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STD MEASUREMENTS OFF WASHINGTON
AND VANCOUVER ISLAND DURING SEPTEMBER 1973

James R. Holbrook

Pacific Marine Environmental Laboratory
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Rogers C.B. Morton, Secretary

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Robert M. White, Administrator

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Summaries of STD measurements recorded during September 1973 in the northeast Pacific near Washington and Vancouver Island are presented as vertical profiles of temperature, salinity, and sigma-t and as tables of temperature, salinity, sigma-t, and dynamic height anomaly at selected depths. Meteorological observations associated with each STD cast are included.

1. INTRODUCTION

During September 1973, 150 vertical profiles of temperature and salinity were measured from the NOAA research vessel *Oceanographer* (OSS-01) in the northeast Pacific near Washington and Vancouver Island. Station positions (fig. 1), which were determined by visual, radar, satellite navigation, and Loran A, were accurate to about 1 km.

The STD measurements were made with a Hytech Model 9006 Salinity/Temperature/Depth/Sound Velocity profiling system and were recorded on 7-track magnetic tape by a Bissett-Berman Model 8114A Digital Data Logger (DDL). The data were recorded only during the descent of the instrument at a rate of one scan every 0.2 seconds. The descent rate was approximately 15 m/min in the upper 200 m, 30 m/min from 200 to 500 m, and 45 m/min below 500 m.

The processing and presentation of the data generally follow the procedures and formats developed in previous reports (Halpern, 1972; Halpern and Holbrook, 1973; Holbrook and Halpern, 1974).

2. DATA PROCESSING

The STD data processing consisted of the following steps. First, engineering units were computed from the recorded binary numbers using the following equations furnished by the manufacturer:

Recorded depth (m):

$$D = \left[\frac{4.75 \times 10^8}{N_D + 32768} - 9712 \right] \left[\frac{2000}{1576} \right]$$

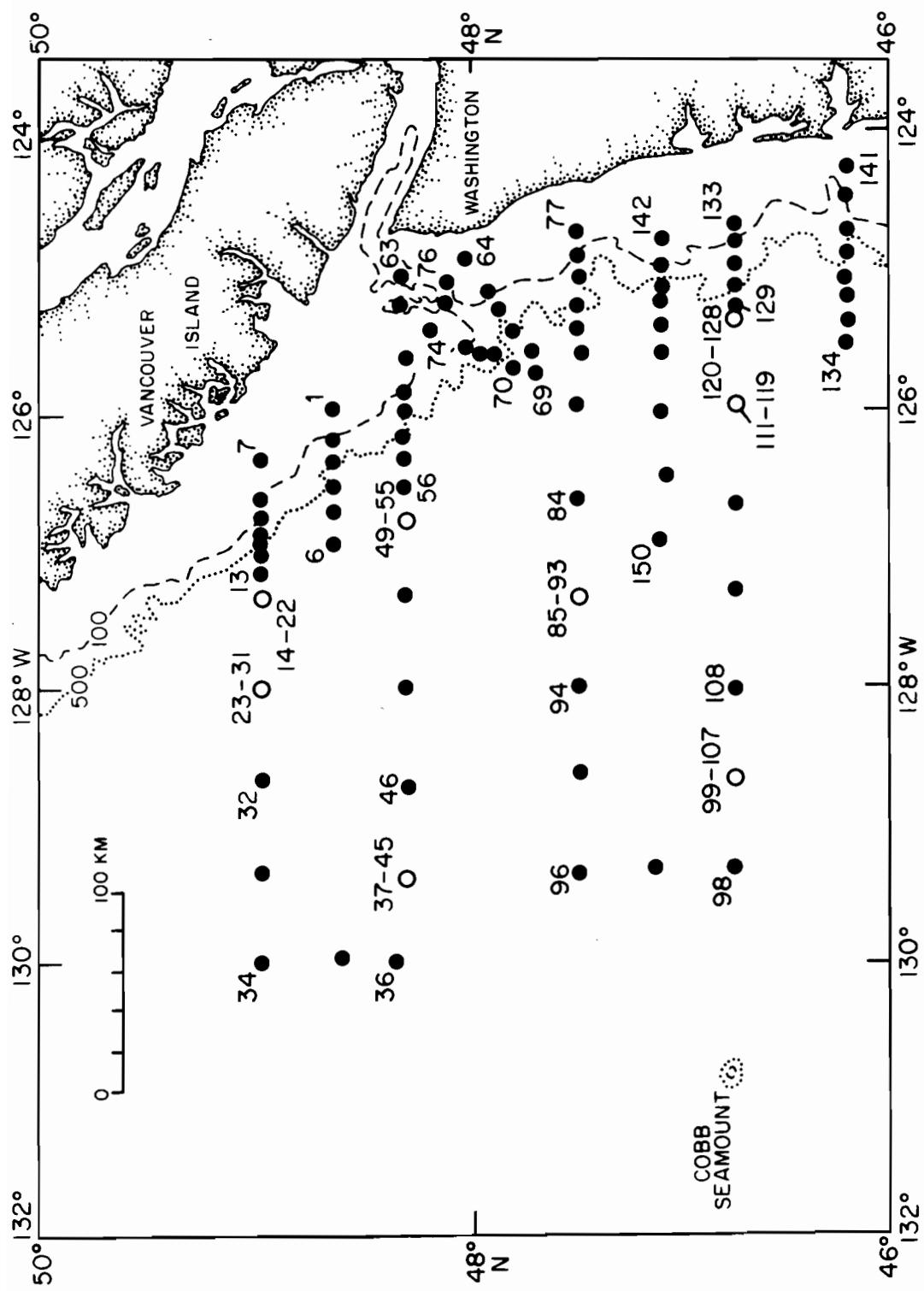


Figure 1. Location chart showing the STD station positions obtained during September 1973. ●'s identify single-cast stations and O's identify multicast stations.

Recorded salinity ($^{\circ}/_{\text{o}}$):

$$S = \left[\frac{3.15 \times 10^8}{N_S + 32768} - 4995 \right] \left[\frac{10}{2906} \right] + 28.00$$

Recorded temperature ($^{\circ}\text{C}$):

$$T = \left[\frac{3.5 \times 10^7}{N_T} - 2127 \right] \left[\frac{37}{2066} \right] - 2.00$$

N_D , N_S , and N_T are the binary numbers recorded on magnetic tape for depth, salinity, and temperature.

Second, the data in each cast were arranged into a monotonically increasing function of depth by dropping scans with depth values less than preceding scan depth values. Third, temperature and salinity values recorded at the same depth were averaged together. Fourth, temperature, salinity, and depth corrections were applied. The corrections were based upon comparison of Nansen bottle and STD frequency data taken on every fifth cast (fig. 2 and 3):

Corrected depth (m):

$$D_C = (0.9913) (D)$$

Corrected salinity ($^{\circ}/_{\text{o}}$):

$$S_C = S + 0.023 - (2.2 \times 10^{-5}) (D)$$

Corrected temperature ($^{\circ}\text{C}$):

$$T_C = T + 0.02$$

Fifth, average values of temperature and salinity were computed at 1-meter intervals; e.g., the average temperature at 90 m was equal to the arithmetic mean of measurements between 89.5 and 90.5 m. Sixth, scans with anomalous temperature or salinity values, which were generally associated with regions of strong vertical gradients, were removed from the 1-meter averaged data when the temperature or salinity gradient on both sides of the scan changed sign and exceeded a critical value. The critical gradients were $0.05^{\circ}\text{C}/\text{m}$ and $0.025 ^{\circ}/_{\text{o}}/\text{m}$ for depth values between 0 and 200 m and $0.01^{\circ}\text{C}/\text{m}$ and $0.01 ^{\circ}/_{\text{o}}/\text{m}$ for depth values greater than 200 m. Finally, the corrected and edited 1-meter averaged temperature, salinity, and sigma-t values were plotted versus depth.

The temperature and salinity corrections (fig. 2 and 3) were determined using the following technique. A Nansen bottle containing two protected and one unprotected thermometers was placed on the cable approximately 6 m above the STD instrument on 26 of the STD lowerings. After soaking for 6 minutes at calibration depth, the Nansen bottle was tripped and the STD was raised 6 m. Frequencies to the nearest tenth were measured

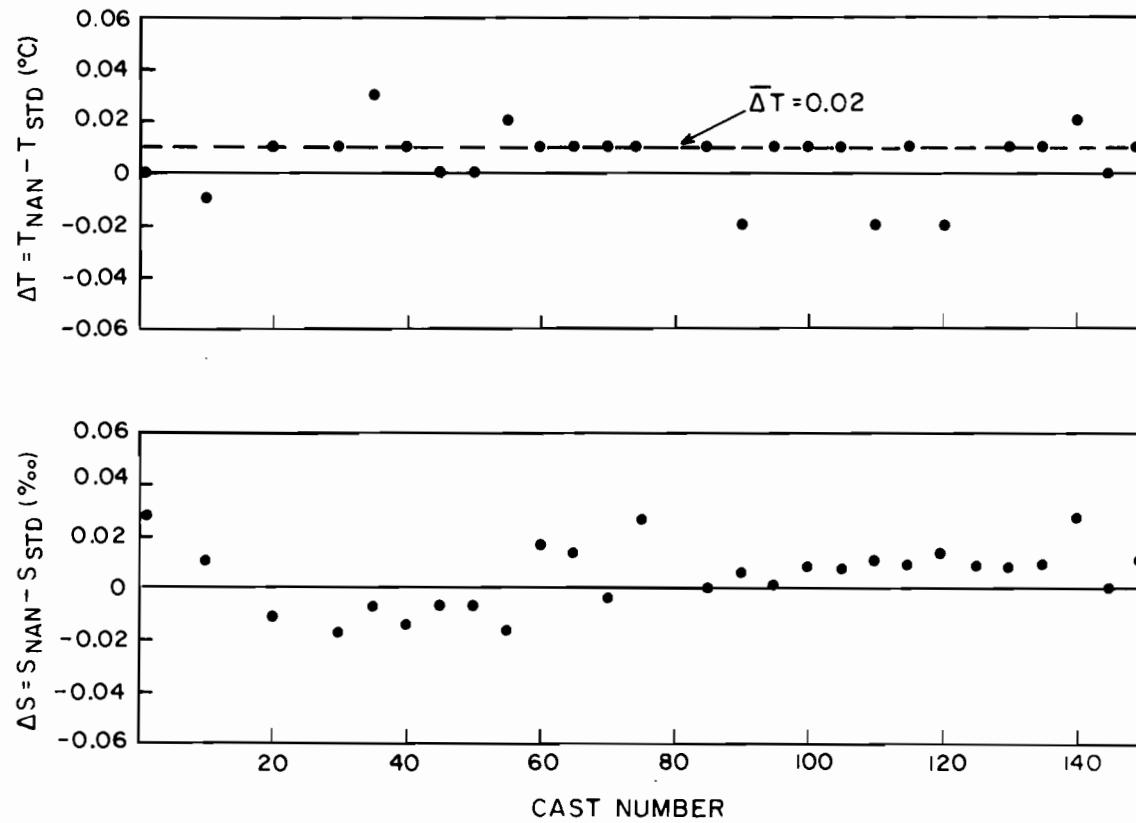


Figure 2. Temperature and salinity comparisons between Nansen bottle and STD data versus cast number.

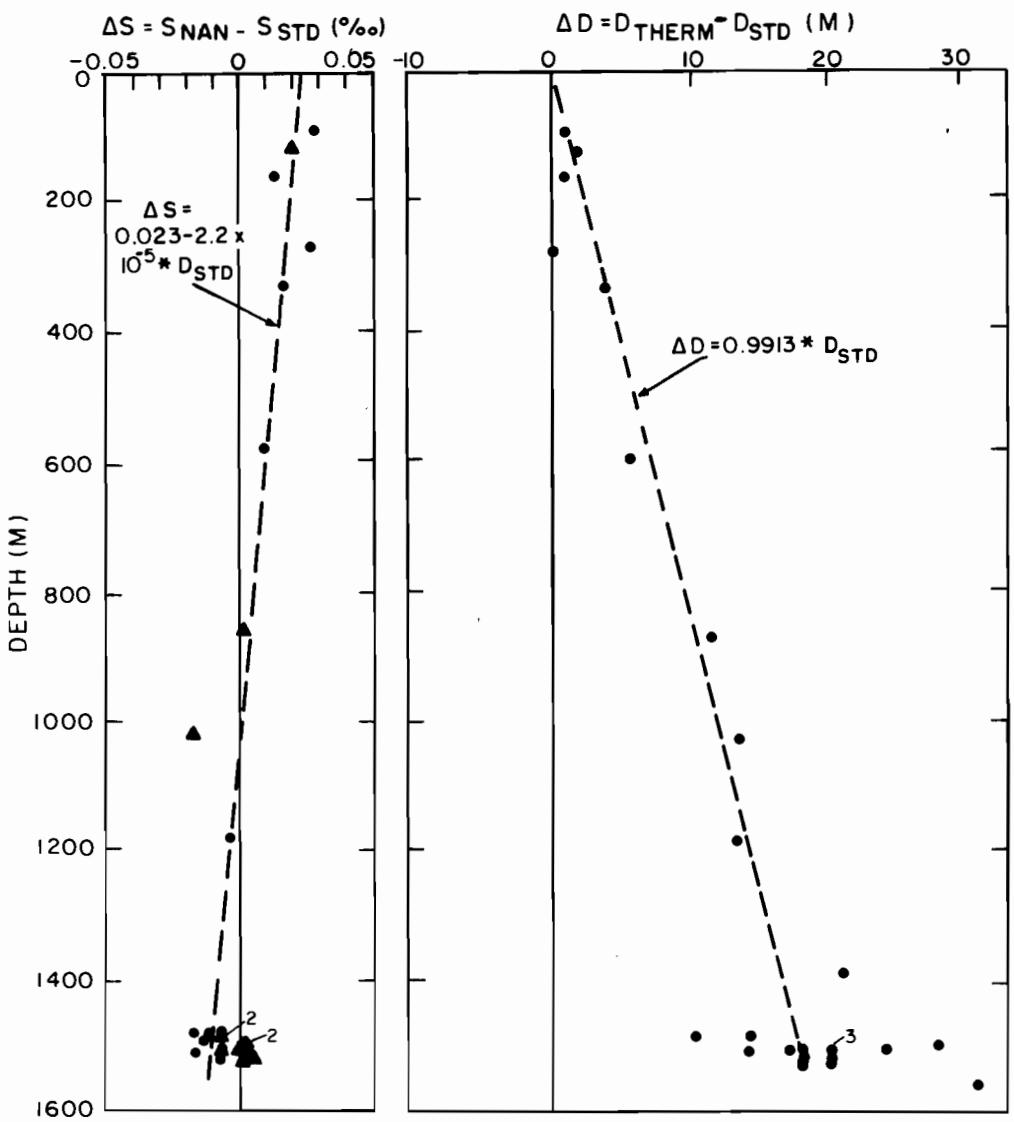


Figure 3. Salinity and depth comparisons between Nansen bottle and STD data versus depth. Both salinity and depth were corrected by the indicated depth dependent function.

from the temperature, salinity, and depth sensors. Comparisons were made between temperatures measured by the protected thermometers and the STD, between salinities determined from the Nansen bottle sample using a Beckman Model R56B salinometer and the STD, and between depths computed from protected and unprotected thermometers (thermometric depth) and the STD. A linear depth dependent correction was determined for the salinity and depth sensors (fig. 3).

3. DATA PRESENTATION

The reduced data from each STD cast are summarized by a computer-generated plot containing the vertical profiles of temperature, salinity, and sigma-t and by a table of selected values of temperature, salinity, sigma-t, and dynamic height anomaly. The shallowest and deepest 1-meter averaged values of each set of STD measurements are shown in the table. When the uppermost depth was not equal to 0 m, surface values of temperature and salinity were computed from a least-squares linear fit of the data recorded above 7 m below the surface. Sigma-t and the anomaly of specific volume were computed from equations developed by Ekman and Knudsen (Sweers, 1971). Depth in meters was defined as equivalent to pressure in decibars. The trapezoidal method of integration was used to calculate the anomaly of dynamic depth. Tables 1 to 6 contain the abbreviations and units used to describe the STD data summary.

4. ACKNOWLEDGMENTS

I thank Ron Reed who was Chief Scientist and Dorothy Klett who very ably assisted in the data processing. Dr. Halpern was most helpful in establishing formats and data processing procedures. The generous support of Captain W. D. Barbee and the officers and crew of the NOAA ship *Oceanographer* is greatly appreciated.

Table 1. Abbreviations and Units Used to Describe
Each Set of STD Measurements

SALINITY	Salinity, parts per thousand ($^{\circ}/_{\text{oo}}$)
TEMPERATURE	Temperature, degrees Celsius ($^{\circ}\text{C}$)
CAST RP-7-OC-007	STD measurement station 007 made from the research vessel <i>Oceanographer</i> on cruise RP-7
DATE	Day, month, year
TIME	Hours and minutes, Greenwich Mean Time (GMT)
LAT	Latitude, degrees and minutes north
LONG	Longitude, degrees and minutes west
WEATHER	Present weather conditions (see table 2)
SEA STATE	Present sea state conditions (see table 5)
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 6)
CLOUD	Cloud type (see table 3)
AMOUNT	Amount of cloud cover (see table 4)
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 STD Measurements

Code	Weather condition
0	Clear (no cloud)
1	Partly cloudy
2	Continuous layer(s) of cloud(s)
3	Sandstorm, duststorm, 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. Cloud Type Code Used to Describe Each Set of STD Measurements

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

Table 4. Cloud Amount Code Used to Describe Each Set of STD Measurements

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 or more, but not 10/10
8	10/10
9	Sky obscured or not determined

Table 5. Sea State Code Used to Describe Each Set of STD Measurements

Code	Height (m)	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

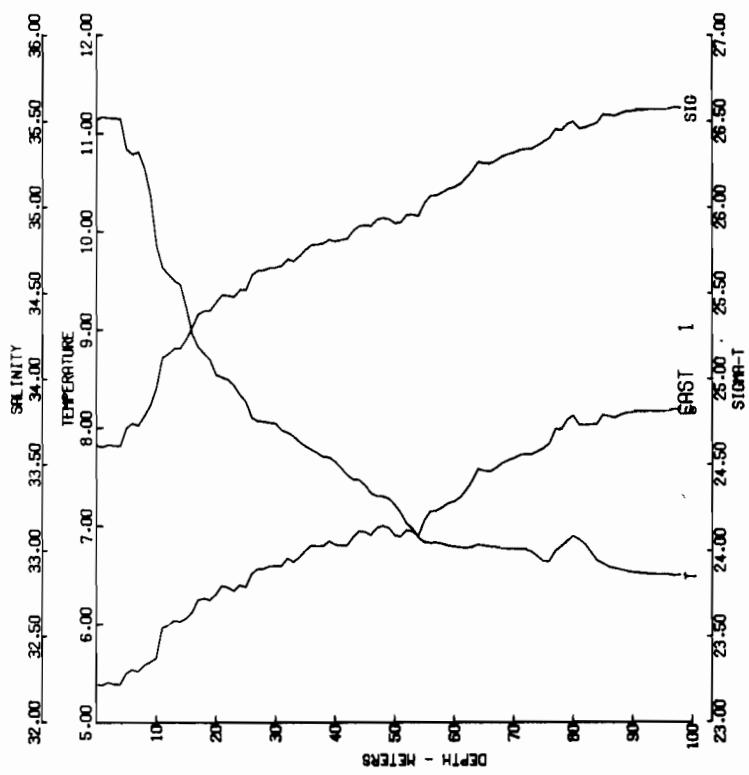
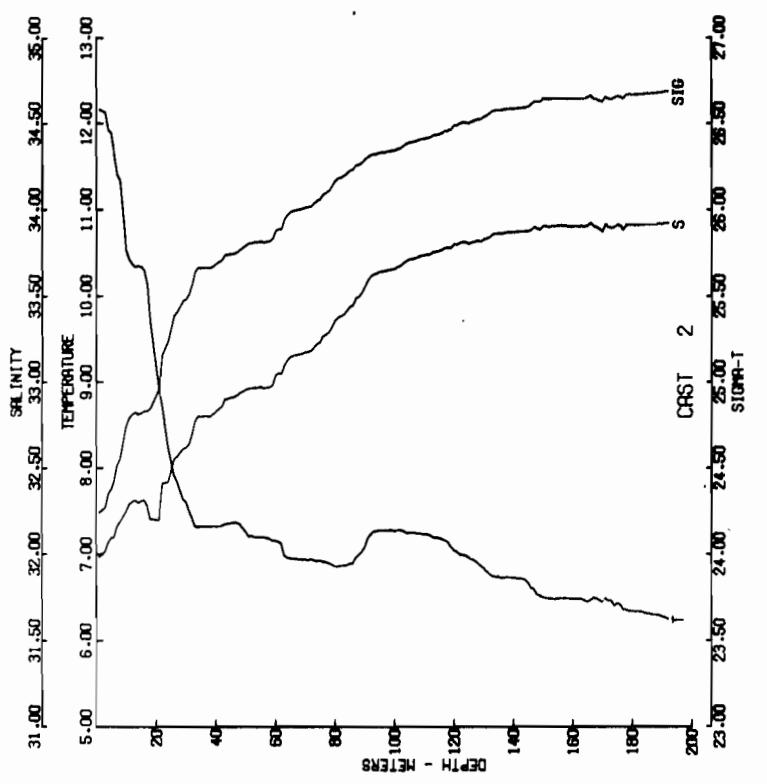
Table 6. Visibility Code Used to Describe
Each Set of STD Measurements

Code	
0	< 50 m
1	50 - 200 m
2	200 - 500 m
3	500 - 1,000 m
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

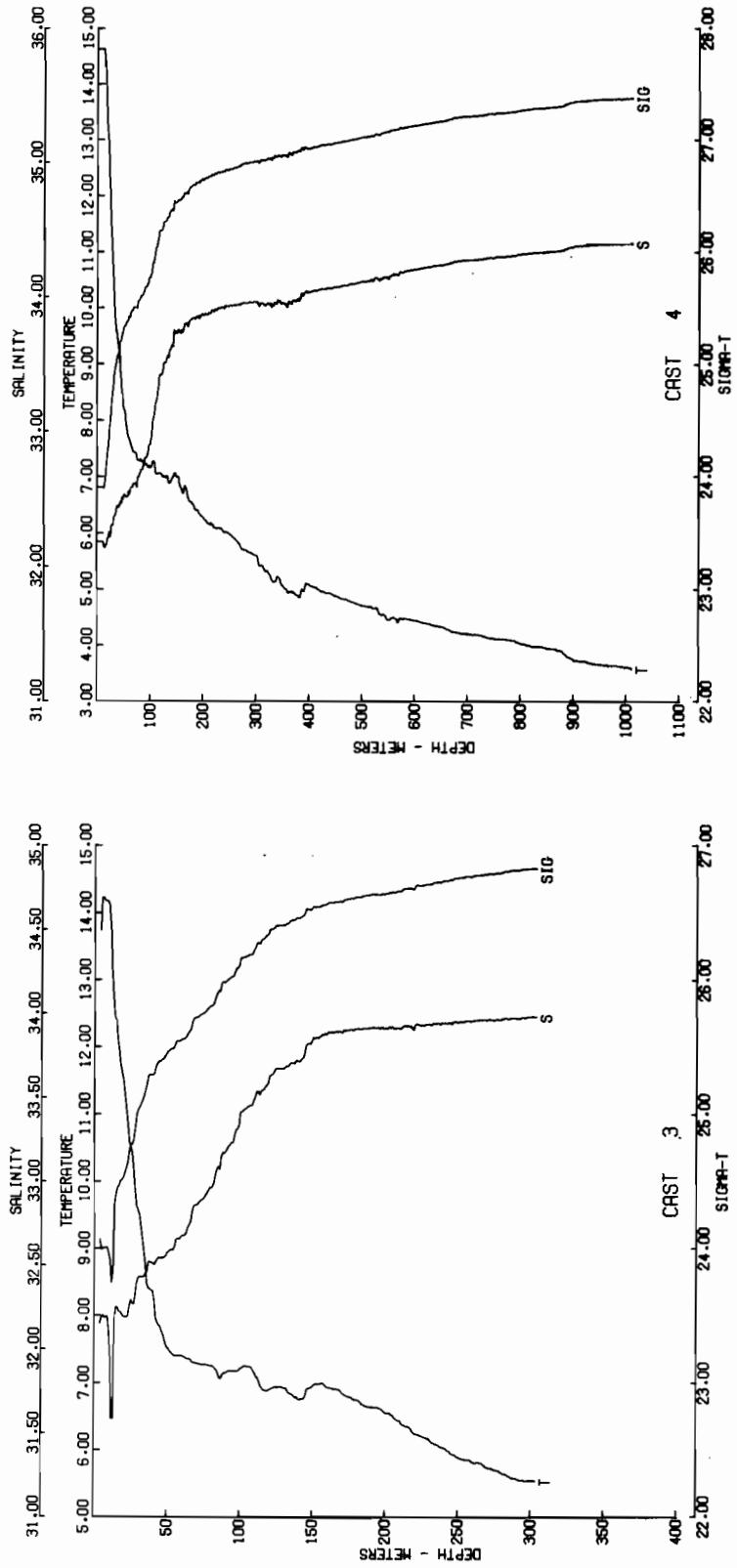
5. REFERENCES

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- Halpern, D., and J. R. Holbrook (1973), STD measurements off the Oregon coast, July/August 1972, CUEA Data Report 4, Department of Oceanography, University of Washington, Seattle, 381 pp.
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- Sweers, H. E., (1971), A comparison of methods used to calculate sigma-t, specific volume anomaly and dynamic height, Marine Technology Society Journal, 5(3): 7-26.

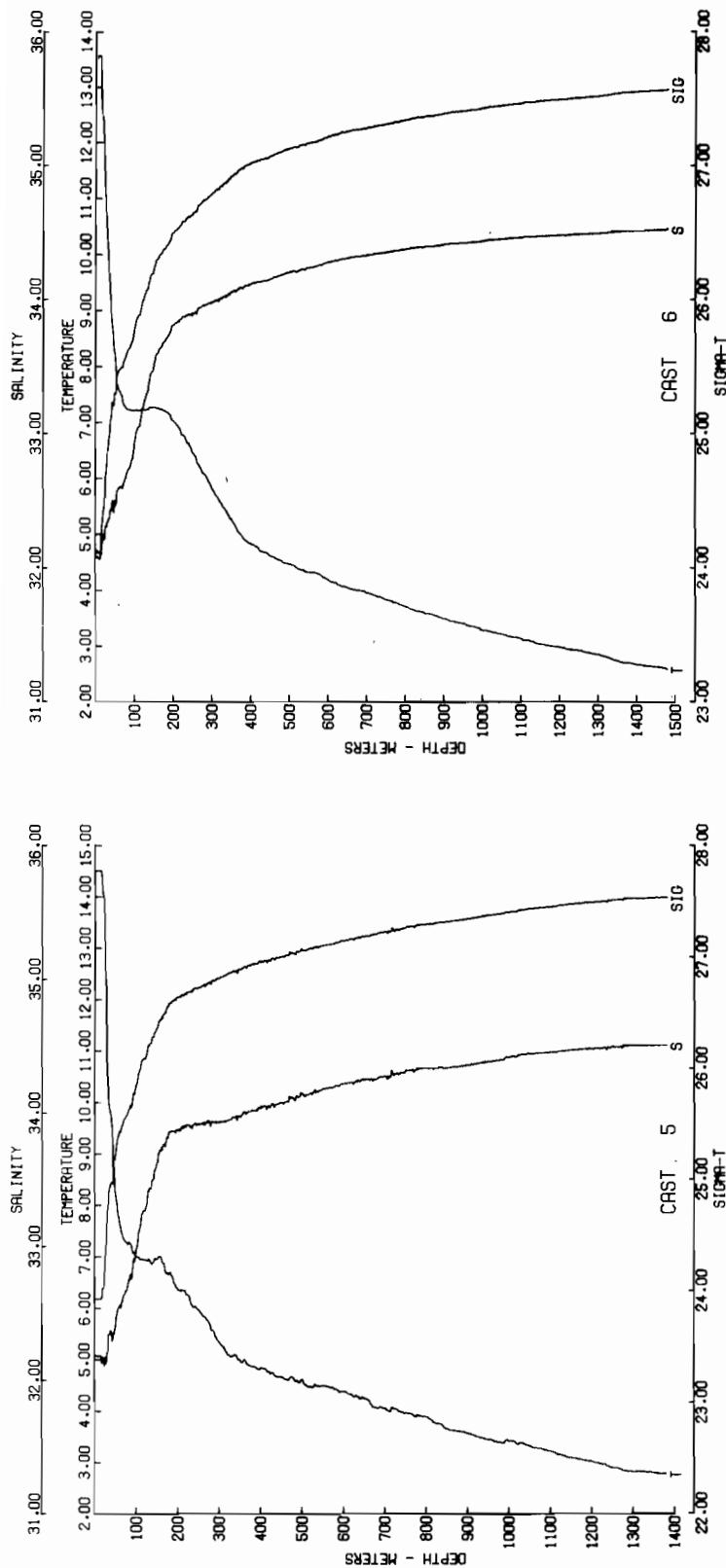
STD STATION DATA: CASTS 1-150



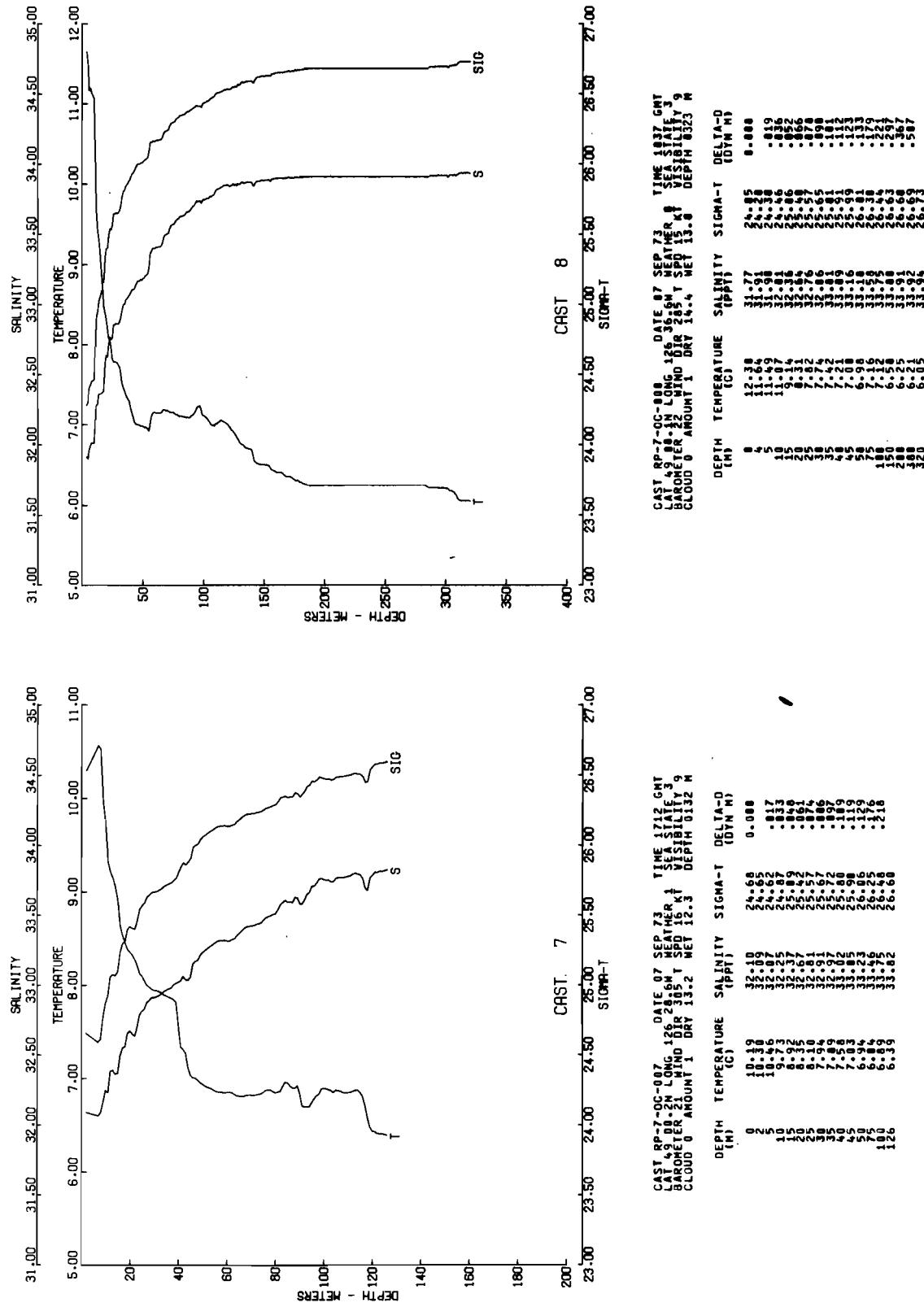
CAST RP-7-06-062 DATE 07 SEP 1966 CMT		TIME 0545 GMT		TYPE 662 CMT	
LADGE 17 W LNG 155° 17' N		SALINITY 31.8		SPECIFIC HEAT	
BLAKEMORE 16 W LNG 155° 17' N		TEMPERATURE 12.6°C		DEPTH 0194 m	
CLOUD X AMOUNT 9		WIND DRY 13.1 MET 12.2		WATER 11.5 MET 12.4	
DEPTH (m)	TEMPERATURE (C)	SALINITY (PPM)	SIGMA-T	DELTA-D (DTW M)	DEPTH (m)
0	12.6	31.8	24.16	0.00	0
4	12.1	31.9	24.16	0.00	4
8	11.6	32.0	24.2	0.00	8
12	11.1	32.1	24.2	0.00	12
16	10.6	32.2	24.2	0.00	16
20	10.1	32.3	24.2	0.00	20
24	9.6	32.4	24.2	0.00	24
28	9.2	32.5	24.2	0.00	28
32	8.8	32.6	24.2	0.00	32
36	8.4	32.7	24.2	0.00	36
40	8.0	32.8	24.2	0.00	40
44	7.6	32.9	24.2	0.00	44
48	7.2	33.0	24.2	0.00	48
52	6.8	33.1	24.2	0.00	52
56	6.4	33.2	24.2	0.00	56
60	6.0	33.3	24.2	0.00	60
64	5.6	33.4	24.2	0.00	64
68	5.2	33.5	24.2	0.00	68
72	4.8	33.6	24.2	0.00	72
76	4.4	33.7	24.2	0.00	76
80	4.0	33.8	24.2	0.00	80
84	3.6	33.9	24.2	0.00	84
88	3.2	34.0	24.2	0.00	88
92	2.8	34.1	24.2	0.00	92
96	2.4	34.2	24.2	0.00	96
100	2.0	34.3	24.2	0.00	100

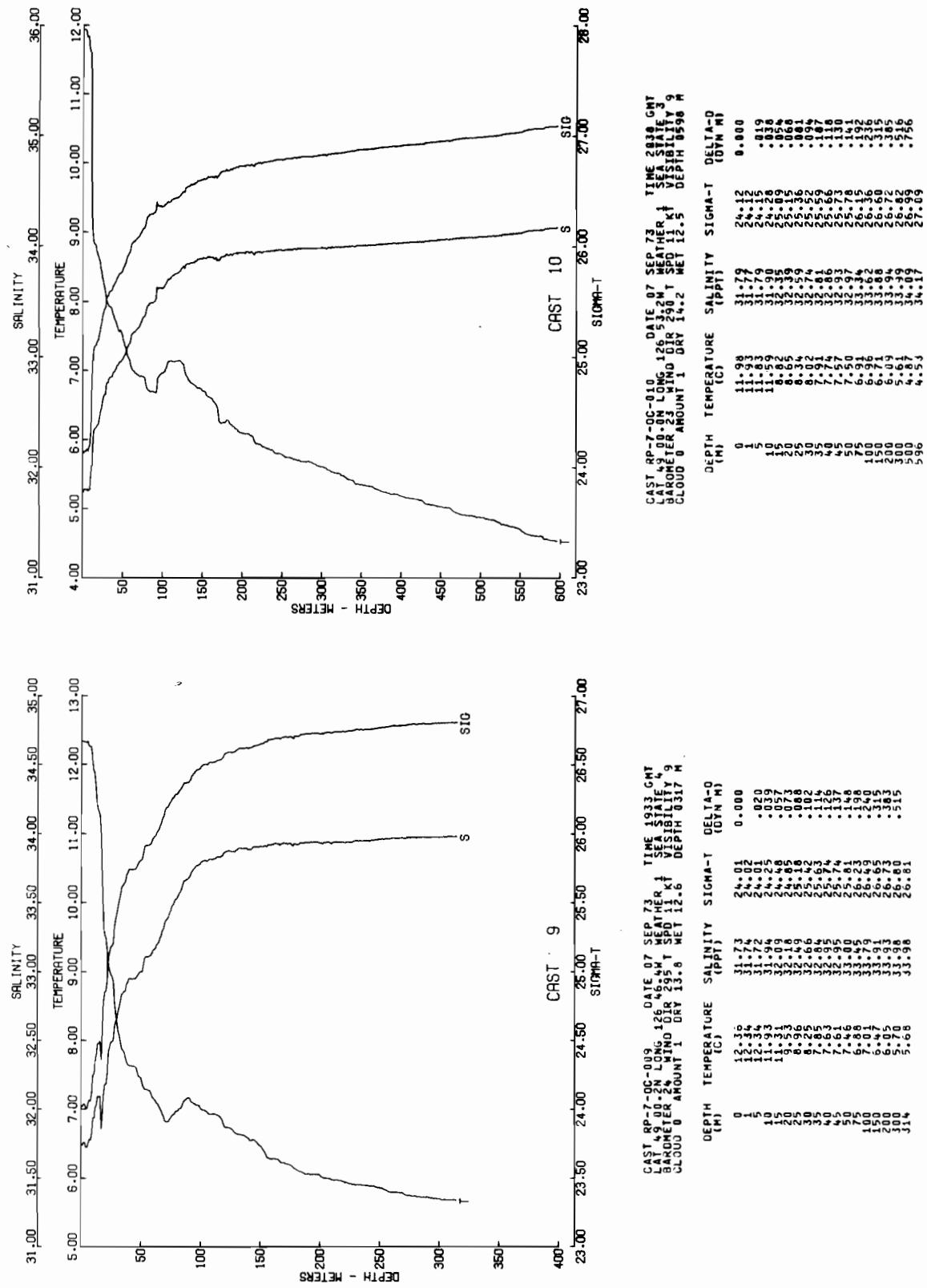


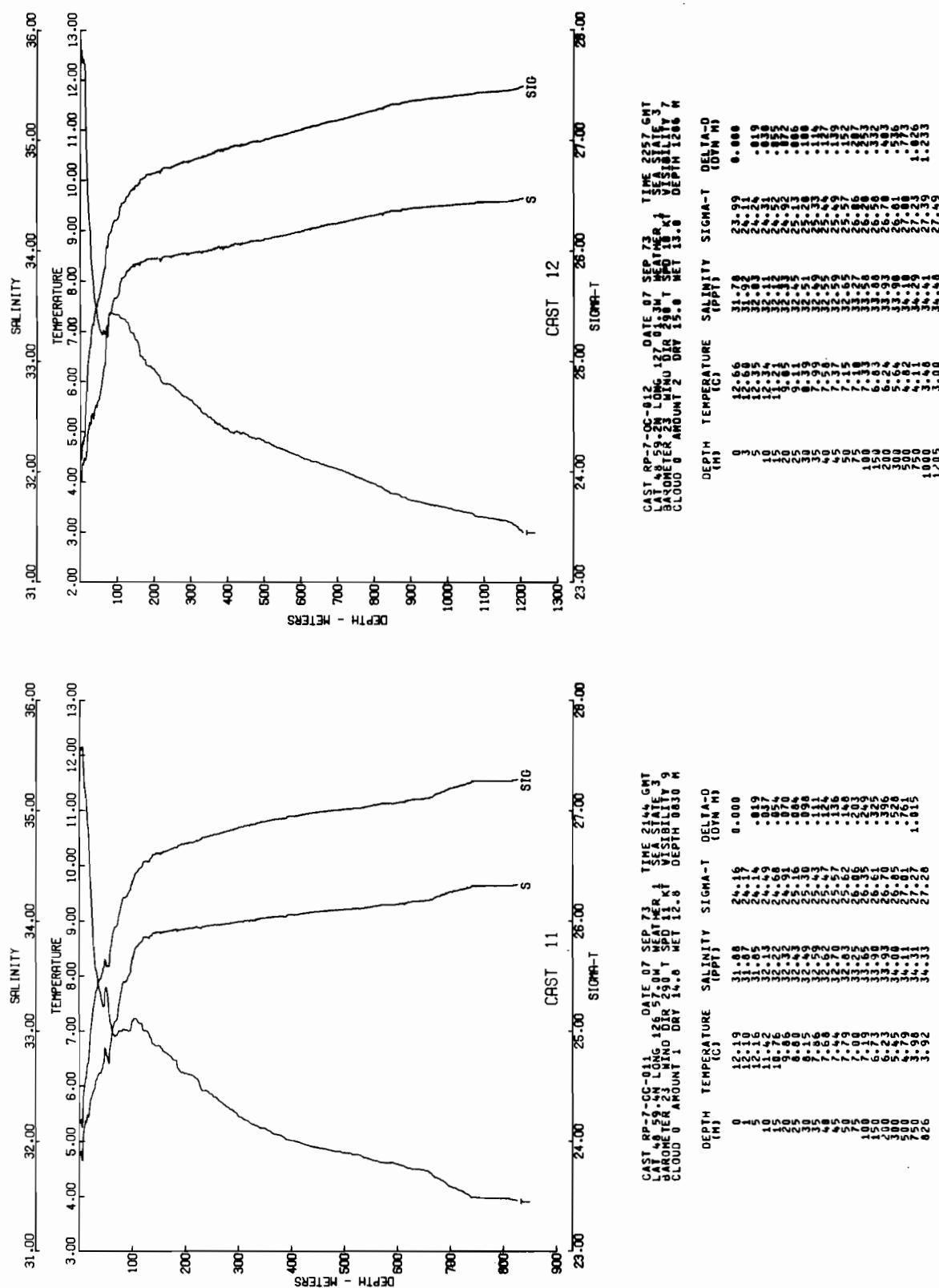
DEPTH (m)	TEMPERATURE (°C)	SALINITY (‰)	SIGMA-T	DELTA-0 (DN 4)
0	16.62	35.00	35.00	0.00
5	16.62	35.00	35.00	0.00
10	16.62	35.00	35.00	0.00
15	16.62	35.00	35.00	0.00
20	16.62	35.00	35.00	0.00
25	16.62	35.00	35.00	0.00
30	16.62	35.00	35.00	0.00
35	16.62	35.00	35.00	0.00
40	16.62	35.00	35.00	0.00
45	16.62	35.00	35.00	0.00
50	16.62	35.00	35.00	0.00
55	16.62	35.00	35.00	0.00
60	16.62	35.00	35.00	0.00
65	16.62	35.00	35.00	0.00
70	16.62	35.00	35.00	0.00
75	16.62	35.00	35.00	0.00
80	16.62	35.00	35.00	0.00
85	16.62	35.00	35.00	0.00
90	16.62	35.00	35.00	0.00
95	16.62	35.00	35.00	0.00
100	16.62	35.00	35.00	0.00
1100	16.62	35.00	35.00	0.00

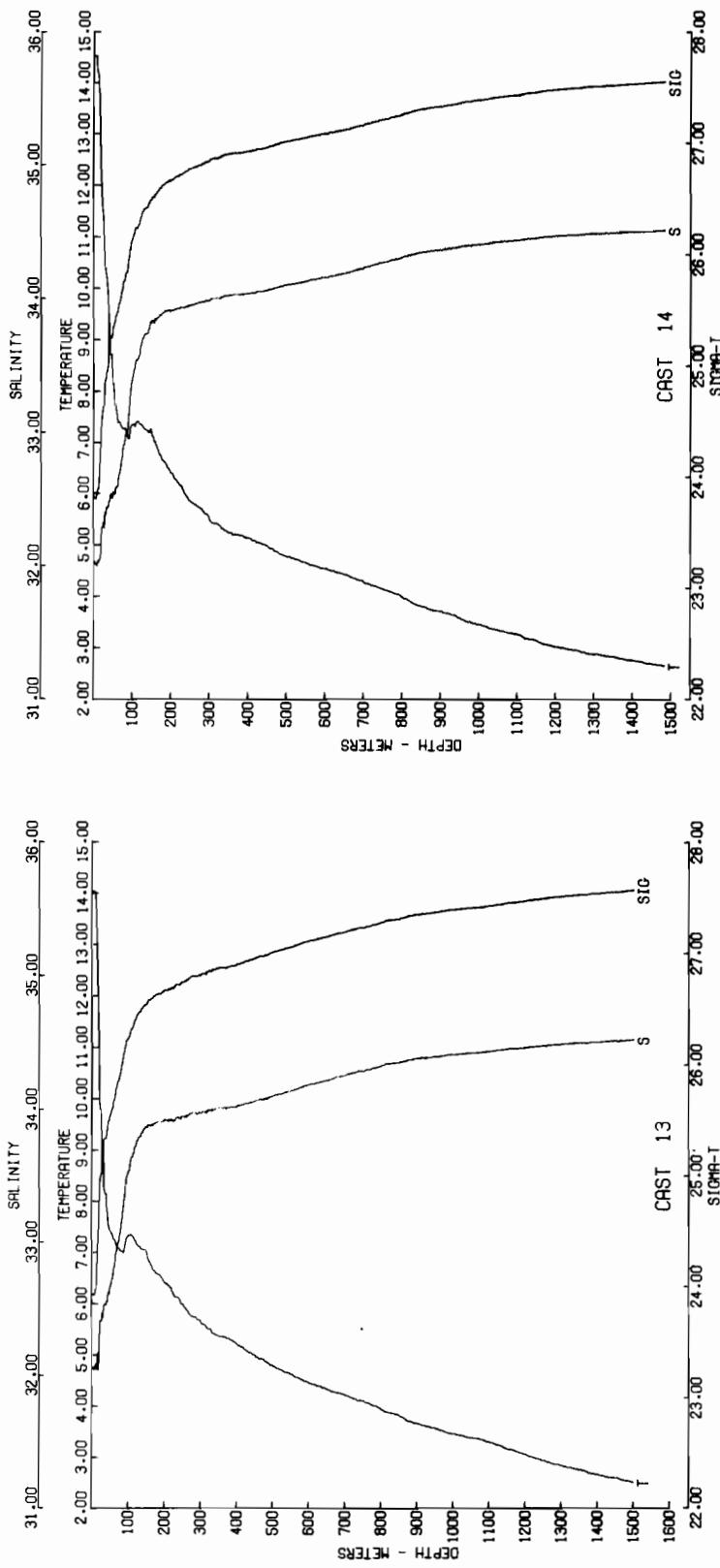


CAST RP-7-OC-006 DATE 07 SEP 73 TIME 1326 GMT		CAST RP-7-OC-005 DATE 07 SEP 73 TIME 1411 GMT	
DEPTH (M)	TEMPERATURE (°C)	DEPTH (M)	TEMPERATURE (°C)
100	32.11	100	32.11
150	32.11	150	32.11
200	32.11	200	32.11
250	32.11	250	32.11
300	32.11	300	32.11
350	32.11	350	32.11
400	32.11	400	32.11
450	32.11	450	32.11
500	32.11	500	32.11
550	32.11	550	32.11
600	32.11	600	32.11
650	32.11	650	32.11
700	32.11	700	32.11
750	32.11	750	32.11
800	32.11	800	32.11
850	32.11	850	32.11
900	32.11	900	32.11
950	32.11	950	32.11
1000	32.11	1000	32.11
1050	32.11	1050	32.11
1100	32.11	1100	32.11
1150	32.11	1150	32.11
1200	32.11	1200	32.11
1250	32.11	1250	32.11
1300	32.11	1300	32.11
1350	32.11	1350	32.11
1400	32.11	1400	32.11
1450	32.11	1450	32.11
1500	32.11	1500	32.11



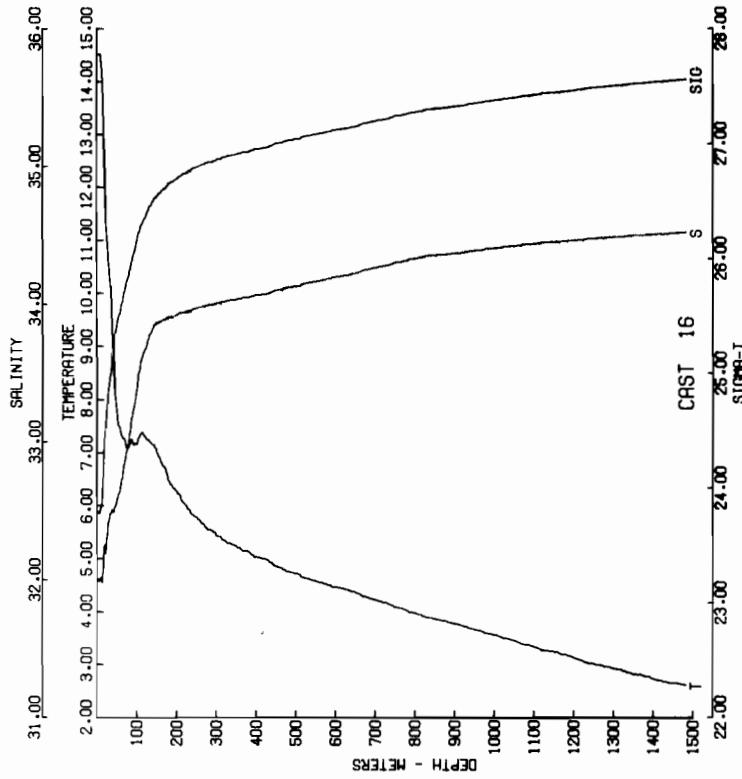
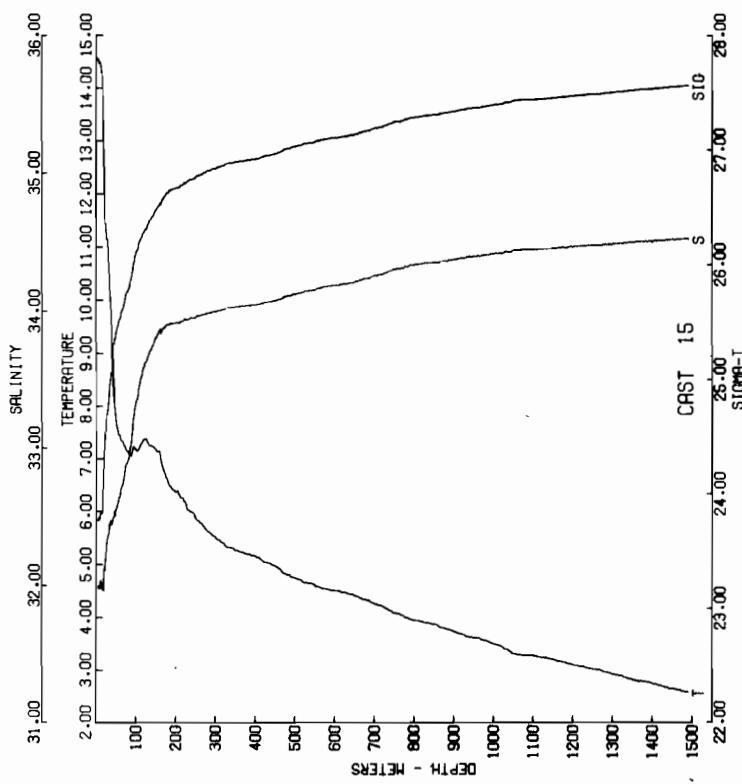




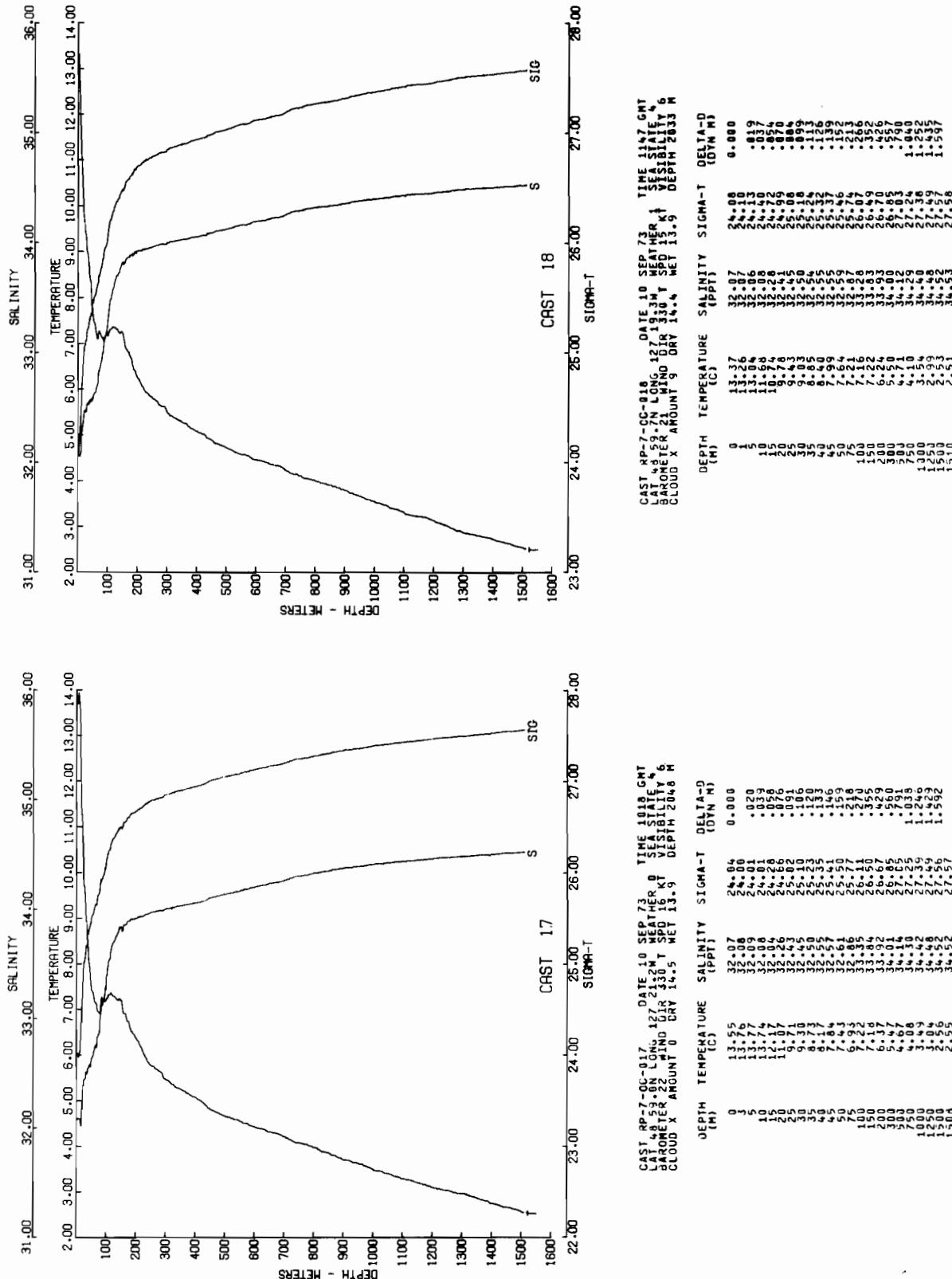


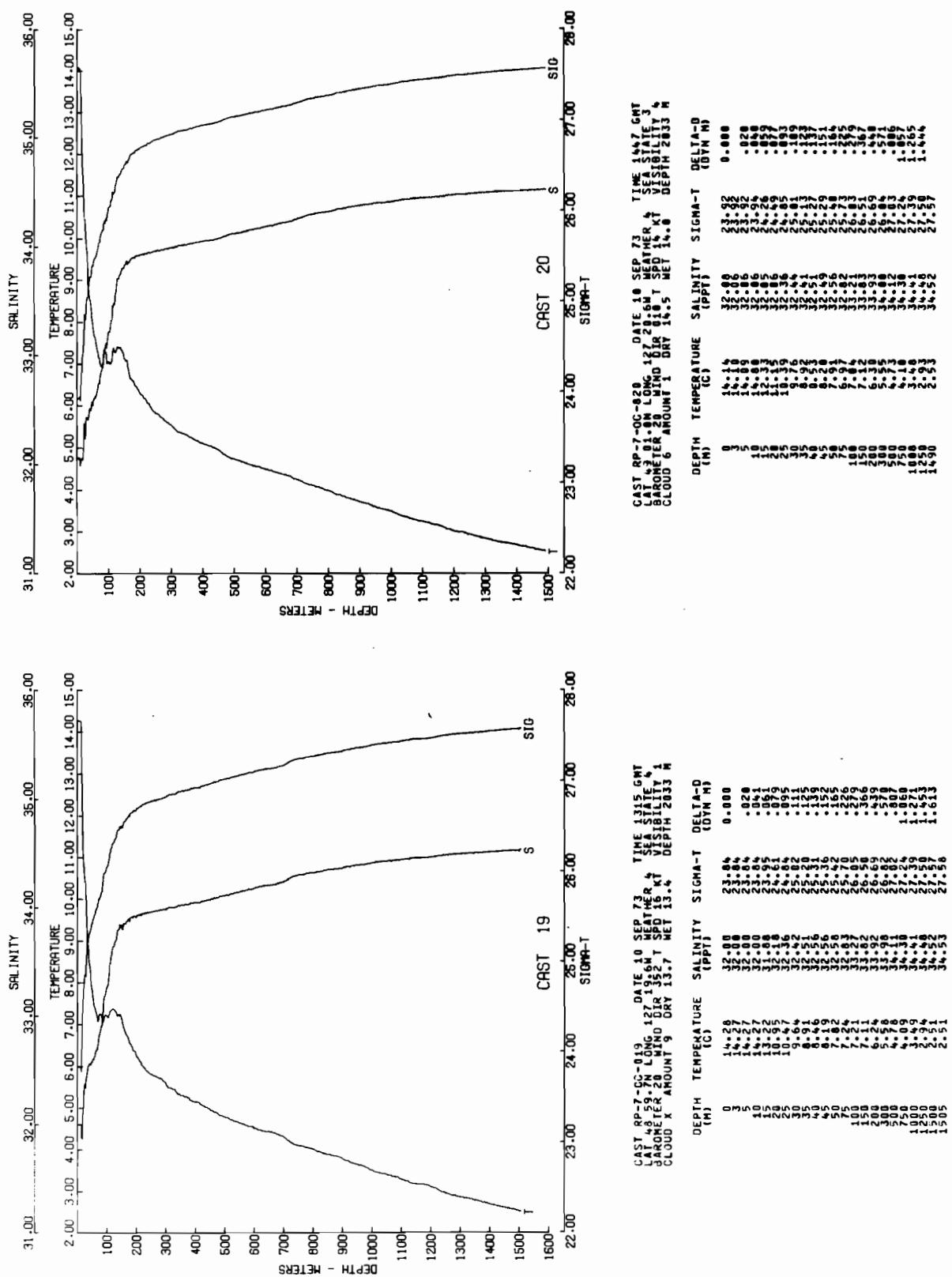
CAST RP-7-OC-014 DATE 10 SEP 73 TIME 0546 GMT
LAT 48°52'N LONG 127°19'W WEATHER 3
BARO 1012.3 HPA WIND 127°19'W SEAS STATE 3
CLOUDS X AMOUNT 9 DRY 15.2 SEA STATE 3
DEPTH 245 M DEPTH 245 M

