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CTD Observations Off Northern California During the Shelf Mixed Layer Experiment, SMILE, February/March 1989

by

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Technical Report

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Approved for Distribution:

Robert C Beardsley

Robert C. Beardsley, Chairman
Department of Physical Oceanography

CTD OBSERVATIONS OFF NORTHERN CALIFORNIA DURING THE SHELF MIXED LAYER EXPERIMENT, SMILE, FEBRUARY/MARCH 1989

Abstract

CTD observations were made off the northern California coast during R/V *Wecoma* cruise W8902 February 22 – March 10, 1989 as part of the Shelf MIxed Layer Experiment (SMILE). The surveys consisted of three sampling plans — a large-scale grid of four cross-shelf transects extending to both sides of Point Arena and Point Reyes, a small-scale grid of five cross-shelf transects located near the central SMILE mooring site, and an expanded small-scale grid of nine cross-shelf transects. All of the cross-shelf transects extended beyond the shelf break and the maximum sampling depth at each station was near-bottom or 1000 m. The average along-shelf separation between cross-shelf transects was about 15 km for the small-scale surveys and 50 km for the large-scale grid.

The primary objectives of the hydrographic measurement program were to observe and characterize the temperature, salinity, density, and light transmission fields and their temporal and spatial variability in the surface boundary layer along the continental shelf and slope near the SMILE moored array, and to acquire estimates of the cross- and along-shelf scales over which the mixed-layer depth varies. This report presents a summary in graphic and tabular form of the hydrographic observations made during cruise W8902 on the R/V *Wecoma*.

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1. Introduction

Past hydrographic (CTD) and Acoustic Doppler Current Profiler (ADCP) mesoscale surveys of the coastal region near Point Arena, California (Huyer and Kosro, 1987; Huyer, 1984; Kosro, 1987) obtained during the Coastal Ocean Dynamics Experiment (CODE) in 1981 and 1982 have provided a description of the spatial structure of the temperature, salinity, density, and velocity fields and variability during the upwelling season (April to August). In summer, when winds were strong and persistently upwelling favorable, surface temperatures increase monotonically and surface salinities decrease with distance from the coast. Also, isopycnals, isotherms, and isohalines all slope upward toward the coast and there is on average a surface intensified, equatorward, baroclinic alongshore coastal jet found at midshelf. During wind relaxation (weak wind) events in the CODE field program, near-surface water warms appreciably, particularly nearshore where warm water is advected northward along the coast as a narrow inshore countercurrent (Send *et al.*, 1987). Also, coherent mesoscale flow structures identified over the outer shelf and slope with shipboard acoustic Doppler current profiler surveys are closely related to the variability observed in satellite infrared imagery.

The Shelf MIxed Layer Experiment (SMILE) was undertaken to investigate the surface boundary layer over the continental shelf off northern California during winter. As part of the SMILE field program, a moored array was deployed on the shelf between Point Arena and Point Reyes from mid November, 1988 through May, 1989 to make long-term (6 months) observations of the atmospheric forcing and the spatial and temporal structure of the oceanic response in the surface boundary layer. Extensive shipboard CTD and ADCP measurements were also made over the shelf and slope in this region as part of SMILE during three periods: the first just following the mooring deployment operations in November, 1988; the second midway through the moored array deployment in February, 1989; and the third after the spring transition and just before the mooring recovery operations in May, 1989. The hydrographic surveys were conducted using three sampling plans — a large-scale grid of four cross-shelf transects extending to both sides of Point Arena and Point Reyes, a small-scale grid of five cross-shelf transects located near the central SMILE mooring site, and an expanded small-scale grid consisting of nine cross-shelf transects. All of the cross-shelf transects extended beyond the shelf break and the maximum sampling depth at each station was near-bottom or 500 m (November), 1000 m (February), or 1500 m (May) respectively. The average along-shelf separation between cross-shelf transects was about 15 km for the small-scale surveys and 50 km for the large-scale grid. We present here in graphic and tabular form a preliminary analysis of the

hydrographic survey observations made off northern California during the February/March, 1989 SMILE field program. The large-scale survey was completed during February 25–27, 1989, the small-scale survey was completed during February 27–28, and the expanded small-scale survey was completed during March 5–7. Time series of CTD profiles repeated every 15 minutes were made at mooring C3 on the central section on March 5, 1989 (stations 97–201), at mooring C2 on March 8 (stations 278–327), at mooring C4 on March 9 (stations 328–369), and at mooring C6 on March 9 (stations 370–398). Data from these time series stations will be presented in a separate report.

2. Instrumentation and Calibration

A Neil Brown Instrument Systems (NBIS) model MKIII CTD fish was used as the primary profiling instrument during R/V *Wecoma* cruise W8902. The instrument provided continuous sampling of temperature, conductivity, pressure, and light transmission. Salinity and density were subsequently derived from the measured variables. The instrument package consisted of the MKIII CTD underwater unit mounted one meter below a General Oceanics rosette sampler with 12 five-liter Niskin bottles. A Sea Tech 25 cm pathlength transmissometer was mounted horizontally near the CTD fish. The fast response thermistor on the CTD fish was disabled and the instrument sampled at a rate of 32 hz. Lowering speeds were approximately 36 m/min to match the response times of the temperature and conductivity sensors (Giles and McDougall, 1986).

The CTD underwater unit is part of the R/V *Wecoma*'s scientific equipment and was calibrated at the manufacturer's calibration facility just prior to the cruise. The precruise calibration specifications were given by NBIS and are shown here in Table 1. Water samples were normally collected at each station on the up cast at a depth where the vertical stratification was minimal. The calibration samples were then processed at Woods Hole on a Guildline AutoSal salinometer to determine salinity. The individual salinities were converted to *in situ* conductivity and compared to the conductivity output of the instrument. A least-squares fit of the difference between the bottle and instrument conductivity gives

$$C(BOTTLE) - C(CTD) = -0.0000149876 * X - 0.0067991$$

where X is the station number which varied from 1 to 419, and the sum of the squares of the residuals is 0.0079 mmho^2. This means that the CTD conductivity sensor drift and

offset were small during the cruise and that the rms difference between the corrected CTD and bottle conductivity values was ±0.007 mmho. The CTD conductivity for the entire cruise has been edited using the linear regression correction given above.

TABLE 1: NBIS CALIBRATION

	Specifications		
Variable	Range	Tolerance	Average Error
Pressure	0–1600 db	± 1.6 db	0.22 db
Temperature	1–30°C	± 0.005°C	.0013°C
Conductivity	17–57 mmho	± 0.005 mmho	0.020 mmho

The Sea Tech transmissometer was calibrated by using the value for light transmission in air as 100% full scale. This air calibration corresponded to a raw count of 3860 on a scale of 0 to 4095.

3. Data Processing

The CTD data were recorded at sea with a PC-based data acquisition system written by Howard Saklad of the University of Alaska, Institute of Marine Science. The program acquires the raw CTD data at 32 hz, displays the data in real time, postcast data averages, and prints lists of data at each station. Normally, only the down profile is processed at sea. During post cruise data processing, the conductivity calibration was first applied to the raw data. Then an exponential recursive filter (Middleton and Foster, 1980) described by Cox was applied to pressure and conductivity to match the amplitude and phase of the platinum temperature sensor. The Cox filter has the form

$$c'(t) = w_0 c'(t - dt) + (1 - w_0)c(t),$$

where $c'(t)$ is the filtered conductivity at time t, $c'(t - dt)$ is the previous filtered conductivity, and $c(t)$ is the original unfiltered conductivity at time t. The filter weight is given by

$$w_0 = e^{-dt/tlag}$$

where $dt = .032$ sec is the sampling period, and $tlag = .235$ sec is the time lag of the platinum temperature sensor. A uniform pressure series of 1 db interval was then created from the filtered data, after spurious data observations (spikes) had been replaced with interpolated data. Salinity was calculated using Lewis (1980) and a value of 42.914 was used to convert to conductivity ratio (Culkin and Smith, 1980).

4. Data Presentation

The hydrographic survey data are shown in the form of vertical sections, T/S correlations, horizontal sections, vertical profiles, and tabular lists at graduated depths. Plots of the mixed layer depth for each survey are defined by a vertical temperature change from the surface value of less than 0.1°C. Light transmission values are given as percent full scale transmission in clear air.

5. Acknowledgments

Cruise W8902 on the R/V *Wecoma* was supported by the NSF Grant OCE87-16937. Dr. Robert Beardsley was the Chief Scientist on the hydrographic cruise. The work was a cooperative effort by R. Beardsley, C. Alessi, A. Voorhis, R. Limeburner, S. Lentz, J. Dean, P. Dragos, and M. Willis. Their assistance is greatly appreciated. Finally, the helpfulness of the officers and crew of the R/V *Wecoma* contributed significantly to the success of the cruise.

6. References

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Lewis, L. L. (1980) The Practical Salinity Scale 1978 and its antecedents. *IEEE Journal of Ocean Engineering*, **OE-5**, 3–8.

Middleton, J. H., and T. D. Foster (1980) Fine structure measurements in a temperature compensated halocline. *Journal of Geophysical Research*, **85(C2)**, 1107–1122.

Send, U., R. C. Beardsley, and C. D. Winant (1987) Relaxation from upwelling in CODE. *Journal of Geophysical Research*, **92**, 1683–1698.

7. Graphic Description of CTD Data

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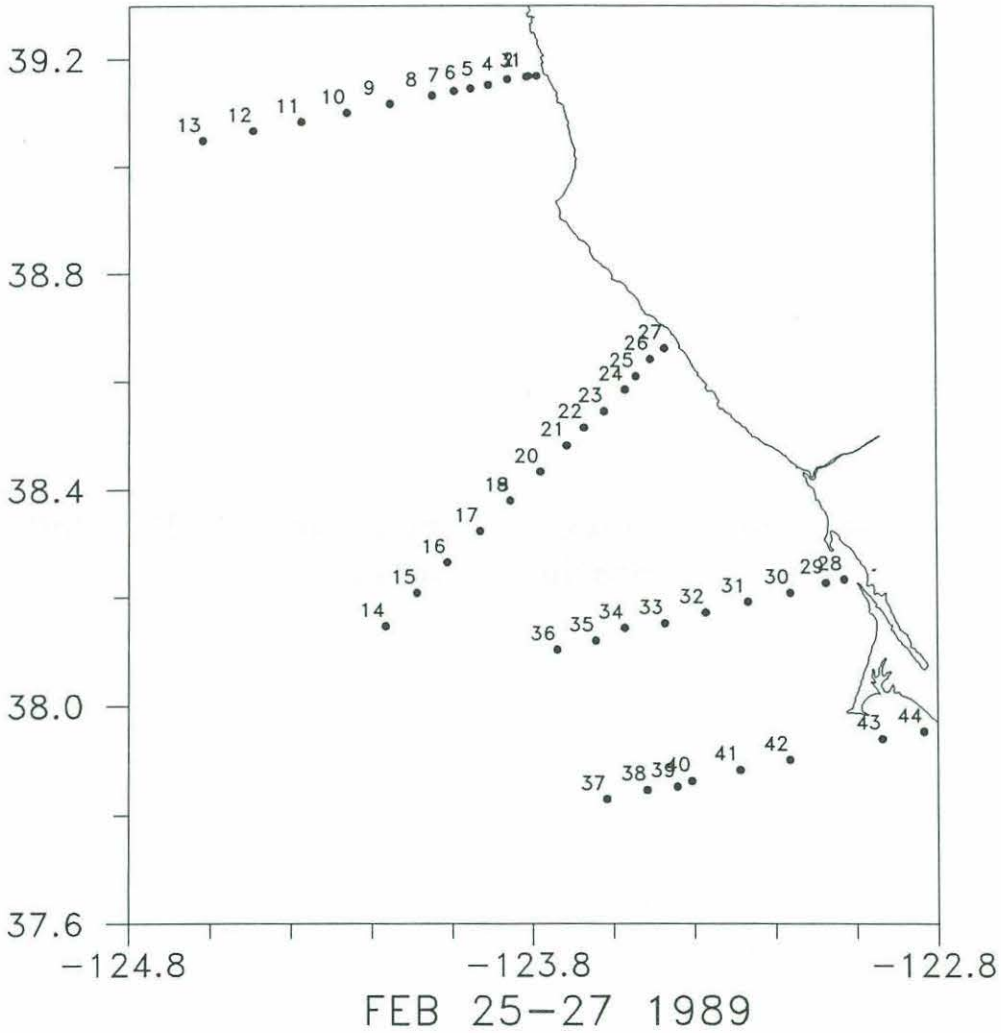
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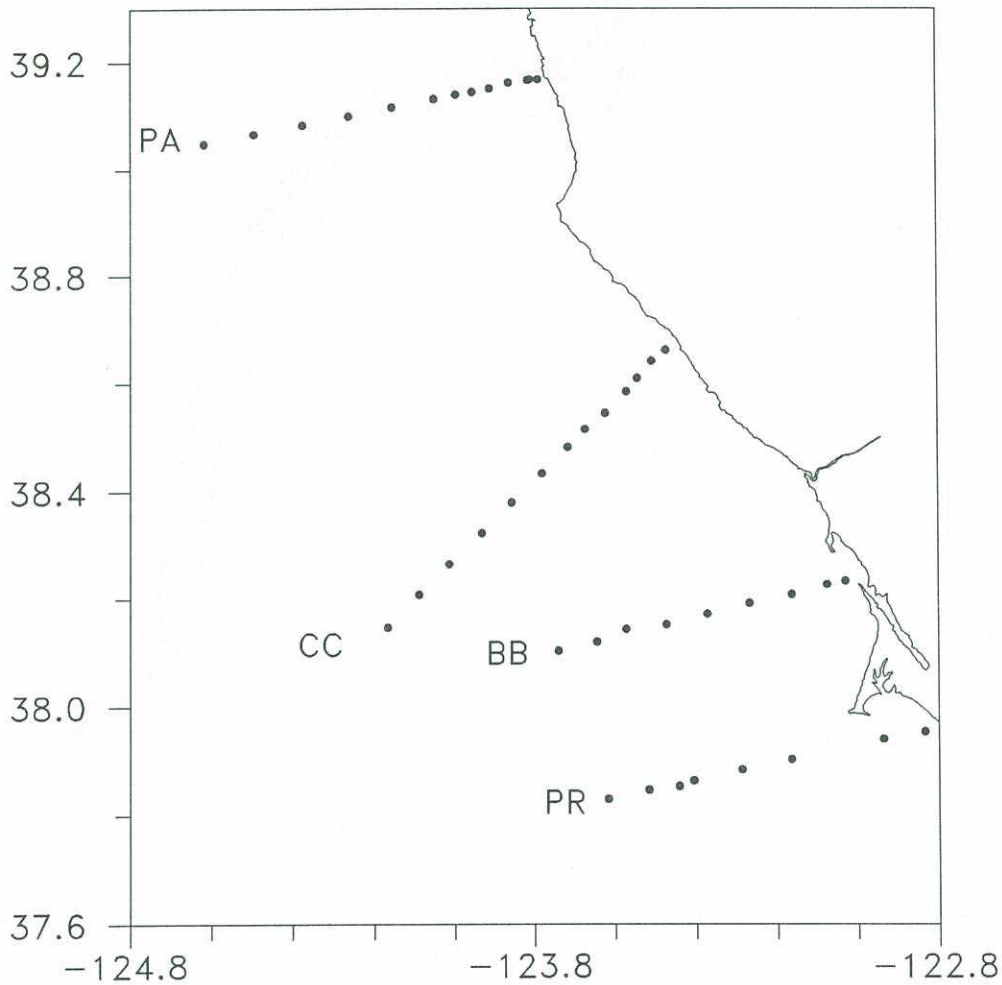

