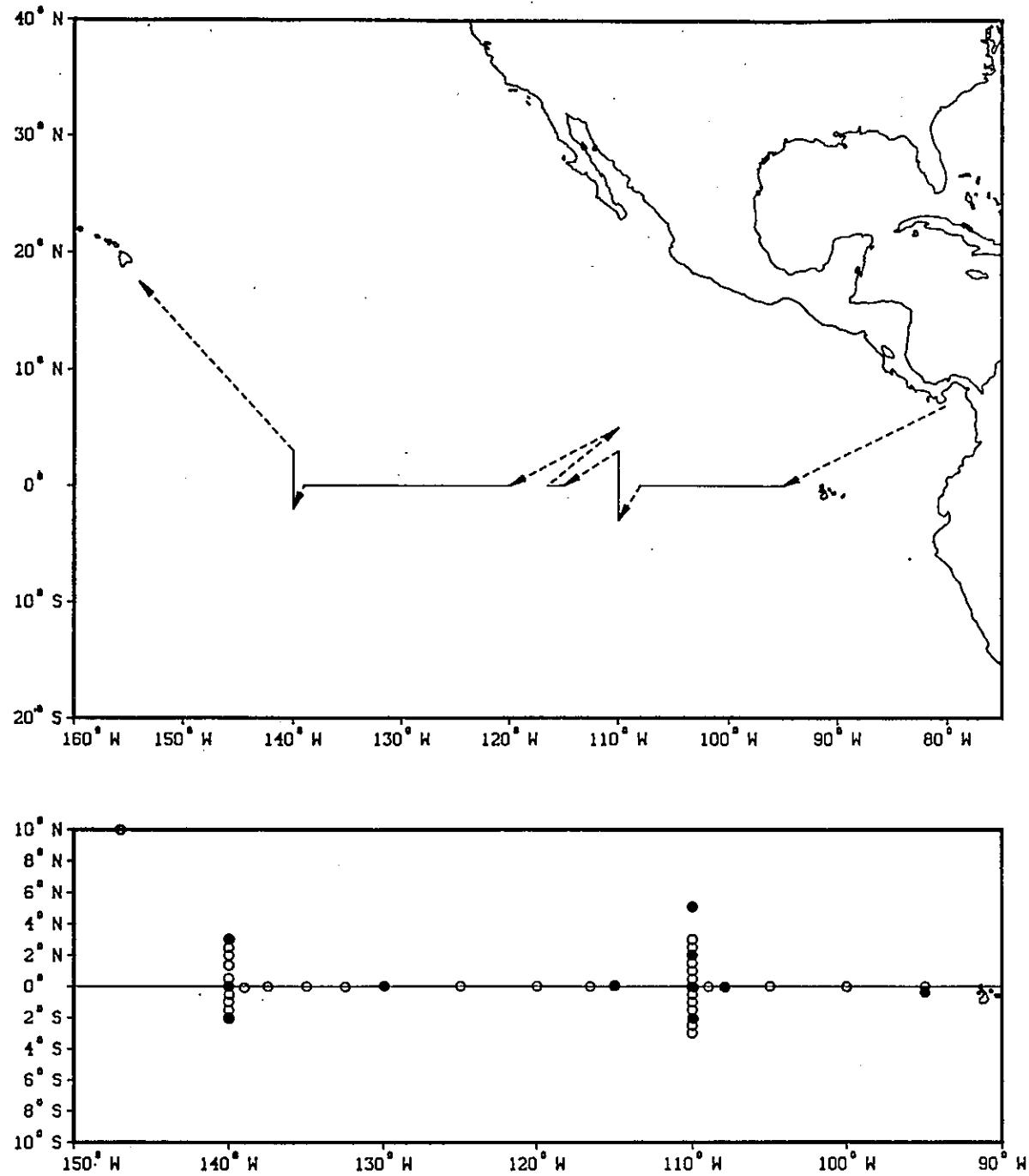


Figure 1. Cruise track and CTD/O<sub>2</sub> stations occupied during EP2-86-OC.

EP3-86-OC  
18 October - 10 November 1986  
Seattle - Manzanillo

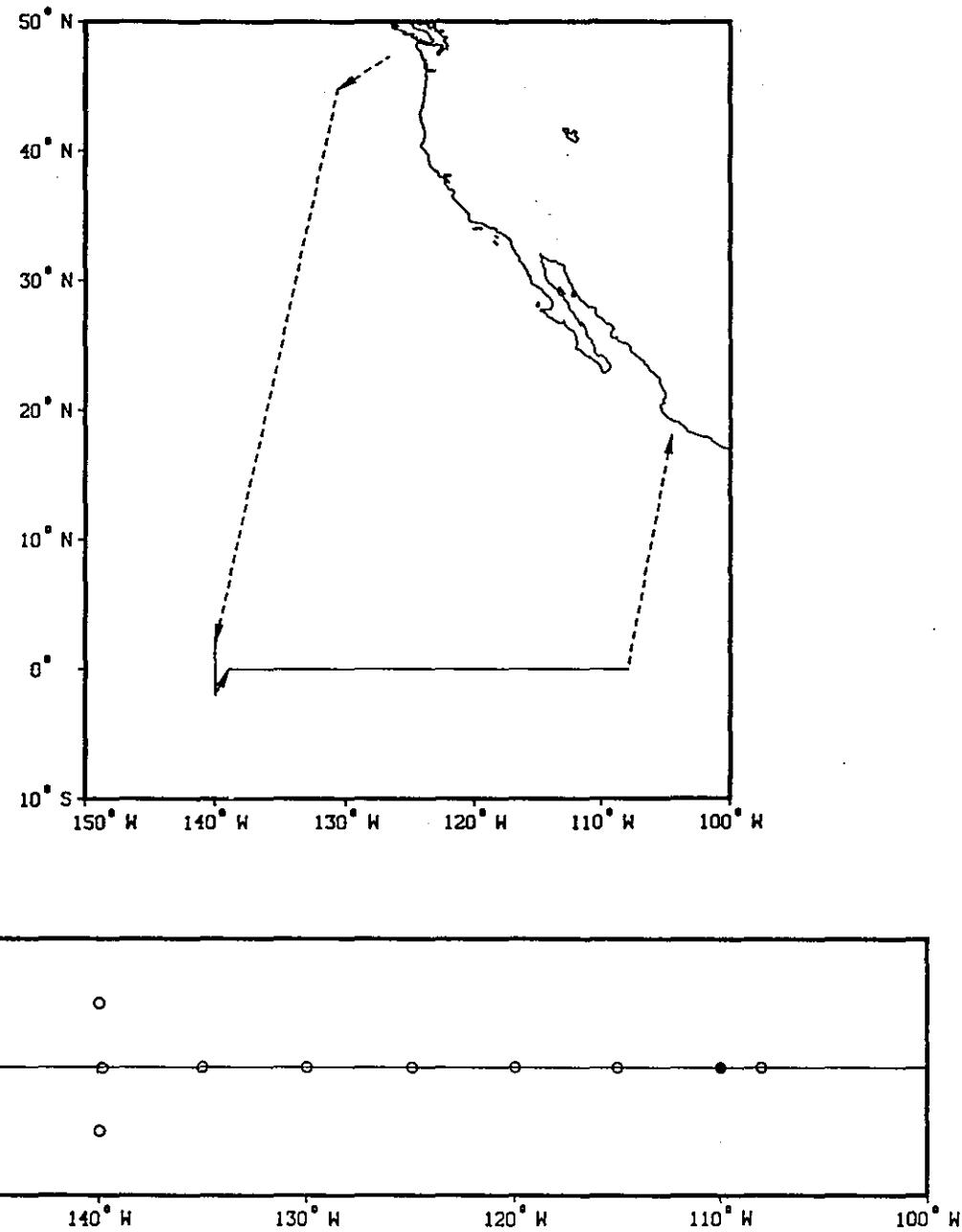


Figure 2. Cruise track and CTD/O<sub>2</sub> stations occupied during EP3-86-OC.

EP4-86-OC  
13 November - 1 December 1986  
Manzanillo - Callao

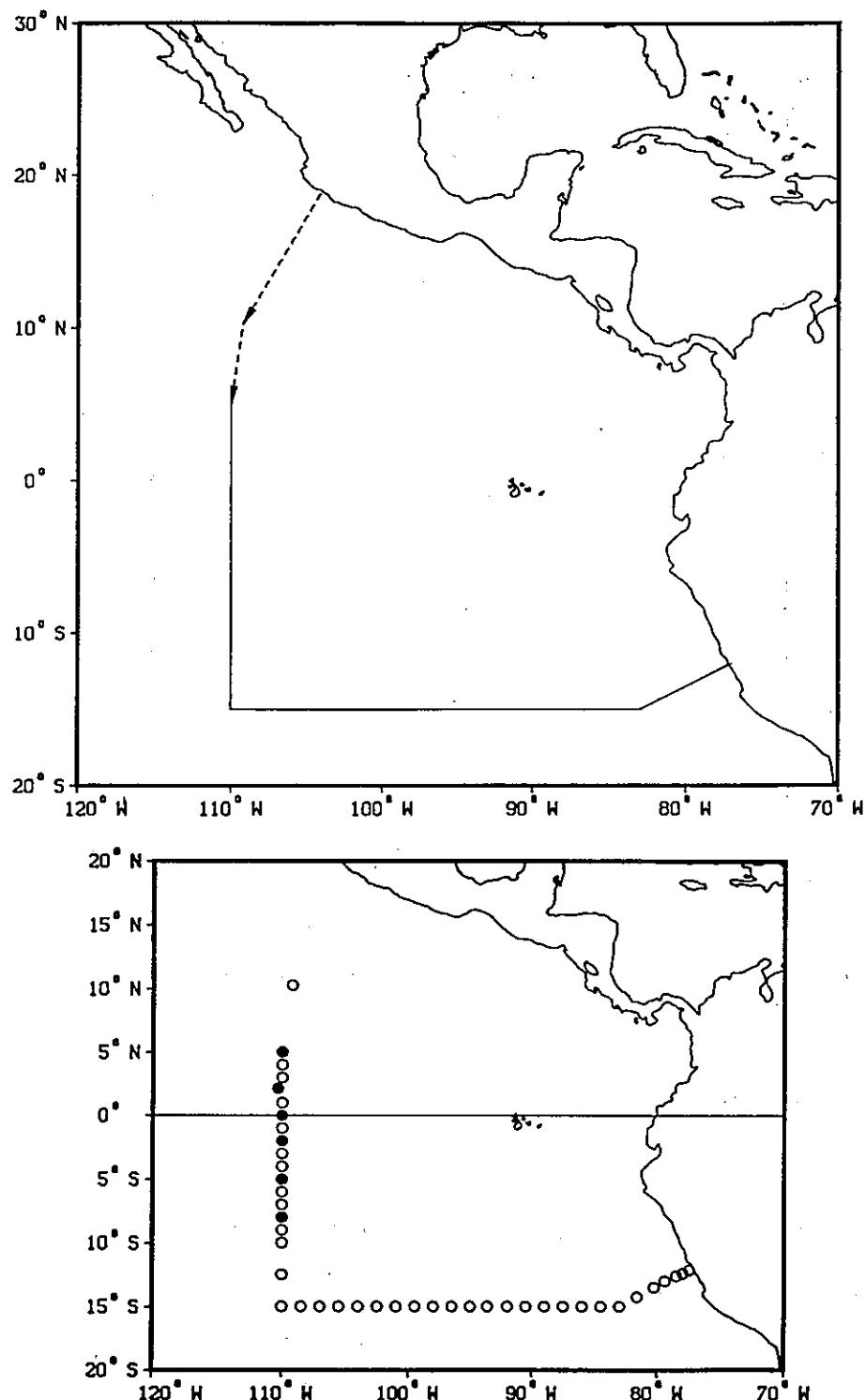


Figure 3. Cruise track and CTD stations occupied during EP4-86-OC.

110°W TEMPERATURE (°C)

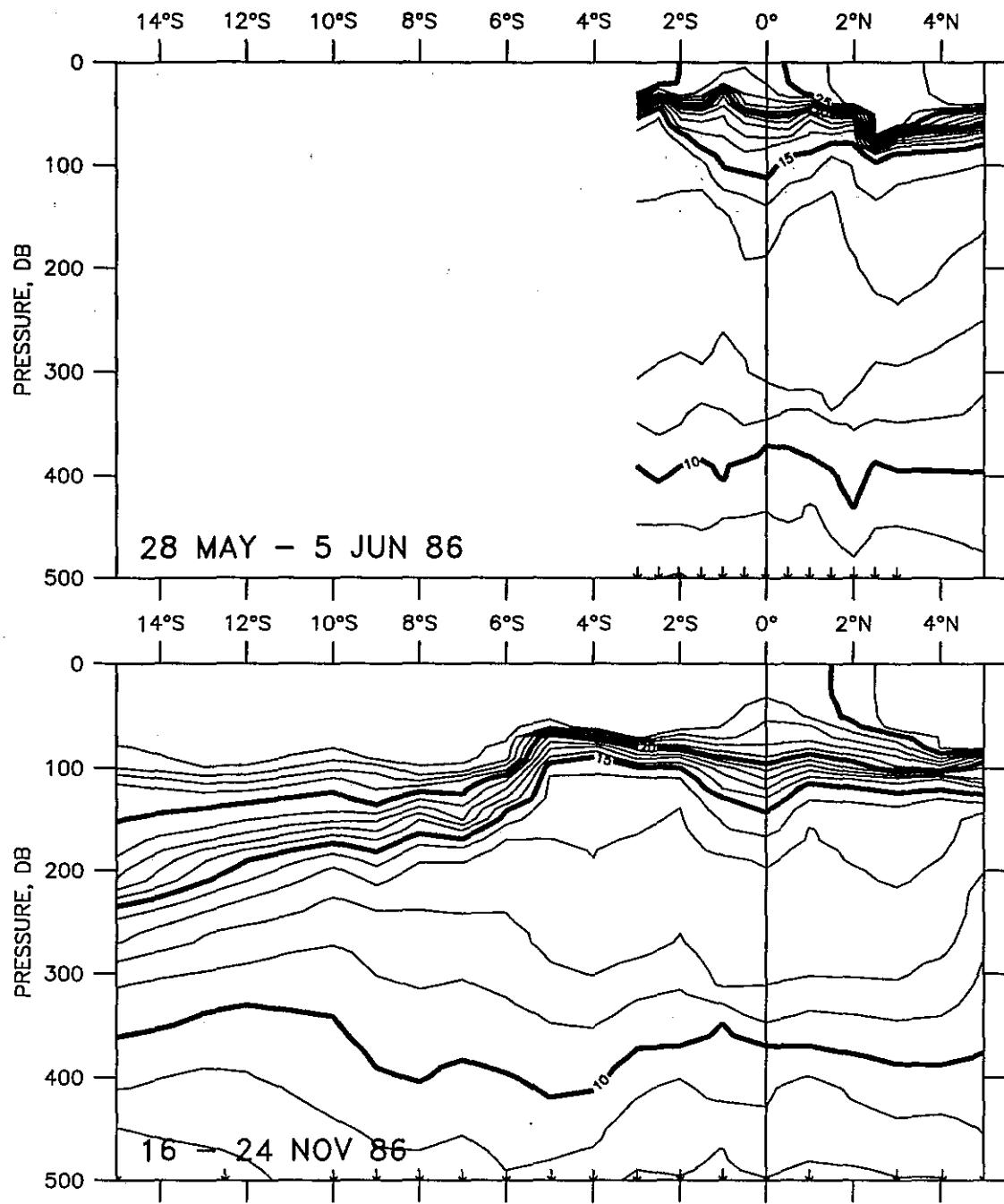


Figure 4. Temperature (°C) sections along 110°W in 1986.

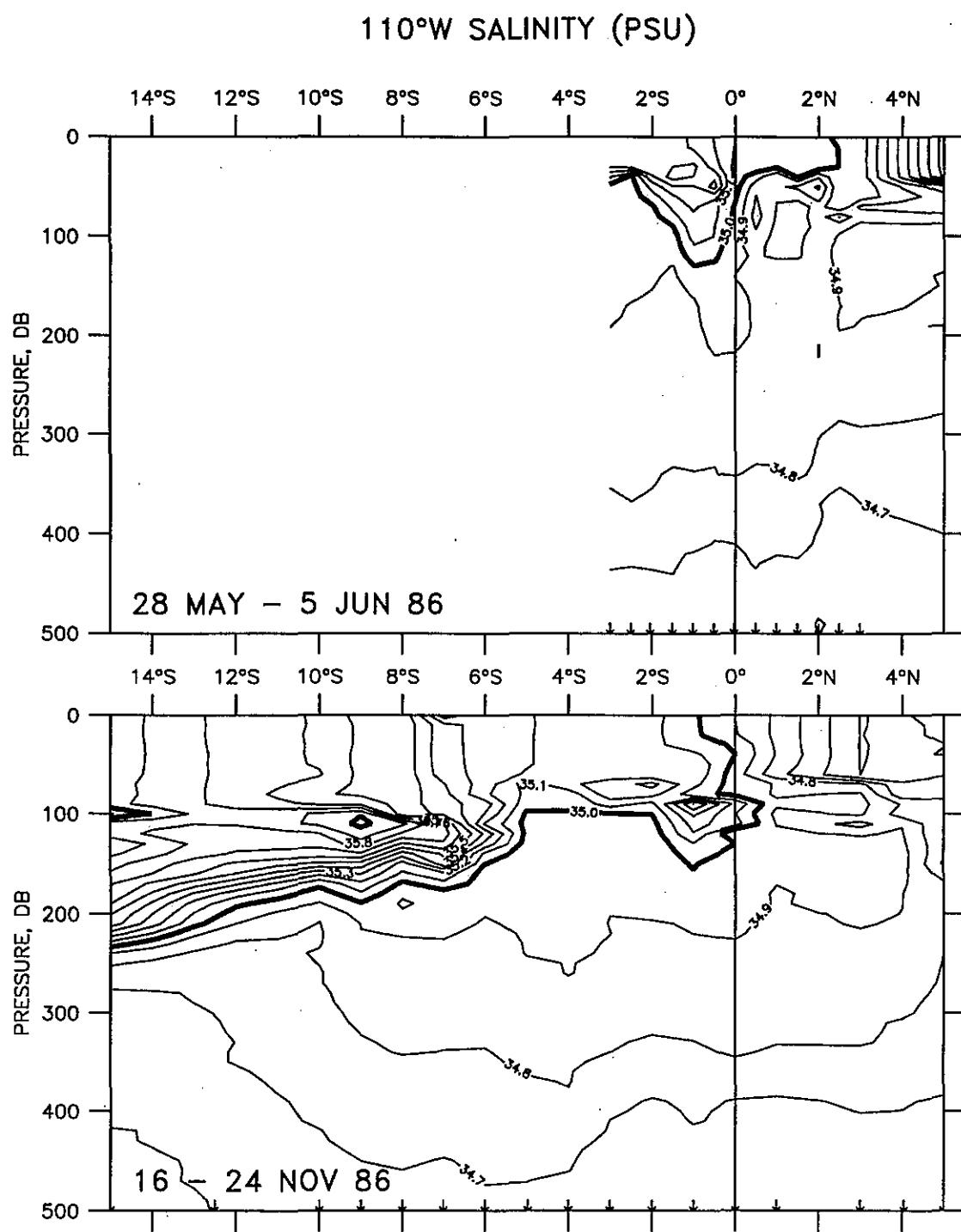


Figure 5. Salinity (psu) sections along 110°W in 1986.

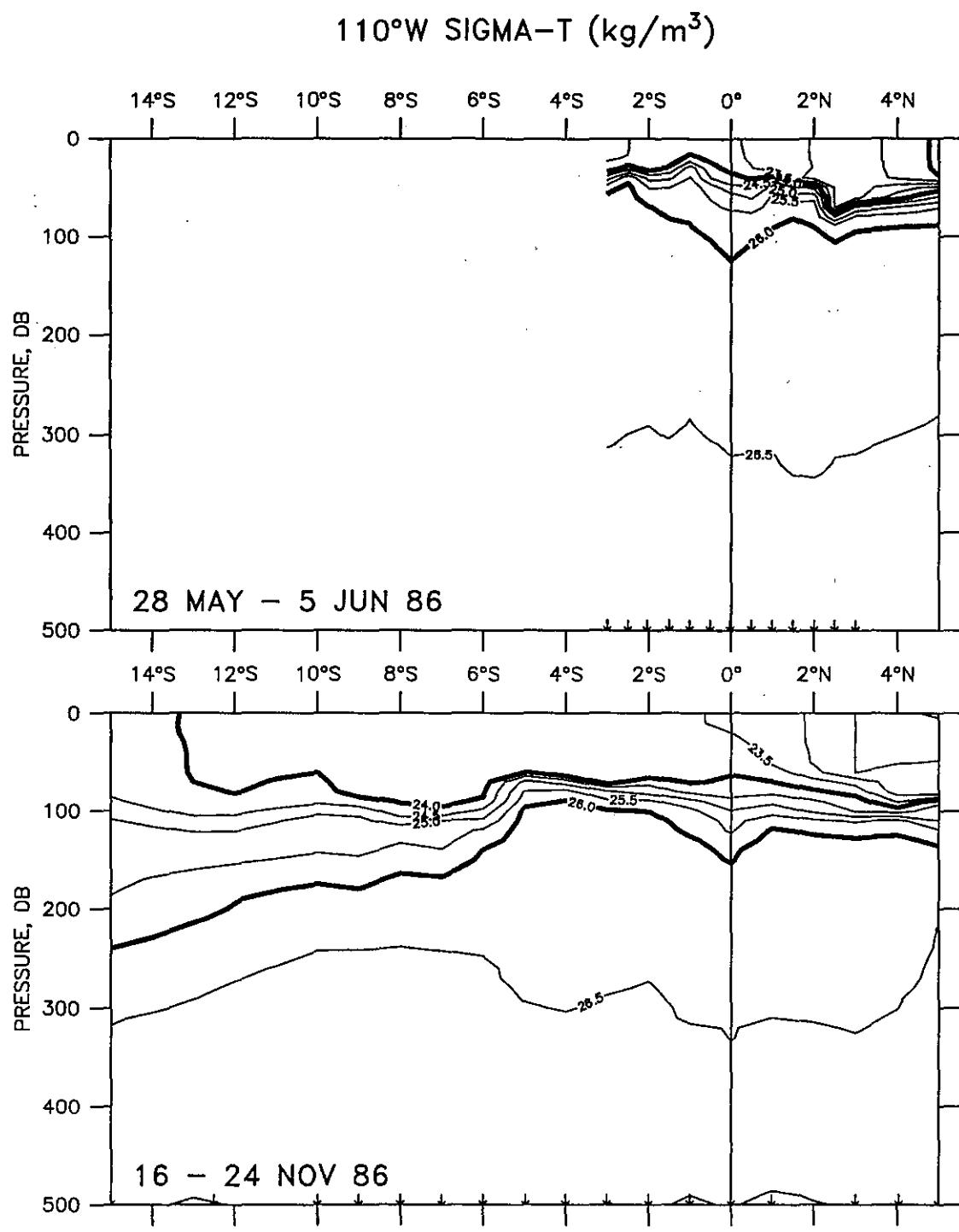


Figure 6. Sigma-T ( $\text{Kg}/\text{m}^3$ ) sections along 110°W in 1986.

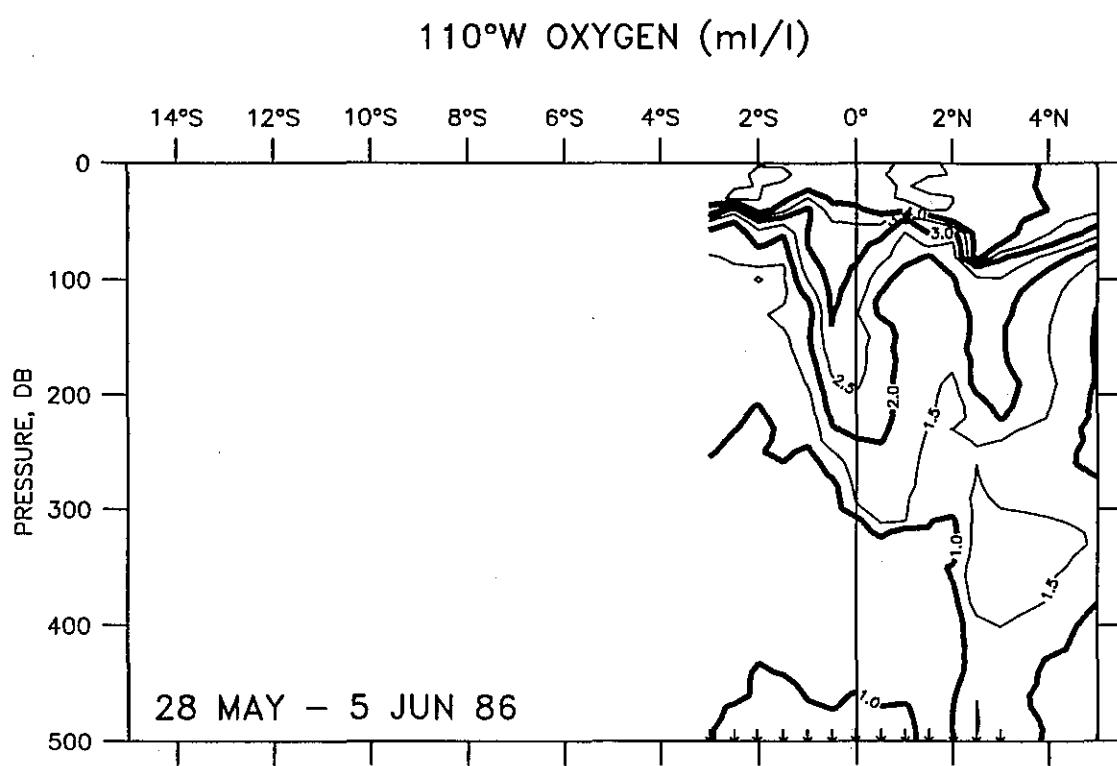


Figure 7. Oxygen (ml/l) section along 110°W in 1986.

140°W TEMPERATURE (°C)

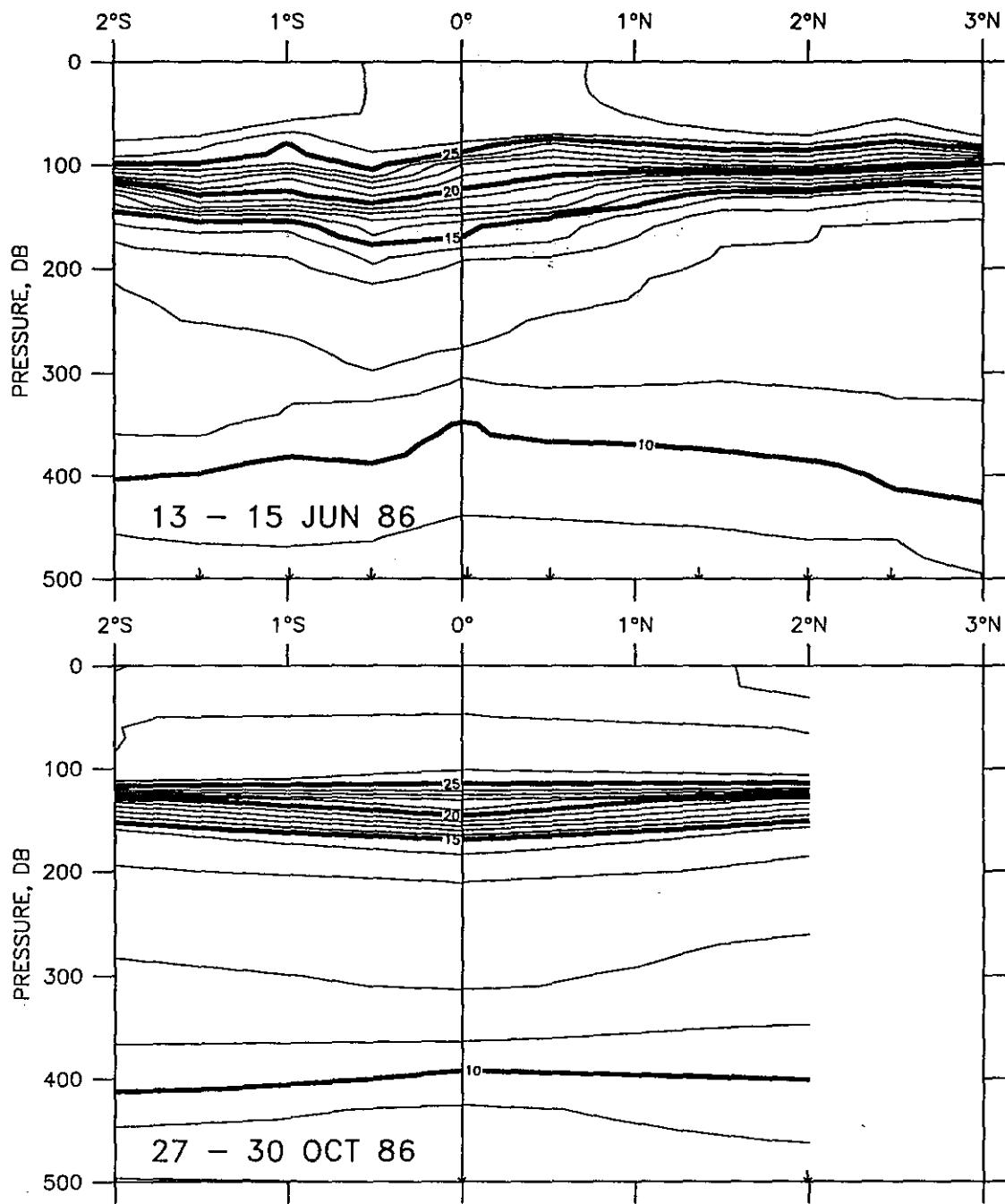


Figure 8. Temperature (°C) sections along 140°W in 1986.

### 140°W SALINITY (PSU)

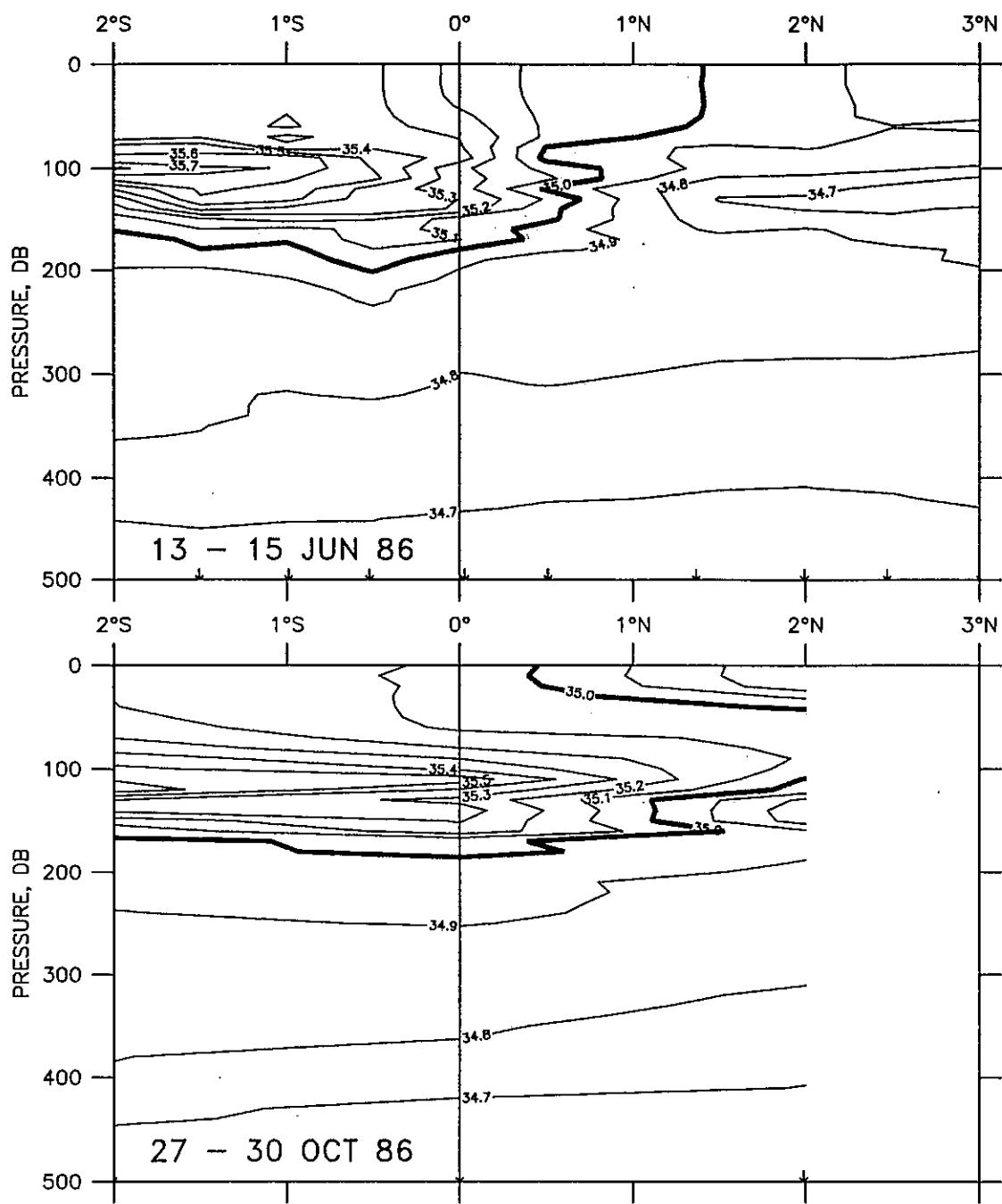


Figure 9. Salinity (psu) sections along 140°W in 1986.

140°W SIGMA-T ( $\text{kg}/\text{m}^3$ )

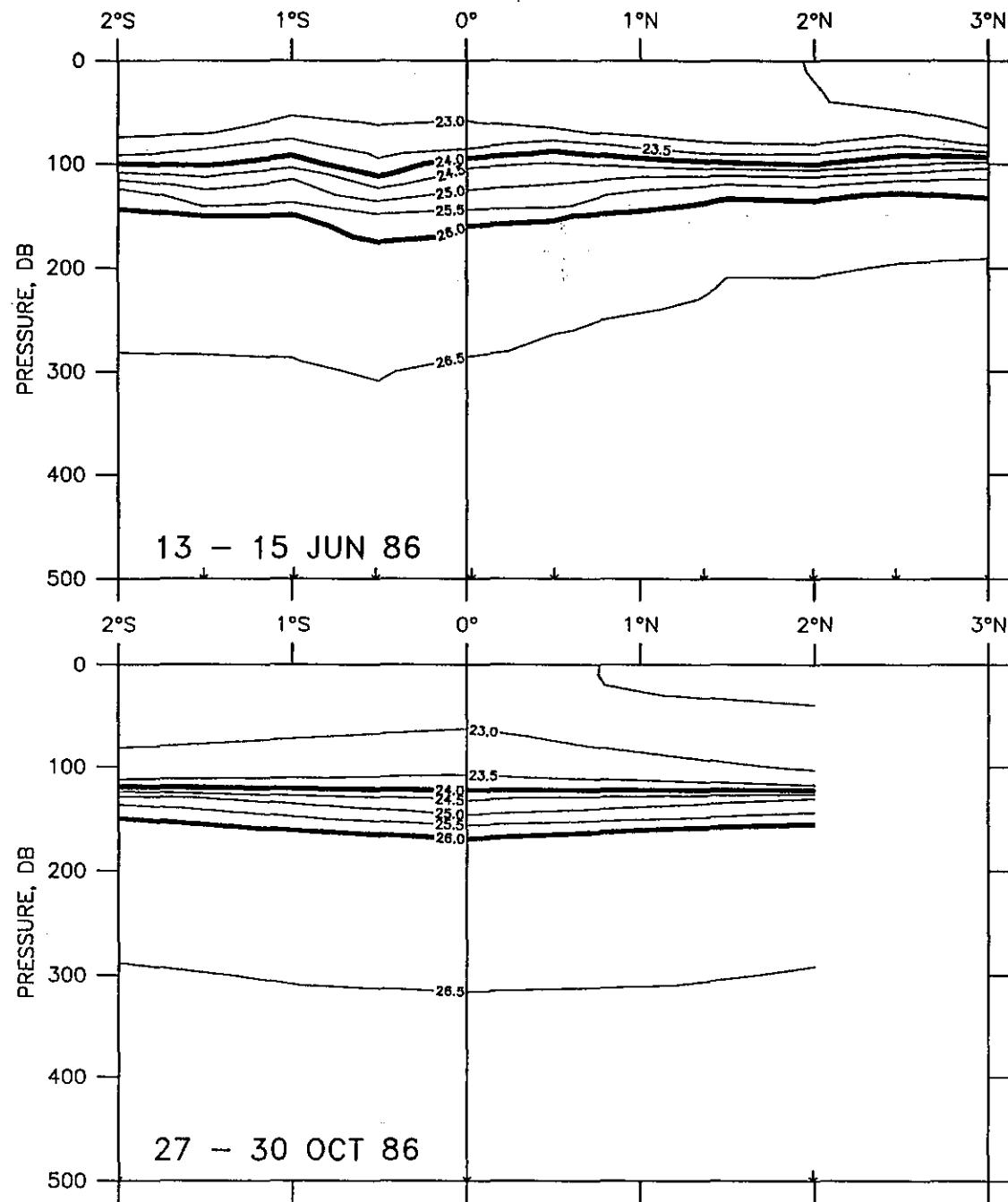


Figure 10. Sigma-T ( $\text{kg}/\text{m}^3$ ) sections along 140°W in 1986.

140°W OXYGEN (ml/l)

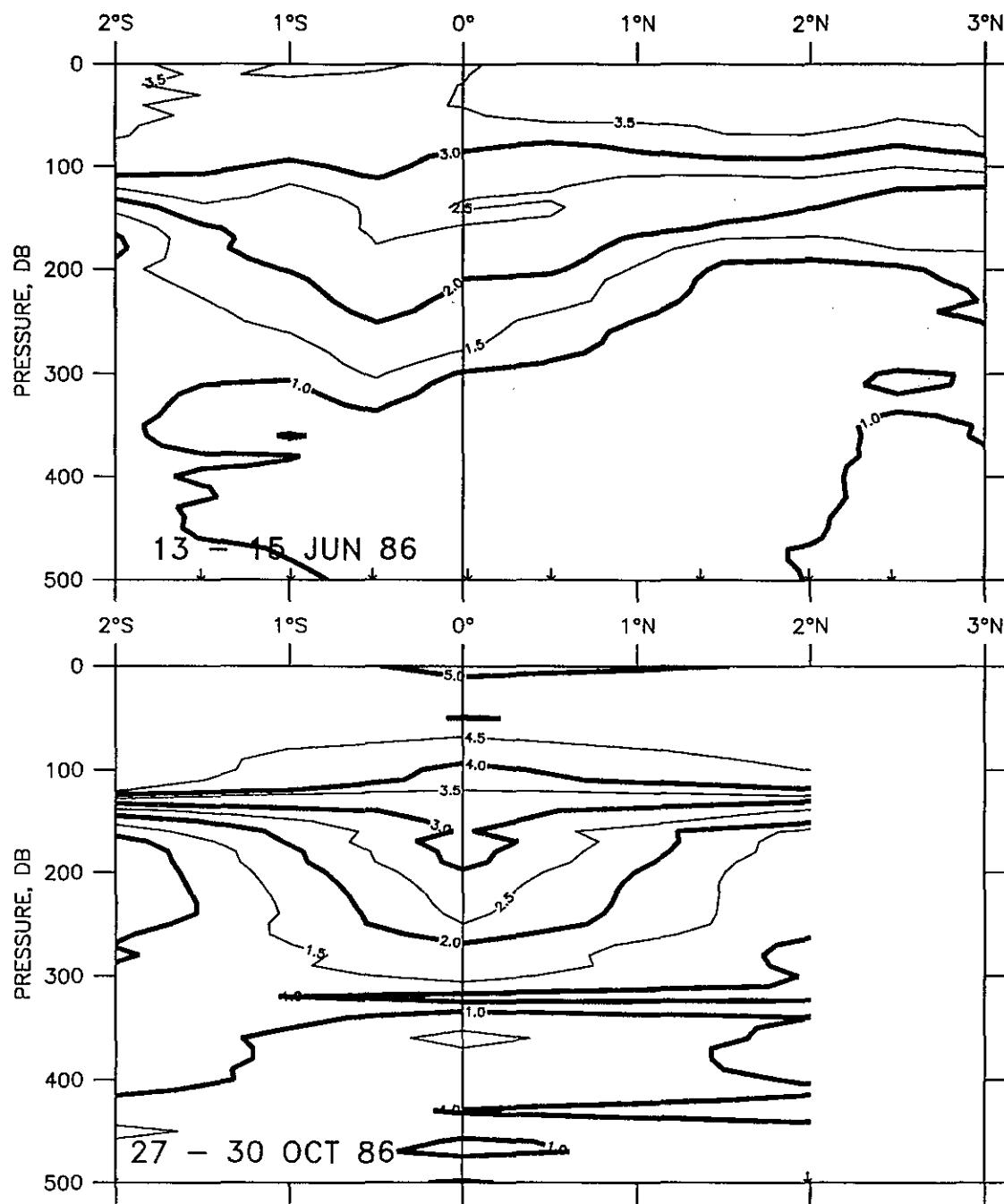


Figure 11. Oxygen (ml/l) sections along 140°W in 1986.

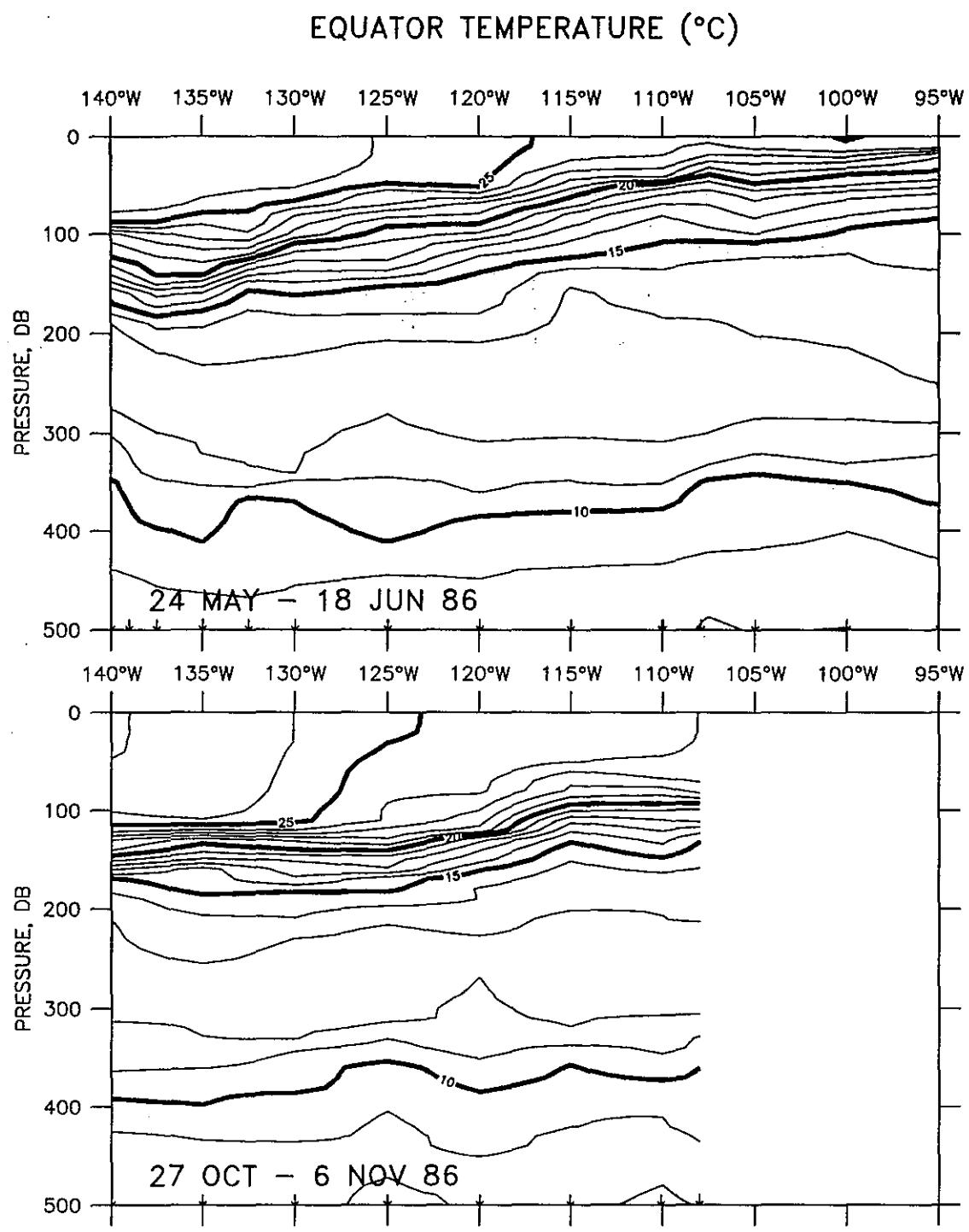


Figure 12. Temperature ( $^{\circ}\text{C}$ ) sections along the equator in 1986.

### EQUATOR SALINITY (PSU)

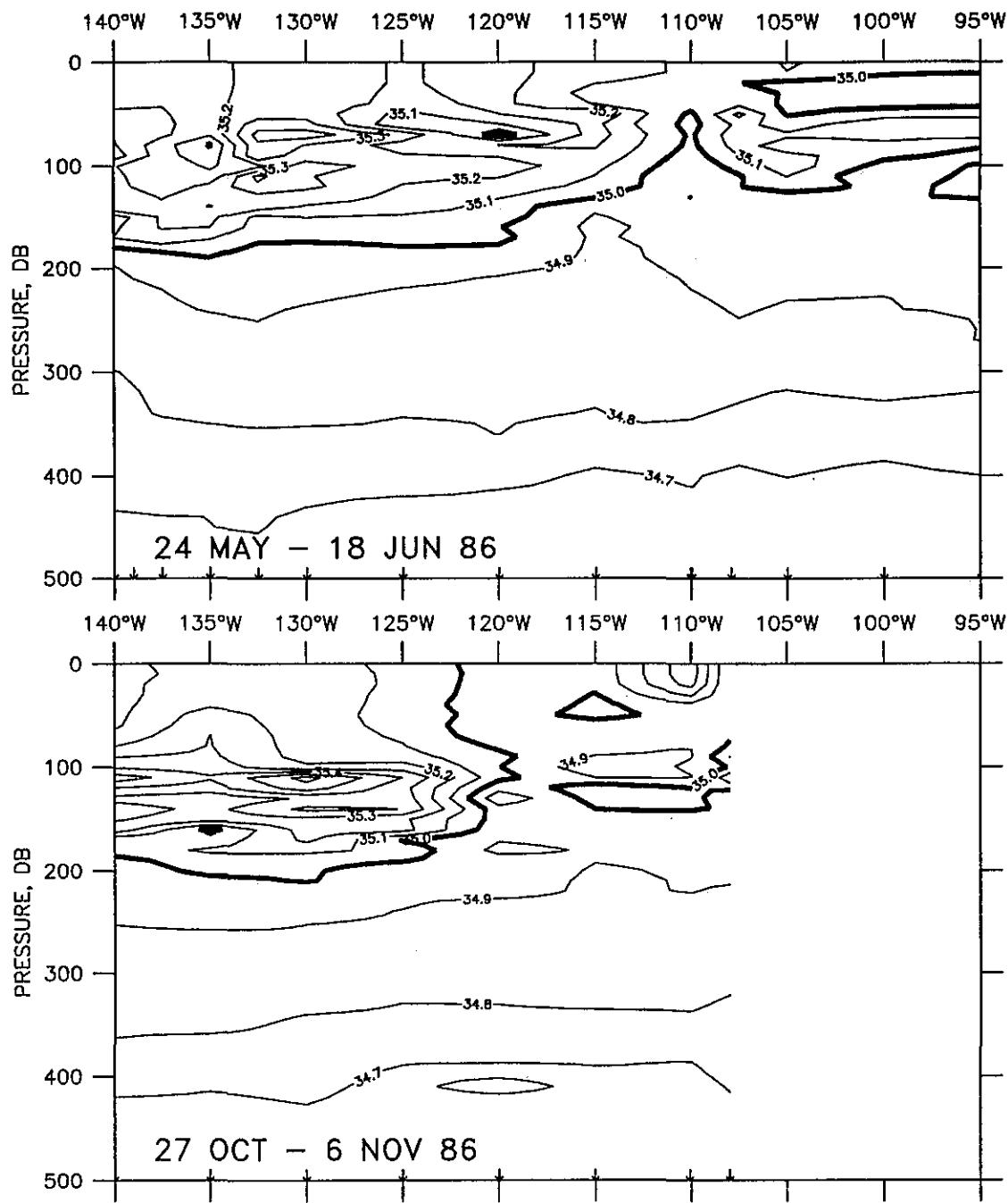


Figure 13. Salinity (psu) sections along the equator in 1986.

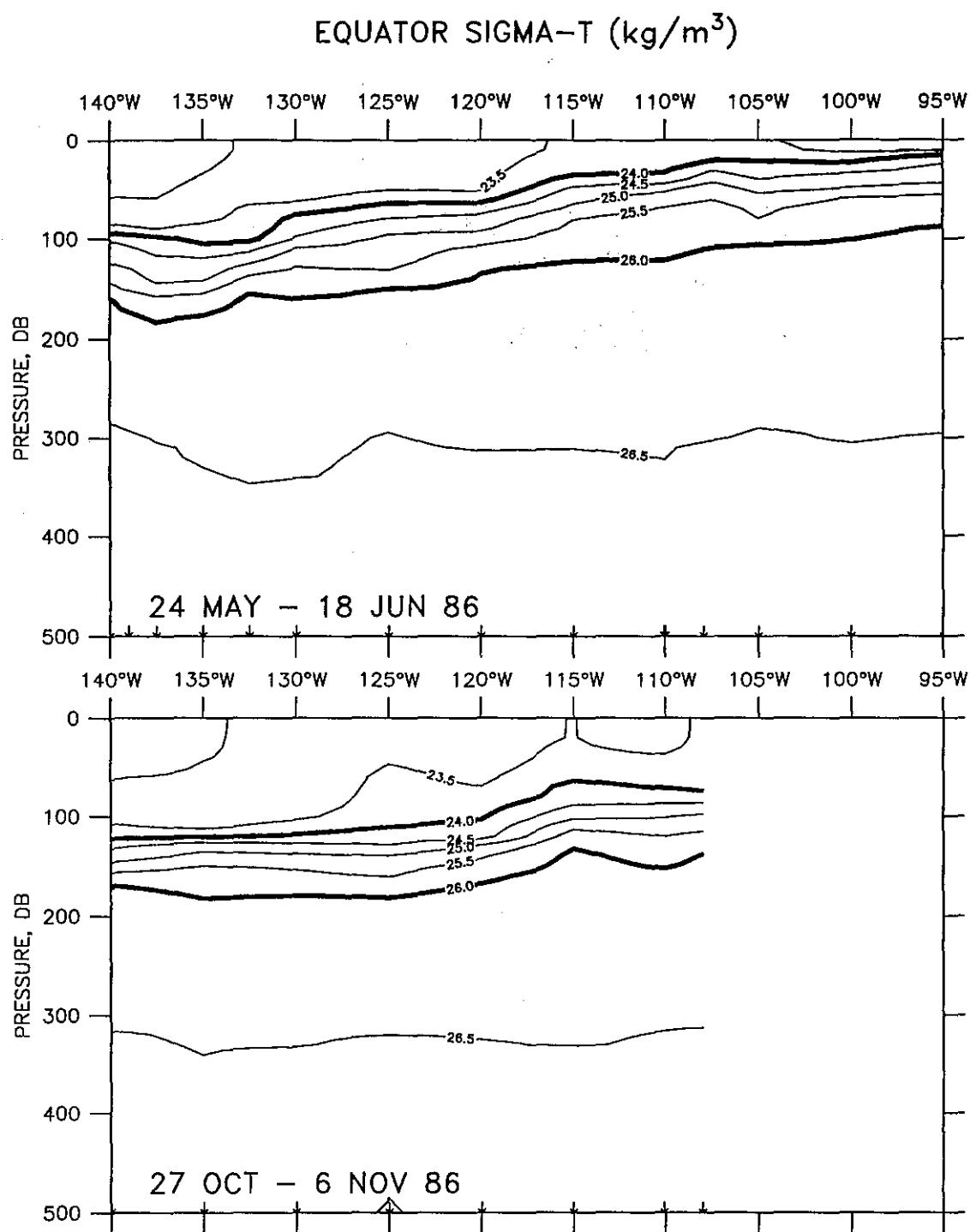


Figure 14. Sigma-T ( $\text{kg}/\text{m}^3$ ) sections along the equator in 1986.

### EQUATOR OXYGEN (ml/l)

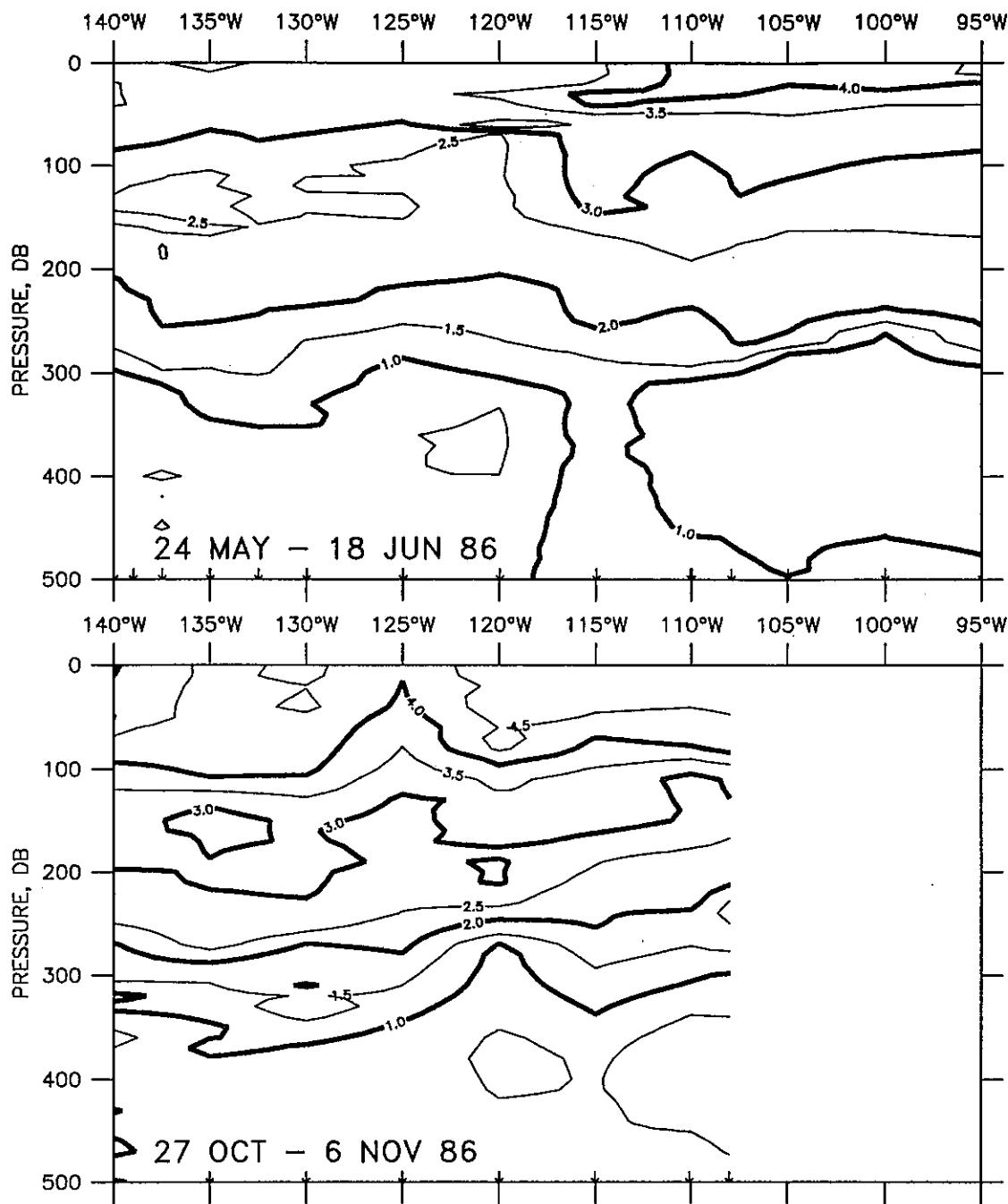


Figure 15. Oxygen (ml/l) sections along the equator in 1986.

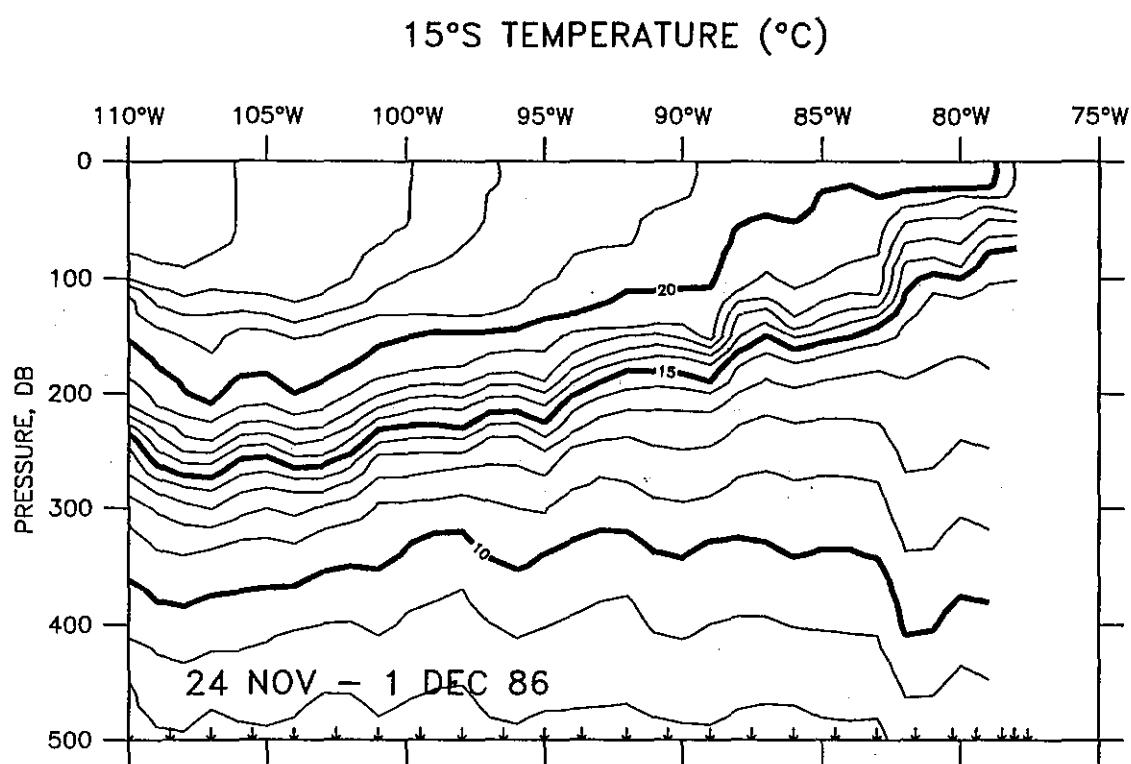


Figure 16. Temperature (°C) section along 15°S in 1986.

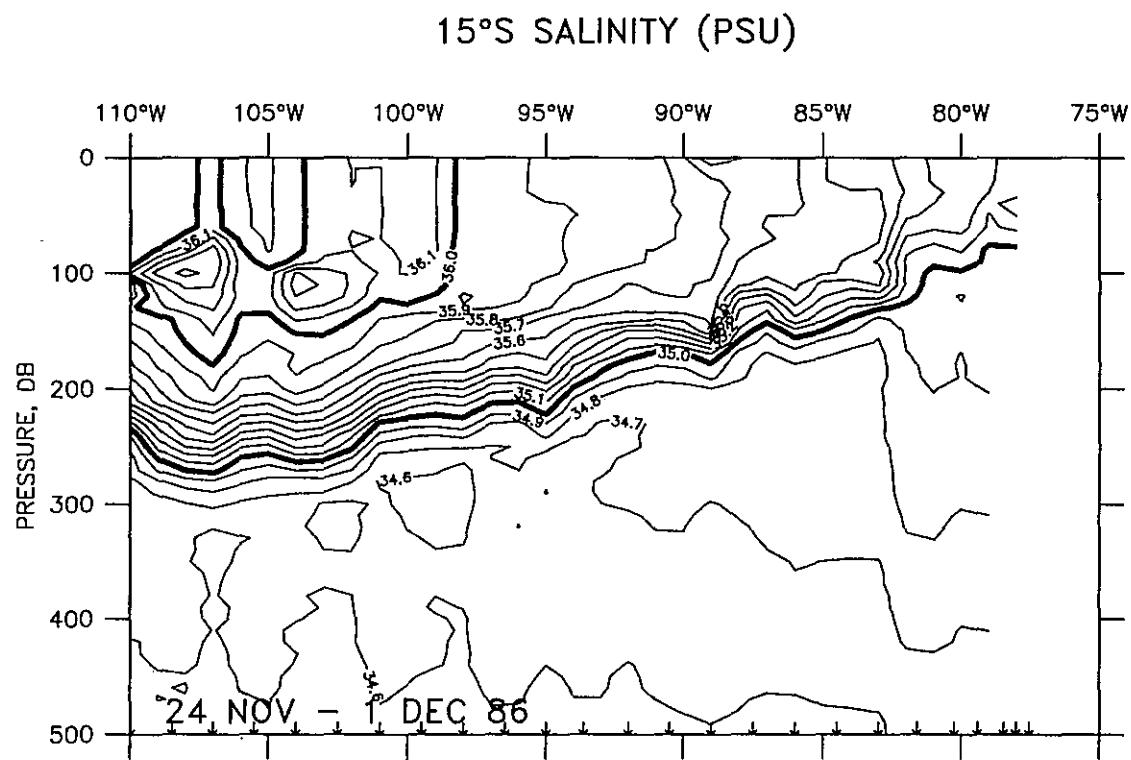


Figure 17. Salinity (psu) section along 15°S in 1986.

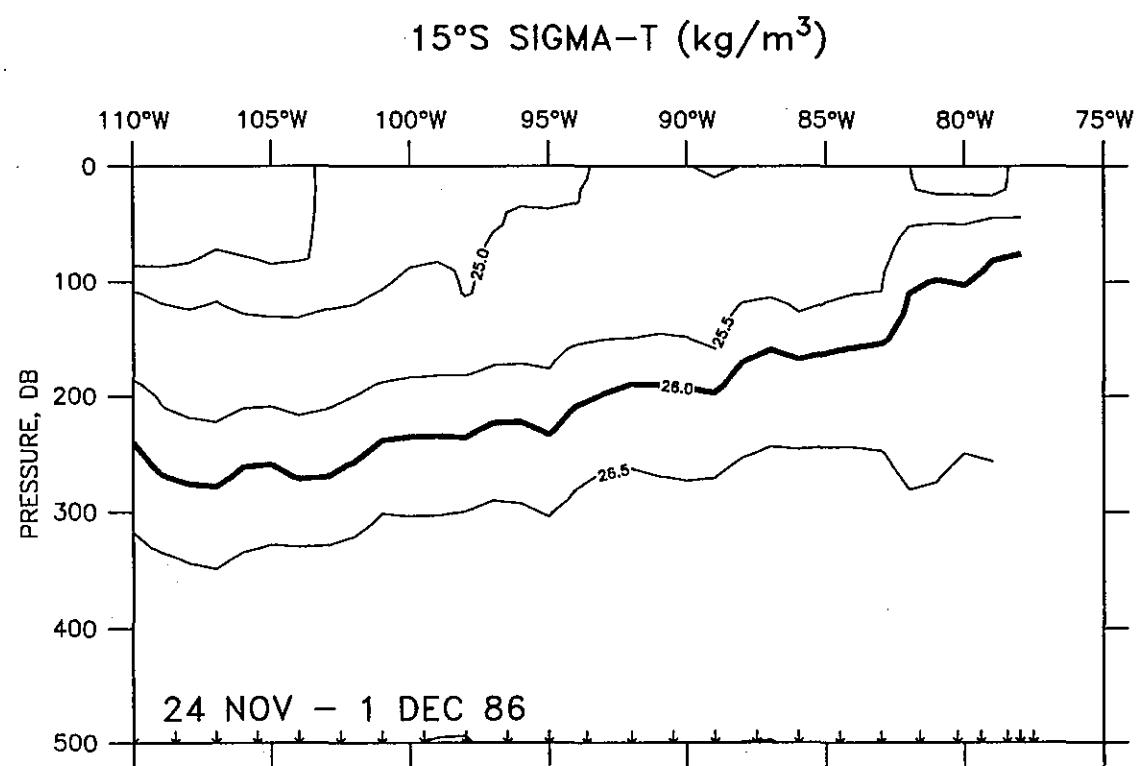


Figure 18. Sigma-T ( $\text{kg}/\text{m}^3$ ) section along 15°S in 1986.

TABLE 1. Abbreviations and units used to describe each set of CTD measurements.

SALINITY	Salinity, practical salinity units (psu)
TEMPERATURE	Temperature, degrees Celsius (°C)
CAST EP2-86-OC-007	CTD measurement station 007 made from the NOAA research vessel OCEANOGRAPHER during 1986
DATE	Day, month, year
TIME	Hours and minutes, Greenwich Mean Time (GMT)
LAT	Latitude, degrees and minutes west
LONG	Longitude, degrees and minutes west
WEATHER	Present weather conditions (see Table 2)
SEA STATE	Present sea state conditions (see Table 3)
BAROMETER	Sea level atmospheric pressure, millibars (mb) over 1000 mb
WIND DIR	Wind direction, degrees True from which the wind blows
SPD	Wind speed, knots
VISIBILITY	Visibility (see Table 4)
CLOUD	Cloud type (see Table 5)
AMOUNT	Amount of cloud cover (see Table 6)
DRY	Dry air temperature, degrees Celsius
WET	Wet bulb temperature, degrees Celsius
DEPTH	Depth to the bottom, meters

TABLE 2. Weather condition code used to describe each set of CTD measurements.

Code	Weather Condition
0	Clear (no cloud)
1	Partly cloudy
2	Continuous layer(s) of cloud(s)
3	Sandstorm, dust storm, or blowing snow
4	Fog, thick dust or haze
5	Drizzle
6	Rain
7	Snow, or rain and snow mixed
8	Shower(s)
9	Thunderstorms

TABLE 3. Sea state code used to describe each set of CTD measurements.

Code	Height (meters)	Description
0	0	Calm-glassy
1	0 - 0.1	Calm-rippled
2	0.1 - 0.5	Smooth-wavelet
3	0.5 - 1.25	Slight
4	1.25 - 2.5	Moderate
5	2.5 - 4	Rough
6	4 - 6	Very rough
7	6 - 9	High
8	9 - 14	Very high
9	> 14	Phenomenal

TABLE 4. Visibility code used to describe each set of CTD measurements.

Code	Visibility
0	< 50 meters
1	50 - 200 meters
2	200 - 500 meters
3	500 - 1,000 meters
4	1 - 2 km
5	2 - 4 km
6	4 - 10 km
7	10 - 20 km
8	20 - 50 km
9	50 km or more

TABLE 5. Cloud Type.

Code	Cloud Types
0	Cirrus
1	Cirrocumulus
2	Cirrostratus
3	Altocumulus
4	Altostratus
5	Nimbostratus
6	Stratocumulus
7	Stratus
8	Cumulus
9	Cumulonimbus
x	Clouds not visible

TABLE 6. Cloud Amount.

Code	Cloud Amount
0	0
1	1/10 or less but not zero
2	2/10 - 3/10
3	4/10
4	5/10
5	6/10
6	7/10 - 8/10
7	9/10
8	10/10
9	Sky obscured or not determined

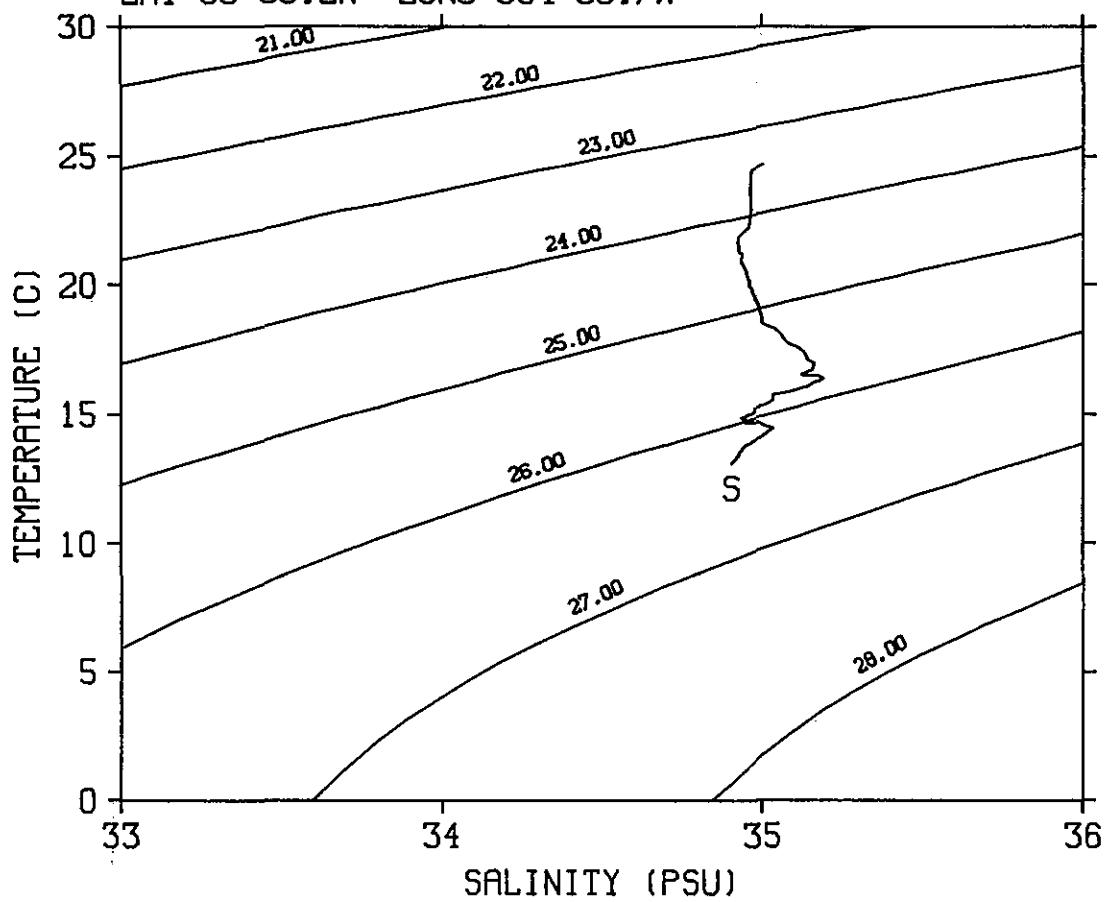
## **DATA**

**EP2-86-OC**

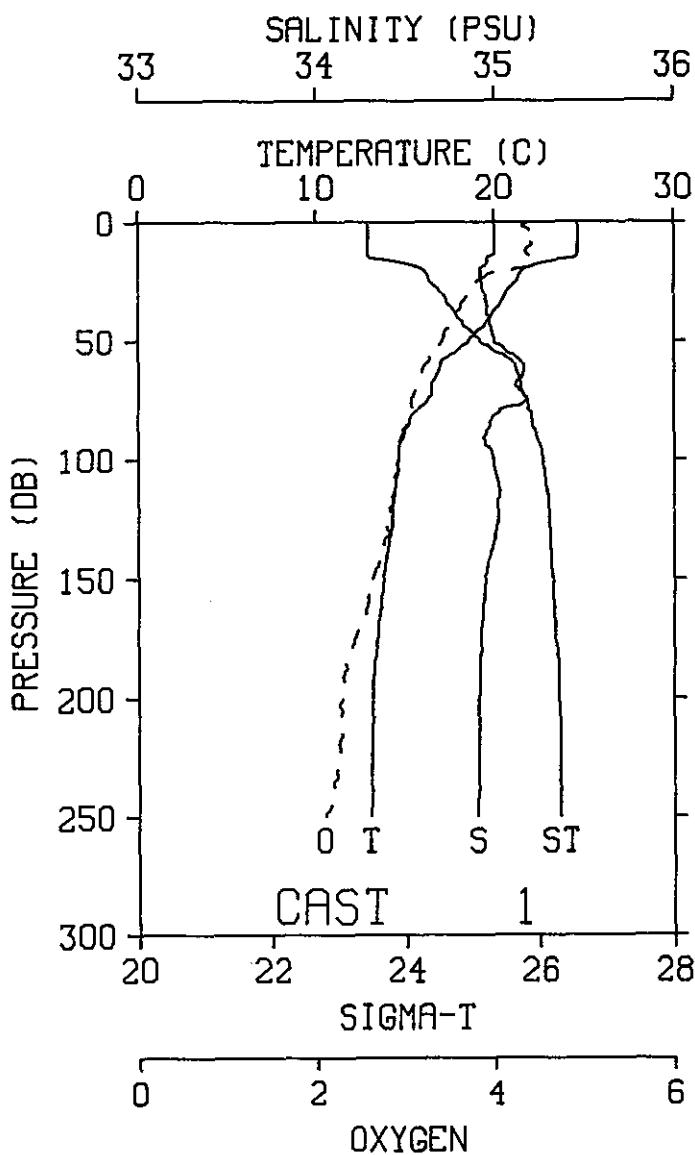
**21 May — 20 June 1986**

**NBIS CTD/O<sub>2</sub> Data Summary**

CAST EP2-86-OC-001 DATE 24 MAY 86 TIME 1519 GMT  
LAT 00 00.2N LONG 094 58.7W



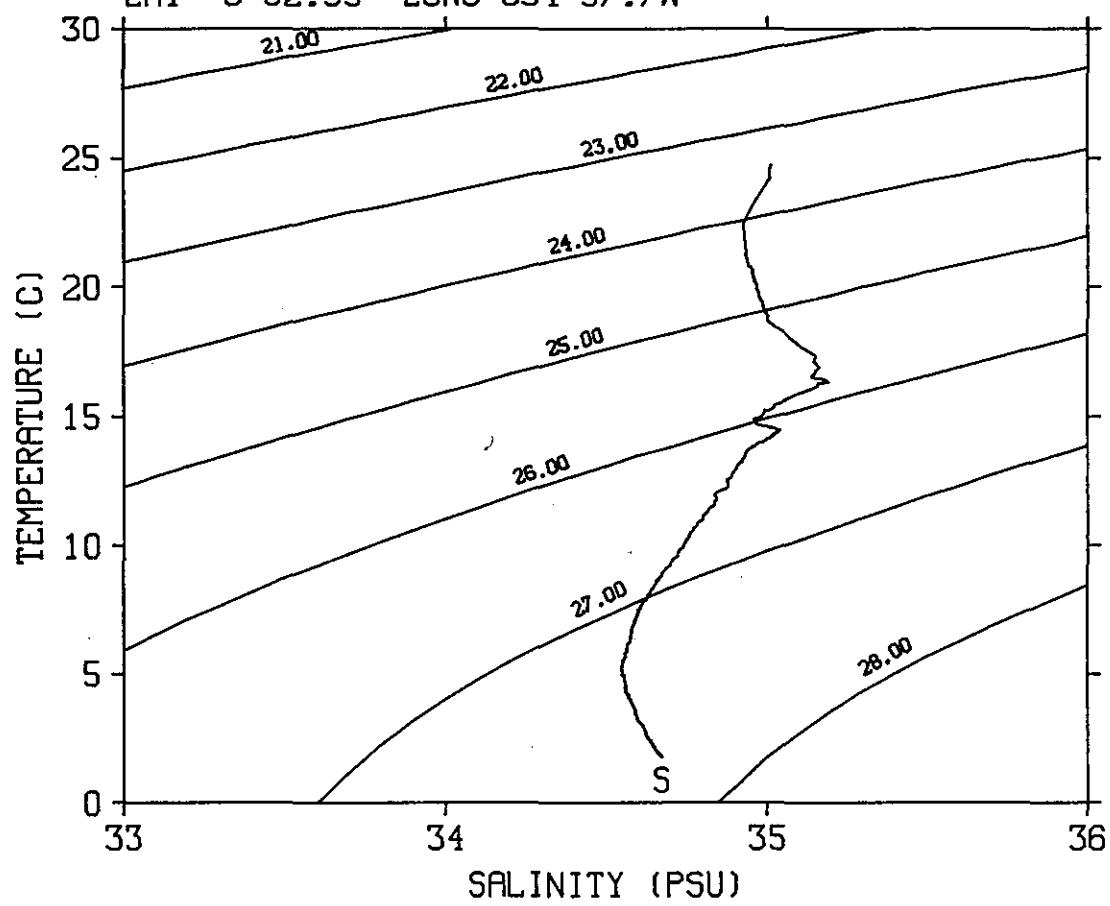
31



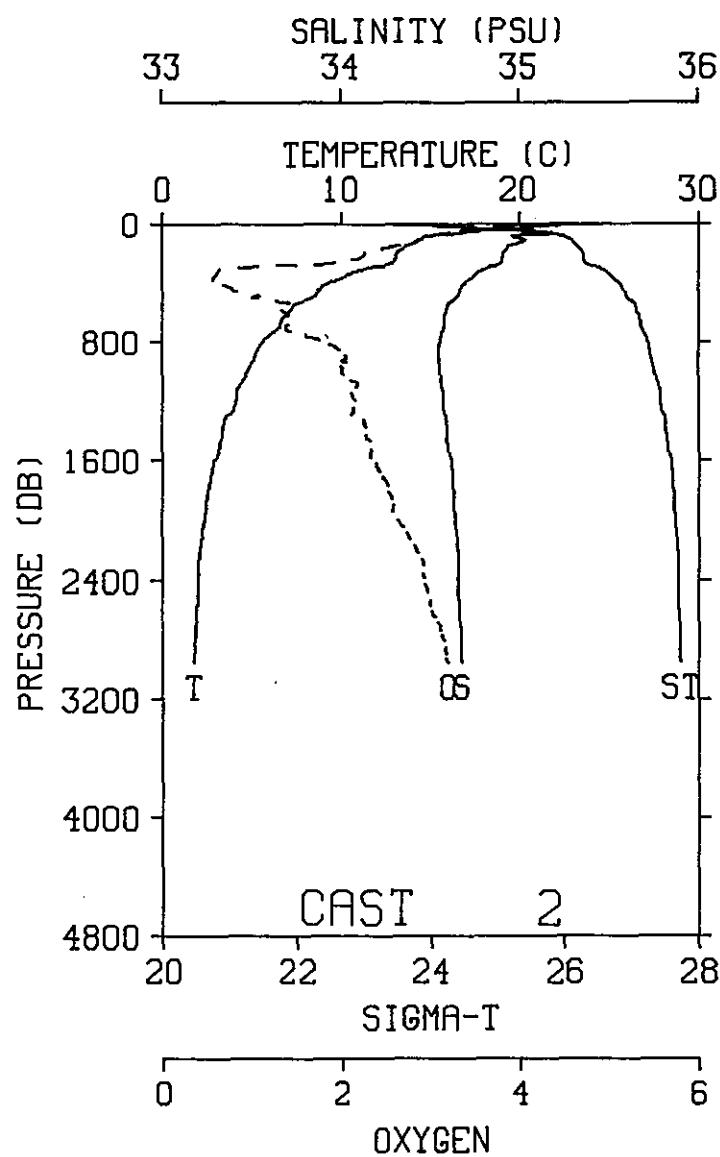
CAST EP2-86-OC-001 DATE 24 MAY 86 TIME 1519 GMT  
 LAT 00 00.2N LONG 094 58.7W WEATHER 1 SEA STATE 1  
 BAROMETER 15 WIND DIR 140 T SPD 10 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 24.0 WET 23.0 DEPTH 3330 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.677	34.999	4.41	23.440	0.000
10.	24.666	35.004	4.42	23.447	0.044
20.	21.631	34.920	4.24	24.261	0.086
30.	20.621	34.948	3.70	24.558	0.121
40.	19.784	34.968	3.50	24.795	0.154
50.	18.535	34.999	3.42	25.139	0.184
60.	16.965	35.161	3.22	25.647	0.210
70.	16.486	35.131	3.13	25.737	0.233
80.	15.506	35.031	3.08	25.884	0.255
90.	14.899	34.948	2.96	25.955	0.276
100.	14.605	34.996	2.93	26.056	0.296
110.	14.474	35.024	2.87	26.105	0.316
120.	14.302	35.021	2.85	26.140	0.335
130.	14.199	35.008	2.80	26.152	0.354
140.	13.973	34.976	2.72	26.175	0.373
150.	13.772	34.948	2.62	26.195	0.391
160.	13.640	34.937	2.58	26.214	0.410
170.	13.497	34.929	2.49	26.238	0.428
180.	13.364	34.925	2.38	26.262	0.446
190.	13.215	34.918	2.31	26.286	0.464
200.	13.178	34.914	2.31	26.291	0.482
250.	13.037	34.904	2.09	26.312	0.570

CAST EP2-86-OC-002 DATE 24 MAY 86 TIME 1731 GMT  
LAT 0 02.3S LONG 094 57.7W



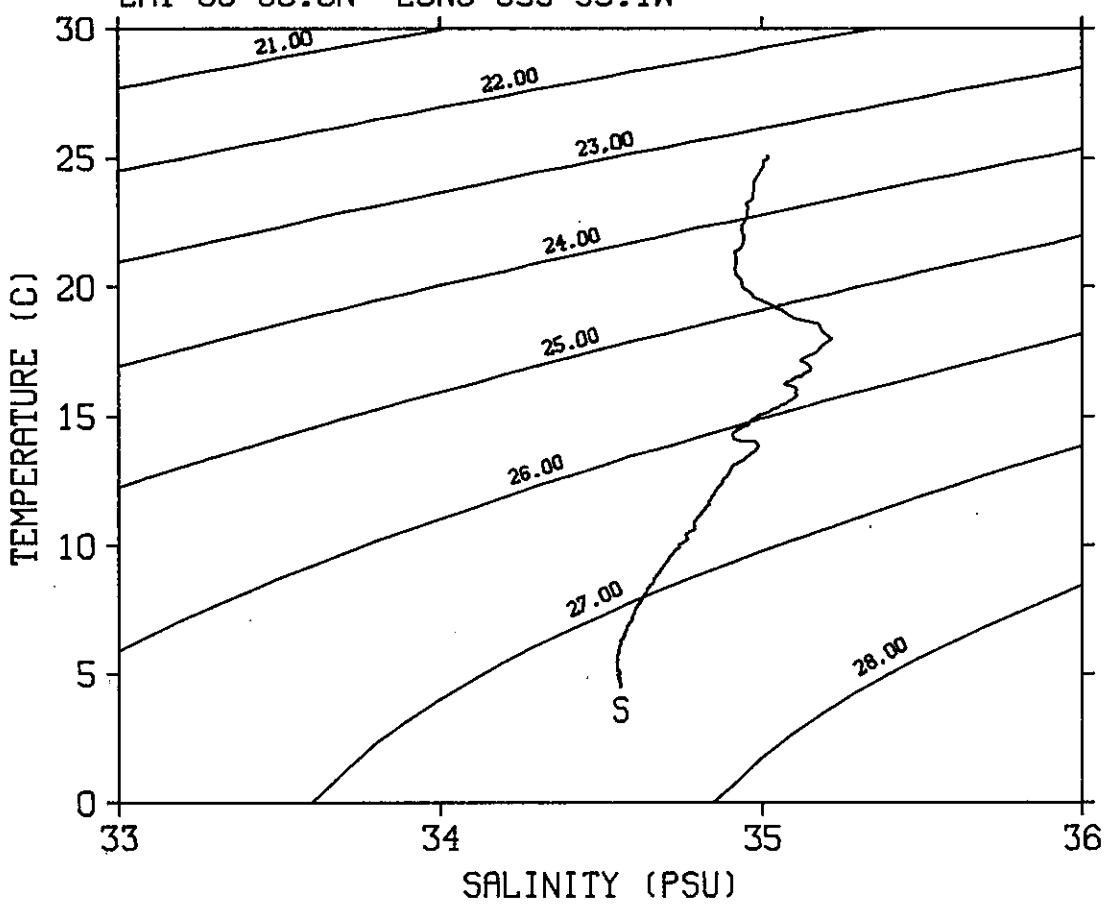
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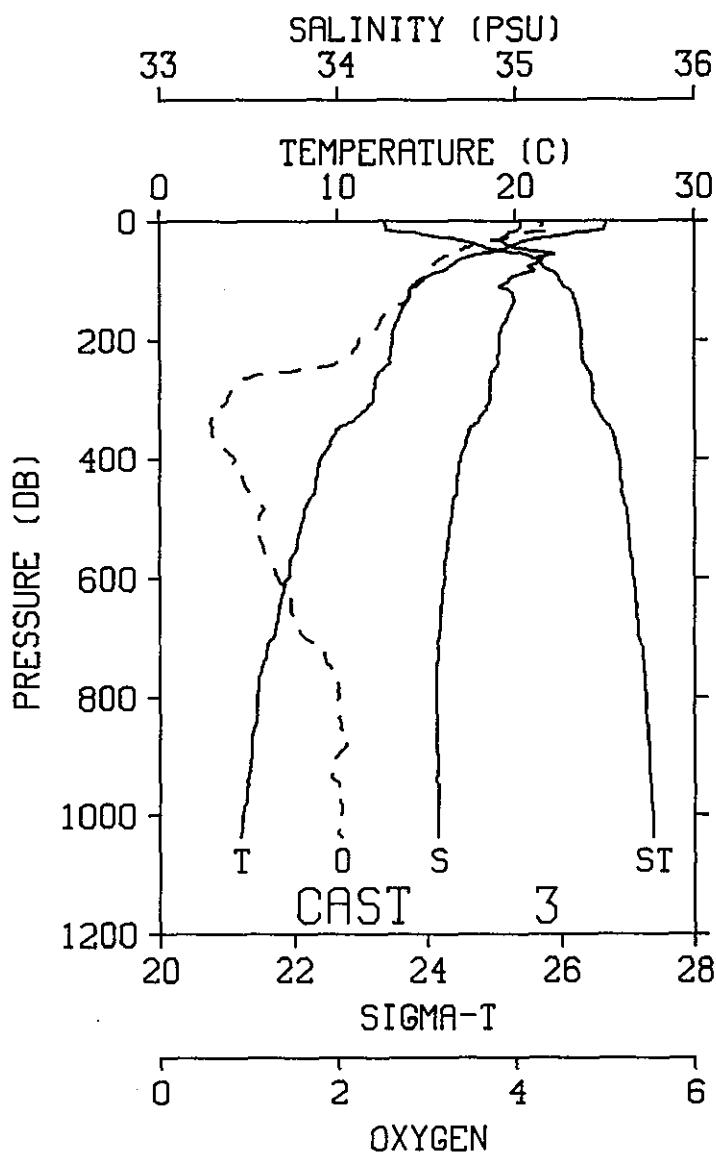
CAST EP2-86-OC-002 DATE 24 MAY 86 TIME 1731 GMT  
 LAT 0 02.3S LONG 094 57.7W WEATHER 1 SEA STATE 1  
 BAROMETER 15 WIND DIR 120 T SPD 10 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 25.2 WET 23.0 DEPTH 3360 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.711	35.012	4.57	23.440	0.000
10.	24.646	35.010	4.59	23.458	0.044
20.	21.131	34.933	3.93	24.409	0.084
30.	20.414	34.956	3.68	24.619	0.118
40.	19.630	34.975	3.51	24.841	0.150
50.	18.237	35.052	3.29	25.254	0.179
60.	16.854	35.162	3.22	25.674	0.204
70.	16.258	35.156	3.09	25.809	0.227
80.	15.260	35.013	3.06	25.925	0.248
90.	14.665	34.970	2.95	26.023	0.268
100.	14.572	35.006	2.93	26.071	0.288
110.	14.455	35.039	2.88	26.121	0.308
120.	14.298	35.022	2.85	26.142	0.327
130.	14.205	35.014	2.81	26.155	0.346
140.	13.900	34.966	2.74	26.183	0.364
150.	13.718	34.944	2.65	26.203	0.383
160.	13.628	34.937	2.58	26.217	0.401
170.	13.515	34.931	2.49	26.235	0.419
180.	13.396	34.928	2.42	26.257	0.438
190.	13.210	34.918	2.31	26.288	0.455
200.	13.175	34.914	2.28	26.292	0.473
250.	13.017	34.903	2.05	26.315	0.562
300.	11.658	34.836	0.78	26.527	0.647
350.	10.362	34.756	0.59	26.699	0.720
400.	9.350	34.699	0.68	26.826	0.788
450.	8.767	34.670	0.78	26.897	0.851
500.	8.399	34.648	1.02	26.937	0.912
550.	7.338	34.600	1.41	27.057	0.969
600.	7.056	34.590	1.37	27.088	1.023
650.	6.664	34.580	1.41	27.134	1.075
700.	6.581	34.581	1.38	27.146	1.125
750.	6.058	34.565	1.57	27.202	1.174
800.	5.570	34.556	1.77	27.256	1.221
850.	5.338	34.551	1.98	27.280	1.265
900.	5.154	34.551	2.07	27.301	1.309
950.	4.961	34.552	2.12	27.325	1.352
1000.	4.759	34.560	2.00	27.354	1.393
1500.	3.184	34.601	2.35	27.549	1.751
2000.	2.331	34.642	2.64	27.658	2.034
2500.	1.950	34.660	2.98	27.703	2.282
2961.	1.757	34.677	3.20	27.732	2.500

CAST EP2-86-OC-003 DATE 25 MAY 86 TIME 1806 GMT  
LAT 00 00.0N LONG 099 59.1W



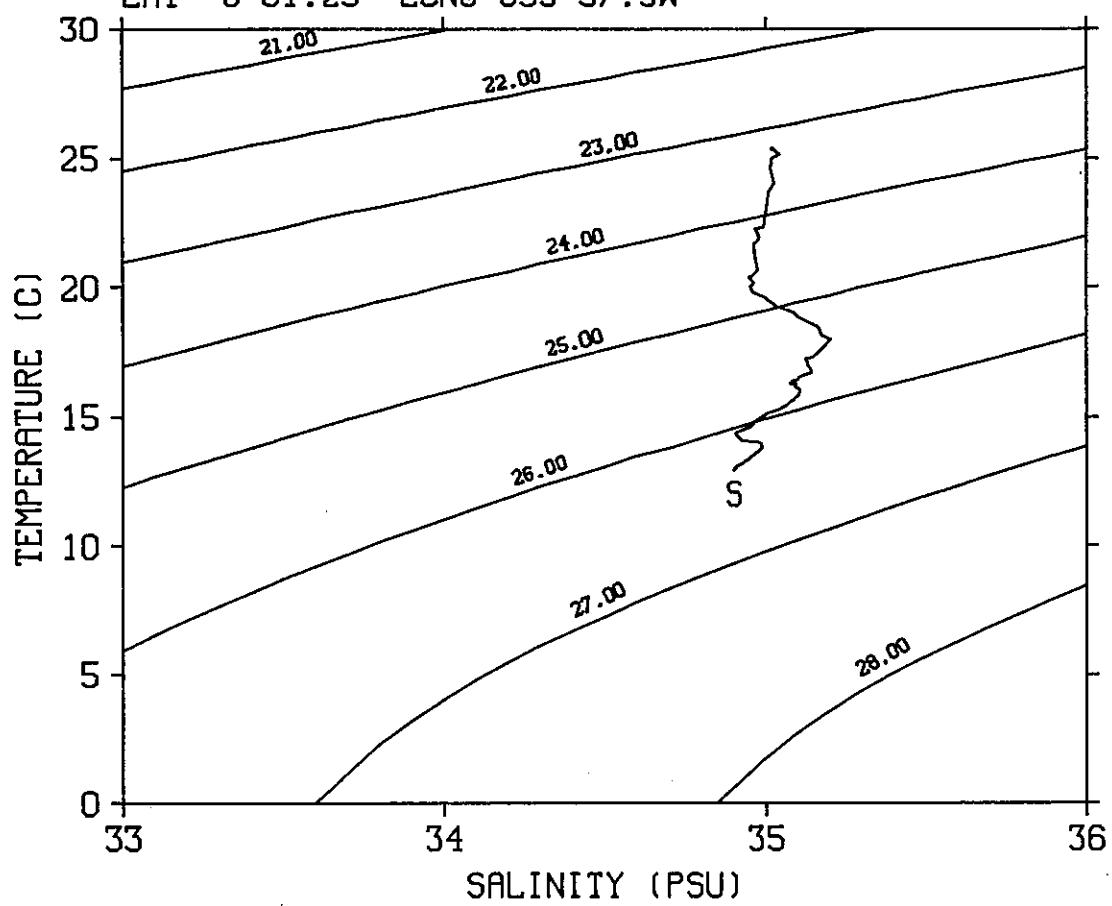
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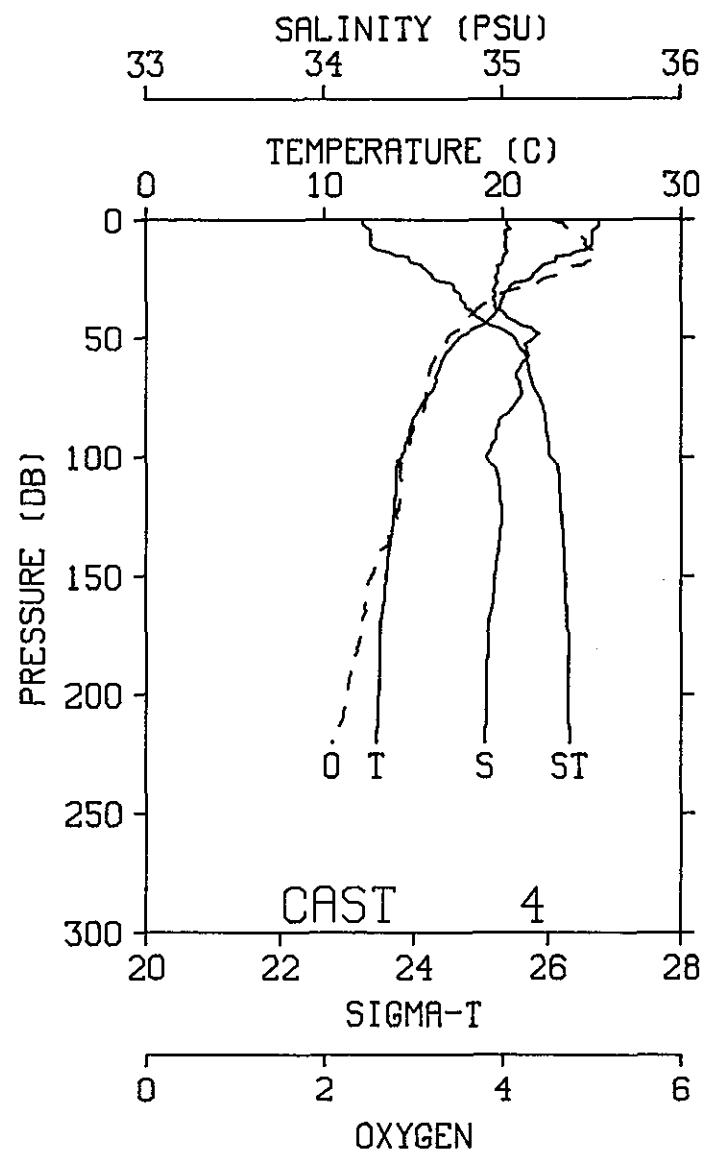
CAST EP2-86-OC-003 DATE 25 MAY 86 TIME 1806 GMT  
 LAT 00 00.0N LONG 099 59.1W WEATHER 2 SEA STATE 1  
 BAROMETER 14 WIND DIR 095 T SPD 04 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 8 DRY 26.1 WET 23.2 DEPTH 3240 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.063	35.018	4.20	23.337	0.000
10.	24.931	35.018	4.28	23.377	0.045
20.	23.248	34.957	4.20	23.831	0.089
30.	21.320	34.913	3.88	24.342	0.128
40.	19.894	34.942	3.51	24.747	0.161
50.	19.084	35.058	3.37	25.045	0.192
60.	17.380	35.156	3.19	25.544	0.218
70.	16.592	35.119	3.10	25.703	0.242
80.	16.170	35.090	3.06	25.779	0.265
90.	15.225	35.030	3.04	25.946	0.286
100.	14.774	34.962	2.90	25.993	0.306
110.	14.309	34.907	2.83	26.050	0.327
120.	13.996	34.976	2.80	26.171	0.346
130.	13.918	34.986	2.79	26.195	0.364
140.	13.755	34.984	2.70	26.227	0.382
150.	13.549	34.965	2.59	26.255	0.400
160.	13.415	34.951	2.51	26.271	0.418
170.	13.283	34.938	2.47	26.288	0.436
180.	13.147	34.918	2.45	26.301	0.454
190.	13.036	34.907	2.32	26.314	0.471
200.	13.026	34.906	2.25	26.316	0.489
250.	12.507	34.877	1.53	26.396	0.576
300.	11.974	34.850	0.75	26.478	0.657
350.	10.014	34.741	0.59	26.747	0.732
400.	9.010	34.683	0.84	26.869	0.798
450.	8.704	34.666	0.97	26.904	0.859
500.	7.975	34.629	1.10	26.987	0.918
550.	7.639	34.613	1.16	27.024	0.975
600.	7.190	34.596	1.31	27.074	1.029
650.	6.671	34.578	1.47	27.131	1.081
700.	6.381	34.567	1.63	27.161	1.131
750.	5.689	34.552	1.92	27.238	1.179
800.	5.436	34.550	2.01	27.267	1.224
850.	5.257	34.550	2.02	27.288	1.268
900.	5.111	34.556	1.98	27.311	1.311
950.	4.891	34.559	2.01	27.338	1.353
1000.	4.601	34.561	2.02	27.373	1.394
1037.	4.532	34.561	2.03	27.380	1.424

CAST EP2-86-OC-004 DATE 25 MAY 86 TIME 1942 GMT  
LAT 0 01.2S LONG 099 57.9W



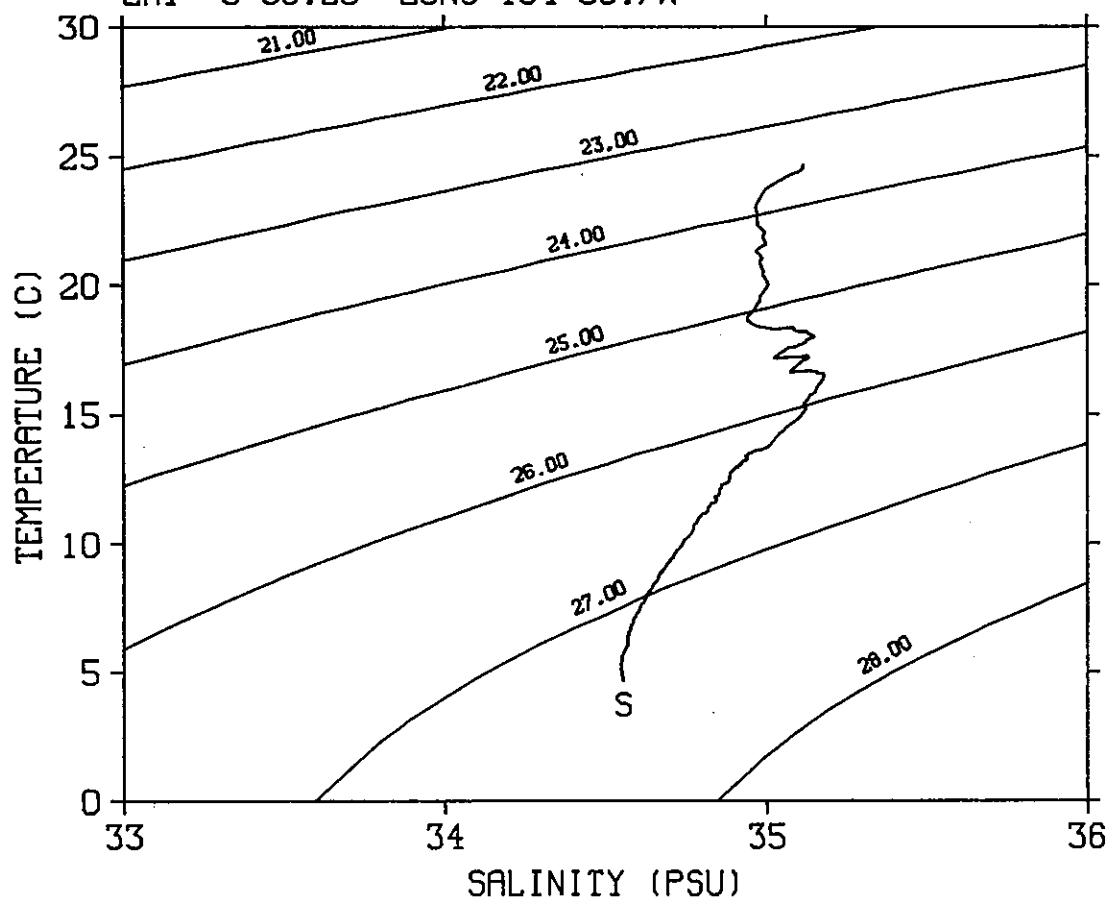
76



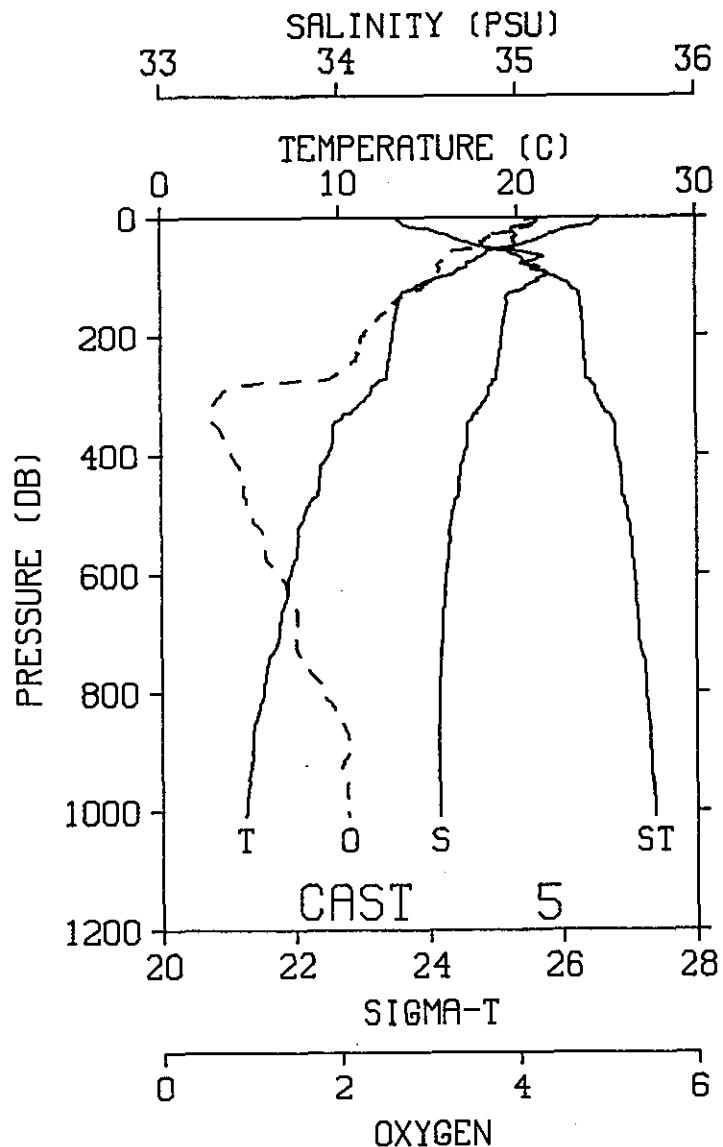
CAST EP2-86-OC-004 DATE 25 MAY 86 TIME 1942 GMT  
 LAT 0 01.2S LONG 099 57.9W WEATHER 2 SEA STATE 2  
 BAROMETER 13 WIND DIR 110 T SPD 04 KT VISIBILITY 8  
 CLOUD 6 AMOUNT 7 DRY 27.4 WET 23.8 DEPTH 3320 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.374	35.019	4.53	23.243	0.000
10.	24.965	35.018	4.92	23.367	0.046
20.	22.238	34.968	4.78	24.128	0.087
30.	20.352	34.944	4.06	24.627	0.123
40.	19.488	35.011	3.66	24.905	0.154
50.	17.542	35.173	3.39	25.518	0.182
60.	16.558	35.115	3.23	25.707	0.206
70.	16.172	35.091	3.15	25.779	0.229
80.	15.329	35.046	3.12	25.935	0.250
90.	14.762	34.959	2.98	25.993	0.270
100.	14.338	34.903	2.88	26.042	0.290
110.	13.991	34.978	2.85	26.173	0.309
120.	13.918	34.988	2.83	26.196	0.328
130.	13.778	34.986	2.76	26.223	0.346
140.	13.604	34.972	2.64	26.249	0.364
150.	13.447	34.955	2.53	26.268	0.382
160.	13.355	34.946	2.47	26.280	0.400
170.	13.165	34.922	2.39	26.300	0.418
180.	13.095	34.913	2.36	26.307	0.435
190.	13.054	34.909	2.28	26.313	0.453
200.	13.031	34.907	2.24	26.316	0.470
220.	12.925	34.900	2.09	26.331	0.505

CASI EP2-86-OC-005 DATE 26 MAY 86 TIME 2030 GMT  
LAT 0 00.2S LONG 104 58.7W



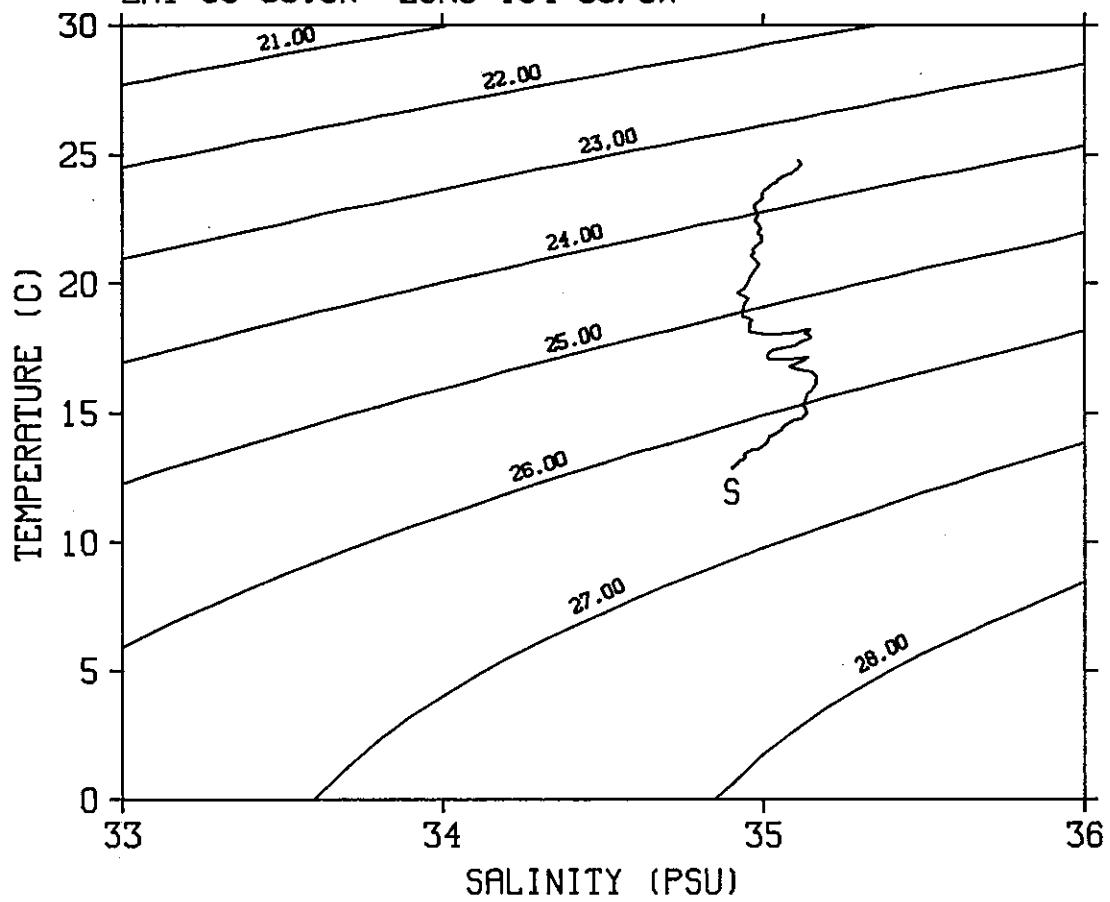
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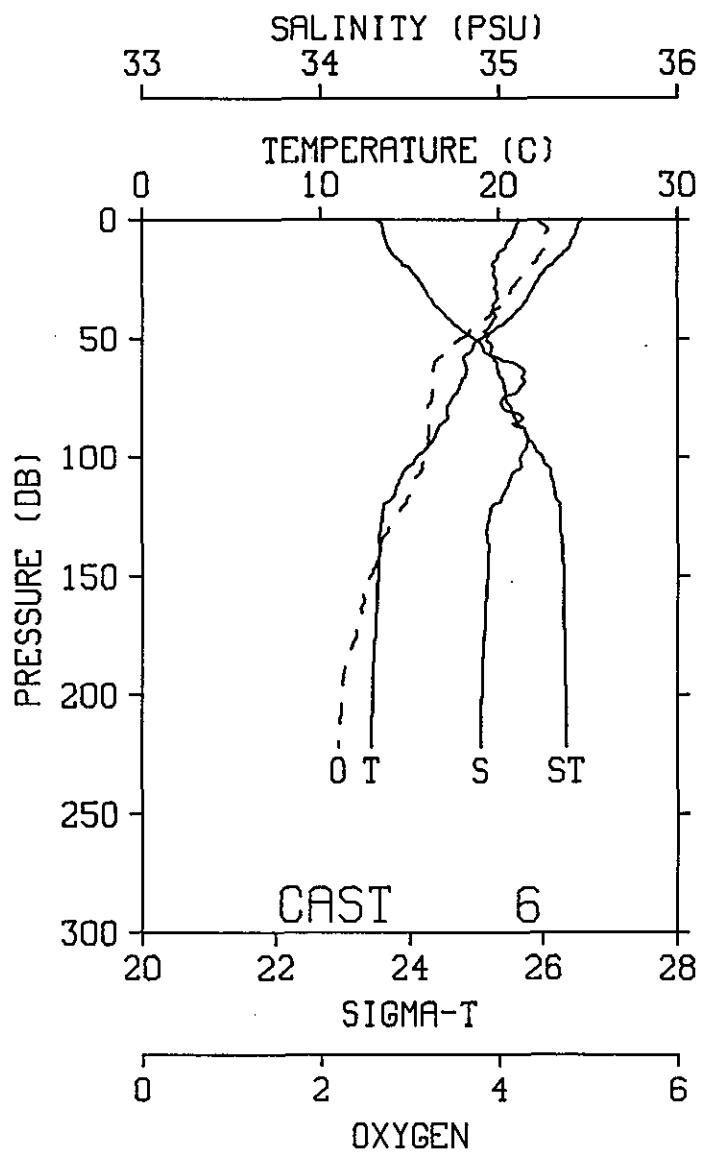


CAST EP2-86-OC-005 DATE 26 MAY 86 TIME 2030 GMT  
 LAT 0 00.2S LONG 104 58.7W WEATHER 1 SEA STATE 0  
 BAROMETER 15 WIND DIR 185 T SPD 03 KT VISIBILITY 8  
 CLOUD 2 AMOUNT 1 DRY 27.0 WET 22.8 DEPTH 3540 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.640	35.116	4.28	23.540	0.000
10.	24.344	35.097	4.20	23.614	0.043
20.	22.846	34.970	4.03	23.956	0.085
30.	21.755	34.993	3.71	24.283	0.123
40.	20.925	34.978	3.66	24.499	0.158
50.	19.766	34.991	3.52	24.818	0.191
60.	18.347	35.065	3.23	25.237	0.220
70.	17.748	35.116	3.16	25.424	0.246
80.	17.180	35.038	3.12	25.501	0.272
90.	16.706	35.134	3.12	25.688	0.296
100.	15.988	35.156	3.12	25.871	0.319
110.	14.822	35.100	3.03	26.089	0.339
120.	14.294	35.045	2.93	26.161	0.358
130.	13.505	34.952	2.80	26.253	0.376
140.	13.367	34.940	2.67	26.273	0.394
150.	13.309	34.942	2.57	26.286	0.412
160.	13.230	34.935	2.52	26.296	0.429
170.	13.167	34.928	2.46	26.304	0.447
180.	13.095	34.921	2.37	26.313	0.465
190.	13.050	34.916	2.31	26.319	0.482
200.	13.011	34.913	2.28	26.324	0.499
250.	12.767	34.890	2.11	26.355	0.586
300.	11.631	34.842	0.67	26.537	0.669
350.	9.648	34.717	0.62	26.791	0.741
400.	9.363	34.701	0.78	26.826	0.807
450.	8.830	34.671	0.92	26.888	0.870
500.	8.033	34.633	1.02	26.981	0.930
550.	7.592	34.611	1.15	27.029	0.986
600.	7.217	34.595	1.31	27.070	1.041
650.	6.887	34.585	1.45	27.108	1.094
700.	6.597	34.576	1.52	27.140	1.145
750.	5.908	34.564	1.60	27.220	1.195
800.	5.700	34.556	1.82	27.240	1.241
850.	5.216	34.552	2.01	27.295	1.286
900.	5.044	34.551	2.11	27.314	1.329
950.	4.858	34.554	2.08	27.338	1.371
1000.	4.693	34.556	2.08	27.359	1.412
1009.	4.654	34.557	2.10	27.364	1.419

CAST EP2-86-OC-006 DATE 26 MAY 86 TIME 2241 GMT  
LAT 00 00.6N LONG 104 58/8W

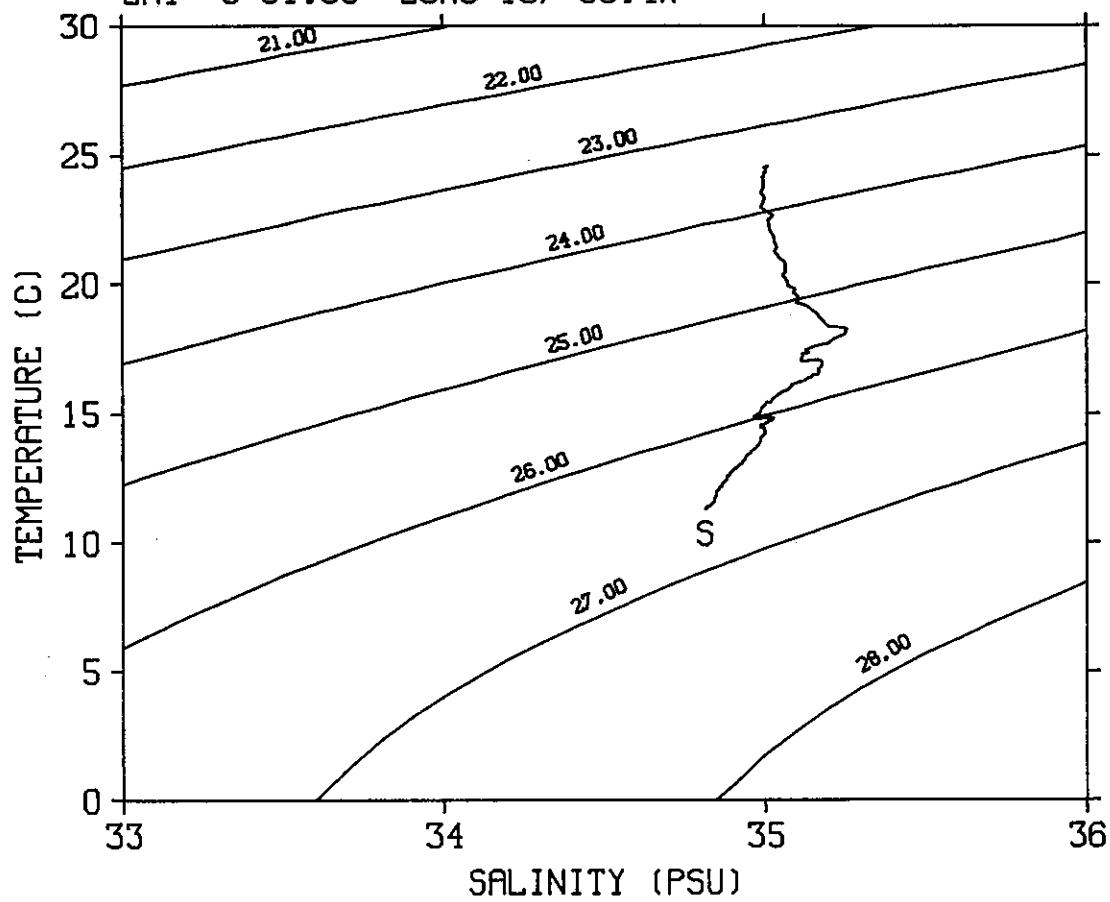


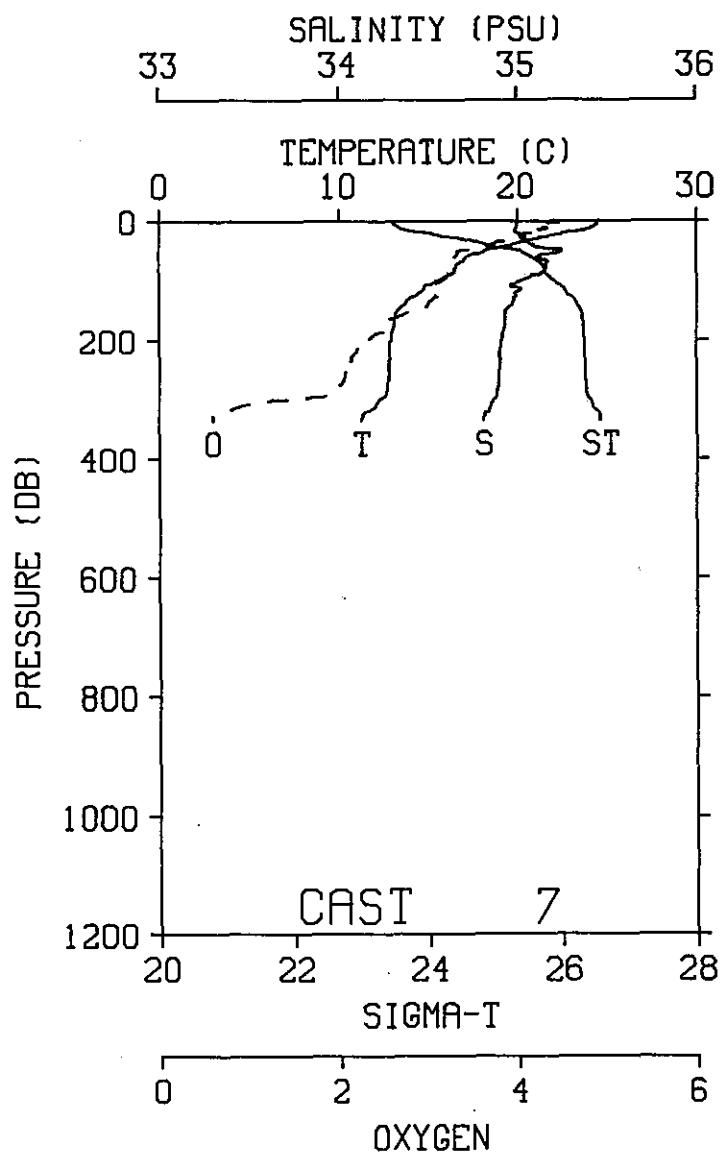


CAST EP2-86-OC-006 DATE 26 MAY 86 TIME 2241 GMT  
 LAT 00 00.6N LONG 104 58/8W WEATHER 1 SEA STATE 1  
 BAROMETER 13 WIND DIR 190 T SPD 03 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 5 DRY 26.0 WET 23.3 DEPTH 3600 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.741	35.109	4.45	23.504	0.000
10.	24.040	35.046	4.54	23.666	0.043
20.	22.802	34.979	4.33	23.976	0.084
30.	21.826	34.994	4.14	24.263	0.122
40.	20.795	34.982	3.90	24.537	0.157
50.	18.991	34.936	3.58	24.975	0.189
60.	18.081	35.079	3.29	25.313	0.218
70.	17.799	35.127	3.27	25.420	0.244
80.	17.074	35.034	3.19	25.523	0.269
90.	16.511	35.158	3.22	25.752	0.293
100.	15.378	35.126	3.19	25.986	0.315
110.	14.432	35.062	3.04	26.144	0.334
120.	13.593	34.980	2.96	26.257	0.353
130.	13.398	34.938	2.77	26.265	0.371
140.	13.312	34.944	2.65	26.287	0.388
150.	13.249	34.939	2.56	26.296	0.406
160.	13.167	34.929	2.49	26.305	0.424
170.	13.118	34.924	2.42	26.311	0.441
180.	13.056	34.918	2.35	26.319	0.458
190.	12.976	34.911	2.27	26.329	0.476
200.	12.935	34.906	2.25	26.334	0.493
222.	12.848	34.898	2.20	26.345	0.531