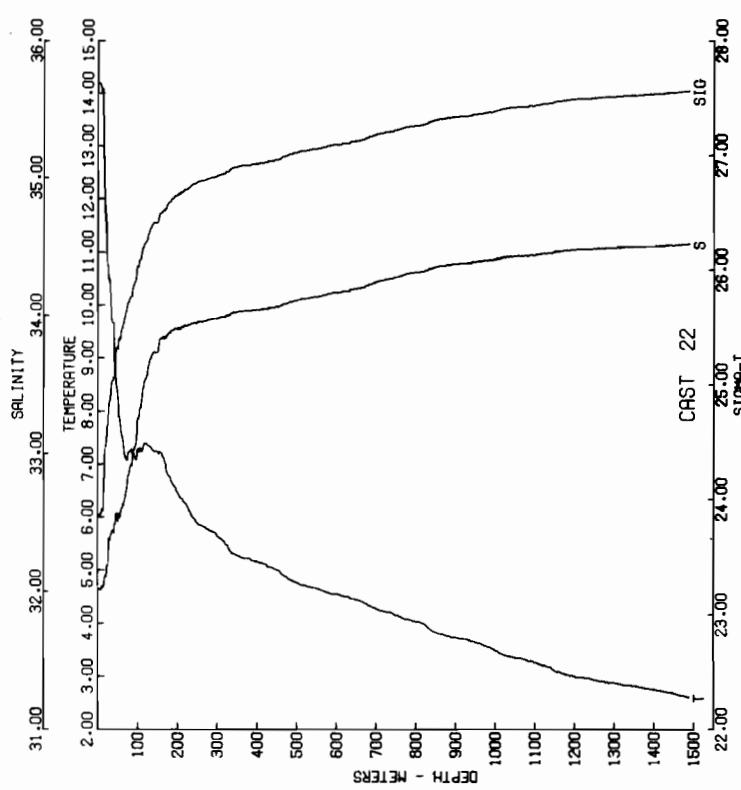
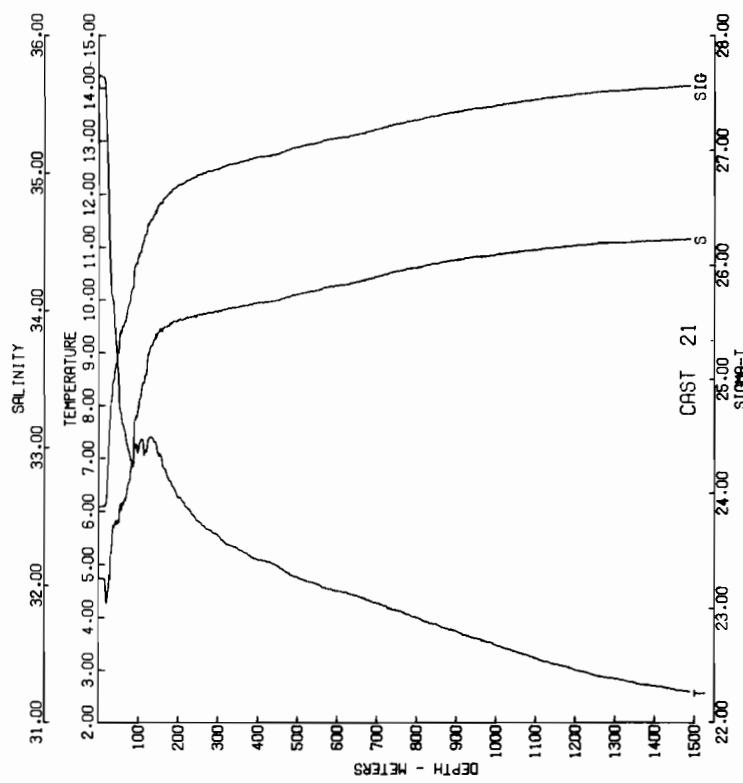
DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T	DETA-D (DYN/M)
0	14.56	32.04	23.81	0.000
5	14.53	32.03	23.79	.021
10	14.51	32.01	23.87	.001
15	14.48	32.02	23.82	.007
20	14.45	32.03	23.82	.007
25	14.42	32.02	23.86	.123
30	14.39	32.03	23.91	.129
35	14.36	32.04	23.95	.143
40	14.33	32.04	23.98	.153
45	14.30	32.05	24.01	.163
50	14.27	32.05	24.04	.173
55	14.24	32.05	24.06	.183
60	14.21	32.05	24.08	.193
65	14.18	32.05	24.10	.203
70	14.15	32.05	24.12	.213
75	14.12	32.05	24.14	.223
80	14.09	32.05	24.16	.233
85	14.06	32.05	24.18	.243
90	14.03	32.05	24.20	.253
95	14.00	32.05	24.22	.263
100	13.97	32.05	24.24	.273
105	13.94	32.05	24.26	.283
110	13.91	32.05	24.28	.293
115	13.88	32.05	24.30	.303
120	13.85	32.05	24.32	.313
125	13.82	32.05	24.34	.323
130	13.79	32.05	24.36	.333
135	13.76	32.05	24.38	.343
140	13.73	32.05	24.40	.353
145	13.70	32.05	24.42	.363
150	13.67	32.05	24.44	.373
155	13.64	32.05	24.46	.383
160	13.61	32.05	24.48	.393
165	13.58	32.05	24.50	.403
170	13.55	32.05	24.52	.413
175	13.52	32.05	24.54	.423
180	13.49	32.05	24.56	.433
185	13.46	32.05	24.58	.443
190	13.43	32.05	24.60	.453
195	13.40	32.05	24.62	.463
200	13.37	32.05	24.64	.473
205	13.34	32.05	24.66	.483
210	13.31	32.05	24.68	.493
215	13.28	32.05	24.70	.503
220	13.25	32.05	24.72	.513
225	13.22	32.05	24.74	.523
230	13.19	32.05	24.76	.533
235	13.16	32.05	24.78	.543
240	13.13	32.05	24.80	.553
245	13.10	32.05	24.82	.563
250	13.07	32.05	24.84	.573
255	13.04	32.05	24.86	.583
260	13.01	32.05	24.88	.593
265	12.98	32.05	24.90	.603
270	12.95	32.05	24.92	.613
275	12.92	32.05	24.94	.623
280	12.89	32.05	24.96	.633
285	12.86	32.05	24.98	.643
290	12.83	32.05	25.00	.653
295	12.80	32.05	25.02	.663
300	12.77	32.05	25.04	.673
305	12.74	32.05	25.06	.683
310	12.71	32.05	25.08	.693
315	12.68	32.05	25.10	.703
320	12.65	32.05	25.12	.713
325	12.62	32.05	25.14	.723
330	12.59	32.05	25.16	.733
335	12.56	32.05	25.18	.743
340	12.53	32.05	25.20	.753
345	12.50	32.05	25.22	.763
350	12.47	32.05	25.24	.773
355	12.44	32.05	25.26	.783
360	12.41	32.05	25.28	.793
365	12.38	32.05	25.30	.803
370	12.35	32.05	25.32	.813
375	12.32	32.05	25.34	.823
380	12.29	32.05	25.36	.833
385	12.26	32.05	25.38	.843
390	12.23	32.05	25.40	.853
395	12.20	32.05	25.42	.863
400	12.17	32.05	25.44	.873
405	12.14	32.05	25.46	.883
410	12.11	32.05	25.48	.893
415	12.08	32.05	25.50	.903
420	12.05	32.05	25.52	.913
425	12.02	32.05	25.54	.923
430	11.99	32.05	25.56	.933
435	11.96	32.05	25.58	.943
440	11.93	32.05	25.60	.953
445	11.90	32.05	25.62	.963
450	11.87	32.05	25.64	.973
455	11.84	32.05	25.66	.983
460	11.81	32.05	25.68	.993
465	11.78	32.05	25.70	.003
470	11.75	32.05	25.72	.013
475	11.72	32.05	25.74	.023
480	11.69	32.05	25.76	.033
485	11.66	32.05	25.78	.043
490	11.63	32.05	25.80	.053
495	11.60	32.05	25.82	.063
500	11.57	32.05	25.84	.073
505	11.54	32.05	25.86	.083
510	11.51	32.05	25.88	.093
515	11.48	32.05	25.90	.103
520	11.45	32.05	25.92	.113
525	11.42	32.05	25.94	.123
530	11.39	32.05	25.96	.133
535	11.36	32.05	25.98	.143
540	11.33	32.05	26.00	.153
545	11.30	32.05	26.02	.163
550	11.27	32.05	26.04	.173
555	11.24	32.05	26.06	.183
560	11.21	32.05	26.08	.193
565	11.18	32.05	26.10	.203
570	11.15	32.05	26.12	.213
575	11.12	32.05	26.14	.223
580	11.09	32.05	26.16	.233
585	11.06	32.05	26.18	.243
590	11.03	32.05	26.20	.253
595	11.00	32.05	26.22	.263
600	10.97	32.05	26.24	.273
605	10.94	32.05	26.26	.283
610	10.91	32.05	26.28	.293
615	10.88	32.05	26.30	.303
620	10.85	32.05	26.32	.313
625	10.82	32.05	26.34	.323
630	10.79	32.05	26.36	.333
635	10.76	32.05	26.38	.343
640	10.73	32.05	26.40	.353
645	10.70	32.05	26.42	.363
650	10.67	32.05	26.44	.373
655	10.64	32.05	26.46	.383
660	10.61	32.05	26.48	.393
665	10.58	32.05	26.50	.403
670	10.55	32.05	26.52	.413
675	10.52	32.05	26.54	.423
680	10.49	32.05	26.56	.433
685	10.46	32.05	26.58	.443
690	10.43	32.05	26.60	.453
695	10.40	32.05	26.62	.463
700	10.37	32.05	26.64	.473
705	10.34	32.05	26.66	.483
710	10.31	32.05	26.68	.493
715	10.28	32.05	26.70	.503
720	10.25	32.05	26.72	.513
725	10.22	32.05	26.74	.523
730	10.19	32.05	26.76	.533
735	10.16	32.05	26.78	.543
740	10.13	32.05	26.80	.553
745	10.10	32.05	26.82	.563
750	10.07	32.05	26.84	.573
755	10.04	32.05	26.86	.583
760	10.01	32.05	26.88	.593
765	9.98	32.05	26.90	.603
770	9.95	32.05	26.92	.613
775	9.92	32.05	26.94	.623
780	9.89	32.05	26.96	.633
785	9.86	32.05	26.98	.643
790	9.83	32.05	27.00	.653
795	9.80	32.05	27.02	.663
800	9.77	32.05	27.04	.673
805	9.74	32.05	27.06	.683
810	9.71	32.05	27.08	.693
815	9.68	32.05	27.10	.703
820	9.65	32.05	27.12	.713
825	9.62	32.05	27.14	.723
830	9.59	32.05	27.16	.733
835	9.56	32.05	27.18	.743
840	9.53	32.05	27.20	.753
845	9.50	32.05	27.22	.763
850	9.47	32.05	27.24	.773
855	9.44	32.05	27.26	.783
860	9.41	32.05	27.28	.793
865	9.38	32.05	27.30	.803
870	9.35	32.05	27.32	.813
875	9.32	32.05	27.34	.823
880	9.29	32.05	27.36	.833
885	9.26	32.05	27.38	.843
890	9.23	32.05	27.40	.853
895	9.20	32.05	27.42	.863
900	9.17	32.05	27.44	.873
905	9.14	32.05	27.46	.883
910	9.11	32.05	27.48	.893
915	9.08	32.05	27.50	.903
920	9.05	32.05	27.52	.913
925	9.02	32.05	27.54	.923
930	9.00	32.05	27.56	.933
935	9.00	32.05	27.58	.943
940	9.00	32.05	27.60	.953



CAST RE-7-00-015 DATE 10 SEP 73 TIME 0715 GMT		CAST RE-7-00-016 DATE 10 SEP 73 TIME 0845 GMT	
LAT	48°59'.0N	LAT	48°59'.0N
LONG	127°17.5'W	LONG	127°16.5'W
WEATHER	9	WEATHER	9
BAROMETER	23	BAROMETER	22
WIND DIR	360°	WIND DIR	330°
SPD 11 Kt	SPD 13 Kt	SPD 15 Kt	SPD 13 Kt
CLOUD X	AMOUNT 0	CLOUD X	AMOUNT 0
MET 15.1 m	MET 13.9 m	VISIBILITY 6	VISIBILITY 6
DEPTH (m)	TEMPERATURE (°C)	DEPTH (m)	TEMPERATURE (°C)
0	32.00	0	32.00
100	31.99	100	31.99
200	31.97	200	31.97
300	31.95	300	31.95
400	31.93	400	31.93
500	31.91	500	31.91
600	31.89	600	31.89
700	31.87	700	31.87
800	31.85	800	31.85
900	31.83	900	31.83
1000	31.81	1000	31.81
1100	31.79	1100	31.79
1200	31.77	1200	31.77
1300	31.75	1300	31.75
1400	31.73	1400	31.73
1500	31.71	1500	31.71
DEPTH (m)	SALINITY (PPT)	DEPTH (m)	SALINITY (PPT)
0	35.5	0	35.5
100	35.5	100	35.5
200	35.5	200	35.5
300	35.5	300	35.5
400	35.5	400	35.5
500	35.5	500	35.5
600	35.5	600	35.5
700	35.5	700	35.5
800	35.5	800	35.5
900	35.5	900	35.5
1000	35.5	1000	35.5
1100	35.5	1100	35.5
1200	35.5	1200	35.5
1300	35.5	1300	35.5
1400	35.5	1400	35.5
1500	35.5	1500	35.5



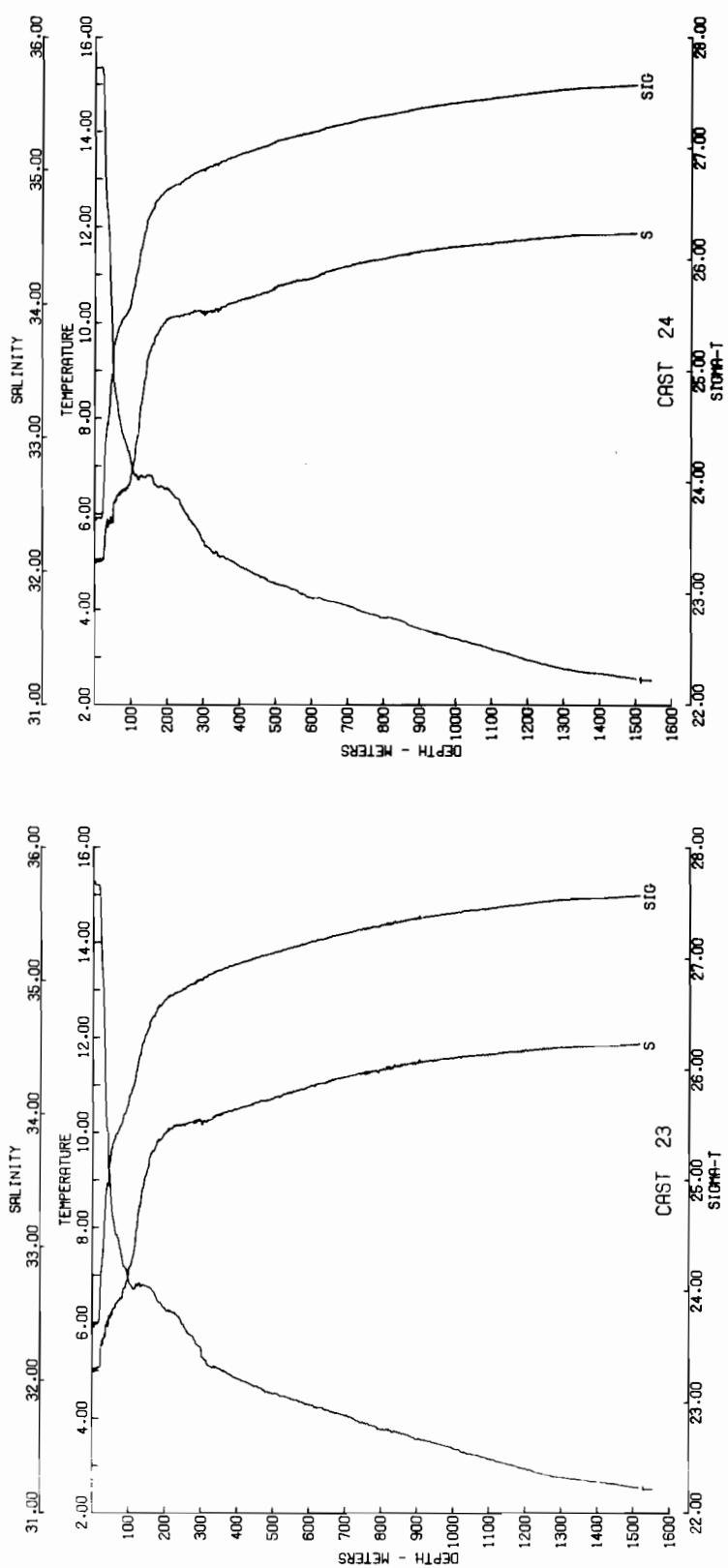




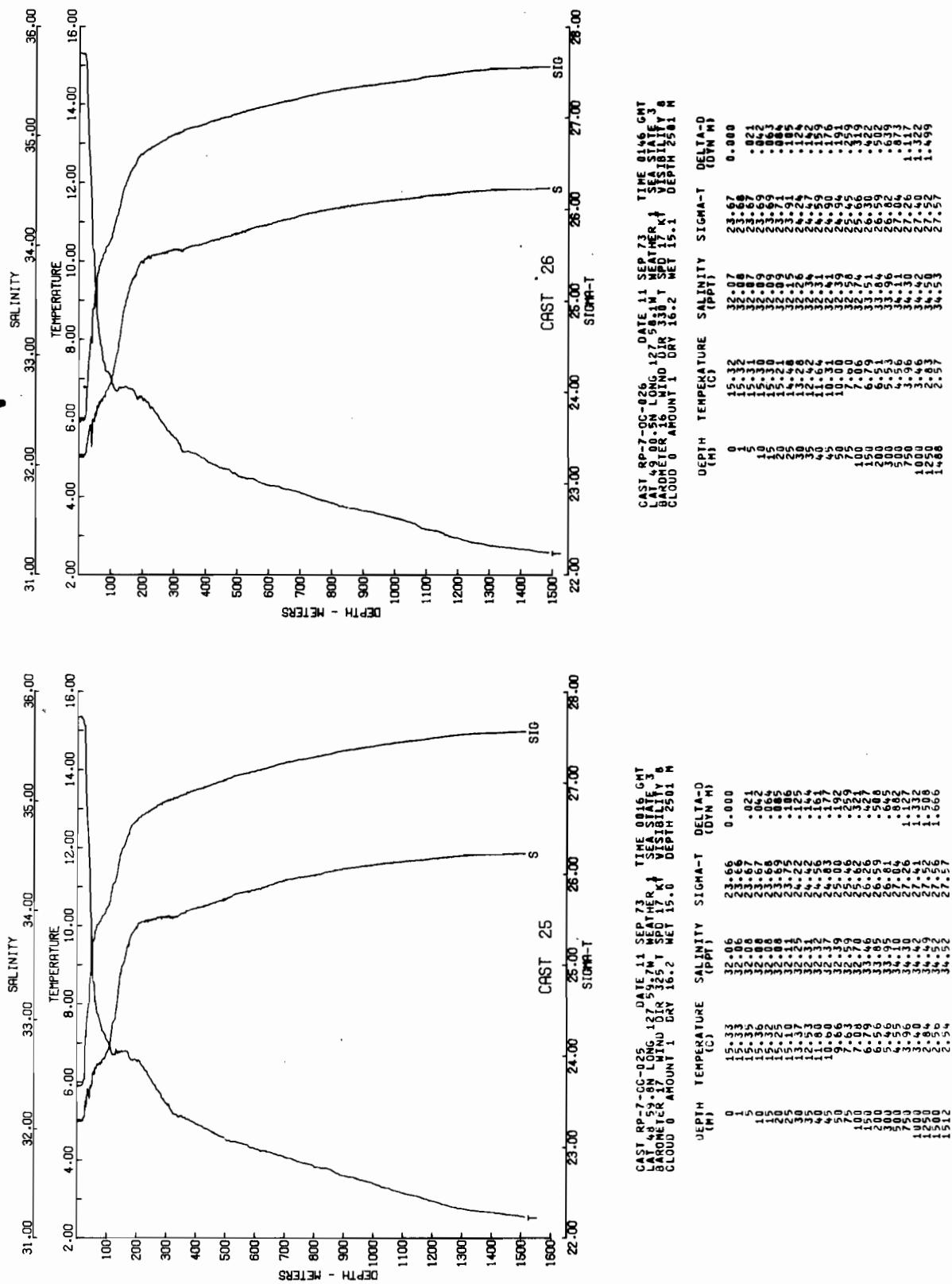
CAST NO-7-OC-022 DATE 10 SEP 73 TIME 1745 GMT
 LAT 49°00' N LONG 127°19' W WEATHER 4 SEA STATE 4
 BAROMETER 30.01 MSLW DIF 325.7 SPD 14.1 KI
 CLOUD 3 AMOUNT 1 DRY 14.2 MET 14.5
 TIME 1745 GMT
 SEA STATE 4
 VISIBILITY 4
 HUMIDITY 20.9 %

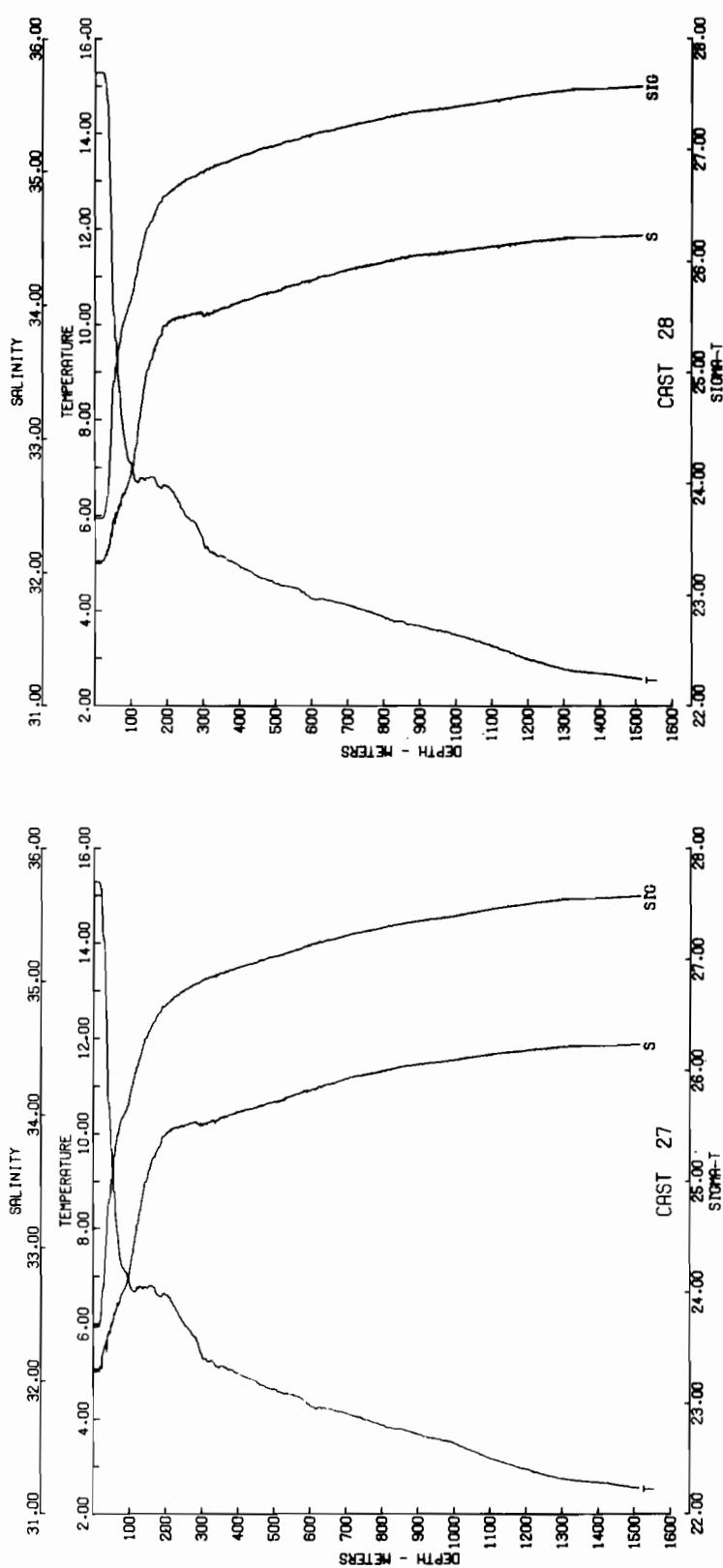
CAST RP-7-CC - 21		DATE 10 SEP 73		TIME 1616 GMT	
LAT 49.3°N	LONG 127°20'W	WEATHER 4	SEA STATE 3	VISIBILITY 4	DEPTH 2025 M
CLOUDS 6	WIND 15.0	MET 14.1	DRY 15.0		
DEPTH (M)	TEMPERATURE (C)	SALINITY (PPM)	SIGMA-T (DYN M ⁻¹)	DELTA-T (DYN M ⁻¹)	TIME 1616 GMT
0	14.2	32.0	2.3	0.000	
3	14.2	32.05	2.3	.020	
5	14.2	32.05	2.3	.040	
10	14.2	32.05	2.3	.060	
15	14.2	32.05	2.3	.081	
20	14.2	32.05	2.4	.100	
25	14.2	32.1	2.4	.133	
30	14.1	32.1	2.4	.148	
35	14.0	32.1	2.5	.162	
40	14.0	32.1	2.5	.176	
45	14.0	32.1	2.5	.190	
50	14.0	32.1	2.5	.209	
55	14.0	32.1	2.5	.229	
60	14.0	32.1	2.5	.250	
65	14.0	32.1	2.5	.273	
70	14.0	32.1	2.5	.297	
75	14.0	32.1	2.5	.323	
80	14.0	32.1	2.5	.351	
85	14.0	32.1	2.5	.382	
90	14.0	32.1	2.5	.414	
95	14.0	32.1	2.5	.449	
100	14.0	32.1	2.5	.484	
105	14.0	32.1	2.5	.519	
110	14.0	32.1	2.5	.553	
115	14.0	32.1	2.5	.587	
120	14.0	32.1	2.5	.619	
125	14.0	32.1	2.5	.649	
130	14.0	32.1	2.5	.679	
135	14.0	32.1	2.5	.709	
140	14.0	32.1	2.5	.739	
145	14.0	32.1	2.5	.769	
150	14.0	32.1	2.5	.800	
155	14.0	32.1	2.5	.830	
160	14.0	32.1	2.5	.860	
165	14.0	32.1	2.5	.890	
170	14.0	32.1	2.5	.920	
175	14.0	32.1	2.5	.950	
180	14.0	32.1	2.5	.980	
185	14.0	32.1	2.5	1.010	
190	14.0	32.1	2.5	1.040	
195	14.0	32.1	2.5	1.070	
200	14.0	32.1	2.5	1.100	

TEMPERATURE [C]	SALINITY [PPM]	DELTA- T (LN H)	SIGMA-T
1.2	32.0	0.000	0.67
1.4	32.0	0.240	0.67
1.6	32.0	0.670	0.67
1.8	32.0	0.875	0.95
2.0	32.0	1.125	1.16
2.2	32.0	1.450	1.45
2.4	32.0	1.650	1.65
2.6	32.0	2.125	2.12
2.8	32.0	2.375	2.37
3.0	32.0	2.625	2.62
3.2	32.0	2.875	2.87
3.4	32.0	3.125	3.12
3.6	32.0	3.375	3.37
3.8	32.0	3.625	3.62
4.0	32.0	3.875	3.87
4.2	32.0	4.125	4.12
4.4	32.0	4.375	4.37
4.6	32.0	4.625	4.62
4.8	32.0	4.875	4.87
5.0	32.0	5.125	5.12



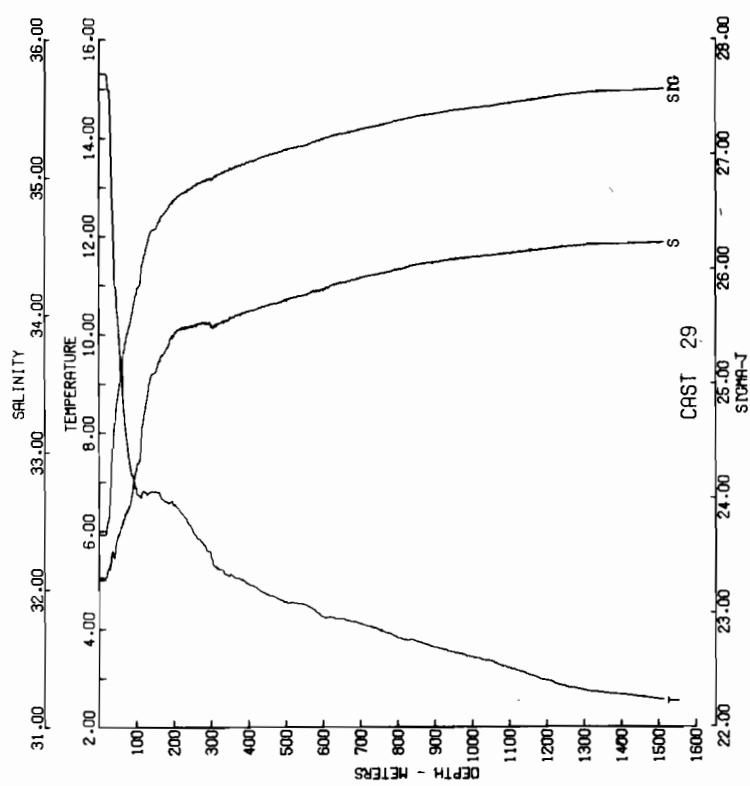
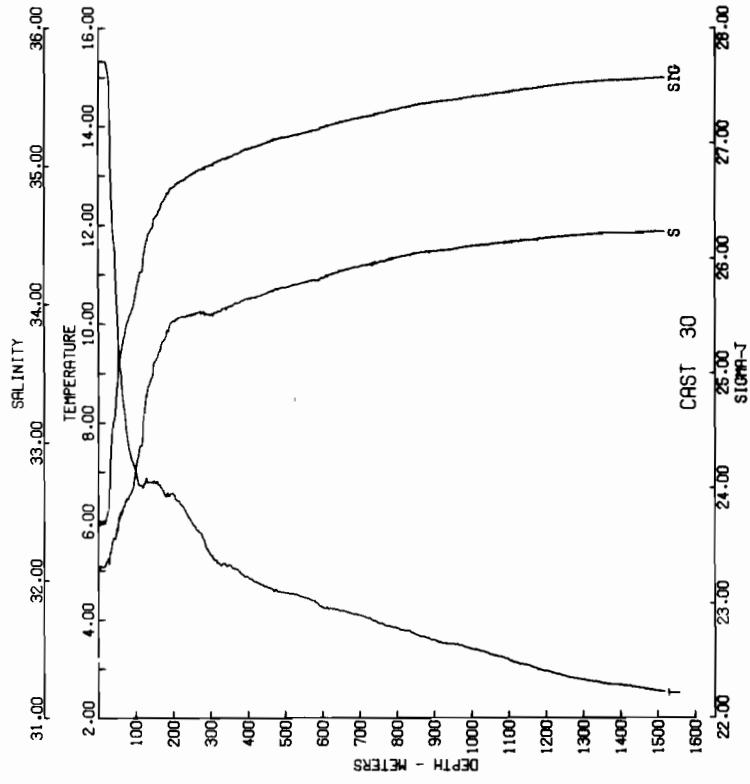
CAST 1 SIG		CAST 2 SIG	
DATE 10 SEP 73	TIME 2246 GNT	DATE 10 SEP 73	TIME 2246 GNT
LAT 16°52'N	LONG 127°45'E	LAT 16°52'N	LONG 127°45'E
WIND 180°	SPD 130 T	WIND 180°	SPD 130 T
CLOUD 2	AMOUNT 2	CLOUD 2	AMOUNT 2
DEPTH 1 M	TEMPERATURE (°C)	DEPTH 1 M	TEMPERATURE (°C)
0	16.35	0	16.35
10	16.35	10	16.35
20	16.32	20	16.32
30	16.29	30	16.29
40	16.26	40	16.26
50	16.23	50	16.23
60	16.20	60	16.20
70	16.17	70	16.17
80	16.14	80	16.14
90	16.11	90	16.11
100	16.08	100	16.08
110	16.05	110	16.05
120	16.02	120	16.02
130	16.00	130	16.00
140	15.97	140	15.97
150	15.95	150	15.95
160	15.93	160	15.93
170	15.91	170	15.91
180	15.89	180	15.89
190	15.87	190	15.87
200	15.85	200	15.85
210	15.83	210	15.83
220	15.81	220	15.81
230	15.79	230	15.79
240	15.77	240	15.77
250	15.75	250	15.75
260	15.73	260	15.73
270	15.71	270	15.71
280	15.69	280	15.69
290	15.67	290	15.67
300	15.65	300	15.65
310	15.63	310	15.63
320	15.61	320	15.61
330	15.59	330	15.59
340	15.57	340	15.57
350	15.55	350	15.55
360	15.53	360	15.53
370	15.51	370	15.51
380	15.49	380	15.49
390	15.47	390	15.47
400	15.45	400	15.45
410	15.43	410	15.43
420	15.41	420	15.41
430	15.39	430	15.39
440	15.37	440	15.37
450	15.35	450	15.35
460	15.33	460	15.33
470	15.31	470	15.31
480	15.29	480	15.29
490	15.27	490	15.27
500	15.25	500	15.25
510	15.23	510	15.23
520	15.21	520	15.21
530	15.19	530	15.19
540	15.17	540	15.17
550	15.15	550	15.15
560	15.13	560	15.13
570	15.11	570	15.11
580	15.09	580	15.09
590	15.07	590	15.07
600	15.05	600	15.05
610	15.03	610	15.03
620	15.01	620	15.01
630	14.99	630	14.99
640	14.97	640	14.97
650	14.95	650	14.95
660	14.93	660	14.93
670	14.91	670	14.91
680	14.89	680	14.89
690	14.87	690	14.87
700	14.85	700	14.85
710	14.83	710	14.83
720	14.81	720	14.81
730	14.79	730	14.79
740	14.77	740	14.77
750	14.75	750	14.75
760	14.73	760	14.73
770	14.71	770	14.71
780	14.69	780	14.69
790	14.67	790	14.67
800	14.65	800	14.65
810	14.63	810	14.63
820	14.61	820	14.61
830	14.59	830	14.59
840	14.57	840	14.57
850	14.55	850	14.55
860	14.53	860	14.53
870	14.51	870	14.51
880	14.49	880	14.49
890	14.47	890	14.47
900	14.45	900	14.45
910	14.43	910	14.43
920	14.41	920	14.41
930	14.39	930	14.39
940	14.37	940	14.37
950	14.35	950	14.35
960	14.33	960	14.33
970	14.31	970	14.31
980	14.29	980	14.29
990	14.27	990	14.27
1000	14.25	1000	14.25
1010	14.23	1010	14.23
1020	14.21	1020	14.21
1030	14.19	1030	14.19
1040	14.17	1040	14.17
1050	14.15	1050	14.15
1060	14.13	1060	14.13
1070	14.11	1070	14.11
1080	14.09	1080	14.09
1090	14.07	1090	14.07
1100	14.05	1100	14.05
1110	14.03	1110	14.03
1120	14.01	1120	14.01
1130	13.99	1130	13.99
1140	13.97	1140	13.97
1150	13.95	1150	13.95
1160	13.93	1160	13.93
1170	13.91	1170	13.91
1180	13.89	1180	13.89
1190	13.87	1190	13.87
1200	13.85	1200	13.85
1210	13.83	1210	13.83
1220	13.81	1220	13.81
1230	13.79	1230	13.79
1240	13.77	1240	13.77
1250	13.75	1250	13.75
1260	13.73	1260	13.73
1270	13.71	1270	13.71
1280	13.69	1280	13.69
1290	13.67	1290	13.67
1300	13.65	1300	13.65
1310	13.63	1310	13.63
1320	13.61	1320	13.61
1330	13.59	1330	13.59
1340	13.57	1340	13.57
1350	13.55	1350	13.55
1360	13.53	1360	13.53
1370	13.51	1370	13.51
1380	13.49	1380	13.49
1390	13.47	1390	13.47
1400	13.45	1400	13.45
1410	13.43	1410	13.43
1420	13.41	1420	13.41
1430	13.39	1430	13.39
1440	13.37	1440	13.37
1450	13.35	1450	13.35
1460	13.33	1460	13.33
1470	13.31	1470	13.31
1480	13.29	1480	13.29
1490	13.27	1490	13.27
1500	13.25	1500	13.25
1510	13.23	1510	13.23
1520	13.21	1520	13.21
1530	13.19	1530	13.19
1540	13.17	1540	13.17
1550	13.15	1550	13.15
1560	13.13	1560	13.13
1570	13.11	1570	13.11
1580	13.09	1580	13.09
1590	13.07	1590	13.07
1600	13.05	1600	13.05



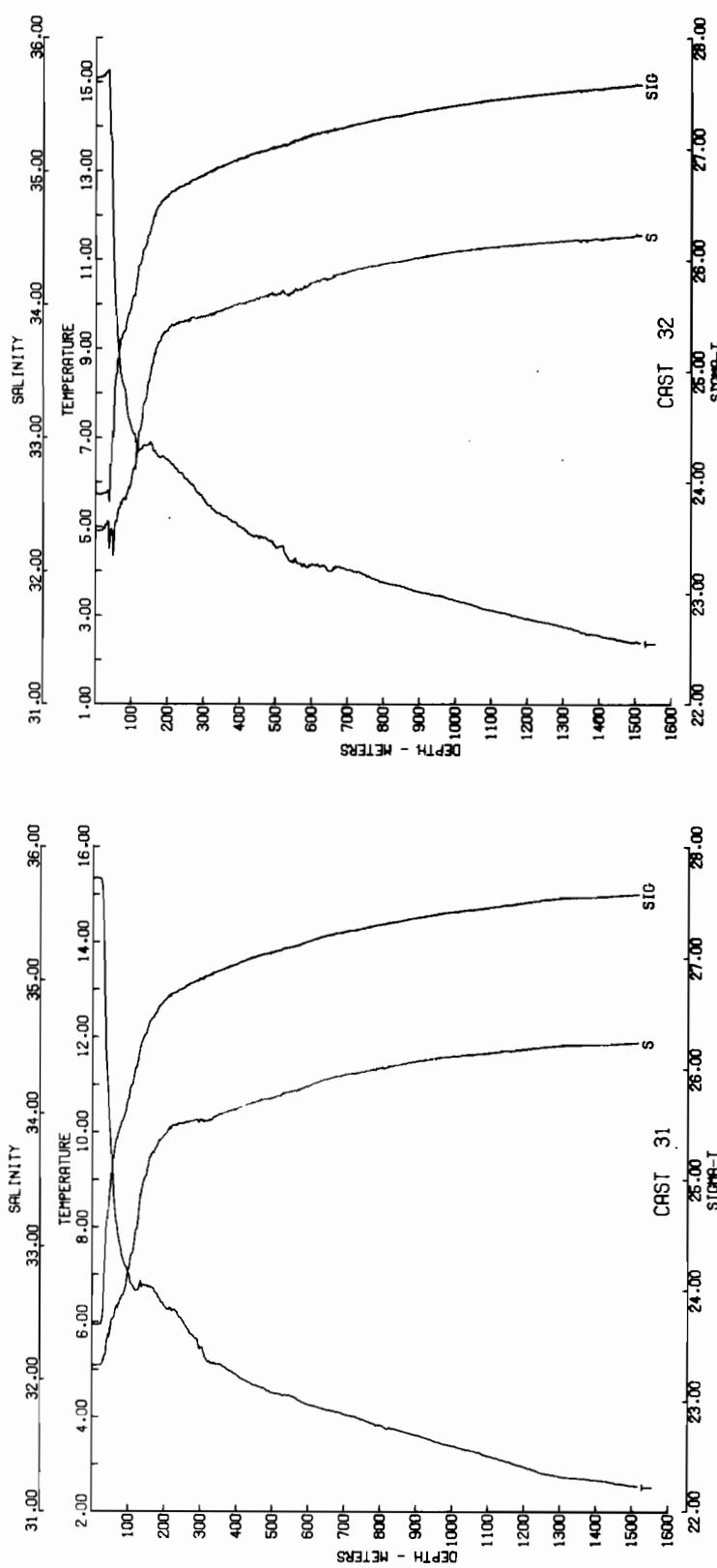


CAST RP-7-OC-028 DATE 11 SEP 73 TIME 0346 GMT		CAST RP-7-OC-028 DATE 11 SEP 73 TIME 0346 GMT	
DEPTH (M)	TEMPERATURE (°C)	DEPTH (M)	TEMPERATURE (°C)
16.0	15.2	16.0	15.2
17.0	15.6	17.0	15.6
18.0	16.0	18.0	16.0
19.0	16.4	19.0	16.4
20.0	16.8	20.0	16.8
21.0	17.2	21.0	17.2
22.0	17.6	22.0	17.6
23.0	18.0	23.0	18.0
24.0	18.4	24.0	18.4
25.0	18.8	25.0	18.8
26.0	19.2	26.0	19.2
27.0	19.6	27.0	19.6
28.0	20.0	28.0	20.0

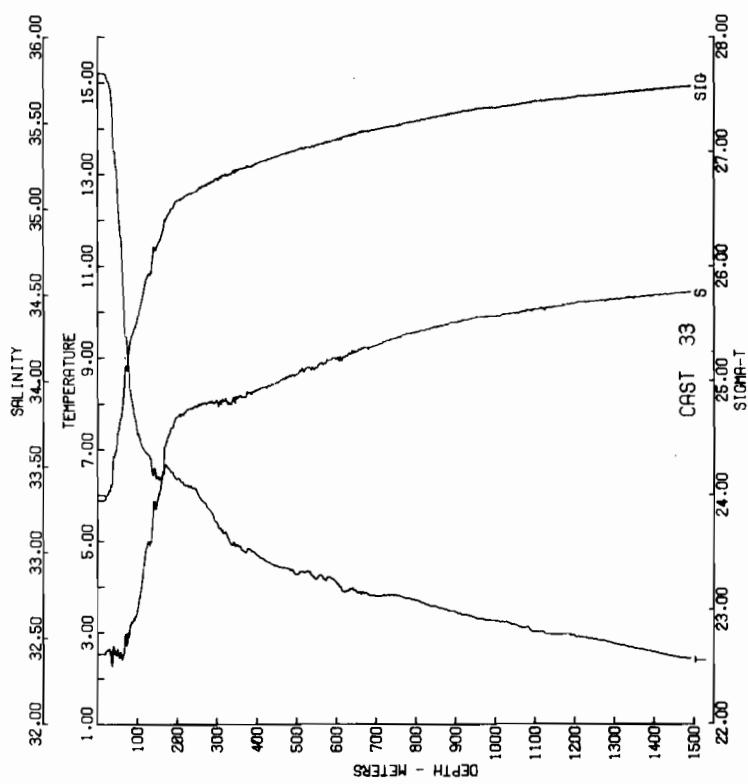
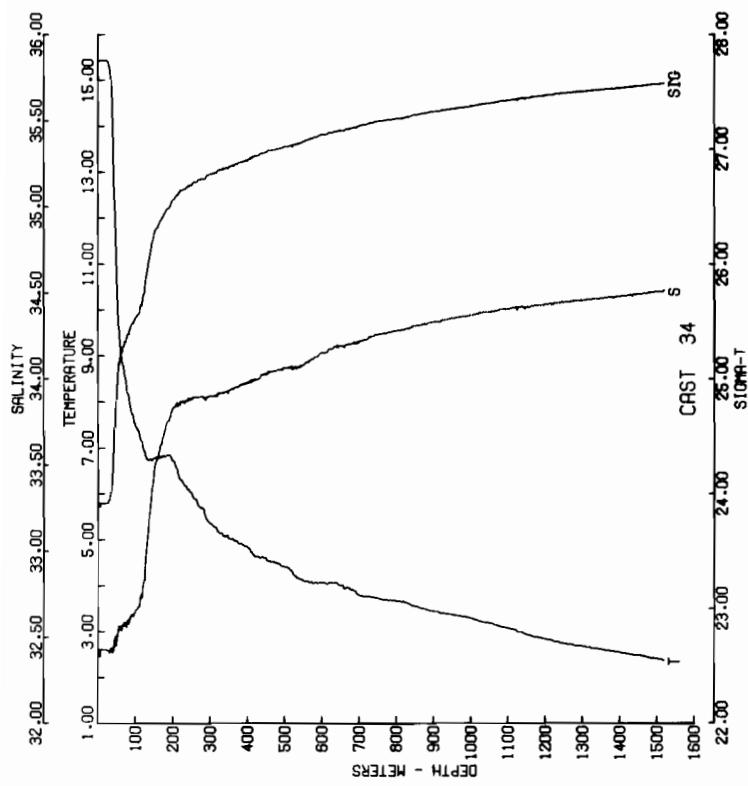
CAST RP-7-OC-027 DATE 11 SEP 73 TIME 0315 GMT		CAST RP-7-OC-027 DATE 11 SEP 73 TIME 0315 GMT	
DEPTH (M)	SALINITY (ppt)	DEPTH (M)	SALINITY (ppt)
22.0	31.9	22.0	31.9
23.0	32.3	23.0	32.3
24.0	32.7	24.0	32.7
25.0	33.1	25.0	33.1
26.0	33.5	26.0	33.5
27.0	33.9	27.0	33.9
28.0	34.3	28.0	34.3