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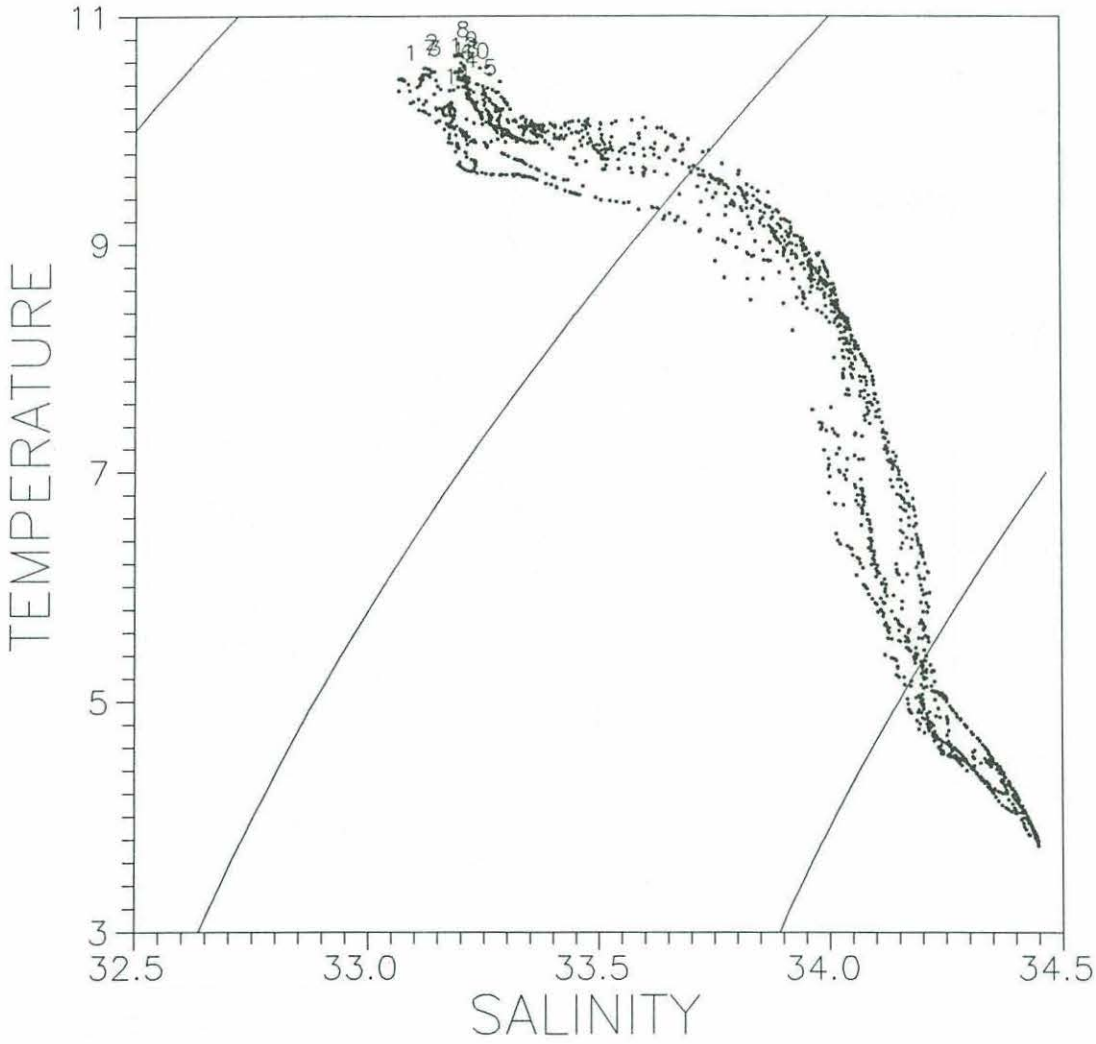
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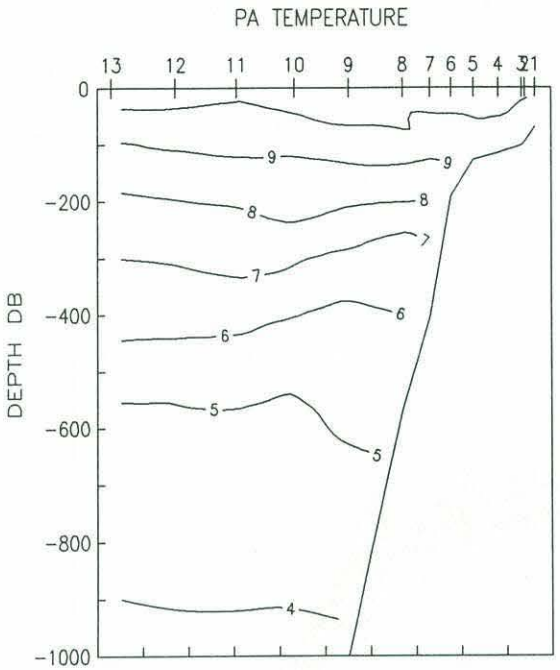
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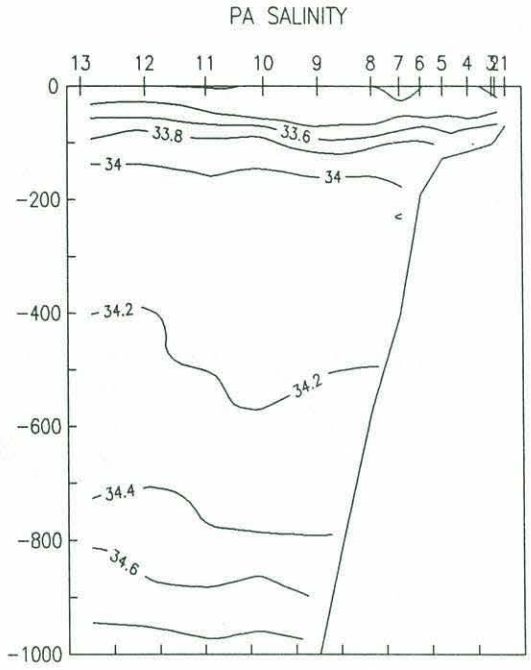
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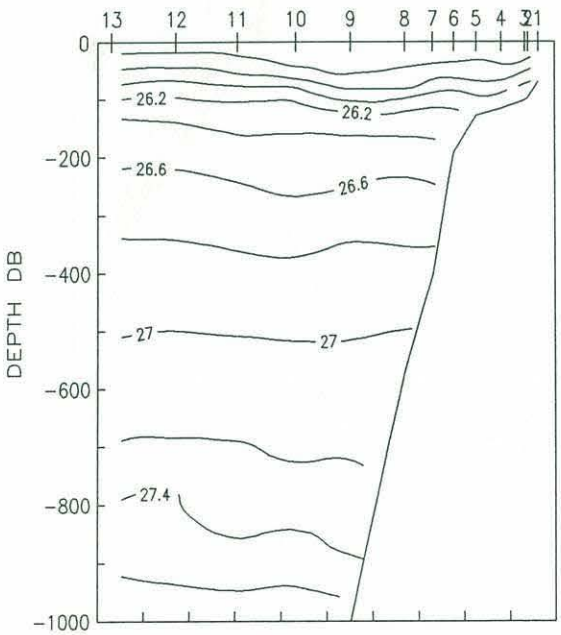
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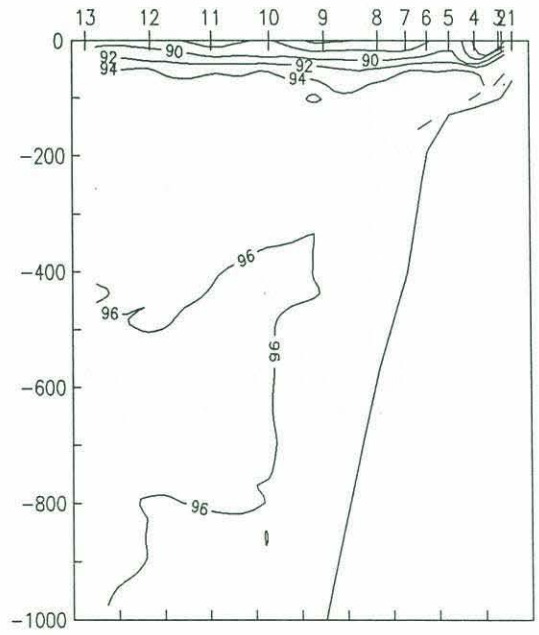
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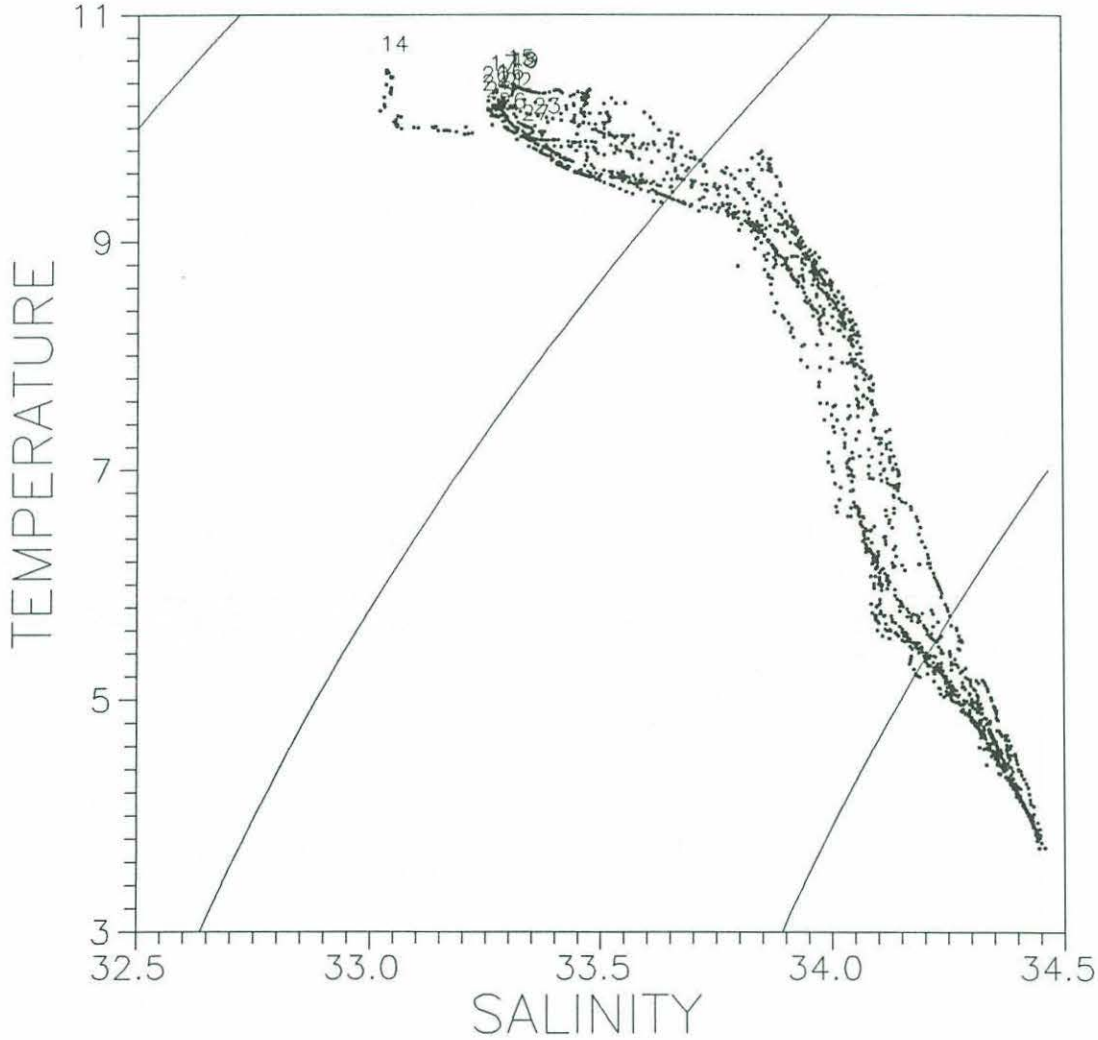
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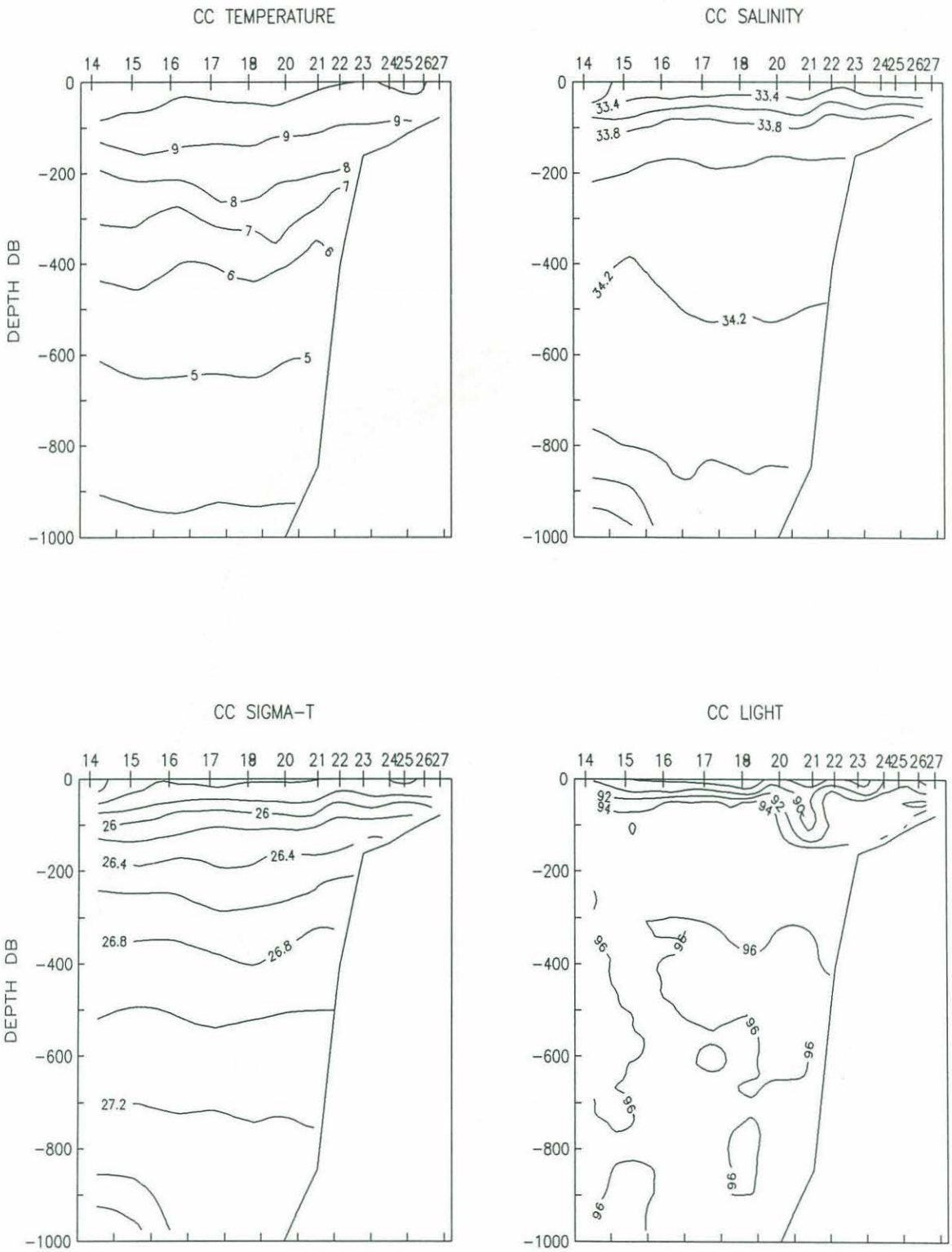
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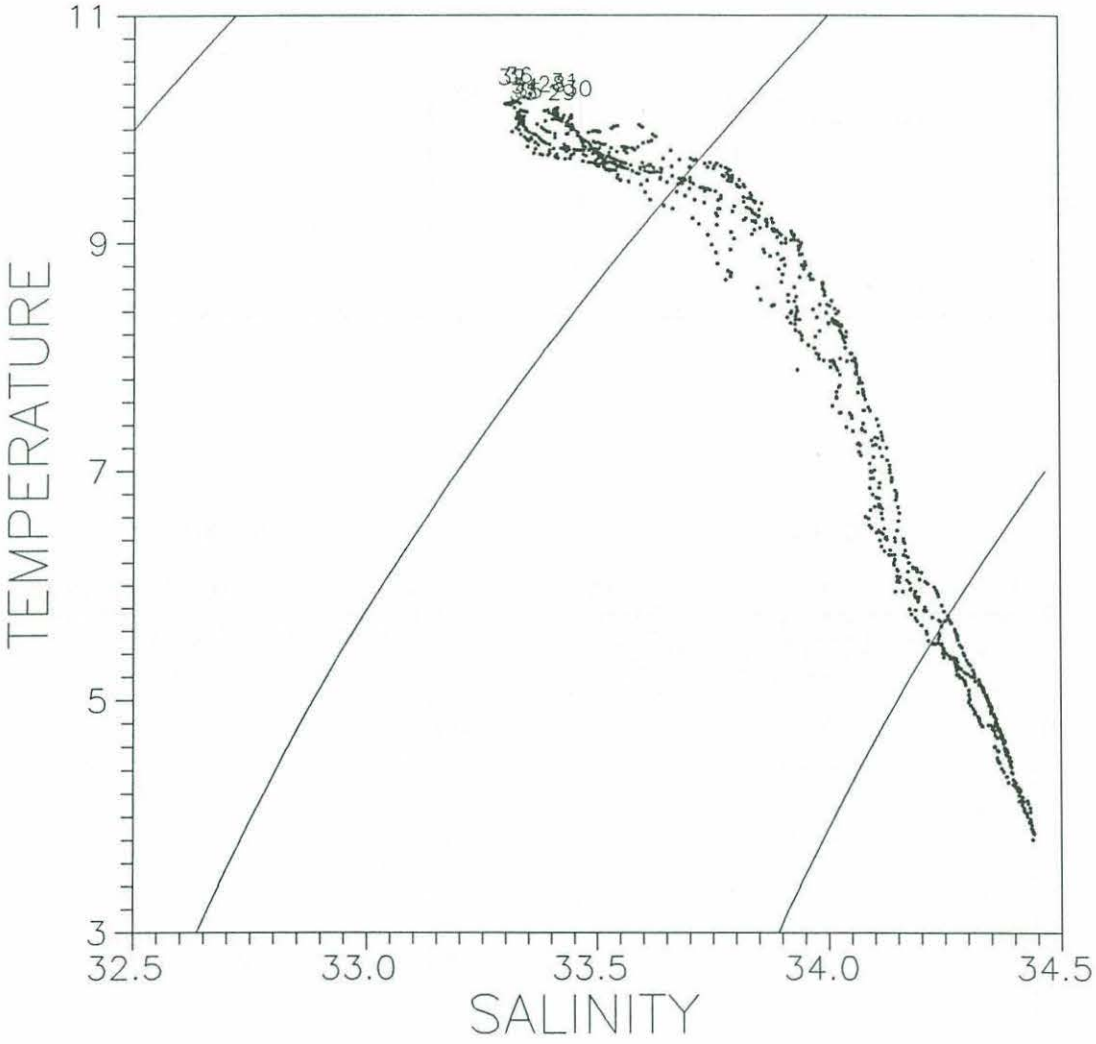
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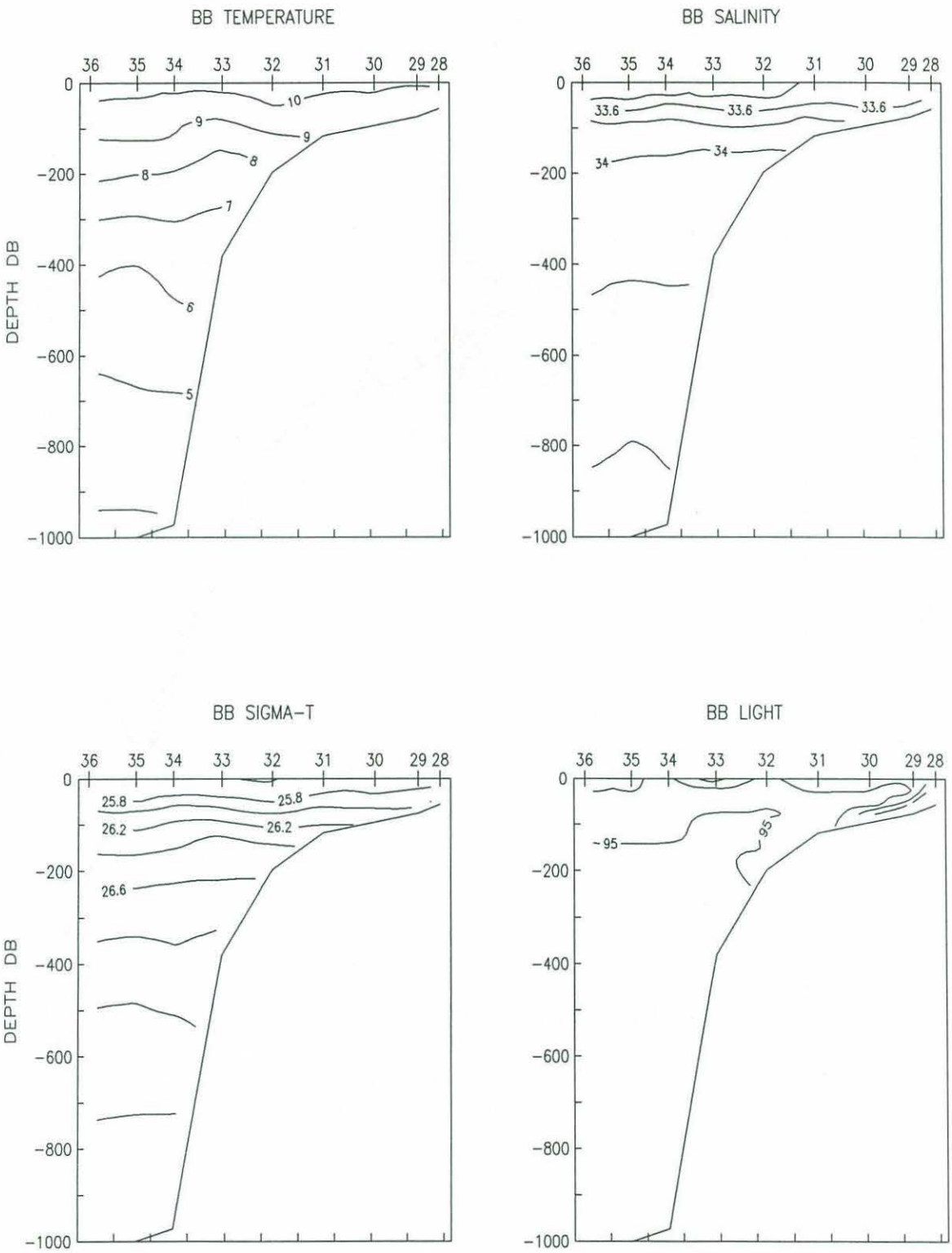
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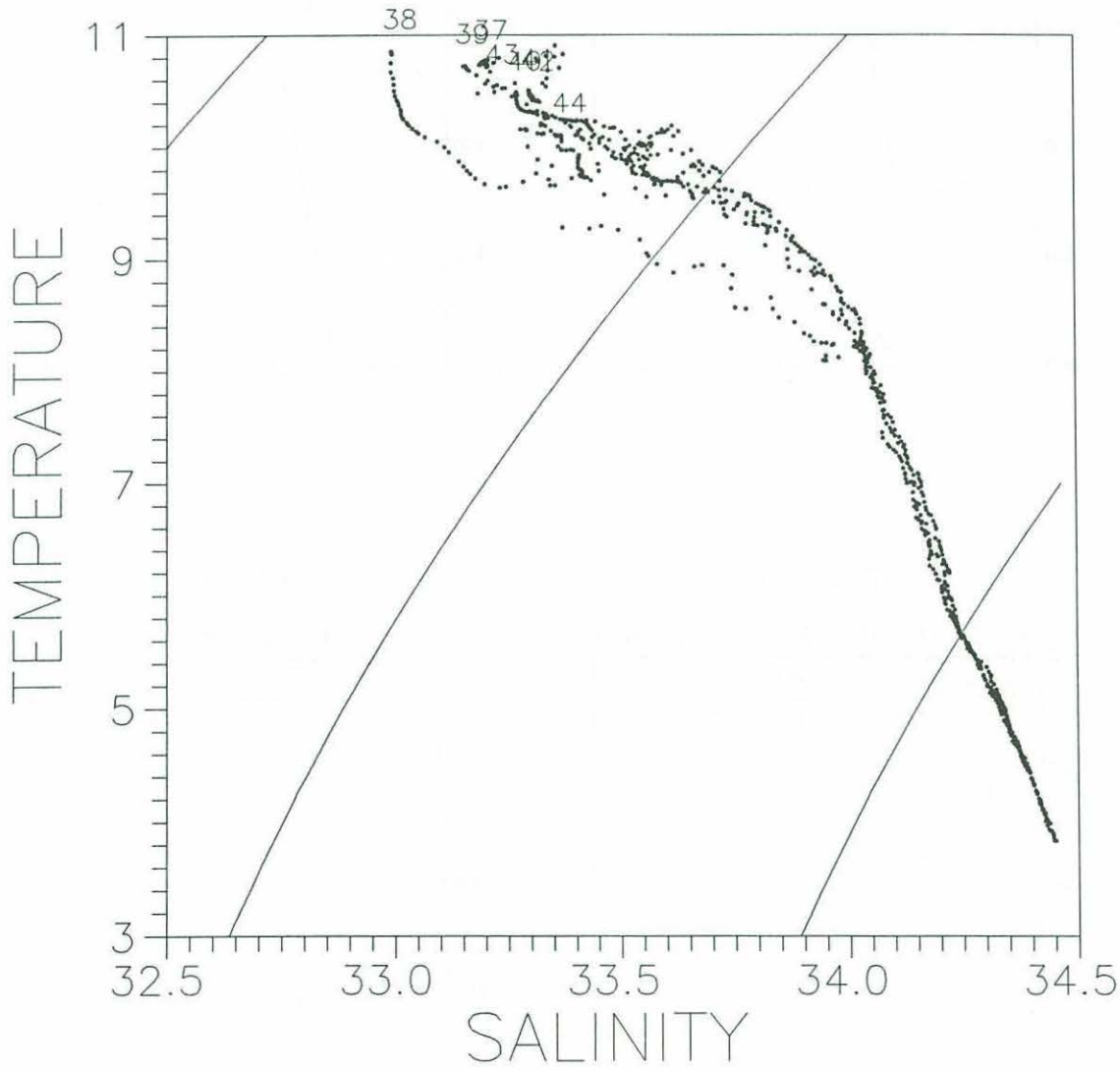
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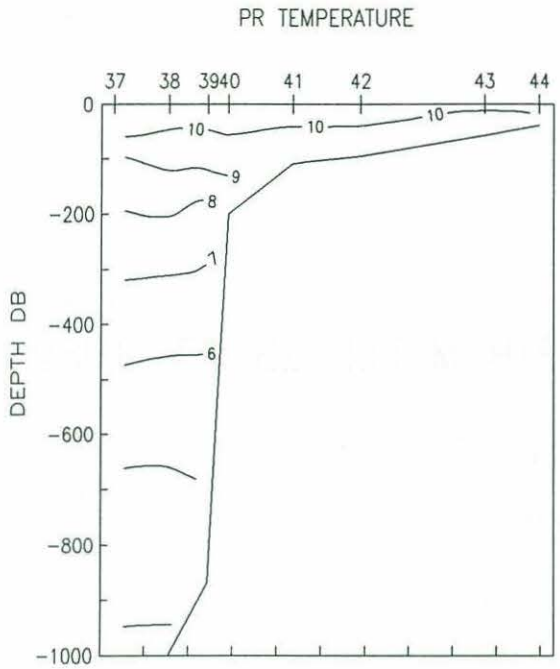
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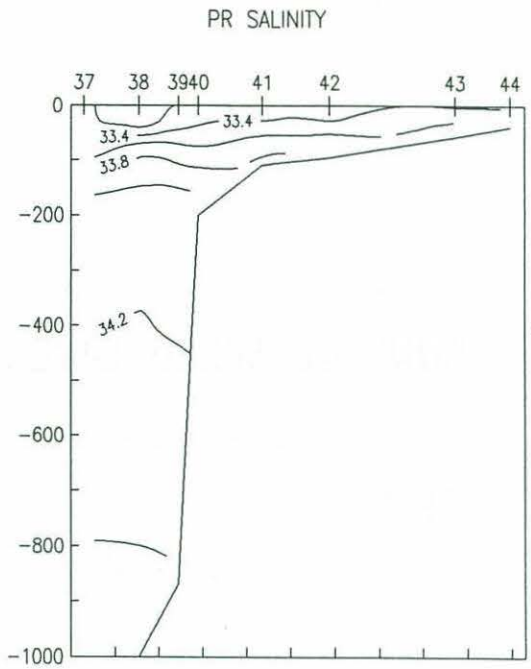
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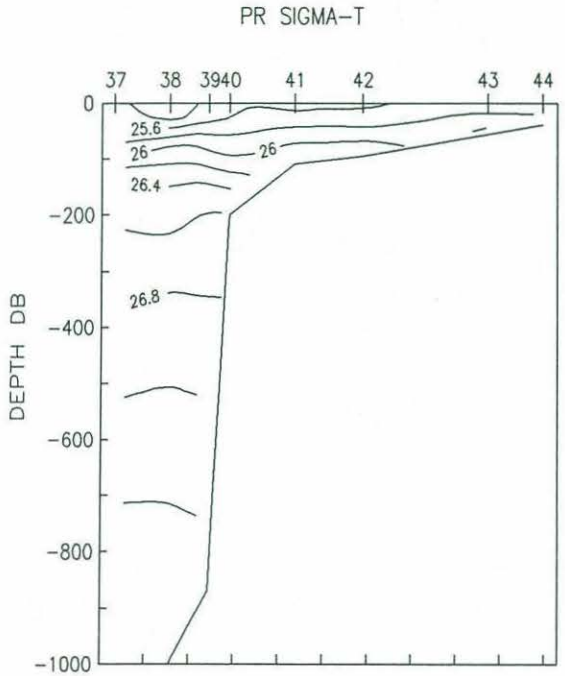
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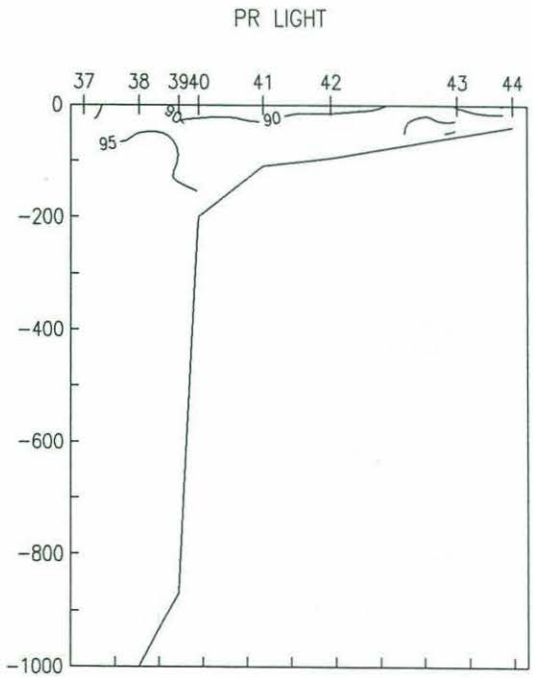
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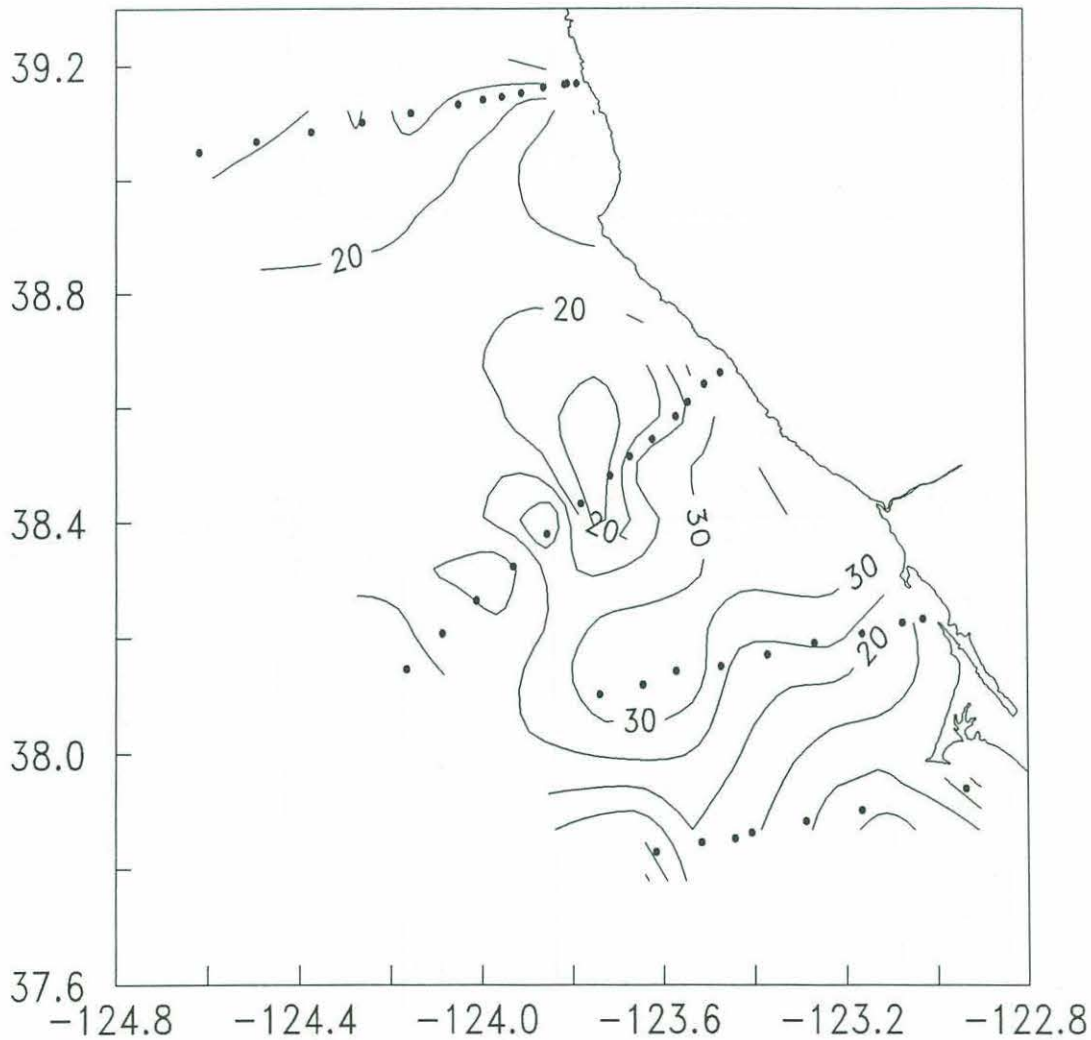

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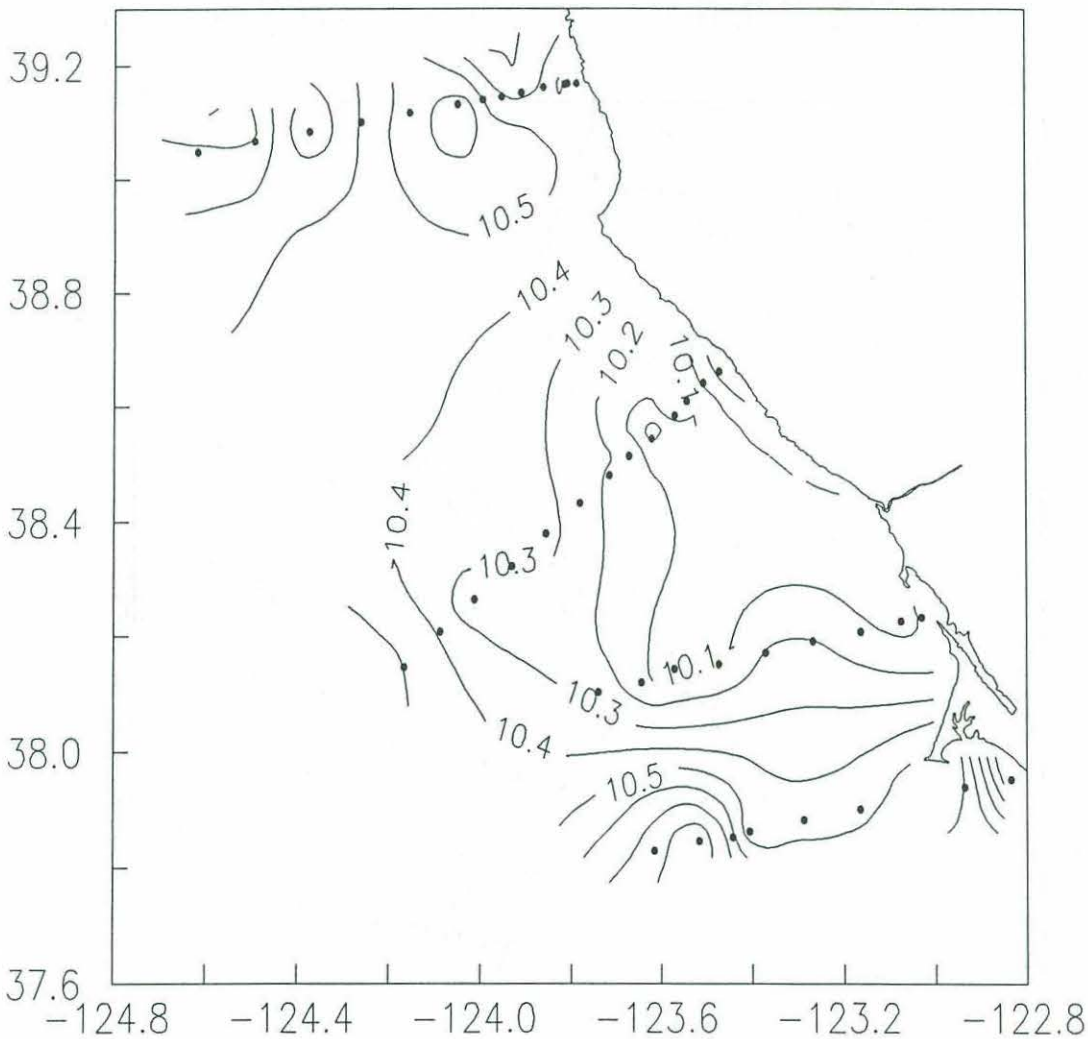

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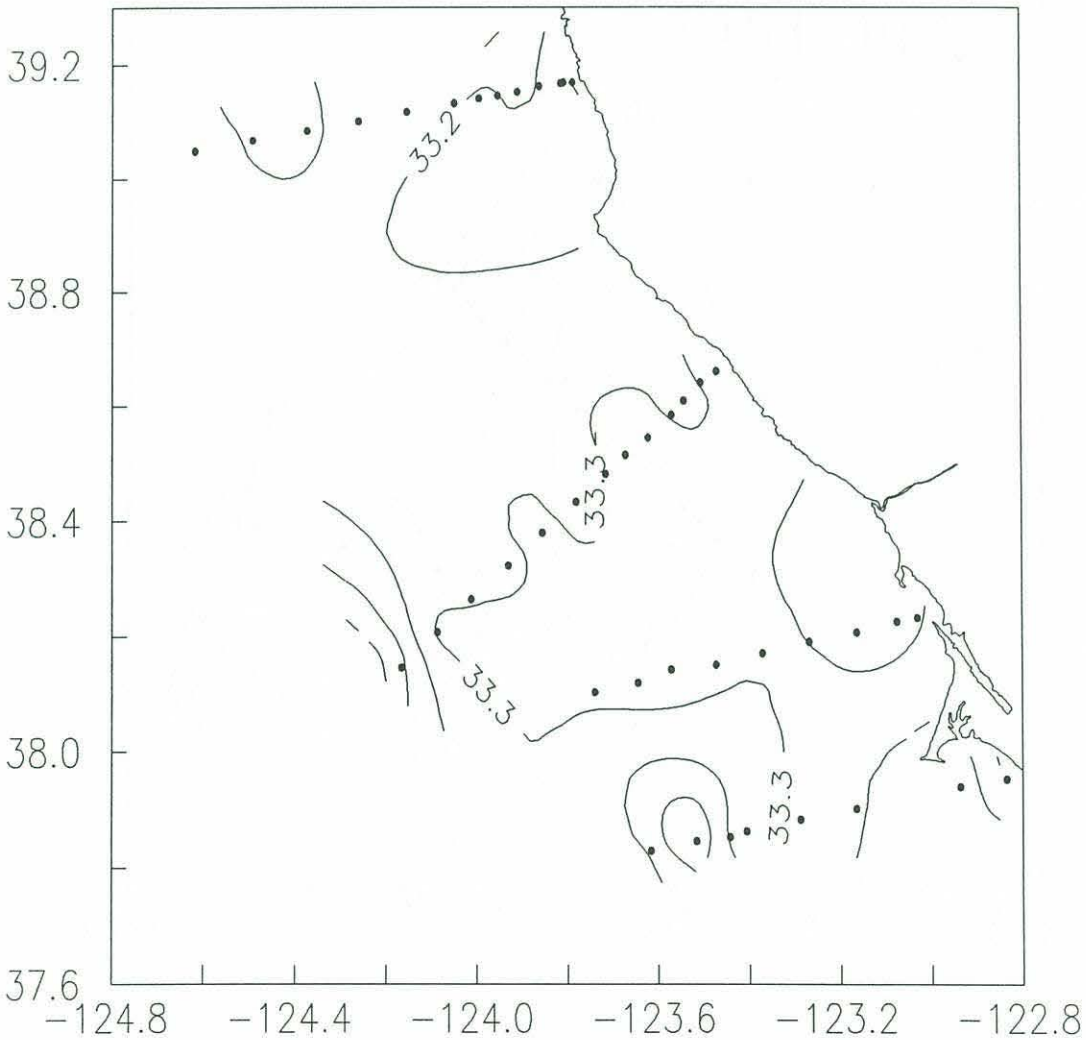

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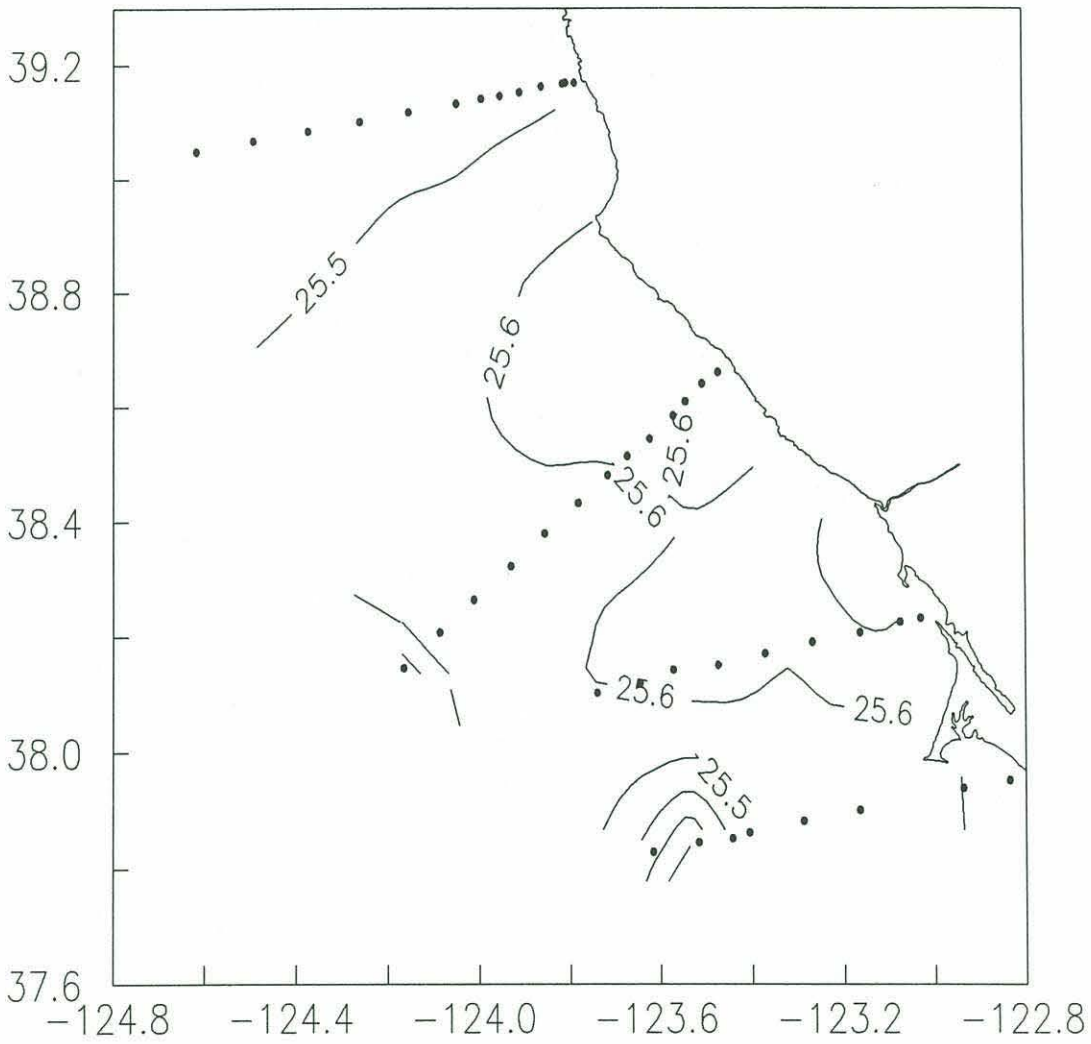