CAST EP2-86-OC-007 DATE 28 MAY 86 TIME 0212 GMT  
LAT 0 01.9S LONG 107 56.4W

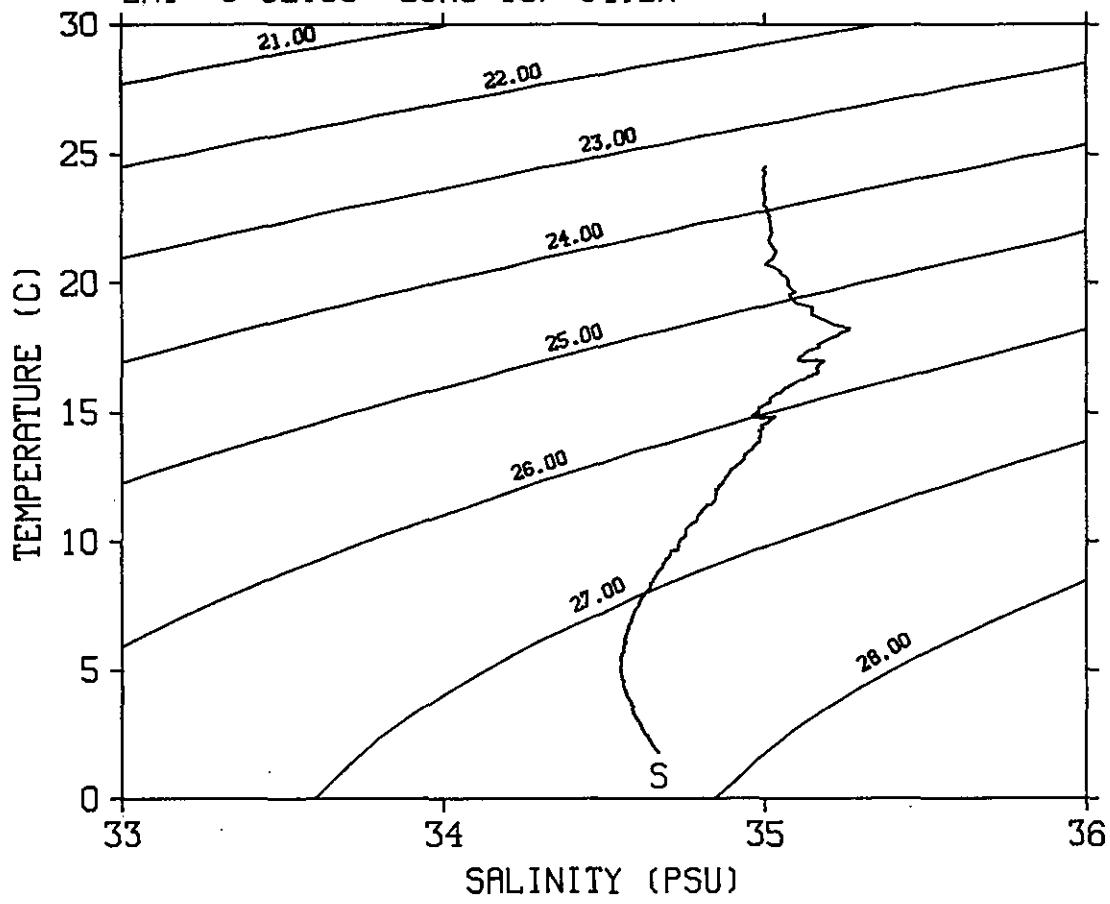




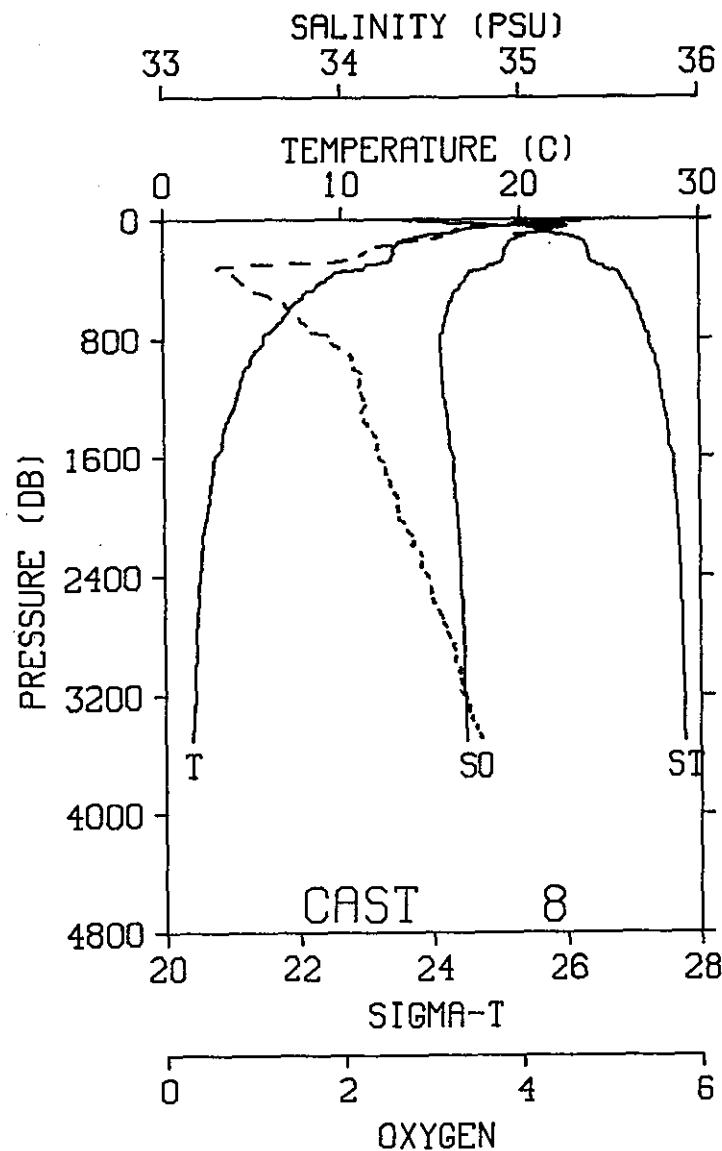
CAST EP2-86-OC-007 DATE 28 MAY 86 TIME 0212 GMT  
 LAT 0 01.9S LONG 107 56.4W WEATHER 1 SEA STATE 1  
 BAROMETER 13 WIND DIR 150 T SPD 10 KT VISIBILITY 7  
 CLOUD X AMOUNT 9 DRY 24.5 WET 23.5 DEPTH 3680 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.563	35.007	4.42	23.481	0.000
10.	24.310	34.992	4.32	23.545	0.044
20.	22.932	34.987	4.23	23.945	0.086
30.	21.148	35.036	3.95	24.482	0.123
40.	19.788	35.092	3.73	24.889	0.155
50.	18.247	35.257	3.39	25.409	0.183
60.	17.257	35.115	3.31	25.542	0.209
70.	16.763	35.168	3.27	25.701	0.232
80.	16.532	35.166	3.24	25.753	0.255
90.	16.292	35.122	3.24	25.775	0.278
100.	15.499	35.020	3.15	25.877	0.300
110.	14.794	34.963	3.06	25.989	0.321
120.	14.534	34.985	3.09	26.063	0.340
130.	13.999	34.984	3.05	26.176	0.360
140.	13.697	34.974	3.00	26.231	0.378
150.	13.308	34.937	2.81	26.283	0.396
160.	13.162	34.933	2.67	26.309	0.413
170.	13.113	34.931	2.59	26.317	0.431
180.	13.076	34.928	2.53	26.323	0.448
190.	12.993	34.920	2.39	26.333	0.466
200.	12.934	34.914	2.32	26.340	0.483
250.	12.803	34.900	2.09	26.355	0.569
300.	12.262	34.865	1.31	26.435	0.655
335.	11.284	34.811	0.59	26.577	0.710

CAST EP2-86-OC-008 DATE 28 MAY 86 TIME 0425 GMT  
LAT 0 02.8S LONG 107 54.2W

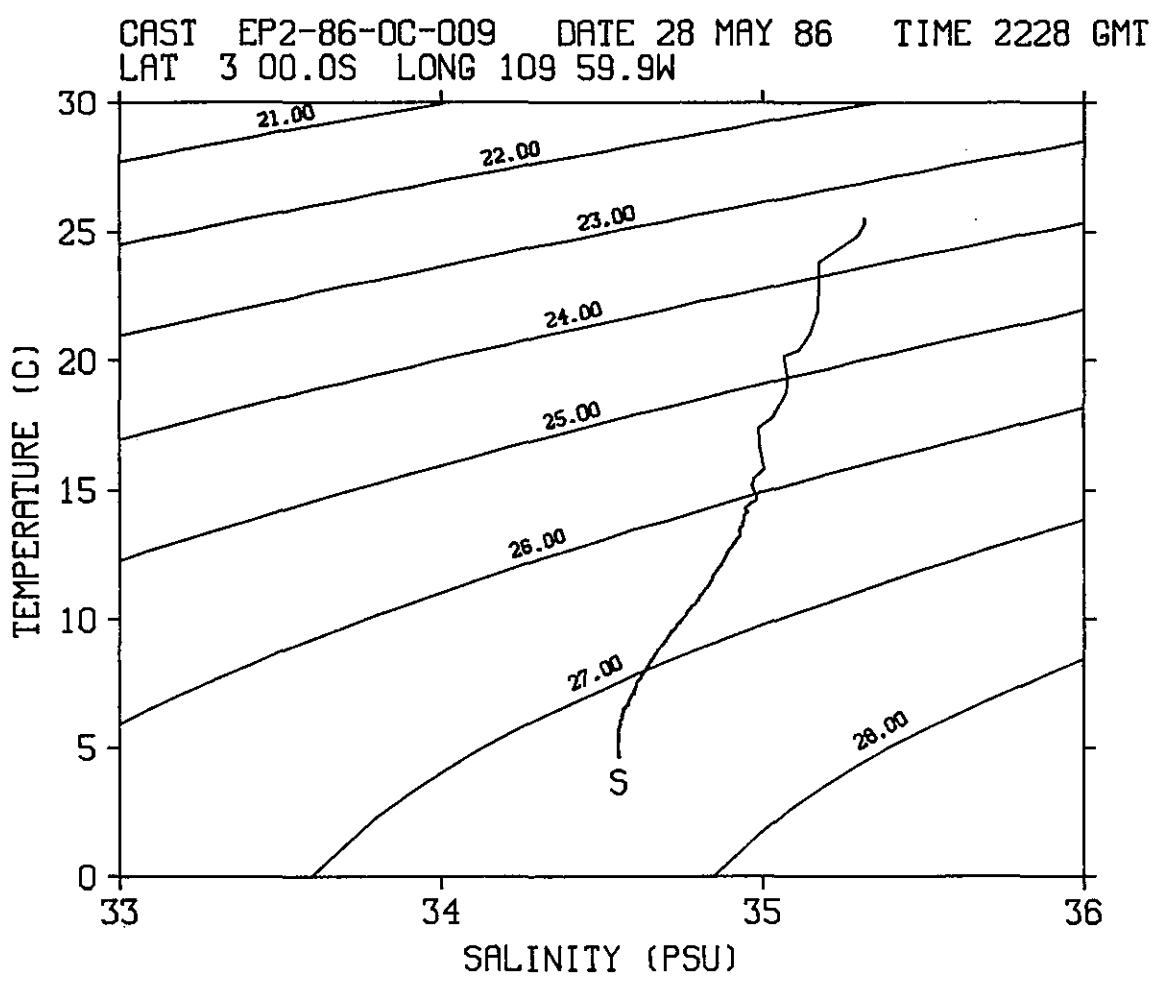


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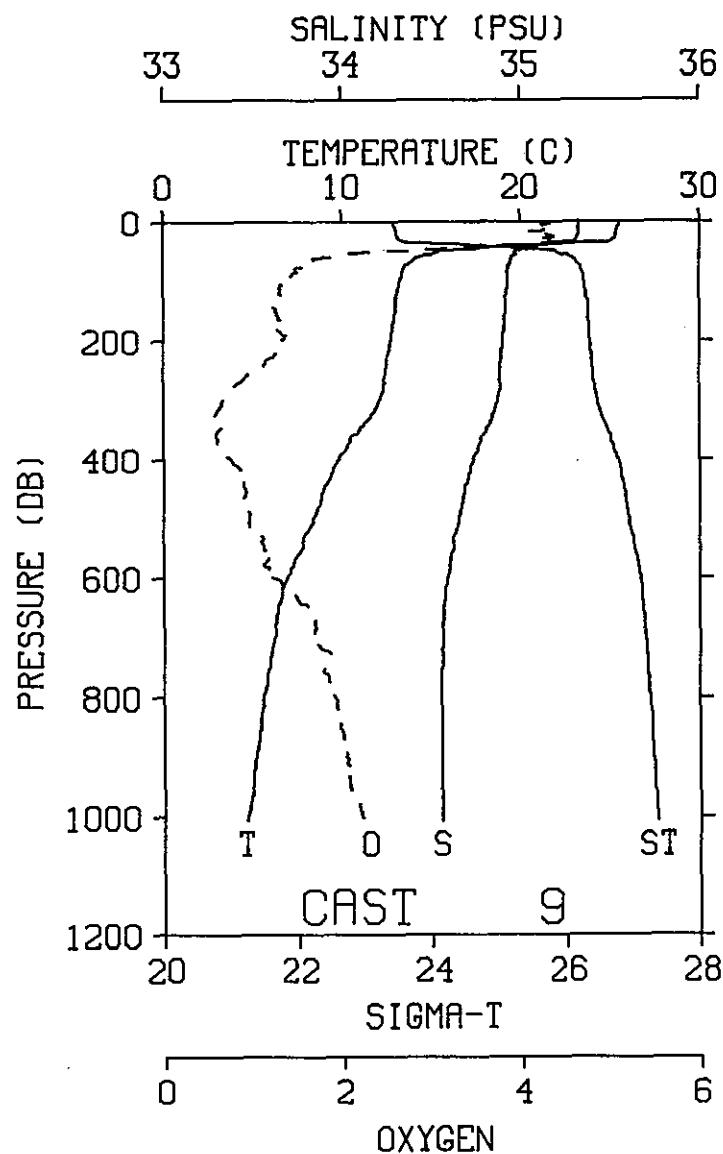


CAST EP2-86-OC-008 DATE 28 MAY 86 TIME 0425 GMT  
 LAT 0 02.8S LONG 107.54.2W WEATHER 1 SEA STATE 1  
 BAROMETER 15 WIND DIR 140 T SPD 10 KT VISIBILITY 7  
 CLOUD X AMOUNT 9 DRY 24.5 WET 23.3 DEPTH 3690 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.506	35.006	4.41	23.497	0.000
10.	23.626	34.994	4.38	23.749	0.043
20.	22.870	35.008	4.20	23.979	0.084
30.	21.115	35.035	4.08	24.491	0.120
40.	19.694	35.090	3.72	24.912	0.153
50.	18.223	35.265	3.43	25.421	0.180
60.	17.385	35.136	3.33	25.527	0.206
70.	16.888	35.177	3.29	25.678	0.230
80.	16.500	35.163	3.26	25.758	0.252
90.	16.121	35.092	3.24	25.792	0.275
100.	15.514	35.018	3.16	25.872	0.297
110.	14.771	34.970	3.08	26.000	0.318
120.	14.466	34.988	3.08	26.079	0.337
130.	13.917	34.981	3.02	26.190	0.356
140.	13.564	34.963	3.00	26.250	0.375
150.	13.265	34.937	2.75	26.292	0.392
160.	13.159	34.934	2.61	26.311	0.410
170.	13.122	34.933	2.57	26.317	0.427
180.	13.039	34.926	2.47	26.328	0.445
190.	12.956	34.918	2.35	26.339	0.462
200.	12.919	34.914	2.30	26.343	0.479
250.	12.802	34.901	2.15	26.356	0.565
300.	12.033	34.855	1.05	26.471	0.650
350.	9.813	34.734	0.65	26.776	0.726
400.	9.170	34.689	0.84	26.847	0.791
450.	8.581	34.658	0.98	26.917	0.853
500.	7.889	34.623	1.15	26.995	0.911
550.	7.437	34.606	1.26	27.047	0.967
600.	7.037	34.589	1.40	27.090	1.021
650.	6.713	34.579	1.51	27.126	1.073
700.	6.389	34.568	1.59	27.161	1.124
750.	6.083	34.566	1.66	27.200	1.172
800.	5.606	34.555	1.88	27.251	1.219
850.	5.438	34.554	1.95	27.270	1.264
900.	5.020	34.552	2.08	27.318	1.307
950.	4.821	34.554	2.10	27.342	1.349
1000.	4.522	34.559	2.11	27.379	1.390
1500.	3.247	34.597	2.37	27.541	1.748
2000.	2.369	34.640	2.61	27.653	2.034
2500.	1.930	34.662	3.00	27.707	2.284
3000.	1.704	34.677	3.27	27.736	2.518
3500.	1.517	34.689	3.55	27.759	2.745
3507.	1.512	34.690	3.57	27.760	2.748



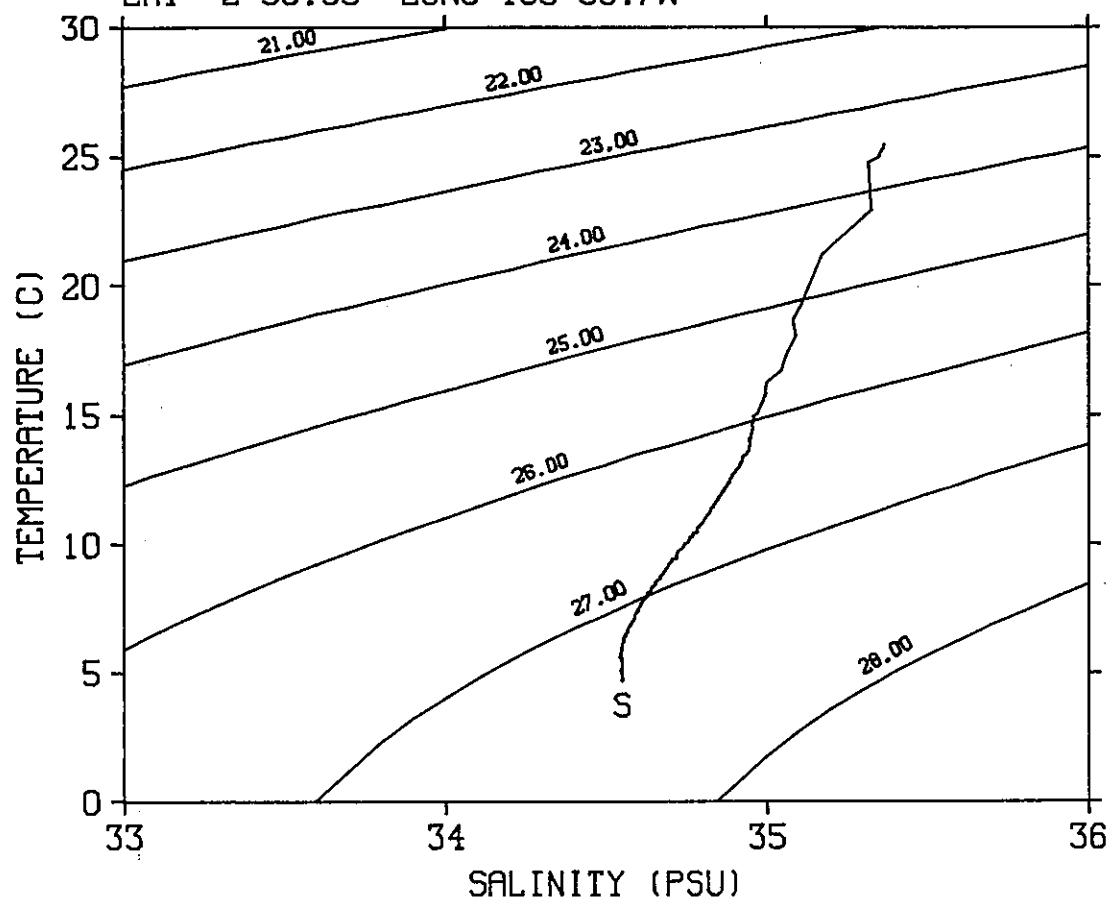
L4

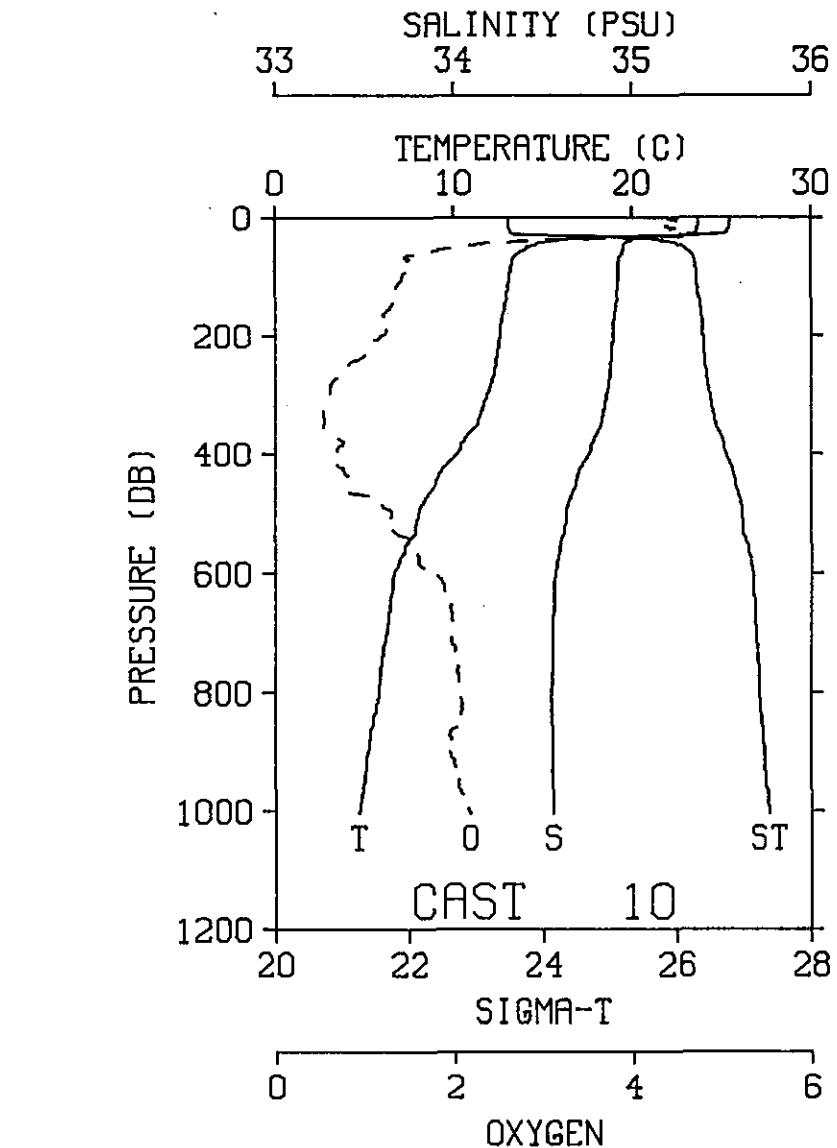


CAST EP2-86-OC-009 DATE 28 MAY 86 TIME 2228 GMT  
 LAT 3 00.0S LONG 109 59.9W WEATHER 0 SEA STATE 2  
 BAROMETER 11 WIND DIR 110 T SPD 16 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 2 DRY 25.1 WET 24.0 DEPTH 3760 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.506	35.319	4.25	23.429	0.000
10.	25.397	35.319	4.35	23.463	0.044
20.	25.306	35.318	4.21	23.490	0.088
30.	25.188	35.314	4.20	23.523	0.132
40.	20.399	35.113	3.88	24.743	0.172
50.	15.432	34.968	2.47	25.853	0.199
60.	14.284	34.946	1.85	26.086	0.219
70.	13.780	34.942	1.65	26.189	0.238
80.	13.489	34.928	1.48	26.239	0.256
90.	13.363	34.929	1.44	26.265	0.274
100.	13.285	34.928	1.29	26.280	0.291
110.	13.234	34.930	1.30	26.292	0.309
120.	13.121	34.922	1.29	26.309	0.326
130.	13.024	34.916	1.32	26.323	0.344
140.	12.979	34.914	1.26	26.331	0.361
150.	12.966	34.912	1.24	26.332	0.378
160.	12.924	34.909	1.29	26.339	0.395
170.	12.884	34.907	1.31	26.344	0.412
180.	12.837	34.905	1.26	26.353	0.429
190.	12.755	34.900	1.36	26.365	0.447
200.	12.724	34.898	1.31	26.370	0.463
250.	12.443	34.885	1.07	26.415	0.548
300.	12.077	34.870	0.66	26.474	0.630
350.	10.963	34.807	0.61	26.632	0.708
400.	9.800	34.733	0.76	26.778	0.778
450.	8.952	34.683	0.91	26.878	0.843
500.	8.392	34.653	0.95	26.942	0.904
550.	7.734	34.621	1.11	27.016	0.962
600.	6.880	34.586	1.21	27.110	1.016
650.	6.392	34.567	1.64	27.160	1.066
700.	6.184	34.562	1.70	27.183	1.115
750.	5.895	34.557	1.78	27.216	1.163
800.	5.540	34.551	1.92	27.255	1.209
850.	5.358	34.551	1.97	27.277	1.254
900.	5.121	34.550	2.04	27.305	1.297
950.	4.959	34.552	2.07	27.325	1.340
1000.	4.622	34.552	2.22	27.363	1.381
1006.	4.592	34.552	2.30	27.367	1.386

CAST EP2-86-OC-010 DATE 29 MAY 86 TIME 0217 GMT  
LAT 230.3S LONG 109 59.7W

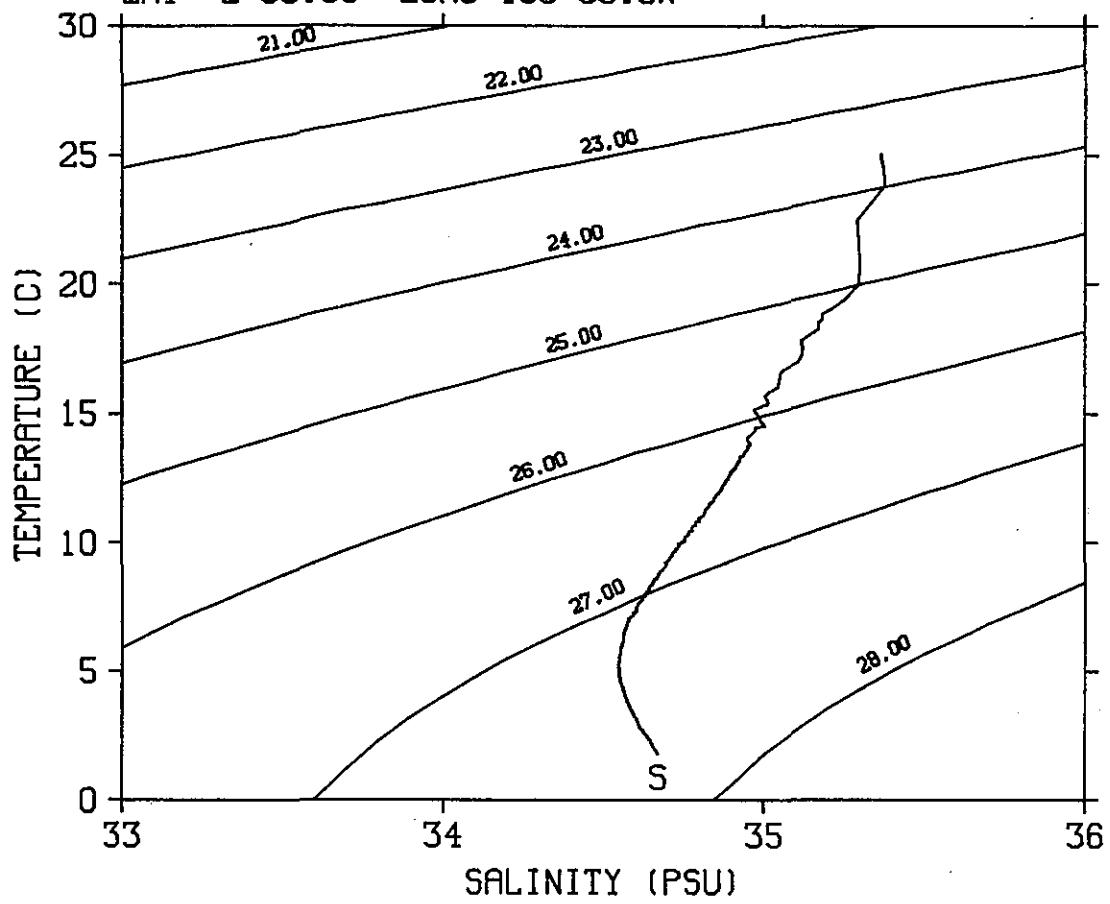


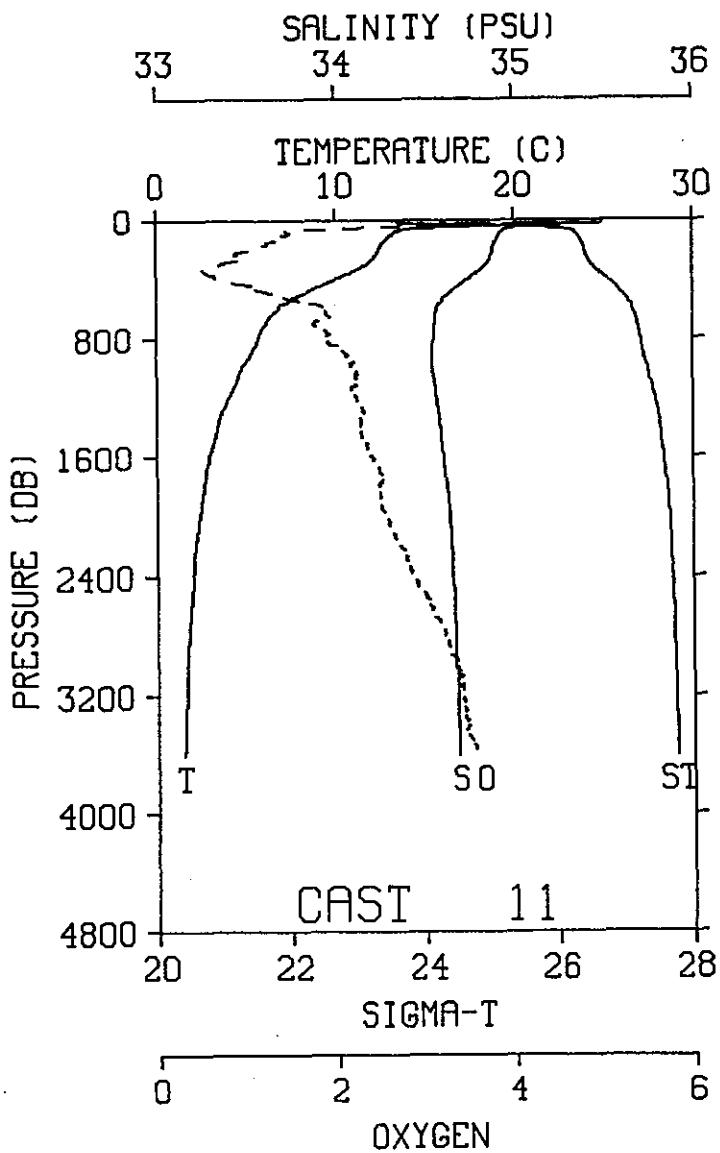


CAST EP2-86-OC-010 DATE 29 MAY 86 TIME 0217 GMT  
 LAT 23° 30.3S LONG 109° 59.7W WEATHER 1 SEA STATE 4  
 BAROMETER 13 WIND DIR 135 T SPD 16 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 25.0 WET 22.5 DEPTH 3865 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.437	35.369	4.48	23.488	0.000
10.	25.430	35.367	4.46	23.489	0.044
20.	25.379	35.365	4.45	23.503	0.088
30.	22.899	35.325	4.65	24.211	0.131
40.	15.389	34.983	2.74	25.873	0.157
50.	14.183	34.952	2.02	26.112	0.177
60.	13.674	34.946	1.66	26.214	0.196
70.	13.385	34.927	1.51	26.259	0.213
80.	13.293	34.927	1.53	26.278	0.231
90.	13.199	34.923	1.48	26.294	0.249
100.	13.172	34.923	1.42	26.299	0.266
110.	13.121	34.921	1.39	26.308	0.283
120.	13.099	34.921	1.36	26.312	0.301
130.	13.015	34.917	1.34	26.326	0.318
140.	12.953	34.913	1.35	26.335	0.335
150.	12.859	34.906	1.30	26.349	0.352
160.	12.811	34.904	1.23	26.357	0.369
170.	12.712	34.898	1.24	26.372	0.386
180.	12.667	34.895	1.26	26.379	0.403
190.	12.634	34.893	1.25	26.384	0.420
200.	12.603	34.893	1.18	26.389	0.437
250.	12.357	34.881	0.81	26.429	0.520
300.	11.878	34.856	0.61	26.501	0.601
350.	11.355	34.827	0.55	26.577	0.679
400.	10.164	34.763	0.75	26.739	0.752
450.	8.967	34.684	0.85	26.876	0.817
500.	8.031	34.631	1.31	26.980	0.877
550.	7.346	34.599	1.55	27.055	0.933
600.	6.605	34.567	1.82	27.132	0.986
650.	6.404	34.559	1.94	27.152	1.036
700.	6.221	34.557	1.98	27.174	1.085
750.	5.928	34.551	2.04	27.207	1.134
800.	5.779	34.549	2.07	27.224	1.181
850.	5.446	34.549	2.10	27.265	1.227
900.	5.183	34.552	1.95	27.299	1.271
950.	4.986	34.552	2.04	27.322	1.313
1000.	4.660	34.554	2.16	27.361	1.355
1005.	4.654	34.553	2.18	27.361	1.359

CAST EP2-86-OC-011 DATE 29 MAY 86 TIME 0730 GMT  
LAT 20 03.8S LONG 109 55.9W

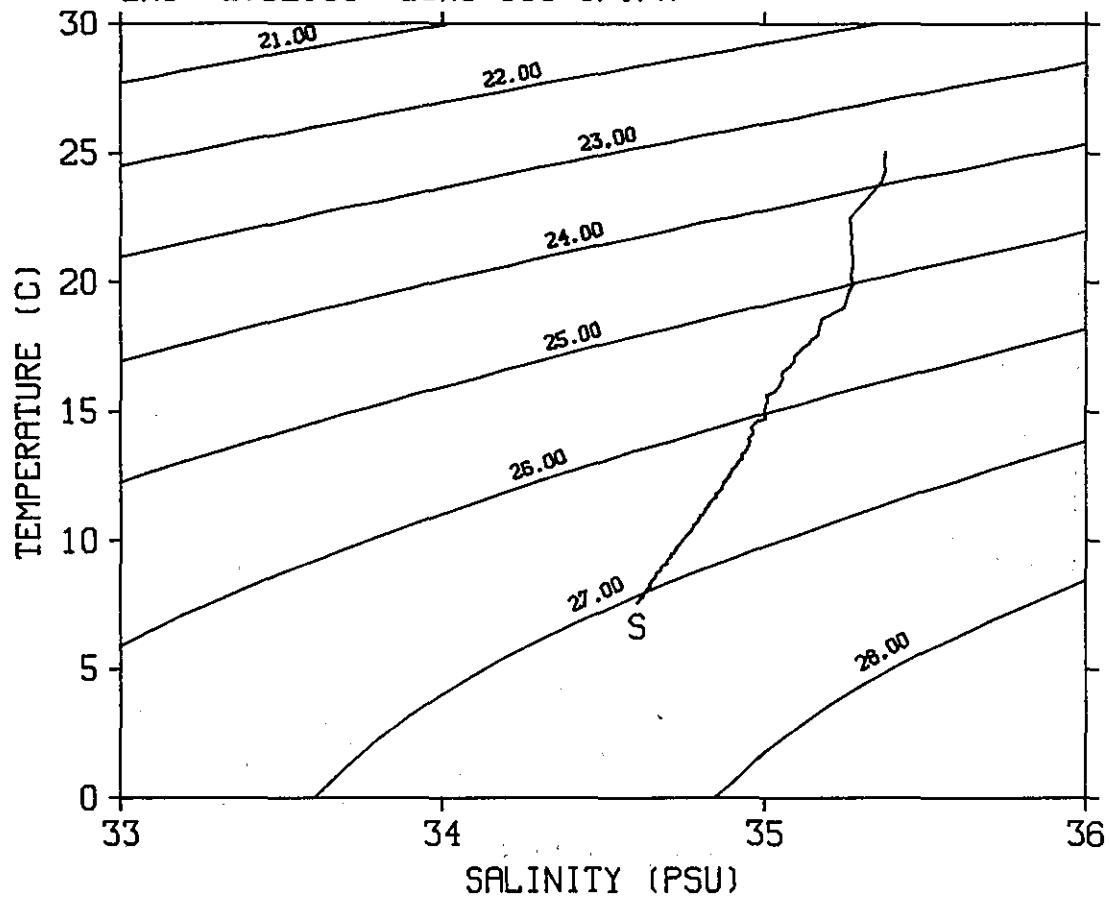




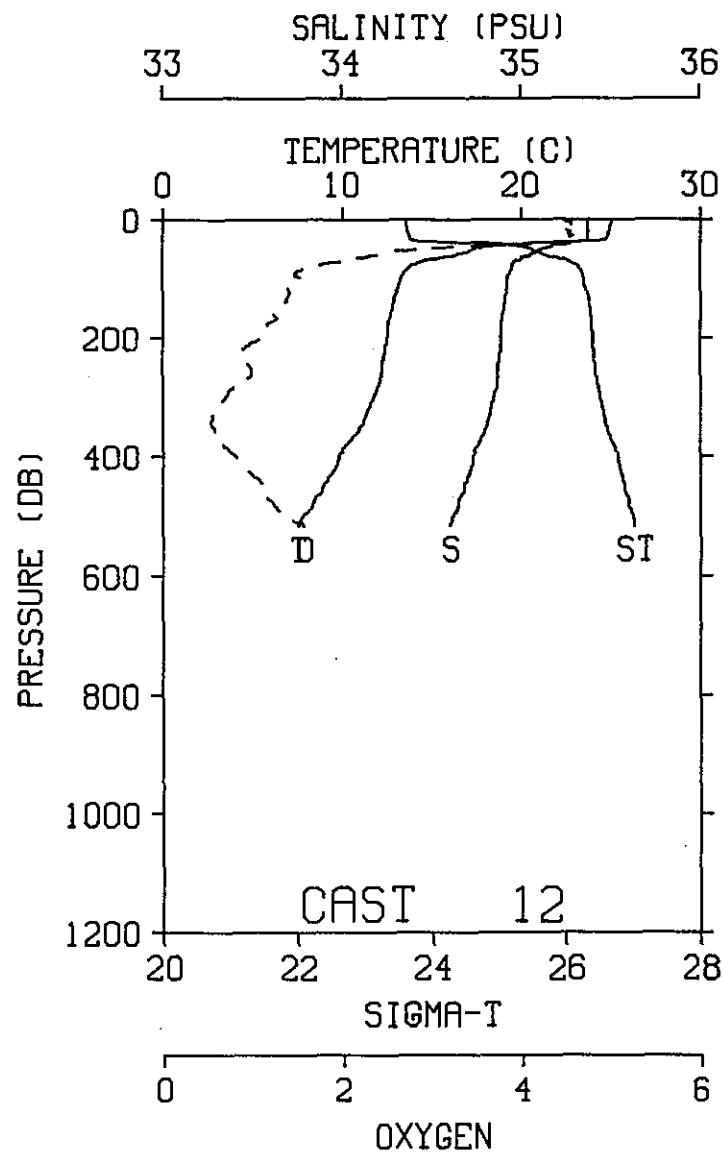
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 LAT 2 03.8S LONG 109 55.9W WEATHER 1 SEA STATE 2  
 BAROMETER 14 WIND DIR 115 T SPD 14 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 3 DRY 25.0 WET 22.8 DEPTH 3940 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.007	35.359	4.67	23.612	0.000
10.	25.012	35.360	4.35	23.611	0.043
20.	25.007	35.360	4.29	23.613	0.085
30.	23.808	35.370	4.40	23.980	0.128
40.	18.043	35.138	3.18	25.368	0.157
50.	15.819	35.016	2.44	25.802	0.181
60.	14.329	34.971	1.97	26.096	0.202
70.	13.652	34.950	1.52	26.222	0.220
80.	13.438	34.940	1.47	26.258	0.238
90.	13.311	34.925	1.50	26.273	0.256
100.	13.214	34.926	1.44	26.293	0.274
110.	13.076	34.919	1.41	26.315	0.291
120.	12.990	34.914	1.36	26.329	0.308
130.	12.926	34.913	1.35	26.341	0.325
140.	12.806	34.905	1.32	26.358	0.342
150.	12.769	34.901	1.25	26.363	0.359
160.	12.687	34.897	1.26	26.376	0.376
170.	12.628	34.894	1.20	26.385	0.393
180.	12.562	34.890	1.14	26.395	0.409
190.	12.539	34.889	1.10	26.399	0.426
200.	12.493	34.888	1.05	26.407	0.443
250.	12.244	34.872	0.98	26.443	0.525
300.	11.829	34.850	0.70	26.505	0.606
350.	10.970	34.800	0.56	26.626	0.683
400.	9.986	34.741	0.75	26.753	0.754
450.	9.025	34.687	1.06	26.870	0.820
500.	8.152	34.642	1.30	26.970	0.881
550.	7.456	34.601	1.60	27.041	0.937
600.	6.837	34.574	1.86	27.106	0.990
650.	6.405	34.561	1.94	27.154	1.040
700.	6.166	34.561	1.76	27.185	1.089
750.	5.883	34.554	1.91	27.215	1.137
800.	5.707	34.553	1.91	27.236	1.183
850.	5.556	34.550	2.02	27.252	1.230
900.	5.327	34.548	2.12	27.278	1.275
950.	5.069	34.547	2.20	27.308	1.319
1000.	4.792	34.551	2.21	27.343	1.361
1500.	3.241	34.598	2.35	27.541	1.722
2000.	2.401	34.640	2.57	27.651	2.012
2500.	1.961	34.660	2.98	27.703	2.267
3000.	1.678	34.675	3.35	27.736	2.502
3500.	1.566	34.685	3.52	27.753	2.728
3604.	1.508	34.690	3.66	27.761	2.774

CAST EP2-86-OC-012 DATE 30 MAY 86 TIME 0157 GMT  
LAT 2.02.5S LONG 109 57.7W



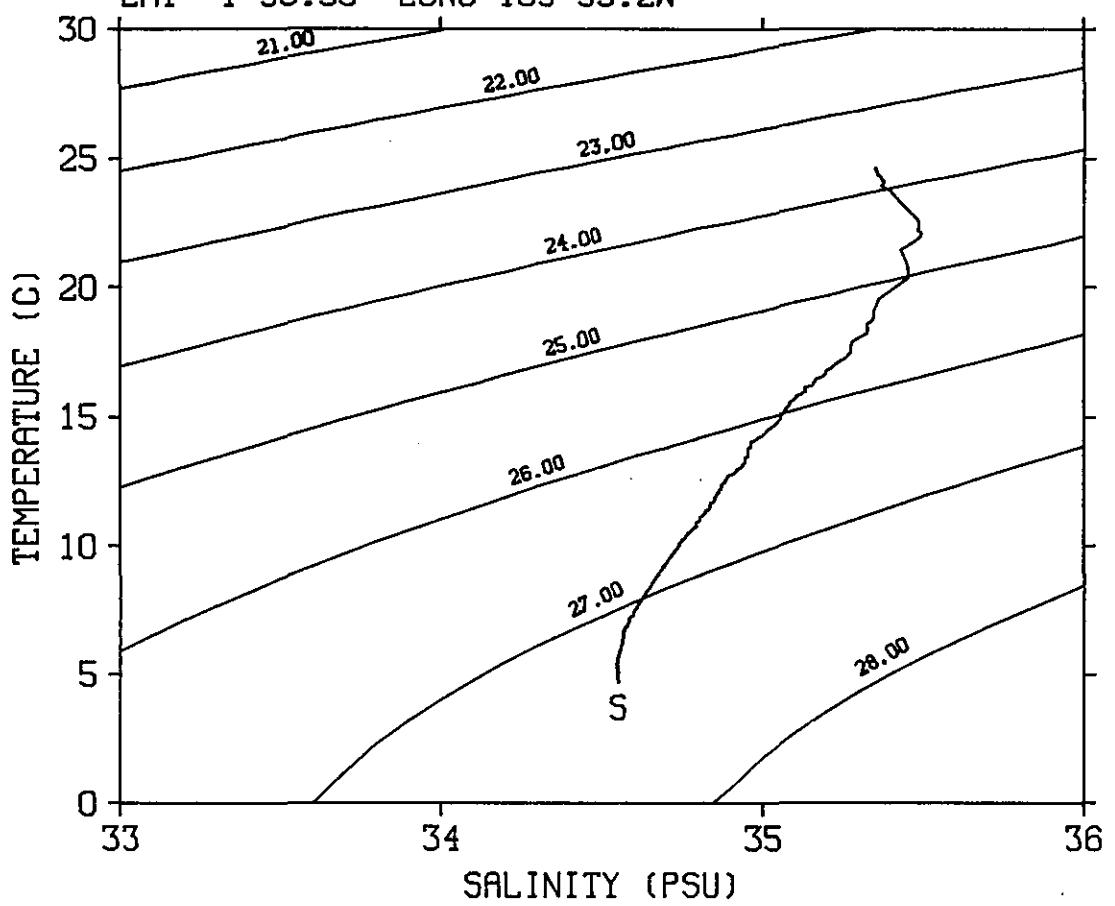
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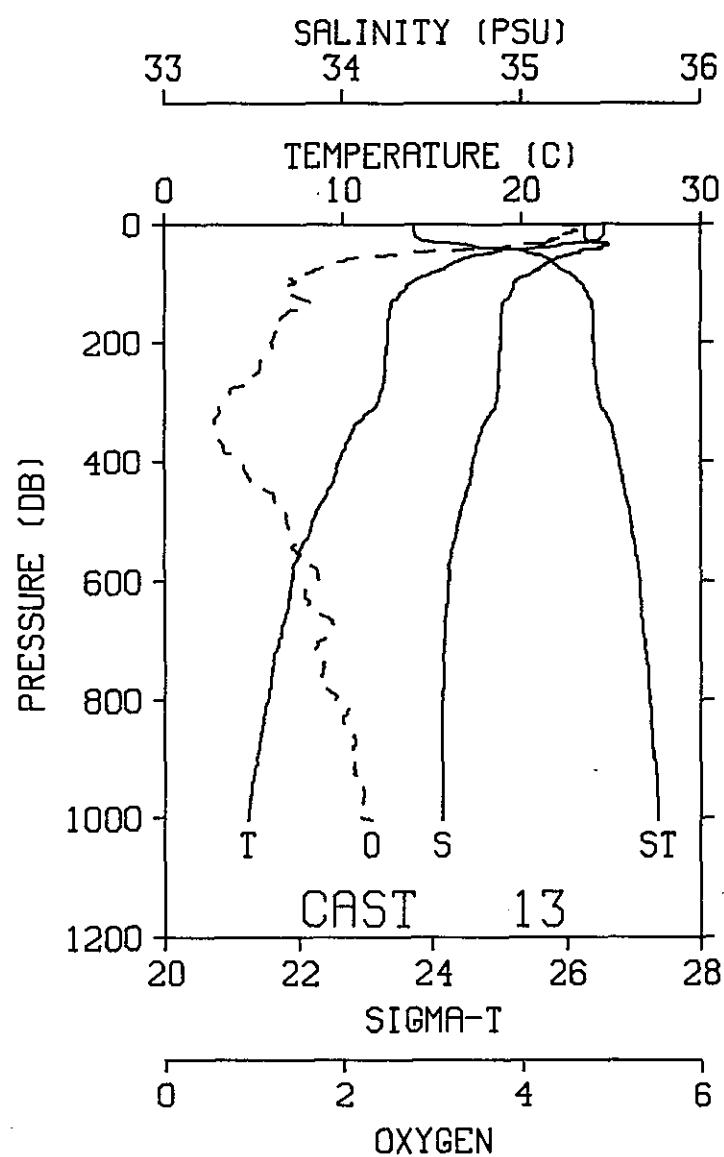
CAST EP2-86-OC-012 DATE 30 MAY 86 TIME 0157 GMT  
 LAT 2.025S LONG 109 57.7W WEATHER 0 SEA STATE 3  
 BAROMETER 14 WIND DIR 110 T SPD 06 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 1 DRY 25.0 WET 23.0 DEPTH 3980 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.007	35.377	4.49	23.626	0.000
10.	25.009	35.376	4.52	23.625	0.043
20.	24.960	35.374	4.52	23.638	0.085
30.	24.835	35.374	4.54	23.676	0.127
40.	20.644	35.275	4.49	24.801	0.168
50.	17.521	35.124	2.97	25.486	0.195
60.	16.448	35.052	2.36	25.685	0.220
70.	14.613	34.976	2.08	26.038	0.241
80.	13.793	34.954	1.73	26.196	0.260
90.	13.508	34.943	1.47	26.246	0.278
100.	13.284	34.928	1.52	26.281	0.296
110.	13.221	34.927	1.46	26.293	0.313
120.	13.077	34.918	1.40	26.314	0.331
130.	12.942	34.914	1.39	26.338	0.348
140.	12.872	34.908	1.38	26.348	0.365
150.	12.789	34.903	1.29	26.360	0.382
160.	12.717	34.898	1.25	26.371	0.399
170.	12.631	34.895	1.25	26.385	0.416
180.	12.559	34.890	1.16	26.396	0.432
190.	12.542	34.889	1.10	26.399	0.449
200.	12.528	34.889	1.09	26.402	0.466
250.	12.237	34.872	0.98	26.445	0.548
300.	11.760	34.847	0.69	26.516	0.629
350.	11.037	34.808	0.55	26.620	0.706
400.	9.797	34.729	0.81	26.775	0.777
450.	8.923	34.683	1.09	26.883	0.842
500.	7.817	34.621	1.35	27.004	0.901
515.	7.553	34.606	1.58	27.031	0.918

CAST EP2-86-OC-013 DATE 30 MAY 86 TIME 0557 GMT  
LAT 1 30.5S LONG 109 59.2W

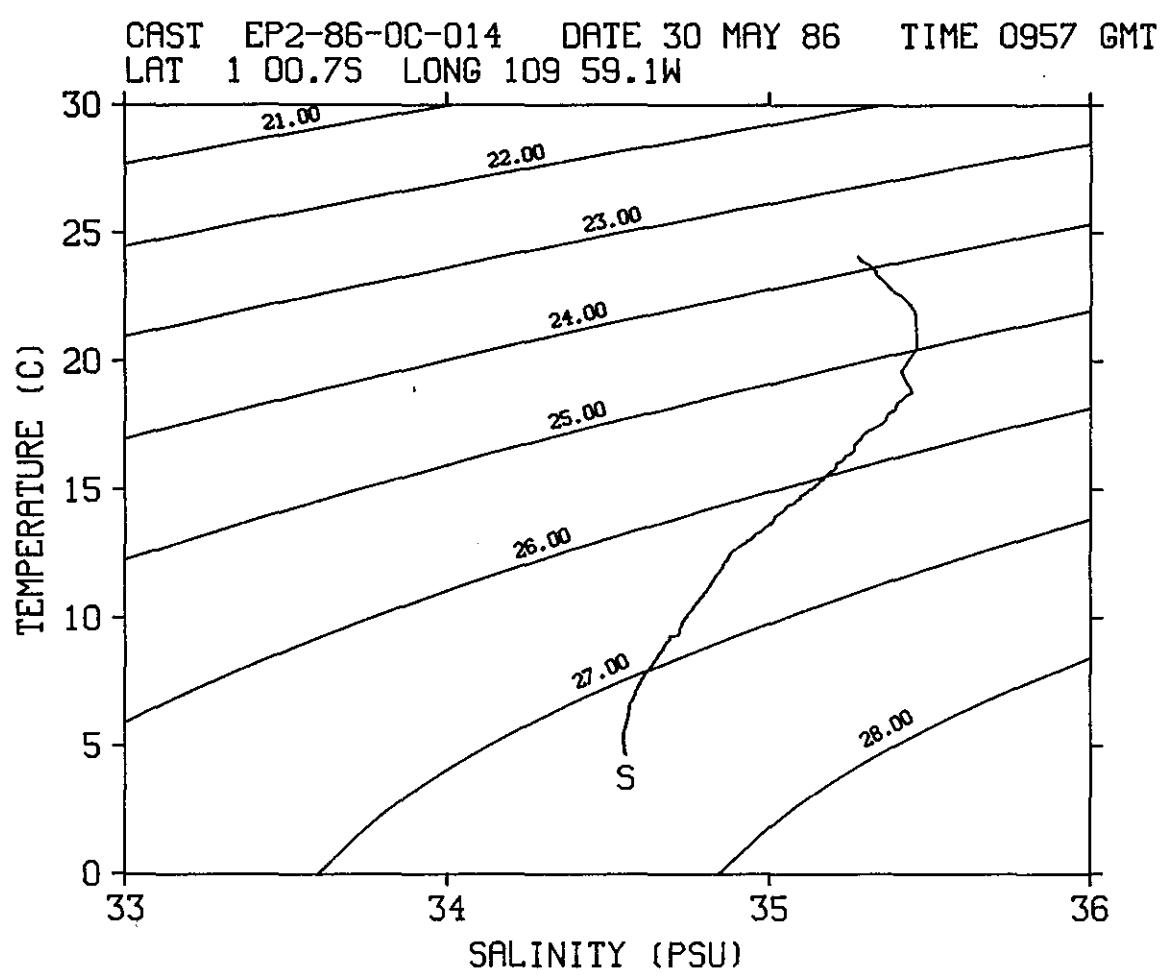


SS

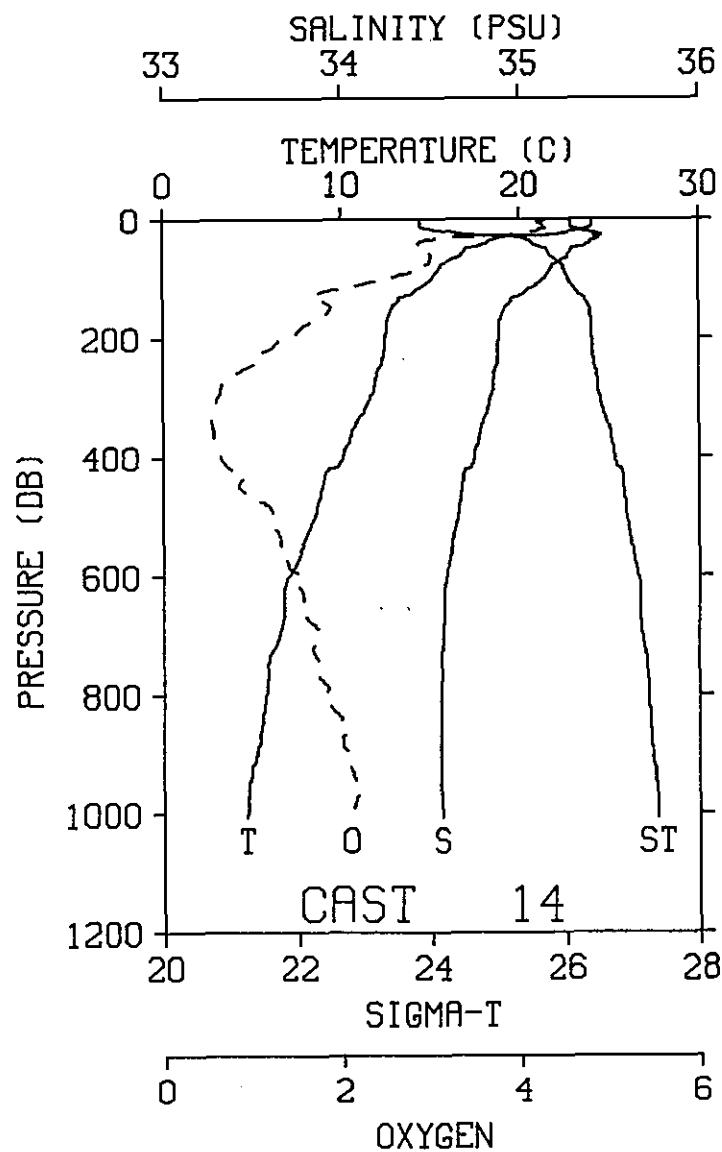


CAST EP2-86-OC-013 DATE 30 MAY 86 TIME 0557 GMT  
 LAT 1 30.5S LONG 109 59.2W WEATHER 0 SEA STATE 1  
 BAROMETER 15 WIND DIR 110 T SPD 10 KT VISIBILITY 8  
 CLOUD X AMOUNT 0 DRY 24.2 WET 22.5 DEPTH 3840 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.609	35.349	4.46	23.725	0.000
10.	24.597	35.348	4.59	23.728	0.042
20.	24.532	35.349	4.43	23.749	0.083
30.	23.691	35.399	4.23	24.037	0.124
40.	20.825	35.450	3.65	24.886	0.158
50.	18.033	35.293	2.66	25.490	0.185
60.	16.554	35.183	2.04	25.761	0.208
70.	15.888	35.121	1.83	25.867	0.230
80.	15.253	35.069	1.66	25.970	0.251
90.	14.240	34.994	1.38	26.132	0.271
100.	13.684	34.952	1.42	26.217	0.289
110.	13.434	34.951	1.33	26.267	0.307
120.	13.128	34.936	1.46	26.318	0.325
130.	12.716	34.896	1.64	26.370	0.342
140.	12.636	34.888	1.51	26.379	0.359
150.	12.586	34.886	1.36	26.387	0.375
160.	12.554	34.885	1.29	26.393	0.392
170.	12.527	34.883	1.21	26.397	0.409
180.	12.518	34.883	1.24	26.398	0.425
190.	12.514	34.883	1.22	26.399	0.442
200.	12.497	34.882	1.19	26.402	0.459
250.	12.309	34.870	1.06	26.429	0.541
300.	11.939	34.856	0.64	26.489	0.623
350.	10.519	34.773	0.55	26.685	0.698
400.	9.742	34.725	0.84	26.782	0.767
450.	9.042	34.685	1.16	26.865	0.833
500.	8.241	34.640	1.37	26.955	0.894
550.	7.523	34.605	1.47	27.034	0.951
600.	7.065	34.586	1.70	27.084	1.005
650.	6.851	34.577	1.67	27.106	1.058
700.	6.342	34.565	1.74	27.165	1.109
750.	5.972	34.561	1.77	27.209	1.157
800.	5.744	34.555	1.91	27.233	1.204
850.	5.451	34.549	2.03	27.265	1.250
900.	5.140	34.550	2.10	27.303	1.294
950.	4.832	34.551	2.21	27.338	1.336
1000.	4.641	34.553	2.20	27.361	1.377
1005.	4.633	34.552	2.31	27.362	1.381



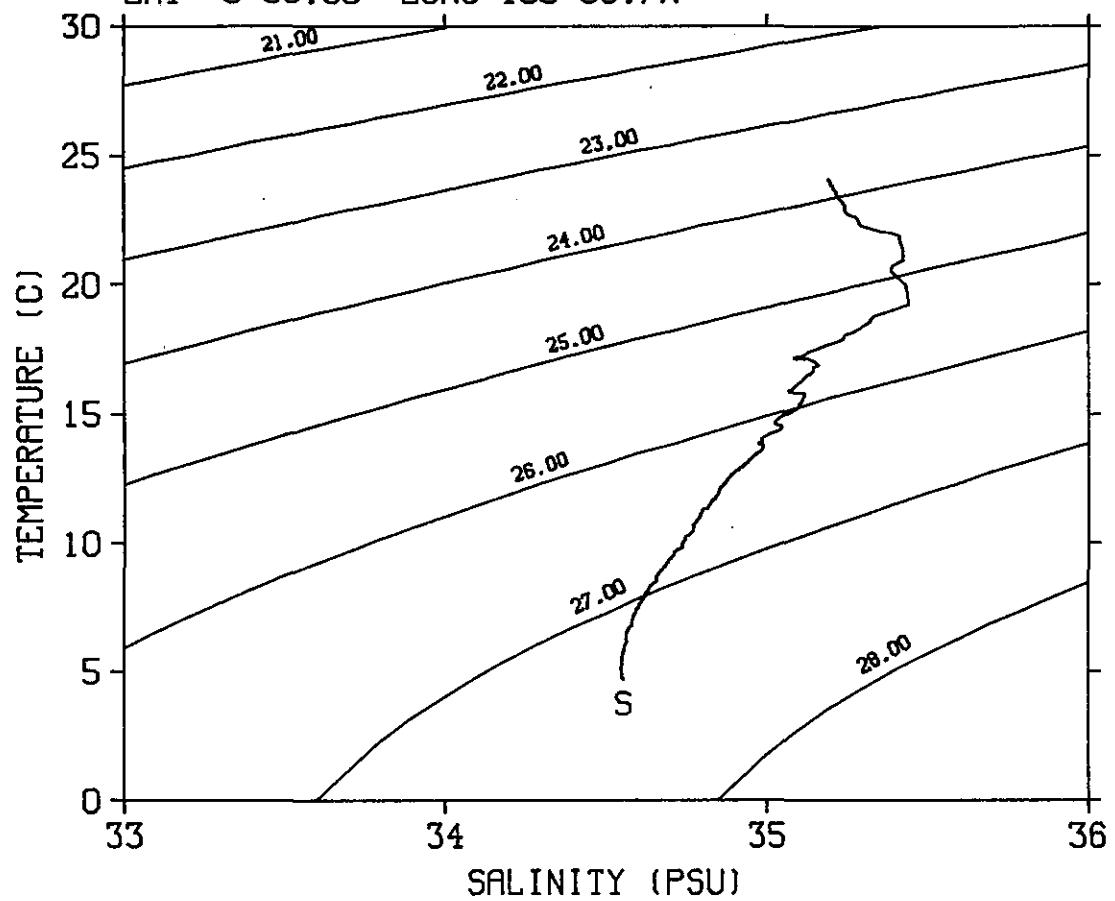
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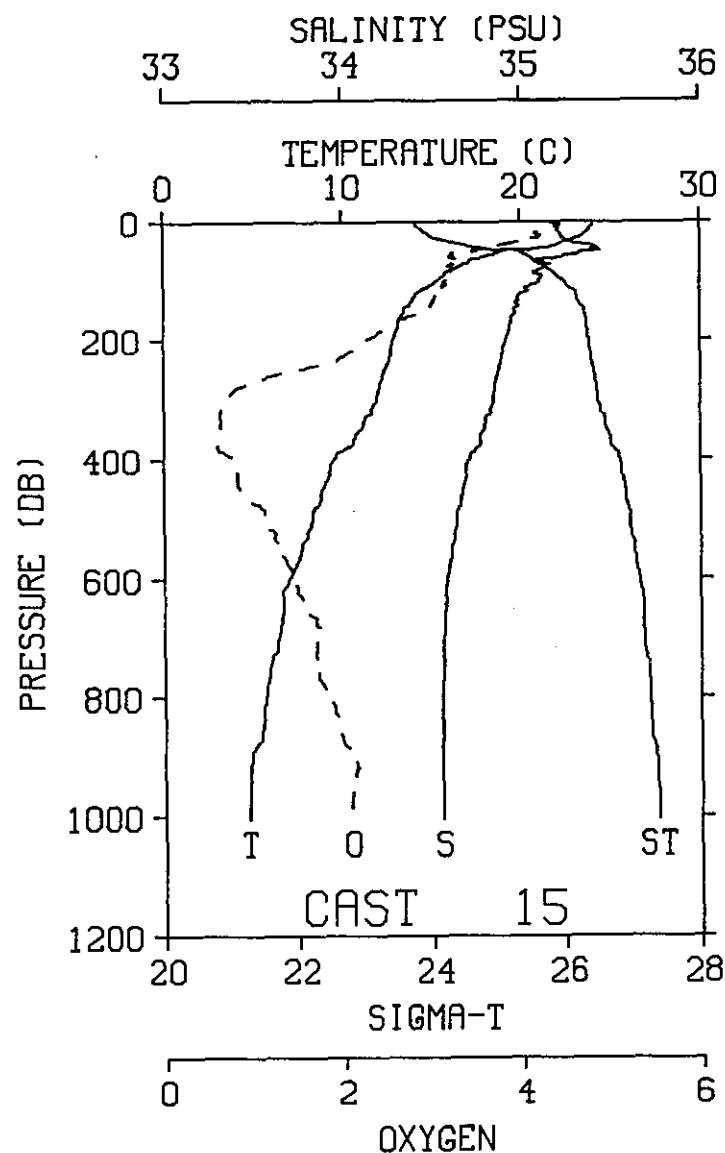
CAST EP2-86-OC-014 DATE 30 MAY 86 TIME 0957 GMT  
 LAT 1 00.7S LONG 109 59.1W WEATHER 1 SEA STATE 1  
 BAROMETER 13 WIND DIR 110 T SPD 12 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 3 DRY 23.8 WET 23.0 DEPTH 4020 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.066	35.277	4.30	23.833	0.000
10.	24.009	35.283	4.30	23.854	0.040
20.	23.276	35.343	4.22	24.116	0.080
30.	19.176	35.430	3.46	25.306	0.114
40.	18.162	35.397	2.87	25.537	0.139
50.	17.010	35.290	2.94	25.735	0.162
60.	16.741	35.269	3.01	25.783	0.185
70.	16.072	35.223	3.00	25.904	0.207
80.	15.594	35.179	2.91	25.979	0.227
90.	15.361	35.164	2.78	26.019	0.248
100.	15.071	35.138	2.49	26.063	0.267
110.	14.729	35.093	2.21	26.104	0.287
120.	14.216	35.047	1.85	26.178	0.306
130.	13.609	34.996	1.69	26.266	0.324
140.	13.132	34.946	1.81	26.326	0.342
150.	12.807	34.913	1.88	26.365	0.359
160.	12.698	34.901	1.83	26.377	0.375
170.	12.580	34.887	1.71	26.390	0.392
180.	12.534	34.884	1.56	26.396	0.409
190.	12.503	34.882	1.50	26.400	0.425
200.	12.462	34.879	1.34	26.407	0.442
250.	12.115	34.860	0.92	26.459	0.525
300.	11.608	34.834	0.61	26.535	0.604
350.	10.708	34.783	0.55	26.660	0.680
400.	10.087	34.744	0.65	26.737	0.750
450.	8.946	34.676	0.84	26.873	0.815
500.	8.511	34.654	1.25	26.925	0.877
550.	7.821	34.618	1.34	27.001	0.935
600.	7.048	34.587	1.53	27.087	0.991
650.	6.763	34.577	1.58	27.118	1.042
700.	6.490	34.569	1.72	27.149	1.094
750.	5.871	34.559	1.74	27.221	1.142
800.	5.717	34.556	1.84	27.238	1.188
850.	5.483	34.551	2.00	27.262	1.234
900.	5.190	34.550	2.07	27.297	1.278
950.	4.734	34.554	2.16	27.352	1.321
1000.	4.647	34.557	2.10	27.364	1.361
1006.	4.636	34.557	2.09	27.365	1.366

CAST EP2-86-OC-015 DATE 31 MAY 86 TIME 0133 GMT  
LAT 0 30.5S LONG 109 58.7W



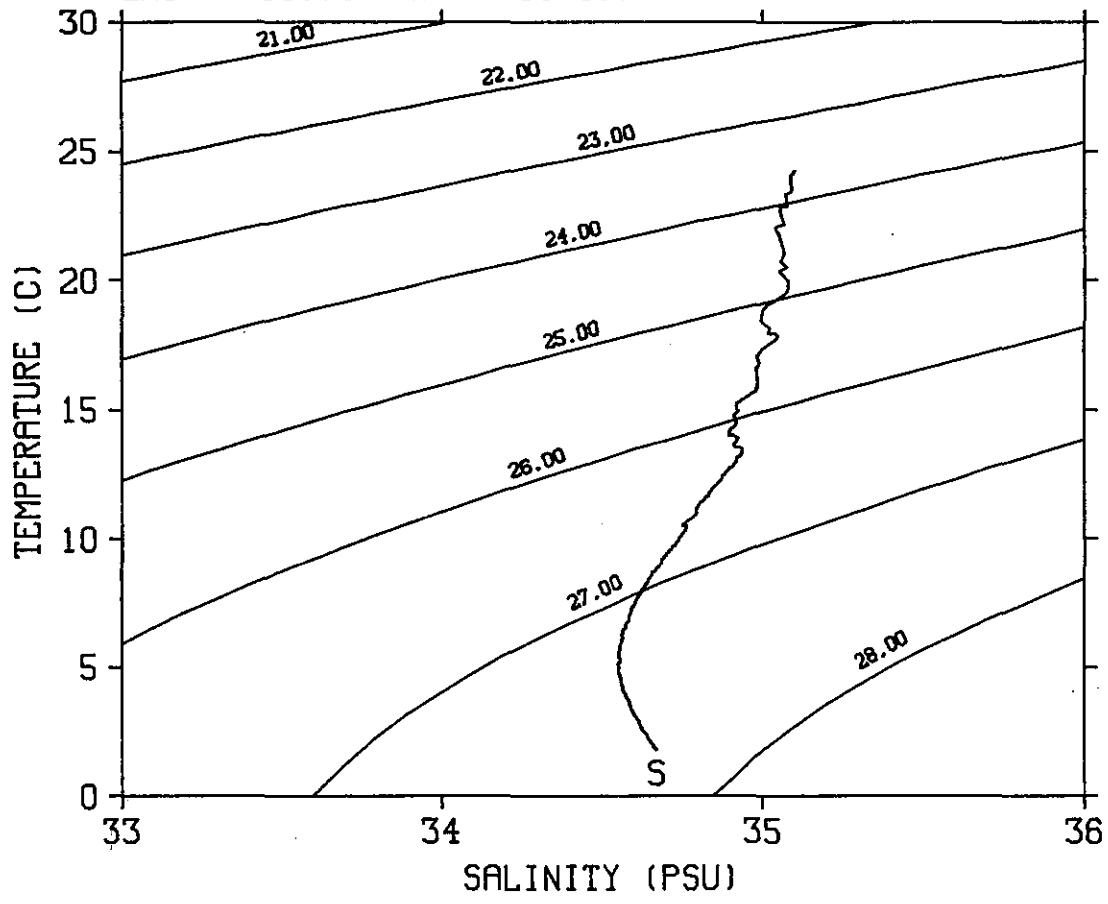
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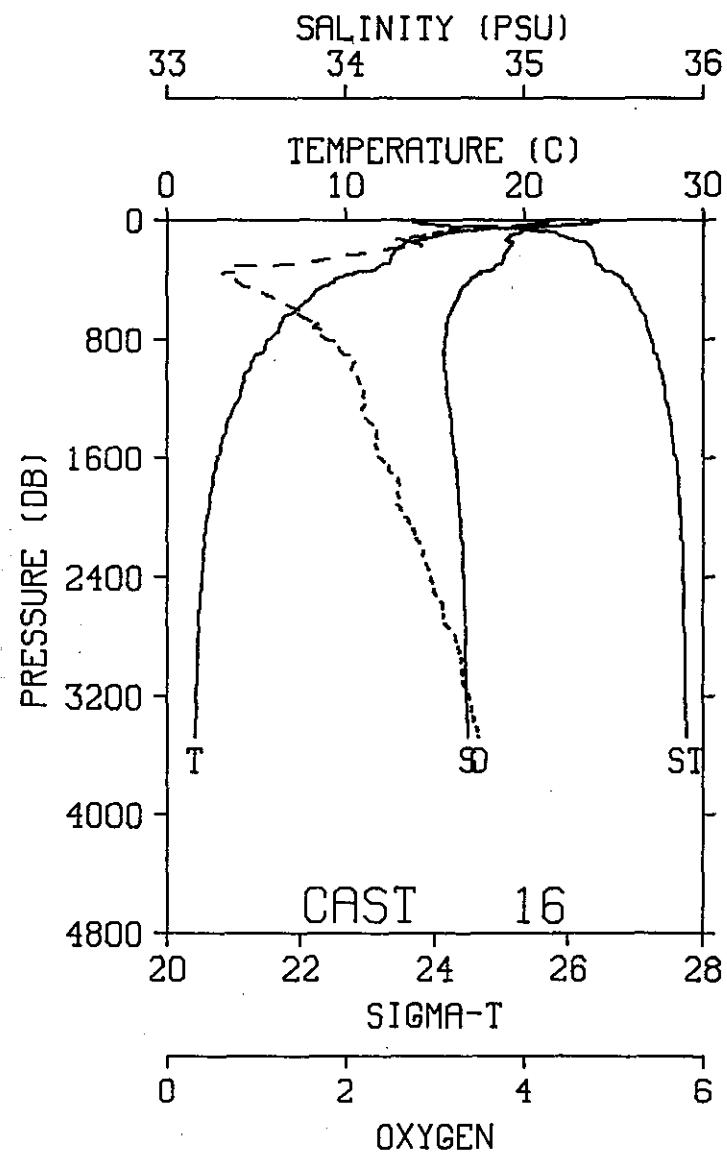


CAST EP2-86-OC-015 DATE 31 MAY 86 TIME 0133 GMT  
 LAT 0 30.5S LONG 109 58.7W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 110 T SPD 13 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 24.0 WET 22.5 DEPTH M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.038	35.197	4.35	23.781	0.000
10.	23.944	35.201	4.41	23.812	0.041
20.	23.588	35.218	4.16	23.930	0.081
30.	22.999	35.249	4.12	24.124	0.120
40.	21.994	35.386	3.80	24.515	0.157
50.	19.208	35.446	3.50	25.310	0.188
60.	17.897	35.239	3.20	25.482	0.214
70.	17.118	35.131	3.20	25.587	0.239
80.	16.409	35.123	3.23	25.748	0.262
90.	15.797	35.105	3.16	25.876	0.284
100.	15.318	35.101	3.19	25.981	0.305
110.	14.868	35.050	3.12	26.040	0.325
120.	14.212	35.019	3.12	26.158	0.345
130.	13.980	34.982	3.03	26.178	0.363
140.	13.788	34.972	3.00	26.210	0.382
150.	13.442	34.962	2.86	26.274	0.400
160.	13.336	34.961	2.78	26.295	0.417
170.	13.185	34.944	2.63	26.313	0.435
180.	13.131	34.942	2.54	26.322	0.452
190.	13.019	34.931	2.40	26.337	0.470
200.	12.876	34.917	2.29	26.354	0.487
250.	12.390	34.875	1.46	26.417	0.572
300.	11.931	34.847	0.72	26.484	0.653
350.	11.030	34.791	0.63	26.607	0.731
400.	9.503	34.710	0.79	26.809	0.801
450.	8.826	34.670	0.85	26.888	0.865
500.	8.325	34.642	1.11	26.944	0.926
550.	7.661	34.610	1.32	27.018	0.984
600.	6.970	34.586	1.46	27.097	1.038
650.	6.622	34.573	1.57	27.134	1.089
700.	6.358	34.565	1.70	27.163	1.140
750.	5.878	34.559	1.75	27.220	1.188
800.	5.637	34.554	1.84	27.246	1.234
850.	5.468	34.551	1.95	27.264	1.280
900.	4.872	34.551	2.13	27.334	1.323
950.	4.722	34.554	2.10	27.354	1.364
1000.	4.659	34.556	2.09	27.362	1.405
1005.	4.657	34.556	2.10	27.363	1.409

CAST EP2-86-OC-016 DATE 31 MAY 86 TIME 0705 GMT  
LAT 0 00.9S LONG 109 58.0W

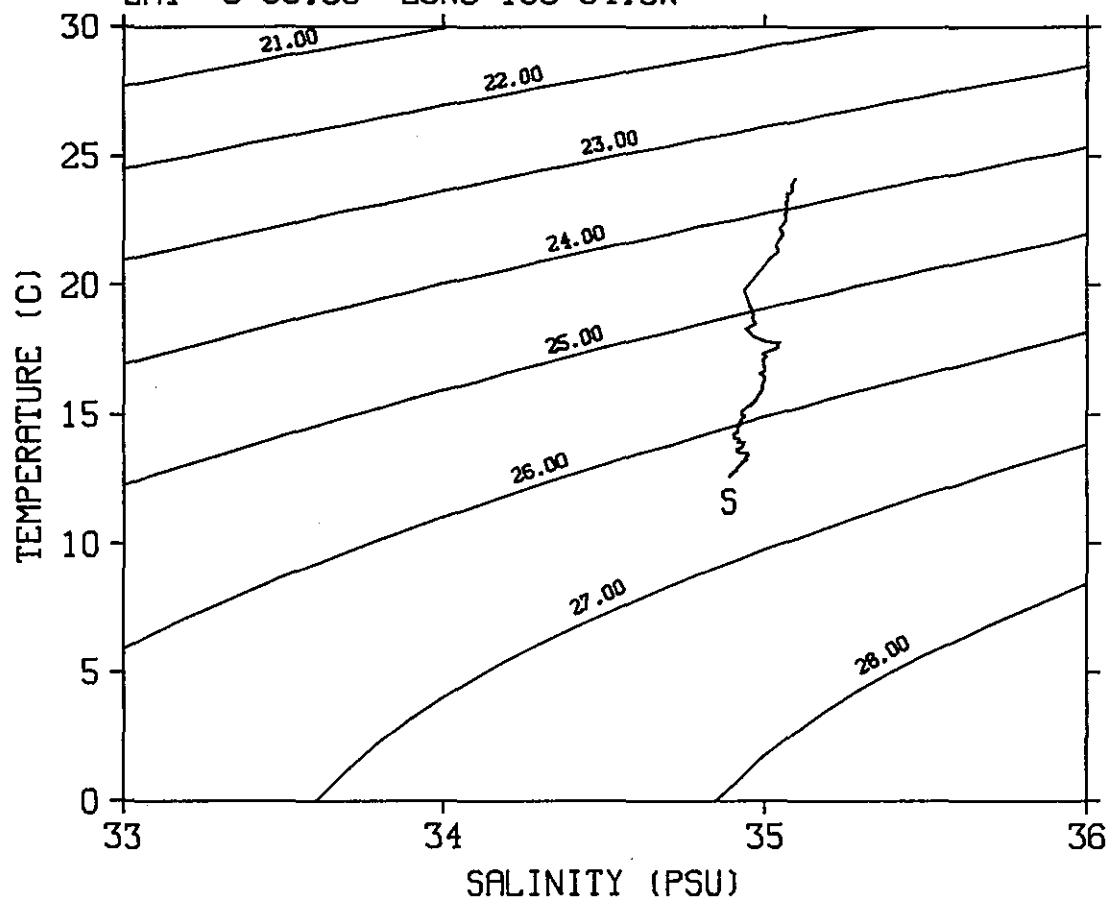




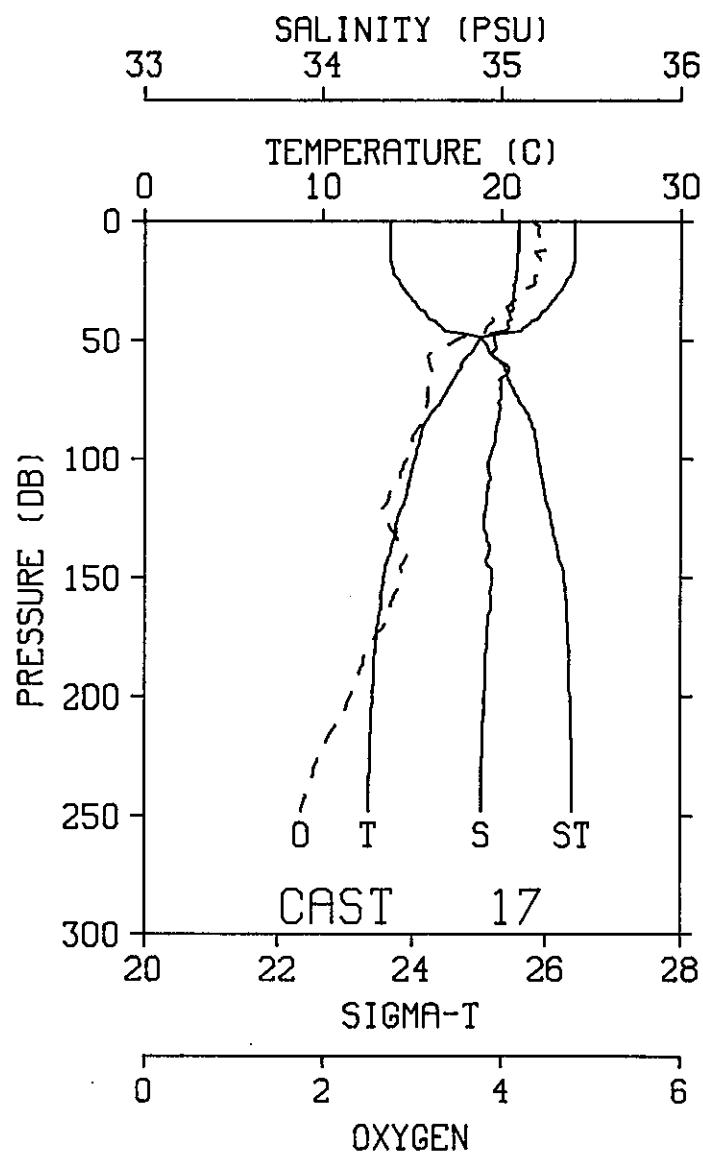
CAST EP2-86-OC-016 DATE 31 MAY 86 TIME 0705 GMT  
 LAT 0 00.9S LONG 109 58.0W WEATHER 0 SEA STATE 3  
 BAROMETER 14 WIND DIR 110 T SPD 08 KT VISIBILITY 7  
 CLOUD X AMOUNT 1 DRY 23.8 WET 22.0 DEPTH 3830 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.230	35.098	4.36	23.649	0.000
10.	24.146	35.095	4.26	23.672	0.042
20.	23.991	35.086	4.27	23.711	0.084
30.	23.329	35.070	4.17	23.893	0.126
40.	22.480	35.059	3.91	24.129	0.165
50.	20.337	35.049	3.62	24.711	0.200
60.	18.130	35.024	3.20	25.260	0.229
70.	17.333	34.996	3.16	25.433	0.255
80.	16.208	34.985	3.10	25.689	0.280
90.	15.619	34.969	2.98	25.811	0.302
100.	15.356	34.936	2.91	25.845	0.324
110.	15.084	34.916	2.84	25.890	0.346
120.	14.745	34.909	2.73	25.958	0.367
130.	14.370	34.915	2.57	26.044	0.387
140.	13.985	34.897	2.66	26.112	0.407
150.	13.642	34.909	2.82	26.192	0.426
160.	13.316	34.937	2.80	26.281	0.443
170.	13.228	34.930	2.83	26.293	0.461
180.	13.075	34.918	2.78	26.315	0.479
190.	12.985	34.916	2.63	26.332	0.496
200.	12.859	34.910	2.49	26.352	0.513
250.	12.585	34.887	1.90	26.389	0.598
300.	12.351	34.873	1.44	26.423	0.683
350.	10.511	34.745	0.73	26.665	0.762
400.	9.429	34.701	0.78	26.815	0.830
450.	8.678	34.658	0.92	26.902	0.894
500.	8.230	34.638	1.13	26.955	0.953
550.	7.712	34.613	1.29	27.013	1.011
600.	7.248	34.593	1.47	27.064	1.067
650.	6.536	34.573	1.51	27.146	1.119
700.	6.332	34.567	1.68	27.168	1.169
750.	6.218	34.564	1.71	27.180	1.218
800.	5.734	34.559	1.78	27.238	1.265
850.	5.489	34.553	1.93	27.263	1.311
900.	5.075	34.553	1.99	27.312	1.356
950.	4.741	34.555	2.09	27.352	1.397
1000.	4.673	34.557	2.07	27.361	1.438
1500.	3.081	34.605	2.34	27.562	1.790
2000.	2.261	34.644	-2.68	27.665	2.070
2500.	1.901	34.663	2.98	27.709	2.316
3000.	1.694	34.675	3.30	27.735	2.549
3477.	1.563	34.686	3.49	27.753	2.766

CAST EP2-86-OC-017 DATE 31 MAY 86 TIME 1119 GMT  
LAT 0 03.3S LONG 109 54.5W



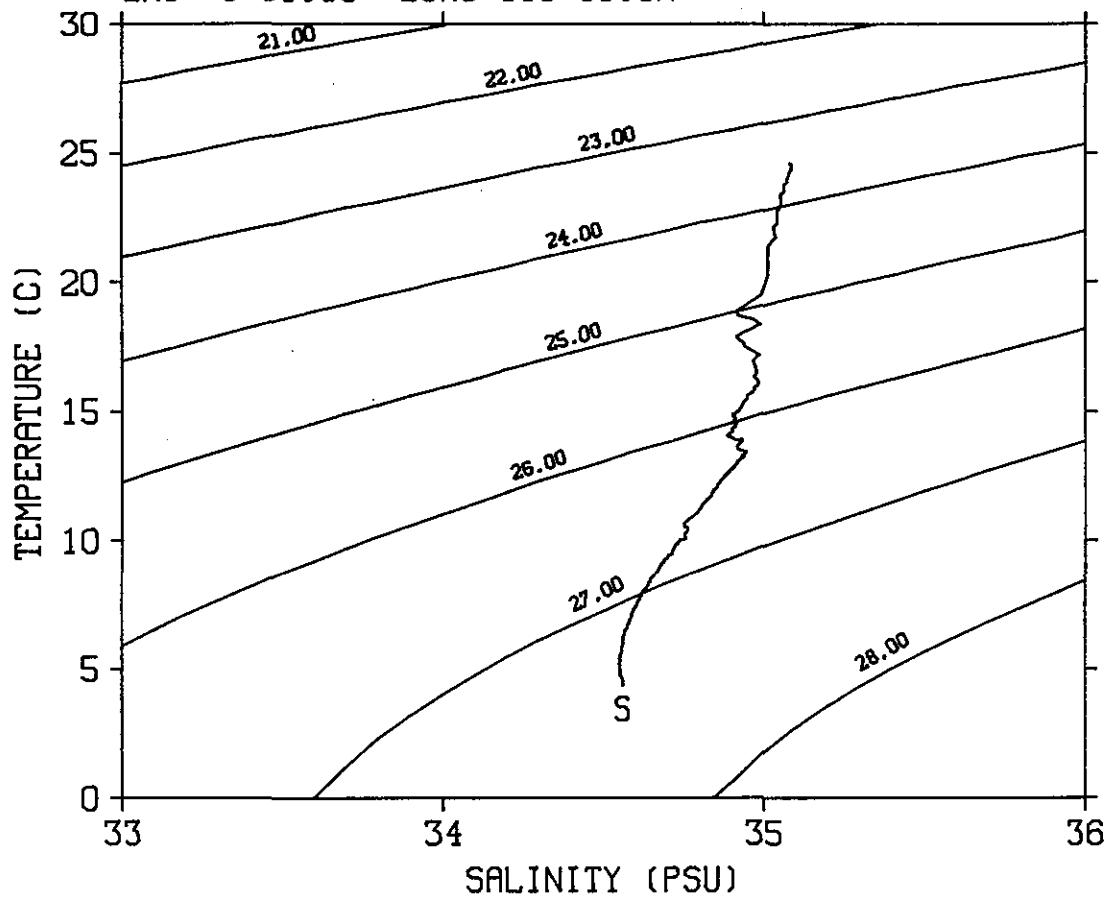
E9



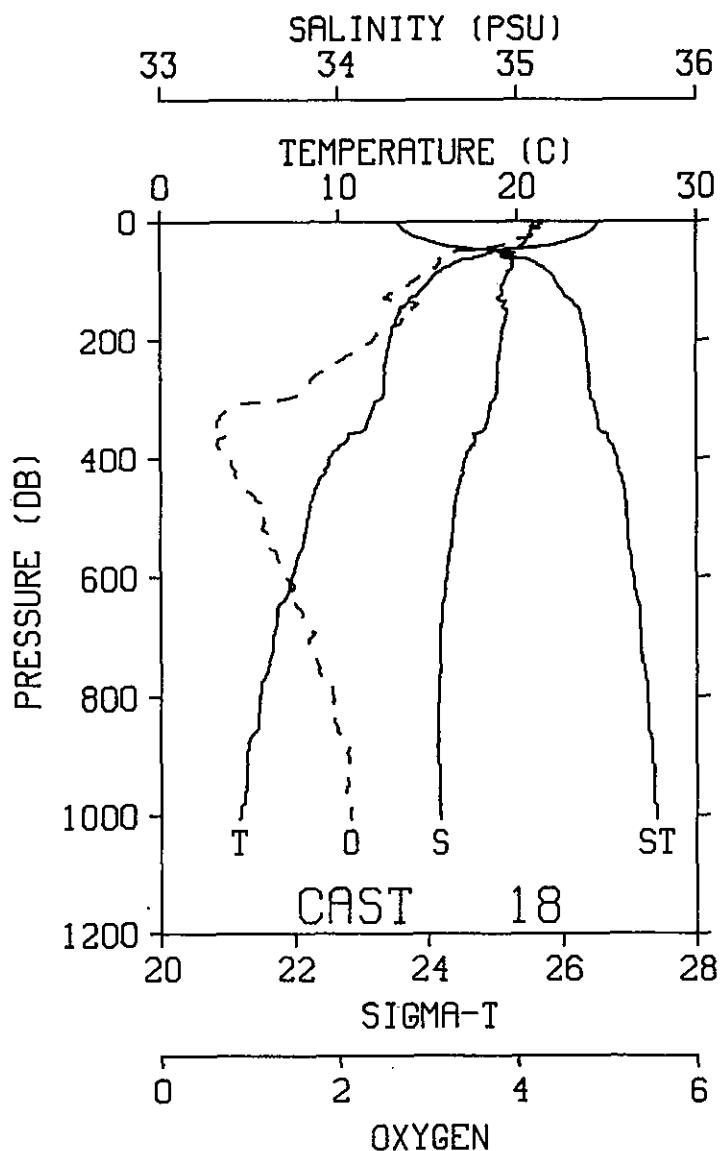
CAST EP2-86-OC-017 DATE 31 MAY 86 TIME 1119 GMT  
 LAT 0 03.3S LONG 109 54.5W WEATHER 1 SEA STATE 1  
 BAROMETER 14 WIND DIR 110 T SPD 10 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 3 DRY 23.2 WET 21.8 DEPTH 3800 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.139	35.093	4.38	23.672	0.000
10.	24.142	35.092	4.51	23.671	0.042
20.	23.979	35.086	4.46	23.714	0.084
30.	23.170	35.061	4.23	23.932	0.125
40.	22.088	35.050	3.89	24.233	0.164
50.	18.724	34.959	3.48	25.061	0.197
60.	17.760	35.028	3.21	25.354	0.225
70.	17.051	34.993	3.18	25.498	0.251
80.	16.140	34.990	3.14	25.708	0.275
90.	15.499	34.966	3.01	25.836	0.297
100.	15.147	34.930	2.94	25.886	0.319
110.	14.836	34.929	2.82	25.954	0.340
120.	14.484	34.915	2.70	26.019	0.360
130.	14.085	34.905	2.77	26.096	0.380
140.	13.774	34.929	2.94	26.180	0.399
150.	13.429	34.946	2.89	26.264	0.417
160.	13.268	34.944	2.78	26.296	0.435
170.	13.076	34.924	2.69	26.320	0.452
180.	12.940	34.917	2.55	26.341	0.469
190.	12.873	34.911	2.40	26.350	0.487
200.	12.808	34.907	2.31	26.360	0.504
248.	12.558	34.886	1.76	26.393	0.585

CAST EP2-86-OC-018 DATE 31 MAY 86 TIME 2216 GMT  
LAT 0 01.8S LONG 110 01.6W



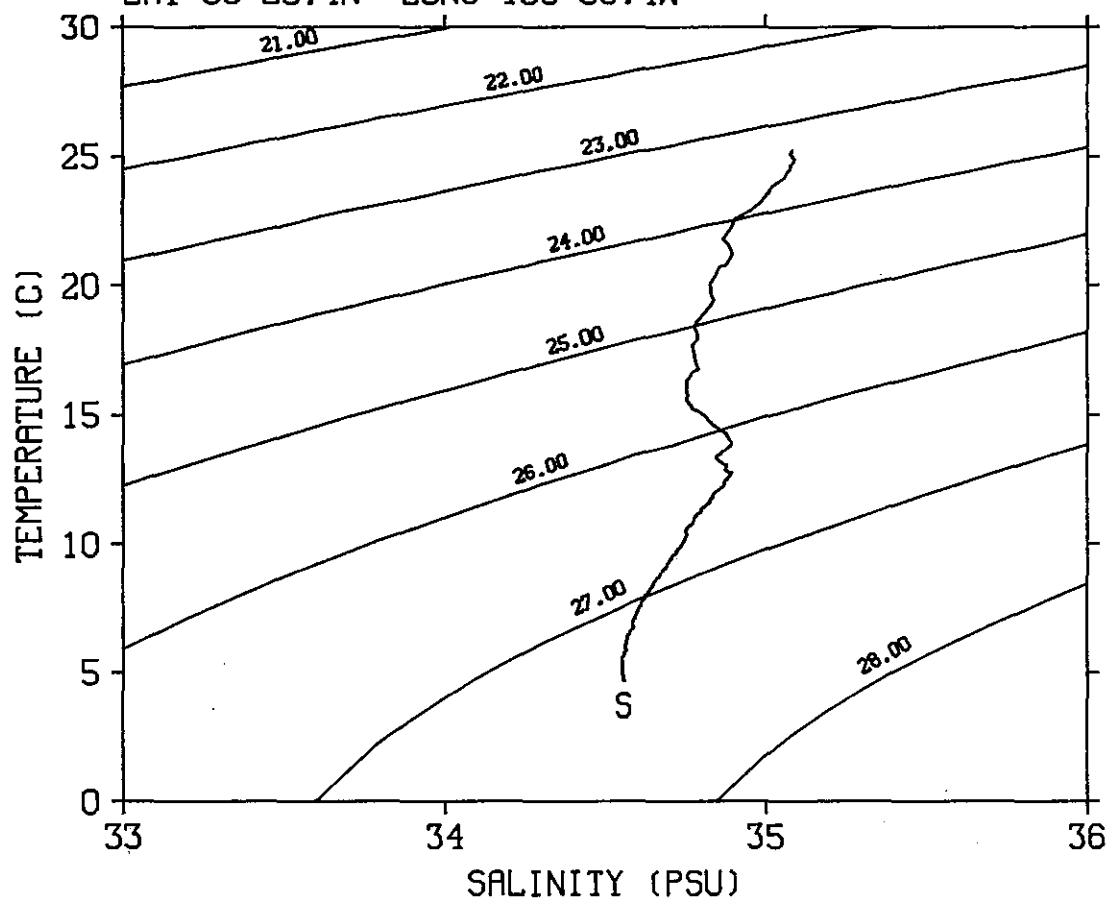
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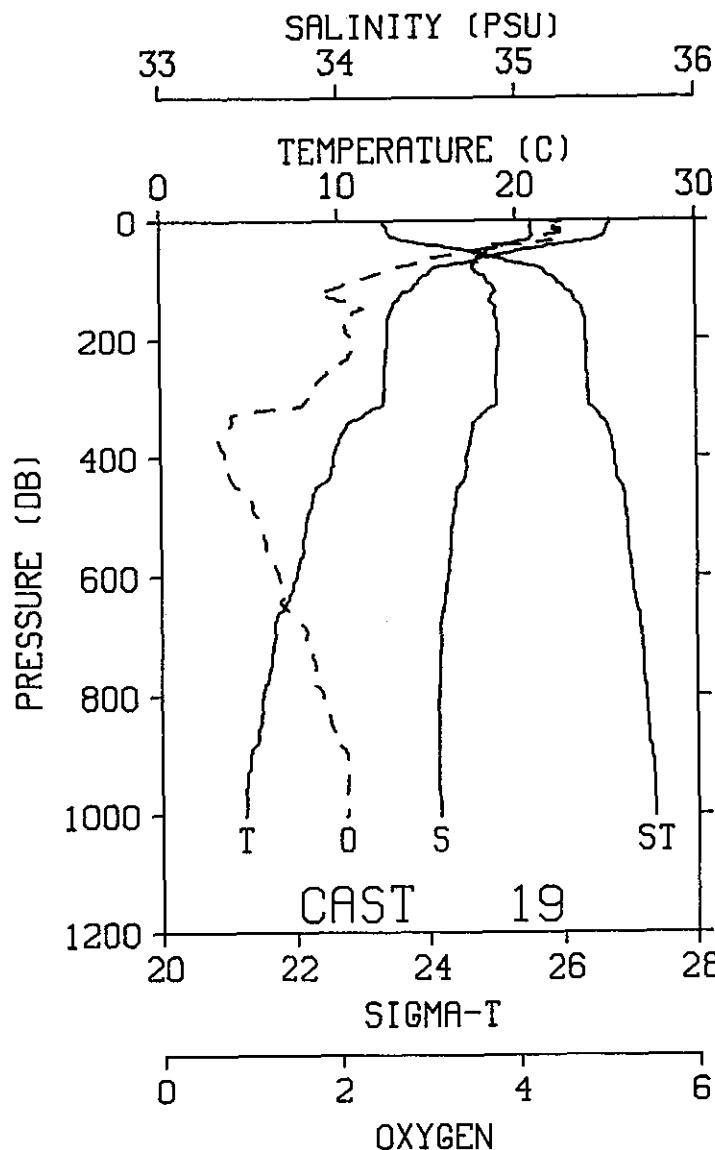
CAST EP2-86-OC-018 DATE 31 MAY 86 TIME 2216 GMT  
 LAT 0 01.8S LONG 110 01.6W WEATHER 1 SEA STATE 3  
 BAROMETER 13 WIND DIR 120 T SPD 06 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 24.8 WET 22.0 DEPTH 3800 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.582	35.083	4.13	23.532	0.000
10.	24.333	35.084	4.15	23.608	0.043
20.	23.935	35.072	4.17	23.717	0.085
30.	23.123	35.055	4.01	23.941	0.126
40.	22.024	35.029	3.84	24.235	0.165
50.	18.690	34.926	3.33	25.044	0.198
60.	17.736	34.924	3.13	25.279	0.226
70.	16.464	34.978	3.14	25.624	0.251
80.	15.929	34.972	3.05	25.743	0.274
90.	15.363	34.940	2.97	25.846	0.296
100.	15.108	34.928	2.84	25.894	0.318
110.	14.816	34.903	2.72	25.938	0.339
120.	14.513	34.915	2.65	26.013	0.359
130.	14.027	34.884	2.53	26.092	0.379
140.	13.769	34.926	2.90	26.178	0.398
150.	13.443	34.945	2.85	26.261	0.416
160.	13.311	34.937	2.77	26.282	0.434
170.	13.233	34.939	2.68	26.299	0.452
180.	12.990	34.916	2.56	26.330	0.469
190.	12.939	34.915	2.42	26.340	0.486
200.	12.887	34.912	2.38	26.348	0.504
250.	12.579	34.887	1.84	26.389	0.589
300.	12.306	34.865	1.35	26.426	0.673
350.	11.488	34.818	0.63	26.545	0.753
400.	9.424	34.704	0.79	26.818	0.823
450.	8.697	34.664	0.90	26.903	0.887
500.	8.233	34.639	1.14	26.956	0.946
550.	7.910	34.625	1.21	26.993	1.005
600.	7.314	34.597	1.41	27.057	1.061
650.	6.584	34.576	1.51	27.141	1.114
700.	6.313	34.568	1.69	27.171	1.164
750.	6.001	34.563	1.78	27.207	1.212
800.	5.544	34.555	1.94	27.258	1.258
850.	5.415	34.553	1.98	27.272	1.303
900.	4.860	34.554	2.11	27.338	1.345
950.	4.726	34.557	2.10	27.356	1.386
1000.	4.429	34.562	2.12	27.393	1.426
1006.	4.364	34.563	2.13	27.400	1.431

CAST EP2-86-OC-019 DATE 01 JUN 86 TIME 0241 GMT  
LAT 00 29.4N LONG 109 59.4W

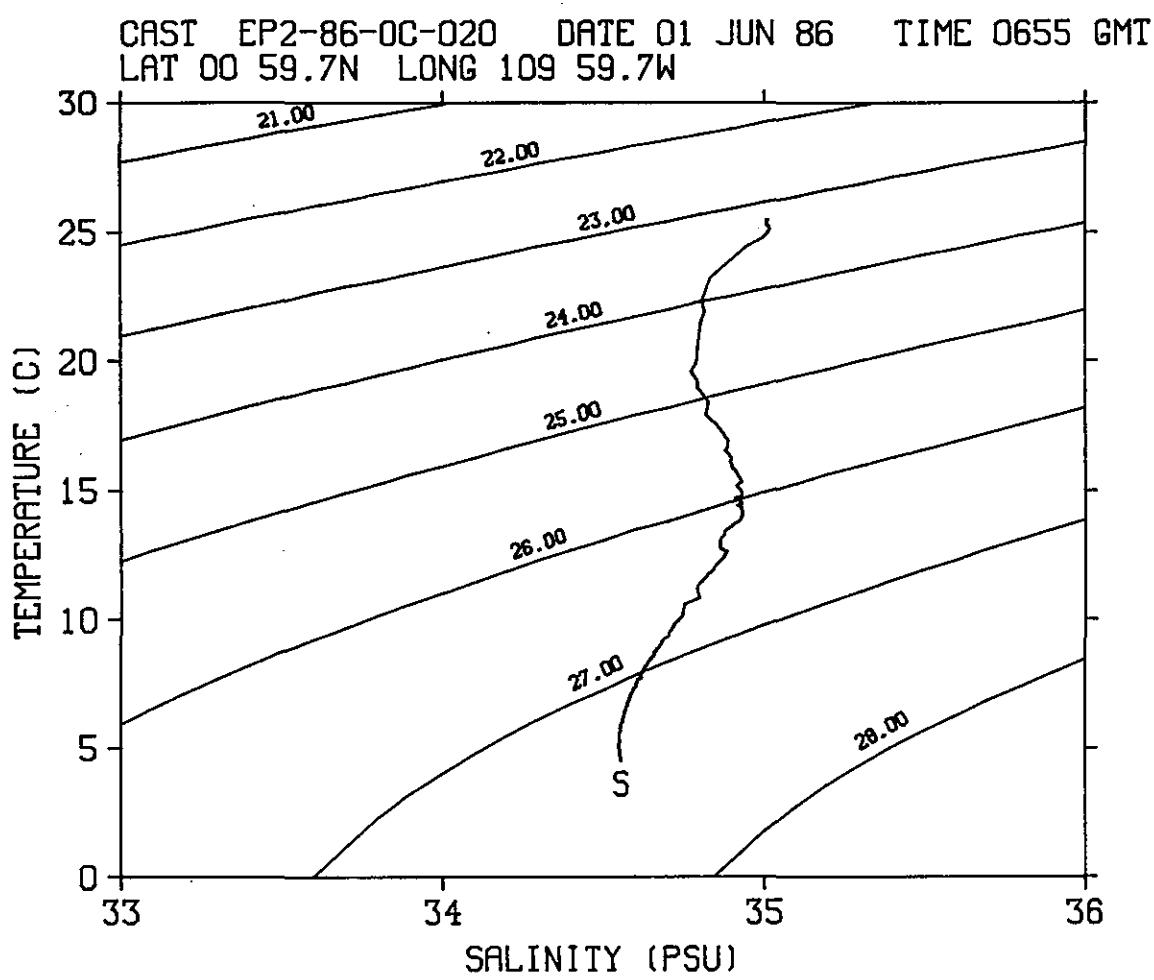


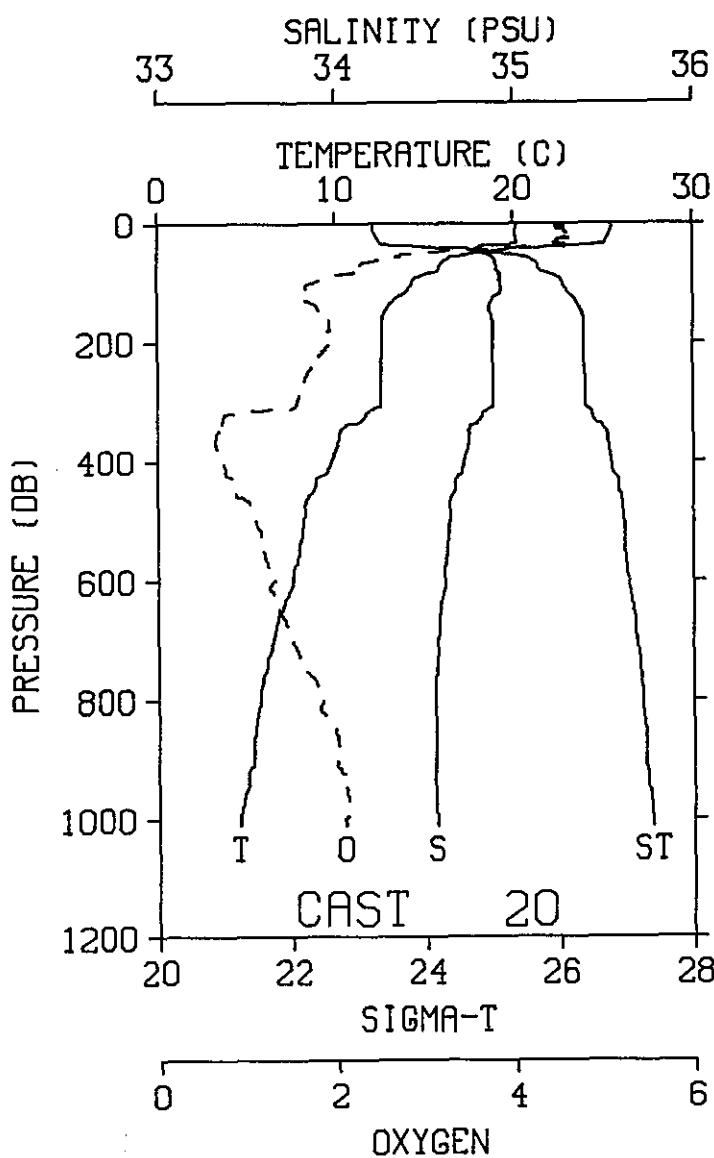
L9



CAST EP2-86-OC-019 DATE 01 JUN 86 TIME 0241 GMT  
 LAT 00 29.4N LONG 109 59.4W WEATHER 1 SEA STATE 2  
 BAROMETER 10 WIND DIR 120 T SPD 06 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 24.0 WET 21.5 DEPTH 3780 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.215	35.082	4.38	23.340	0.000
10.	25.074	35.074	4.48	23.376	0.045
20.	24.985	35.084	4.39	23.411	0.090
30.	24.598	35.075	4.39	23.521	0.134
40.	22.833	34.948	4.24	23.944	0.176
50.	20.424	34.848	3.66	24.535	0.213
60.	18.721	34.796	3.19	24.937	0.245
70.	17.362	34.779	2.88	25.259	0.274
80.	15.488	34.755	2.68	25.676	0.299
90.	15.117	34.787	2.43	25.782	0.322
100.	14.601	34.834	2.21	25.932	0.343
110.	14.310	34.872	2.04	26.023	0.364
120.	13.931	34.893	1.80	26.120	0.384
130.	13.486	34.861	1.92	26.187	0.402
140.	13.157	34.859	2.20	26.253	0.421
150.	13.000	34.880	2.27	26.300	0.438
160.	12.852	34.874	2.10	26.326	0.456
170.	12.753	34.887	2.11	26.356	0.473
180.	12.748	34.892	2.07	26.360	0.490
190.	12.754	34.895	2.08	26.361	0.507
200.	12.744	34.895	2.13	26.363	0.524
250.	12.624	34.888	1.91	26.382	0.609
300.	12.548	34.884	1.65	26.394	0.694
350.	10.423	34.752	0.75	26.685	0.773
400.	9.672	34.717	0.73	26.787	0.841
450.	8.786	34.673	0.83	26.896	0.907
500.	8.224	34.640	1.09	26.958	0.967
550.	7.976	34.626	1.18	26.984	1.025
600.	7.594	34.610	1.32	27.028	1.082
650.	6.917	34.586	1.38	27.104	1.136
700.	6.353	34.569	1.62	27.166	1.186
750.	6.111	34.563	1.73	27.193	1.235
800.	5.707	34.557	1.81	27.239	1.282
850.	5.482	34.553	1.90	27.264	1.328
900.	4.937	34.552	2.08	27.327	1.371
950.	4.727	34.556	2.09	27.354	1.413
1000.	4.653	34.558	2.08	27.364	1.453
1003.	4.645	34.558	2.07	27.366	1.456

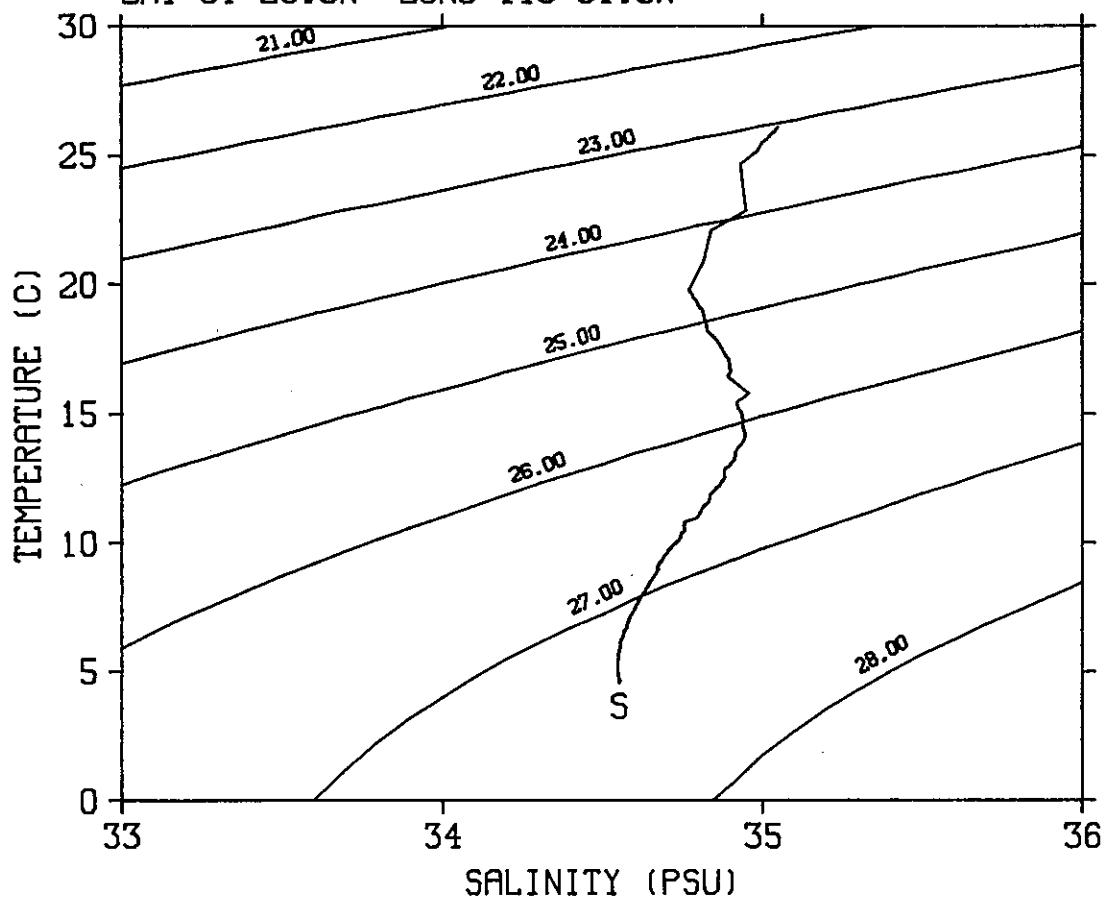


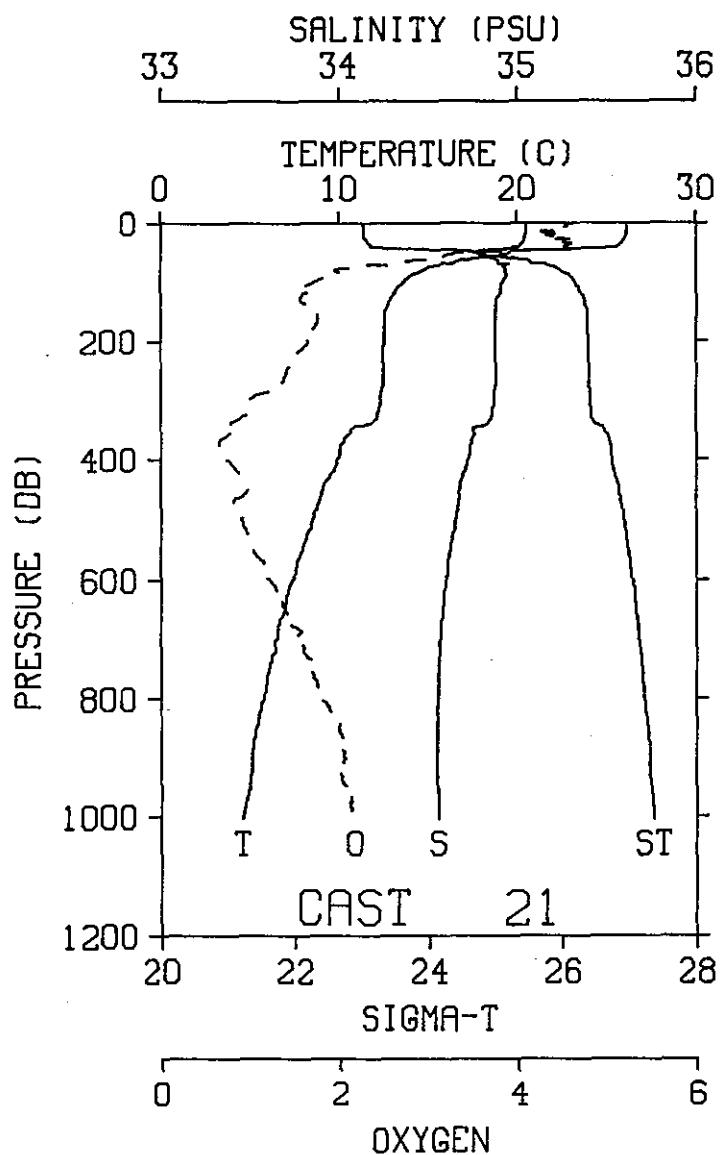


CAST EP2-86-OC-020 DATE 01 JUN 86 TIME 0655 GMT  
 LAT 00 59.7N LONG 109 59.7W WEATHER 1 SEA STATE 2  
 BAROMETER 14 WIND DIR 155 T SPD 06 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 24.2 WET 22.0 DEPTH M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.433	35.014	4.56	23.221	0.000
10.	25.423	35.012	4.57	23.223	0.046
20.	25.295	35.010	4.56	23.261	0.093
30.	25.136	35.018	4.58	23.316	0.139
40.	21.857	34.817	4.18	24.120	0.183
50.	17.912	34.816	2.89	25.153	0.215
60.	16.332	34.896	2.48	25.592	0.240
70.	15.878	34.902	2.26	25.701	0.264
80.	15.764	34.911	2.23	25.734	0.287
90.	14.698	34.923	1.95	25.979	0.308
100.	14.302	34.933	1.74	26.072	0.328
110.	14.067	34.934	1.68	26.123	0.347
120.	13.708	34.908	1.66	26.178	0.366
130.	13.219	34.876	1.66	26.253	0.385
140.	12.922	34.864	1.79	26.304	0.402
150.	12.738	34.867	1.85	26.343	0.419
160.	12.644	34.880	1.91	26.371	0.436
170.	12.634	34.882	1.94	26.375	0.453
180.	12.628	34.883	1.95	26.376	0.470
190.	12.626	34.884	1.93	26.378	0.487
200.	12.630	34.886	1.93	26.379	0.504
250.	12.565	34.883	1.68	26.390	0.588
300.	12.545	34.882	1.57	26.393	0.673
350.	10.194	34.745	0.68	26.720	0.751
400.	9.753	34.718	0.74	26.774	0.820
450.	8.784	34.668	0.85	26.893	0.884
500.	8.172	34.635	1.09	26.962	0.943
550.	7.961	34.625	1.19	26.985	1.002
600.	7.536	34.607	1.29	27.034	1.058
650.	6.961	34.587	1.35	27.099	1.113
700.	6.471	34.572	1.50	27.154	1.163
750.	6.018	34.563	1.66	27.206	1.212
800.	5.690	34.555	1.86	27.240	1.259
850.	5.394	34.551	1.99	27.273	1.304
900.	5.333	34.552	2.01	27.281	1.348
950.	4.896	34.555	2.11	27.335	1.391
1000.	4.554	34.559	2.09	27.376	1.432
1010.	4.520	34.560	2.10	27.380	1.440

CAST EP2-86-OC-021 DATE 01 JUN 86 TIME 1018 GMT  
LAT 01 29.6N LONG 110 01.0W

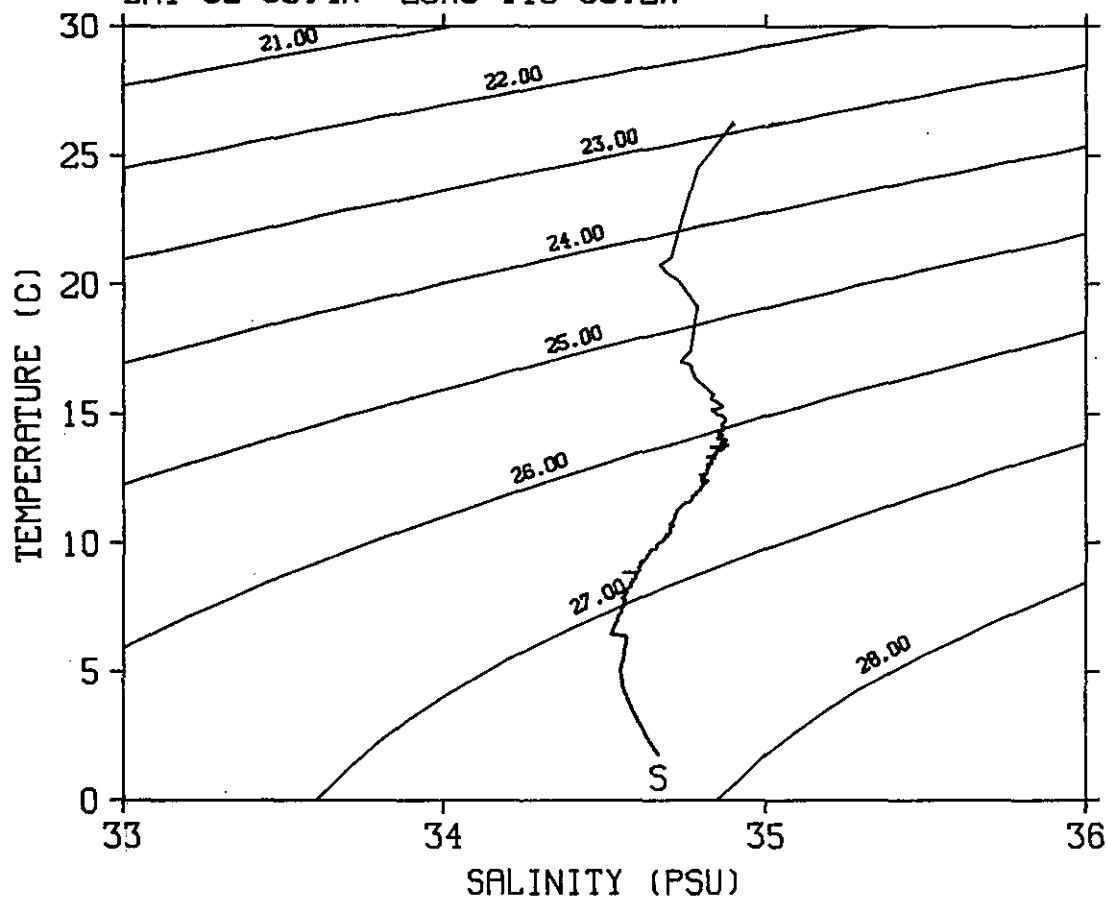


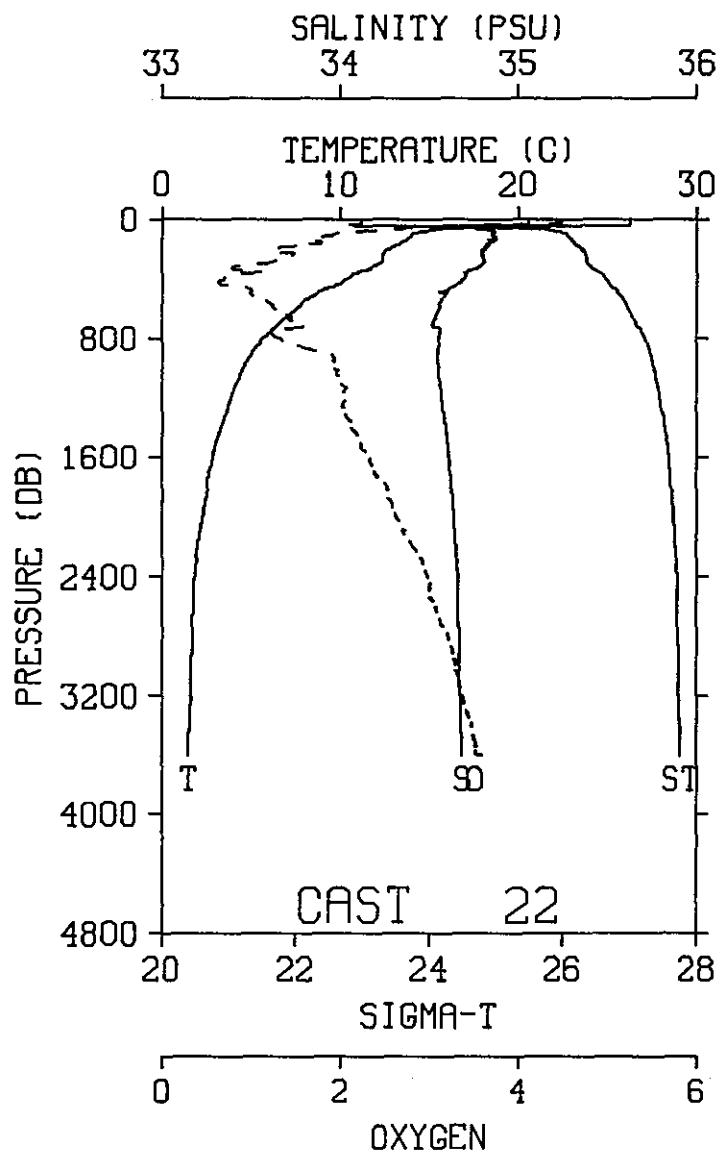


CAST EP2-86-OC-021 DATE 01 JUN 86 TIME 1018 GMT  
 LAT 01 29.6N LONG 110 01.0W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 180 T SPD 12 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 1 DRY 24.0 WET 21.8 DEPTH 3780 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.125	35.046	4.68	23.031	0.000
10.	26.116	35.045	4.53	23.033	0.048
20.	26.104	35.044	4.33	23.036	0.097
30.	25.915	35.036	4.62	23.089	0.145
40.	25.659	35.014	4.51	23.152	0.192
50.	19.647	34.781	3.41	24.689	0.233
60.	17.730	34.867	3.01	25.237	0.263
70.	15.795	34.956	2.58	25.762	0.288
80.	14.755	34.939	1.96	25.979	0.310
90.	14.031	34.942	1.85	26.136	0.329
100.	13.679	34.924	1.72	26.196	0.348
110.	13.313	34.912	1.63	26.262	0.366
120.	13.127	34.905	1.59	26.295	0.384
130.	12.853	34.882	1.56	26.332	0.401
140.	12.745	34.877	1.64	26.349	0.418
150.	12.587	34.878	1.70	26.381	0.435
160.	12.567	34.881	1.76	26.387	0.452
170.	12.558	34.880	1.75	26.389	0.468
180.	12.545	34.879	1.71	26.390	0.485
190.	12.532	34.879	1.70	26.393	0.502
200.	12.522	34.880	1.65	26.395	0.518
250.	12.470	34.878	1.40	26.404	0.602
300.	12.330	34.870	1.00	26.425	0.686
350.	10.687	34.756	0.86	26.642	0.767
400.	9.891	34.722	0.73	26.753	0.837
450.	9.077	34.675	0.97	26.851	0.903
500.	8.505	34.652	0.90	26.924	0.966
550.	7.927	34.624	1.04	26.990	1.025
600.	7.334	34.599	1.21	27.056	1.081
650.	6.930	34.581	1.40	27.099	1.134
700.	6.524	34.569	1.56	27.144	1.185
750.	6.057	34.557	1.68	27.196	1.235
800.	5.767	34.554	1.79	27.230	1.282
850.	5.334	34.551	1.98	27.280	1.327
900.	5.106	34.550	2.06	27.306	1.371
950.	4.948	34.551	2.06	27.325	1.413
1000.	4.595	34.555	2.15	27.369	1.454
1005.	4.582	34.555	2.18	27.370	1.458