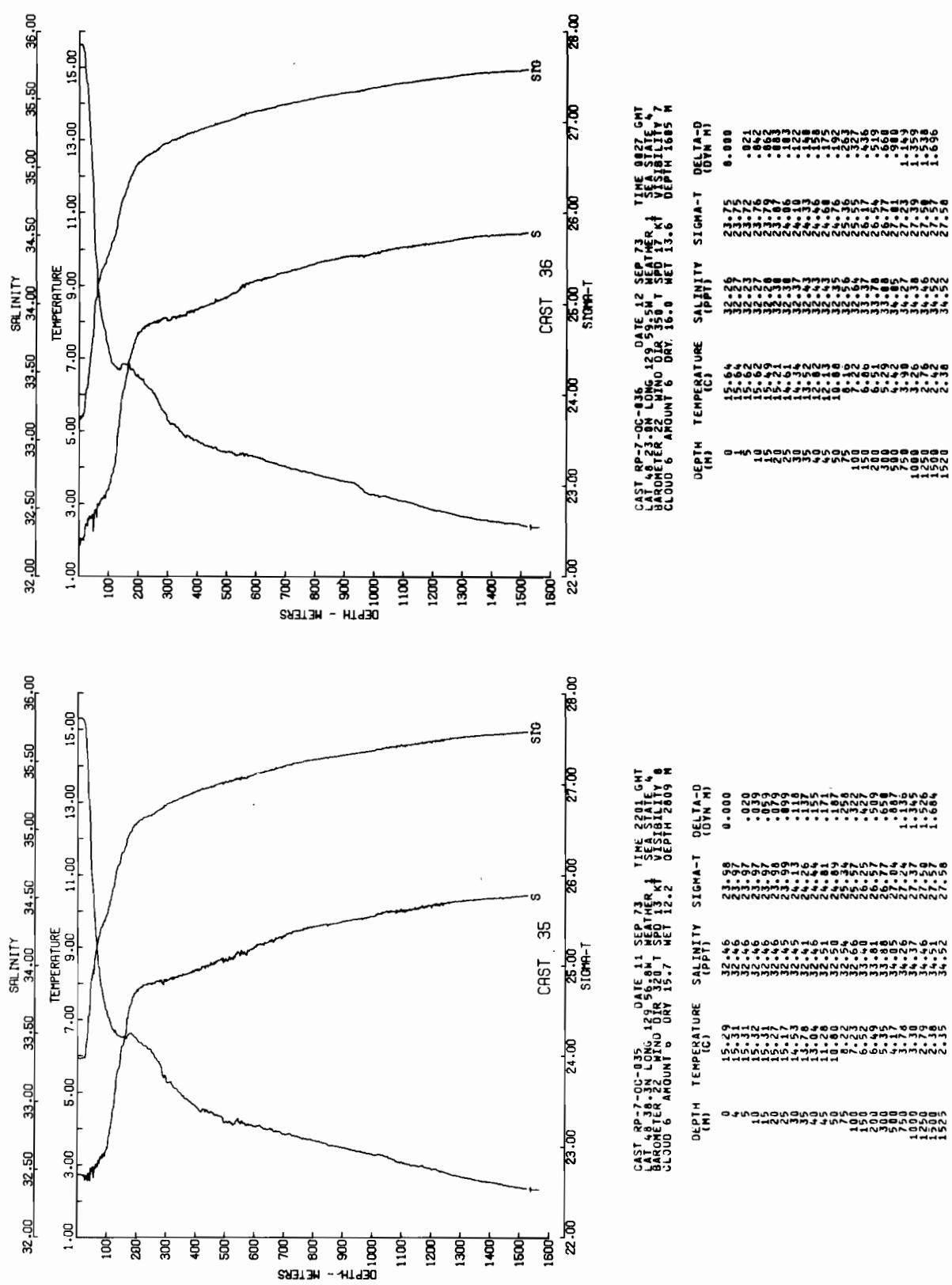
CAST NP-7-CC-029		DATE 11 SEP 73		TIME 0615 GMT		CAST RP-7-CC-030		DATE 11 SEP 73		TIME 0645 GMT	
		LAT 48°57'N LONG 127°57'W		WEATHER 4 SEA STATE 4		LAT 48°59'44"N LONG 126°00'W		WEATHER 4 SEA STATE 4		LAT 48°59'44"N LONG 126°00'W	
		BAROMETER 16 MIND 31.01		SPD 16 KT DRY 15.0		BAROMETER 16 MIND 31.01		SPD 14.4 WET		BAROMETER 16 MIND 31.01	
DEPTH (M)	TEMPERATURE (°C)	SALINITY (‰)	SIGMA-T (PPB)	DELTA-D (DYN M)	DEPTH (M)	TEMPERATURE (°C)	SALINITY (‰)	SIGMA-T (PPB)	DELTA-D (DYN M)	DEPTH (M)	TEMPERATURE (°C)
0	15.3	32.0	0.000	0	15.3	32.0	0.000	0	0.000	15.3	32.0
4	15.4	32.0	0.021	0.000	15.4	32.0	0.021	0.000	0.000	15.4	32.0
8	15.5	32.0	0.042	0.000	15.5	32.0	0.042	0.000	0.000	15.5	32.0
12	15.6	32.0	0.063	0.000	15.6	32.0	0.063	0.000	0.000	15.6	32.0
16	15.7	32.0	0.083	0.000	15.7	32.0	0.083	0.000	0.000	15.7	32.0
20	15.8	32.0	0.103	0.000	15.8	32.0	0.103	0.000	0.000	15.8	32.0
24	15.9	32.0	0.123	0.000	15.9	32.0	0.123	0.000	0.000	15.9	32.0
28	16.0	32.0	0.144	0.000	16.0	32.0	0.144	0.000	0.000	16.0	32.0
32	16.1	32.0	0.165	0.000	16.1	32.0	0.165	0.000	0.000	16.1	32.0
36	16.2	32.0	0.186	0.000	16.2	32.0	0.186	0.000	0.000	16.2	32.0
40	16.3	32.0	0.206	0.000	16.3	32.0	0.206	0.000	0.000	16.3	32.0
44	16.4	32.0	0.227	0.000	16.4	32.0	0.227	0.000	0.000	16.4	32.0
48	16.5	32.0	0.247	0.000	16.5	32.0	0.247	0.000	0.000	16.5	32.0
52	16.6	32.0	0.268	0.000	16.6	32.0	0.268	0.000	0.000	16.6	32.0
56	16.7	32.0	0.288	0.000	16.7	32.0	0.288	0.000	0.000	16.7	32.0
60	16.8	32.0	0.308	0.000	16.8	32.0	0.308	0.000	0.000	16.8	32.0
64	16.9	32.0	0.328	0.000	16.9	32.0	0.328	0.000	0.000	16.9	32.0
68	17.0	32.0	0.348	0.000	17.0	32.0	0.348	0.000	0.000	17.0	32.0
72	17.1	32.0	0.368	0.000	17.1	32.0	0.368	0.000	0.000	17.1	32.0
76	17.2	32.0	0.388	0.000	17.2	32.0	0.388	0.000	0.000	17.2	32.0
80	17.3	32.0	0.408	0.000	17.3	32.0	0.408	0.000	0.000	17.3	32.0
84	17.4	32.0	0.428	0.000	17.4	32.0	0.428	0.000	0.000	17.4	32.0
88	17.5	32.0	0.448	0.000	17.5	32.0	0.448	0.000	0.000	17.5	32.0
92	17.6	32.0	0.468	0.000	17.6	32.0	0.468	0.000	0.000	17.6	32.0
96	17.7	32.0	0.488	0.000	17.7	32.0	0.488	0.000	0.000	17.7	32.0
100	17.8	32.0	0.508	0.000	17.8	32.0	0.508	0.000	0.000	17.8	32.0
104	17.9	32.0	0.528	0.000	17.9	32.0	0.528	0.000	0.000	17.9	32.0
108	18.0	32.0	0.548	0.000	18.0	32.0	0.548	0.000	0.000	18.0	32.0
112	18.1	32.0	0.568	0.000	18.1	32.0	0.568	0.000	0.000	18.1	32.0
116	18.2	32.0	0.588	0.000	18.2	32.0	0.588	0.000	0.000	18.2	32.0
120	18.3	32.0	0.608	0.000	18.3	32.0	0.608	0.000	0.000	18.3	32.0
124	18.4	32.0	0.628	0.000	18.4	32.0	0.628	0.000	0.000	18.4	32.0
128	18.5	32.0	0.648	0.000	18.5	32.0	0.648	0.000	0.000	18.5	32.0
132	18.6	32.0	0.668	0.000	18.6	32.0	0.668	0.000	0.000	18.6	32.0
136	18.7	32.0	0.688	0.000	18.7	32.0	0.688	0.000	0.000	18.7	32.0
140	18.8	32.0	0.708	0.000	18.8	32.0	0.708	0.000	0.000	18.8	32.0
144	18.9	32.0	0.728	0.000	18.9	32.0	0.728	0.000	0.000	18.9	32.0
148	19.0	32.0	0.748	0.000	19.0	32.0	0.748	0.000	0.000	19.0	32.0
152	19.1	32.0	0.768	0.000	19.1	32.0	0.768	0.000	0.000	19.1	32.0
156	19.2	32.0	0.788	0.000	19.2	32.0	0.788	0.000	0.000	19.2	32.0
160	19.3	32.0	0.808	0.000	19.3	32.0	0.808	0.000	0.000	19.3	32.0
164	19.4	32.0	0.828	0.000	19.4	32.0	0.828	0.000	0.000	19.4	32.0
168	19.5	32.0	0.848	0.000	19.5	32.0	0.848	0.000	0.000	19.5	32.0
172	19.6	32.0	0.868	0.000	19.6	32.0	0.868	0.000	0.000	19.6	32.0
176	19.7	32.0	0.888	0.000	19.7	32.0	0.888	0.000	0.000	19.7	32.0
180	19.8	32.0	0.908	0.000	19.8	32.0	0.908	0.000	0.000	19.8	32.0
184	19.9	32.0	0.928	0.000	19.9	32.0	0.928	0.000	0.000	19.9	32.0
188	20.0	32.0	0.948	0.000	20.0	32.0	0.948	0.000	0.000	20.0	32.0
192	20.1	32.0	0.968	0.000	20.1	32.0	0.968	0.000	0.000	20.1	32.0
196	20.2	32.0	0.988	0.000	20.2	32.0	0.988	0.000	0.000	20.2	32.0
200	20.3	32.0	1.008	0.000	20.3	32.0	1.008	0.000	0.000	20.3	32.0
204	20.4	32.0	1.028	0.000	20.4	32.0	1.028	0.000	0.000	20.4	32.0
208	20.5	32.0	1.048	0.000	20.5	32.0	1.048	0.000	0.000	20.5	32.0
212	20.6	32.0	1.068	0.000	20.6	32.0	1.068	0.000	0.000	20.6	32.0
216	20.7	32.0	1.088	0.000	20.7	32.0	1.088	0.000	0.000	20.7	32.0
220	20.8	32.0	1.108	0.000	20.8	32.0	1.108	0.000	0.000	20.8	32.0
224	20.9	32.0	1.128	0.000	20.9	32.0	1.128	0.000	0.000	20.9	32.0
228	21.0	32.0	1.148	0.000	21.0	32.0	1.148	0.000	0.000	21.0	32.0
232	21.1	32.0	1.168	0.000	21.1	32.0	1.168	0.000	0.000	21.1	32.0
236	21.2	32.0	1.188	0.000	21.2	32.0	1.188	0.000	0.000	21.2	32.0
240	21.3	32.0	1.208	0.000	21.3	32.0	1.208	0.000	0.000	21.3	32.0
244	21.4	32.0	1.228	0.000	21.4	32.0	1.228	0.000	0.000	21.4	32.0
248	21.5	32.0	1.248	0.000	21.5	32.0	1.248	0.000	0.000	21.5	32.0
252	21.6	32.0	1.268	0.000	21.6	32.0	1.268	0.000	0.000	21.6	32.0
256	21.7	32.0	1.288	0.000	21.7	32.0	1.288	0.000	0.000	21.7	32.0
260	21.8	32.0	1.308	0.000	21.8	32.0	1.308	0.000	0.000	21.8	32.0
264	21.9	32.0	1.328	0.000	21.9	32.0	1.328	0.000	0.000	21.9	32.0
268	22.0	32.0	1.348	0.000	22.0	32.0	1.348	0.000	0.000	22.0	32.0
272	22.1	32.0	1.368	0.000	22.1	32.0	1.368	0.000	0.000	22.1	32.0
276	22.2	32.0	1.388	0.000	22.2	32.0	1.388	0.000	0.000	22.2	32.0
280	22.3	32.0	1.408	0.000	22.3	32.0	1.408	0.000	0.000	22.3	32.0
284	22.4	32.0	1.428	0.000	22.4	32.0	1.428	0.000	0.000	22.4	32.0
288	22.5	32.0	1.448	0.000	22.5	32.0	1.448	0.000	0.000	22.5	32.0
292	22.6	32.0	1.468	0.000	22.6	32.0	1.468	0.000	0.000	22.6	32.0
296	22.7	32.0	1.488	0.000	22.7	32.0	1.488	0.000	0.000	22.7	32.0
300	22.8	32.0	1.508	0.000	22.8	32.0	1.508	0.000	0.000	22.8	32.0
304	22.9	32.0	1.528	0.000	22.9	32.0	1.528	0.000	0.000	22.9	32.0
308	23.0	32.0	1.548	0.000	23.0	32.0	1.548	0.000	0.000	23.0	32.0
312	23.1	32.0	1.568	0.000	23.1	32.0	1.568	0.000	0.000	23.1	32.0
316	23.2	32.0	1.588	0.000	23.2	32.0	1.588	0.000	0.000	23.2	32.0
320	23.3	32.0	1.608	0.000	23.3	32.0	1.608	0.000	0.000	23.3	32.0
324	23.4	32.0	1.628	0.000	23.4	32.0	1.628	0.000	0.000	23.4	32.0
328	23.5	32.0	1.648	0.000</							

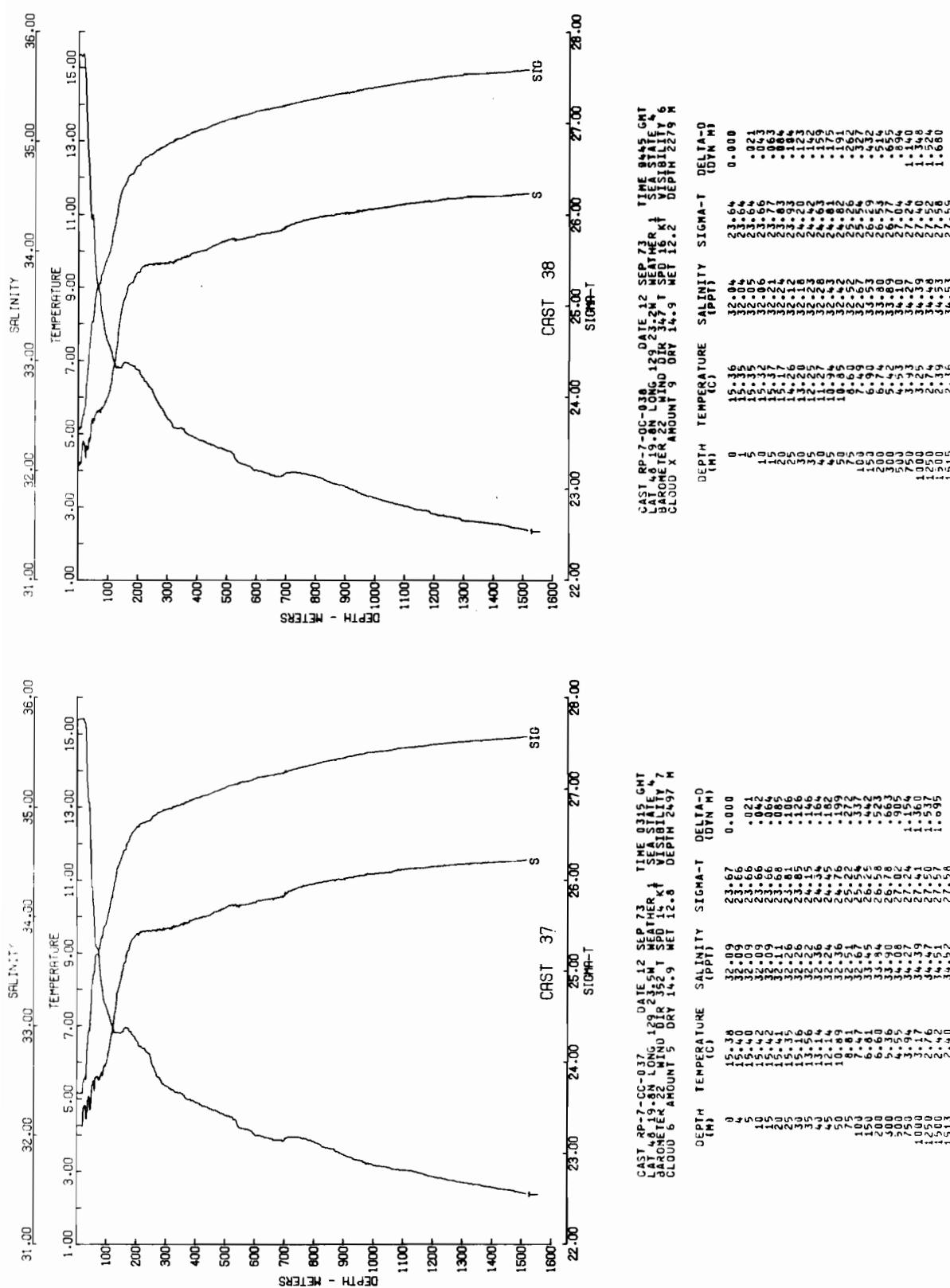


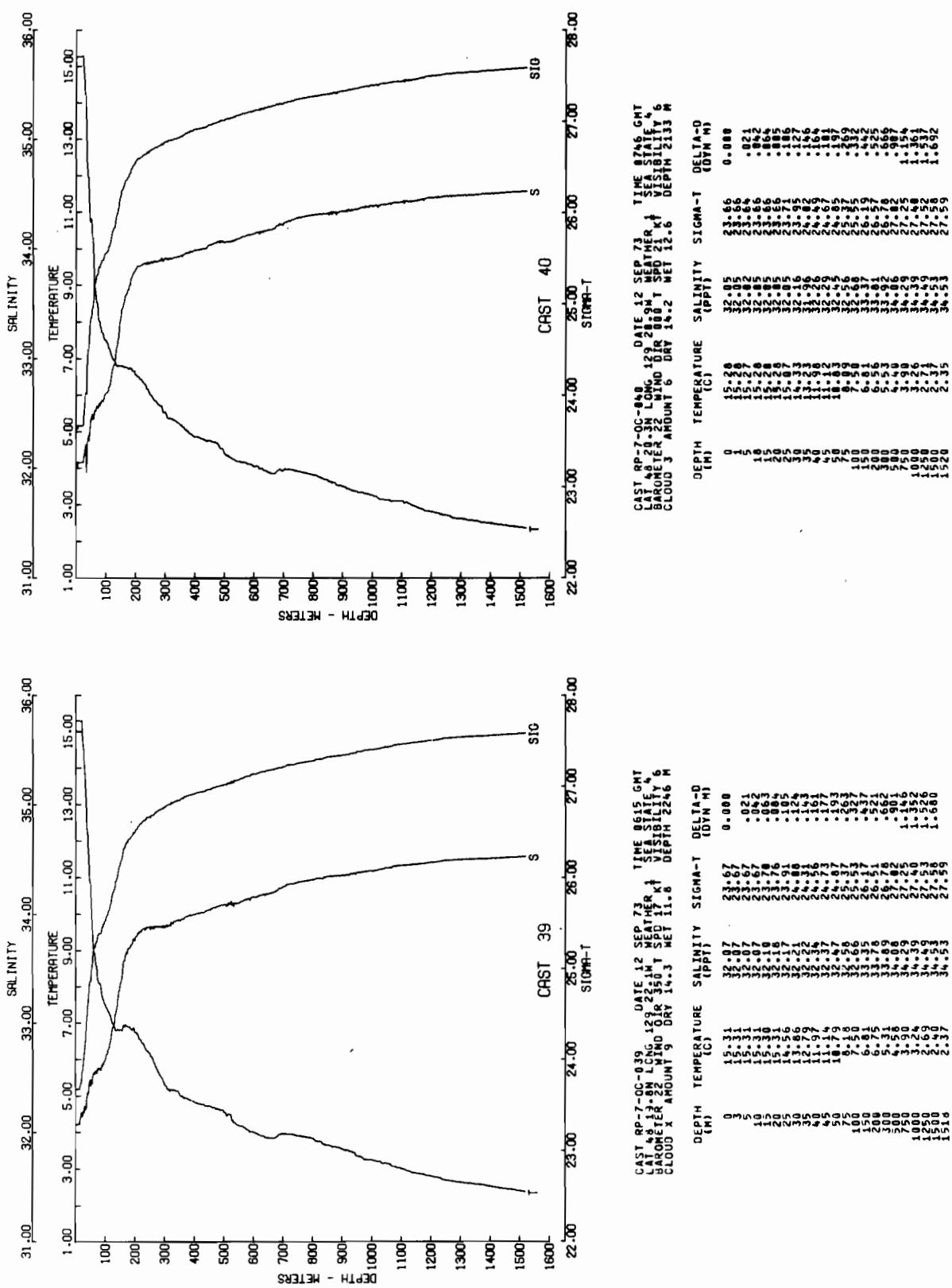
CAST RP-7-OC-031 DATE 11 SEP 73 TIME 0923 GMT		TIME 1252 GMT	
LAT 43°00'N LONG 067°58'W		WEATHER 4	
BAROMETER 1013.0 KPA		SEA STATE 4	
CLOUD X AMOUNT 9		VISIBILITY 4	
DRY 14.0 METERS		WET 14.1	
DEPTH (m)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T (dyn/cm²)
0	15.3	32.1	15.89
5	15.3	32.1	15.89
10	15.3	32.1	15.89
20	15.3	32.1	15.89
40	15.3	32.1	15.89
60	15.3	32.1	15.89
80	15.3	32.1	15.89
100	15.3	32.1	15.89
120	15.3	32.1	15.89
140	15.3	32.1	15.89
160	15.3	32.1	15.89
180	15.3	32.1	15.89
200	15.3	32.1	15.89
250	15.3	32.1	15.89
300	15.3	32.1	15.89
400	15.3	32.1	15.89
500	15.3	32.1	15.89
600	15.3	32.1	15.89
700	15.3	32.1	15.89
800	15.3	32.1	15.89
900	15.3	32.1	15.89
1000	15.3	32.1	15.89
1100	15.3	32.1	15.89
1200	15.3	32.1	15.89
1300	15.3	32.1	15.89
1400	15.3	32.1	15.89
1500	15.3	32.1	15.89
1600	15.3	32.1	15.89
1700	15.3	32.1	15.89
1800	15.3	32.1	15.89
1900	15.3	32.1	15.89
2000	15.3	32.1	15.89
2100	15.3	32.1	15.89
2200	15.3	32.1	15.89
2300	15.3	32.1	15.89
2400	15.3	32.1	15.89
2500	15.3	32.1	15.89
2600	15.3	32.1	15.89
2700	15.3	32.1	15.89
2800	15.3	32.1	15.89
2900	15.3	32.1	15.89
3000	15.3	32.1	15.89
3100	15.3	32.1	15.89
3200	15.3	32.1	15.89
3300	15.3	32.1	15.89
3400	15.3	32.1	15.89
3500	15.3	32.1	15.89
3600	15.3	32.1	15.89

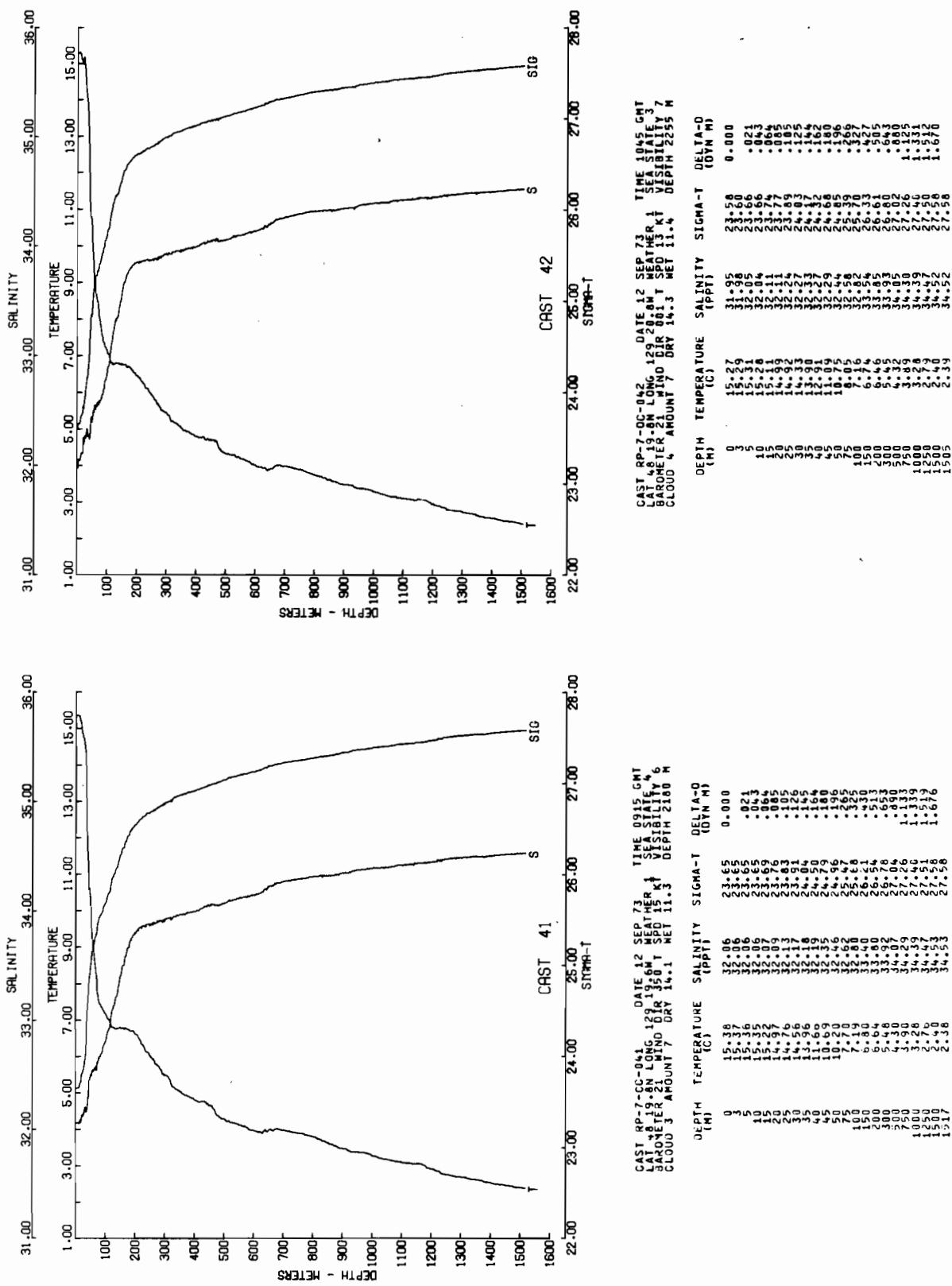


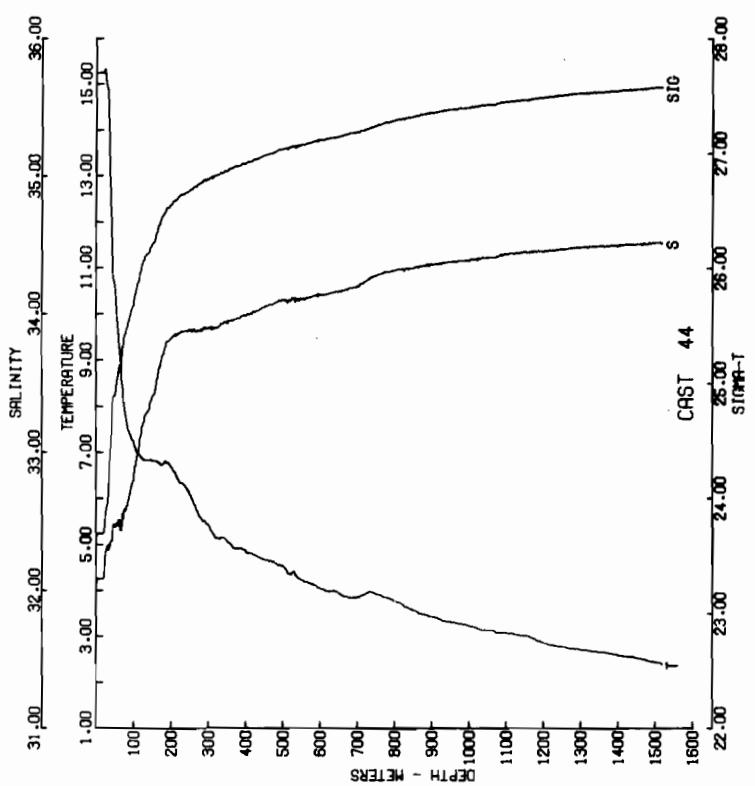
CAST 3P-7-OC-033 DATE 11 SEP 73 TIME 1600 GMT		CAST 3P-7-OC-034 DATE 11 SEP 73 TIME 1912 GMT	
LAT 43°53'N LONG 129°20'W	WEATHER 2 SEA STATE 3	LAT 43°53'N LONG 130°00'W	WEATHER 1 SEA STATE 4
BATHOMETER 18	WIND DIR 260° T SPD 10 KF	BATHOMETER 21	WIND DIR 310° T SPD 16 KF
CLOUD 6 AMOUNT 8	WEATHER 3	DEPTH 2694 M	DEPTH 2694 M
DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T (DYN CM⁻³)
0	15.44	32.42	23.91
3	15.44	32.42	23.89
5	15.44	32.42	23.88
10	15.44	32.42	23.87
15	15.44	32.42	23.86
20	15.44	32.42	23.85
25	15.44	32.42	23.84
30	15.44	32.42	23.83
35	15.44	32.42	23.82
40	15.44	32.42	23.81
45	15.44	32.42	23.80
50	15.44	32.42	23.79
75	15.44	32.42	23.77
100	15.44	32.42	23.76
150	15.44	32.42	23.75
200	15.44	32.42	23.74
250	15.44	32.42	23.73
300	15.44	32.42	23.72
400	15.44	32.42	23.71
500	15.44	32.42	23.70
750	15.44	32.42	23.69
1000	15.44	32.42	23.68
1250	15.44	32.42	23.67
1500	15.44	32.42	23.66
1518	15.44	32.42	23.65





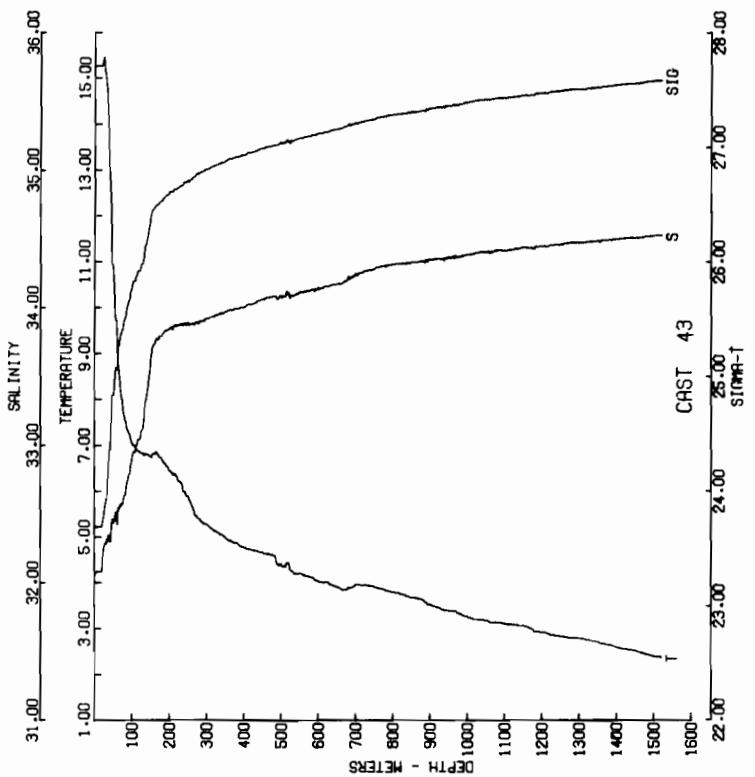






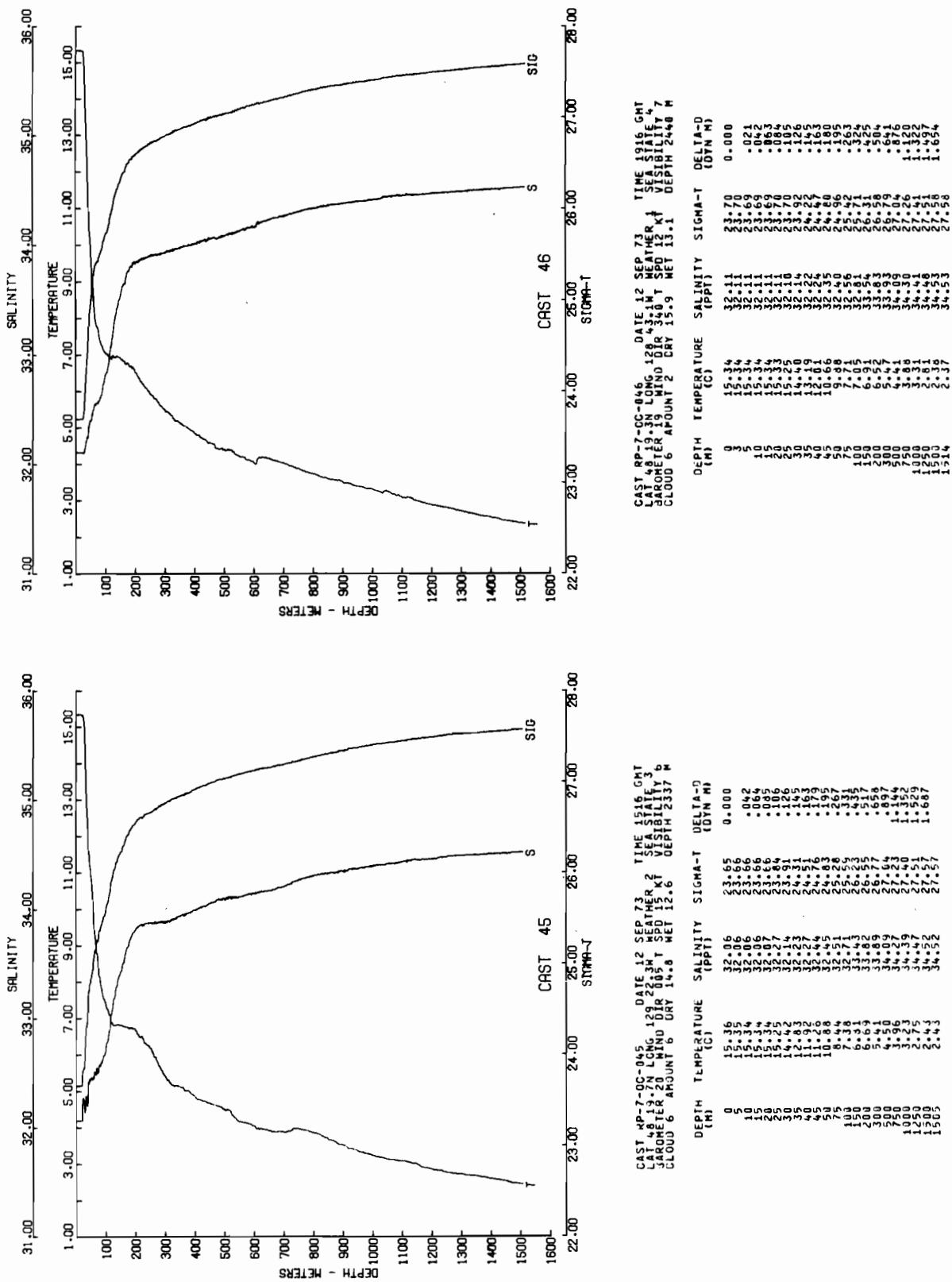
CAST RP-7-OC-043 DATE 12 SEP 73 TIME 1345 GMT
LAT 48°13'N LONG 129°45'W SEA STATE 1
BAROMETER 29.98 IN Hg WIND 14.0 KTS VISIBILITY 6
CLOUD 6 AMOUNT 6 DRY 11.4 DEPTH 2467 M
DEPTH TEMPERATURE SALINITY SIGMA-T
(M) (C) (PPM) (DYN CM)

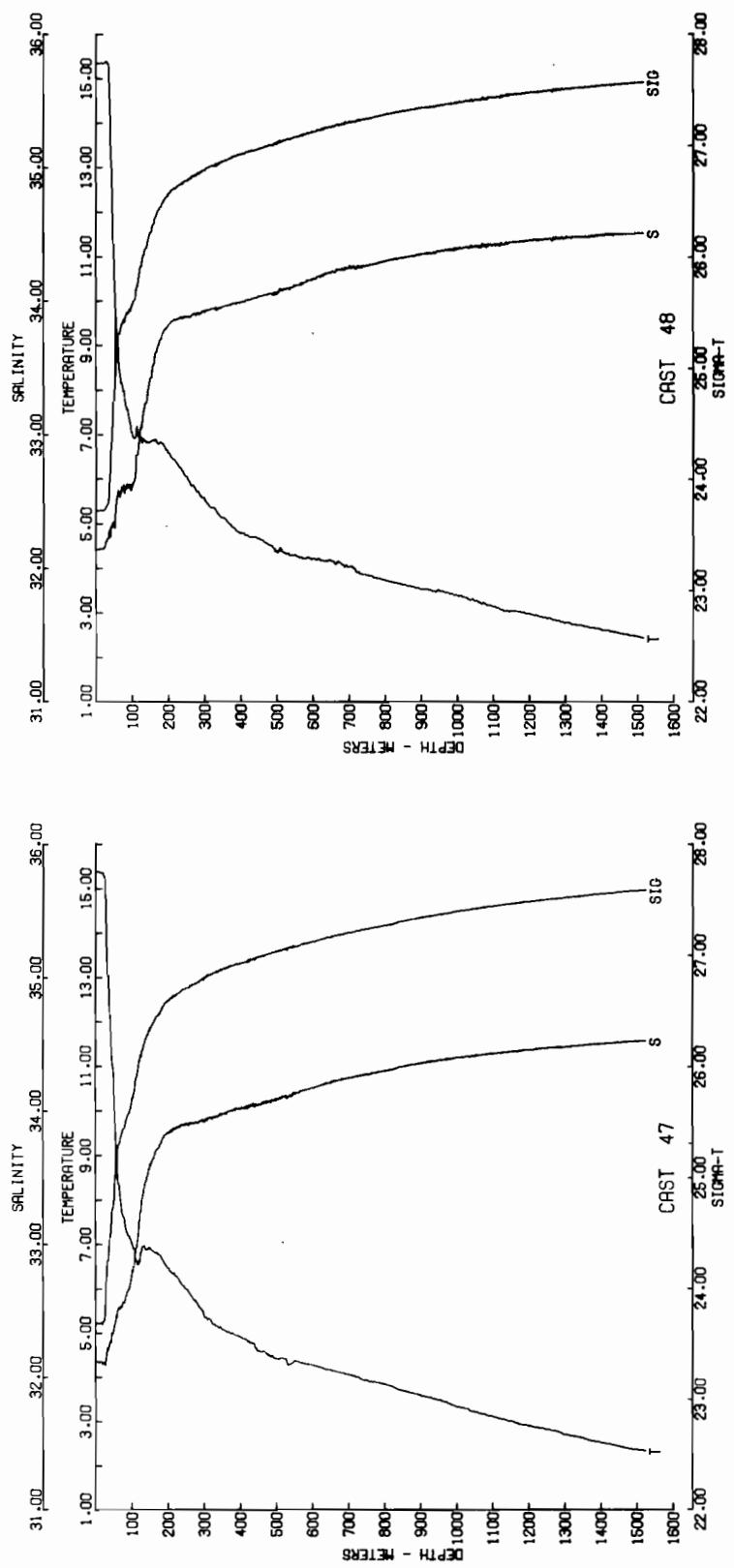
0	15.25	32.06	31.67
1	15.25	32.05	31.69
5	15.25	32.05	31.69
10	15.25	32.05	31.69
15	15.25	32.05	31.69
20	15.25	32.05	31.69
25	15.25	32.05	31.69
30	15.25	32.05	31.69
35	15.25	32.05	31.69
40	15.25	32.05	31.69
45	15.25	32.05	31.69
50	15.25	32.05	31.69
55	15.25	32.05	31.69
60	15.25	32.05	31.69
65	15.25	32.05	31.69
70	15.25	32.05	31.69
75	15.25	32.05	31.69
80	15.25	32.05	31.69
85	15.25	32.05	31.69
90	15.25	32.05	31.69
95	15.25	32.05	31.69
100	15.25	32.05	31.69
105	15.25	32.05	31.69
110	15.25	32.05	31.69
115	15.25	32.05	31.69
120	15.25	32.05	31.69
125	15.25	32.05	31.69
130	15.25	32.05	31.69
135	15.25	32.05	31.69
140	15.25	32.05	31.69
145	15.25	32.05	31.69
150	15.25	32.05	31.69
155	15.25	32.05	31.69
160	15.25	32.05	31.69



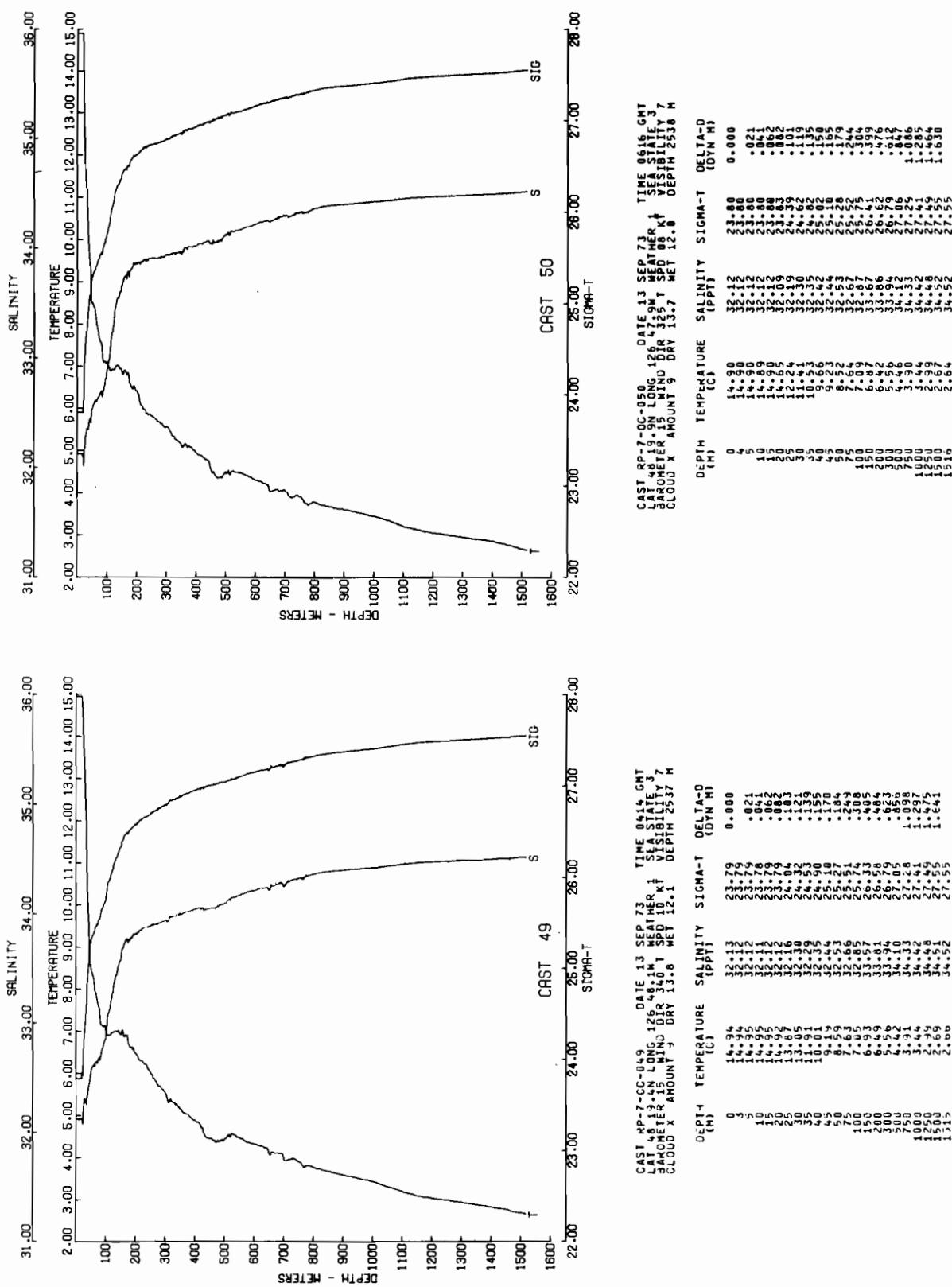
CAST RP-7-OC-043 DATE 12 SEP 73 TIME 1215 GMT
LAT 48°13'N LONG 129°45'W SEA STATE 1
BAROMETER 29.98 IN Hg WIND 14.0 KTS VISIBILITY 6
CLOUD 6 AMOUNT 6 DRY 11.2 DEPTH 2467 M
DEPTH TEMPERATURE SALINITY SIGMA-T
(M) (C) (PPM) (DYN CM)

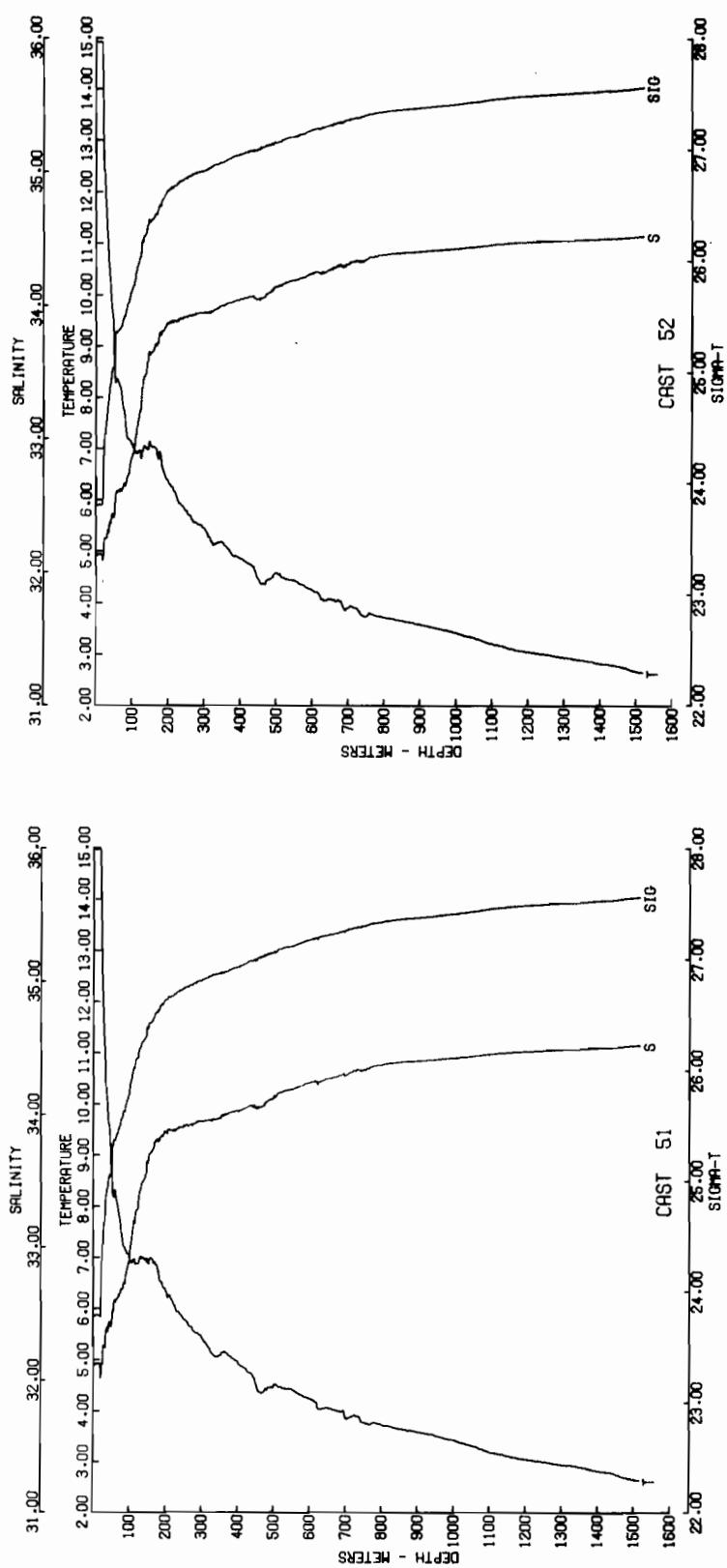
0	15.27	32.07	31.68
1	15.27	32.07	31.68
5	15.27	32.07	31.68
10	15.27	32.07	31.68
15	15.27	32.07	31.68
20	15.27	32.07	31.68
25	15.27	32.07	31.68
30	15.27	32.07	31.68
35	15.27	32.07	31.68
40	15.27	32.07	31.68
45	15.27	32.07	31.68
50	15.27	32.07	31.68
55	15.27	32.07	31.68
60	15.27	32.07	31.68
65	15.27	32.07	31.68
70	15.27	32.07	31.68
75	15.27	32.07	31.68
80	15.27	32.07	31.68
85	15.27	32.07	31.68
90	15.27	32.07	31.68
95	15.27	32.07	31.68
100	15.27	32.07	31.68
105	15.27	32.07	31.68
110	15.27	32.07	31.68
115	15.27	32.07	31.68
120	15.27	32.07	31.68
125	15.27	32.07	31.68
130	15.27	32.07	31.68
135	15.27	32.07	31.68
140	15.27	32.07	31.68
145	15.27	32.07	31.68
150	15.27	32.07	31.68
155	15.27	32.07	31.68
160	15.27	32.07	31.68





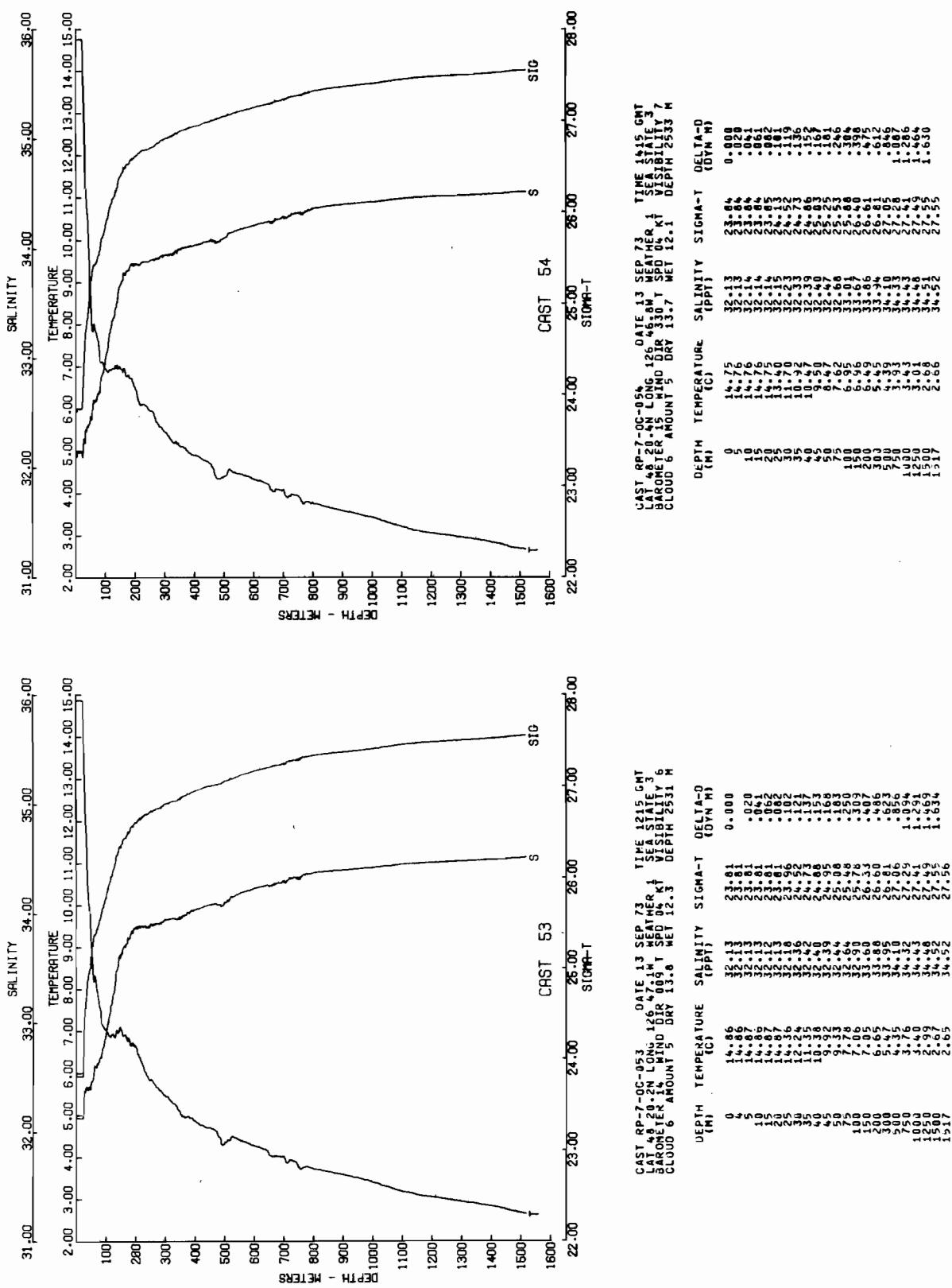
CAST RP-7-OC-047 DATE 12 SEP 73 TIME 2229 GMT		CAST RP-7-OC-046 DATE 13 SEP 73 TIME 0136 GMT	
LAT 48 21.4 N	LNG 127 10.4 E	LAT 48 17.9 N	LNG 127 21.5 E
WIND 10 KTS	WIND 10 KTS	WIND 10 KTS	WIND 10 KTS
CLOUD 6	AMOUNT 2	CLOUD 2	AMOUNT 3
DEPTH 2570 M	WEIGHT 13.1	DEPTH 2570 M	WEIGHT 14.1
	WEIGHT 16.2		WEIGHT 12.2
	DEPTH 2570 M		DEPTH 2614 M
DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T (DYN CM⁻²)
0	15.3	35.5	24.0
100	12.9	34.5	25.0
200	11.5	34.0	25.5
300	10.5	34.0	26.0
400	10.0	34.0	26.5
500	9.5	34.0	27.0
600	9.0	34.0	27.5
700	8.5	34.0	28.0
800	8.0	34.0	28.5
900	7.5	34.0	29.0
1000	7.0	34.0	29.5
1100	6.5	34.0	30.0
1200	6.0	34.0	30.5
1300	5.8	34.0	31.0
1400	5.5	34.0	31.5
1500	5.2	34.0	32.0
1600	5.0	34.0	32.5

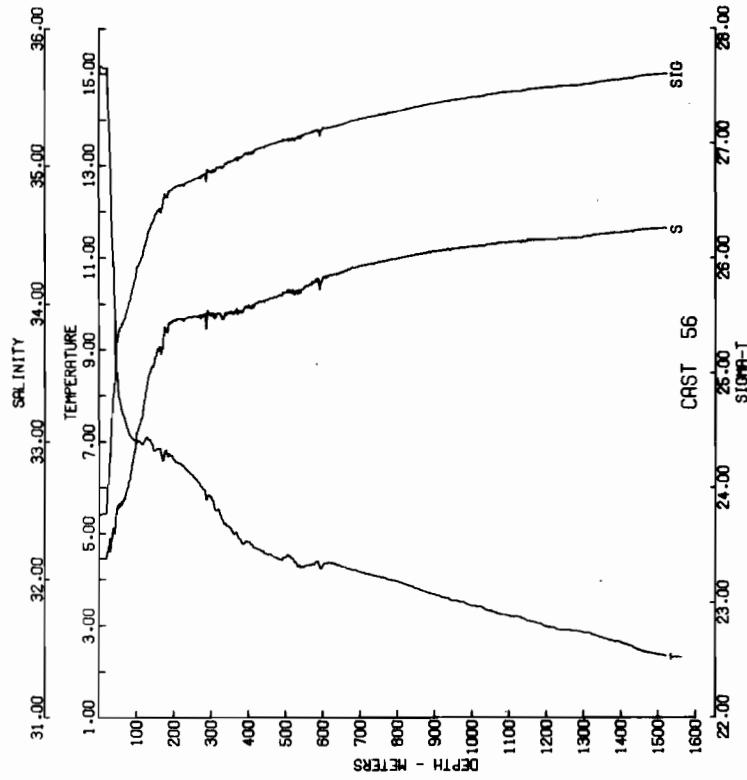
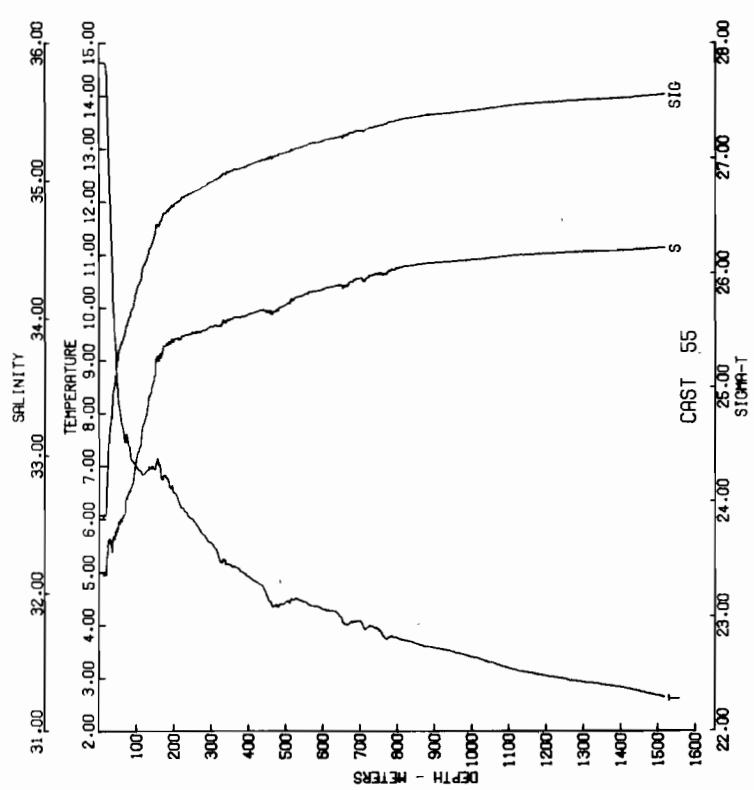




CAST RP-7-OC-052 DATE 13 SEP 73 TIME 1016 GMT
LAT 48°19'.9N LONG 126°45'.6W HEIHT 3
BARO METER 1015.6 IN. DR 13.6 K
CLOUDS 8 AMOUNT 2 DAY 13.6 DEPTH 22.2 K

DEPTH (M)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T	DELTA-D (dyn m)
0	14.97	32.10	26.00	0.000
1	14.97	32.11	26.00	0.1
5	14.97	32.12	26.00	0.5
10	14.97	32.13	26.00	1.5
15	14.98	32.13	26.00	1.5
20	14.98	32.13	26.00	1.5
25	14.98	32.13	26.00	1.5
30	14.98	32.13	26.00	1.5
35	14.98	32.13	26.00	1.5
40	14.98	32.13	26.00	1.5
45	14.98	32.13	26.00	1.5
50	14.98	32.13	26.00	1.5
75	14.97	32.13	26.00	1.5
100	14.96	32.13	26.00	1.5
150	14.96	32.13	26.00	1.5
200	14.96	32.13	26.00	1.5
250	14.96	32.13	26.00	1.5
300	14.96	32.13	26.00	1.5
350	14.96	32.13	26.00	1.5
400	14.96	32.13	26.00	1.5
450	14.96	32.13	26.00	1.5
500	14.96	32.13	26.00	1.5
600	14.96	32.13	26.00	1.5
700	14.96	32.13	26.00	1.5
800	14.96	32.13	26.00	1.5
900	14.96	32.13	26.00	1.5
1000	14.96	32.13	26.00	1.5
1100	14.96	32.13	26.00	1.5
1200	14.96	32.13	26.00	1.5
1300	14.96	32.13	26.00	1.5
1400	14.96	32.13	26.00	1.5
1500	14.96	32.13	26.00	1.5
1600	14.96	32.13	26.00	1.5