B. Small-Scale Survey — February 27–28, 1989
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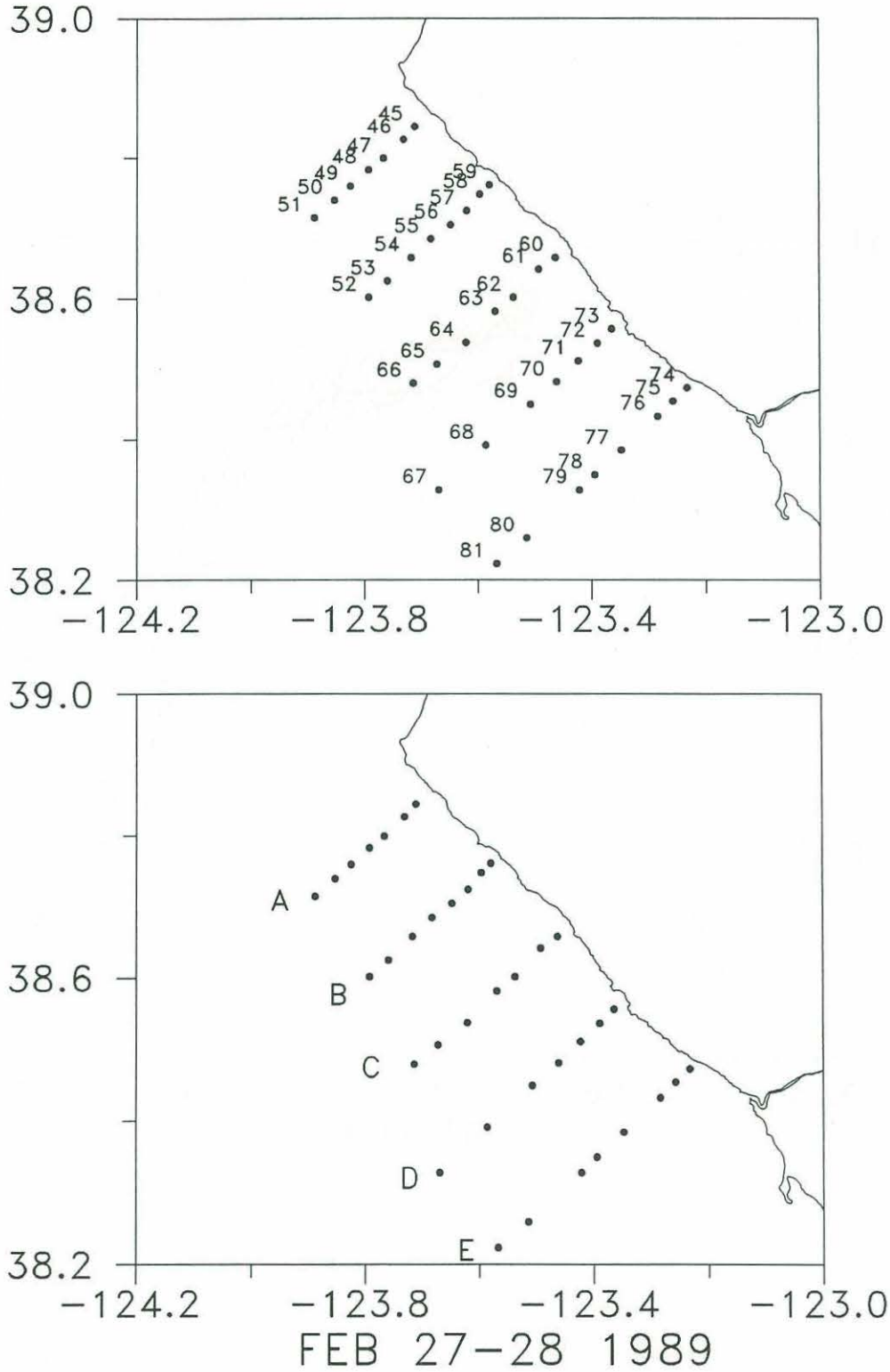
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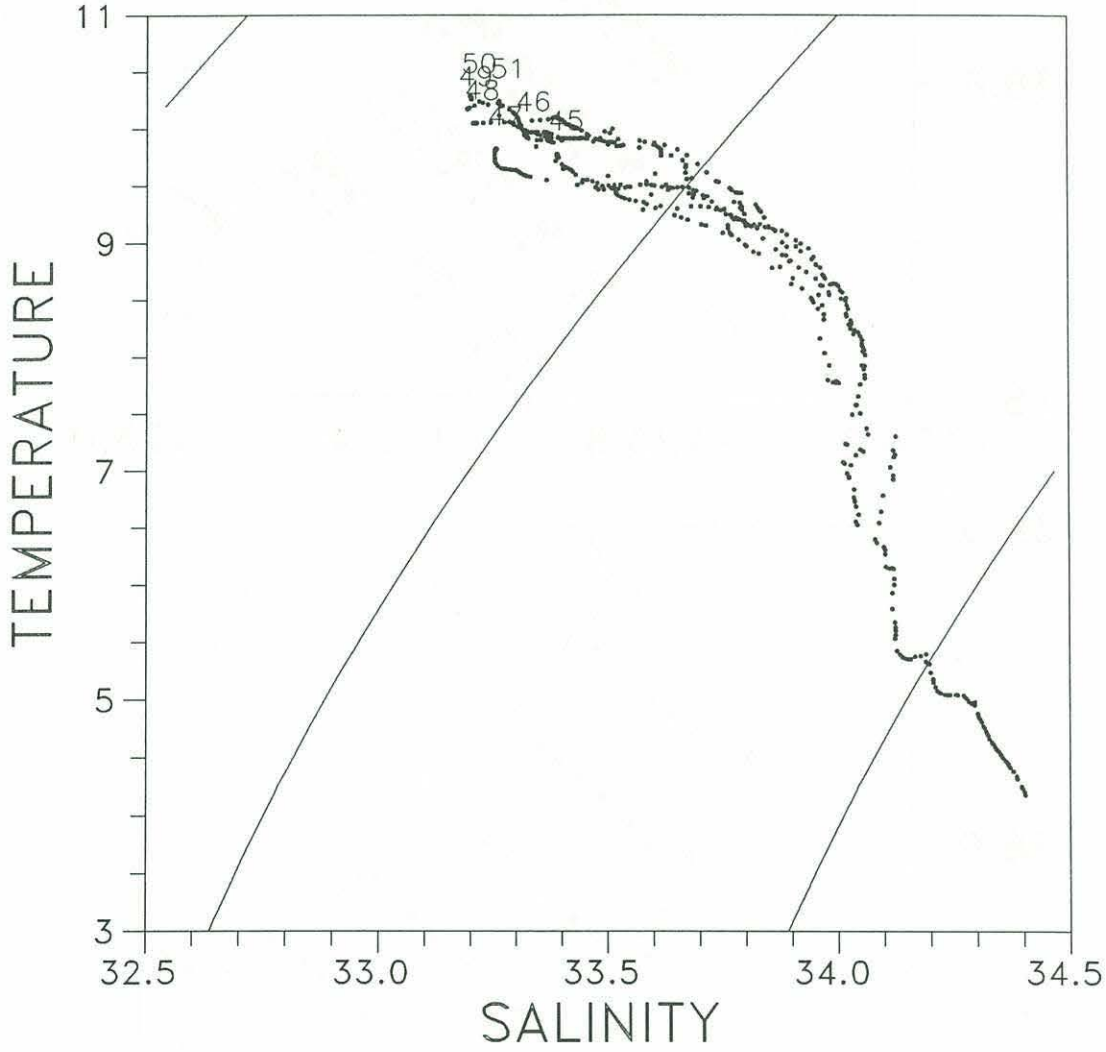
FEB 27−28 1989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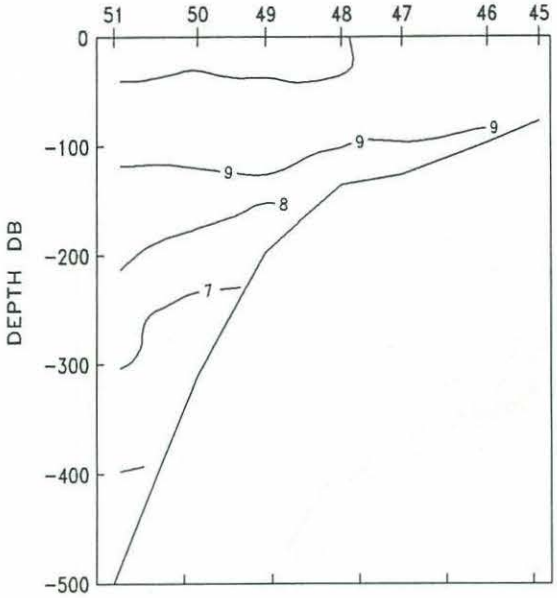

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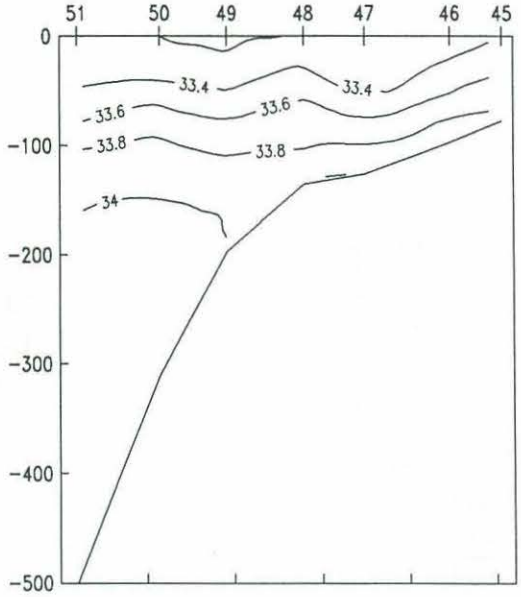

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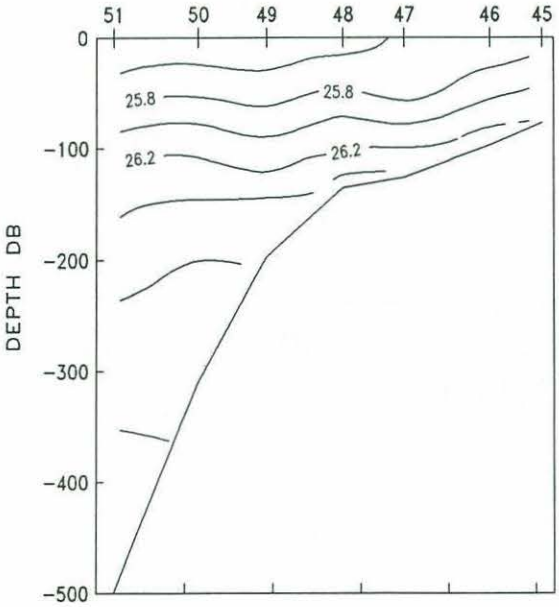

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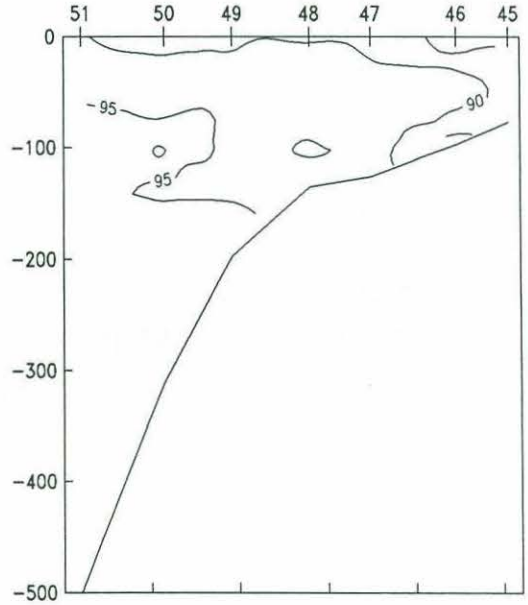

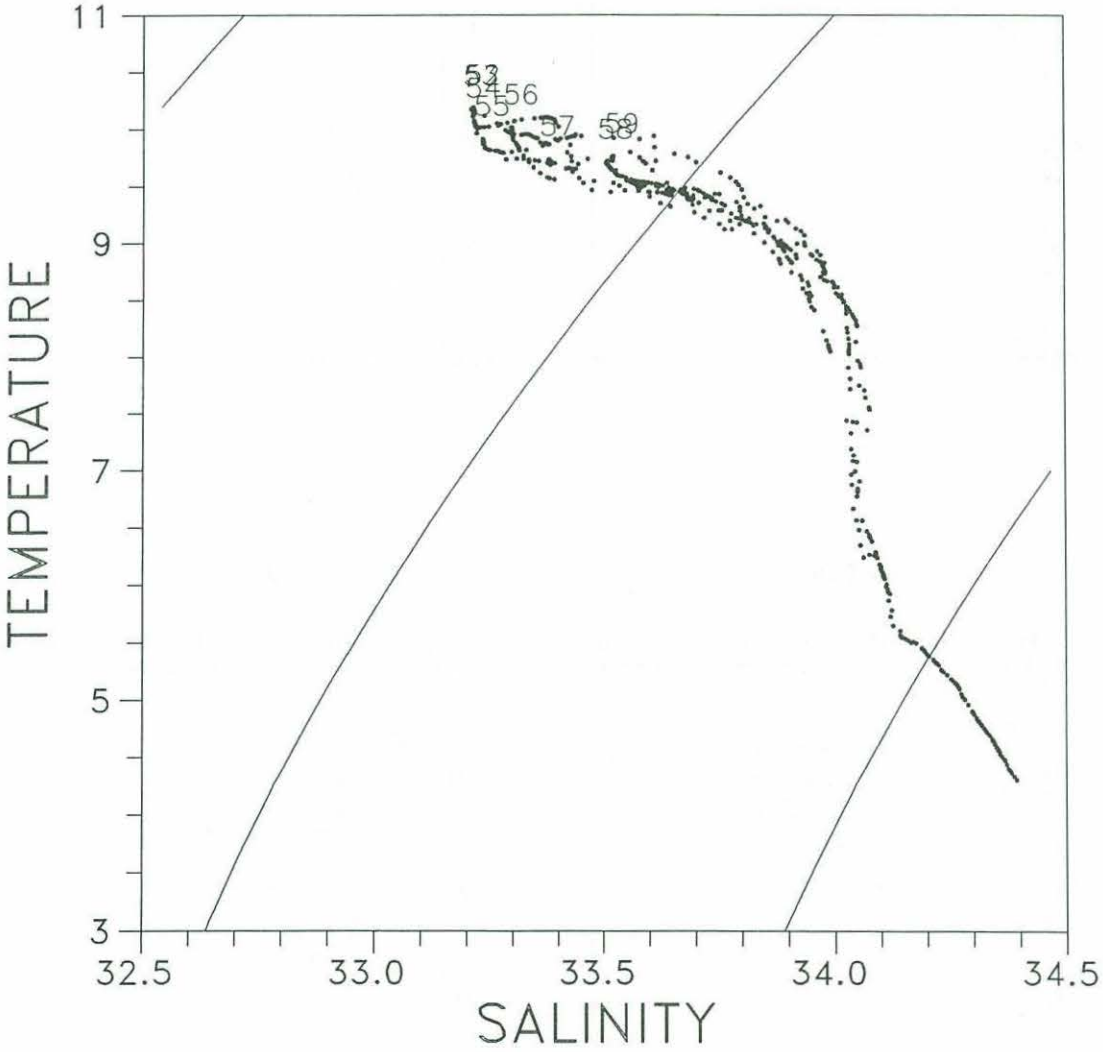
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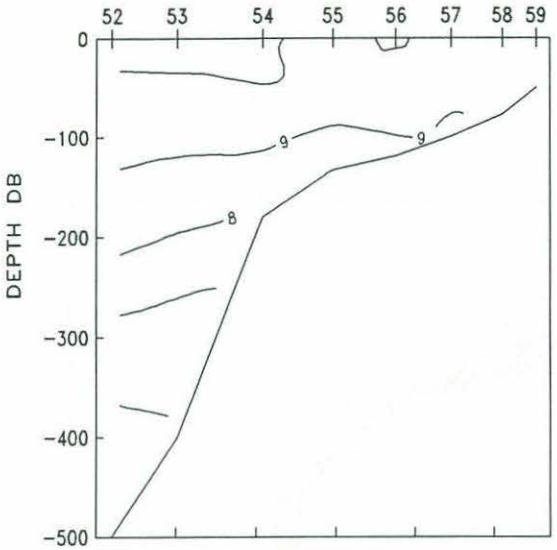
B TEMPERATURE



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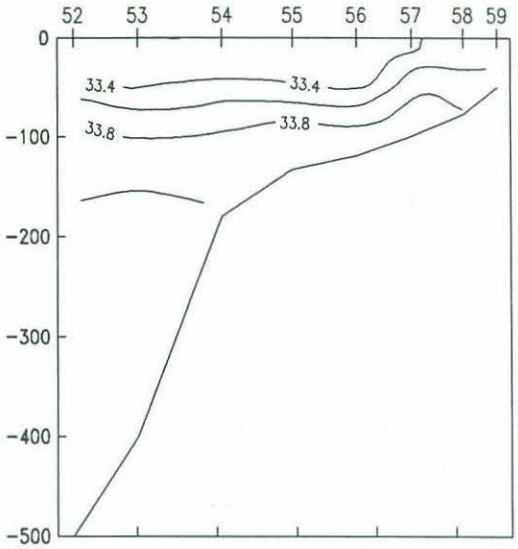
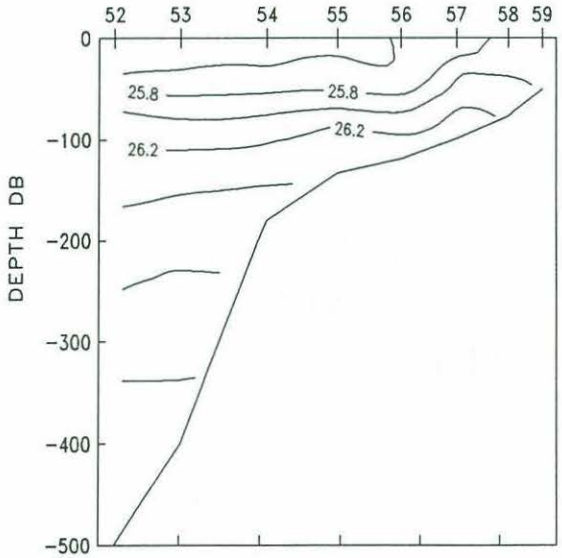
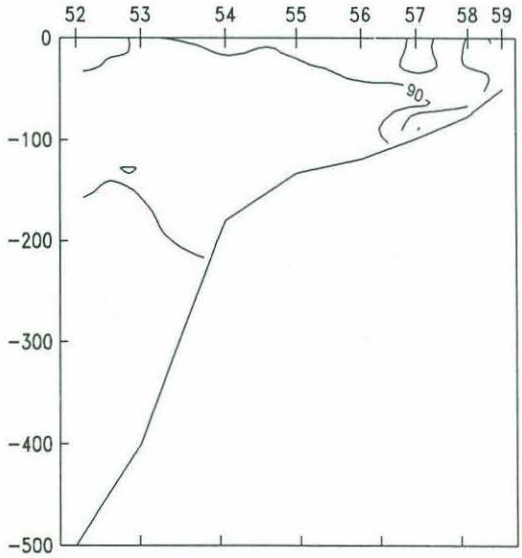
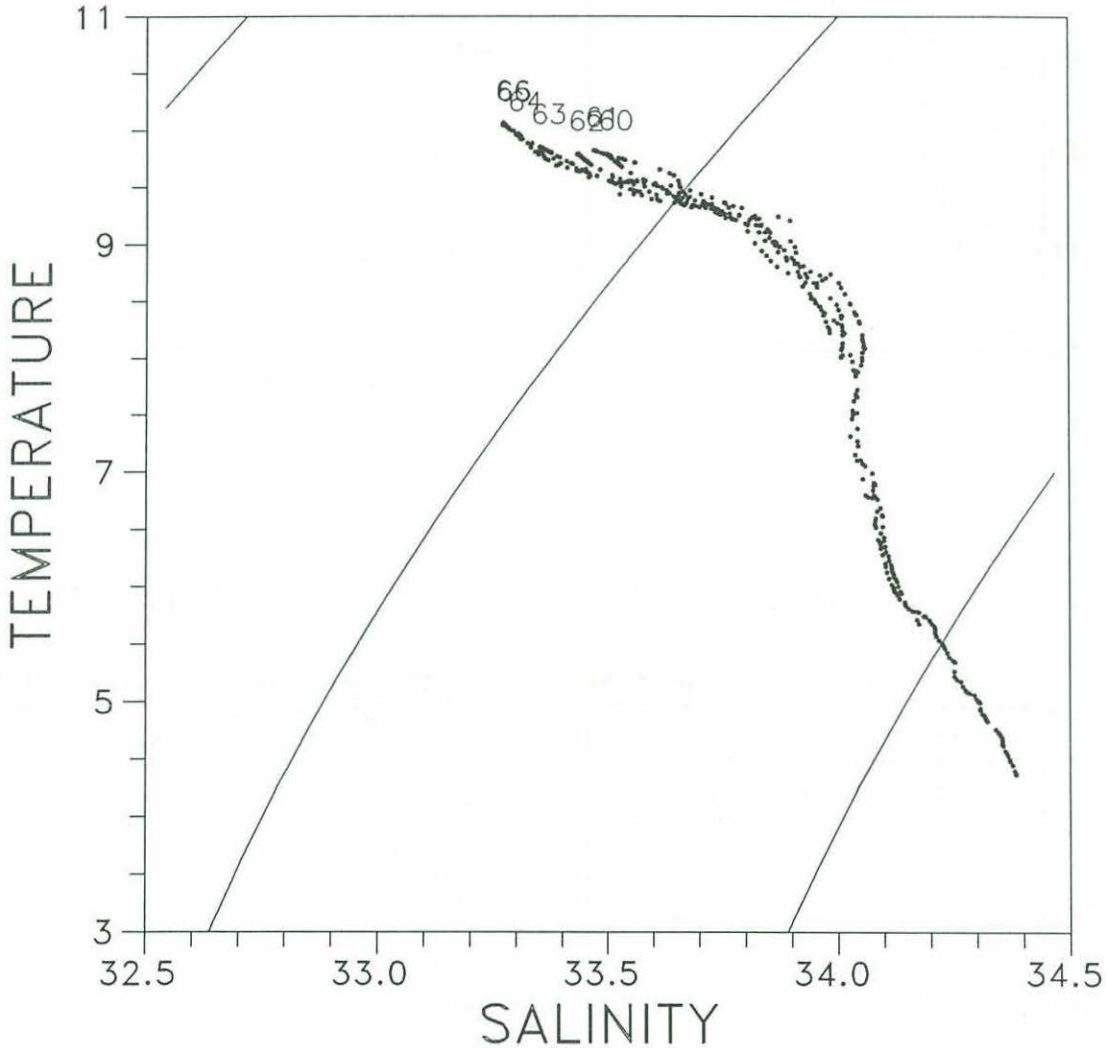