CAST EP2-86-OC-022 DATE 01 JUN 86 TIME 1556 GMT  
LAT 02 00.4N LONG 110 00.2W

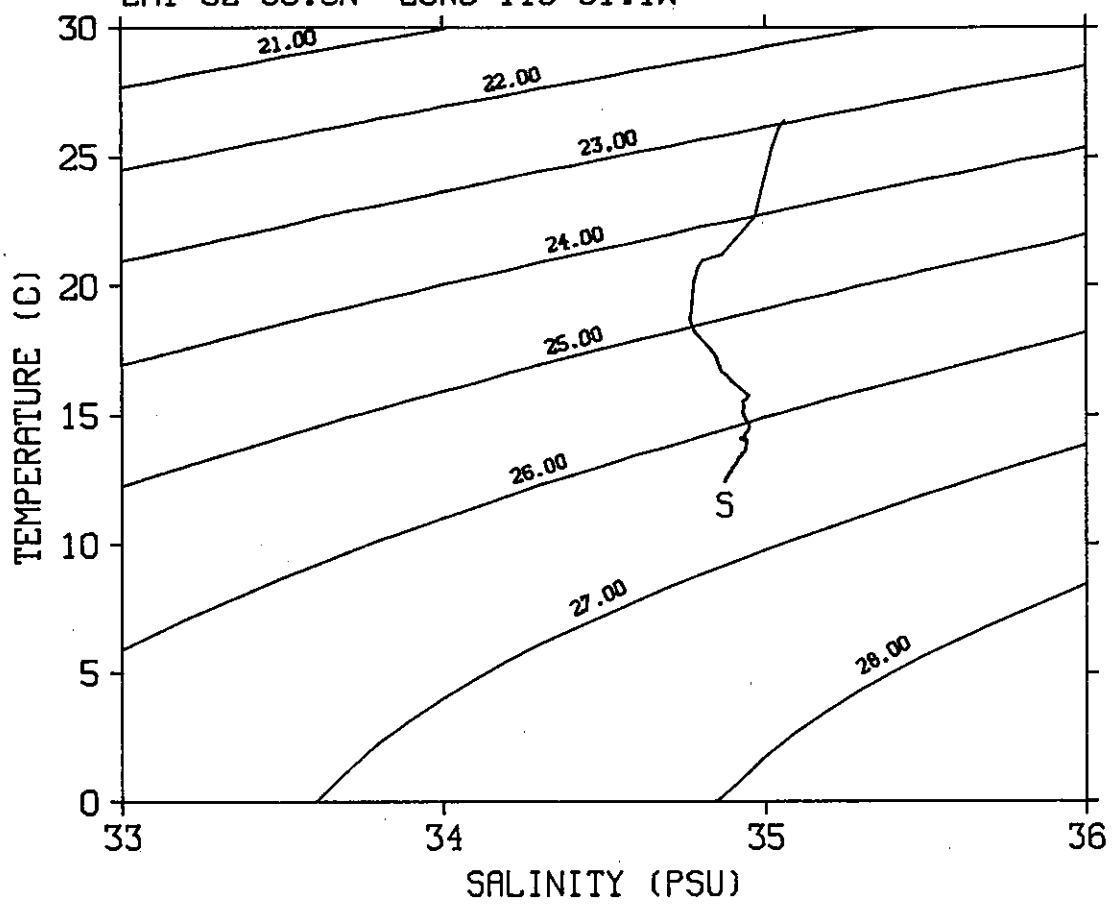




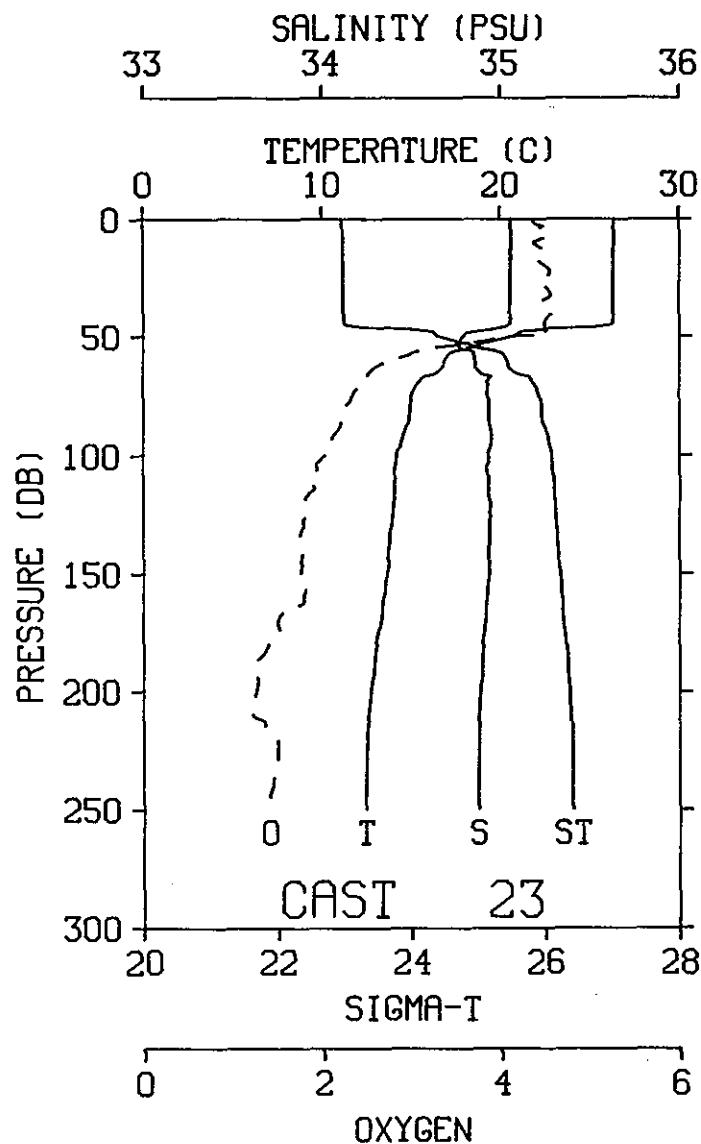
CAST EP2-86-OC-022 DATE 01 JUN '86 TIME 1556 GMT  
 LAT 02 00.4N LONG 110 00.2W WEATHER 1 SEA STATE 2  
 BAROMETER 14 WIND DIR 175 T SPD 12 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 26.0 WET 23.0 DEPTH 3820 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.277	35.057	4.33	22.992	0.000
10.	26.282	35.057	4.49	22.990	0.049
20.	26.281	35.056	4.48	22.990	0.097
30.	26.287	35.057	4.50	22.988	0.146
40.	26.278	34.811	4.50	22.806	0.195
50.	20.614	34.681	3.99	24.357	0.240
60.	16.972	34.753	2.75	25.332	0.270
70.	15.334	34.856	2.41	25.788	0.294
80.	14.950	34.853	2.27	25.871	0.315
90.	14.434	34.873	2.08	25.998	0.336
100.	14.063	34.851	1.95	26.059	0.356
110.	14.023	34.859	1.92	26.074	0.376
120.	13.975	34.879	1.79	26.100	0.395
130.	13.837	34.866	1.76	26.119	0.415
140.	13.722	34.842	1.77	26.124	0.434
150.	13.655	34.872	1.75	26.161	0.453
160.	13.492	34.844	1.79	26.173	0.471
170.	13.328	34.826	1.55	26.192	0.490
180.	13.148	34.829	1.51	26.231	0.508
190.	12.943	34.824	1.34	26.268	0.526
200.	12.873	34.820	1.28	26.279	0.544
250.	12.435	34.802	1.41	26.352	0.631
300.	12.262	34.803	1.13	26.386	0.717
350.	11.136	34.716	1.05	26.530	0.800
400.	10.358	34.696	0.69	26.653	0.875
450.	9.705	34.640	0.84	26.721	0.947
500.	8.749	34.599	0.99	26.844	1.014
550.	8.009	34.569	1.19	26.935	1.076
600.	7.572	34.557	1.26	26.989	1.135
650.	7.058	34.542	1.43	27.050	1.191
700.	6.599	34.525	1.57	27.099	1.245
750.	6.149	34.566	1.22	27.191	1.296
800.	5.699	34.559	1.32	27.242	1.343
850.	5.391	34.555	1.46	27.277	1.389
900.	5.028	34.548	1.90	27.313	1.432
950.	4.791	34.551	1.92	27.343	1.474
1000.	4.591	34.555	1.97	27.369	1.514
1500.	3.045	34.606	2.23	27.566	1.866
2000.	2.306	34.640	2.63	27.658	2.148
2500.	1.823	34.666	3.02	27.718	2.392
3000.	1.672	34.673	3.30	27.735	2.622
3500.	1.531	34.685	3.51	27.755	2.847
3606.	1.519	34.687	3.51	27.757	2.894

CAST EP2-86-OC-023 DATE 01 JUN 86 TIME 1821 GMT  
LAT 02 00.5N LONG 110 01.1W



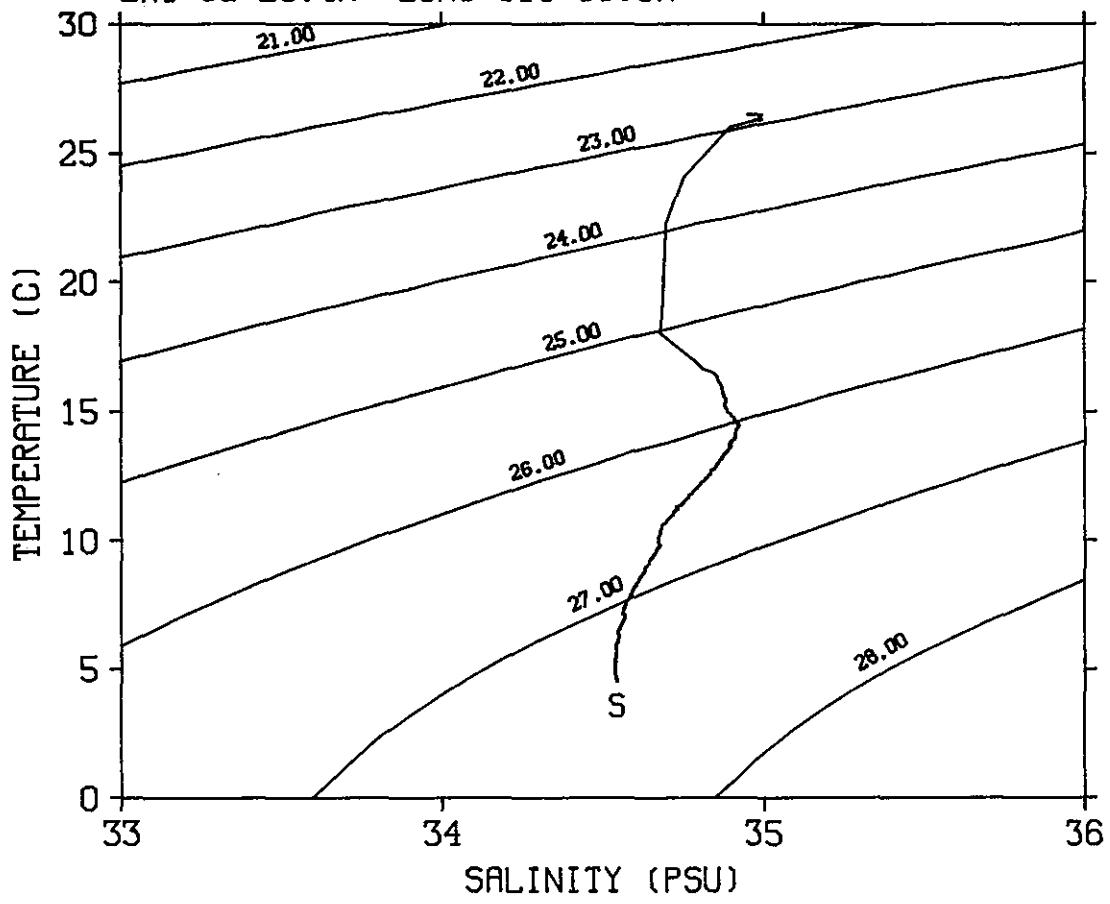
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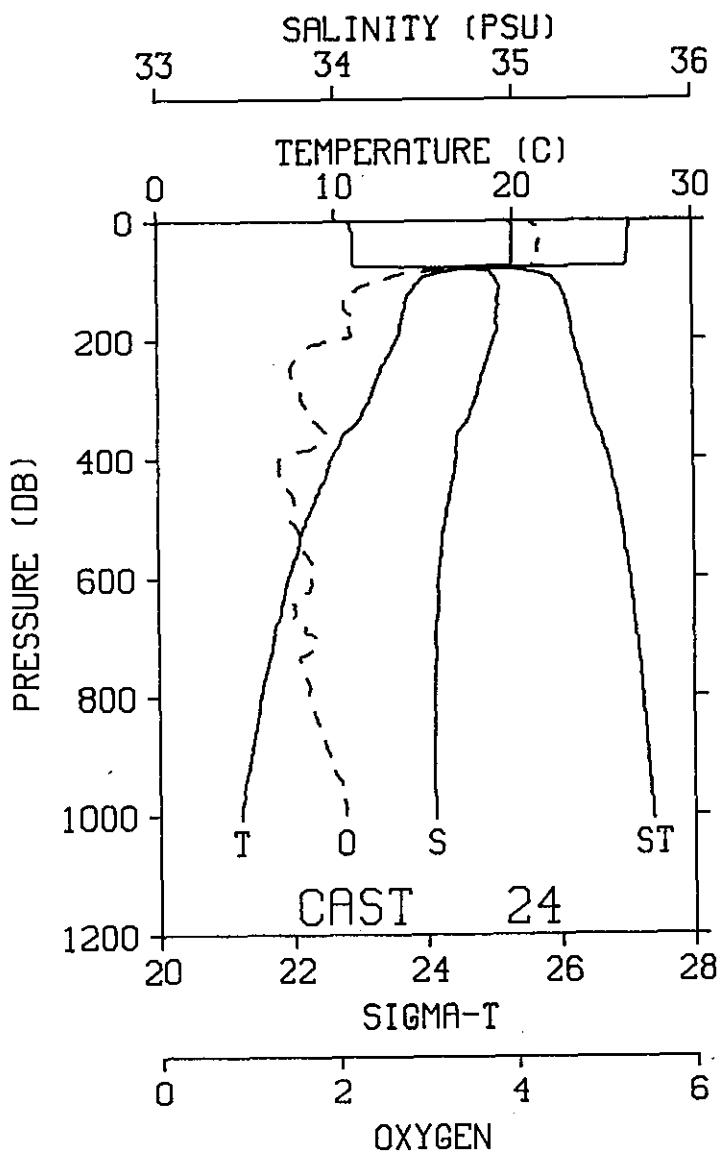


CAST EP2-86-OC-023 DATE 01 JUN 86 TIME 1821 GMT  
 LAT 02 00.5N LONG 110 01.1W WEATHER 1 SEA STATE 1  
 BAROMETER 14 WIND DIR 160 T SPD 12 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 26.0 WET 23.0 DEPTH 3600 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.363	35.060	4.37	22.966	0.000
10.	26.316	35.058	4.37	22.980	0.049
20.	26.305	35.057	4.49	22.983	0.098
30.	26.296	35.057	4.53	22.986	0.146
40.	26.285	35.056	4.56	22.988	0.195
50.	20.721	34.792	4.16	24.412	0.240
60.	16.893	34.854	2.82	25.429	0.269
70.	15.361	34.932	2.45	25.841	0.293
80.	14.913	34.933	2.26	25.940	0.314
90.	14.594	34.948	2.16	26.021	0.334
100.	14.182	34.931	2.03	26.097	0.354
110.	14.054	34.930	1.88	26.122	0.373
120.	14.003	34.942	1.84	26.143	0.392
130.	13.887	34.937	1.80	26.163	0.411
140.	13.725	34.934	1.77	26.194	0.430
150.	13.615	34.934	1.75	26.217	0.448
160.	13.412	34.925	1.79	26.252	0.466
170.	13.284	34.915	1.50	26.271	0.484
180.	13.026	34.900	1.41	26.311	0.502
190.	12.889	34.894	1.23	26.334	0.519
200.	12.714	34.886	1.26	26.362	0.537
250.	12.435	34.872	1.41	26.406	0.620

CAST EP2-86-OC-024 DATE 01 JUN 86 TIME 2118 GMT  
LAT 02 29.4N LONG 110 00.0W

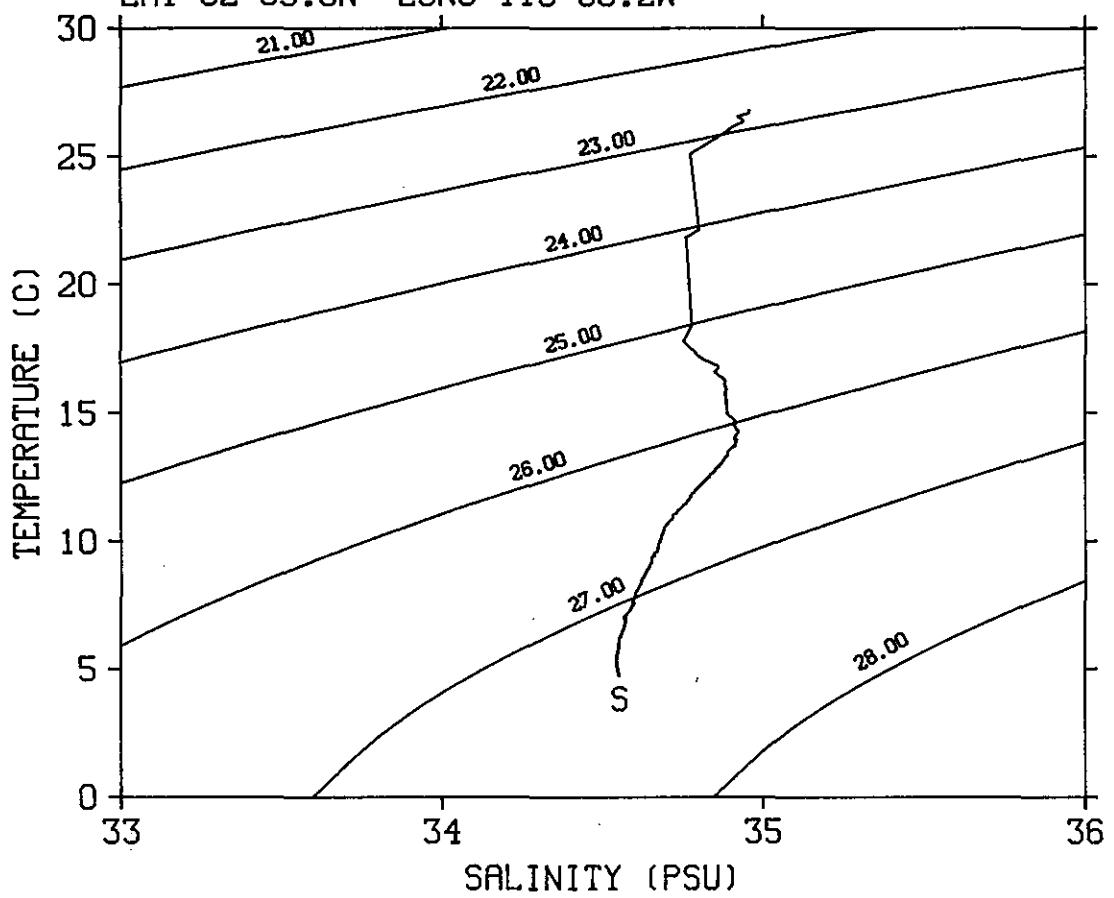




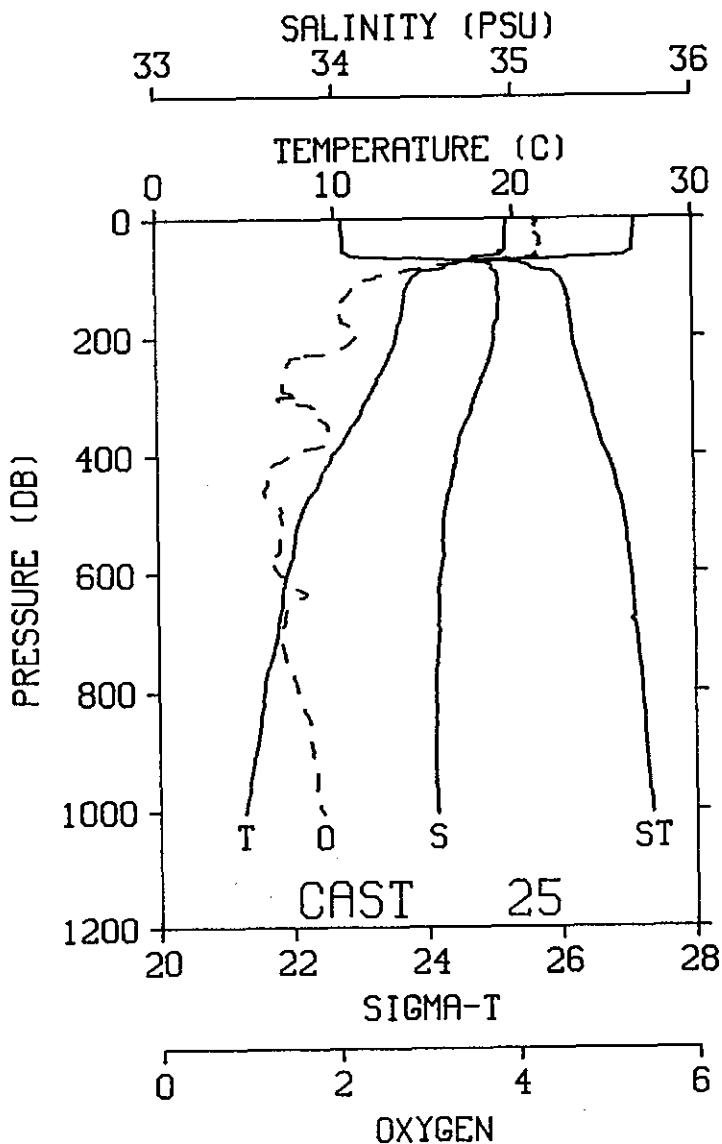
CAST EP2-86-OC-024 DATE 01 JUN 86 TIME 2118 GMT  
 LAT 02 29.4N LONG 110 00.0W WEATHER 1 SEA STATE 1  
 BAROMETER 11 WIND DIR 165 T SPD 16 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 27.2 WET 23.0 DEPTH 3730 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.485	34.958	4.25	22.852	0.000
10.	26.428	34.994	4.26	22.896	0.050
20.	26.348	34.998	4.28	22.924	0.099
30.	26.336	34.997	4.29	22.928	0.149
40.	26.329	34.997	4.25	22.930	0.198
50.	26.326	34.998	4.27	22.932	0.247
60.	26.325	34.998	4.25	22.932	0.297
70.	26.320	34.999	4.23	22.935	0.346
80.	20.147	34.692	4.27	24.489	0.393
90.	15.582	34.882	2.72	25.753	0.419
100.	14.783	34.907	2.41	25.949	0.440
110.	14.453	34.927	2.29	26.036	0.461
120.	14.261	34.915	2.19	26.067	0.480
130.	14.044	34.915	2.10	26.113	0.500
140.	13.930	34.916	2.08	26.138	0.519
150.	13.853	34.906	2.11	26.146	0.538
160.	13.753	34.904	2.15	26.165	0.557
170.	13.656	34.898	2.13	26.181	0.576
180.	13.608	34.909	2.15	26.199	0.594
190.	13.588	34.907	2.17	26.202	0.613
200.	13.408	34.890	1.96	26.226	0.631
250.	12.550	34.838	1.49	26.358	0.720
300.	11.841	34.782	1.60	26.451	0.804
350.	10.805	34.705	1.84	26.582	0.884
400.	9.761	34.678	1.35	26.741	0.956
450.	9.021	34.642	1.44	26.835	1.023
500.	8.358	34.611	1.48	26.915	1.085
550.	7.851	34.592	1.63	26.976	1.144
600.	7.230	34.570	1.71	27.048	1.201
650.	6.857	34.571	1.52	27.101	1.255
700.	6.405	34.552	1.75	27.146	1.306
750.	6.043	34.552	1.63	27.193	1.355
800.	5.683	34.549	1.70	27.236	1.403
850.	5.399	34.546	1.79	27.268	1.448
900.	5.087	34.544	1.90	27.303	1.492
950.	4.775	34.545	2.05	27.340	1.534
1000.	4.530	34.550	2.07	27.371	1.575
1006.	4.497	34.550	2.08	27.375	1.580

CAST EP2-86-OC-025 DATE 02 JUN 86 TIME 0045 GMT  
LAT 02 59.6N LONG 110 00.2W



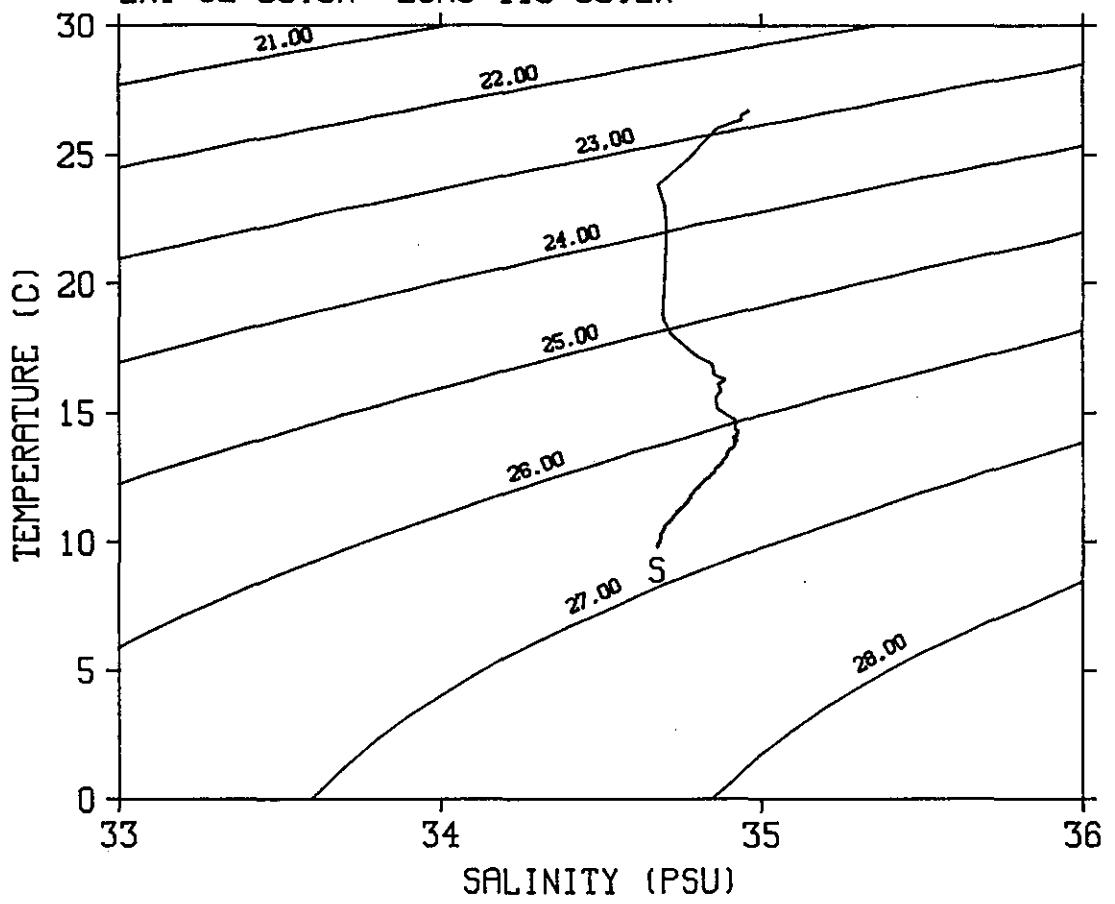
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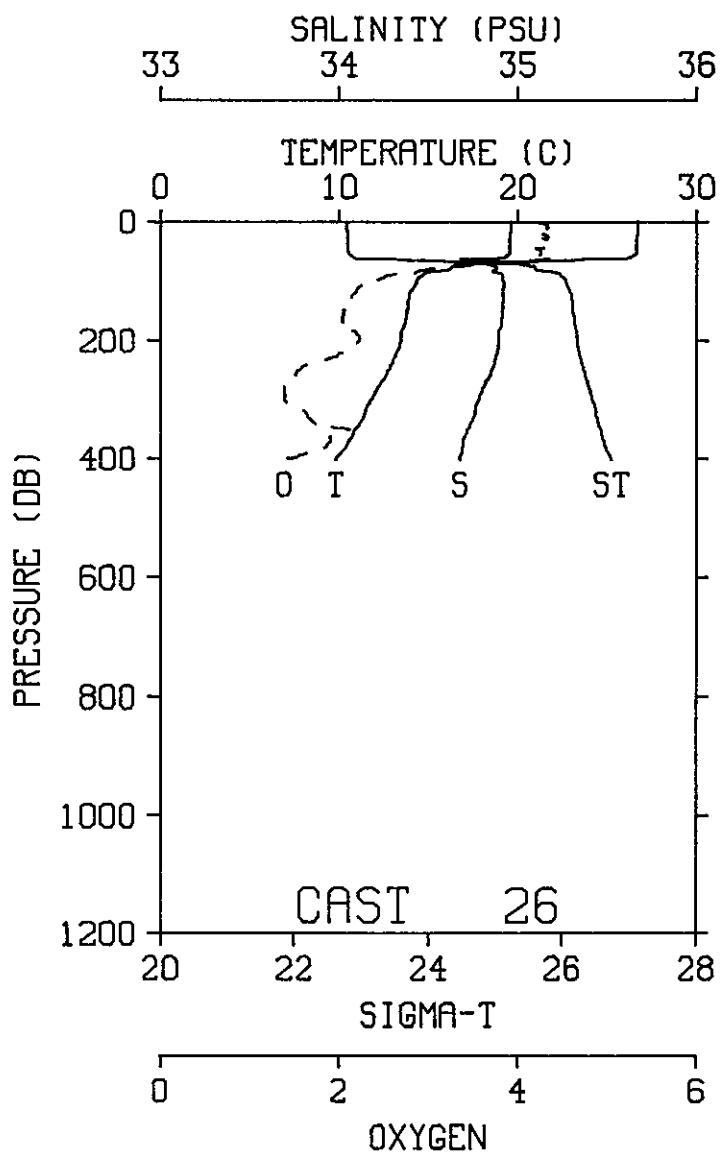


CAST EP2-86-OC-025 DATE 02 JUN 86 TIME 0045 GMT  
 LAT 02 59.6N LONG 110 00.2W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 190 T SPD 15 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 25.5 WET 24.0 DEPTH 3800 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.762	34.965	4.24	22.769	0.000
10.	26.756	34.963	4.24	22.770	0.051
20.	26.716	34.961	4.23	22.781	0.102
30.	26.675	34.961	4.29	22.794	0.152
40.	26.667	34.962	4.30	22.797	0.203
50.	26.662	34.961	4.25	22.798	0.253
60.	26.361	34.946	4.26	22.882	0.304
70.	20.103	34.773	3.98	24.563	0.349
80.	16.277	34.885	3.11	25.597	0.375
90.	14.772	34.912	2.73	25.955	0.398
100.	14.368	34.921	2.46	26.049	0.418
110.	14.167	34.924	2.26	26.094	0.438
120.	13.968	34.917	2.18	26.131	0.457
130.	13.903	34.922	2.14	26.148	0.476
140.	13.843	34.921	2.07	26.160	0.495
150.	13.818	34.920	2.06	26.164	0.514
160.	13.757	34.919	2.07	26.176	0.533
170.	13.679	34.917	2.08	26.191	0.551
180.	13.535	34.901	2.16	26.208	0.570
190.	13.478	34.897	2.27	26.216	0.588
200.	13.437	34.895	2.23	26.224	0.607
250.	12.748	34.856	1.47	26.332	0.697
300.	11.880	34.789	1.51	26.449	0.781
350.	10.928	34.723	1.91	26.573	0.861
400.	9.818	34.679	1.52	26.732	0.935
450.	8.976	34.648	1.23	26.847	1.001
500.	8.035	34.610	1.37	26.962	1.062
550.	7.613	34.600	1.36	27.017	1.119
600.	7.206	34.586	1.35	27.064	1.174
650.	6.941	34.578	1.51	27.095	1.228
700.	6.650	34.574	1.36	27.131	1.280
750.	6.225	34.560	1.43	27.176	1.330
800.	5.873	34.556	1.56	27.218	1.378
850.	5.609	34.552	1.68	27.248	1.425
900.	5.378	34.550	1.72	27.274	1.470
950.	5.066	34.551	1.76	27.312	1.514
1000.	4.773	34.556	1.82	27.349	1.556
1006.	4.719	34.557	1.84	27.356	1.561

CAST EP2-86-OC-026 DATE 02 JUN 86 TIME 0157 GMT  
LAT 02 59.6N LONG 110 00.2W

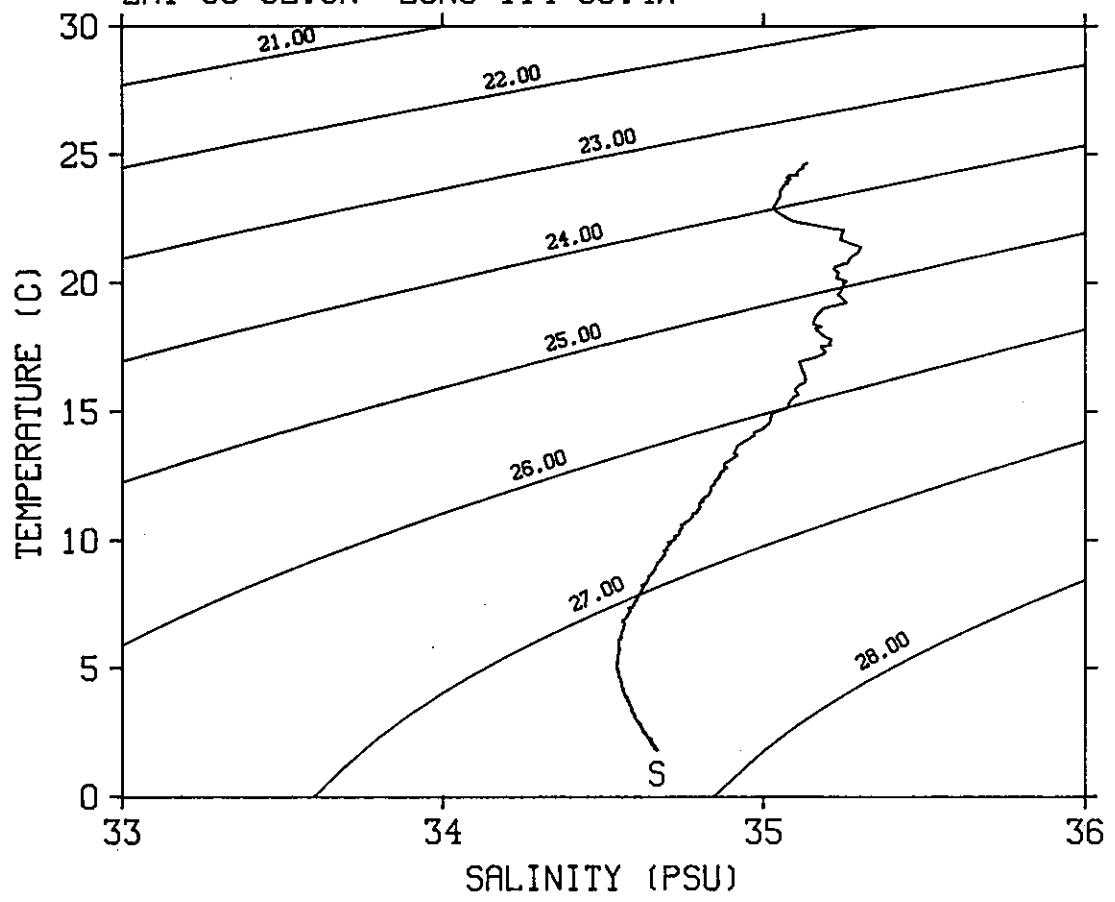




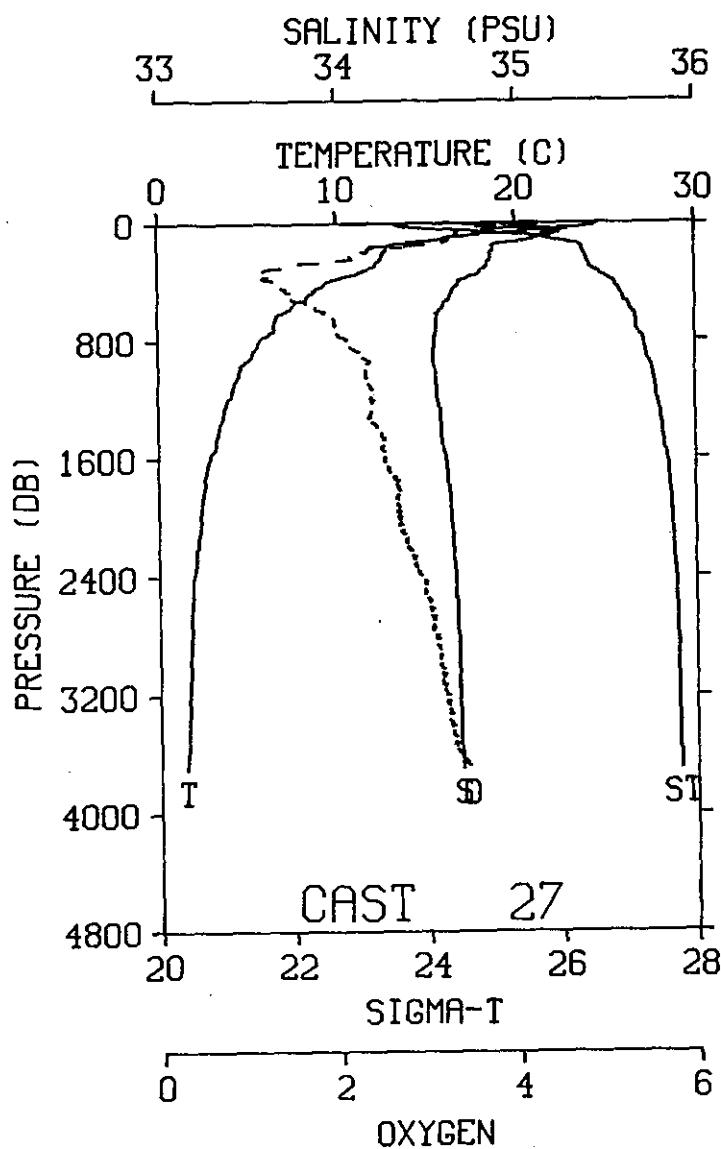
CAST EP2-86-OC-026 DATE 02 JUN 86 TIME 0157 GMT  
 LAT 02 59.6N LONG 110 00.2W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 190 T SPD 15 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 25.5 WET 24.0 DEPTH 3800 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.701	34.966	4.30	22.789	0.000
10.	26.705	34.964	4.34	22.787	0.051
20.	26.691	34.963	4.28	22.790	0.101
30.	26.655	34.961	4.31	22.800	0.152
40.	26.649	34.962	4.31	22.803	0.202
50.	26.633	34.960	4.27	22.806	0.253
60.	26.325	34.942	4.25	22.890	0.303
70.	17.194	34.808	3.72	25.321	0.344
80.	16.222	34.889	3.00	25.612	0.369
90.	14.706	34.921	2.58	25.976	0.390
100.	14.327	34.926	2.36	26.061	0.410
110.	14.179	34.927	2.22	26.094	0.430
120.	13.960	34.921	2.19	26.135	0.449
130.	13.913	34.926	2.13	26.149	0.468
140.	13.849	34.920	2.08	26.158	0.487
150.	13.828	34.921	2.04	26.162	0.506
160.	13.758	34.919	2.05	26.176	0.524
170.	13.689	34.918	2.04	26.189	0.543
180.	13.553	34.905	2.07	26.208	0.562
190.	13.474	34.899	2.21	26.219	0.580
200.	13.455	34.897	2.23	26.221	0.599
250.	12.755	34.860	1.56	26.334	0.689
300.	11.840	34.785	1.39	26.453	0.773
350.	10.905	34.725	2.12	26.579	0.852
400.	9.821	34.681	1.43	26.733	0.926
403.	9.818	34.680	1.38	26.733	0.930

CAST EP2-86-OC-027 DATE 03 JUN 86 TIME 0736 GMT  
LAT 00 02.3N LONG 114 58.4W



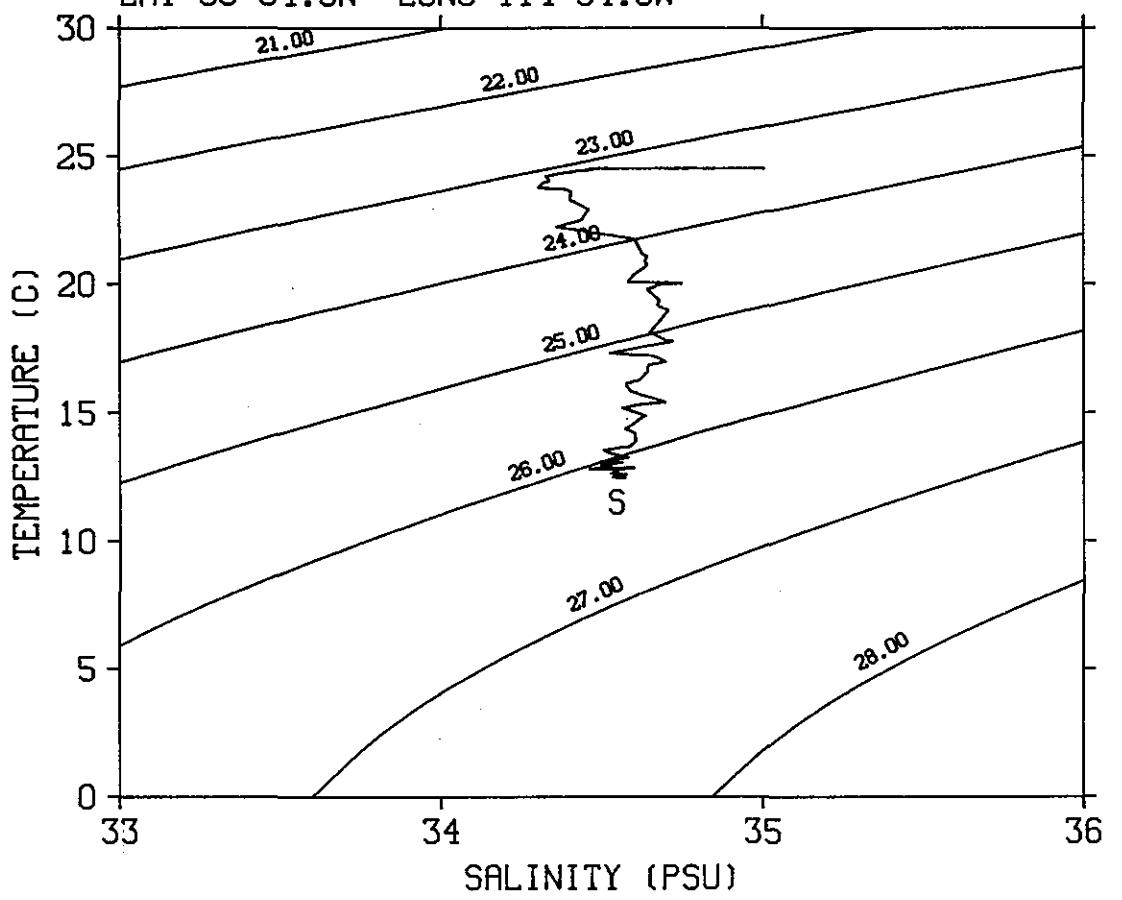
E8



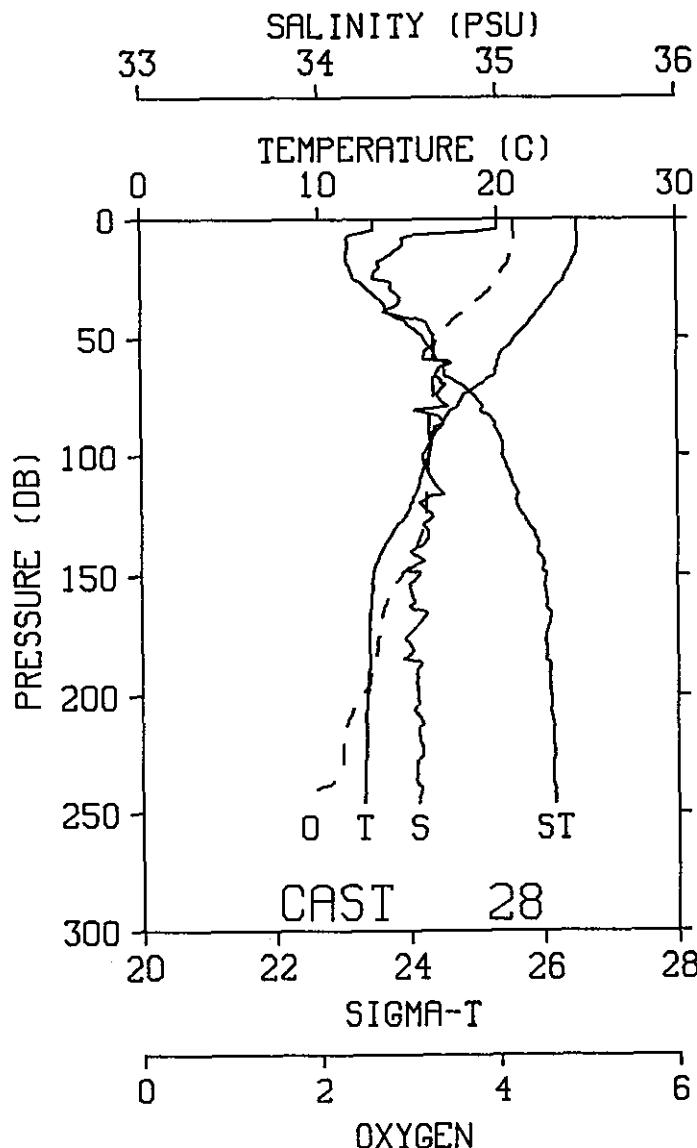
CAST EP2-86-OC-027 DATE 03 JUN 86 TIME 0736 GMT  
 LAT 00 02.3N LONG 114 58.4W WEATHER 1 SEA STATE 3  
 BAROMETER 14 WIND DIR 110 T SPD 05 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 1 DRY 24.8 WET 23.0 DEPTH 3995 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.659	35.136	3.43	23.549	0.000
10.	24.628	35.136	3.40	23.558	0.043
20.	24.230	35.104	3.56	23.653	0.086
30.	23.638	35.055	4.15	23.792	0.128
40.	22.397	35.092	4.09	24.177	0.168
50.	21.391	35.300	3.49	24.617	0.203
60.	20.167	35.226	3.35	24.891	0.235
70.	19.390	35.244	3.34	25.109	0.265
80.	17.790	35.211	3.34	25.486	0.292
90.	17.196	35.179	3.27	25.605	0.317
100.	16.321	35.127	3.27	25.772	0.340
110.	15.842	35.098	3.27	25.860	0.362
120.	15.301	35.078	3.25	25.966	0.383
130.	14.495	35.015	3.21	26.094	0.403
140.	13.497	34.914	3.13	26.226	0.422
150.	13.058	34.893	2.96	26.299	0.440
160.	12.882	34.877	2.64	26.322	0.457
170.	12.828	34.886	2.45	26.339	0.474
180.	12.812	34.885	2.35	26.342	0.492
190.	12.778	34.884	2.36	26.348	0.509
200.	12.669	34.874	2.28	26.362	0.526
250.	12.435	34.862	2.12	26.399	0.610
300.	12.107	34.841	1.41	26.446	0.693
350.	10.955	34.781	1.28	26.614	0.771
400.	9.402	34.693	1.29	26.813	0.841
450.	8.796	34.657	1.41	26.882	0.905
500.	8.335	34.636	1.48	26.938	0.966
550.	7.612	34.602	1.69	27.019	1.024
600.	7.063	34.578	1.85	27.078	1.079
650.	6.623	34.565	1.97	27.128	1.131
700.	6.521	34.565	1.98	27.141	1.182
750.	6.200	34.557	1.99	27.178	1.232
800.	5.687	34.553	2.12	27.239	1.280
850.	5.471	34.546	2.16	27.259	1.325
900.	5.254	34.545	2.26	27.285	1.370
950.	4.834	34.548	2.35	27.336	1.413
1000.	4.553	34.554	2.31	27.373	1.453
1500.	3.209	34.597	2.50	27.544	1.809
2000.	2.332	34.640	2.69	27.657	2.092
2500.	1.891	34.663	2.98	27.710	2.342
3000.	1.699	34.676	3.15	27.735	2.574
3500.	1.559	34.685	3.29	27.753	2.802
3701.	1.435	34.694	3.46	27.769	2.890

CAST EP2-86-OC-028 DATE 03 JUN 86 TIME 1106 GMT  
LAT 00 04.0N LONG 114 54.8W



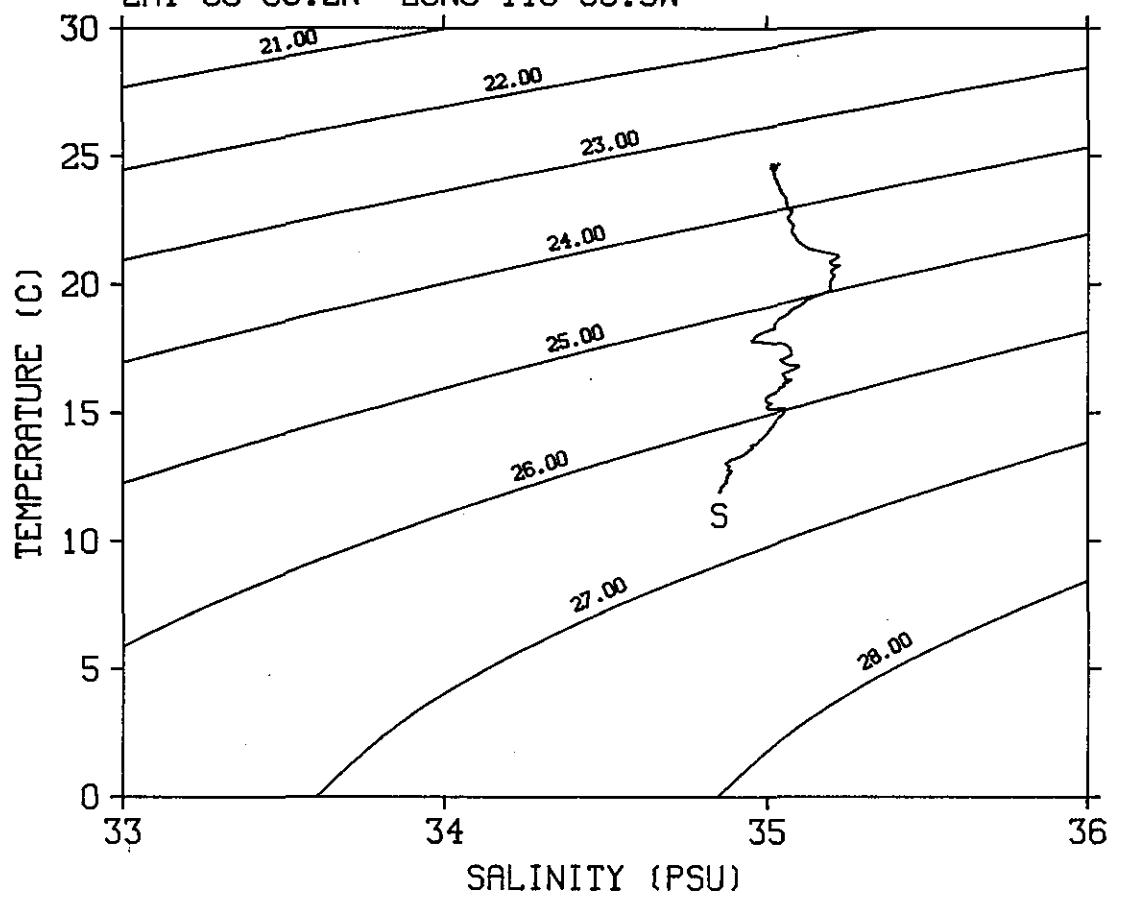
S8



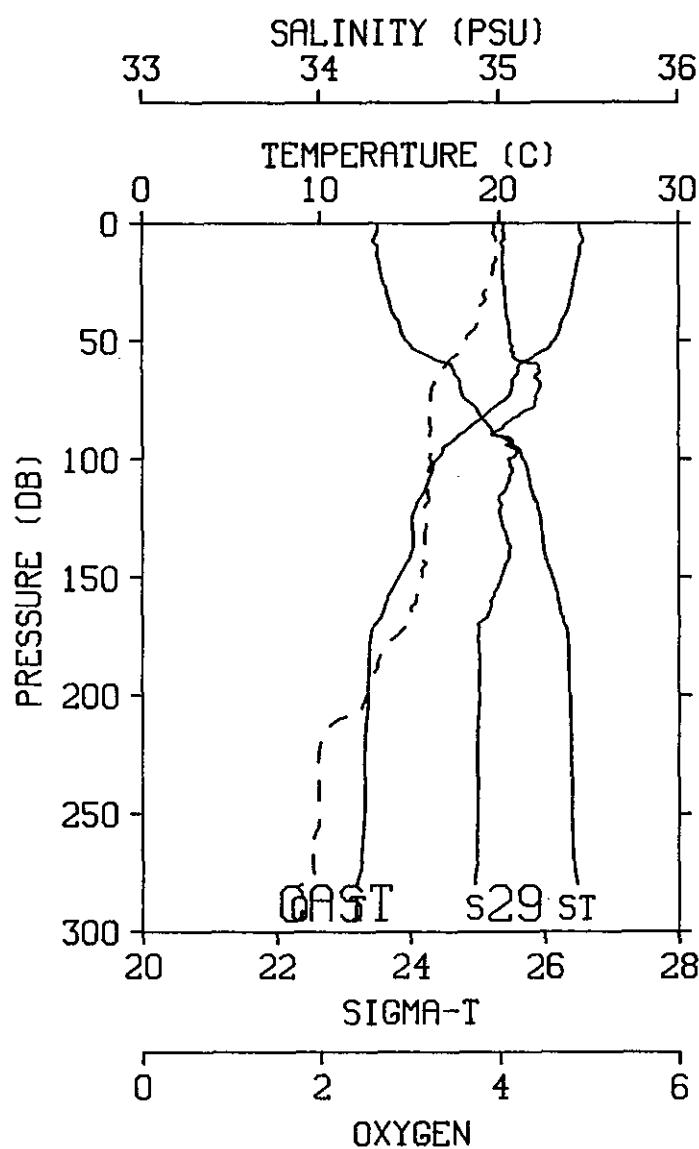
CAST EP2-86-OC-028 DATE 03 JUN 86 TIME 1106 GMT  
 LAT 00 04.0N LONG 114 54.8W WEATHER 1 SEA STATE 3  
 BAROMETER 14 WIND DIR 110 T SPD 05 KT VISIBILITY 1  
 CLOUD 8 AMOUNT 1 DRY 24.8 WET 23.0 DEPTH 3990 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.513	35.139	4.15	23.595	0.000
10.	24.486	34.478	4.17	23.103	0.047
20.	24.081	34.343	4.09	23.122	0.095
30.	23.194	34.423	3.91	23.442	0.141
40.	22.101	34.427	3.58	23.756	0.184
50.	20.975	34.646	3.32	24.233	0.223
60.	20.047	34.738	3.28	24.551	0.258
70.	18.967	34.715	3.28	24.813	0.292
80.	17.536	34.631	3.24	25.103	0.322
90.	16.565	34.649	3.23	25.348	0.349
100.	16.139	34.582	3.22	25.395	0.375
110.	15.663	34.637	3.21	25.546	0.400
120.	15.181	34.572	3.21	25.603	0.425
130.	14.263	34.595	3.17	25.820	0.448
140.	13.524	34.513	3.07	25.910	0.469
150.	13.033	34.571	2.92	26.054	0.489
160.	12.865	34.528	2.76	26.054	0.509
170.	12.814	34.563	2.69	26.092	0.529
180.	12.802	34.524	2.65	26.064	0.549
190.	12.747	34.550	2.59	26.095	0.568
200.	12.665	34.554	2.48	26.115	0.588
250.	12.396	34.550	1.84	26.164	0.684

CAST EP2-86-OC-029 DATE 03 JUN 86 TIME 2130 GMT  
LAT 00 00.2N LONG 116 30.9W



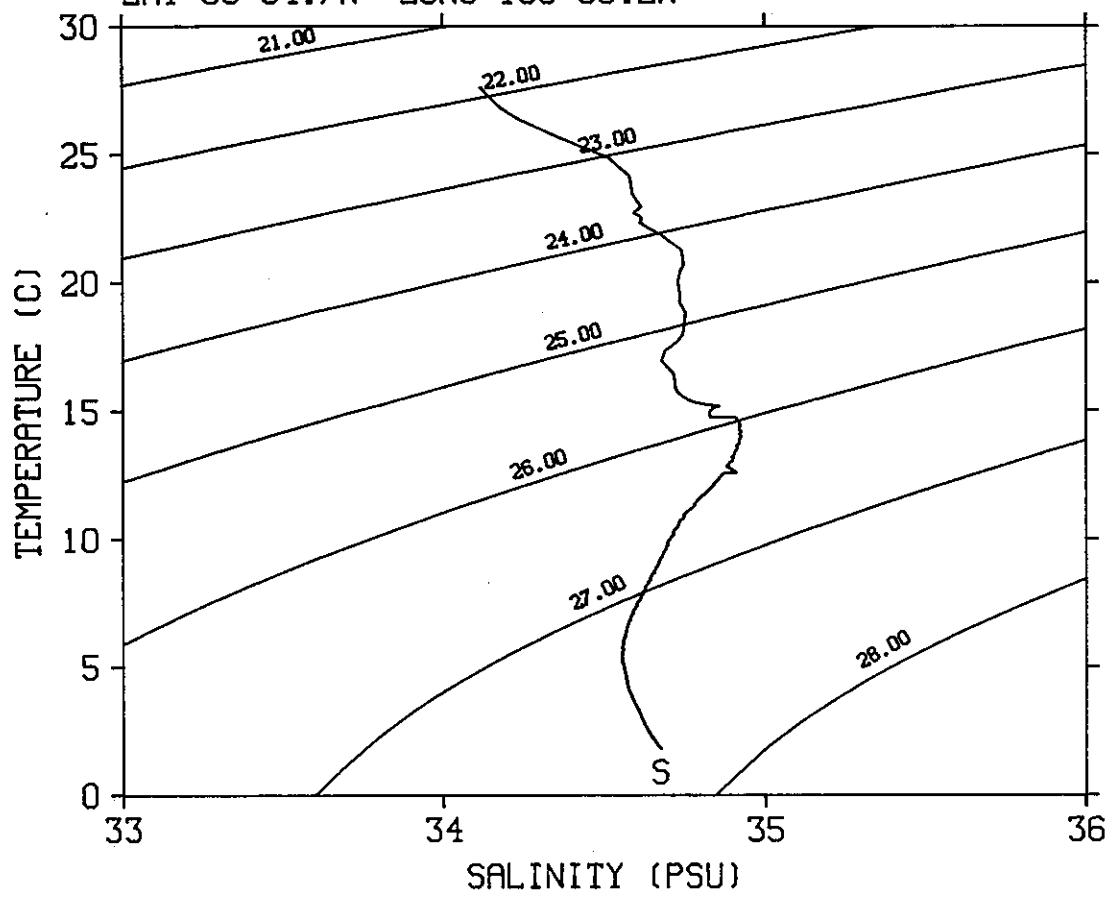
L8

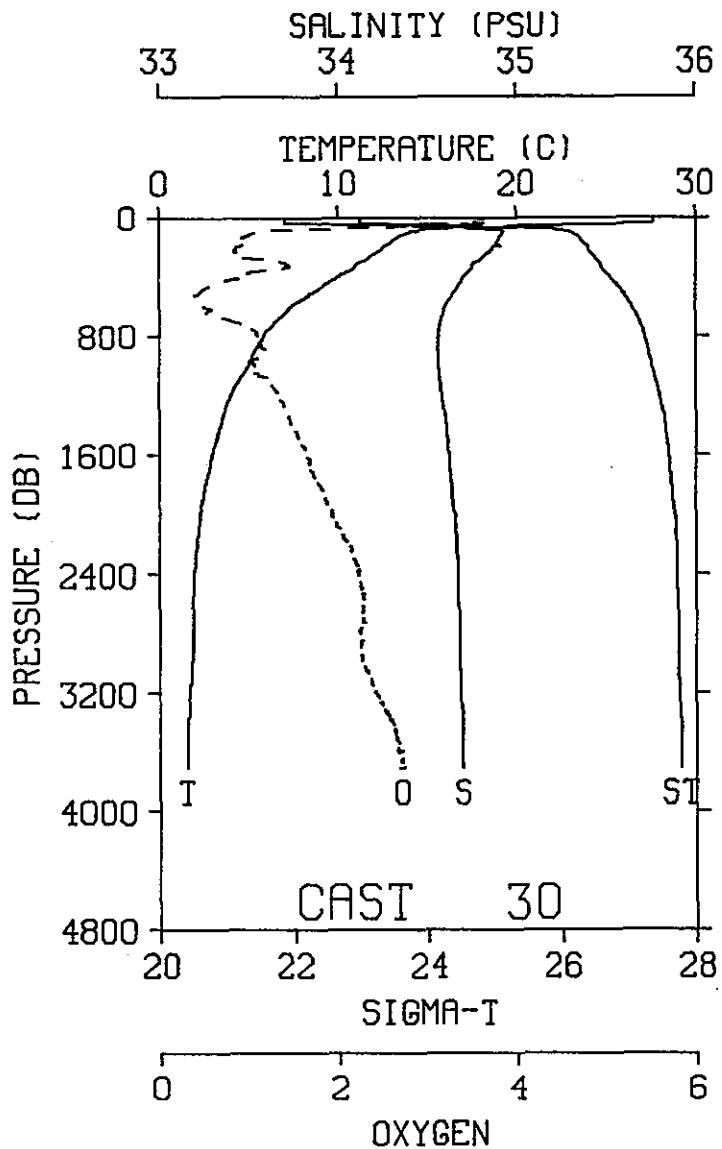


CAST EP2-86-OC-029 DATE 03 JUN 86 TIME 2130 GMT  
 LAT 00 00.2N LONG 116 30.9W WEATHER 1 SEA STATE 1  
 BAROMETER 12 WIND DIR 115 T SPD 14 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 3 DRY 25.5 WET 23.0 DEPTH 4100 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.474	35.023	3.94	23.519	0.000
10.	24.454	35.022	3.97	23.525	0.044
20.	24.290	35.022	3.94	23.573	0.087
30.	24.013	35.030	3.82	23.662	0.130
40.	23.616	35.042	3.78	23.788	0.172
50.	23.079	35.061	3.64	23.959	0.212
60.	21.150	35.206	3.42	24.611	0.249
70.	20.684	35.225	3.25	24.752	0.282
80.	19.437	35.134	3.23	25.012	0.313
90.	17.779	34.951	3.22	25.290	0.341
100.	16.477	35.048	3.22	25.675	0.366
110.	16.001	35.048	3.19	25.785	0.389
120.	15.360	35.011	3.17	25.902	0.410
130.	15.160	35.031	3.16	25.961	0.431
140.	15.040	35.052	3.14	26.004	0.452
150.	14.357	35.008	3.14	26.119	0.472
160.	13.713	34.950	3.07	26.209	0.491
170.	13.005	34.872	2.97	26.293	0.509
180.	12.729	34.886	2.70	26.359	0.526
190.	12.703	34.889	2.60	26.367	0.543
200.	12.645	34.885	2.51	26.375	0.560
250.	12.448	34.876	1.99	26.407	0.644
298.	11.911	34.851	1.44	26.491	0.722

CAST EP2-86-OC-030 DATE 05 JUN 86 TIME 0704 GMT  
LAT 05 04.7N LONG 109 59.2W

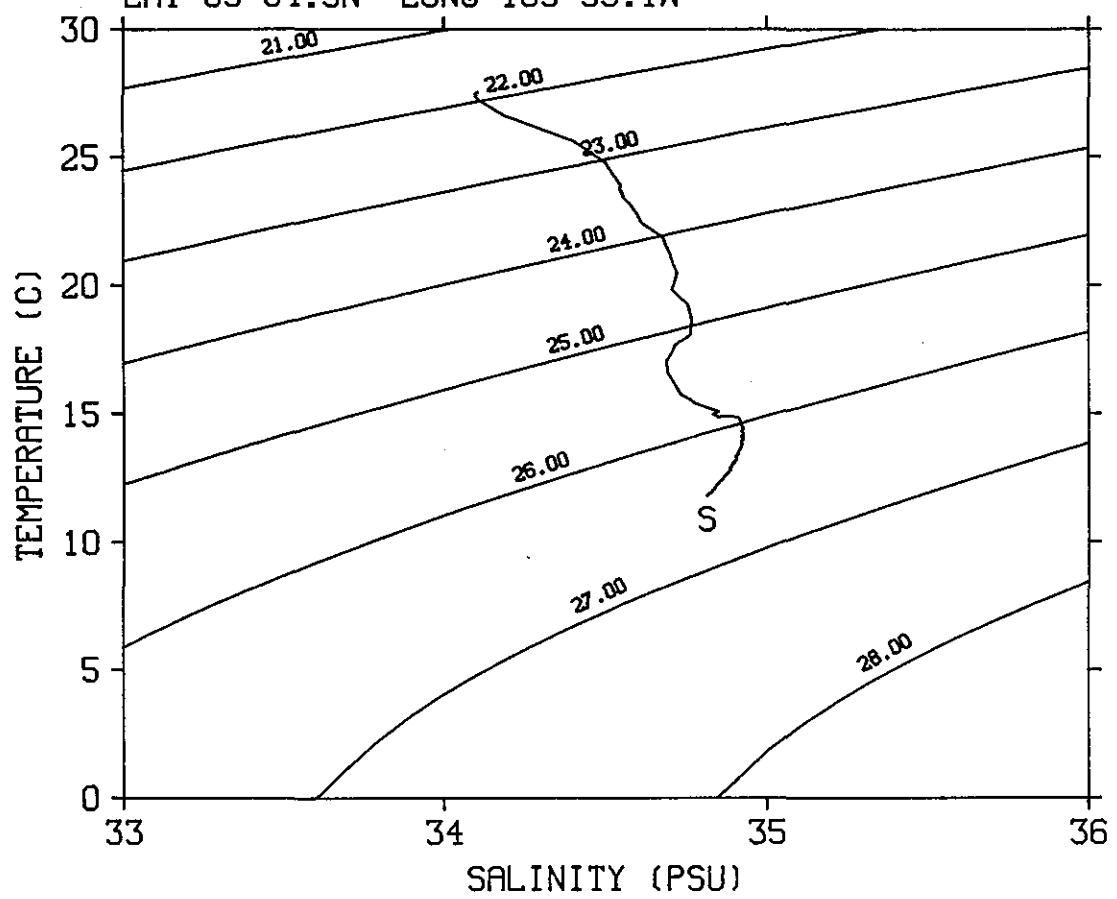


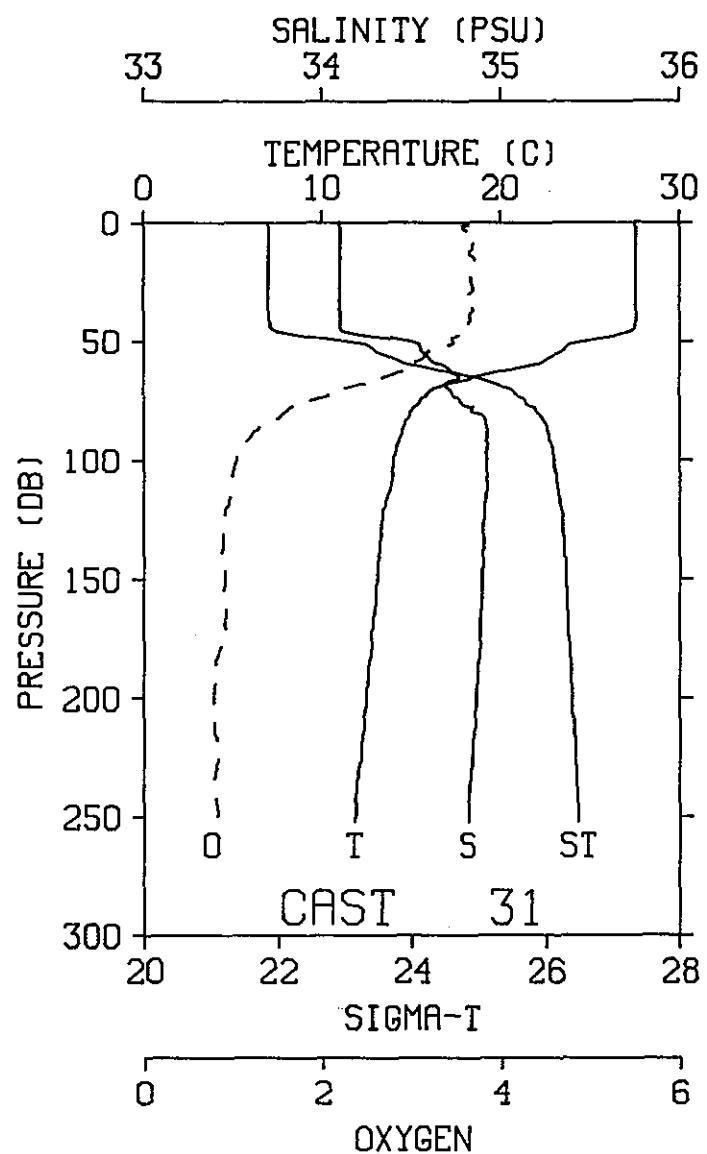


CAST EP2-86-OC-030 DATE 05 JUN 86 TIME 0704 GMT  
 LAT 05 04.7N LONG 109 59.2W WEATHER 1 SEA STATE 3  
 BAROMETER 13 WIND DIR 150 T SPD 12 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 26.2 WET 23.0 DEPTH 3870 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.593	34.119	3.61	21.866	0.000
10.	27.593	34.117	3.59	21.865	0.059
20.	27.597	34.118	3.56	21.864	0.119
30.	27.599	34.118	3.56	21.864	0.178
40.	27.264	34.144	3.65	21.991	0.238
50.	22.614	34.607	3.11	23.748	0.286
60.	19.543	34.735	2.70	24.681	0.324
70.	16.149	34.720	2.00	25.499	0.353
80.	14.945	34.826	1.51	25.851	0.376
90.	14.443	34.922	1.24	26.033	0.396
100.	13.967	34.924	1.08	26.136	0.416
110.	13.797	34.919	1.01	26.168	0.434
120.	13.553	34.913	0.98	26.214	0.453
130.	13.336	34.903	0.93	26.250	0.471
140.	13.198	34.896	0.92	26.273	0.489
150.	13.102	34.898	0.91	26.294	0.506
160.	12.996	34.892	0.90	26.311	0.524
170.	12.922	34.885	0.92	26.320	0.541
180.	12.769	34.886	0.92	26.351	0.559
190.	12.641	34.901	0.91	26.388	0.576
200.	12.517	34.865	0.86	26.385	0.592
250.	11.983	34.830	0.85	26.461	0.675
300.	11.321	34.781	1.35	26.547	0.755
350.	10.779	34.745	1.28	26.617	0.830
400.	9.957	34.701	0.84	26.726	0.902
450.	9.309	34.679	0.59	26.817	0.970
500.	8.613	34.650	0.45	26.905	1.034
550.	8.052	34.625	0.39	26.972	1.094
600.	7.396	34.600	0.48	27.048	1.150
650.	6.917	34.581	0.56	27.101	1.204
700.	6.489	34.569	0.83	27.149	1.255
750.	6.117	34.562	0.99	27.191	1.305
800.	5.782	34.558	1.09	27.231	1.352
850.	5.535	34.555	1.12	27.259	1.398
900.	5.273	34.556	1.17	27.291	1.443
950.	5.101	34.560	1.09	27.315	1.486
1000.	4.936	34.562	1.06	27.336	1.529
1500.	3.136	34.612	1.55	27.563	1.884
2000.	2.225	34.648	1.93	27.672	2.165
2500.	1.875	34.669	2.27	27.717	2.408
3000.	1.773	34.677	2.26	27.731	2.643
3500.	1.521	34.691	2.64	27.761	2.869
3714.	1.487	34.694	2.71	27.765	2.962

CAST EP2-86-OC-031 DATE 05 JUN 86 TIME 1010 GMT  
LAT 05 04.5N LONG 109 59.1W

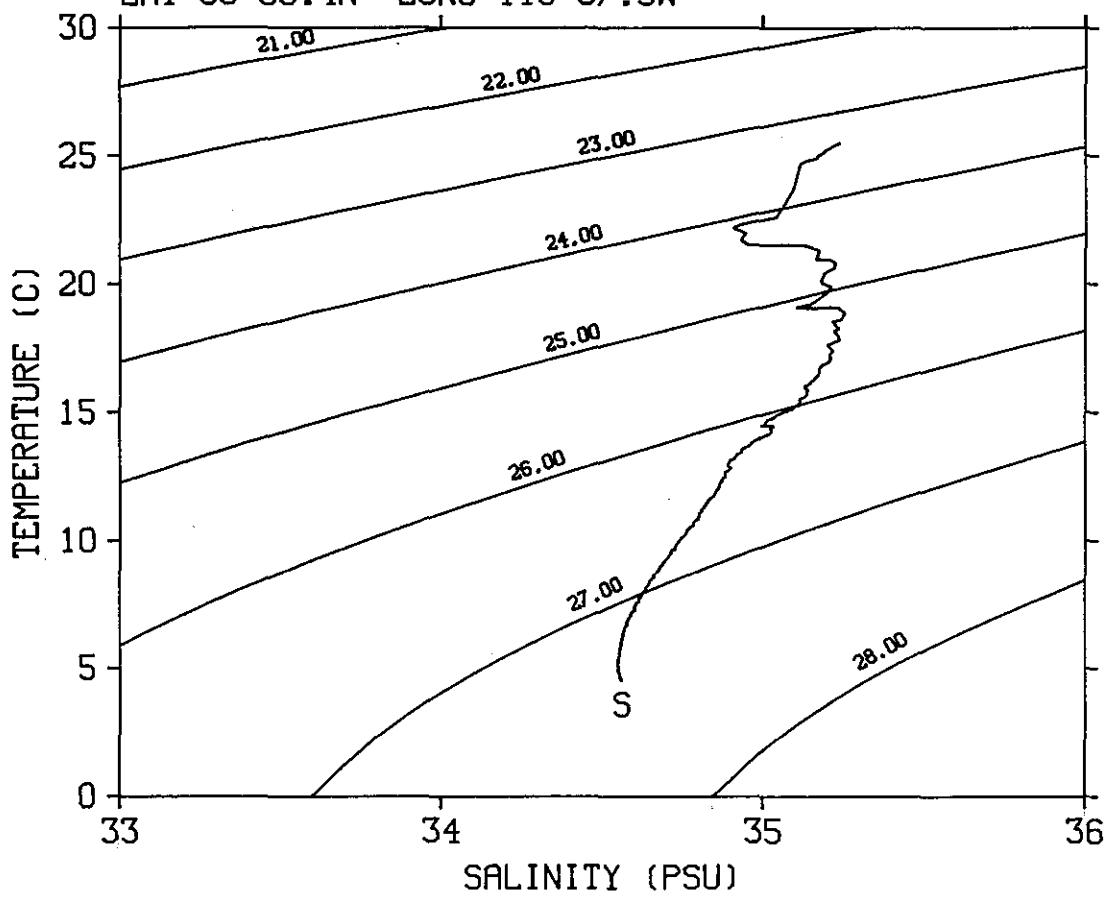




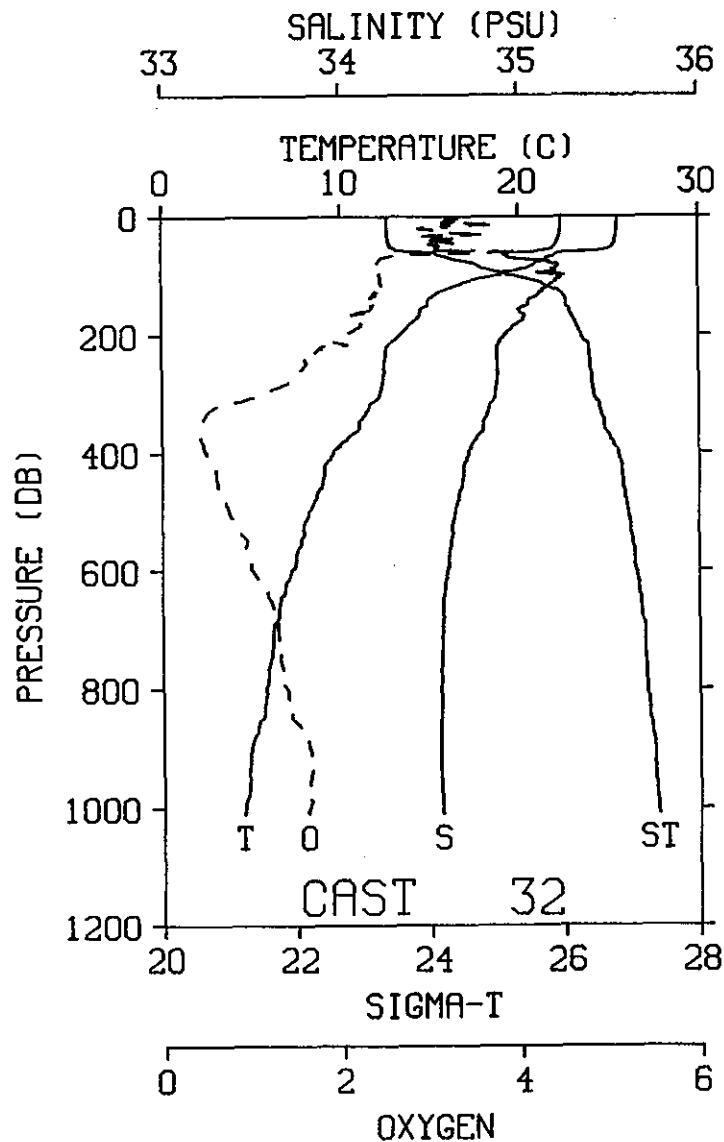
CAST EP2-86-OC-031 DATE 05 JUN 86 TIME 1010 GMT  
 LAT 05 04.5N LONG 109 59.1W WEATHER 2 SEA STATE 3  
 BAROMETER 11 WIND DIR 140 T SPD 13 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 26.0 WET 22.8 DEPTH 3870 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.542	34.103	3.60	21.871	0.000
10.	27.555	34.103	3.68	21.866	0.059
20.	27.558	34.103	3.70	21.866	0.119
30.	27.557	34.102	3.65	21.865	0.178
40.	27.559	34.102	3.65	21.864	0.238
50.	24.775	34.501	3.45	23.034	0.295
60.	21.866	34.677	2.98	24.012	0.338
70.	16.280	34.706	2.22	25.458	0.369
80.	14.861	34.845	1.57	25.884	0.392
90.	14.395	34.924	1.19	26.045	0.413
100.	14.003	34.925	1.04	26.129	0.432
110.	13.835	34.921	0.98	26.161	0.451
120.	13.448	34.907	0.92	26.230	0.469
130.	13.284	34.901	0.89	26.259	0.487
140.	13.172	34.901	0.88	26.282	0.505
150.	13.052	34.892	0.91	26.299	0.523
160.	13.009	34.892	0.91	26.308	0.540
170.	12.815	34.883	0.91	26.340	0.557
180.	12.715	34.879	0.84	26.357	0.575
190.	12.549	34.867	0.79	26.380	0.591
200.	12.469	34.862	0.78	26.391	0.608
250.	11.805	34.814	0.82	26.482	0.690
252.	11.784	34.812	0.76	26.485	0.693

CAST EP2-86-OC-032 DATE 07 JUN 86 TIME 1720 GMT  
LAT 00 00.4N LONG 119 57.9W

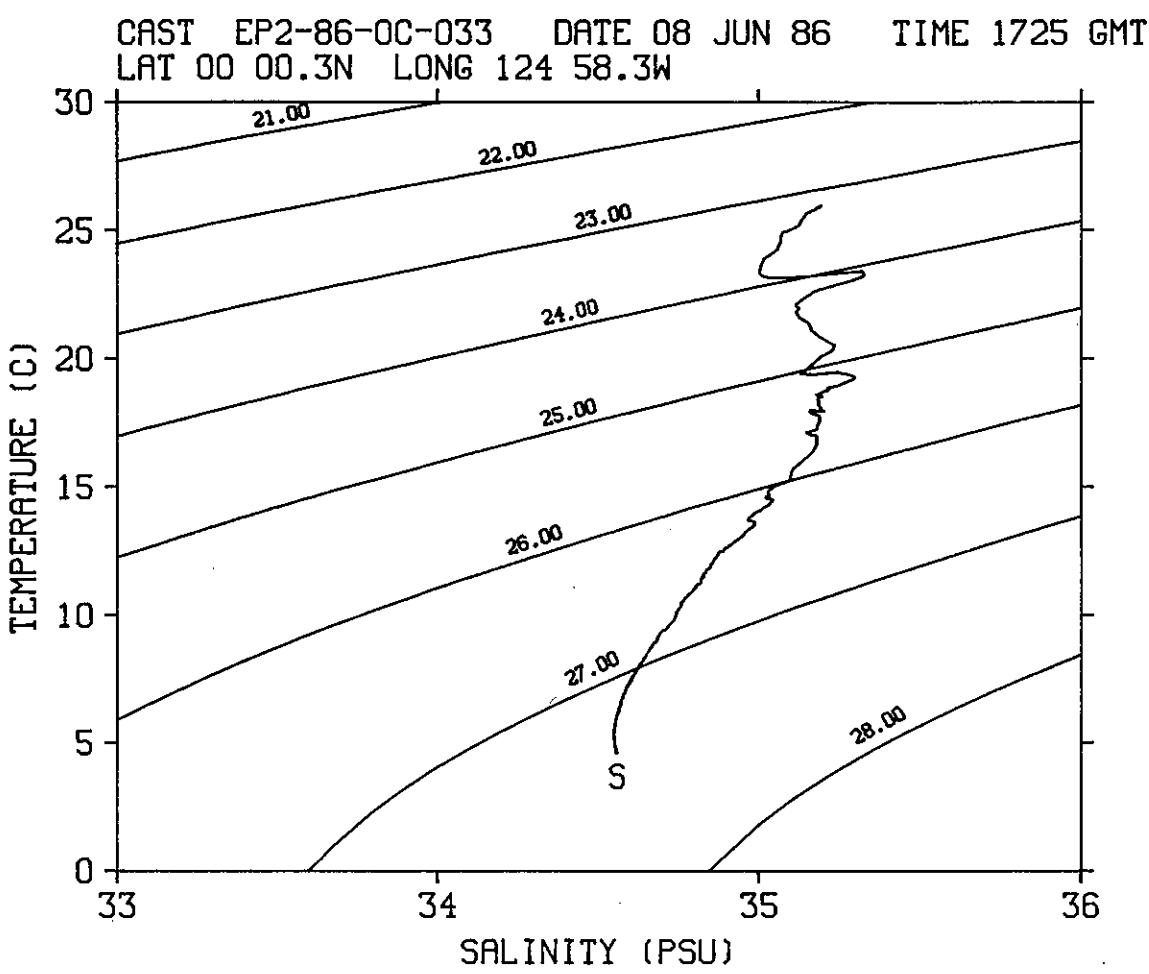


E6

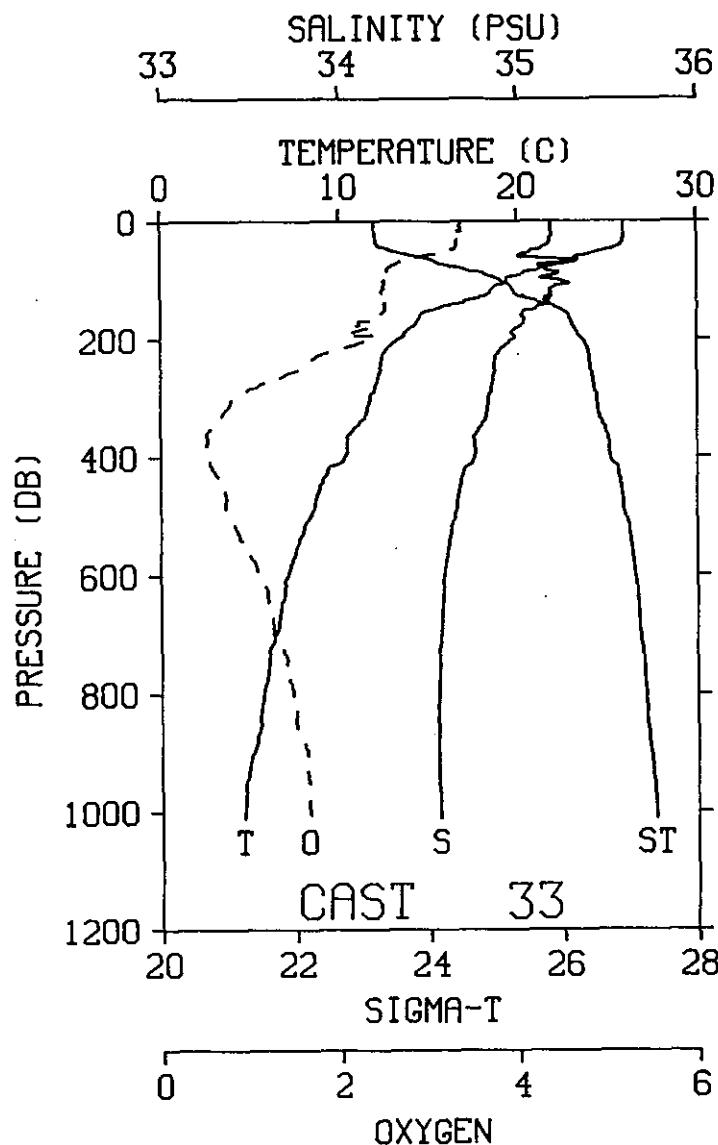


CAST EP2-86-OC-032 DATE 07 JUN 86 TIME 1720 GMT  
 LAT 00 00.4N LONG 119 57.9W WEATHER 1 SEA STATE 3  
 BAROMETER 14 WIND DIR 090 T SPD 14 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 26.0 WET 24.0 DEPTH 4100 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.494	35.237	3.30	23.371	0.000
10.	25.491	35.237	3.26	23.372	0.045
20.	25.483	35.235	3.08	23.373	0.090
30.	25.454	35.231	3.63	23.379	0.135
40.	25.393	35.222	3.36	23.391	0.180
50.	25.227	35.200	3.13	23.425	0.225
60.	23.691	35.093	3.91	23.805	0.269
70.	21.574	34.944	2.48	24.295	0.307
80.	20.935	35.200	2.42	24.665	0.342
90.	19.989	35.191	2.43	24.912	0.374
100.	18.847	35.256	2.45	25.257	0.403
110.	17.253	35.209	2.46	25.615	0.428
120.	16.171	35.148	2.43	25.823	0.451
130.	15.388	35.111	2.36	25.973	0.472
140.	14.948	35.056	2.39	26.028	0.493
150.	14.875	35.043	2.34	26.033	0.513
160.	14.483	35.006	2.22	26.090	0.533
170.	14.388	35.026	2.19	26.125	0.552
180.	14.000	34.991	2.24	26.181	0.571
190.	13.696	34.960	2.17	26.220	0.589
200.	13.370	34.926	2.06	26.261	0.608
250.	12.507	34.883	1.62	26.401	0.693
300.	12.231	34.867	1.08	26.442	0.777
350.	11.107	34.804	0.44	26.604	0.855
400.	9.590	34.715	0.51	26.799	0.926
450.	8.991	34.682	0.62	26.871	0.989
500.	8.231	34.643	0.75	26.959	1.050
550.	7.754	34.617	0.94	27.010	1.108
600.	7.223	34.594	1.01	27.068	1.163
650.	6.610	34.573	1.21	27.136	1.215
700.	6.175	34.564	1.29	27.186	1.265
750.	6.043	34.563	1.31	27.202	1.313
800.	5.762	34.558	1.38	27.233	1.361
850.	5.543	34.555	1.44	27.258	1.407
900.	4.929	34.553	1.65	27.329	1.450
950.	4.812	34.555	1.65	27.344	1.491
1000.	4.543	34.561	1.63	27.379	1.532
1011.	4.499	34.562	1.62	27.385	1.540



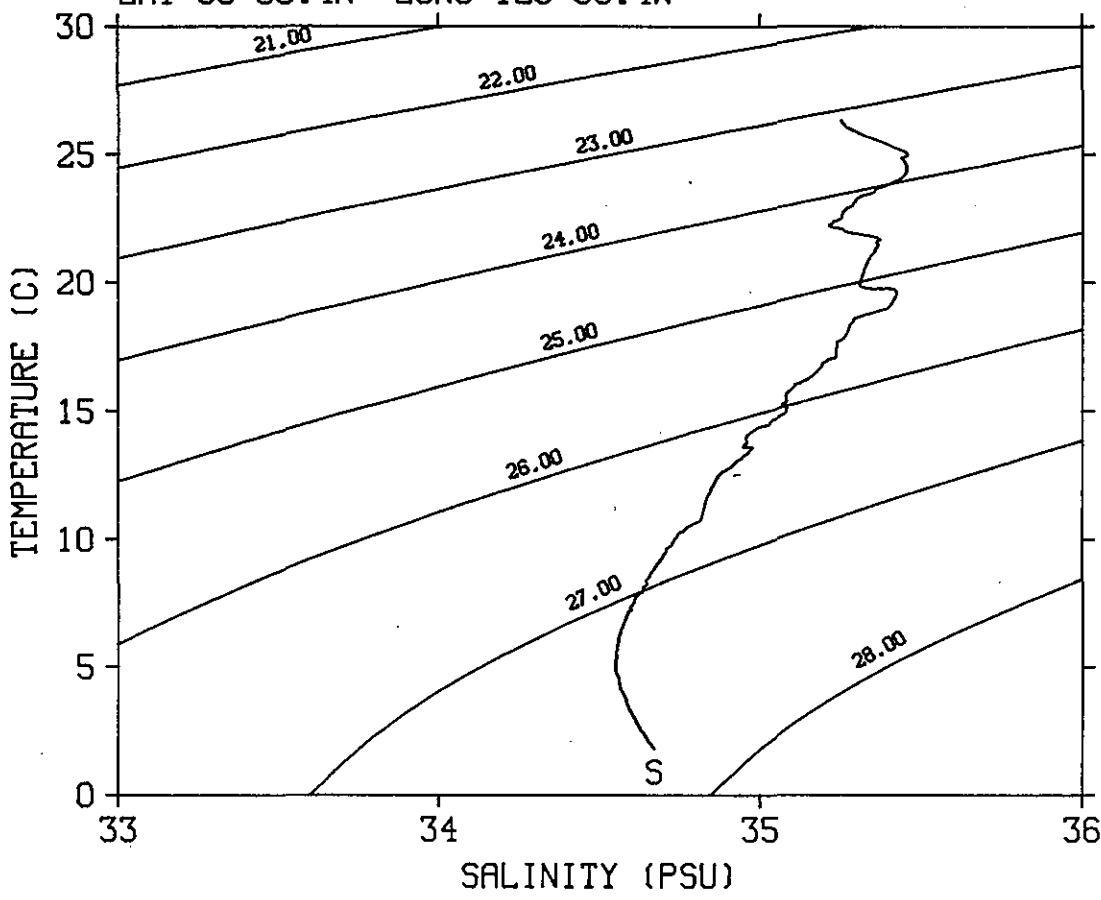
S6

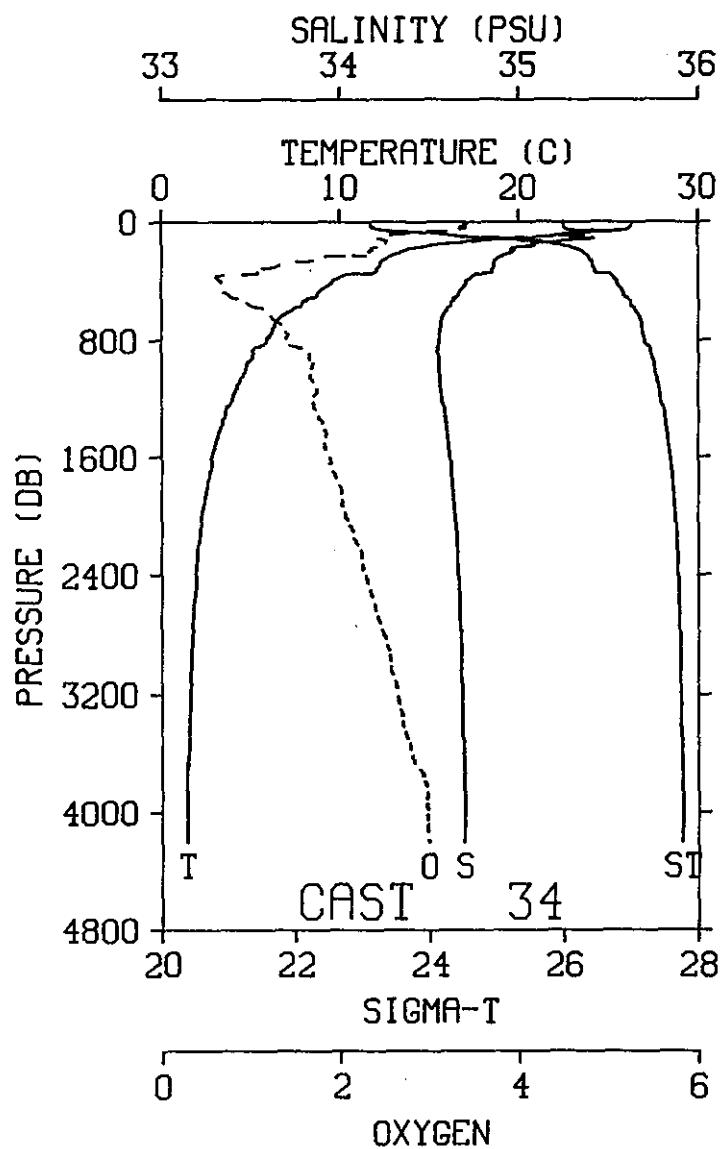


CAST EP2-86-OC-033 DATE 08 JUN 86 TIME 1725 GMT  
 LAT 00 00.3N LONG 124 58.3W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 110 T SPD 13 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 26.0 WET 24.5 DEPTH 4690 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.939	35.189	3.36	23.197	0.000
10.	25.945	35.189	3.35	23.195	0.047
20.	25.932	35.190	3.34	23.199	0.093
30.	25.872	35.181	3.36	23.211	0.140
40.	25.750	35.169	3.31	23.241	0.187
50.	24.780	35.068	3.18	23.461	0.232
60.	23.198	35.008	2.93	23.884	0.275
70.	22.989	35.274	2.66	24.147	0.314
80.	21.360	35.153	2.54	24.513	0.350
90.	20.160	35.208	2.50	24.879	0.382
100.	19.449	35.243	2.49	25.093	0.412
110.	18.784	35.219	2.50	25.244	0.440
120.	18.488	35.195	2.48	25.301	0.468
130.	17.762	35.183	2.51	25.472	0.494
140.	16.635	35.177	2.52	25.737	0.518
150.	15.153	35.078	2.51	25.999	0.539
160.	14.517	35.026	2.47	26.098	0.559
170.	14.361	35.034	2.21	26.138	0.579
180.	14.011	34.996	2.24	26.182	0.598
190.	13.662	34.968	2.29	26.233	0.616
200.	13.331	34.969	2.32	26.303	0.634
250.	12.315	34.871	1.55	26.429	0.718
300.	11.728	34.837	0.81	26.514	0.799
350.	10.849	34.788	0.59	26.638	0.877
400.	10.297	34.758	0.50	26.712	0.948
450.	8.919	34.676	0.73	26.877	1.014
500.	8.321	34.646	0.75	26.948	1.075
550.	7.631	34.611	0.95	27.023	1.132
600.	7.117	34.588	1.09	27.078	1.187
650.	6.702	34.575	1.20	27.125	1.239
700.	6.386	34.568	1.26	27.161	1.290
750.	6.005	34.559	1.40	27.204	1.338
800.	5.714	34.553	1.47	27.236	1.385
850.	5.533	34.552	1.51	27.257	1.431
900.	5.128	34.550	1.63	27.304	1.476
950.	4.720	34.555	1.65	27.354	1.517
1000.	4.607	34.557	1.66	27.369	1.558
1012.	4.576	34.559	1.65	27.374	1.567

CAST EP2-86-OC-034 DATE 09 JUN 86 TIME 1724 GMT  
LAT 00 00.4N LONG 129 58.4W

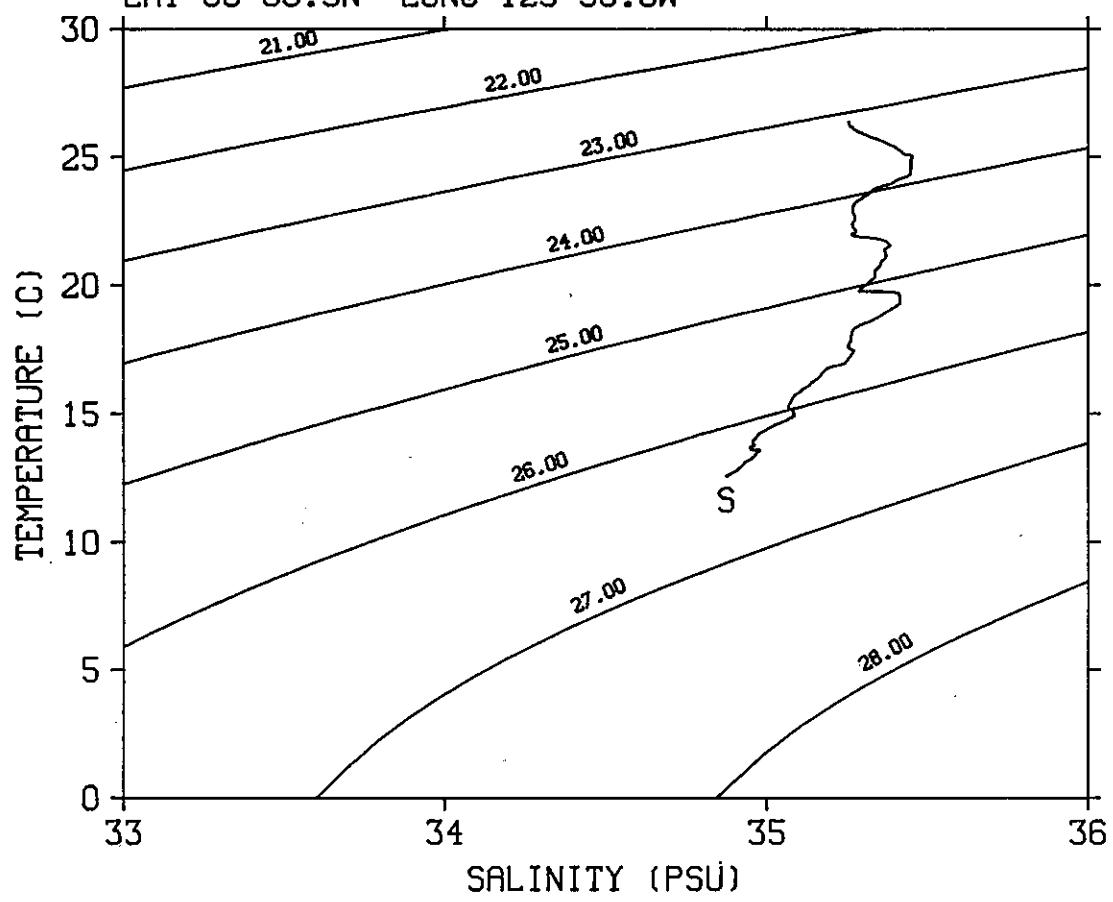


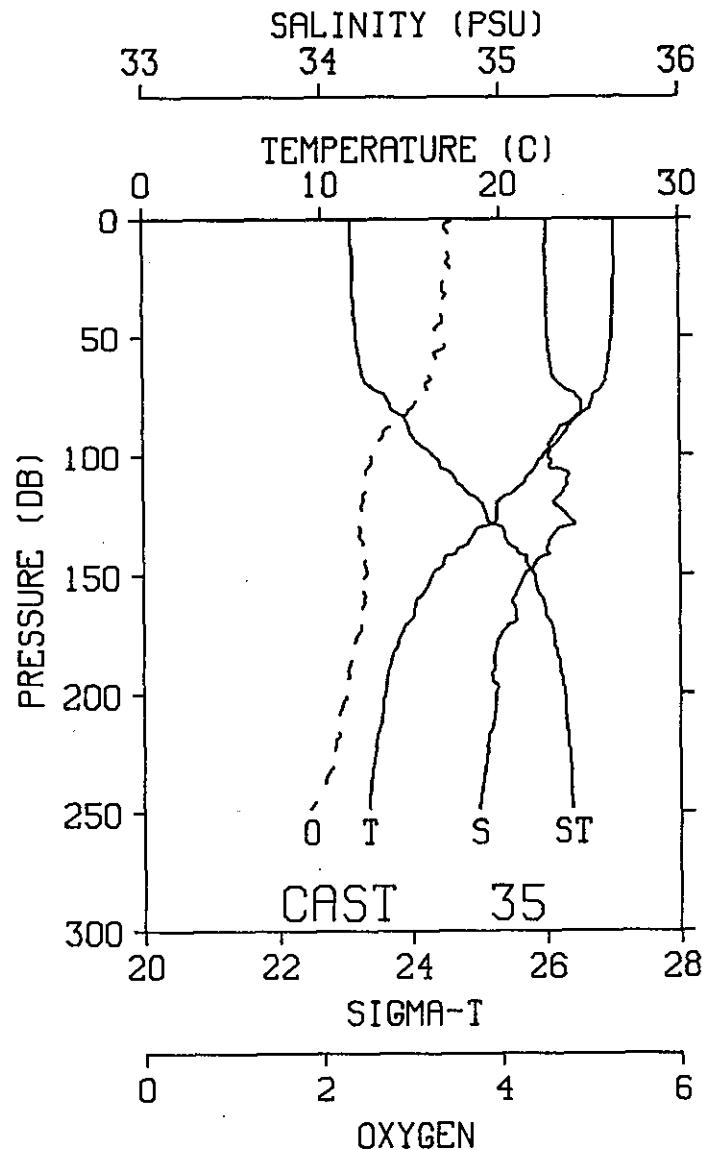


CAST EP2-86-OC-034 DATE 09 JUN 86 TIME 1724 GMT  
 LAT 00 00.4N LONG 129 58.4W WEATHER 1 SEA STATE 4  
 BAROMETER 12 WIND DIR 125 T SPD 18 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 27.0 WET 24.5 DEPTH 4342 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.305	35.252	3.37	23.130	0.000
10.	26.308	35.252	3.40	23.129	0.047
20.	26.308	35.252	3.40	23.129	0.095
30.	26.284	35.253	3.40	23.137	0.142
40.	26.202	35.258	3.40	23.166	0.189
50.	26.110	35.264	3.34	23.200	0.236
60.	25.663	35.335	3.24	23.393	0.283
70.	24.561	35.455	2.99	23.820	0.326
80.	23.135	35.295	2.71	24.120	0.365
90.	22.308	35.226	2.57	24.305	0.402
100.	21.758	35.359	2.51	24.560	0.437
110.	19.872	35.308	2.50	25.032	0.470
120.	18.730	35.327	2.47	25.341	0.498
130.	17.657	35.238	2.52	25.539	0.524
140.	16.786	35.193	2.51	25.714	0.548
150.	15.910	35.103	2.49	25.848	0.570
160.	15.143	35.077	2.48	26.001	0.591
170.	14.481	35.029	2.41	26.108	0.611
180.	14.098	34.966	2.35	26.141	0.631
190.	13.638	34.949	2.35	26.224	0.649
200.	13.419	34.966	2.33	26.282	0.667
250.	12.568	34.878	1.82	26.384	0.754
300.	12.217	34.860	1.30	26.439	0.837
350.	10.746	34.816	1.07	26.679	0.919
400.	9.561	34.707	0.66	26.798	0.987
450.	9.068	34.688	0.64	26.863	1.052
500.	8.632	34.661	0.78	26.911	1.114
550.	7.860	34.620	0.97	26.996	1.173
600.	7.183	34.590	1.13	27.071	1.228
650.	6.571	34.571	1.24	27.139	1.280
700.	6.346	34.564	1.34	27.164	1.330
750.	6.172	34.560	1.40	27.183	1.379
800.	5.902	34.558	1.41	27.216	1.427
850.	5.239	34.550	1.57	27.290	1.473
900.	5.081	34.550	1.66	27.309	1.516
950.	4.796	34.552	1.69	27.344	1.559
1000.	4.699	34.555	1.67	27.357	1.599
1500.	3.056	34.607	1.83	27.566	1.952
2000.	2.259	34.645	2.06	27.666	2.234
2500.	1.884	34.665	2.33	27.713	2.479
3000.	1.676	34.677	2.57	27.738	2.709
3500.	1.526	34.688	2.76	27.758	2.934
4000.	1.427	34.697	2.97	27.772	3.149
4208.	1.445	34.697	2.99	27.771	3.239

CAST EP2-86-OC-035 DATE 09 JUN 86 TIME 2037 GMT  
LAT 00 00.3N LONG 129 56.0W

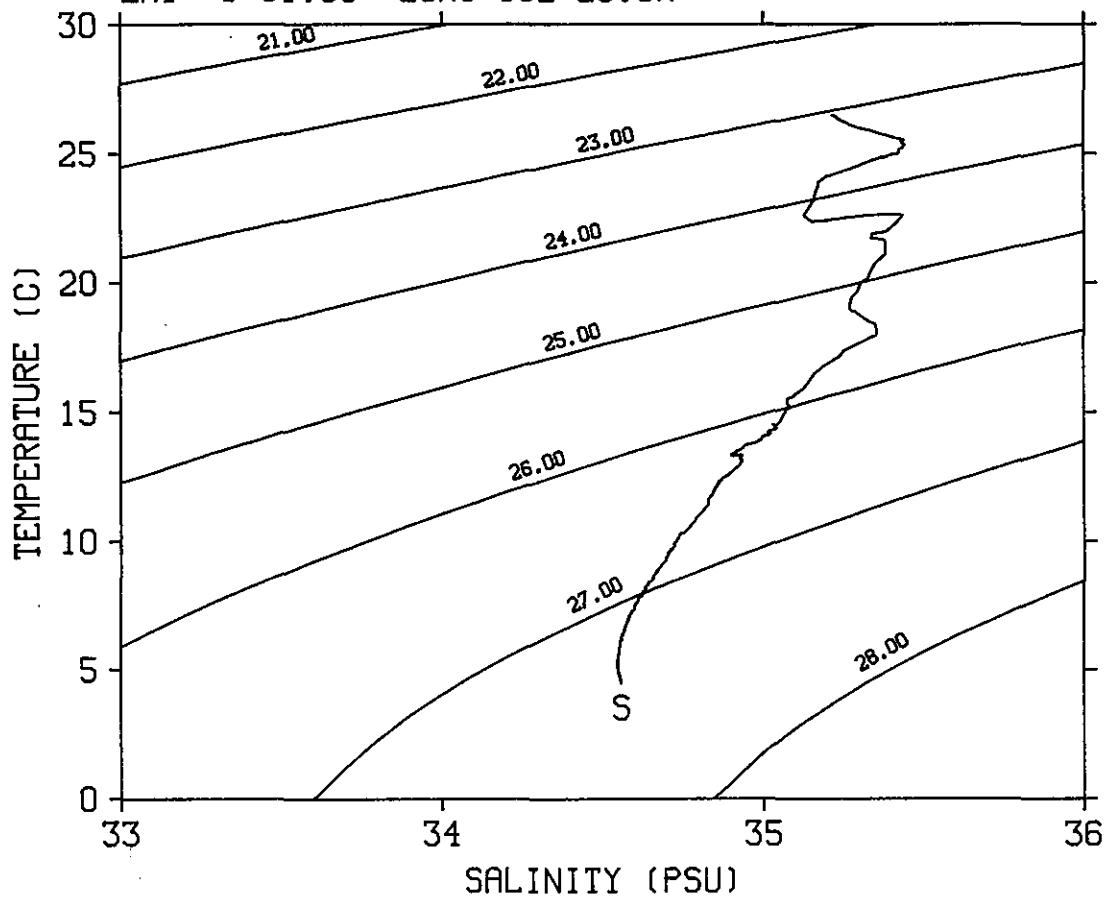


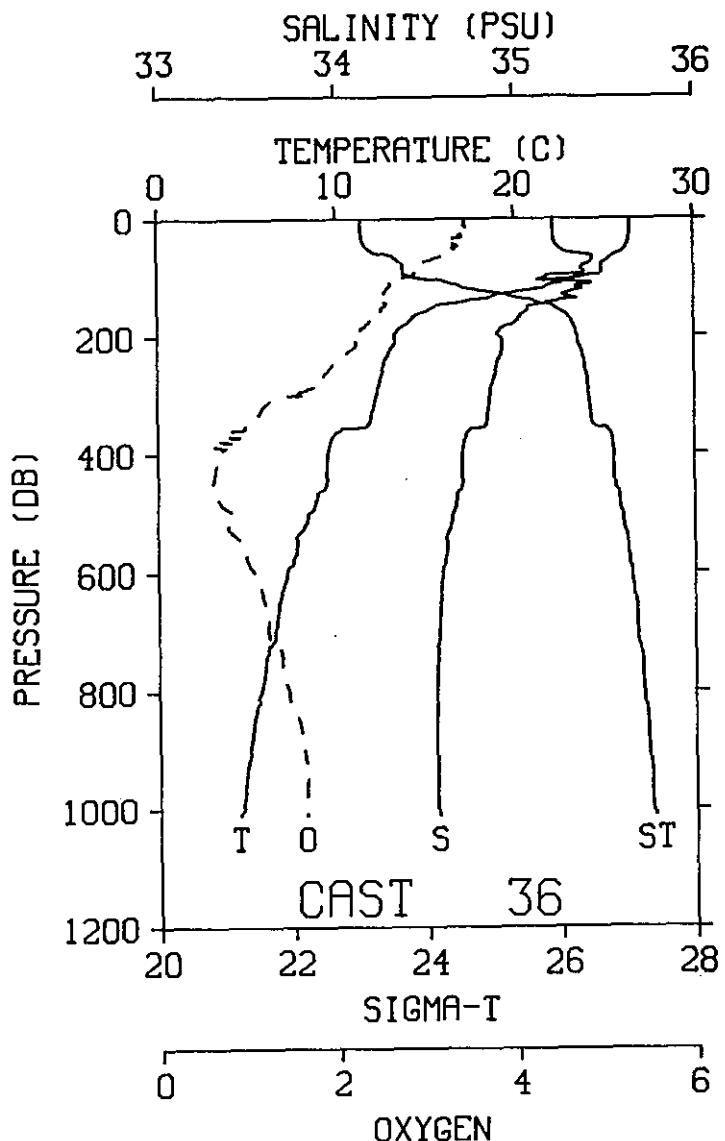


CAST EP2-86-OC-035 DATE 09 JUN 86 TIME 2037 GMT  
 LAT 00 00.3N LONG 129 56.0W WEATHER 1 SEA STATE 3  
 BAROMETER 11 WIND DIR 120 T SPD 18 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 1 DRY 27 0 WET 23.5 DEPTH M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.369	35.256	3.45	23.112	0.000
10.	26.347	35.255	3.42	23.119	0.047
20.	26.321	35.255	3.43	23.127	0.095
30.	26.292	35.255	3.34	23.137	0.142
40.	26.245	35.258	3.34	23.153	0.190
50.	26.171	35.262	3.32	23.179	0.237
60.	26.038	35.276	3.26	23.232	0.284
70.	25.762	35.323	3.15	23.353	0.330
80.	24.946	35.448	2.99	23.698	0.373
90.	23.632	35.323	2.69	23.996	0.413
100.	22.328	35.266	2.55	24.329	0.451
110.	21.391	35.366	2.48	24.667	0.486
120.	19.731	35.286	2.44	25.052	0.517
130.	18.696	35.342	2.43	25.361	0.546
140.	17.547	35.255	2.46	25.579	0.572
150.	16.087	35.131	2.48	25.829	0.595
160.	15.278	35.065	2.46	25.962	0.616
170.	14.734	35.063	2.41	26.080	0.637
180.	14.149	34.973	2.34	26.136	0.656
190.	13.696	34.959	2.29	26.220	0.675
200.	13.454	34.967	2.28	26.276	0.693
249.	12.549	34.876	1.82	26.387	0.778

CAST EP2-86-OC-036 DATE 10 JUN 86 TIME 0935 GMT  
LAT 0 01.5S LONG 132 28.5W

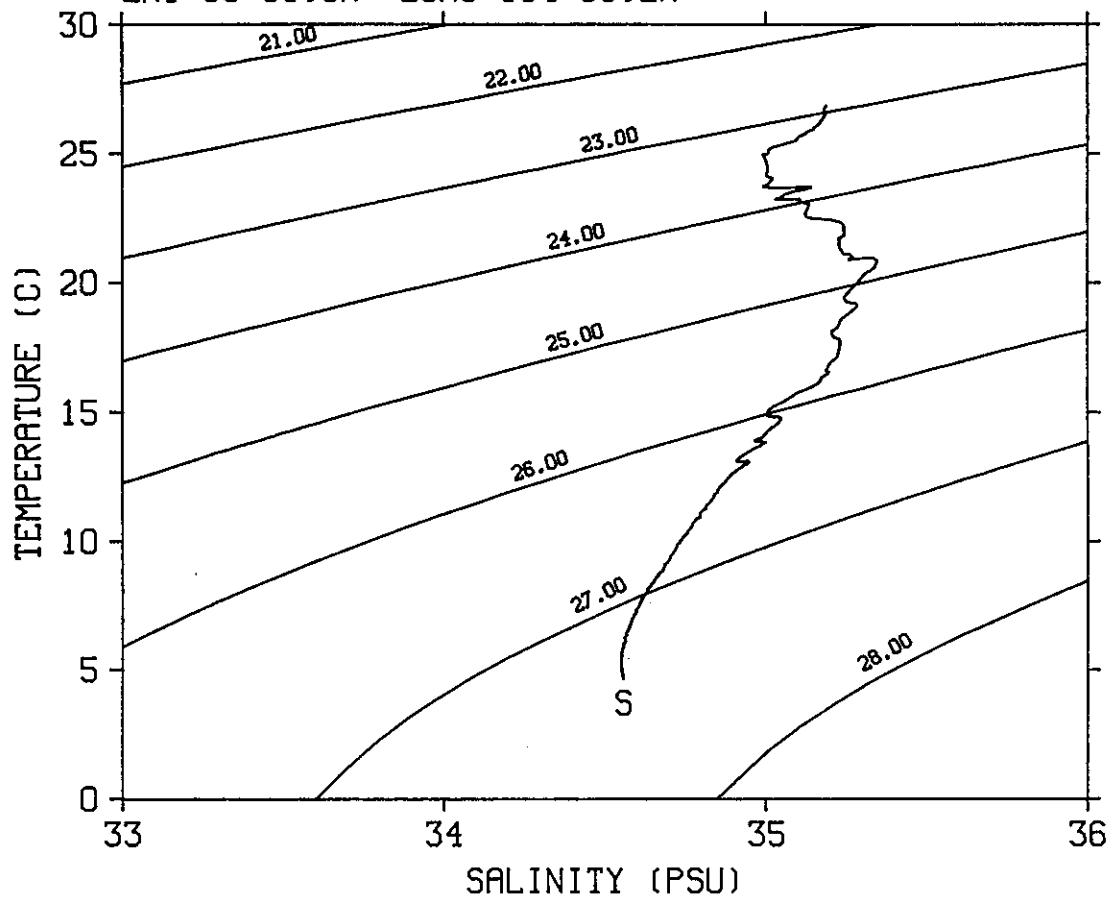




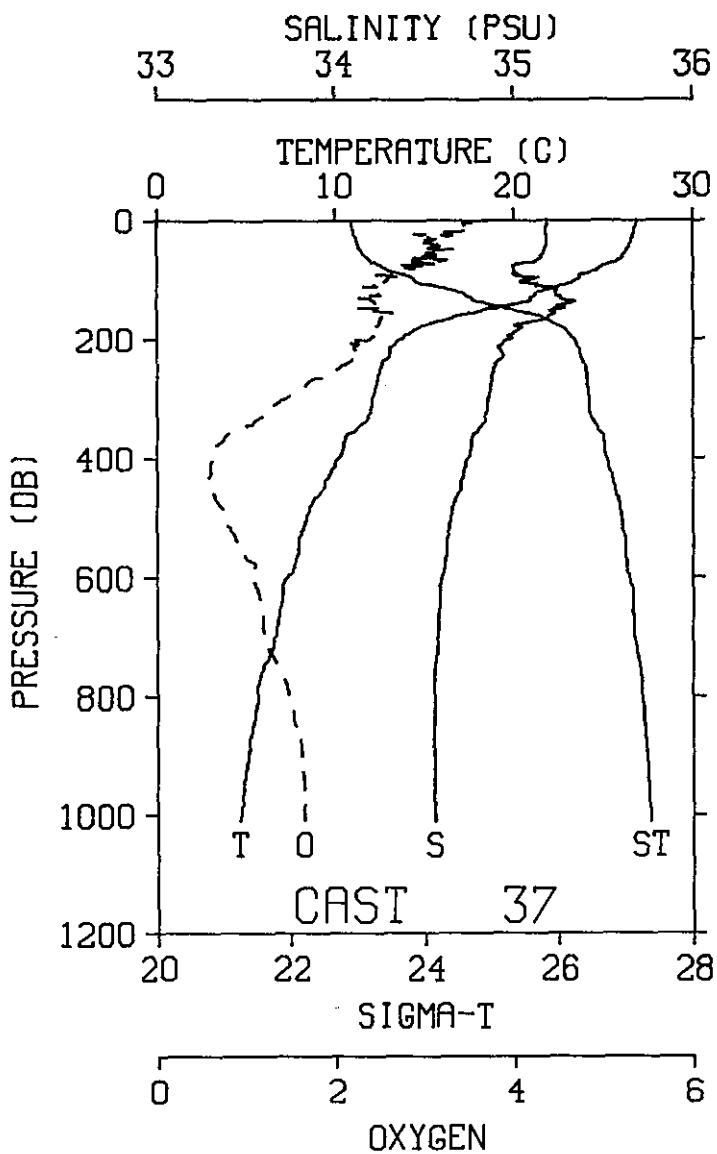
CAST EP2-86-OC-036 DATE 10 JUN 86 TIME 0935 GMT  
 LAT 0 01.5S LONG 132 28.5W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 125 T SPD 13 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 2 DRY 26.2 WET 23.5 DEPTH 4600 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.486	35.216	3.43	23.046	0.000
10.	26.492	35.218	3.46	23.045	0.048
20.	26.476	35.219	3.45	23.051	0.096
30.	26.452	35.221	3.39	23.061	0.144
40.	26.394	35.228	3.39	23.084	0.192
50.	26.209	35.252	3.31	23.160	0.240
60.	25.805	35.353	3.29	23.362	0.287
70.	25.251	35.438	3.08	23.598	0.331
80.	24.880	35.383	2.95	23.669	0.373
90.	24.878	35.390	2.87	23.675	0.416
100.	23.766	35.172	2.76	23.842	0.458
110.	22.632	35.427	2.61	24.365	0.496
120.	21.064	35.380	2.58	24.768	0.530
130.	19.015	35.265	2.53	25.221	0.560
140.	17.337	35.248	2.54	25.625	0.586
150.	15.419	35.074	2.56	25.937	0.608
160.	14.787	35.057	2.48	26.064	0.629
170.	14.256	35.018	2.40	26.148	0.648
180.	13.855	34.984	2.33	26.206	0.667
190.	13.418	34.913	2.28	26.241	0.685
200.	13.273	34.909	2.21	26.268	0.703
250.	12.659	34.901	1.95	26.385	0.791
300.	12.260	34.860	1.57	26.431	0.874
350.	11.770	34.839	1.04	26.508	0.956
400.	9.524	34.705	0.69	26.802	1.025
450.	9.407	34.702	0.62	26.819	1.091
500.	8.411	34.649	0.86	26.936	1.153
550.	7.751	34.615	0.93	27.009	1.212
600.	7.181	34.592	1.07	27.072	1.267
650.	6.732	34.577	1.19	27.122	1.320
700.	6.510	34.570	1.23	27.146	1.371
750.	5.926	34.558	1.37	27.213	1.420
800.	5.705	34.553	1.45	27.237	1.467
850.	5.275	34.550	1.56	27.287	1.512
900.	5.058	34.550	1.61	27.312	1.555
950.	4.806	34.553	1.65	27.343	1.597
1000.	4.648	34.556	1.62	27.364	1.638
1012.	4.440	34.561	1.64	27.390	1.647