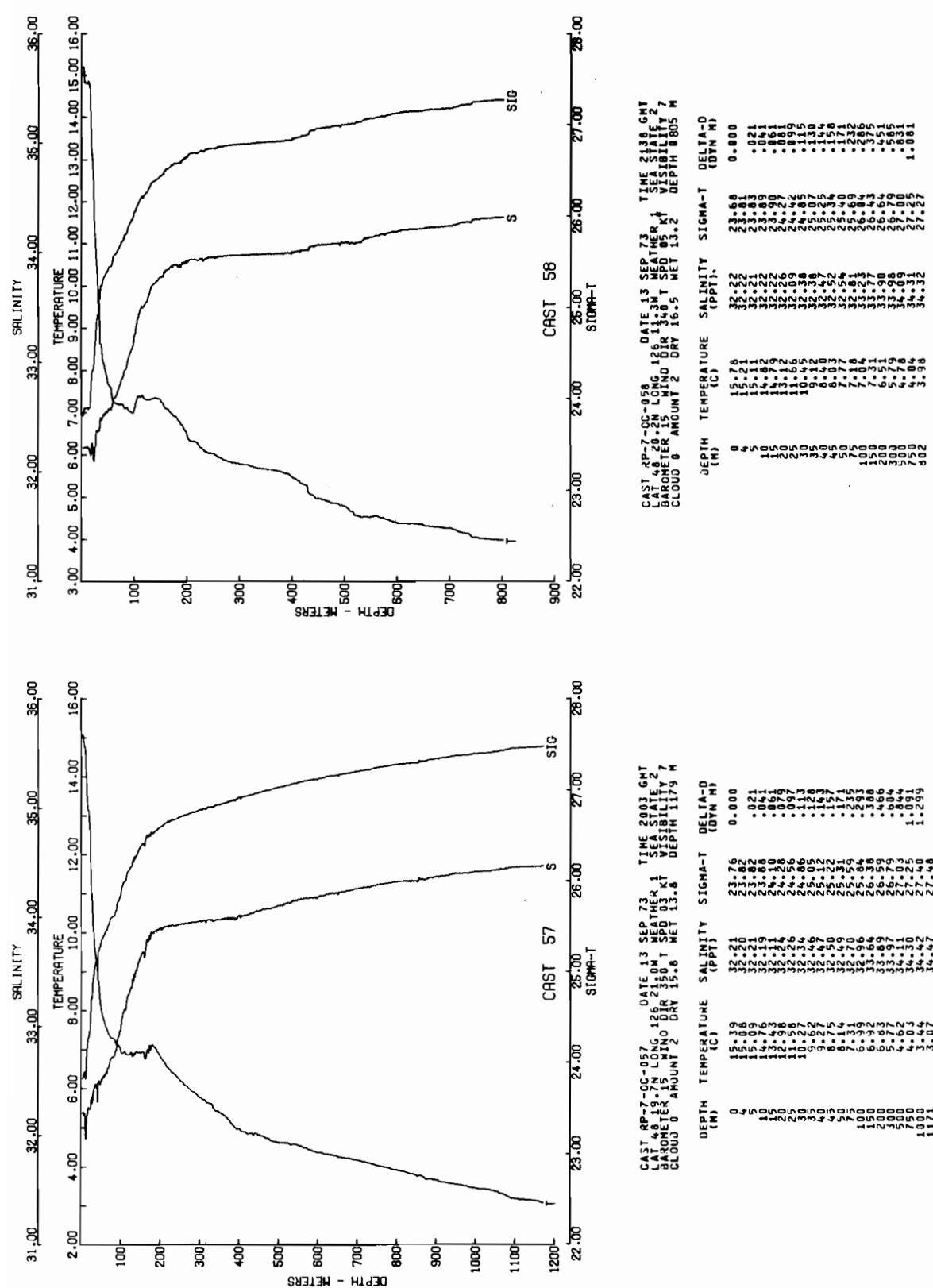


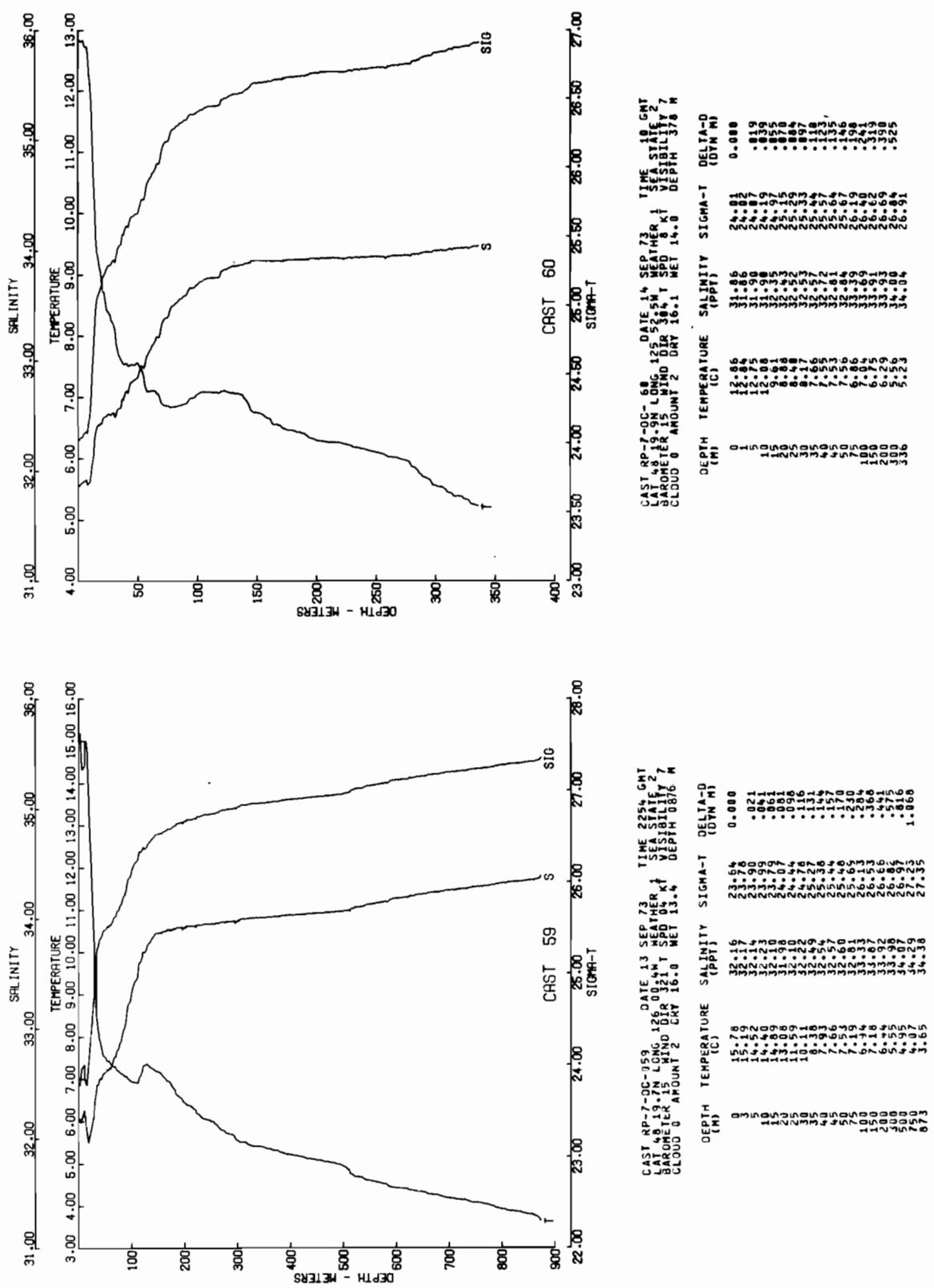
CAST RP-7-OC-056 DATE 13 SEP 73 TIME 1252 GMT
LAT 48°19.4'N LONG 126°25.2'W SEA STATE 1
WIND 15 KNOTS DIRECTION 320° WAVE 0.3 M VISIBILITY 7
CLOUD 6 AMOUNT 6 DRY 13.1 MET 13.1 DEPTH 1616 M

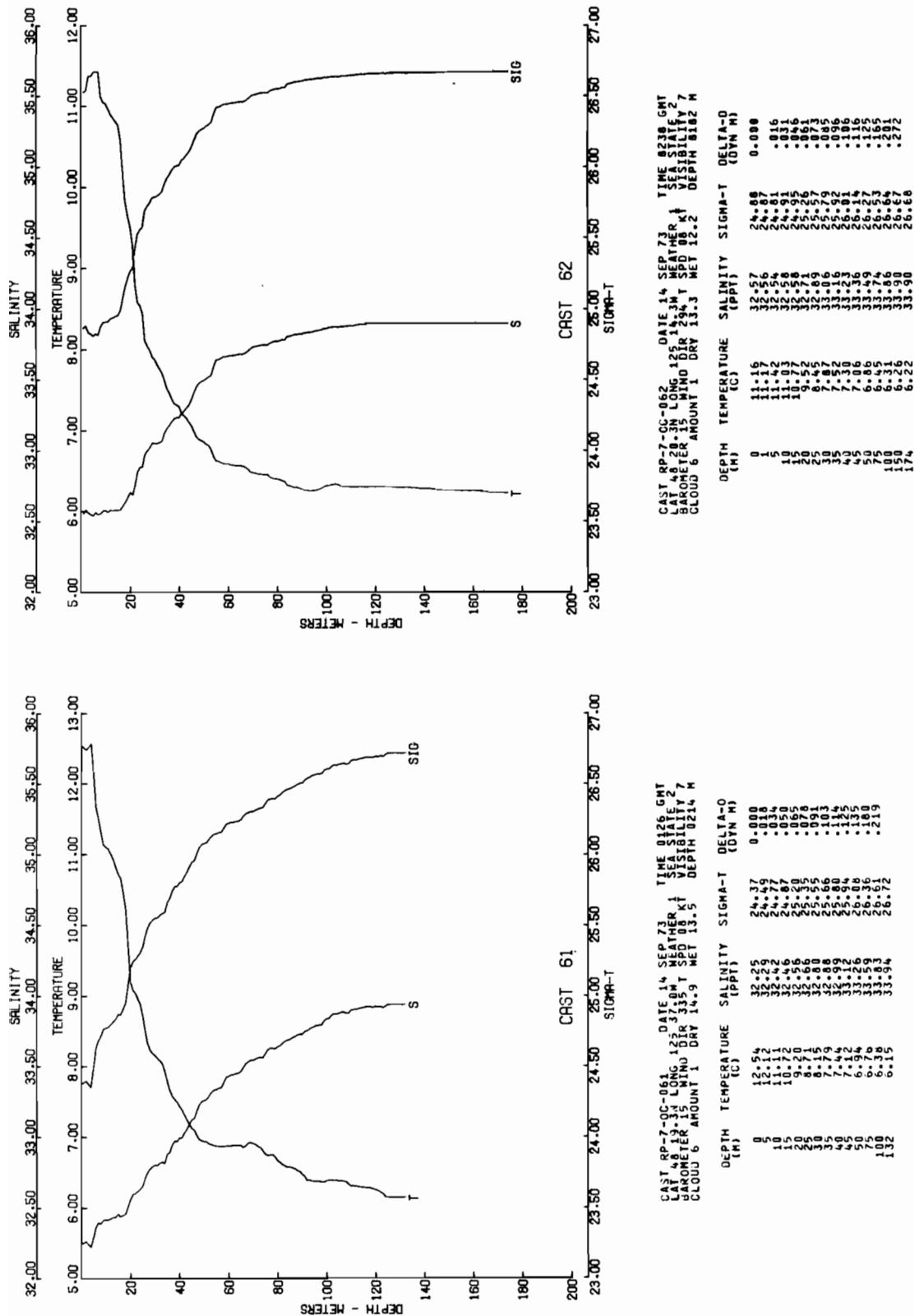
DEPTH (M)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T	DELTA-D (DYN/M)
200	15.0	34.0	35.00	0.000
300	14.8	34.2	35.00	-0.200
400	14.5	34.4	35.00	-0.400
500	14.2	34.6	35.00	-0.600
600	13.9	34.8	35.00	-0.800
700	13.6	35.0	35.00	-1.000
800	13.3	35.2	35.00	-1.200
900	13.0	35.4	35.00	-1.400
1000	12.7	35.6	35.00	-1.600
1100	12.4	35.8	35.00	-1.800
1200	12.1	36.0	35.00	-2.000
1300	11.8	36.2	35.00	-2.200
1400	11.5	36.4	35.00	-2.400
1500	11.2	36.6	35.00	-2.600
1600	11.0	36.8	35.00	-2.800

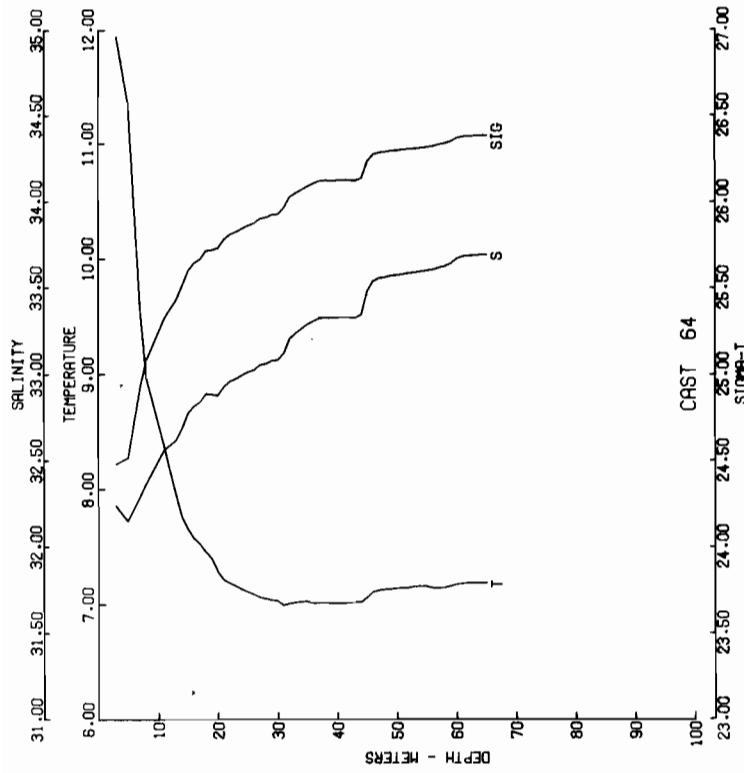
CAST RP-7-OC-055 DATE 13 SEP 73 TIME 1616 GMT
LAT 48°19.6'N LONG 126°47.9'W SEA STATE 2
WIND 15 KNOTS DIRECTION 320° WAVE 0.3 M VISIBILITY 7
CLOUD 6 AMOUNT 6 DRY 13.9 MET 12.1 DEPTH 2336 M

DEPTH (M)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T	DELTA-D (DYN/M)
200	15.0	34.0	35.00	0.000
300	14.8	34.2	35.00	-0.200
400	14.5	34.4	35.00	-0.400
500	14.2	34.6	35.00	-0.600
600	13.9	34.8	35.00	-0.800
700	13.6	35.0	35.00	-1.000
800	13.3	35.2	35.00	-1.200
900	13.0	35.4	35.00	-1.400
1000	12.7	35.6	35.00	-1.600
1100	12.4	35.8	35.00	-1.800
1200	12.1	36.0	35.00	-2.000
1300	11.8	36.2	35.00	-2.200
1400	11.5	36.4	35.00	-2.400
1500	11.2	36.6	35.00	-2.600
1600	11.0	36.8	35.00	-2.800

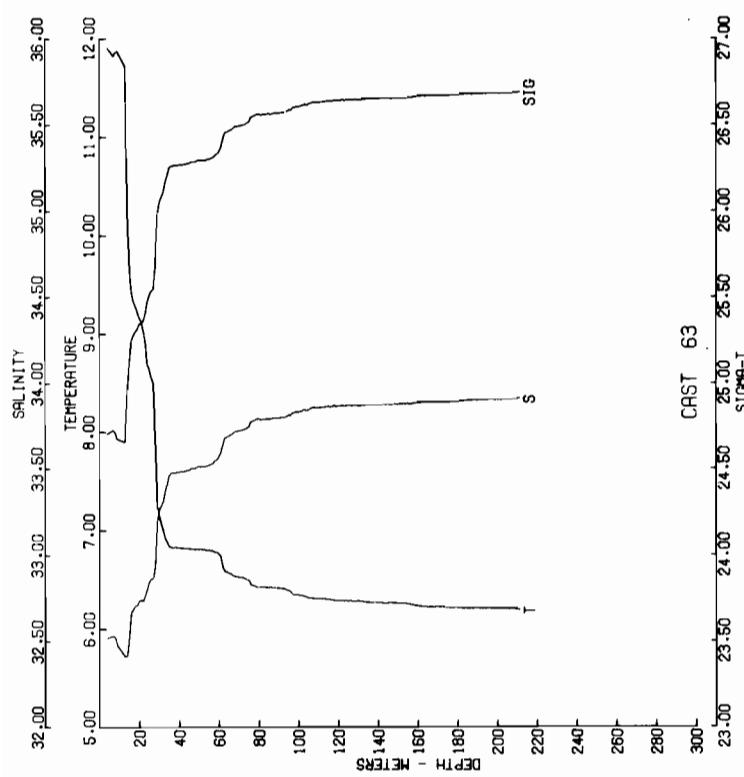




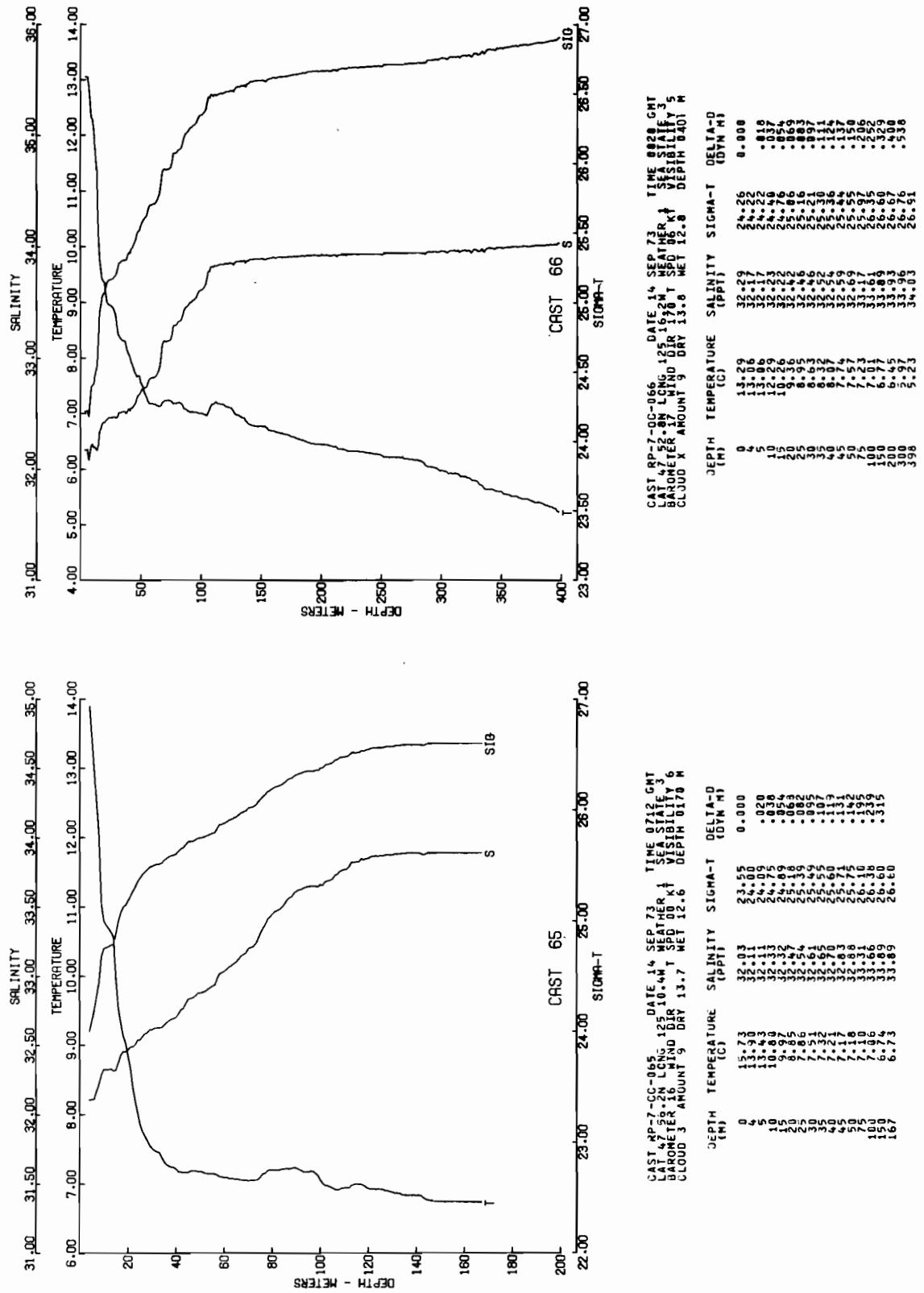


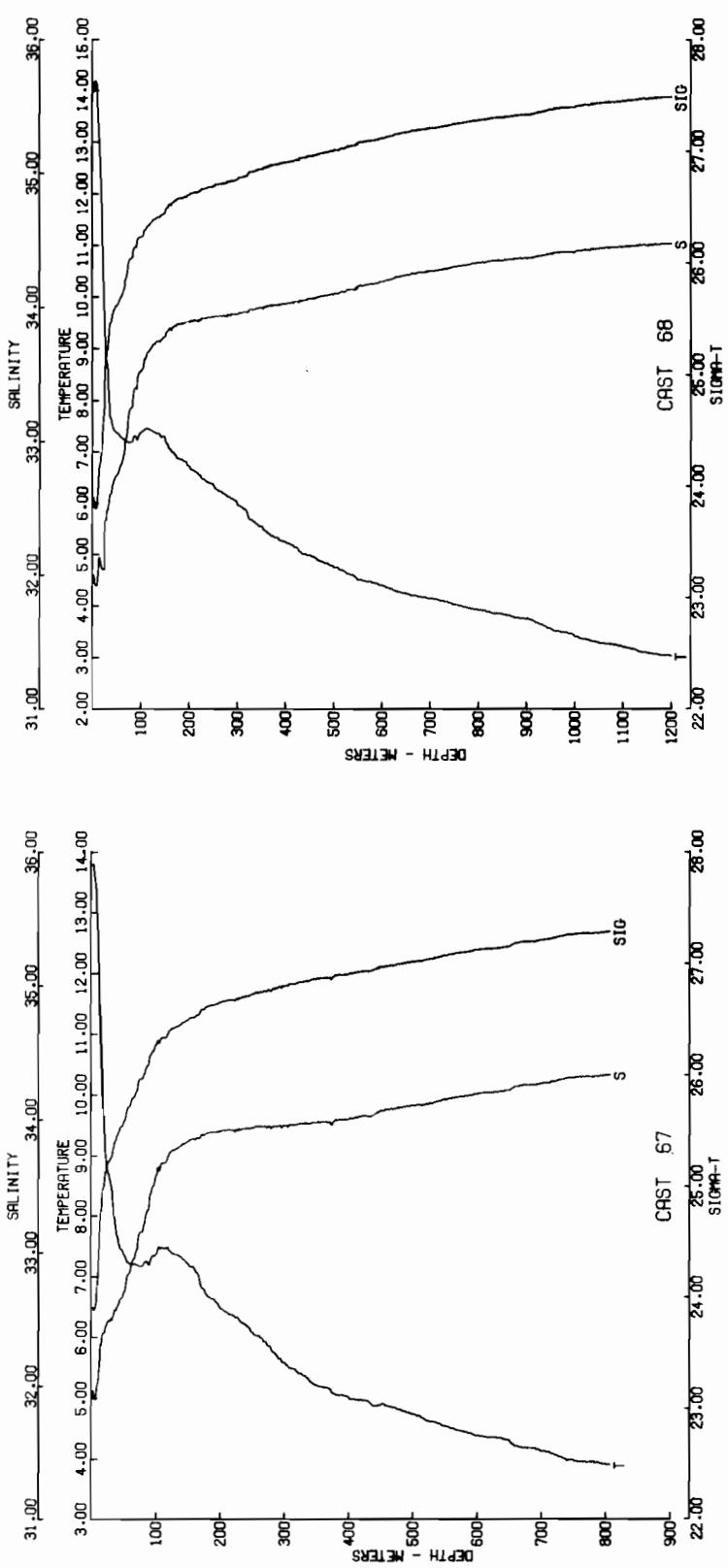


CAST RP-7-OC-064 DATE 14 SEP 73
LAT 48°3'N LONG 124°39'W
TIME 0526 GMT
BAROME 1012.5 Hg
CLOUD 0 DRY
DEPTH 0-100 M
SIGMA-T 31.5
SIGMA-T 34.5
SIGMA-T 35.0
SIGMA-T 35.5
SIGMA-T 36.0
SIGMA-T 36.5
SIGMA-T 37.0
SIGMA-T 37.5
SIGMA-T 38.0
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SIGMA-T 39.0
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SIGMA-T 43.0
SIGMA-T 43.5
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SIGMA-T 100.0

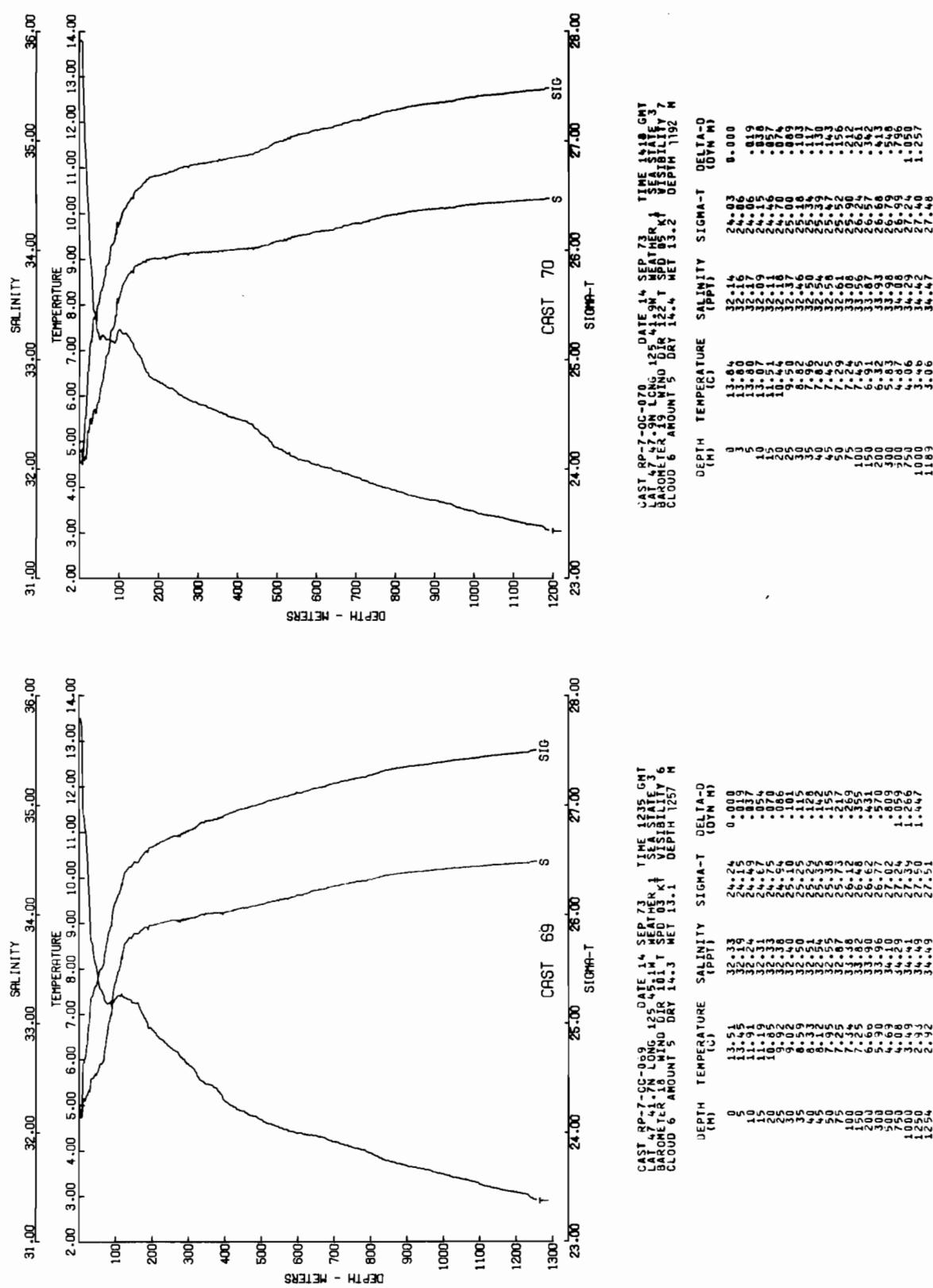


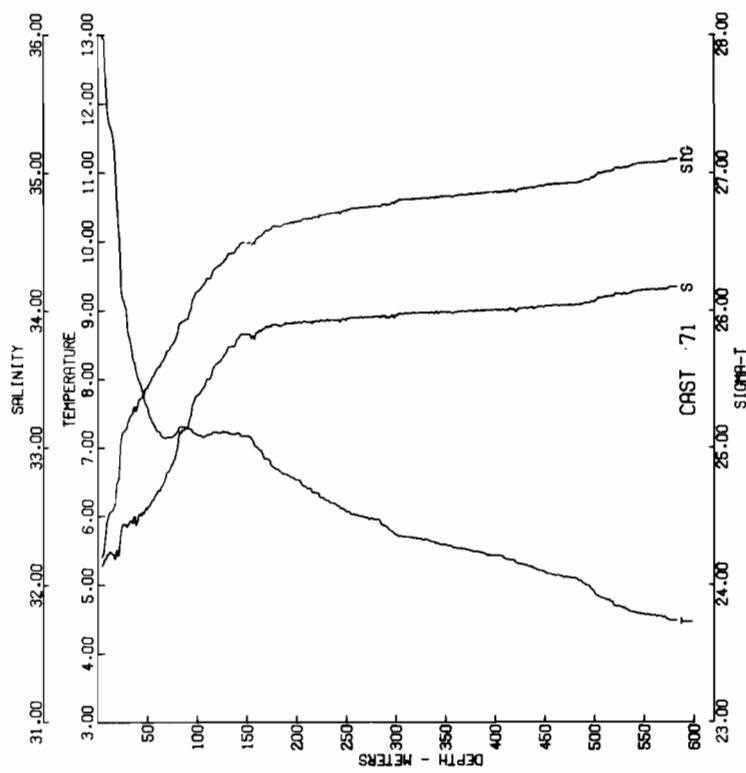
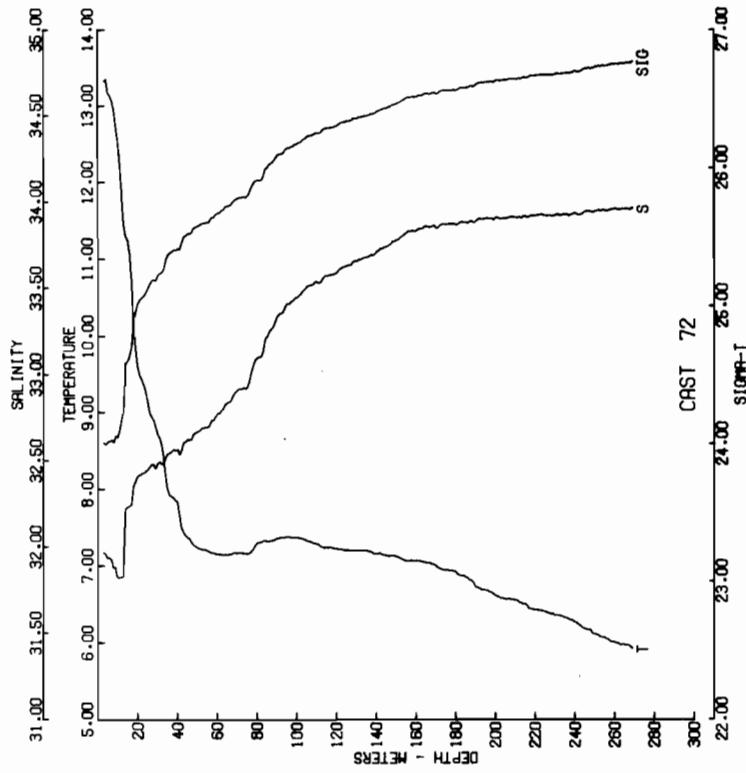
CAST RP-7-CC-063 DATE 14 SEP 73
LAT 48°20'N LONG 124°38'W
TIME 0335 GMT
BAROME 1012.5 Hg
CLOUD 0 DRY
DEPTH 0-300 M
SIGMA-T 34.5
SIGMA-T 35.0
SIGMA-T 35.5
SIGMA-T 36.0
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SIGMA-T 99.5
SIGMA-T 100.0



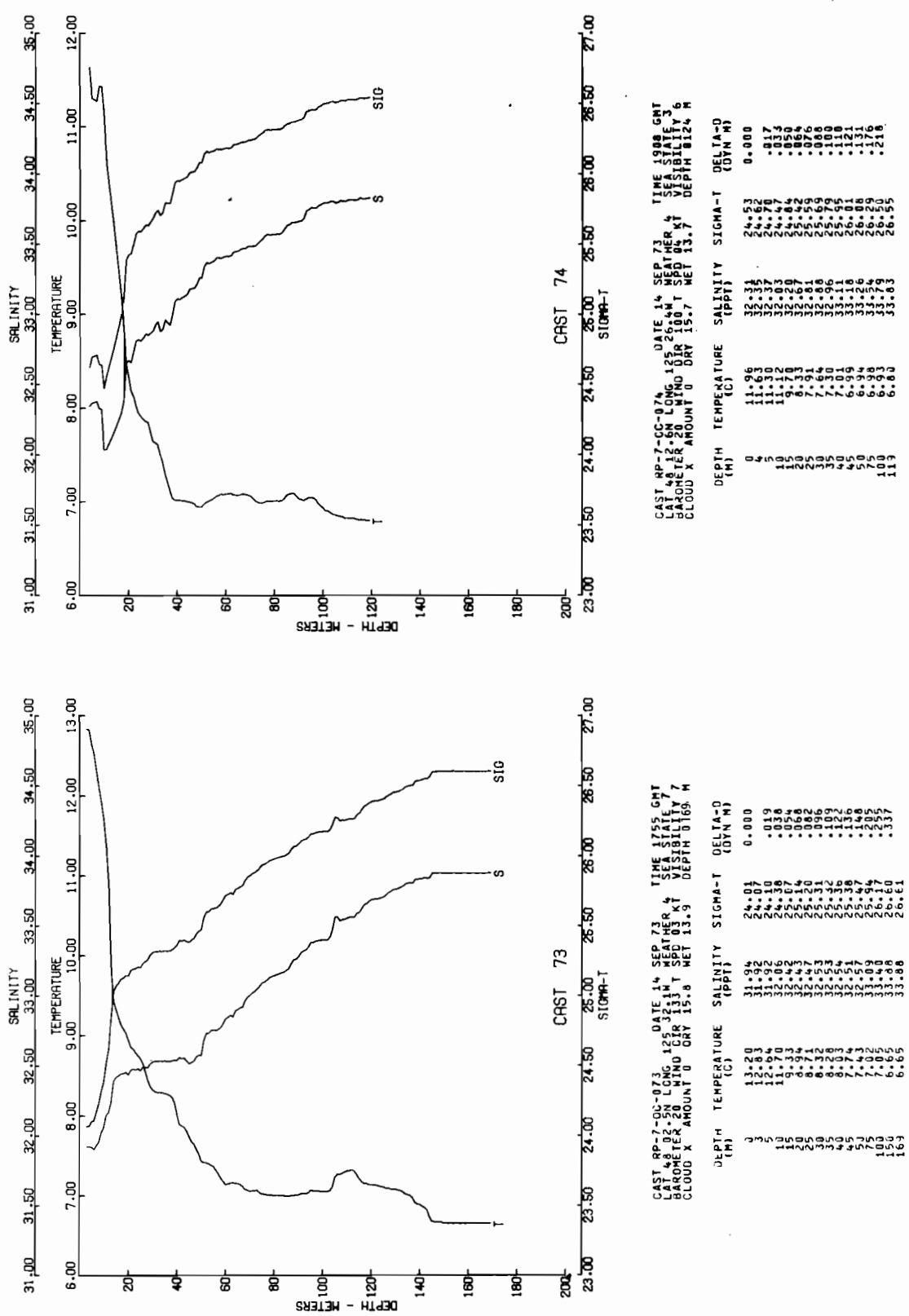


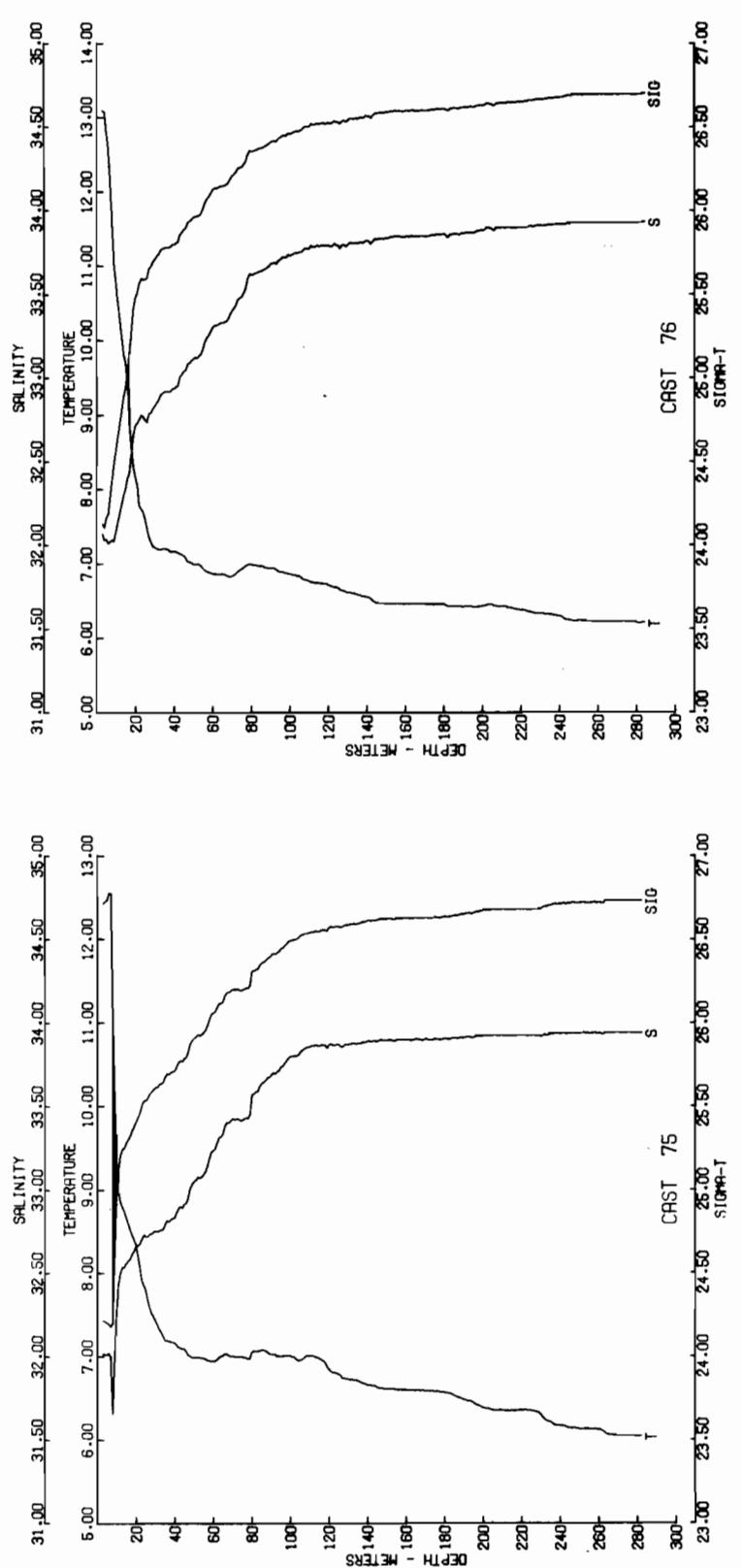
CAST RP-7-00-068 DATE 14 SEP 73 TIME 0915 GMT		CAST RP-7-00-067 DATE 14 SEP 73 TIME 0915 GMT	
LAT 43°43'N	LONG 165°22'W	WEATHER 1	WEATHER 1
BAROMETER 1017	WIND DIRECTION 163°	SEA STATE 3	SEA STATE 3
CLOUDS X AMOUNT 9	DRY 14.3	VISIBILITY 5	VISIBILITY 5
DEPTH 080 M	DEPTH 13.0 M	DEPTH 13.0 M	DEPTH 13.0 M
DEPTH (M)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T (DYN/M)
0	13.9	31.9	25.0
5	14.1	32.0	25.1
10	14.2	32.1	25.2
15	14.3	32.2	25.3
20	14.4	32.3	25.4
25	14.5	32.4	25.5
30	14.6	32.5	25.6
35	14.7	32.6	25.7
40	14.8	32.7	25.8
45	14.9	32.8	25.9
50	15.0	32.9	26.0
55	15.1	33.0	26.1
60	15.2	33.1	26.2
65	15.3	33.2	26.3
70	15.4	33.3	26.4
75	15.5	33.4	26.5
80	15.6	33.5	26.6
85	15.7	33.6	26.7
90	15.8	33.7	26.8
95	15.9	33.8	26.9
100	16.0	33.9	27.0
105	16.1	34.0	27.1
110	16.2	34.1	27.2
115	16.3	34.2	27.3
120	16.4	34.3	27.4





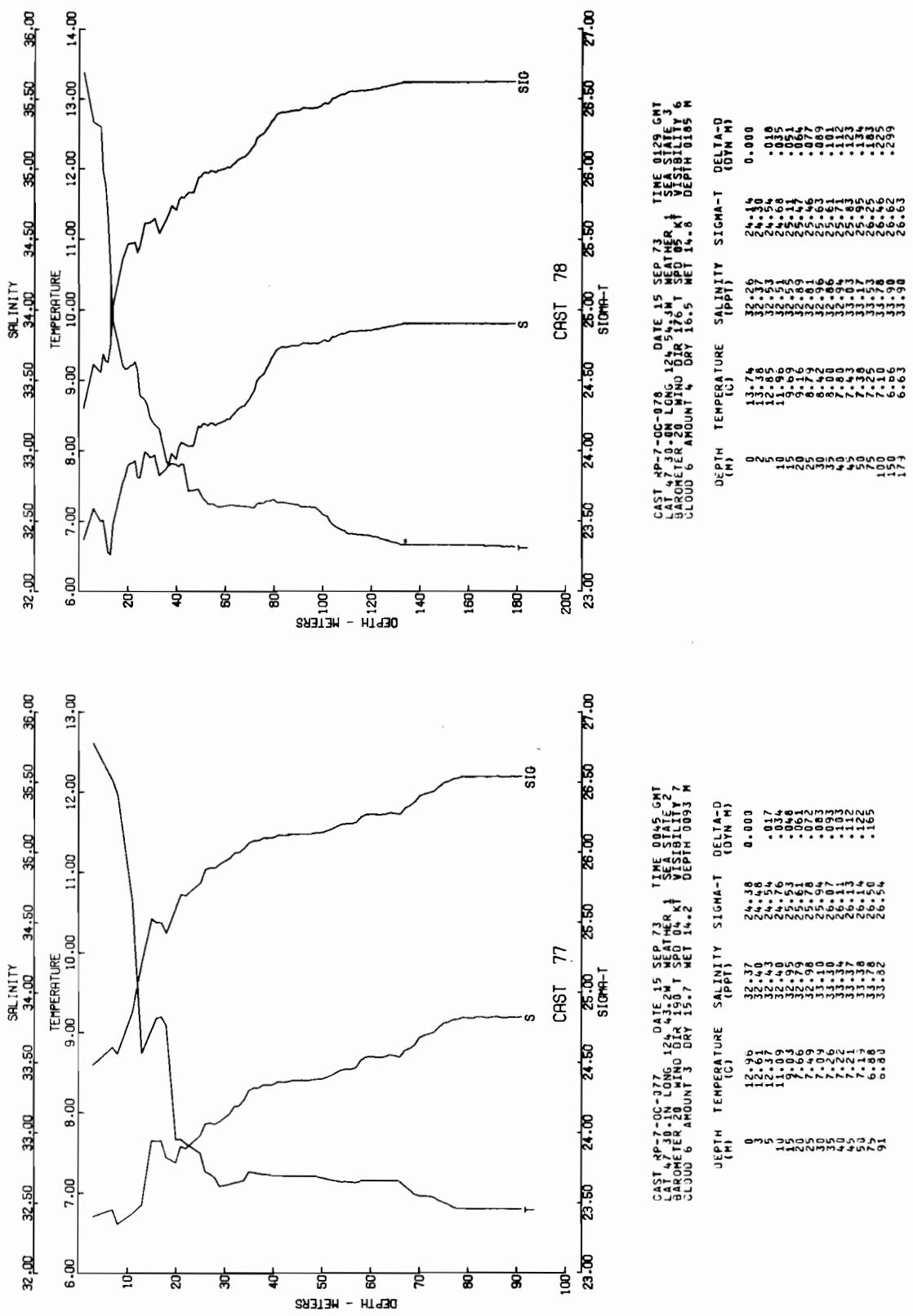
CAST RP-7-OC-071 DATE 14 SEP 73 TIME 1603 GMT		TIME 1703 GMT	
LAT 47°53'N LONG 165°08'W		DATE 14 SEP 73	TIME 1703 GMT
WIND 10 KTS		MEAN WIND 10 KTS	MEAN WIND 10 KTS
CLOUD X	AMOUNT 0	DAY 14.9	DAY 14.9
DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T (DYN CM)
0	13.4	35.5	26.5
4	12.8	35.5	26.5
5	12.6	35.5	26.5
10	11.5	35.5	26.5
20	10.5	35.5	26.5
30	10.0	35.5	26.5
40	9.5	35.5	26.5
50	9.0	35.5	26.5
60	8.5	35.5	26.5
70	8.0	35.5	26.5
80	7.5	35.5	26.5
90	7.0	35.5	26.5
100	6.5	35.5	26.5
150	5.5	35.5	26.5
200	5.0	35.5	26.5
250	4.5	35.5	26.5
300	4.0	35.5	26.5
350	3.5	35.5	26.5
400	3.0	35.5	26.5
450	2.5	35.5	26.5
500	2.0	35.5	26.5
550	1.5	35.5	26.5
600	1.0	35.5	26.5

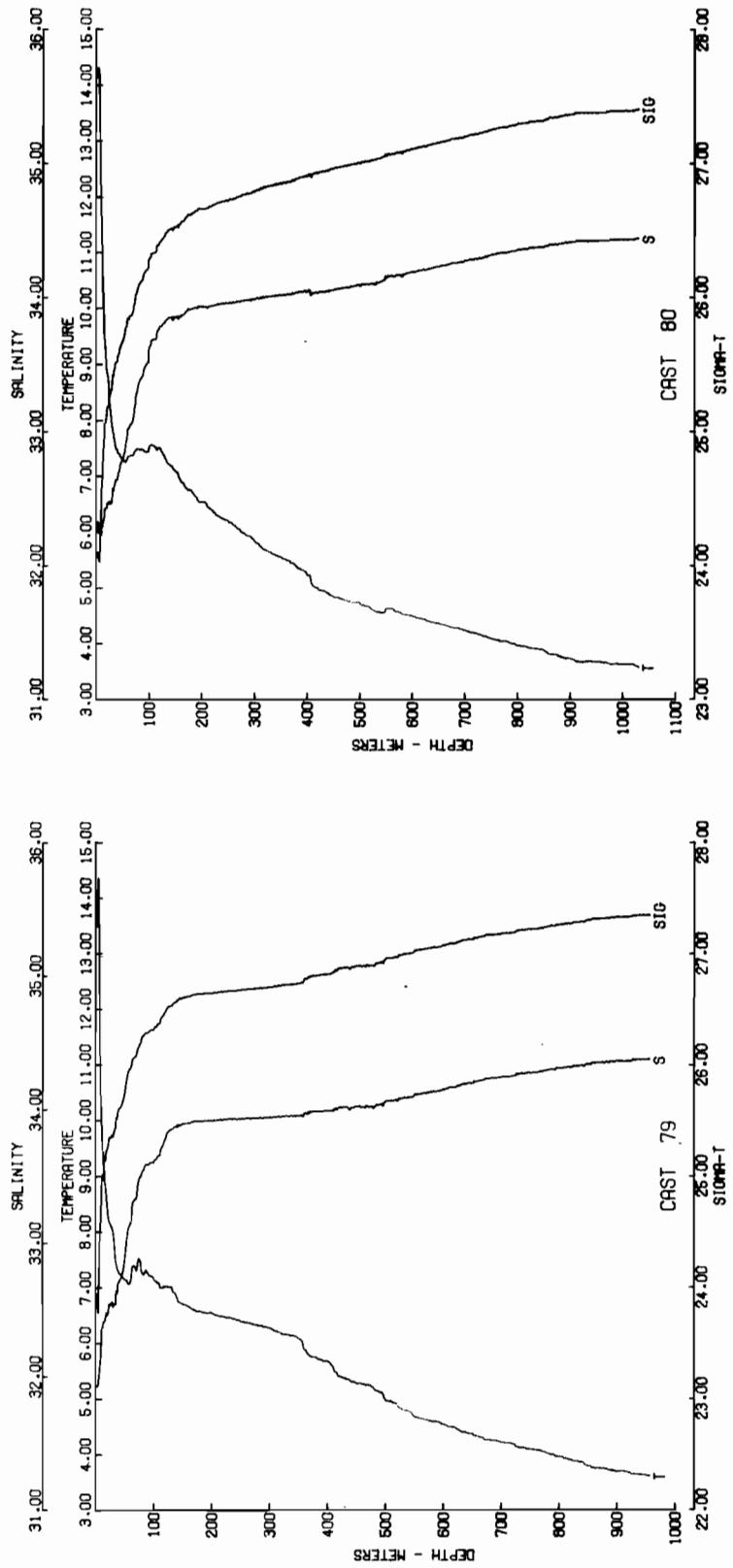




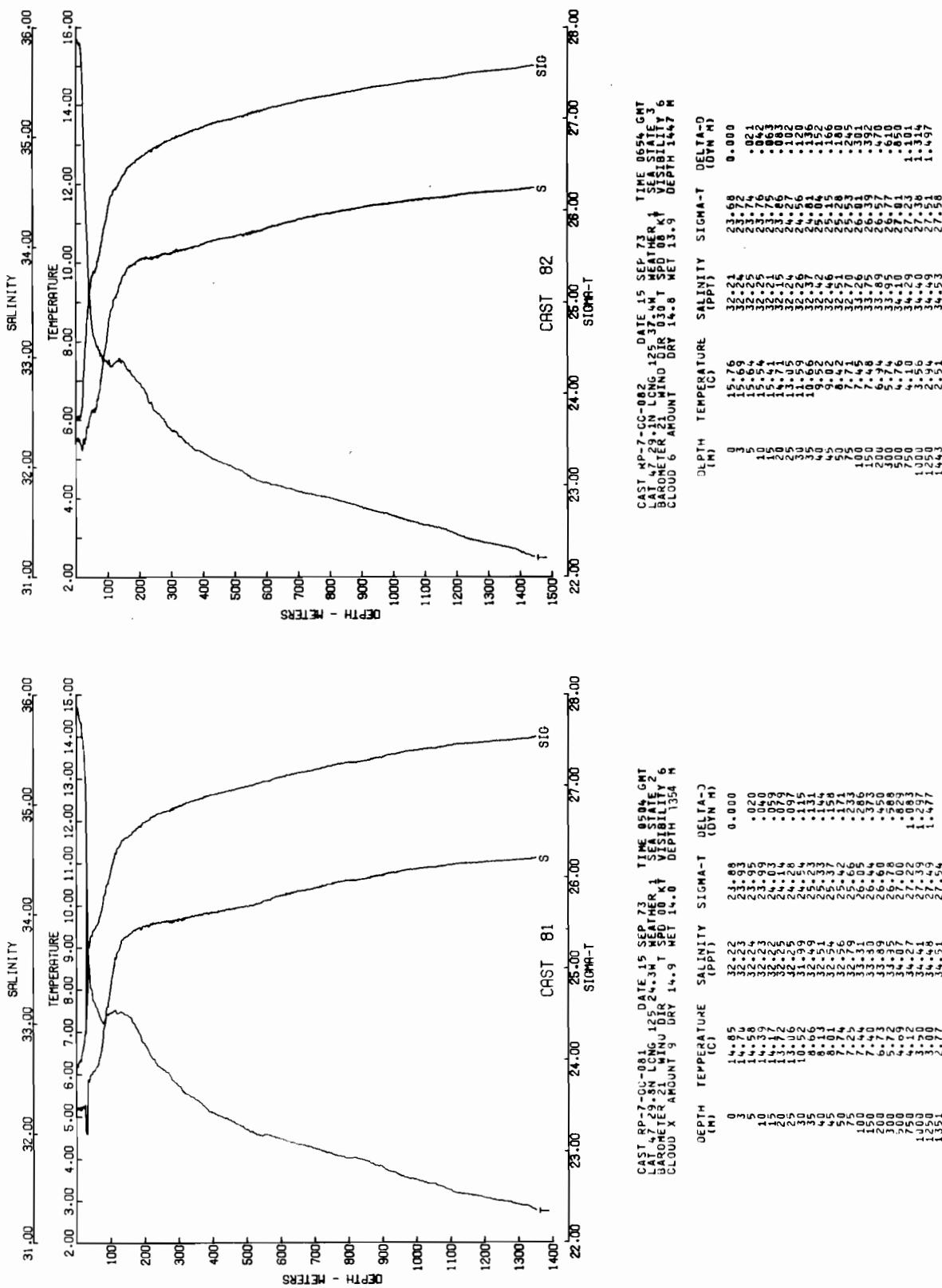
CAST RP-7 CC-075 DATE 14 SEP 73 TIME 2922 GMT
 LAT 46°08'N LONG 125°10'W TEMP 18.8°C
 WIND 0°15 KTS DEPTH 0286 M
 CLOUDS & AMOUNT 0 DRY 17.2 WET 14.3

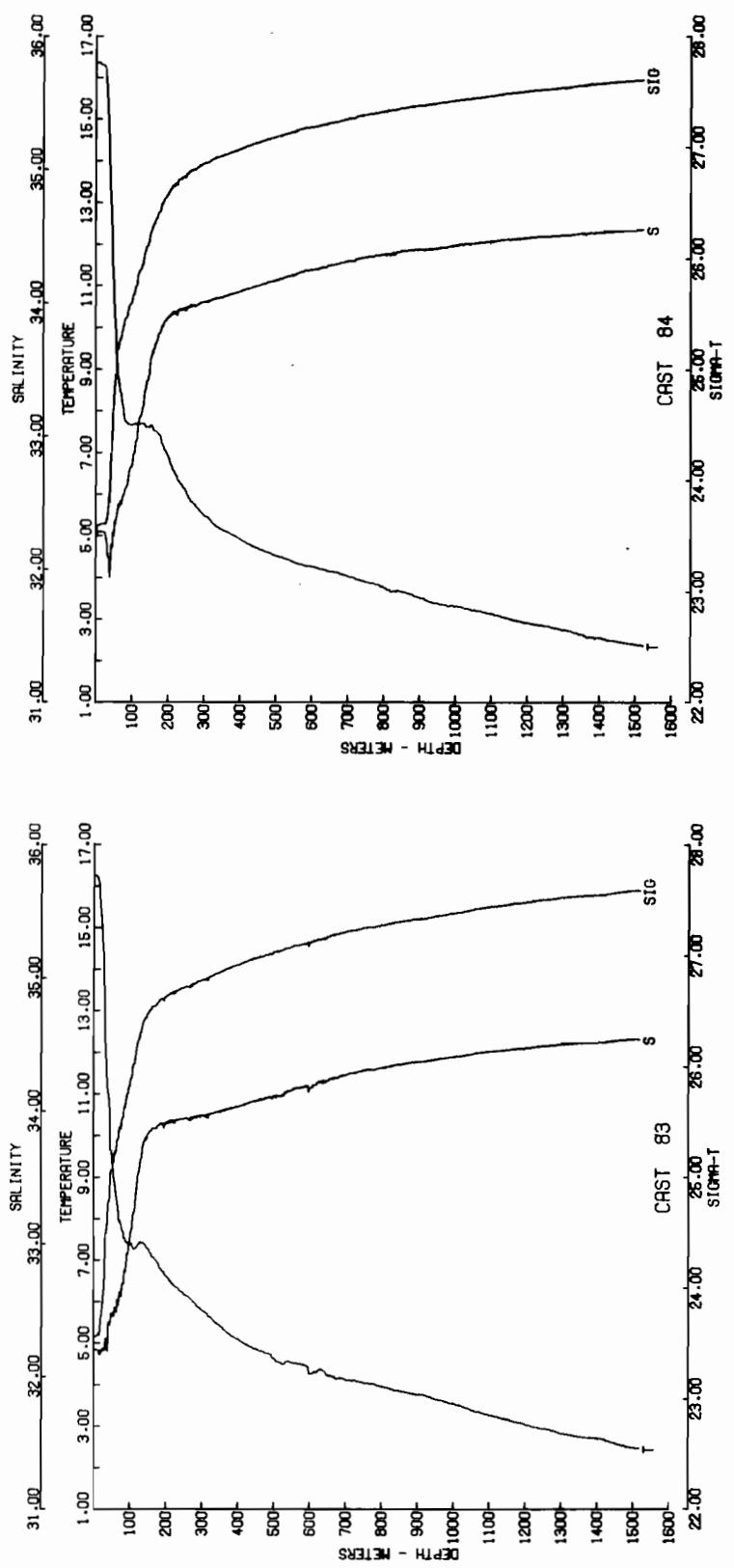
DEPTH (M)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T	DELTA-D (DYN/M)
0	12.3	32.0	24.2	0.000
3	12.4	32.0	24.2	0.000
5	12.4	32.0	24.2	0.000
10	12.5	32.0	24.2	0.000
15	12.6	32.0	24.2	0.000
20	12.7	32.0	24.2	0.000
25	12.8	32.0	24.2	0.000
30	12.9	32.0	24.2	0.000
35	12.9	32.0	24.2	0.000
40	12.9	32.0	24.2	0.000
45	12.9	32.0	24.2	0.000
50	12.9	32.0	24.2	0.000
75	12.9	32.0	24.2	0.000
100	12.9	32.0	24.2	0.000
150	12.9	32.0	24.2	0.000
200	12.9	32.0	24.2	0.000
250	12.9	32.0	24.2	0.000
280	12.9	32.0	24.2	0.000