B SIGMA-T



B LIGHT

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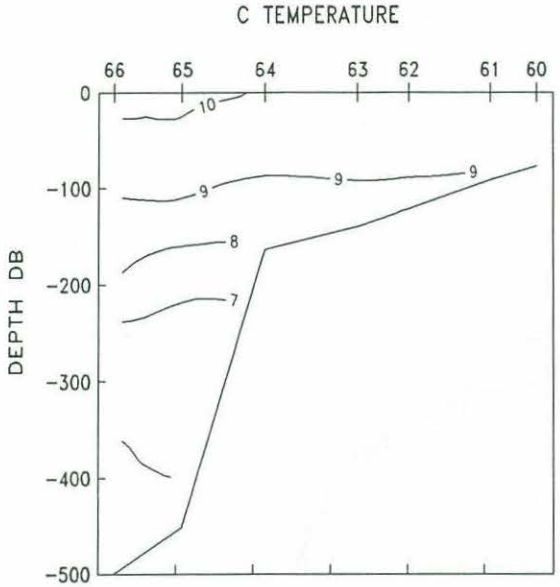
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DEPTH DB
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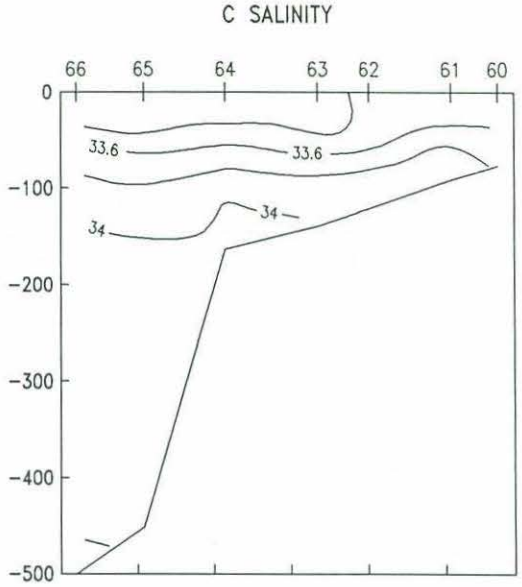
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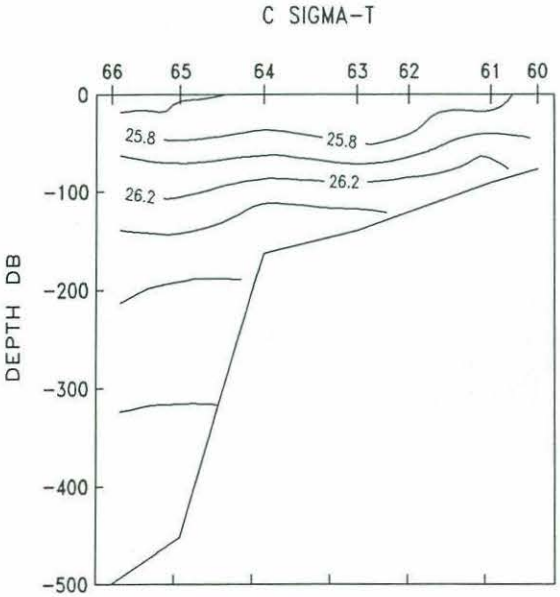
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DEPTH DB
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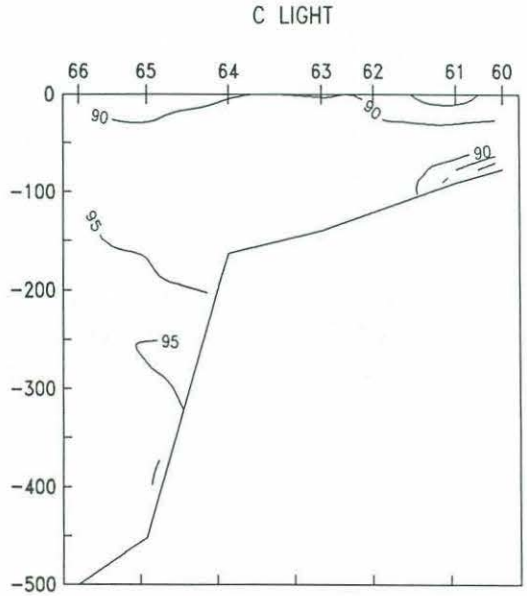
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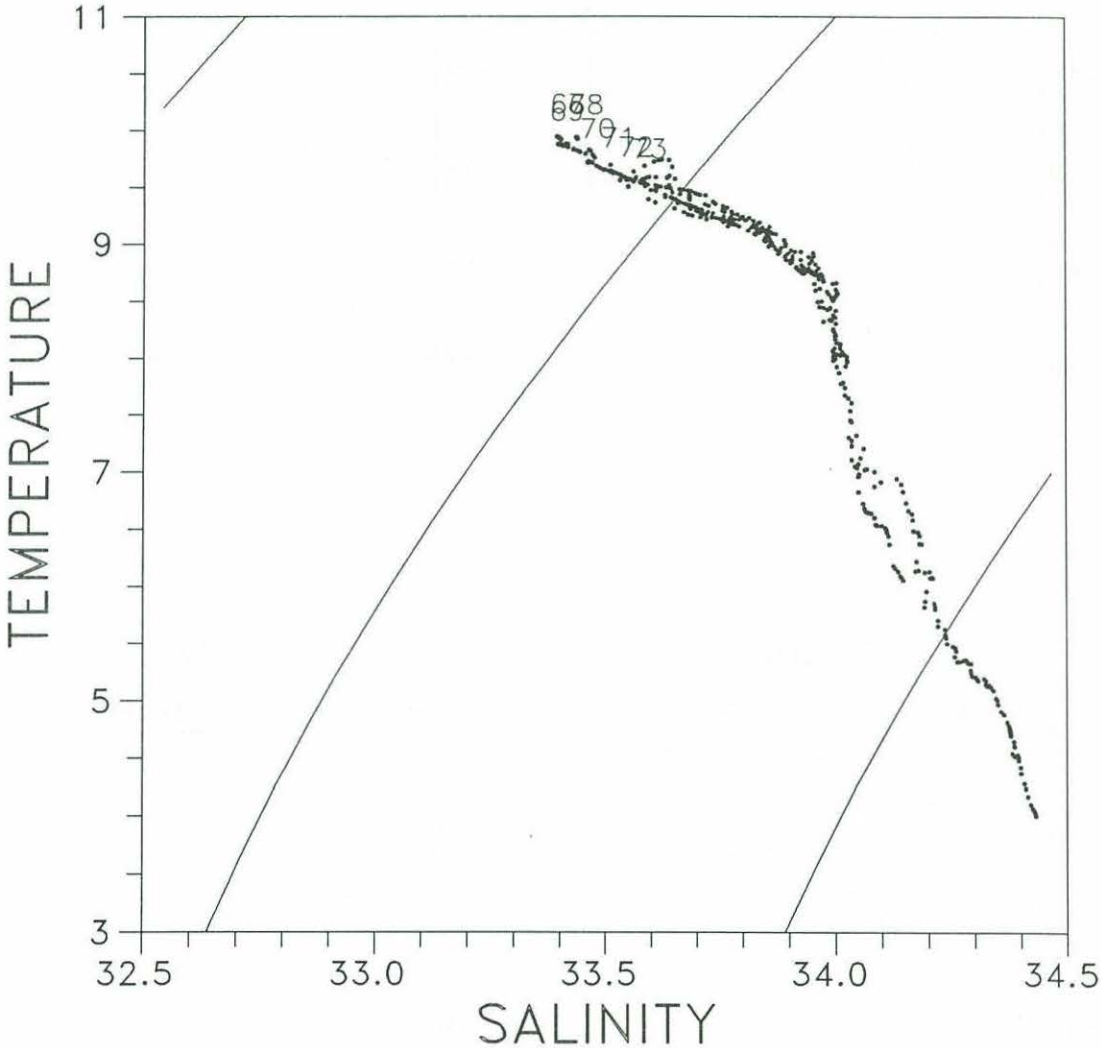
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TEMPERATURE
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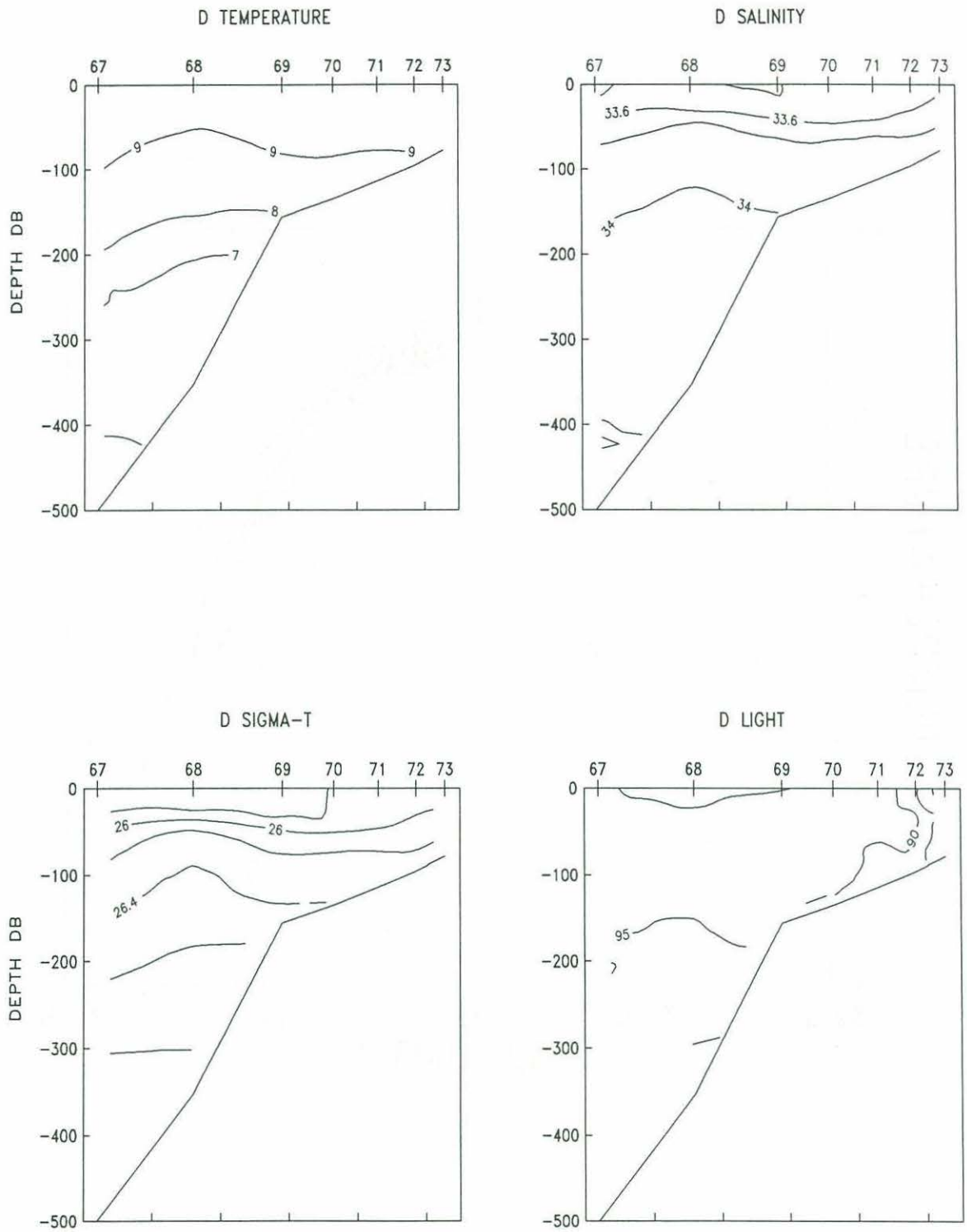
D TEMPERATURE
D SALINITY
D SIGMA-T
D LIGHT
DEPTH DB
67
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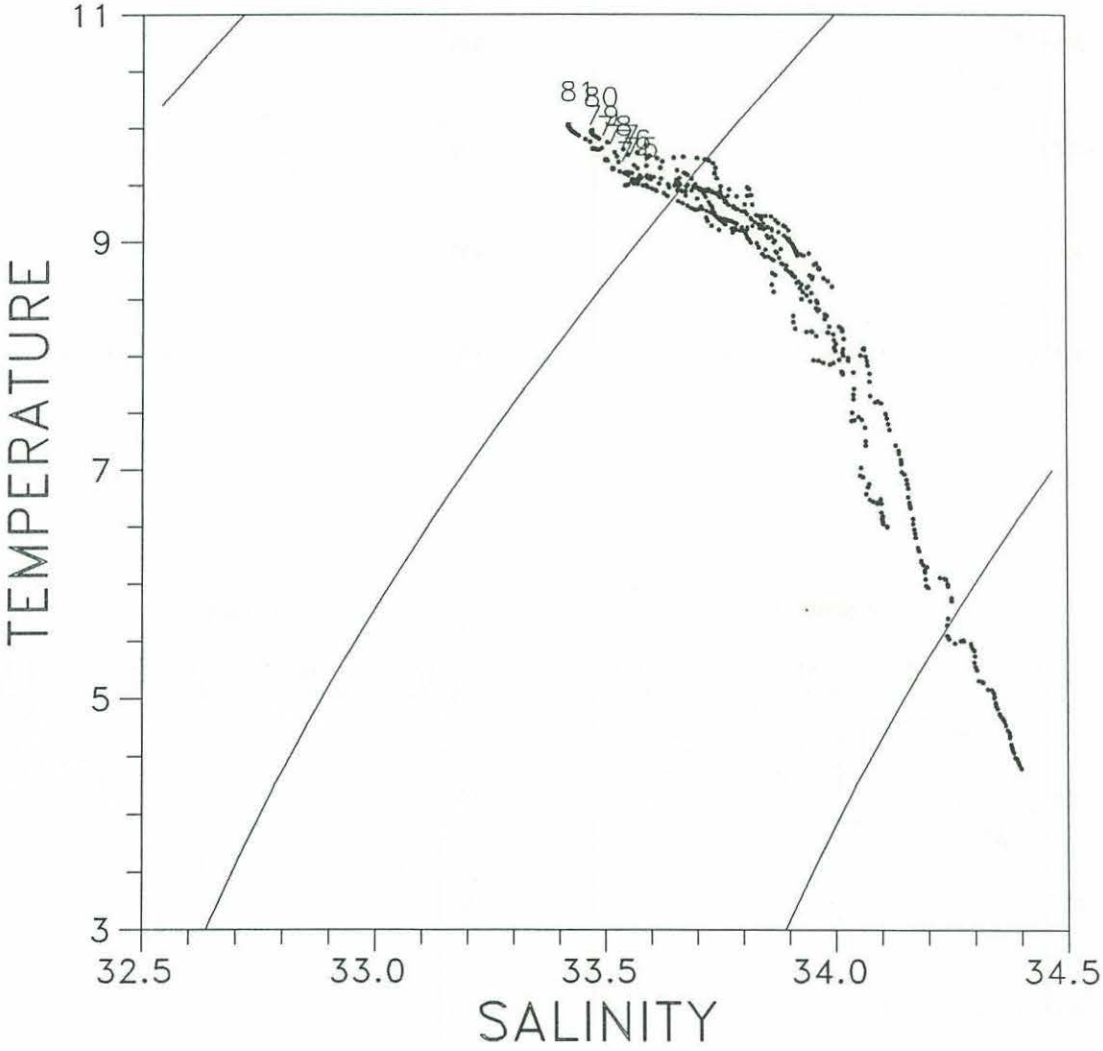
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TEMPERATURE
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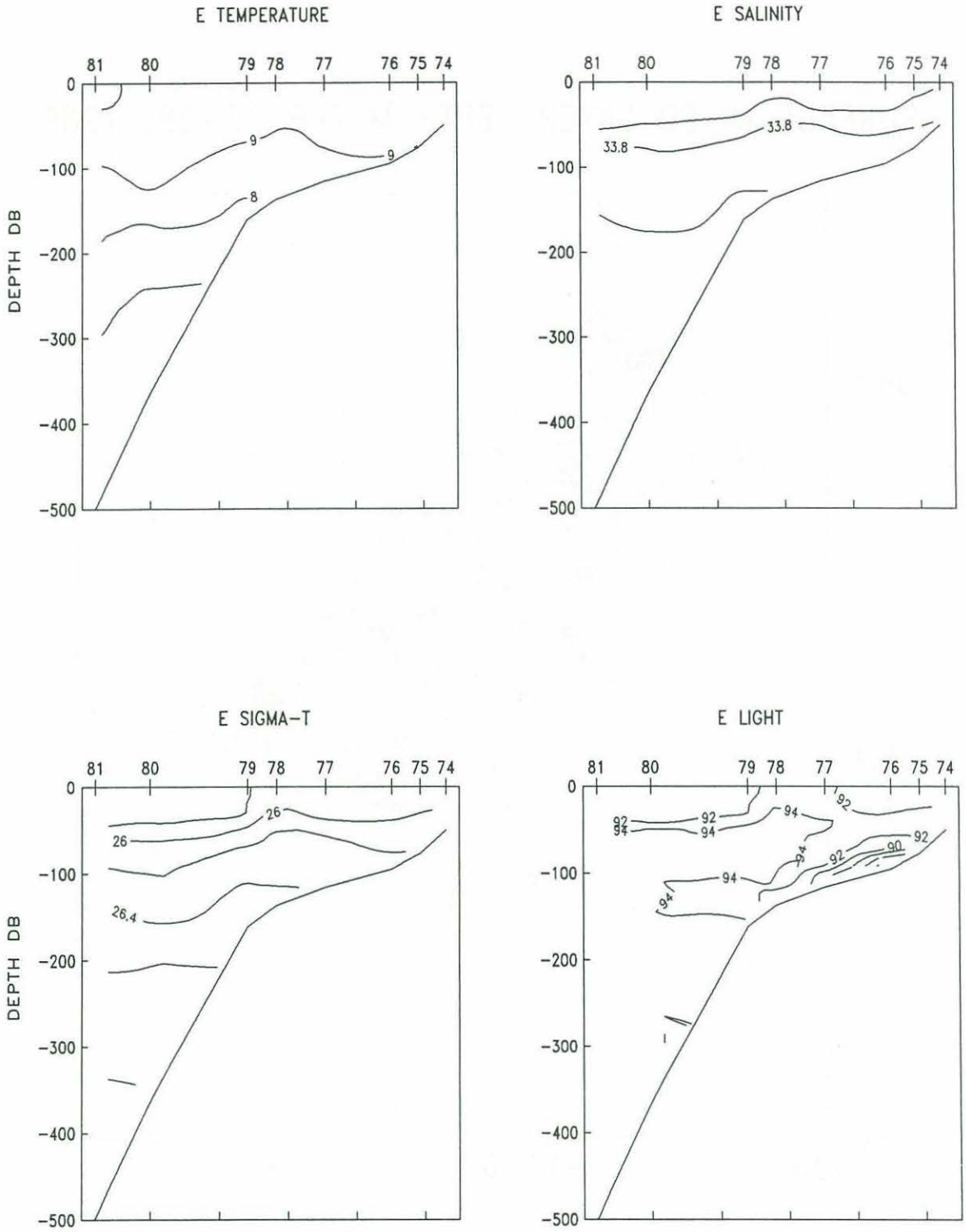
E TEMPERATURE
E SALINITY
E SIGMA-T
E LIGHT
DEPTH DB
81 80 79 78 77 76 75 74
0
-100
-200
-300
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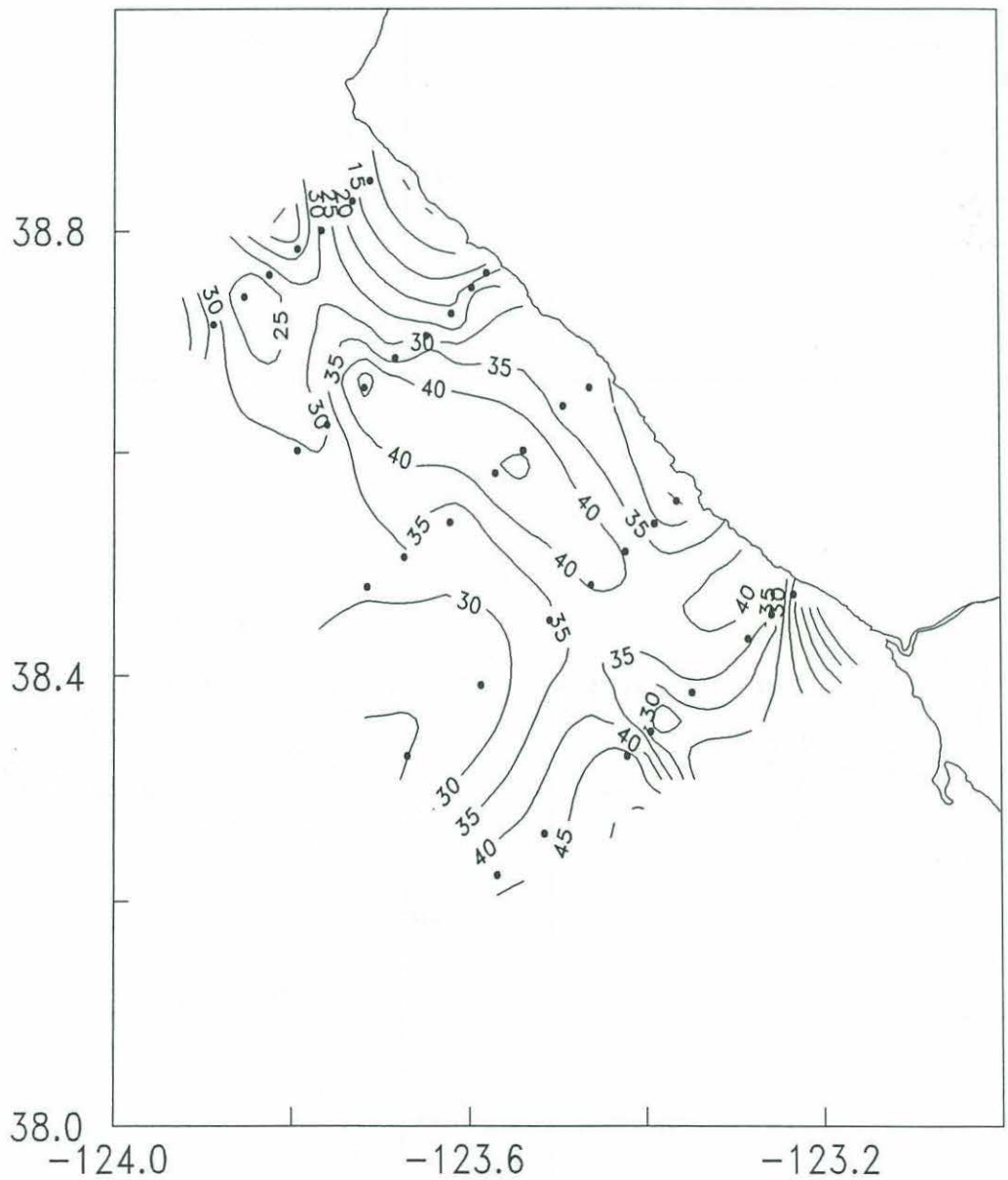
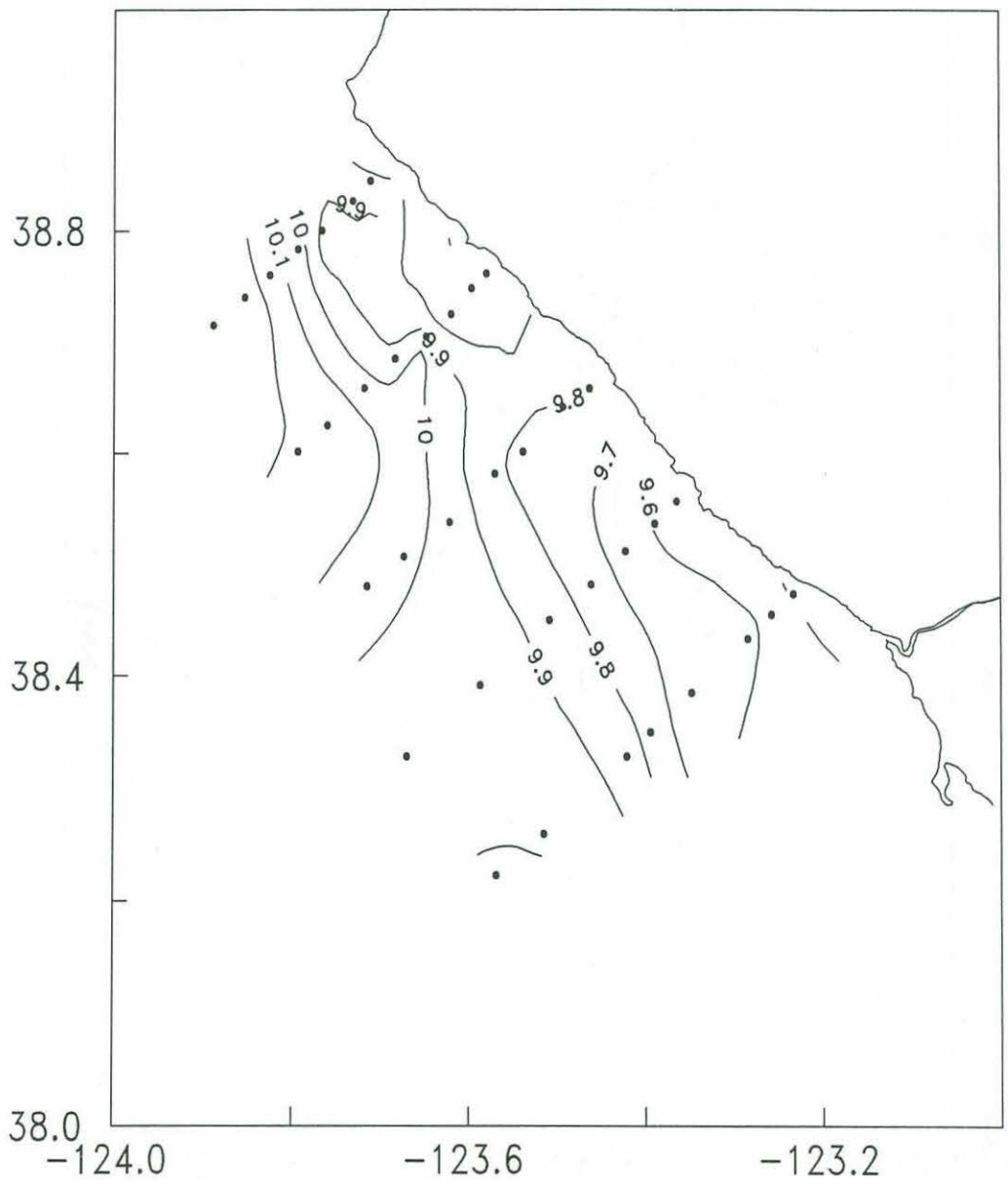
-500
9
8
33.8
26
26.4
92
94
90

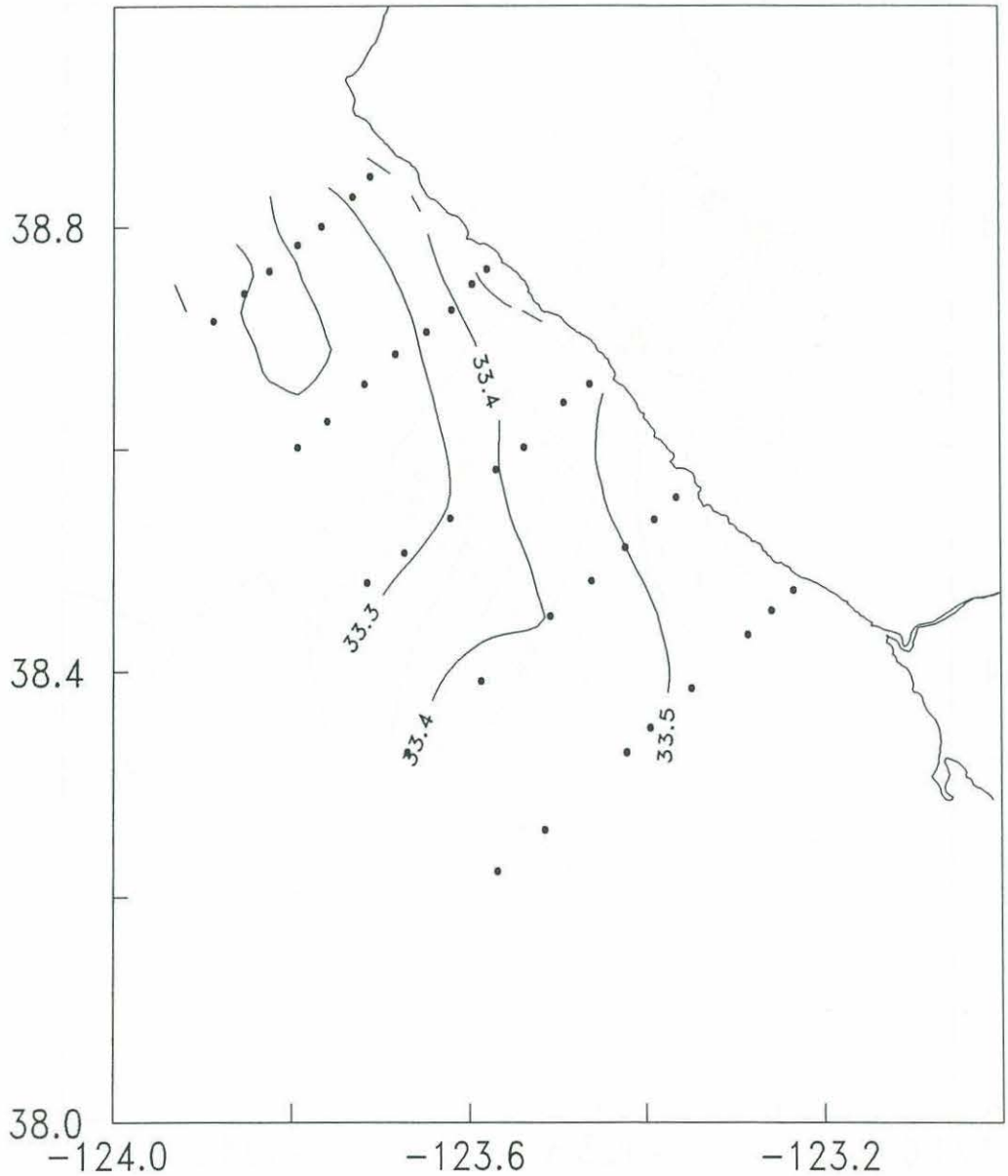
SURFACE MIXED LAYER DEPTH M FEB 27-28, 1989



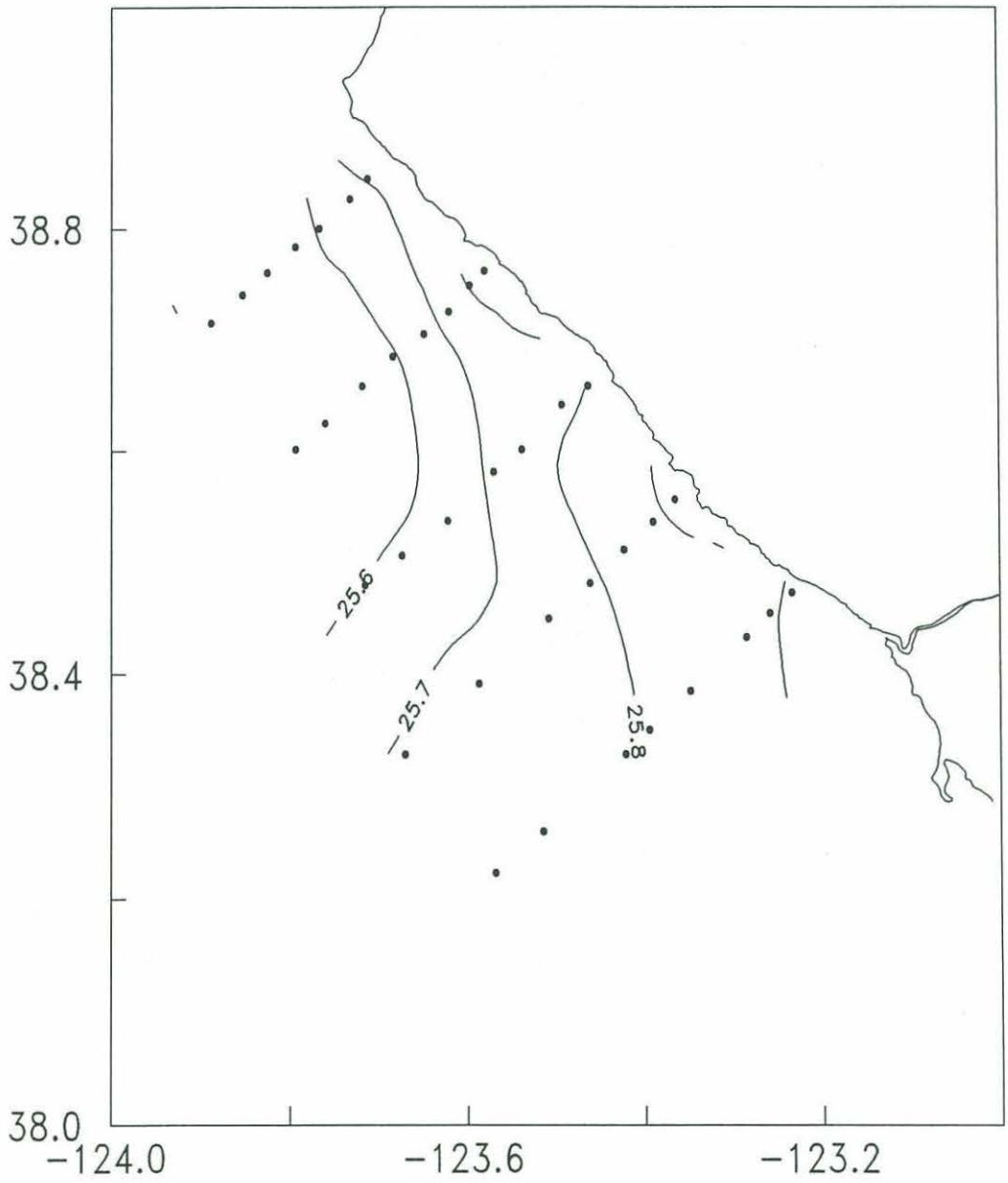
SURFACE TEMP FEB 27-28 1989



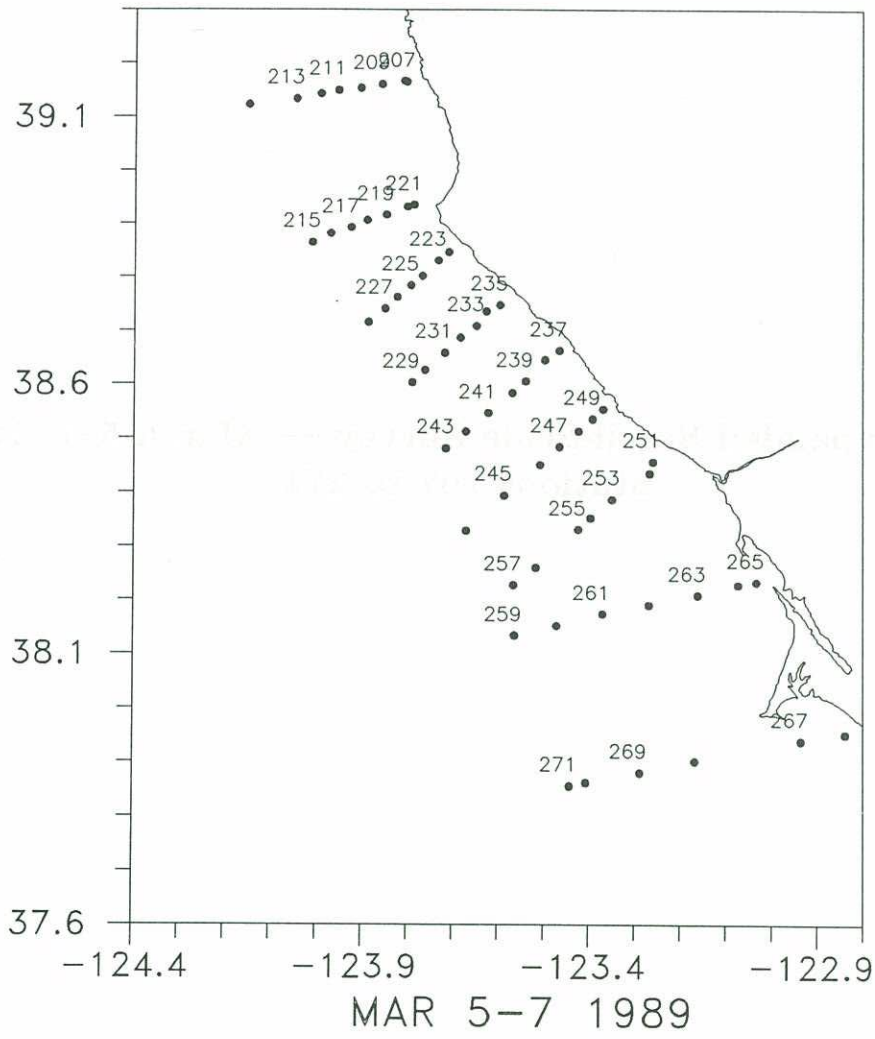
SURFACE SALINITY FEB 27-28 1989



SURFACE SIGMA-T FEB 27-28 1989



C. Expanded Small-Scale Survey — March 5–7, 1989
Stations 207 to 271


39.1
38.6
38.1
37.6
−124.4
−123.9
−123.4
−122.9
MAR 5−7 1989
213
211
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207
221
219
217
215
223
225
227
235
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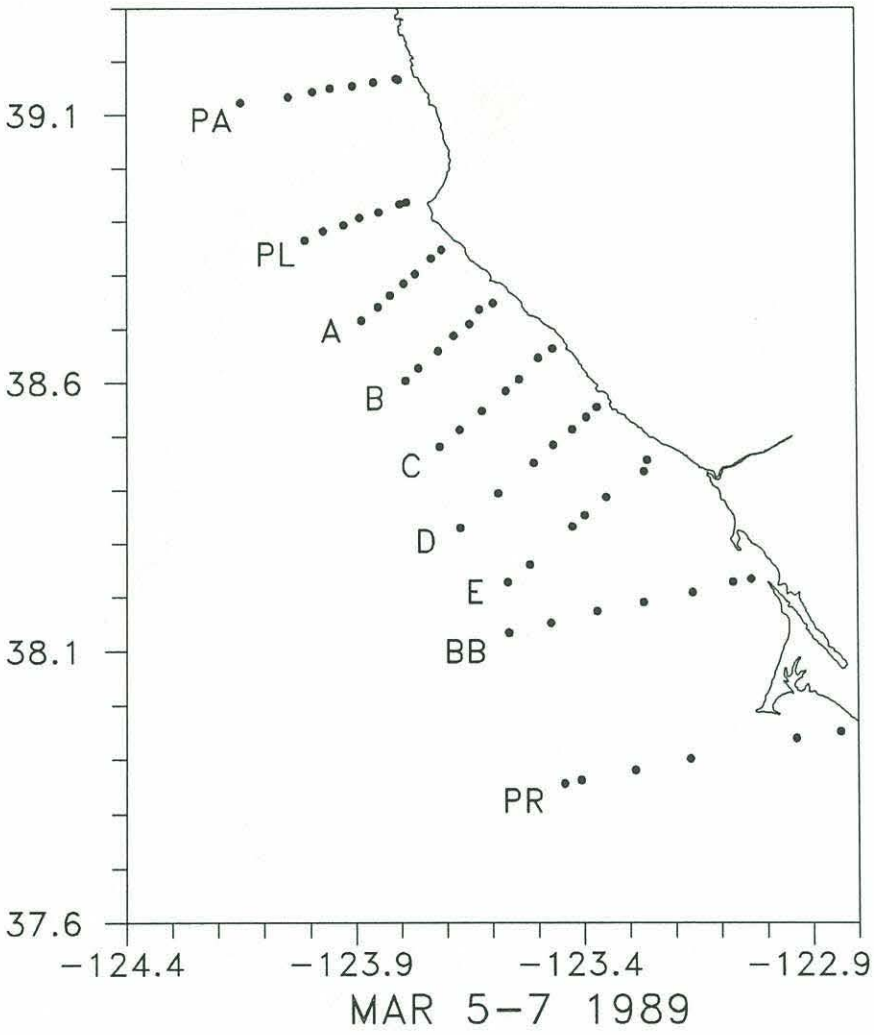
271