CAST EP2-86-OC-037 DATE 11 JUN 86 TIME 0332 GMT  
LAT 00 00.0N LONG 134 59.2W

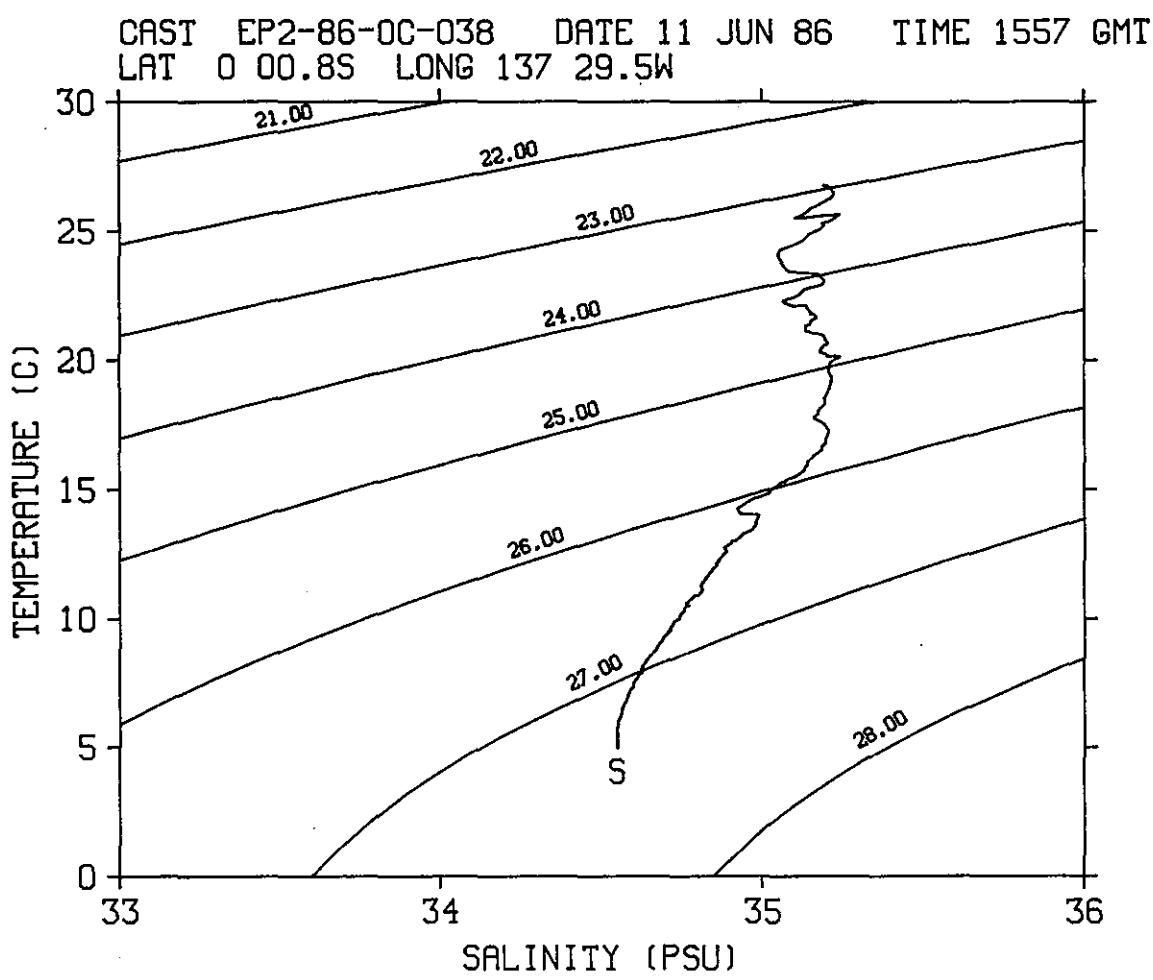


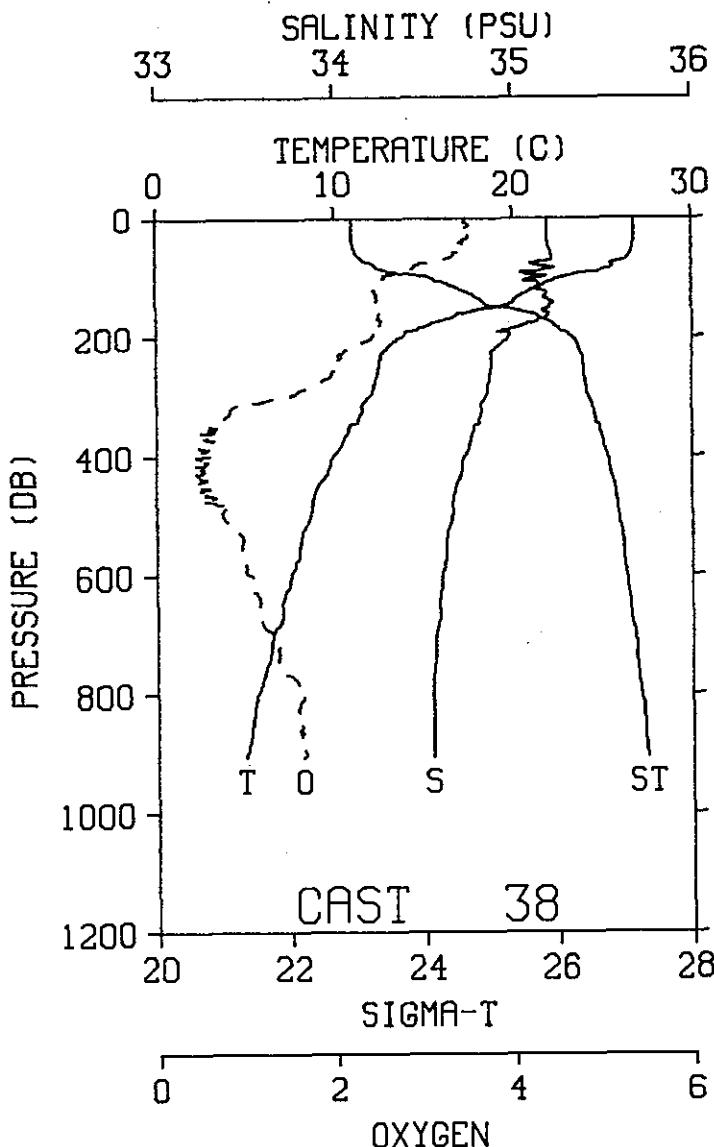
103



CAST EP2-86-OC-037 DATE 11 JUN 86 TIME 0332 GMT  
 LAT 00 00.0N LONG 134 59.2W WEATHER 1 SEA STATE 3  
 BAROMETER 11 WIND DIR 090 T SPD 10 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 1 DRY 27.2 WET 24.8 DEPTH 4400 M

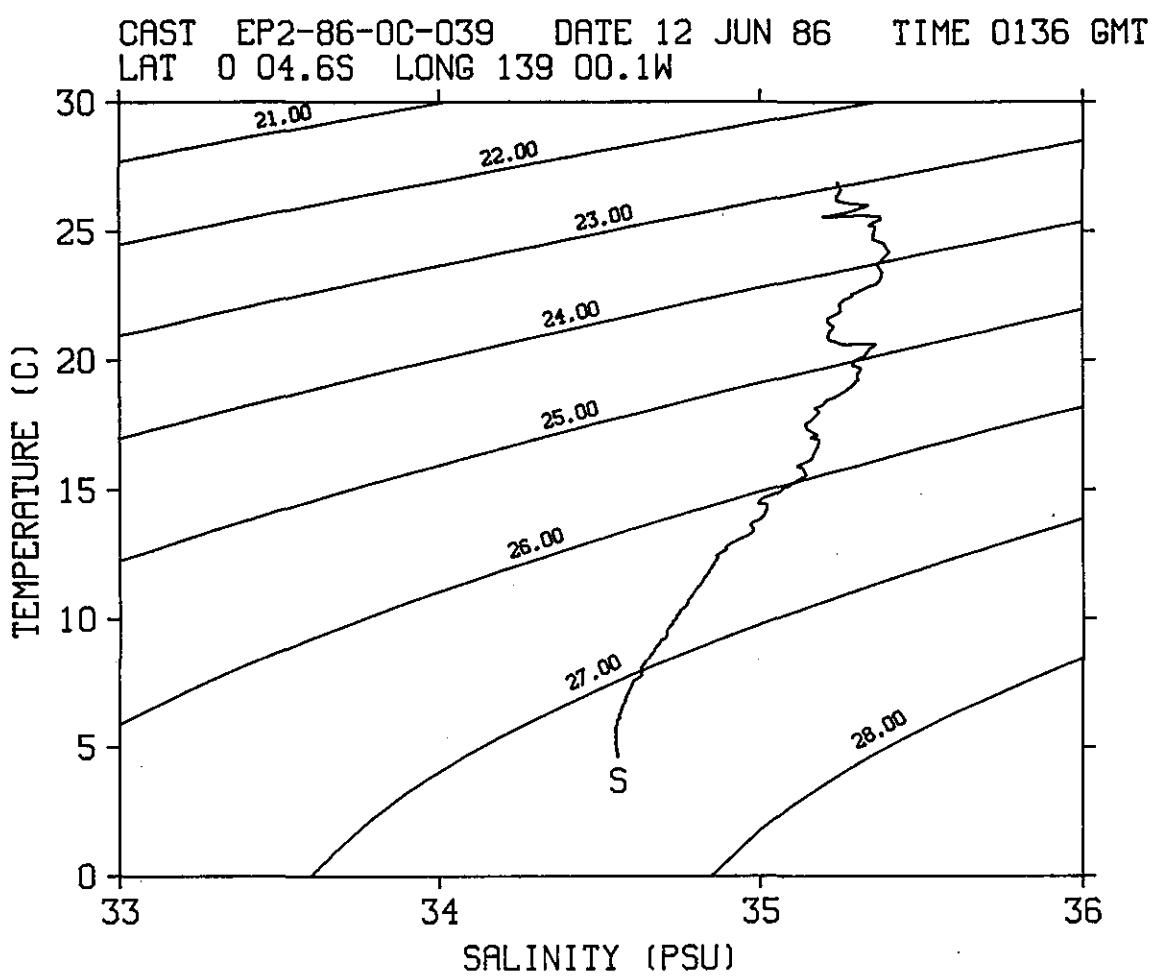
PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.848	35.186	3.87	22.908	0.000
10.	26.831	35.182	3.44	22.911	0.049
20.	26.691	35.180	3.45	22.954	0.099
30.	26.594	35.182	3.05	22.986	0.148
40.	26.503	35.183	3.00	23.015	0.196
50.	26.326	35.177	3.33	23.067	0.245
60.	26.099	35.161	3.17	23.126	0.293
70.	25.724	35.114	2.87	23.207	0.340
80.	24.888	34.992	2.89	23.371	0.386
90.	24.017	35.020	2.73	23.653	0.430
100.	23.517	35.086	2.57	23.850	0.471
110.	22.646	35.120	2.43	24.128	0.511
120.	21.543	35.227	2.49	24.519	0.548
130.	20.931	35.271	2.33	24.721	0.581
140.	20.299	35.304	2.47	24.916	0.613
150.	18.567	35.233	2.26	25.310	0.642
160.	16.937	35.203	2.58	25.686	0.667
170.	15.844	35.117	2.49	25.874	0.690
180.	14.769	35.045	2.45	26.058	0.711
190.	14.194	35.000	2.46	26.147	0.730
200.	13.722	34.987	2.40	26.236	0.749
250.	12.523	34.888	2.02	26.401	0.836
300.	12.101	34.857	1.45	26.460	0.919
350.	11.191	34.801	0.92	26.587	0.999
400.	10.197	34.746	0.59	26.720	1.071
450.	9.351	34.700	0.64	26.826	1.139
500.	8.401	34.649	0.75	26.938	1.200
550.	7.897	34.622	0.95	26.993	1.259
600.	7.326	34.598	1.05	27.056	1.315
650.	6.897	34.582	1.16	27.104	1.368
700.	6.667	34.575	1.21	27.129	1.420
750.	5.965	34.557	1.36	27.207	1.470
800.	5.632	34.551	1.49	27.244	1.516
850.	5.364	34.551	1.55	27.276	1.561
900.	5.098	34.550	1.62	27.308	1.605
950.	4.859	34.553	1.65	27.337	1.647
1000.	4.680	34.557	1.65	27.360	1.688
1011.	4.633	34.558	1.65	27.366	1.697



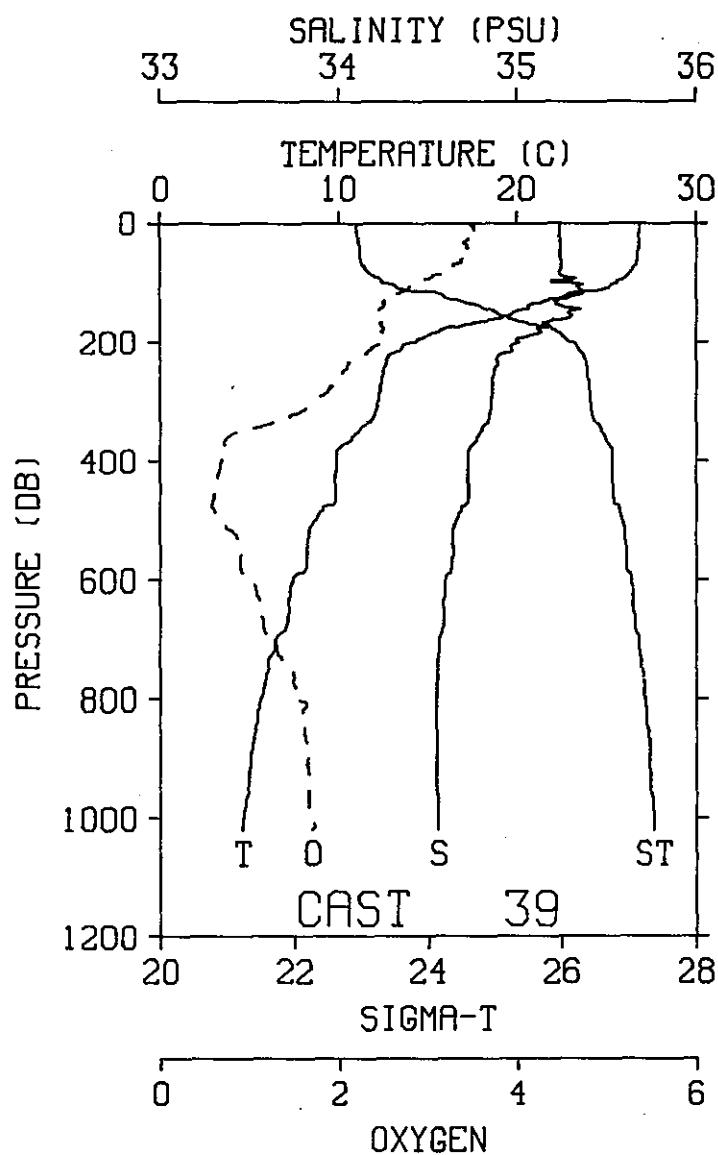


CAST EP2-86-OC-038 DATE 11 JUN 86 TIME 1557 GMT  
 LAT 0 00.8S LONG 137 29.5W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 090 T SPD 10 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 2 DRY 26.5 WET 23.5 DEPTH 4200 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.758	35.194	3.48	22.943	0.000
10.	26.764	35.194	3.49	22.941	0.049
20.	26.767	35.194	3.46	22.940	0.098
30.	26.767	35.194	3.47	22.940	0.148
40.	26.761	35.198	3.46	22.945	0.197
50.	26.733	35.204	3.45	22.959	0.246
60.	26.624	35.216	3.36	23.002	0.295
70.	26.392	35.221	3.26	23.079	0.343
80.	25.524	35.139	2.95	23.288	0.390
90.	24.831	35.144	2.78	23.503	0.435
100.	22.770	35.144	2.58	24.111	0.476
110.	21.847	35.150	2.51	24.376	0.514
120.	21.138	35.134	2.47	24.559	0.549
130.	20.540	35.190	2.48	24.764	0.582
140.	20.144	35.225	2.46	24.896	0.613
150.	19.121	35.215	2.51	25.156	0.644
160.	17.251	35.208	2.51	25.615	0.670
170.	16.339	35.163	2.49	25.796	0.693
180.	15.294	35.065	2.50	25.958	0.714
190.	14.239	34.921	2.50	26.077	0.735
200.	13.780	34.981	2.42	26.219	0.754
250.	12.541	34.884	2.02	26.395	0.840
300.	11.981	34.852	1.46	26.478	0.923
350.	10.832	34.782	0.64	26.636	1.001
400.	9.913	34.728	0.44	26.755	1.072
450.	9.083	34.685	0.48	26.858	1.138
500.	8.633	34.658	0.74	26.909	1.201
550.	8.056	34.628	0.96	26.974	1.260
600.	7.561	34.605	1.08	27.028	1.318
650.	7.038	34.585	1.17	27.087	1.372
700.	6.500	34.566	1.35	27.145	1.425
750.	6.182	34.559	1.36	27.181	1.475
800.	5.616	34.547	1.56	27.243	1.522
850.	5.324	34.549	1.63	27.279	1.567
900.	4.999	34.551	1.67	27.320	1.610
907.	4.957	34.550	1.64	27.324	1.616



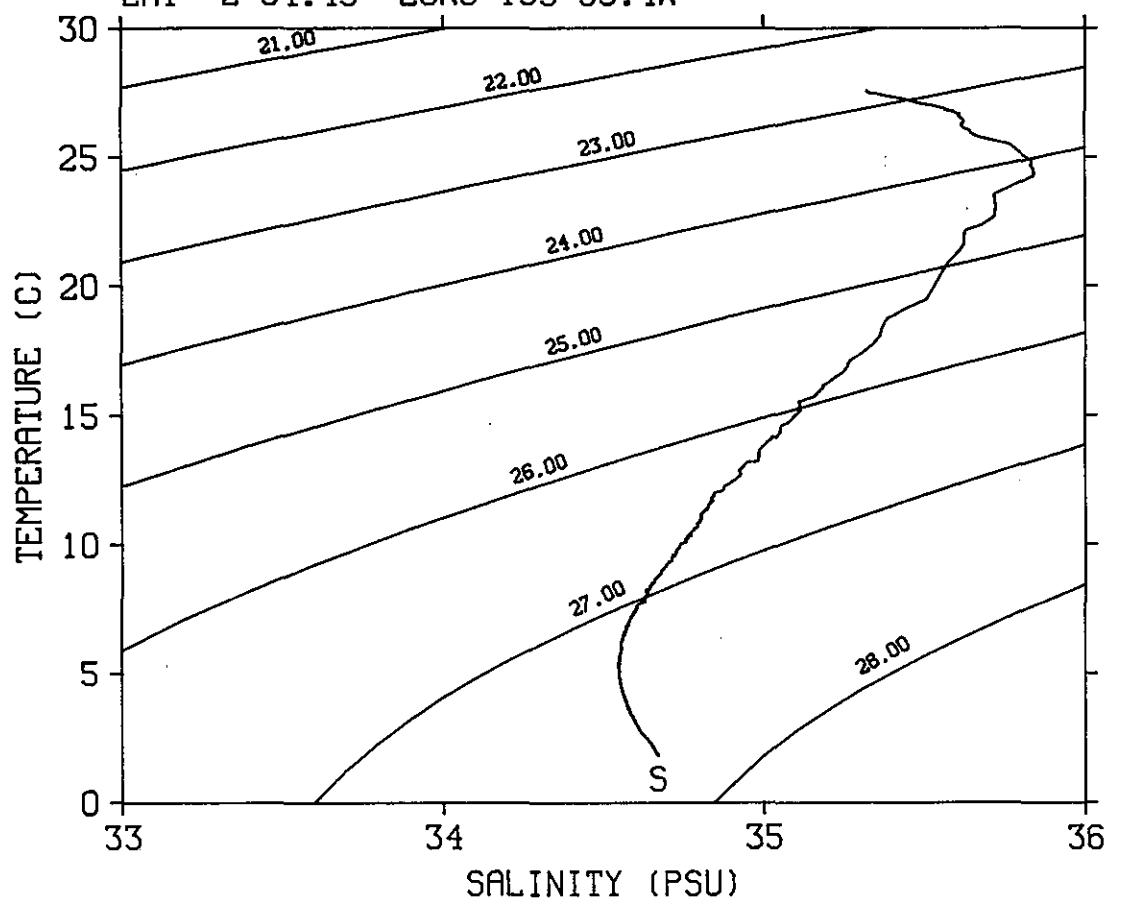
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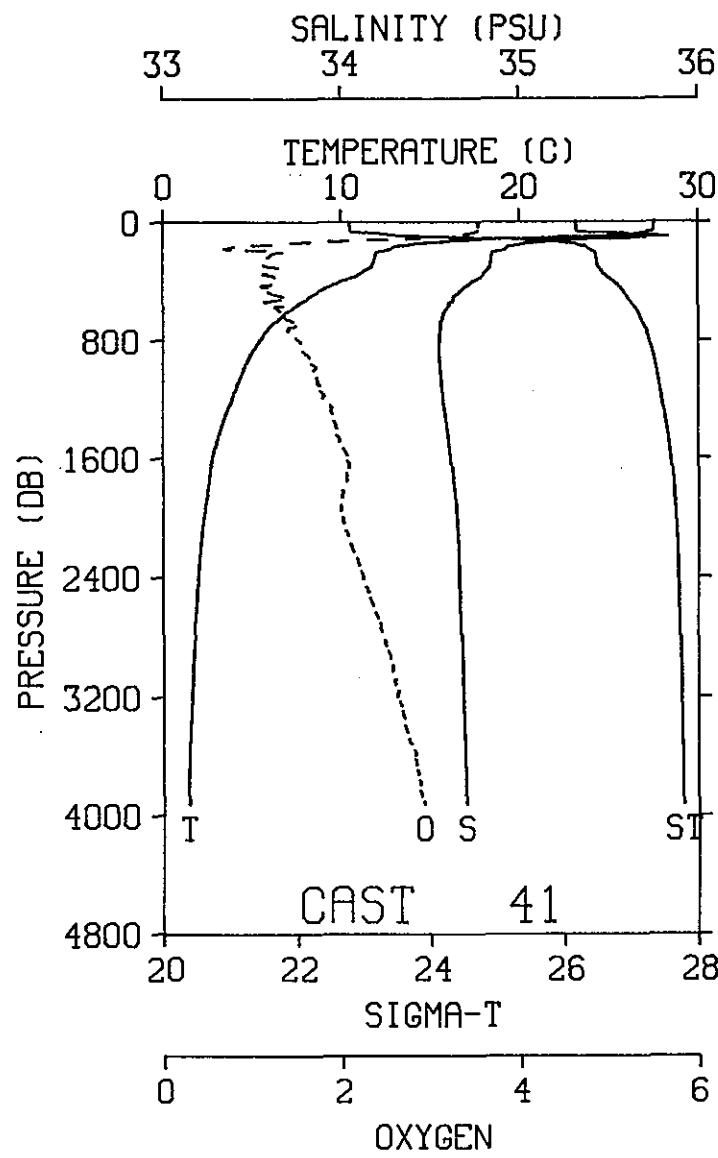
CAST EP2-86-OC-039 DATE 12 JUN 86 TIME 0136 GMT  
 LAT 0 04.6S LONG 139 00.1W WEATHER 1 SEA STATE 4  
 BAROMETER 09 WIND DIR 095 T SPD 15 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 28.2 WET 24.2 DEPTH 4380 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.883	35.241	3.52	22.938	0.000
10.	26.877	35.243	3.53	22.942	0.049
20.	26.840	35.243	3.45	22.954	0.098
30.	26.788	35.243	3.43	22.971	0.147
40.	26.772	35.243	3.44	22.975	0.196
50.	26.752	35.243	3.42	22.982	0.245
60.	26.723	35.244	3.39	22.992	0.294
70.	26.627	35.251	3.28	23.027	0.343
80.	26.394	35.241	3.22	23.094	0.391
90.	26.075	35.269	3.07	23.215	0.439
100.	25.572	35.237	2.88	23.347	0.485
110.	24.964	35.352	2.81	23.620	0.529
120.	22.861	35.341	2.64	24.234	0.569
130.	21.576	35.207	2.54	24.495	0.605
140.	20.585	35.268	2.50	24.811	0.639
150.	19.839	35.287	2.48	25.024	0.669
160.	19.131	35.294	2.45	25.213	0.698
170.	17.342	35.144	2.48	25.544	0.725
180.	15.748	35.134	2.51	25.909	0.747
190.	14.992	35.066	2.49	26.026	0.768
200.	14.201	35.020	2.48	26.161	0.788
250.	12.491	34.872	2.04	26.395	0.875
300.	12.232	34.860	1.73	26.437	0.959
350.	11.100	34.799	0.86	26.601	1.039
400.	9.861	34.726	0.68	26.762	1.109
450.	9.833	34.725	0.60	26.766	1.177
500.	8.697	34.666	0.66	26.905	1.243
550.	8.222	34.638	0.89	26.956	1.303
600.	7.421	34.600	1.01	27.045	1.361
650.	7.162	34.591	1.12	27.074	1.415
700.	6.454	34.567	1.25	27.151	1.468
750.	6.024	34.554	1.41	27.198	1.517
800.	5.608	34.549	1.55	27.245	1.564
850.	5.312	34.550	1.61	27.282	1.609
900.	5.049	34.550	1.66	27.313	1.652
950.	4.886	34.554	1.65	27.335	1.694
1000.	4.619	34.556	1.69	27.366	1.735
1020.	4.595	34.557	1.70	27.370	1.751

CAST EP2-86-OC-041 DATE 13 JUN 86 TIME 0101 GMT  
LAT 20 04.4S LONG 139 59.4W



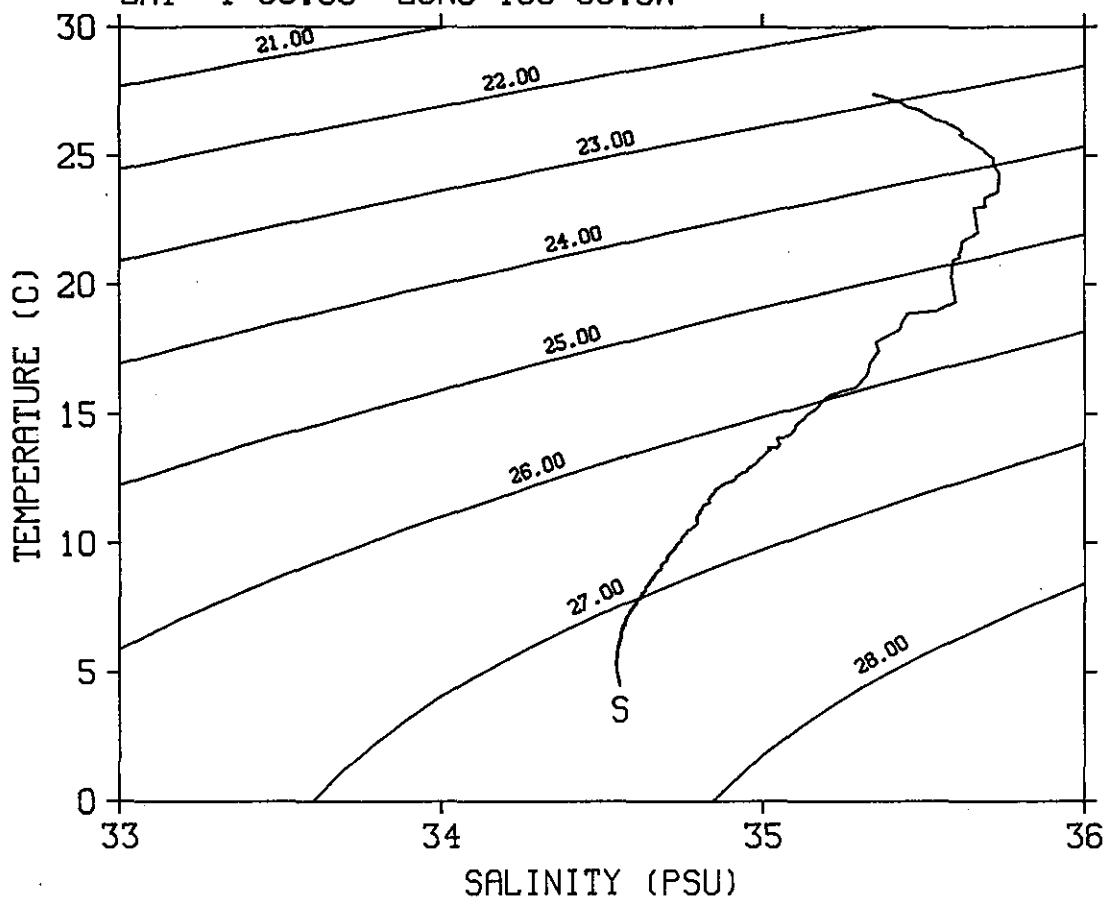
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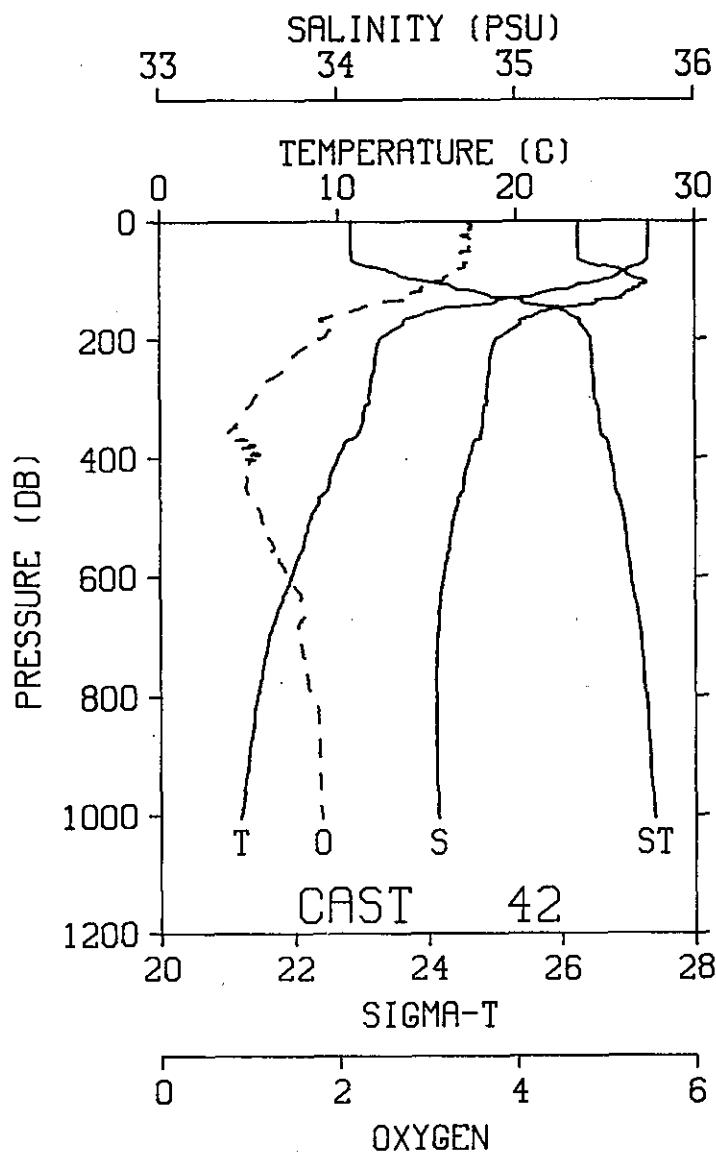
CAST EP2-86-OC-041 DATE 13 JUN 86 TIME 0101 GMT  
 LAT 2 04.4S LONG 139 59.4W WEATHER 1 SEA STATE 4  
 BAROMETER 07 WIND DIR 085 T SPD 18 KT VISIBILITY 8  
 CLOUD 6 AMOUNT 4 DRY 28.5 WET 25.5 DEPTH 4180 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.569	35.321	3.53	22.778	0.000
10.	27.573	35.321	3.55	22.777	0.051
20.	27.522	35.320	3.54	22.793	0.101
30.	27.512	35.320	3.55	22.796	0.152
40.	27.507	35.320	3.55	22.798	0.203
50.	27.506	35.320	3.54	22.798	0.253
60.	27.503	35.321	3.53	22.800	0.304
70.	27.454	35.339	3.53	22.829	0.355
80.	26.822	35.568	3.48	23.205	0.404
90.	26.293	35.618	3.40	23.409	0.450
100.	24.827	35.835	3.35	24.027	0.493
110.	22.160	35.629	2.97	24.653	0.528
120.	18.554	35.374	2.52	25.421	0.558
130.	16.150	35.186	1.99	25.857	0.581
140.	15.319	35.112	1.57	25.989	0.602
150.	14.122	35.026	1.25	26.182	0.622
160.	13.731	34.996	1.00	26.241	0.640
170.	12.995	34.933	0.80	26.343	0.658
180.	12.834	34.924	0.69	26.368	0.675
190.	12.646	34.929	0.88	26.409	0.692
200.	12.320	34.891	1.28	26.443	0.708
250.	11.876	34.843	1.16	26.492	0.788
300.	11.737	34.838	1.15	26.514	0.867
350.	11.121	34.803	1.14	26.601	0.945
400.	10.067	34.760	1.23	26.754	1.017
450.	9.083	34.689	1.15	26.862	1.083
500.	8.362	34.641	1.32	26.938	1.144
550.	7.652	34.609	1.18	27.018	1.202
600.	7.054	34.584	1.31	27.084	1.257
650.	6.566	34.568	1.36	27.138	1.309
700.	6.070	34.555	1.54	27.192	1.358
750.	5.686	34.552	1.42	27.238	1.405
800.	5.410	34.551	1.52	27.271	1.450
850.	5.148	34.550	1.57	27.301	1.494
900.	4.857	34.550	1.62	27.335	1.536
950.	4.681	34.554	1.66	27.358	1.577
1000.	4.490	34.557	1.69	27.382	1.617
1500.	2.978	34.605	1.99	27.572	1.963
2000.	2.270	34.647	2.01	27.667	2.240
2500.	1.901	34.664	2.29	27.710	2.486
3000.	1.655	34.677	2.58	27.740	2.718
3500.	1.496	34.690	2.76	27.762	2.939
3933.	1.404	34.697	2.92	27.774	3.124

CAST EP2-86-OC-042 DATE 13 JUN 86 TIME 0547 GMT  
LAT 130.5S LONG 139 59.8W



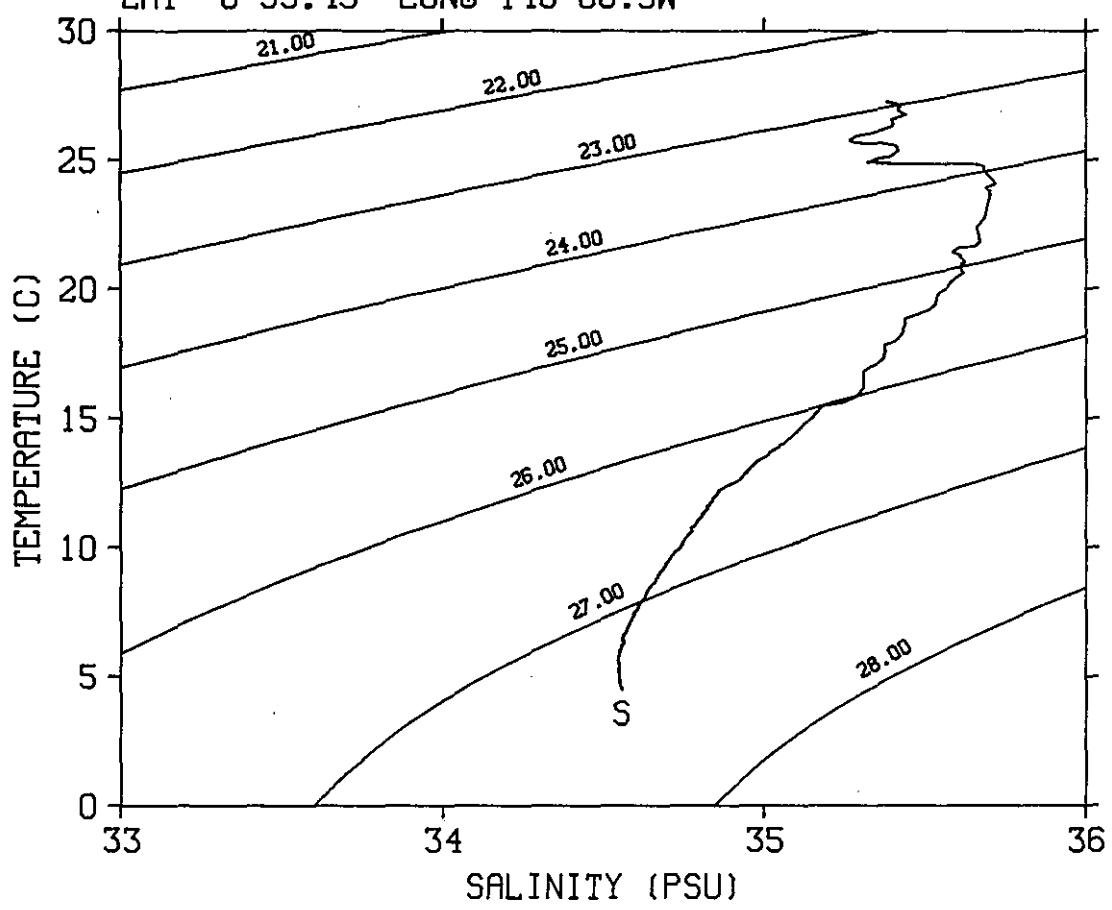
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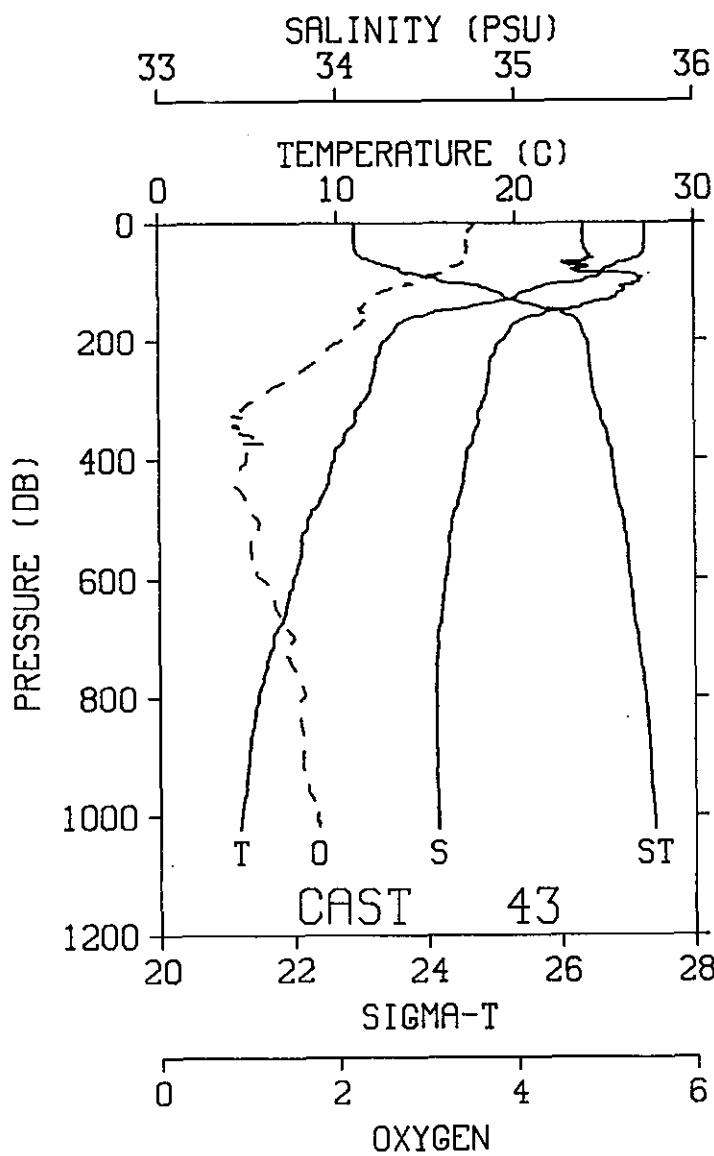


CAST EP2-86-OC-042 DATE 13 JUN 86 TIME 0547 GMT  
 LAT 1 30.5S LONG 139 59.8W WEATHER 1 SEA STATE 4  
 BAROMETER 09 WIND DIR 090 T SPD 20 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 1 DRY 27.0 WET 25.0 DEPTH 4342 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.377	35.345	3.46	22.858	0.000
10.	27.380	35.344	3.49	22.857	0.050
20.	27.378	35.344	3.44	22.858	0.100
30.	27.386	35.345	3.50	22.855	0.150
40.	27.386	35.344	3.43	22.855	0.200
50.	27.365	35.349	3.48	22.866	0.250
60.	27.362	35.351	3.45	22.868	0.300
70.	27.201	35.393	3.42	22.952	0.350
80.	26.272	35.578	3.34	23.387	0.398
90.	25.780	35.618	3.21	23.570	0.442
100.	24.917	35.717	3.20	23.910	0.484
110.	23.306	35.689	2.94	24.369	0.522
120.	21.671	35.617	2.88	24.781	0.556
130.	19.926	35.591	2.72	25.234	0.587
140.	18.544	35.434	2.37	25.470	0.613
150.	15.555	35.188	2.19	25.994	0.635
160.	14.562	35.099	1.91	26.145	0.655
170.	13.658	35.024	1.84	26.278	0.673
180.	13.323	34.999	1.92	26.327	0.690
190.	12.764	34.947	1.87	26.400	0.707
200.	12.319	34.882	1.80	26.437	0.724
250.	12.030	34.852	1.39	26.469	0.805
300.	11.738	34.833	1.04	26.510	0.884
350.	11.236	34.803	0.81	26.580	0.962
400.	9.972	34.733	0.91	26.749	1.034
450.	9.419	34.700	0.96	26.816	1.100
500.	8.443	34.645	1.13	26.928	1.163
550.	7.980	34.620	1.28	26.979	1.222
600.	7.340	34.592	1.46	27.050	1.279
650.	6.623	34.563	1.59	27.126	1.332
700.	6.051	34.553	1.56	27.193	1.381
750.	5.761	34.549	1.63	27.226	1.429
800.	5.375	34.544	1.71	27.270	1.474
850.	5.190	34.544	1.77	27.292	1.518
900.	4.920	34.548	1.78	27.326	1.561
950.	4.710	34.551	1.79	27.353	1.602
1000.	4.476	34.555	1.81	27.381	1.642
1006.	4.442	34.556	1.81	27.386	1.647

CAST EP2-86-OC-043 DATE 13 JUN 86 TIME 0930 GMT  
LAT 0 59.4S LONG 140 00.3W

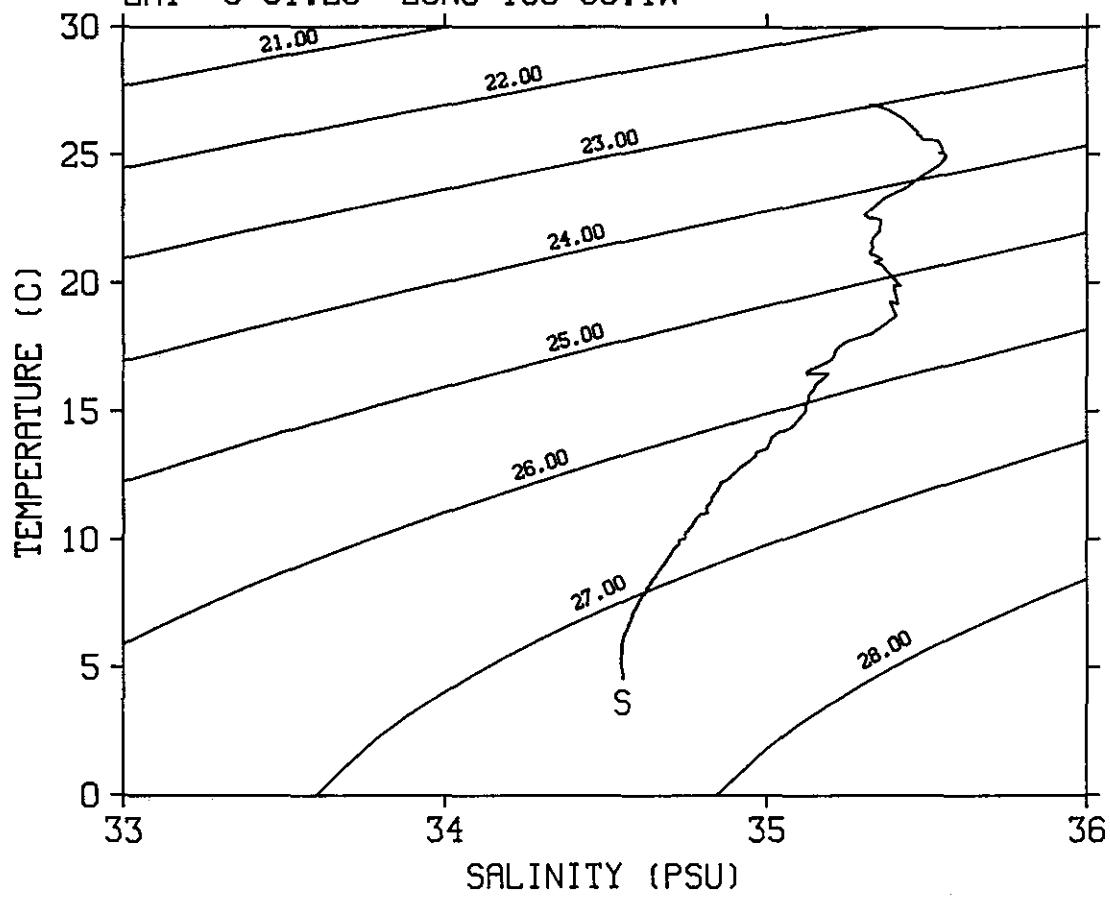


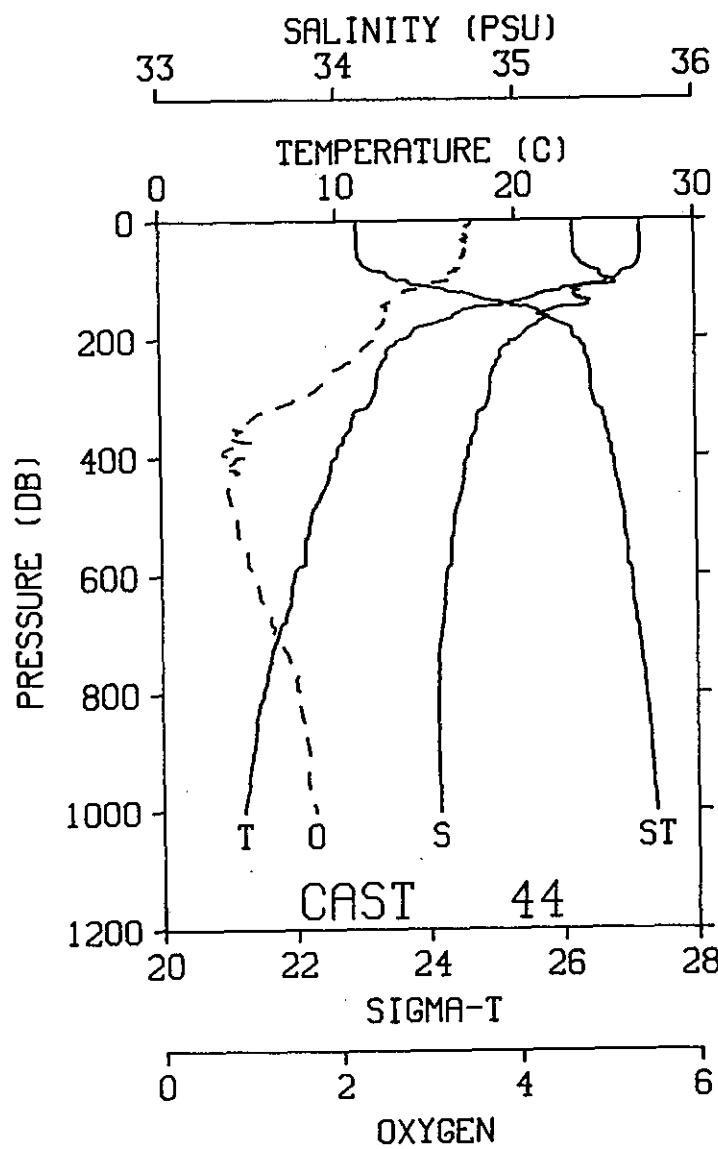


CAST EP2-86-OC-043 DATE 13 JUN 86 TIME 0930 GMT  
 LAT 0 59.4S LONG 140 00.3W WEATHER 1 SEA STATE 4  
 BAROMETER 09 WIND DIR 090 T SPD 15 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 1 DRY 26.8 WET 24.8 DEPTH 4260 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.240	35.381	3.51	22.930	0.000
10.	27.243	35.381	3.52	22.929	0.049
20.	27.244	35.381	3.45	22.928	0.099
30.	27.245	35.381	3.45	22.928	0.148
40.	27.221	35.391	3.47	22.943	0.197
50.	27.174	35.403	3.46	22.968	0.246
60.	26.902	35.414	3.41	23.063	0.295
70.	25.679	35.271	3.41	23.340	0.342
80.	24.919	35.320	3.27	23.610	0.386
90.	24.742	35.684	3.09	23.938	0.428
100.	23.783	35.695	2.84	24.234	0.466
110.	21.291	35.610	2.62	24.880	0.500
120.	20.272	35.576	2.45	25.131	0.530
130.	19.710	35.535	2.31	25.248	0.558
140.	17.807	35.372	2.30	25.606	0.584
150.	15.598	35.239	2.25	26.023	0.606
160.	14.225	35.076	2.32	26.199	0.626
170.	13.641	35.014	2.28	26.274	0.644
180.	13.228	34.971	2.19	26.325	0.661
190.	12.977	34.952	2.12	26.361	0.679
200.	12.688	34.930	2.03	26.402	0.696
250.	12.119	34.855	1.62	26.454	0.778
300.	11.563	34.824	1.08	26.535	0.858
350.	10.562	34.772	0.84	26.677	0.932
400.	9.803	34.722	0.97	26.769	1.002
450.	9.314	34.693	0.89	26.827	1.068
500.	8.321	34.639	1.11	26.942	1.130
550.	7.915	34.622	1.01	26.990	1.189
600.	7.464	34.601	1.15	27.039	1.245
650.	7.072	34.583	1.31	27.081	1.300
700.	6.357	34.560	1.52	27.159	1.352
750.	5.946	34.550	1.51	27.204	1.401
800.	5.482	34.549	1.60	27.261	1.447
850.	5.223	34.549	1.58	27.292	1.491
900.	4.944	34.552	1.60	27.327	1.533
950.	4.790	34.553	1.65	27.345	1.575
1000.	4.505	34.556	1.75	27.379	1.615
1020.	4.458	34.557	1.77	27.385	1.631

CAST EP2-86-OC-044 DATE 13 JUN 86 TIME 1352 GMT  
LAT 0 31.2S LONG 139 58.1W

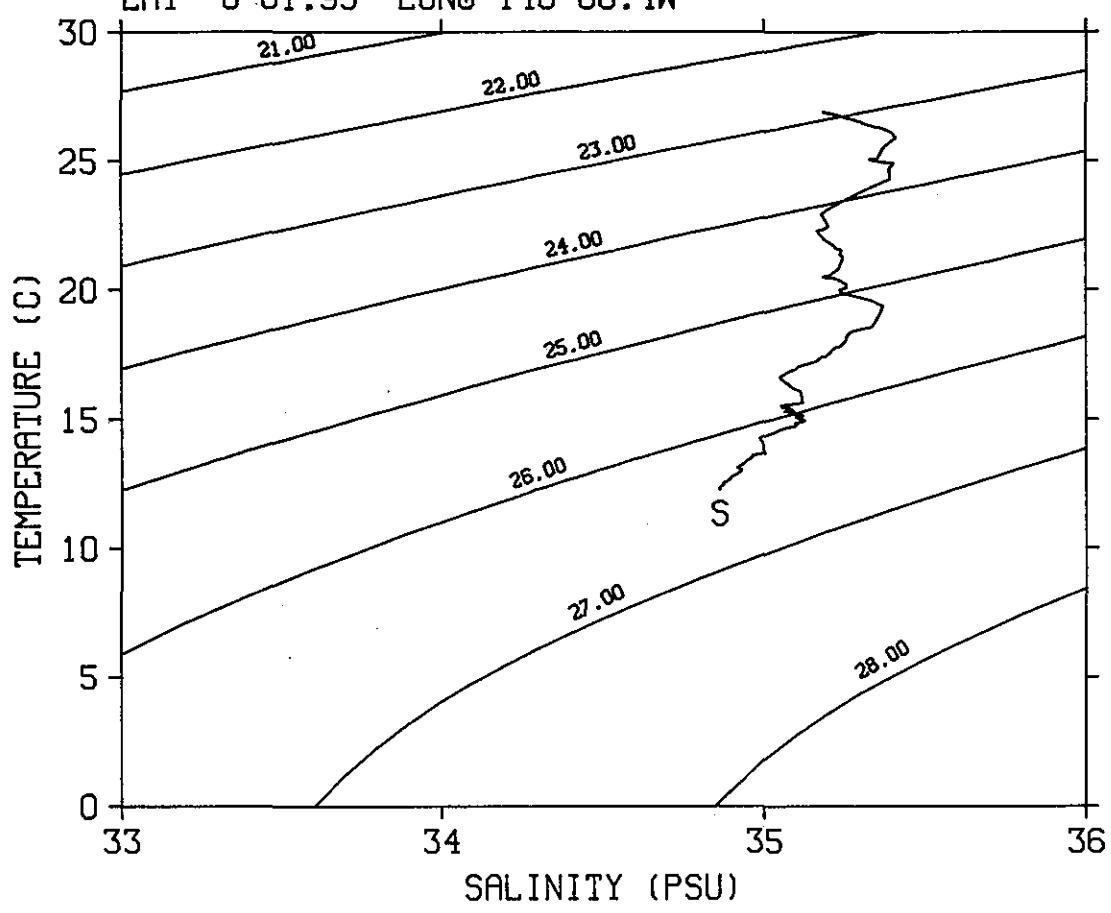


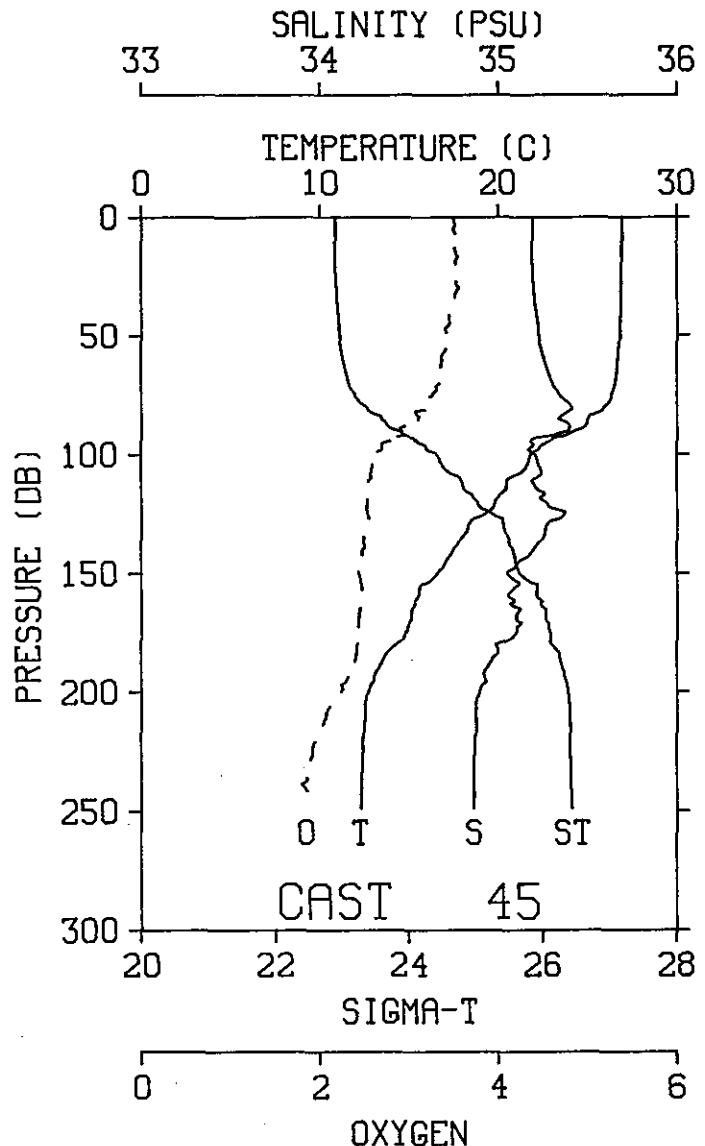


CAST EP2-86-OC-044 DATE 13 JUN 86 TIME 1352 GMT  
 LAT 0 31.2S LONG 139 58.1W WEATHER 6 SEA STATE 3  
 BAROMETER 08 WIND DIR 080 T SPD 14 KT VISIBILITY 6  
 CLOUD 8 AMOUNT 8 DRY 26.2 WET 24.5 DEPTH 4260 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.965	35.324	3.56	22.975	0.000
10.	26.975	35.324	3.47	22.972	0.049
20.	26.975	35.323	3.45	22.971	0.098
30.	26.977	35.324	3.47	22.971	0.147
40.	26.977	35.325	3.45	22.972	0.196
50.	26.976	35.327	3.45	22.974	0.245
60.	26.957	35.335	3.42	22.986	0.294
70.	26.859	35.361	3.42	23.037	0.342
80.	26.693	35.393	3.39	23.114	0.391
90.	25.878	35.471	3.26	23.429	0.437
100.	25.617	35.505	3.22	23.536	0.481
110.	24.600	35.540	3.06	23.872	0.523
120.	22.465	35.359	2.75	24.361	0.561
130.	21.081	35.340	2.64	24.732	0.595
140.	19.674	35.401	2.56	25.155	0.625
150.	17.432	35.216	2.55	25.577	0.651
160.	16.488	35.120	2.55	25.728	0.675
170.	15.964	35.150	2.52	25.872	0.697
180.	14.698	35.101	2.49	26.116	0.718
190.	14.231	35.052	2.42	26.179	0.737
200.	13.939	35.012	2.39	26.210	0.755
250.	12.320	34.876	2.02	26.431	0.841
300.	12.002	34.850	1.60	26.473	0.923
350.	10.717	34.775	0.84	26.652	0.999
400.	9.937	34.730	0.95	26.752	1.069
450.	9.238	34.693	0.75	26.840	1.135
500.	8.474	34.651	0.86	26.928	1.197
550.	8.096	34.630	0.96	26.969	1.257
600.	7.476	34.602	1.06	27.039	1.315
650.	7.232	34.591	1.15	27.065	1.370
700.	6.555	34.571	1.26	27.142	1.422
750.	6.043	34.554	1.47	27.195	1.471
800.	5.690	34.551	1.56	27.237	1.519
850.	5.236	34.549	1.59	27.290	1.563
900.	5.085	34.548	1.65	27.307	1.607
950.	4.830	34.553	1.63	27.340	1.649
1000.	4.556	34.556	1.71	27.373	1.689
1003.	4.556	34.556	1.71	27.373	1.689

CAST EP2-86-OC-045 DATE 14 JUN 86 TIME 0522 GMT  
LAT 001.9S LONG 140 00.4W

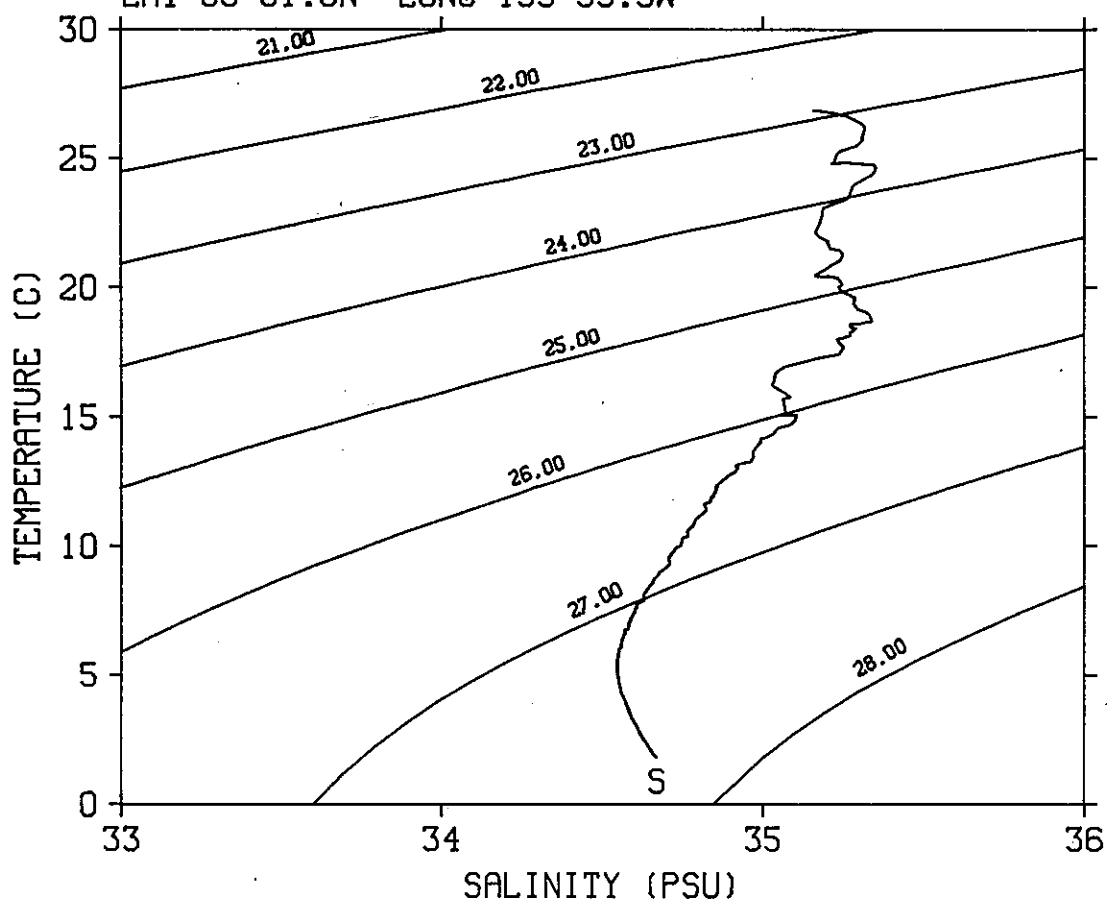


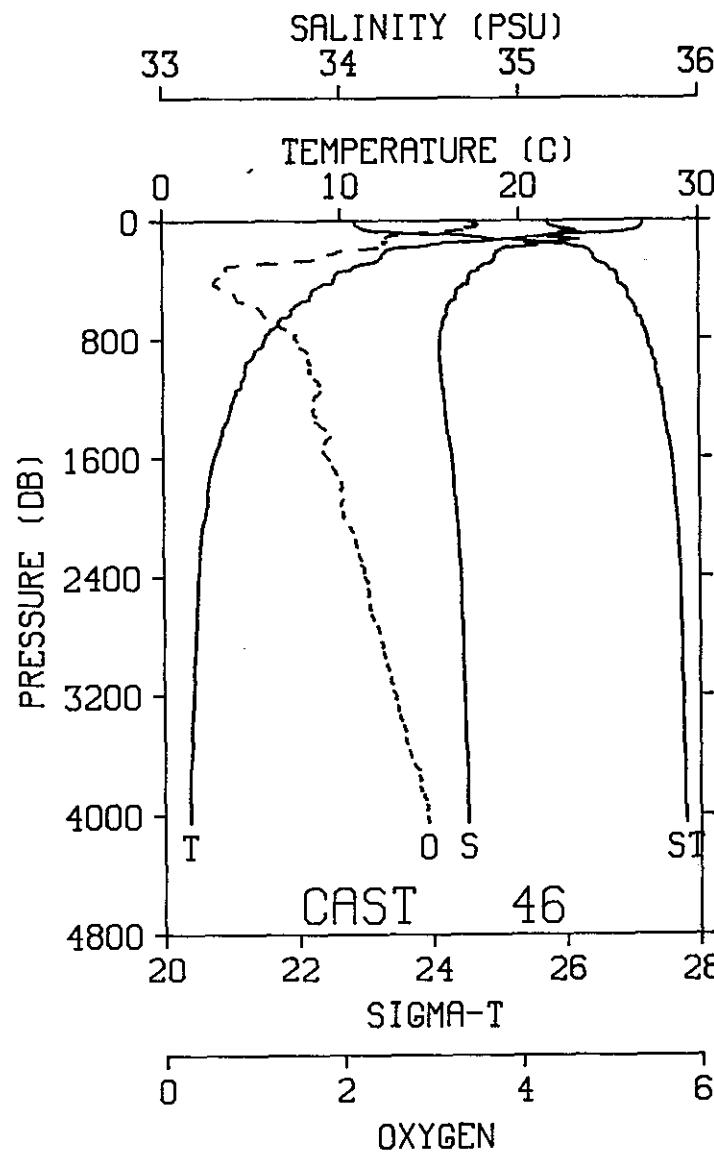


CAST EP2-86-OC-045 DATE 14 JUN 86 TIME 0522 GMT  
 LAT 0 01.9S LONG 140 00.4W WEATHER 1 SEA STATE 3  
 BAROMETER 10 WIND DIR 085 T SPD 16 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 2 DRY 27.0 WET 25.0 DEPTH 4317 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.909	35.188	3.50	22.891	0.000
10.	26.908	35.189	3.49	22.892	0.050
20.	26.896	35.191	3.52	22.896	0.099
30.	26.853	35.199	3.56	22.916	0.149
40.	26.824	35.210	3.48	22.934	0.198
50.	26.781	35.224	3.42	22.958	0.248
60.	26.681	35.255	3.36	23.014	0.296
70.	26.513	35.302	3.33	23.102	0.345
80.	25.921	35.408	3.15	23.368	0.392
90.	24.281	35.392	2.91	23.856	0.435
100.	21.845	35.205	2.63	24.418	0.473
110.	20.551	35.204	2.57	24.772	0.507
120.	19.788	35.266	2.53	25.022	0.538
130.	18.274	35.264	2.51	25.407	0.566
140.	17.434	35.192	2.47	25.559	0.591
150.	16.607	35.047	2.43	25.644	0.616
160.	15.474	35.058	2.45	25.912	0.638
170.	15.073	35.097	2.42	26.031	0.658
180.	14.258	34.986	2.41	26.122	0.678
190.	13.270	34.935	2.38	26.289	0.696
200.	12.702	34.895	2.22	26.372	0.713
249.	12.277	34.861	1.83	26.428	0.795

CAST EP2-86-OC-046 DATE 14 JUN 86 TIME 0814 GMT  
LAT 00 01.8N LONG 139 59.9W

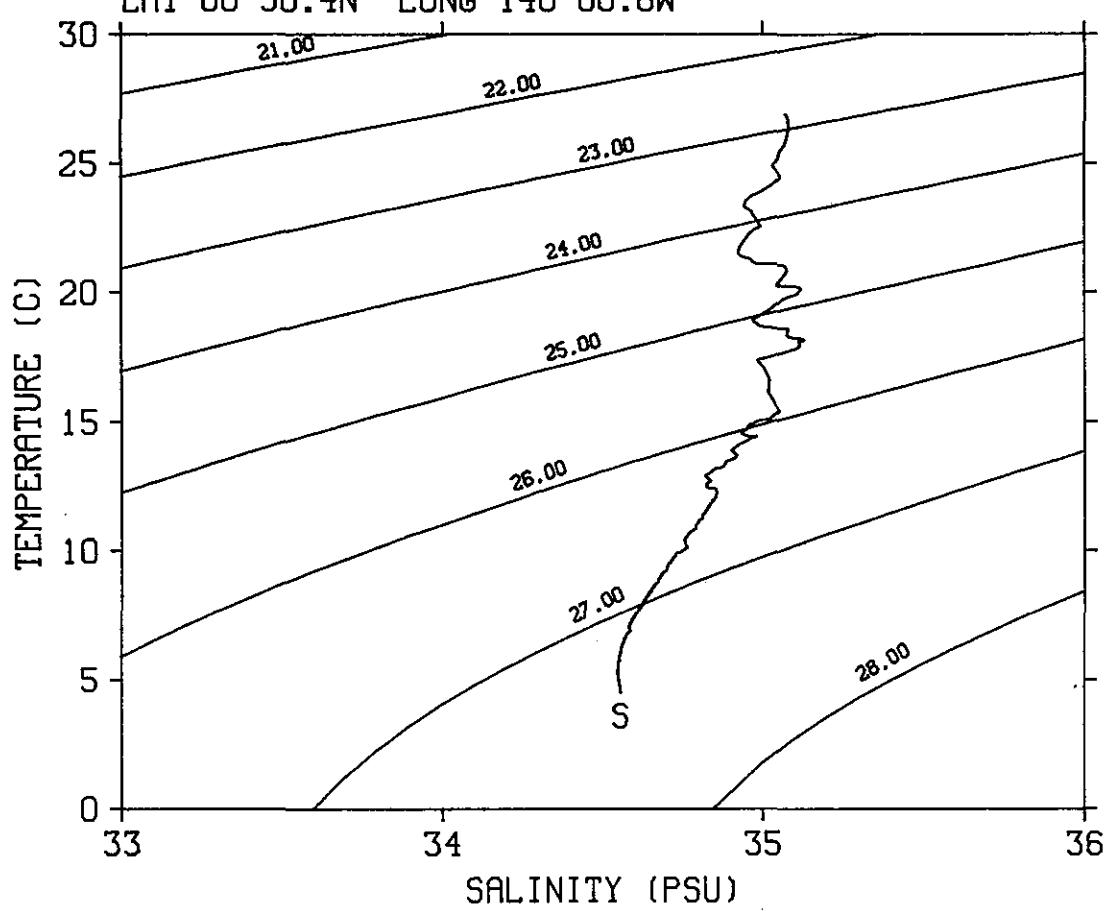


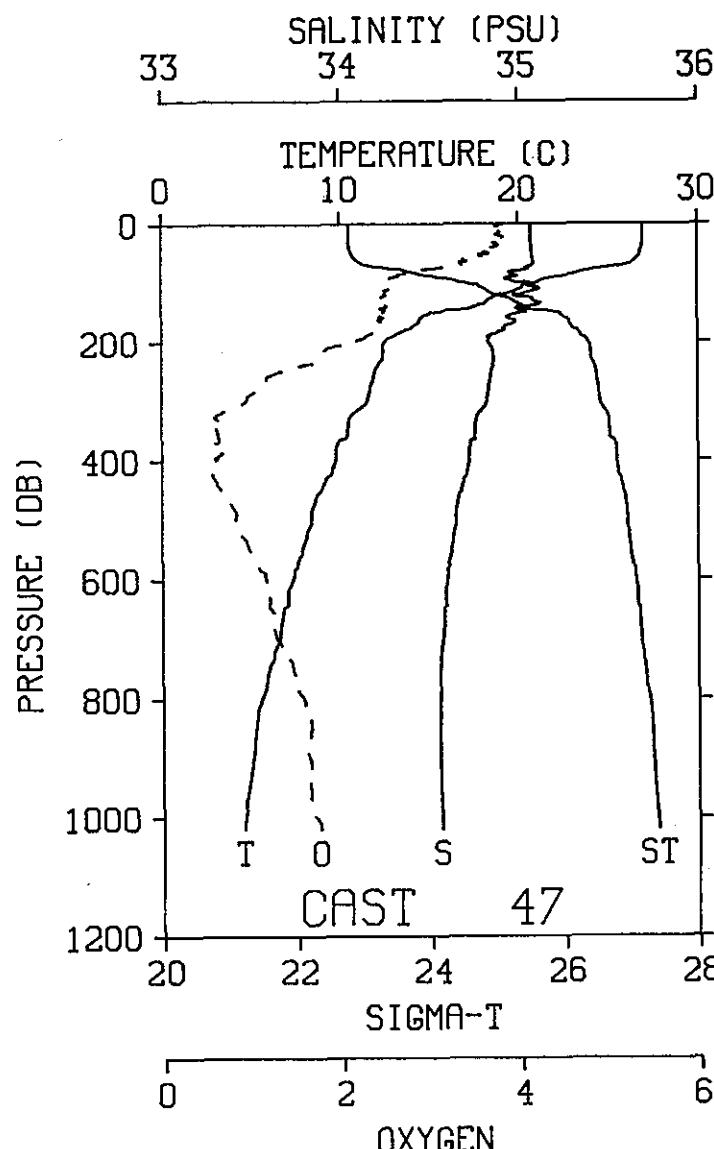


CAST EP2-86-OC-046 DATE 14 JUN 86 TIME 0814 GMT  
 LAT 00 01.8N LONG 139 59.9W WEATHER 1 SEA STATE 3  
 BAROMETER 11 WIND DIR 075 T SPD 16 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 1 DRY 25.5 WET 24.0 DEPTH 4333 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.876	35.159	3.41	22.879	0.000
10.	26.878	35.158	3.48	22.878	0.050
20.	26.882	35.158	3.51	22.876	0.100
30.	26.876	35.164	3.51	22.883	0.149
40.	26.828	35.183	3.51	22.912	0.199
50.	26.765	35.219	3.44	22.960	0.248
60.	26.672	35.249	3.42	23.012	0.297
70.	26.468	35.292	3.29	23.109	0.346
80.	25.849	35.310	3.16	23.316	0.392
90.	24.767	35.350	2.82	23.678	0.436
100.	21.791	35.205	2.65	24.433	0.475
110.	20.866	35.217	2.56	24.697	0.510
120.	20.352	35.237	2.51	24.850	0.541
130.	19.160	35.297	2.50	25.208	0.571
140.	18.133	35.274	2.49	25.450	0.598
150.	16.688	35.039	2.52	25.619	0.623
160.	15.075	35.082	2.49	26.020	0.644
170.	14.955	35.101	2.45	26.060	0.664
180.	14.012	34.993	2.42	26.180	0.684
190.	13.016	34.924	2.32	26.332	0.702
200.	12.680	34.889	2.17	26.371	0.719
250.	12.266	34.858	1.78	26.428	0.802
300.	11.057	34.793	0.89	26.605	0.882
350.	9.863	34.726	0.70	26.762	0.954
400.	9.599	34.712	0.60	26.795	1.020
450.	8.783	34.670	0.63	26.895	1.085
500.	8.326	34.643	0.80	26.944	1.145
550.	7.763	34.613	0.94	27.005	1.204
600.	7.214	34.592	1.08	27.068	1.259
650.	6.980	34.583	1.13	27.093	1.313
700.	6.451	34.565	1.29	27.151	1.363
750.	5.962	34.552	1.44	27.204	1.412
800.	5.690	34.552	1.49	27.238	1.459
850.	5.560	34.550	1.54	27.252	1.505
900.	5.110	34.549	1.63	27.305	1.549
950.	4.745	34.554	1.63	27.351	1.591
1000.	4.622	34.556	1.64	27.366	1.631
1500.	3.120	34.603	1.81	27.557	1.988
2000.	2.313	34.642	2.01	27.660	2.268
2500.	1.875	34.666	2.30	27.714	2.513
3000.	1.684	34.676	2.50	27.737	2.746
3500.	1.533	34.688	2.71	27.757	2.971
4000.	1.401	34.698	2.94	27.775	3.186
4053.	1.405	34.698	2.95	27.775	3.209

CAST EP2-86-OC-047 DATE 14 JUN 86 TIME 1329 GMT  
LAT 00 30.4N LONG 140 00.6W

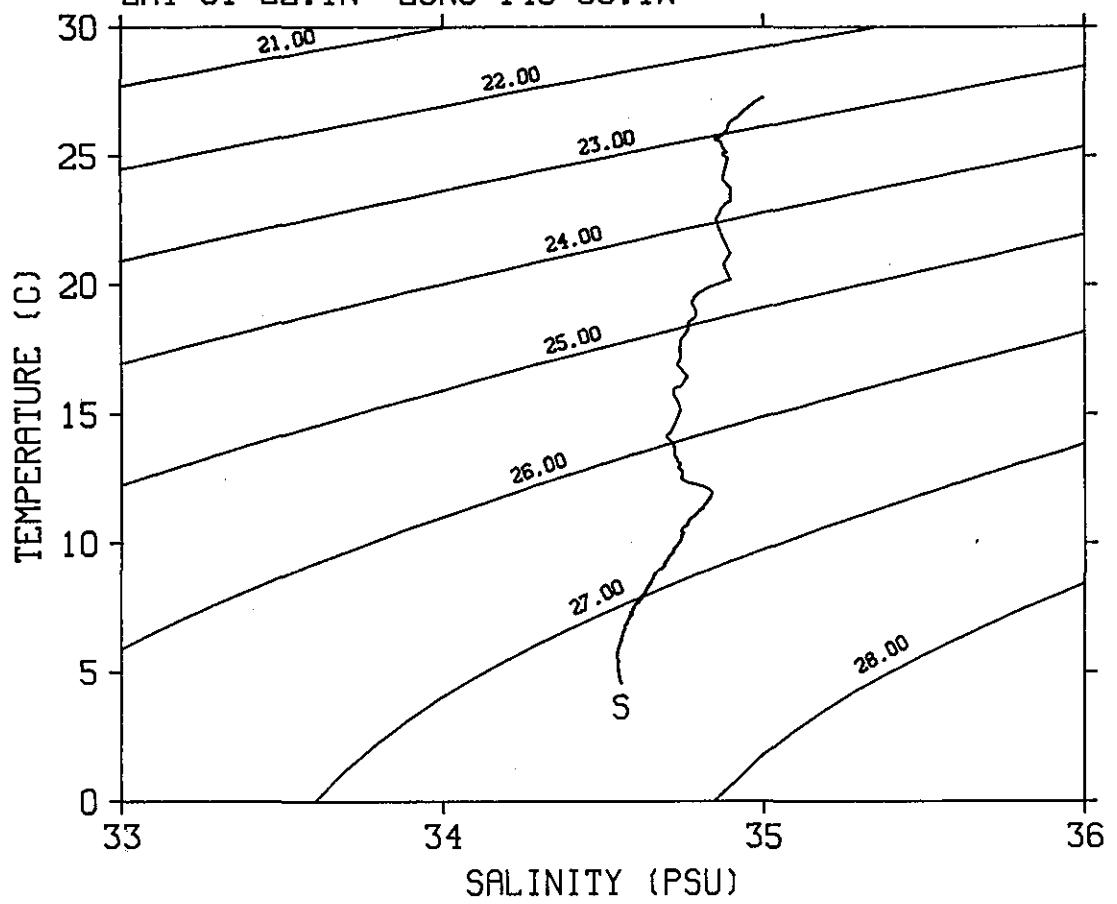


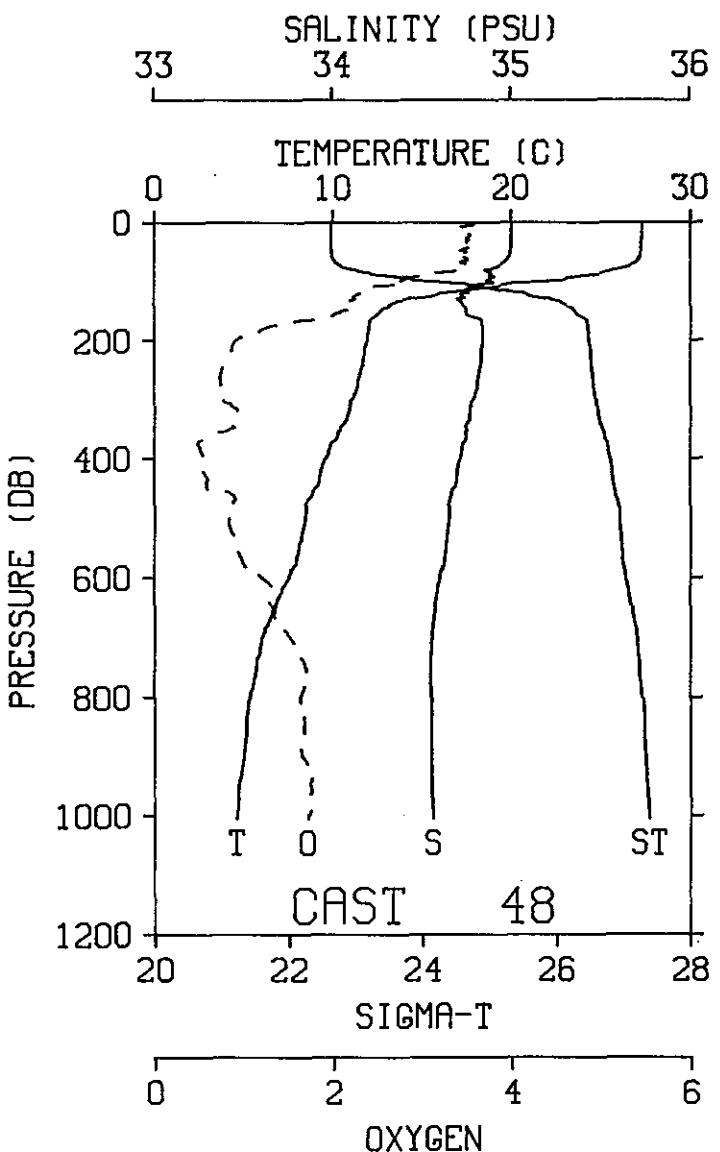


CAST EP2-86-OC-047 DATE 14 JUN 86 TIME 1329 GMT  
 LAT 00 30.4N LONG 140 00.6W WEATHER 2 SEA STATE 1  
 BAROMETER 09 WIND DIR 090 T SPD 18 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 6 DRY 24.0 WET 24.0 DEPTH 4320 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.909	35.070	3.79	22.802	0.000
10.	26.914	35.070	3.81	22.800	0.050
20.	26.917	35.069	3.75	22.799	0.101
30.	26.908	35.070	3.80	22.802	0.152
40.	26.875	35.072	3.74	22.814	0.202
50.	26.783	35.076	3.67	22.846	0.252
60.	26.588	35.081	3.40	22.912	0.302
70.	26.031	35.077	3.36	23.084	0.352
80.	23.839	34.989	2.80	23.682	0.396
90.	22.296	34.960	2.63	24.106	0.437
100.	21.015	35.070	2.51	24.544	0.473
110.	20.124	35.121	2.55	24.823	0.505
120.	18.953	34.977	2.52	25.017	0.536
130.	18.248	35.085	2.48	25.277	0.564
140.	17.518	35.025	2.53	25.410	0.591
150.	15.102	35.022	2.49	25.967	0.615
160.	14.470	34.943	2.47	26.044	0.635
170.	14.301	34.960	2.44	26.093	0.655
180.	13.614	34.919	2.39	26.205	0.674
190.	12.948	34.830	2.29	26.272	0.692
200.	12.474	34.825	2.12	26.363	0.710
250.	11.909	34.843	1.28	26.485	0.792
300.	11.505	34.819	0.94	26.543	0.871
350.	10.417	34.755	0.62	26.689	0.944
400.	9.703	34.718	0.60	26.782	1.012
450.	8.906	34.675	0.66	26.879	1.077
500.	8.329	34.643	0.82	26.944	1.137
550.	7.839	34.618	0.98	26.998	1.195
600.	7.247	34.590	1.15	27.061	1.251
650.	6.748	34.575	1.22	27.119	1.304
700.	6.532	34.568	1.28	27.142	1.355
750.	5.934	34.554	1.47	27.209	1.404
800.	5.468	34.549	1.58	27.262	1.450
850.	5.153	34.548	1.66	27.300	1.494
900.	5.007	34.550	1.64	27.318	1.537
950.	4.759	34.553	1.65	27.349	1.579
1000.	4.530	34.556	1.71	27.376	1.619
1020.	4.486	34.557	1.75	27.382	1.635

CAST EP2-86-OC-048 DATE 14 JUN 86 TIME 1904 GMT  
LAT 01 22.1N LONG 140 00.1W

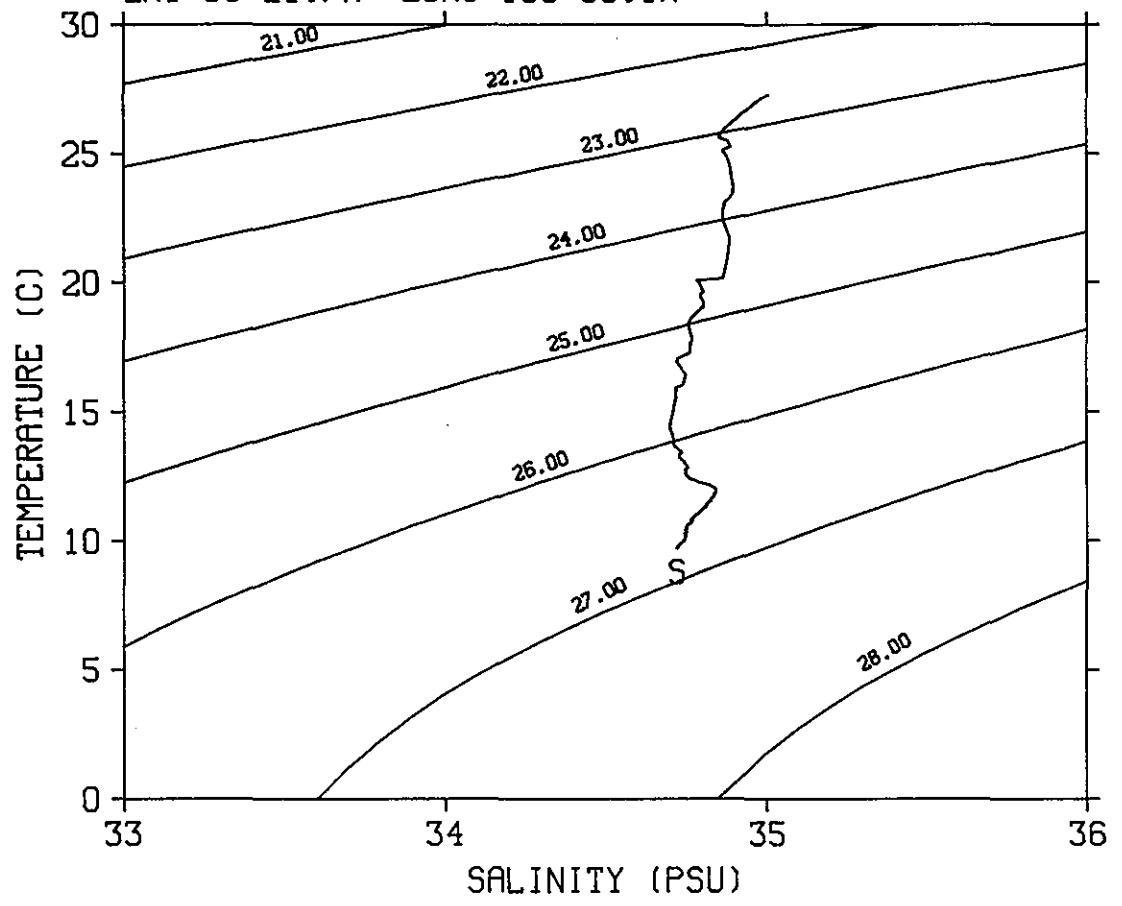


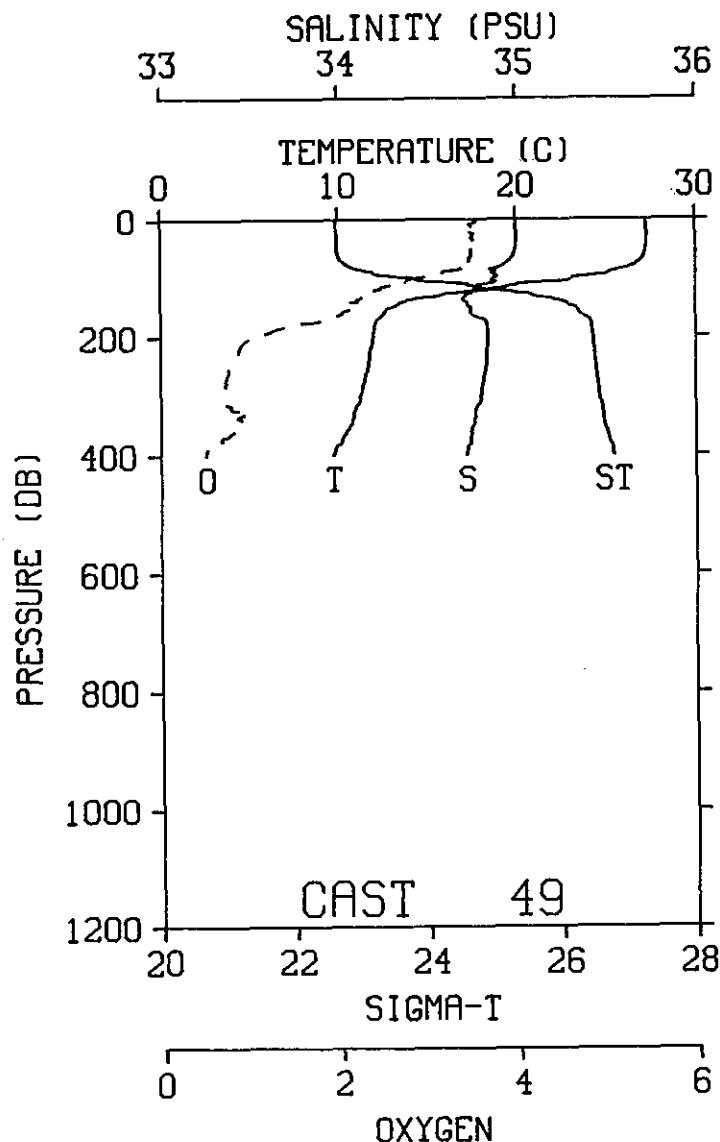


CAST EP2-86-OC-048 DATE 14 JUN 86 TIME 1904 GMT  
 LAT 01 22.1N LONG 140 00.1W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 110 T SPD 14 KT VISIBILITY 8  
 CLOUD 6 AMOUNT 3 DRY 27.5 WET 25.5 DEPTH 4462 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.253	35.001	3.58	22.639	0.000
10.	27.256	35.001	3.49	22.639	0.052
20.	27.256	35.001	3.51	22.638	0.104
30.	27.245	35.000	3.53	22.642	0.156
40.	27.238	34.999	3.51	22.643	0.208
50.	27.211	34.994	3.49	22.648	0.260
60.	27.122	34.983	3.50	22.668	0.312
70.	26.811	34.947	3.50	22.740	0.364
80.	25.740	34.871	3.38	23.019	0.415
90.	24.361	34.880	3.05	23.445	0.462
100.	21.971	34.870	2.73	24.129	0.503
110.	18.721	34.788	2.43	24.931	0.536
120.	15.999	34.720	2.29	25.533	0.564
130.	14.172	34.697	2.24	25.917	0.587
140.	13.180	34.733	2.18	26.151	0.607
150.	12.667	34.746	2.10	26.263	0.625
160.	12.297	34.777	1.98	26.359	0.643
170.	12.041	34.834	1.51	26.453	0.659
180.	12.006	34.838	1.23	26.462	0.675
190.	11.948	34.839	1.05	26.475	0.691
200.	11.915	34.840	0.91	26.481	0.707
250.	11.555	34.820	0.75	26.534	0.786
300.	11.076	34.786	0.77	26.595	0.862
350.	10.418	34.747	0.83	26.683	0.936
400.	9.584	34.712	0.53	26.797	1.004
450.	8.964	34.675	0.58	26.870	1.069
500.	8.413	34.647	0.82	26.934	1.130
550.	8.070	34.628	0.92	26.972	1.189
600.	7.508	34.594	1.21	27.027	1.246
650.	6.671	34.569	1.33	27.124	1.300
700.	6.000	34.550	1.52	27.197	1.349
750.	5.654	34.545	1.70	27.236	1.396
800.	5.308	34.548	1.63	27.281	1.441
850.	5.088	34.548	1.67	27.307	1.484
900.	4.949	34.550	1.65	27.324	1.527
950.	4.705	34.553	1.75	27.354	1.568
1000.	4.560	34.557	1.71	27.374	1.608
1006.	4.545	34.557	1.71	27.375	1.613

CAST EP2-86-OC-049 DATE 14 JUN 86 TIME 2037 GMT  
LAT 01 21.7N LONG 139 59.1W

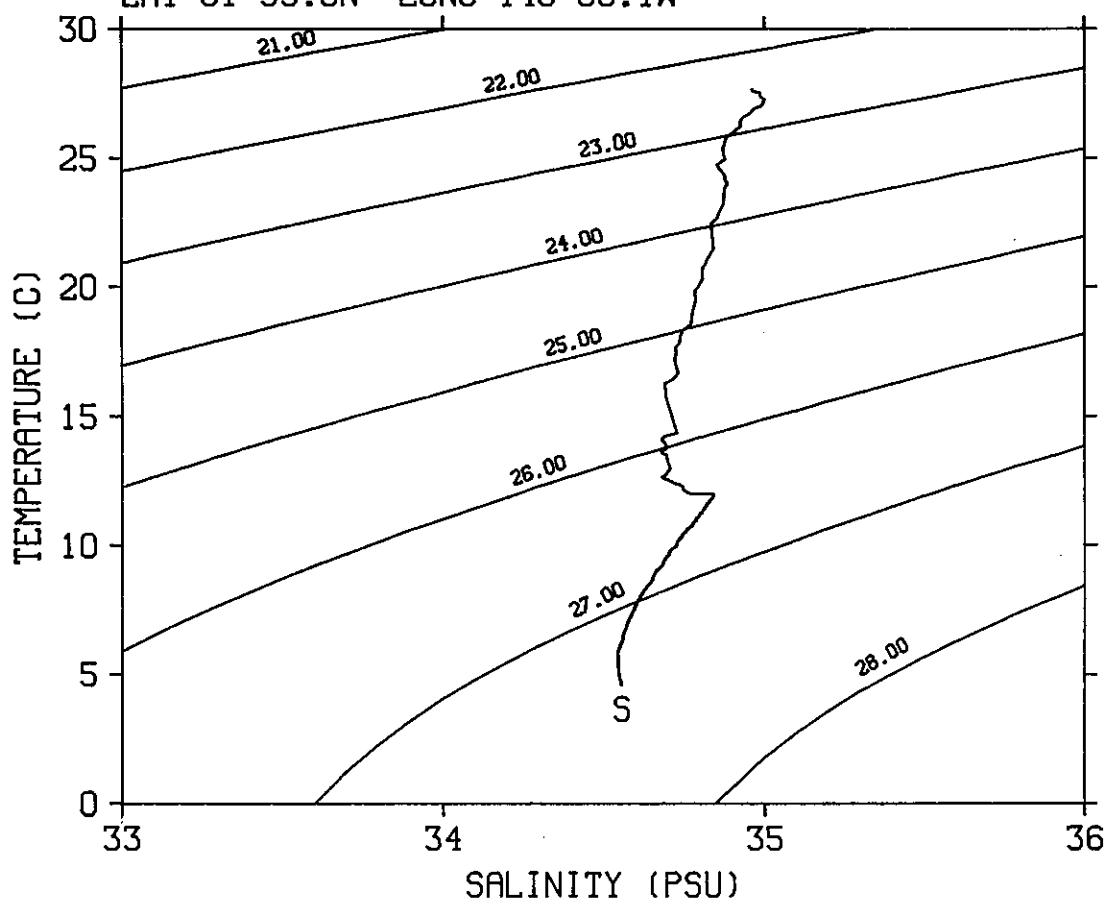


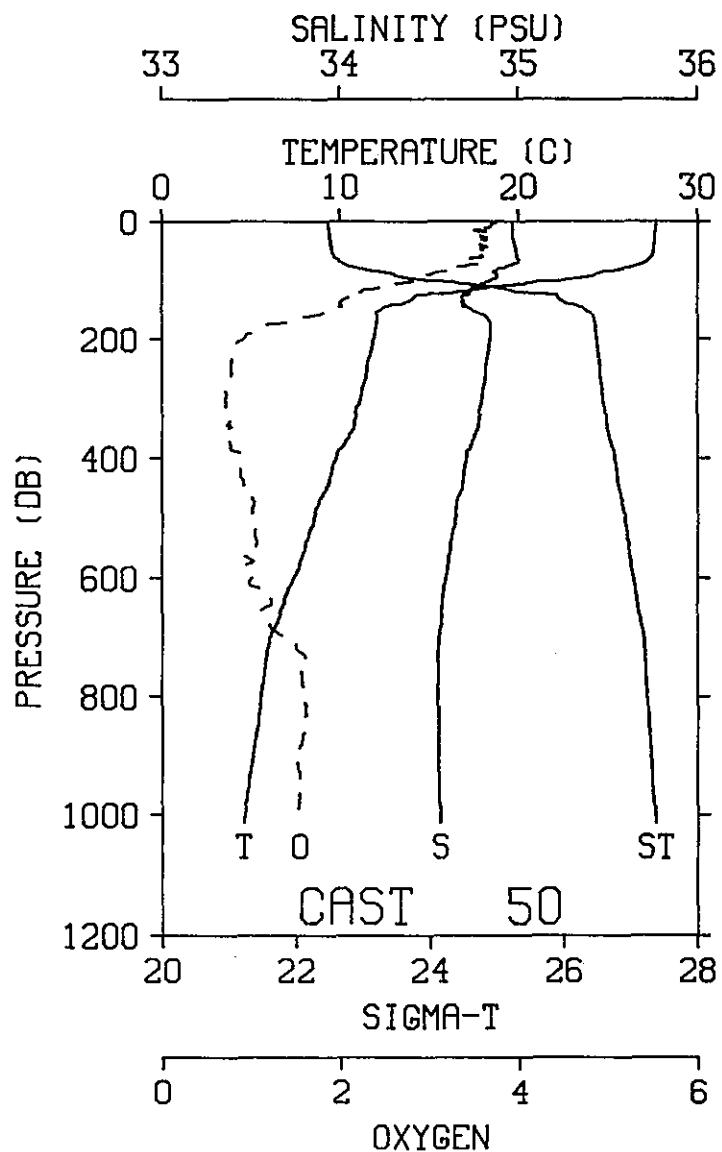


CAST EP2-86-OC-049 DATE 14 JUN 86 TIME 2037 GMT  
 LAT 01 21.7N LONG 139 59.1W WEATHER 1 SEA STATE 3  
 BAROMETER 11 WIND DIR 100 T SPD 16 KT VISIBILITY 8  
 CLOUD 4 AMOUNT 2 DRY 26.4 WET 24.8 DEPTH M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.263	35.002	3.54	22.637	0.000
10.	27.256	35.001	3.48	22.639	0.052
20.	27.257	35.001	3.48	22.639	0.104
30.	27.252	35.001	3.51	22.640	0.156
40.	27.228	34.998	3.51	22.645	0.208
50.	27.215	34.995	3.51	22.647	0.260
60.	27.138	34.985	3.49	22.664	0.313
70.	26.980	34.966	3.48	22.701	0.364
80.	26.528	34.921	3.35	22.810	0.416
90.	25.235	34.889	3.19	23.187	0.465
100.	23.400	34.893	2.96	23.738	0.510
110.	20.665	34.871	2.76	24.488	0.550
120.	18.556	34.761	2.45	24.952	0.583
130.	15.794	34.717	2.31	25.578	0.609
140.	13.703	34.710	2.21	26.025	0.631
150.	13.009	34.742	2.15	26.191	0.651
160.	12.576	34.747	2.07	26.281	0.669
170.	12.189	34.813	1.89	26.408	0.686
180.	12.042	34.836	1.47	26.454	0.702
190.	12.005	34.840	1.26	26.464	0.718
200.	11.947	34.842	1.05	26.477	0.734
250.	11.683	34.830	0.78	26.518	0.813
300.	11.259	34.801	0.74	26.574	0.890
350.	10.649	34.756	0.82	26.649	0.965
400.	9.719	34.721	0.51	26.782	1.034
401.	9.713	34.719	0.51	26.782	1.036

CAST EP2-86-OC-050 DATE 15 JUN 86 TIME 0054 GMT  
LAT 01 59.6N LONG 140 00.1W

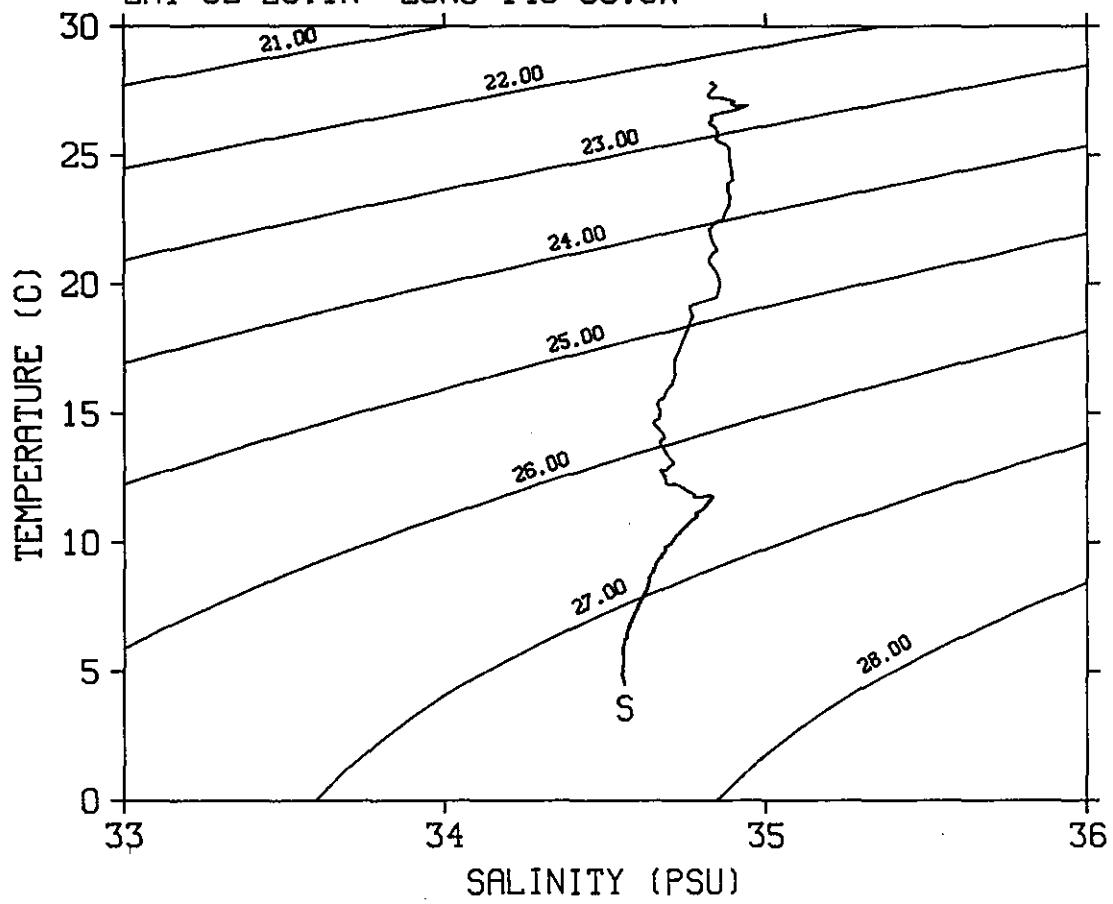


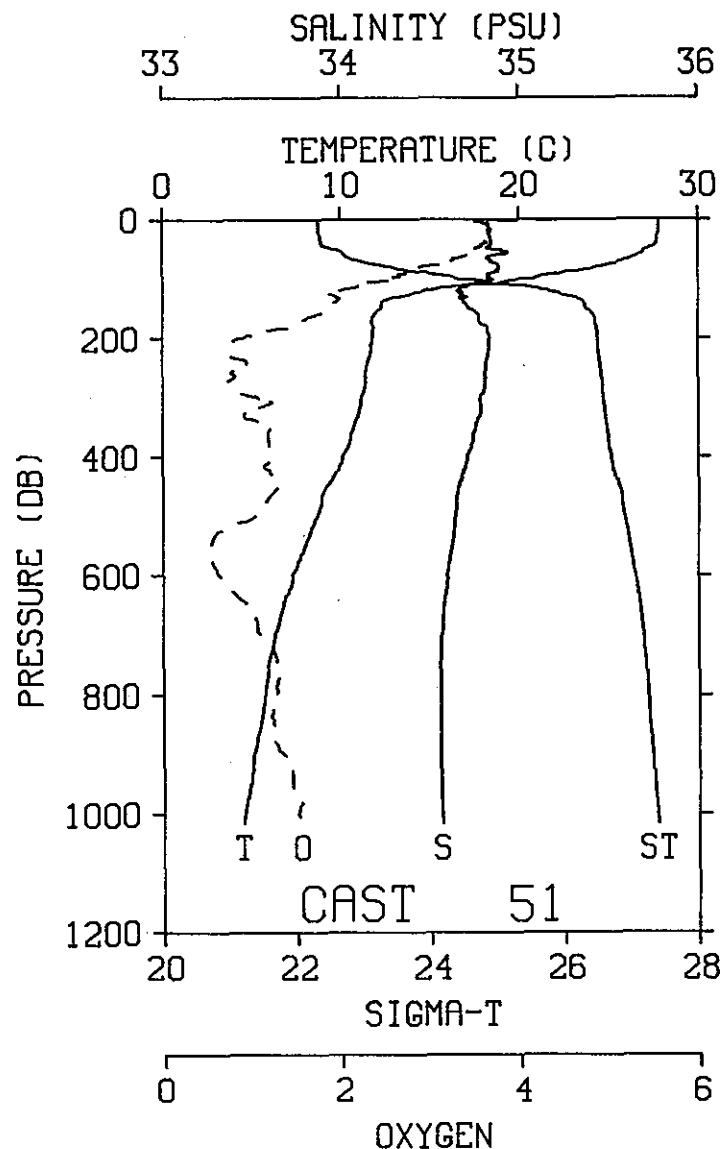


CAST EP2-86-OC-050 DATE 15 JUN 86 TIME 0054 GMT  
 LAT 01 59.6N LONG 140 00.1W WEATHER 2 SEA STATE 1  
 BAROMETER 09 WIND DIR 110 T SPD 13 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 6 DRY 27.1 WET 25.5 DEPTH 4360 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.639	34.962	3.75	22.485	0.000
10.	27.625	34.962	3.67	22.490	0.053
20.	27.587	34.961	3.58	22.502	0.107
30.	27.558	34.966	3.58	22.515	0.160
40.	27.542	34.974	3.57	22.526	0.214
50.	27.511	34.986	3.63	22.545	0.267
60.	27.422	34.988	3.60	22.576	0.320
70.	27.118	34.996	3.48	22.679	0.372
80.	26.001	34.903	3.33	22.962	0.423
90.	24.274	34.875	3.03	23.467	0.470
100.	22.572	34.843	2.80	23.939	0.512
110.	18.993	34.776	2.52	24.853	0.548
120.	16.650	34.733	2.23	25.393	0.576
130.	14.089	34.681	2.09	25.922	0.599
140.	13.491	34.696	2.01	26.059	0.620
150.	12.356	34.734	1.92	26.315	0.638
160.	12.024	34.809	1.70	26.437	0.654
170.	12.029	34.828	1.44	26.451	0.670
180.	11.969	34.839	1.10	26.470	0.686
190.	11.924	34.840	1.00	26.480	0.702
200.	11.845	34.837	0.92	26.492	0.718
250.	11.502	34.815	0.78	26.539	0.796
300.	11.137	34.795	0.72	26.592	0.872
350.	10.729	34.768	0.75	26.644	0.946
400.	9.755	34.705	0.87	26.763	1.017
450.	9.247	34.681	0.92	26.829	1.083
500.	8.509	34.641	1.01	26.915	1.146
550.	8.009	34.613	1.04	26.969	1.206
600.	7.394	34.590	1.01	27.040	1.263
650.	6.736	34.569	1.16	27.116	1.316
700.	6.010	34.551	1.40	27.197	1.366
750.	5.762	34.547	1.60	27.225	1.413
800.	5.549	34.546	1.61	27.250	1.459
850.	5.358	34.546	1.62	27.274	1.504
900.	5.077	34.549	1.54	27.309	1.548
950.	4.885	34.551	1.55	27.333	1.590
1000.	4.614	34.556	1.54	27.367	1.631
1014.	4.557	34.558	1.54	27.375	1.642

CAST EP2-86-OC-051 DATE 15 JUN 86 TIME 0419 GMT  
LAT 02 28.1N LONG 140 00.6W

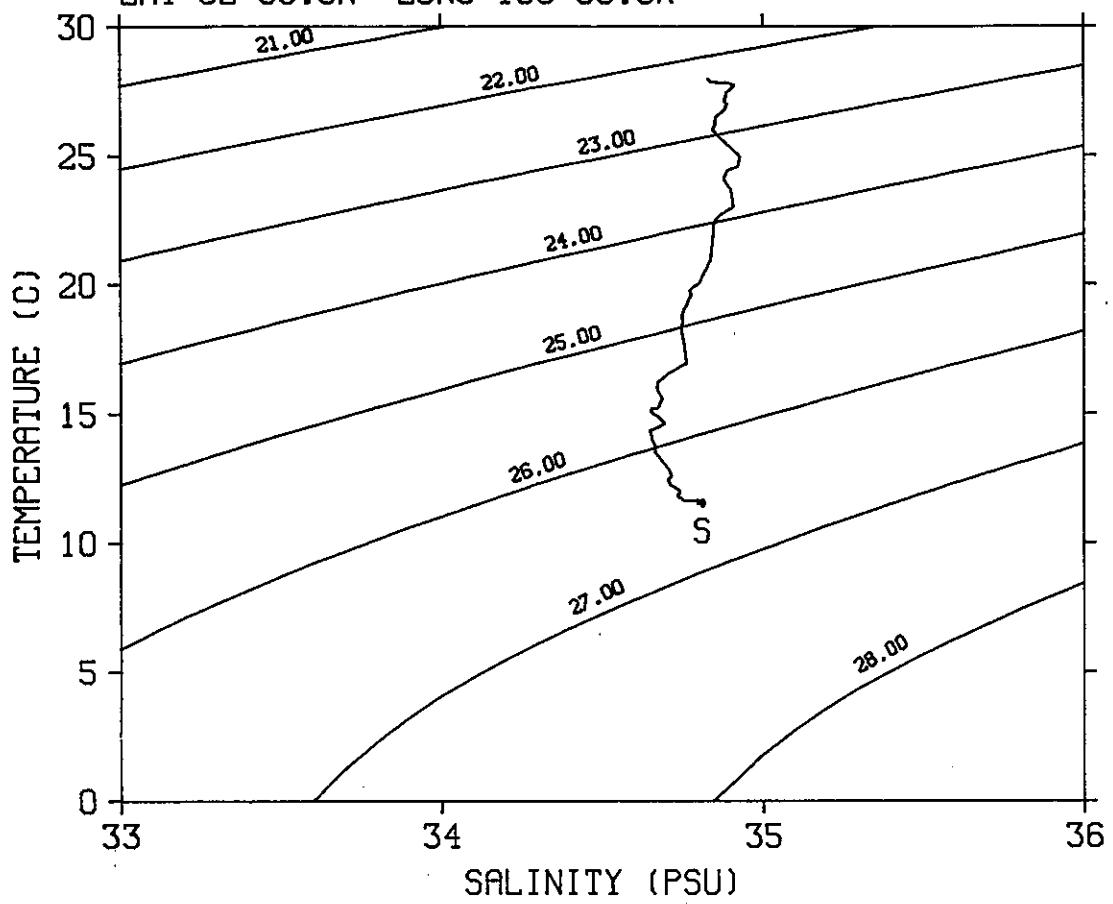




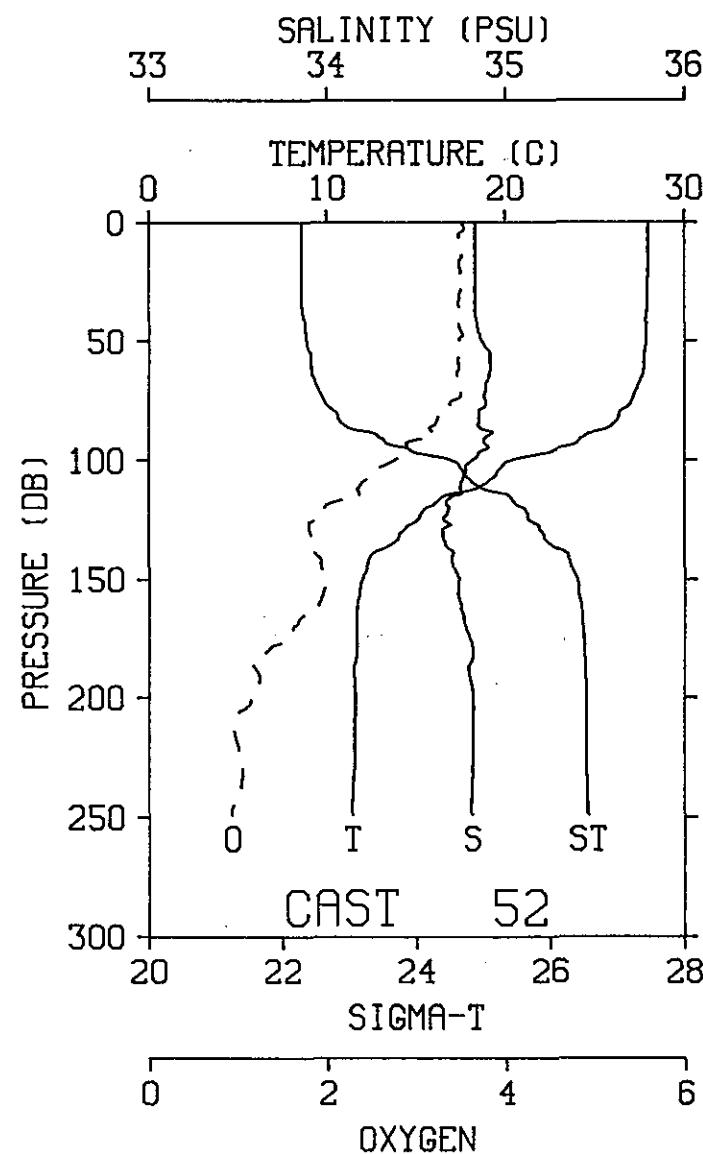
CAST EP2-86-OC-051 DATE 15 JUN 86 TIME 0419 GMT  
 LAT 02 28.1N LONG 140 00.6W WEATHER 1 SEA STATE 3  
 BAROMETER 10 WIND DIR 110 T SPD 14 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 6 DRY 27.2 WET 25.0 DEPTH 4400 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.795	34.829	3.75	22.335	0.000
10.	27.795	34.828	3.67	22.334	0.055
20.	27.788	34.828	3.65	22.337	0.110
30.	27.713	34.838	3.68	22.369	0.165
40.	27.681	34.843	3.64	22.383	0.219
50.	27.200	34.832	3.52	22.529	0.274
60.	26.753	34.907	3.44	22.729	0.326
70.	25.922	34.848	3.27	22.945	0.376
80.	24.583	34.887	2.95	23.383	0.424
90.	22.712	34.870	2.84	23.919	0.467
100.	20.943	34.821	2.49	24.375	0.505
110.	18.045	34.746	2.31	25.068	0.537
120.	14.782	34.666	2.02	25.763	0.562
130.	13.448	34.686	1.94	26.060	0.583
140.	12.299	34.686	1.94	26.289	0.602
150.	12.270	34.713	1.88	26.315	0.619
160.	11.891	34.771	1.74	26.432	0.636
170.	11.761	34.775	1.59	26.460	0.652
180.	11.828	34.820	1.50	26.483	0.668
190.	11.786	34.825	1.17	26.494	0.684
200.	11.769	34.832	0.86	26.503	0.699
250.	11.470	34.813	0.82	26.544	0.777
300.	11.142	34.779	1.09	26.578	0.854
350.	10.725	34.754	1.21	26.634	0.928
400.	10.104	34.708	1.21	26.706	1.001
450.	9.172	34.655	1.31	26.820	1.069
500.	8.656	34.639	1.04	26.890	1.133
550.	7.976	34.619	0.54	26.979	1.193
600.	7.261	34.591	0.63	27.060	1.249
650.	6.721	34.571	0.95	27.119	1.302
700.	6.252	34.559	1.10	27.172	1.353
750.	5.892	34.553	1.28	27.213	1.401
800.	5.687	34.551	1.28	27.238	1.447
850.	5.428	34.553	1.24	27.271	1.493
900.	5.069	34.551	1.36	27.311	1.537
950.	4.858	34.552	1.44	27.337	1.579
1000.	4.545	34.559	1.51	27.377	1.619
1017.	4.476	34.560	1.55	27.385	1.633

CAST EP2-86-OC-052 DATE 15 JUN 86 TIME 0724 GMT  
LAT 02 59.9N LONG 139 59.9W



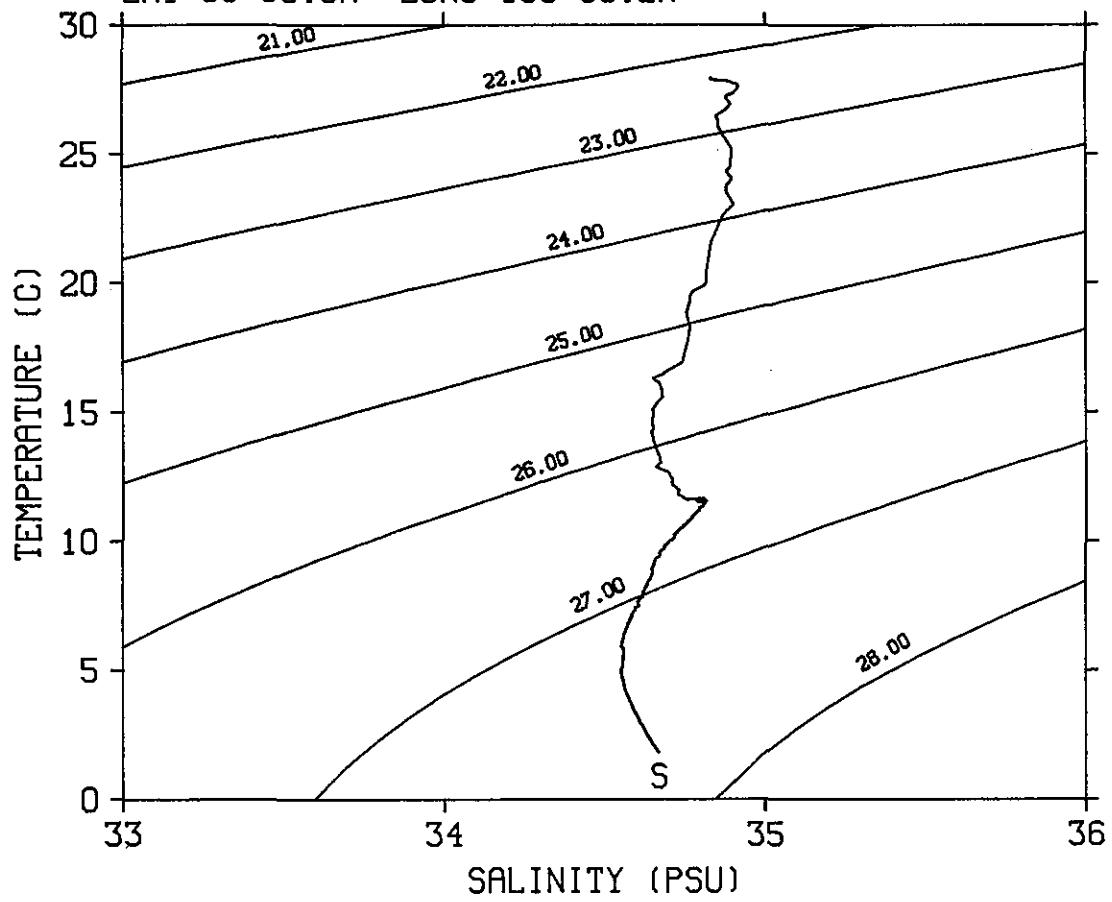
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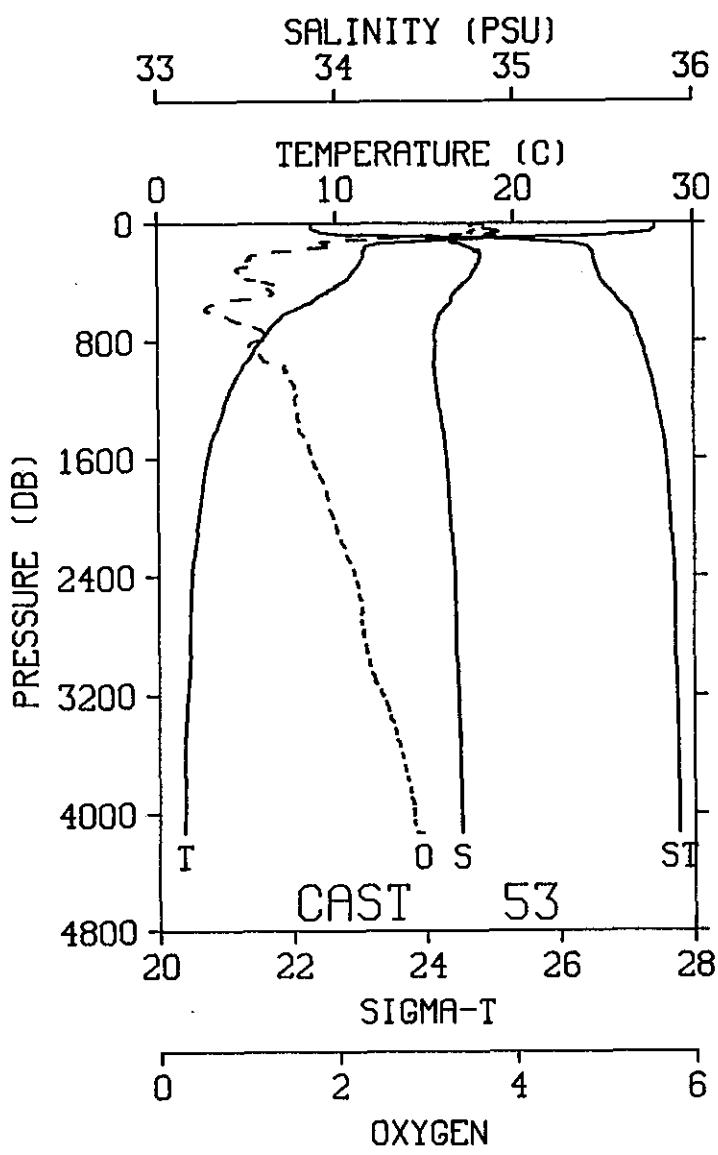


CAST EP2-86-OC-052 DATE 15 JUN 86 TIME 0724 GMT  
 LAT 02 59.9N LONG 139 59.9W WEATHER 1 SEA STATE 3  
 BAROMETER 11 WIND DIR 095 T SPD 14 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 3 DRY 27.2 WET 25.0 DEPTH 4290 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.938	34.831	3.51	22.290	0.000
10.	27.937	34.830	3.49	22.289	0.055
20.	27.938	34.829	3.50	22.289	0.111
30.	27.928	34.830	3.48	22.292	0.166
40.	27.850	34.834	3.48	22.321	0.222
50.	27.810	34.864	3.47	22.357	0.277
60.	27.691	34.914	3.47	22.433	0.331
70.	27.290	34.887	3.48	22.542	0.385
80.	26.363	34.852	3.29	22.810	0.437
90.	24.404	34.890	3.17	23.439	0.486
100.	20.390	34.814	2.76	24.518	0.527
110.	18.773	34.746	2.38	24.886	0.559
120.	15.579	34.685	1.97	25.601	0.586
130.	14.176	34.650	1.81	25.880	0.609
140.	12.455	34.703	1.90	26.271	0.629
150.	11.955	34.741	1.96	26.397	0.646
160.	11.684	34.750	1.91	26.455	0.663
170.	11.651	34.776	1.63	26.482	0.679
180.	11.666	34.818	1.34	26.511	0.694
190.	11.514	34.796	1.23	26.523	0.710
200.	11.566	34.816	1.15	26.529	0.725
247.	11.411	34.809	0.94	26.552	0.798