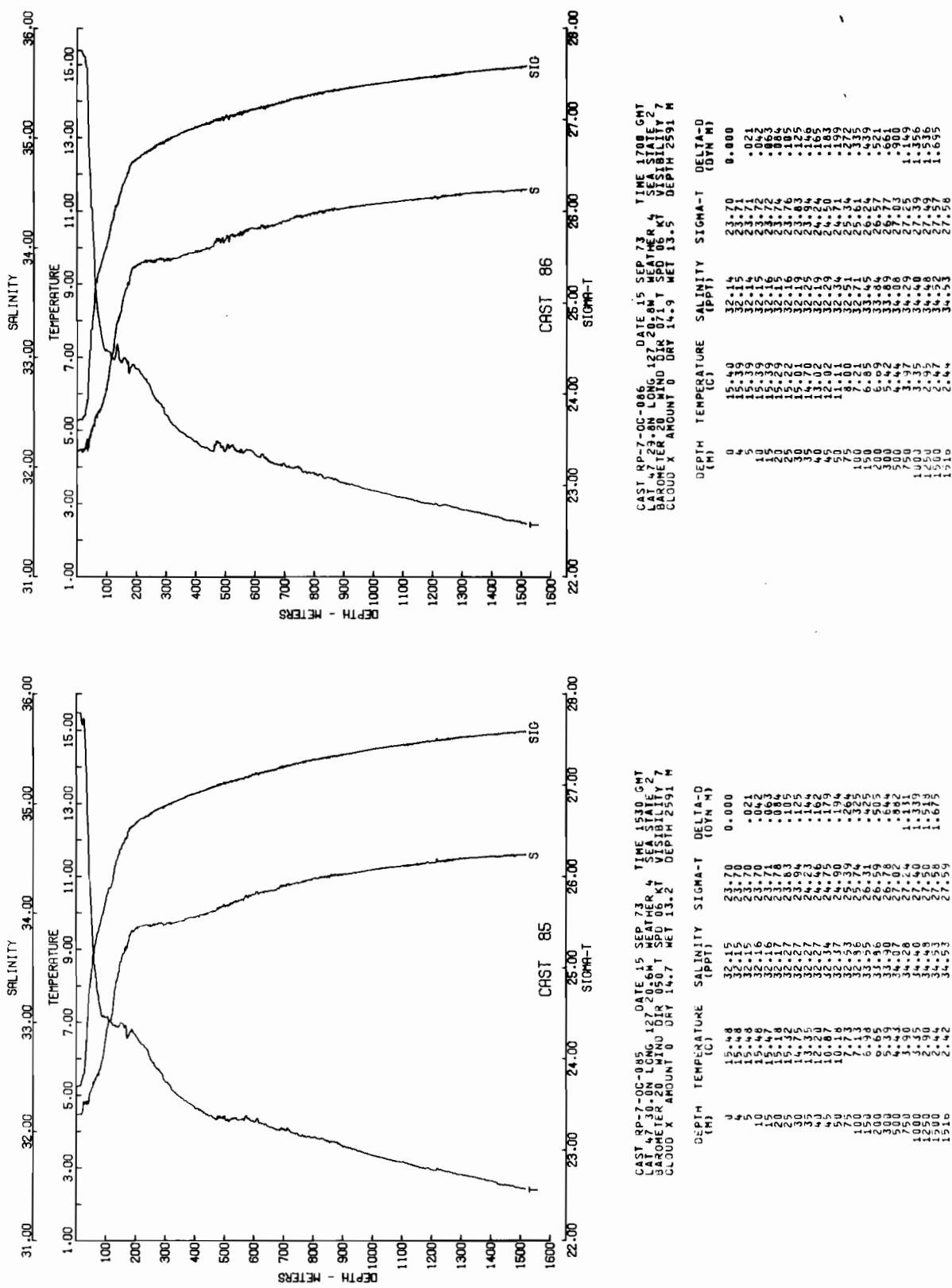
CAST RP-7-OC-079		TIME 0212 GM		TIME 0338 GM	
LAT	47°30'N	DATE	15 SEP 73	LOC	125°16'.W
LONG	125°0'W	TIME	0212 GM	SEA STATE	1
WIND	16.0	WATER TEMP	14.2	WIND DIR	15.1
CLOUD	6	WATER DEPTH	966.0	WATER TEMP	14.3
AMOUNT	3			DEPTH	1000
DEPTH (m)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DETA-0 (DYN/M)	SIGMA-T (PPM)
0	14.9	31.91	26.00	0.000	0
100	13.5	31.93	26.00	0.020	2.0
200	14.2	31.92	26.00	0.036	4.0
300	14.9	31.92	26.00	0.053	6.0
400	15.6	31.92	26.00	0.067	8.0
500	16.3	31.92	26.00	0.080	10.0
600	17.0	31.92	26.00	0.093	12.0
700	17.7	31.92	26.00	0.106	14.0
800	18.4	31.92	26.00	0.119	16.0
900	19.1	31.92	26.00	0.132	18.0
1000	19.8	31.92	26.00	0.145	20.0
DEPTH (m)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DETA-0 (DYN/M)	SIGMA-T (PPM)
0	14.9	31.91	26.00	0.000	0
100	13.5	31.93	26.00	0.020	2.0
200	14.2	31.92	26.00	0.036	4.0
300	14.9	31.92	26.00	0.053	6.0
400	15.6	31.92	26.00	0.067	8.0
500	16.3	31.92	26.00	0.080	10.0
600	17.0	31.92	26.00	0.093	12.0
700	17.7	31.92	26.00	0.106	14.0
800	18.4	31.92	26.00	0.119	16.0
900	19.1	31.92	26.00	0.132	18.0
1000	19.8	31.92	26.00	0.145	20.0

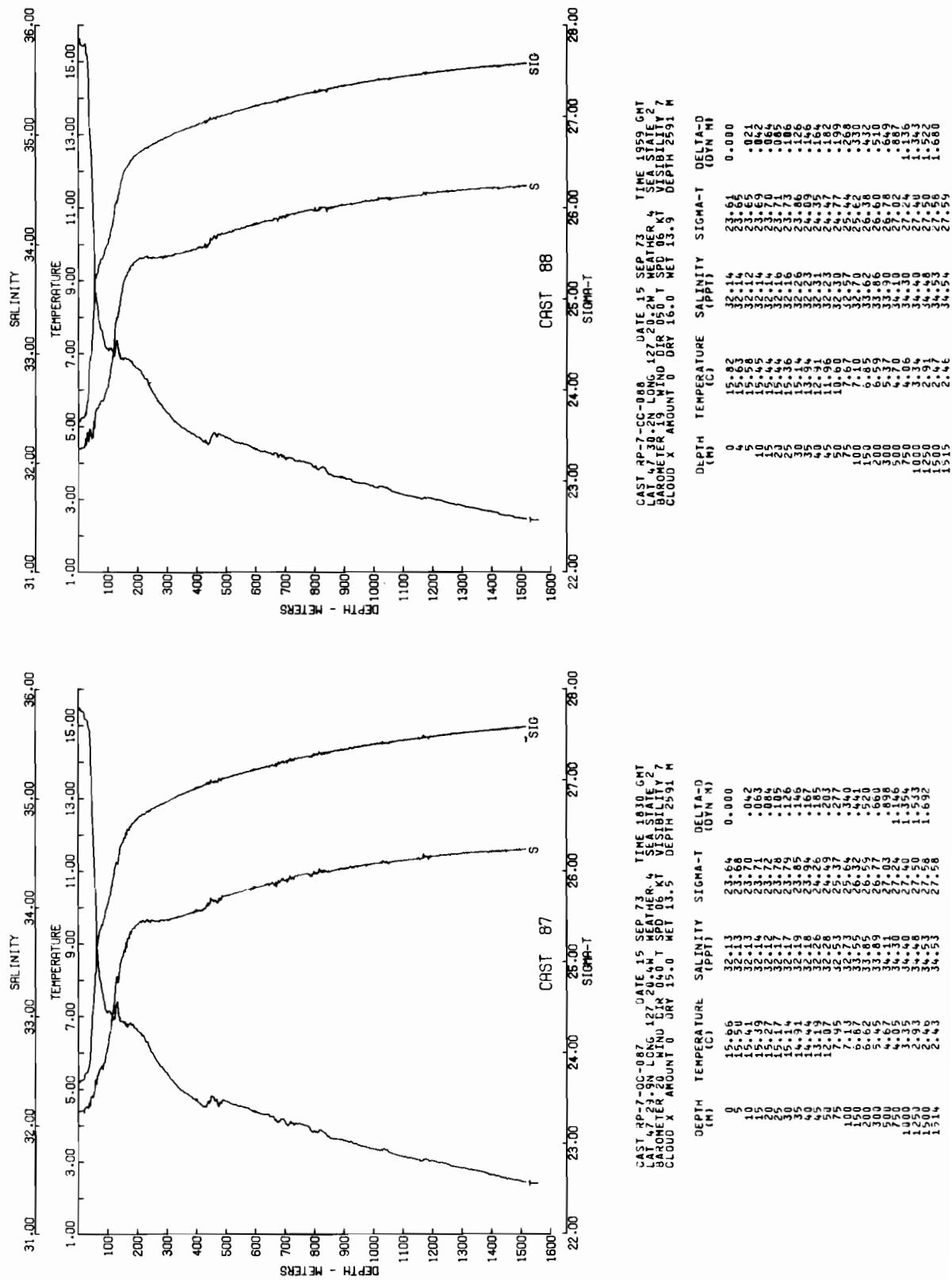


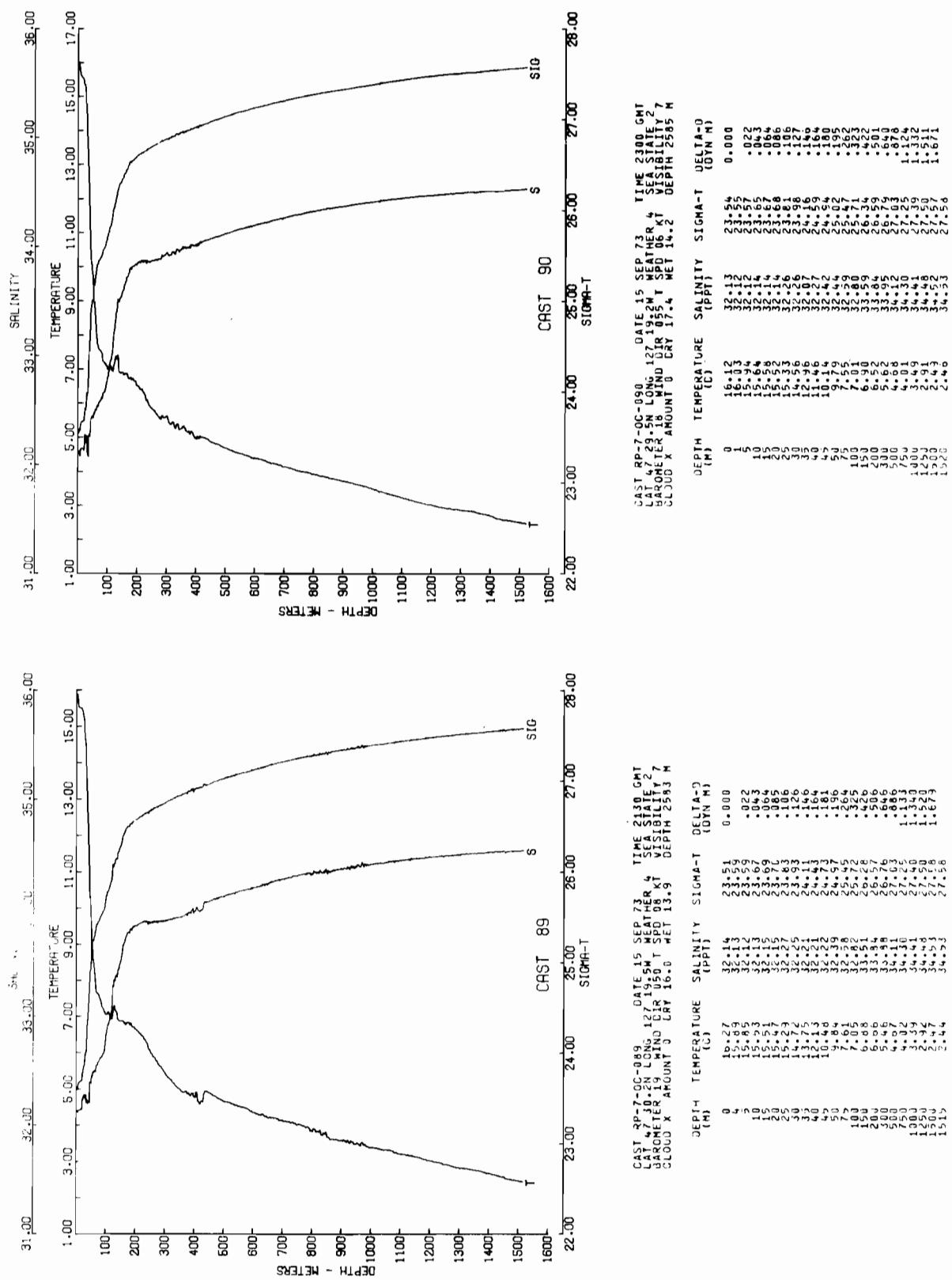


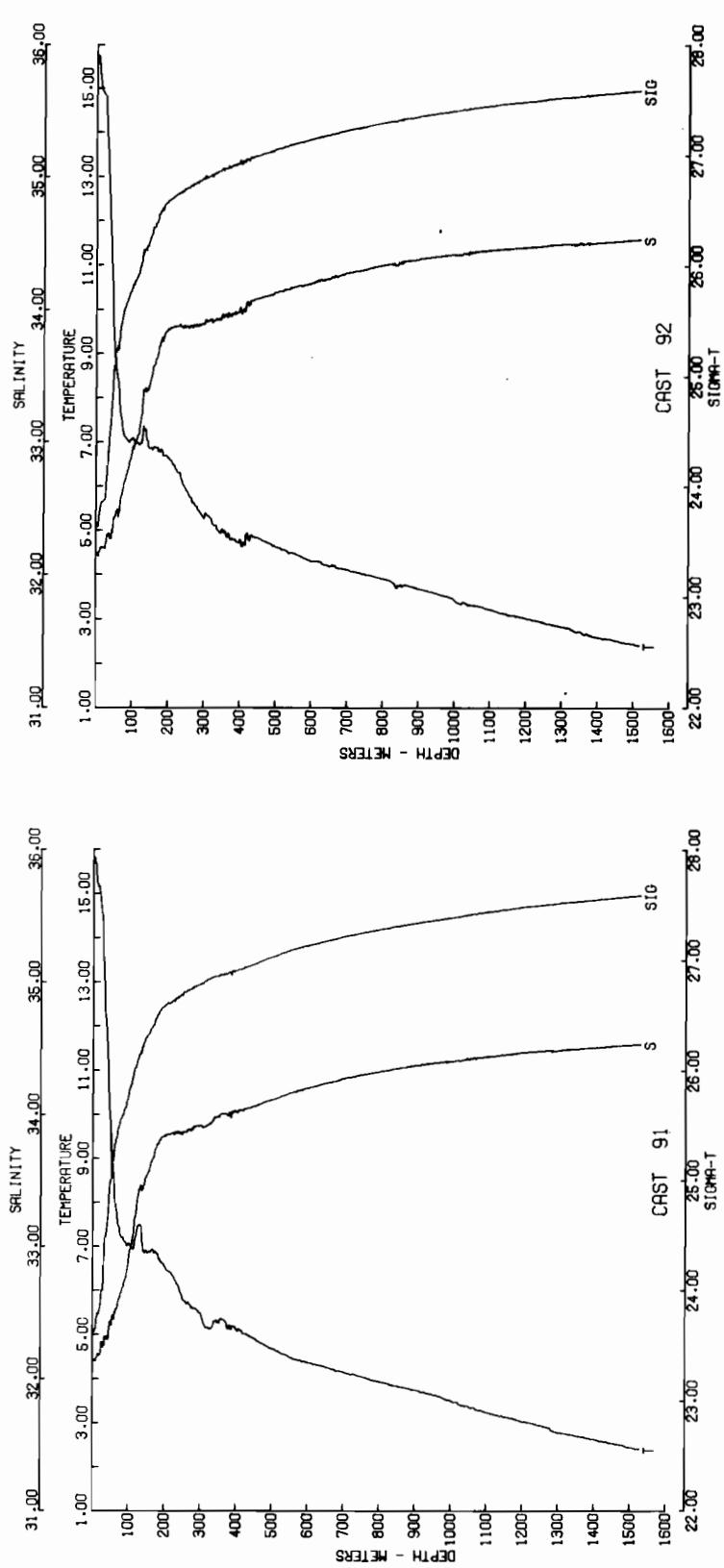
CAST RP-7-OC-06 DATE 15 SEP 73 TIME 0916 GMT
LAT 47°30'N LONG 125°56'W SEA STATE 1
DRY 0.22 INCH DIR 0.0 T SPD 10 Kt VISIBILITY 6
CLOUD X AMOUNT 9 DAY 14.8 DEPTH 1688 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T	DELTA-T (0.7N)
0	16.27	32.20	23.56	0.000
5	16.26	32.20	23.56	0.000
10	16.24	32.20	23.56	0.000
15	16.09	32.16	23.57	0.043
20	14.99	32.08	23.62	0.089
25	14.90	32.00	23.63	0.107
30	14.80	32.00	23.63	0.127
35	14.75	32.00	23.63	0.147
40	14.70	32.00	23.63	0.167
45	14.65	32.00	23.63	0.177
50	14.60	32.00	23.63	0.192
55	14.55	32.00	23.63	0.208
60	14.50	32.00	23.63	0.225
65	14.45	32.00	23.63	0.242
70	14.40	32.00	23.63	0.259
75	14.35	32.00	23.63	0.276
80	14.30	32.00	23.63	0.293
85	14.25	32.00	23.63	0.310
90	14.20	32.00	23.63	0.327
95	14.15	32.00	23.63	0.344
100	14.10	32.00	23.63	0.361
105	14.05	32.00	23.63	0.378
110	14.00	32.00	23.63	0.395
115	13.95	32.00	23.63	0.412
120	13.90	32.00	23.63	0.429
125	13.85	32.00	23.63	0.446
130	13.80	32.00	23.63	0.463
135	13.75	32.00	23.63	0.480
140	13.70	32.00	23.63	0.497
145	13.65	32.00	23.63	0.514
150	13.60	32.00	23.63	0.531
155	13.55	32.00	23.63	0.548
160	13.50	32.00	23.63	0.565
165	13.45	32.00	23.63	0.582
170	13.40	32.00	23.63	0.599
175	13.35	32.00	23.63	0.616
180	13.30	32.00	23.63	0.633
185	13.25	32.00	23.63	0.650
190	13.20	32.00	23.63	0.667
195	13.15	32.00	23.63	0.684
200	13.10	32.00	23.63	0.701
205	13.05	32.00	23.63	0.718
210	13.00	32.00	23.63	0.735
215	12.95	32.00	23.63	0.752
220	12.90	32.00	23.63	0.769
225	12.85	32.00	23.63	0.786
230	12.80	32.00	23.63	0.803
235	12.75	32.00	23.63	0.820
240	12.70	32.00	23.63	0.837
245	12.65	32.00	23.63	0.854
250	12.60	32.00	23.63	0.871
255	12.55	32.00	23.63	0.888
260	12.50	32.00	23.63	0.905
265	12.45	32.00	23.63	0.922
270	12.40	32.00	23.63	0.939
275	12.35	32.00	23.63	0.956
280	12.30	32.00	23.63	0.973
285	12.25	32.00	23.63	0.990
290	12.20	32.00	23.63	1.007
295	12.15	32.00	23.63	1.024
300	12.10	32.00	23.63	1.041
305	12.05	32.00	23.63	1.058
310	12.00	32.00	23.63	1.075
315	11.95	32.00	23.63	1.092
320	11.90	32.00	23.63	1.109
325	11.85	32.00	23.63	1.126
330	11.80	32.00	23.63	1.143
335	11.75	32.00	23.63	1.160
340	11.70	32.00	23.63	1.177
345	11.65	32.00	23.63	1.194
350	11.60	32.00	23.63	1.211
355	11.55	32.00	23.63	1.228
360	11.50	32.00	23.63	1.245
365	11.45	32.00	23.63	1.262
370	11.40	32.00	23.63	1.279
375	11.35	32.00	23.63	1.296
380	11.30	32.00	23.63	1.313
385	11.25	32.00	23.63	1.330
390	11.20	32.00	23.63	1.347
395	11.15	32.00	23.63	1.364
400	11.10	32.00	23.63	1.381
405	11.05	32.00	23.63	1.398
410	11.00	32.00	23.63	1.415
415	10.95	32.00	23.63	1.432
420	10.90	32.00	23.63	1.449
425	10.85	32.00	23.63	1.466
430	10.80	32.00	23.63	1.483
435	10.75	32.00	23.63	1.500
440	10.70	32.00	23.63	1.517
445	10.65	32.00	23.63	1.534
450	10.60	32.00	23.63	1.551
455	10.55	32.00	23.63	1.568
460	10.50	32.00	23.63	1.585
465	10.45	32.00	23.63	1.602
470	10.40	32.00	23.63	1.619
475	10.35	32.00	23.63	1.636
480	10.30	32.00	23.63	1.653
485	10.25	32.00	23.63	1.670
490	10.20	32.00	23.63	1.687
495	10.15	32.00	23.63	1.704
500	10.10	32.00	23.63	1.721
505	10.05	32.00	23.63	1.738
510	10.00	32.00	23.63	1.755
515	9.95	32.00	23.63	1.772
520	9.90	32.00	23.63	1.789
525	9.85	32.00	23.63	1.806
530	9.80	32.00	23.63	1.823
535	9.75	32.00	23.63	1.840
540	9.70	32.00	23.63	1.857
545	9.65	32.00	23.63	1.874
550	9.60	32.00	23.63	1.891
555	9.55	32.00	23.63	1.908
560	9.50	32.00	23.63	1.925
565	9.45	32.00	23.63	1.942
570	9.40	32.00	23.63	1.959
575	9.35	32.00	23.63	1.976
580	9.30	32.00	23.63	1.993
585	9.25	32.00	23.63	2.010
590	9.20	32.00	23.63	2.027
595	9.15	32.00	23.63	2.044
600	9.10	32.00	23.63	2.061
605	9.05	32.00	23.63	2.078
610	9.00	32.00	23.63	2.095
615	8.95	32.00	23.63	2.112
620	8.90	32.00	23.63	2.129
625	8.85	32.00	23.63	2.146
630	8.80	32.00	23.63	2.163
635	8.75	32.00	23.63	2.180
640	8.70	32.00	23.63	2.197
645	8.65	32.00	23.63	2.214
650	8.60	32.00	23.63	2.231
655	8.55	32.00	23.63	2.248
660	8.50	32.00	23.63	2.265
665	8.45	32.00	23.63	2.282
670	8.40	32.00	23.63	2.299
675	8.35	32.00	23.63	2.316
680	8.30	32.00	23.63	2.333
685	8.25	32.00	23.63	2.350
690	8.20	32.00	23.63	2.367
695	8.15	32.00	23.63	2.384
700	8.10	32.00	23.63	2.401
705	8.05	32.00	23.63	2.418
710	8.00	32.00	23.63	2.435
715	7.95	32.00	23.63	2.452
720	7.90	32.00	23.63	2.469
725	7.85	32.00	23.63	2.486
730	7.80	32.00	23.63	2.503
735	7.75	32.00	23.63	2.520
740	7.70	32.00	23.63	2.537
745	7.65	32.00	23.63	2.554
750	7.60	32.00	23.63	2.571
755	7.55	32.00	23.63	2.588
760	7.50	32.00	23.63	2.605
765	7.45	32.00	23.63	2.622
770	7.40	32.00	23.63	2.639
775	7.35	32.00	23.63	2.656
780	7.30	32.00	23.63	2.673
785	7.25	32.00	23.63	2.690
790	7.20	32.00	23.63	2.707
795	7.15	32.00	23.63	2.724
800	7.10	32.00	23.63	2.741
805	7.05	32.00	23.63	2.758
810	7.00	32.00	23.63	2.775
815	6.95	32.00	23.63	2.792
820	6.90	32.00	23.63	2.809
825	6.85	32.00	23.63	2.826
830	6.80	32.00	23.63	2.843
835	6.75	32.00	23.63	2.860
840	6.70	32.00	23.63	2.877
845	6.65	32.00	23.63	2.894
850	6.60	32.00	23.63	2.911
855	6.55	32.00	23.63	2.928
860	6.50	32.00	23.63	2.945
865	6.45	32.00	23.63	2.962
870	6.40	32.00	23.63	2.979
875	6.35	32.00	23.63	2.996
880	6.30	32.00	23.63	3.013
885	6.25	32.00	23.63	3.030
890	6.20	32.00	23.63	3.047
895	6.15	32.00	23.63	3.064
900	6.10	32.00	23.63	3.081
905	6.05	32.00	23.63	3.098
910	6.00	32.00	23.63	3.115
915	5.95	32.00	23.63	3.132
920	5.90	32.00	23.63	3.149
925	5.85	32.00	23.63	3.166
930	5.80	32.00	23.63	3.183
935	5.75	32.00	23.63	3.199
940	5.70	32.00	23.63	3.216
945	5.65	32.00	23.63	3.233
950	5.60	32.00	23.63	3.250
955	5.55	32.00	23.63	3.267
960	5.50	32.00	23.63	3.284
965	5.45	32.00	23.63	3.301
970	5.40	32.00	23.63	3.318
975	5.35	32.00	23.63	3.335
980	5.30	32.00	23.63	3.352
985	5.25	32.00	23.63	3.369
990	5.20	32.00	23.63	3.386
995	5.15	32.00	23.63	3.403
1000	5.10	32.00	23.63	3.420
1005	5.05	32.00	23.63	3.437
1010	5.00	32.00	23.63	3.454
1015	4.95	32.00	23.63	3.471
1020	4.90	32.00	23.63	3.488
1025	4.85	32.00	23.63	3.505
1030	4.80	32.00	23.63	3.522
1035	4.75	32.00	23.63	3.539
1040	4.70	32.00	23.63	3.556
1045	4.65	32.00	23.63	3.573
1050	4.60	32.00	23.63	3.590
1055	4.55	32		

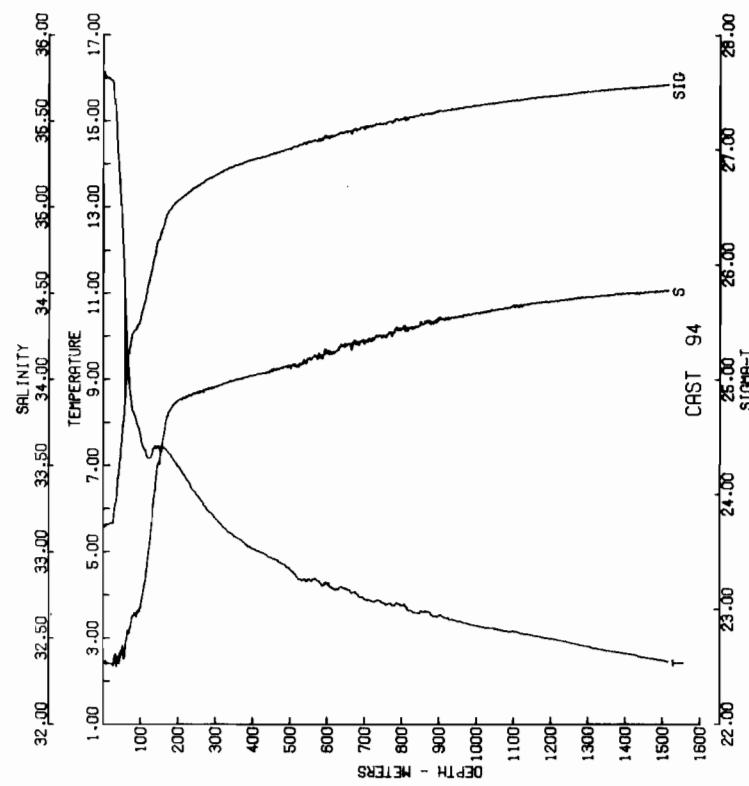




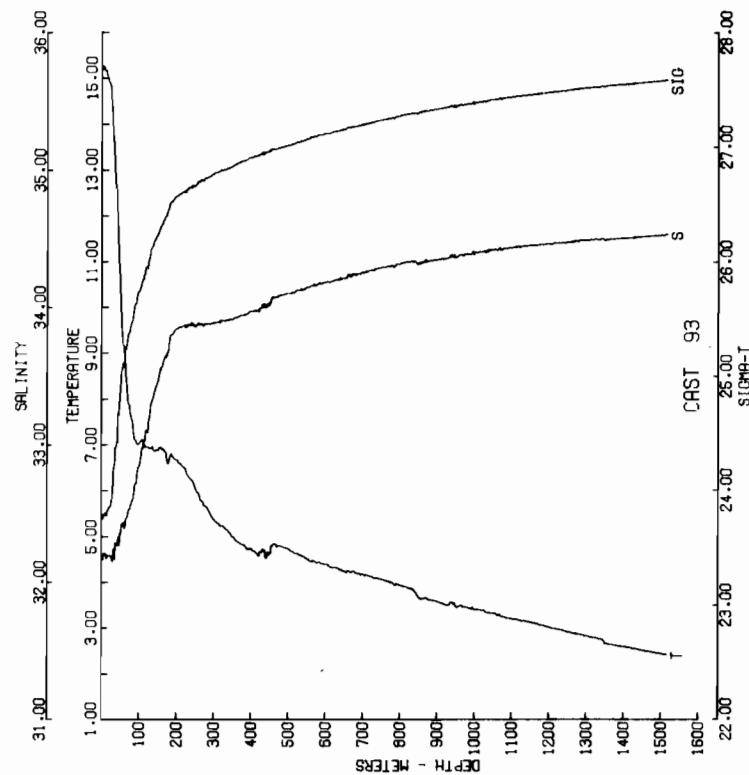




CAST RP-7-OC-092 DATE 16 SEP 73 TIME 0030 GMT		TIME 0200 GMT	
LAT 47°29.7'N	LONG 127°27.0'W	WEATHER 4	SEA STATE 3
LONG 127°27.0'W	WEATHER 4	SEA STATE 3	WEATHER 4
BAROMETER 1015.7	WIND DIRECTION 15.7	VISIBILITY 7	DEPTH 2586 M
CLOUDS X AMOUNT 0	DRY 14.9		
DEPTH (M)	TEMPERATURE (C)	SALINITY (PPT)	SIGMA-T (DYN M)
0	15.9	32.15	23.64
1	15.9	32.14	23.64
5	15.7	32.16	23.65
10	15.5	32.17	23.65
15	15.4	32.20	23.65
20	15.3	32.20	23.65
25	15.2	32.20	23.65
30	15.1	32.25	23.65
35	15.0	32.25	23.65
40	14.9	32.30	23.65
45	14.8	32.30	23.65
50	14.7	32.33	23.65
55	14.6	32.33	23.65
60	14.5	32.33	23.65
65	14.4	32.33	23.65
70	14.3	32.33	23.65
75	14.2	32.33	23.65
80	14.1	32.33	23.65
85	14.0	32.33	23.65
90	13.9	32.33	23.65
95	13.8	32.33	23.65
100	13.7	32.33	23.65
105	13.6	32.33	23.65
110	13.5	32.33	23.65
115	13.4	32.33	23.65
120	13.3	32.33	23.65
125	13.2	32.33	23.65
130	13.1	32.33	23.65
135	13.0	32.33	23.65
140	12.9	32.33	23.65
145	12.8	32.33	23.65
150	12.7	32.33	23.65
155	12.6	32.33	23.65
160	12.5	32.33	23.65

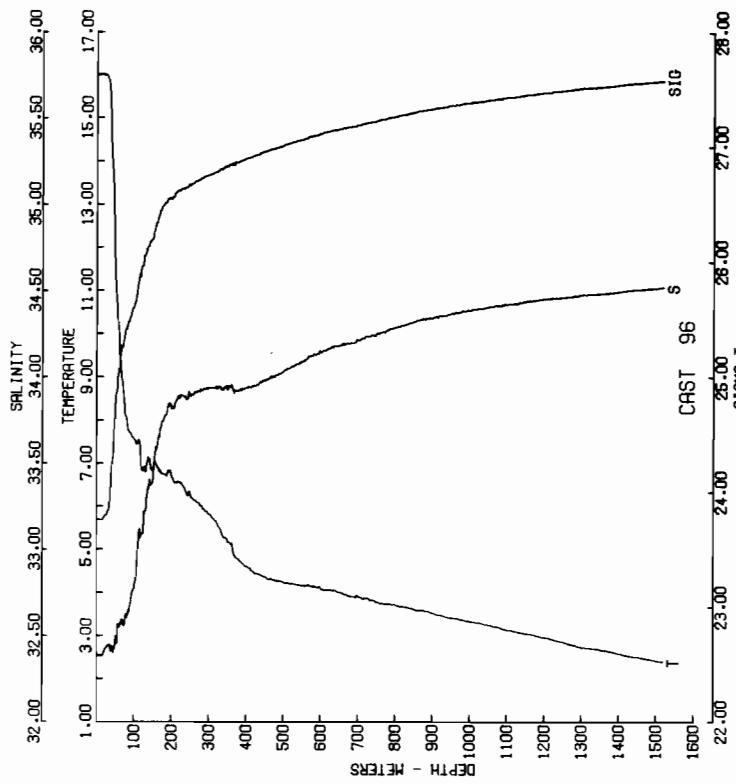
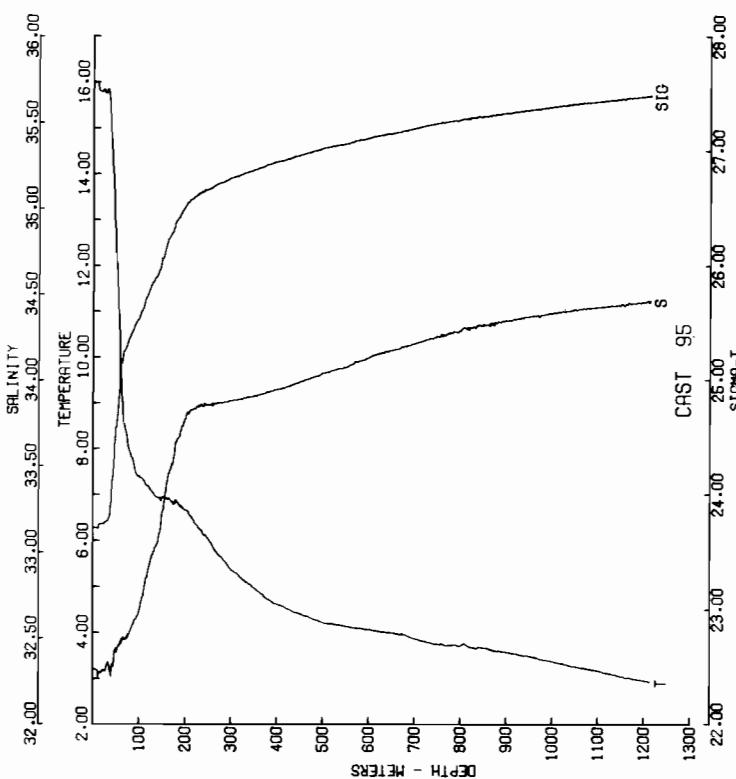


CAST 94
DATE 16 SEP 73
TIME 0624 GMT
LAT 47°23'N LONG 128°01'E
WEATHER 1 SEA STATE 2
VISIBILITY 6 METER
WIND 16 KPH
CLOUD 15%
DEPTH 2667 M
CLOUD 15.9 METERS
AMOUNT 14.2
H



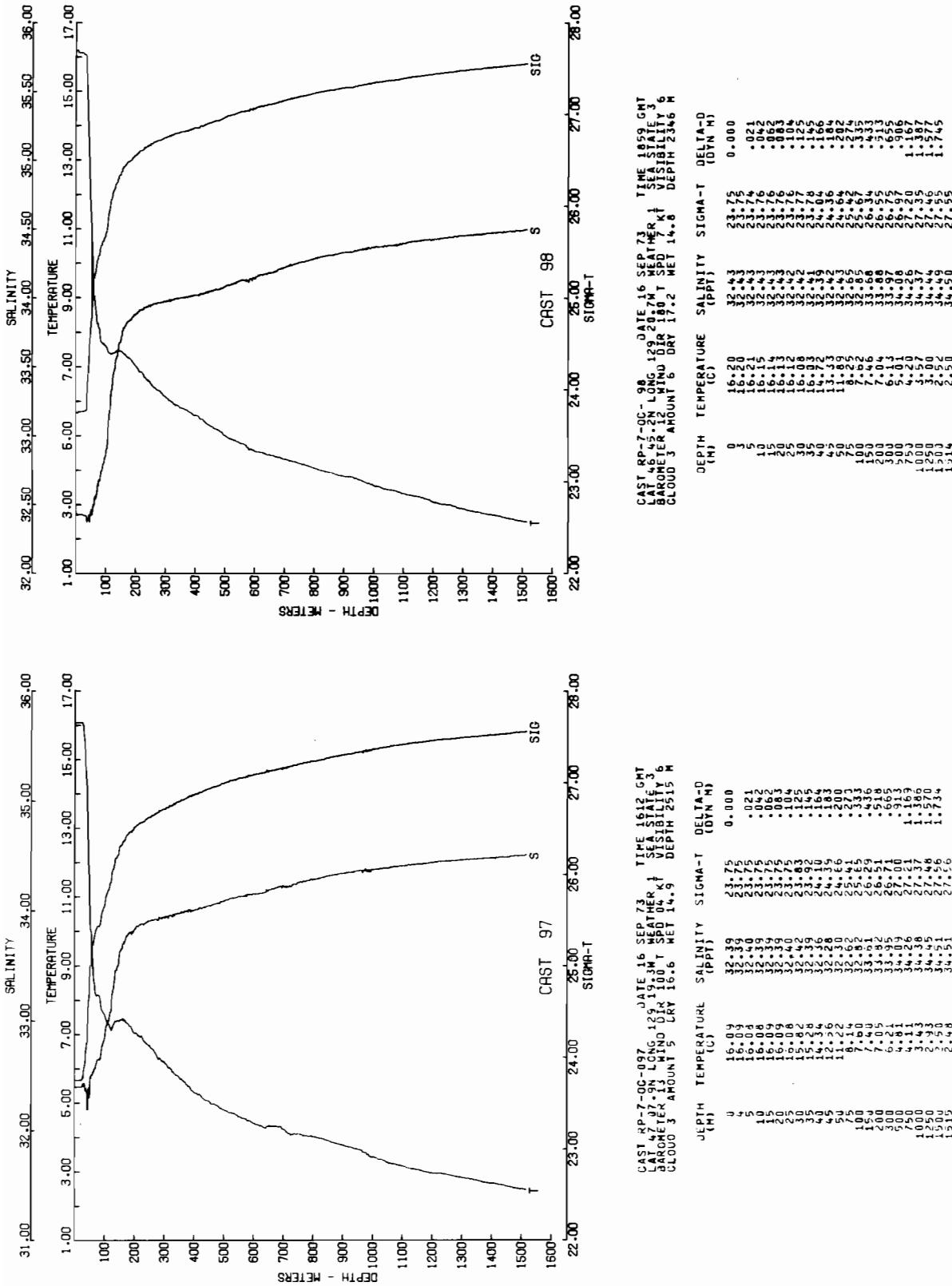
CAST 93
DATE 16 SEP 73
TIME 0328 GMT
LAT 47°29'N LONG 129°16' E
WEATHER 1 SEA STATE 2
VISIBILITY 6 METER
CLOUD 7 DEPTH 2667 M
CLOUD 15.7 METERS
AMOUNT 14.2
H

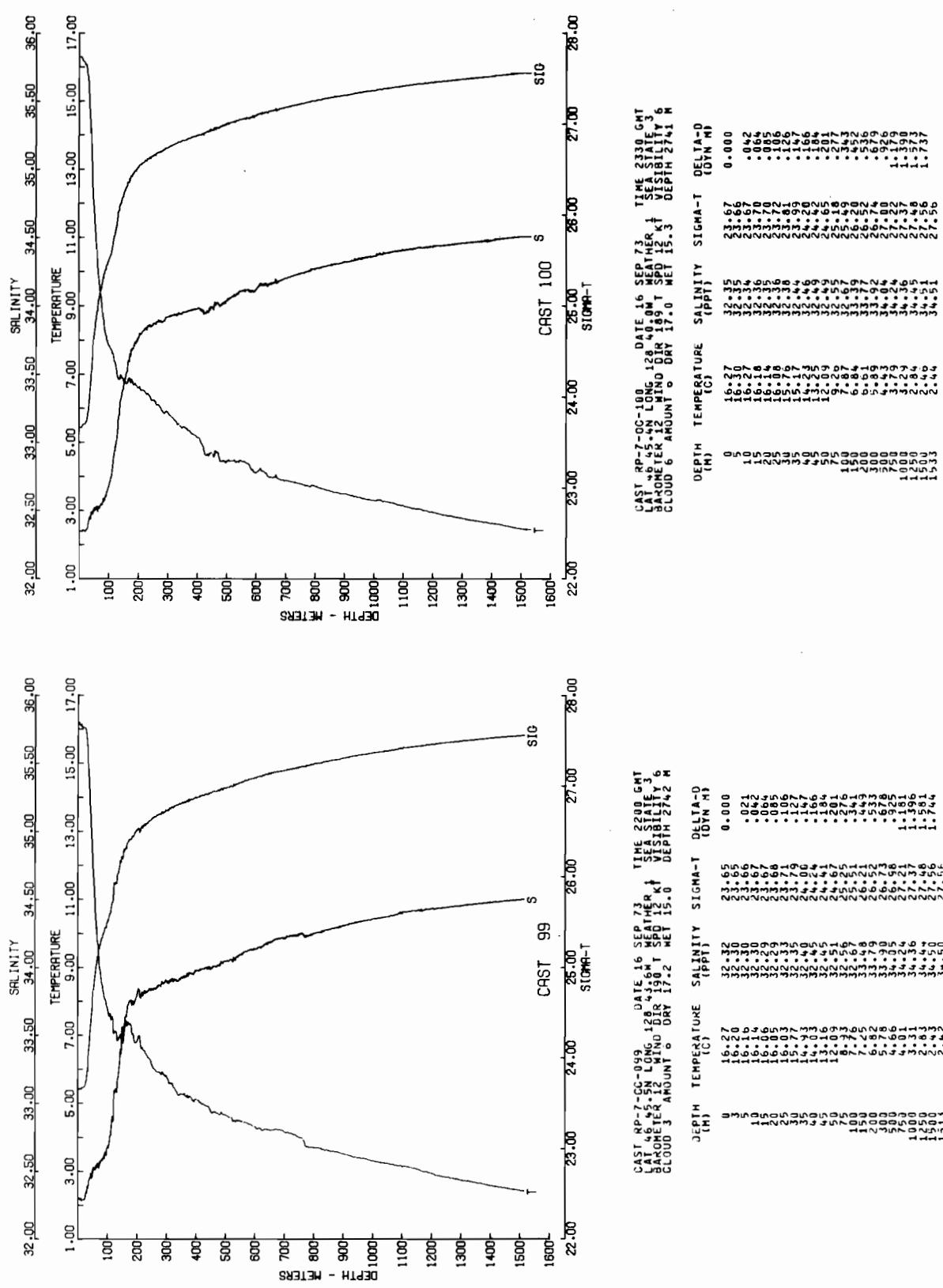
DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T (DYN CM⁻²)
0	12.49	32.10	28.34
45	12.17	32.75	28.67
95	12.23	32.75	28.67
145	12.32	32.80	28.74
195	12.32	32.85	28.74
245	12.32	32.85	28.74
295	12.32	32.87	28.75
345	12.32	32.87	28.75
395	12.32	32.87	28.75
445	12.32	32.87	28.75
495	12.32	32.87	28.75
545	12.32	32.87	28.75
595	12.32	32.87	28.75
645	12.32	32.87	28.75
695	12.32	32.87	28.75
745	12.32	32.87	28.75
795	12.32	32.87	28.75
845	12.32	32.87	28.75
895	12.32	32.87	28.75
945	12.32	32.87	28.75
995	12.32	32.87	28.75
1045	12.32	32.87	28.75
1095	12.32	32.87	28.75
1145	12.32	32.87	28.75
1195	12.32	32.87	28.75
1245	12.32	32.87	28.75
1295	12.32	32.87	28.75
1345	12.32	32.87	28.75
1395	12.32	32.87	28.75
1445	12.32	32.87	28.75
1495	12.32	32.87	28.75
1545	12.32	32.87	28.75
1595	12.32	32.87	28.75
1645	12.32	32.87	28.75
1695	12.32	32.87	28.75
1745	12.32	32.87	28.75
1795	12.32	32.87	28.75
1845	12.32	32.87	28.75
1895	12.32	32.87	28.75
1945	12.32	32.87	28.75
1995	12.32	32.87	28.75
2045	12.32	32.87	28.75
2095	12.32	32.87	28.75
2145	12.32	32.87	28.75
2195	12.32	32.87	28.75
2245	12.32	32.87	28.75
2295	12.32	32.87	28.75
2345	12.32	32.87	28.75
2395	12.32	32.87	28.75
2445	12.32	32.87	28.75
2495	12.32	32.87	28.75
2545	12.32	32.87	28.75
2595	12.32	32.87	28.75
2645	12.32	32.87	28.75
2695	12.32	32.87	28.75
2745	12.32	32.87	28.75
2795	12.32	32.87	28.75
2845	12.32	32.87	28.75
2895	12.32	32.87	28.75
2945	12.32	32.87	28.75
2995	12.32	32.87	28.75
3045	12.32	32.87	28.75
3095	12.32	32.87	28.75
3145	12.32	32.87	28.75
3195	12.32	32.87	28.75
3245	12.32	32.87	28.75
3295	12.32	32.87	28.75
3345	12.32	32.87	28.75
3395	12.32	32.87	28.75
3445	12.32	32.87	28.75
3495	12.32	32.87	28.75
3545	12.32	32.87	28.75
3595	12.32	32.87	28.75
3645	12.32	32.87	28.75
3695	12.32	32.87	28.75
3745	12.32	32.87	28.75
3795	12.32	32.87	28.75
3845	12.32	32.87	28.75
3895	12.32	32.87	28.75
3945	12.32	32.87	28.75
3995	12.32	32.87	28.75
4045	12.32	32.87	28.75
4095	12.32	32.87	28.75
4145	12.32	32.87	28.75
4195	12.32	32.87	28.75
4245	12.32	32.87	28.75
4295	12.32	32.87	28.75
4345	12.32	32.87	28.75
4395	12.32	32.87	28.75
4445	12.32	32.87	28.75
4495	12.32	32.87	28.75
4545	12.32	32.87	28.75
4595	12.32	32.87	28.75
4645	12.32	32.87	28.75
4695	12.32	32.87	28.75
4745	12.32	32.87	28.75
4795	12.32	32.87	28.75
4845	12.32	32.87	28.75
4895	12.32	32.87	28.75
4945	12.32	32.87	28.75
4995	12.32	32.87	28.75
5045	12.32	32.87	28.75
5095	12.32	32.87	28.75
5145	12.32	32.87	28.75
5195	12.32	32.87	28.75
5245	12.32	32.87	28.75
5295	12.32	32.87	28.75
5345	12.32	32.87	28.75
5395	12.32	32.87	28.75
5445	12.32	32.87	28.75
5495	12.32	32.87	28.75
5545	12.32	32.87	28.75
5595	12.32	32.87	28.75
5645	12.32	32.87	28.75
5695	12.32	32.87	28.75
5745	12.32	32.87	28.75
5795	12.32	32.87	28.75
5845	12.32	32.87	28.75
5895	12.32	32.87	28.75
5945	12.32	32.87	28.75
5995	12.32	32.87	28.75
6045	12.32	32.87	28.75
6095	12.32	32.87	28.75
6145	12.32	32.87	28.75
6195	12.32	32.87	28.75
6245	12.32	32.87	28.75
6295	12.32	32.87	28.75
6345	12.32	32.87	28.75
6395	12.32	32.87	28.75
6445	12.32	32.87	28.75
6495	12.32	32.87	28.75
6545	12.32	32.87	28.75
6595	12.32	32.87	28.75
6645	12.32	32.87	28.75
6695	12.32	32.87	28.75
6745	12.32	32.87	28.75
6795	12.32	32.87	28.75
6845	12.32	32.87	28.75
6895	12.32	32.87	28.75
6945	12.32	32.87	28.75
6995	12.32	32.87	28.75
7045	12.32	32.87	28.75
7095	12.32	32.87	28.75
7145	12.32	32.87	28.75
7195	12.32	32.87	28.75
7245	12.32	32.87	28.75
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7895	12.32	32.87	28.75
7945	12.32	32.87	28.75
7995	12.32	32.87	28.75
8045	12.32	32.87	28.75
8095	12.32	32.87	28.75
8145	12.32	32.87	28.75
8195	12.32	32.87	28.75
8245	12.32	32.87	28.75
8295	12.32	32.87	28.75
8345	12.32	32.87	28.75
8395	12.32	32.87	28.75
8445	12.32	32.87	28.75
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8595	12.32	32.87	28.75
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8695	12.32	32.87	28.75
8745	12.32	32.87	28.75
8795	12.32	32.87	28.75
8845	12.32	32.87	28.75
8895	12.32	32.87	28.75
8945	12.32	32.87	28.75
8995	12.32	32.87	28.75
9045	12.32	32.87	28.75
9095	12.32	32.87	28.75
9145	12.32	32.87	28.75
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9295	12.32	32.87	28.75
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9395	12.32	32.87	28.75
9445	12.32	32.87	28.75
9495	12.32	32.87	28.75
9545	12.32	32.87	28.75
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9795	12.32	32.87	28.75
9845	12.32	32.87	28.75
9895	12.32	32.87	28.75
9945	12.32	32.87	28.75
9995	12.32	32.87	28.75
10045	12.32	32.87	28.75
10095	12.32	32.87	28.75
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10195	12.32	32.87	28.75
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10595	12.32	32.87	28.75
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10695	12.32	32.87	28.75
10745	12.32	32.87	28.75
10795	12.32	32.87	28.75
10845	12.32	32.87	28.75
10895	12.32	32.87	28.75
10945	12.32	32.87	28.75
10995	12.32	32.87	28.75
11045	12.32	32.87	28.75
11095	12.32	32.87	28.75
11145	12.32	32.87	28.75
11195	12.32	32.87	28.75
11245	12.32	32.87	28.75
11295	12.32	32.87	28.75
11345	12.32	32.87	28.75
11395	12.32	32.87	28.75
11445	12.32	32.87	28.75
11495	12.32	32.87	28.75
11545	12.32	32.87	28.75
11595	12.32	32.87	28.75
11645	12.32	32.87	28.75
11695	12.32	32.87	28.75
11745	12.32	32.87	28.75
11795	12.32	32.87	28.75
11845	12.32	32.87	28.75
11895	12.32	32.87	28.75
11945	12.32	32.87	28.75
11995	12.32	32.87	28.75
12045	12.32	32.87	28.75
12095	12.32	32.87	28.75
12145	12.32	32.87	28.75
12195	12.32	32.87	28.75
12245	12.32	32.87	28.75