39.1
38.6
38.1
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PA
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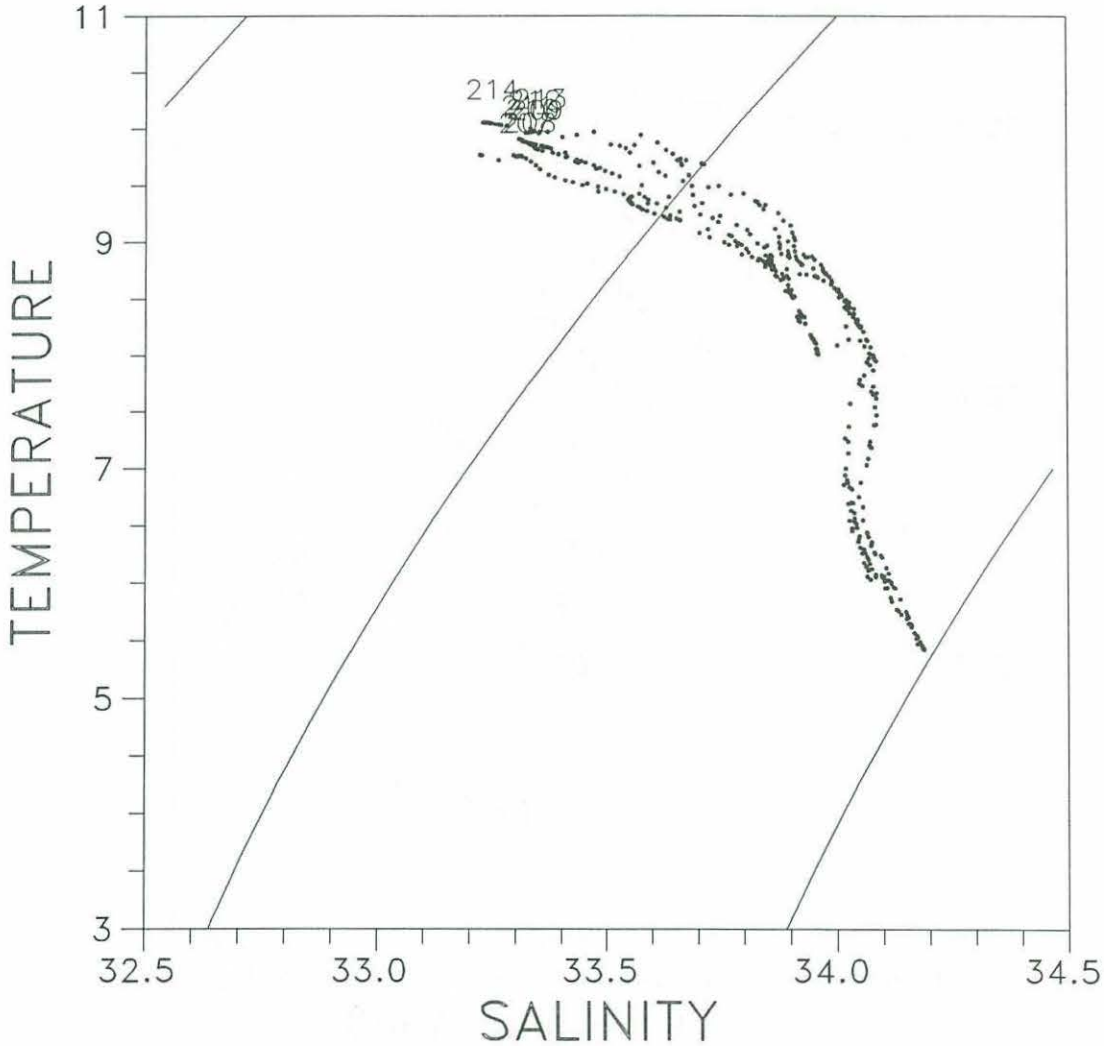
A
B
C
D
E
BB
PR
−124.4
−123.9
−123.4
−122.9
MAR 5−7 1989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5
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TEMPERATURE
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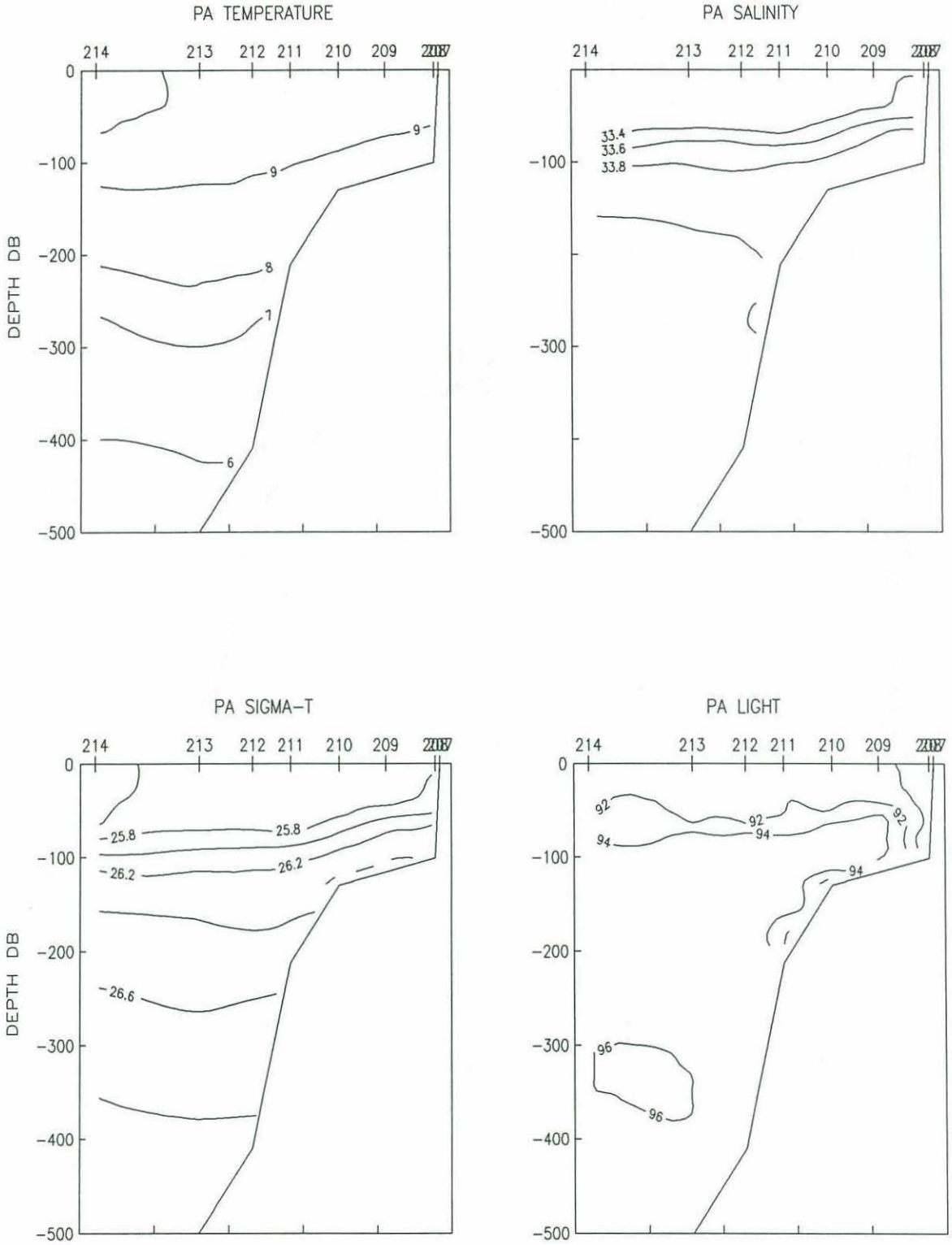
SALINITY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PA SALINITY
PA SIGMA-T
PA LIGHT
DEPTH DB
214
213
212
211
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209
208
207
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-200
-300
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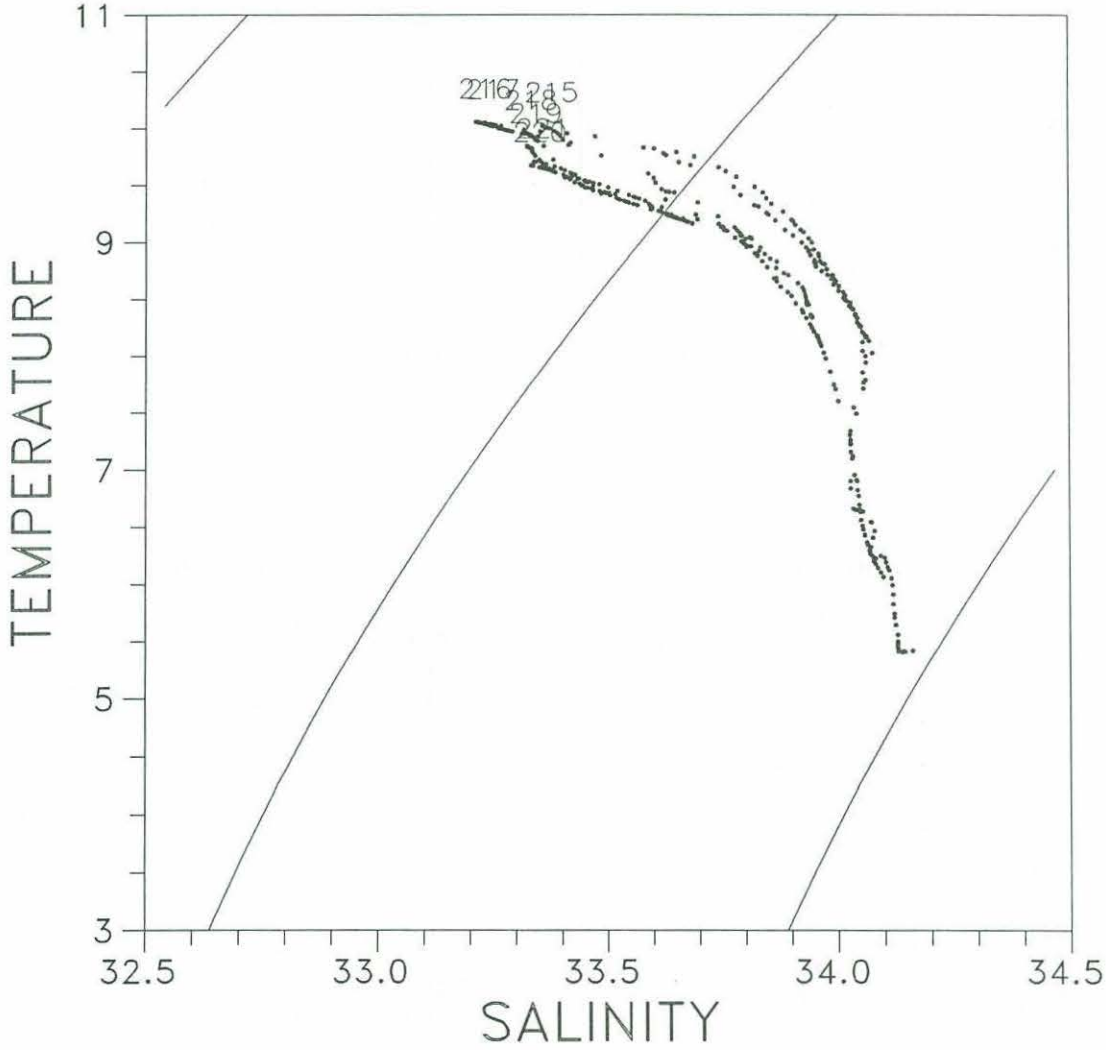
6
33.4
33.6
33.8
25.8
26.2
26.6
92
94
96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TEMPERATURE
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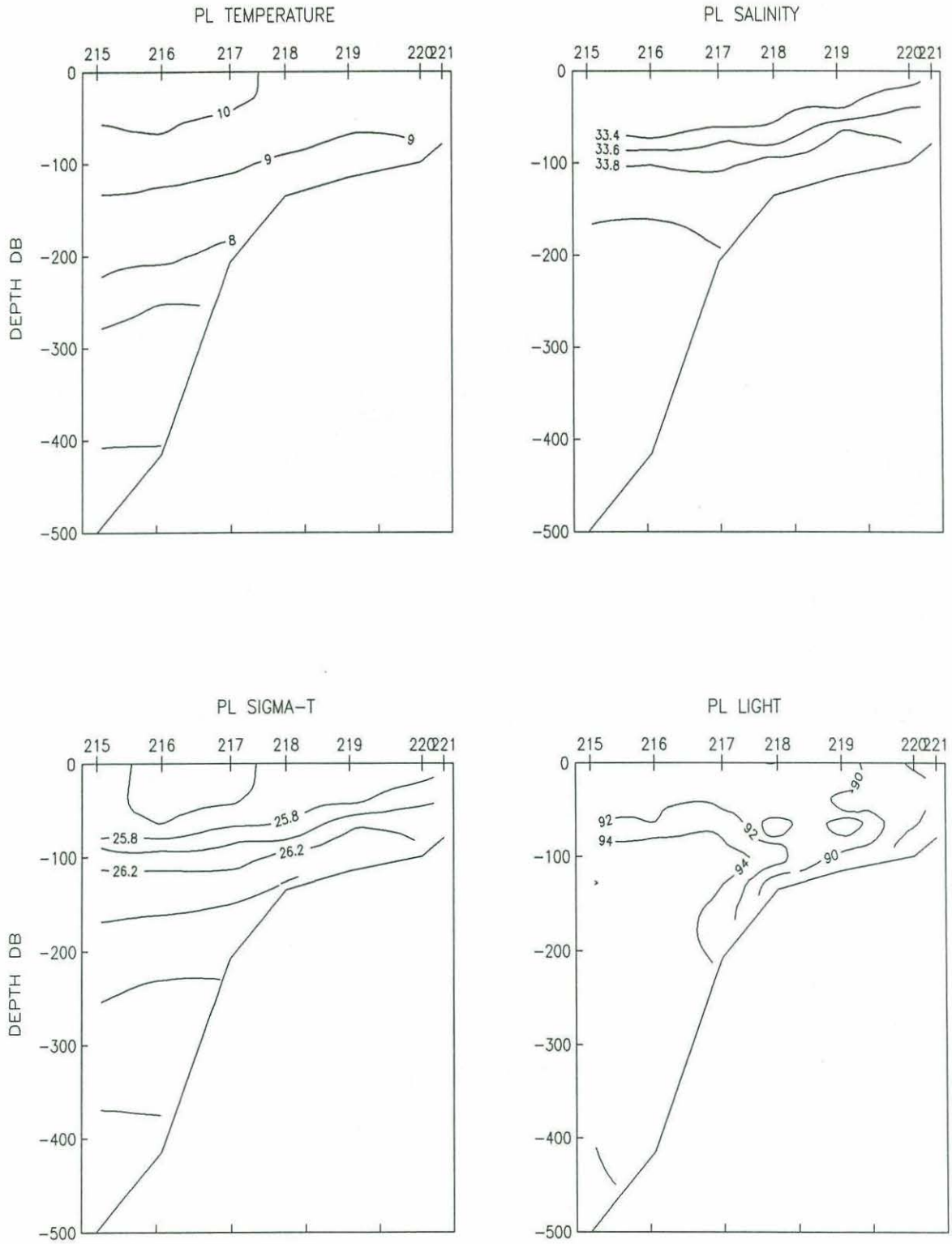
SALINITY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PL SALINITY
PL SIGMA-T
PL LIGHT
DEPTH DB
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216
217
218
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221
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-500
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8
33.4
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33.8
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26.2
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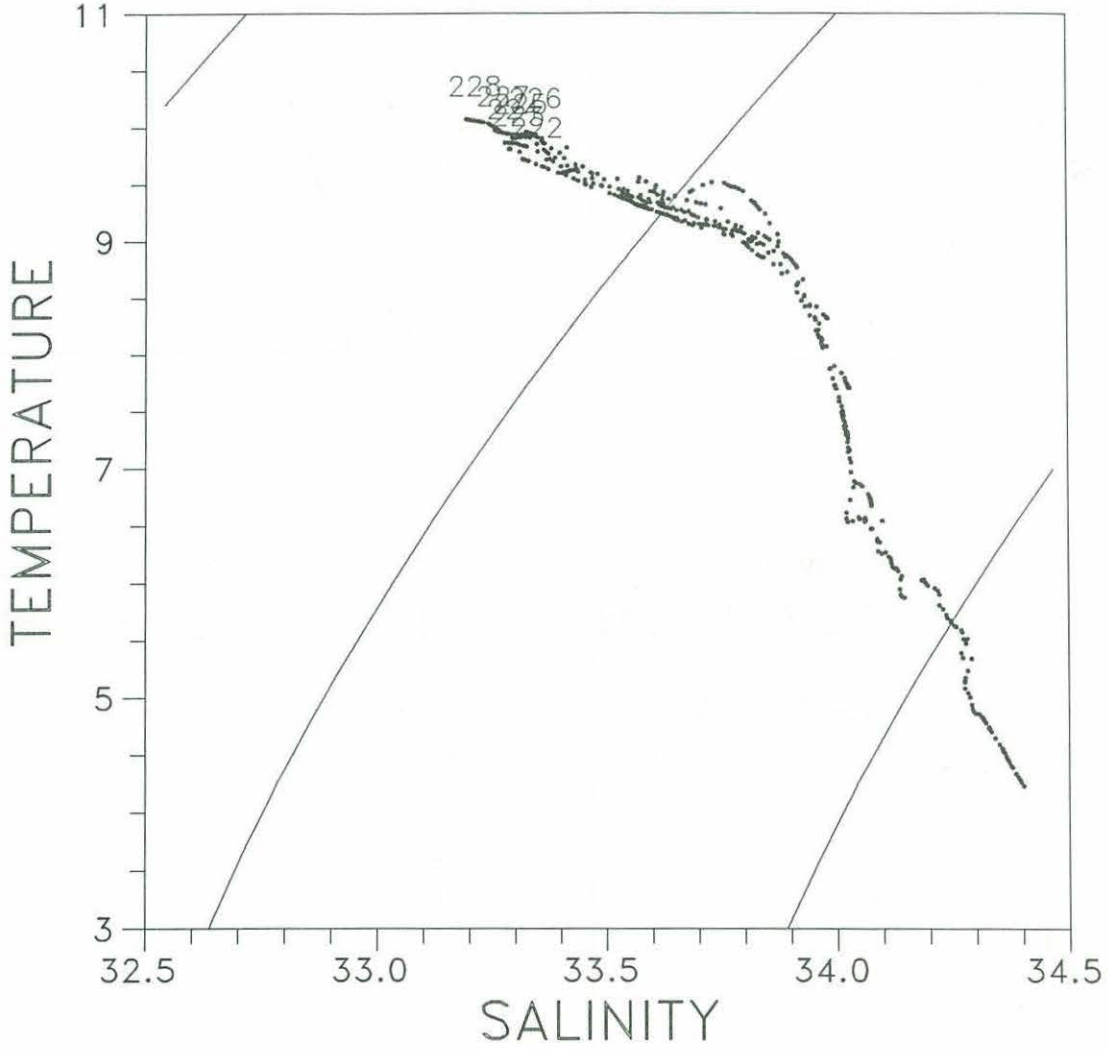
94
90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TEMPERATURE
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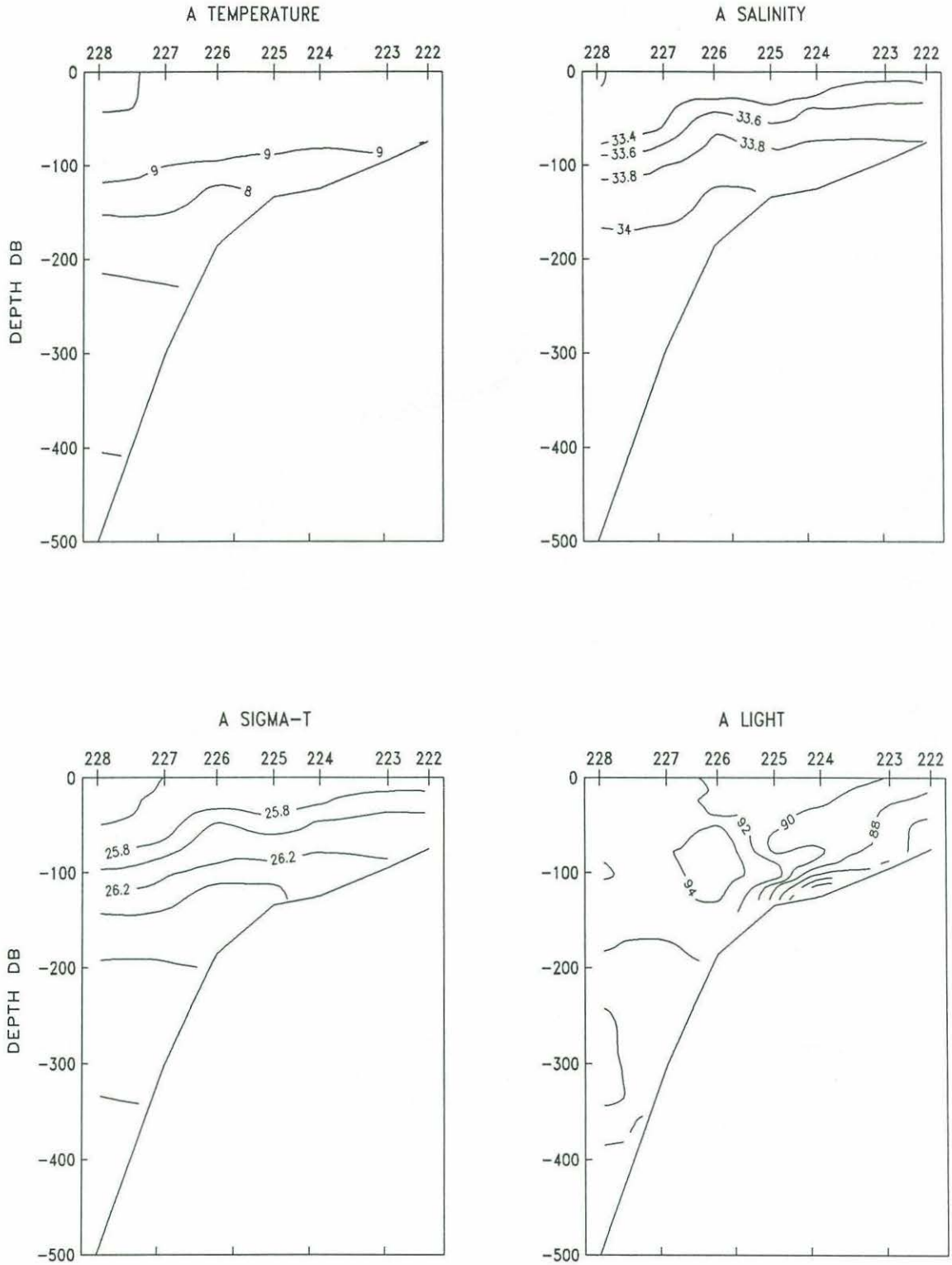
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A SALINITY
A SIGMA-T
A LIGHT
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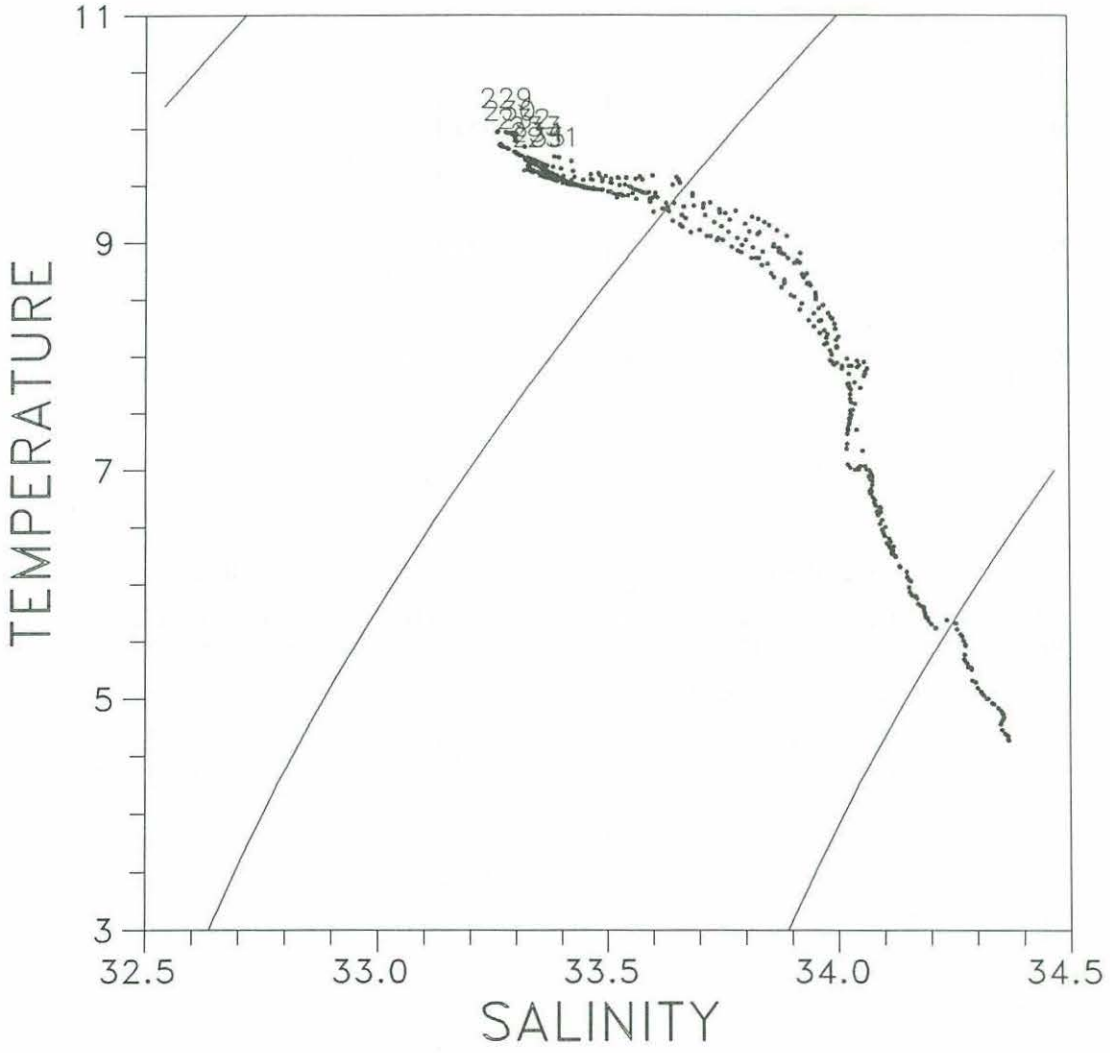
25.8
26.2
92
90
88
94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TEMPERATURE
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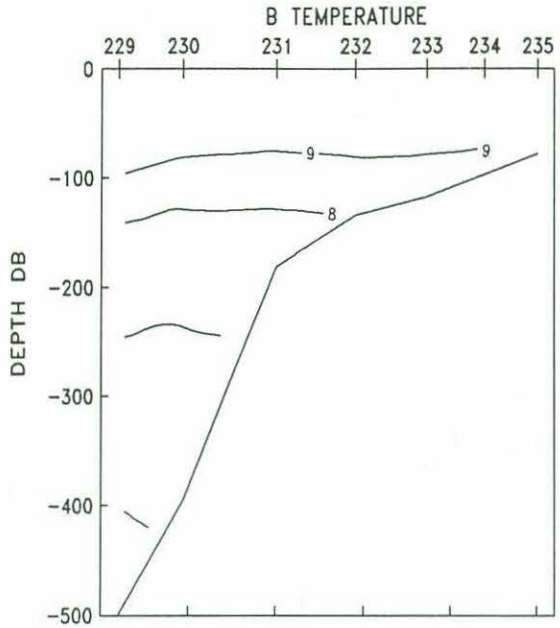
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-400
-500
DEPTH DB
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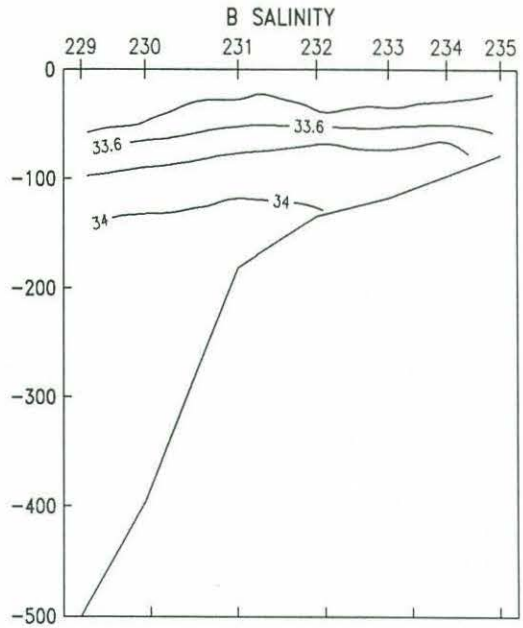
B SALINITY
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-500
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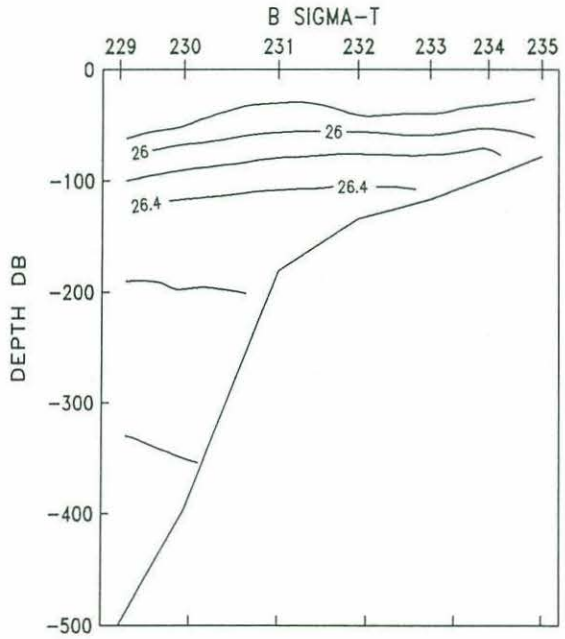
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DEPTH DB
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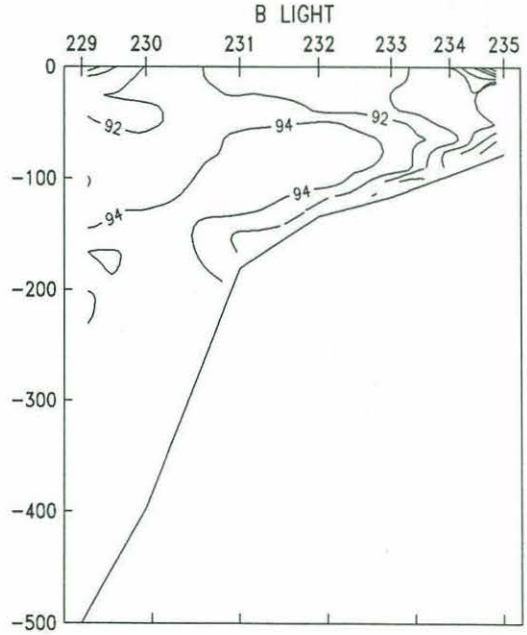
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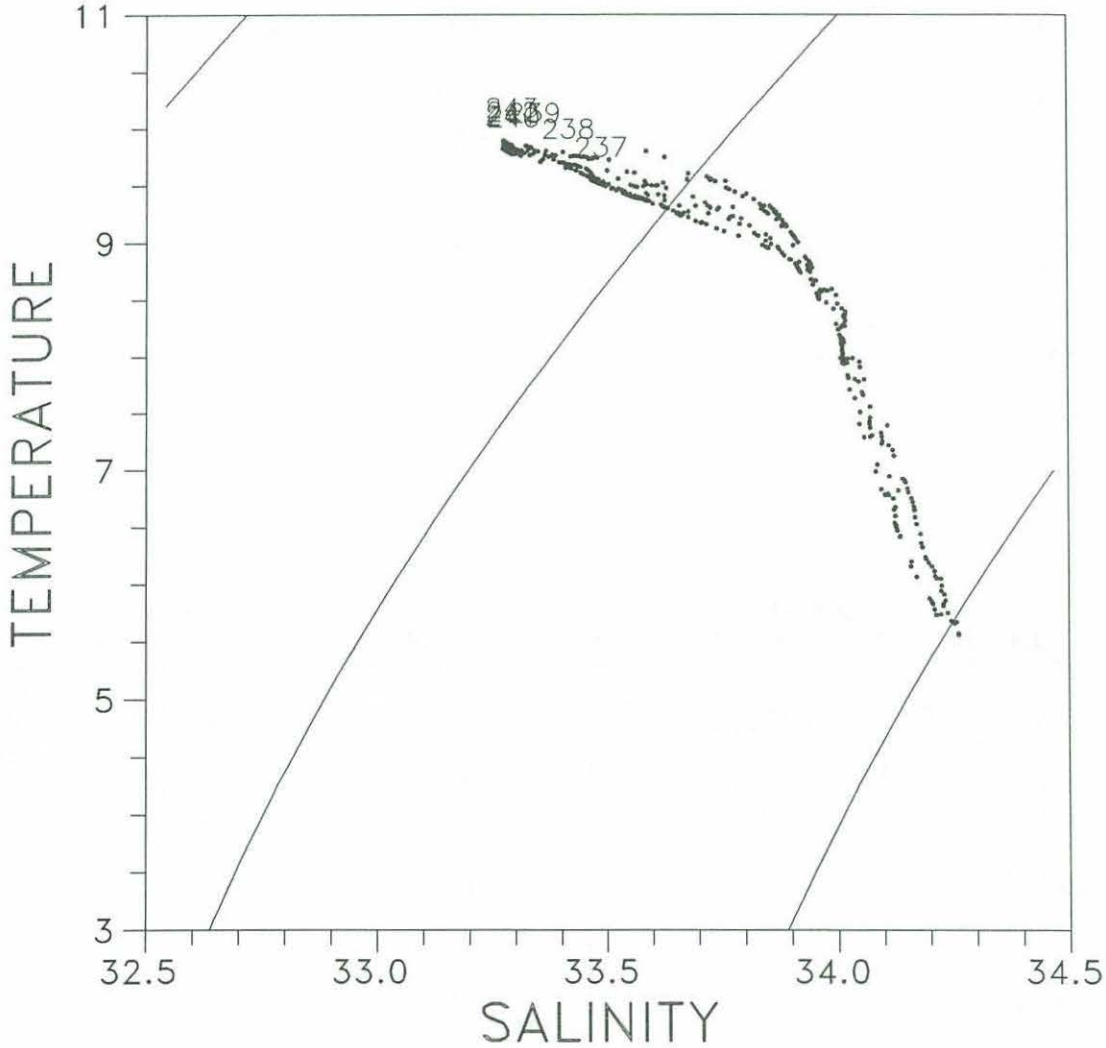
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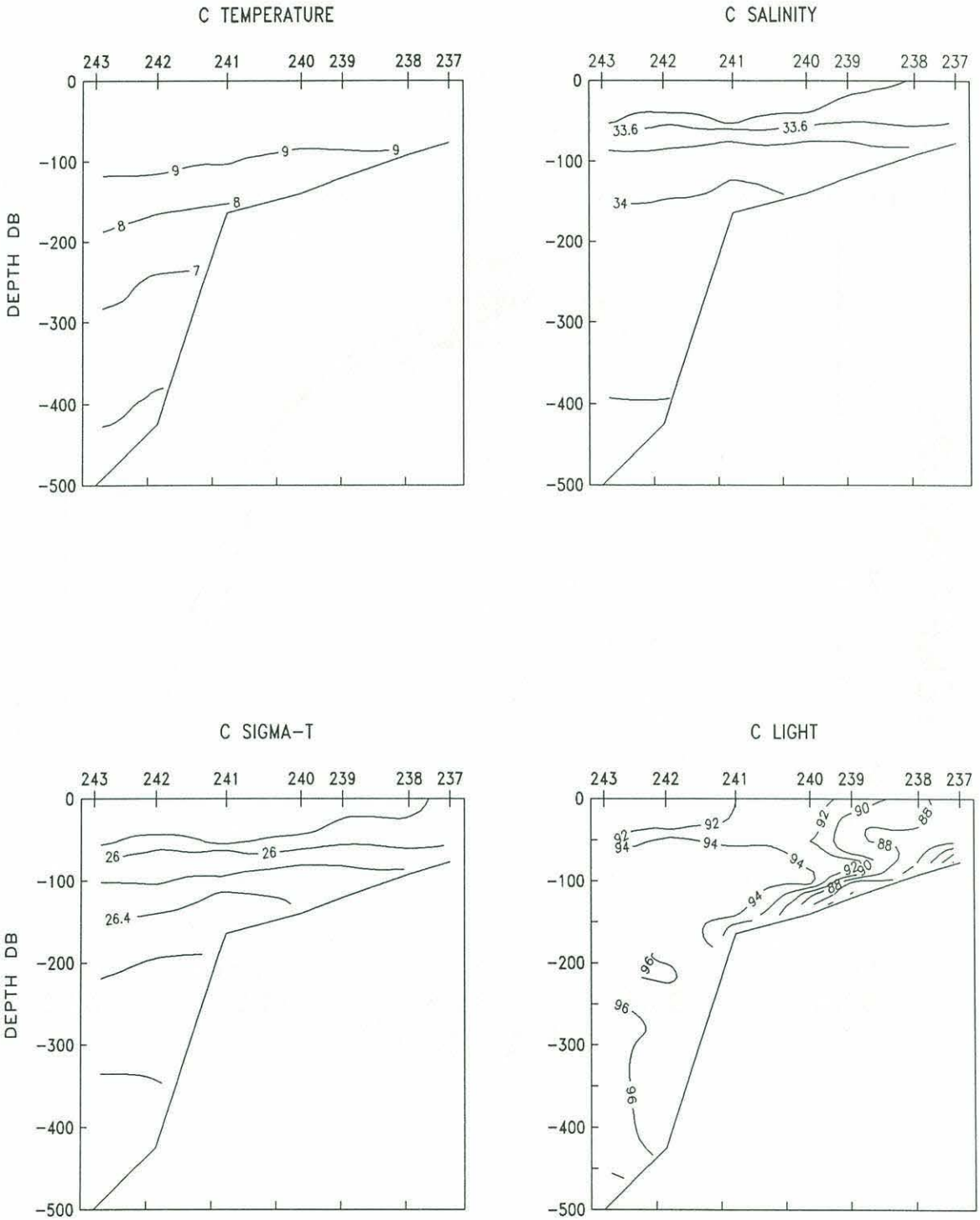
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C SALINITY
C SIGMA-T
C LIGHT
DEPTH DB
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26.4
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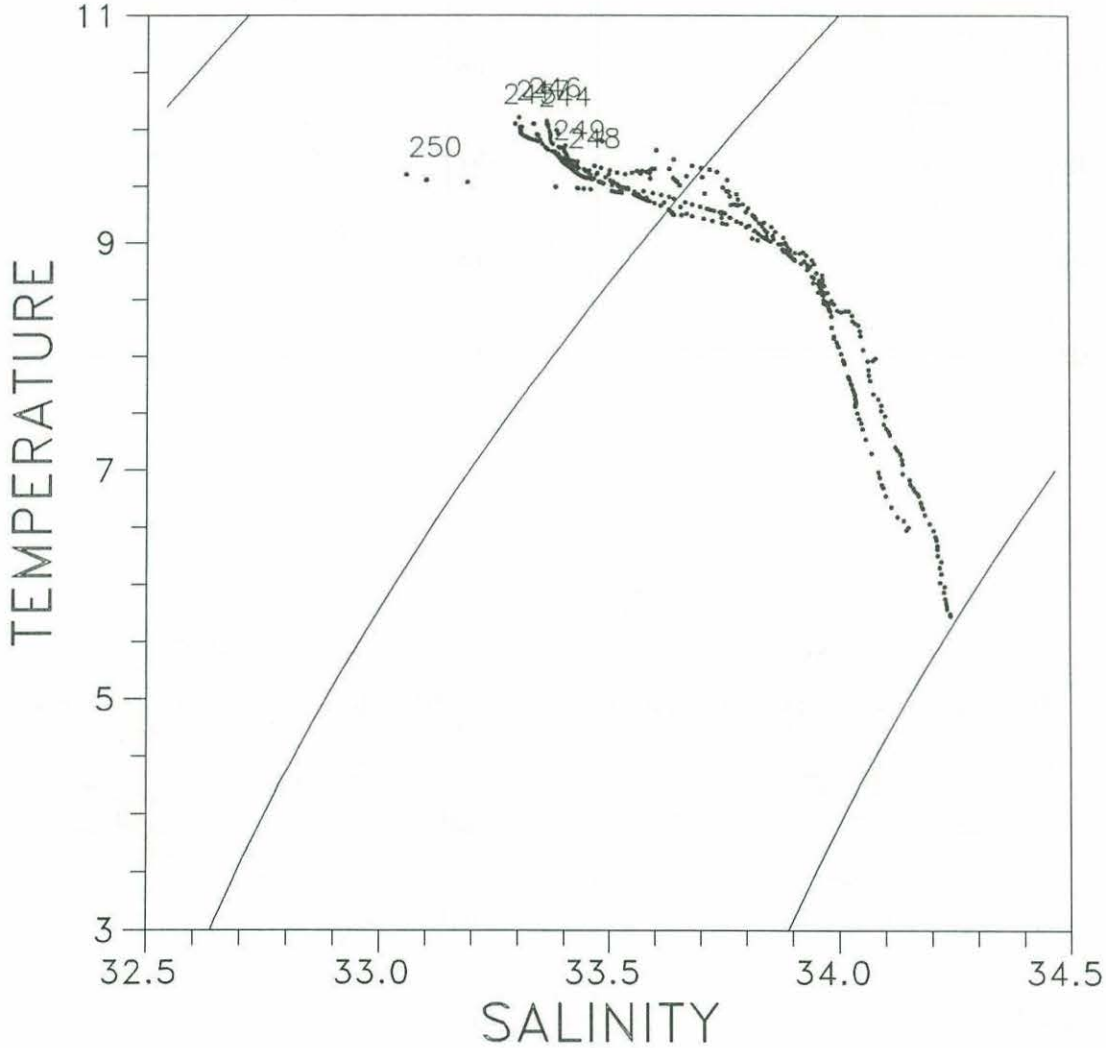
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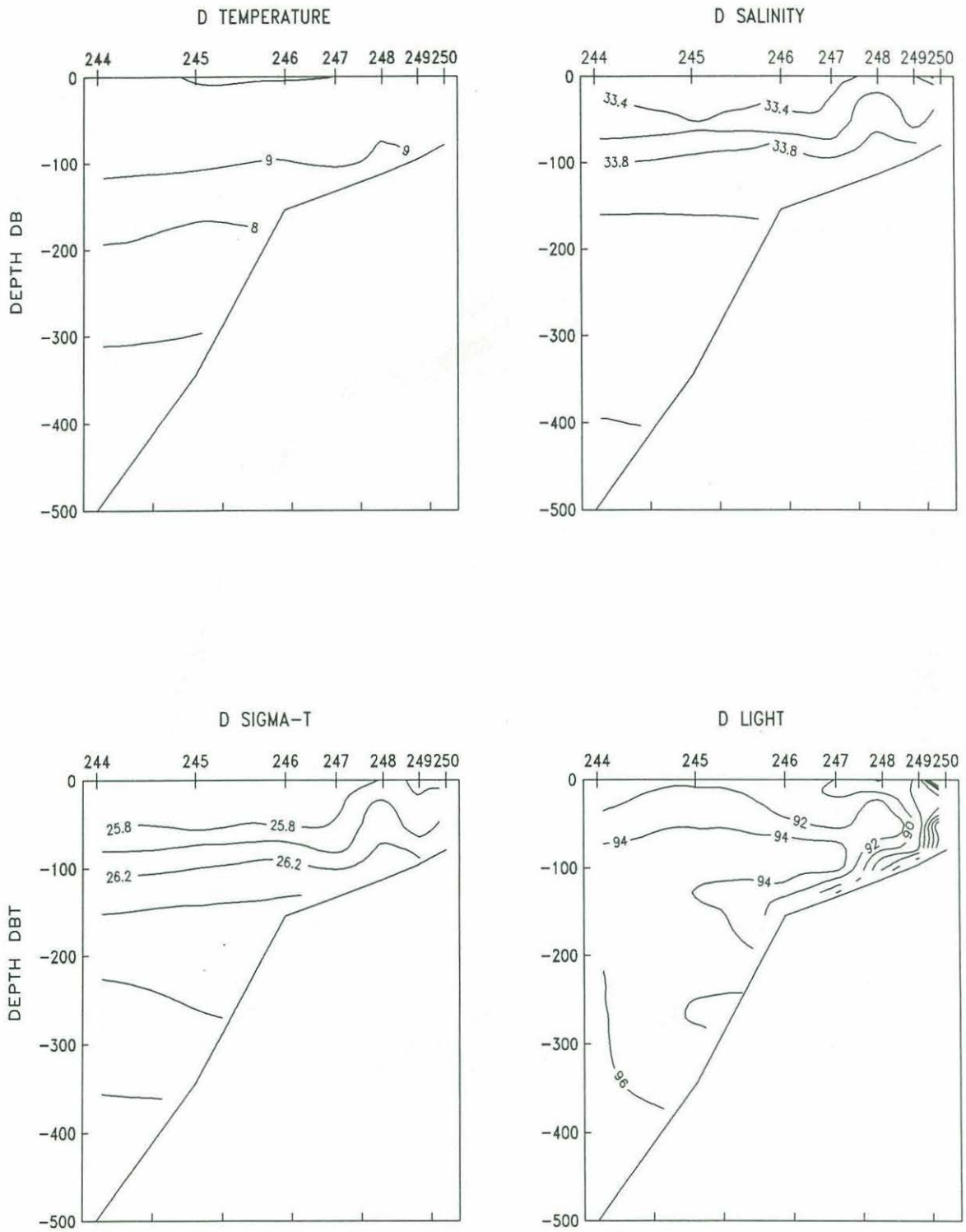
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D SALINITY
D SIGMA-T
D LIGHT
DEPTH DB
DEPTH DBT
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248
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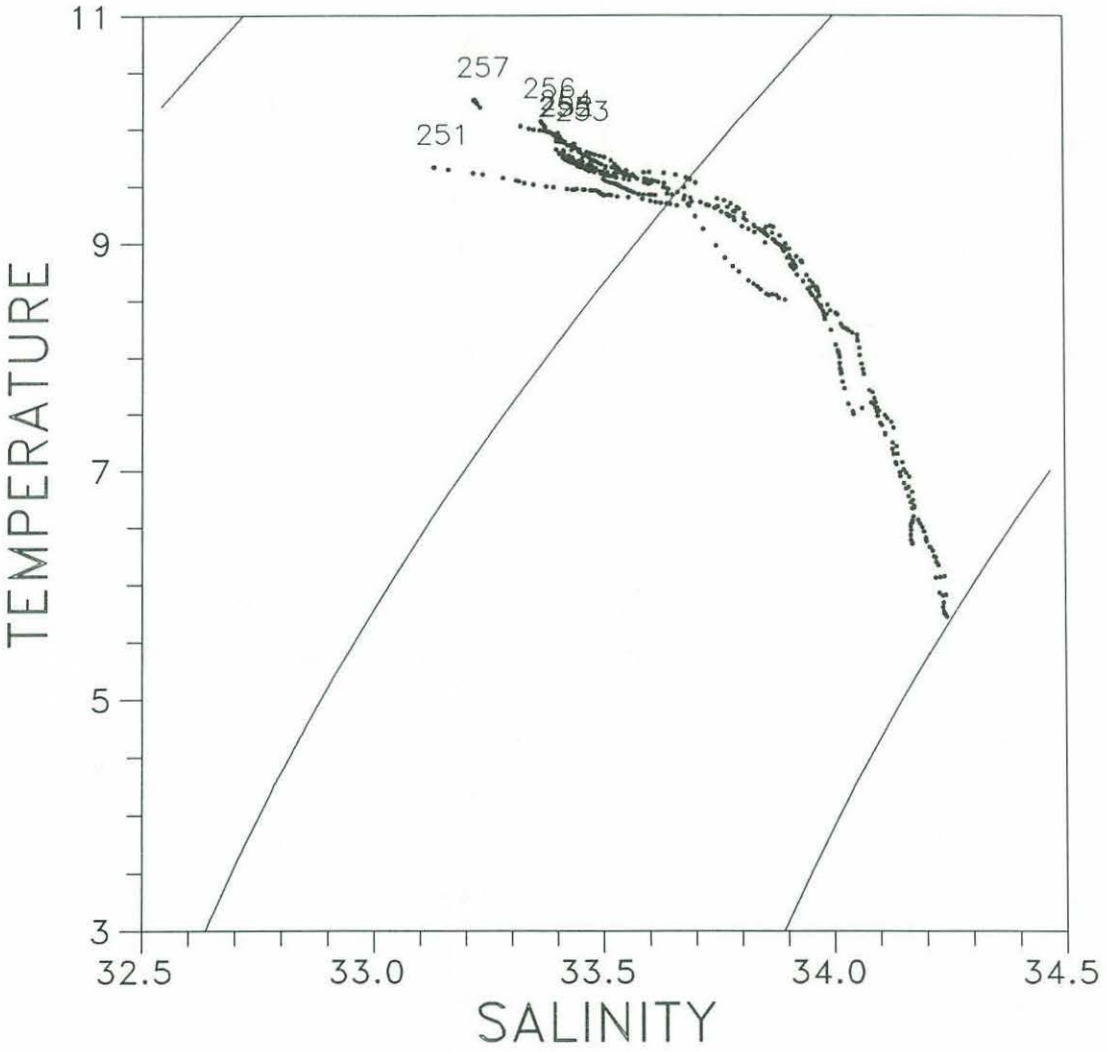
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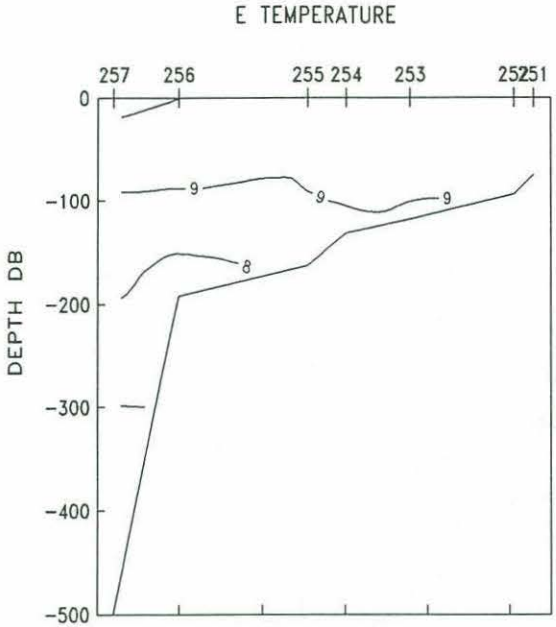
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-400
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DEPTH DB
9
9
9
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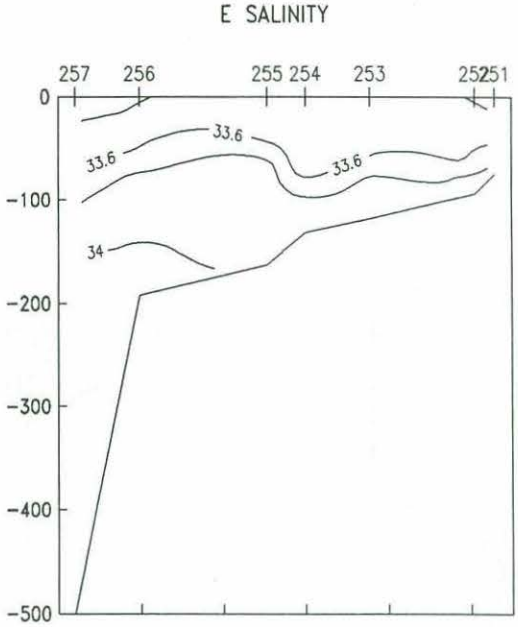
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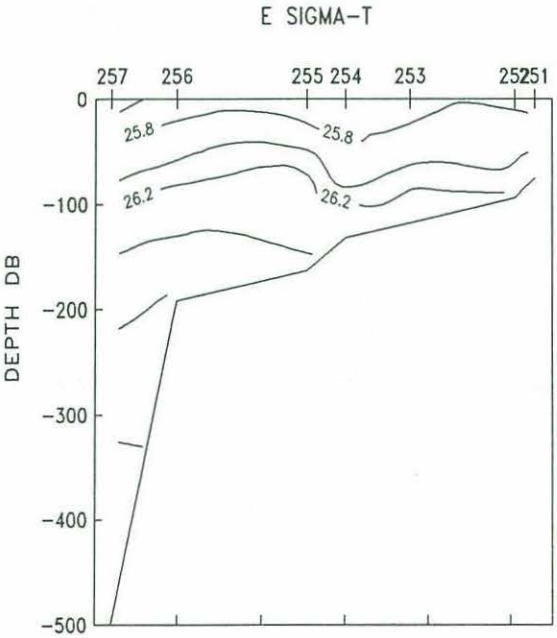
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DEPTH DB
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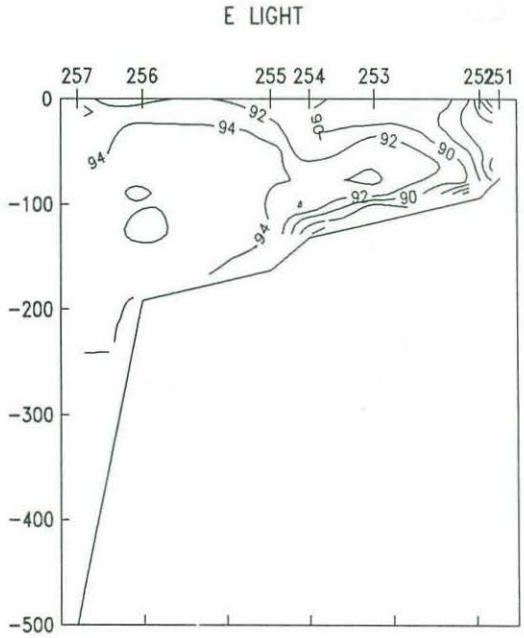
26.2