CAST EP2-86-OC-053 DATE 15 JUN 86 TIME 0937 GMT  
LAT 03 00.3N LONG 139 58.2W

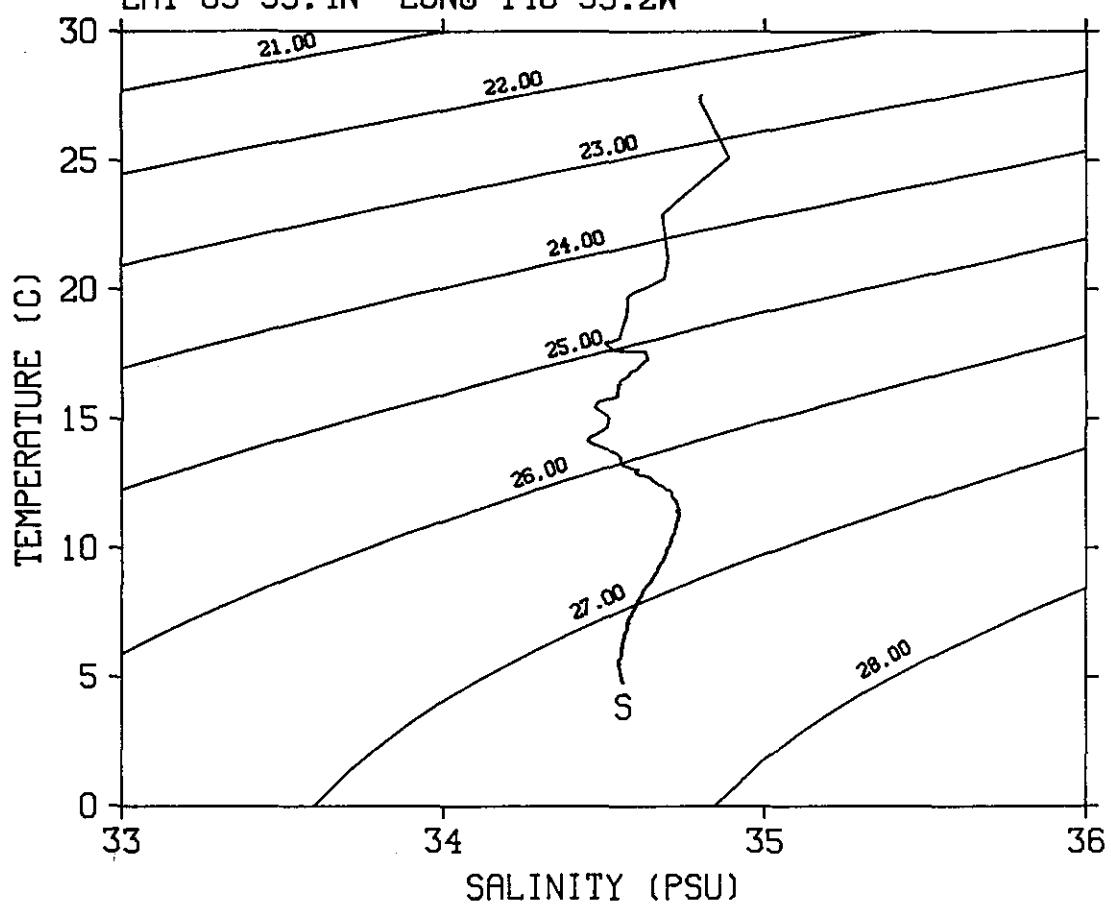


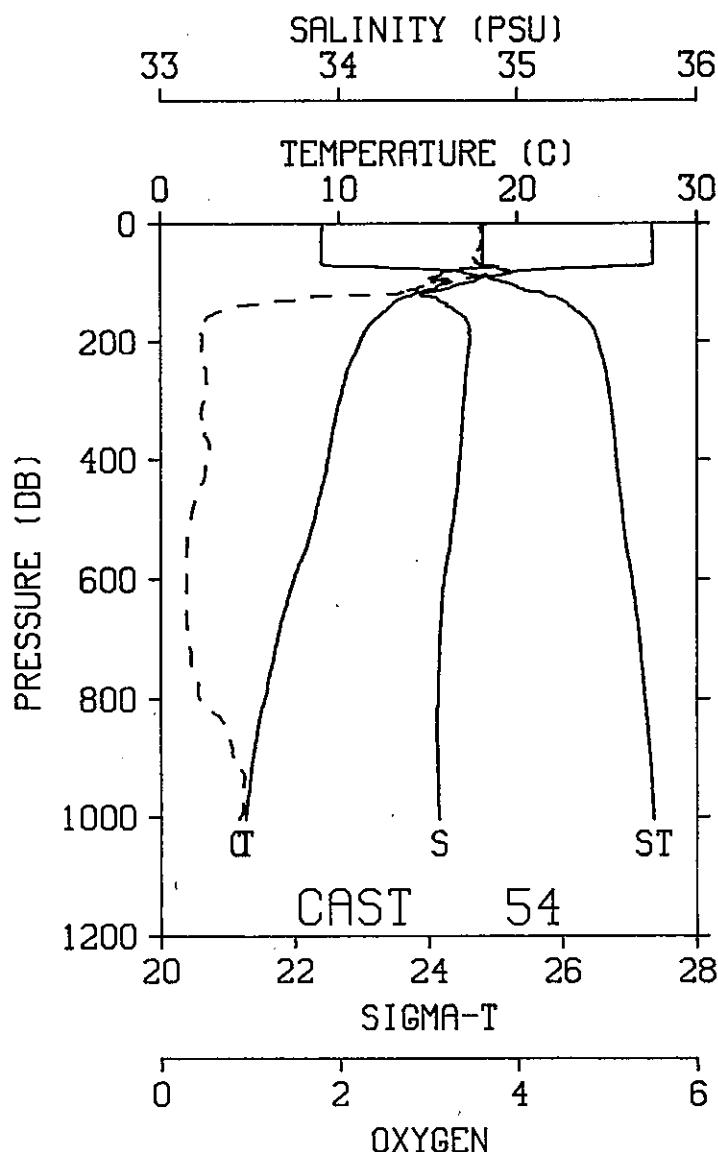


CAST EP2-86-OC-053 DATE 15 JUN 86 TIME 0937 GMT  
 LAT 03 00.3N LONG 139 58.2W WEATHER 1 SEA STATE 3  
 BAROMETER 11 WIND DIR 110 T SPD 14 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 1 DRY 27.0 WET 24.8 DEPTH 4290 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.909	34.834	3.55	22.302	0.000
10.	27.915	34.834	3.55	22.300	0.055
20.	27.918	34.834	3.52	22.299	0.111
30.	27.905	34.834	3.52	22.303	0.166
40.	27.882	34.836	3.51	22.312	0.221
50.	27.781	34.893	3.54	22.387	0.276
60.	27.686	34.914	3.52	22.435	0.331
70.	27.250	34.881	3.52	22.550	0.384
80.	26.232	34.856	3.32	22.855	0.436
90.	23.801	34.880	2.96	23.611	0.482
100.	19.560	34.770	2.66	24.702	0.519
110.	16.525	34.686	2.39	25.386	0.549
120.	15.332	34.663	2.00	25.639	0.574
130.	14.069	34.650	1.82	25.903	0.596
140.	12.399	34.713	1.92	26.290	0.616
150.	12.126	34.716	1.97	26.345	0.633
160.	11.688	34.746	1.91	26.452	0.649
170.	11.634	34.769	1.70	26.479	0.665
180.	11.660	34.788	1.56	26.489	0.681
190.	11.592	34.782	1.34	26.497	0.697
200.	11.563	34.811	1.27	26.525	0.712
250.	11.444	34.810	1.01	26.547	0.789
300.	11.192	34.794	0.95	26.580	0.866
350.	10.852	34.765	0.96	26.620	0.941
400.	10.416	34.730	1.21	26.670	1.014
450.	9.689	34.686	1.24	26.760	1.085
500.	8.926	34.648	1.12	26.855	1.151
550.	8.278	34.633	0.59	26.944	1.214
600.	7.397	34.596	0.60	27.045	1.271
650.	6.820	34.576	0.82	27.109	1.324
700.	6.352	34.560	1.07	27.160	1.375
750.	6.083	34.554	1.20	27.190	1.424
800.	5.773	34.559	1.10	27.233	1.471
850.	5.445	34.558	1.08	27.272	1.517
900.	5.251	34.557	1.15	27.294	1.561
950.	4.910	34.552	1.32	27.330	1.604
1000.	4.668	34.557	1.45	27.362	1.645
1500.	2.945	34.611	1.68	27.580	1.993
2000.	2.293	34.642	1.97	27.661	2.270
2500.	1.836	34.668	2.25	27.718	2.514
3000.	1.719	34.674	2.36	27.733	2.747
3500.	1.472	34.691	2.67	27.764	2.970
4000.	1.421	34.696	2.85	27.772	3.185
4135.	1.410	34.697	2.96	27.773	3.243

CAST EP2-86-OC-054 DATE 17 JUN 86 TIME 0344 GMT  
LAT 09 59.4N LONG 146 59.2W

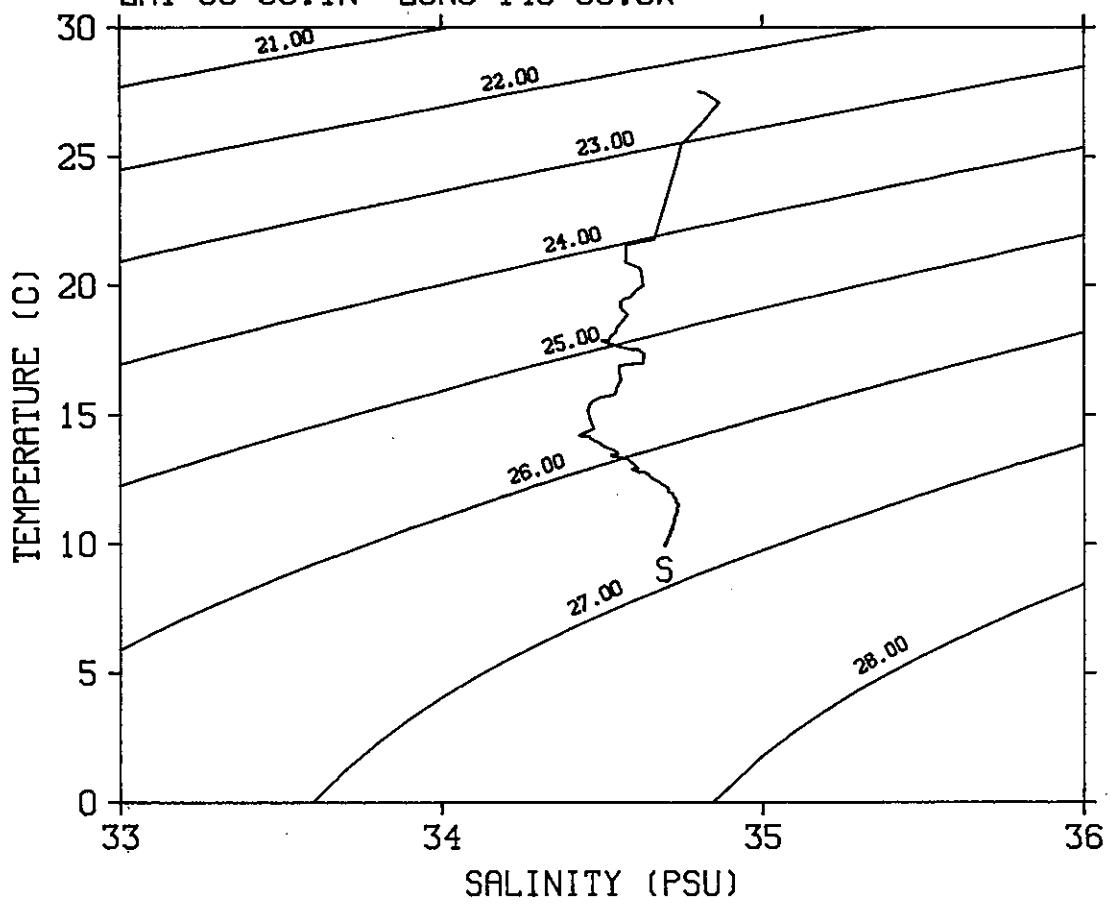




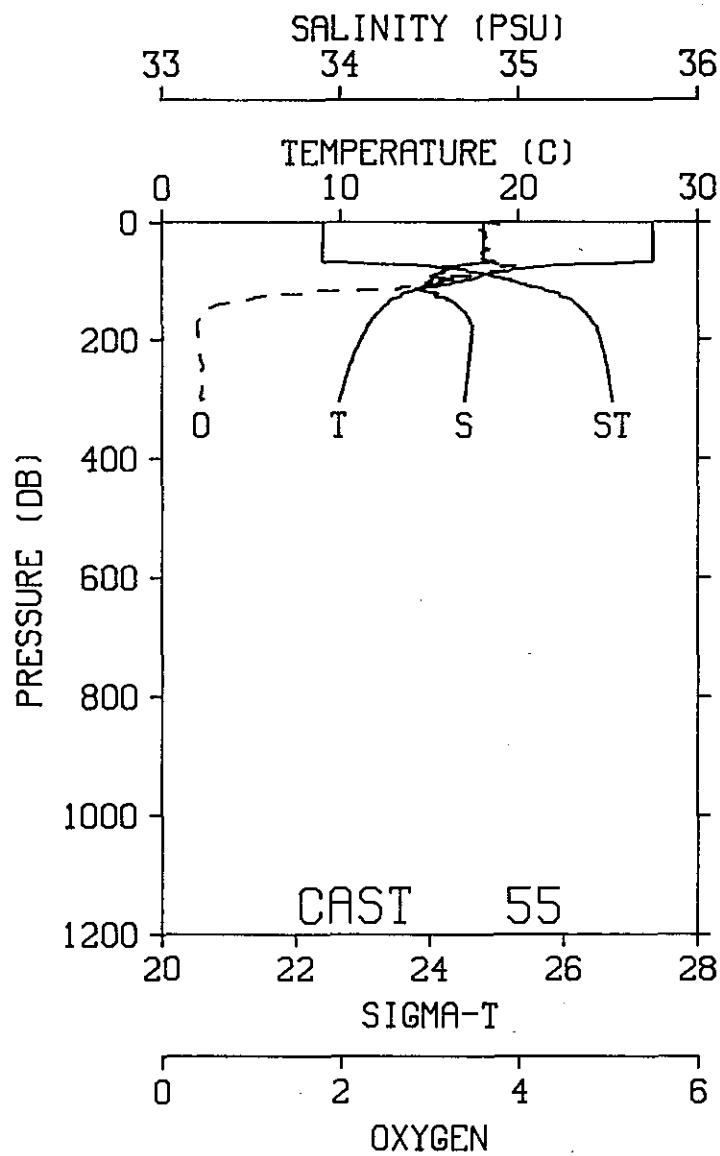
CAST EP2-86-OC-054 DATE 17 JUN 86 TIME 0344 GMT  
 LAT 09 59.4N LONG 146 59.2W WEATHER 2 SEA STATE 3  
 BAROMETER 09 WIND DIR 065 T SPD 22 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 6 DRY 26.5 WET 24.2 DEPTH 5280 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.485	34.800	3.66	22.414	0.000
10.	27.489	34.803	3.59	22.415	0.054
20.	27.495	34.803	3.57	22.412	0.108
30.	27.497	34.803	3.61	22.412	0.163
40.	27.500	34.802	3.58	22.410	0.217
50.	27.503	34.802	3.58	22.410	0.271
60.	27.504	34.803	3.49	22.409	0.326
70.	27.473	34.802	3.59	22.419	0.380
80.	20.385	34.687	3.91	24.422	0.426
90.	18.397	34.554	3.55	24.833	0.459
100.	17.287	34.635	3.09	25.167	0.489
110.	16.114	34.542	2.89	25.370	0.516
120.	14.167	34.449	2.60	25.727	0.541
130.	13.216	34.559	1.31	26.009	0.562
140.	12.887	34.600	0.87	26.106	0.582
150.	12.466	34.667	0.64	26.241	0.601
160.	12.130	34.713	0.52	26.342	0.618
170.	11.795	34.724	0.47	26.415	0.635
180.	11.523	34.733	0.43	26.472	0.651
190.	11.369	34.732	0.47	26.500	0.667
200.	11.192	34.729	0.47	26.530	0.682
250.	10.432	34.710	0.51	26.652	0.757
300.	10.018	34.698	0.49	26.713	0.827
350.	9.651	34.686	0.52	26.766	0.895
400.	9.355	34.672	0.53	26.804	0.962
450.	9.002	34.659	0.43	26.851	1.026
500.	8.620	34.638	0.34	26.895	1.089
550.	8.131	34.615	0.29	26.952	1.150
600.	7.436	34.586	0.29	27.032	1.207
650.	6.954	34.571	0.29	27.088	1.262
700.	6.517	34.561	0.32	27.139	1.314
750.	6.149	34.556	0.36	27.183	1.364
800.	5.827	34.551	0.44	27.220	1.412
850.	5.412	34.545	0.73	27.266	1.457
900.	5.147	34.552	0.83	27.303	1.502
950.	4.943	34.552	0.92	27.327	1.544
1000.	4.752	34.557	0.90	27.352	1.586
1006.	4.730	34.559	0.87	27.357	1.591

CAST EP2-86-OC-055 DATE 17 JUN 86 TIME 0454 GMT  
LAT 09 59.1N LONG 146 59.0W



LCL



CAST EP2-86-OC-055 DATE 17 JUN 86 TIME 0454 GMT  
 LAT 09 59.1N LONG 146 59.0W WEATHER 2 SEA STATE 7  
 BAROMETER 09 WIND DIR 060 T SPD 20 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 8 DRY 27.0 WET 24.0 DEPTH 5280 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.485	34.805	3.67	22.417	0.000
10.	27.489	34.805	3.65	22.416	0.054
20.	27.492	34.805	3.63	22.415	0.108
30.	27.495	34.804	3.61	22.414	0.163
40.	27.496	34.804	3.66	22.413	0.217
50.	27.498	34.804	3.62	22.412	0.271
60.	27.500	34.804	3.53	22.412	0.326
70.	26.245	34.809	3.71	22.814	0.380
80.	19.975	34.630	3.96	24.488	0.421
90.	18.093	34.531	3.57	24.891	0.454
100.	16.961	34.593	3.02	25.212	0.483
110.	15.432	34.466	2.76	25.466	0.510
120.	13.814	34.504	1.66	25.843	0.533
130.	13.118	34.598	1.03	26.059	0.554
140.	12.678	34.648	0.66	26.185	0.573
150.	12.304	34.687	0.52	26.288	0.591
160.	11.999	34.710	0.44	26.365	0.608
170.	11.775	34.724	0.40	26.418	0.625
180.	11.447	34.735	0.39	26.488	0.641
190.	11.329	34.737	0.41	26.511	0.657
200.	11.140	34.732	0.41	26.542	0.672
250.	10.442	34.714	0.45	26.652	0.746
300.	9.960	34.697	0.47	26.723	0.816
304.	9.913	34.695	0.44	26.729	0.821

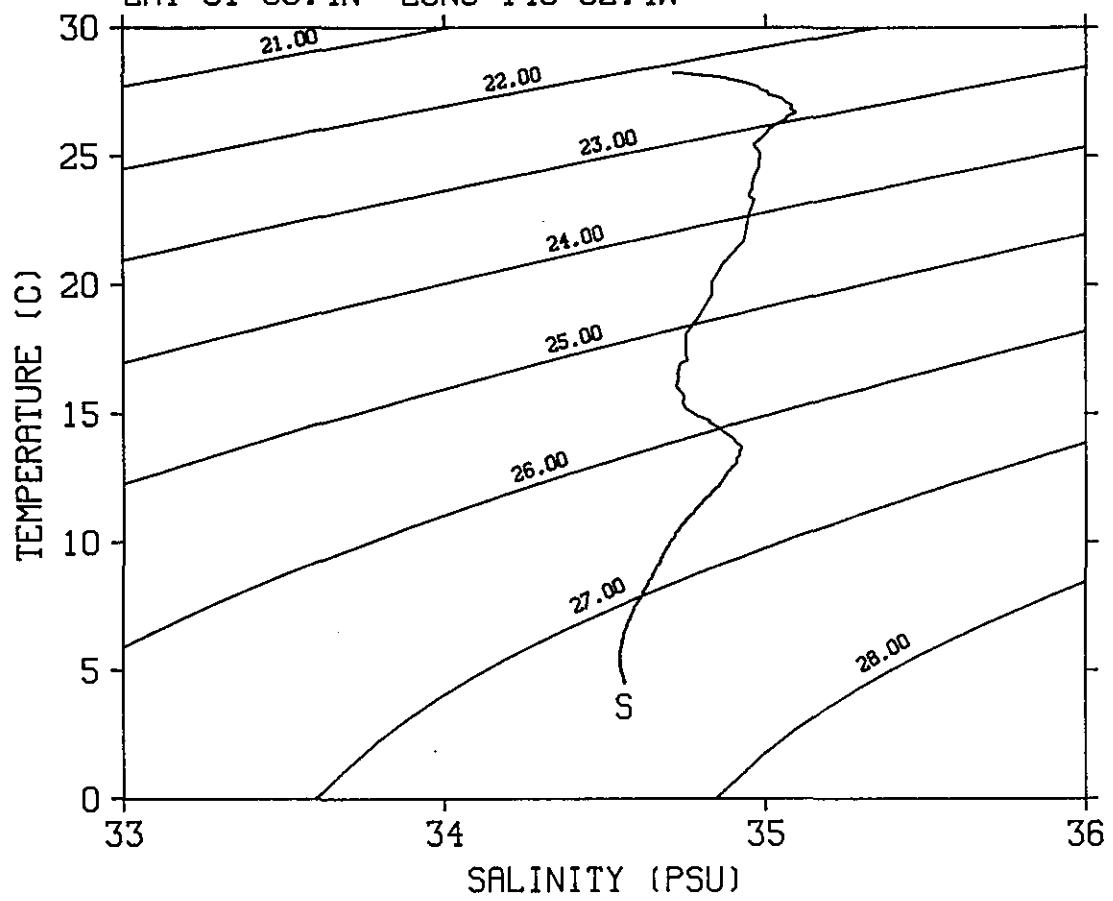


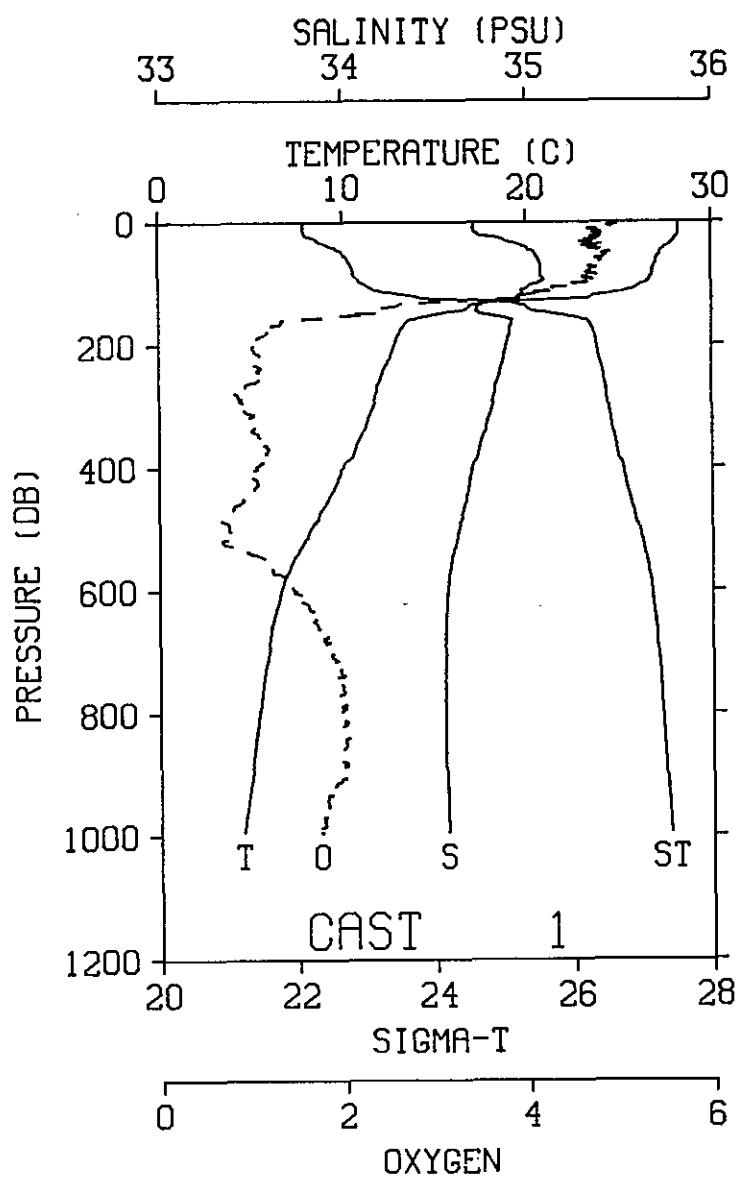
**EP3-86-OC**

**18 October — 10 November 1986**

**NBIS CTD/O<sub>2</sub> Data Summary**

CAST EP3-86-OC-001 DATE 27 OCT 86 TIME 0312 GMT  
LAT 01 59.4N LONG 140 02.4W

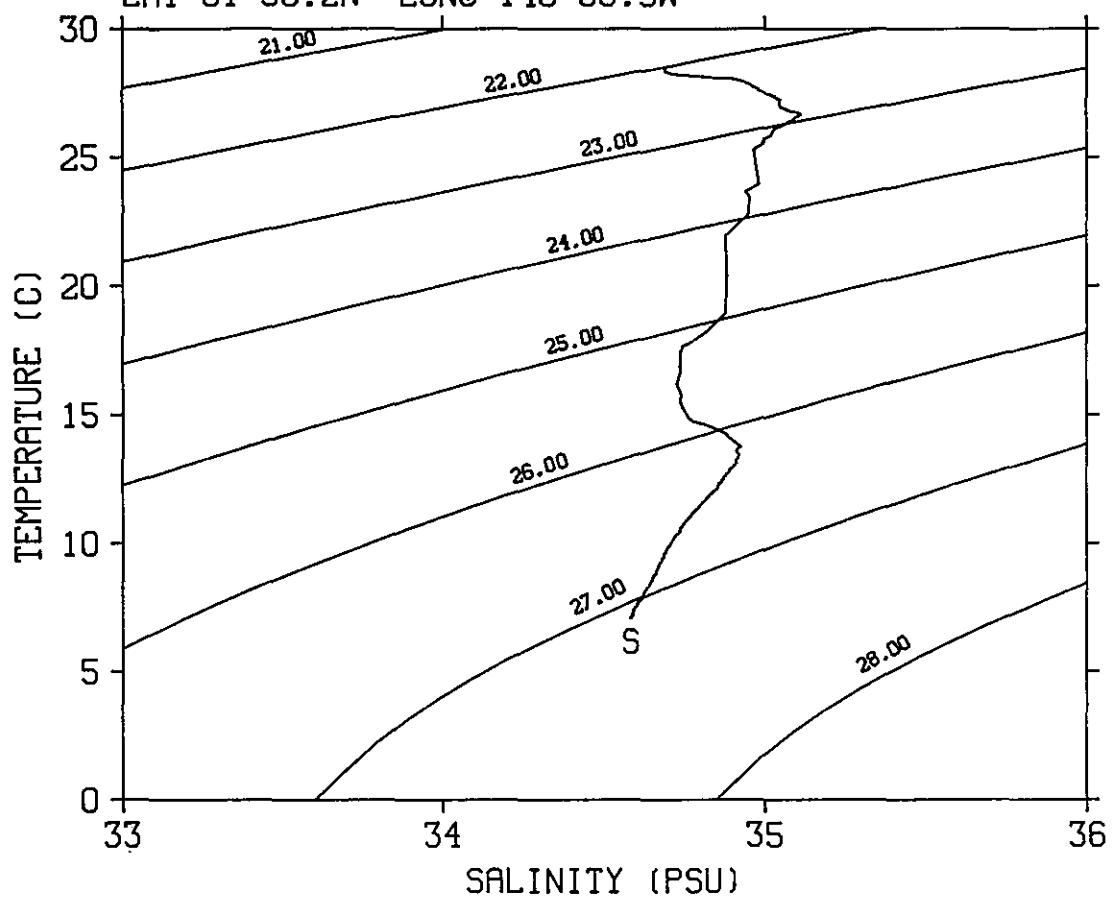




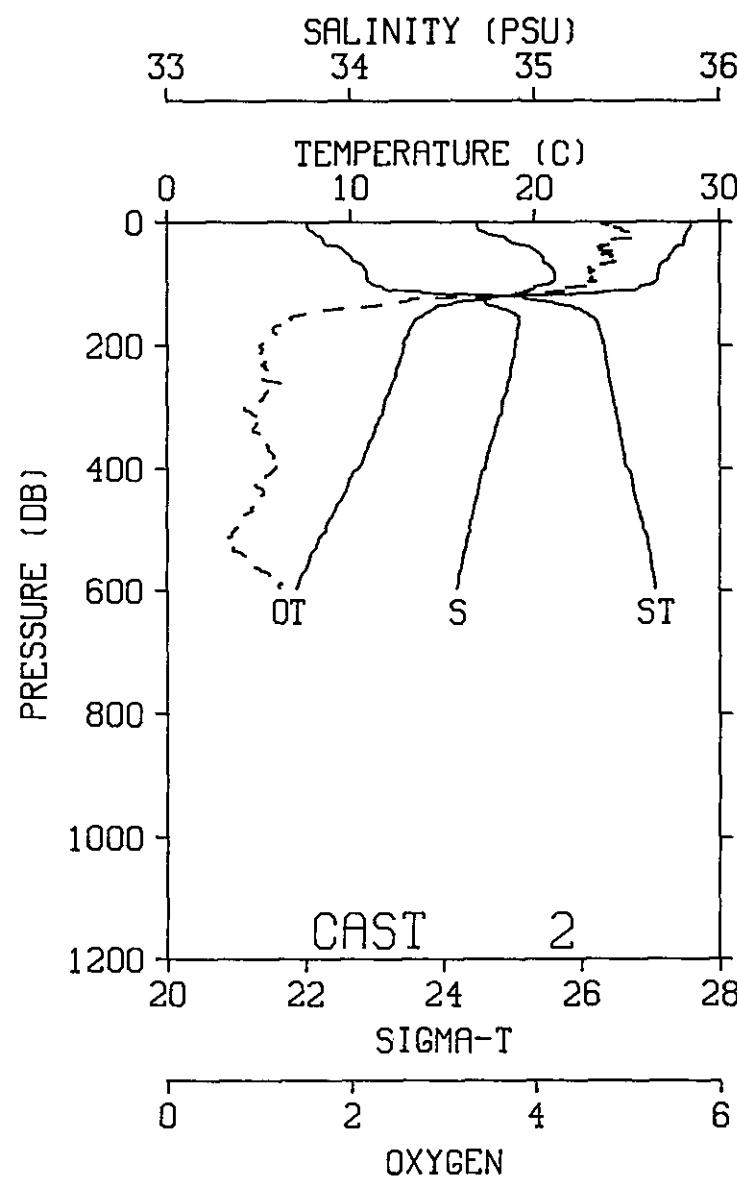
CAST EP3-86-OC-001 DATE 27 OCT 86 TIME 0312 GMT  
 LAT 01 59.4N LONG 140 02.4W WEATHER 1 SEA STATE 2  
 BAROMETER 12 WIND DIR 095 T SPD 10 KT VISIBILITY 8  
 CLOUD AMOUNT 1 DRY 26.5 WET 23.6 DEPTH 4370 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	28.238	34.715	4.99	22.105	0.000
10.	28.229	34.713	4.76	22.106	0.057
20.	28.220	34.739	4.85	22.129	0.114
30.	28.008	34.882	4.68	22.306	0.170
40.	27.599	34.984	4.59	22.515	0.225
50.	27.241	35.047	4.92	22.678	0.277
60.	27.058	35.067	4.75	22.752	0.329
70.	26.945	35.082	4.74	22.799	0.380
80.	26.829	35.081	4.71	22.835	0.430
90.	26.738	35.091	4.61	22.872	0.481
100.	26.424	35.068	4.50	22.954	0.531
110.	25.735	34.992	4.27	23.111	0.579
120.	23.841	34.958	3.94	23.659	0.625
130.	18.516	34.779	3.05	24.976	0.663
140.	16.816	34.732	2.44	25.353	0.691
150.	15.180	34.753	2.12	25.742	0.716
160.	13.552	34.920	1.35	26.219	0.736
170.	13.292	34.912	1.18	26.266	0.754
180.	13.083	34.909	1.19	26.307	0.772
190.	12.922	34.897	1.05	26.330	0.789
200.	12.813	34.889	1.03	26.345	0.807
250.	12.123	34.850	1.10	26.449	0.890
300.	11.634	34.808	0.98	26.510	0.971
350.	10.942	34.757	1.08	26.597	1.048
400.	10.014	34.705	1.04	26.719	1.121
450.	9.235	34.672	0.92	26.824	1.189
500.	8.192	34.629	0.75	26.954	1.251
550.	7.258	34.587	1.18	27.058	1.308
600.	6.571	34.566	1.50	27.136	1.360
650.	6.168	34.556	1.69	27.181	1.409
700.	5.890	34.552	1.85	27.213	1.457
750.	5.594	34.549	1.98	27.247	1.503
800.	5.347	34.550	2.02	27.278	1.547
850.	5.149	34.549	2.02	27.301	1.591
900.	4.956	34.553	1.96	27.326	1.633
950.	4.703	34.559	1.82	27.360	1.674
995.	4.474	34.562	1.75	27.387	1.710

CAST EP3-86-OC-002 DATE 27 OCT 86 TIME 2231 GMT  
LAT 01 58.2N LONG 140 00.5W



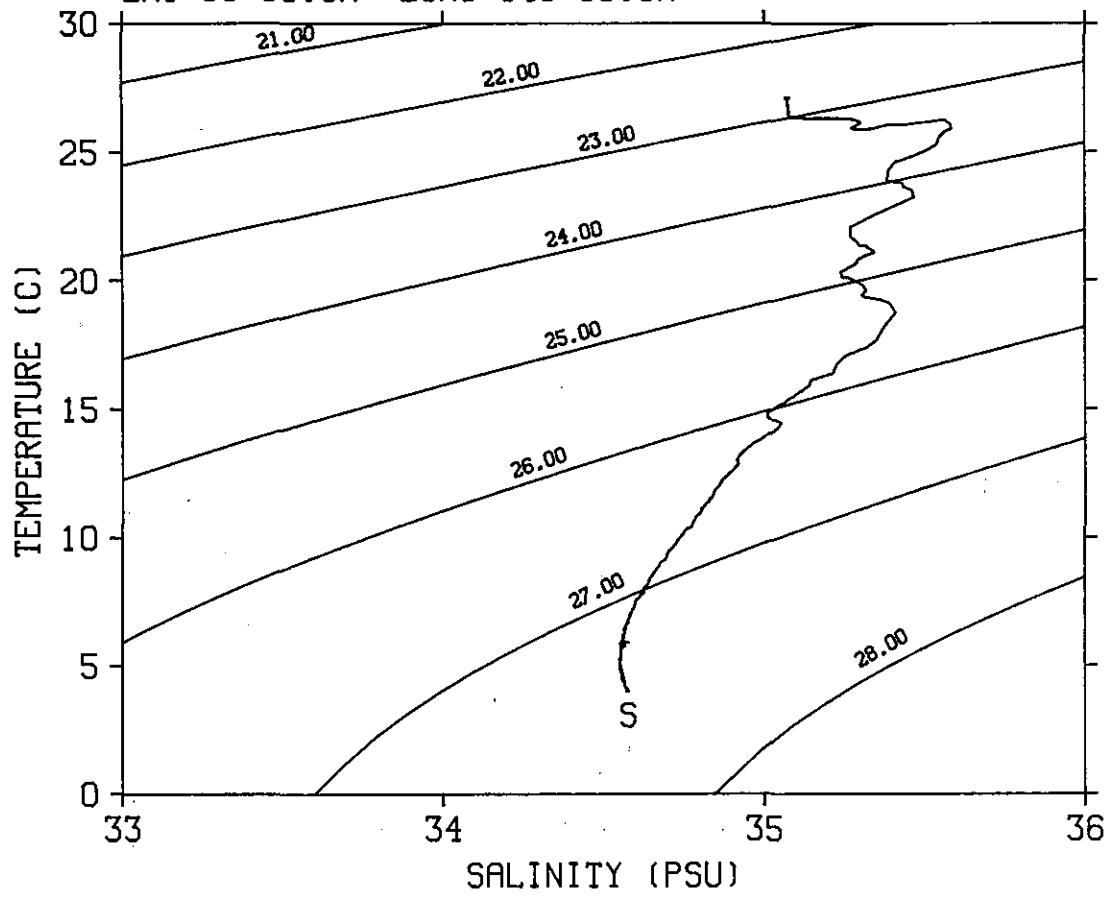
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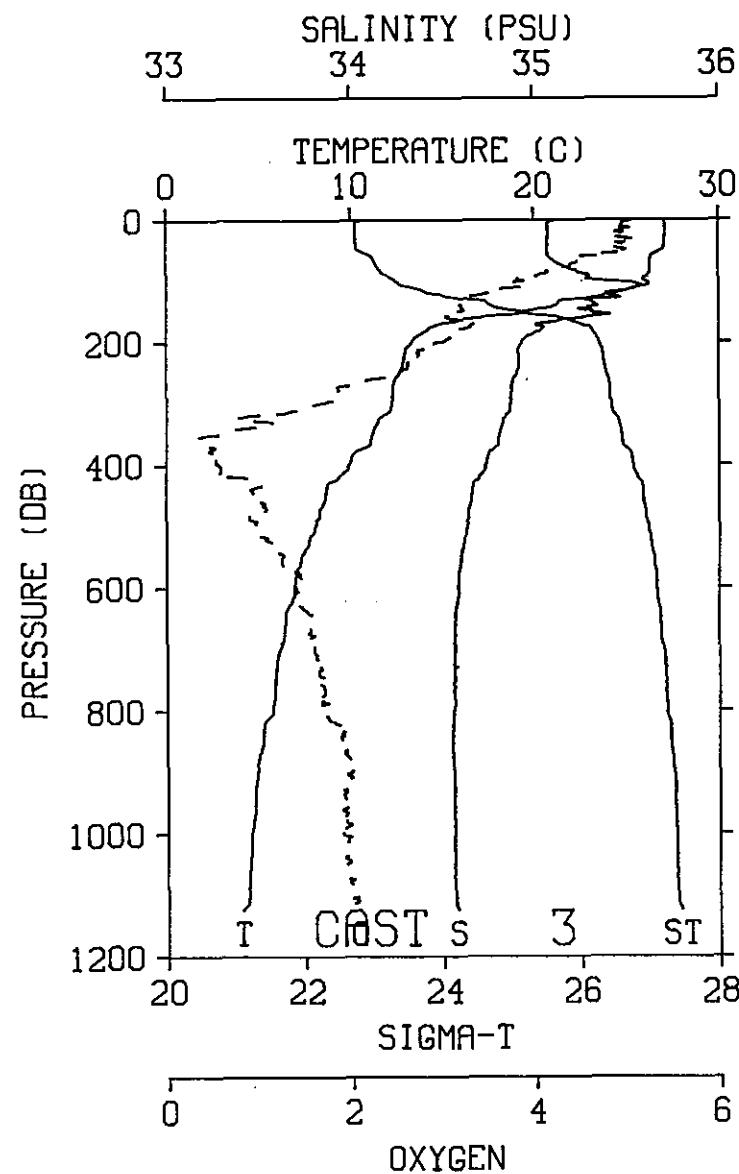
CAST EP3-86-OC-002 DATE 27 OCT 86 TIME 2231 GMT  
 LAT 01 58.2N LONG 140 00.5W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 100 T SPD 12 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 5 DRY 27.4 WET 23.6 DEPTH 4370 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	28.420	34.686	4.83	22.023	0.000
10.	28.366	34.687	4.90	22.041	0.058
20.	28.182	34.752	5.03	22.151	0.115
30.	28.076	34.853	4.83	22.261	0.171
40.	27.731	34.963	4.76	22.456	0.226
50.	27.427	35.018	4.79	22.596	0.280
60.	27.235	35.051	4.85	22.683	0.332
70.	26.800	35.077	4.73	22.842	0.383
80.	26.695	35.107	4.65	22.897	0.433
90.	26.667	35.113	4.68	22.911	0.483
100.	26.426	35.086	4.55	22.967	0.532
110.	25.469	34.990	4.30	23.192	0.581
120.	18.919	34.875	3.86	24.947	0.622
130.	15.853	34.736	2.58	25.579	0.650
140.	14.598	34.812	2.01	25.916	0.672
150.	14.008	34.896	1.49	26.106	0.692
160.	13.488	34.914	1.34	26.228	0.711
170.	13.311	34.915	1.17	26.265	0.729
180.	13.163	34.910	1.17	26.291	0.747
190.	13.019	34.904	1.11	26.315	0.764
200.	12.882	34.894	1.00	26.335	0.782
250.	12.435	34.866	1.05	26.402	0.867
300.	11.770	34.818	0.83	26.492	0.949
350.	11.160	34.772	1.05	26.570	1.027
400.	10.355	34.724	1.15	26.676	1.102
450.	9.503	34.682	1.00	26.787	1.171
500.	8.637	34.644	0.73	26.897	1.235
550.	7.730	34.610	0.91	27.007	1.294
597.	7.062	34.581	1.23	27.080	1.345

CAST EP3-86-OC-003 DATE 27 OCT 86 TIME 0000 GMT  
LAT 00 00.0N LONG 140 00.0W



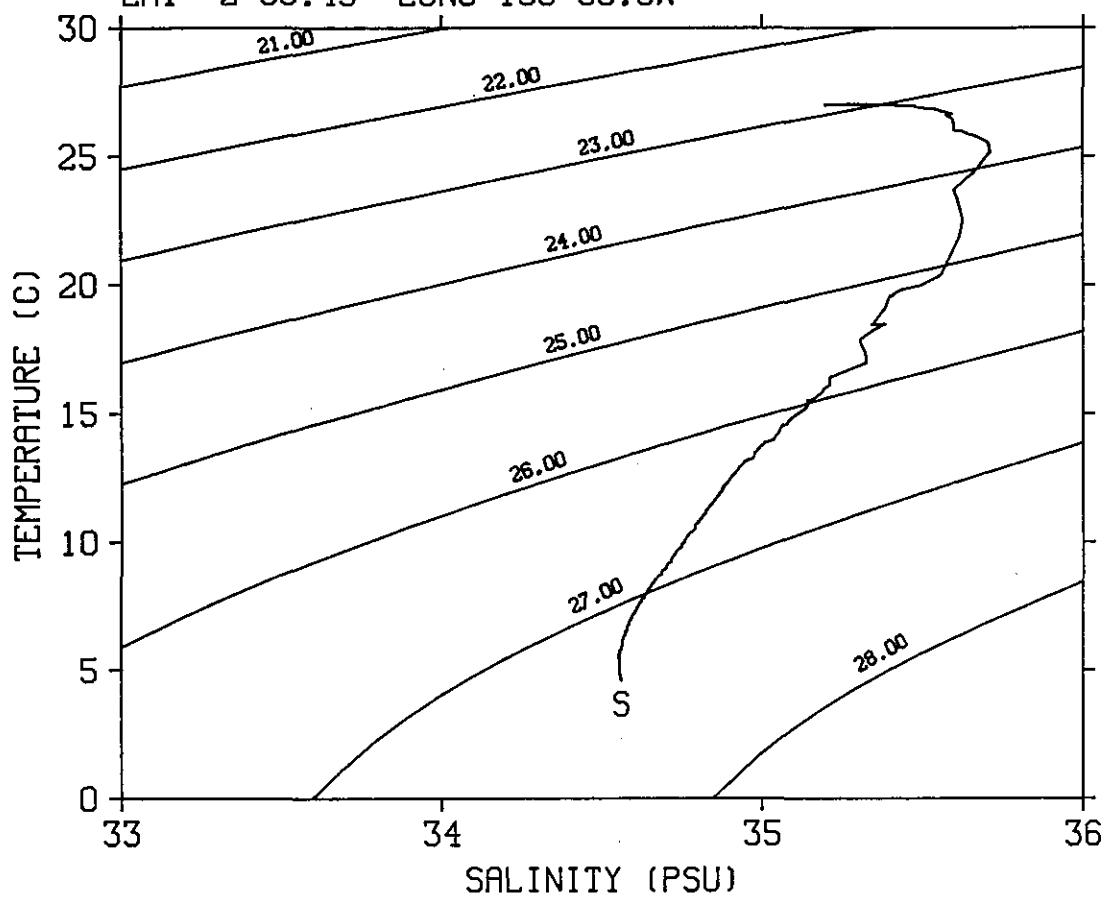
S41

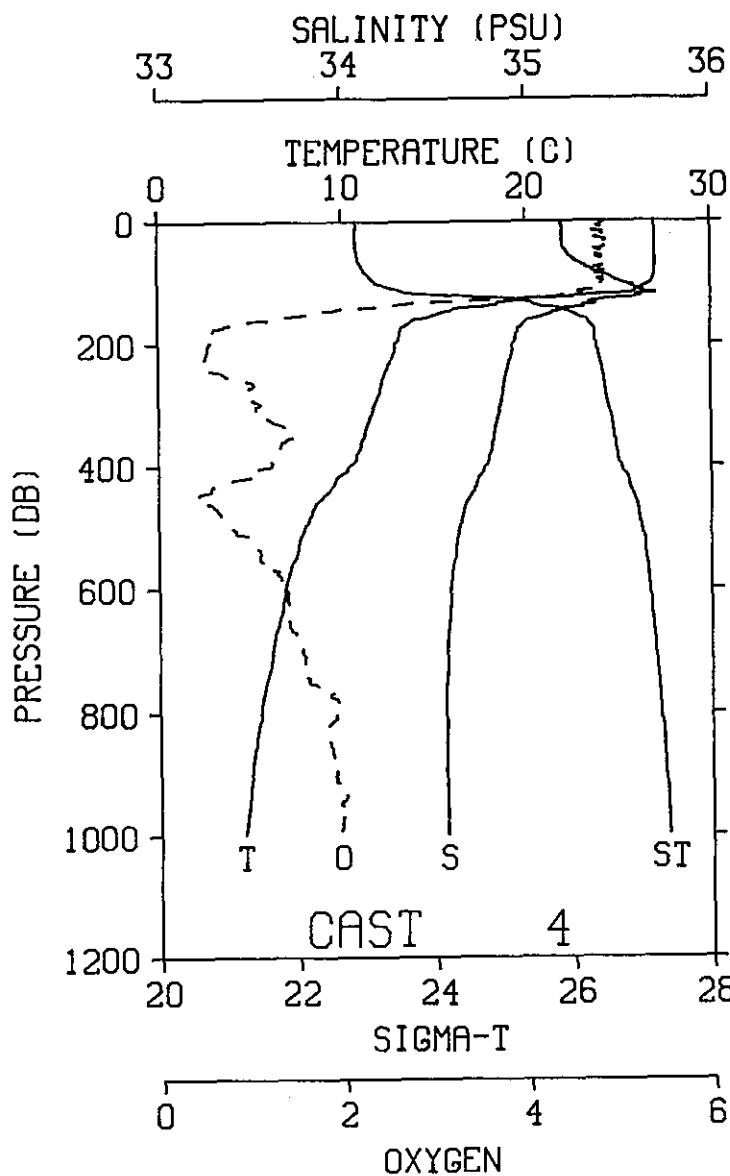


CAST EP3-86-OC-003 DATE 27 OCT 86 TIME 0000 GMT  
 LAT 00 00.0N LONG 140 00.0W WEATHER 0 SEA STATE 0  
 BAROMETER 00 WIND DIR 000 T SPD 00 KT VISIBILITY 0  
 CLOUD 0 AMOUNT 0 DRY 00.0 WET 00.0 DEPTH 0000 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.976	35.113	5.06	22.813	0.000
10.	27.101	35.071	5.00	22.741	0.051
20.	27.108	35.080	4.88	22.745	0.102
30.	27.085	35.076	4.94	22.750	0.153
40.	27.066	35.077	4.93	22.756	0.204
50.	26.969	35.075	5.01	22.787	0.255
60.	26.364	35.084	4.61	22.985	0.305
70.	26.302	35.131	4.47	23.040	0.353
80.	26.309	35.201	4.25	23.090	0.402
90.	26.208	35.298	4.06	23.195	0.449
100.	26.059	35.385	3.89	23.307	0.496
110.	25.625	35.555	3.85	23.571	0.541
120.	24.302	35.392	3.49	23.850	0.583
130.	22.061	35.272	3.28	24.409	0.622
140.	21.063	35.348	3.21	24.743	0.655
150.	19.399	35.308	3.17	25.155	0.686
160.	17.098	35.260	3.05	25.692	0.712
170.	14.926	35.021	3.34	26.005	0.734
180.	14.199	35.039	3.19	26.176	0.753
190.	13.648	34.967	3.15	26.236	0.772
200.	13.327	34.935	2.94	26.277	0.790
250.	12.673	34.906	2.49	26.386	0.876
300.	12.204	34.866	1.64	26.447	0.959
350.	11.170	34.811	0.55	26.598	1.038
400.	9.873	34.732	0.58	26.765	1.109
450.	8.616	34.660	0.94	26.913	1.173
500.	8.031	34.631	1.02	26.980	1.232
550.	7.267	34.596	1.24	27.064	1.288
600.	6.933	34.582	1.39	27.099	1.341
650.	6.430	34.567	1.55	27.155	1.392
700.	6.095	34.563	1.60	27.195	1.441
750.	5.846	34.564	1.70	27.227	1.488
800.	5.699	34.556	1.71	27.240	1.534
850.	5.187	34.551	1.91	27.298	1.578
900.	4.850	34.554	2.01	27.339	1.620
950.	4.726	34.555	1.96	27.353	1.661
1000.	4.538	34.562	1.91	27.380	1.701
1138.	3.981	34.578	1.98	27.453	1.808

CAST EP3-86-OC-004 DATE 30 OCT 86 TIME 0853 GMT  
LAT 20 00.4S LONG 139 56.6W

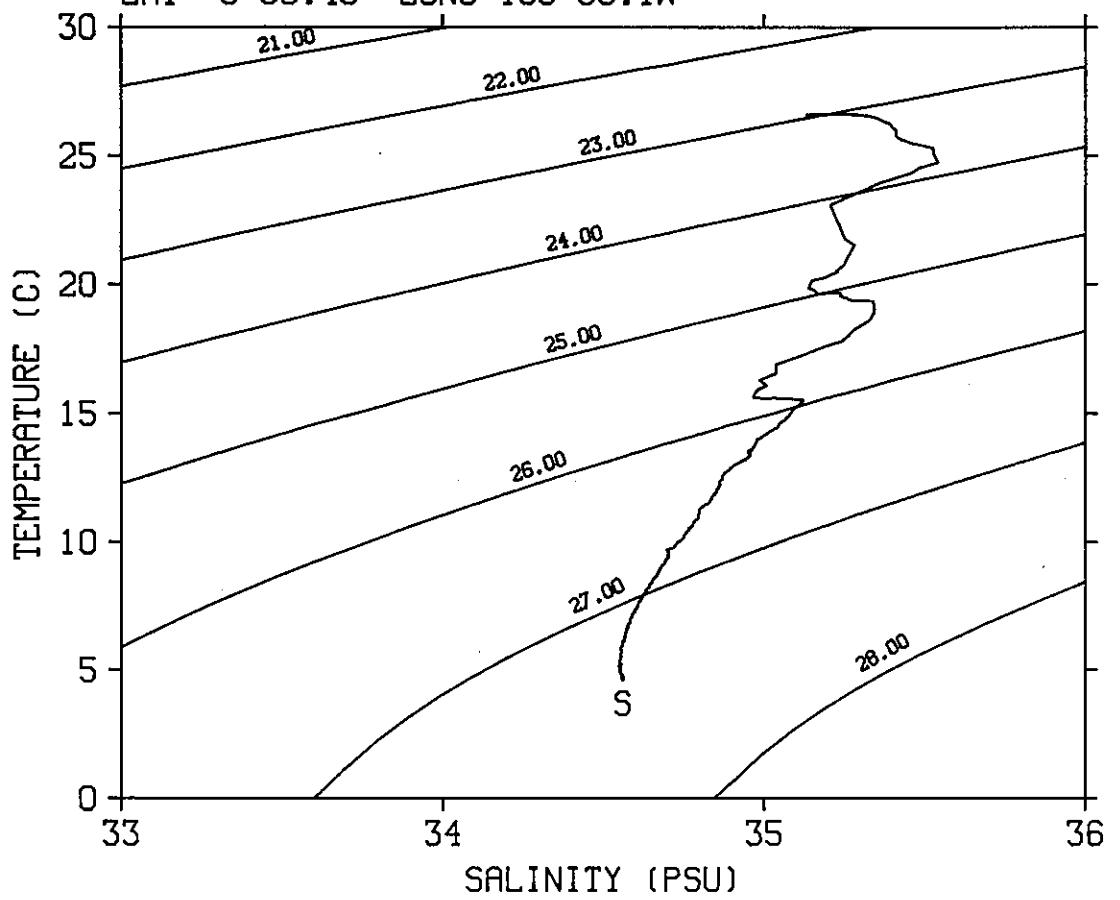


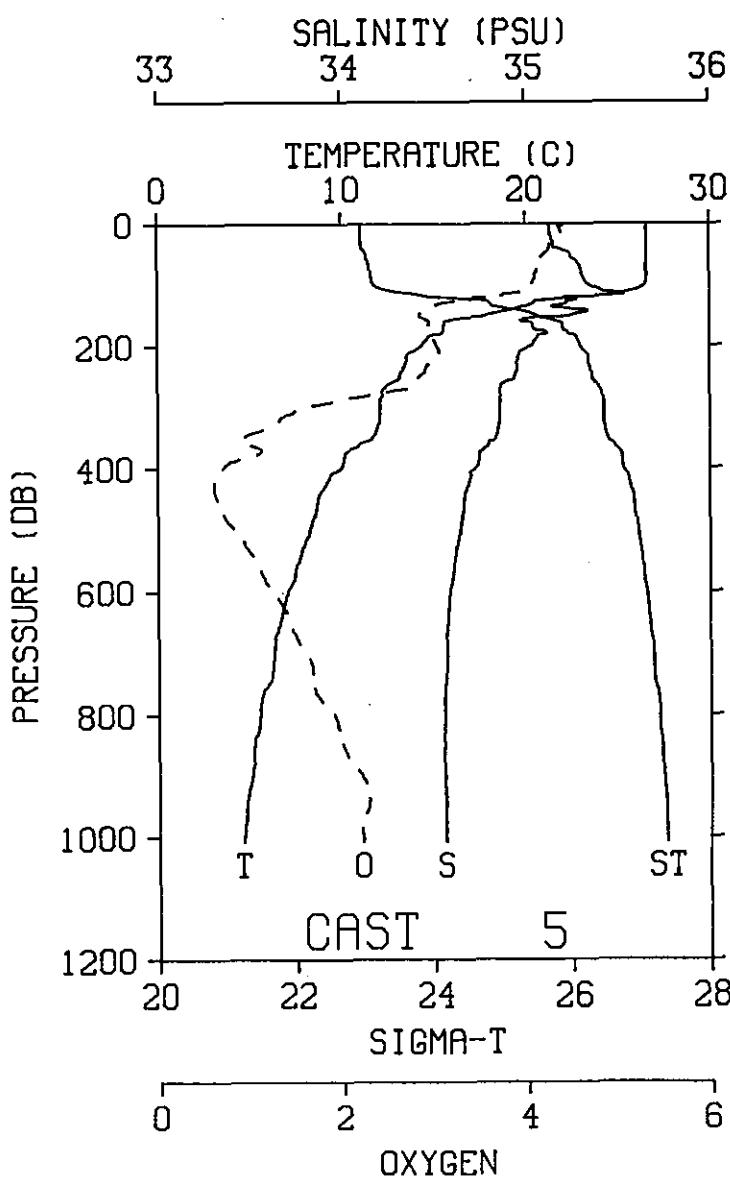


CAST EP3-86-OC-004 DATE 30 OCT 86 TIME 0853 GMT  
 LAT 2 00.4S LONG 139 56.6W WEATHER 1 SEA STATE 3  
 BAROMETER 13 WIND DIR 100 T SPD 12 KT VISIBILITY 8  
 CLOUD AMOUNT 1 DRY 25.9 WET 23.6 DEPTH 4340 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	27.000	35.199	4.86	22.870	0.000
10.	27.003	35.198	4.81	22.868	0.050
20.	27.010	35.198	4.81	22.865	0.100
30.	27.010	35.199	4.85	22.866	0.150
40.	27.009	35.202	4.89	22.870	0.200
50.	27.002	35.224	4.79	22.888	0.250
60.	27.016	35.253	4.78	22.905	0.299
70.	27.025	35.298	4.82	22.936	0.349
80.	27.009	35.359	4.74	22.987	0.398
90.	26.982	35.454	4.75	23.067	0.447
100.	26.856	35.526	4.83	23.162	0.495
110.	26.351	35.592	4.72	23.372	0.541
120.	24.314	35.654	4.52	24.045	0.584
130.	19.560	35.395	3.28	25.180	0.616
140.	17.335	35.320	2.35	25.681	0.642
150.	15.373	35.145	1.64	26.001	0.663
160.	13.935	35.034	1.21	26.228	0.683
170.	13.475	34.982	0.76	26.283	0.701
180.	13.165	34.956	0.60	26.326	0.718
190.	13.088	34.947	0.57	26.335	0.736
200.	12.888	34.930	0.55	26.361	0.753
250.	12.274	34.889	0.71	26.450	0.837
300.	11.761	34.859	1.11	26.525	0.917
350.	11.201	34.823	1.47	26.602	0.994
400.	10.381	34.778	1.22	26.713	1.067
450.	8.895	34.689	0.40	26.892	1.133
500.	7.923	34.634	0.77	26.998	1.192
550.	7.415	34.608	1.10	27.052	1.247
600.	6.849	34.584	1.40	27.112	1.300
650.	6.494	34.576	1.41	27.154	1.351
700.	6.137	34.564	1.54	27.191	1.400
750.	5.757	34.559	1.61	27.235	1.447
800.	5.479	34.552	1.89	27.264	1.492
850.	5.189	34.553	1.85	27.299	1.536
900.	4.958	34.554	1.92	27.327	1.578
950.	4.787	34.556	1.95	27.348	1.619
998.	4.573	34.560	1.96	27.375	1.658

CAST EP3-86-OC-005 DATE 31 OCT 86 TIME 1549 GMT  
LAT 0 00.4S LONG 135 00.1W

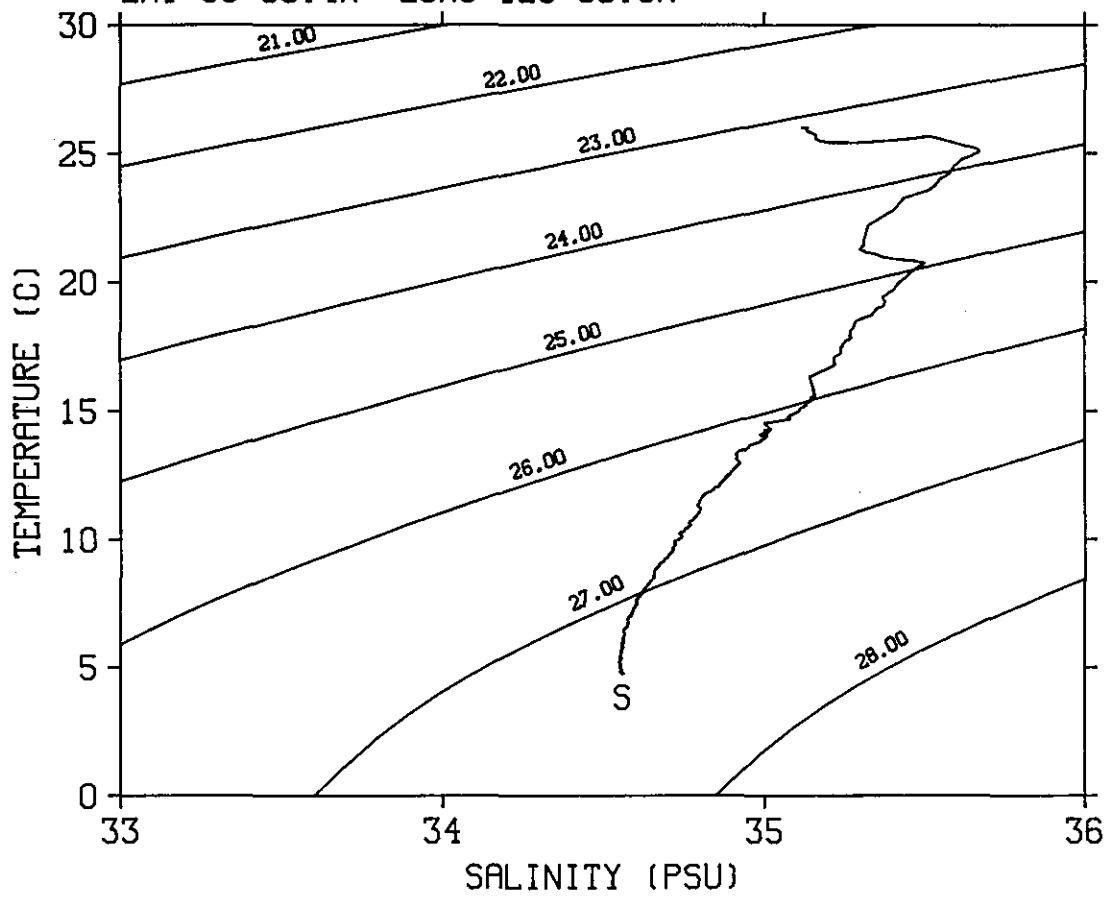




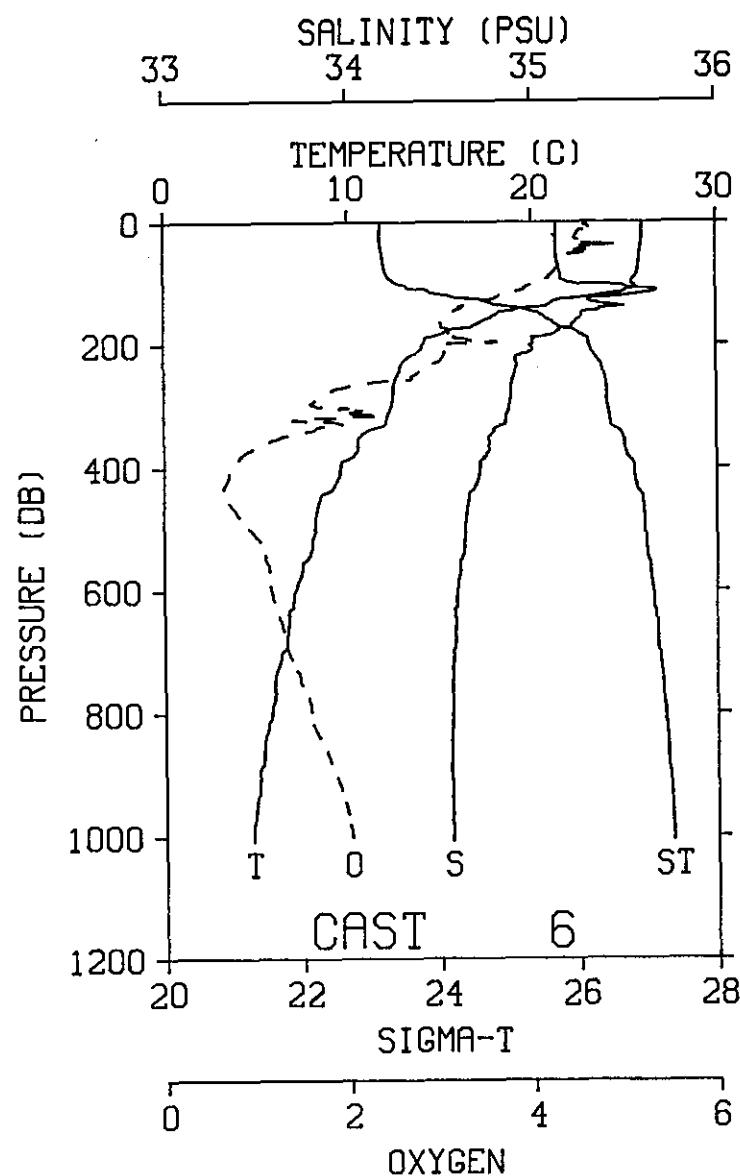
CAST EP3-86-OC-005 DATE 31 OCT 86 TIME 1549 GMT  
 LAT 0 00.4S LONG 135 00.1W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 150 T SPD 12 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 25.5 WET 24.5 DEPTH 4462 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	26.584	35.132	4.37	22.952	0.000
10.	26.582	35.134	4.39	22.954	0.049
20.	26.595	35.144	4.36	22.957	0.098
30.	26.600	35.155	4.30	22.964	0.147
40.	26.608	35.181	4.26	22.981	0.196
50.	26.615	35.249	4.21	23.030	0.245
60.	26.597	35.278	4.17	23.057	0.293
70.	26.575	35.301	4.13	23.082	0.341
80.	26.574	35.304	4.12	23.084	0.389
90.	26.552	35.317	4.10	23.101	0.437
100.	26.495	35.344	4.07	23.139	0.485
110.	25.922	35.412	3.98	23.370	0.532
120.	23.950	35.361	3.56	23.931	0.575
130.	20.449	35.230	3.09	24.819	0.609
140.	19.360	35.271	2.96	25.137	0.639
150.	17.889	35.253	2.85	25.494	0.666
160.	15.620	34.967	2.96	25.809	0.690
170.	15.556	35.043	2.95	25.882	0.712
180.	15.428	35.118	2.99	25.969	0.733
190.	14.667	35.056	3.01	26.089	0.753
200.	14.385	35.033	3.03	26.131	0.772
250.	13.179	34.941	2.85	26.312	0.863
300.	12.092	34.859	1.63	26.462	0.947
350.	11.671	34.836	0.93	26.525	1.028
400.	9.975	34.727	0.71	26.743	1.100
450.	8.714	34.666	0.65	26.902	1.164
500.	8.231	34.640	0.84	26.957	1.224
550.	7.664	34.612	1.06	27.019	1.281
600.	7.051	34.588	1.24	27.088	1.336
650.	6.647	34.577	1.44	27.134	1.388
700.	6.267	34.568	1.61	27.177	1.437
750.	5.953	34.562	1.70	27.213	1.486
800.	5.507	34.556	1.91	27.264	1.531
850.	5.198	34.558	2.02	27.302	1.576
900.	5.052	34.555	2.21	27.317	1.618
950.	4.762	34.561	2.27	27.354	1.660
1000.	4.642	34.560	2.22	27.367	1.701
1008.	4.601	34.561	2.22	27.373	1.707

CAST EP3-86-OC-006 DATE 01 NOV 86 TIME 1536 GMT  
LAT 00 00.4N LONG 129 59.8W



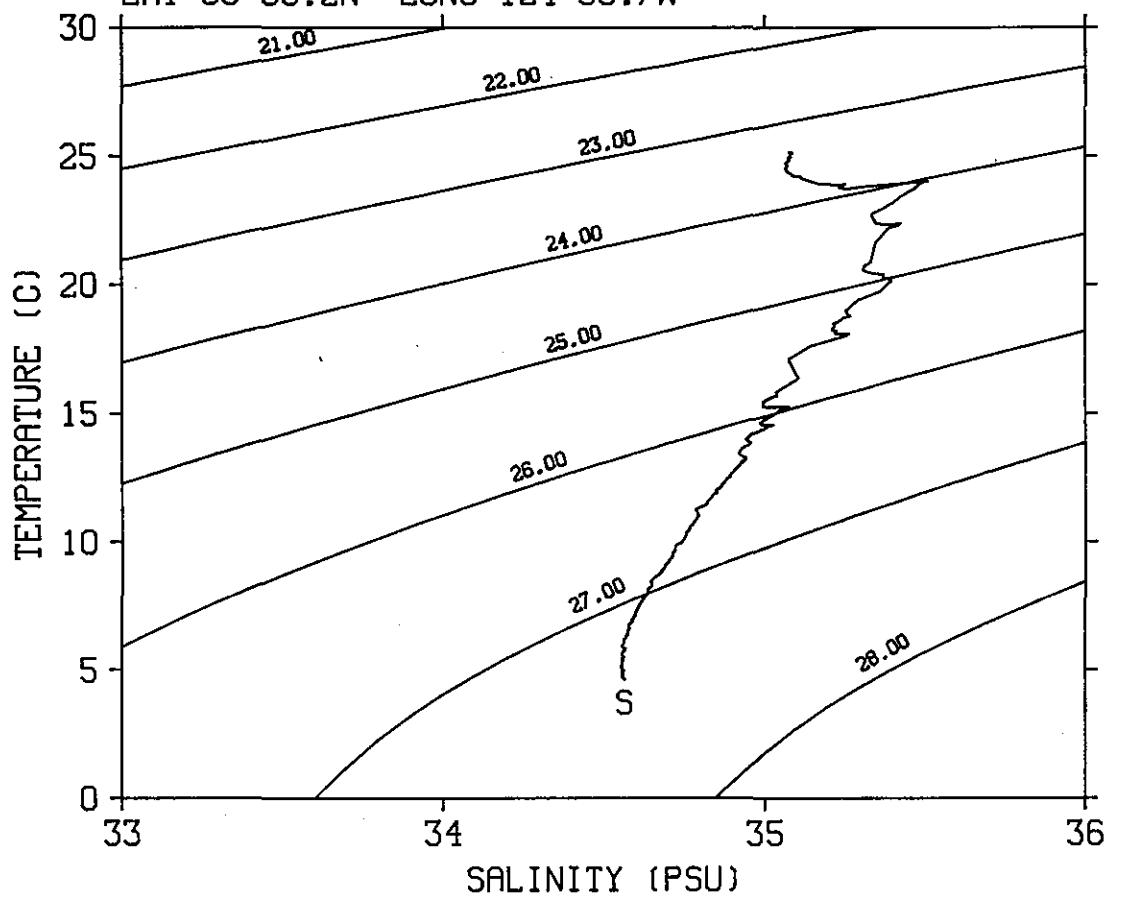
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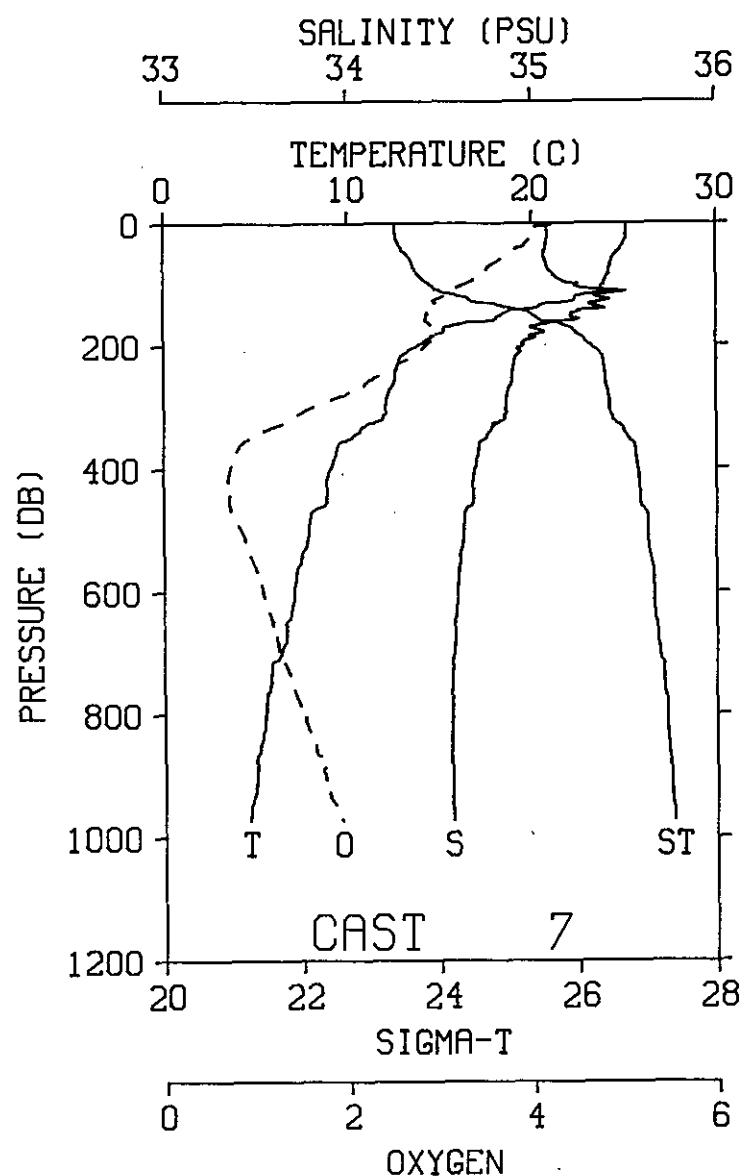


CAST EP3-86-OC-006 DATE 01 NOV 86 TIME 1536 GMT  
 LAT 00 00.4N LONG 129 59.8W WEATHER 1 SEA STATE 2  
 BAROMETER 12 WIND DIR 120 T SPD 07 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 2 DRY 26.0 WET 24.5 DEPTH 4462 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.993	35.134	4.59	23.138	0.000
10.	25.993	35.133	4.61	23.138	0.047
20.	25.995	35.136	4.49	23.140	0.095
30.	25.989	35.135	4.53	23.141	0.142
40.	25.934	35.133	4.61	23.156	0.189
50.	25.891	35.135	4.40	23.171	0.236
60.	25.856	35.138	4.36	23.184	0.283
70.	25.815	35.146	4.32	23.203	0.330
80.	25.770	35.153	4.26	23.222	0.377
90.	25.644	35.161	4.19	23.267	0.424
100.	25.424	35.222	4.10	23.381	0.470
110.	25.262	35.636	3.93	23.743	0.514
120.	24.008	35.550	3.71	24.057	0.554
130.	21.183	35.316	3.42	24.686	0.590
140.	19.986	35.423	3.24	25.090	0.622
150.	18.131	35.270	3.09	25.447	0.649
160.	17.500	35.247	3.03	25.585	0.674
170.	16.822	35.218	3.03	25.725	0.698
180.	15.291	35.130	3.09	26.009	0.720
190.	14.265	35.020	3.16	26.147	0.739
200.	14.170	35.009	3.06	26.159	0.759
250.	12.684	34.902	2.71	26.381	0.848
300.	12.361	34.876	1.65	26.424	0.932
350.	10.714	34.774	1.31	26.651	1.012
400.	9.588	34.719	0.73	26.802	1.082
450.	8.476	34.656	0.67	26.932	1.146
500.	8.196	34.637	0.91	26.960	1.205
550.	7.686	34.612	1.10	27.015	1.263
600.	7.105	34.593	1.17	27.084	1.317
650.	6.714	34.580	1.25	27.127	1.369
700.	6.357	34.567	1.33	27.164	1.420
750.	5.973	34.564	1.48	27.212	1.468
800.	5.759	34.561	1.57	27.236	1.515
850.	5.360	34.558	1.72	27.282	1.560
900.	5.081	34.556	1.86	27.314	1.604
950.	4.916	34.556	1.96	27.333	1.647
1000.	4.743	34.559	2.03	27.355	1.688
1007.	4.743	34.559	2.03	27.355	1.693

CAST EP3-86-OC-007 DATE 02 NOV 86 TIME 1250 GMT  
LAT 00 00.2N LONG 124 59.7W

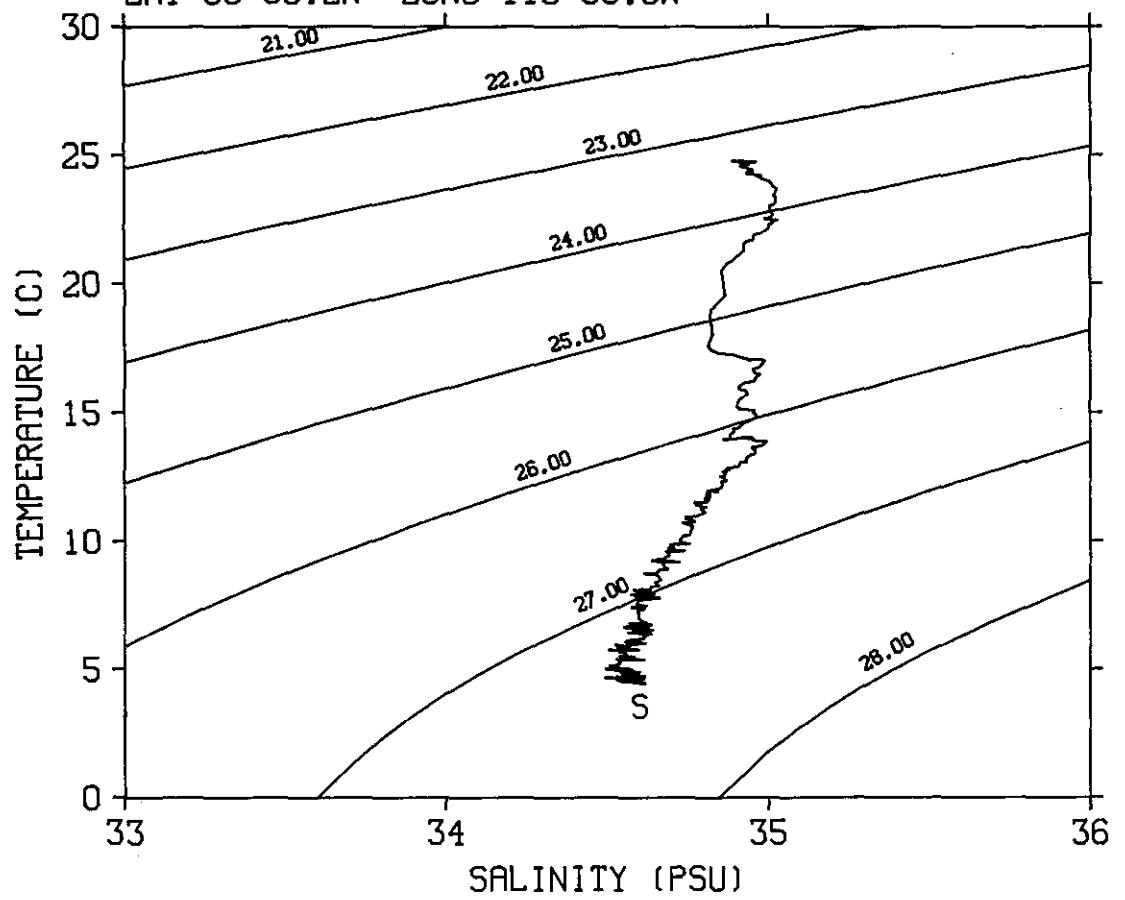




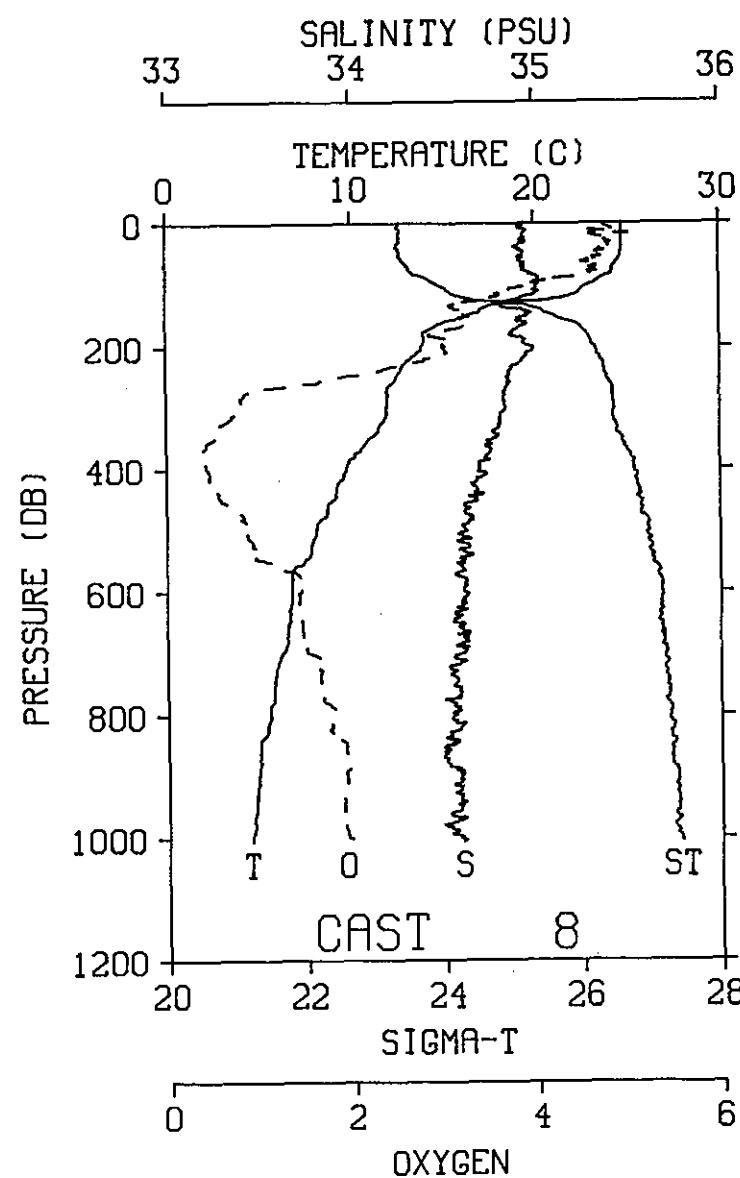
CAST EP3-86-OC-007 DATE 02 NOV 86 TIME 1250 GMT  
 LAT 00 00.2N LONG 124 59.7W WEATHER 1 SEA STATE 3  
 BAROMETER 10 WIND DIR 105 T SPD 13 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 25.0 WET 22.0 DEPTH 4680 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXV (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	25.151	35.078	4.22	23.356	0.000
10.	25.150	35.087	4.01	23.363	0.045
20.	25.122	35.087	3.99	23.372	0.090
30.	25.013	35.081	3.96	23.400	0.135
40.	24.848	35.079	3.89	23.449	0.180
50.	24.586	35.070	3.80	23.521	0.224
60.	24.365	35.076	3.67	23.592	0.268
70.	24.276	35.088	3.57	23.628	0.311
80.	24.195	35.105	3.48	23.665	0.353
90.	24.030	35.136	3.40	23.738	0.396
100.	23.904	35.254	3.28	23.864	0.437
110.	23.906	35.399	3.12	23.973	0.477
120.	22.721	35.332	3.05	24.267	0.516
130.	21.872	35.364	2.93	24.532	0.551
140.	20.144	35.398	2.90	25.029	0.582
150.	18.400	35.220	2.87	25.342	0.610
160.	17.929	35.237	2.84	25.472	0.636
170.	15.435	34.993	2.92	25.871	0.660
180.	15.205	35.066	2.89	25.978	0.681
190.	14.428	35.005	2.90	26.100	0.701
200.	13.812	34.959	2.84	26.196	0.720
250.	12.576	34.896	2.33	26.397	0.806
300.	12.085	34.862	1.63	26.466	0.889
350.	10.255	34.758	0.93	26.719	0.966
400.	9.059	34.688	0.73	26.865	1.030
450.	8.824	34.680	0.71	26.896	1.092
500.	7.845	34.630	0.85	27.007	1.150
550.	7.384	34.607	0.97	27.056	1.205
600.	7.034	34.597	1.07	27.097	1.258
650.	6.627	34.580	1.18	27.139	1.310
700.	6.335	34.577	1.25	27.176	1.360
750.	5.775	34.565	1.38	27.238	1.407
800.	5.449	34.562	1.51	27.275	1.452
850.	5.197	34.561	1.63	27.304	1.496
900.	4.953	34.562	1.73	27.334	1.538
950.	4.650	34.562	1.88	27.368	1.579
973.	4.620	34.565	1.93	27.374	1.597

CAST EP3-86-OC-008 DATE 03 NOV 86 TIME 1344 GMT  
LAT 00 00.2N LONG 119 59.6W



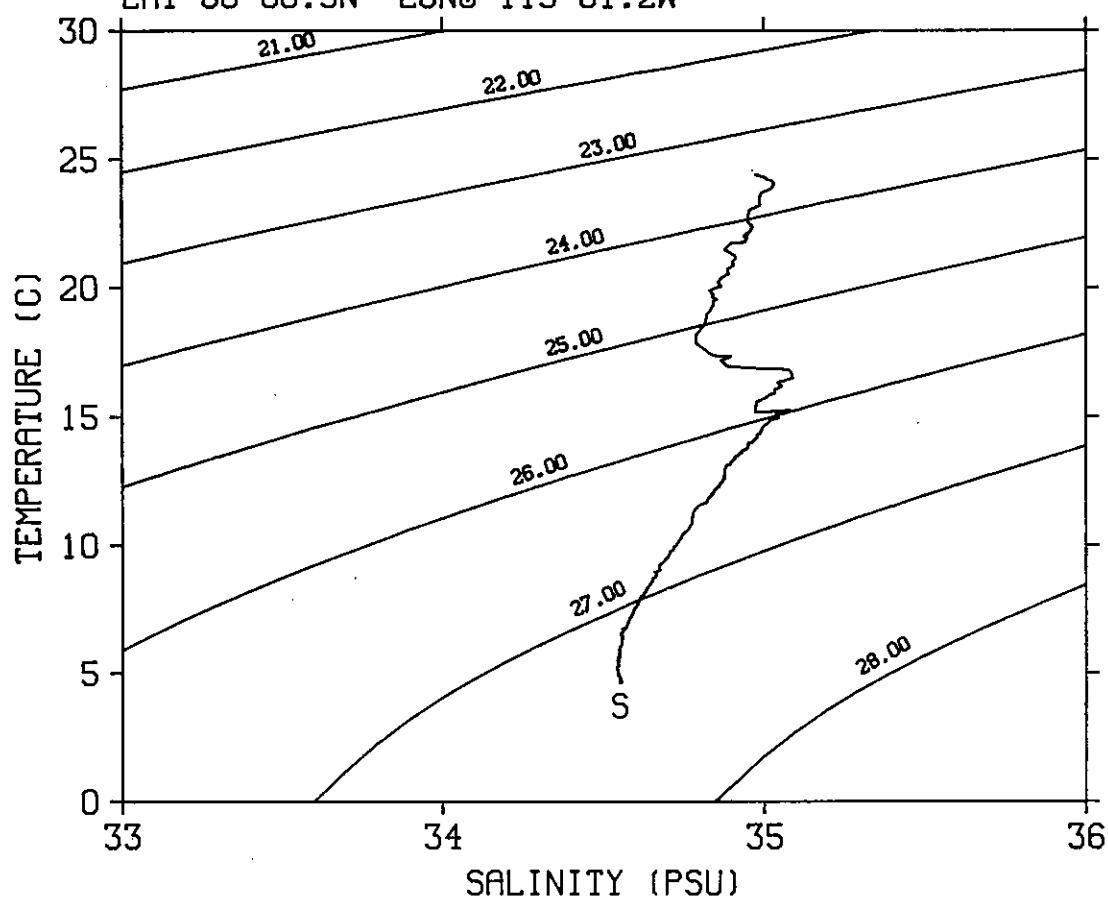
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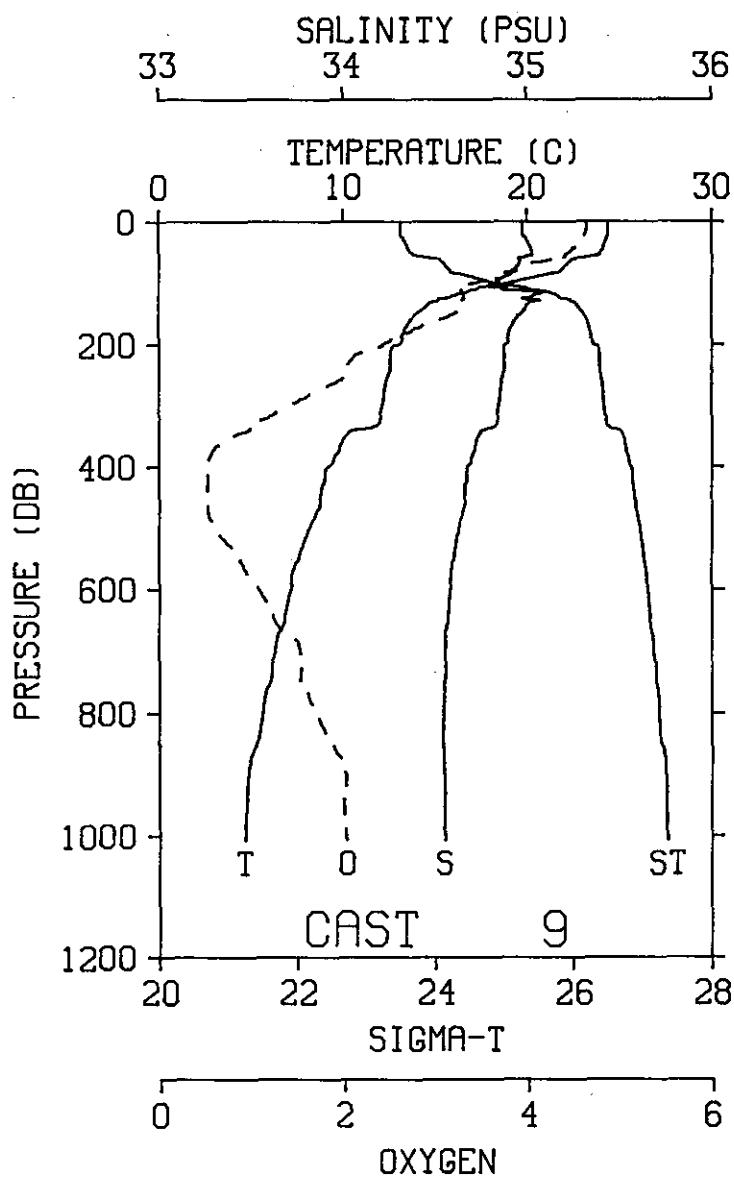


CAST EP3-86-OC-008 DATE 03 NOV 86 TIME 1344 GMT  
 LAT 00 00.2N LONG 119 59.6W WEATHER 1 SEA STATE 3  
 BAROMETER 10 WIND DIR 125 T SPD 12 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 4 DRY 25.0 WET 23.0 DEPTH 4200 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.734	34.941	4.75	23.379	0.000
10.	24.728	34.947	4.86	23.385	0.045
20.	24.741	34.939	4.63	23.375	0.090
30.	24.737	34.934	4.79	23.373	0.135
40.	24.751	34.904	4.81	23.346	0.180
50.	24.694	34.946	4.65	23.395	0.225
60.	24.571	34.912	4.51	23.406	0.270
70.	24.290	34.930	4.69	23.504	0.315
80.	24.198	34.982	4.59	23.570	0.359
90.	23.556	35.024	4.13	23.792	0.401
100.	22.999	35.003	3.92	23.938	0.442
110.	22.447	35.029	3.62	24.115	0.481
120.	21.653	34.937	3.53	24.268	0.519
130.	18.287	34.826	3.08	25.069	0.552
140.	17.077	34.934	3.22	25.446	0.579
150.	16.384	34.961	3.27	25.630	0.604
160.	15.099	34.931	3.21	25.898	0.627
170.	14.419	34.908	3.16	26.027	0.647
180.	13.927	34.870	2.88	26.103	0.667
190.	13.987	34.944	3.05	26.148	0.687
200.	13.839	34.995	3.03	26.218	0.706
250.	12.492	34.845	1.84	26.375	0.794
300.	11.929	34.841	0.77	26.480	0.876
350.	11.027	34.785	0.52	26.604	0.955
400.	9.722	34.694	0.44	26.760	1.026
450.	9.018	34.674	0.59	26.860	1.092
500.	8.078	34.618	0.85	26.963	1.153
550.	7.441	34.596	1.10	27.039	1.210
600.	6.718	34.605	1.45	27.147	1.261
650.	6.613	34.548	1.46	27.115	1.311
700.	6.172	34.614	1.54	27.225	1.359
750.	5.762	34.561	1.65	27.236	1.406
800.	5.495	34.559	1.75	27.267	1.451
850.	5.001	34.504	1.93	27.282	1.494
900.	4.855	34.586	1.93	27.364	1.537
950.	4.706	34.589	1.90	27.383	1.577
1000.	4.471	34.580	1.98	27.402	1.617
1006.	4.451	34.598	1.94	27.419	1.621

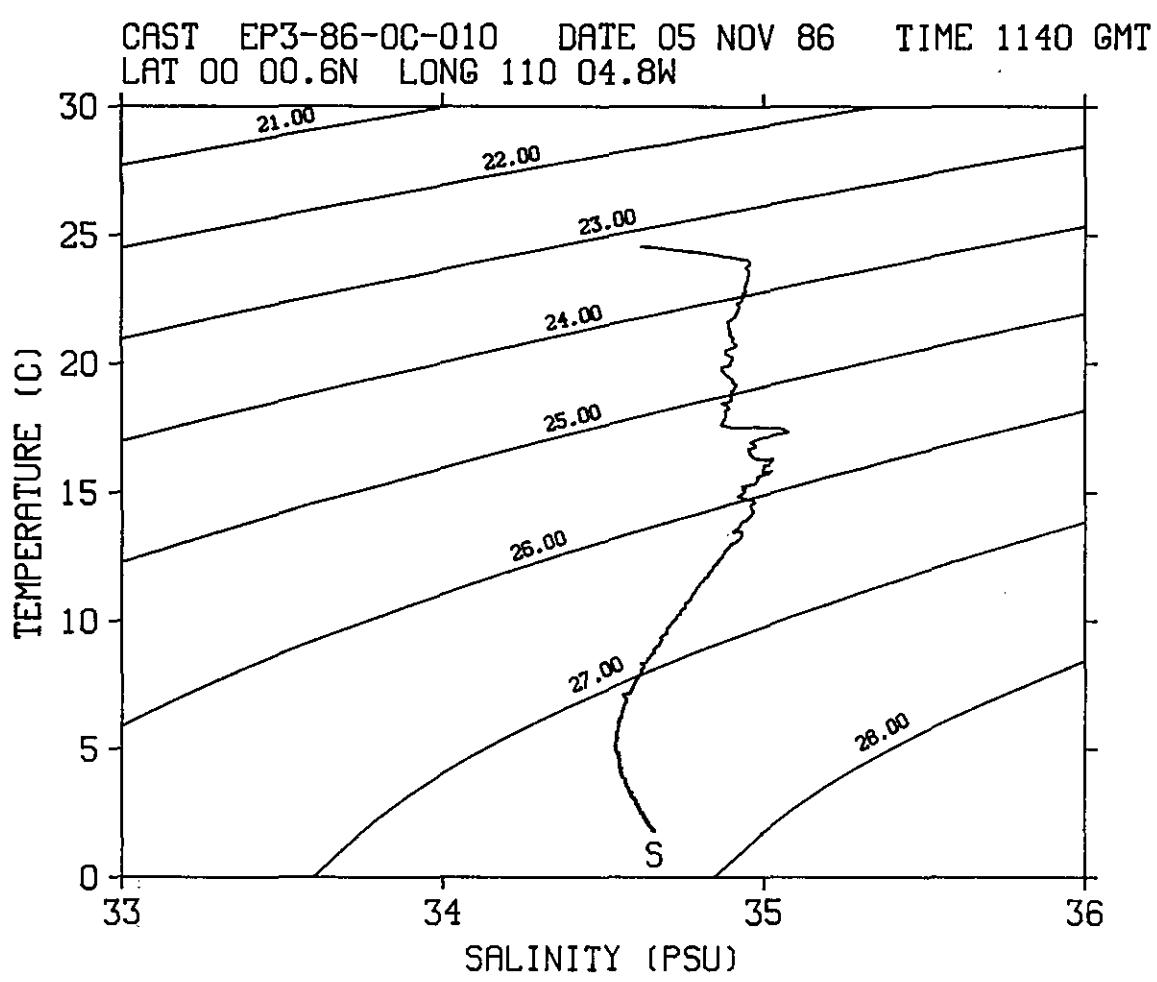
CAST EP3-86-OC-009 DATE 04 NOV 86 TIME 1107 GMT  
LAT 00 00.3N LONG 115 01.2W



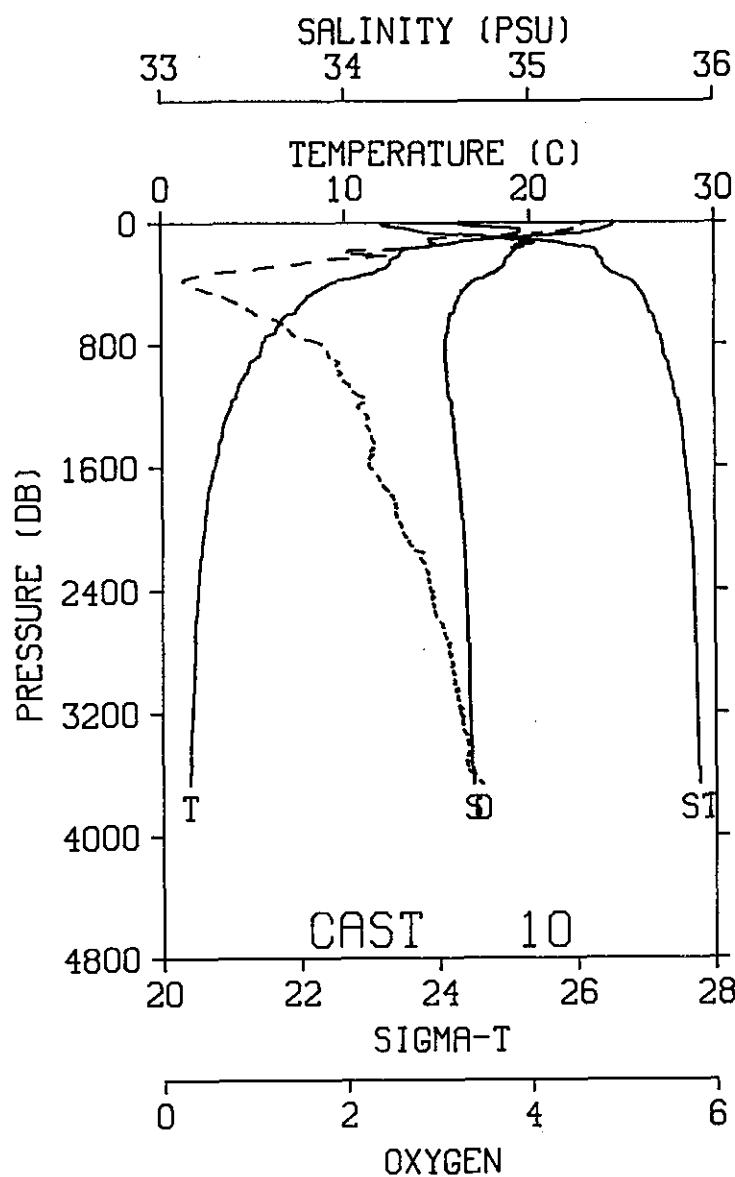


CAST EP3-86-OC -009 DATE 04 NOV 86 TIME 1107 GMT  
 LAT 00 00.3N LONG 115 01.2W WEATHER 1 SEA STATE 3  
 BAROMETER 09 WIND DIR 140 T SPD 12 KT VISIBILITY 8  
 CLOUD 7 AMOUNT 6 DRY 24.0 WET 22.9 DEPTH 4040 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.395	34.981	4.65	23.511	0.000
10.	24.398	34.982	4.65	23.511	0.044
20.	24.395	34.985	4.63	23.514	0.087
30.	24.309	35.004	4.60	23.554	0.131
40.	24.165	35.025	4.54	23.613	0.174
50.	24.028	35.036	4.47	23.662	0.217
60.	23.006	34.960	4.37	23.903	0.258
70.	22.144	34.960	3.98	24.148	0.297
80.	21.828	34.947	3.84	24.227	0.334
90.	20.498	34.894	3.77	24.550	0.370
100.	19.088	34.836	3.44	24.874	0.403
110.	17.300	34.900	3.27	25.367	0.432
120.	16.134	35.055	3.31	25.760	0.456
130.	15.165	35.041	3.30	25.968	0.477
140.	14.464	35.000	3.28	26.089	0.497
150.	14.067	34.971	3.22	26.151	0.516
160.	13.702	34.944	3.04	26.207	0.535
170.	13.471	34.925	2.87	26.239	0.553
180.	13.298	34.911	2.72	26.265	0.571
190.	13.221	34.905	2.54	26.275	0.589
200.	13.070	34.886	2.42	26.291	0.607
250.	12.452	34.873	2.03	26.404	0.692
300.	12.124	34.852	1.42	26.451	0.774
350.	10.153	34.738	0.81	26.722	0.853
400.	9.176	34.677	0.52	26.837	0.920
450.	8.764	34.666	0.51	26.894	0.982
500.	8.152	34.633	0.61	26.963	1.043
550.	7.581	34.607	0.87	27.027	1.100
600.	7.142	34.585	1.07	27.073	1.154
650.	6.792	34.574	1.25	27.112	1.206
700.	6.312	34.563	1.53	27.167	1.257
750.	6.002	34.552	1.53	27.198	1.305
800.	5.617	34.548	1.71	27.244	1.351
850.	5.295	34.551	1.88	27.285	1.396
900.	4.845	34.554	2.04	27.340	1.438
950.	4.751	34.556	2.00	27.352	1.479
1000.	4.643	34.560	2.02	27.367	1.520
1007.	4.617	34.554	2.04	27.366	1.525



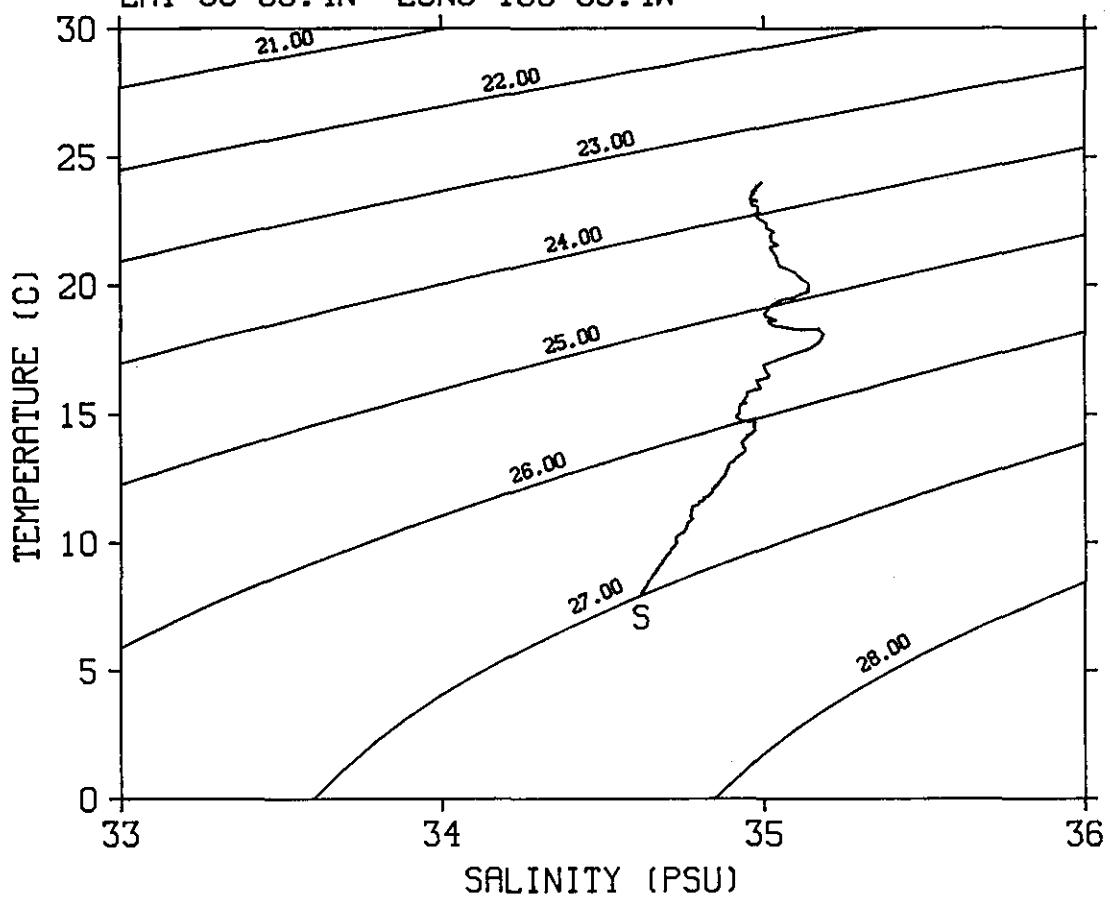
651

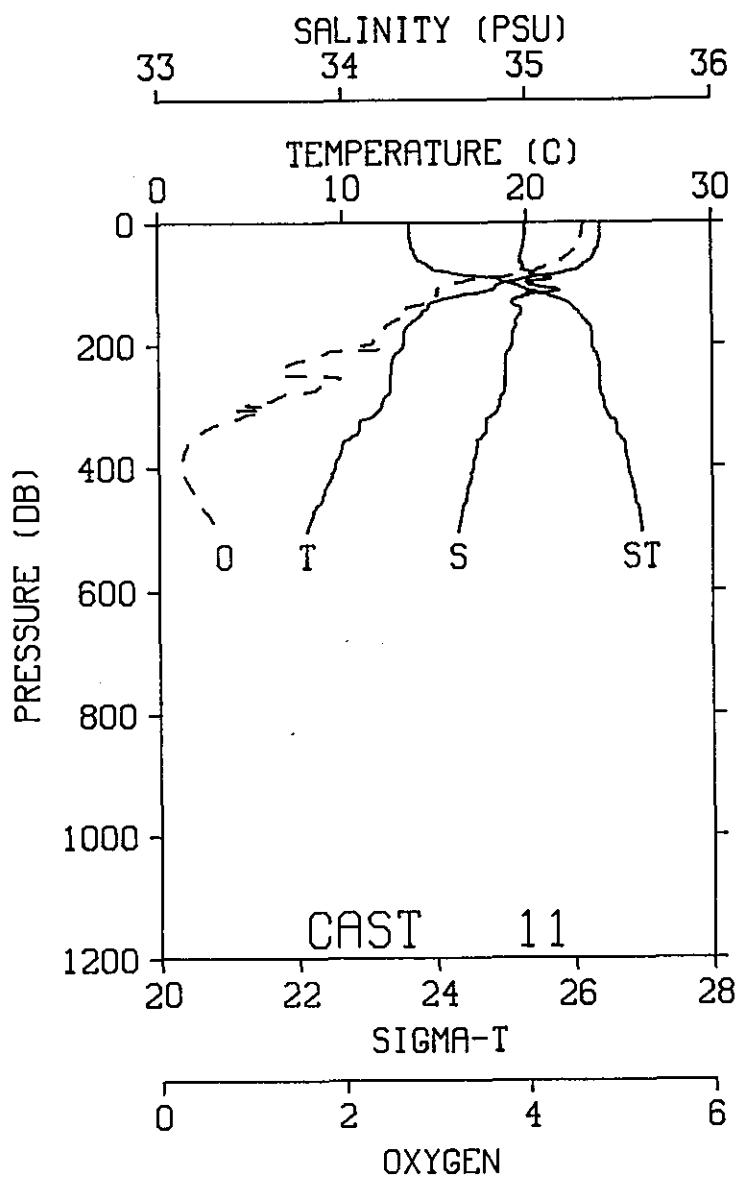


CAST EP3-86-OC -010 DATE 05 NOV 86 TIME 1140 GMT  
 LAT 00 00.6N LONG 110 04.8W WEATHER 2 SEA STATE 3  
 BAROMETER 10 WIND DIR 130 T SPD 10 KT VISIBILITY 7  
 CLOUD 6 AMOUNT 8 DRY 23.5 WET 22.0 DEPTH 3769 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	24.546	34.628	4.58	23.199	0.000
10.	24.542	34.627	4.61	23.200	0.047
20.	24.514	34.656	4.57	23.230	0.093
30.	24.346	34.776	4.55	23.371	0.139
40.	24.101	34.919	4.50	23.552	0.184
50.	23.852	34.961	4.43	23.657	0.226
60.	23.469	34.961	4.31	23.769	0.268
70.	22.802	34.951	4.13	23.955	0.309
80.	21.405	34.898	3.93	24.307	0.348
90.	20.365	34.887	3.49	24.580	0.383
100.	18.961	34.911	3.08	24.964	0.415
110.	17.907	34.886	2.89	25.209	0.444
120.	17.091	34.994	2.91	25.489	0.470
130.	16.254	35.036	2.93	25.718	0.494
140.	15.748	35.022	2.97	25.823	0.517
150.	14.839	34.928	2.95	25.953	0.538
160.	14.255	34.975	2.81	26.114	0.558
170.	13.460	34.910	2.64	26.230	0.577
180.	13.214	34.934	2.44	26.299	0.595
190.	13.111	34.925	2.04	26.313	0.613
200.	13.026	34.915	2.00	26.322	0.630
250.	12.488	34.876	1.71	26.399	0.716
300.	12.201	34.860	1.07	26.442	0.800
350.	10.849	34.779	0.37	26.631	0.878
400.	9.185	34.687	0.29	26.844	0.947
450.	8.440	34.647	0.50	26.930	1.008
500.	7.862	34.619	0.72	26.996	1.066
550.	7.469	34.603	0.91	27.041	1.122
600.	6.942	34.583	1.02	27.099	1.176
650.	6.482	34.568	1.30	27.149	1.227
700.	6.230	34.564	1.38	27.178	1.276
750.	5.685	34.554	1.47	27.240	1.324
800.	5.483	34.551	1.75	27.262	1.369
850.	5.392	34.551	1.81	27.273	1.414
900.	5.023	34.549	1.87	27.315	1.458
950.	4.758	34.553	1.90	27.349	1.499
1000.	4.523	34.559	1.93	27.380	1.539
1500.	3.089	34.602	2.28	27.560	1.883
2000.	2.295	34.637	2.60	27.657	2.165
2500.	1.920	34.659	2.96	27.705	2.413
3000.	1.697	34.669	3.17	27.730	2.647
3500.	1.530	34.687	3.31	27.757	2.873
3663.	1.450	34.690	3.47	27.765	2.944

CAST EP3-86-OC-011 DATE 06 NOV 86 TIME 1224 GMT  
LAT 00 00.4N LONG 108 00.4W





CAST EP3-86-OC -011 DATE 06 NOV 86 TIME 1224 GMT  
 LAT 00 00.4N LONG 108 00.4W WEATHER 2 SEA STATE 3  
 BAROMETER 10 WIND DIR 130 T SPD 10 KT VISIBILITY 7  
 CLOUD 6 AMOUNT B DRY 23.5 WET 21.5 DEPTH 3720 M

PRES (DB)	TEMP (C)	SAL (PSU)	OXY (ML/L)	SIG-T	DELTA-D (DYN-M)
0.	23.982	34.999	4.62	23.647	0.000
10.	23.974	34.998	4.60	23.649	0.042
20.	23.981	35.000	4.59	23.648	0.085
30.	23.927	34.994	4.58	23.660	0.127
40.	23.879	34.988	4.54	23.670	0.170
50.	23.726	34.980	4.48	23.709	0.212
60.	23.546	34.971	4.40	23.755	0.253
70.	23.060	34.987	4.28	23.908	0.294
80.	22.406	35.014	4.11	24.116	0.334
90.	20.479	35.101	3.81	24.713	0.370
100.	18.792	35.008	3.21	25.081	0.400
110.	18.295	35.174	3.04	25.334	0.428
120.	16.465	35.025	3.01	25.660	0.454
130.	15.094	34.930	3.00	25.898	0.476
140.	14.703	34.978	2.70	26.020	0.497
150.	14.330	34.976	2.68	26.100	0.516
160.	13.950	34.944	2.57	26.155	0.535
170.	13.497	34.946	2.47	26.250	0.554
180.	13.323	34.926	2.41	26.271	0.572
190.	13.312	34.925	2.34	26.273	0.590
200.	13.286	34.922	2.27	26.275	0.608
250.	12.598	34.886	1.50	26.385	0.694
300.	12.124	34.857	0.94	26.455	0.778
350.	10.594	34.766	0.41	26.666	0.854
400.	9.585	34.714	0.26	26.799	0.922
450.	8.825	34.671	0.41	26.888	0.986
500.	8.035	34.632	0.66	26.980	1.046
506.	7.997	34.628	0.70	26.982	1.053

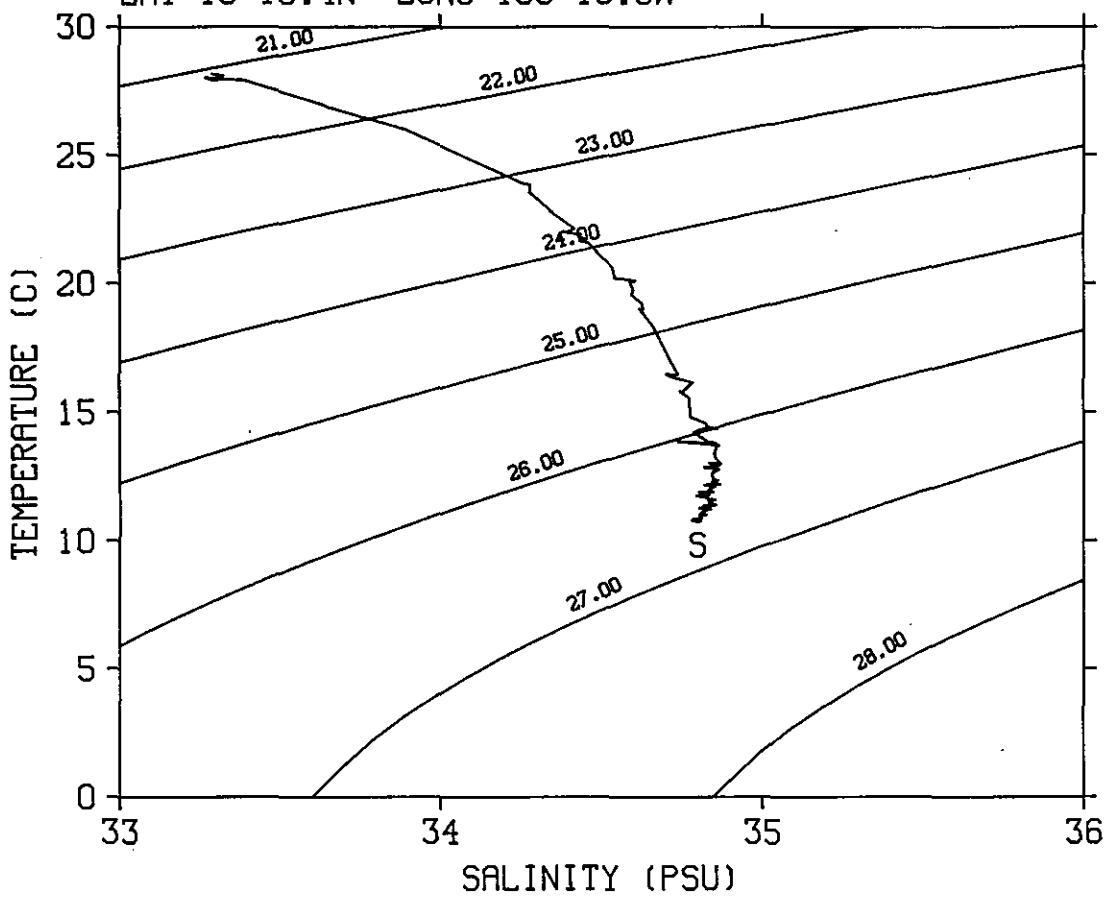


**EP4-86-OC**

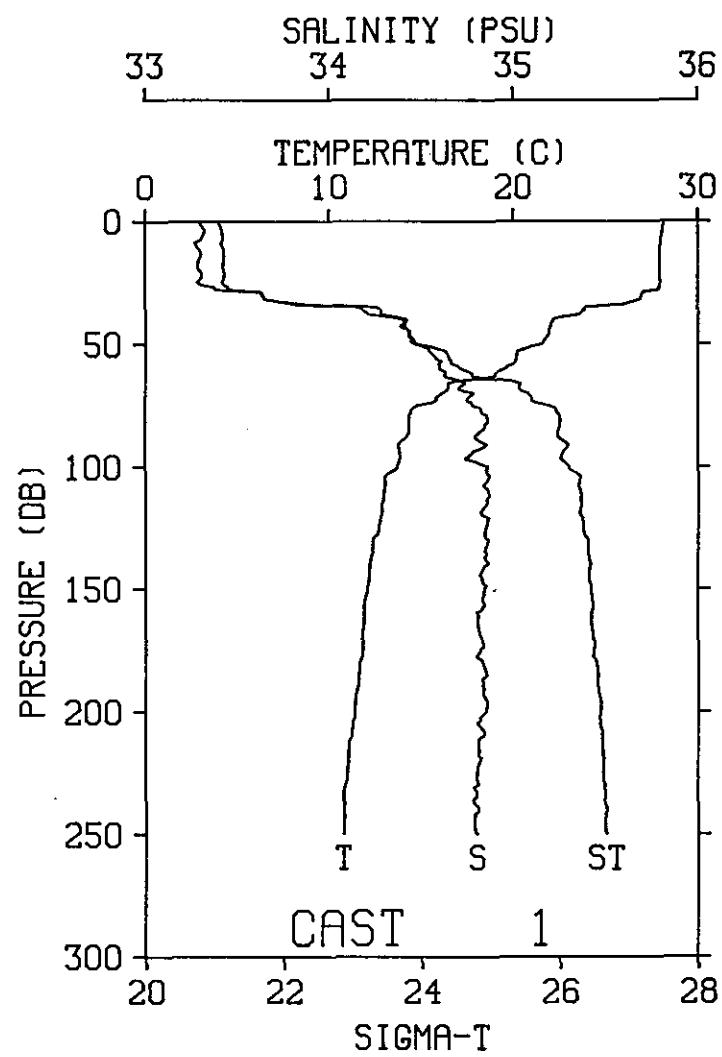
**13 November — 1 December 1986**

**NBIS CTD/O<sub>2</sub> Data Summary**

CAST EP4-86-OC-001 DATE 15 NOV 86 TIME 2109 GMT  
LAT 10 15.4N LONG 109 13.9W



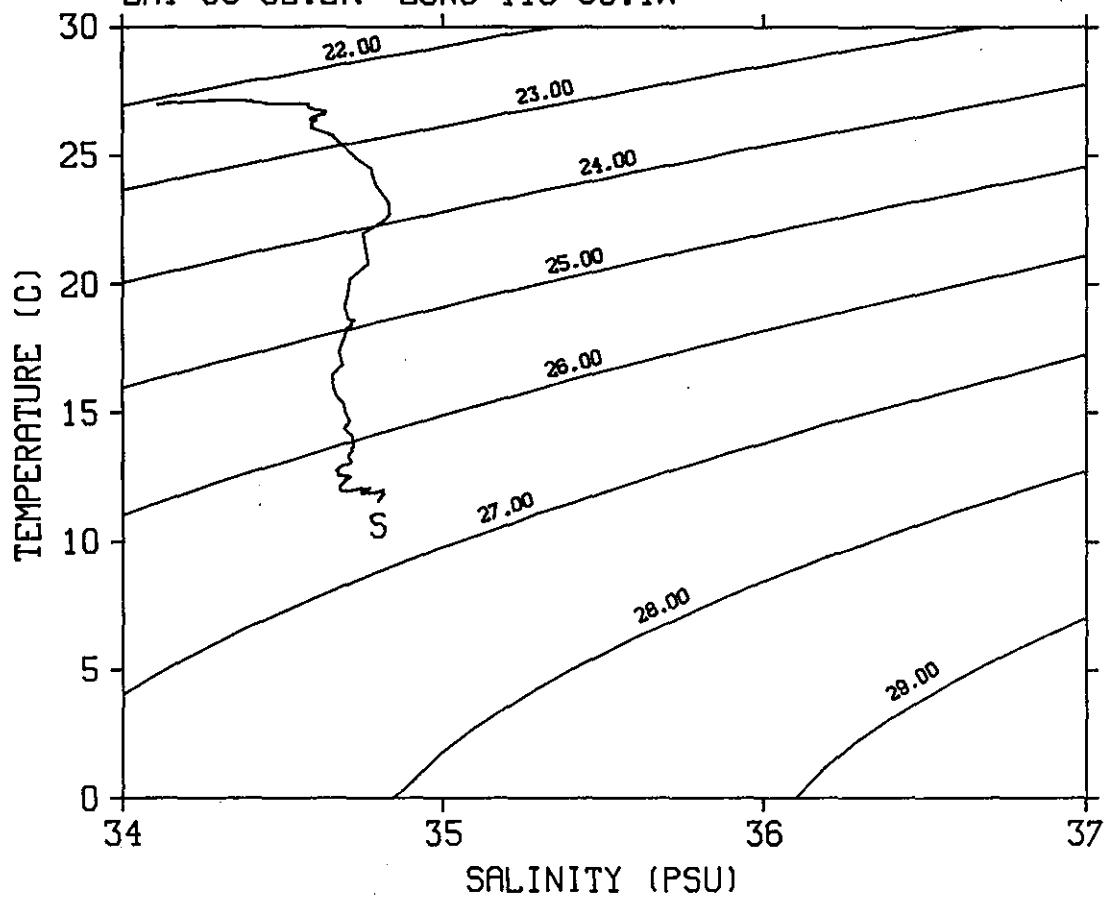
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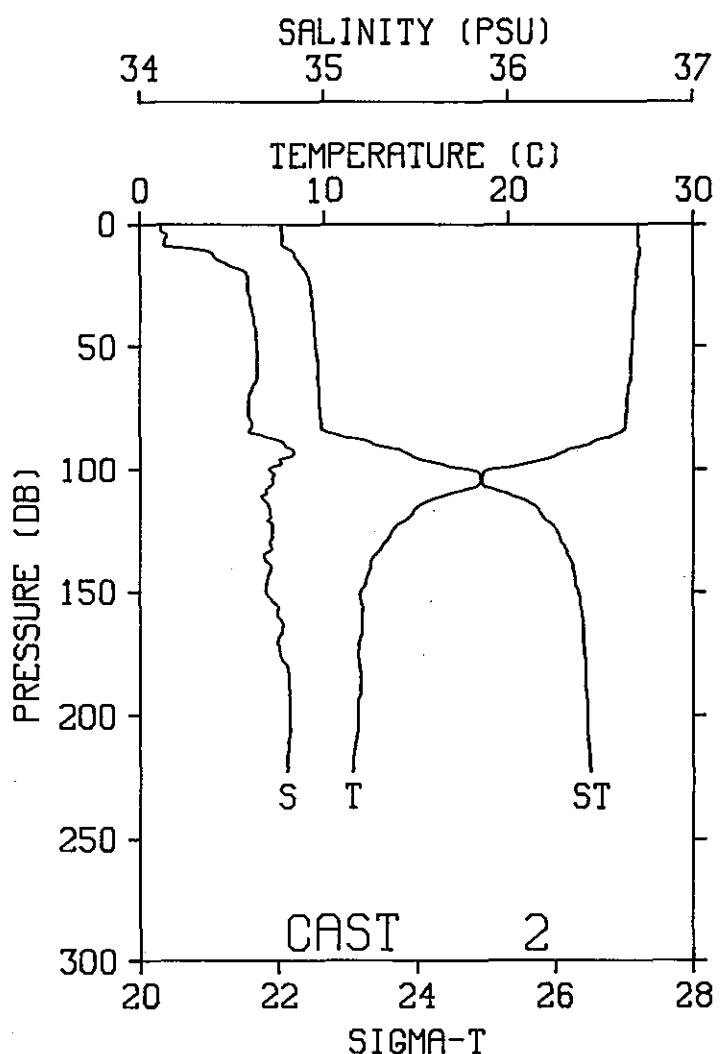
CAST EP4-86-OC-001 DATE 15 NOV 86 TIME 2109 GMT  
 LAT 10 15.4N LONG 109 13.9W WEATHER 1 SEA STATE 2  
 BAROMETER 98 WIND DIR 090 T-SPD 06 KT VISIBILITY 8  
 CLOUD AMOUNT 5 DRY 28.2 WET 26.1 DEPTH 0850 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	28.154	33.292	21.062	0.000
10.	27.975	33.274	21.108	0.067
20.	27.925	33.296	21.140	0.133
30.	26.950	33.636	21.709	0.199
40.	22.132	34.420	23.742	0.251
50.	21.566	34.465	23.933	0.292
60.	19.563	34.596	24.569	0.327
70.	16.156	34.787	25.549	0.356
80.	14.329	34.860	26.010	0.378
90.	13.862	34.829	26.084	0.398
100.	13.693	34.865	26.148	0.418
110.	12.959	34.862	26.295	0.436
120.	12.822	34.833	26.300	0.453
130.	12.340	34.862	26.417	0.470
140.	12.182	34.868	26.452	0.486
150.	12.063	34.843	26.455	0.503
160.	11.893	34.801	26.455	0.518
170.	11.800	34.826	26.493	0.534
180.	11.629	34.831	26.528	0.550
190.	11.547	34.831	26.544	0.565
200.	11.379	34.853	26.592	0.580
250.	10.741	34.800	26.667	0.653