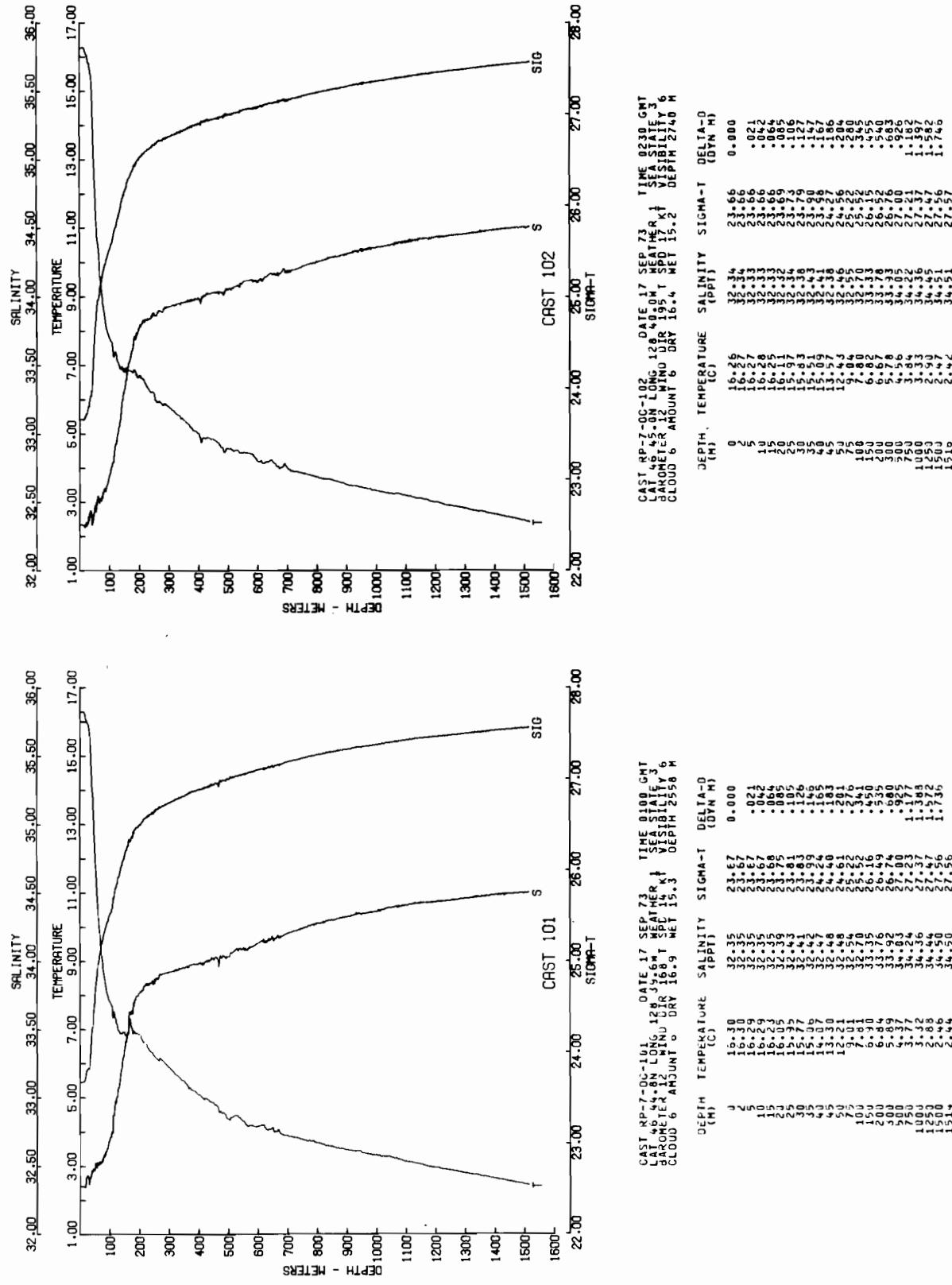


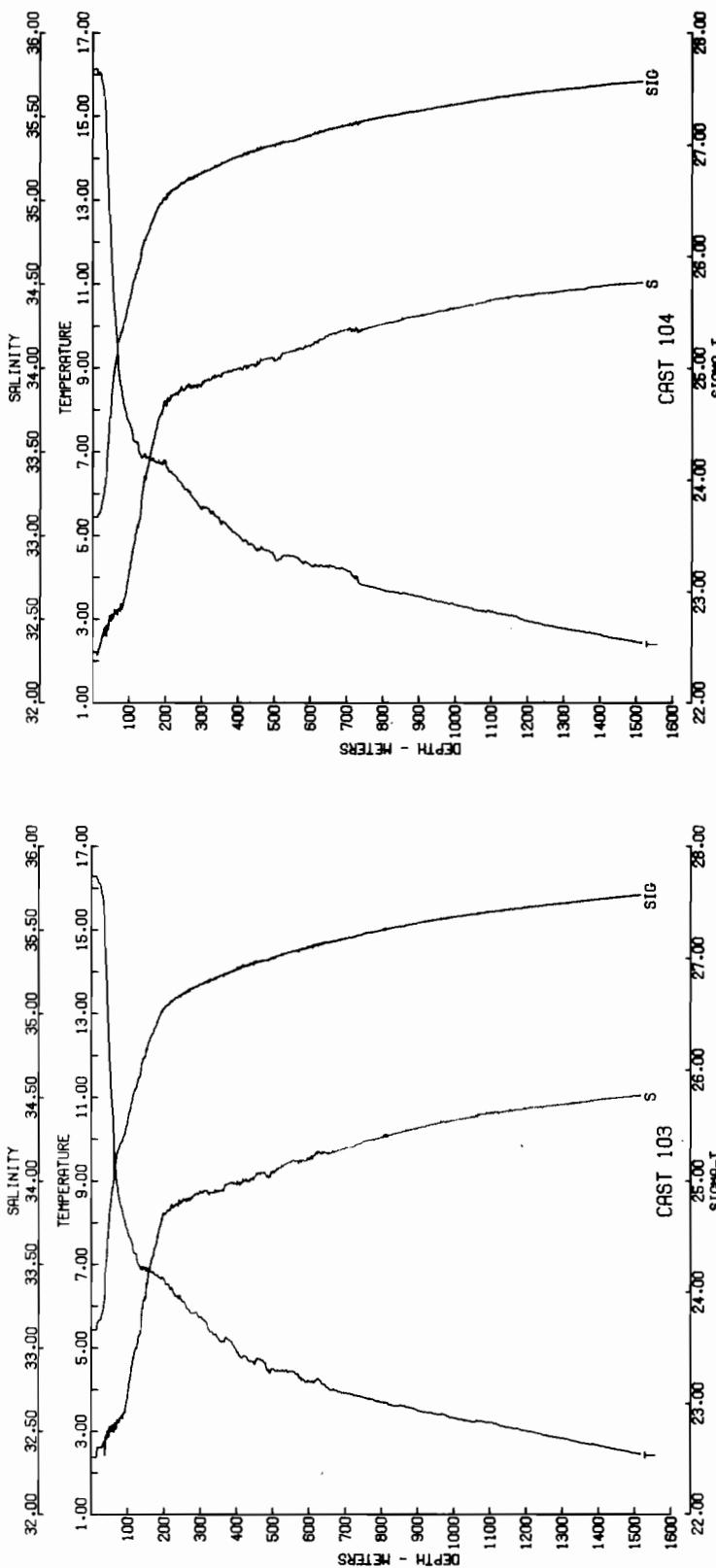
DEPTH (M)	TEMPERATURE (°C)	SALINITY SIGMA-T	DEPTH (M)	TEMPERATURE (°C)	SALINITY SIGMA-T
0	16.00	95.00	320	23.71	95.00
5	16.01	95.00	323	23.71	95.00
10	16.00	95.00	326	23.71	95.00
15	15.99	95.00	329	23.71	95.00
20	15.98	95.00	332	23.71	95.00
25	15.97	95.00	335	23.71	95.00
30	15.96	95.00	338	23.71	95.00
35	15.95	95.00	341	23.71	95.00
40	15.94	95.00	344	23.71	95.00
45	15.93	95.00	347	23.71	95.00
50	15.92	95.00	350	23.71	95.00
55	15.91	95.00	353	23.71	95.00
60	15.90	95.00	356	23.71	95.00
65	15.89	95.00	359	23.71	95.00
70	15.88	95.00	362	23.71	95.00
75	15.87	95.00	365	23.71	95.00
80	15.86	95.00	368	23.71	95.00
85	15.85	95.00	371	23.71	95.00
90	15.84	95.00	374	23.71	95.00
95	15.83	95.00	377	23.71	95.00
100	15.82	95.00	380	23.71	95.00
105	15.81	95.00	383	23.71	95.00
110	15.80	95.00	386	23.71	95.00
115	15.79	95.00	389	23.71	95.00
120	15.78	95.00	392	23.71	95.00
125	15.77	95.00	395	23.71	95.00
130	15.76	95.00	398	23.71	95.00
135	15.75	95.00	401	23.71	95.00
140	15.74	95.00	404	23.71	95.00
145	15.73	95.00	407	23.71	95.00
150	15.72	95.00	410	23.71	95.00
155	15.71	95.00	413	23.71	95.00
160	15.70	95.00	416	23.71	95.00

DEPTH (M)	TEMPERATURE (°C)	SALINITY SIGMA-T	DEPTH (M)	TEMPERATURE (°C)	SALINITY SIGMA-T
0	16.02	95.00	320	23.76	95.00
5	16.03	95.00	323	23.76	95.00
10	16.02	95.00	326	23.76	95.00
15	16.03	95.00	329	23.76	95.00
20	16.00	95.00	332	23.76	95.00
25	15.99	95.00	335	23.76	95.00
30	15.98	95.00	338	23.76	95.00
35	15.97	95.00	341	23.76	95.00
40	15.96	95.00	344	23.76	95.00
45	15.95	95.00	347	23.76	95.00
50	15.94	95.00	350	23.76	95.00
55	15.93	95.00	353	23.76	95.00
60	15.92	95.00	356	23.76	95.00
65	15.91	95.00	359	23.76	95.00
70	15.90	95.00	362	23.76	95.00
75	15.89	95.00	365	23.76	95.00
80	15.88	95.00	368	23.76	95.00
85	15.87	95.00	371	23.76	95.00
90	15.86	95.00	374	23.76	95.00
95	15.85	95.00	377	23.76	95.00
100	15.84	95.00	380	23.76	95.00
105	15.83	95.00	383	23.76	95.00
110	15.82	95.00	386	23.76	95.00
115	15.81	95.00	389	23.76	95.00
120	15.80	95.00	392	23.76	95.00
125	15.79	95.00	395	23.76	95.00
130	15.78	95.00	398	23.76	95.00
135	15.77	95.00	401	23.76	95.00
140	15.76	95.00	404	23.76	95.00
145	15.75	95.00	407	23.76	95.00
150	15.74	95.00	410	23.76	95.00
155	15.73	95.00	413	23.76	95.00
160	15.72	95.00	416	23.76	95.00

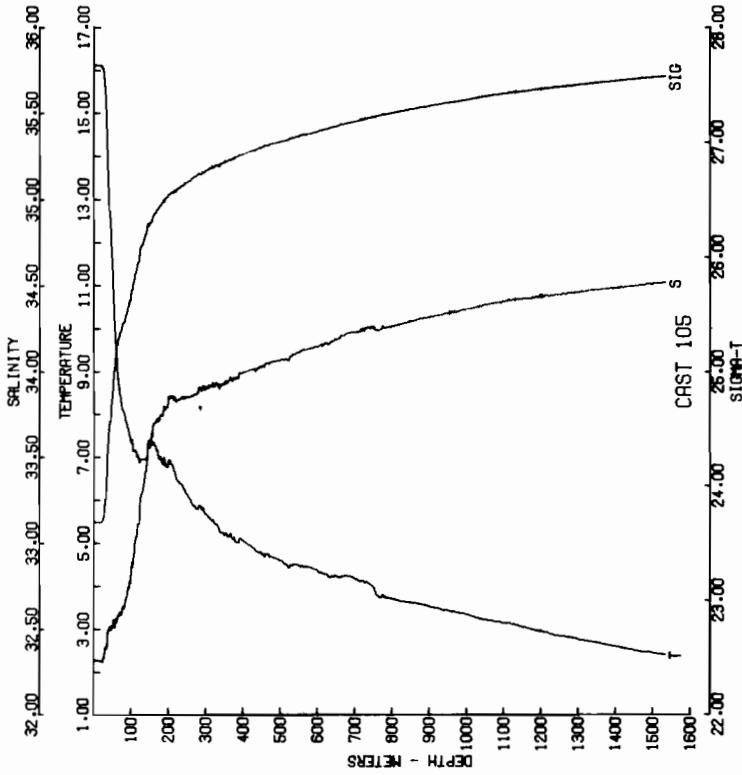


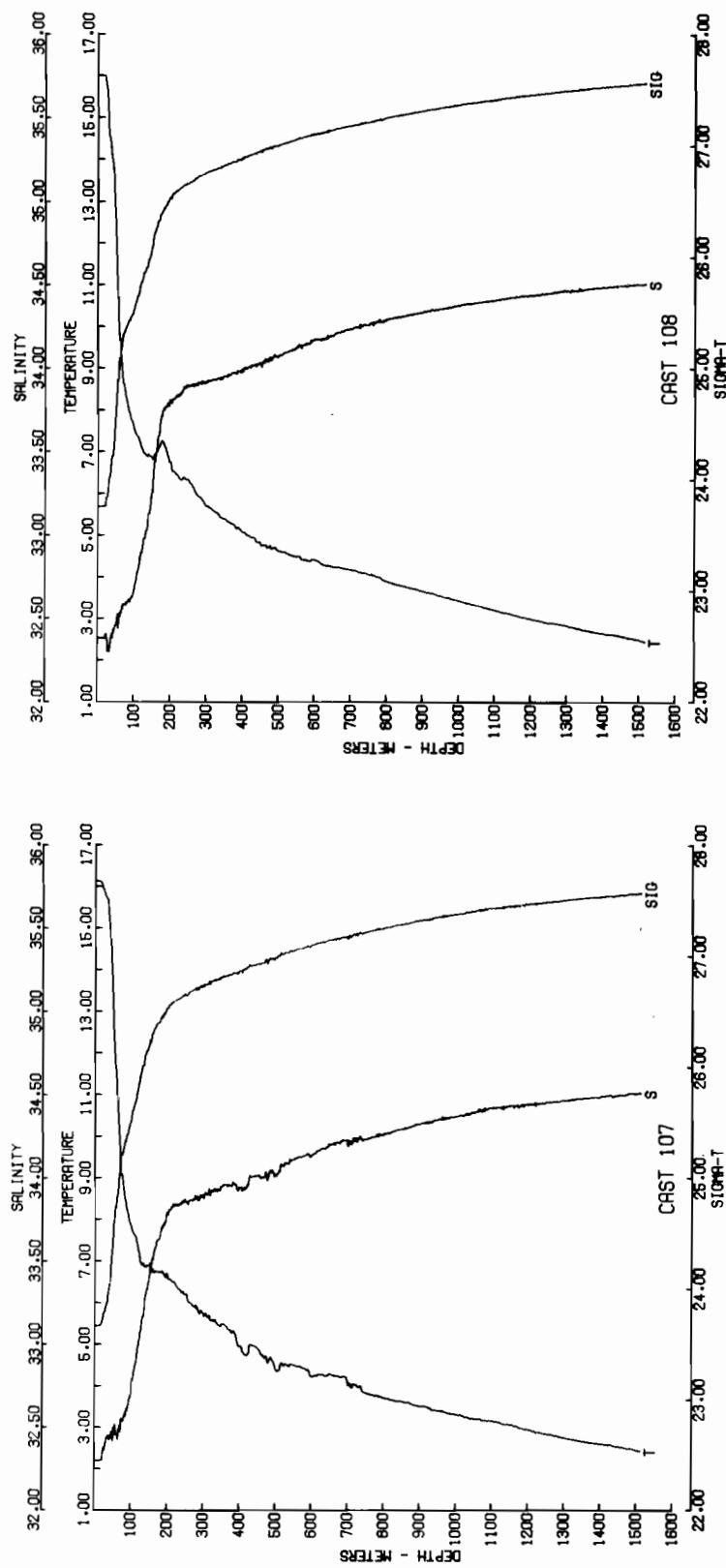




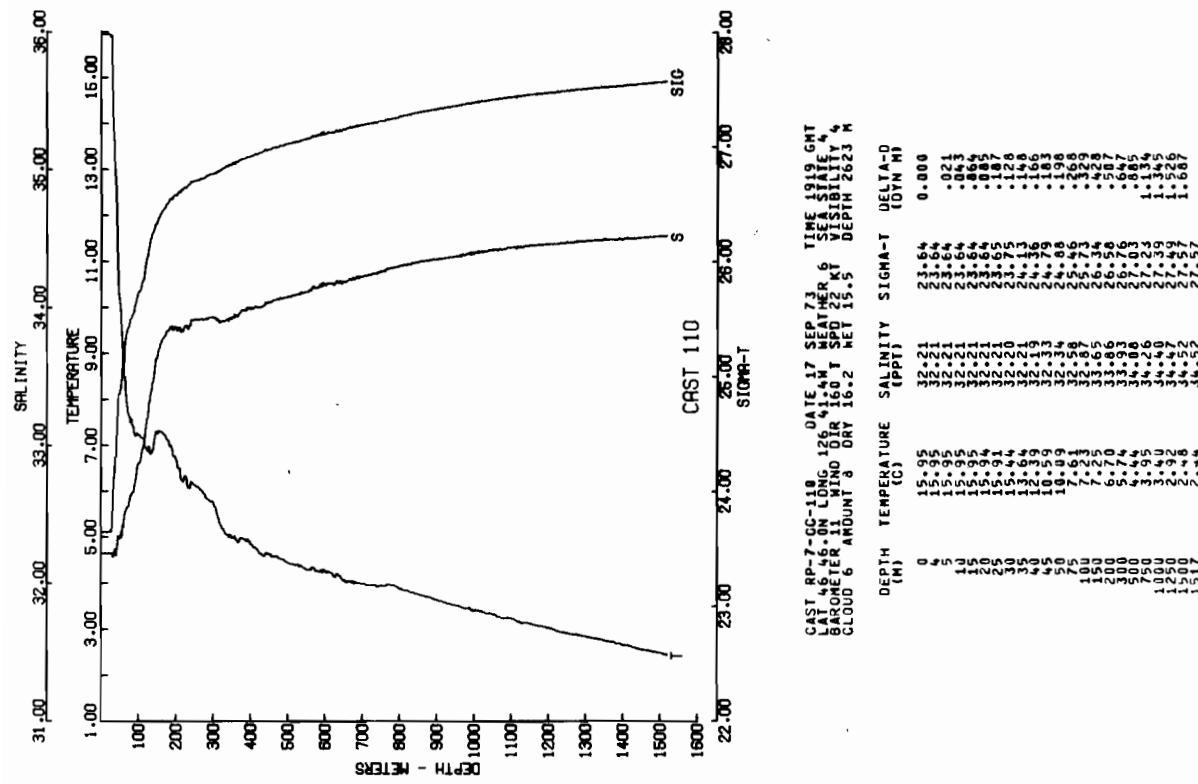
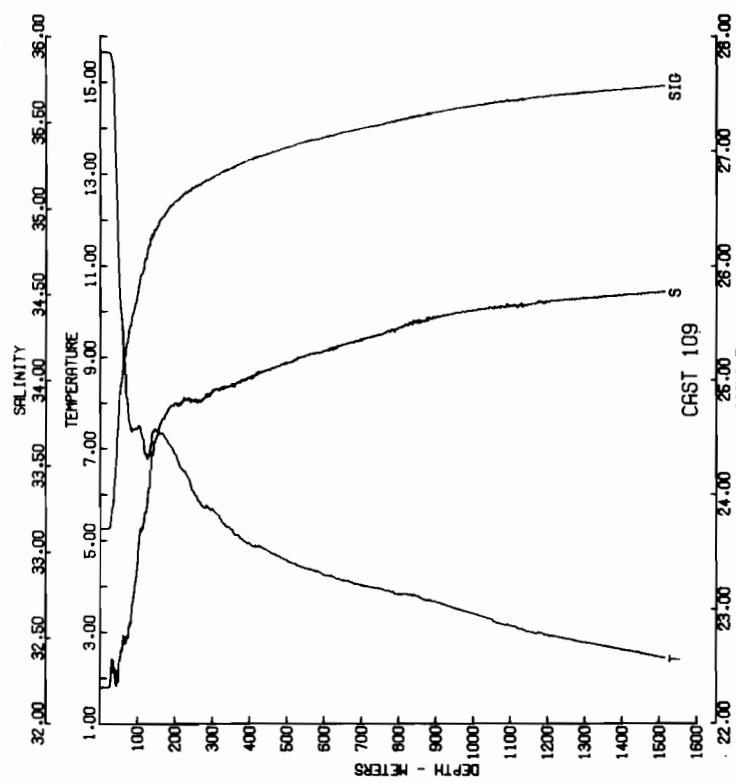


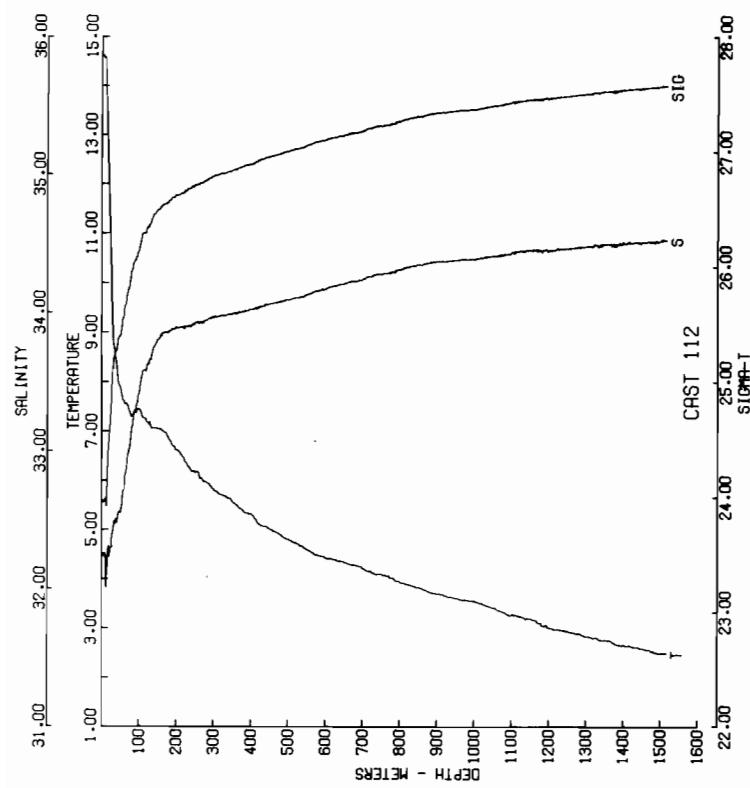
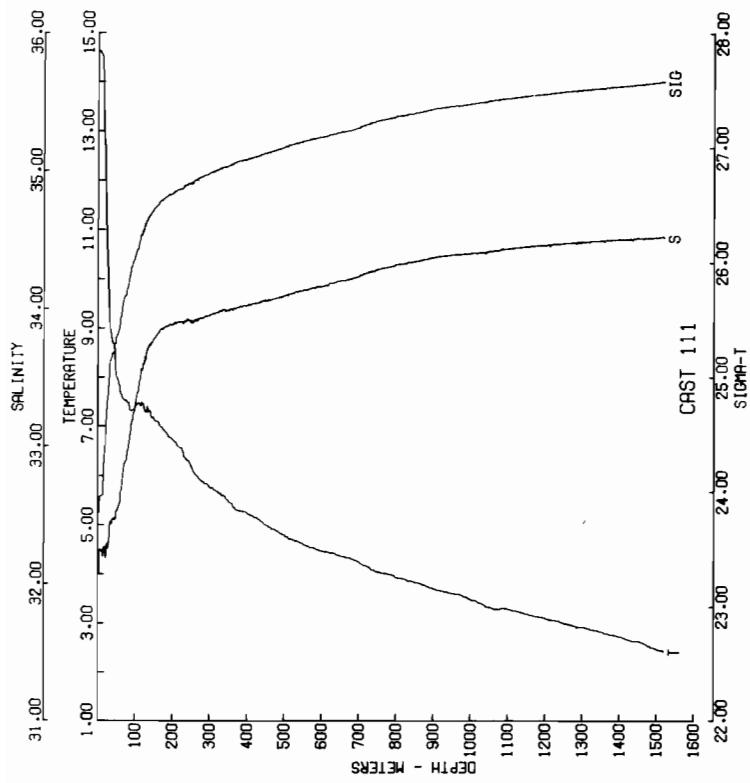
CAST RP-7-CC-103		DATE 17 SEP 73		TIME 0400 GMT		DATE 17 SEP 73		TIME 0530 GMT	
DEPTH (M)	TEMPERATURE (C)	SALINITY	SIGMA-T	DEPTH (M)	TEMPERATURE (C)	SALINITY	SIGMA-T	DEPTH (M)	TEMPERATURE (C)
0	16.30	32.34	23.66	0	16.14	32.31	23.67	0	16.00
4	16.30	32.34	23.66	4	16.14	32.31	23.67	4	16.00
5	16.30	32.34	23.66	5	16.14	32.31	23.67	5	16.00
10	16.29	32.35	23.67	10	16.14	32.31	23.67	10	16.00
15	16.28	32.35	23.67	15	16.14	32.31	23.67	15	16.00
20	16.25	32.40	23.74	20	16.05	32.32	23.68	20	15.95
25	16.20	32.40	23.74	25	15.86	32.32	23.68	25	15.85
30	16.16	32.40	23.74	30	15.75	32.32	23.68	30	15.75
40	16.12	32.44	23.74	40	15.65	32.32	23.68	40	15.65
45	16.12	32.44	23.74	45	15.55	32.32	23.68	45	15.55
50	16.12	32.44	23.74	50	15.45	32.32	23.68	50	15.45
60	16.05	32.51	23.81	60	15.35	32.32	23.68	60	15.35
75	16.05	32.51	23.81	75	15.25	32.32	23.68	75	15.25
100	16.00	32.51	23.81	100	15.15	32.32	23.68	100	15.15
125	16.00	32.51	23.81	125	15.05	32.32	23.68	125	15.05
140	16.00	32.51	23.81	140	14.95	32.32	23.68	140	14.95
150	16.00	32.51	23.81	150	14.85	32.32	23.68	150	14.85
151.4	16.00	32.51	23.81	151.4	14.75	32.32	23.68	151.4	14.75
151.5	16.00	32.51	23.81	151.5	14.65	32.32	23.68	151.5	14.65
151.6	16.00	32.51	23.81	151.6	14.55	32.32	23.68	151.6	14.55
151.7	16.00	32.51	23.81	151.7	14.45	32.32	23.68	151.7	14.45
151.8	16.00	32.51	23.81	151.8	14.35	32.32	23.68	151.8	14.35
151.9	16.00	32.51	23.81	151.9	14.25	32.32	23.68	151.9	14.25
152.0	16.00	32.51	23.81	152.0	14.15	32.32	23.68	152.0	14.15
152.1	16.00	32.51	23.81	152.1	14.05	32.32	23.68	152.1	14.05
152.2	16.00	32.51	23.81	152.2	13.95	32.32	23.68	152.2	13.95
152.3	16.00	32.51	23.81	152.3	13.85	32.32	23.68	152.3	13.85
152.4	16.00	32.51	23.81	152.4	13.75	32.32	23.68	152.4	13.75
152.5	16.00	32.51	23.81	152.5	13.65	32.32	23.68	152.5	13.65
152.6	16.00	32.51	23.81	152.6	13.55	32.32	23.68	152.6	13.55
152.7	16.00	32.51	23.81	152.7	13.45	32.32	23.68	152.7	13.45
152.8	16.00	32.51	23.81	152.8	13.35	32.32	23.68	152.8	13.35
152.9	16.00	32.51	23.81	152.9	13.25	32.32	23.68	152.9	13.25
153.0	16.00	32.51	23.81	153.0	13.15	32.32	23.68	153.0	13.15
153.1	16.00	32.51	23.81	153.1	13.05	32.32	23.68	153.1	13.05
153.2	16.00	32.51	23.81	153.2	12.95	32.32	23.68	153.2	12.95
153.3	16.00	32.51	23.81	153.3	12.85	32.32	23.68	153.3	12.85
153.4	16.00	32.51	23.81	153.4	12.75	32.32	23.68	153.4	12.75
153.5	16.00	32.51	23.81	153.5	12.65	32.32	23.68	153.5	12.65
153.6	16.00	32.51	23.81	153.6	12.55	32.32	23.68	153.6	12.55
153.7	16.00	32.51	23.81	153.7	12.45	32.32	23.68	153.7	12.45
153.8	16.00	32.51	23.81	153.8	12.35	32.32	23.68	153.8	12.35
153.9	16.00	32.51	23.81	153.9	12.25	32.32	23.68	153.9	12.25
154.0	16.00	32.51	23.81	154.0	12.15	32.32	23.68	154.0	12.15
154.1	16.00	32.51	23.81	154.1	12.05	32.32	23.68	154.1	12.05
154.2	16.00	32.51	23.81	154.2	11.95	32.32	23.68	154.2	11.95
154.3	16.00	32.51	23.81	154.3	11.85	32.32	23.68	154.3	11.85
154.4	16.00	32.51	23.81	154.4	11.75	32.32	23.68	154.4	11.75
154.5	16.00	32.51	23.81	154.5	11.65	32.32	23.68	154.5	11.65
154.6	16.00	32.51	23.81	154.6	11.55	32.32	23.68	154.6	11.55
154.7	16.00	32.51	23.81	154.7	11.45	32.32	23.68	154.7	11.45
154.8	16.00	32.51	23.81	154.8	11.35	32.32	23.68	154.8	11.35
154.9	16.00	32.51	23.81	154.9	11.25	32.32	23.68	154.9	11.25
155.0	16.00	32.51	23.81	155.0	11.15	32.32	23.68	155.0	11.15
155.1	16.00	32.51	23.81	155.1	11.05	32.32	23.68	155.1	11.05
155.2	16.00	32.51	23.81	155.2	10.95	32.32	23.68	155.2	10.95
155.3	16.00	32.51	23.81	155.3	10.85	32.32	23.68	155.3	10.85
155.4	16.00	32.51	23.81	155.4	10.75	32.32	23.68	155.4	10.75
155.5	16.00	32.51	23.81	155.5	10.65	32.32	23.68	155.5	10.65
155.6	16.00	32.51	23.81	155.6	10.55	32.32	23.68	155.6	10.55
155.7	16.00	32.51	23.81	155.7	10.45	32.32	23.68	155.7	10.45
155.8	16.00	32.51	23.81	155.8	10.35	32.32	23.68	155.8	10.35
155.9	16.00	32.51	23.81	155.9	10.25	32.32	23.68	155.9	10.25
156.0	16.00	32.51	23.81	156.0	10.15	32.32	23.68	156.0	10.15
156.1	16.00	32.51	23.81	156.1	10.05	32.32	23.68	156.1	10.05
156.2	16.00	32.51	23.81	156.2	0.95	32.32	23.68	156.2	0.95
156.3	16.00	32.51	23.81	156.3	0.85	32.32	23.68	156.3	0.85
156.4	16.00	32.51	23.81	156.4	0.75	32.32	23.68	156.4	0.75
156.5	16.00	32.51	23.81	156.5	0.65	32.32	23.68	156.5	0.65
156.6	16.00	32.51	23.81	156.6	0.55	32.32	23.68	156.6	0.55
156.7	16.00	32.51	23.81	156.7	0.45	32.32	23.68	156.7	0.45
156.8	16.00	32.51	23.81	156.8	0.35	32.32	23.68	156.8	0.35
156.9	16.00	32.51	23.81	156.9	0.25	32.32	23.68	156.9	0.25
157.0	16.00	32.51	23.81	157.0	0.15	32.32	23.68	157.0	0.15
157.1	16.00	32.51	23.81	157.1	0.05	32.32	23.68	157.1	0.05
157.2	16.00	32.51	23.81	157.2	-0.05	32.32	23.68	157.2	-0.05
157.3	16.00	32.51	23.81	157.3	-0.15	32.32	23.68	157.3	-0.15
157.4	16.00	32.51	23.81	157.4	-0.25	32.32	23.68	157.4	-0.25
157.5	16.00	32.51	23.81	157.5	-0.35	32.32	23.68	157.5	-0.35
157.6	16.00	32.51	23.81	157.6	-0.45	32.32	23.68	157.6	-0.45
157.7	16.00	32.51	23.81	157.7	-0.55	32.32	23.68	157.7	-0.55
157.8	16.00	32.51	23.81	157.8	-0.65	32.32	23.68	157.8	-0.65
157.9	16.00	32.51	23.81	157.9	-0.75	32.32	23.68	157.9	-0.75
158.0	16.00	32.51	23.81	158.0	-0.85	32.32	23.68	158.0	-0.85
158.1	16.00	32.51	23.81	158.1	-0.95	32.32	23.68	158.1	-0.95
158.2	16.00	32.51	23.81	158.2	-1.05	32.32	23.68	158.2	-1.05
158.3	16.00	32.51	23.81	158.3	-1.15	32.32	23.68	158.3	-1.15
158.4	16.00	32.51	23.81	158.4	-1.25	32.32	23.68	158.4	-1.25
158.5	16.00	32.51	23.81	158.5	-1.35	32.32	23.68	158.5	-1.35
158.6	16.00	32.51	23.81	158.6	-1.45	32.32	23.68	158.6	-1.45
158.7	16.00	32.51	23.81	158.7	-1.55	32.32	23.68	158.7	-1.55
158.8	16.00	32.51	23.81	158.8	-1.65	32.32	23.68	158.8	-1.65
158.9	16.00	32.51	23.81	158.9	-1.75	32.32	23.68	158.9	-1.75
159.0	16.00	32.51	23.81	159.0	-1.85	32.32	23.68	159.0	-1.85
159.1	16.00	32.51	23.81	159.1	-1.95	32.32	23.68	159.1	-1.95
159.2	16.00	32.51	23.81	159.2	-2.05	32.32	23.68	159.2	-2.05
159.3	16.00	32.51	23.81	159.3	-2.15	32.32	23.68	159.3	-2.15
159.4	16.00	32.51	23.81	159.4	-2.25	32.32	23.68	159.4	-2.25
159.5	16.00	32.51	23.81	159.5	-2.35	32.32	23.68	159.5	-2.35
159.6	16.00	32.51	23.81	159.6	-2.45	32.32	23.68	159.6	-2.45
159.7	16.00	32.51	23.81	159.7	-2.55	32.32	23.68	159.7	-2.55
159.8	16.00	32.51	23.81	159.8	-2.65	32.32	23.68	159.8	-2.65
159.9	16.00	32.51	23.81	159.9	-2.75	32.32	23.68	159.9	-2.75
160.0	16.00	32.51	23.81	160.0	-2.85	32.32	23.68	160.	





CAST NP-7-OC-107		DATE 17 SEP 73		TIME 1000 GMT		DATE 17 SEP 73		TIME 1305 GMT	
		LAT 46.454N LONG 128.41W		WEATHER 3 SEA STATE 3		LONG 128.44N		WEATHER 1 SEA STATE 3	
		WIND 180.1 KI		VISIBILITY 5		WIND 175.10 KI		VISIBILITY 5	
		CLOUD X AMOUNT 9		DRY 16.0 WET 16.0		CLOUD X AMOUNT 9		DRY 16.8 WET 16.0	
DEPTH (m)	TEMPERATURE (°C)	DEPTH (m)	TEMPERATURE (°C)	DEPTH (m)	TEMPERATURE (°C)	DEPTH (m)	TEMPERATURE (°C)	DEPTH (m)	TEMPERATURE (°C)
0	16.15	0	32.39	0	32.39	0	32.33	0	32.72
5	16.13	5	32.38	5	32.38	5	32.38	5	32.76
10	16.11	10	32.37	10	32.37	10	32.38	10	32.76
15	16.09	15	32.36	15	32.36	15	32.38	15	32.76
20	16.07	20	32.35	20	32.35	20	32.38	20	32.76
25	15.97	25	32.34	25	32.34	25	32.38	25	32.76
30	15.87	30	32.33	30	32.33	30	32.38	30	32.76
35	15.76	35	32.32	35	32.32	35	32.38	35	32.76
40	15.66	40	32.31	40	32.31	40	32.38	40	32.76
45	15.53	45	32.30	45	32.30	45	32.38	45	32.76
50	15.41	50	32.29	50	32.29	50	32.38	50	32.76
55	15.28	55	32.28	55	32.28	55	32.38	55	32.76
60	15.16	60	32.27	60	32.27	60	32.38	60	32.76
65	15.04	65	32.26	65	32.26	65	32.38	65	32.76
70	14.92	70	32.25	70	32.25	70	32.38	70	32.76
75	14.80	75	32.24	75	32.24	75	32.38	75	32.76
80	14.68	80	32.23	80	32.23	80	32.38	80	32.76
85	14.56	85	32.22	85	32.22	85	32.38	85	32.76
90	14.44	90	32.21	90	32.21	90	32.38	90	32.76
95	14.32	95	32.20	95	32.20	95	32.38	95	32.76
100	14.20	100	32.19	100	32.19	100	32.38	100	32.76
105	14.08	105	32.18	105	32.18	105	32.38	105	32.76
110	13.96	110	32.17	110	32.17	110	32.38	110	32.76
115	13.84	115	32.16	115	32.16	115	32.38	115	32.76
120	13.72	120	32.15	120	32.15	120	32.38	120	32.76
125	13.60	125	32.14	125	32.14	125	32.38	125	32.76
130	13.48	130	32.13	130	32.13	130	32.38	130	32.76
135	13.36	135	32.12	135	32.12	135	32.38	135	32.76
140	13.24	140	32.11	140	32.11	140	32.38	140	32.76
145	13.12	145	32.10	145	32.10	145	32.38	145	32.76
150	13.00	150	32.09	150	32.09	150	32.38	150	32.76
155	12.88	155	32.08	155	32.08	155	32.38	155	32.76
160	12.76	160	32.07	160	32.07	160	32.38	160	32.76
165	12.64	165	32.06	165	32.06	165	32.38	165	32.76
170	12.52	170	32.05	170	32.05	170	32.38	170	32.76
175	12.40	175	32.04	175	32.04	175	32.38	175	32.76
180	12.28	180	32.03	180	32.03	180	32.38	180	32.76
185	12.16	185	32.02	185	32.02	185	32.38	185	32.76
190	12.04	190	32.01	190	32.01	190	32.38	190	32.76
195	11.92	195	32.00	195	32.00	195	32.38	195	32.76
200	11.80	200	31.99	200	31.99	200	32.38	200	32.76
205	11.68	205	31.98	205	31.98	205	32.38	205	32.76
210	11.56	210	31.97	210	31.97	210	32.38	210	32.76
215	11.44	215	31.96	215	31.96	215	32.38	215	32.76
220	11.32	220	31.95	220	31.95	220	32.38	220	32.76
225	11.20	225	31.94	225	31.94	225	32.38	225	32.76
230	11.08	230	31.93	230	31.93	230	32.38	230	32.76
235	10.96	235	31.92	235	31.92	235	32.38	235	32.76
240	10.84	240	31.91	240	31.91	240	32.38	240	32.76
245	10.72	245	31.90	245	31.90	245	32.38	245	32.76
250	10.60	250	31.89	250	31.89	250	32.38	250	32.76
255	10.48	255	31.88	255	31.88	255	32.38	255	32.76
260	10.36	260	31.87	260	31.87	260	32.38	260	32.76
265	10.24	265	31.86	265	31.86	265	32.38	265	32.76
270	10.12	270	31.85	270	31.85	270	32.38	270	32.76
275	10.00	275	31.84	275	31.84	275	32.38	275	32.76
280	0.98	280	31.83	280	31.83	280	32.38	280	32.76
285	0.96	285	31.82	285	31.82	285	32.38	285	32.76
290	0.94	290	31.81	290	31.81	290	32.38	290	32.76
295	0.92	295	31.80	295	31.80	295	32.38	295	32.76
300	0.90	300	31.79	300	31.79	300	32.38	300	32.76
305	0.88	305	31.78	305	31.78	305	32.38	305	32.76
310	0.86	310	31.77	310	31.77	310	32.38	310	32.76
315	0.84	315	31.76	315	31.76	315	32.38	315	32.76
320	0.82	320	31.75	320	31.75	320	32.38	320	32.76
325	0.80	325	31.74	325	31.74	325	32.38	325	32.76
330	0.78	330	31.73	330	31.73	330	32.38	330	32.76
335	0.76	335	31.72	335	31.72	335	32.38	335	32.76
340	0.74	340	31.71	340	31.71	340	32.38	340	32.76
345	0.72	345	31.70	345	31.70	345	32.38	345	32.76
350	0.70	350	31.69	350	31.69	350	32.38	350	32.76
355	0.68	355	31.68	355	31.68	355	32.38	355	32.76
360	0.66	360	31.67	360	31.67	360	32.38	360	32.76
365	0.64	365	31.66	365	31.66	365	32.38	365	32.76
370	0.62	370	31.65	370	31.65	370	32.38	370	32.76
375	0.60	375	31.64	375	31.64	375	32.38	375	32.76
380	0.58	380	31.63	380	31.63	380	32.38	380	32.76
385	0.56	385	31.62	385	31.62	385	32.38	385	32.76
390	0.54	390	31.61	390	31.61	390	32.38	390	32.76
395	0.52	395	31.60	395	31.60	395	32.38	395	32.76
400	0.50	400	31.59	400	31.59	400	32.38	400	32.76
405	0.48	405	31.58	405	31.58	405	32.38	405	32.76
410	0.46	410	31.57	410	31.57	410	32.38	410	32.76
415	0.44	415	31.56	415	31.56	415	32.38	415	32.76
420	0.42	420	31.55	420	31.55	420	32.38	420	32.76
425	0.40	425	31.54	425	31.54	425	32.38	425	32.76
430	0.38	430	31.53	430	31.53	430	32.38	430	32.76
435	0.36	435	31.52	435	31.52	435	32.38	435	32.76
440	0.34	440	31.51	440	31.51	440	32.38	440	32.76
445	0.32	445	31.50	445	31.50	445	32.38	445	32.76
450	0.30	450	31.49	450	31.49	450	32.38	450	32.76
455	0.28	455	31.48	455	31.48	455	32.38	455	32.76
460	0.26	460	31.47	460	31.47	460	32.38	460	32.76
465	0.24	465	31.46	465	31.46	465	32.38	465	32.76
470	0.22	470	31.45	470	31.45	470	32.38	470	32.76
475	0.20	475	31.44	475	31.44	475	32.38	475	32.76
480	0.18	480	31.43	480	31.43	480	32.38	480	32.76
485	0.16	485	31.42	485	31.42	485	32.38	485	32.76
490	0.14	490	31.41	490	31.41	490	32.38	490	32.76
495	0.12	495	31.40	495	31.40	495	32.38	495	32.76
500	0.10	500	31.39	500	31.39	500	32.38	500	32.76
505	0.08	505	31.38	505	31.38	505	32.38	505	32.76
510	0.06	510	31.37	510	31.37	510	32.38	510	32.76
515	0.04	515	31.36	515	31.36	515	32.38	515	32.76
520	0.02	520	31.35	520	31.35	520	32.38	520	32.76
525	-0.00	525	31.34	525	31.34	525	32.38	525	3



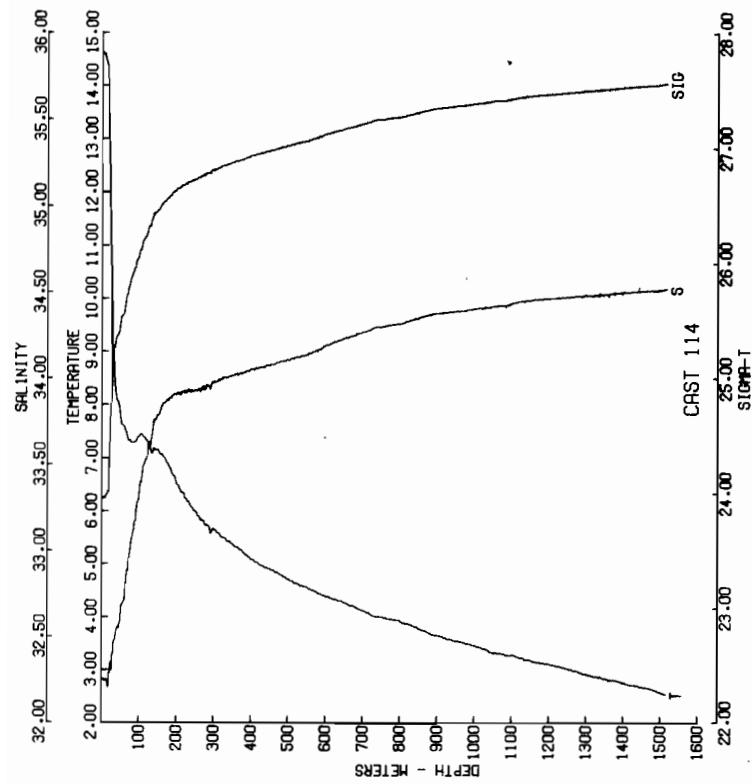
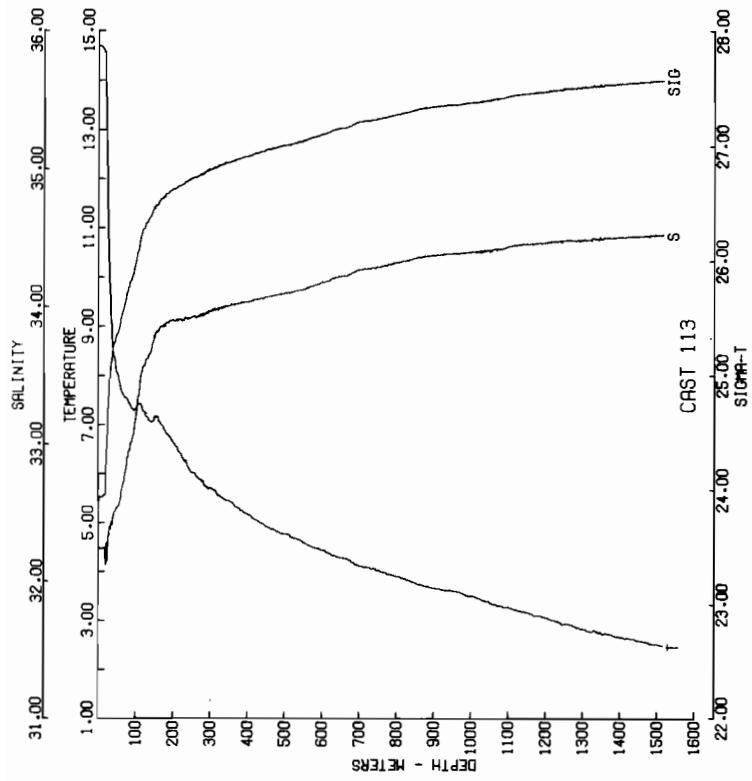


CAST 111 - OC-111 DATE 17 SEP 73 TIME 2256 GWT
LAT 42° 45' N LONG 126° 32' E DEPTH 15.0 M
DEPTH 1600 M DEPTH 15.0 M DEPTH 15.0 M
DEPTH 1600 M DEPTH 15.0 M DEPTH 15.0 M

DEPTH (M)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T	DELTA-T (dyn cm⁻²)
0	14.66	32.03	23.78	0.000
100	14.89	32.07	23.82	0.000
200	14.97	32.14	23.95	0.000
300	14.97	32.24	23.95	0.000
400	13.74	32.23	24.16	0.000
500	12.11	32.21	24.13	0.000
600	10.52	32.21	24.12	0.073
700	9.49	32.21	24.17	0.093
800	9.33	32.22	24.17	0.125
900	8.74	32.24	24.14	0.125
1000	8.19	32.24	24.14	0.125
1100	7.92	32.25	24.13	0.125
1200	7.49	32.25	24.11	0.125
1300	7.14	32.25	24.05	0.125
1400	6.75	32.25	23.99	0.125
1500	6.34	32.25	23.95	0.125
1600	6.02	32.25	23.95	0.125

CAST 112 - OC-112 DATE 18 SEP 73 TIME 0027 GWT
LAT 42° 45' N LONG 126° 32' E DEPTH 15.0 M
DEPTH 1600 M DEPTH 15.0 M DEPTH 15.0 M
DEPTH 1600 M DEPTH 15.0 M DEPTH 15.0 M

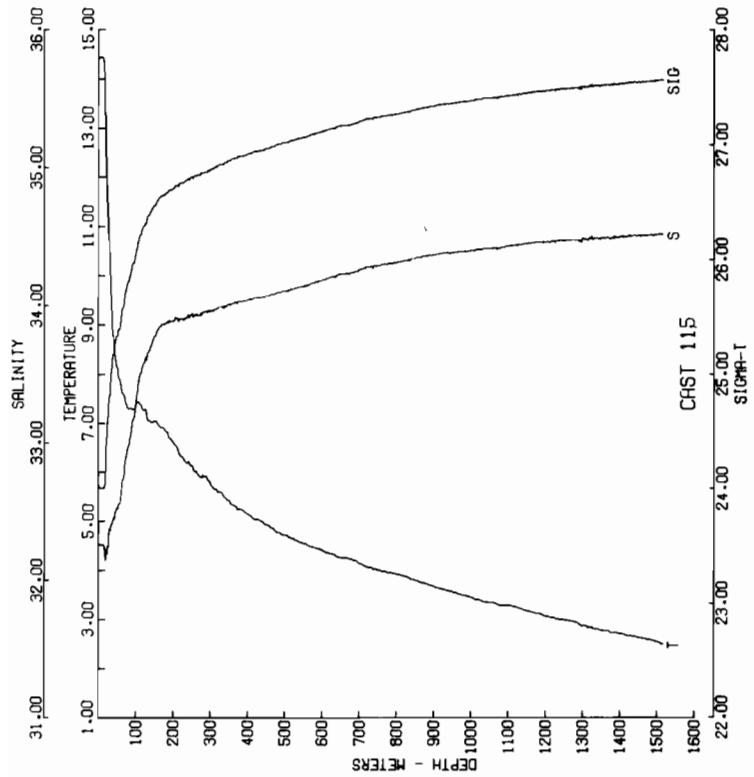
DEPTH (M)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T	DELTA-T (dyn cm⁻²)
0	14.64	32.24	23.95	0.000
100	14.93	32.22	23.95	0.000
200	14.93	32.22	23.95	0.000
300	14.93	32.22	23.95	0.000
400	14.56	32.21	24.07	0.059
500	13.05	32.18	24.13	0.097
600	12.10	32.14	24.14	0.094
700	11.50	32.14	24.14	0.094
800	10.22	32.14	24.16	0.103
900	9.15	32.14	24.16	0.103
1000	8.16	32.14	24.16	0.103
1100	7.74	32.14	24.16	0.103
1200	7.32	32.14	24.16	0.103
1300	6.90	32.14	24.16	0.103
1400	6.48	32.14	24.16	0.103
1500	6.06	32.14	24.16	0.103
1600	5.64	32.14	24.16	0.103



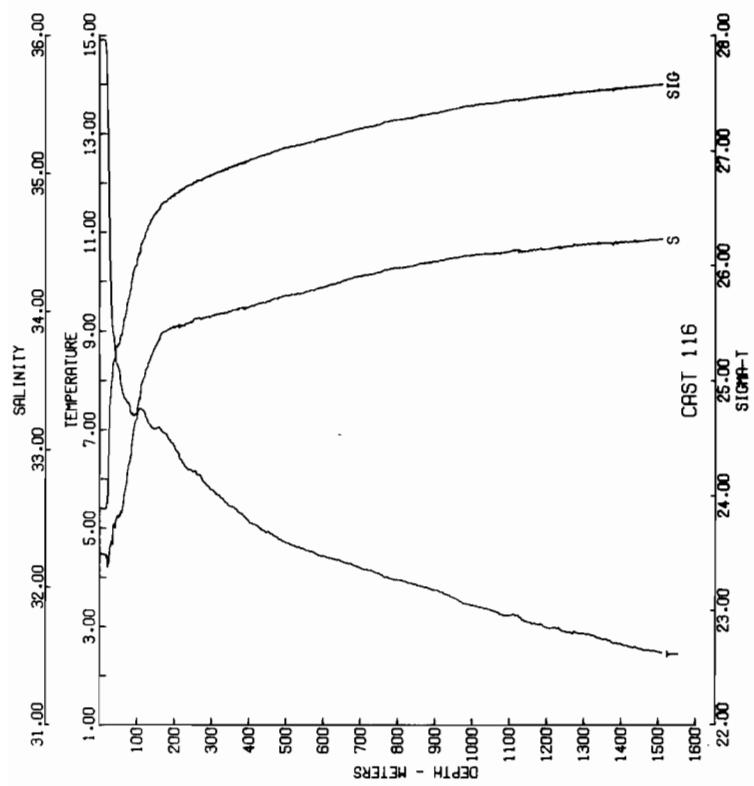
CAST 20-7-GC-113 DATE 18 SEP 73 TIME 0200 GMT
LAT +6°45'N LONG 166°04'W WEATHER 1
BAROMETER 1013 MIND 199 T SEA STATE 3
CLD 0 AMOUNT 5 VISIBILITY 7
DRY 16.0 WET 14.6 DEPTH 2593 M

DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPT)	SIGMA-T (σ₄ₐₙₘ)
0	14.6	32.92	0.000
100	14.6	32.90	0.000
200	14.6	32.84	0.020
300	14.6	32.74	0.040
400	14.6	32.64	0.060
500	14.6	32.54	0.080
600	14.6	32.44	0.093
700	14.6	32.34	0.114
800	14.6	32.24	0.129
900	14.6	32.14	0.143
1000	14.6	32.04	0.157
1100	14.6	31.94	0.170
1200	14.6	31.84	0.187
1300	14.6	31.74	0.202
1400	14.6	31.64	0.217
1500	14.6	31.54	0.232
1600	14.6	31.44	0.247

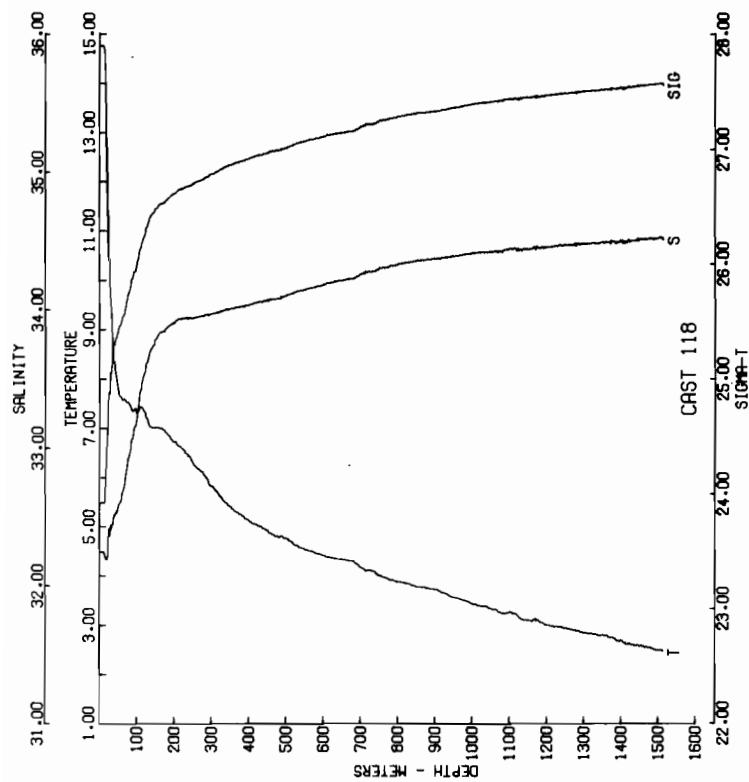
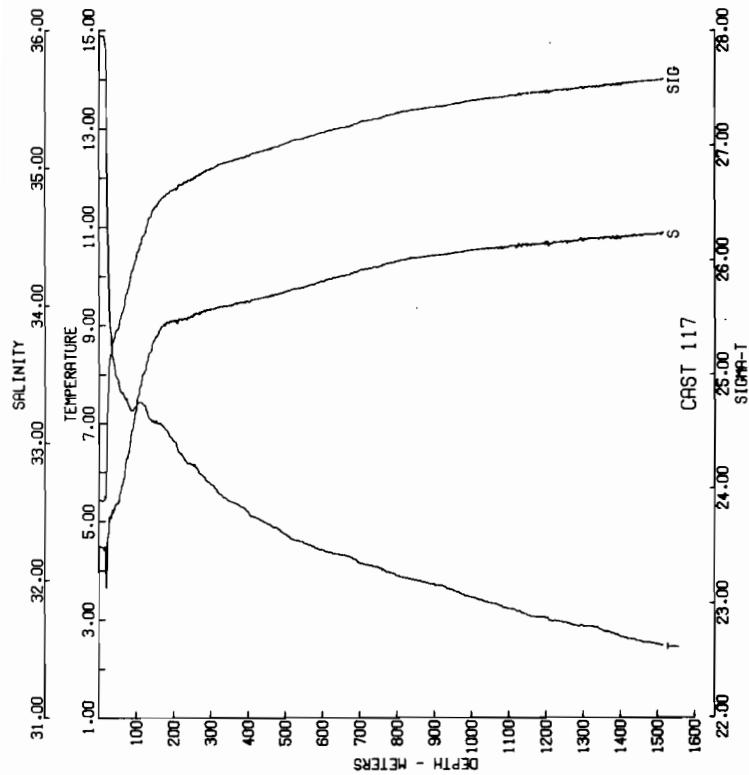
DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPT)	SIGMA-T (σ₄ₐₙₘ)
0	14.6	32.92	0.000
100	14.6	32.90	0.000
200	14.6	32.84	0.020
300	14.6	32.74	0.040
400	14.6	32.64	0.060
500	14.6	32.54	0.080
600	14.6	32.44	0.093
700	14.6	32.34	0.114
800	14.6	32.24	0.129
900	14.6	32.14	0.143
1000	14.6	32.04	0.157
1100	14.6	31.94	0.170
1200	14.6	31.84	0.187
1300	14.6	31.74	0.202
1400	14.6	31.64	0.217
1500	14.6	31.54	0.232
1600	14.6	31.44	0.247