E LIGHT
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-400
-500
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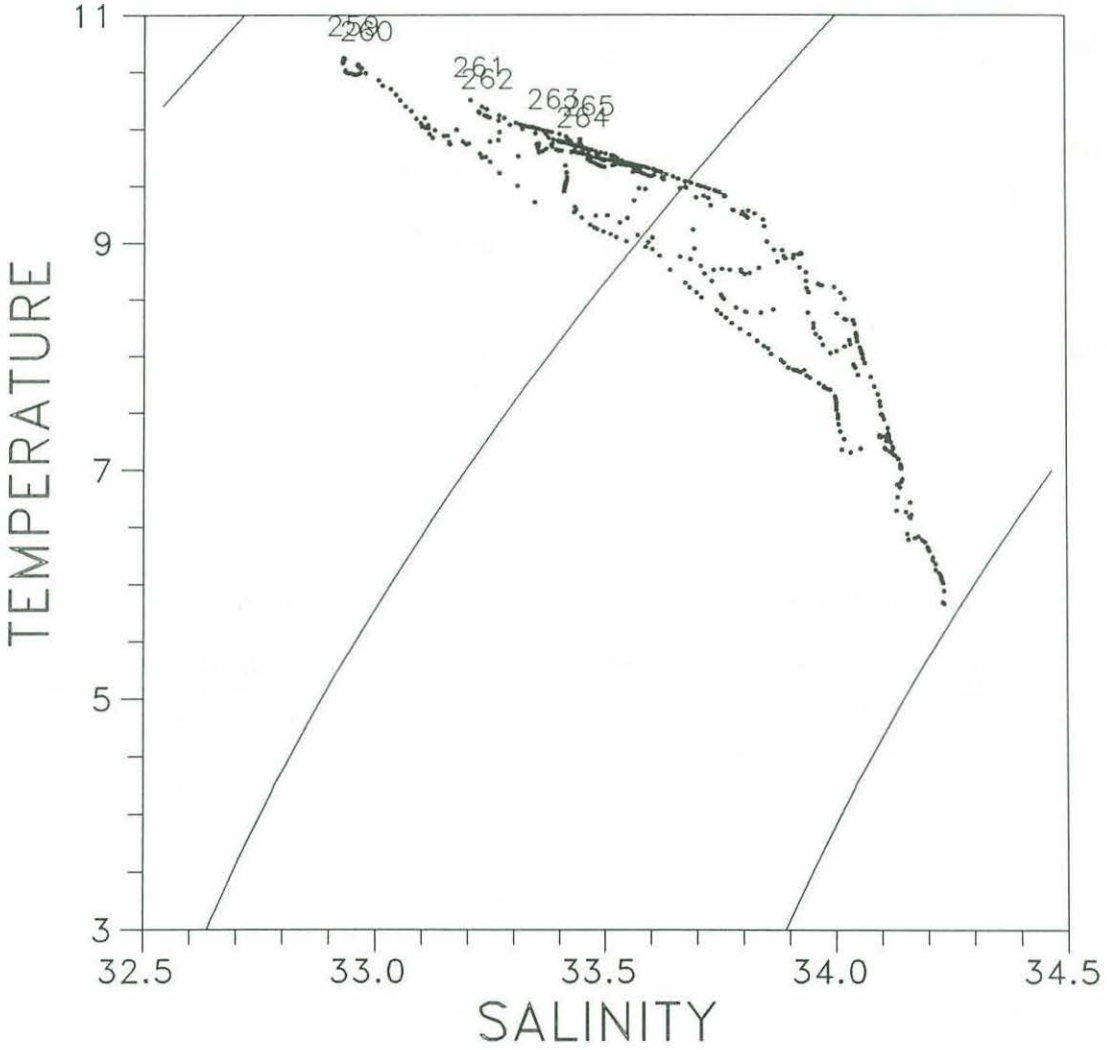
94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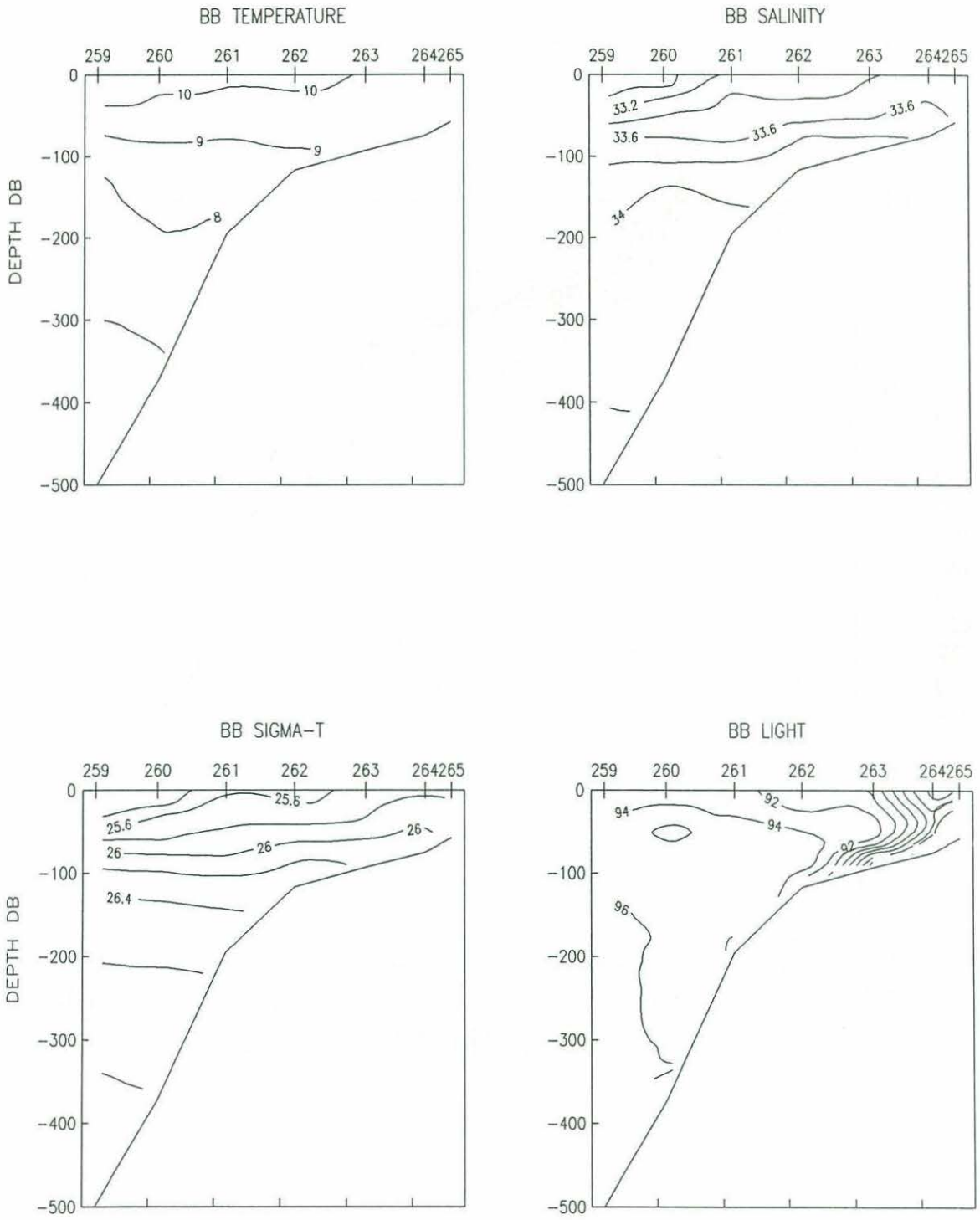
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BB SALINITY
BB SIGMA-T
BB LIGHT
DEPTH DB
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26.4
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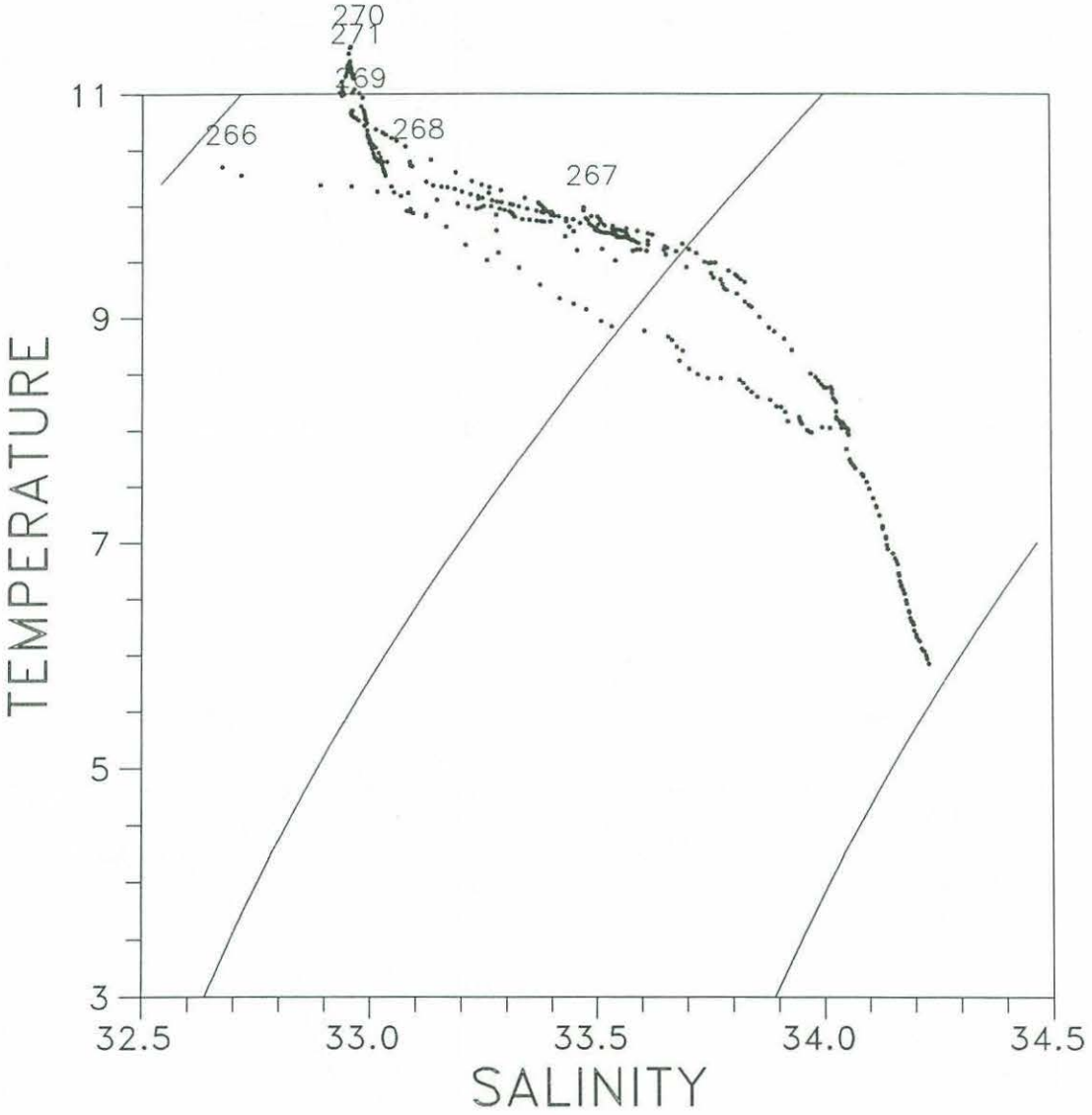
270
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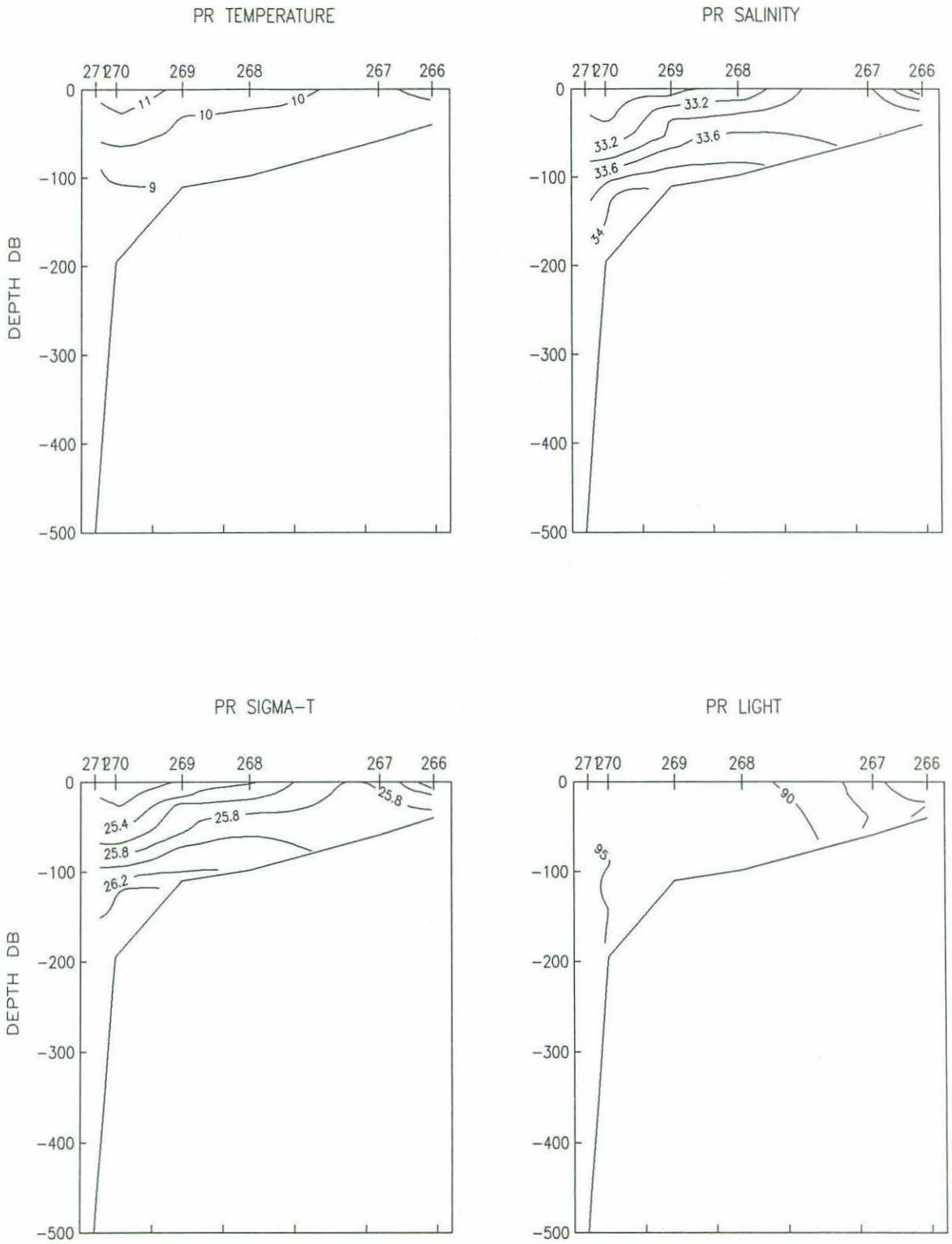
34.5
SALINITY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PR SALINITY
PR SIGMA-T
PR LIGHT
DEPTH DB
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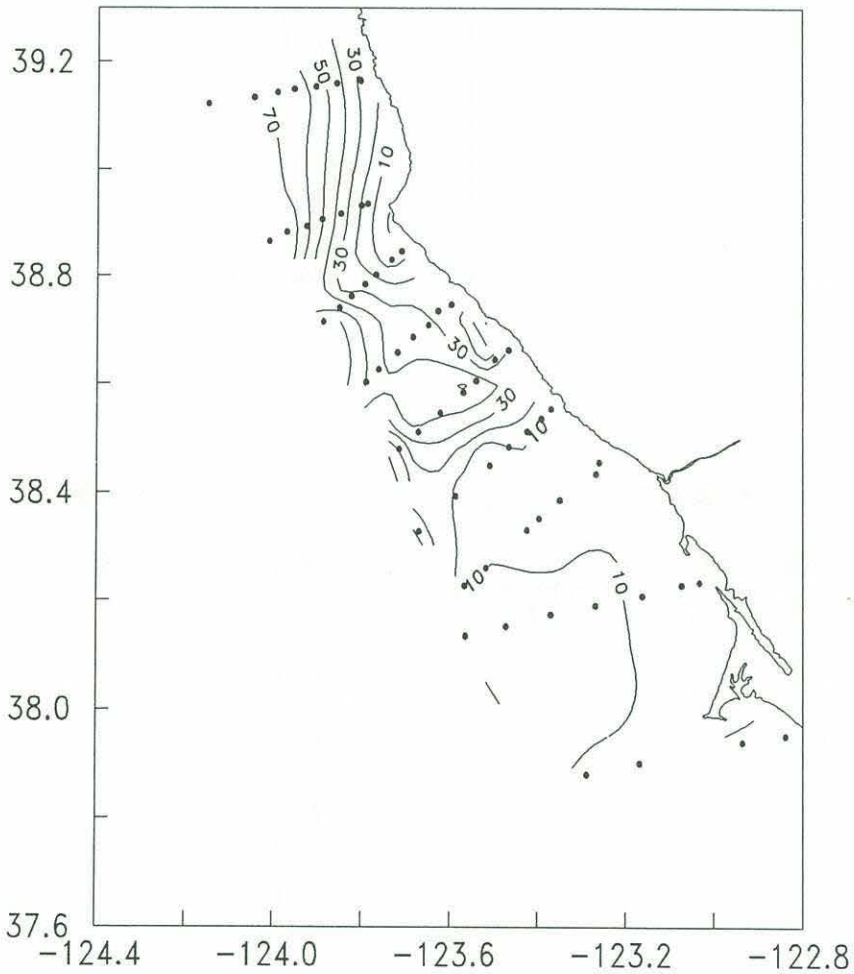
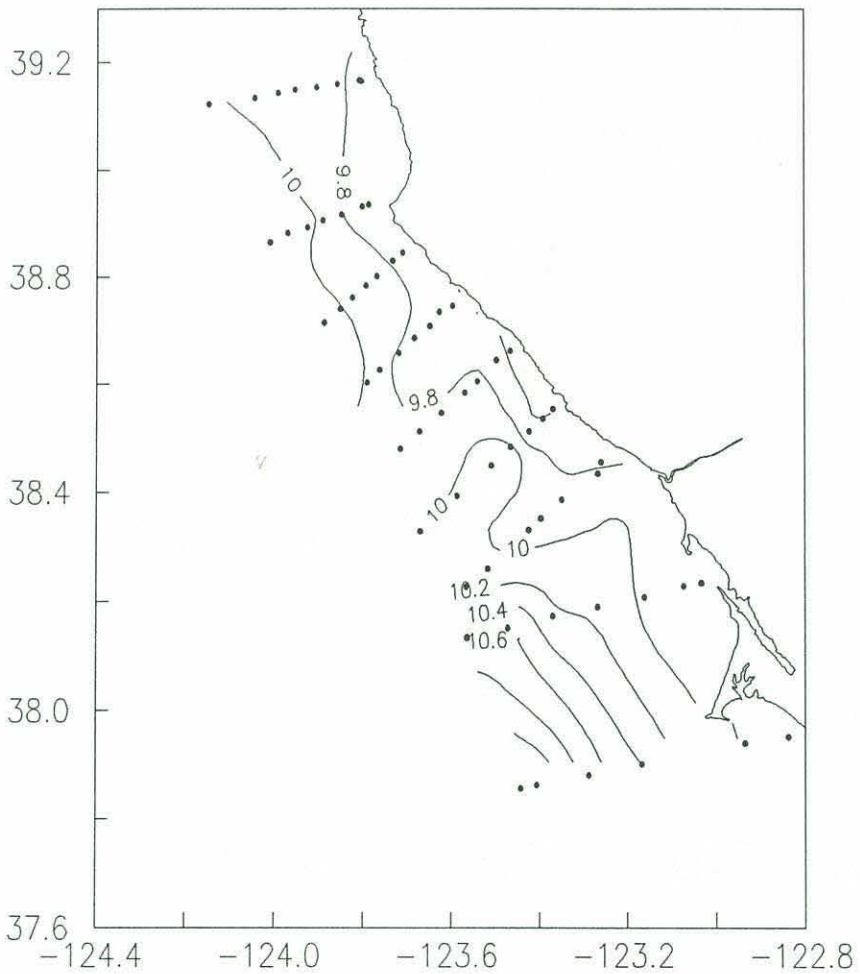
0 -100 -200 -300 -400 -500
11
10
9
33.2
33.6
34
25.4
25.8
26.2
90
95