CAST EP4-86-OC-002 DATE 16 NOV 86 TIME 1854 GMT  
LAT 05 02.2N LONG 110 00.1W



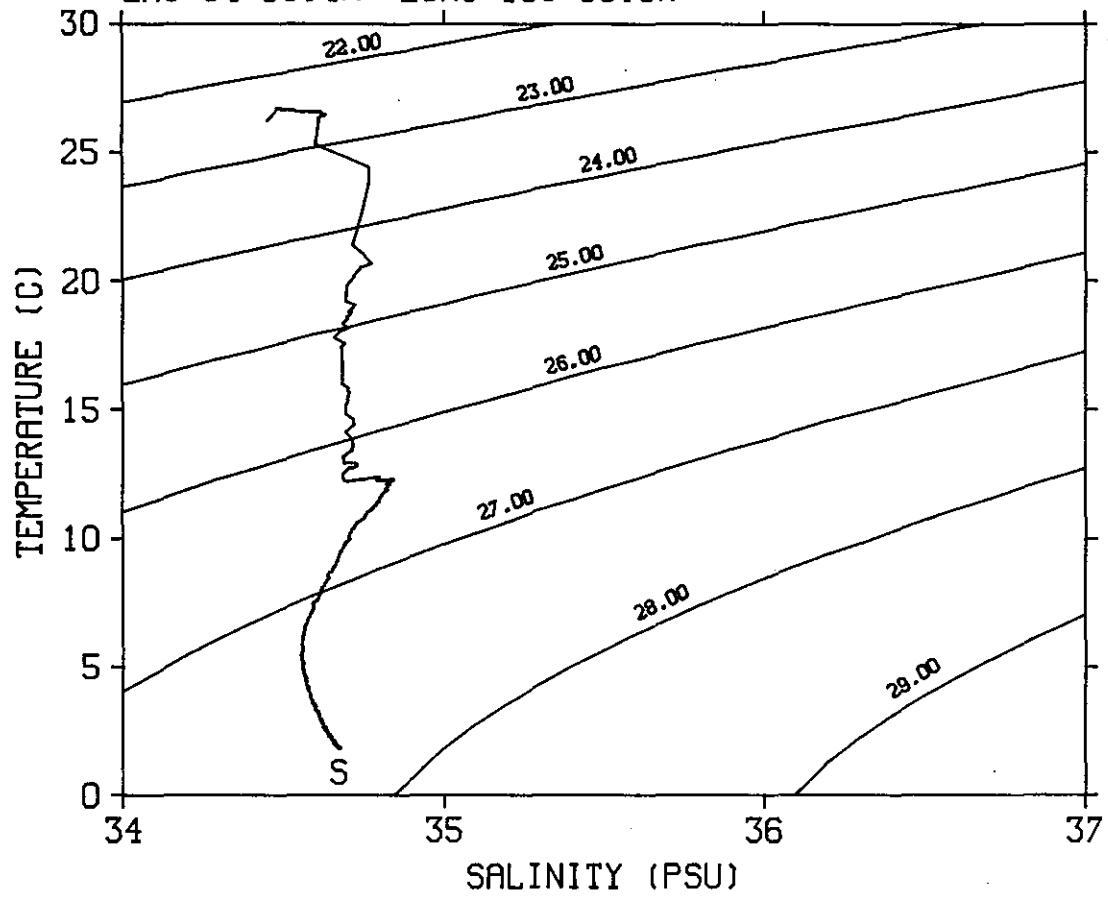
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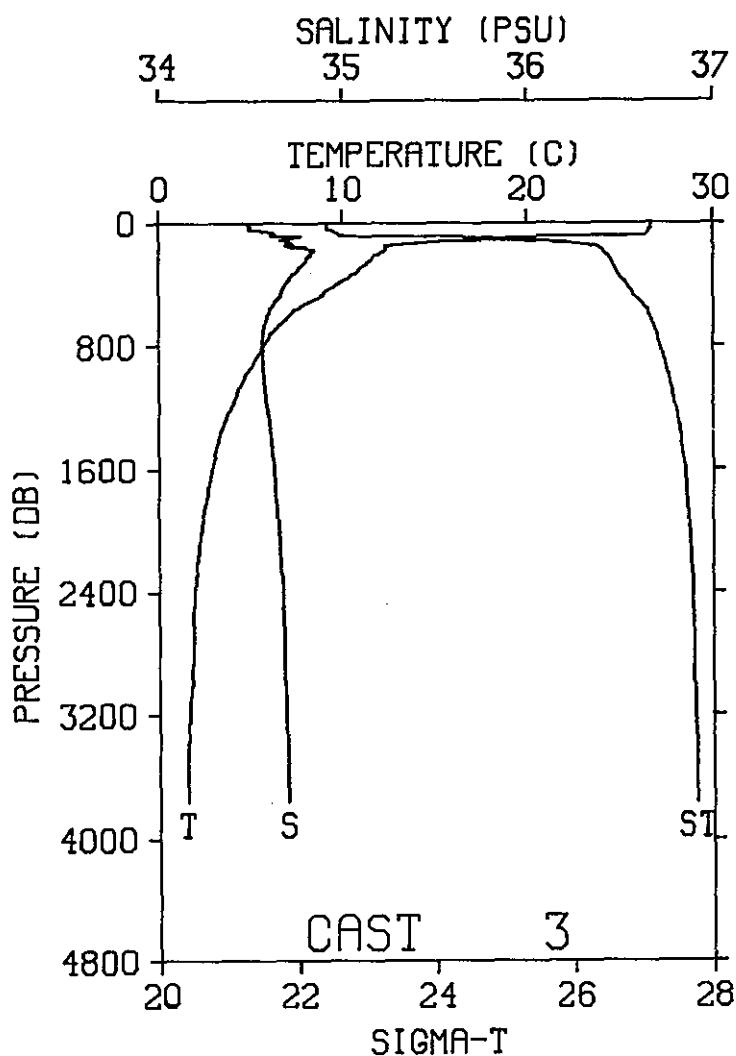


CAST EP4-86-OC-002 DATE 16 NOV 86 TIME 1854 GMT  
 LAT 05 02.2N LONG 110 00.1W WEATHER 6 SEA STATE 3  
 BAROMETER 11 WIND DIR 200 T SPD 10 KT VISIBILITY 6  
 CLOUD 7 AMOUNT 8 DRY 23.8 WET 23.8 DEPTH 3930 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	27.005	34.112	22.049	0.000
10.	27.121	34.277	22.137	0.058
20.	26.959	34.582	22.418	0.113
30.	26.786	34.592	22.481	0.167
40.	26.734	34.615	22.515	0.220
50.	26.684	34.631	22.542	0.274
60.	26.589	34.635	22.575	0.326
70.	26.423	34.591	22.594	0.379
80.	26.366	34.600	22.619	0.432
90.	24.281	34.778	23.391	0.482
100.	19.081	34.696	24.769	0.521
110.	16.803	34.689	25.323	0.551
120.	14.558	34.704	25.841	0.575
130.	13.326	34.702	26.097	0.595
140.	12.520	34.712	26.266	0.613
150.	11.963	34.680	26.348	0.631
160.	12.016	34.744	26.387	0.648
170.	11.892	34.746	26.413	0.664
180.	11.929	34.799	26.447	0.681
190.	11.975	34.813	26.449	0.697
200.	11.813	34.814	26.480	0.713
223.	11.535	34.797	26.519	0.749

CAST EP4-86-OC-003 DATE 16 NOV 86 TIME 2327 GMT  
LAT 04 59.4N LONG 109 59.6W

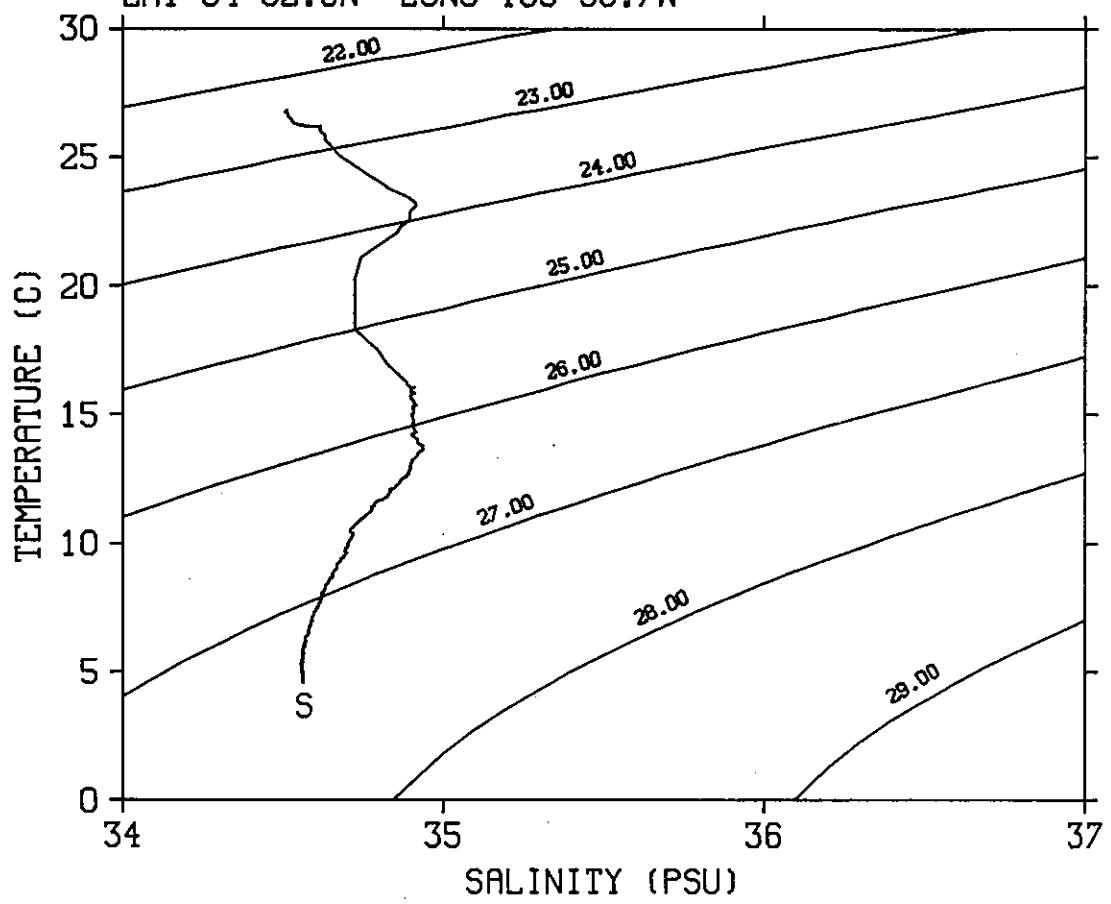




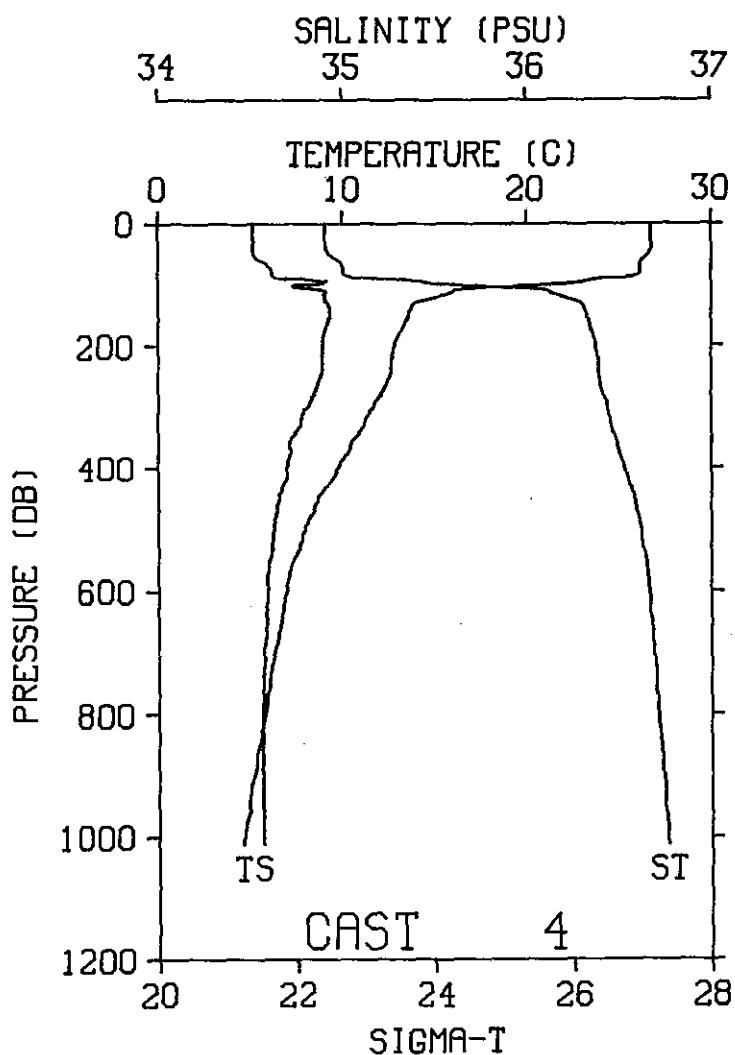
CAST EP4-86-OC-003 DATE 16 NOV 86 TIME 2327 GMT  
 LAT 04 59.4N LONG 109 59.6W WEATHER 2 SEA STATE 3  
 BAROMETER 09 WIND DIR 180 T SPD 12 KT VISIBILITY 7  
 CLOUD 6 AMOUNT 8 DRY 26.0 WET 24.5 DEPTH 3920 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	26.208	34.453	22.558	0.000
10.	26.694	34.485	22.429	0.054
20.	26.697	34.486	22.429	0.108
30.	26.658	34.502	22.453	0.162
40.	26.671	34.496	22.445	0.216
50.	26.573	34.549	22.516	0.270
60.	26.562	34.595	22.554	0.323
70.	26.486	34.621	22.597	0.376
80.	26.437	34.638	22.625	0.428
90.	20.835	34.763	24.359	0.474
100.	18.901	34.717	24.831	0.507
110.	18.155	34.704	25.008	0.538
120.	15.767	34.701	25.571	0.565
130.	14.417	34.720	25.883	0.588
140.	13.379	34.715	26.096	0.608
150.	12.310	34.685	26.286	0.626
160.	12.328	34.755	26.337	0.644
170.	12.286	34.813	26.389	0.661
180.	12.291	34.846	26.414	0.677
190.	12.160	34.824	26.422	0.694
200.	12.031	34.825	26.448	0.710
250.	11.420	34.796	26.540	0.789
300.	10.896	34.757	26.606	0.864
350.	10.361	34.715	26.668	0.938
400.	9.656	34.687	26.766	1.008
450.	9.039	34.664	26.849	1.074
500.	8.354	34.636	26.934	1.136
550.	7.608	34.608	27.024	1.194
600.	7.056	34.590	27.089	1.248
650.	6.670	34.576	27.130	1.300
700.	6.264	34.566	27.176	1.349
750.	5.981	34.563	27.210	1.397
800.	5.671	34.560	27.246	1.444
850.	5.378	34.558	27.280	1.489
900.	5.116	34.564	27.316	1.532
950.	4.898	34.564	27.341	1.574
1000.	4.644	34.566	27.372	1.615
1500.	3.043	34.615	27.574	1.960
2000.	2.272	34.646	27.666	2.239
2500.	1.867	34.670	27.718	2.483
3000.	1.739	34.680	27.735	2.717
3500.	1.489	34.697	27.767	2.938
3761.	1.471	34.694	27.767	3.051

CAST EP4-86-OC-004 DATE 17 NOV 86 TIME 0601 GMT  
LAT 04 02.5N LONG 109 58.7W



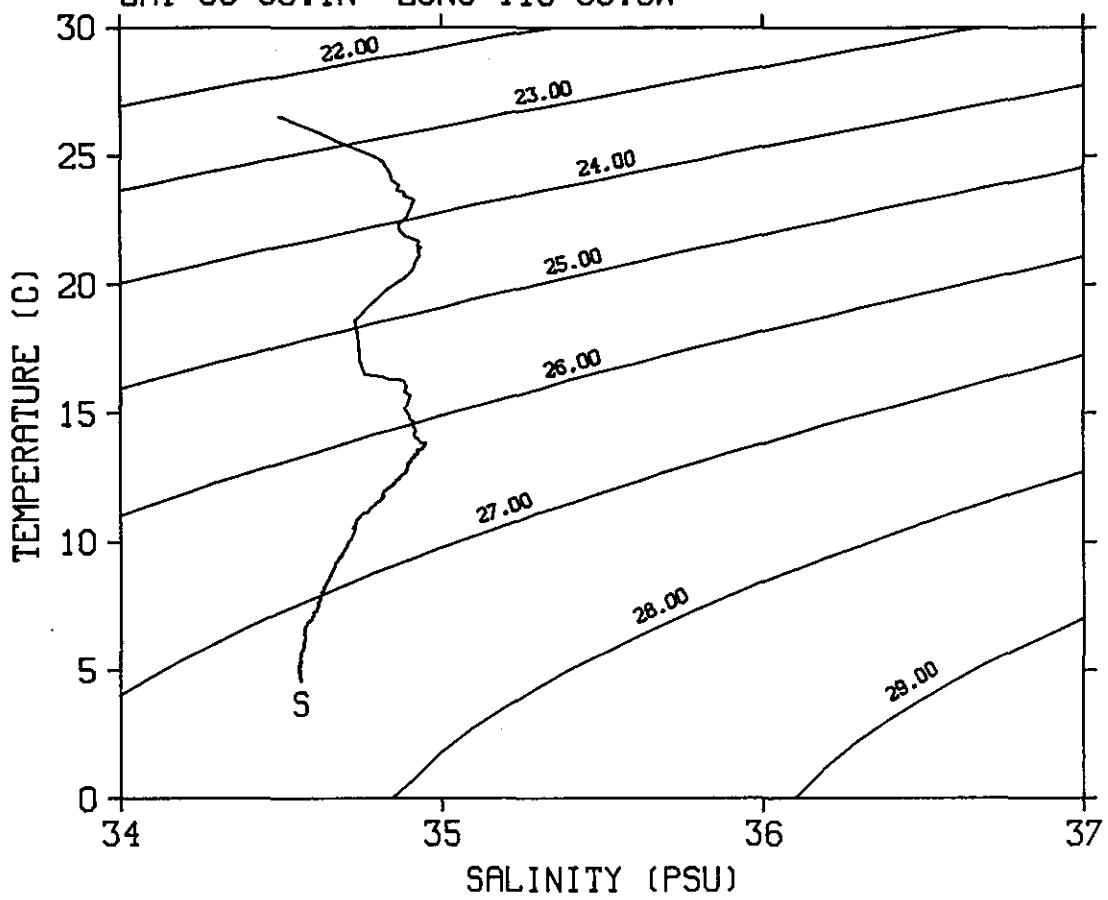
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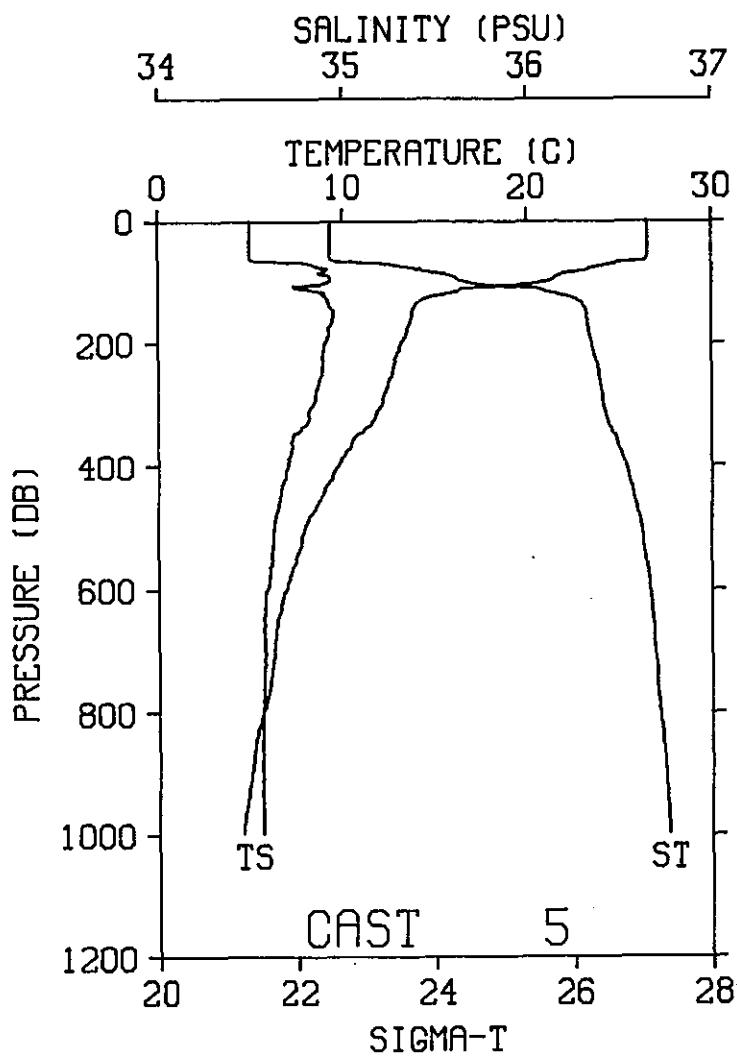


CAST EP4-86-OC-004 DATE 17 NOV 86 TIME 0601 GMT  
 LAT 04 02.5N LONG 109 58.7W WEATHER 0 SEA STATE 1  
 BAROMETER 12 WIND DIR 160 T SPD 10 KT VISIBILITY 8  
 CLOUD AMOUNT 0 DRY 25.8 WET 23.5 DEPTH 3900 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	26.761	34.512	22.428	0.000
10.	26.762	34.517	22.432	0.054
20.	26.773	34.517	22.428	0.108
30.	26.774	34.516	22.427	0.162
40.	26.751	34.516	22.434	0.216
50.	26.613	34.521	22.482	0.270
60.	26.253	34.548	22.615	0.323
70.	26.186	34.607	22.681	0.375
80.	26.188	34.622	22.691	0.427
90.	24.202	34.785	23.421	0.478
100.	21.098	34.747	24.276	0.519
110.	16.013	34.901	25.670	0.547
120.	15.079	34.908	25.884	0.570
130.	13.957	34.920	26.135	0.590
140.	13.752	34.937	26.191	0.609
150.	13.635	34.939	26.217	0.627
160.	13.455	34.922	26.241	0.646
170.	13.304	34.910	26.262	0.664
180.	13.108	34.900	26.294	0.681
190.	12.942	34.899	26.327	0.699
200.	12.846	34.899	26.346	0.716
250.	12.580	34.885	26.388	0.801
300.	11.720	34.816	26.500	0.884
350.	10.750	34.731	26.611	0.961
400.	9.804	34.699	26.751	1.033
450.	8.685	34.657	26.900	1.097
500.	7.960	34.628	26.988	1.157
550.	7.328	34.602	27.060	1.213
600.	6.941	34.591	27.105	1.265
650.	6.629	34.584	27.142	1.317
700.	6.285	34.572	27.178	1.366
750.	6.017	34.571	27.212	1.414
800.	5.774	34.563	27.236	1.461
850.	5.464	34.563	27.274	1.506
900.	5.157	34.563	27.310	1.550
950.	4.924	34.566	27.340	1.592
1000.	4.635	34.567	27.374	1.633
1013.	4.585	34.569	27.381	1.643

CAST EP4-86-OC-005 DATE 17 NOV 86 TIME 1144 GMT  
LAT 03 00.1N LONG 110 00.5W

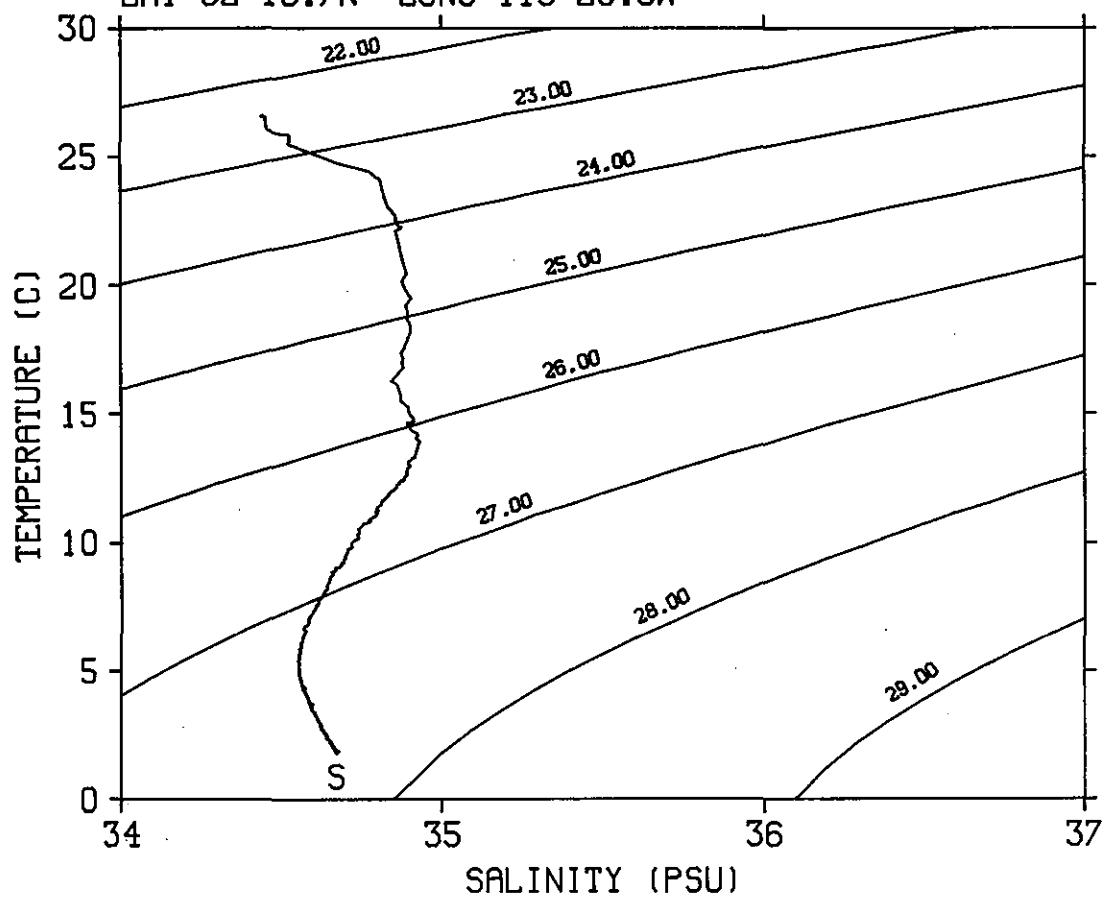




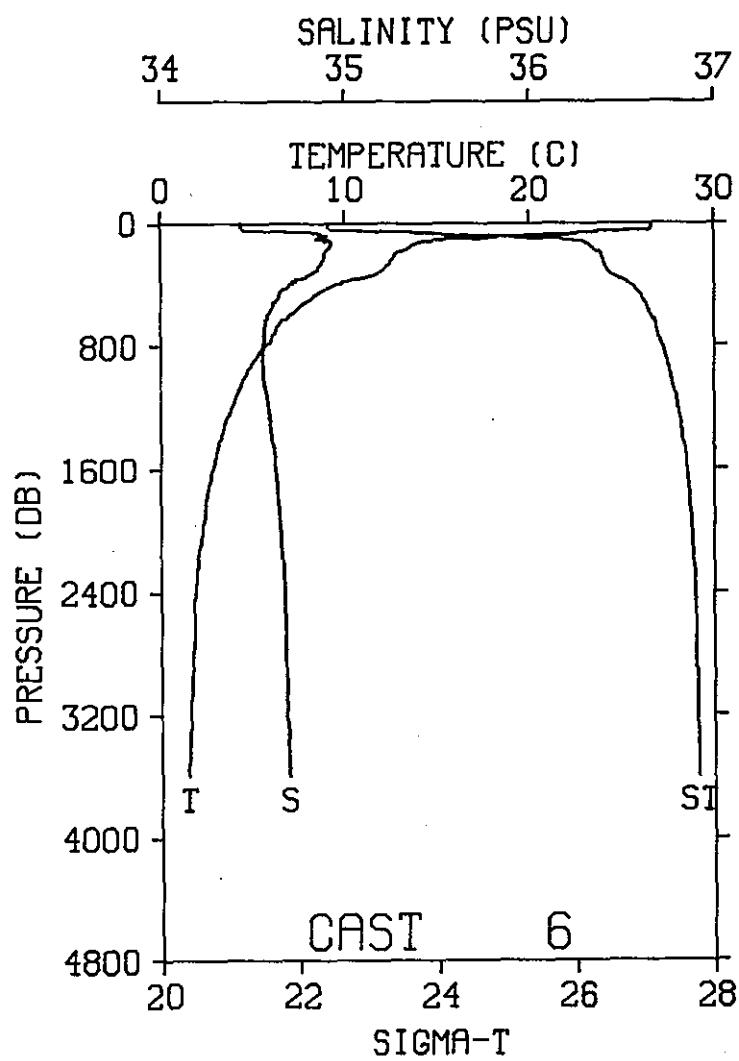
CAST EP4-86-OC-005 DATE 17 NOV 86 TIME 1144 GMT  
 LAT 03 00.1N LONG 110 00.5W WEATHER 2 SEA STATE 1  
 BAROMETER 11 WIND DIR 160 T SPD 10 KT VISIBILITY 8  
 CLOUD 3 AMOUNT 8 DRY 25.0 WET 22.1 DEPTH 3895 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	26.501	34.497	22.499	0.000
10.	26.515	34.497	22.494	0.053
20.	26.516	34.498	22.495	0.107
30.	26.519	34.496	22.493	0.160
40.	26.521	34.497	22.493	0.214
50.	26.521	34.497	22.493	0.267
60.	26.510	34.499	22.498	0.321
70.	24.548	34.831	23.351	0.372
80.	23.245	34.915	23.800	0.415
90.	21.680	34.931	24.256	0.454
100.	20.820	34.914	24.479	0.490
110.	16.468	34.759	25.455	0.521
120.	15.423	34.895	25.798	0.545
130.	14.271	34.920	26.068	0.565
140.	13.891	34.934	26.160	0.584
150.	13.776	34.950	26.196	0.603
160.	13.707	34.945	26.207	0.622
170.	13.610	34.938	26.221	0.640
180.	13.483	34.928	26.239	0.658
190.	13.408	34.925	26.252	0.676
200.	13.189	34.905	26.282	0.694
250.	12.682	34.887	26.369	0.781
300.	12.119	34.840	26.443	0.865
350.	10.783	34.737	26.610	0.945
400.	9.728	34.702	26.766	1.016
450.	8.839	34.657	26.876	1.081
500.	7.941	34.627	26.990	1.141
550.	7.467	34.615	27.050	1.197
600.	6.922	34.588	27.105	1.250
650.	6.451	34.572	27.156	1.300
700.	6.264	34.574	27.183	1.349
750.	6.037	34.570	27.208	1.397
800.	5.646	34.566	27.254	1.444
850.	5.233	34.561	27.300	1.488
900.	4.974	34.561	27.331	1.531
950.	4.755	34.561	27.355	1.572
998.	4.571	34.563	27.378	1.610

CAST EP4-86-OC-006 DATE 18 NOV 86 TIME 457 GMT  
LAT 02 10.7N LONG 110 20.6W



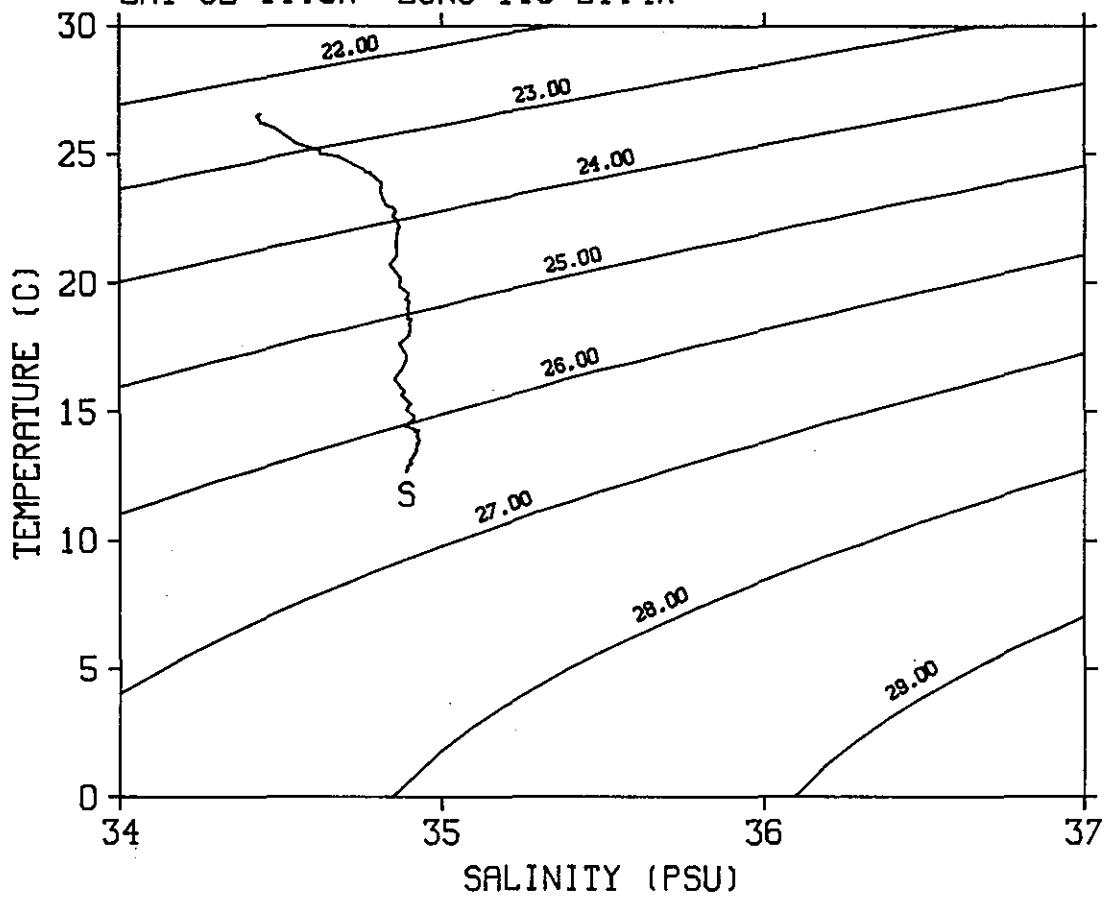
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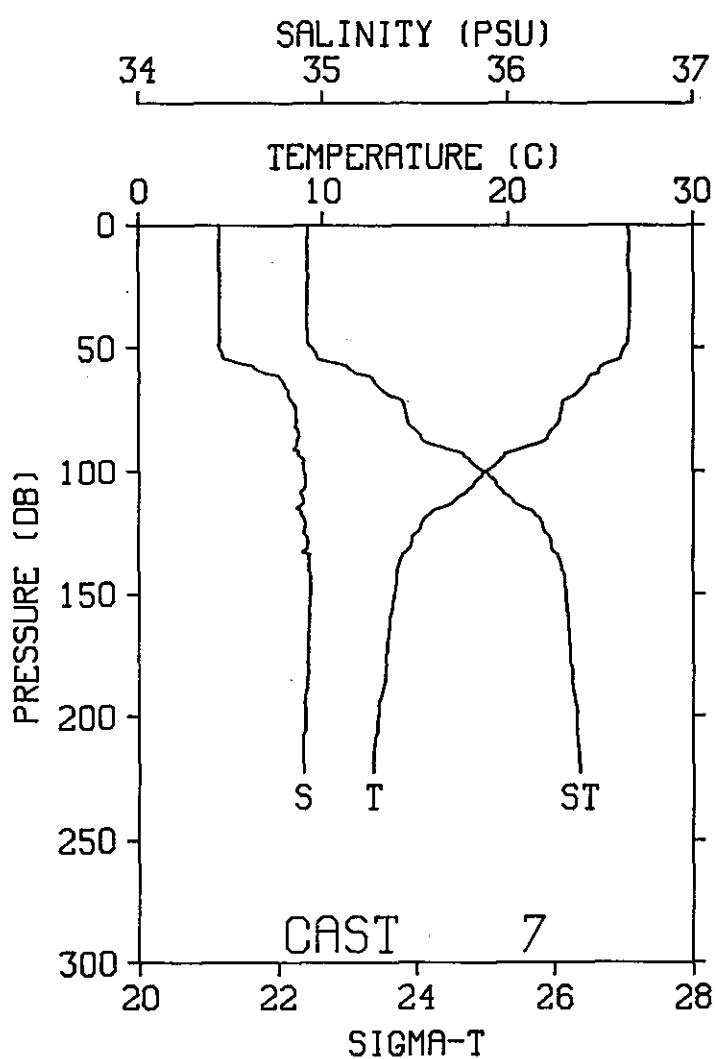


CAST EP4-86-OC-006 DATE 18 NOV 86 TIME 457 GMT  
 LAT 02 10.7N LONG 110 20.6W WEATHER 1 SEA STATE 3  
 BAROMETER 13 WIND DIR 150 T SPD 12 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 3 DRY 24.1 WET 22.1 DEPTH 3845 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	26.570	34.436	22.431	0.000
10.	26.580	34.437	22.429	0.054
20.	26.584	34.439	22.429	0.108
30.	26.581	34.440	22.431	0.162
40.	26.565	34.443	22.438	0.216
50.	25.821	34.513	22.723	0.270
60.	23.370	34.819	23.691	0.316
70.	22.551	34.853	23.952	0.356
80.	20.443	34.888	24.560	0.394
90.	18.655	34.889	25.025	0.426
100.	17.326	34.868	25.336	0.454
110.	15.153	34.891	25.855	0.478
120.	14.267	34.918	26.068	0.499
130.	13.953	34.923	26.138	0.518
140.	13.809	34.922	26.168	0.537
150.	13.632	34.920	26.203	0.555
160.	13.476	34.915	26.231	0.574
170.	13.362	34.912	26.252	0.592
180.	13.187	34.896	26.275	0.610
190.	12.949	34.901	26.327	0.627
200.	12.747	34.891	26.360	0.644
250.	12.462	34.878	26.406	0.729
300.	12.137	34.854	26.450	0.812
350.	11.244	34.796	26.573	0.892
400.	9.562	34.695	26.788	0.963
450.	8.642	34.645	26.897	1.027
500.	8.110	34.632	26.969	1.086
550.	7.509	34.601	27.033	1.143
600.	6.993	34.580	27.089	1.197
650.	6.450	34.567	27.152	1.248
700.	6.233	34.561	27.176	1.298
750.	5.981	34.560	27.207	1.346
800.	5.612	34.552	27.248	1.393
850.	5.296	34.553	27.286	1.438
900.	5.013	34.554	27.320	1.481
950.	4.764	34.553	27.348	1.522
1000.	4.558	34.558	27.375	1.563
1500.	2.985	34.613	27.578	1.907
2000.	2.235	34.648	27.671	2.182
2500.	1.789	34.671	27.724	2.421
3000.	1.643	34.685	27.747	2.650
3500.	1.493	34.692	27.764	2.870
3598.	1.465	34.691	27.764	2.913

CAST EP4-86-OC-007 DATE 18 NOV 86 TIME 0747 GMT  
LAT 02 11.3N LONG 110 21.4W

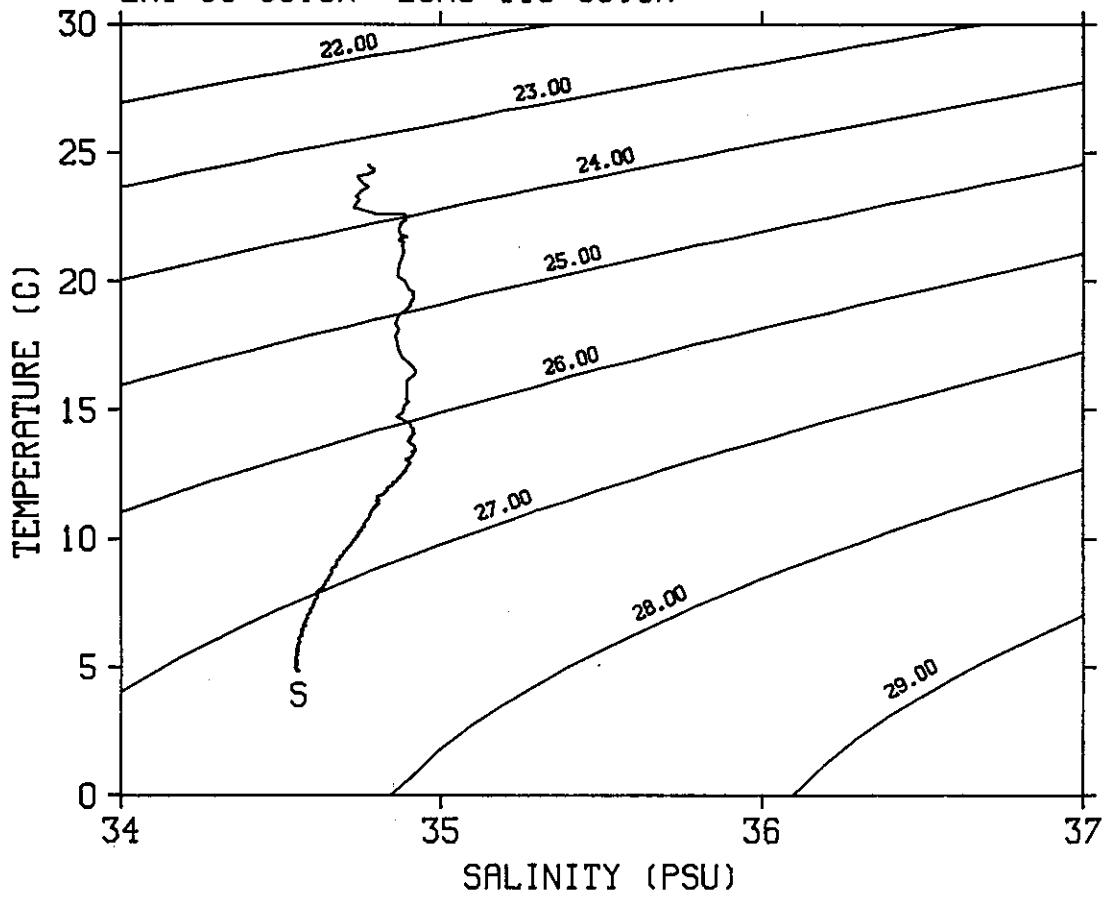


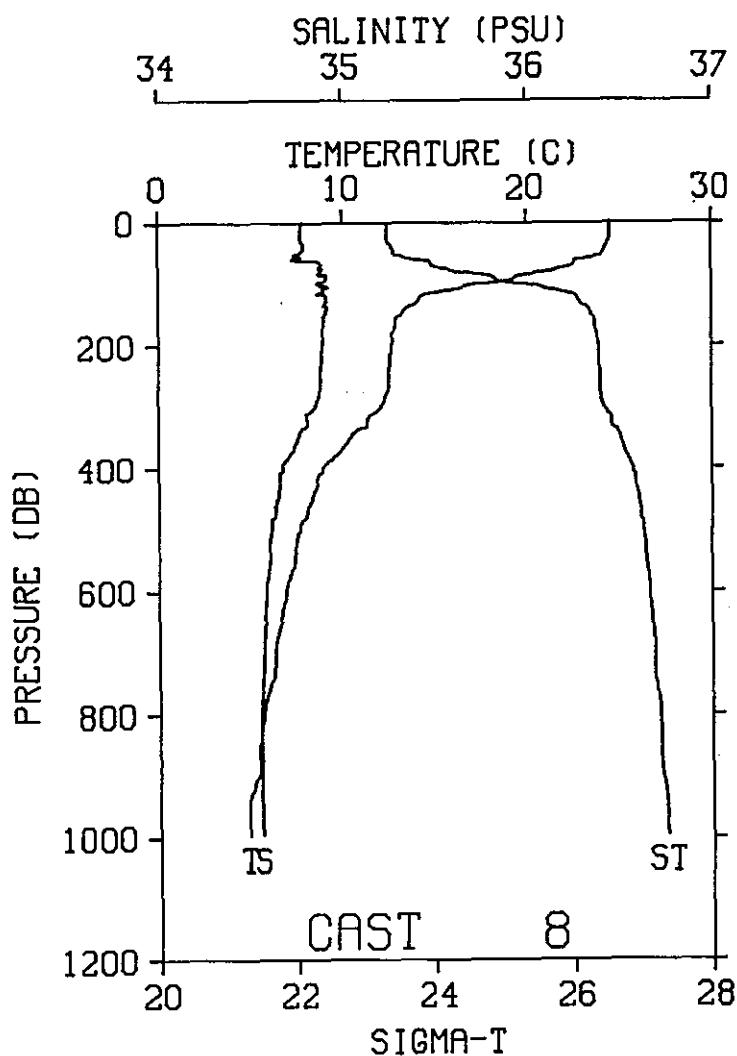


CAST EP4-86-OC-007 DATE 18 NOV 86 TIME 0747 GMT  
 LAT 02 11.3N LONG 110 21.4W WEATHER 1 SEA STATE 2  
 BAROMETER 12 WIND DIR 150 T SPD 11 KT VISIBILITY 8  
 CLOUD 4 AMOUNT 4 DRY 24.0 WET 22.2 DEPTH 3712 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	26.545	34.435	22.439	0.000
10.	26.546	34.434	22.437	0.054
20.	26.552	34.437	22.438	0.108
30.	26.555	34.436	22.436	0.162
40.	26.555	34.437	22.437	0.216
50.	26.276	34.440	22.527	0.270
60.	24.902	34.684	23.134	0.321
70.	23.289	34.815	23.711	0.365
80.	22.765	34.856	23.893	0.406
90.	21.046	34.860	24.376	0.445
100.	18.789	34.894	24.995	0.477
110.	17.348	34.883	25.343	0.505
120.	15.411	34.897	25.802	0.530
130.	14.765	34.914	25.958	0.551
140.	14.018	34.921	26.123	0.571
150.	13.841	34.931	26.167	0.590
160.	13.646	34.921	26.201	0.608
170.	13.481	34.918	26.232	0.627
180.	13.359	34.913	26.253	0.645
190.	13.189	34.907	26.283	0.663
200.	12.986	34.905	26.323	0.680
223.	12.700	34.889	26.368	0.720

CAST EP4-86-OC-008 DATE 18 NOV 86 TIME 1526 GMT  
LAT 00 59.8N LONG 110 00.3W

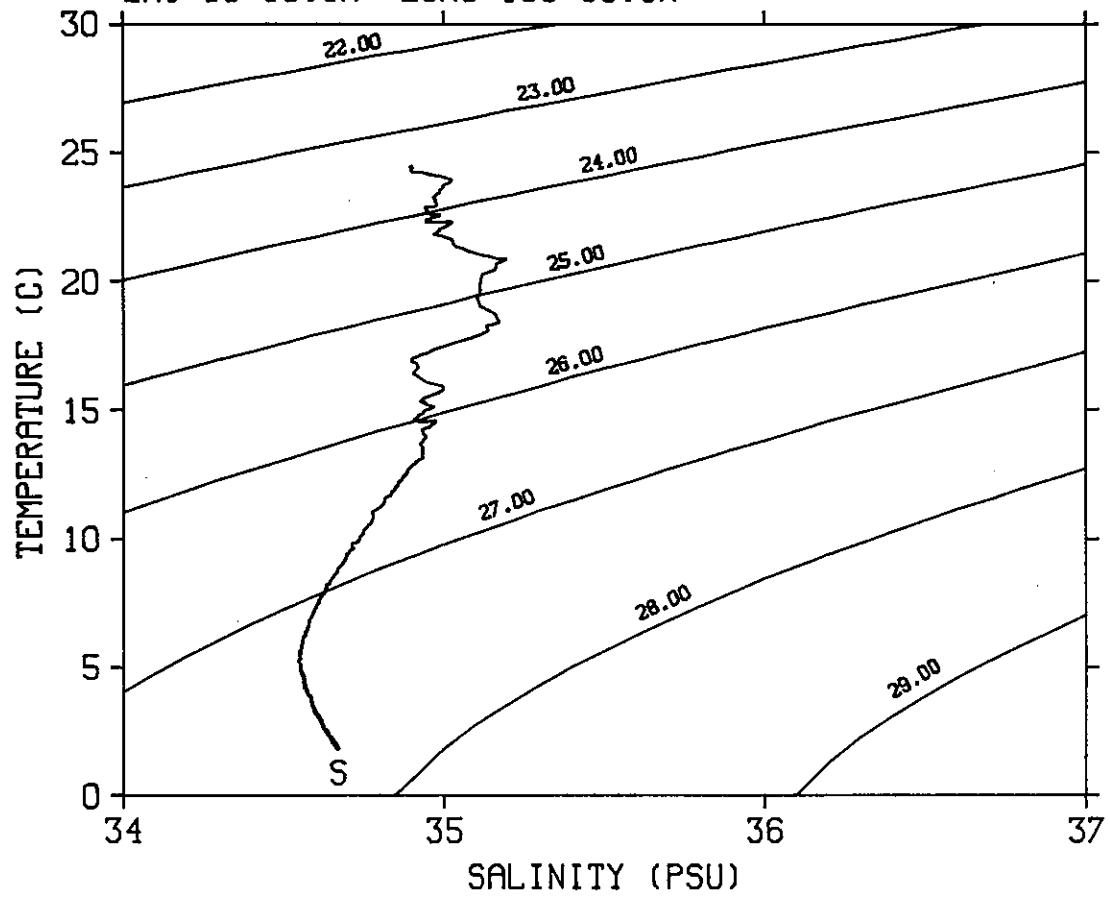




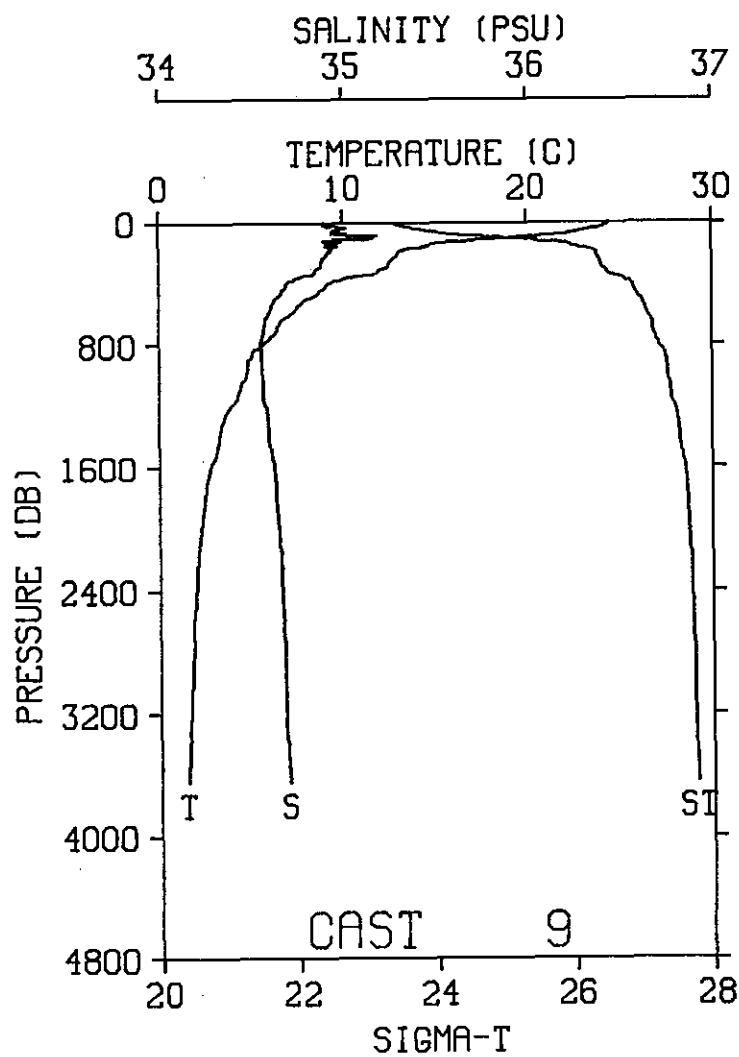
CAST EP4-86-OC-008 DATE 18 NOV 86 TIME 1526 GMT  
 LAT 00 59.8N LONG 110 00.3W WEATHER 1 SEA STATE 3  
 BAROMETER 14 WIND DIR 150 T SPD 11 KT VISIBILITY 8  
 CLOUD 6 AMOUNT 5 DRY 24.7 WET 23.0 DEPTH 3829 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.516	34.781	23.324	0.000
10.	24.517	34.779	23.322	0.045
20.	24.516	34.778	23.321	0.091
30.	24.484	34.782	23.334	0.137
40.	24.291	34.791	23.399	0.182
50.	24.147	34.769	23.425	0.227
60.	22.833	34.730	23.778	0.270
70.	22.435	34.894	24.016	0.310
80.	21.153	34.887	24.368	0.347
90.	19.358	34.919	24.868	0.380
100.	17.296	34.873	25.347	0.410
110.	15.649	34.896	25.748	0.434
120.	14.267	34.916	26.066	0.455
130.	14.061	34.912	26.107	0.474
140.	13.438	34.917	26.240	0.493
150.	13.235	34.912	26.278	0.511
160.	12.950	34.903	26.328	0.528
170.	12.920	34.901	26.333	0.546
180.	12.763	34.893	26.358	0.563
190.	12.734	34.895	26.365	0.580
200.	12.681	34.892	26.374	0.597
250.	12.544	34.884	26.394	0.681
300.	12.082	34.852	26.459	0.765
350.	10.467	34.761	26.685	0.842
400.	8.967	34.677	26.870	0.909
450.	8.384	34.649	26.940	0.969
500.	7.683	34.616	27.019	1.027
550.	7.374	34.602	27.053	1.081
600.	6.911	34.586	27.105	1.134
650.	6.630	34.581	27.140	1.186
700.	6.327	34.570	27.171	1.235
750.	6.049	34.564	27.202	1.284
800.	5.641	34.555	27.246	1.331
850.	5.477	34.552	27.264	1.376
900.	5.378	34.550	27.274	1.421
950.	4.842	34.555	27.340	1.464
997.	4.847	34.559	27.343	1.503

CAST EP4-86-OC-009 DATE 18 NOV 86 TIME 2247 GMT  
LAT 00 00.3N LONG 109 59.6W



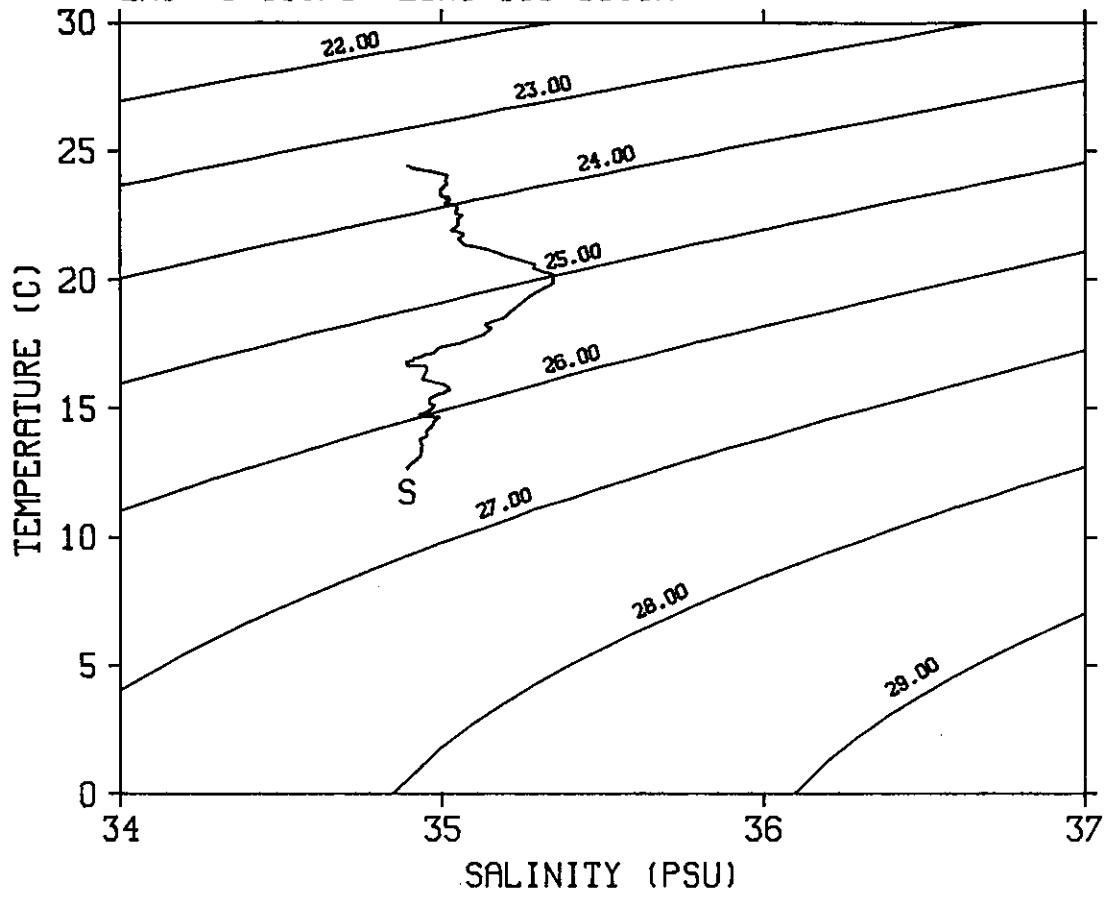
181

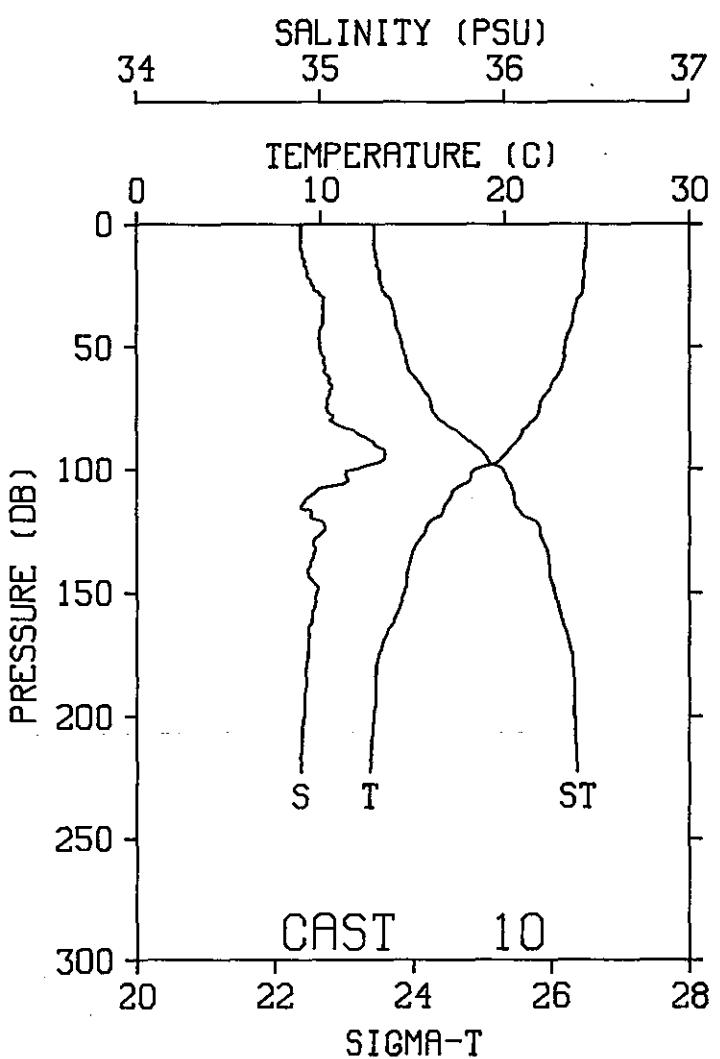


CAST EP4-86-OC-009 DATE 18 NOV 86 TIME 2247 GMT  
 LAT 00 00.3N LONG 109 59.6W WEATHER 1 SEA STATE 3  
 BAROMETER 11 WIND DIR 110 T SPD 12 KT VISIBILITY 8  
 CLOUD 6 AMOUNT 3 DRY 24.9 WET 22.0 DEPTH 3859 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.454	34.899	23.432	0.000
10.	24.448	34.901	23.435	0.044
20.	24.240	34.908	23.503	0.089
30.	24.076	34.986	23.610	0.132
40.	23.672	35.000	23.740	0.174
50.	23.164	34.974	23.868	0.215
60.	22.745	34.945	23.967	0.255
70.	22.380	34.946	24.072	0.295
80.	21.821	34.969	24.246	0.332
90.	20.866	35.172	24.662	0.367
100.	19.317	35.104	25.020	0.399
110.	18.062	35.140	25.365	0.426
120.	17.014	34.904	25.438	0.452
130.	15.808	35.001	25.793	0.476
140.	15.126	34.971	25.923	0.498
150.	14.740	34.921	25.968	0.519
160.	14.488	34.974	26.064	0.539
170.	13.720	34.930	26.193	0.559
180.	13.296	34.934	26.282	0.577
190.	13.096	34.929	26.319	0.594
200.	12.968	34.915	26.334	0.612
250.	12.589	34.887	26.387	0.698
300.	12.221	34.862	26.440	0.782
350.	10.734	34.774	26.648	0.862
400.	9.165	34.691	26.850	0.929
450.	8.688	34.665	26.905	0.992
500.	7.914	34.627	26.994	1.051
550.	7.511	34.610	27.040	1.108
600.	7.128	34.594	27.082	1.162
650.	6.576	34.575	27.142	1.213
700.	6.426	34.570	27.158	1.263
750.	6.013	34.561	27.204	1.312
800.	5.644	34.555	27.245	1.359
850.	5.042	34.556	27.318	1.403
900.	4.794	34.557	27.348	1.445
950.	4.755	34.556	27.351	1.486
1000.	4.708	34.561	27.361	1.527
1500.	3.094	34.609	27.565	1.878
2000.	2.242	34.647	27.669	2.154
2500.	1.902	34.664	27.710	2.399
3000.	1.701	34.678	27.736	2.681
3500.	1.506	34.688	27.760	2.856
3646.	1.437	34.696	27.771	2.918

CAST EP4-86-OC-010 DATE 19 NOV 86 TIME 0123 GMT  
LAT 0 01.7S LONG 109 59.0W

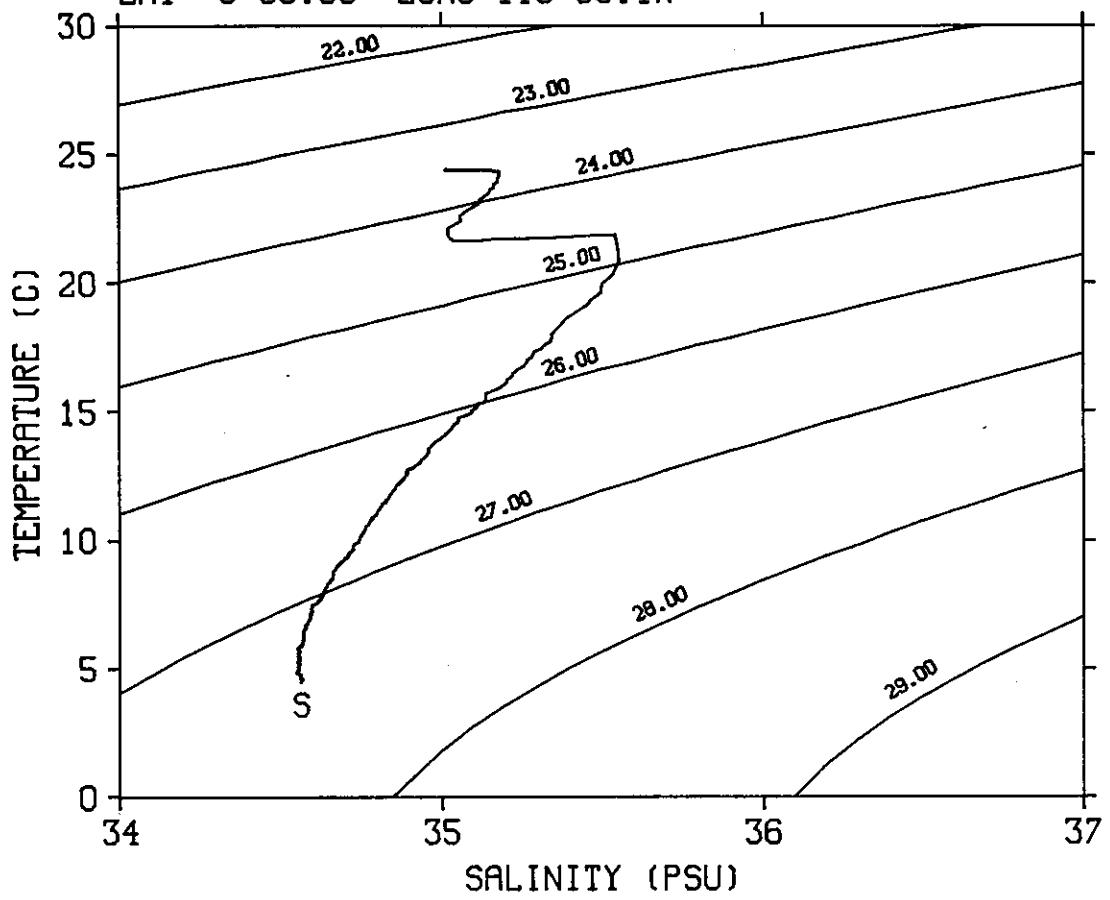




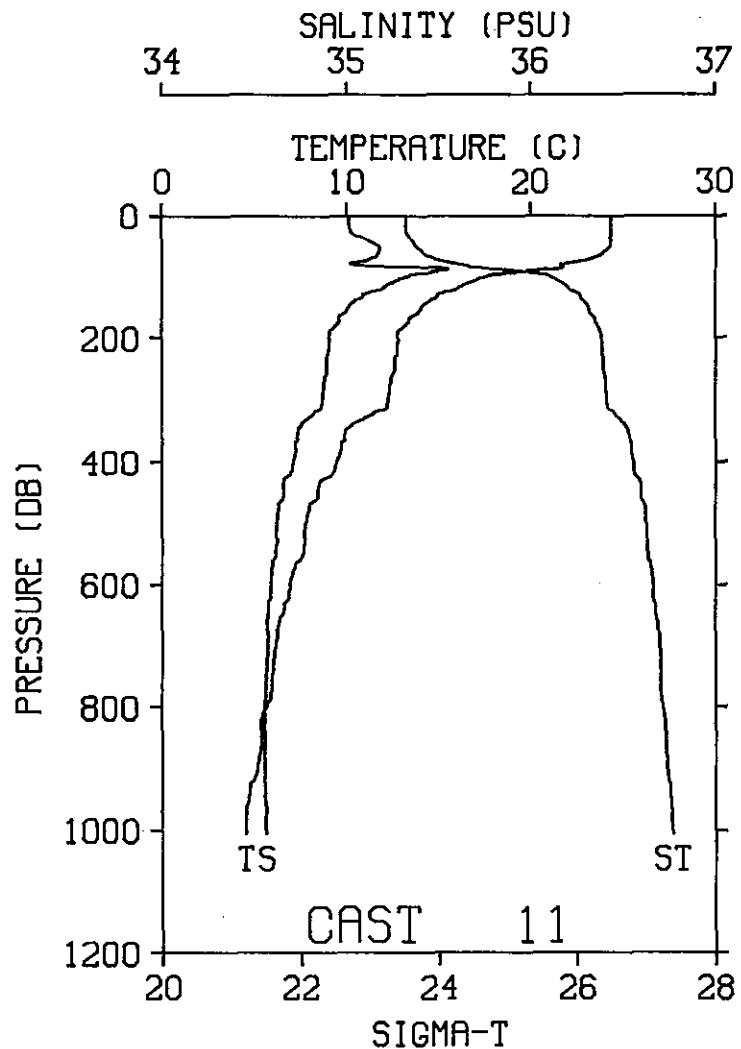
CAST EP4-86-OC-010 DATE 19 NOV 86 TIME 0123 GMT  
 LAT 0 01.7S LONG 109 59.0W WEATHER 1 SEA STATE 2  
 BAROMETER 11 WIND DIR 125 T SPD 12 KT VISIBILITY 8  
 CLOUD 4 AMOUNT 5 DRY 24.0 WET 22.1 DEPTH 3960 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.403	34.894	23.442	0.000
10.	24.400	34.892	23.443	0.044
20.	24.271	34.927	23.507	0.088
30.	24.022	35.018	23.650	0.132
40.	23.651	35.011	23.755	0.174
50.	23.288	34.999	23.851	0.215
60.	22.957	35.012	23.956	0.255
70.	22.069	35.048	24.236	0.293
80.	21.556	35.053	24.383	0.330
90.	20.413	35.288	24.873	0.363
100.	18.482	35.193	25.301	0.392
110.	17.105	34.967	25.465	0.418
120.	16.128	34.939	25.672	0.443
130.	15.221	34.959	25.893	0.465
140.	14.765	34.936	25.974	0.486
150.	14.532	34.980	26.059	0.506
160.	14.008	34.950	26.148	0.526
170.	13.385	34.935	26.265	0.544
180.	13.053	34.925	26.325	0.562
190.	12.956	34.913	26.335	0.579
200.	12.913	34.910	26.341	0.596
223.	12.648	34.890	26.379	0.635

CAST EP4-86-OC-011 DATE 19 NOV 86 TIME 0711 GMT  
LAT 0 59.95 LONG 110 00.1W



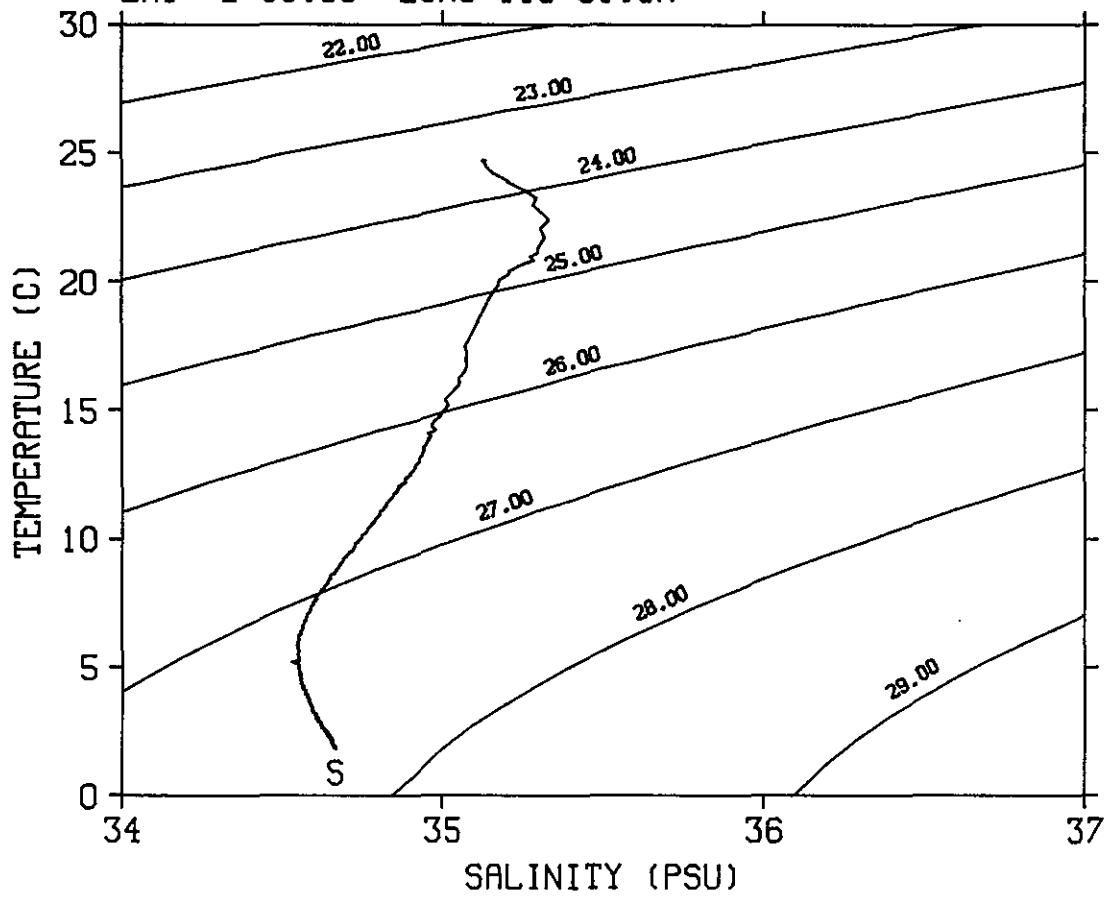
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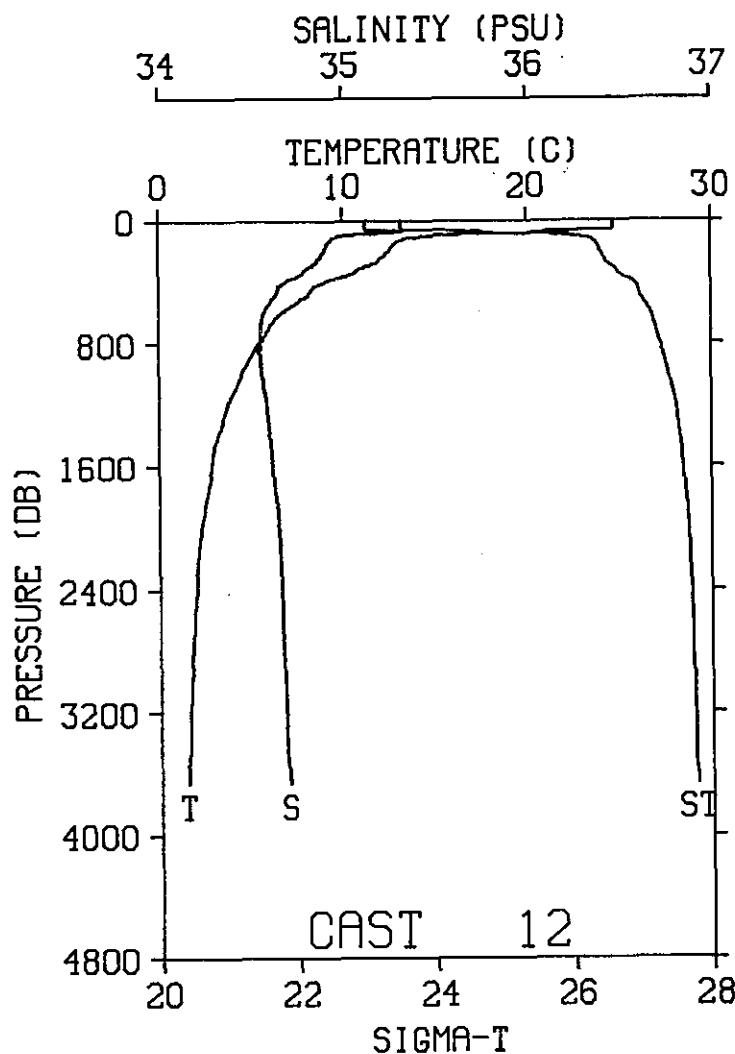


CAST EP4-86-OC-011 DATE 19 NOV 86 TIME 0711 GMT  
 LAT 0 59.9S LONG 110 00.1W WEATHER 1 SEA STATE 4  
 BAROMETER 12 WIND DIR 125 T SPD 10 KT VISIBILITY 7  
 CLOUD 7 AMOUNT 5 DRY 23.6 WET 23.6 DEPTH 3960 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.388	35.015	23.539	0.000
10.	24.395	35.017	23.539	0.043
20.	24.393	35.022	23.542	0.087
30.	24.381	35.044	23.563	0.130
40.	24.354	35.123	23.631	0.173
50.	24.320	35.183	23.687	0.216
60.	23.963	35.177	23.788	0.257
70.	23.290	35.131	23.950	0.298
80.	21.608	35.041	24.360	0.336
90.	19.931	35.501	25.164	0.369
100.	17.534	35.319	25.632	0.394
110.	16.606	35.239	25.791	0.417
120.	15.990	35.192	25.898	0.439
130.	14.931	35.094	26.061	0.460
140.	14.532	35.046	26.110	0.479
150.	14.092	35.011	26.177	0.498
160.	13.902	34.992	26.202	0.517
170.	13.429	34.960	26.275	0.535
180.	13.213	34.943	26.306	0.553
190.	12.831	34.907	26.355	0.570
200.	12.797	34.904	26.360	0.587
250.	12.600	34.890	26.388	0.672
300.	12.279	34.871	26.436	0.755
350.	9.974	34.740	26.754	0.832
400.	9.458	34.707	26.814	0.898
450.	8.465	34.657	26.934	0.960
500.	7.778	34.623	27.011	1.018
550.	7.612	34.617	27.030	1.074
600.	6.928	34.589	27.106	1.127
650.	6.524	34.571	27.146	1.178
700.	6.130	34.569	27.195	1.227
750.	5.944	34.562	27.214	1.274
800.	5.654	34.555	27.244	1.321
850.	5.324	34.556	27.286	1.365
900.	5.137	34.551	27.304	1.409
950.	4.668	34.558	27.363	1.450
1000.	4.509	34.561	27.383	1.490
1007.	4.493	34.562	27.385	1.495

CAST EP4-86-OC-012 DATE 19 NOV 86 TIME 1328 GMT  
LAT 20 00.0S LONG 110 01.3W

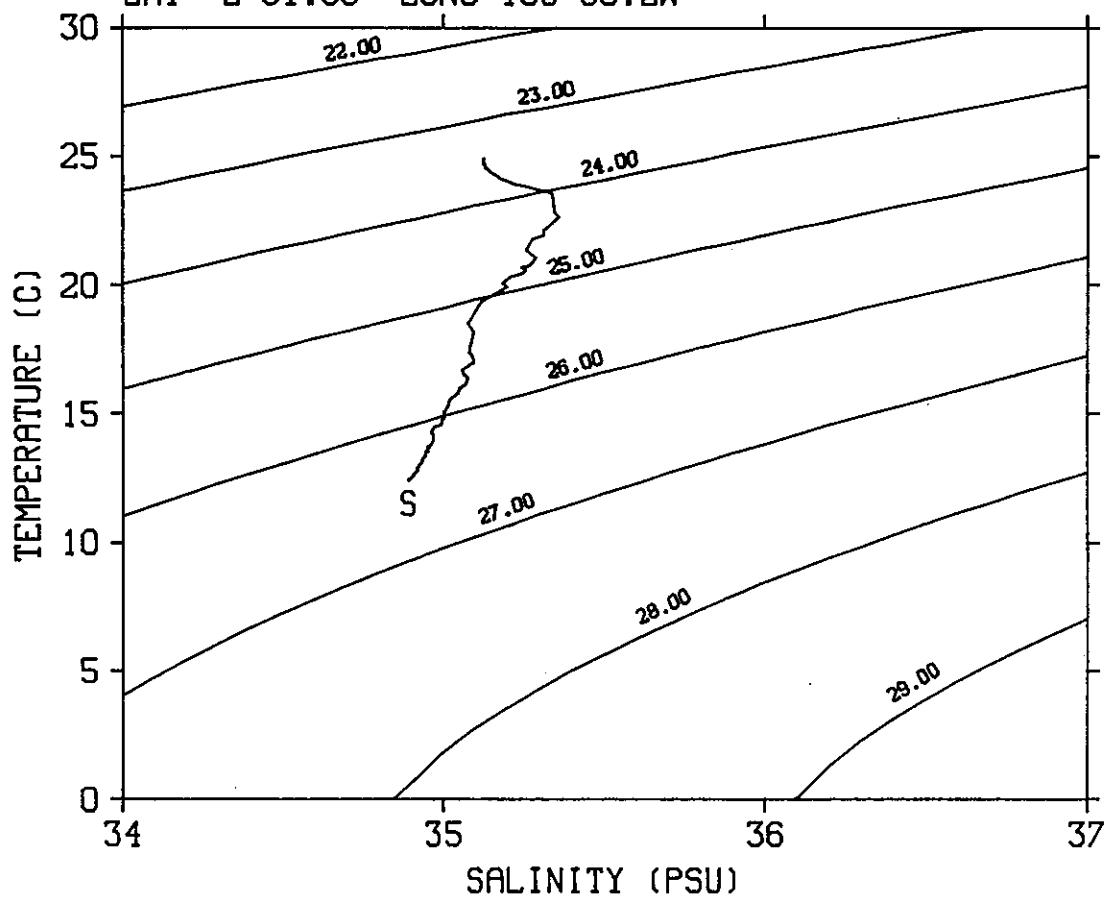




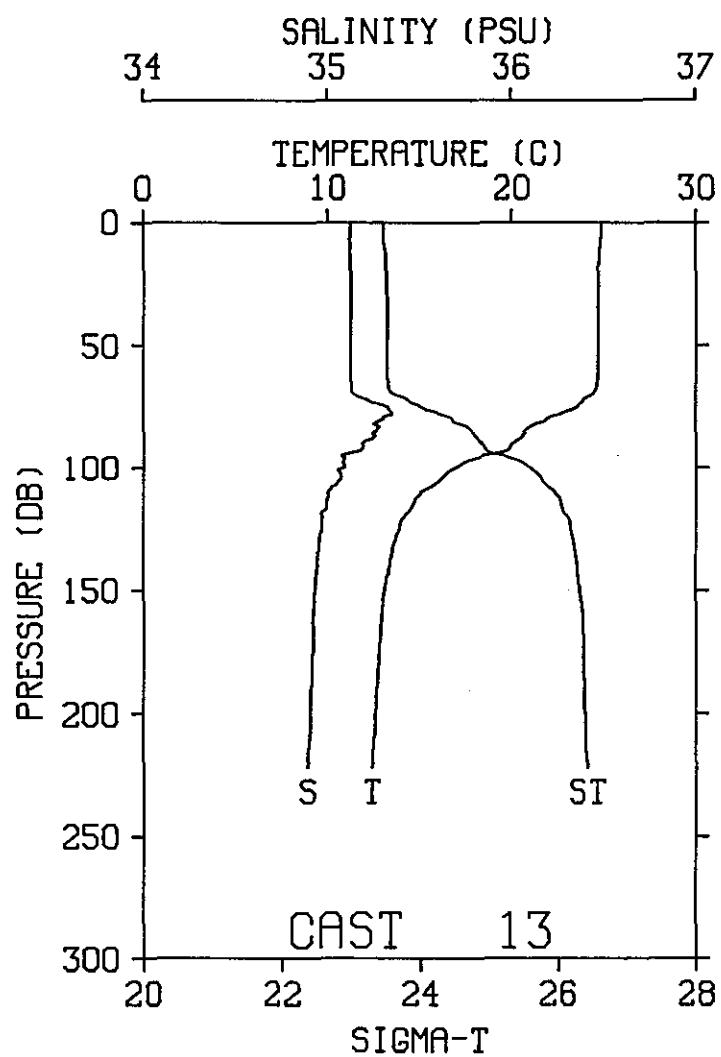
CAST EP4-86-OC-012 DATE 19 NOV 86 TIME 1328 GMT  
 LAT 2 00.0S LONG 110 01.3W WEATHER 1 SEA STATE 4  
 BAROMETER 12 WIND DIR 110 T SPD 12 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 23.5 WET 22.0 DEPTH 3980 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.688	35.135	23.540	0.000
10.	24.700	35.127	23.530	0.044
20.	24.706	35.126	23.527	0.087
30.	24.710	35.126	23.526	0.131
40.	24.710	35.124	23.525	0.174
50.	24.704	35.126	23.528	0.218
60.	24.637	35.129	23.551	0.262
70.	22.395	35.333	24.361	0.302
80.	20.574	35.237	24.791	0.335
90.	16.903	35.071	25.593	0.364
100.	14.942	35.002	25.987	0.386
110.	13.968	34.966	26.168	0.406
120.	13.402	34.944	26.268	0.424
130.	13.199	34.933	26.301	0.441
140.	12.989	34.926	26.339	0.459
150.	12.910	34.925	26.353	0.476
160.	12.802	34.916	26.368	0.493
170.	12.734	34.913	26.379	0.510
180.	12.666	34.911	26.391	0.526
190.	12.608	34.906	26.399	0.543
200.	12.574	34.905	26.404	0.560
250.	12.062	34.872	26.478	0.641
300.	11.286	34.824	26.587	0.720
350.	10.534	34.780	26.688	0.793
400.	9.033	34.686	26.868	0.860
450.	8.302	34.645	26.950	0.920
500.	7.946	34.623	26.986	0.978
550.	7.281	34.592	27.058	1.033
600.	6.620	34.567	27.129	1.086
650.	6.264	34.562	27.173	1.135
700.	5.972	34.555	27.204	1.183
750.	5.734	34.553	27.233	1.230
800.	5.399	34.550	27.272	1.275
850.	5.175	34.547	27.296	1.319
900.	4.914	34.552	27.330	1.361
950.	4.702	34.559	27.360	1.402
1000.	4.488	34.563	27.387	1.442
1500.	2.975	34.614	27.579	1.783
2000.	2.302	34.647	27.664	2.064
2500.	1.925	34.663	27.708	2.312
3000.	1.692	34.675	27.735	2.547
3500.	1.549	34.688	27.757	2.772
3668.	1.467	34.697	27.770	2.845

CAST EP4-86-OC-013 DATE 19 NOV 86 TIME 1830 GMT  
LAT 20 01.6S LONG 109 58.2W



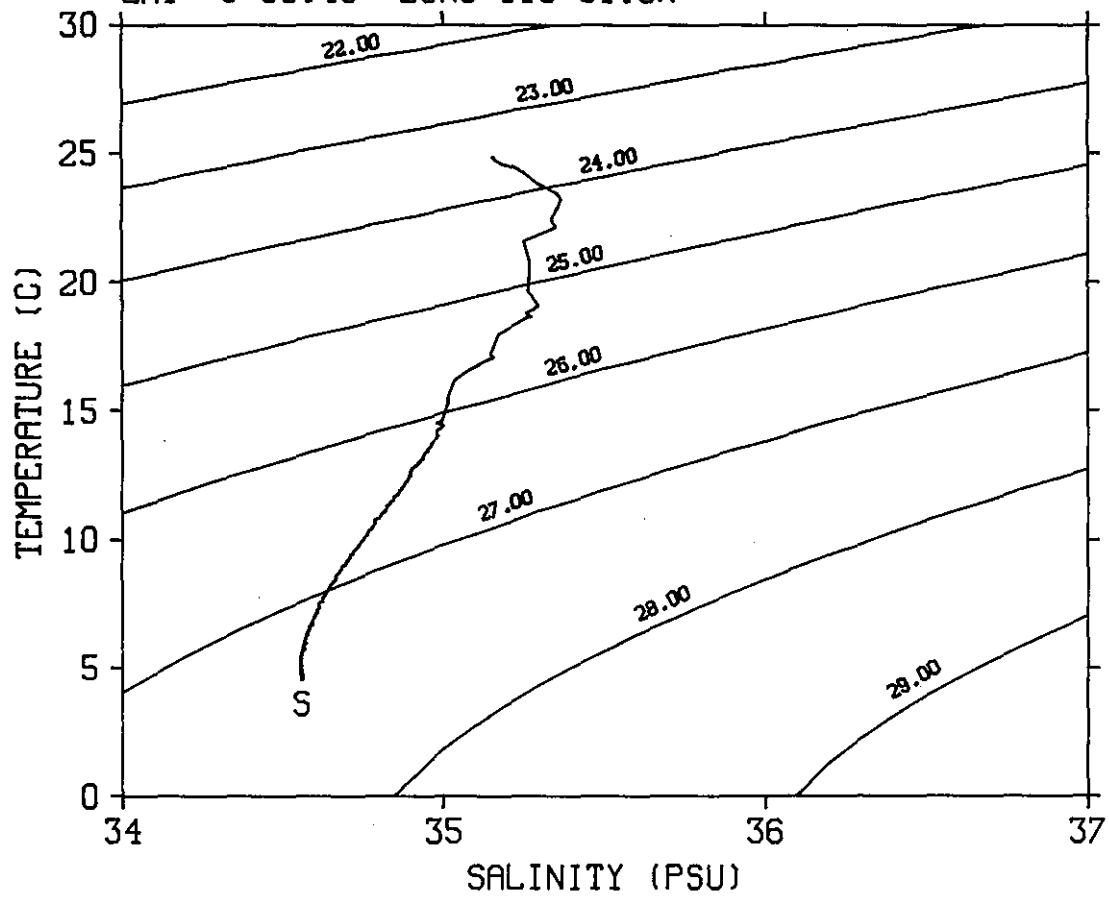
681

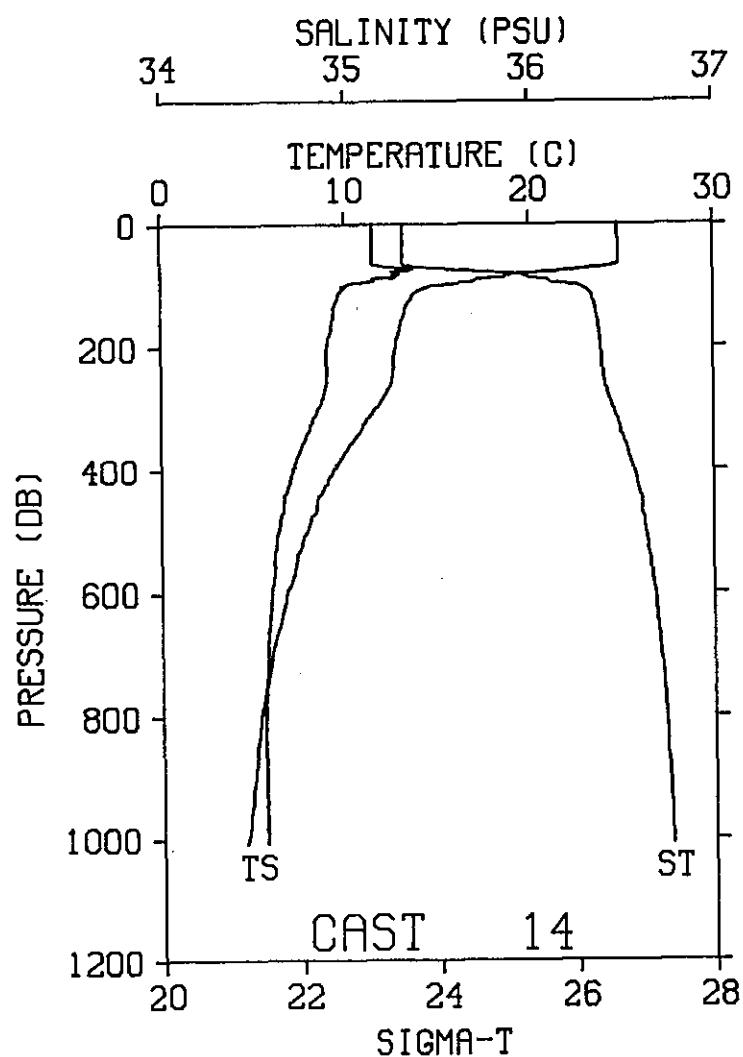


CAST EP4-86-OC-013 DATE 19 NOV 86 TIME 1830 GMT  
 LAT 20 01.6S LONG 109 58.2W WEATHER 2 SEA STATE 4  
 BAROMETER 13 WIND DIR 125 T SPD 10 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 7 DRY 24.8 WET 22.8 DEPTH 3930 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.886	35.126	23.473	0.000
10.	24.801	35.123	23.497	0.044
20.	24.723	35.123	23.520	0.088
30.	24.715	35.123	23.522	0.131
40.	24.710	35.123	23.524	0.175
50.	24.704	35.123	23.526	0.219
60.	24.692	35.125	23.531	0.263
70.	24.340	35.150	23.655	0.306
80.	21.903	35.307	24.480	0.345
90.	20.060	35.183	24.887	0.377
100.	16.959	35.093	25.596	0.405
110.	15.051	35.003	25.964	0.427
120.	14.144	34.971	26.135	0.447
130.	13.636	34.952	26.227	0.466
140.	13.347	34.945	26.280	0.484
150.	13.081	34.931	26.324	0.501
160.	12.887	34.919	26.353	0.518
170.	12.814	34.918	26.367	0.535
180.	12.751	34.916	26.378	0.552
190.	12.662	34.908	26.390	0.569
200.	12.609	34.907	26.399	0.586
222.	12.402	34.890	26.427	0.622

CAST EP4-86-OC-014 DATE 20 NOV 86 TIME 1104 GMT  
LAT 300.4S LONG 11001.3W

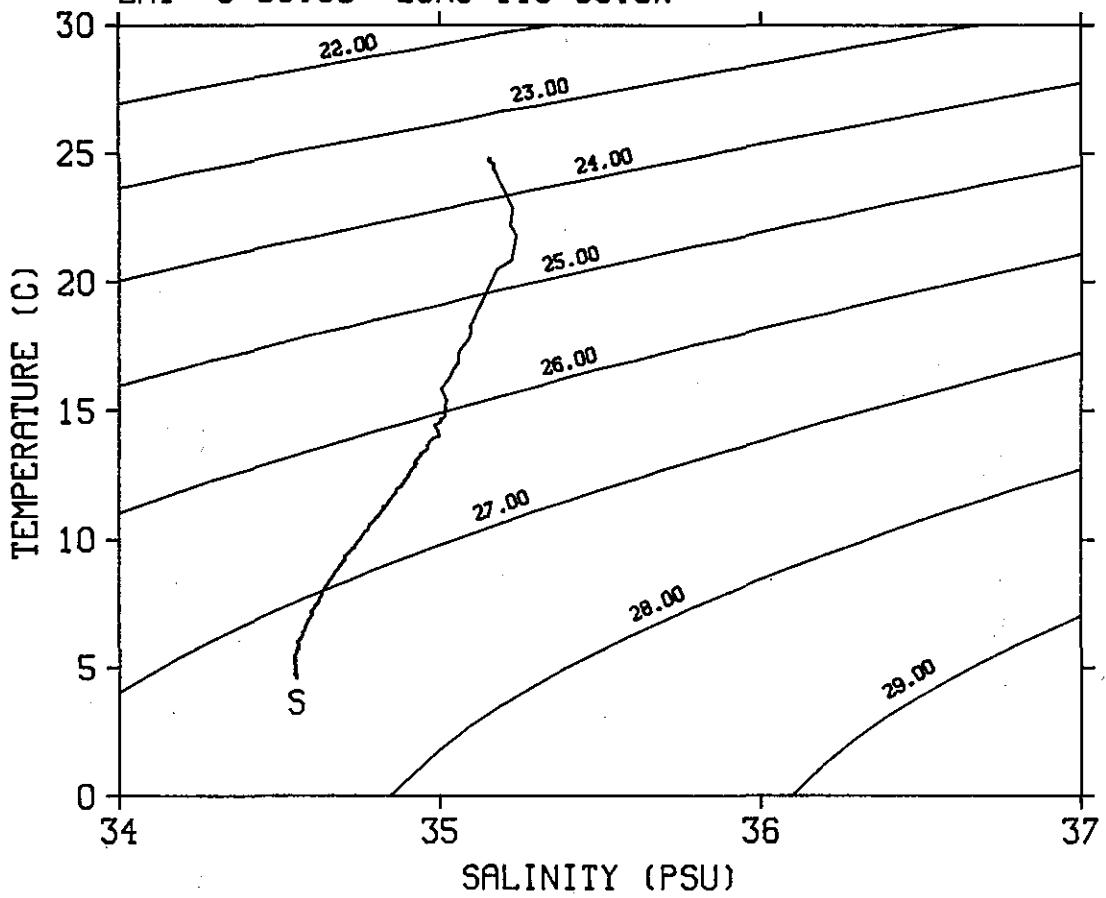




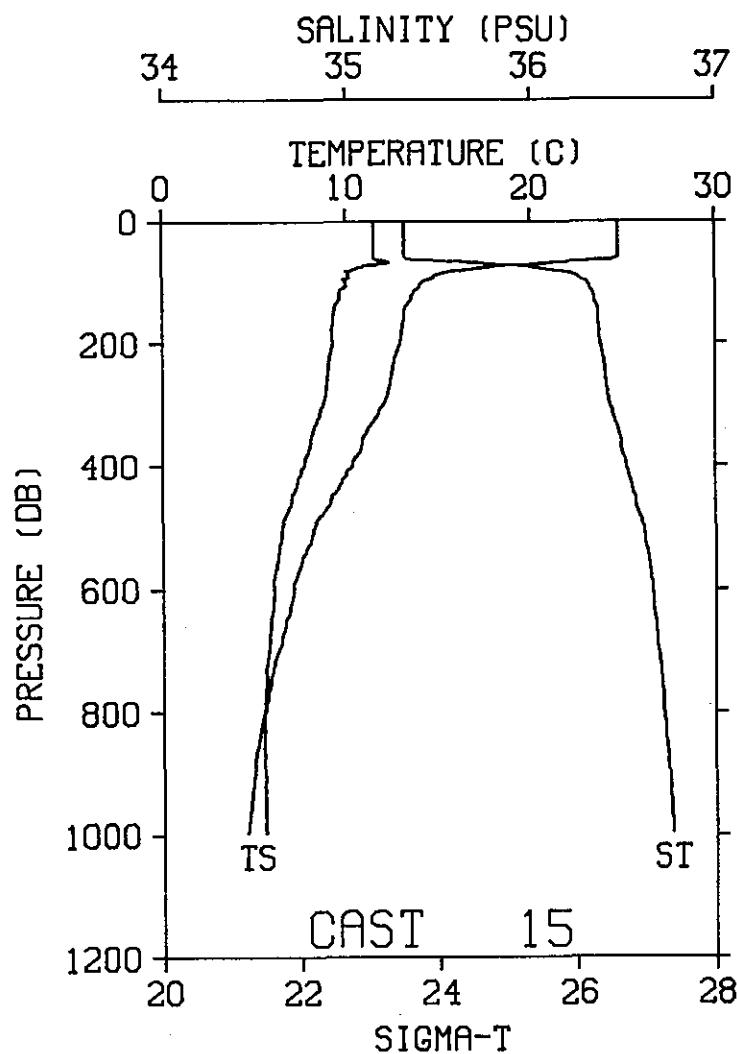
CAST EP4-86-OC-014 DATE 20 NOV 86 TIME 1104 GMT  
 LAT 3 00.4S LONG 110 01.3W WEATHER 2 SEA STATE 2  
 BAROMETER 11 WIND DIR 110 T SPD 12 KT VISIBILITY 8  
 CLOUD 6 AMOUNT 8 DRY 24.0 WET 22.5 DEPTH 3798 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.834	35.153	23.509	0.000
10.	24.837	35.151	23.507	0.044
20.	24.838	35.152	23.507	0.087
30.	24.847	35.150	23.503	0.131
40.	24.847	35.153	23.505	0.175
50.	24.848	35.153	23.505	0.219
60.	24.851	35.150	23.502	0.263
70.	24.290	35.244	23.742	0.307
80.	19.626	35.264	25.063	0.342
90.	17.177	35.145	25.584	0.369
100.	14.696	34.998	26.038	0.392
110.	13.875	34.975	26.195	0.411
120.	13.575	34.958	26.244	0.429
130.	13.361	34.943	26.276	0.447
140.	13.231	34.939	26.299	0.464
150.	13.151	34.935	26.312	0.482
160.	13.045	34.927	26.328	0.499
170.	12.955	34.923	26.343	0.516
180.	12.885	34.918	26.353	0.533
190.	12.767	34.904	26.366	0.551
200.	12.741	34.900	26.368	0.568
250.	12.520	34.895	26.407	0.652
300.	11.660	34.851	26.538	0.733
350.	10.506	34.782	26.695	0.807
400.	9.305	34.710	26.842	0.874
450.	8.418	34.663	26.946	0.936
500.	7.880	34.632	27.003	0.994
550.	7.302	34.612	27.071	1.048
600.	6.712	34.593	27.138	1.101
650.	6.381	34.579	27.171	1.150
700.	5.937	34.569	27.220	1.198
750.	5.635	34.561	27.252	1.244
800.	5.286	34.554	27.288	1.288
850.	5.105	34.553	27.309	1.331
900.	4.944	34.556	27.330	1.373
950.	4.775	34.558	27.350	1.414
1000.	4.559	34.560	27.377	1.454
1008.	4.512	34.559	27.381	1.461

CAST EP4-86-OC-015 DATE 20 NOV 86 TIME 1641 GMT  
LAT 3 59.95 LONG 110 00.0W

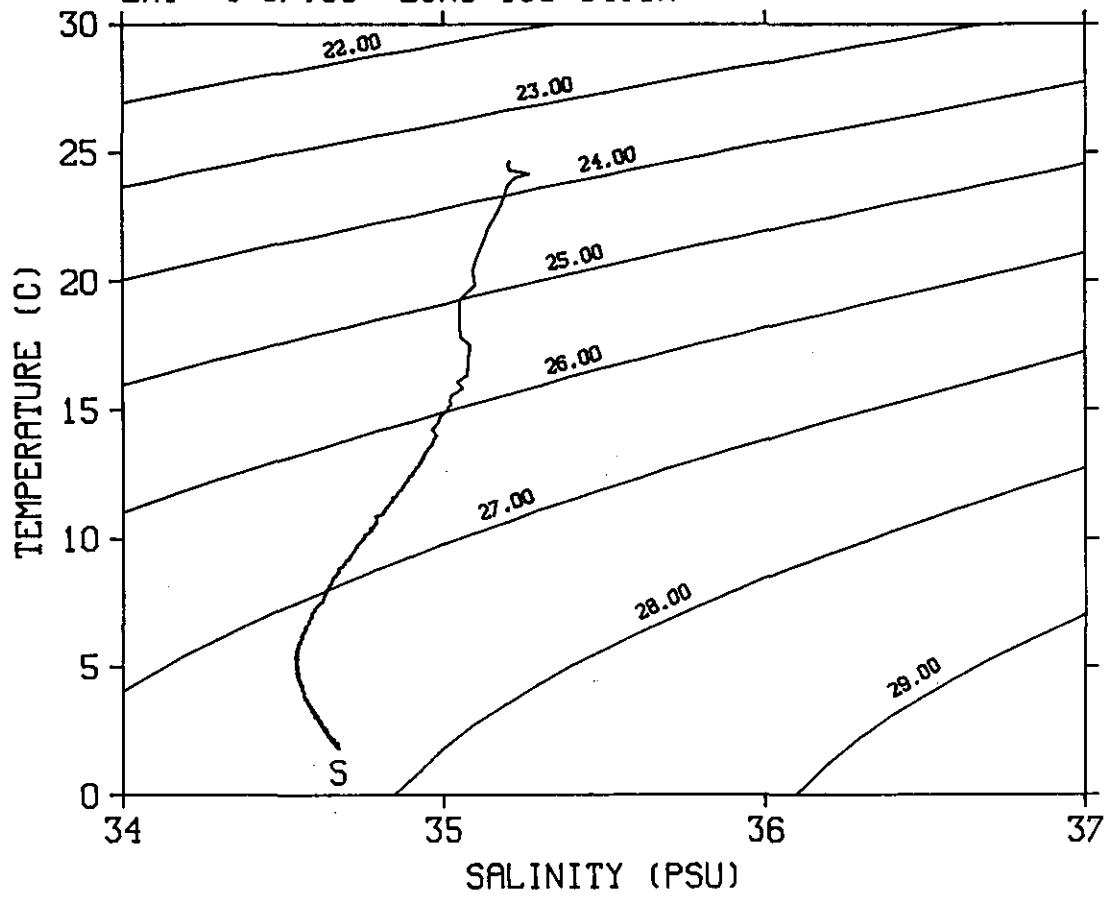


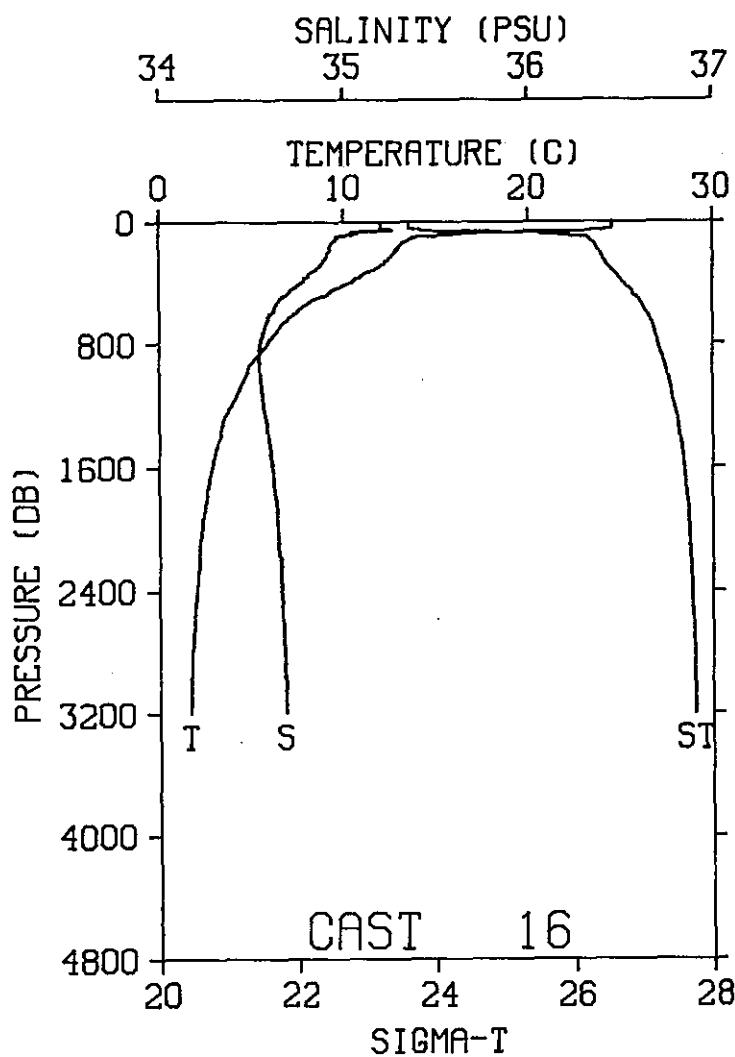
CAST EP4-86-OC-015 DATE 20 NOV 86 TIME 1641 GMT  
 LAT 3 59.9S LONG 110 00.0W WEATHER 1 SEA STATE 3  
 BAROMETER 13 WIND DIR 105 T SPD 13 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 3 DRY 24.9 WET 21.9 DEPTH 3660 M



PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.787	35.156	23.526	0.000
10.	24.784	35.157	23.527	0.044
20.	24.774	35.155	23.529	0.087
30.	24.774	35.157	23.530	0.131
40.	24.775	35.154	23.528	0.174
50.	24.773	35.154	23.528	0.218
60.	24.741	35.159	23.542	0.262
70.	20.486	35.180	24.771	0.300
80.	16.583	35.042	25.646	0.327
90.	14.812	35.018	26.028	0.348
100.	14.101	34.993	26.161	0.367
110.	13.921	34.984	26.192	0.386
120.	13.590	34.961	26.243	0.404
130.	13.493	34.960	26.262	0.422
140.	13.223	34.935	26.298	0.439
150.	13.139	34.932	26.313	0.457
160.	13.110	34.932	26.319	0.474
170.	13.067	34.926	26.323	0.492
180.	13.013	34.924	26.332	0.509
190.	12.994	34.923	26.335	0.526
200.	12.947	34.930	26.350	0.543
250.	12.485	34.901	26.419	0.628
300.	12.034	34.877	26.488	0.710
350.	11.032	34.814	26.625	0.787
400.	10.334	34.774	26.718	0.859
450.	9.235	34.708	26.852	0.926
500.	8.227	34.651	26.966	0.987
550.	7.607	34.626	27.038	1.044
600.	7.115	34.606	27.092	1.098
650.	6.669	34.586	27.138	1.150
700.	6.281	34.576	27.181	1.200
750.	5.879	34.563	27.223	1.247
800.	5.555	34.551	27.254	1.293
850.	5.179	34.550	27.298	1.337
900.	4.920	34.550	27.328	1.380
950.	4.747	34.553	27.350	1.421
997.	4.553	34.555	27.373	1.459

CAST EP4-86-OC-016 DATE 21 NOV 86 TIME 1131 GMT  
LAT 4 57.8S LONG 109 54.0W

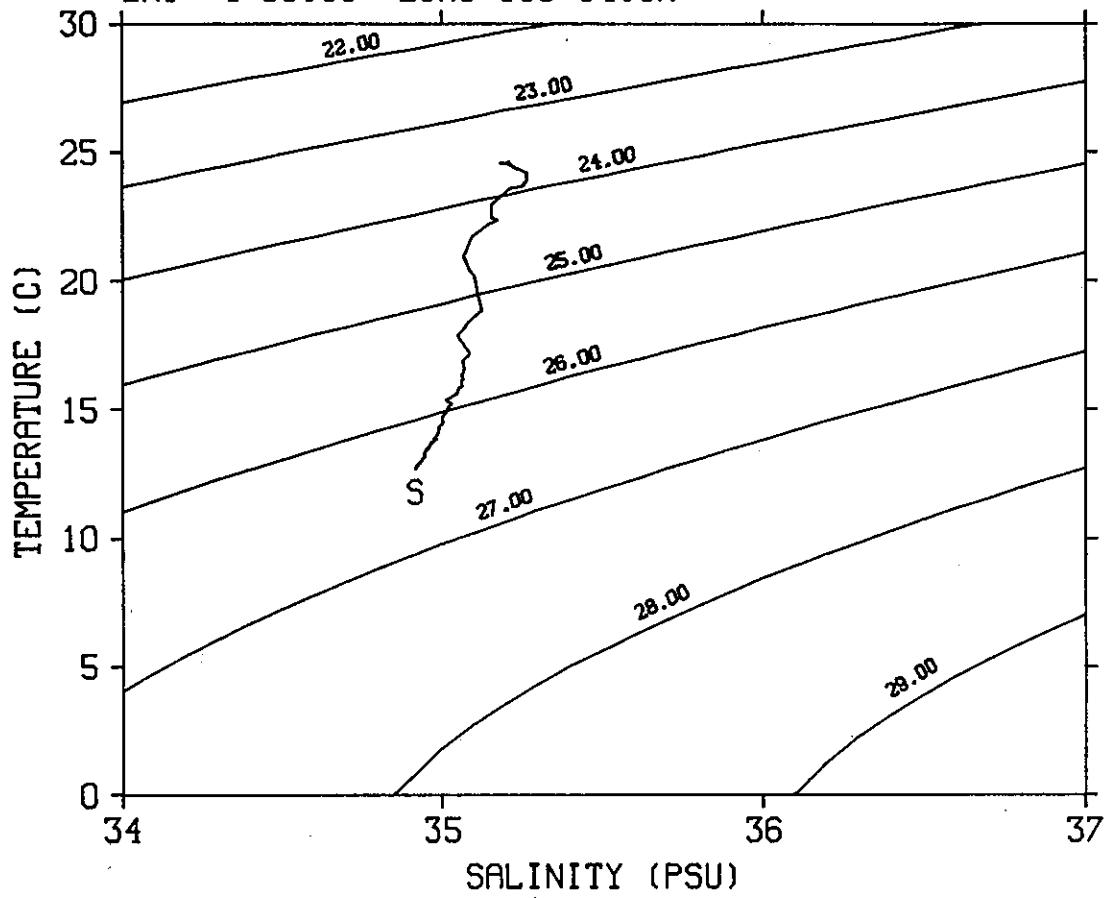




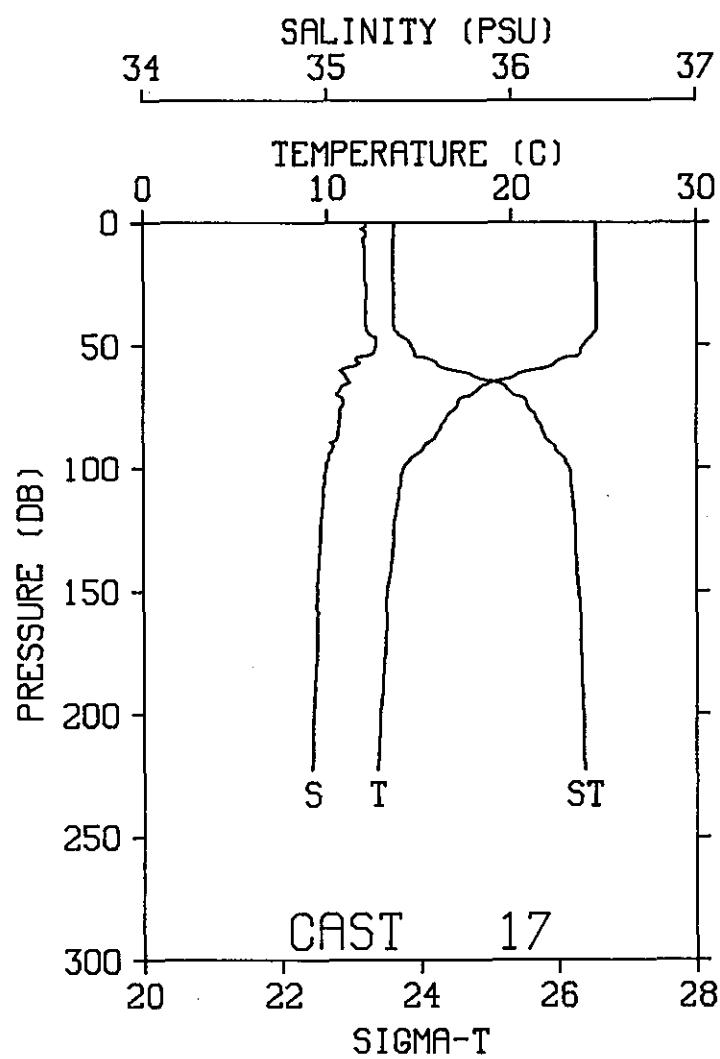
CAST EP4-86-OC-016 DATE 21 NOV 86 TIME 1131 GMT  
 LAT 45 57.8S LONG 109 54.0W WEATHER 0 SEA STATE 4  
 BAROMETER 11 WIND DIR 120 T SPD 18 KT VISIBILITY 8  
 CLOUD 3 AMOUNT 1 DRY 23.5 WET 21.0 DEPTH 3390 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.604	35.207	23.620	0.000
10.	24.610	35.209	23.619	0.043
20.	24.609	35.207	23.618	0.085
30.	24.607	35.207	23.618	0.128
40.	24.602	35.207	23.620	0.171
50.	24.372	35.208	23.690	0.214
60.	23.225	35.188	24.013	0.254
70.	18.525	35.050	25.181	0.289
80.	16.997	35.077	25.575	0.314
90.	15.545	35.025	25.871	0.336
100.	13.982	34.977	26.174	0.356
110.	13.721	34.965	26.219	0.374
120.	13.611	34.960	26.238	0.393
130.	13.488	34.952	26.257	0.410
140.	13.305	34.941	26.286	0.428
150.	13.182	34.937	26.308	0.446
160.	13.089	34.935	26.326	0.463
170.	12.990	34.930	26.341	0.480
180.	12.931	34.926	26.350	0.497
190.	12.867	34.922	26.360	0.515
200.	12.763	34.917	26.376	0.531
250.	12.404	34.896	26.431	0.615
300.	11.843	34.864	26.514	0.696
350.	10.983	34.812	26.633	0.772
400.	10.346	34.764	26.708	0.845
450.	9.352	34.712	26.836	0.912
500.	8.523	34.660	26.928	0.975
550.	7.854	34.631	27.006	1.034
600.	7.245	34.596	27.067	1.089
650.	6.873	34.582	27.107	1.142
700.	6.478	34.568	27.149	1.193
750.	6.138	34.561	27.188	1.242
800.	5.849	34.551	27.217	1.290
850.	5.519	34.544	27.253	1.337
900.	5.163	34.544	27.295	1.381
950.	4.841	34.547	27.334	1.424
1000.	4.723	34.544	27.346	1.466
1500.	3.045	34.603	27.564	1.819
2000.	2.296	34.641	27.660	2.101
2500.	1.938	34.666	27.709	2.351
3000.	1.667	34.682	27.743	2.584
3200.	1.644	34.682	27.744	2.674

CAST EP4-86-OC-017 DATE 21 NOV 86 TIME 1353 GMT  
LAT 4 59.9S LONG 109 54.5W



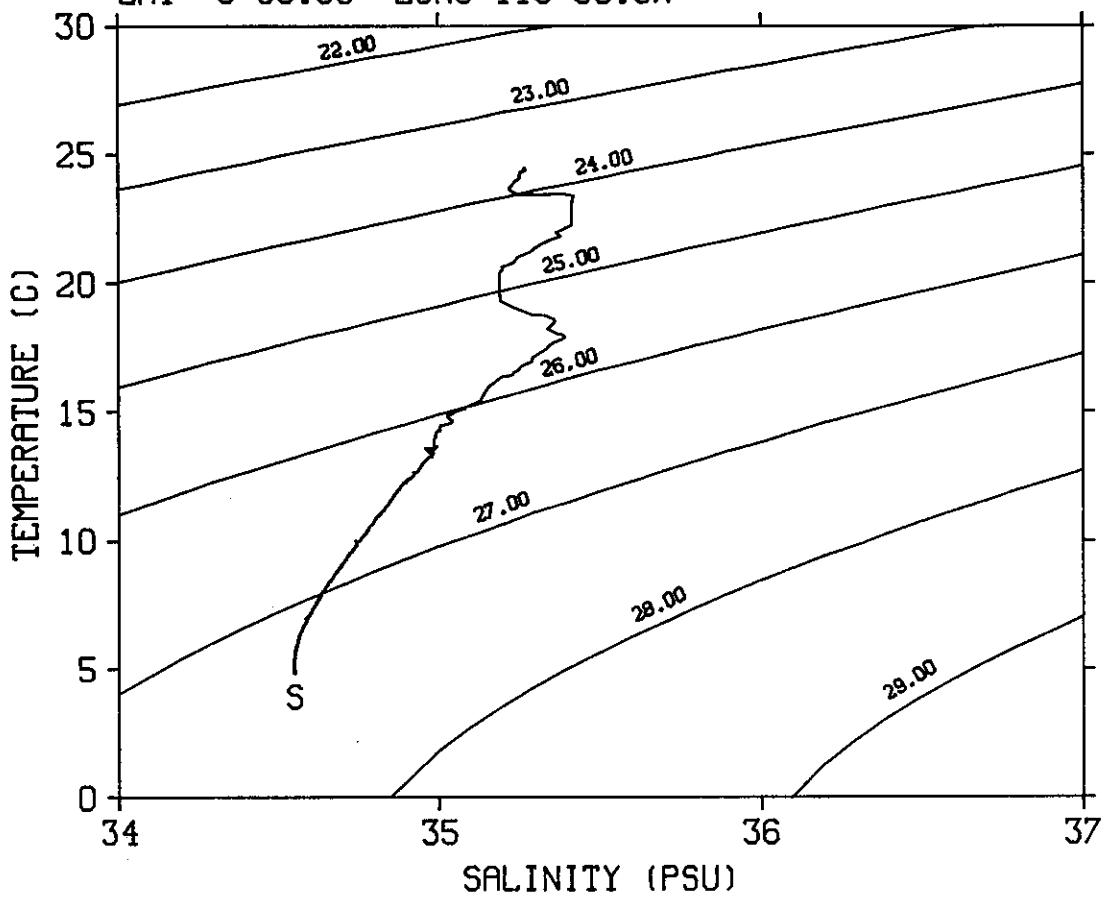
161

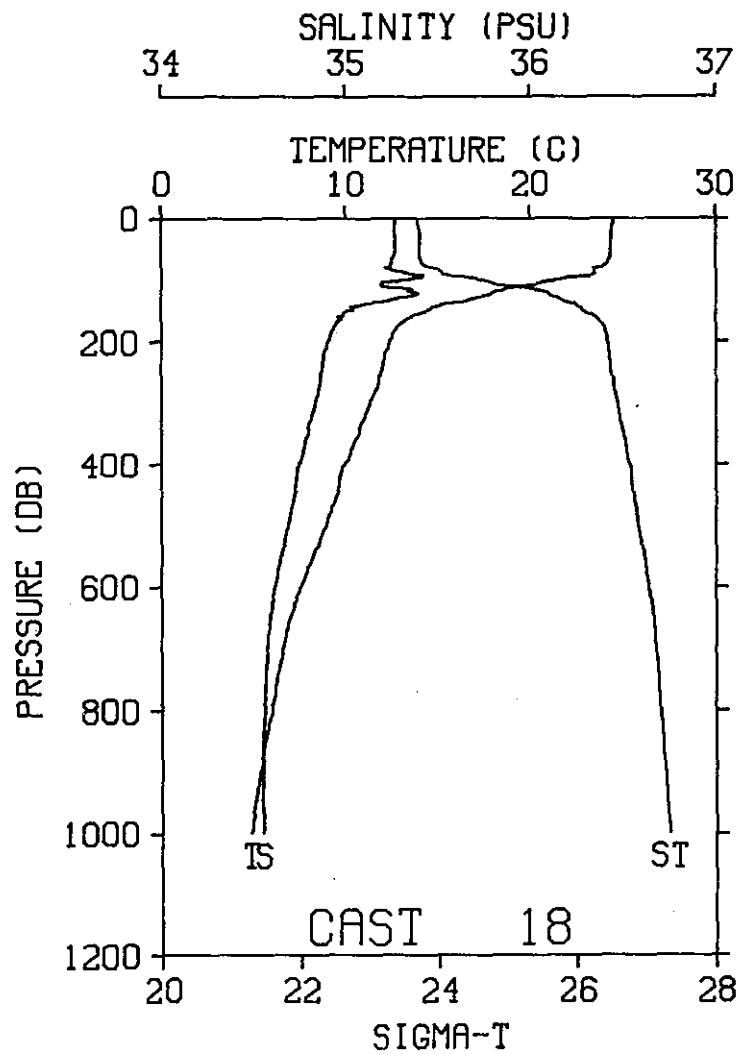


CAST EP4-86-OC-017 DATE 21 NOV 86 TIME 1353 GMT  
 LAT 4 59.9S LONG 109 54.5W WEATHER 2 SEA STATE 3  
 BAROMETER 14 WIND DIR 130 T SPD 14 KT VISIBILITY 7  
 CLOUD 7 AMOUNT 8 DRY 24.0 WET 21.2 DEPTH 3519 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.572	35.208	23.630	0.000
10.	24.582	35.208	23.626	0.043
20.	24.585	35.207	23.625	0.085
30.	24.588	35.208	23.625	0.128
40.	24.585	35.207	23.625	0.171
50.	23.836	35.264	23.891	0.213
60.	20.946	35.067	24.561	0.251
70.	17.800	35.048	25.359	0.280
80.	16.416	35.069	25.706	0.304
90.	15.336	35.010	25.906	0.326
100.	14.112	34.990	26.156	0.346
110.	13.840	34.975	26.202	0.364
120.	13.662	34.965	26.231	0.383
130.	13.548	34.959	26.250	0.401
140.	13.449	34.950	26.264	0.419
150.	13.235	34.945	26.304	0.436
160.	13.158	34.943	26.317	0.454
170.	13.130	34.940	26.321	0.471
180.	13.039	34.935	26.335	0.488
190.	12.957	34.931	26.348	0.506
200.	12.852	34.924	26.364	0.523
223.	12.698	34.914	26.387	0.562