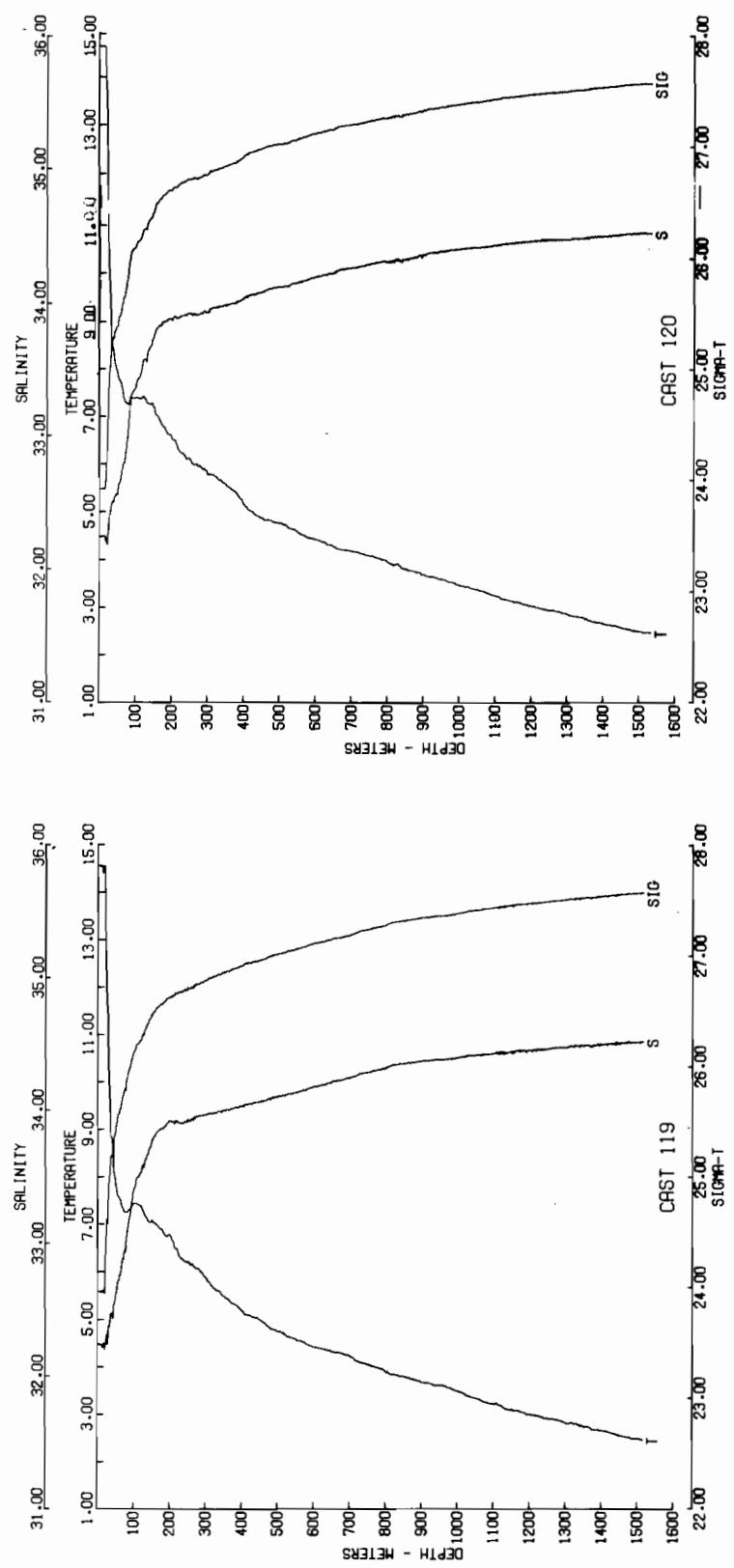
CAST 115 - 10-15 DATE 10 SEP 73 TIME 0501 GMT
LAT 40°44'N LONG 126°14'W DEPTH 15 M
HAZARD 4 WIND 15 KTS
CLD QTY 15.2 VISIBILITY 6
CLOUD AMOUNT 2591 M
SHEAR 14.0
CAST 115 SIGMA-T
DEPTH (M) TEMPERATURE (C) SALINITY (PPT) SIGMA-T (DYN CM)
0 28.0 36.0 25.0
100 27.5 35.5 25.5
200 27.0 35.0 26.0
300 26.5 34.5 26.5
400 26.0 34.0 27.0
500 25.5 33.5 27.5
600 25.0 33.0 28.0
700 24.5 32.5 28.5
800 24.0 32.0 29.0
900 23.5 31.5 29.5
1000 23.0 31.0 30.0
1100 22.5 30.5 30.5
1200 22.0 30.0 31.0
1300 21.5 29.5 31.5
1400 21.0 29.0 32.0
1500 20.5 28.5 32.5
1600 20.0 28.0 33.0



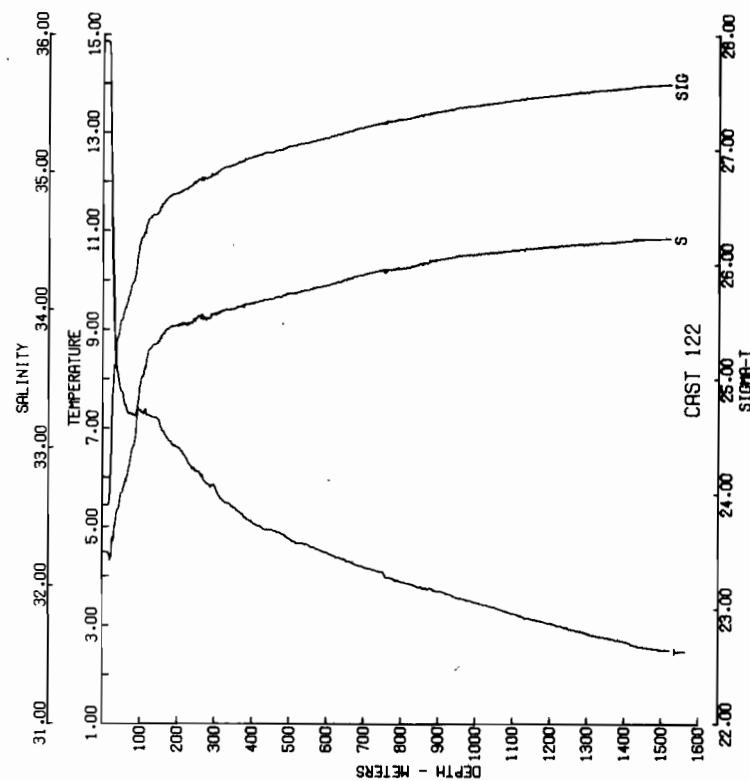
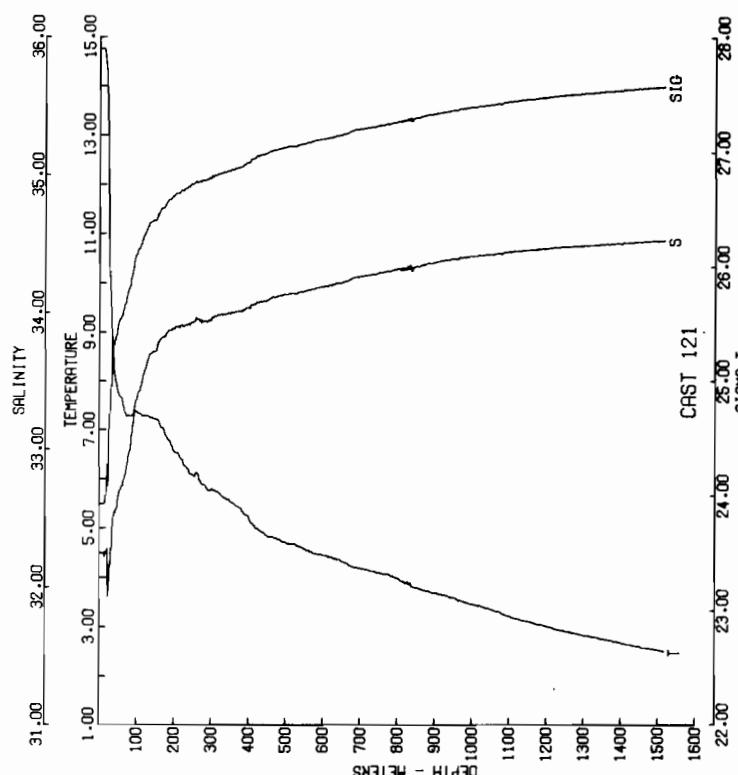
CAST 116 - 10-16 DATE 10 SEP 73 TIME 0501 GMT
LAT 40°44'N LONG 126°15'W DEPTH 15 M
HAZARD 4 WIND 15 KTS
CLD QTY 14.2
CAST 116 SIGMA-T
DEPTH (M) TEMPERATURE (C) SALINITY (PPT) SIGMA-T (DYN CM)
0 28.0 36.0 25.0
100 27.5 35.5 25.5
200 27.0 35.0 26.0
300 26.5 34.5 26.5
400 26.0 34.0 27.0
500 25.5 33.5 27.5
600 25.0 33.0 28.0
700 24.5 32.5 28.5
800 24.0 32.0 29.0
900 23.5 31.5 29.5
1000 23.0 31.0 30.0
1100 22.5 30.5 30.5
1200 22.0 30.0 31.0
1300 21.5 29.5 31.5
1400 21.0 29.0 32.0
1500 20.5 28.5 32.5
1600 20.0 28.0 33.0



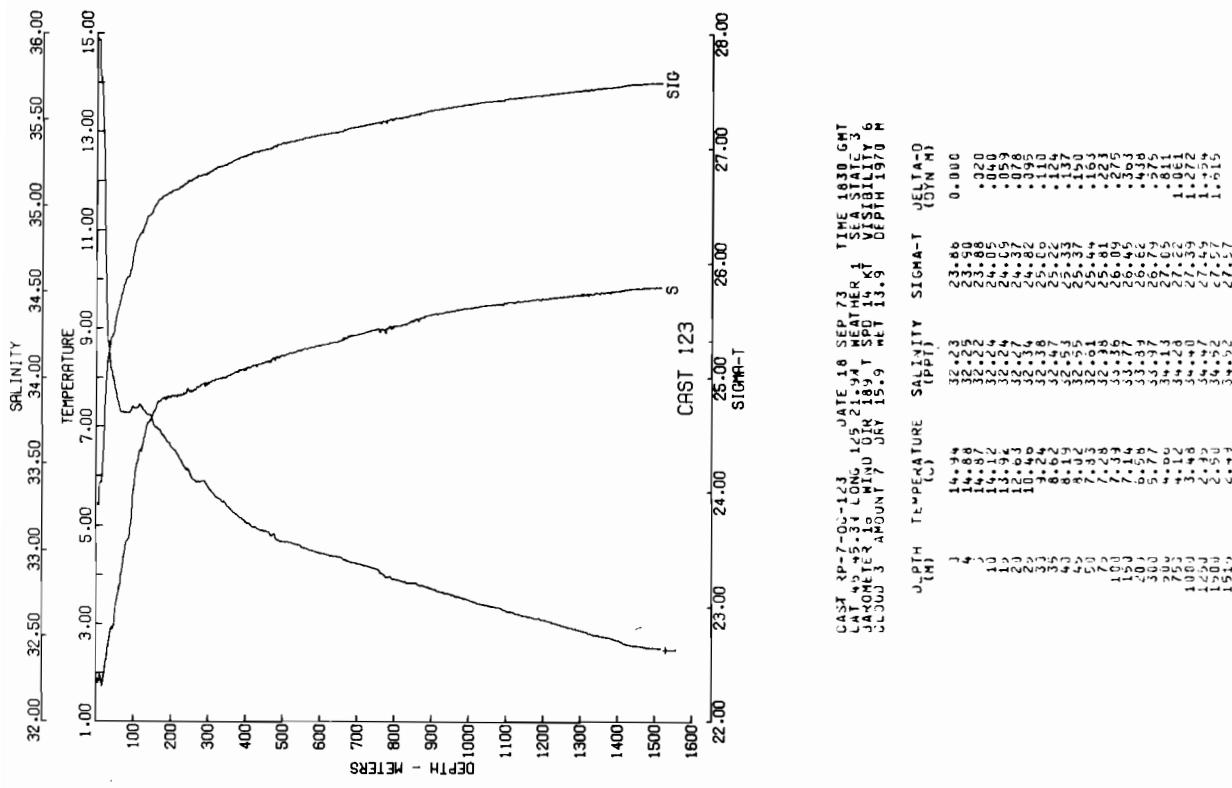
CAST 118			
TIME 0800 GMT	DATE 18 SEP 73	TIME 0800 GMT	DATE 18 SEP 73
LAT 45° 50' N	LONG 125° 50' E	LAT 45° 50' N	LONG 125° 50' E
WATER TEMP 16.4°C	AIR TEMP 15.5°C	WATER TEMP 16.4°C	AIR TEMP 15.5°C
VISIBILITY 6	DEPTH 2583 m	VISIBILITY 6	DEPTH 2583 m
DEPTH 2583 m	CLOUD X AMOUNT 9 DRY	DEPTH 2583 m	CLOUD X AMOUNT 9 DRY
DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T (DIN H)
0	16.68	32.24	31.90
5	14.89	32.24	31.90
10	14.69	32.24	31.89
15	14.89	32.24	31.89
20	13.82	32.23	31.89
25	13.17	31.35	31.90
30	10.35	31.35	31.92
35	6.93	32.45	31.92
40	6.93	32.45	31.92
45	7.30	32.56	31.92
50	7.47	32.56	31.92
55	7.44	32.56	31.92
60	7.44	32.56	31.92
65	7.42	32.56	31.92
70	7.42	32.56	31.92
75	7.42	32.56	31.92
80	7.42	32.56	31.92
85	7.42	32.56	31.92
90	7.42	32.56	31.92
95	7.42	32.56	31.92
100	7.42	32.56	31.92
105	7.42	32.56	31.92
110	7.42	32.56	31.92
115	7.42	32.56	31.92
120	7.42	32.56	31.92
125	7.42	32.56	31.92
130	7.42	32.56	31.92
135	7.42	32.56	31.92
140	7.42	32.56	31.92
145	7.42	32.56	31.92
150	7.42	32.56	31.92
155	7.42	32.56	31.92
160	7.42	32.56	31.92

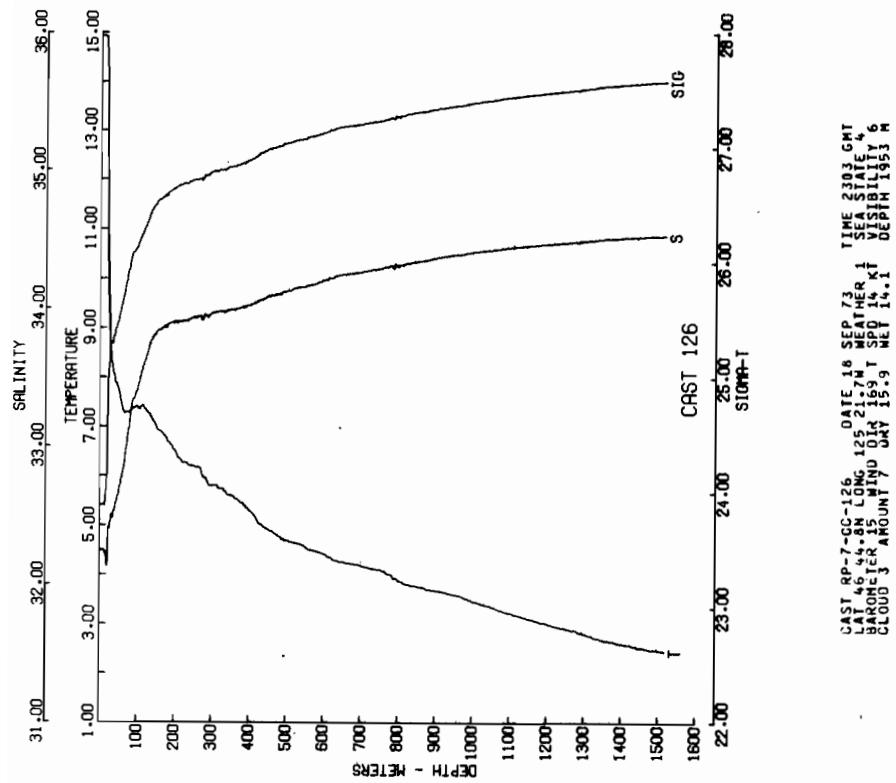
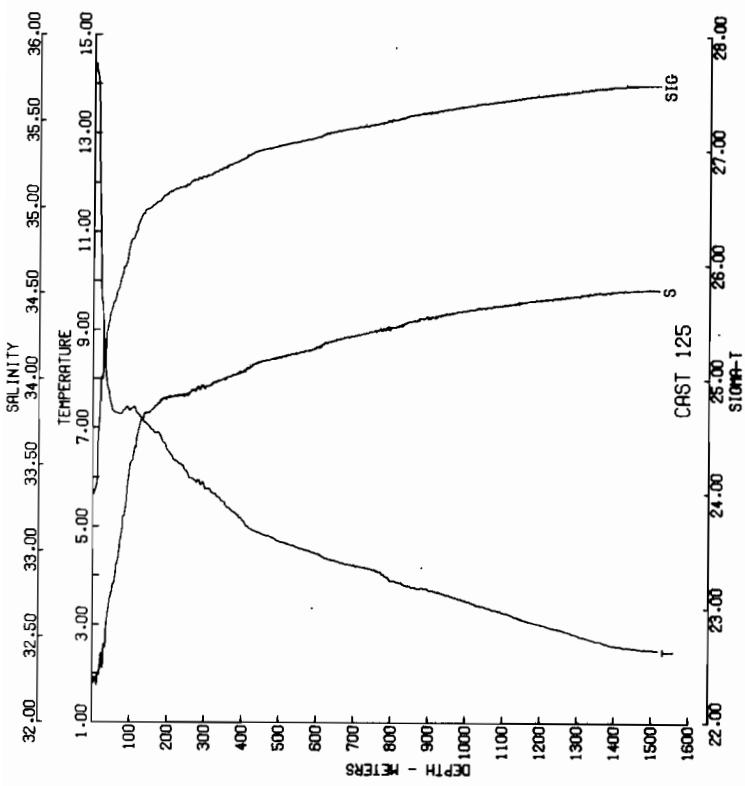


CAST 2P-7-00-119		DATE 10 SEP 73		TIME 1103 GMT		CAST 18 SEP 73		TIME 1442 GMT	
LAT 40° 5' N LONG 125° 59' W		WATER TEMP 15.4°C		SEA STATE 1		LONG 162° 21' E		WATER TEMP 14.8°C	
CLOUDS 10% HUMIDITY 100%		WATER DEPTH 15.3 M		VISIBILITY 3.5 KM		WATER DEPTH 15.0 M		VISIBILITY 1.6 KM	
DEPTH (m)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T (dyn/cm²)	DEPTH (m)	TEMPERATURE (°C)	SALINITY (ppt)	SIGMA-T (dyn/cm²)	DEPTH (m)	TEMPERATURE (°C)
0	14.39	32.20	23.95	0	14.78	32.24	23.92	0	14.00
12	14.37	32.24	23.96	3	14.79	32.24	23.92	3	14.02
15	14.34	32.22	23.96	5	14.78	32.24	23.92	5	14.04
22	14.35	32.22	23.96	10	14.77	32.24	23.92	10	14.06
23	14.30	32.25	24.05	12	14.76	32.24	23.92	12	14.08
23	10.60	32.27	24.07	14	14.75	32.24	23.92	14	14.10
33	9.49	32.42	24.08	22	14.74	32.24	23.92	22	14.12
33	8.80	32.46	24.10	25	14.73	32.24	23.92	25	14.14
42	8.62	32.52	24.13	30	14.72	32.24	23.92	30	14.16
42	7.34	32.54	24.14	42	14.71	32.24	23.92	42	14.18
72	7.34	32.54	24.14	53	14.70	32.24	23.92	53	14.20
102	7.16	32.57	24.15	60	14.69	32.24	23.92	60	14.22
102	7.16	32.57	24.15	72	14.68	32.24	23.92	72	14.24
202	6.50	33.37	24.66	100	14.67	32.24	23.92	100	14.26
202	5.48	33.37	24.67	120	14.66	32.24	23.92	120	14.28
202	4.74	34.10	24.82	150	14.65	32.24	23.92	150	14.30
202	4.74	34.10	24.82	180	14.64	32.24	23.92	180	14.32
102	3.43	34.49	24.84	210	14.63	32.24	23.92	210	14.34
102	2.41	34.49	24.84	240	14.62	32.24	23.92	240	14.36
102	2.41	34.49	24.84	270	14.61	32.24	23.92	270	14.38
102	2.41	34.49	24.84	300	14.60	32.24	23.92	300	14.40
1212	2.41	34.49	24.84	330	14.59	32.24	23.92	330	14.42

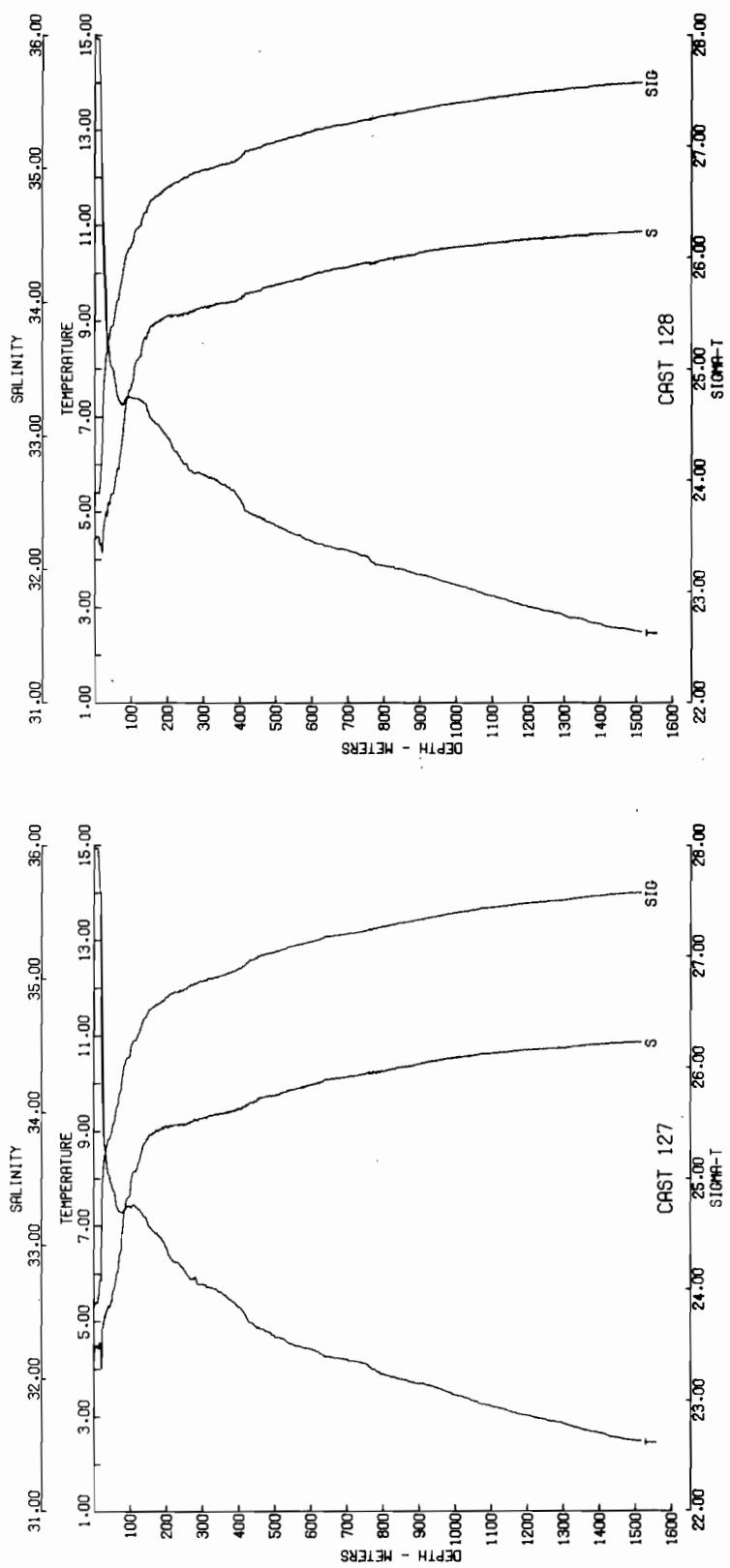


DEPTH (m)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T (DYN/H)	SIGMA-T (PPM)	DEPTHS (m)
100	14.87	31.000	0	32.25	23.90
150	14.80	31.022	4	32.24	23.90
200	14.73	31.045	5	32.24	23.90
250	14.66	31.068	10	32.24	23.90
300	14.59	31.091	15	32.24	23.90
350	14.52	31.114	20	32.24	23.90
400	14.45	31.137	25	32.24	23.90
450	14.38	31.160	30	32.24	23.90
500	14.31	31.183	35	32.24	23.90
550	14.24	31.206	40	32.24	23.90
600	14.17	31.229	45	32.24	23.90
650	14.10	31.252	50	32.24	23.90
700	13.93	31.275	55	32.24	23.90
750	13.76	31.298	60	32.24	23.90
800	13.59	31.321	65	32.24	23.90
850	13.42	31.344	70	32.24	23.90
900	13.25	31.367	75	32.24	23.90
950	13.08	31.390	80	32.24	23.90
1000	12.91	31.413	85	32.24	23.90
1050	12.74	31.436	90	32.24	23.90
1100	12.57	31.459	95	32.24	23.90
1150	12.40	31.482	100	32.24	23.90
1200	12.23	31.505	105	32.24	23.90
1250	12.06	31.528	110	32.24	23.90
1300	11.89	31.551	115	32.24	23.90
1350	11.72	31.574	120	32.24	23.90
1400	11.55	31.597	125	32.24	23.90
1450	11.38	31.620	130	32.24	23.90
1500	11.21	31.643	135	32.24	23.90
1550	11.04	31.666	140	32.24	23.90
1600	10.87	31.689	145	32.24	23.90

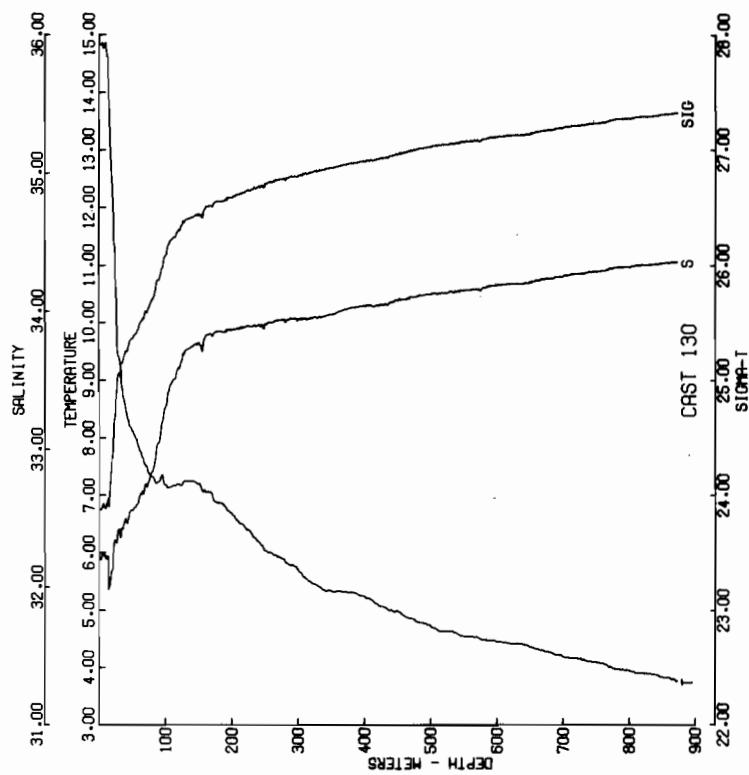
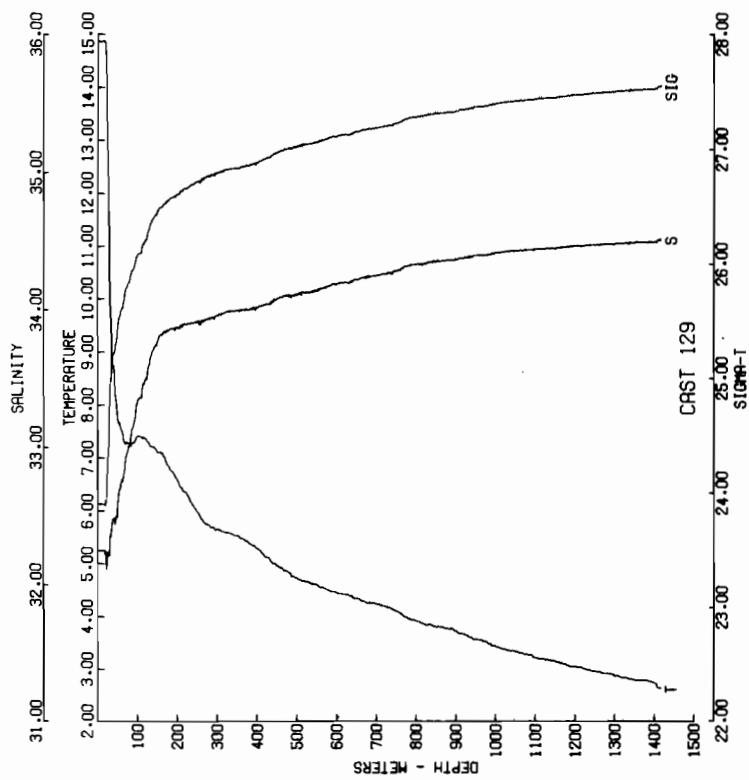




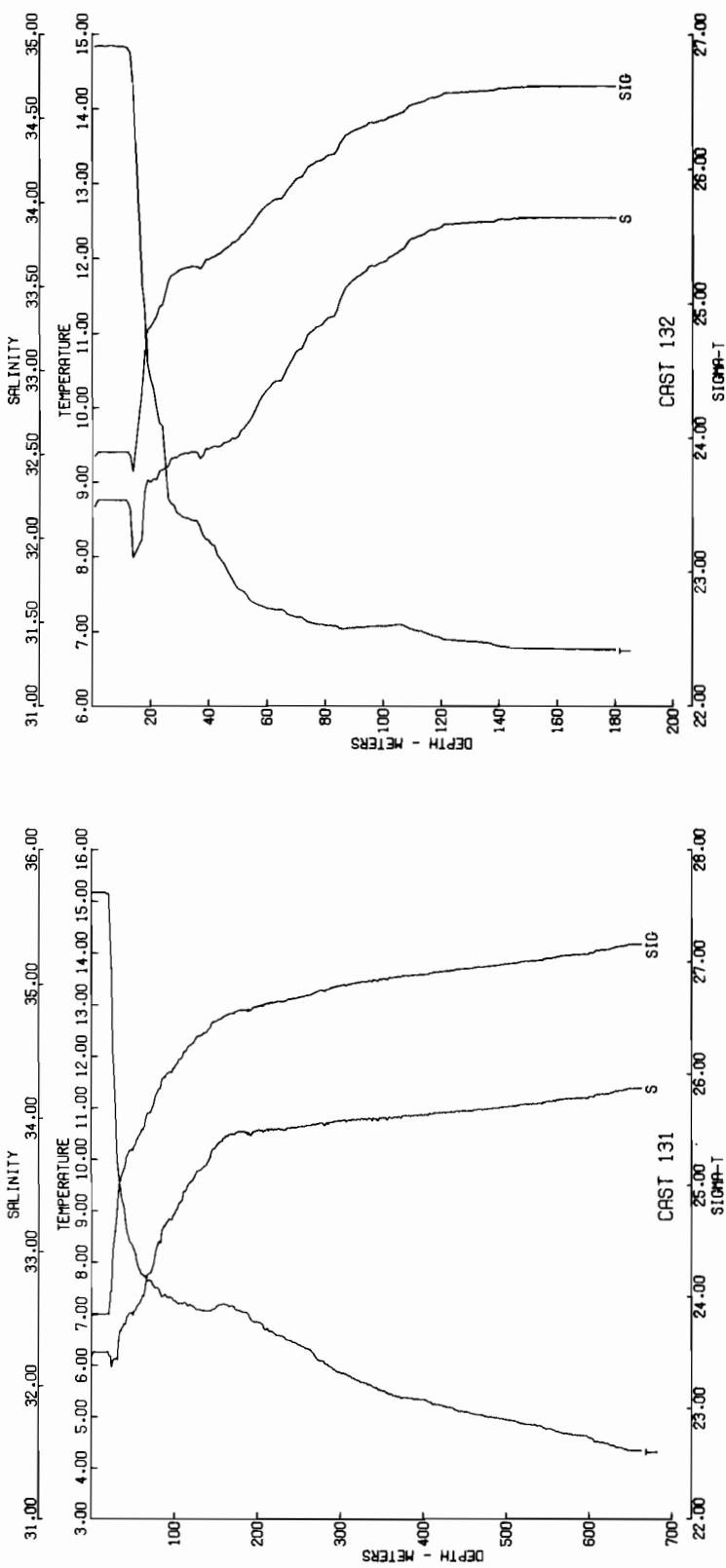
DEPTH [M]	TEMPERATURE [°C]	SALINITY [PPM]	SIGMA-T	DELTAP-0	
				JAE	JAE
CAST 1	18.7	32.4	23.96	0.000	0.000
CAST 2	15.5	32.3	24.00	-0.039	-0.039
CAST 3	15.5	32.2	24.04	-0.058	-0.058
CAST 4	15.5	32.2	24.04	-0.075	-0.075
CAST 5	15.5	32.2	24.04	-0.093	-0.093
CAST 6	15.5	32.2	24.04	-0.111	-0.111
CAST 7	15.5	32.2	24.05	-0.129	-0.129
CAST 8	15.5	32.2	24.05	-0.147	-0.147
CAST 9	15.5	32.2	24.05	-0.165	-0.165
CAST 10	15.5	32.2	24.05	-0.183	-0.183
CAST 11	15.5	32.2	24.05	-0.201	-0.201
CAST 12	15.5	32.2	24.05	-0.219	-0.219
CAST 13	15.5	32.2	24.05	-0.237	-0.237
CAST 14	15.5	32.2	24.05	-0.255	-0.255
CAST 15	15.5	32.2	24.05	-0.273	-0.273
CAST 16	15.5	32.2	24.05	-0.291	-0.291
CAST 17	15.5	32.2	24.05	-0.309	-0.309
CAST 18	15.5	32.2	24.05	-0.327	-0.327
CAST 19	15.5	32.2	24.05	-0.345	-0.345
CAST 20	15.5	32.2	24.05	-0.363	-0.363
CAST 21	15.5	32.2	24.05	-0.381	-0.381
CAST 22	15.5	32.2	24.05	-0.399	-0.399
CAST 23	15.5	32.2	24.05	-0.417	-0.417
CAST 24	15.5	32.2	24.05	-0.435	-0.435
CAST 25	15.5	32.2	24.05	-0.453	-0.453
CAST 26	15.5	32.2	24.05	-0.471	-0.471
CAST 27	15.5	32.2	24.05	-0.489	-0.489
CAST 28	15.5	32.2	24.05	-0.507	-0.507
CAST 29	15.5	32.2	24.05	-0.525	-0.525
CAST 30	15.5	32.2	24.05	-0.543	-0.543
CAST 31	15.5	32.2	24.05	-0.561	-0.561
CAST 32	15.5	32.2	24.05	-0.579	-0.579
CAST 33	15.5	32.2	24.05	-0.597	-0.597
CAST 34	15.5	32.2	24.05	-0.615	-0.615
CAST 35	15.5	32.2	24.05	-0.633	-0.633
CAST 36	15.5	32.2	24.05	-0.651	-0.651
CAST 37	15.5	32.2	24.05	-0.669	-0.669
CAST 38	15.5	32.2	24.05	-0.687	-0.687
CAST 39	15.5	32.2	24.05	-0.705	-0.705
CAST 40	15.5	32.2	24.05	-0.723	-0.723
CAST 41	15.5	32.2	24.05	-0.741	-0.741
CAST 42	15.5	32.2	24.05	-0.759	-0.759
CAST 43	15.5	32.2	24.05	-0.777	-0.777
CAST 44	15.5	32.2	24.05	-0.795	-0.795
CAST 45	15.5	32.2	24.05	-0.813	-0.813
CAST 46	15.5	32.2	24.05	-0.831	-0.831
CAST 47	15.5	32.2	24.05	-0.849	-0.849
CAST 48	15.5	32.2	24.05	-0.867	-0.867
CAST 49	15.5	32.2	24.05	-0.885	-0.885
CAST 50	15.5	32.2	24.05	-0.903	-0.903
CAST 51	15.5	32.2	24.05	-0.921	-0.921
CAST 52	15.5	32.2	24.05	-0.939	-0.939
CAST 53	15.5	32.2	24.05	-0.957	-0.957
CAST 54	15.5	32.2	24.05	-0.975	-0.975
CAST 55	15.5	32.2	24.05	-0.993	-0.993
CAST 56	15.5	32.2	24.05	-0.101	-0.101
CAST 57	15.5	32.2	24.05	-0.119	-0.119
CAST 58	15.5	32.2	24.05	-0.137	-0.137
CAST 59	15.5	32.2	24.05	-0.155	-0.155
CAST 60	15.5	32.2	24.05	-0.173	-0.173
CAST 61	15.5	32.2	24.05	-0.191	-0.191
CAST 62	15.5	32.2	24.05	-0.209	-0.209
CAST 63	15.5	32.2	24.05	-0.227	-0.227
CAST 64	15.5	32.2	24.05	-0.245	-0.245
CAST 65	15.5	32.2	24.05	-0.263	-0.263
CAST 66	15.5	32.2	24.05	-0.281	-0.281
CAST 67	15.5	32.2	24.05	-0.299	-0.299
CAST 68	15.5	32.2	24.05	-0.317	-0.317
CAST 69	15.5	32.2	24.05	-0.335	-0.335
CAST 70	15.5	32.2	24.05	-0.353	-0.353
CAST 71	15.5	32.2	24.05	-0.371	-0.371
CAST 72	15.5	32.2	24.05	-0.389	-0.389
CAST 73	15.5	32.2	24.05	-0.407	-0.407
CAST 74	15.5	32.2	24.05	-0.425	-0.425
CAST 75	15.5	32.2	24.05	-0.443	-0.443
CAST 76	15.5	32.2	24.05	-0.461	-0.461
CAST 77	15.5	32.2	24.05	-0.479	-0.479
CAST 78	15.5	32.2	24.05	-0.497	-0.497
CAST 79	15.5	32.2	24.05	-0.515	-0.515
CAST 80	15.5	32.2	24.05	-0.533	-0.533
CAST 81	15.5	32.2	24.05	-0.551	-0.551
CAST 82	15.5	32.2	24.05	-0.569	-0.569
CAST 83	15.5	32.2	24.05	-0.587	-0.587
CAST 84	15.5	32.2	24.05	-0.605	-0.605
CAST 85	15.5	32.2	24.05	-0.623	-0.623
CAST 86	15.5	32.2	24.05	-0.641	-0.641
CAST 87	15.5	32.2	24.05	-0.659	-0.659
CAST 88	15.5	32.2	24.05	-0.677	-0.677
CAST 89	15.5	32.2	24.05	-0.695	-0.695
CAST 90	15.5	32.2	24.05	-0.713	-0.713
CAST 91	15.5	32.2	24.05	-0.731	-0.731
CAST 92	15.5	32.2	24.05	-0.749	-0.749
CAST 93	15.5	32.2	24.05	-0.767	-0.767
CAST 94	15.5	32.2	24.05	-0.785	-0.785
CAST 95	15.5	32.2	24.05	-0.803	-0.803
CAST 96	15.5	32.2	24.05	-0.821	-0.821
CAST 97	15.5	32.2	24.05	-0.839	-0.839
CAST 98	15.5	32.2	24.05	-0.857	-0.857
CAST 99	15.5	32.2	24.05	-0.875	-0.875
CAST 100	15.5	32.2	24.05	-0.893	-0.893
CAST 101	15.5	32.2	24.05	-0.911	-0.911
CAST 102	15.5	32.2	24.05	-0.929	-0.929
CAST 103	15.5	32.2	24.05	-0.947	-0.947
CAST 104	15.5	32.2	24.05	-0.965	-0.965
CAST 105	15.5	32.2	24.05	-0.983	-0.983
CAST 106	15.5	32.2	24.05	-0.101	-0.101
CAST 107	15.5	32.2	24.05	-0.119	-0.119
CAST 108	15.5	32.2	24.05	-0.137	-0.137
CAST 109	15.5	32.2	24.05	-0.155	-0.155
CAST 110	15.5	32.2	24.05	-0.173	-0.173
CAST 111	15.5	32.2	24.05	-0.191	-0.191
CAST 112	15.5	32.2	24.05	-0.209	-0.209
CAST 113	15.5	32.2	24.05	-0.227	-0.227
CAST 114	15.5	32.2	24.05	-0.245	-0.245
CAST 115	15.5	32.2	24.05	-0.263	-0.263
CAST 116	15.5	32.2	24.05	-0.281	-0.281
CAST 117	15.5	32.2	24.05	-0.299	-0.299
CAST 118	15.5	32.2	24.05	-0.317	-0.317
CAST 119	15.5	32.2	24.05	-0.335	-0.335
CAST 120	15.5	32.2	24.05	-0.353	-0.353
CAST 121	15.5	32.2	24.05	-0.371	-0.371
CAST 122	15.5	32.2	24.05	-0.389	-0.389
CAST 123	15.5	32.2	24.05	-0.407	-0.407
CAST 124	15.5	32.2	24.05	-0.425	-0.425
CAST 125	15.5	32.2	24.05	-0.443	-0.443
CAST 126	15.5	32.2	24.05	-0.461	-0.461
CAST 127	15.5	32.2	24.05	-0.479	-0.479
CAST 128	15.5	32.2	24.05	-0.497	-0.497
CAST 129	15.5	32.2	24.05	-0.515	-0.515
CAST 130	15.5	32.2	24.05	-0.533	-0.533
CAST 131	15.5	32.2	24.05	-0.551	-0.551
CAST 132	15.5	32.2	24.05	-0.569	-0.569
CAST 133	15.5	32.2	24.05	-0.587	-0.587
CAST 134	15.5	32.2	24.05	-0.605	-0.605
CAST 135	15.5	32.2	24.05	-0.623	-0.623
CAST 136	15.5	32.2	24.05	-0.641	-0.641
CAST 137	15.5	32.2	24.05	-0.659	-0.659
CAST 138	15.5	32.2	24.05	-0.677	-0.677
CAST 139	15.5	32.2	24.05	-0.695	-0.695
CAST 140	15.5	32.2	24.05	-0.713	-0.713
CAST 141	15.5	32.2	24.05	-0.731	-0.731
CAST 142	15.5	32.2	24.05	-0.749	-0.749
CAST 143	15.5	32.2	24.05	-0.767	-0.767
CAST 144	15.5	32.2	24.05	-0.785	-0.785
CAST 145	15.5	32.2	24.05	-0.803	-0.803
CAST 146	15.5	32.2	24.05	-0.821	-0.821
CAST 147	15.5	32.2	24.05	-0.839	-0.839
CAST 148	15.5	32.2	24.05	-0.857	-0.857
CAST 149	15.5	32.2	24.05	-0.875	-0.875
CAST 150	15.5	32.2	24.05	-0.893	-0.893
CAST 151	15.5	32.2	24.05	-0.911	-0.911
CAST 152	15.5	32.2	24.05	-0.929	-0.929
CAST 153	15.5	32.2	24.05	-0.947	-0.947
CAST 154	15.5	32.2	24.05	-0.965	-0.965
CAST 155	15.5	32.2	24.05	-0.983	-0.983
CAST 156	15.5	32.2	24.05	-0.101	-0.101
CAST 157	15.5	32.2	24.05	-0.119	-0.119
CAST 158	15.5	32.2	24.05	-0.137	-0.137
CAST 159	15.5	32.2	24.05	-0.155	-0.155
CAST 160	15.5	32.2	24.05	-0.173	-0.173
CAST 161	15.5	32.2	24.05	-0.191	-0.191
CAST 162	15.5	32.2	24.05	-0.209	-0.209
CAST 163	15.5	32.2	24.05	-0.227	-0.227
CAST 164	15.5	32.2	24.05	-0.245	-0.245
CAST 165	15.5	32.2	24.05	-0.263	-0.263
CAST 166	15.5	32.2	24.05	-0.281	-0.281
CAST 167	15.5	32.2	24.05	-0.299	-0.299
CAST 168	15.5	32.2	24.05	-0.317	-0.317
CAST 169	15.5	32.2	24.05	-0.335	-0.335
CAST 170	15.5	32.2	24.05	-0.353	-0.353
CAST 171	15.5	32.2	24.05	-0.371	-0.371
CAST 172	15.5	32.2	24.05	-0.389	-0.389
CAST 173	15.5	32.2	24.05	-0.407	-0.407
CAST 174	15.5	32.2	24.05	-0.425	-0.425
CAST 175	15.5	32.2	24.05	-0.443	-0.443
CAST 176	15.5	32.2	24.05	-0.461	-0.461
CAST 177	15.5	32.2	24.05	-0.479	-0.479
CAST 178	15.5	32.2	24.05	-0.497	-0.497
CAST 179	15.5	32.2	24.05	-0.515	-0.515
CAST 180	15.5	32.2	24.05	-0.533	-0.533
CAST 181	15.5	32.2	24.05	-0.551	-0.551
CAST 182	15.5	32.2	24.05	-0.569	-0.569
CAST 183	15.5	32.2	24.05	-0.587	-0.587
CAST 184	15.5	32.2	24.05	-0.605	-0.605
CAST 185	15.5	32.2	24.05	-0.623	-0.623
CAST 186	15.5	32.2	24.05	-0.641	-0.641
CAST 187	15.5	32.2	24.05	-0.659	-0.659
CAST 188	15.5	32.2	24.05	-0.677	-0.677
CAST 189	15.5	32.2	24.05	-0.695	-0.695
CAST 190	15.5	32.2	24.05	-0.713	-0.713
CAST 191	15.5	32.2	24.05	-0.731	-0.731
CAST 192	15.5	32.2	24.05	-0.749	-0.749
CAST 193	15.5	32.2	24.05	-0.767	-0.767
CAST 194	15.5	32.2	24.05	-0.785	



DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	CLOUD X AMOUNT	WIND DIRECTION	WIND FORCE	WEATHER	VISIBILITY KM	DATE	TIME	STATE	CAST
								0	15	30	165
0	14.4	32.2	22	145	1	WEATHER 1	10.0	1978-07-26	07:30	SEA STATE 4	KP7-001
15	14.9	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	07:45	SEA STATE 4	KP7-002
30	14.5	32.8	26	145	1	WEATHER 1	10.0	1978-07-26	07:50	SEA STATE 4	KP7-003
45	14.2	32.2	24	145	1	WEATHER 1	10.0	1978-07-26	08:05	SEA STATE 4	KP7-004
60	14.0	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	08:20	SEA STATE 4	KP7-005
75	13.9	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	08:35	SEA STATE 4	KP7-006
90	13.8	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	08:50	SEA STATE 4	KP7-007
105	13.7	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	09:05	SEA STATE 4	KP7-008
120	13.6	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	09:20	SEA STATE 4	KP7-009
135	13.5	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	09:35	SEA STATE 4	KP7-010
150	13.4	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	09:50	SEA STATE 4	KP7-011
165	13.3	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	10:05	SEA STATE 4	KP7-012
0	14.3	32.2	22	145	1	WEATHER 1	10.0	1978-07-26	10:20	SEA STATE 4	KP7-013
15	14.8	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	10:35	SEA STATE 4	KP7-014
30	14.4	32.8	26	145	1	WEATHER 1	10.0	1978-07-26	10:50	SEA STATE 4	KP7-015
45	14.1	32.2	24	145	1	WEATHER 1	10.0	1978-07-26	11:05	SEA STATE 4	KP7-016
60	14.0	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	11:20	SEA STATE 4	KP7-017
75	13.9	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	11:35	SEA STATE 4	KP7-018
90	13.8	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	11:50	SEA STATE 4	KP7-019
105	13.7	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	12:05	SEA STATE 4	KP7-020
120	13.6	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	12:20	SEA STATE 4	KP7-021
135	13.5	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	12:35	SEA STATE 4	KP7-022
150	13.4	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	12:50	SEA STATE 4	KP7-023
165	13.3	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	13:05	SEA STATE 4	KP7-024
0	14.2	32.2	22	145	1	WEATHER 1	10.0	1978-07-26	13:20	SEA STATE 4	KP7-025
15	14.7	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	13:35	SEA STATE 4	KP7-026
30	14.3	32.8	26	145	1	WEATHER 1	10.0	1978-07-26	13:50	SEA STATE 4	KP7-027
45	14.0	32.2	24	145	1	WEATHER 1	10.0	1978-07-26	14:05	SEA STATE 4	KP7-028
60	13.9	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	14:20	SEA STATE 4	KP7-029
75	13.8	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	14:35	SEA STATE 4	KP7-030
90	13.7	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	14:50	SEA STATE 4	KP7-031
105	13.6	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	15:05	SEA STATE 4	KP7-032
120	13.5	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	15:20	SEA STATE 4	KP7-033
135	13.4	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	15:35	SEA STATE 4	KP7-034
150	13.3	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	15:50	SEA STATE 4	KP7-035
165	13.2	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	16:05	SEA STATE 4	KP7-036
0	14.1	32.2	22	145	1	WEATHER 1	10.0	1978-07-26	16:20	SEA STATE 4	KP7-037
15	14.6	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	16:35	SEA STATE 4	KP7-038
30	14.2	32.8	26	145	1	WEATHER 1	10.0	1978-07-26	16:50	SEA STATE 4	KP7-039
45	13.9	32.2	24	145	1	WEATHER 1	10.0	1978-07-26	17:05	SEA STATE 4	KP7-040
60	13.8	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	17:20	SEA STATE 4	KP7-041
75	13.7	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	17:35	SEA STATE 4	KP7-042
90	13.6	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	17:50	SEA STATE 4	KP7-043
105	13.5	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	18:05	SEA STATE 4	KP7-044
120	13.4	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	18:20	SEA STATE 4	KP7-045
135	13.3	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	18:35	SEA STATE 4	KP7-046
150	13.2	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	18:50	SEA STATE 4	KP7-047
165	13.1	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	19:05	SEA STATE 4	KP7-048
0	14.0	32.2	22	145	1	WEATHER 1	10.0	1978-07-26	19:20	SEA STATE 4	KP7-049
15	14.5	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	19:35	SEA STATE 4	KP7-050
30	14.1	32.8	26	145	1	WEATHER 1	10.0	1978-07-26	19:50	SEA STATE 4	KP7-051
45	13.8	32.2	24	145	1	WEATHER 1	10.0	1978-07-26	20:05	SEA STATE 4	KP7-052
60	13.7	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	20:20	SEA STATE 4	KP7-053
75	13.6	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	20:35	SEA STATE 4	KP7-054
90	13.5	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	20:50	SEA STATE 4	KP7-055
105	13.4	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	21:05	SEA STATE 4	KP7-056
120	13.3	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	21:20	SEA STATE 4	KP7-057
135	13.2	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	21:35	SEA STATE 4	KP7-058
150	13.1	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	21:50	SEA STATE 4	KP7-059
165	13.0	32.4	24	145	1	WEATHER 1	10.0	1978-07-26	22:05	SEA STATE 4	KP7-060

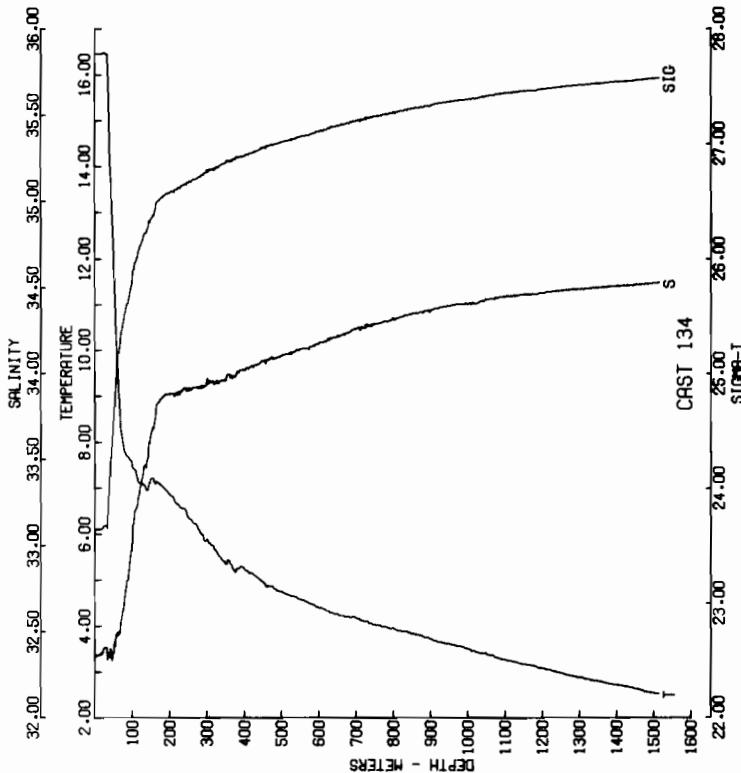
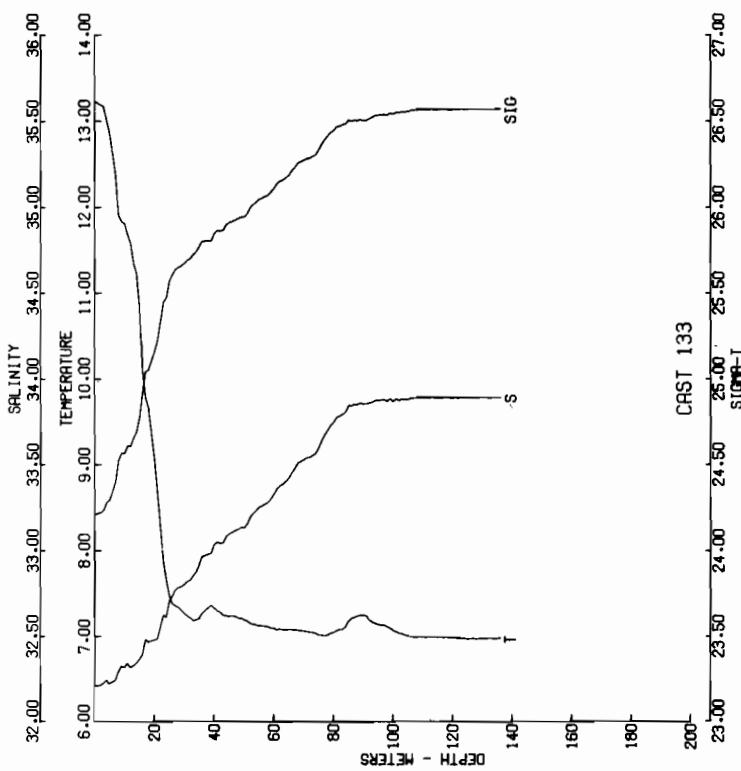


DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T (DYN CM)	DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T (DYN CM)
100	34.0	33.00	32.00	100	34.0	33.00	32.00
200	33.5	33.00	32.00	200	33.5	33.00	32.00
300	33.0	33.00	32.00	300	33.0	33.00	32.00
400	32.5	33.00	32.00	400	32.5	33.00	32.00
500	32.0	33.00	32.00	500	32.0	33.00	32.00
600	31.8	33.00	32.00	600	31.8	33.00	32.00
700	31.6	33.00	32.00	700	31.6	33.00	32.00
800	31.4	33.00	32.00	800	31.4	33.00	32.00
900	31.2	33.00	32.00	900	31.2	33.00	32.00
1000	31.0	33.00	32.00	1000	31.0	33.00	32.00
1100	30.8	33.00	32.00	1100	30.8	33.00	32.00
1200	30.6	33.00	32.00	1200	30.6	33.00	32.00
1300	30.4	33.00	32.00	1300	30.4	33.00	32.00
1400	30.2	33.00	32.00	1400	30.2	33.00	32.00
1500	30.0	33.00	32.00	1500	30.0	33.00	32.00