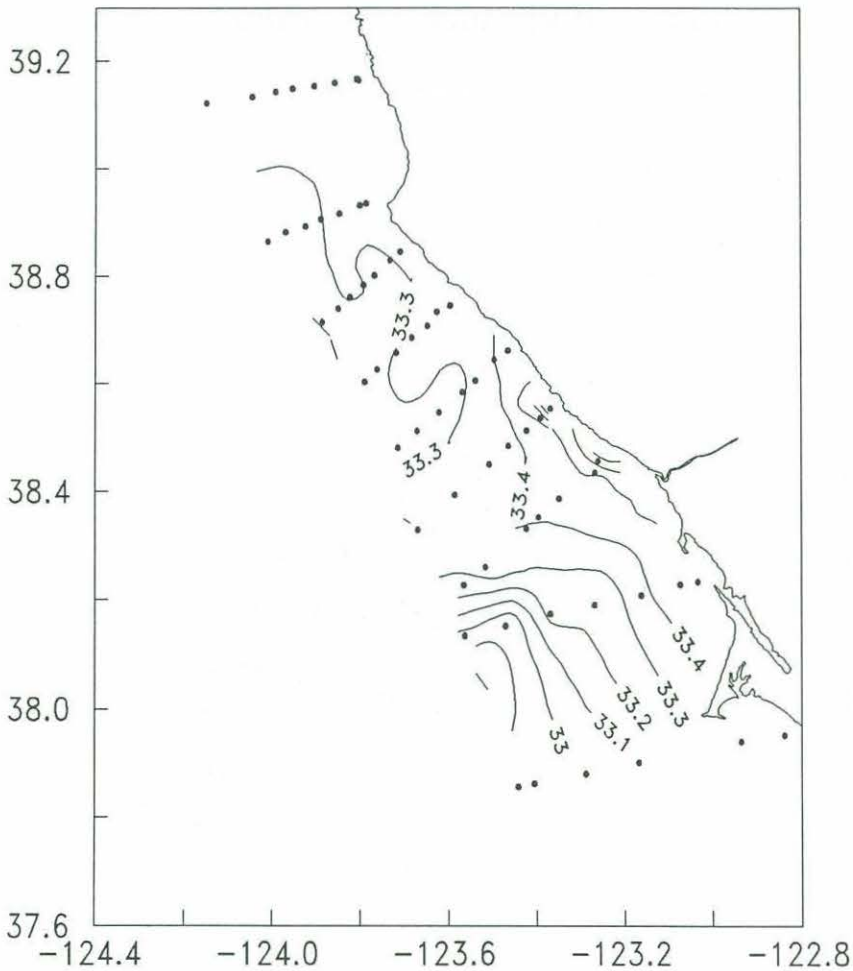
SURFACE MIXED LAYER DEPTH M MAR 5-7, 1989



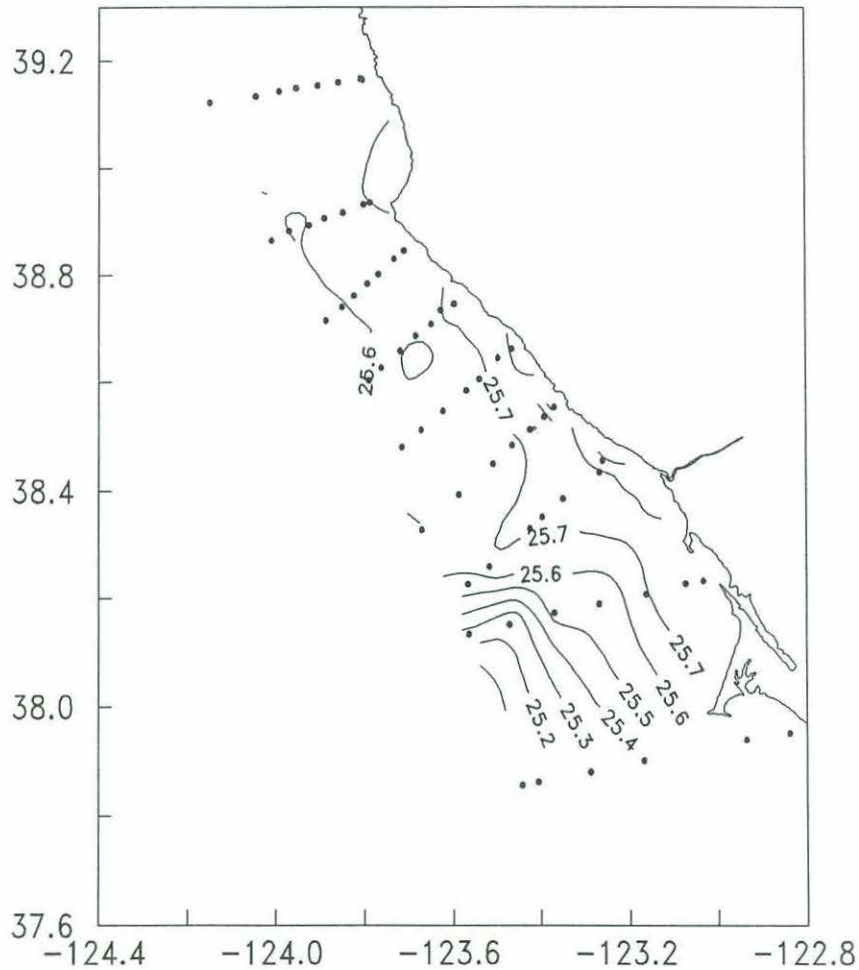
SURFACE TEMP MAR 5-7 1989



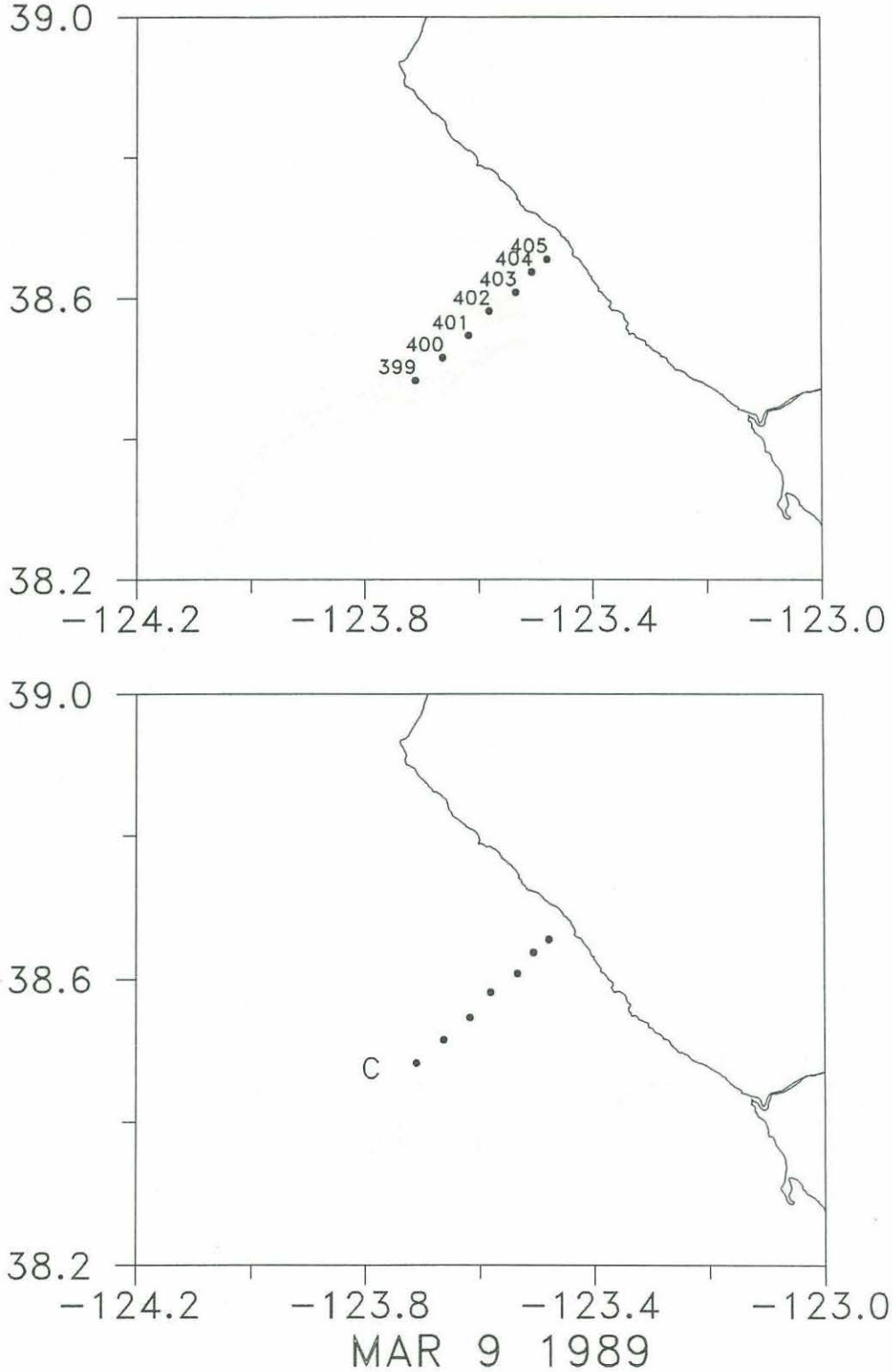
SURFACE SALINITY MAR 5-7 1989



SURFACE SIGMA-T MAR 5-7 1989



D. Section C — March 9, 1989 — Stations 399 to 405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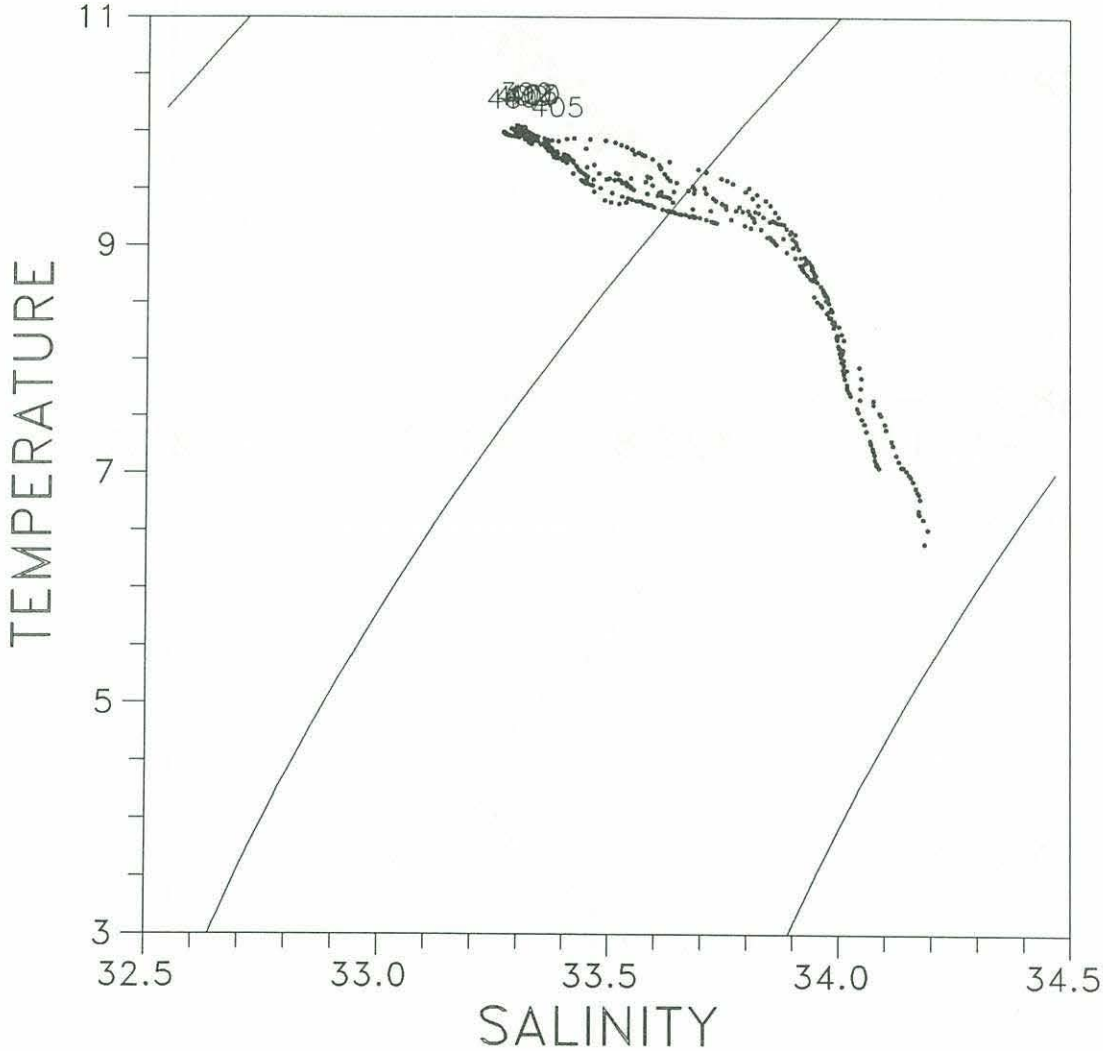
38.2
−124.2
−123.8
−123.4
−123.0
405
404
403
402
401
400
399
39.0
38.6
38.2
−124.2
−123.8
−123.4
−123.0
C
MAR 9 1989


11
9
7
5
3
TEMPERATURE
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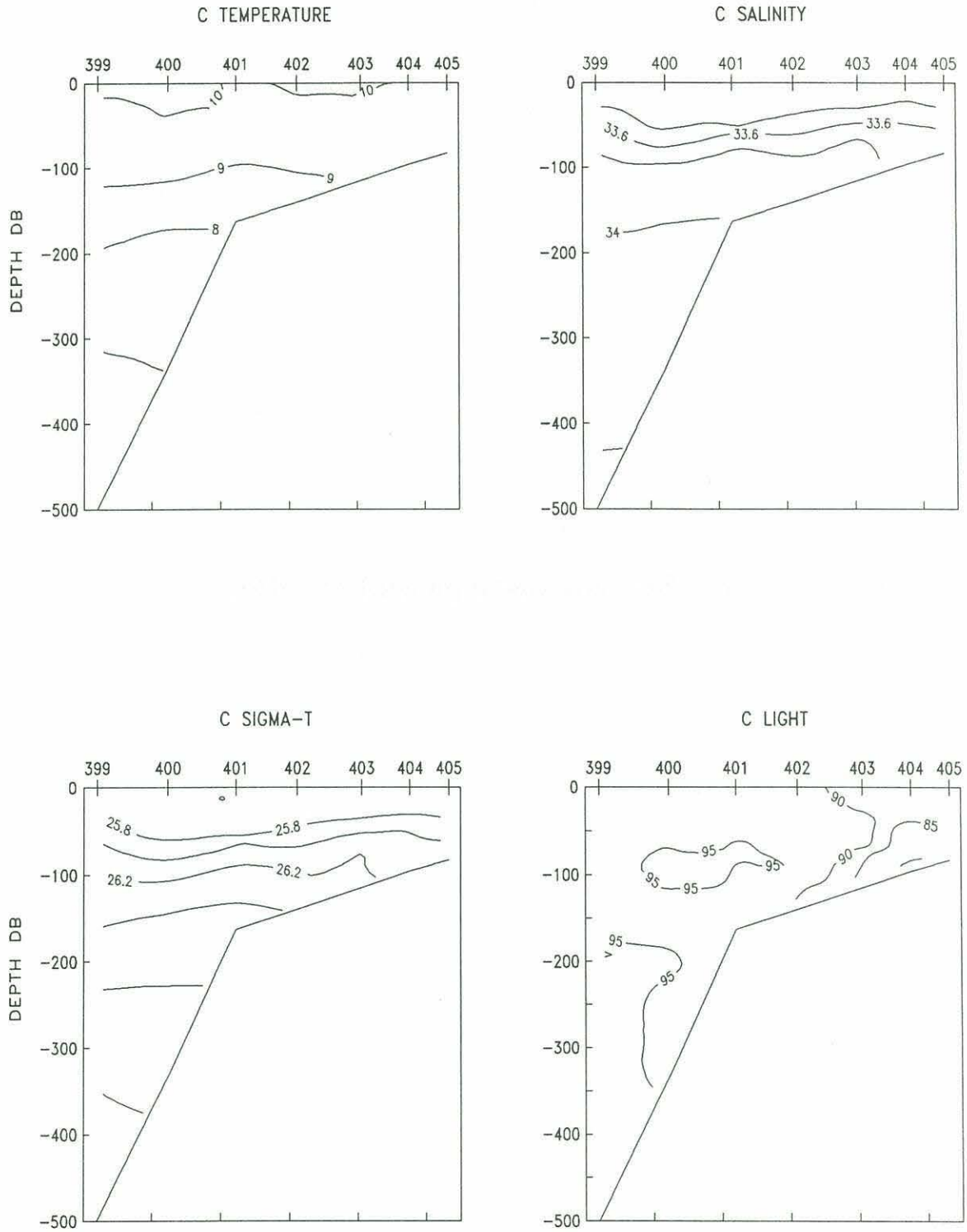
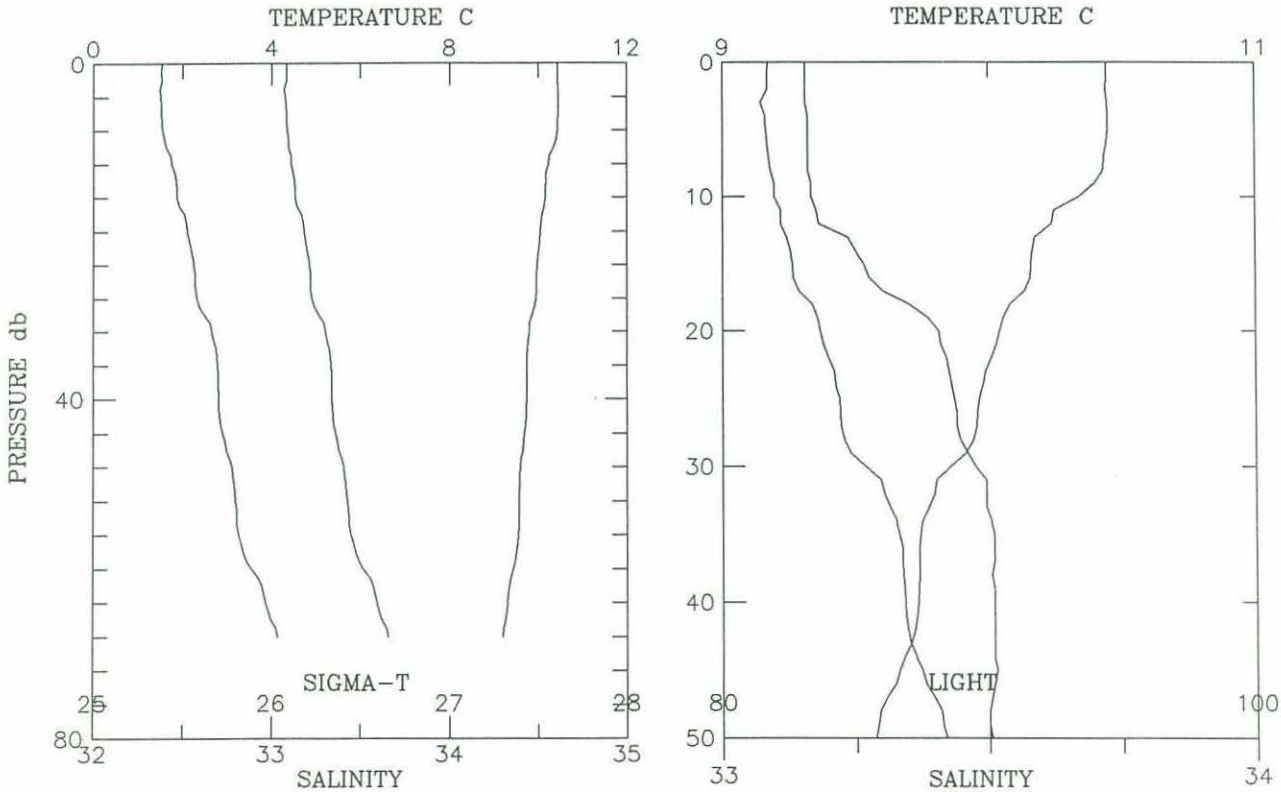
33.0
33.5
34.0
34.5
SALINITY
405


C TEMPERATURE
C SALINITY
C SIGMA-T
C LIGHT
DEPTH DB
399
400
401
402
403
404
405
0
-100
-200
-300
-400
-500
10
9
8
33.6
34
25.8
26.2
95
90
85

8. Station Listings and Profiles

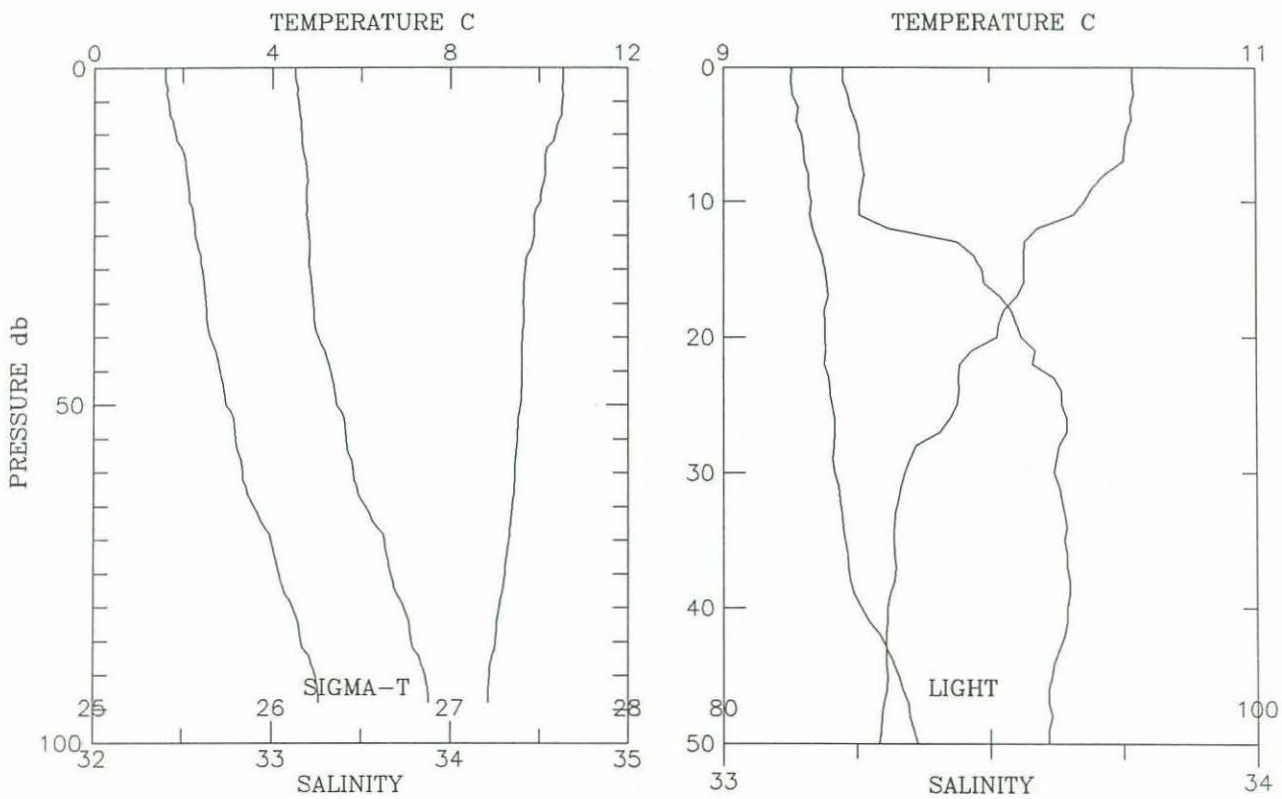
Cruise W8902 Station # 1 Depth m: 70 Time: 1989-02-25 02:12
Position: 39 10.10'N 123 47.20'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.444	33.084	25.381	0.0000	83.1
5.0		10.448	33.081	25.378	0.0131	83.2
10.0		10.343	33.096	25.408	0.0262	83.3
15.0		10.161	33.131	25.466	0.0390	85.3
20.0		10.043	33.183	25.526	0.0515	88.1
25.0		9.964	33.219	25.568	0.0638	88.7
30.0		9.856	33.268	25.624	0.0760	89.5
35.0		9.740	33.331	25.693	0.0878	90.2
40.0		9.732	33.341	25.702	0.0994	90.2
45.0		9.662	33.373	25.738	0.1109	90.3
50.0		9.571	33.419	25.789	0.1222	90.1
55.0		9.561	33.440	25.807	0.1334	89.5
60.0		9.432	33.516	25.887	0.1443	70.9
65.0		9.282	33.606	25.982	0.1548	58.6
68.0		9.205	33.655	26.033	0.1609	42.9



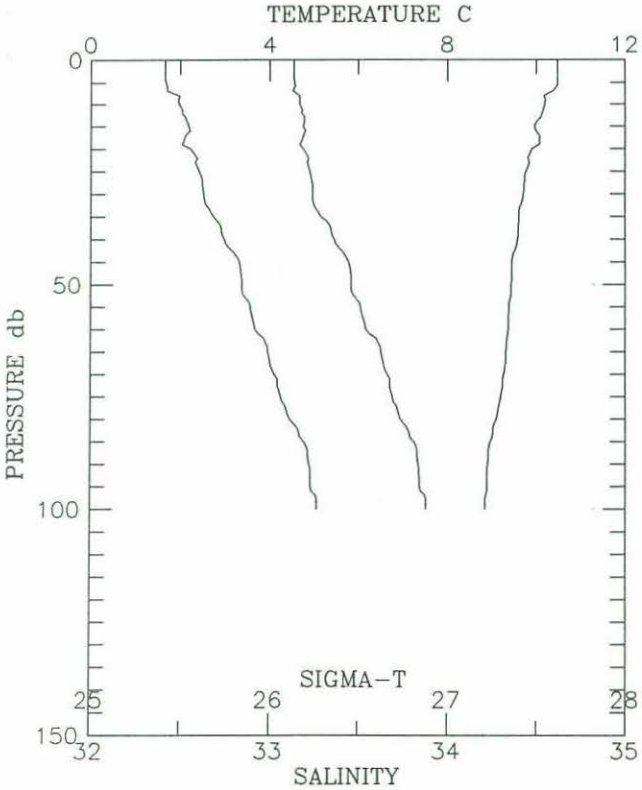
Cruise W8902 Station # 2 Depth m: 97 Time: 1989-02-25 02:42
Position: 39 10.10'N 123 48.40'W Depth Deck Offset: 0.00