CAST EP4-86-OC-018 DATE 21 NOV 86 TIME 2001 GMT  
LAT 6 00.0S LONG 110 00.0W

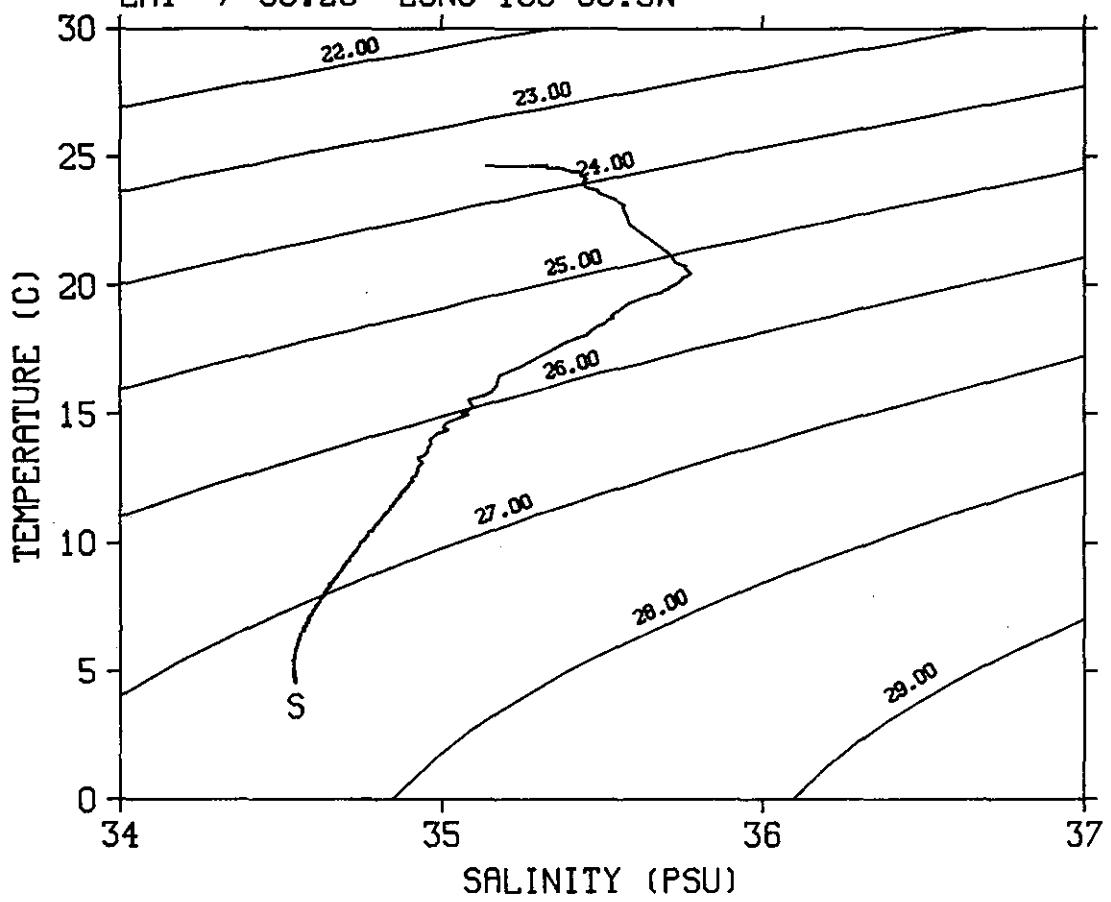




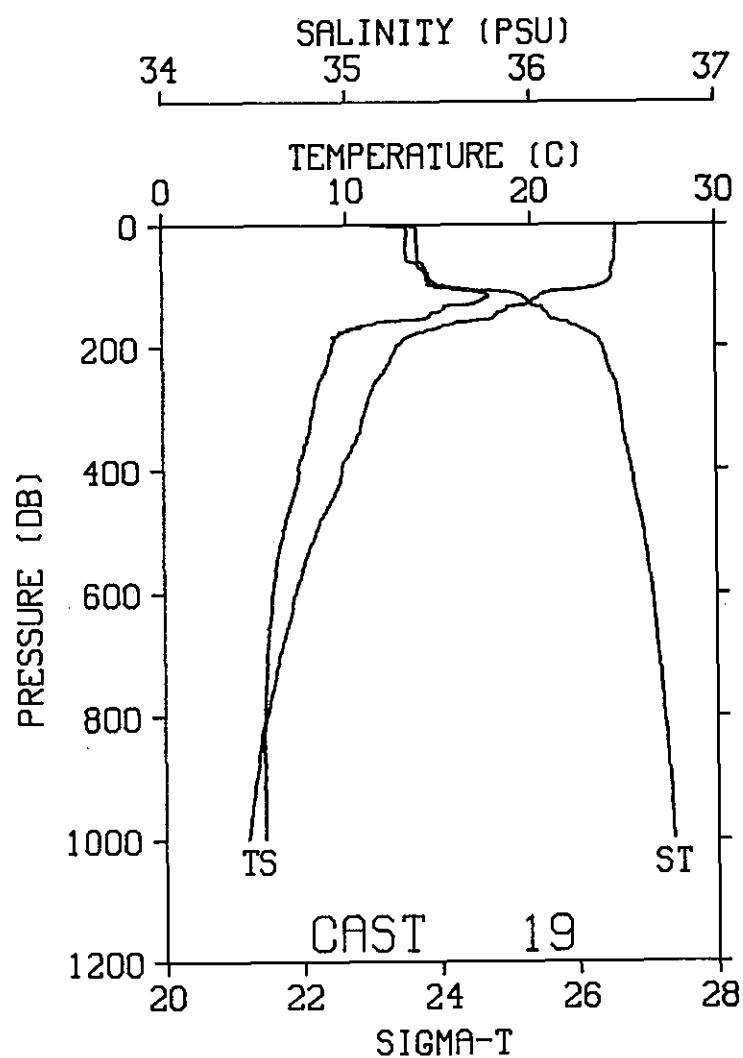
CAST EP4-86-OC-018 DATE 21 NOV 86 TIME 2001 GMT  
 LAT 6 00.0S LONG 110 00.0W WEATHER 1 SEA STATE 4  
 BAROMETER 13 WIND DIR 110 T SPD 14 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 1 DRY 25.0 WET 21.2 DEPTH 3480 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.467	35.267	23.706	0.000
10.	24.460	35.263	23.705	0.042
20.	24.380	35.263	23.729	0.084
30.	24.372	35.268	23.735	0.125
40.	24.365	35.269	23.738	0.167
50.	24.364	35.270	23.739	0.209
60.	24.337	35.263	23.742	0.250
70.	24.217	35.252	23.769	0.292
80.	23.656	35.219	23.910	0.333
90.	23.459	35.353	24.070	0.372
100.	21.341	35.296	24.628	0.408
110.	19.285	35.191	25.095	0.440
120.	17.973	35.384	25.574	0.466
130.	16.817	35.269	25.765	0.489
140.	15.134	35.080	26.005	0.511
150.	14.438	35.003	26.097	0.531
160.	13.584	34.957	26.241	0.549
170.	12.989	34.947	26.355	0.567
180.	12.669	34.933	26.407	0.584
190.	12.484	34.916	26.430	0.600
200.	12.358	34.902	26.444	0.616
250.	11.916	34.867	26.503	0.696
300.	11.314	34.835	26.590	0.774
350.	10.668	34.790	26.672	0.847
400.	9.898	34.745	26.770	0.917
450.	9.464	34.717	26.821	0.983
500.	8.902	34.686	26.888	1.047
550.	8.164	34.643	26.969	1.107
600.	7.526	34.613	27.040	1.164
650.	6.927	34.585	27.102	1.218
700.	6.548	34.570	27.142	1.270
750.	6.216	34.562	27.179	1.320
800.	5.933	34.554	27.209	1.368
850.	5.563	34.547	27.249	1.415
900.	5.284	34.544	27.281	1.460
950.	5.030	34.545	27.311	1.504
998.	4.828	34.549	27.337	1.545

CAST EP4-86-OC-019 DATE 22 NOV 86 TIME 0153 GMT  
LAT 7 00.2S LONG 109 59.5W



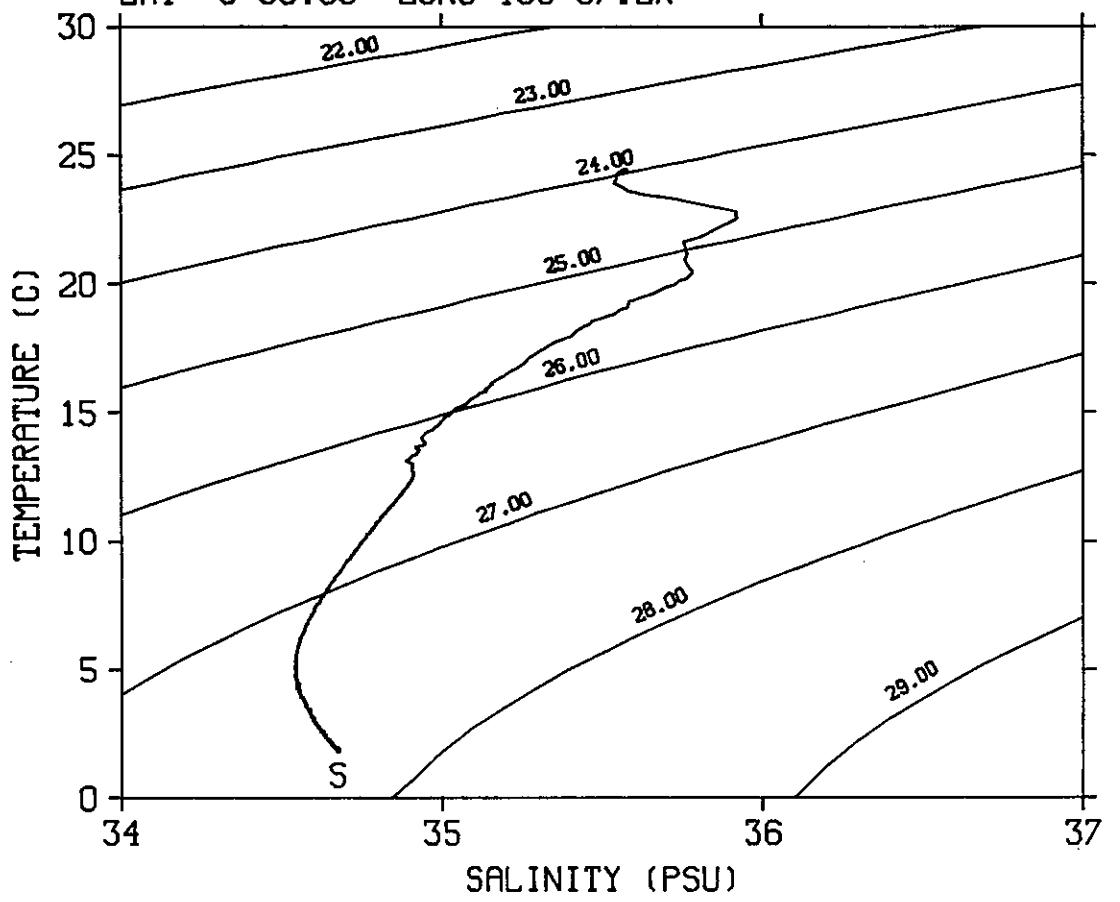
201

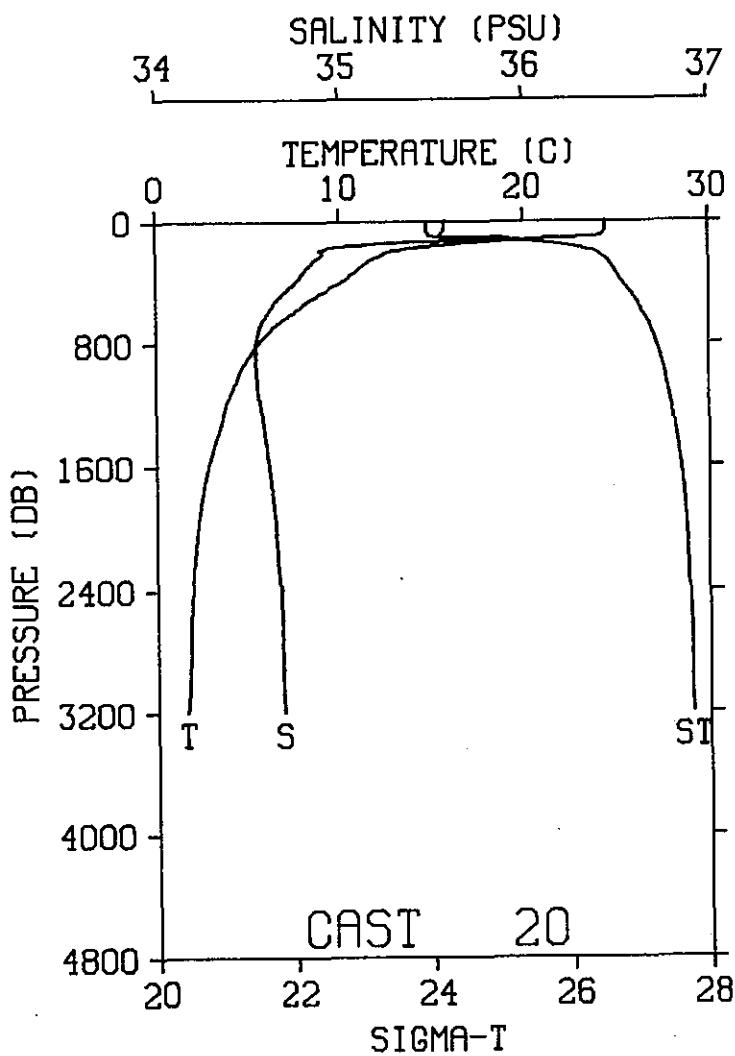


CAST EP4-86-OC-019 DATE 22 NOV 86 TIME 0153 GMT  
 LAT 7 00.2S LONG 109 59.5W WEATHER 1 SEA STATE 4  
 BAROMETER 11 WIND DIR 110 T SPD 14 KT VISIBILITY 8  
 CLOUD 2 AMOUNT 8 DRY 24.0 WET 21.0 DEPTH 3558 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.672	35.140	23.548	0.000
10.	24.676	35.331	23.692	0.042
20.	24.671	35.331	23.693	0.084
30.	24.638	35.328	23.701	0.126
40.	24.597	35.329	23.714	0.168
50.	24.592	35.331	23.717	0.210
60.	24.569	35.346	23.735	0.252
70.	24.435	35.407	23.822	0.293
80.	24.397	35.434	23.854	0.334
90.	24.287	35.439	23.890	0.375
100.	23.726	35.482	24.089	0.414
110.	21.135	35.714	25.002	0.450
120.	20.271	35.751	25.264	0.478
130.	19.735	35.685	25.356	0.505
140.	18.609	35.517	25.517	0.530
150.	18.089	35.454	25.599	0.555
160.	16.068	35.169	25.863	0.578
170.	14.904	35.073	26.050	0.599
180.	13.695	34.956	26.218	0.618
190.	13.075	34.937	26.330	0.636
200.	12.736	34.920	26.384	0.653
250.	11.769	34.864	26.528	0.734
300.	11.054	34.819	26.625	0.810
350.	10.535	34.787	26.693	0.882
400.	9.737	34.738	26.792	0.950
450.	9.118	34.695	26.861	1.016
500.	8.300	34.652	26.956	1.077
550.	7.715	34.618	27.016	1.134
600.	7.150	34.592	27.076	1.189
650.	6.800	34.577	27.113	1.241
700.	6.319	34.561	27.164	1.292
750.	5.944	34.551	27.205	1.340
800.	5.552	34.544	27.249	1.387
850.	5.218	34.542	27.287	1.431
900.	4.968	34.545	27.318	1.474
950.	4.746	34.545	27.344	1.516
998.	4.544	34.547	27.368	1.555

CAST EP4-86-OC-020 DATE 22 NOV 86 TIME 0855 GMT  
LAT 8 00.0S LONG 109 57.2W

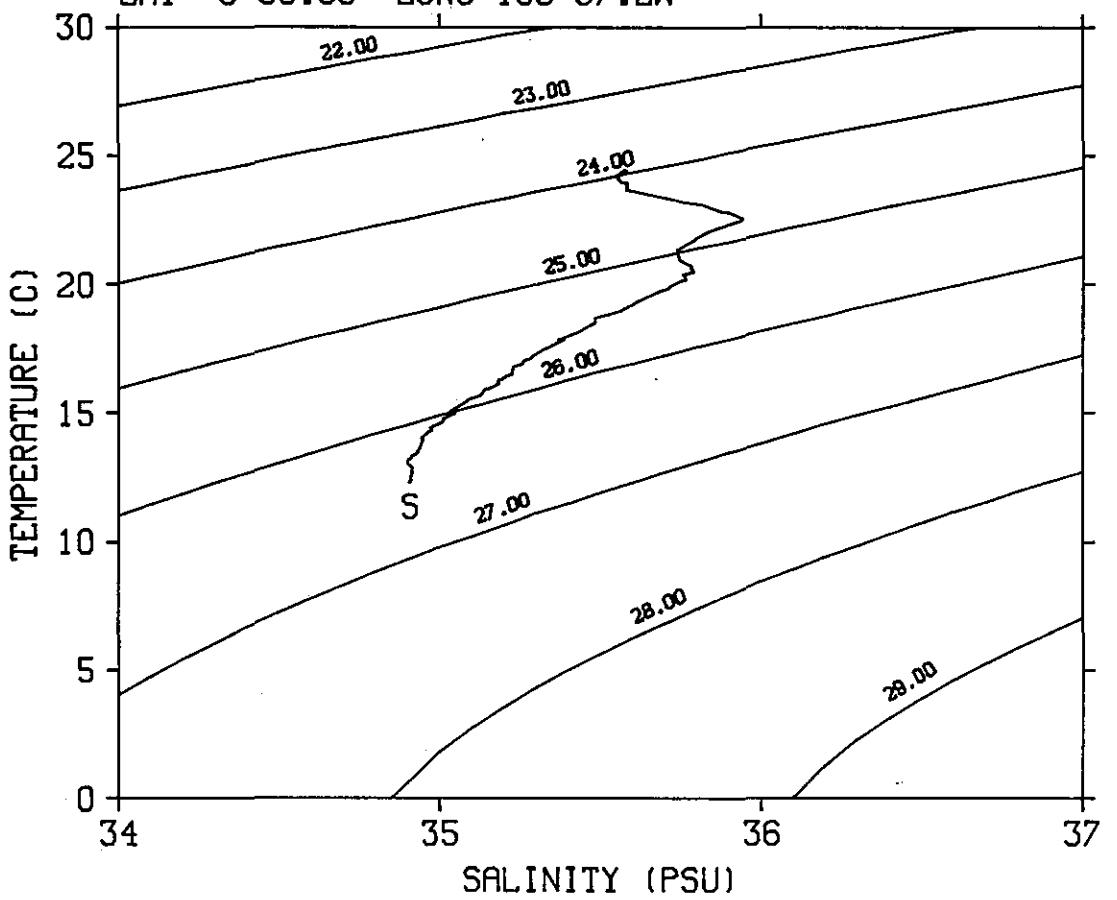


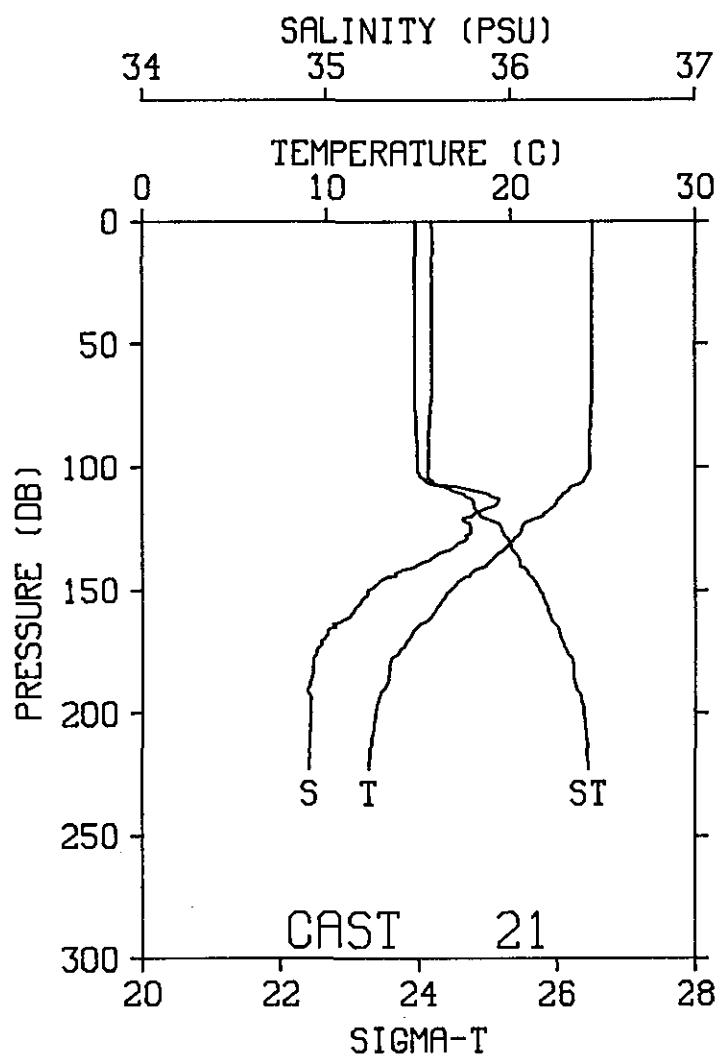


CAST EP4-86-OC-020 DATE 22 NOV 86 TIME 0855 GMT  
 LAT 8 00.0S LONG 109 57.2W WEATHER 1 SEA STATE 4  
 BAROMETER 13 WIND DIR 120 T SPD 20 KT VISIBILITY 8  
 CLOUD 3 AMOUNT 5 DRY 23.3 WET 22.0 DEPTH 3510 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.445	35.581	23.950	0.000
10.	24.454	35.573	23.941	0.040
20.	24.456	35.572	23.940	0.079
30.	24.457	35.574	23.942	0.119
40.	24.460	35.572	23.939	0.159
50.	24.444	35.571	23.943	0.198
60.	24.441	35.572	23.944	0.238
70.	24.425	35.569	23.947	0.278
80.	24.319	35.559	23.971	0.318
90.	24.280	35.554	23.979	0.357
100.	23.913	35.540	24.078	0.396
110.	22.500	35.925	24.780	0.432
120.	20.400	35.784	25.255	0.462
130.	19.073	35.582	25.448	0.489
140.	17.700	35.357	25.620	0.514
150.	16.044	35.158	25.860	0.536
160.	15.440	35.083	25.939	0.558
170.	14.405	34.979	26.085	0.578
180.	13.631	34.915	26.199	0.597
190.	13.101	34.887	26.286	0.615
200.	12.677	34.913	26.391	0.632
250.	11.773	34.869	26.531	0.713
300.	11.160	34.829	26.613	0.789
350.	10.609	34.792	26.684	0.861
400.	10.075	34.757	26.750	0.931
450.	9.352	34.714	26.837	0.998
500.	8.538	34.665	26.929	1.060
550.	7.952	34.634	26.994	1.119
600.	7.424	34.608	27.050	1.175
650.	6.803	34.582	27.117	1.228
700.	6.312	34.563	27.167	1.279
750.	5.944	34.555	27.208	1.327
800.	5.561	34.545	27.248	1.374
850.	5.266	34.545	27.284	1.418
900.	4.994	34.545	27.316	1.461
950.	4.687	34.545	27.350	1.503
1000.	4.499	34.550	27.375	1.543
1500.	3.062	34.602	27.561	1.894
2000.	2.234	34.645	27.669	2.173
2500.	1.861	34.672	27.720	2.416
3000.	1.738	34.686	27.740	2.647
3198.	1.633	34.689	27.751	2.736

CAST EP4-86-OC-021 DATE 22 NOV 86 TIME 1114 GMT  
LAT 8 00.0S LONG 109 57.2W

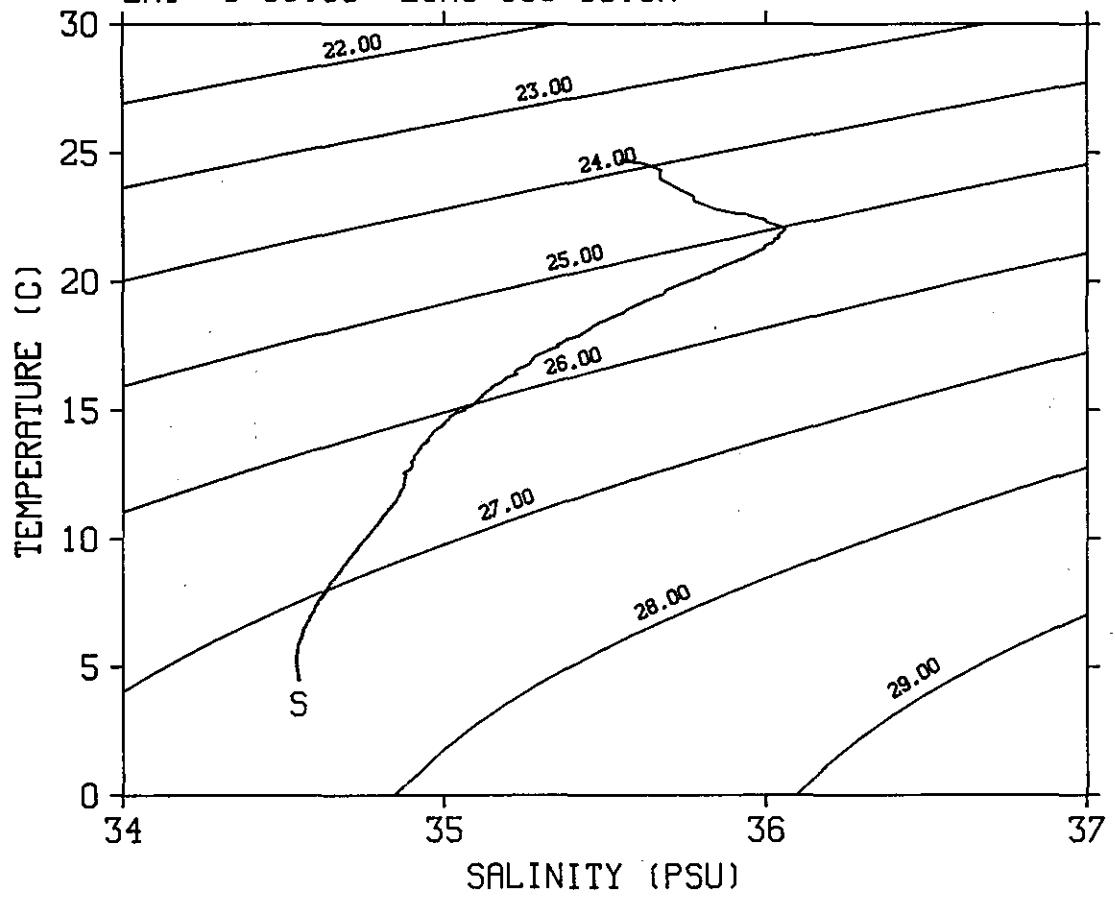


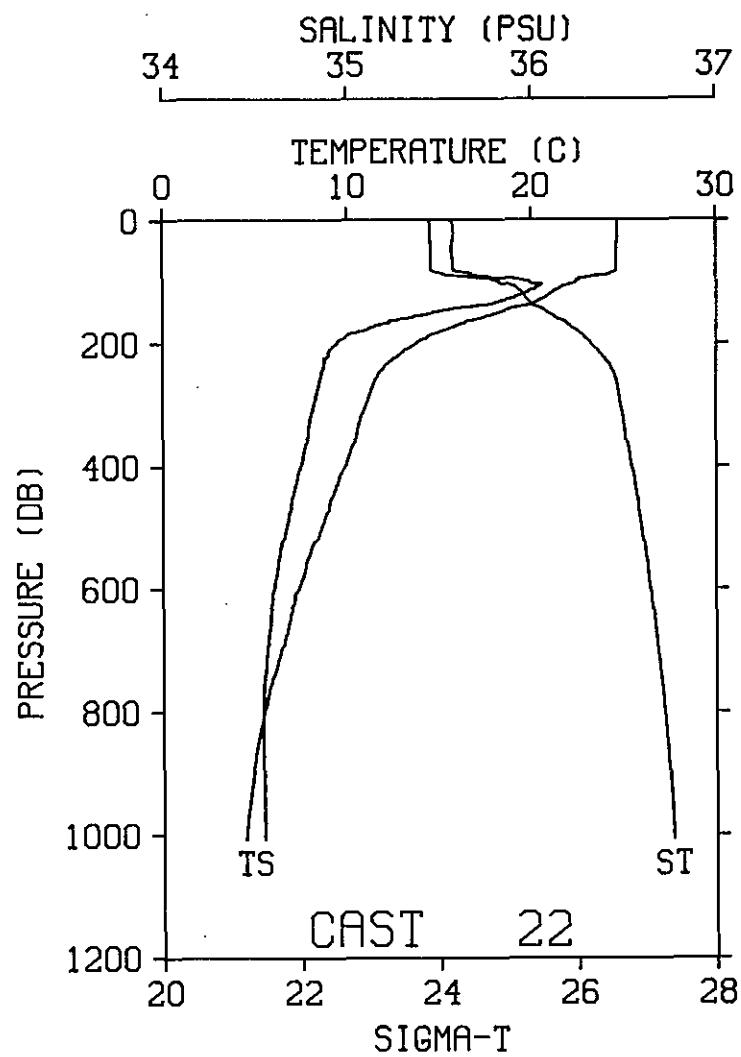


CAST EP4-86-OC-021 DATE 22 NOV 86 TIME 1114 GMT  
 LAT 8 00.0S LONG 109 57.2W WEATHER 1 SEA STATE 3  
 BAROMETER 13 WIND DIR 105 T SPD 17 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 4 DRY 24.0 WET 21.8 DEPTH 3413 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.422	35.571	23.950	0.000
10.	24.431	35.574	23.949	0.040
20.	24.435	35.573	23.947	0.079
30.	24.439	35.576	23.948	0.119
40.	24.444	35.573	23.944	0.158
50.	24.444	35.577	23.948	0.198
60.	24.441	35.577	23.948	0.238
70.	24.413	35.572	23.953	0.277
80.	24.330	35.562	23.970	0.317
90.	24.287	35.557	23.979	0.357
100.	24.264	35.555	23.985	0.396
110.	23.105	35.817	24.524	0.434
120.	21.737	35.791	24.894	0.466
130.	20.121	35.752	25.305	0.495
140.	18.657	35.481	25.478	0.521
150.	16.759	35.228	25.747	0.545
160.	15.727	35.128	25.909	0.567
170.	14.476	34.985	26.075	0.587
180.	13.453	34.925	26.244	0.606
190.	13.162	34.900	26.283	0.624
200.	12.664	34.916	26.395	0.641
223.	12.299	34.905	26.459	0.679

CAST EP4-86-OC-022 DATE 23 NOV 86 TIME 0422 GMT  
LAT 8 59.9S LONG 109 59.9W

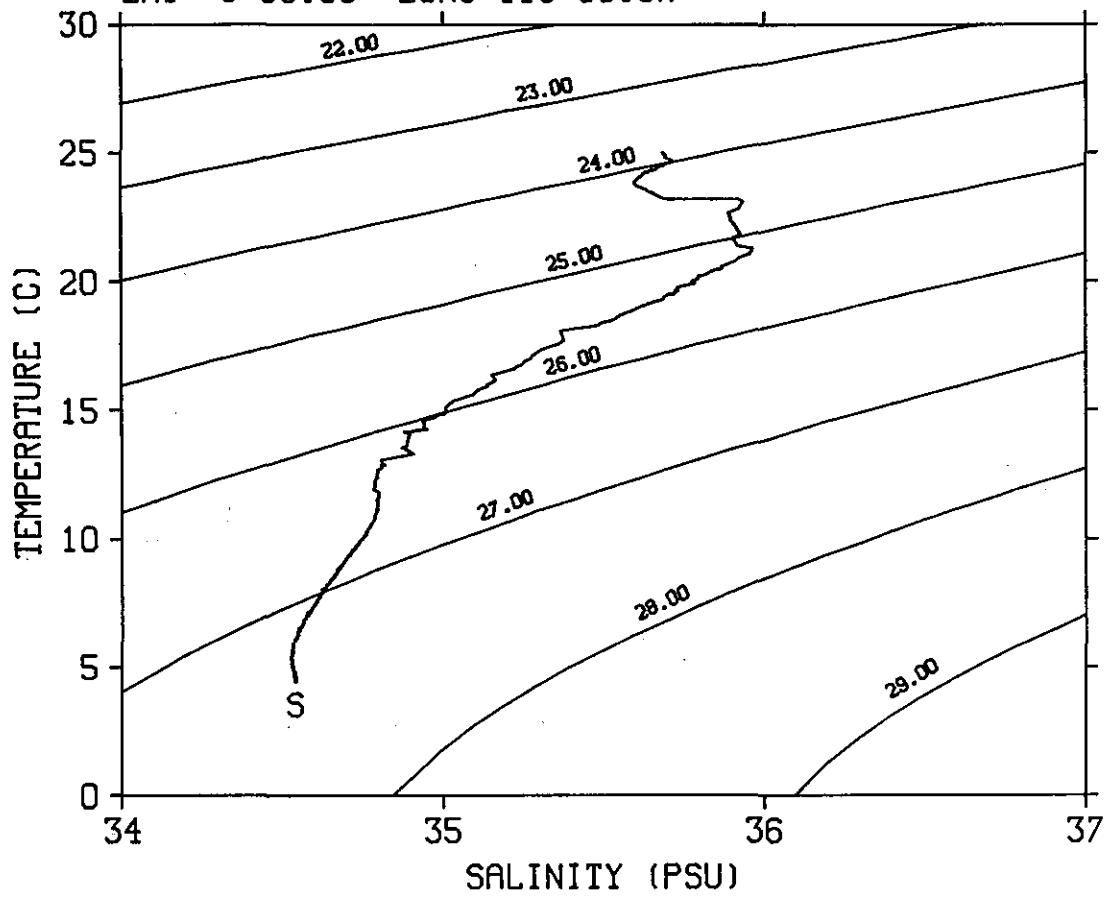




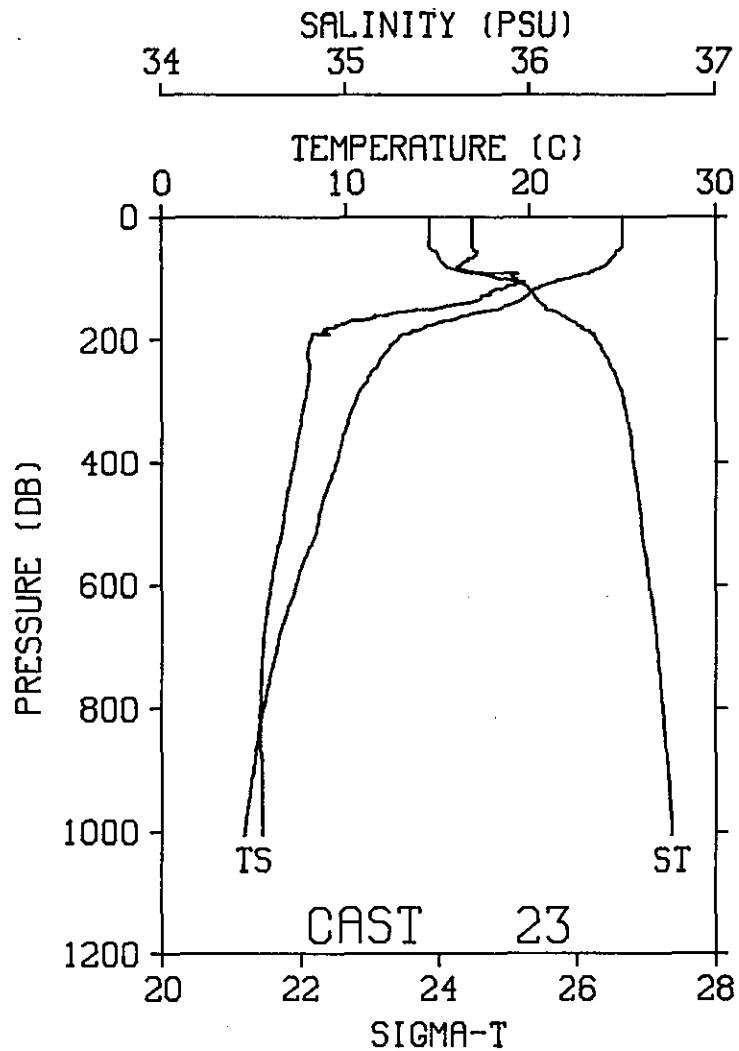
CAST EP4-86-OC-022 DATE 23 NOV 86 TIME 0422 GMT  
 LAT 8 59.9S LONG 109 59.9W WEATHER 1 SEA STATE 3  
 BAROMETER 14 WIND DIR 105 T SPD 16 KT VISIBILITY 7  
 CLOUD 6 AMOUNT 2 DRY 23.5 WET 21.3 DEPTH 3180 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.678	35.555	23.860	0.000
10.	24.698	35.577	23.871	0.040
20.	24.703	35.580	23.872	0.081
30.	24.693	35.578	23.873	0.121
40.	24.633	35.570	23.885	0.161
50.	24.625	35.570	23.888	0.201
60.	24.628	35.575	23.891	0.242
70.	24.633	35.579	23.892	0.282
80.	24.634	35.580	23.893	0.322
90.	24.219	35.675	24.089	0.362
100.	22.389	35.992	24.863	0.396
110.	21.621	36.025	25.104	0.426
120.	21.043	35.961	25.215	0.454
130.	20.499	35.856	25.283	0.482
140.	19.618	35.688	25.389	0.509
150.	18.246	35.468	25.571	0.534
160.	17.198	35.309	25.705	0.558
170.	16.025	35.176	25.878	0.580
180.	15.156	35.084	26.003	0.601
190.	14.353	34.993	26.108	0.621
200.	13.755	34.946	26.197	0.640
250.	11.681	34.859	26.541	0.725
300.	11.023	34.821	26.632	0.800
350.	10.527	34.791	26.698	0.871
400.	9.869	34.747	26.777	0.940
450.	9.157	34.700	26.859	1.005
500.	8.593	34.668	26.922	1.067
550.	7.871	34.627	27.000	1.126
600.	7.368	34.602	27.054	1.182
650.	6.850	34.581	27.109	1.235
700.	6.357	34.559	27.159	1.286
750.	5.865	34.547	27.212	1.335
800.	5.457	34.542	27.259	1.381
850.	5.122	34.541	27.297	1.425
900.	4.841	34.542	27.331	1.468
950.	4.629	34.544	27.356	1.509
1000.	4.453	34.546	27.377	1.549
1008.	4.441	34.545	27.378	1.555

CAST EP4-86-OC-023 DATE 23 NOV 86 TIME 1027 GMT  
LAT 9 59.85 LONG 110 00.0W



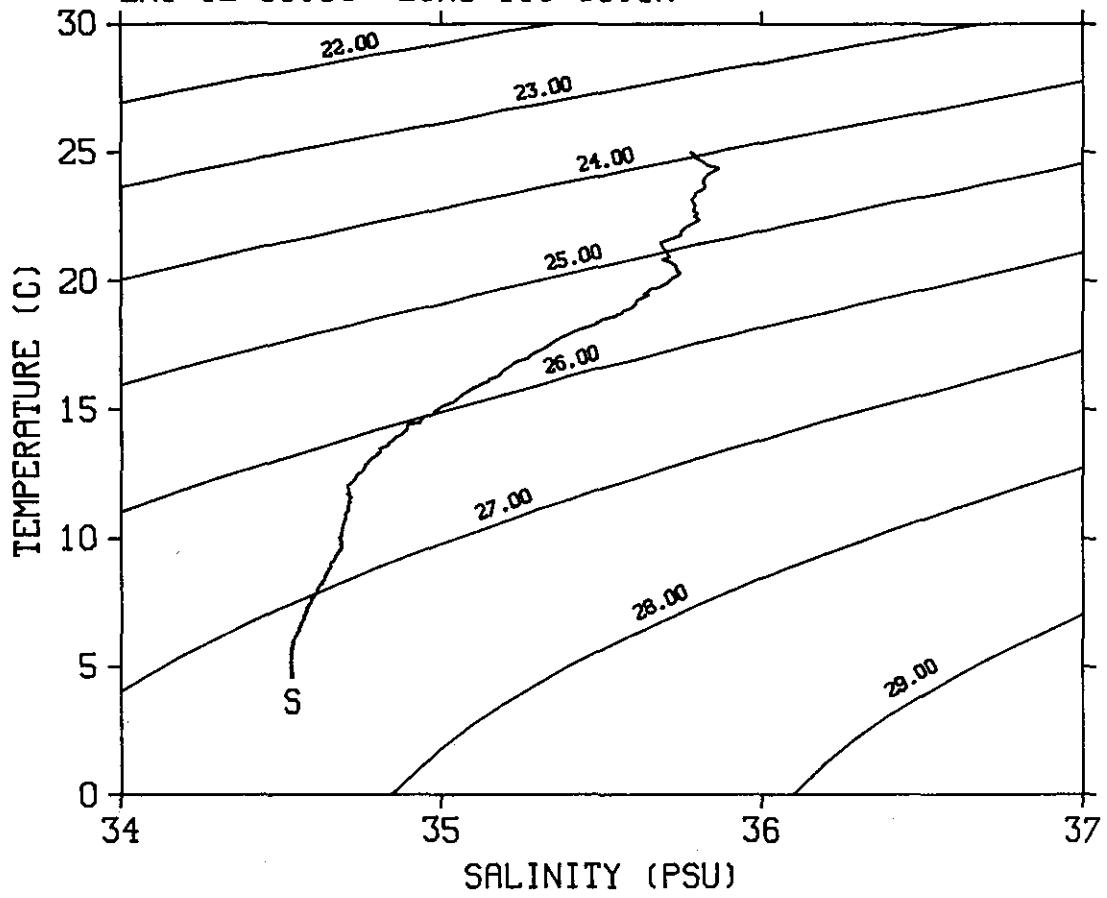
209

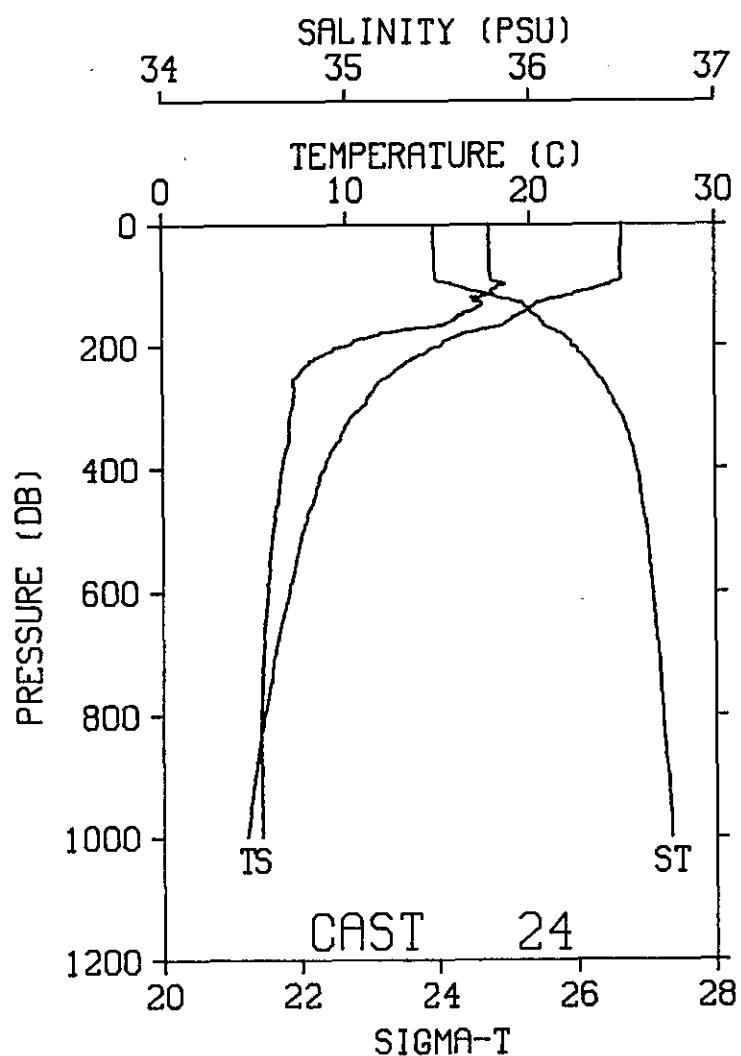


CAST EP4-86-OC-023 DATE 23 NOV 86 TIME 1027 GMT  
 LAT 9 59.8S LONG 110 00.0W WEATHER 1 SEA STATE 3  
 BAROMETER 12 WIND DIR 100 T SPD 14 KT VISIBILITY 7  
 CLOUD 3 AMOUNT 4 DRY 23.0 WET 20.3 DEPTH 3045 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.971	35.687	23.871	0.000
10.	24.971	35.689	23.872	0.040
20.	24.974	35.685	23.869	0.081
30.	24.978	35.687	23.869	0.121
40.	24.981	35.686	23.867	0.161
50.	24.969	35.689	23.873	0.202
60.	24.608	35.710	23.999	0.242
70.	24.358	35.665	24.040	0.281
80.	24.029	35.614	24.099	0.319
90.	23.220	35.682	24.389	0.357
100.	22.185	35.909	24.858	0.389
110.	20.901	35.923	25.225	0.419
120.	20.136	35.797	25.335	0.446
130.	19.680	35.728	25.403	0.472
140.	19.202	35.657	25.473	0.498
150.	18.294	35.483	25.570	0.523
160.	16.679	35.230	25.767	0.547
170.	15.342	35.032	25.921	0.568
180.	14.267	34.951	26.093	0.589
190.	13.461	34.893	26.217	0.608
200.	12.798	34.812	26.288	0.626
250.	11.438	34.802	26.541	0.709
300.	10.529	34.775	26.685	0.782
350.	9.903	34.743	26.768	0.851
400.	9.474	34.714	26.818	0.917
450.	8.847	34.678	26.891	0.980
500.	8.480	34.658	26.933	1.041
550.	7.859	34.621	26.997	1.100
600.	7.284	34.593	27.059	1.155
650.	6.701	34.565	27.117	1.208
700.	6.238	34.548	27.165	1.259
750.	5.832	34.537	27.208	1.307
800.	5.487	34.535	27.249	1.353
850.	5.190	34.535	27.284	1.398
900.	4.949	34.537	27.314	1.441
950.	4.690	34.541	27.346	1.483
1000.	4.481	34.544	27.373	1.523
1007.	4.445	34.545	27.377	1.528

CAST EP4-86-OC-024 DATE 23 NOV 86 TIME 2231 GMT  
LAT 12 30.3S LONG 110 00.1W

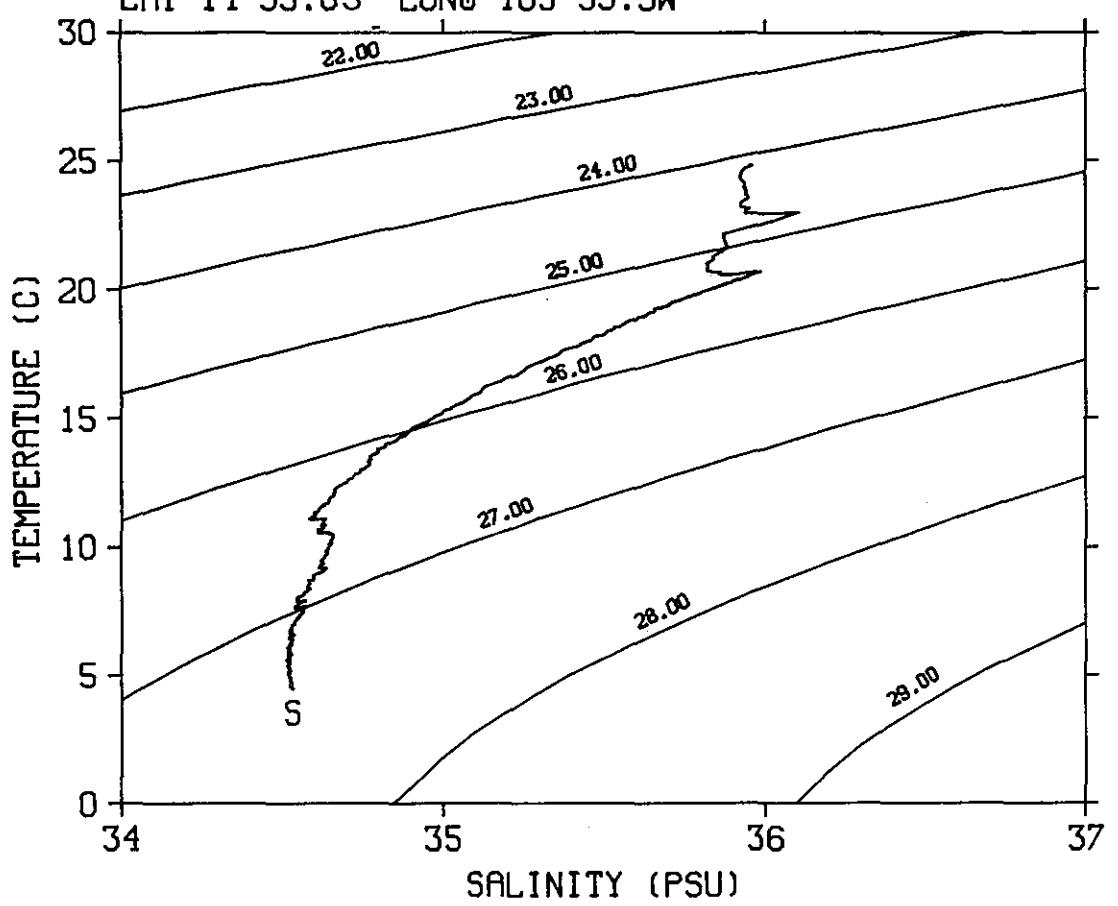


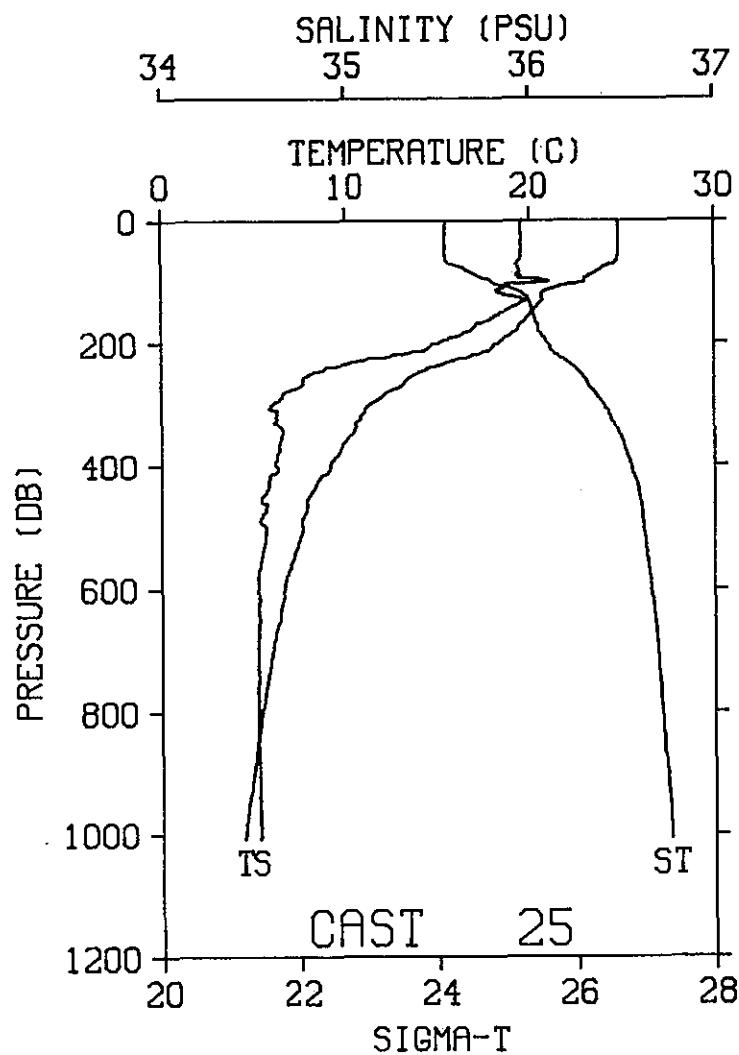


CAST EP4-86-OC-024 DATE 23 NOV 86 TIME 2231 GMT  
 LAT 12 30.3S LONG 110 00.1W WEATHER 1 SEA STATE 4  
 BAROMETER 13 WIND DIR 080 T SPD 14 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 4 DRY 23.3 WET 22.0 DEPTH 3256 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.985	35.778	23.936	0.000
10.	24.988	35.780	23.936	0.040
20.	24.982	35.779	23.938	0.079
30.	24.947	35.781	23.949	0.119
40.	24.936	35.784	23.956	0.159
50.	24.930	35.783	23.957	0.198
60.	24.930	35.783	23.956	0.238
70.	24.930	35.786	23.959	0.277
80.	24.926	35.786	23.960	0.317
90.	24.912	35.786	23.964	0.357
100.	24.146	35.831	24.229	0.395
110.	22.905	35.791	24.563	0.431
120.	21.461	35.679	24.886	0.463
130.	20.319	35.736	25.240	0.492
140.	19.861	35.695	25.330	0.520
150.	19.261	35.608	25.420	0.546
160.	18.736	35.563	25.520	0.571
170.	17.829	35.386	25.611	0.596
180.	16.334	35.185	25.814	0.620
190.	15.416	35.052	25.920	0.641
200.	15.025	34.989	25.959	0.663
250.	12.302	34.735	26.326	0.758
300.	10.832	34.705	26.576	0.838
350.	9.695	34.693	26.764	0.909
400.	8.808	34.654	26.878	0.973
450.	8.226	34.628	26.948	1.034
500.	7.624	34.599	27.014	1.091
550.	7.244	34.581	27.055	1.146
600.	6.901	34.574	27.097	1.199
650.	6.471	34.558	27.142	1.250
700.	6.101	34.546	27.181	1.300
750.	5.824	34.536	27.209	1.348
800.	5.483	34.534	27.249	1.394
850.	5.252	34.532	27.275	1.439
900.	4.961	34.535	27.311	1.482
950.	4.739	34.539	27.340	1.525
1000.	4.545	34.538	27.360	1.566

CAST EP4-86-OC-025 DATE 24 NOV 86 TIME 1051 GMT  
LAT 14 59.8S LONG 109 59.9W

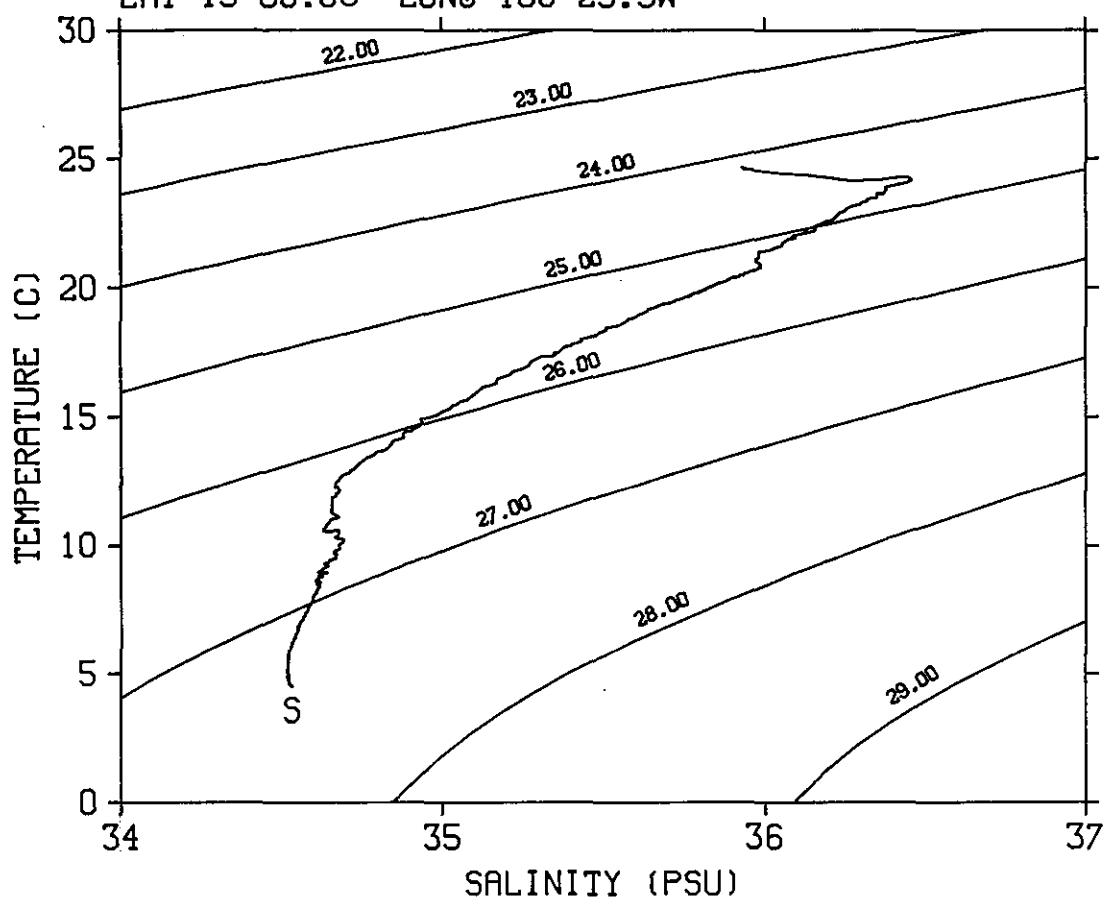


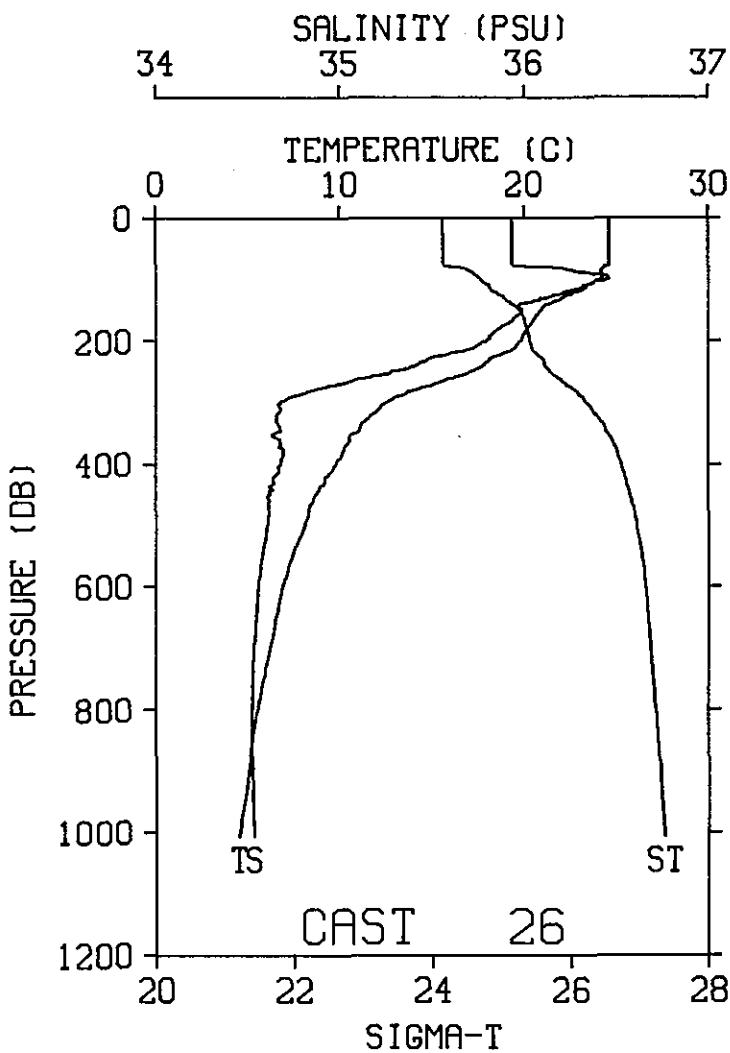


CAST EP4-86-OC-025 DATE 24 NOV 86 TIME 1051 GMT  
 LAT 14 59.8S LONG 109 59.9W WEATHER 1 SEA STATE 3  
 BAROMETER 15 WIND DIR 095 T SPD 16 KT VISIBILITY 8  
 CLOUD 3 AMOUNT 4 DRY 23.0 WET 20.0 DEPTH 3413 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.799	35.959	24.129	0.000
10.	24.817	35.955	24.121	0.038
20.	24.821	35.955	24.119	0.076
30.	24.821	35.958	24.122	0.114
40.	24.825	35.959	24.121	0.152
50.	24.829	35.957	24.119	0.190
60.	24.799	35.953	24.125	0.228
70.	24.621	35.936	24.166	0.266
80.	23.854	35.941	24.399	0.302
90.	23.202	35.927	24.580	0.337
100.	22.985	36.107	24.780	0.370
110.	21.372	35.852	25.042	0.400
120.	20.676	35.851	25.231	0.429
130.	20.713	35.981	25.320	0.456
140.	20.398	35.924	25.362	0.483
150.	20.069	35.839	25.385	0.509
160.	19.824	35.789	25.412	0.535
170.	19.441	35.709	25.450	0.561
180.	19.311	35.684	25.465	0.587
190.	18.830	35.602	25.526	0.612
200.	18.260	35.507	25.597	0.637
250.	13.826	34.811	26.078	0.749
300.	11.371	34.607	26.403	0.841
350.	10.332	34.655	26.626	0.920
400.	9.155	34.618	26.794	0.990
450.	7.988	34.547	26.920	1.052
500.	7.706	34.569	26.979	1.111
550.	7.175	34.543	27.035	1.167
600.	6.692	34.529	27.090	1.221
650.	6.406	34.533	27.131	1.272
700.	5.998	34.520	27.174	1.322
750.	5.731	34.524	27.210	1.370
800.	5.448	34.523	27.245	1.416
850.	5.188	34.521	27.274	1.461
900.	4.932	34.526	27.307	1.505
950.	4.663	34.526	27.337	1.547
1000.	4.489	34.533	27.363	1.588
1008.	4.463	34.533	27.366	1.594

CAST EP4-86-OC-026 DATE 24 NOV 86 TIME 1929 GMT  
LAT 15 00.0S LONG 108 29.9W

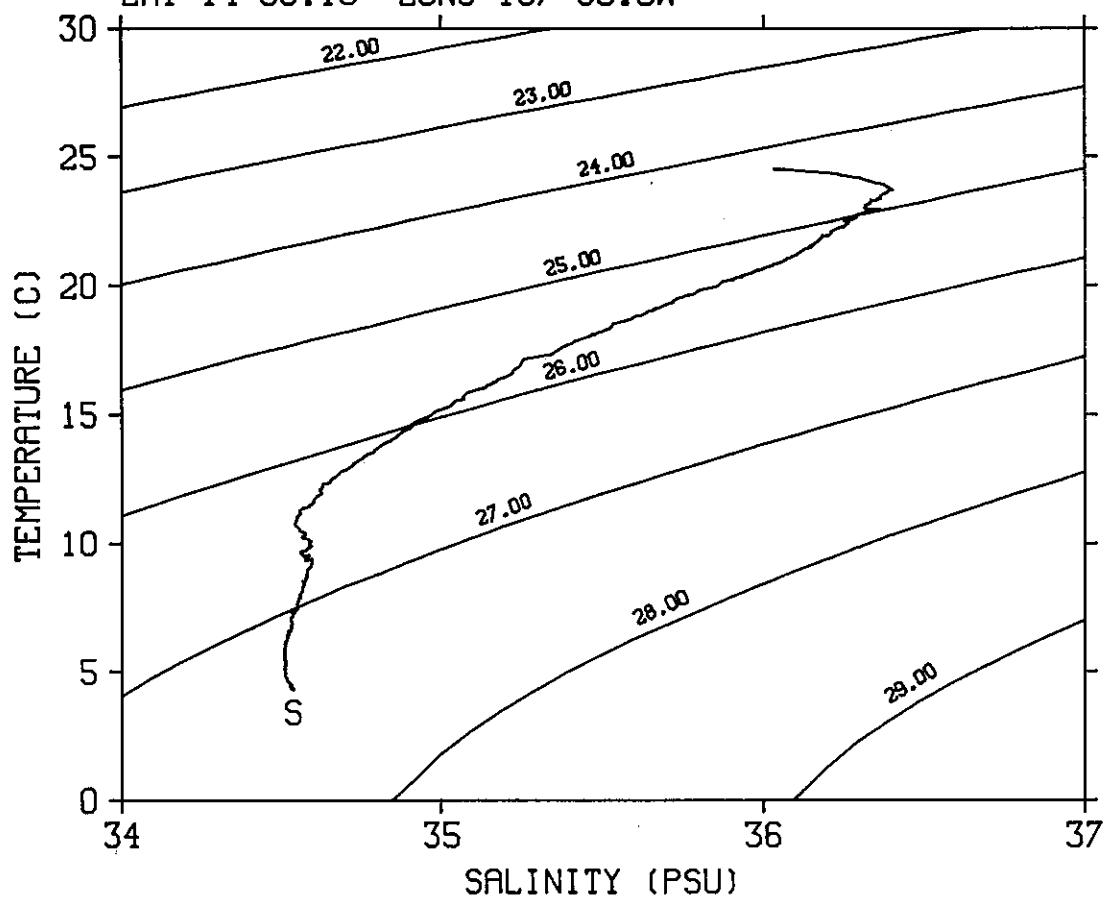


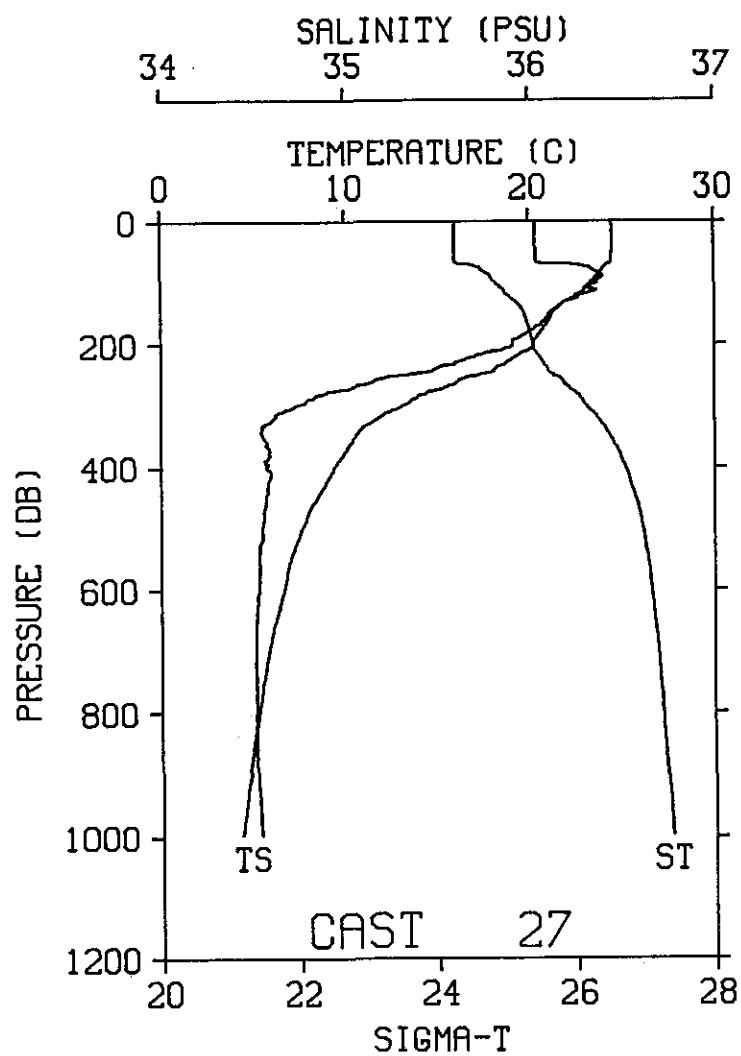


CAST EP4-86-OC-026 DATE 24 NOV 86 TIME 1929 GMT  
 LAT 15 00.0S LONG 108 29.9W WEATHER 1 SEA STATE 4  
 BAROMETER 16 WIND DIR 120 T SPD 20 KT VISIBILITY 8  
 CLOUD 3 AMOUNT 7 DRY 23.2 WET 21.0 DEPTH 3600 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.649	35.931	24.153	0.000
10.	24.642	35.938	24.161	0.038
20.	24.629	35.937	24.164	0.075
30.	24.615	35.937	24.168	0.113
40.	24.608	35.939	24.172	0.150
50.	24.611	35.940	24.172	0.188
60.	24.610	35.937	24.169	0.225
70.	24.610	35.938	24.171	0.263
80.	24.410	36.044	24.311	0.300
90.	24.161	36.316	24.592	0.335
100.	24.134	36.459	24.708	0.368
110.	23.468	36.335	24.812	0.400
120.	22.867	36.232	24.908	0.432
130.	22.116	36.131	25.046	0.462
140.	21.399	35.981	25.133	0.491
150.	20.918	35.989	25.271	0.519
160.	20.642	35.959	25.323	0.546
170.	20.443	35.922	25.348	0.573
180.	20.190	35.867	25.374	0.599
190.	19.955	35.822	25.403	0.626
200.	19.814	35.797	25.420	0.652
250.	17.041	35.275	25.717	0.777
300.	12.508	34.678	26.241	0.881
350.	10.776	34.639	26.535	0.965
400.	9.799	34.674	26.732	1.038
450.	8.659	34.609	26.866	1.104
500.	8.072	34.598	26.948	1.164
550.	7.392	34.577	27.031	1.221
600.	6.862	34.551	27.084	1.276
650.	6.497	34.542	27.127	1.328
700.	6.193	34.531	27.157	1.378
750.	5.838	34.521	27.195	1.427
800.	5.517	34.523	27.236	1.474
850.	5.212	34.521	27.271	1.519
900.	4.991	34.519	27.295	1.563
950.	4.778	34.520	27.320	1.606
1000.	4.524	34.529	27.356	1.647
1007.	4.494	34.530	27.360	1.653

CAST EP4-86-OC-027 DATE 25 NOV 86 TIME 0358 GMT  
LAT 14 58.1S LONG 107 00.8W

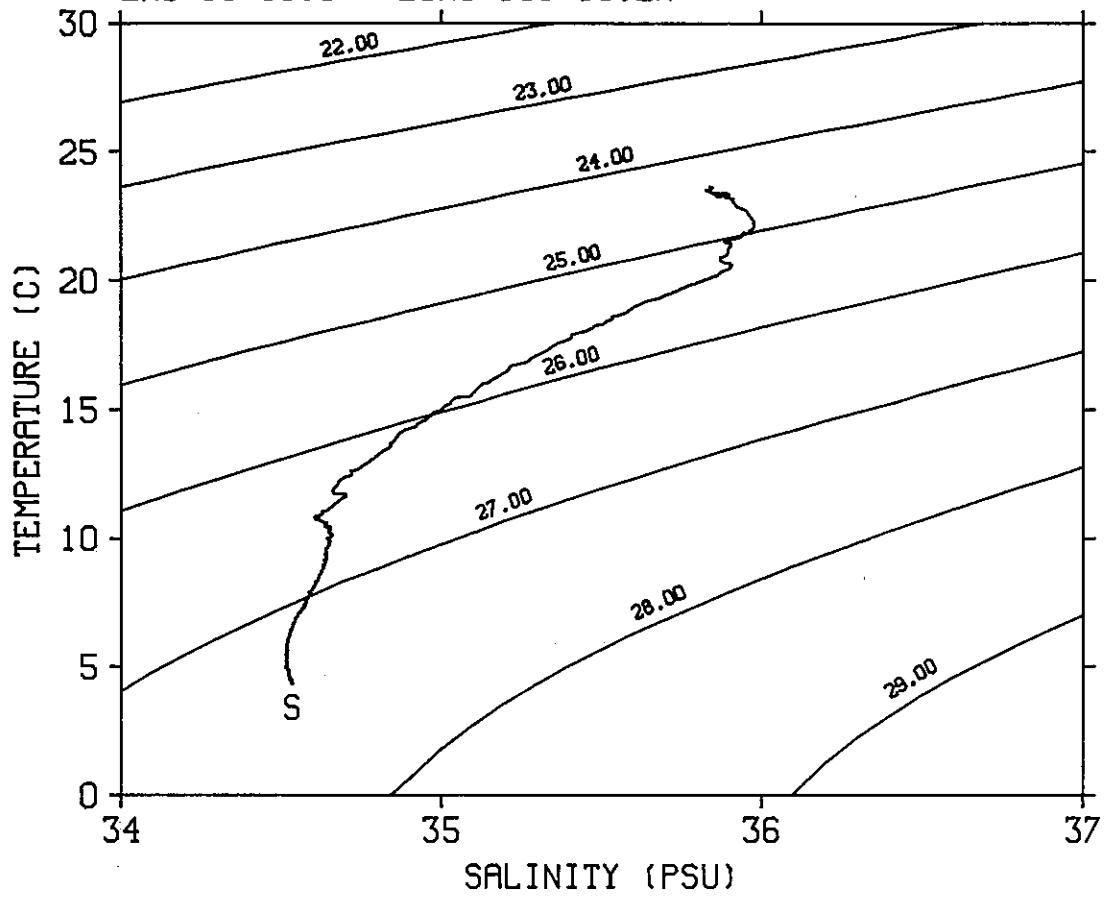


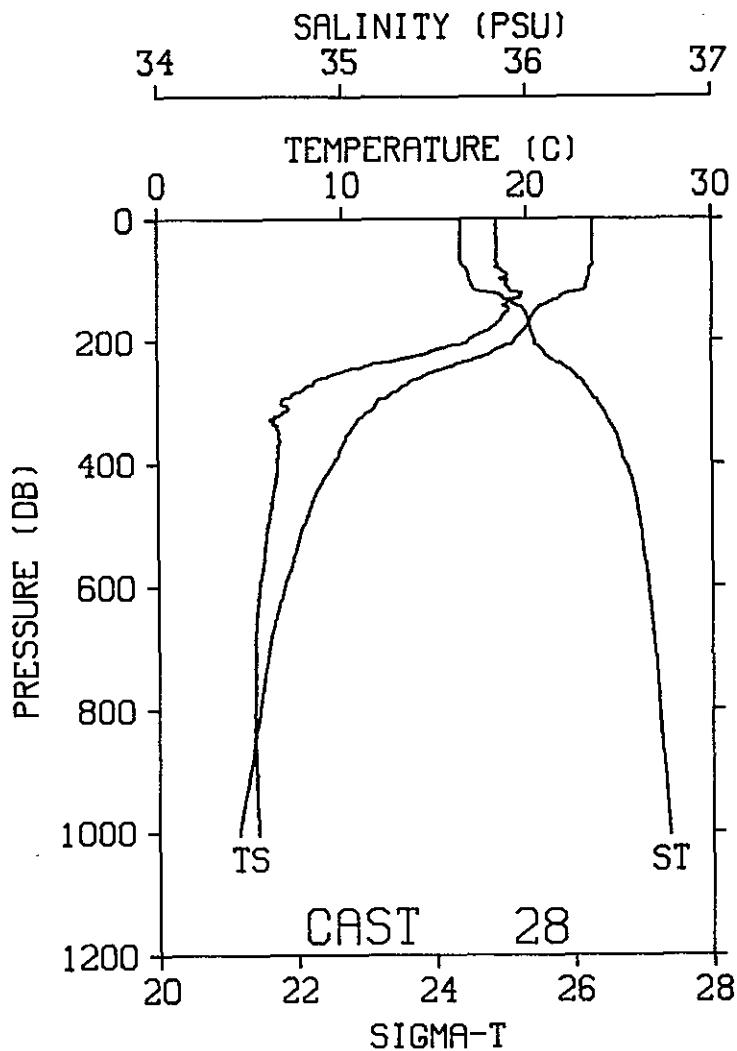


CAST EP4-86-OC-027 DATE 25 NOV 86 TIME 0358 GMT  
 LAT 14 58.1S LONG 107 00.8W WEATHER 1 SEA STATE 4  
 BAROMETER 16 WIND DIR 105 T SPD 18 KT VISIBILITY 8  
 CLOUD AMOUNT 2 DRY 23.2 WET 19.0 DEPTH 3840 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	24.515	36.040	24.277	0.000
10.	24.533	36.038	24.270	0.036
20.	24.536	36.036	24.267	0.073
30.	24.538	36.037	24.267	0.109
40.	24.533	36.038	24.270	0.146
50.	24.528	36.040	24.273	0.183
60.	24.527	36.042	24.274	0.219
70.	24.333	36.224	24.470	0.256
80.	23.993	36.357	24.673	0.289
90.	23.719	36.403	24.789	0.322
100.	23.405	36.373	24.859	0.353
110.	22.970	36.314	24.941	0.384
120.	22.529	36.266	25.032	0.414
130.	22.057	36.216	25.127	0.444
140.	21.593	36.160	25.215	0.472
150.	21.255	36.110	25.270	0.499
160.	21.108	36.089	25.295	0.527
170.	20.894	36.053	25.326	0.554
180.	20.644	35.999	25.353	0.581
190.	20.370	35.934	25.377	0.607
200.	20.243	35.911	25.393	0.634
250.	17.291	35.340	25.707	0.761
300.	13.081	34.722	26.162	0.866
350.	10.552	34.553	26.508	0.953
400.	9.359	34.575	26.728	1.027
450.	8.451	34.571	26.869	1.093
500.	7.599	34.547	26.977	1.153
550.	7.007	34.532	27.049	1.209
600.	6.648	34.528	27.095	1.262
650.	6.195	34.514	27.144	1.313
700.	5.796	34.511	27.192	1.362
750.	5.518	34.509	27.225	1.409
800.	5.253	34.511	27.258	1.455
850.	4.977	34.510	27.289	1.499
900.	4.747	34.518	27.322	1.542
950.	4.515	34.526	27.354	1.583
997.	4.310	34.536	27.385	1.620

CAST EP4-86-OC-028 DATE 25 NOV 86 TIME 1204 GMT  
LAT 15 00.0S LONG 105 30.2W

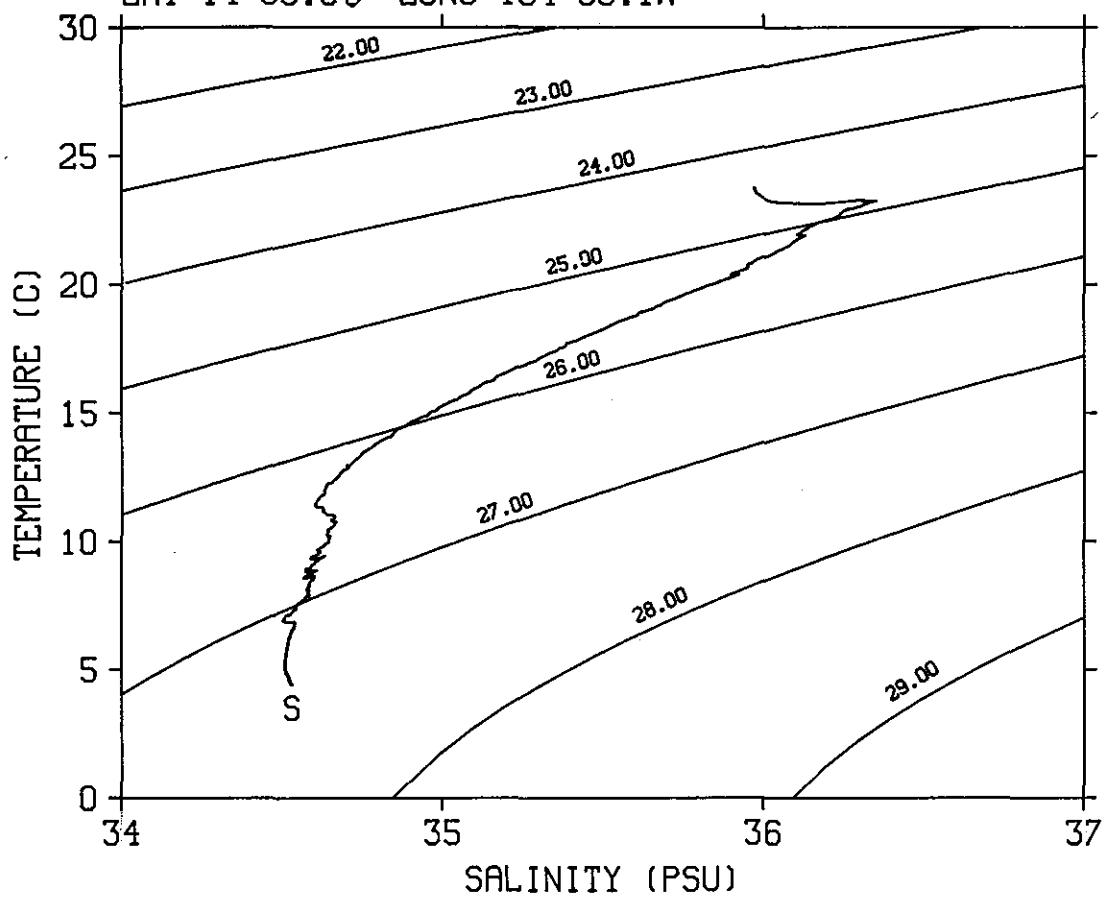


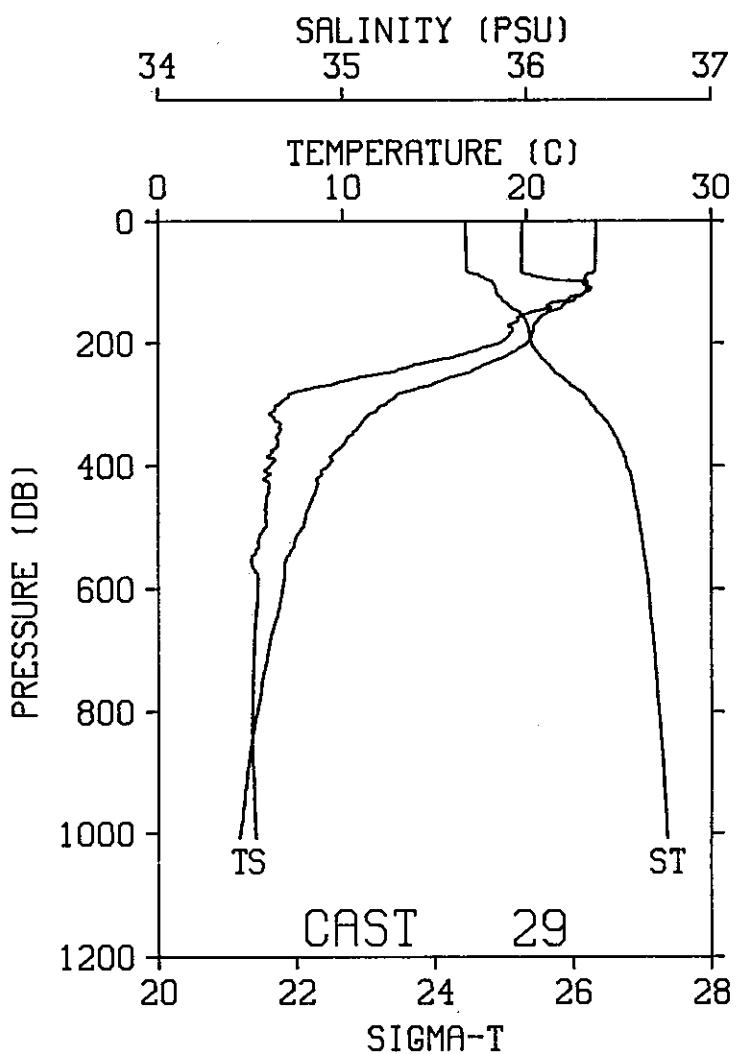


CAST EP4-86-OC-028 DATE 25 NOV 86 TIME 1204 GMT  
 LAT 15 00.0S LONG 105 30.2W WEATHER 2 SEA STATE 5  
 BAROMETER 14 WIND DIR 115 T SPD 22 KT VISIBILITY 7  
 CLOUD 6 AMOUNT 7 DRY 21.0 WET 19.5 DEPTH 3920 M

PRESSURE (db)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	23.624	35.840	24.390	0.000
10.	23.624	35.839	24.389	0.035
20.	23.628	35.840	24.389	0.071
30.	23.635	35.841	24.388	0.106
40.	23.637	35.843	24.389	0.141
50.	23.642	35.843	24.387	0.177
60.	23.641	35.843	24.387	0.212
70.	23.646	35.840	24.384	0.248
80.	23.401	35.849	24.463	0.284
90.	23.399	35.895	24.498	0.318
100.	23.347	35.900	24.517	0.353
110.	23.228	35.892	24.546	0.387
120.	22.534	35.959	24.797	0.421
130.	21.823	35.943	24.986	0.451
140.	20.958	35.890	25.184	0.480
150.	20.511	35.902	25.315	0.508
160.	20.260	35.866	25.355	0.535
170.	20.118	35.845	25.376	0.561
180.	19.932	35.803	25.394	0.588
190.	19.646	35.746	25.426	0.614
200.	19.354	35.690	25.459	0.640
250.	14.954	34.998	25.981	0.758
300.	11.857	34.666	26.357	0.853
350.	10.326	34.655	26.627	0.933
400.	9.472	34.643	26.762	1.004
450.	8.469	34.622	26.906	1.068
500.	7.883	34.588	26.968	1.128
550.	7.367	34.573	27.031	1.184
600.	6.804	34.544	27.087	1.238
650.	6.359	34.529	27.135	1.290
700.	6.004	34.521	27.174	1.339
750.	5.681	34.521	27.214	1.387
800.	5.456	34.519	27.240	1.434
850.	5.188	34.518	27.271	1.479
900.	4.896	34.524	27.310	1.522
950.	4.595	34.528	27.347	1.564
1000.	4.348	34.537	27.381	1.604
1006.	4.321	34.537	27.384	1.609

CAST EP4-86-OC-029 DATE 25 NOV 86 TIME 1944 GMT  
LAT 14 59.6S LONG 104 00.1W

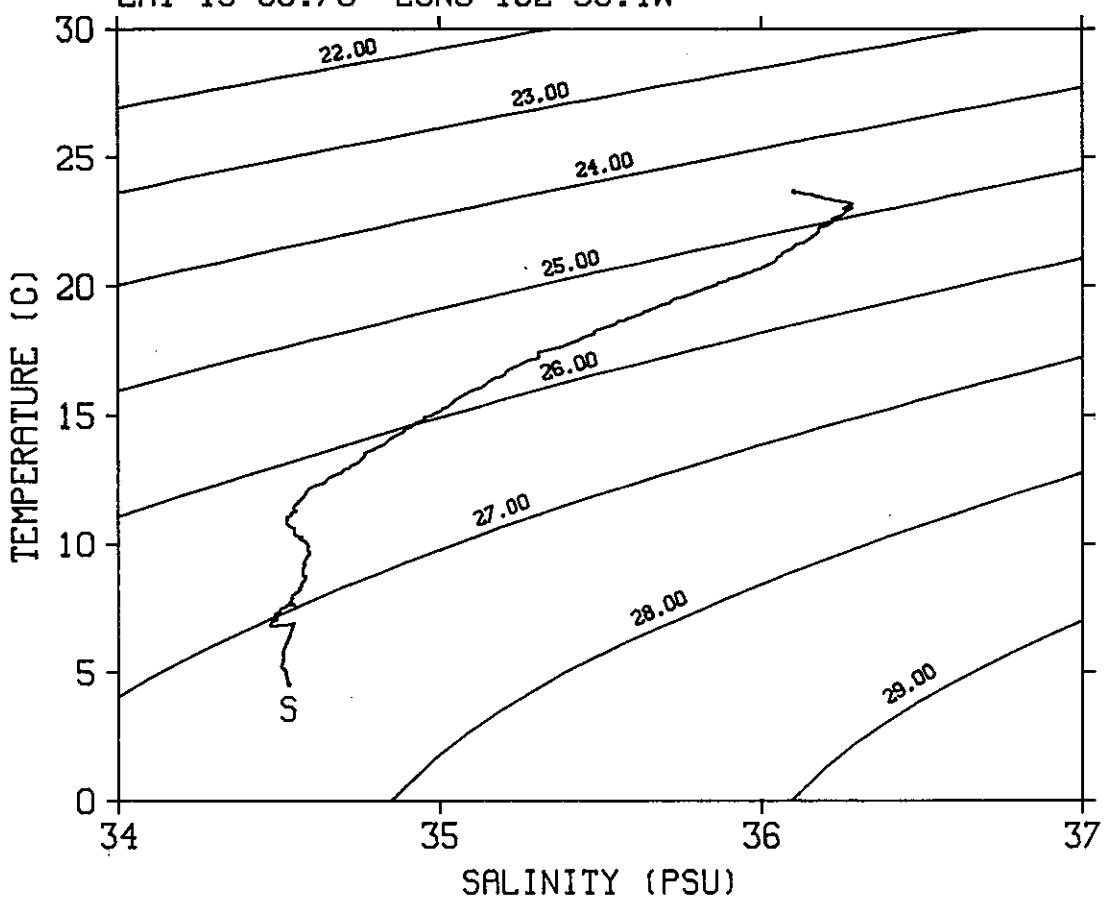


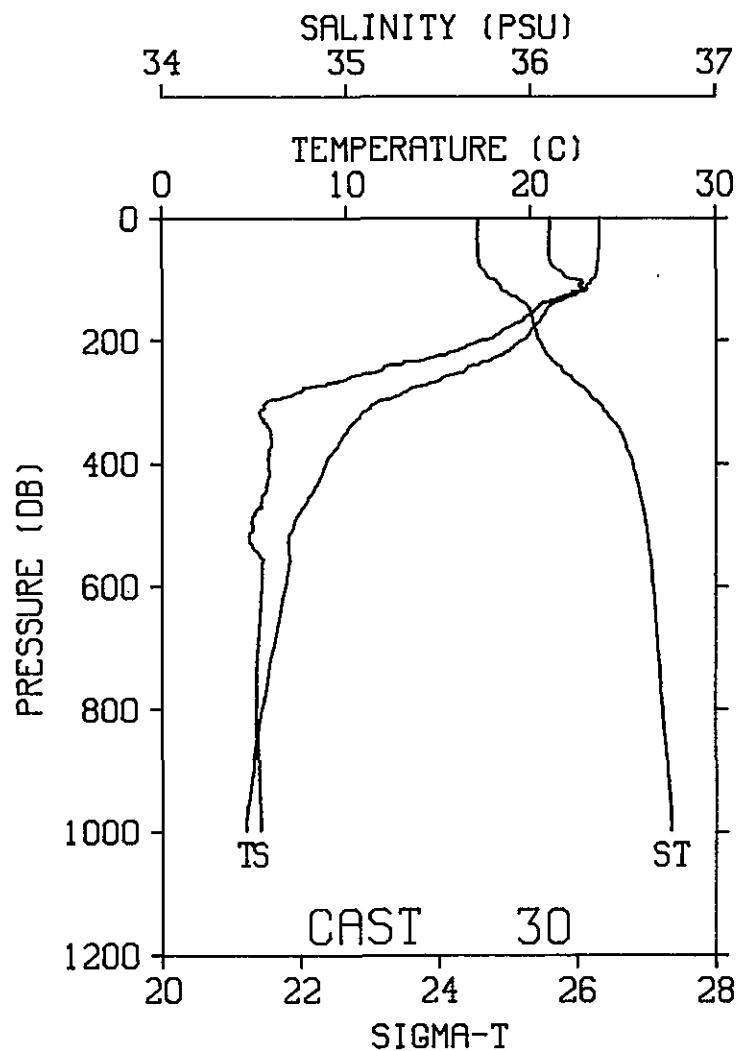


CAST EP4-86-OC-029 DATE 25 NOV 86 TIME 1944 GMT  
 LAT 14 59.6S LONG 104 00.1W WEATHER 1 SEA STATE 4  
 BAROMETER 15 WIND DIR 090 T SPD 15 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 5 DRY 22.2 WET 20.2 DEPTH 3960 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	23.752	35.974	24.454	0.000
10.	23.753	35.974	24.454	0.035
20.	23.755	35.973	24.453	0.069
30.	23.738	35.972	24.457	0.104
40.	23.734	35.972	24.458	0.139
50.	23.721	35.974	24.463	0.174
60.	23.719	35.973	24.463	0.209
70.	23.715	35.973	24.464	0.243
80.	23.711	35.973	24.466	0.278
90.	23.236	36.026	24.645	0.312
100.	23.279	36.308	24.847	0.345
110.	23.249	36.351	24.888	0.376
120.	23.026	36.300	24.914	0.407
130.	22.571	36.221	24.985	0.437
140.	21.892	36.114	25.096	0.467
150.	21.106	36.015	25.239	0.495
160.	20.669	35.949	25.308	0.523
170.	20.402	35.902	25.344	0.550
180.	20.354	35.921	25.372	0.576
190.	20.233	35.895	25.384	0.603
200.	20.002	35.847	25.409	0.629
250.	16.623	35.209	25.765	0.753
300.	12.324	34.658	26.262	0.855
350.	10.458	34.641	26.593	0.937
400.	9.207	34.605	26.776	1.007
450.	8.396	34.589	26.891	1.071
500.	7.858	34.583	26.968	1.131
550.	6.942	34.505	27.037	1.187
600.	6.735	34.539	27.092	1.240
650.	6.388	34.527	27.129	1.292
700.	5.952	34.518	27.178	1.342
750.	5.624	34.513	27.215	1.389
800.	5.378	34.510	27.243	1.436
850.	5.069	34.507	27.277	1.481
900.	4.821	34.514	27.311	1.524
950.	4.654	34.522	27.336	1.566
1000.	4.442	34.528	27.364	1.606
1008.	4.405	34.531	27.370	1.613

CAST EP4-86-OC-030 DATE 26 NOV 86 TIME 0333 GMT  
LAT 15 00.7S LONG 102 30.1W

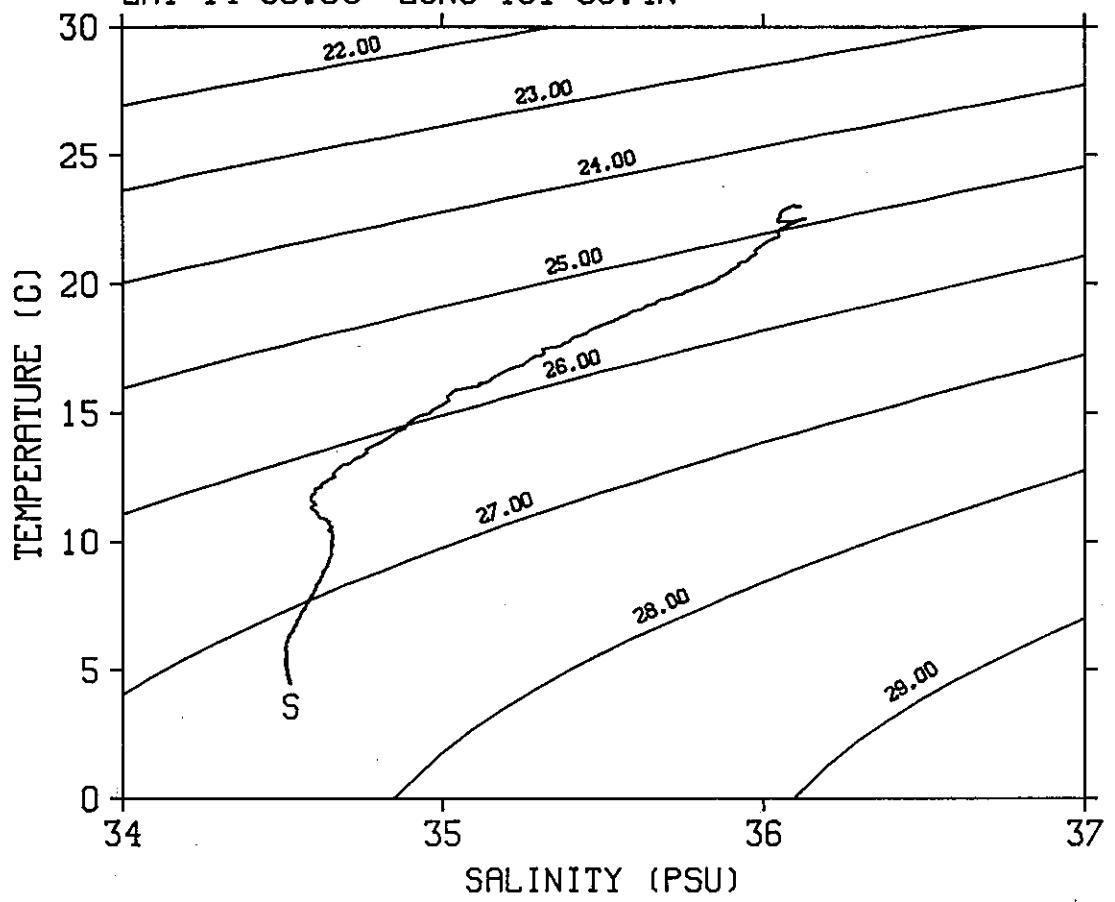


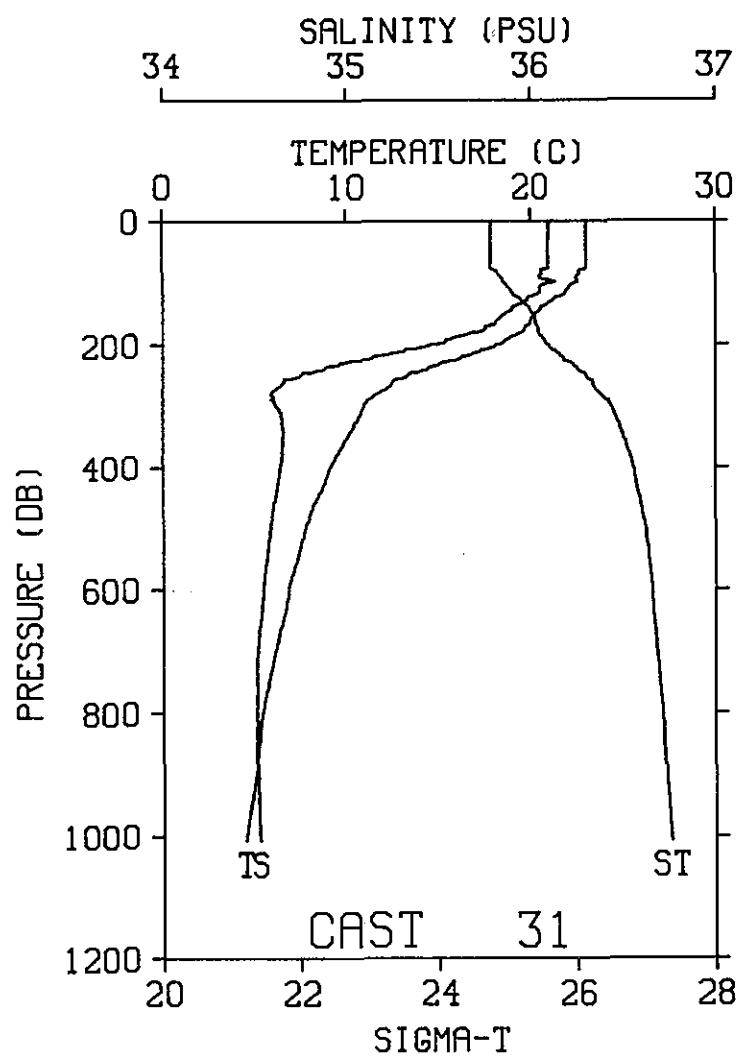


CAST EP4-86-OC-030 DATE 26 NOV 86 TIME 0333 GMT  
 LAT 15 00.7S LONG 102 30.1W WEATHER 1 SEA STATE 4  
 BAROMETER 16 WIND DIR 095 T SPD 14 KT VISIBILITY 7  
 CLOUD 6 AMOUNT 3 DRY 22.2 WET 19.2 DEPTH 4020 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	23.695	36.105	24.570	0.000
10.	23.699	36.103	24.568	0.034
20.	23.703	36.102	24.566	0.067
30.	23.704	36.101	24.565	0.101
40.	23.700	36.100	24.566	0.135
50.	23.700	36.100	24.565	0.169
60.	23.657	36.098	24.576	0.202
70.	23.643	36.108	24.588	0.236
80.	23.620	36.123	24.606	0.270
90.	23.495	36.169	24.678	0.303
100.	23.317	36.233	24.778	0.335
110.	22.998	36.255	24.888	0.367
120.	22.752	36.252	24.957	0.398
130.	21.930	36.158	25.119	0.427
140.	21.190	36.059	25.250	0.456
150.	20.826	36.020	25.319	0.483
160.	20.625	35.978	25.342	0.510
170.	20.433	35.939	25.364	0.536
180.	20.118	35.864	25.391	0.563
190.	19.874	35.818	25.421	0.589
200.	19.485	35.727	25.453	0.615
250.	16.410	35.171	25.785	0.737
300.	11.639	34.555	26.312	0.838
350.	9.973	34.586	26.634	0.918
400.	8.877	34.572	26.803	0.987
450.	8.084	34.550	26.908	1.050
500.	7.129	34.493	27.001	1.108
550.	6.876	34.524	27.061	1.163
600.	6.678	34.540	27.101	1.216
650.	6.346	34.527	27.135	1.267
700.	6.013	34.517	27.170	1.317
750.	5.686	34.508	27.204	1.365
800.	5.382	34.511	27.242	1.412
850.	5.120	34.515	27.277	1.457
900.	4.905	34.519	27.305	1.500
950.	4.659	34.524	27.337	1.542
999.	4.491	34.527	27.358	1.582

CAST EP4-86-OC-031 DATE 26 NOV 86 TIME 1117 GMT  
LAT 14 59.9S LONG 101 00.4W

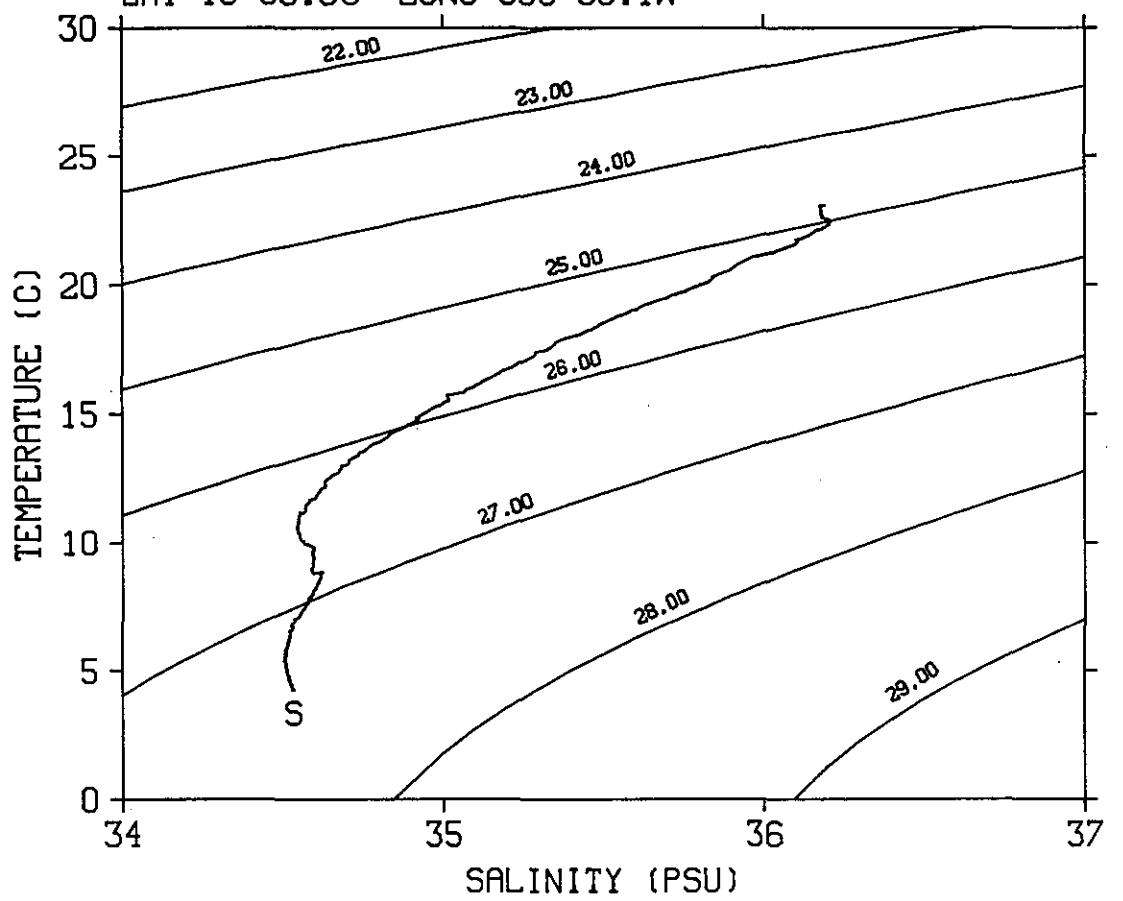




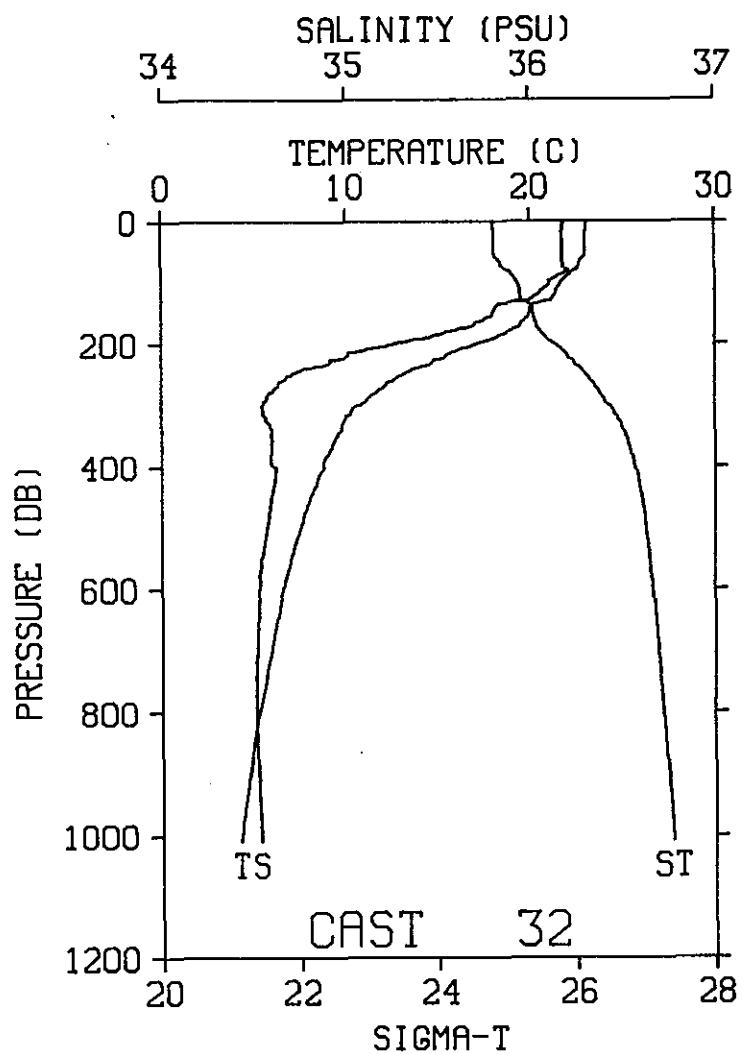
CAST EP4-86-OC-031 DATE 26 NOV 86 TIME 1117 GMT  
 LAT 14 59.9S LONG 101 00.4W WEATHER 1 SEA STATE 3  
 BAROMETER 15 WIND DIR 110 T SPD 18 KT VISIBILITY 8  
 CLOUD 4 AMOUNT 4 DRY 21.3 WET 18.6 DEPTH 3570 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	23.001	36.115	24.781	0.000
10.	23.030	36.096	24.758	0.032
20.	23.032	36.097	24.758	0.064
30.	23.037	36.096	24.756	0.095
40.	23.039	36.094	24.754	0.127
50.	23.037	36.095	24.755	0.159
60.	23.040	36.096	24.755	0.191
70.	23.041	36.098	24.756	0.223
80.	22.667	36.051	24.828	0.255
90.	22.454	36.044	24.884	0.287
100.	22.359	36.092	24.948	0.317
110.	21.969	36.047	25.024	0.347
120.	21.666	36.015	25.084	0.377
130.	21.081	35.965	25.208	0.405
140.	20.513	35.897	25.310	0.433
150.	20.187	35.858	25.368	0.459
160.	19.969	35.820	25.397	0.486
170.	19.705	35.756	25.417	0.512
180.	19.470	35.710	25.444	0.538
190.	18.773	35.567	25.514	0.564
200.	18.152	35.455	25.584	0.588
250.	13.313	34.749	26.136	0.698
300.	10.921	34.619	26.493	0.787
350.	10.056	34.656	26.674	0.862
400.	9.129	34.639	26.815	0.930
450.	8.433	34.616	26.907	0.993
500.	7.745	34.585	26.986	1.052
550.	7.318	34.565	27.032	1.108
600.	6.843	34.542	27.080	1.162
650.	6.528	34.531	27.113	1.215
700.	6.105	34.517	27.158	1.265
750.	5.735	34.511	27.200	1.314
800.	5.406	34.513	27.242	1.361
850.	5.229	34.516	27.265	1.406
900.	5.024	34.513	27.286	1.451
950.	4.760	34.521	27.323	1.494
1000.	4.515	34.524	27.352	1.535
1008.	4.484	34.527	27.358	1.542

CAST EP4-86-OC-032 DATE 26 NOV 86 TIME 1847 GMT  
LAT 15 00.0S LONG 099 30.1W



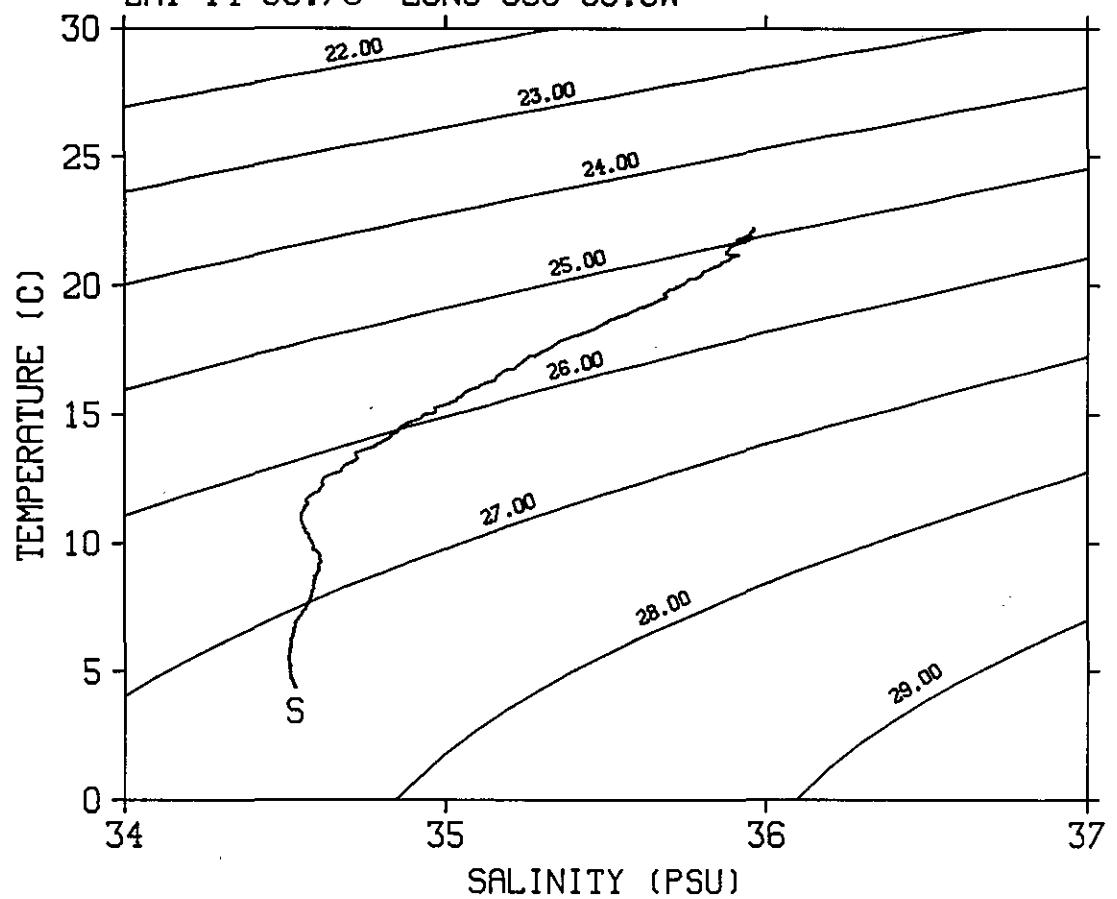
227

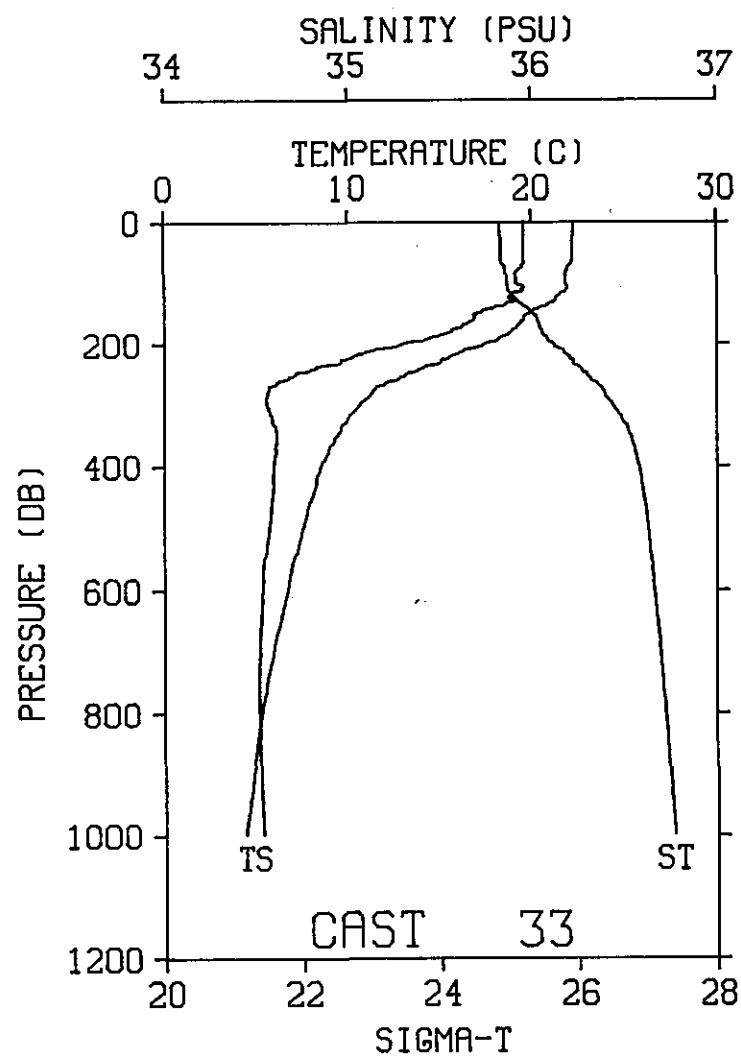


CAST EP4-86-OC-032 DATE 26 NOV 86 TIME 1847 GMT  
 LAT 15 00.0S LONG 099 30.1W WEATHER 1 SEA STATE 4  
 BAROMETER 17 WIND DIR 095 T SPD 13 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 6 DRY 22.8 WET 18.9 DEPTH 3480 M

PRESSURE (db)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	23.083	36.189	24.813	0.000
10.	23.068	36.178	24.809	0.031
20.	23.038	36.175	24.815	0.063
30.	23.023	36.177	24.822	0.094
40.	23.027	36.177	24.820	0.125
50.	23.023	36.177	24.821	0.157
60.	22.939	36.180	24.848	0.188
70.	22.673	36.184	24.928	0.219
80.	22.478	36.206	25.000	0.249
90.	22.045	36.157	25.086	0.278
100.	21.687	36.108	25.149	0.307
110.	21.497	36.079	25.180	0.335
120.	21.358	36.048	25.195	0.363
130.	21.146	35.995	25.213	0.391
140.	20.048	35.813	25.371	0.418
150.	19.960	35.799	25.384	0.445
160.	19.744	35.754	25.406	0.471
170.	19.476	35.697	25.433	0.497
180.	18.893	35.567	25.483	0.523
190.	18.193	35.450	25.570	0.548
200.	17.136	35.264	25.685	0.572
250.	13.121	34.710	26.144	0.679
300.	10.768	34.552	26.469	0.767
350.	9.539	34.598	26.716	0.841
400.	8.828	34.610	26.840	0.908
450.	8.081	34.597	26.945	0.968
500.	7.550	34.571	27.004	1.026
550.	7.039	34.543	27.054	1.081
600.	6.615	34.531	27.102	1.134
650.	6.264	34.524	27.143	1.185
700.	5.966	34.518	27.176	1.234
750.	5.636	34.513	27.213	1.282
800.	5.288	34.512	27.255	1.328
850.	4.989	34.515	27.292	1.372
900.	4.741	34.520	27.324	1.414
950.	4.486	34.526	27.358	1.455
1000.	4.274	34.533	27.386	1.495
1010.	4.251	34.538	27.392	1.502

CAST EP4-86-OC-033 DATE 27 NOV 86 TIME 0207 GMT  
LAT 14 59.7S LONG 098 00.0W

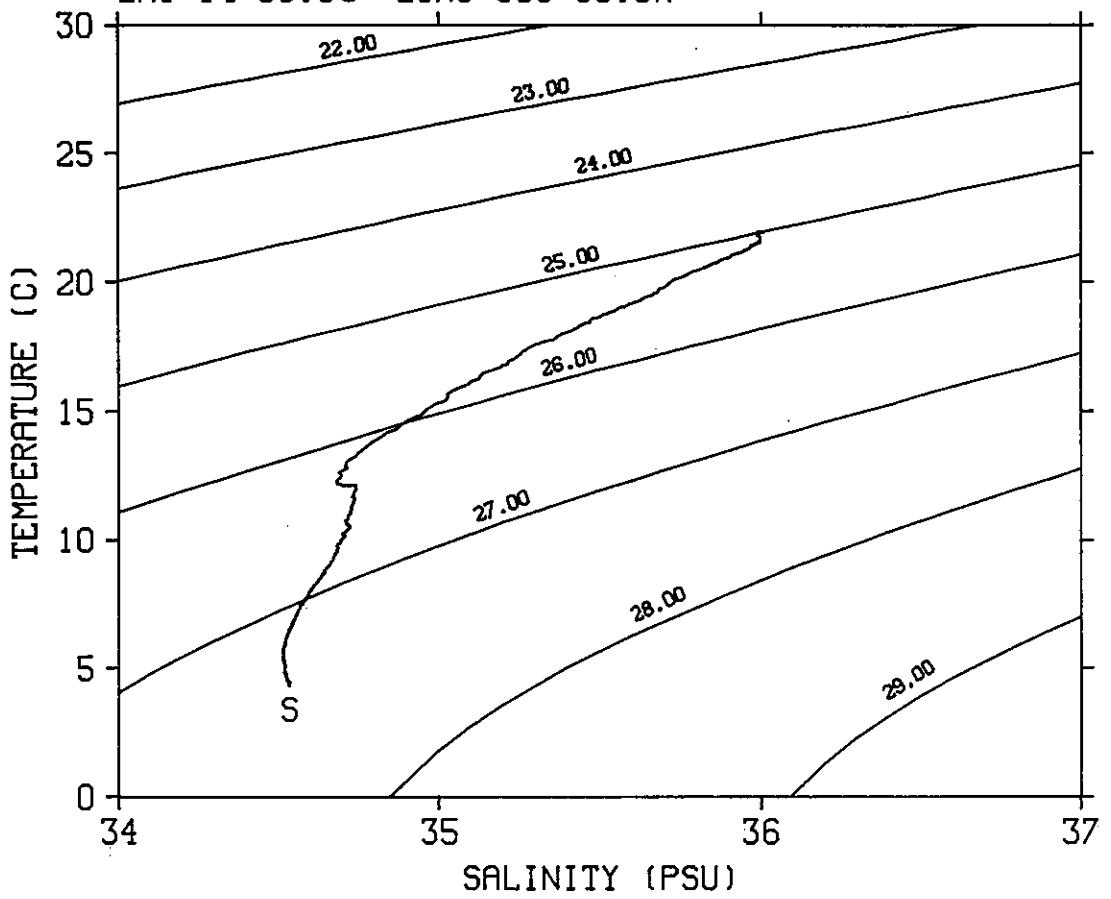


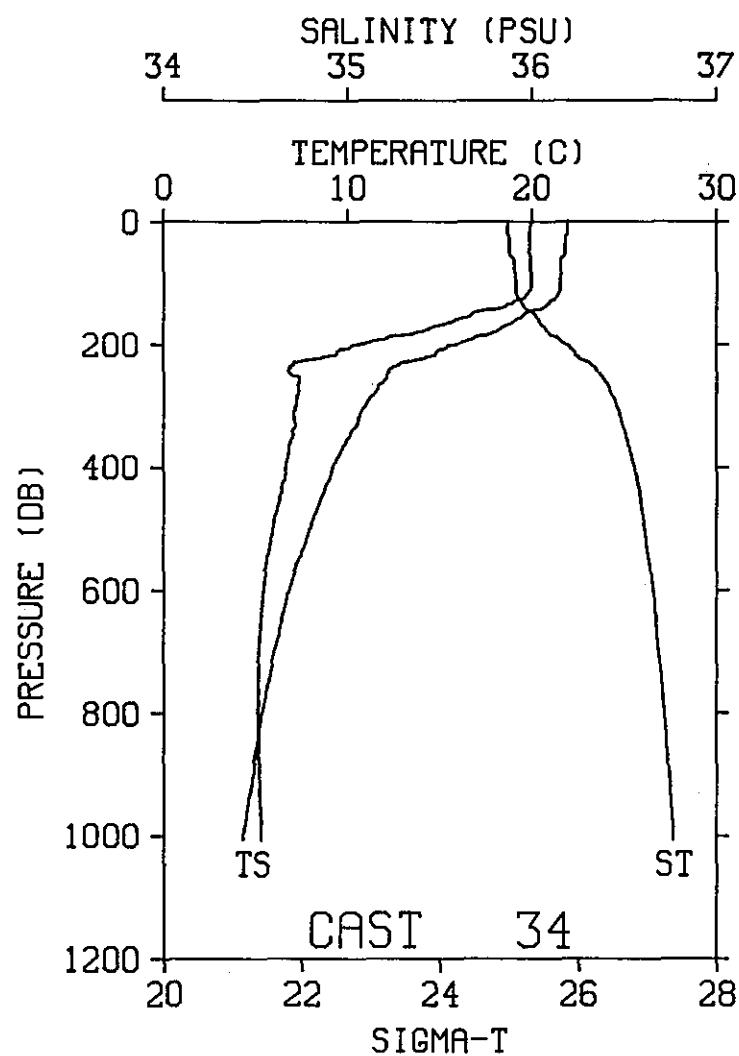


CAST EP4-86-OC-033 DATE 27 NOV 86 TIME 0207 GMT  
 LAT 14 59.7S LONG 098 00.0W WEATHER 2 SEA STATE 3  
 BAROMETER 16 WIND DIR 110 T SPD 16 KT VISIBILITY 7  
 CLOUD 6 AMOUNT 8 DRY 21.3 WET 18.5 DEPTH 3290 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	22.233	35.959	24.882	0.000
10.	22.233	35.958	24.882	0.031
20.	22.231	35.959	24.883	0.061
30.	22.203	35.958	24.890	0.092
40.	22.197	35.957	24.891	0.123
50.	22.193	35.956	24.892	0.153
60.	22.187	35.958	24.894	0.184
70.	22.050	35.947	24.925	0.215
80.	21.879	35.924	24.956	0.245
90.	21.792	35.909	24.969	0.275
100.	21.782	35.908	24.970	0.305
110.	21.850	35.947	24.981	0.335
120.	21.406	35.883	25.056	0.365
130.	21.217	35.909	25.128	0.394
140.	20.395	35.793	25.263	0.422
150.	19.827	35.696	25.340	0.449
160.	19.505	35.683	25.414	0.476
170.	19.212	35.624	25.445	0.501
180.	18.882	35.566	25.485	0.527
190.	18.198	35.442	25.563	0.552
200.	17.399	35.298	25.648	0.577
250.	13.158	34.709	26.137	0.685
300.	10.611	34.559	26.502	0.772
350.	9.360	34.609	26.754	0.845
400.	8.504	34.593	26.878	0.909
450.	8.031	34.587	26.945	0.970
500.	7.514	34.570	27.008	1.027
550.	7.024	34.542	27.055	1.082
600.	6.693	34.536	27.096	1.135
650.	6.305	34.525	27.138	1.187
700.	5.902	34.518	27.185	1.236
750.	5.555	34.515	27.225	1.283
800.	5.265	34.515	27.260	1.329
850.	5.038	34.516	27.287	1.373
900.	4.810	34.522	27.318	1.416
950.	4.595	34.526	27.345	1.457
999.	4.357	34.533	27.377	1.496