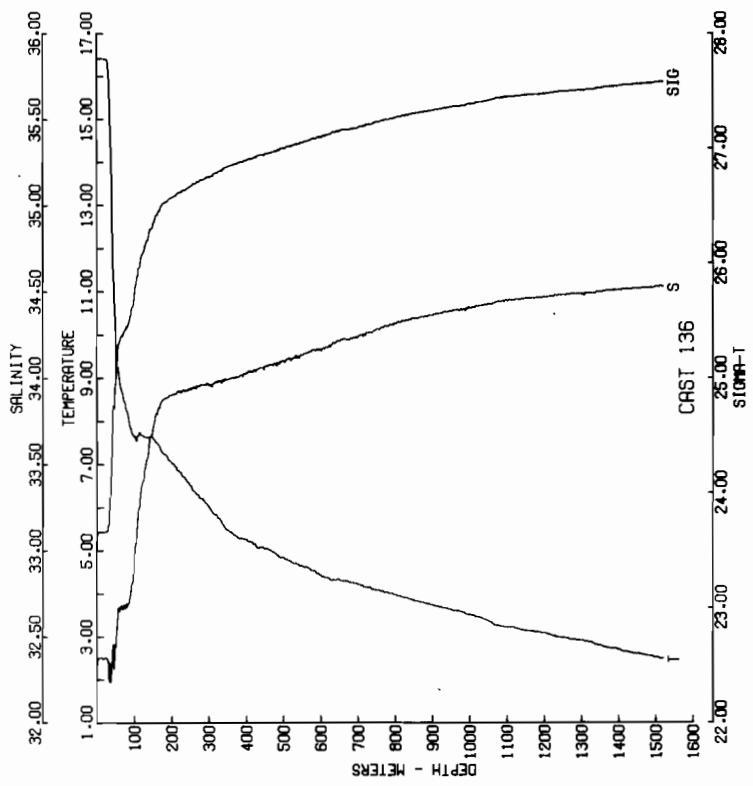
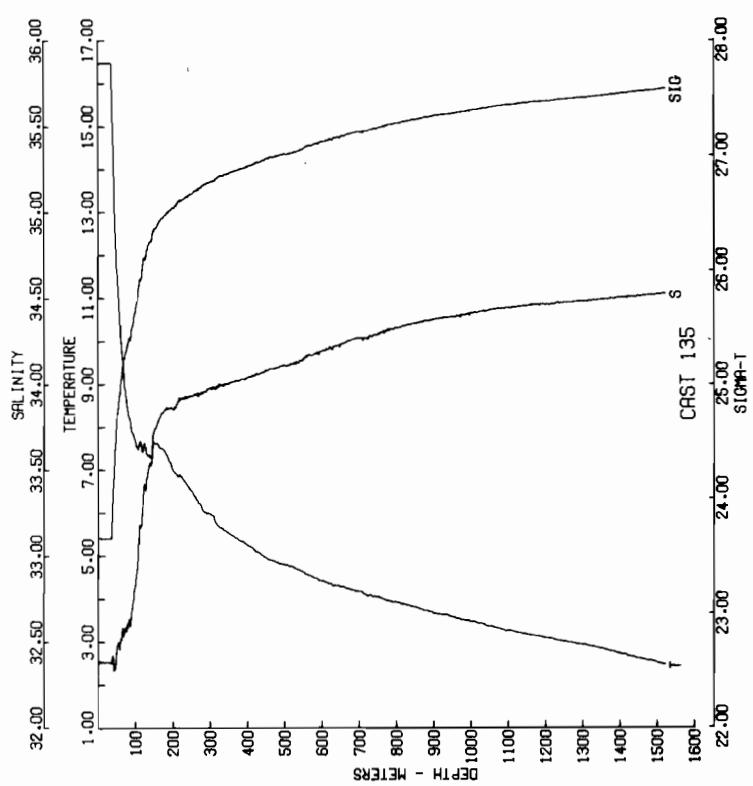
CAST RP-7-OC-132 DATE 19 SEP 73 TIME 0814 GMT
LAT 49° 45' N LONG 124° 59' W WEATHER 5
SEA STATE 4
VISIBILITY 4
CLOUDS 11 AMOUNT 9 DRY 14.5 WET 15.0 DEPTH 0668 M

DEPTH (M)	TEMPERATURE (C)	SALINITY (PPM)	SIGMA-T (DYN/M)
0	14.84	32.20	23.86
5	14.84	32.19	23.86
10	14.84	32.23	23.89
15	14.84	32.23	23.89
20	13.39	32.23	23.89
25	12.23	32.27	24.03
30	11.92	32.27	24.03
35	11.29	32.27	24.03
40	10.93	32.27	24.03
45	10.07	32.27	24.03
50	9.57	32.27	24.03
55	9.21	32.27	24.03
60	8.49	32.27	24.03
65	8.22	32.27	24.03
70	7.92	32.27	24.03
75	7.58	32.27	24.03
80	7.17	32.27	24.03
85	6.76	32.27	24.03
90	6.31	32.27	24.03
95	6.12	32.27	24.03
100	6.75	32.27	24.03



CAST	KP-7-CO-153	DATE	19 SEP 73	TIME	0912 GM
LATITUDE	40° 14' N	LONGITUDE	124° 50' E	SEASAT	3
DEPTH	13.5 M	DRY	13.5 M	WET	13.5 M
CLOUDS	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
DEPTH (M)	TEMPERATURE ($^{\circ}$ C)	SALINITY SIGMA-T	DELTAD (Ω)		
0	13.6	32.2	2.4	0.000	
1.2	12.6	32.2	2.4	-0.018	
2.4	11.6	32.2	2.4	-0.016	
3.6	10.9	32.1	2.4	-0.017	
4.8	10.4	32.1	2.4	-0.017	
6.0	9.7	32.1	2.4	-0.022	
7.2	9.1	32.1	2.4	-0.022	
8.4	8.4	32.1	2.4	-0.022	
9.6	7.7	32.1	2.4	-0.022	
10.8	7.1	32.1	2.4	-0.022	
12.0	6.4	32.1	2.4	-0.022	
13.5	5.7	32.1	2.4	-0.022	

CAST RP-7-OC-134		DATE 19 SEP 73		TIME 1:30 PM GMT	
LAT 40° 12'	LONG 125° 32'W	WEATHER 6	SEA STATE 4	VISIBILITY 1165 M	DEPTH 1165 M
DAROMEX AROUND 9	NO 02 WIND DIA 13.6	WEFT 13.0			
DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPT)	SIGMA-T	DELTAD	(DEPTH)
0	16.45	32.16	23.64	0.000	
16.4	16.46	32.15	23.63	.021	
16.4	16.46	32.16	23.63	.043	
16.4	16.46	32.16	23.63	.064	
16.4	16.46	32.16	23.63	.085	
16.4	16.46	32.16	23.63	.106	
16.4	16.46	32.16	23.63	.127	
16.4	16.46	32.16	23.63	.148	
16.4	16.46	32.16	23.63	.169	
16.4	16.46	32.16	23.63	.188	
16.4	16.46	32.16	23.63	.209	
16.4	16.46	32.16	23.63	.227	
16.4	16.46	32.16	23.63	.244	
16.4	16.46	32.16	23.63	.264	
16.4	16.46	32.16	23.63	.284	
16.4	16.46	32.16	23.63	.303	
16.4	16.46	32.16	23.63	.323	
16.4	16.46	32.16	23.63	.343	
16.4	16.46	32.16	23.63	.363	
16.4	16.46	32.16	23.63	.383	
16.4	16.46	32.16	23.63	.403	
16.4	16.46	32.16	23.63	.423	
16.4	16.46	32.16	23.63	.443	
16.4	16.46	32.16	23.63	.463	
16.4	16.46	32.16	23.63	.483	
16.4	16.46	32.16	23.63	.503	
16.4	16.46	32.16	23.63	.523	
16.4	16.46	32.16	23.63	.543	
16.4	16.46	32.16	23.63	.563	
16.4	16.46	32.16	23.63	.583	
16.4	16.46	32.16	23.63	.603	
16.4	16.46	32.16	23.63	.623	
16.4	16.46	32.16	23.63	.643	
16.4	16.46	32.16	23.63	.663	
16.4	16.46	32.16	23.63	.683	
16.4	16.46	32.16	23.63	.703	
16.4	16.46	32.16	23.63	.723	
16.4	16.46	32.16	23.63	.743	
16.4	16.46	32.16	23.63	.763	
16.4	16.46	32.16	23.63	.783	
16.4	16.46	32.16	23.63	.803	
16.4	16.46	32.16	23.63	.823	
16.4	16.46	32.16	23.63	.843	
16.4	16.46	32.16	23.63	.863	
16.4	16.46	32.16	23.63	.883	
16.4	16.46	32.16	23.63	.903	
16.4	16.46	32.16	23.63	.923	
16.4	16.46	32.16	23.63	.943	
16.4	16.46	32.16	23.63	.963	
16.4	16.46	32.16	23.63	.983	
16.4	16.46	32.16	23.63	.1003	

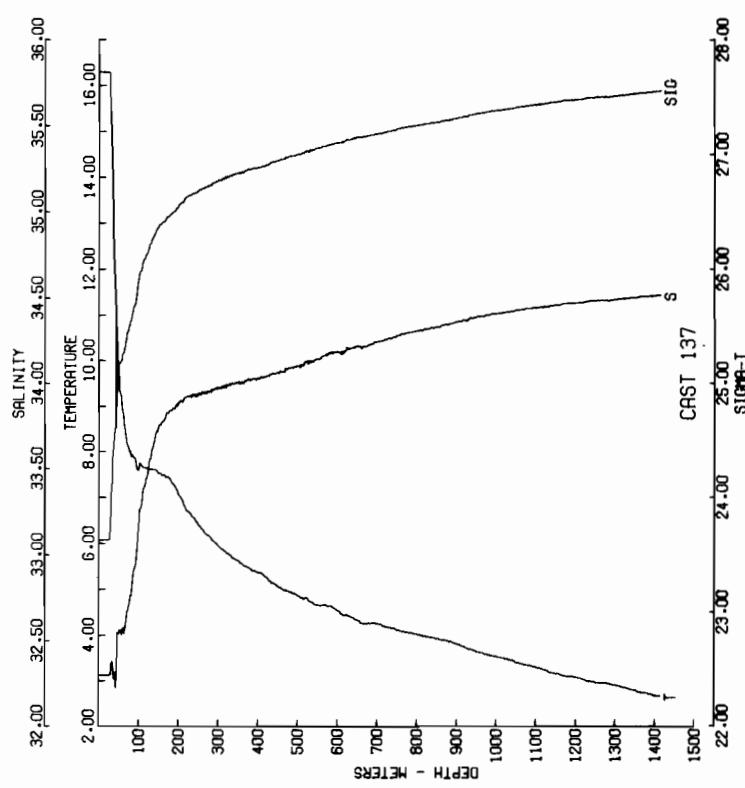


CAST RP-7-OC-136 DATE 19 SEP 73 TIME 1722 GMT
LAT 4°12'26" N LONG 125°11'59.2" W
WEATHER 2 SEA STATE 4
DANOMETER 01 WIND 19.6 KTS
CLOUD 3 AMOUNT 8 VISIBILITY 7
DIR 150° T DEPTH 16.0 METERS

DEPTH (M)	TEMPERATURE (C)	SALINITY	SIGMA-T
22.00	23.00	32.00	31.00
23.00	24.00	32.50	31.50
24.00	25.00	33.00	32.00
25.00	26.00	33.50	32.50
26.00	27.00	34.00	33.50
27.00	28.00	34.50	34.00
28.00	29.00	35.00	34.50

CAST RP-7-OC-135 DATE 19 SEP 73 TIME 1507 GMT
LAT 4°12'23.4" N LONG 125°11'59.2" W
WEATHER 4 SEA STATE 4
DANOMETER 01 WIND 19.6 KTS
CLOUD 3 AMOUNT 8 VISIBILITY 7
DIR 150° T DEPTH 15.9 METERS

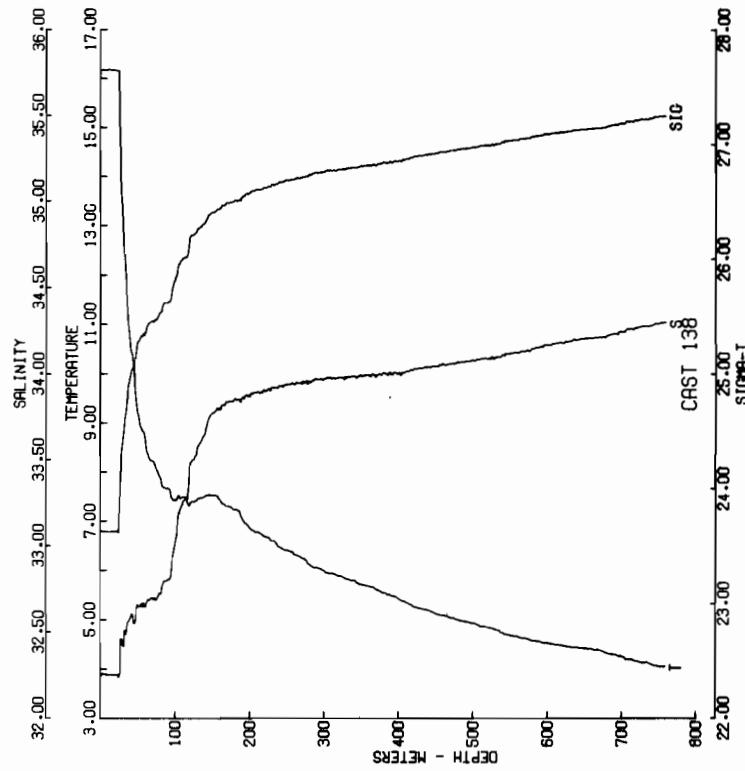
DEPTH (M)	TEMPERATURE (C)	SALINITY	SIGMA-T
22.00	23.00	32.00	31.00
23.00	24.00	32.50	31.50
24.00	25.00	33.00	32.00
25.00	26.00	33.50	32.50
26.00	27.00	34.00	33.50
27.00	28.00	34.50	34.00
28.00	29.00	35.00	34.50



CAST 137 SIGMA-T

DATE 19 SEP 73 TIME 1203 GMT
 LAT 42°11'N LONG 124°35'W MEAN TIDE 2.5'
 SEA STATE 4 WIND DRY 19.6 KI METER 0.1
 CLOUD AMOUNT 3 WET 15.8 DEPTH 1416 M

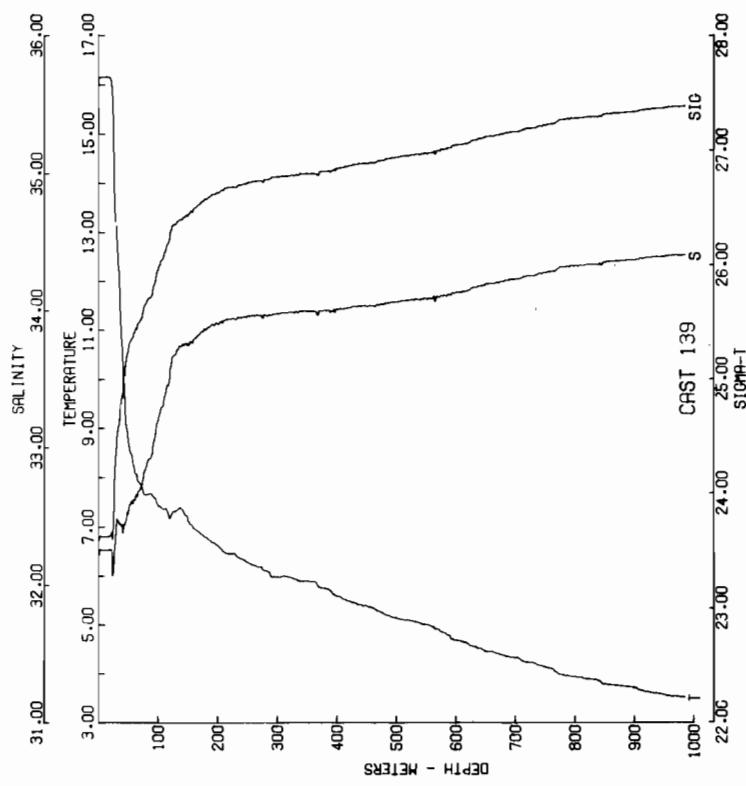
DEPTH (M)	TEMPERATURE (°C)	SALINITY (‰)
100	16.0	34.0
200	12.0	34.0
300	10.0	34.0
400	9.0	34.0
500	8.5	34.2
600	7.5	34.4
700	6.5	34.6
800	6.0	34.8
900	5.5	35.0
1000	4.5	35.2
1100	4.0	35.4
1200	4.0	35.6
1300	4.0	35.8
1400	5.0	36.0



CAST 138 SIGMA-T

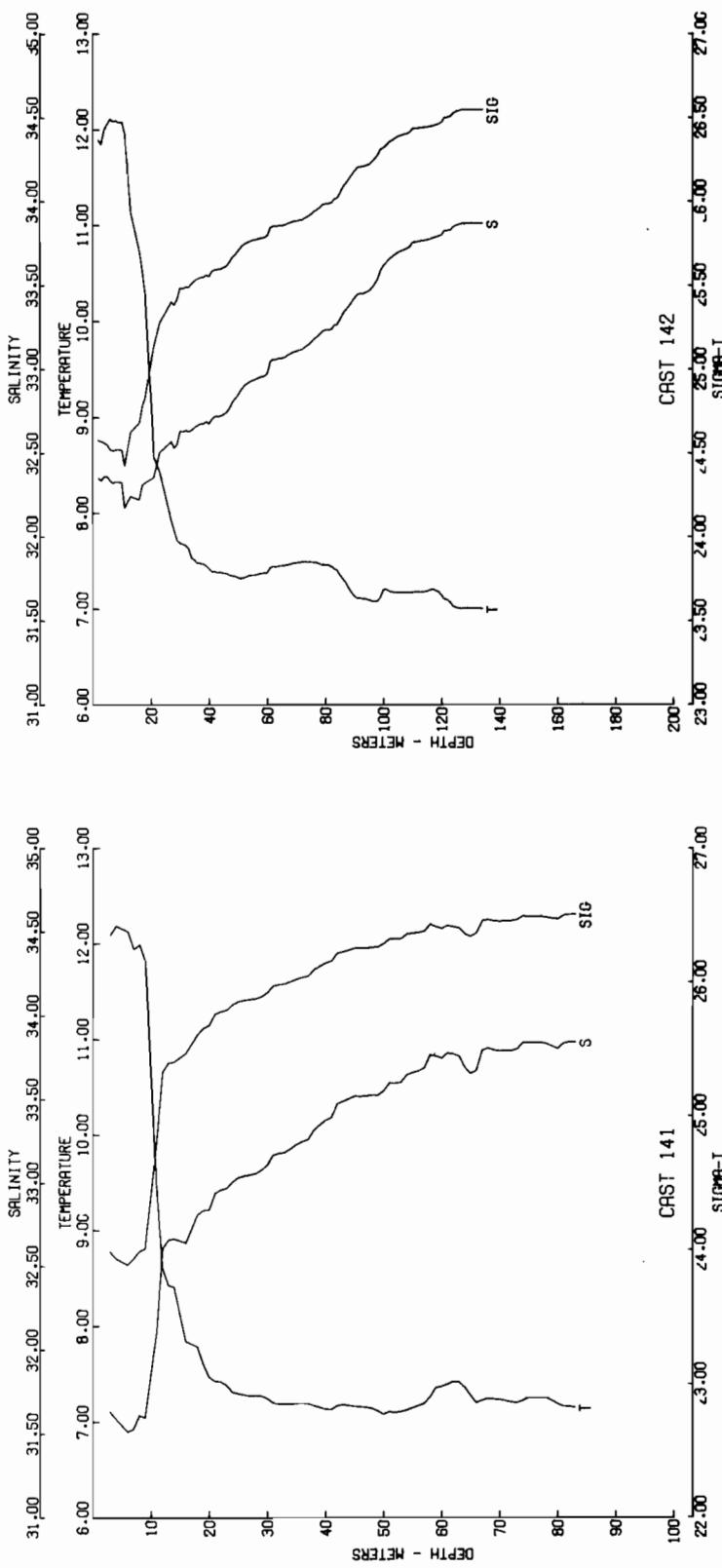
DATE 19 SEP 73 TIME 2106 GMT
 LAT 42°11'N LONG 124°35'W MEAN TIDE 2.5'
 SEA STATE 4 WIND DIR 16.9 KI METER 0.1
 CLOUD AMOUNT 8 WET 15.9 DEPTH 1416 M

DEPTH (M)	TEMPERATURE (°C)	SALINITY (‰)
100	16.0	34.0
200	12.0	34.0
300	10.0	34.0
400	9.0	34.0
500	8.5	34.2
600	7.5	34.4
700	6.5	34.6
800	6.0	34.8
900	5.5	35.0
1000	4.5	35.2
1100	4.0	35.4
1200	4.0	35.6
1300	4.0	35.8
1400	5.0	36.0

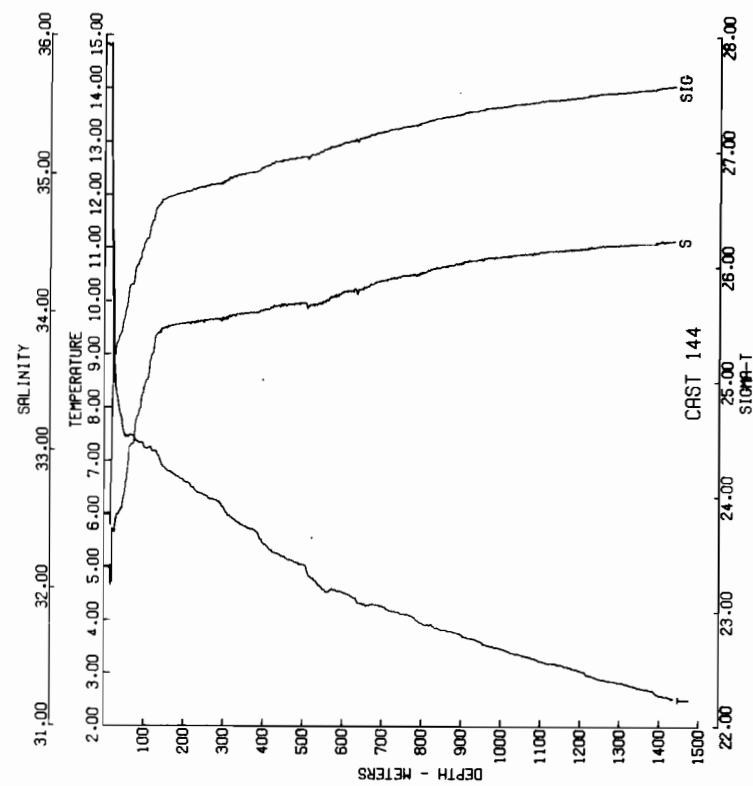
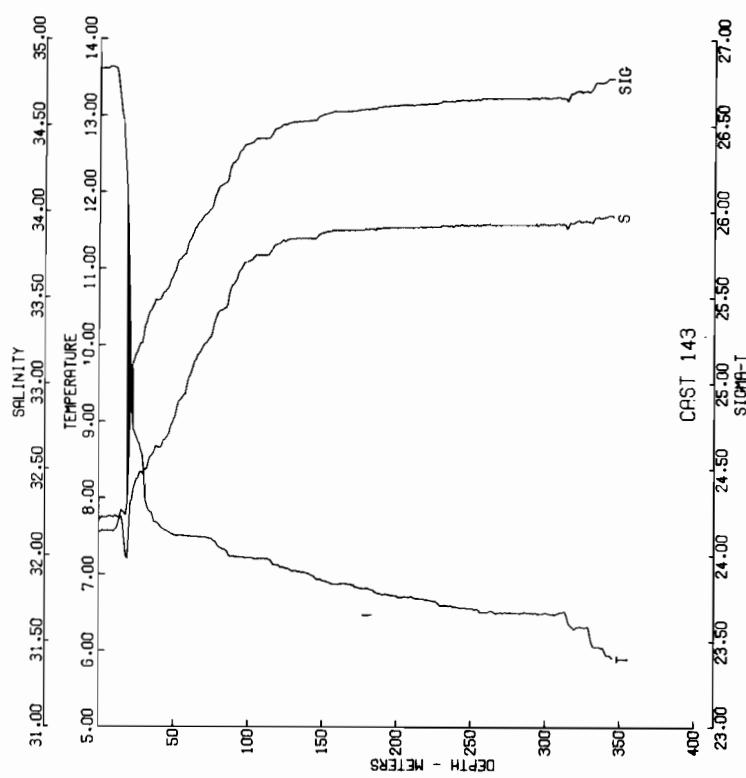


CAST 139, 10/19/1994, DATE 19 SEP 1994, TIME 22:36 GM
LAT 42°16'N LONG 124°42'E STATE 4
WATER TEMP 16.2 DEPTH 937 m
AMOUNT 6 CLOUDS 6

DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T	DELTAD (DN M)
0	16.1	32.12	23.60	0.000
10	16.1	32.11	23.60	0.000
20	16.1	32.10	23.60	0.000
30	16.1	32.09	23.60	0.000
40	16.1	32.08	23.60	0.000
50	16.1	32.07	23.60	0.000
60	16.1	32.06	23.60	0.000
70	16.1	32.05	23.60	0.000
80	16.1	32.04	23.60	0.000
90	16.1	32.03	23.60	0.000
100	16.1	32.02	23.60	0.000
200	16.1	32.01	23.60	0.000
300	16.1	32.00	23.60	0.000
400	16.1	32.00	23.60	0.000
500	16.1	32.00	23.60	0.000
600	16.1	32.00	23.60	0.000
700	16.1	32.00	23.60	0.000
800	16.1	32.00	23.60	0.000
900	16.1	32.00	23.60	0.000
1000	16.1	32.00	23.60	0.000
1500	16.1	32.01	23.61	0.001
2000	16.1	32.02	23.62	0.001
2500	16.1	32.03	23.63	0.001
3000	16.1	32.04	23.64	0.001
3500	16.1	32.05	23.65	0.001
4000	16.1	32.06	23.66	0.001
4500	16.1	32.07	23.67	0.001
5000	16.1	32.08	23.68	0.001
5500	16.1	32.09	23.69	0.001
6000	16.1	32.10	23.70	0.001
6500	16.1	32.11	23.71	0.001
7000	16.1	32.12	23.72	0.001
7500	16.1	32.13	23.73	0.001
8000	16.1	32.14	23.74	0.001
8500	16.1	32.15	23.75	0.001
9000	16.1	32.16	23.76	0.001
9500	16.1	32.17	23.77	0.001
10000	16.1	32.18	23.78	0.001
15000	16.1	32.19	23.79	0.001
20000	16.1	32.20	23.80	0.001
25000	16.1	32.21	23.81	0.001
30000	16.1	32.22	23.82	0.001
35000	16.1	32.23	23.83	0.001
40000	16.1	32.24	23.84	0.001
45000	16.1	32.25	23.85	0.001
50000	16.1	32.26	23.86	0.001
55000	16.1	32.27	23.87	0.001
60000	16.1	32.28	23.88	0.001
65000	16.1	32.29	23.89	0.001
70000	16.1	32.30	23.90	0.001
75000	16.1	32.31	23.91	0.001
80000	16.1	32.32	23.92	0.001
85000	16.1	32.33	23.93	0.001
90000	16.1	32.34	23.94	0.001
95000	16.1	32.35	23.95	0.001
100000	16.1	32.36	23.96	0.001
150000	16.1	32.37	23.97	0.001
200000	16.1	32.38	23.98	0.001
250000	16.1	32.39	23.99	0.001
300000	16.1	32.40	24.00	0.001
350000	16.1	32.41	24.01	0.001
400000	16.1	32.42	24.02	0.001
450000	16.1	32.43	24.03	0.001
500000	16.1	32.44	24.04	0.001
550000	16.1	32.45	24.05	0.001
600000	16.1	32.46	24.06	0.001
650000	16.1	32.47	24.07	0.001
700000	16.1	32.48	24.08	0.001
750000	16.1	32.49	24.09	0.001
800000	16.1	32.50	24.10	0.001
850000	16.1	32.51	24.11	0.001
900000	16.1	32.52	24.12	0.001
950000	16.1	32.53	24.13	0.001
1000000	16.1	32.54	24.14	0.001
1500000	16.1	32.55	24.15	0.001
2000000	16.1	32.56	24.16	0.001
2500000	16.1	32.57	24.17	0.001
3000000	16.1	32.58	24.18	0.001
3500000	16.1	32.59	24.19	0.001
4000000	16.1	32.60	24.20	0.001
4500000	16.1	32.61	24.21	0.001
5000000	16.1	32.62	24.22	0.001
5500000	16.1	32.63	24.23	0.001
6000000	16.1	32.64	24.24	0.001
6500000	16.1	32.65	24.25	0.001
7000000	16.1	32.66	24.26	0.001
7500000	16.1	32.67	24.27	0.001
8000000	16.1	32.68	24.28	0.001
8500000	16.1	32.69	24.29	0.001
9000000	16.1	32.70	24.30	0.001
9500000	16.1	32.71	24.31	0.001
10000000	16.1	32.72	24.32	0.001
15000000	16.1	32.73	24.33	0.001
20000000	16.1	32.74	24.34	0.001
25000000	16.1	32.75	24.35	0.001
30000000	16.1	32.76	24.36	0.001
35000000	16.1	32.77	24.37	0.001
40000000	16.1	32.78	24.38	0.001
45000000	16.1	32.79	24.39	0.001
50000000	16.1	32.80	24.40	0.001
55000000	16.1	32.81	24.41	0.001
60000000	16.1	32.82	24.42	0.001
65000000	16.1	32.83	24.43	0.001
70000000	16.1	32.84	24.44	0.001
75000000	16.1	32.85	24.45	0.001
80000000	16.1	32.86	24.46	0.001
85000000	16.1	32.87	24.47	0.001
90000000	16.1	32.88	24.48	0.001
95000000	16.1	32.89	24.49	0.001
100000000	16.1	32.90	24.50	0.001
150000000	16.1	32.91	24.51	0.001
200000000	16.1	32.92	24.52	0.001
250000000	16.1	32.93	24.53	0.001
300000000	16.1	32.94	24.54	0.001
350000000	16.1	32.95	24.55	0.001
400000000	16.1	32.96	24.56	0.001
450000000	16.1	32.97	24.57	0.001
500000000	16.1	32.98	24.58	0.001
550000000	16.1	32.99	24.59	0.001
600000000	16.1	33.00	24.60	0.001
650000000	16.1	33.01	24.61	0.001
700000000	16.1	33.02	24.62	0.001
750000000	16.1	33.03	24.63	0.001
800000000	16.1	33.04	24.64	0.001
850000000	16.1	33.05	24.65	0.001
900000000	16.1	33.06	24.66	0.001
950000000	16.1	33.07	24.67	0.001
1000000000	16.1	33.08	24.68	0.001
1500000000	16.1	33.09	24.69	0.001
2000000000	16.1	33.10	24.70	0.001
2500000000	16.1	33.11	24.71	0.001
3000000000	16.1	33.12	24.72	0.001
3500000000	16.1	33.13	24.73	0.001
4000000000	16.1	33.14	24.74	0.001
4500000000	16.1	33.15	24.75	0.001
5000000000	16.1	33.16	24.76	0.001
5500000000	16.1	33.17	24.77	0.001
6000000000	16.1	33.18	24.78	0.001
6500000000	16.1	33.19	24.79	0.001
7000000000	16.1	33.20	24.80	0.001
7500000000	16.1	33.21	24.81	0.001
8000000000	16.1	33.22	24.82	0.001
8500000000	16.1	33.23	24.83	0.001
9000000000	16.1	33.24	24.84	0.001
9500000000	16.1	33.25	24.85	0.001
10000000000	16.1	33.26	24.86	0.001
15000000000	16.1	33.27	24.87	0.001
20000000000	16.1	33.28	24.88	0.001
25000000000	16.1	33.29	24.89	0.001
30000000000	16.1	33.30	24.90	0.001
35000000000	16.1	33.31	24.91	0.001
40000000000	16.1	33.32	24.92	0.001
45000000000	16.1	33.33	24.93	0.001
50000000000	16.1	33.34	24.94	0.001
55000000000	16.1	33.35	24.95	0.001
60000000000	16.1	33.36	24.96	0.001
65000000000	16.1	33.37	24.97	0.001
70000000000	16.1	33.38	24.98	0.001
75000000000	16.1	33.39	24.99	0.001
80000000000	16.1	33.40	25.00	0.001
85000000000	16.1	33.41	25.01	0.001
90000000000	16.1	33.42	25.02	0.001
95000000000	16.1	33.43	25.03	0.001
100000000000	16.1	33.44	25.04	0.001
150000000000	16.1	33.45	25.05	0.001
200000000000	16.1	33.46	25.06	0.001
250000000000	16.1	33.47	25.07	0.001
300000000000	16.1	33.48	25.08	0.001
350000000000	16.1	33.49	25.09	0.001
400000000000	16.1	33.50	25.10	0.001
450000000000	16.1	33.51	25.11	0.001
500000000000	16.1	33.52	25.12	0.001
550000000000	16.1	33.53	25.13	0.001
600000000000	16.1	33.54	25.14	0.001
650000000000	16.1	33.55	25.15	0.001
700000000000	16.1	33.56	25.16	0.001
750000000000	16.1	33.57	25.17	0.001
800000000000	16.1	33.58	25.18	0.001
850000000000	16.1	33.59	25.19	0.001
900000000000	16.1	33.60	25.20	0.001
950000000000	16.1	33.61	25.21	0.001
1000000000000	16.1	33.62	25.22	0.001
1500000000000	16.1	33.63	25.23	0.001
2000000000000	16.1	33.64	25.24	0.001
2500000000000	16.1	33.65	25.25	0.001
3000000000000	16.1	33.66	25.26	0.001
3500000000000	16.1	33.67	25.27	0.001
4000000000000	16.1	33.68	25.28	0.001
4500000000000	16.1	33.69	25.29	0.001
5000000000000	16.1	33.70	25.30	0.001
5500000000000	16.1	33.71	25.31	0.001
6000000000000	16.1	33.72	25.32	0.001
6500000000000	16.1	33.73	25.33	0.001

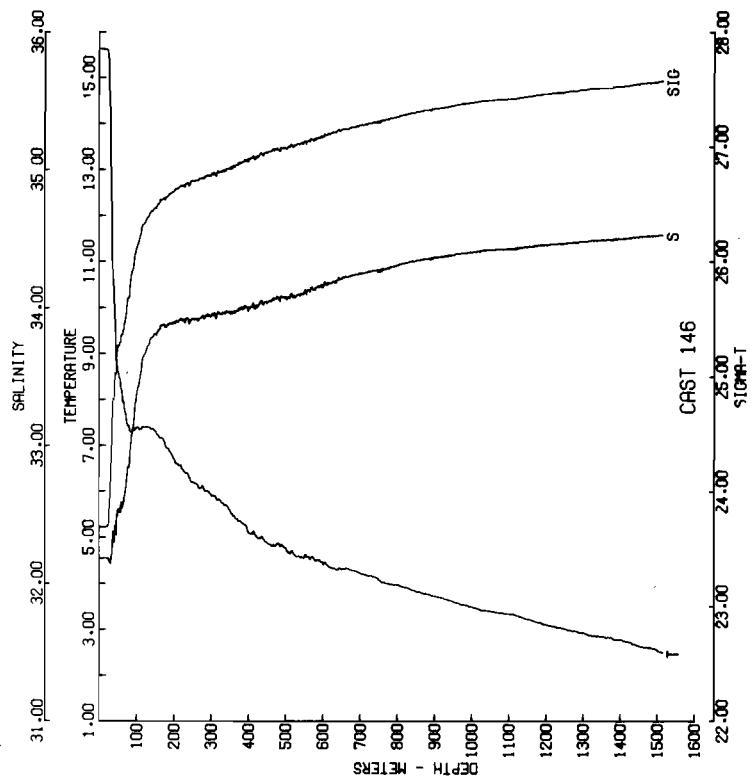
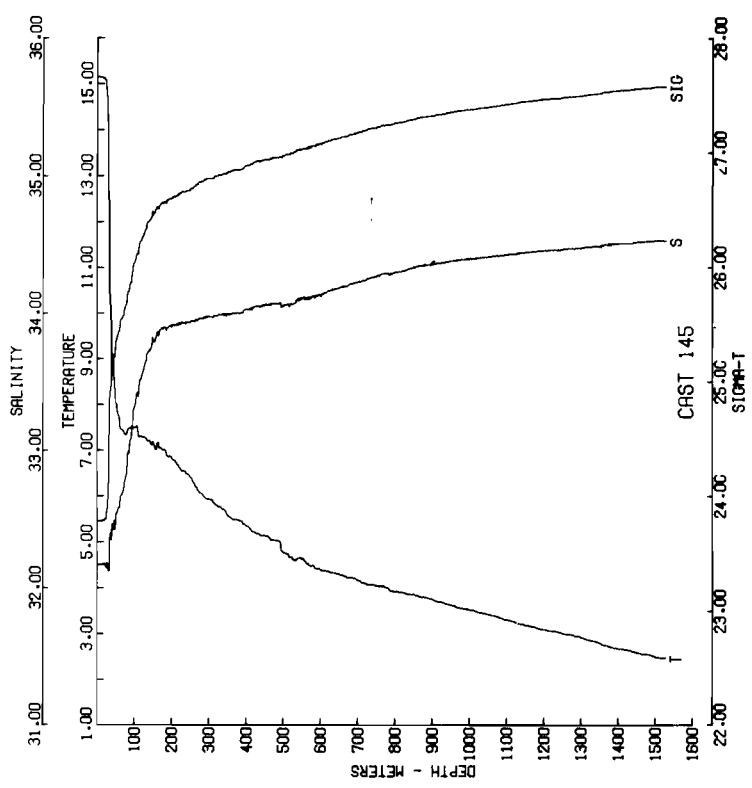


CAST 142 - CC-142		DATE 20 SEP 73		TIME 0002 GMT	
LAT 42°12'.N	LONG 164°16'.W	WIND 02	SPD 19K	WEATHER 5	SEA STATE 4
CLOUD 6	AMOUNT 7	DRY 14.4	WET 13.7	DEPTH 0103 M	DEPTH 0133 M
DEPTH (M)	TEMPERATURE (°C)	SALINITY (PSU)	SIGMA-T (DYN CM ⁻²)	DEPTH (M)	TEMPERATURE (°C)
0	12.0	34.5	35.00	0	11.7
3	12.0	34.5	35.00	3	12.1
5	10.0	34.5	35.00	5	12.3
10	8.0	34.5	35.00	10	12.8
15	7.5	34.5	35.00	15	13.0
20	7.0	34.5	35.00	20	13.2
25	7.0	34.5	35.00	25	13.4
30	7.0	34.5	35.00	30	13.6
35	7.0	34.5	35.00	35	13.8
40	7.0	34.5	35.00	40	14.0
45	7.0	34.5	35.00	45	14.2
50	7.0	34.5	35.00	50	14.4
55	7.0	34.5	35.00	55	14.6
60	7.0	34.5	35.00	60	14.8
65	7.0	34.5	35.00	65	15.0
70	7.0	34.5	35.00	70	15.2
75	7.0	34.5	35.00	75	15.4
80	7.0	34.5	35.00	80	15.6
85	7.0	34.5	35.00	85	15.8
90	7.0	34.5	35.00	90	16.0
95	7.0	34.5	35.00	95	16.2
100	7.0	34.5	35.00	100	16.4



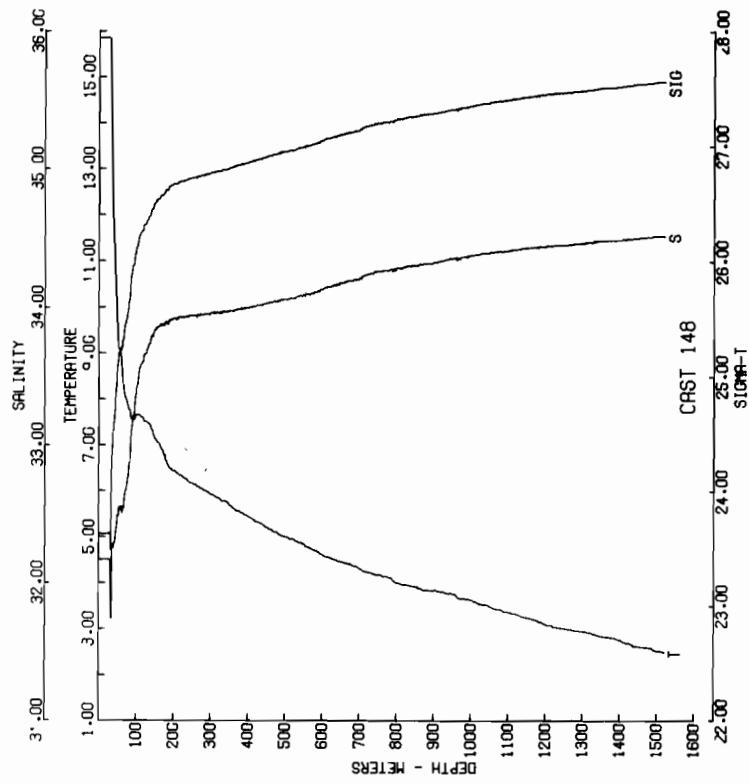
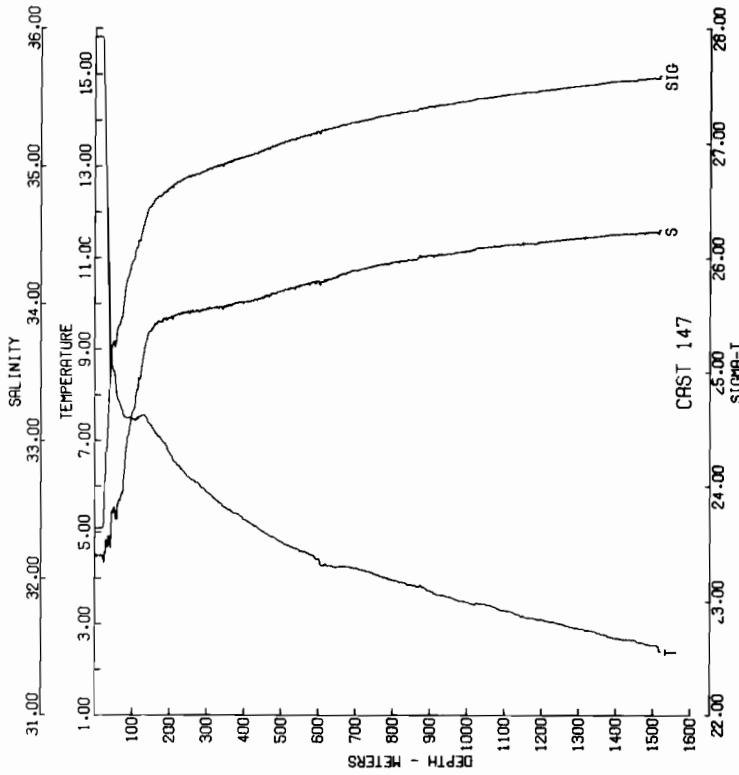
DEPTH (M)	TEMPERATURE (°C)	SALINITY	SIGMA-T (PPM)	DELTAP- (DN M)
0	13.61	35.95	24.4	0.000
1	13.62	35.95	24.4	-0.001
2	13.63	35.95	24.4	-0.034
3	13.61	35.95	24.4	-0.077
4	13.51	35.95	24.4	-0.077
5	11.15	32.14	22.5	-0.077
6	7.79	32.14	22.5	-0.040
7	6.32	32.14	22.5	-0.040
8	5.82	32.14	22.5	-0.117
9	5.32	32.14	22.5	-0.117
10	4.82	32.14	22.5	-0.142
11	4.32	32.14	22.5	-0.142
12	3.82	32.14	22.5	-0.154
13	3.32	32.14	22.5	-0.204
14	2.82	32.14	22.5	-0.204
15	2.32	32.14	22.5	-0.204
16	1.82	32.14	22.5	-0.332
17	1.32	32.14	22.5	-0.332
18	0.82	32.14	22.5	-0.544
19	0.32	32.14	22.5	-0.544

DEPTH (M)	TEMPERATURE (°C) (PPY)	SALINITY (PSU) (PPY)	DELTAP-7		
			SIGMA-T	SEA STATE	TIME
0	14.63	32.15	23.84	0.000	0735 GMT
3	14.64	32.15	23.84	*0.020	DATE 20 SEP 73
7	14.64	32.16	23.85	*0.041	LONG 125°0'W
13	14.64	32.16	23.84	*0.041	WIND 140° K
19	14.64	32.16	23.84	*0.041	WIND 25° K
25	14.64	32.16	23.84	*0.041	WIND 15.2 MET 14.4
31	14.64	32.16	23.84	*0.041	CLOUD X 90% DRY
37	14.64	32.16	23.84	*0.041	AMOUNT 95%
43	14.64	32.16	23.84	*0.041	DEPTH 1452 M



CAST 3P-7-CC-145 DATE 20 SEP 73 TIME 0931 GMT
 LAT 47.06°N LONG 125.13°W WEATHER 1 SEA STATE 4
 BAROMETER 99.50 MSLW 180 T SPD 14 KI
 CLOUDS X AMOUNT 9 DRY 15.5 WET 14.2 VISIBILITY 6
 CLOUDS X AMOUNT 9 DRY 15.5 WET 14.2 VISIBILITY 6
 CLOUDS X AMOUNT 9 DRY 15.5 WET 14.2 VISIBILITY 6
 CLOUDS X AMOUNT 9 DRY 15.5 WET 14.2 VISIBILITY 6

DEPTH (M)	TEMPERATURE (°C)	SALINITY	SIGMA-T	VELTAD (DN M)
0-2	15.0	32.15	23.67	0.0001
2-4	15.0	32.18	23.69	-0.042
4-6	15.0	32.18	23.69	-0.063
6-8	15.0	32.18	23.70	-0.084
8-10	15.0	32.18	23.70	-0.105
10-12	15.0	32.18	23.70	-0.126
12-14	15.0	32.18	23.70	-0.146
14-16	15.0	32.18	23.70	-0.177
16-18	15.0	32.18	23.70	-0.198
18-20	15.0	32.18	23.70	-0.256
20-22	15.0	32.17	23.69	-0.310
22-24	15.0	32.17	23.69	-0.343
24-26	15.0	32.17	23.69	-0.373
26-28	15.0	32.17	23.69	-0.457
28-30	15.0	32.17	23.69	-1.132
30-32	15.0	32.17	23.69	-1.507
32-34	15.0	32.17	23.69	-1.071
34-36	15.0	32.17	23.69	-2.452
36-38	15.0	32.17	23.69	-2.757
38-40	15.0	32.17	23.69	-2.757
40-42	15.0	32.17	23.69	-2.757
42-44	15.0	32.17	23.69	-2.757
44-46	15.0	32.17	23.69	-2.757
46-48	15.0	32.17	23.69	-2.757
48-50	15.0	32.17	23.69	-2.757
50-52	15.0	32.17	23.69	-2.757
52-54	15.0	32.17	23.69	-2.757
54-56	15.0	32.17	23.69	-2.757
56-58	15.0	32.17	23.69	-2.757
58-60	15.0	32.17	23.69	-2.757
60-62	15.0	32.17	23.69	-2.757
62-64	15.0	32.17	23.69	-2.757
64-66	15.0	32.17	23.69	-2.757
66-68	15.0	32.17	23.69	-2.757
68-70	15.0	32.17	23.69	-2.757
70-72	15.0	32.17	23.69	-2.757
72-74	15.0	32.17	23.69	-2.757
74-76	15.0	32.17	23.69	-2.757
76-78	15.0	32.17	23.69	-2.757
78-80	15.0	32.17	23.69	-2.757
80-82	15.0	32.17	23.69	-2.757
82-84	15.0	32.17	23.69	-2.757
84-86	15.0	32.17	23.69	-2.757
86-88	15.0	32.17	23.69	-2.757
88-90	15.0	32.17	23.69	-2.757
90-92	15.0	32.17	23.69	-2.757
92-94	15.0	32.17	23.69	-2.757
94-96	15.0	32.17	23.69	-2.757
96-98	15.0	32.17	23.69	-2.757
98-100	15.0	32.17	23.69	-2.757
100-102	15.0	32.17	23.69	-2.757
102-104	15.0	32.17	23.69	-2.757
104-106	15.0	32.17	23.69	-2.757
106-108	15.0	32.17	23.69	-2.757
108-110	15.0	32.17	23.69	-2.757
110-112	15.0	32.17	23.69	-2.757
112-114	15.0	32.17	23.69	-2.757
114-116	15.0	32.17	23.69	-2.757

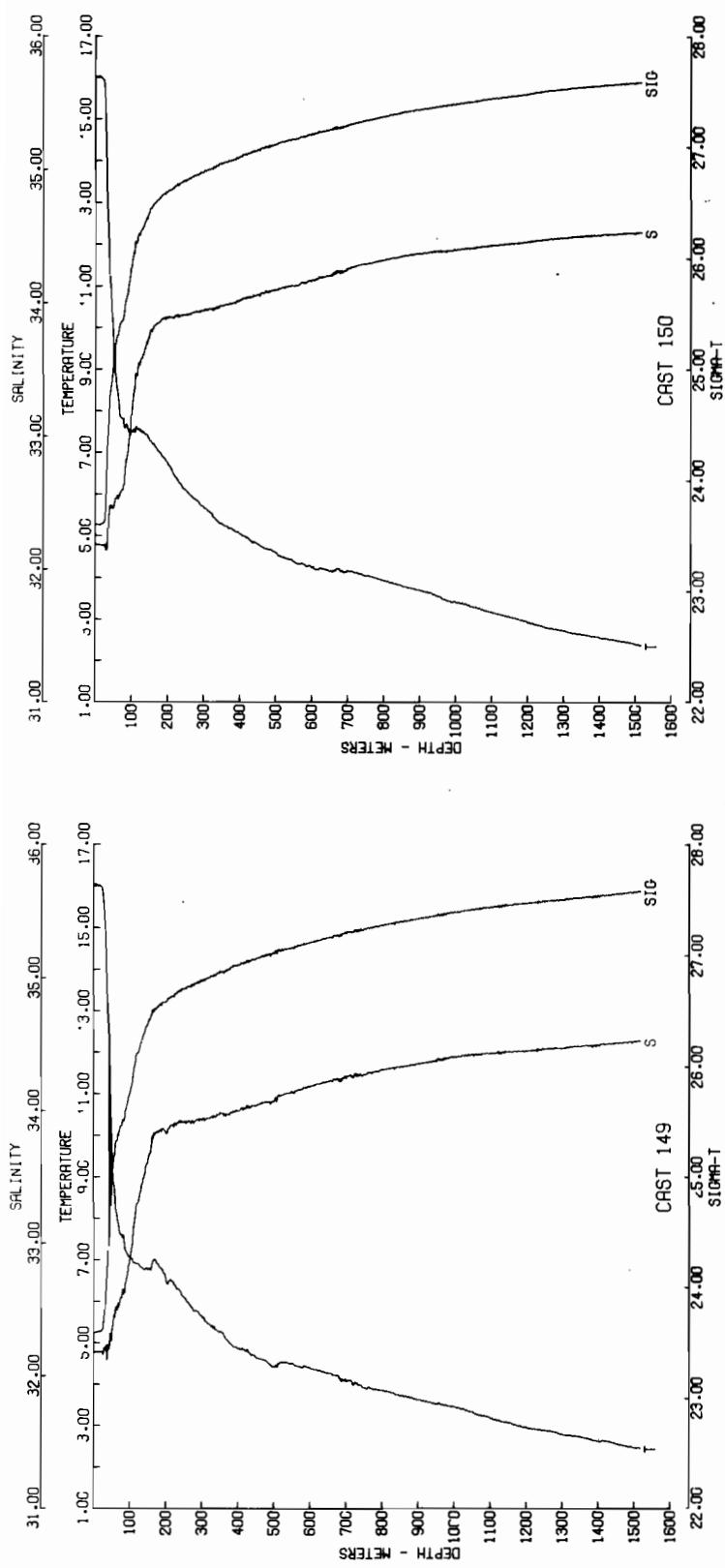


CAST RP-7-GC-147 DATE 20 SEP 73 TIME 1401 GMT
 LAT 47°05'N LONG 122°37'W WEATHER 4 SEA STATE 4
 BAROMETER 30.96 INCHES CLOUDS 6 VISIBILITY 15.1 M
 DEPTH 15.0 METERS

DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T
0	12.9	32.17	26.00
5	15.8	32.16	25.00
10	15.8	32.16	24.00
15	15.8	32.16	23.00
20	15.8	32.16	22.00
25	14.0	32.16	21.00
30	13.1	32.16	20.00
35	12.4	32.23	19.00
40	11.9	32.23	18.00
45	11.4	32.23	17.00
50	10.9	32.23	16.00
55	10.4	32.23	15.00
60	9.9	32.23	14.00
65	9.4	32.23	13.00
70	8.9	32.23	12.00
75	8.4	32.23	11.00
80	7.9	32.23	10.00
85	7.4	32.23	9.00
90	6.9	32.23	8.00
95	6.4	32.23	7.00
100	5.9	32.23	6.00
1100	11.0	32.23	26.00
1500	10.0	32.23	26.00

CAST RP-7-GC-148 DATE 20 SEP 73 TIME 1650 GMT
 LAT 47°06'N LONG 122°37'W WEATHER 3 SEA STATE 3
 BAROMETER 30.92 INCHES CLOUDS 8 VISIBILITY 15.1 M
 DEPTH 15.0 METERS

DEPTH (M)	TEMPERATURE (°C)	SALINITY (PPM)	SIGMA-T
0	15.8	32.17	23.63
5	15.8	32.17	23.62
10	15.8	32.17	23.62
15	15.8	32.17	23.62
20	15.8	32.17	23.62
25	15.8	32.17	23.62
30	15.8	32.17	23.62
35	15.8	32.17	23.62
40	15.8	32.17	23.62
45	15.8	32.17	23.62
50	15.8	32.17	23.62
55	15.8	32.17	23.62
60	15.8	32.17	23.62
65	15.8	32.17	23.62
70	15.8	32.17	23.62
75	15.8	32.17	23.62
80	15.8	32.17	23.62
85	15.8	32.17	23.62
90	15.8	32.17	23.62
95	15.8	32.17	23.62
100	15.8	32.17	23.62
1100	11.0	32.17	27.00
1500	10.0	32.17	27.00



CAST RP-7-OC-149 DATE 20 SEP 73 TIME 1921 GM		CAST RP-7-OC-150 DATE 20 SEP 73 TIME 2212 GM	
LAT 47°45'N LONG 126°58'W		LAT 47°45'N LONG 126°58'W	
WIND DIRECTION 03 WIND AMOUNT 0		WIND DIRECTION 16° WIND AMOUNT 8	
CLOUDS 8 AMOUNT 2		CLOUDS 6 AMOUNT 0	
DEPTH (M)	TEMPERATURE (°C)	DEPTH (M)	TEMPERATURE (°C)
0	16.00	0	16.02
5	16.00	5	16.02
10	16.04	10	16.03
15	16.02	15	16.03
20	16.02	20	16.03
25	16.01	25	16.03
30	16.01	30	16.03
35	16.01	35	16.03
40	16.01	40	16.03
45	16.01	45	16.03
50	16.01	50	16.03
55	16.01	55	16.03
60	16.01	60	16.03
65	16.01	65	16.03
70	16.01	70	16.03
75	16.01	75	16.03
80	16.01	80	16.03
85	16.01	85	16.03
90	16.01	90	16.03
95	16.01	95	16.03
100	16.01	100	16.03
105	16.01	105	16.03
110	16.01	110	16.03
115	16.01	115	16.03
120	16.01	120	16.03
125	16.01	125	16.03
130	16.01	130	16.03
135	16.01	135	16.03
140	16.01	140	16.03
145	16.01	145	16.03
150	16.01	150	16.03
155	16.01	155	16.03
160	16.01	160	16.03
165	16.01	165	16.03
170	16.01	170	16.03
175	16.01	175	16.03
180	16.01	180	16.03
185	16.01	185	16.03
190	16.01	190	16.03
195	16.01	195	16.03
200	16.01	200	16.03
205	16.01	205	16.03
210	16.01	210	16.03
215	16.01	215	16.03
220	16.01	220	16.03
225	16.01	225	16.03
230	16.01	230	16.03
235	16.01	235	16.03
240	16.01	240	16.03
245	16.01	245	16.03
250	16.01	250	16.03
255	16.01	255	16.03
260	16.01	260	16.03
265	16.01	265	16.03
270	16.01	270	16.03
275	16.01	275	16.03
280	16.01	280	16.03
285	16.01	285	16.03
290	16.01	290	16.03
295	16.01	295	16.03
300	16.01	300	16.03
305	16.01	305	16.03
310	16.01	310	16.03
315	16.01	315	16.03
320	16.01	320	16.03
325	16.01	325	16.03
330	16.01	330	16.03
335	16.01	335	16.03
340	16.01	340	16.03
345	16.01	345	16.03
350	16.01	350	16.03
355	16.01	355	16.03
360	16.01	360	16.03