CAST EP4-86-OC-034 DATE 27 NOV 86 TIME 0940 GMT  
LAT 14 59.6S LONG 096 30.0W

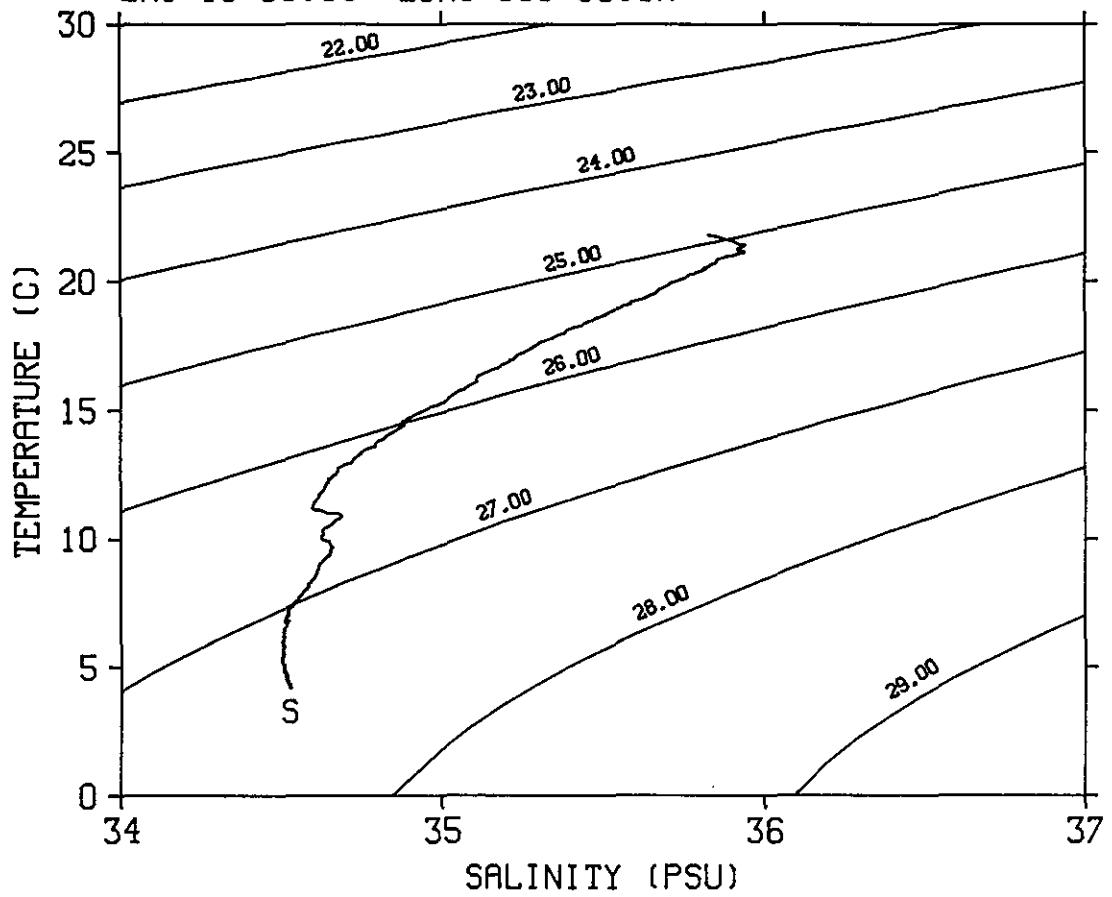


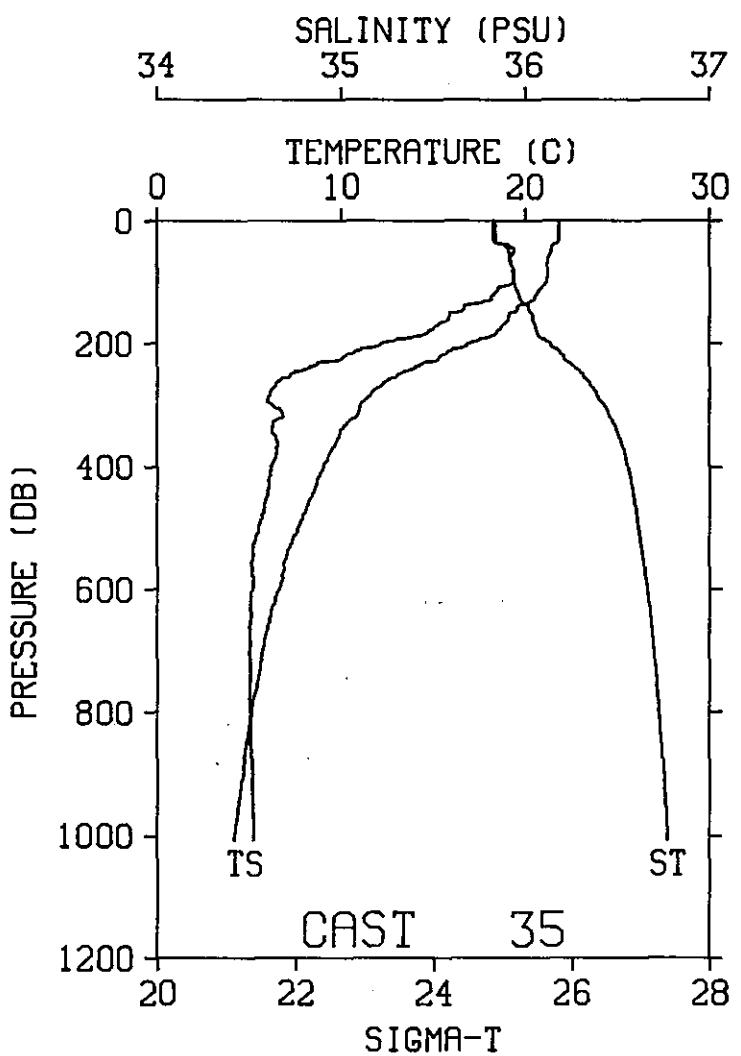


CAST EP4-86-OC-034 DATE 27 NOV 86 TIME 0940 GMT  
 LAT 14 59.6S LONG 096 30.0W WEATHER 2 SEA STATE 2  
 BAROMETER 15 WIND DIR 115 T SPD 12 KT VISIBILITY 8  
 CLOUD 6 AMOUNT 8 DRY 21.1 WET 16.5 DEPTH 3317 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	21.943	36.008	25.002	0.000
10.	21.962	35.993	24.985	0.030
20.	21.944	35.993	24.990	0.059
30.	21.854	35.992	25.014	0.089
40.	21.844	35.990	25.016	0.118
50.	21.831	35.987	25.017	0.148
60.	21.678	36.000	25.069	0.177
70.	21.594	35.998	25.091	0.206
80.	21.576	35.997	25.096	0.235
90.	21.566	35.997	25.099	0.264
100.	21.551	35.998	25.103	0.293
110.	21.535	35.994	25.105	0.321
120.	21.414	35.969	25.119	0.350
130.	20.979	35.904	25.189	0.379
140.	20.657	35.843	25.230	0.407
150.	19.634	35.679	25.378	0.434
160.	19.136	35.591	25.439	0.460
170.	18.578	35.477	25.495	0.486
180.	18.029	35.399	25.571	0.511
190.	16.875	35.215	25.709	0.535
200.	15.883	35.061	25.822	0.558
250.	12.120	34.691	26.326	0.656
300.	10.994	34.718	26.558	0.737
350.	10.129	34.706	26.700	0.811
400.	9.215	34.668	26.824	0.878
450.	8.548	34.631	26.901	0.941
500.	7.963	34.590	26.958	1.001
550.	7.332	34.563	27.028	1.058
600.	6.800	34.541	27.085	1.112
650.	6.399	34.528	27.128	1.164
700.	5.990	34.515	27.171	1.214
750.	5.663	34.508	27.206	1.262
800.	5.328	34.507	27.246	1.308
850.	5.089	34.520	27.285	1.353
900.	4.857	34.517	27.309	1.396
950.	4.577	34.524	27.346	1.437
1000.	4.314	34.532	27.381	1.477
1008.	4.305	34.532	27.382	1.484

CAST EP4-86-OC-035 DATE 27 NOV 86 TIME 1644 GMT  
LAT 15 00.0S LONG 095 00.1W

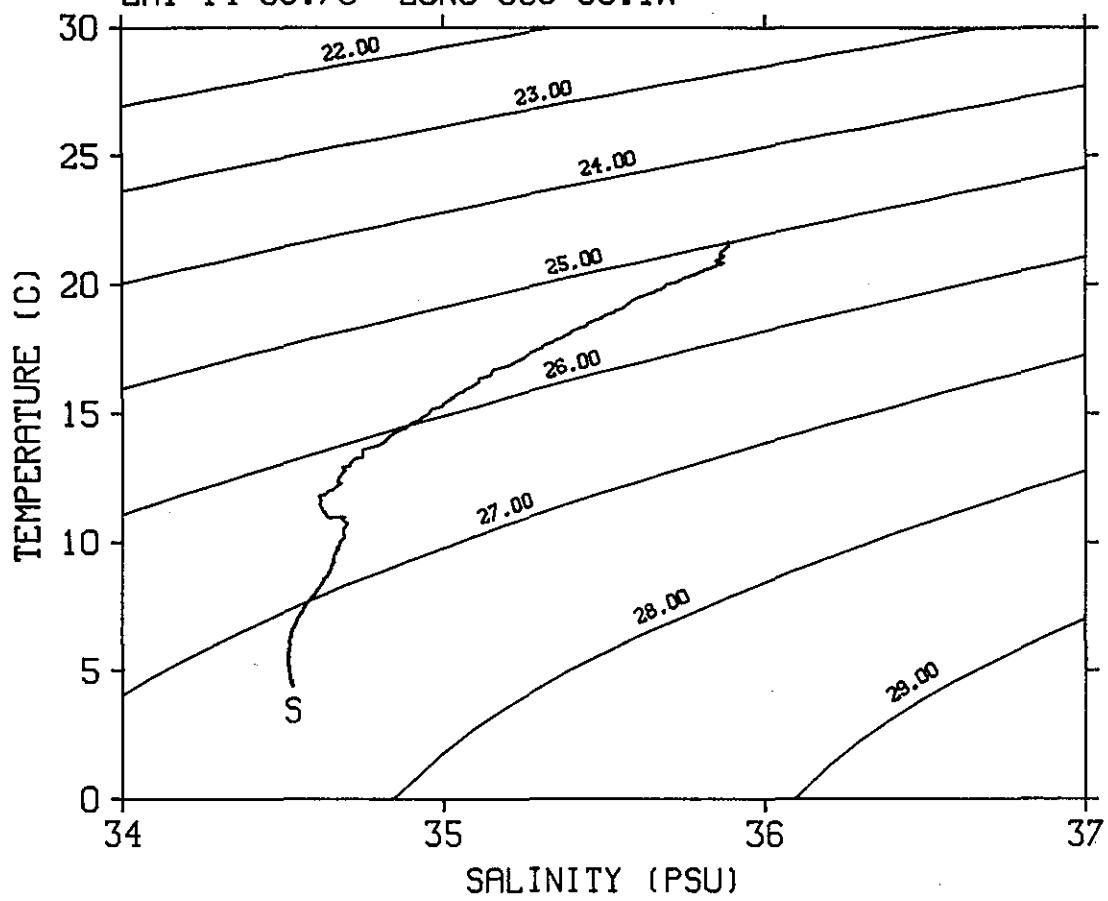


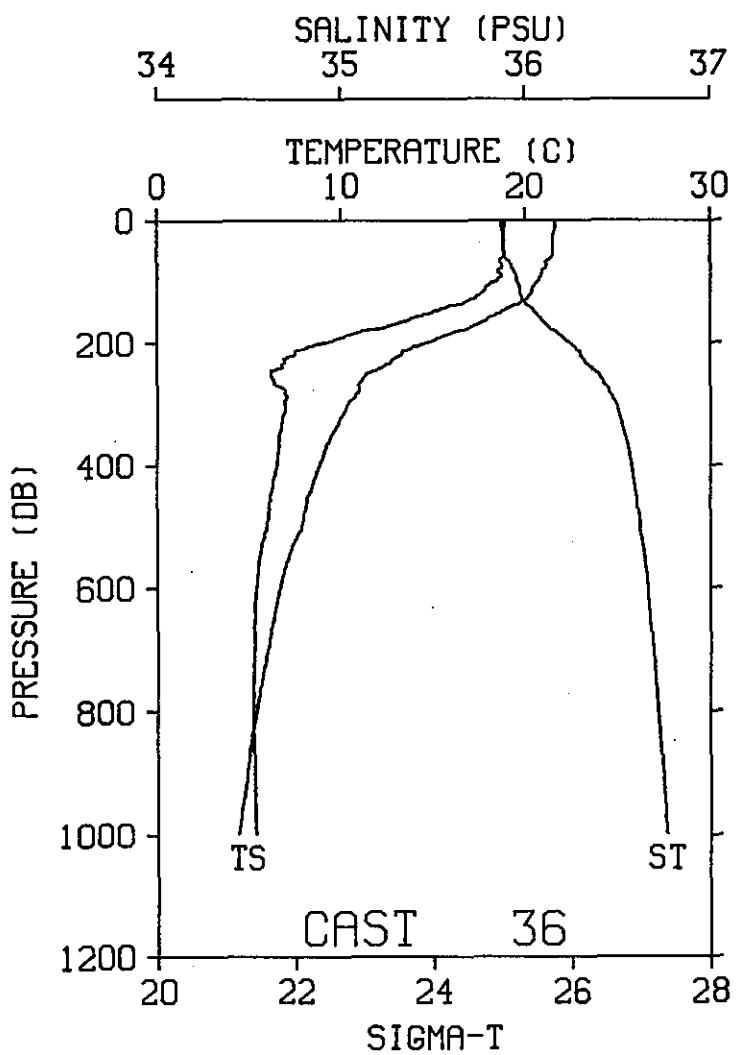


CAST EP4-86-OC-035 DATE 27 NOV 86 TIME 1644 GMT  
 LAT 15 00.0S LONG 095 00.1W WEATHER 2 SEA STATE 3  
 BAROMETER 101 WIND DIR 120 T SPD 08 KT VISIBILITY 7  
 CLOUD 6 AMOUNT 8 DRY 23.1 WET 18.3 DEPTH 3880 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	21.816	35.828	24.900	0.000
10.	21.816	35.830	24.901	0.030
20.	21.805	35.827	24.903	0.061
30.	21.802	35.826	24.903	0.091
40.	21.519	35.913	25.048	0.122
50.	21.416	35.943	25.099	0.151
60.	21.275	35.919	25.120	0.179
70.	21.215	35.924	25.140	0.208
80.	21.192	35.937	25.156	0.236
90.	21.167	35.936	25.162	0.264
100.	21.142	35.936	25.169	0.293
110.	20.813	35.852	25.195	0.321
120.	20.579	35.828	25.240	0.348
130.	20.447	35.816	25.266	0.376
140.	19.569	35.667	25.385	0.403
150.	19.289	35.623	25.424	0.429
160.	19.087	35.583	25.446	0.455
170.	18.796	35.526	25.476	0.481
180.	18.487	35.473	25.514	0.506
190.	17.981	35.383	25.571	0.531
200.	16.924	35.223	25.705	0.555
250.	13.040	34.722	26.170	0.661
300.	11.042	34.630	26.481	0.749
350.	9.908	34.644	26.690	0.825
400.	9.036	34.620	26.815	0.892
450.	8.348	34.591	26.900	0.955
500.	7.644	34.550	26.973	1.014
550.	7.009	34.521	27.041	1.070
600.	6.611	34.514	27.089	1.124
650.	6.114	34.507	27.149	1.175
700.	5.724	34.505	27.196	1.223
750.	5.426	34.502	27.230	1.270
800.	5.129	34.505	27.268	1.315
850.	4.845	34.504	27.300	1.359
900.	4.622	34.514	27.333	1.401
950.	4.400	34.517	27.360	1.441
1000.	4.197	34.525	27.388	1.481
1007.	4.169	34.525	27.391	1.486

CAST EP4-86-OC-036 DATE 27 NOV 86 TIME 2317 GMT  
LAT 14 59.7S LONG 093 38.1W

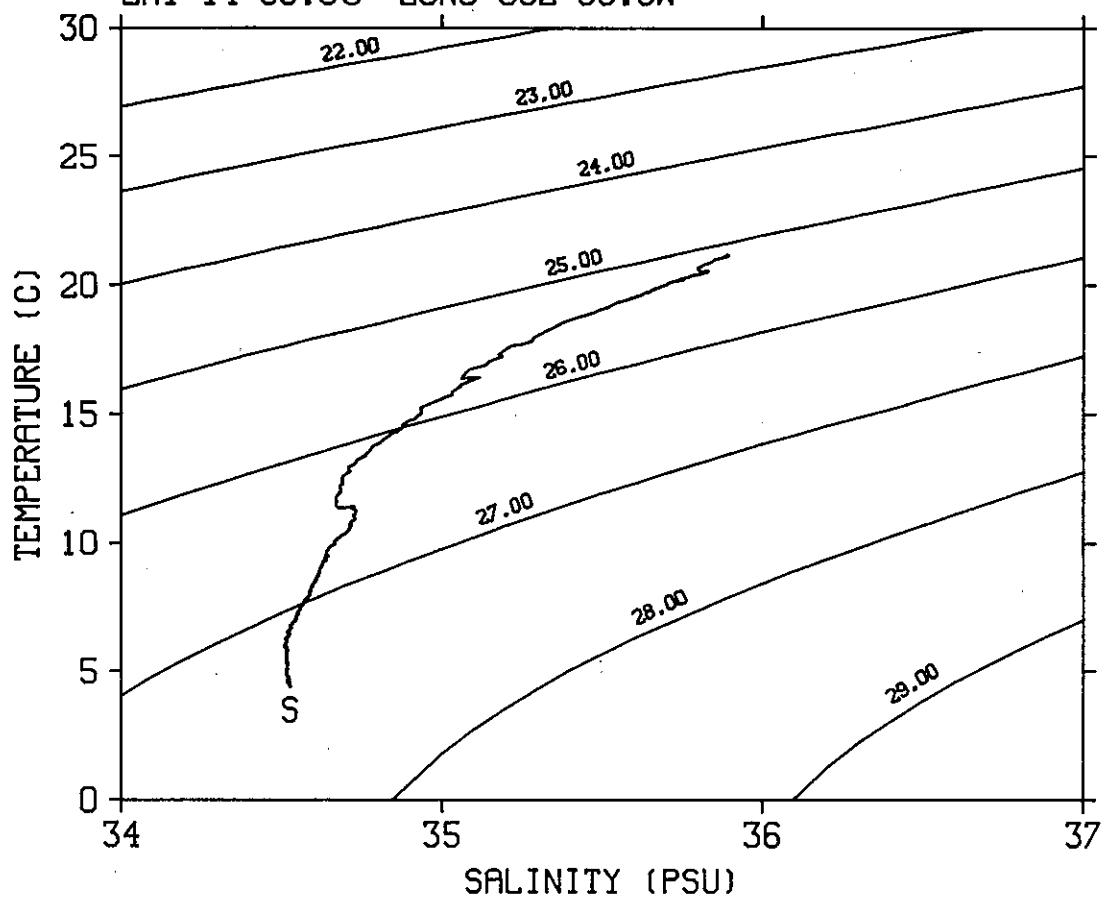




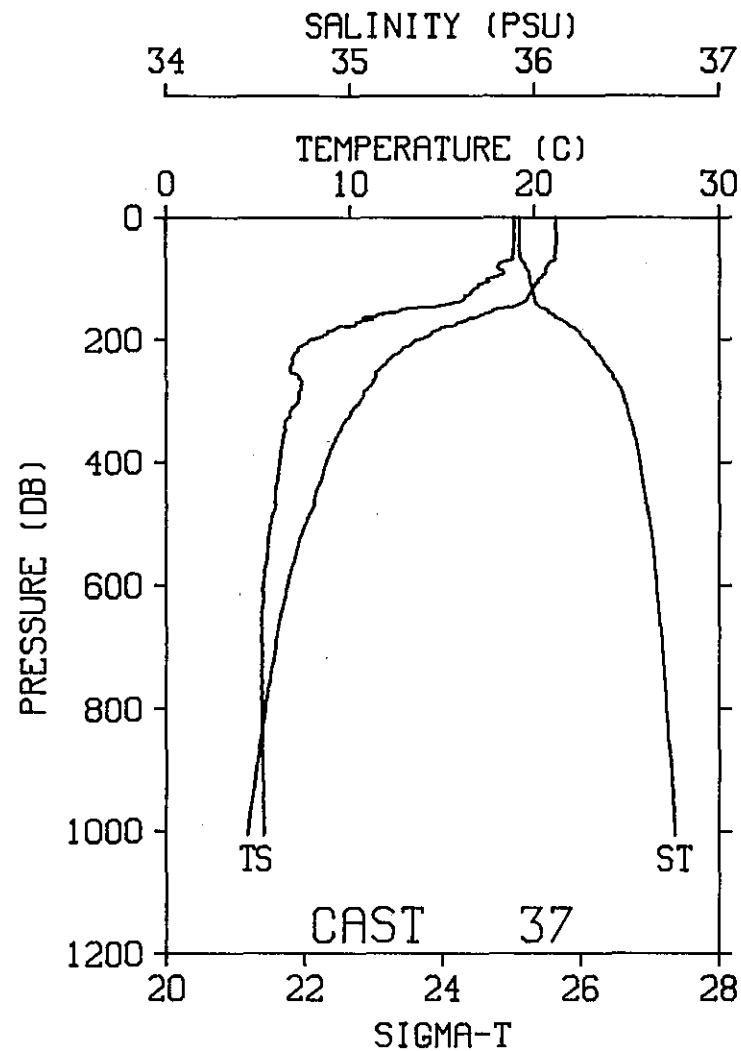
CAST EP4-86-OC-036 DATE 27 NOV 86 TIME 2317 GMT  
 LAT 14 59.7S LONG 093 38.1W WEATHER 2 SEA STATE 2  
 BAROMETER 16 WIND DIR 110 T SPD 12 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 8 DRY 21.7 WET 18.5 DEPTH M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	21.666	35.884	24.985	0.000
10.	21.637	35.885	24.994	0.030
20.	21.548	35.887	25.020	0.059
30.	21.529	35.887	25.025	0.088
40.	21.521	35.887	25.027	0.118
50.	21.512	35.887	25.030	0.147
60.	21.456	35.883	25.043	0.177
70.	21.128	35.870	25.123	0.205
80.	20.950	35.856	25.161	0.234
90.	20.837	35.873	25.204	0.262
100.	20.681	35.837	25.219	0.290
110.	20.384	35.782	25.257	0.317
120.	20.262	35.754	25.269	0.345
130.	19.897	35.686	25.314	0.372
140.	19.257	35.580	25.399	0.399
150.	18.667	35.497	25.487	0.424
160.	17.996	35.382	25.566	0.449
170.	17.371	35.284	25.645	0.474
180.	16.314	35.113	25.763	0.497
190.	15.436	35.012	25.885	0.519
200.	14.608	34.900	25.981	0.540
250.	11.395	34.618	26.406	0.634
300.	10.337	34.689	26.652	0.712
350.	9.450	34.661	26.780	0.781
400.	8.816	34.649	26.873	0.845
450.	8.177	34.611	26.942	0.906
500.	7.787	34.591	26.985	0.964
550.	7.093	34.554	27.055	1.020
600.	6.657	34.537	27.101	1.072
650.	6.328	34.529	27.138	1.124
700.	5.962	34.521	27.179	1.173
750.	5.654	34.520	27.217	1.221
800.	5.365	34.516	27.249	1.267
850.	5.078	34.519	27.285	1.311
900.	4.812	34.522	27.318	1.354
950.	4.583	34.527	27.348	1.395
999.	4.369	34.535	27.377	1.435

CAST EP4-86-OC-037 DATE 28 NOV 86 TIME 0658 GMT  
LAT 14 59.9S LONG 092 00.3W



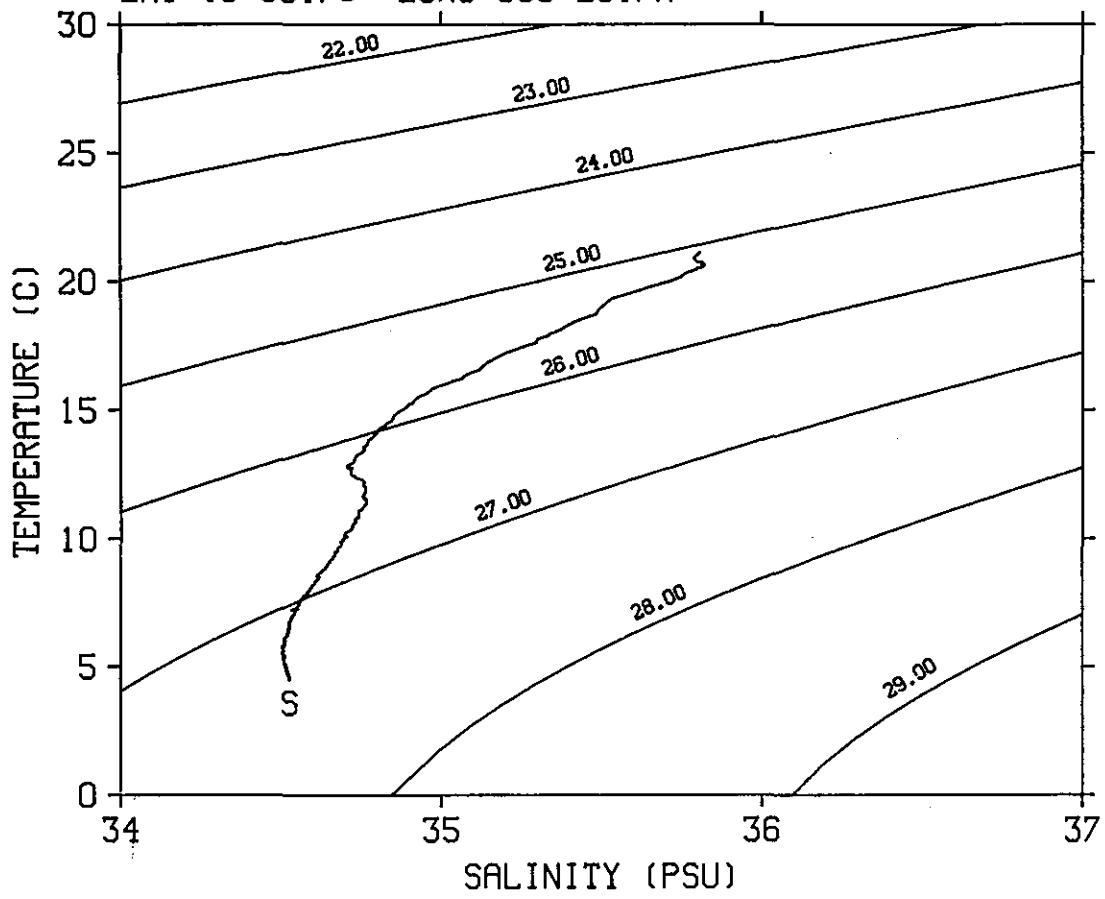
237

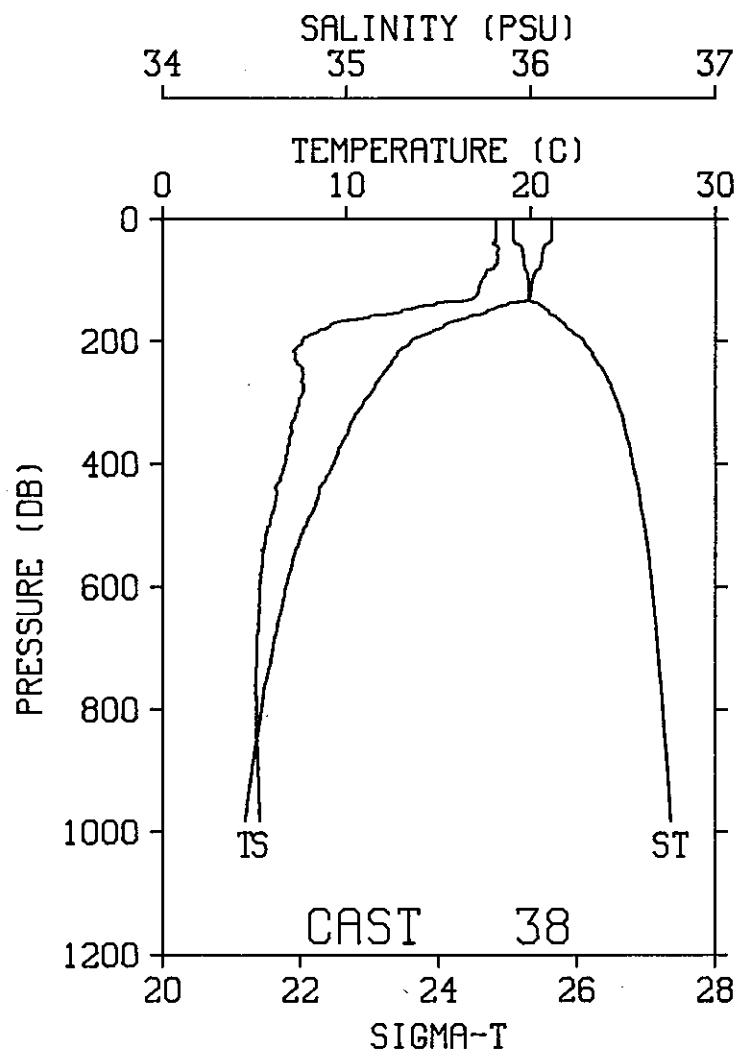


CAST EP4-86-OC-037 DATE 28 NOV 86 TIME 0658 GMT  
 LAT 14 59.9S LONG 092 00.3W WEATHER 2 SEA STATE 3  
 BAROMETER 16 WIND DIR 105 T SPD 08 KT VISIBILITY 7  
 CLOUD 7 AMOUNT 8 DRY 20.3 WET 17.0 DEPTH 3450 M

PRESSURE (db)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	21.185	35.887	25.120	0.000
10.	21.190	35.892	25.123	0.028
20.	21.193	35.891	25.121	0.057
30.	21.197	35.892	25.120	0.085
40.	21.199	35.892	25.120	0.114
50.	21.178	35.890	25.124	0.142
60.	21.146	35.886	25.130	0.171
70.	21.068	35.864	25.134	0.199
80.	20.678	35.801	25.193	0.227
90.	20.564	35.833	25.247	0.255
100.	20.316	35.762	25.261	0.282
110.	20.012	35.694	25.290	0.309
120.	19.841	35.664	25.312	0.336
130.	19.641	35.626	25.335	0.363
140.	19.350	35.550	25.353	0.390
150.	17.906	35.281	25.511	0.416
160.	17.076	35.158	25.618	0.441
170.	16.099	35.058	25.771	0.464
180.	14.996	34.935	25.923	0.486
190.	14.425	34.874	26.000	0.507
200.	13.757	34.784	26.071	0.527
250.	11.557	34.675	26.420	0.617
300.	10.525	34.713	26.638	0.694
350.	9.433	34.641	26.767	0.764
400.	8.700	34.617	26.866	0.829
450.	8.116	34.593	26.937	0.890
500.	7.538	34.568	27.002	0.948
550.	7.000	34.544	27.060	1.003
600.	6.577	34.527	27.104	1.055
650.	6.226	34.521	27.146	1.106
700.	5.908	34.517	27.183	1.155
750.	5.617	34.521	27.222	1.203
800.	5.382	34.517	27.248	1.249
850.	5.137	34.521	27.279	1.293
900.	4.846	34.524	27.315	1.336
950.	4.634	34.523	27.339	1.378
1000.	4.422	34.531	27.368	1.419
1007.	4.394	34.530	27.370	1.424

CAST EP4-86-OC-038 DATE 28 NOV 86 TIME 1506 GMT  
LAT 15 00.7S LONG 090 29.7W

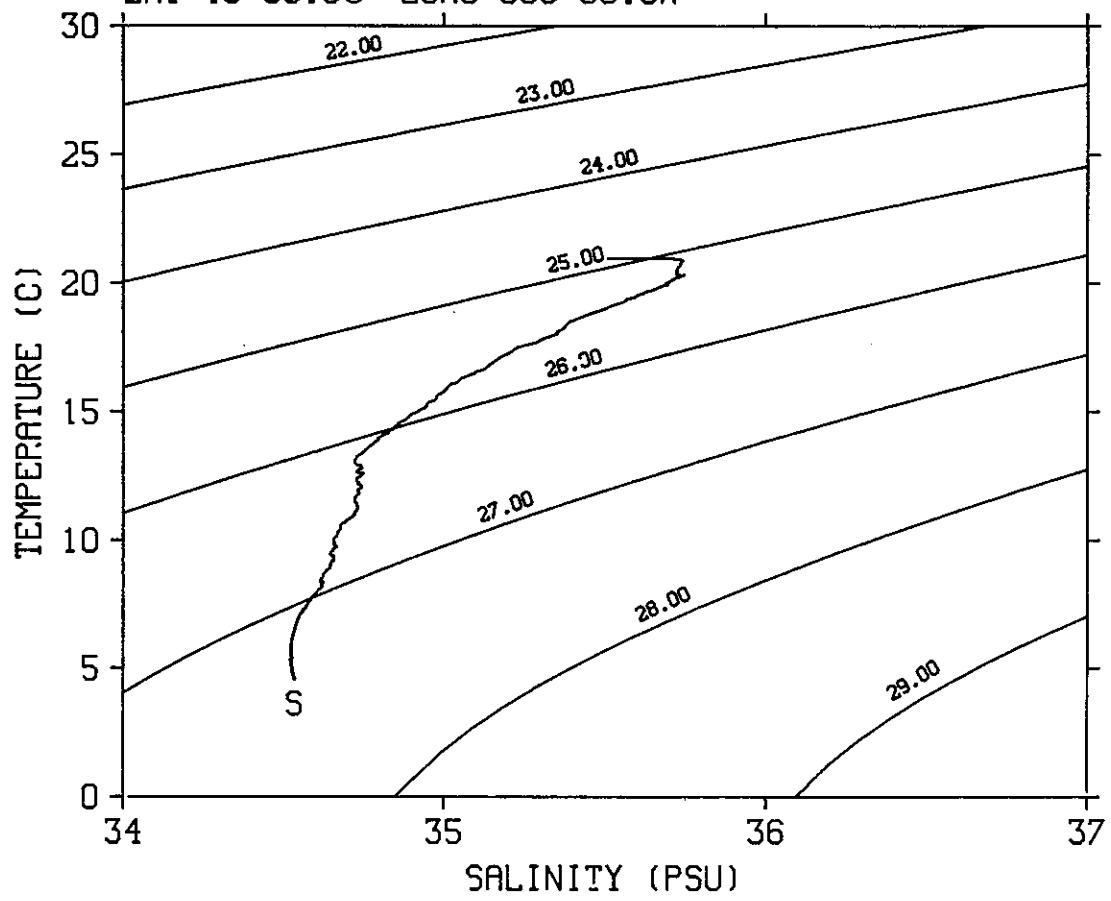


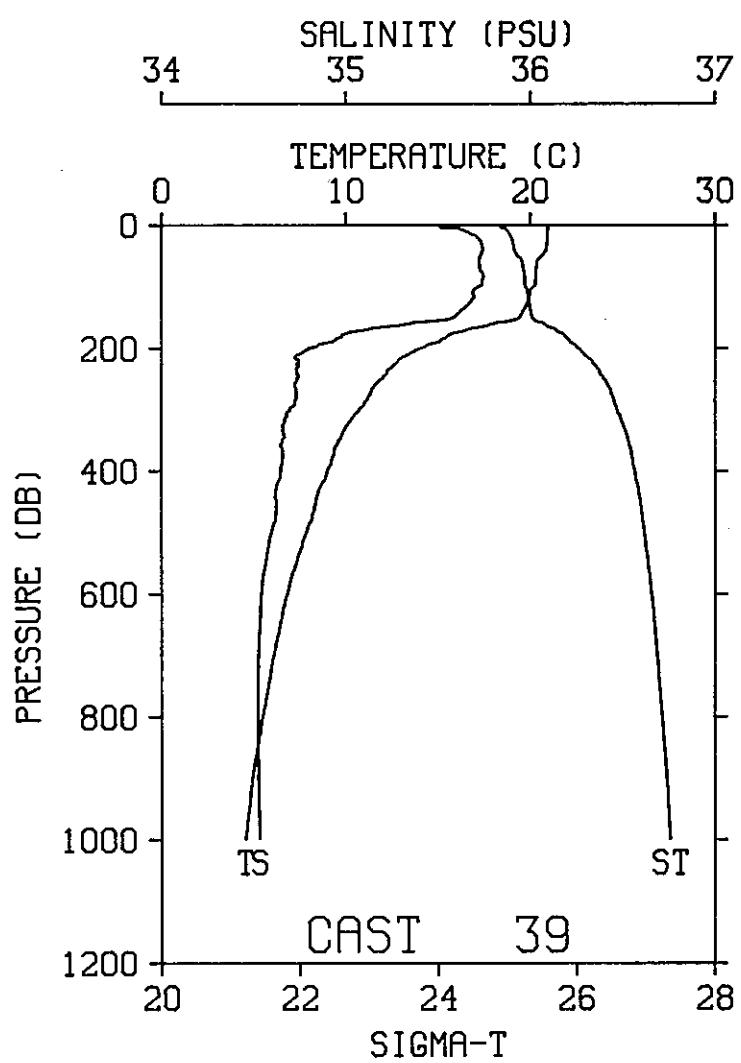


CAST EP4-86-OC-038 DATE 28 NOV 86 TIME 1506 GMT  
 LAT 15 00.7S LONG 090 29.7W WEATHER 1 SEA STATE 3  
 BAROMETER 18 WIND DIR 120 T SPD 16 KT VISIBILITY 7  
 CLOUD 6 AMOUNT 6 DRY 23.1 WET 18.6 DEPTH 4270 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	21.108	35.810	25.082	0.000
10.	21.109	35.809	25.081	0.029
20.	21.103	35.809	25.083	0.057
30.	21.098	35.809	25.084	0.086
40.	20.944	35.796	25.116	0.115
50.	20.642	35.824	25.220	0.143
60.	20.571	35.814	25.231	0.170
70.	20.555	35.816	25.238	0.198
80.	20.457	35.799	25.250	0.225
90.	20.154	35.752	25.296	0.252
100.	20.069	35.734	25.305	0.279
110.	20.006	35.718	25.310	0.306
120.	19.974	35.713	25.314	0.333
130.	19.872	35.684	25.318	0.360
140.	18.693	35.479	25.467	0.387
150.	17.633	35.296	25.590	0.412
160.	16.615	35.123	25.700	0.436
170.	15.541	34.933	25.801	0.458
180.	15.055	34.886	25.873	0.480
190.	14.191	34.800	25.993	0.502
200.	13.498	34.756	26.104	0.521
250.	12.048	34.756	26.391	0.613
300.	10.939	34.741	26.585	0.692
350.	10.068	34.701	26.707	0.764
400.	9.300	34.666	26.808	0.832
450.	8.466	34.620	26.904	0.895
500.	7.804	34.582	26.975	0.954
550.	7.131	34.544	27.042	1.011
600.	6.692	34.527	27.089	1.064
650.	6.324	34.523	27.135	1.116
700.	5.982	34.512	27.169	1.166
750.	5.654	34.511	27.209	1.214
800.	5.367	34.509	27.243	1.260
850.	5.100	34.514	27.279	1.305
900.	4.847	34.519	27.312	1.348
950.	4.620	34.525	27.342	1.390
983.	4.492	34.528	27.358	1.417

CAST EP4-86-OC-039 DATE 28 NOV 86 TIME 2246 GM1  
LAT 15 00.0S LONG 088 59.3W

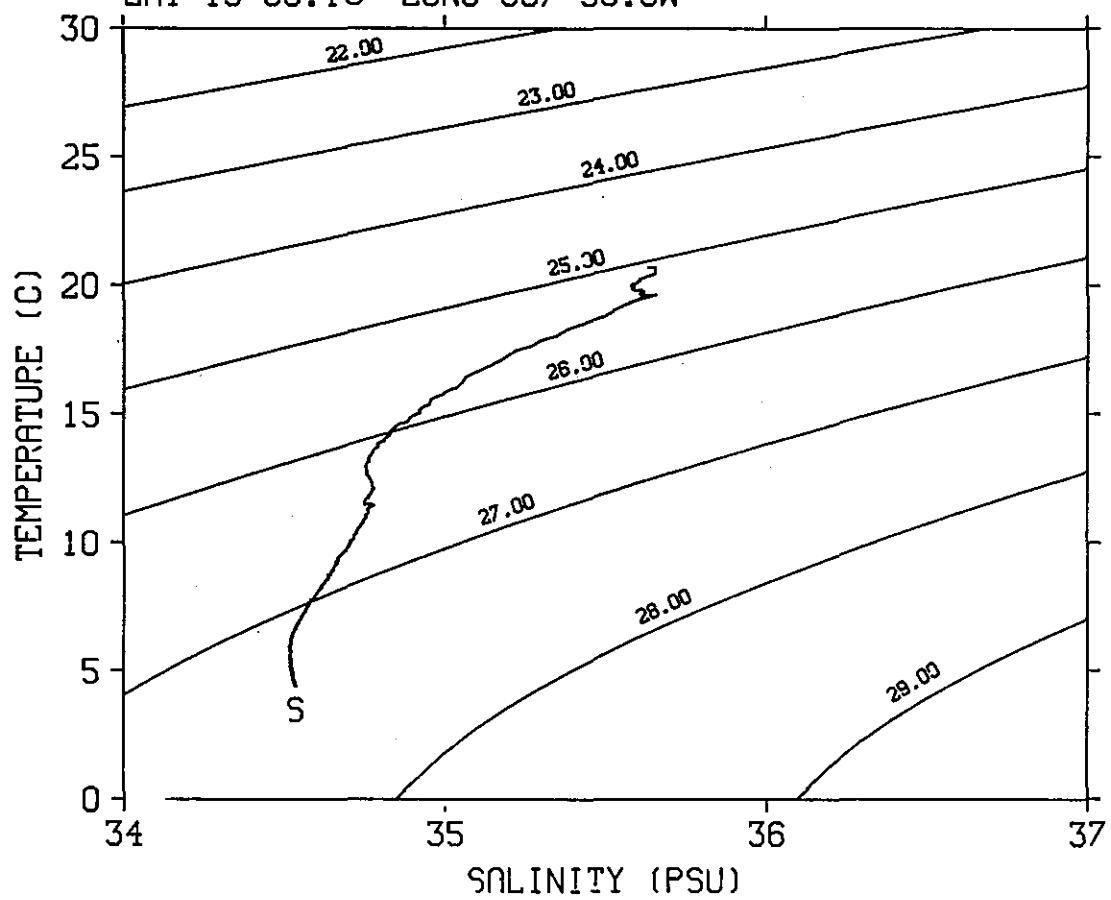


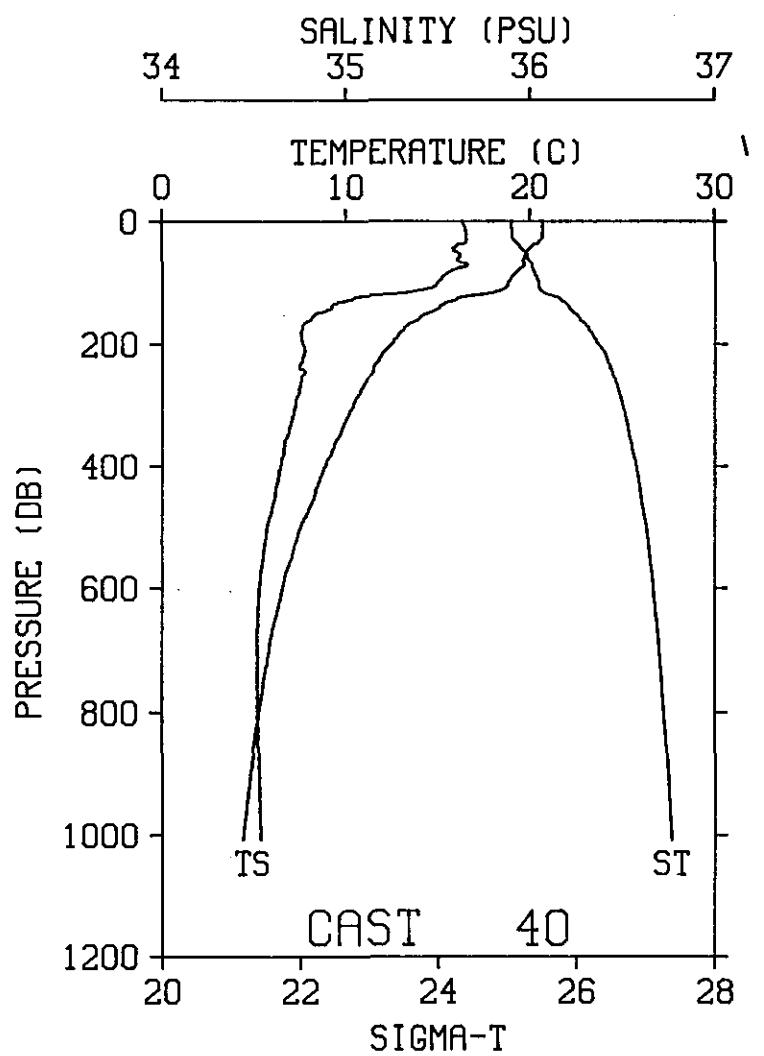


CAST EP4-86-OC-039 DATE 28 NOV 86 TIME 2246 GMT  
 LAT 15 00.0S LONG 088 59.3W WEATHER 2 SEA STATE 2  
 BAROMETER 14 WIND DIR 105 T SPD 13 KT VISIBILITY 8  
 CLOUD 6 AMOUNT 7 DRY 21.1 WET 18.0 DEPTH 4281 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	20.950	35.510	24.897	0.000
10.	20.947	35.651	25.005	0.030
20.	20.930	35.713	25.058	0.059
30.	20.897	35.736	25.084	0.088
40.	20.852	35.745	25.103	0.117
50.	20.651	35.734	25.149	0.145
60.	20.353	35.722	25.220	0.173
70.	20.322	35.727	25.232	0.201
80.	20.305	35.744	25.249	0.228
90.	20.278	35.740	25.254	0.256
100.	20.151	35.716	25.269	0.283
110.	19.951	35.687	25.300	0.310
120.	19.896	35.684	25.312	0.337
130.	19.780	35.663	25.327	0.364
140.	19.581	35.620	25.346	0.391
150.	19.409	35.585	25.364	0.417
160.	18.017	35.357	25.542	0.443
170.	16.526	35.096	25.701	0.467
180.	15.501	34.978	25.845	0.490
190.	14.995	34.921	25.913	0.511
200.	13.976	34.793	26.033	0.532
250.	11.882	34.729	26.401	0.623
300.	10.711	34.694	26.589	0.702
350.	9.598	34.655	26.750	0.774
400.	8.985	34.645	26.843	0.839
450.	8.343	34.623	26.926	0.901
500.	7.832	34.595	26.981	0.960
550.	7.282	34.562	27.035	1.017
600.	6.790	34.540	27.086	1.070
650.	6.406	34.532	27.131	1.122
700.	6.063	34.524	27.169	1.172
750.	5.768	34.522	27.205	1.220
800.	5.465	34.525	27.243	1.267
850.	5.190	34.523	27.275	1.312
900.	4.916	34.525	27.308	1.356
950.	4.734	34.527	27.330	1.398
999.	4.538	34.532	27.357	1.438

CAST EP4-86-OC-040 DATE 29 NOV 86 TIME 0557 GMF  
LAT 15 00.1S LONG 087 30.0W

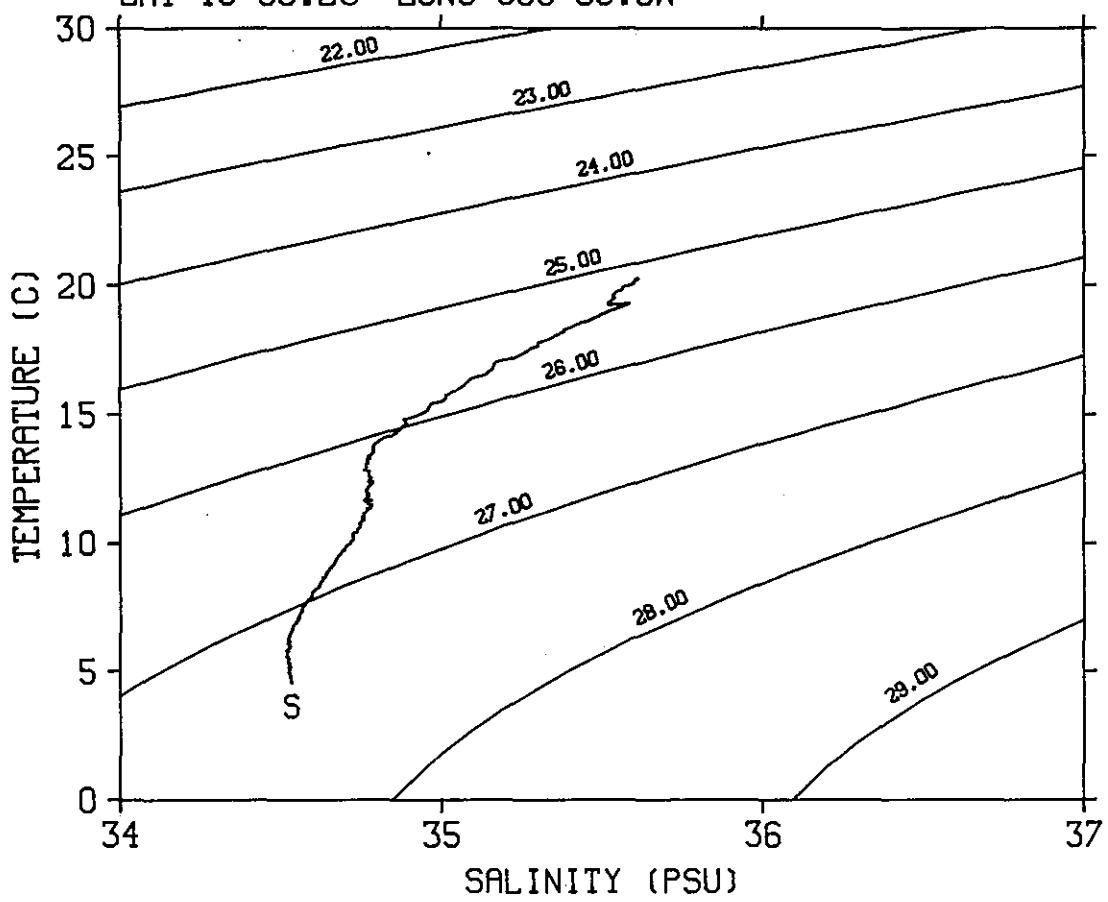


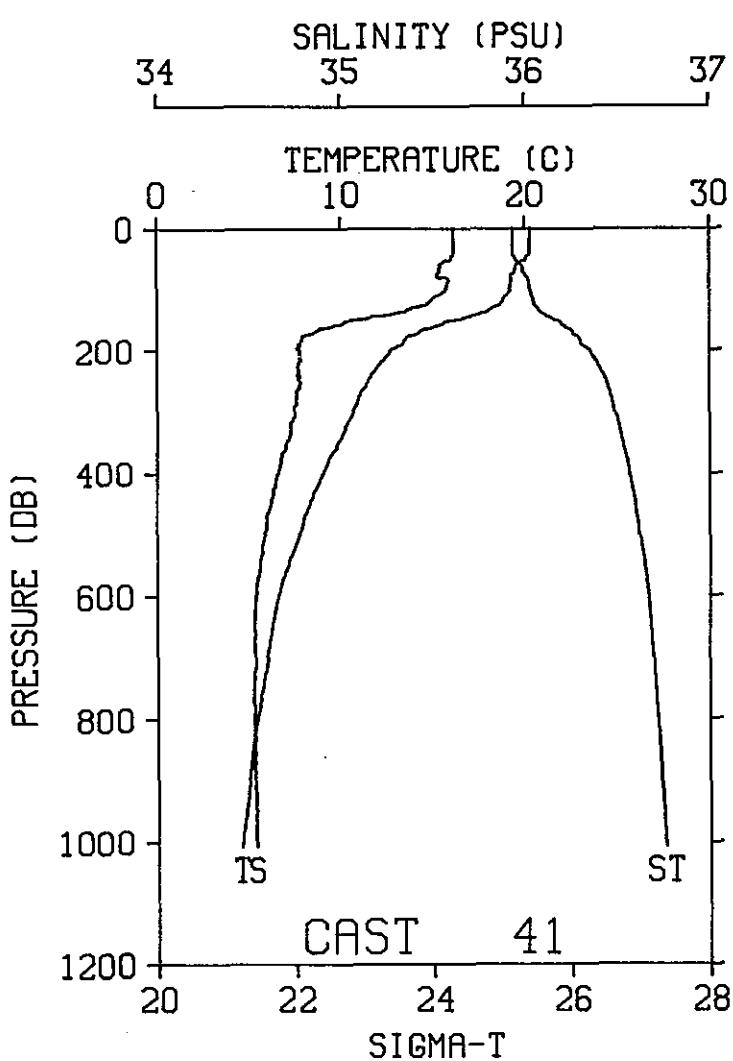


CAST EP4-86-OC-040 DATE 29 NOV 86 TIME 0557 GMT  
 LAT 15 00.1S LONG 087 30.0W WEATHER 2 SEA STATE 3  
 BAROMETER 16 WIND DIR 120 T SPD 15 KT VISIBILITY 7  
 CLOUD 7 AMOUNT 7 DRY 19.9 WET 16.8 DEPTH 3410 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	20.690	35.635	25.063	0.000
10.	20.695	35.649	25.072	0.029
20.	20.683	35.655	25.080	0.058
30.	20.621	35.656	25.098	0.086
40.	20.125	35.604	25.191	0.115
50.	19.807	35.602	25.273	0.142
60.	19.718	35.617	25.308	0.169
70.	19.652	35.662	25.359	0.196
80.	19.308	35.577	25.384	0.222
90.	18.974	35.520	25.426	0.248
100.	18.780	35.495	25.457	0.273
110.	18.555	35.438	25.471	0.299
120.	17.073	35.169	25.627	0.324
130.	15.772	34.993	25.795	0.347
140.	15.055	34.922	25.900	0.368
150.	14.385	34.835	25.979	0.389
160.	13.932	34.807	26.053	0.409
170.	13.298	34.758	26.146	0.429
180.	12.969	34.752	26.208	0.448
190.	12.741	34.757	26.257	0.466
200.	12.472	34.765	26.316	0.484
250.	11.359	34.762	26.525	0.565
300.	10.389	34.723	26.669	0.639
350.	9.621	34.680	26.767	0.708
400.	8.856	34.645	26.863	0.773
450.	8.255	34.613	26.931	0.834
500.	7.495	34.571	27.011	0.892
550.	7.025	34.551	27.062	0.946
600.	6.515	34.527	27.112	0.999
650.	6.124	34.519	27.157	1.049
700.	5.797	34.516	27.196	1.098
750.	5.482	34.515	27.234	1.144
800.	5.244	34.517	27.264	1.190
850.	4.997	34.521	27.296	1.233
900.	4.772	34.526	27.326	1.276
950.	4.573	34.533	27.353	1.317
1000.	4.416	34.534	27.371	1.357
1008.	4.385	34.534	27.375	1.364

CAST EP4-86-OC-041 DATE 29 NOV 86 TIME 1310 GMT  
LAT 15 00.2S LONG 085 59.8W

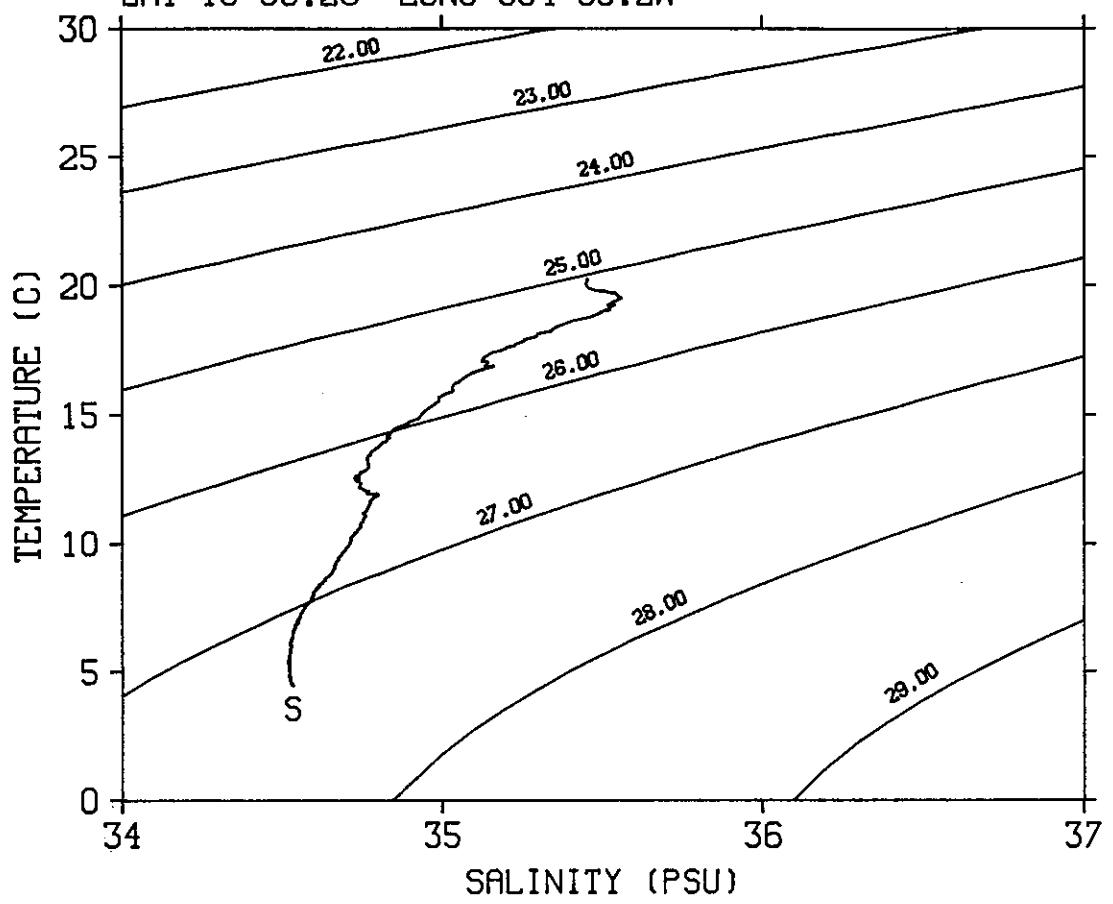


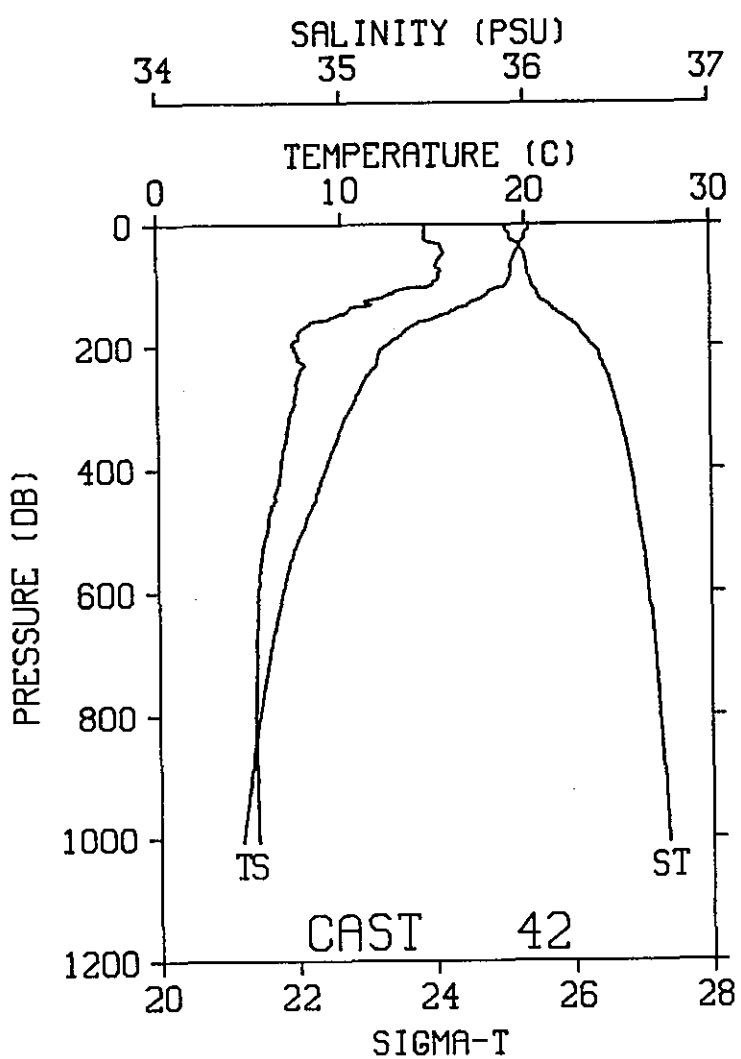


CAST EP4-86-OC-041 DATE 29 NOV 86 TIME 1310 GMT  
 LAT 15 00.2S LONG 085 59.8W WEATHER 2 SEA STATE 4  
 BAROMETER 17 WIND DIR 120 T SPD 12 KT VISIBILITY 7  
 CLOUD 6 AMOUNT 7 DRY 19.9 WET 17.3 DEPTH 4715 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	20.272	35.614	25.159	0.000
10.	20.274	35.615	25.159	0.028
20.	20.275	35.614	25.158	0.056
30.	20.278	35.615	25.158	0.084
40.	20.255	35.614	25.164	0.112
50.	20.062	35.599	25.204	0.140
60.	19.551	35.534	25.288	0.167
70.	19.465	35.542	25.317	0.194
80.	19.237	35.537	25.372	0.221
90.	19.248	35.581	25.403	0.247
100.	19.171	35.566	25.411	0.273
110.	18.965	35.520	25.429	0.298
120.	18.715	35.480	25.462	0.324
130.	18.187	35.384	25.521	0.349
140.	17.484	35.275	25.610	0.374
150.	16.045	35.063	25.787	0.397
160.	15.103	34.956	25.917	0.419
170.	14.232	34.854	26.026	0.440
180.	13.512	34.790	26.126	0.460
190.	13.299	34.768	26.153	0.479
200.	12.663	34.773	26.285	0.497
250.	11.471	34.780	26.519	0.581
300.	10.667	34.749	26.640	0.656
350.	9.807	34.703	26.753	0.726
400.	9.030	34.660	26.847	0.792
450.	8.287	34.621	26.933	0.853
500.	7.710	34.581	26.988	0.912
550.	7.093	34.557	27.057	0.967
600.	6.545	34.532	27.112	1.019
650.	6.222	34.527	27.151	1.070
700.	5.969	34.532	27.187	1.119
750.	5.689	34.523	27.215	1.166
800.	5.423	34.526	27.249	1.213
850.	5.174	34.530	27.282	1.257
900.	4.972	34.526	27.303	1.300
950.	4.783	34.536	27.333	1.343
1000.	4.586	34.539	27.356	1.384
1007.	4.551	34.537	27.359	1.390

CAST EP4-86-OC-042 DATE 29 NOV 86 TIME 2045 GMT  
LAT 15 00.2S LONG 084 30.2W

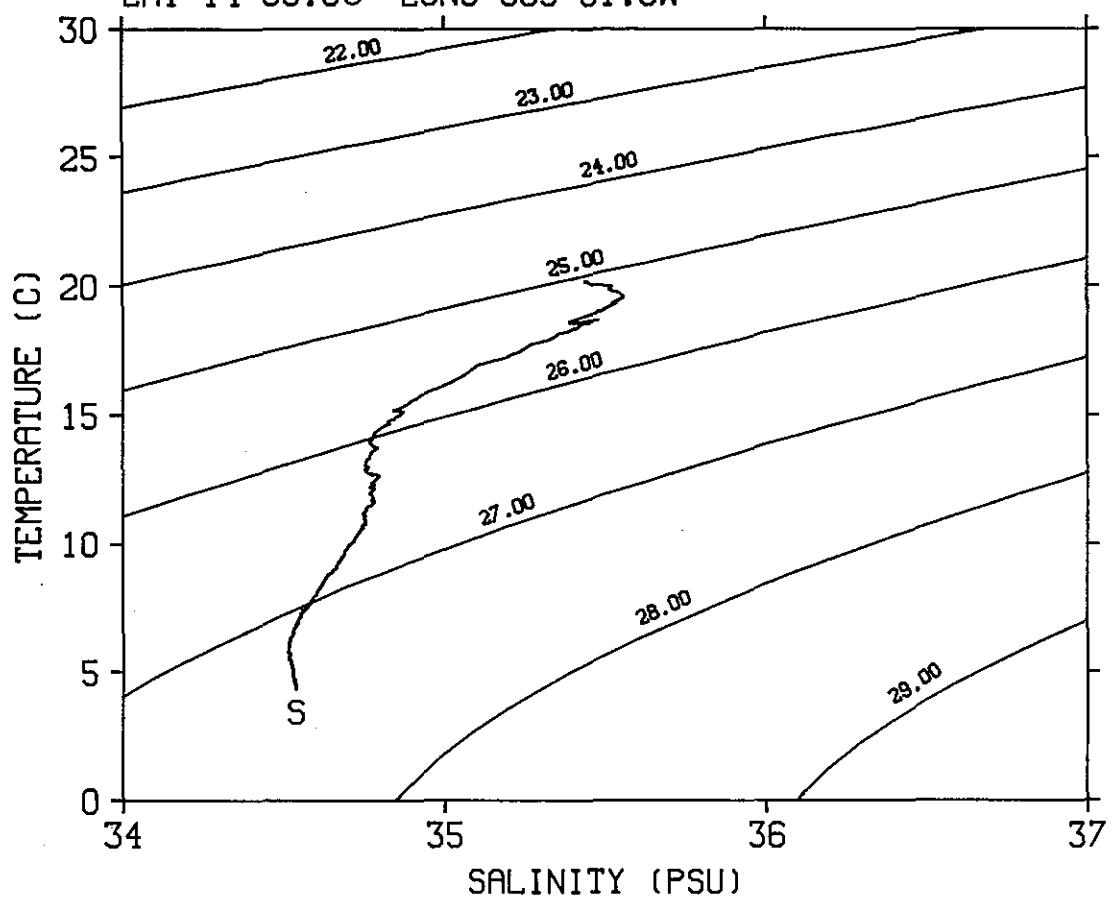




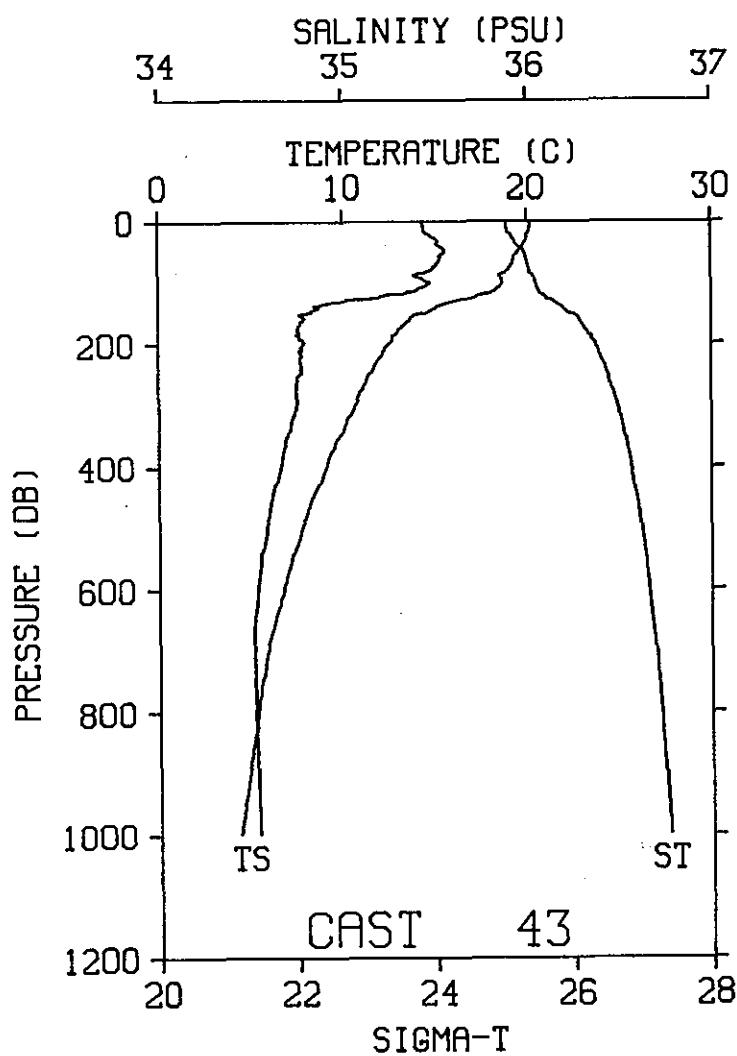
CAST EP4-86-OC-042 DATE 29 NOV 86 TIME 2045 GMT  
 LAT 15 00.2S LONG 084 30.2W WEATHER 1 SEA STATE 2  
 BAROMETER 15 WIND DIR 130 T SPD 12 KT VISIBILITY 8  
 CLOUD 3 AMOUNT 2 DRY 22.4 WET 18.5 DEPTH 4787 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	20.237	35.455	25.047	0.000
10.	20.199	35.455	25.057	0.029
20.	19.985	35.454	25.113	0.058
30.	19.778	35.505	25.207	0.086
40.	19.662	35.548	25.270	0.113
50.	19.445	35.553	25.330	0.140
60.	19.310	35.527	25.346	0.166
70.	19.220	35.518	25.362	0.193
80.	19.219	35.534	25.374	0.219
90.	19.082	35.526	25.404	0.245
100.	18.886	35.488	25.424	0.271
110.	18.002	35.293	25.497	0.296
120.	17.642	35.223	25.532	0.321
130.	16.869	35.133	25.649	0.346
140.	16.194	35.043	25.737	0.369
150.	15.329	34.969	25.876	0.391
160.	14.242	34.834	26.009	0.412
170.	13.664	34.792	26.097	0.432
180.	13.293	34.765	26.153	0.451
190.	12.788	34.753	26.245	0.470
200.	12.366	34.744	26.320	0.488
250.	11.347	34.766	26.530	0.570
300.	10.537	34.740	26.656	0.644
350.	9.752	34.698	26.758	0.714
400.	9.089	34.663	26.841	0.779
450.	8.561	34.639	26.905	0.842
500.	7.824	34.593	26.980	0.901
550.	7.151	34.557	27.049	0.957
600.	6.754	34.545	27.094	1.010
650..	6.355	34.534	27.139	1.062
700.	6.000	34.534	27.185	1.111
750.	5.715	34.527	27.215	1.159
800.	5.473	34.522	27.241	1.205
850.	5.203	34.525	27.275	1.250
900.	4.922	34.525	27.308	1.294
950.	4.733	34.526	27.330	1.336
1000.	4.498	34.533	27.361	1.377
1007.	4.466	34.535	27.367	1.383

CAST EP4-86-OC-043 DATE 30 NOV 86 TIME 0457 GMT  
LAT 14 59.8S LONG 083 01.0W



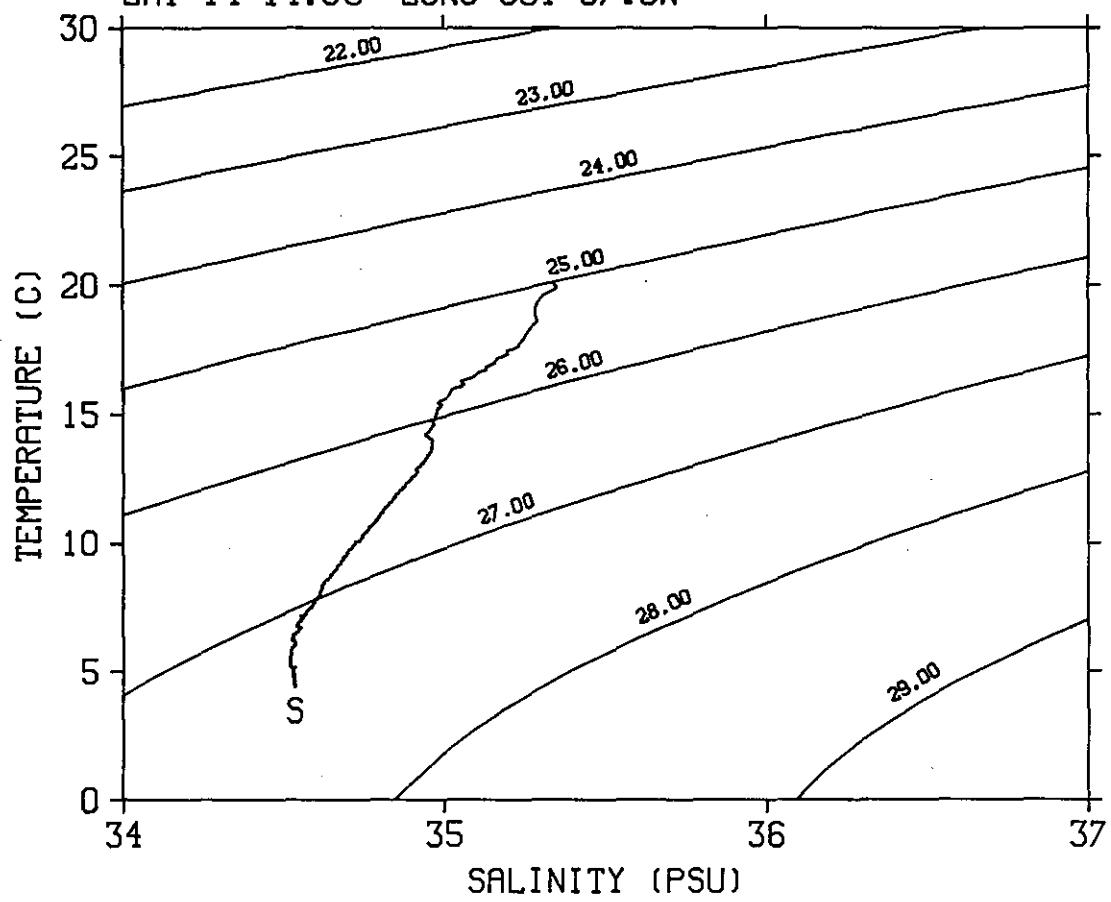
249

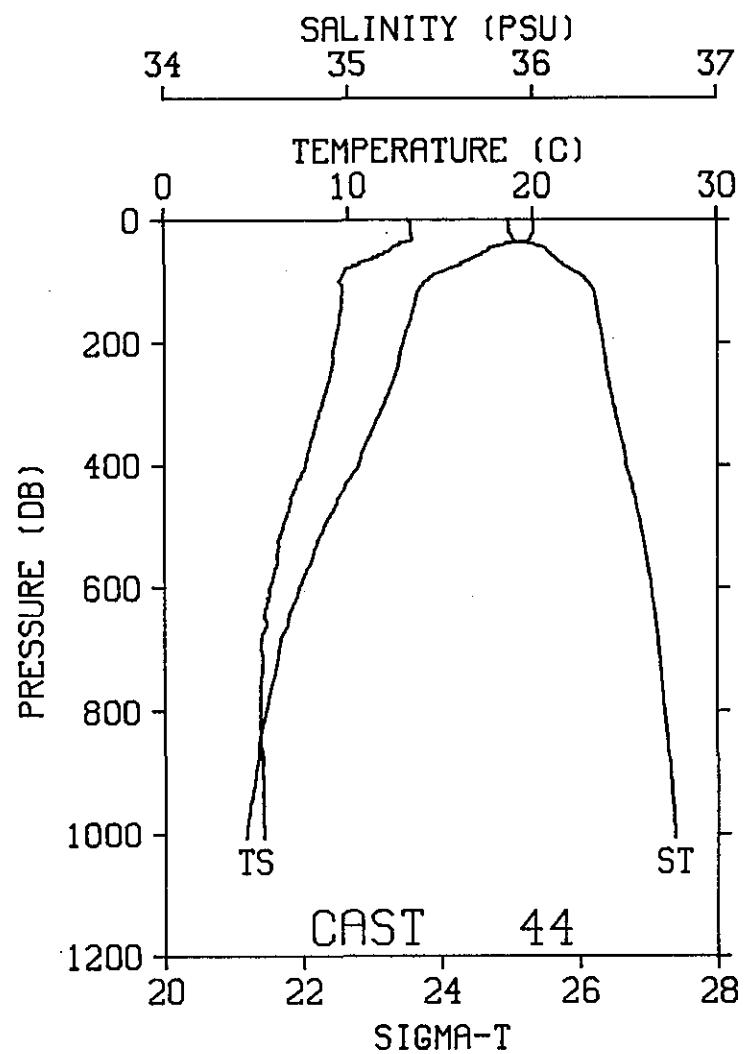


CAST EP4-86-OC-043 DATE 30 NOV 86 TIME 0457 GMT  
 LAT 14 59.8S LONG 083 01.0W WEATHER 1 SEA STATE 3  
 BAROMETER 17 WIND DIR 140 T SPD 12 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 2 DRY 19.5 WET 17.3 DEPTH 4750 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	20.180	35.440	25.051	0.000
10.	20.182	35.446	25.055	0.029
20.	20.056	35.468	25.106	0.058
30.	20.003	35.515	25.155	0.086
40.	19.811	35.524	25.212	0.114
50.	19.559	35.560	25.307	0.141
60.	19.342	35.534	25.343	0.168
70.	19.223	35.514	25.358	0.194
80.	19.022	35.488	25.390	0.220
90.	18.525	35.388	25.439	0.246
100.	18.682	35.479	25.469	0.272
110.	18.374	35.415	25.498	0.297
120.	17.500	35.243	25.582	0.322
130.	16.216	35.017	25.712	0.346
140.	15.104	34.874	25.853	0.368
150.	14.475	34.806	25.937	0.390
160.	13.697	34.794	26.092	0.410
170.	13.338	34.769	26.146	0.429
180.	12.989	34.760	26.210	0.448
190.	12.698	34.765	26.271	0.466
200.	12.503	34.788	26.328	0.484
250.	11.425	34.760	26.512	0.566
300.	10.651	34.744	26.640	0.642
350.	9.812	34.695	26.747	0.712
400.	9.100	34.660	26.836	0.778
450.	8.355	34.618	26.920	0.840
500.	7.738	34.589	26.990	0.899
550.	7.169	34.550	27.041	0.955
600.	6.746	34.534	27.087	1.009
650.	6.274	34.518	27.137	1.060
700.	5.837	34.510	27.187	1.109
750.	5.522	34.512	27.226	1.157
800.	5.305	34.523	27.261	1.202
850.	5.068	34.525	27.291	1.246
900.	4.816	34.528	27.323	1.289
950.	4.553	34.531	27.354	1.330
999.	4.339	34.536	27.382	1.369

CAST EP4-86-OC-044 DATE 30 NOV 86 TIME 1137 GMT  
LAT 14 14.9S LONG 081 37.3W

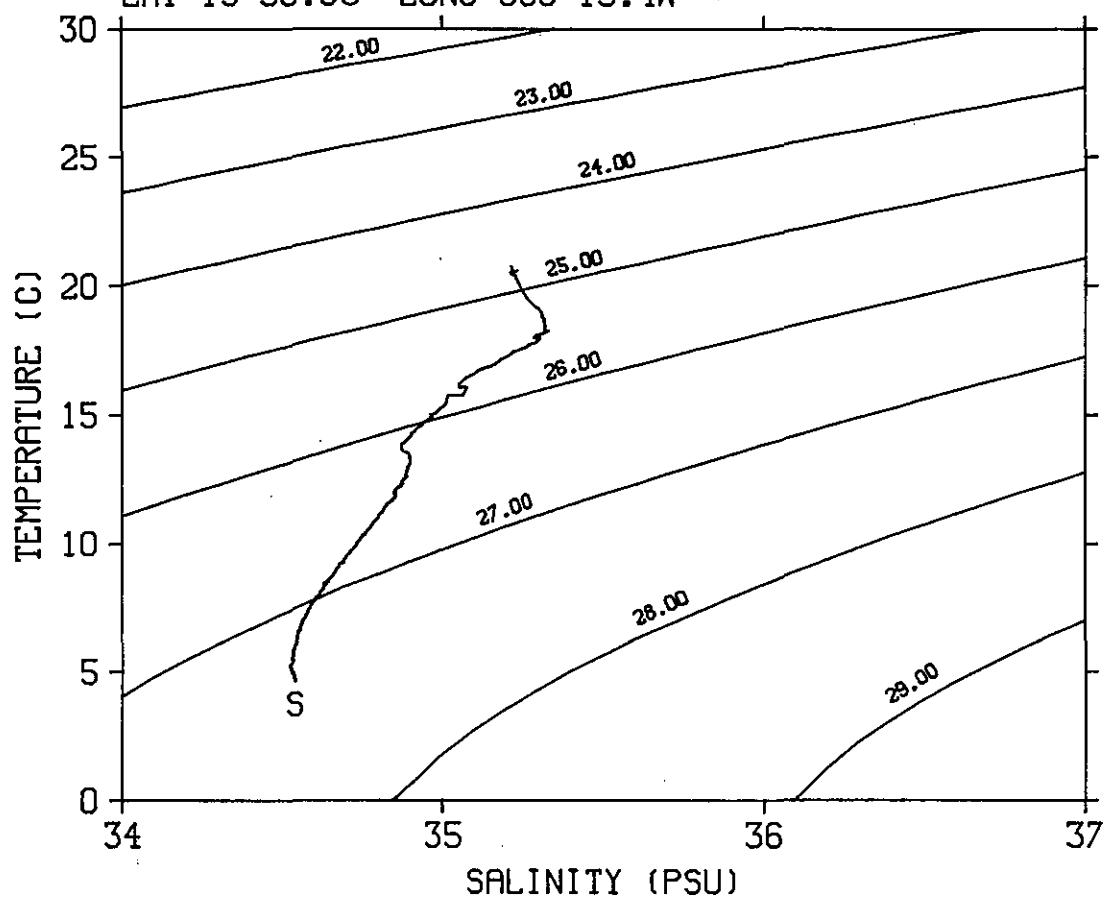


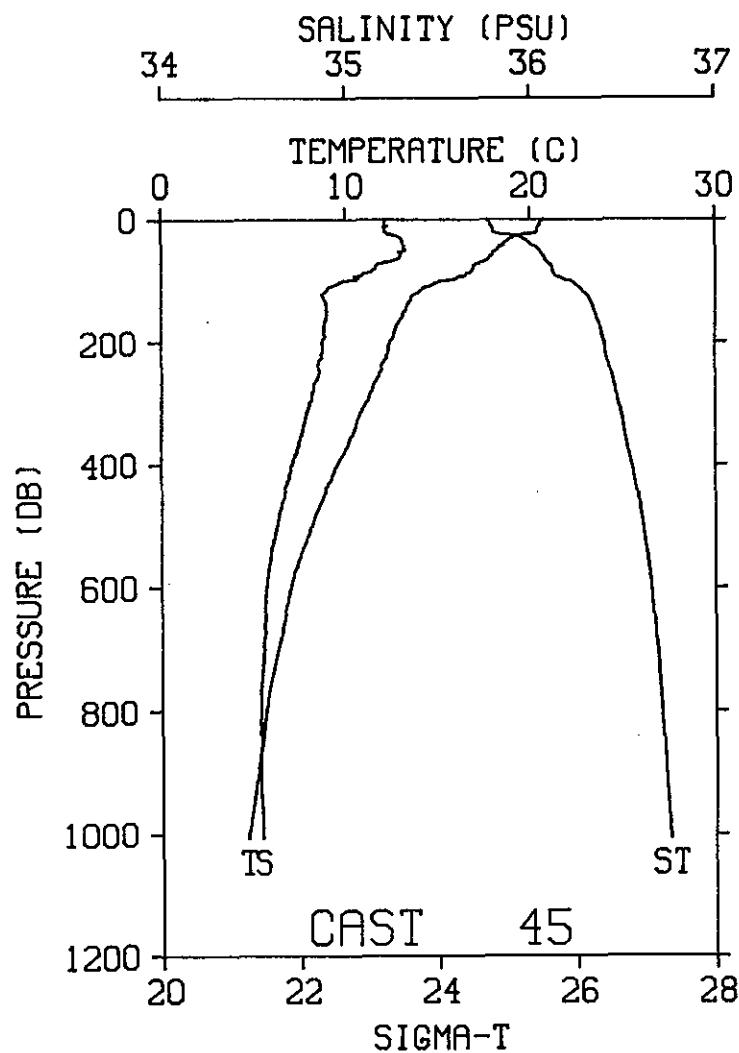


CAST EP4-86-OC-044 DATE 30 NOV 86 TIME 1137 GMT  
 LAT 14 14.9S LONG 081 37.3W WEATHER 1 SEA STATE 3  
 BAROMETER 15 WIND DIR 130 T SPD 12 KT VISIBILITY 8  
 CLOUD 6 AMOUNT 6 DRY 20.0 WET 18.0 DEPTH 4703 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	20.089	35.328	24.990	0.000
10.	20.096	35.342	24.999	0.030
20.	20.080	35.344	25.004	0.059
30.	19.905	35.349	25.054	0.088
40.	18.492	35.287	25.371	0.117
50.	17.570	35.230	25.554	0.141
60.	16.942	35.156	25.649	0.165
70.	16.141	35.066	25.767	0.189
80.	15.426	34.979	25.862	0.211
90.	14.628	34.969	26.030	0.231
100.	14.138	34.940	26.113	0.251
110.	13.847	34.958	26.187	0.270
120.	13.708	34.966	26.222	0.288
130.	13.627	34.961	26.235	0.306
140.	13.541	34.962	26.254	0.324
150.	13.462	34.956	26.265	0.342
160.	13.368	34.949	26.279	0.360
170.	13.288	34.946	26.293	0.378
180.	13.152	34.939	26.315	0.395
190.	13.051	34.931	26.330	0.412
200.	12.968	34.925	26.342	0.430
250.	12.558	34.902	26.405	0.515
300.	11.905	34.856	26.495	0.596
350.	11.153	34.807	26.598	0.674
400.	10.530	34.764	26.676	0.748
450.	9.497	34.690	26.795	0.817
500.	8.643	34.642	26.895	0.881
550.	8.017	34.609	26.964	0.942
600.	7.298	34.571	27.039	0.999
650.	6.706	34.541	27.098	1.053
700.	6.176	34.520	27.151	1.104
750.	5.881	34.521	27.189	1.153
800.	5.487	34.519	27.237	1.200
850.	5.143	34.520	27.278	1.245
900.	4.895	34.525	27.311	1.288
950.	4.625	34.530	27.345	1.330
1000.	4.400	34.535	27.374	1.370
1007.	4.372	34.535	27.377	1.376

CAST EP4-86-OC-045 DATE 30 NOV 86 TIME 1857 GMT  
LAT 13 30.0S LONG 080 15.4W

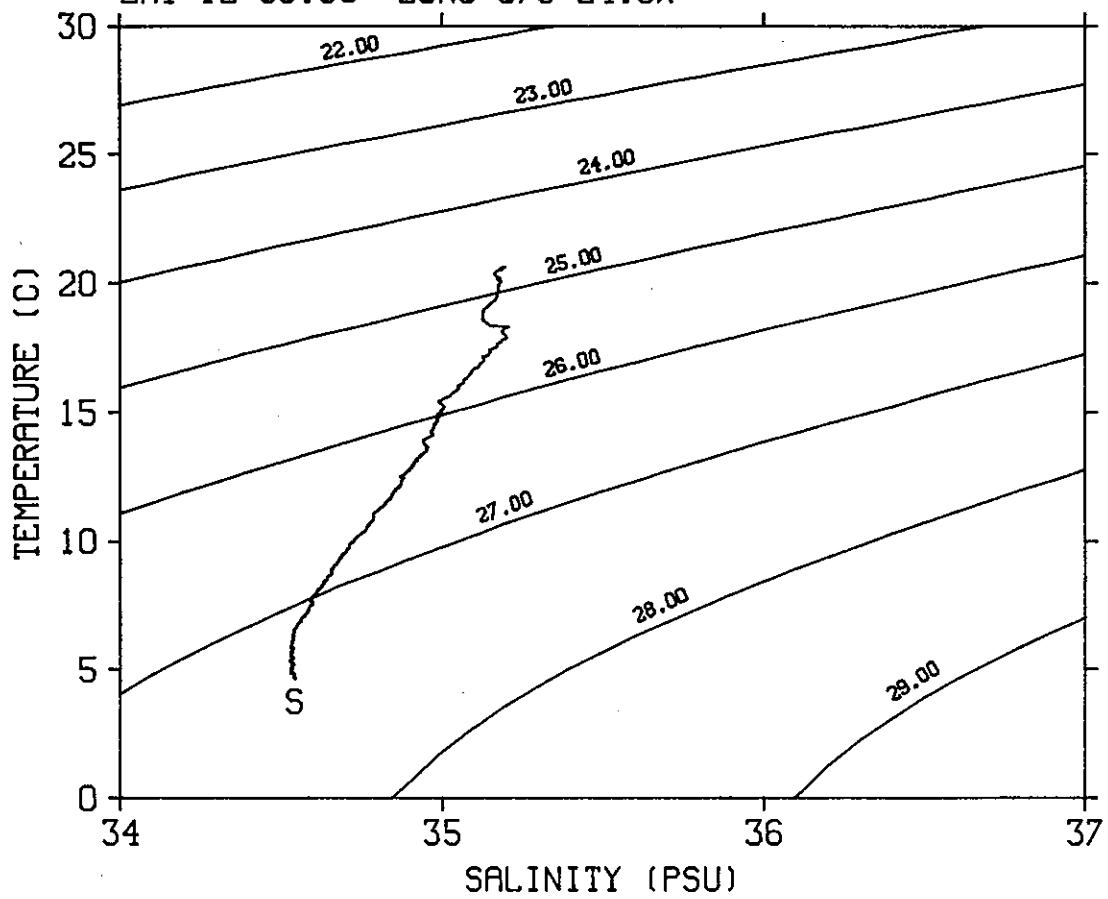


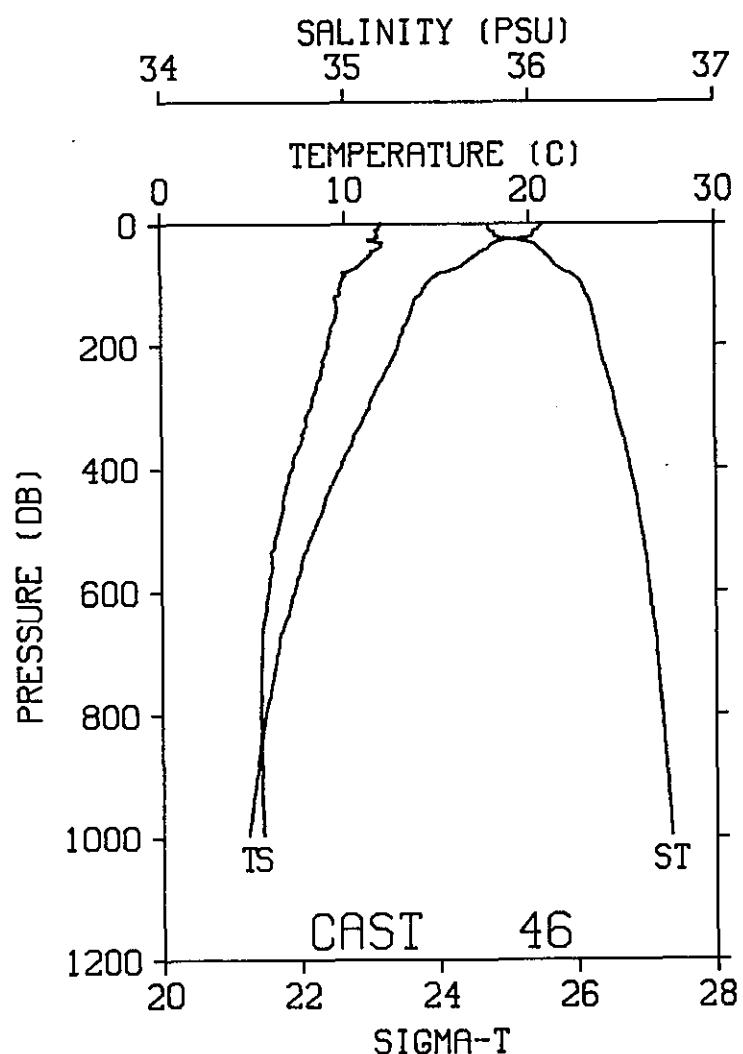


CAST EP4-86-OC-045 DATE 30 NOV 86 TIME 1857 GMT  
 LAT 13 30.0S LONG 080 15.4W WEATHER 1 SEA STATE 3  
 BAROMETER 15 WIND DIR 160 T SPD 10 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 2 DRY 22.2 WET 19.2 DEPTH 4650 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	20.746	35.214	24.727	0.000
10.	20.567	35.218	24.778	0.032
20.	20.429	35.217	24.815	0.063
30.	19.094	35.301	25.228	0.093
40.	18.636	35.311	25.353	0.119
50.	18.214	35.326	25.470	0.145
60.	17.870	35.299	25.534	0.170
70.	17.299	35.205	25.601	0.194
80.	16.925	35.160	25.656	0.218
90.	16.531	35.096	25.699	0.241
100.	15.196	34.988	25.920	0.264
110.	14.330	34.912	26.050	0.284
120.	13.844	34.875	26.124	0.303
130.	13.534	34.888	26.199	0.322
140.	13.342	34.898	26.245	0.340
150.	13.182	34.899	26.279	0.358
160.	13.059	34.896	26.301	0.376
170.	12.830	34.889	26.342	0.393
180.	12.700	34.885	26.364	0.410
190.	12.615	34.892	26.387	0.427
200.	12.393	34.874	26.416	0.444
250.	11.797	34.853	26.514	0.525
300.	11.054	34.802	26.612	0.601
350.	10.345	34.758	26.704	0.673
400.	9.545	34.708	26.801	0.741
450.	8.768	34.662	26.891	0.805
500.	8.114	34.621	26.959	0.865
550.	7.492	34.589	27.026	0.922
600.	6.966	34.565	27.081	0.976
650.	6.621	34.557	27.122	1.029
700.	6.257	34.549	27.164	1.079
750.	5.893	34.537	27.201	1.128
800.	5.648	34.535	27.230	1.175
850.	5.402	34.535	27.259	1.221
900.	5.141	34.530	27.287	1.265
950.	4.922	34.537	27.317	1.309
1000.	4.666	34.540	27.349	1.350
1008.	4.624	34.541	27.354	1.357

CAST EP4-86-OC-046 DATE 01 DEC 86 TIME 0018 GMT  
LAT 12 59.5S LONG 079 24.5W

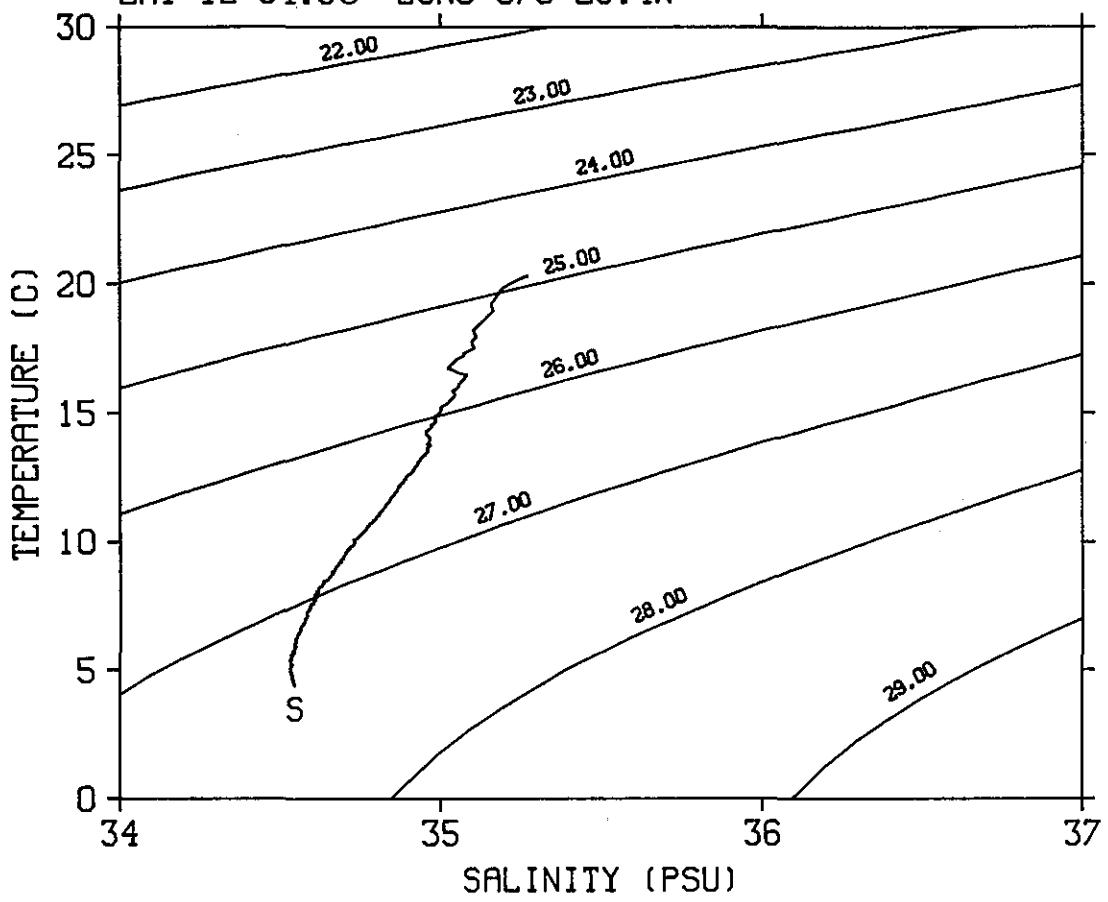




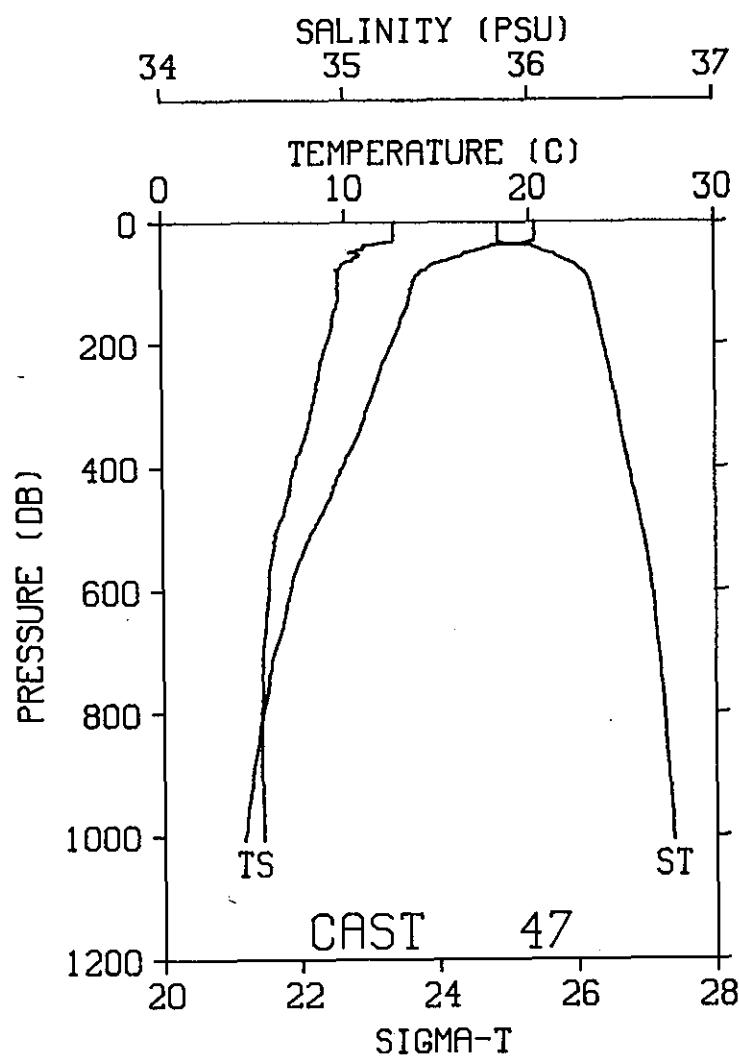
CAST EP4-86-OC-046 DATE 01 DEC 86 TIME 0018 GMT  
 LAT 12 59.5S LONG 079 24.5W WEATHER 1 SEA STATE 4  
 BAROMETER 14 WIND DIR 150 T SPD 10 KT VISIBILITY 8  
 CLOUD 8 AMOUNT 3 DRY 20.0 WET 18.1 DEPTH 4221 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	20.648	35.195	24.739	0.000
10.	20.536	35.193	24.767	0.032
20.	20.190	35.180	24.850	0.063
30.	18.327	35.153	25.309	0.092
40.	17.777	35.189	25.473	0.118
50.	17.205	35.143	25.576	0.143
60.	16.741	35.111	25.662	0.166
70.	16.301	35.076	25.738	0.189
80.	15.387	34.989	25.878	0.212
90.	14.717	34.986	26.024	0.232
100.	14.360	34.972	26.090	0.252
110.	14.167	34.965	26.125	0.271
120.	13.888	34.940	26.165	0.290
130.	13.704	34.950	26.211	0.308
140.	13.601	34.956	26.237	0.327
150.	13.500	34.950	26.253	0.345
160.	13.379	34.941	26.271	0.363
170.	13.163	34.921	26.299	0.380
180.	13.106	34.920	26.310	0.398
190.	12.958	34.912	26.333	0.415
200.	12.889	34.911	26.347	0.432
250.	12.077	34.865	26.470	0.516
300.	11.322	34.815	26.573	0.594
350.	10.421	34.762	26.694	0.667
400.	9.691	34.708	26.777	0.736
450.	8.880	34.658	26.870	0.801
500.	8.247	34.628	26.945	0.862
550.	7.595	34.596	27.017	0.920
600.	7.194	34.580	27.061	0.975
650.	6.620	34.548	27.115	1.028
700.	6.250	34.540	27.157	1.079
750.	5.914	34.534	27.195	1.128
800.	5.553	34.531	27.238	1.175
850.	5.300	34.538	27.274	1.220
900.	5.054	34.533	27.299	1.264
950.	4.837	34.538	27.328	1.307
997.	4.648	34.542	27.352	1.346

CAST EP4-86-OC-047 DATE 01 DEC 86 TIME 0551 GMT  
LAT 12 34.9S LONG 078 28.4W



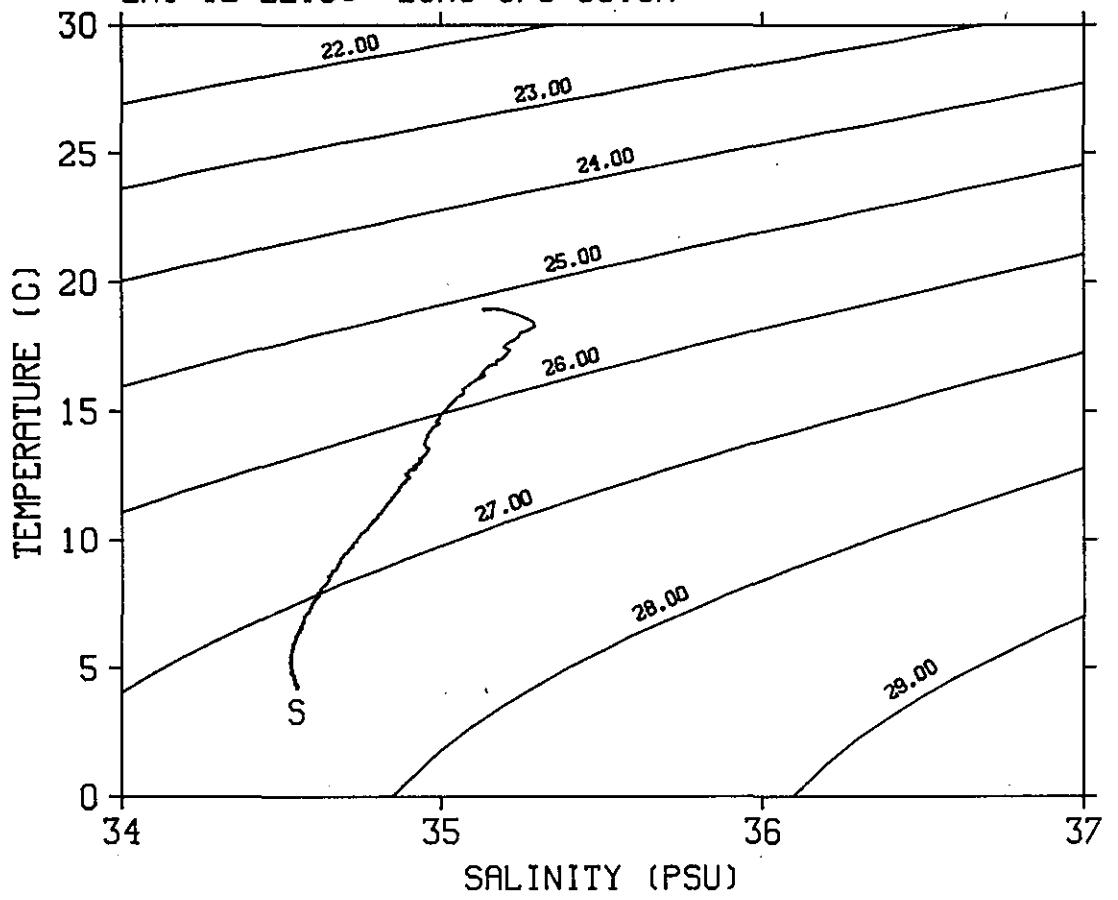
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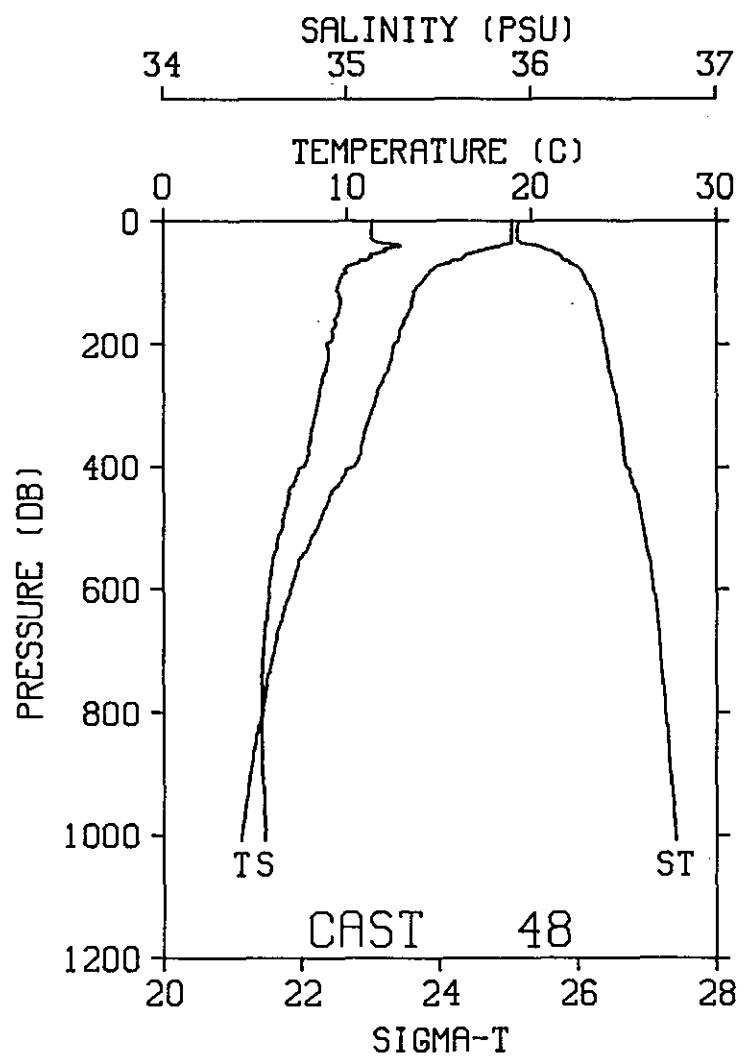
CAST EP4-86-OC-047 DATE 01 DEC 86 TIME 0551 GMT  
 LAT 12 34.9S LONG 078 28.4W WEATHER 2 SEA STATE 3  
 BAROMETER 14 WIND DIR 170 T SPD 10 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 2 DRY 19.4 WET 18.1 DEPTH 4800 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	20.298	35.272	24.891	0.000
10.	20.315	35.268	24.884	0.031
20.	20.318	35.269	24.884	0.061
30.	20.298	35.265	24.886	0.092
40.	17.897	35.112	25.384	0.121
50.	16.694	35.023	25.605	0.146
60.	15.928	35.051	25.804	0.169
70.	14.754	34.984	26.014	0.190
80.	14.167	34.956	26.119	0.209
90.	13.857	34.964	26.190	0.228
100.	13.734	34.971	26.221	0.246
110.	13.596	34.956	26.238	0.264
120.	13.509	34.959	26.258	0.282
130.	13.438	34.956	26.270	0.300
140.	13.341	34.951	26.287	0.318
150.	13.159	34.936	26.312	0.335
160.	13.030	34.931	26.334	0.352
170.	12.950	34.926	26.346	0.370
180.	12.824	34.921	26.367	0.387
190.	12.673	34.910	26.389	0.404
200.	12.536	34.898	26.407	0.420
250.	11.845	34.856	26.507	0.501
300.	11.215	34.820	26.597	0.578
350.	10.633	34.778	26.669	0.651
400.	9.855	34.727	26.764	0.721
450.	9.088	34.682	26.855	0.787
500.	8.215	34.622	26.945	0.848
550.	7.466	34.590	27.031	0.906
600.	6.935	34.576	27.094	0.959
650.	6.581	34.561	27.130	1.011
700.	6.073	34.546	27.185	1.061
750.	5.733	34.538	27.221	1.108
800.	5.409	34.531	27.256	1.154
850.	5.175	34.535	27.286	1.198
900.	4.866	34.532	27.320	1.241
950.	4.614	34.537	27.352	1.283
1000.	4.423	34.545	27.379	1.323
1007.	4.387	34.547	27.385	1.328

CAST EP4-86-OC-048 DATE 01 DEC 86 TIME 0902 GMT  
LAT 12 22.9S LONG 078 00.5W



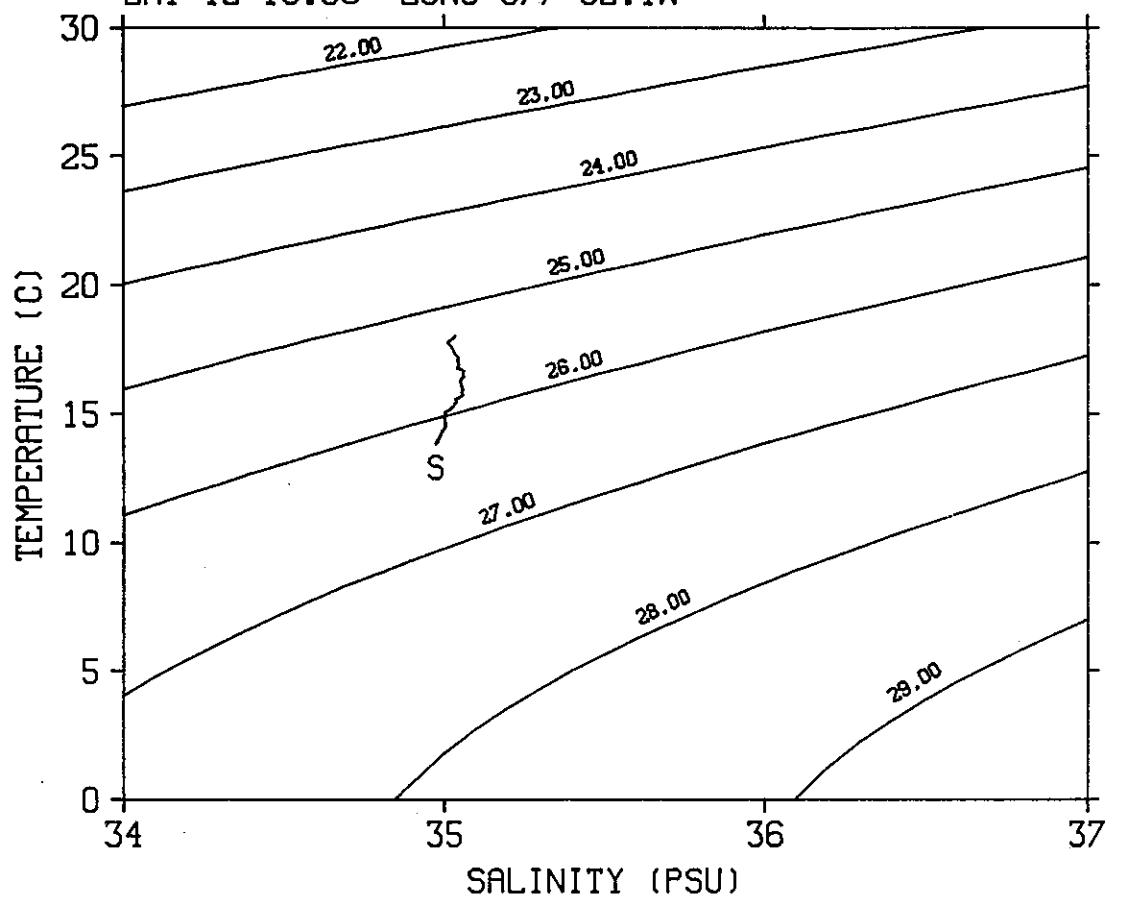
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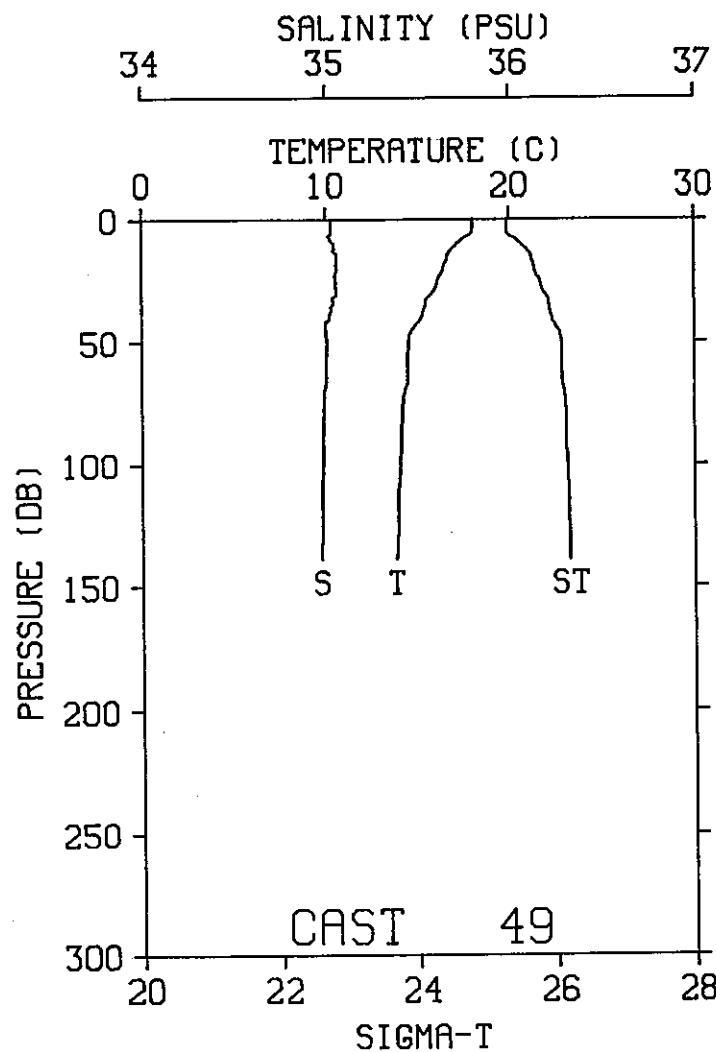


CAST EP4-86-OC-048 DATE 01 DEC 86 TIME 0902 GMT  
 LAT 12 22.9S LONG 078 00.5W WEATHER 1 SEA STATE 1  
 BAROMETER 13 WIND DIR 170 T SPD 15 KT VISIBILITY 7  
 CLOUD AMOUNT 5 DRY 18.9 WET 17.8 DEPTH 1869 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	18.927	35.136	25.145	0.000
10.	18.951	35.133	25.137	0.028
20.	18.957	35.133	25.135	0.056
30.	18.961	35.138	25.138	0.085
40.	18.403	35.289	25.395	0.112
50.	17.150	35.205	25.637	0.137
60.	16.307	35.129	25.777	0.160
70.	15.367	35.041	25.923	0.181
80.	14.568	34.982	26.053	0.202
90.	14.310	34.974	26.102	0.221
100.	14.042	34.957	26.146	0.240
110.	13.748	34.949	26.201	0.259
120.	13.583	34.952	26.237	0.277
130.	13.493	34.960	26.262	0.295
140.	13.444	34.960	26.272	0.313
150.	13.289	34.950	26.296	0.330
160.	13.089	34.929	26.320	0.348
170.	12.971	34.931	26.346	0.365
180.	12.830	34.917	26.363	0.382
190.	12.780	34.921	26.376	0.399
200.	12.539	34.887	26.398	0.416
250.	12.054	34.874	26.482	0.498
300.	11.433	34.835	26.568	0.576
350.	10.885	34.802	26.642	0.650
400.	10.326	34.761	26.710	0.723
450.	8.976	34.680	26.872	0.789
500.	8.352	34.645	26.942	0.851
550.	7.441	34.596	27.039	0.908
600.	6.920	34.572	27.093	0.962
650.	6.422	34.559	27.150	1.013
700.	5.994	34.543	27.193	1.062
750.	5.628	34.539	27.235	1.109
800.	5.353	34.531	27.262	1.154
850.	4.958	34.533	27.310	1.197
900.	4.710	34.536	27.341	1.239
950.	4.457	34.546	27.377	1.279
1000.	4.232	34.550	27.404	1.318
1009.	4.200	34.549	27.407	1.325

CAST EP4-86-OC-049 DATE 01 DEC 86 TIME 1210 GMT  
LAT 12 10.0S LONG 077 32.1W





CAST EP4-86-OC-049 DATE 01 DEC 86 TIME 1210 GMT  
 LAT 12 10.0S LONG 077 32.1W WEATHER 2 SEA STATE 1  
 BAROMETER 14 WIND DIR 165 T SPD 12 KT VISIBILITY 7  
 CLOUD 8 AMOUNT 8 DRY 18.9 WET 17.0 DEPTH 163 M

PRESSURE (DB)	TEMPERATURE (C)	SALINITY (PSU)	SIGMA-T	DELTA-D (DYN M)
0.	17.986	35.032	25.301	0.000
10.	17.141	35.047	25.518	0.026
20.	16.395	35.063	25.706	0.050
30.	15.797	35.054	25.836	0.072
40.	15.201	35.022	25.946	0.093
50.	14.510	35.006	26.084	0.113
60.	14.470	35.004	26.091	0.132
70.	14.297	34.989	26.116	0.151
80.	14.147	34.989	26.148	0.170
90.	14.097	34.986	26.156	0.189
100.	14.046	34.982	26.164	0.208
110.	13.958	34.980	26.181	0.226
120.	13.934	34.978	26.185	0.245
130.	13.889	34.978	26.194	0.263
139.	13.819	34.973	26.205	0.280