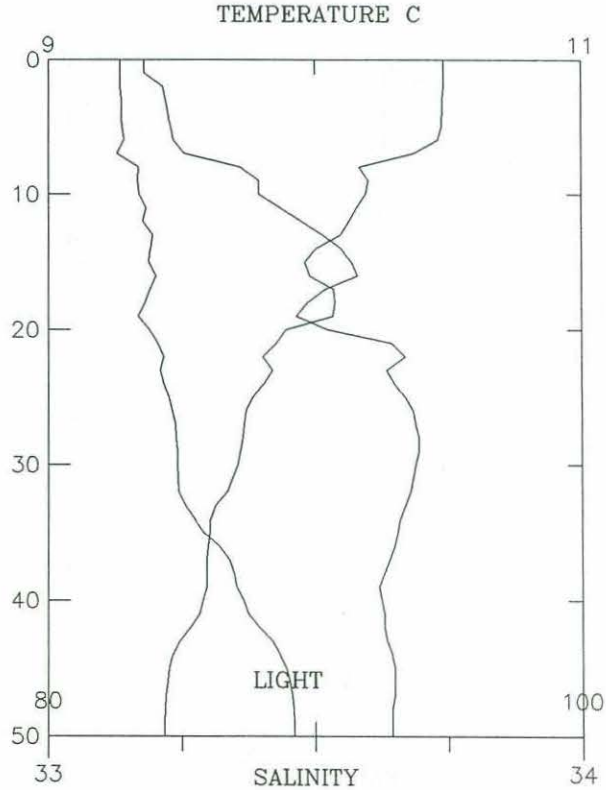
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.538	33.129	25.400	0.0000	84.5
5.0		10.514	33.147	25.418	0.0130	85.1
10.0		10.357	33.166	25.460	0.0258	85.1
15.0		10.129	33.191	25.518	0.0384	89.7
20.0		10.028	33.191	25.535	0.0508	91.2
25.0		9.878	33.204	25.570	0.0630	92.7
30.0		9.681	33.209	25.607	0.0751	92.4
35.0		9.640	33.229	25.629	0.0871	92.8
40.0		9.616	33.259	25.657	0.0990	92.9
45.0		9.615	33.328	25.711	0.1107	92.3
50.0		9.584	33.363	25.743	0.1222	92.2
55.0		9.501	33.417	25.799	0.1334	92.3
60.0		9.447	33.454	25.837	0.1445	92.7
65.0		9.391	33.524	25.900	0.1554	91.5
70.0		9.317	33.629	25.994	0.1658	91.8
75.0		9.220	33.668	26.041	0.1759	89.6
80.0		9.092	33.738	26.116	0.1858	88.3
85.0		9.013	33.784	26.164	0.1954	81.9
90.0		8.870	33.860	26.246	0.2046	81.9
94.0		8.851	33.877	26.263	0.2118	63.6



Cruise W8902 Station # 3 Depth m: 102 Time: 1989-02-25 03:08
Position: 39 10.00'N 123 48.80'W Depth Deck Offset: 0.00

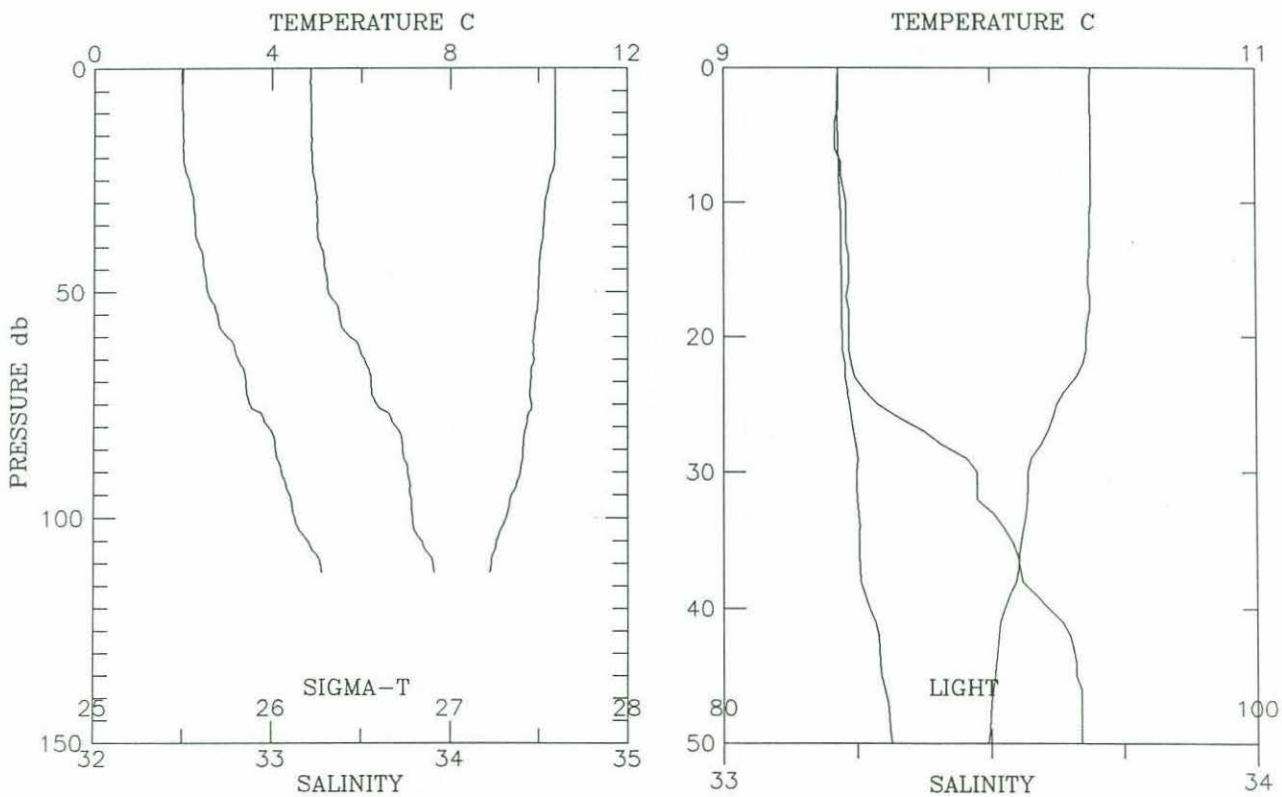
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.484	33.135	25.414	0.0000	83.6
5.0		10.478	33.139	25.418	0.0129	84.6
10.0		10.192	33.170	25.491	0.0257	87.9
15.0		9.961	33.189	25.545	0.0381	91.4
20.0		9.892	33.190	25.557	0.0505	90.5
25.0		9.766	33.226	25.606	0.0626	93.4
30.0		9.709	33.242	25.628	0.0746	93.8
35.0		9.605	33.290	25.683	0.0864	93.1
40.0		9.578	33.365	25.746	0.0979	92.5
45.0		9.453	33.446	25.829	0.1091	93.0
50.0		9.436	33.460	25.843	0.1201	92.9
55.0		9.387	33.512	25.892	0.1309	92.6
60.0		9.375	33.545	25.919	0.1416	92.0
65.0		9.320	33.627	25.992	0.1520	92.4
70.0		9.267	33.662	26.028	0.1621	91.2
75.0		9.201	33.692	26.062	0.1721	89.3
80.0		9.103	33.737	26.113	0.1819	88.7
85.0		8.966	33.811	26.193	0.1914	86.5
90.0		8.906	33.838	26.224	0.2006	89.0
95.0		8.897	33.846	26.231	0.2098	88.5
100.0		8.854	33.881	26.265	0.2188	31.7





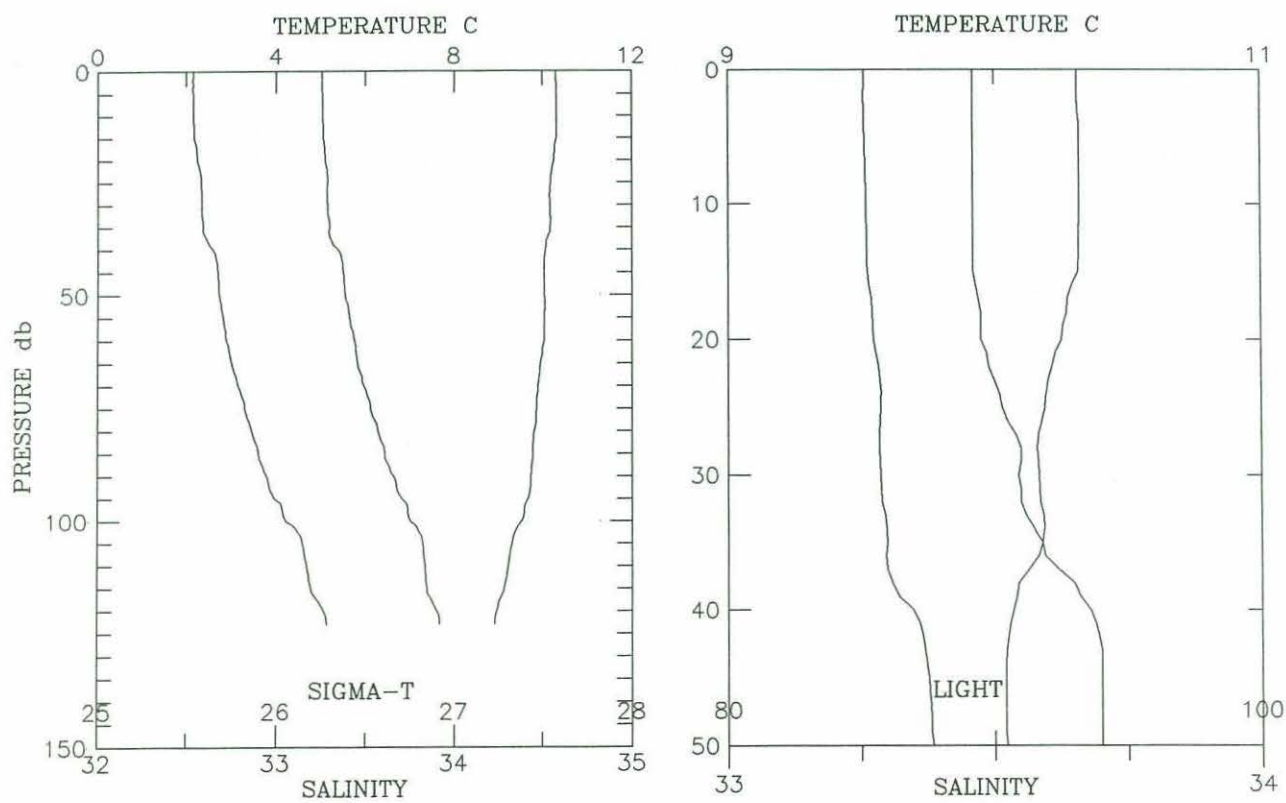
Cruise W8902 Station # 4 Depth m: 116 Time: 1989-02-25 03:50
Position: 39 9.70'N 123 51.60'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.380	33.215	25.494	0.0000	84.3
10.0		10.380	33.219	25.497	0.0251	84.6
20.0		10.363	33.223	25.503	0.0502	84.7
30.0		10.142	33.249	25.561	0.0750	89.5
40.0		10.052	33.273	25.595	0.0994	92.2
50.0		9.988	33.315	25.639	0.1234	93.4
60.0		9.888	33.435	25.749	0.1467	94.5
70.0		9.812	33.553	25.854	0.1689	94.8
80.0		9.704	33.697	25.984	0.1903	94.9
90.0		9.576	33.763	26.057	0.2105	95.0
100.0		9.254	33.790	26.130	0.2301	94.8
110.0		8.913	33.904	26.274	0.2487	82.7
112.0		8.899	33.909	26.280	0.2523	75.7



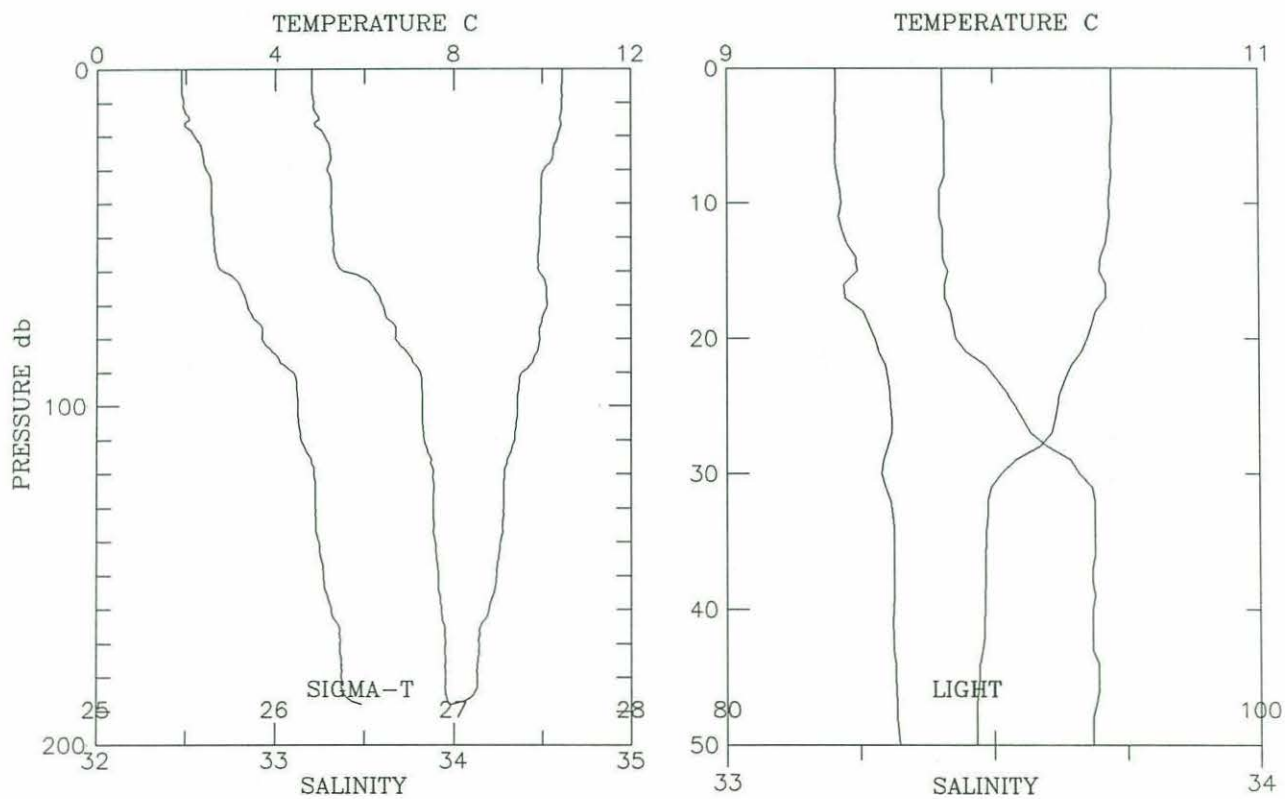
Cruise W8902 Station # 5 Depth m: 128 Time: 1989-02-25 04:31
Position: 39 9.10'N 123 54.50'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.313	33.256	25.538	0.0000	89.2
10.0		10.321	33.260	25.540	0.0247	89.2
20.0		10.254	33.274	25.562	0.0493	89.5
30.0		10.169	33.287	25.586	0.0736	90.9
40.0		10.071	33.347	25.650	0.0978	93.6
50.0		10.047	33.385	25.684	0.1213	94.0
60.0		10.035	33.436	25.725	0.1445	94.4
70.0		9.897	33.490	25.791	0.1672	94.4
80.0		9.810	33.569	25.867	0.1893	94.5
90.0		9.744	33.660	25.949	0.2106	94.7
100.0		9.537	33.754	26.056	0.2311	94.9
110.0		9.222	33.837	26.172	0.2503	94.8
120.0		8.968	33.903	26.265	0.2689	92.2
123.0		8.923	33.919	26.284	0.2743	86.6



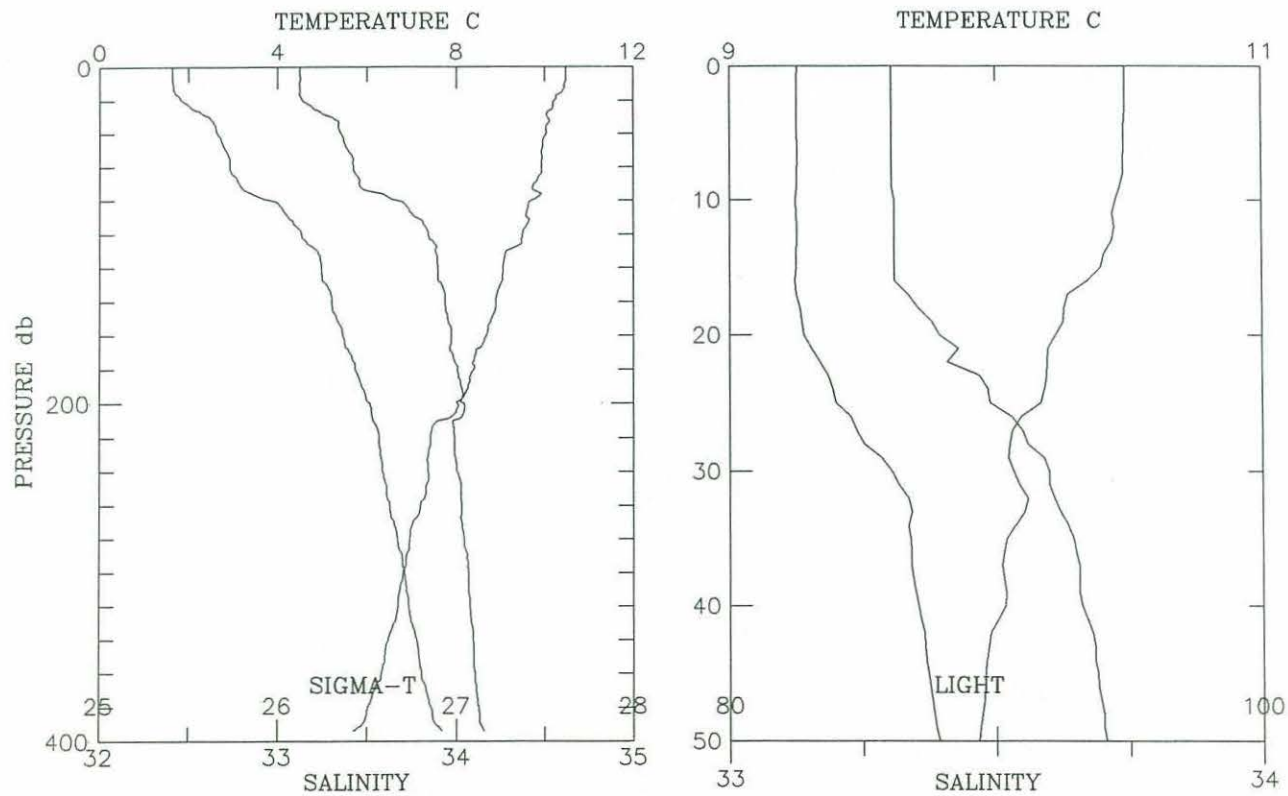
Cruise W8902 Station # 6 Depth m: 192 Time: 1989-02-25 05:21
Position: 39 8.70'N 123 57.10'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.447	33.205	25.475	0.0000	88.1
10.0		10.434	33.215	25.485	0.0253	88.0
20.0		10.353	33.278	25.548	0.0503	88.6
30.0		10.030	33.290	25.612	0.0746	93.2
40.0		9.966	33.312	25.640	0.0984	93.7
50.0		9.935	33.323	25.654	0.1221	93.7
60.0		9.903	33.382	25.705	0.1457	94.3
70.0		10.105	33.603	25.844	0.1680	94.9
80.0		9.939	33.670	25.924	0.1894	94.8
90.0		9.524	33.812	26.104	0.2099	94.7
100.0		9.428	33.823	26.128	0.2292	94.5
110.0		9.367	33.833	26.146	0.2484	94.5
120.0		9.147	33.884	26.221	0.2671	94.9
130.0		9.120	33.886	26.227	0.2855	95.0
140.0		9.044	33.897	26.248	0.3039	95.0
150.0		8.956	33.912	26.274	0.3220	93.5
160.0		8.783	33.932	26.316	0.3398	91.7
170.0		8.570	33.953	26.366	0.3571	90.1
180.0		8.533	33.954	26.373	0.3742	90.0
188.0		7.942	33.983	26.484	0.3878	91.2



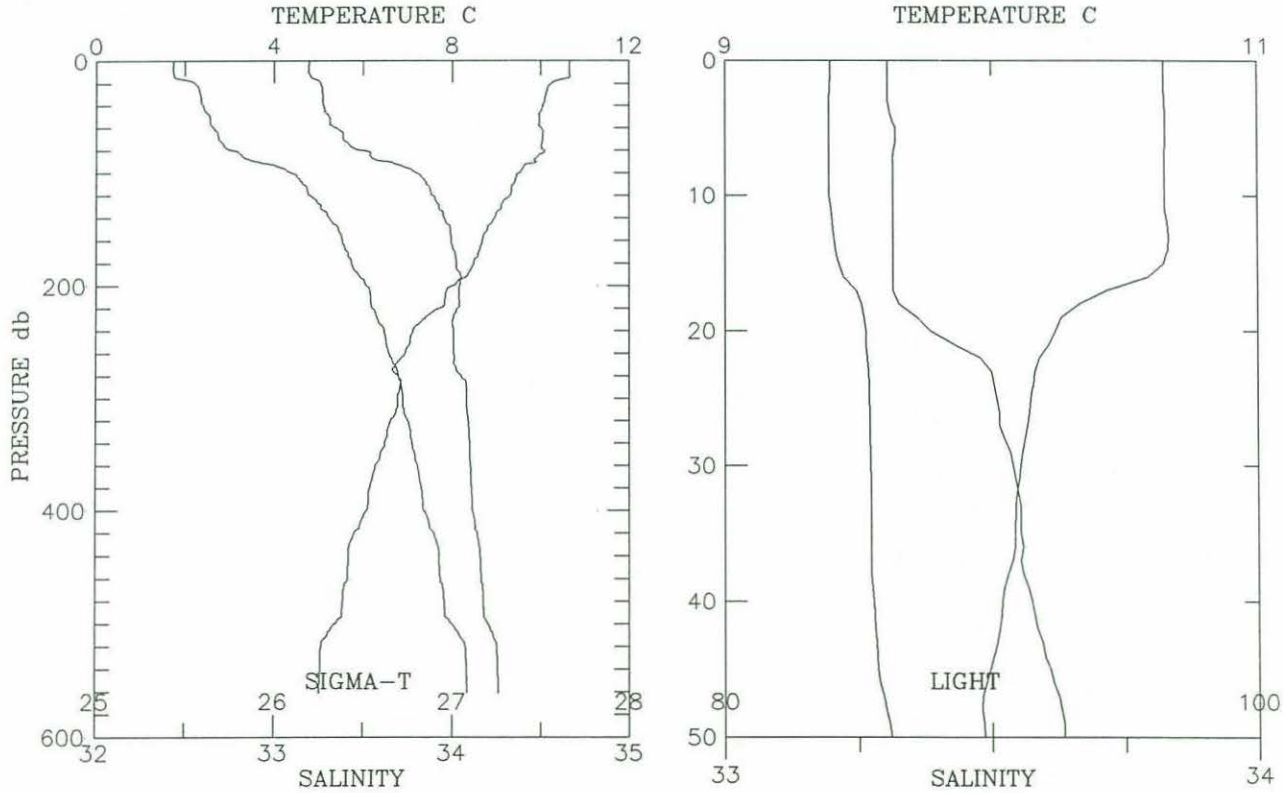
Cruise W8902 Station # 7 Depth m: 405 Time: 1989-02-25 06:02
Position: 39 8.40'N 123 59.60'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.486	33.127	25.408	0.0000	86.1
10.0		10.450	33.123	25.411	0.0259	86.2
20.0		10.225	33.139	25.462	0.0517	87.9
30.0		10.067	33.305	25.618	0.0764	92.0
40.0		10.034	33.355	25.662	0.1002	93.2
50.0		9.934	33.393	25.709	0.1235	94.1
60.0		9.923	33.421	25.732	0.1465	94.5
80.0		9.693	33.667	25.963	0.1911	94.8
100.0		9.494	33.842	26.132	0.2309	94.6
150.0		8.799	33.952	26.330	0.3216	95.1
200.0		8.026	34.043	26.519	0.4048	95.7
250.0		7.325	34.027	26.607	0.4813	95.4
300.0		6.806	34.069	26.712	0.5537	95.3
394.0		5.712	34.157	26.922	0.6787	93.7



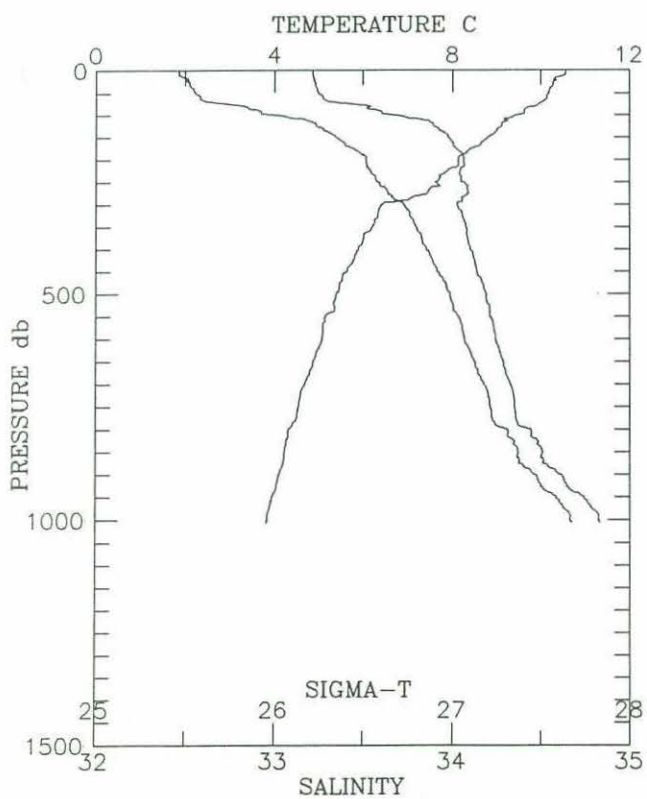
Cruise W8902 Station # 8 Depth m: 570 Time: 1989-02-25 06:53
Position: 39 7.90'N 124 2.90'W Depth Deck Offset: 0.00

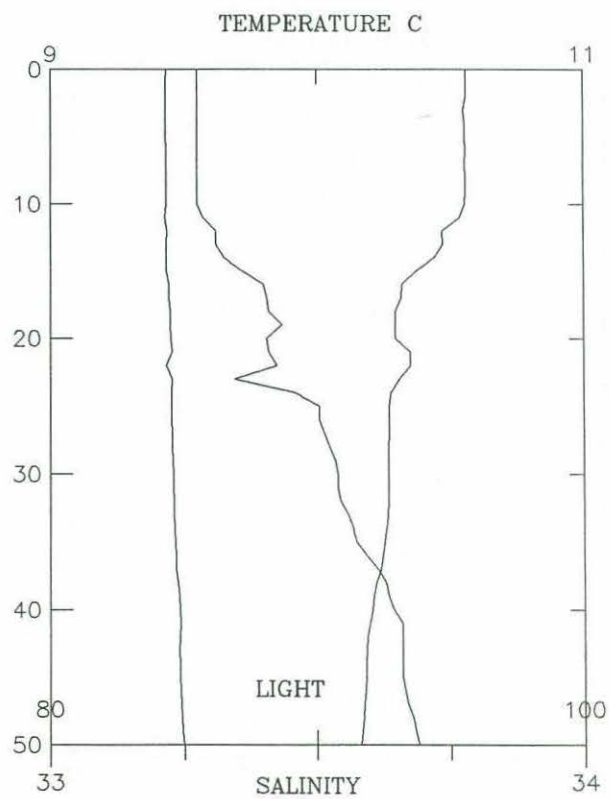
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.648	33.197	25.434	0.0000	86.1
10.0		10.651	33.195	25.432	0.0259	86.3
20.0		10.240	33.264	25.557	0.0513	87.7
30.0		10.111	33.272	25.585	0.0756	90.8
40.0		10.038	33.278	25.601	0.0999	91.5
50.0		9.971	33.311	25.639	0.1239	92.7
60.0		10.021	33.351	25.661	0.1477	93.7
80.0		10.086	33.501	25.767	0.1943	94.7
100.0		9.516	33.798	26.094	0.2366	94.4
150.0		8.776	33.989	26.362	0.3280	95.0
200.0		8.009	34.042	26.521	0.4108	95.6
250.0		7.055	34.009	26.630	0.4867	95.9
300.0		6.787	34.083	26.725	0.5578	95.5
400.0		6.085	34.115	26.843	0.6910	95.1
500.0		5.358	34.205	27.003	0.8118	95.2
561.0		5.024	34.258	27.084	0.8776	95.0



Cruise W8902 Station # 9 Depth m: 1016 Time: 1989-02-25 08:09
Position: 39 7.00'N 124 9.20'W Depth Deck Offset: 0.00

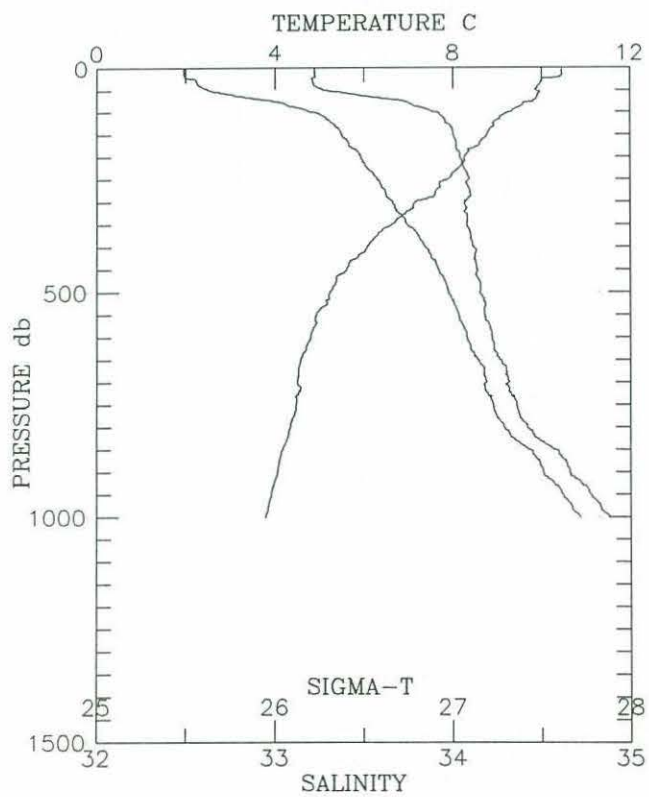
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.561	33.216	25.464	0.0000	85.5
10.0		10.555	33.216	25.465	0.0254	85.5
20.0		10.296	33.225	25.517	0.0505	88.1
30.0		10.270	33.230	25.525	0.0754	90.8
40.0		10.208	33.242	25.545	0.1002	92.9
50.0		10.165	33.249	25.557	0.1249	93.8
60.0		10.127	33.273	25.583	0.1494	94.0
80.0		9.807	33.540	25.845	0.1964	94.5
100.0		9.434	33.685	26.019	0.2391	93.5
150.0		8.792	33.979	26.352	0.3305	94.7
200.0		8.136	34.063	26.518	0.4126	95.6
250.0		7.645	34.068	26.594	0.4902	95.8
300.0		6.410	34.027	26.731	0.5631	95.9
400.0		5.896	34.100	26.855	0.6953	96.0
500.0		5.391	34.189	26.987	0.8165	95.5
600.0		5.071	34.243	27.067	0.9286	95.4
700.0		4.679	34.327	27.178	1.0326	95.7
800.0		4.319	34.443	27.310	1.1281	95.7
900.0		4.097	34.615	27.470	1.2100	95.8
1000.0		3.840	34.827	27.665	1.2733	95.6
1005.0		3.830	34.834	27.672	1.2760	95.6

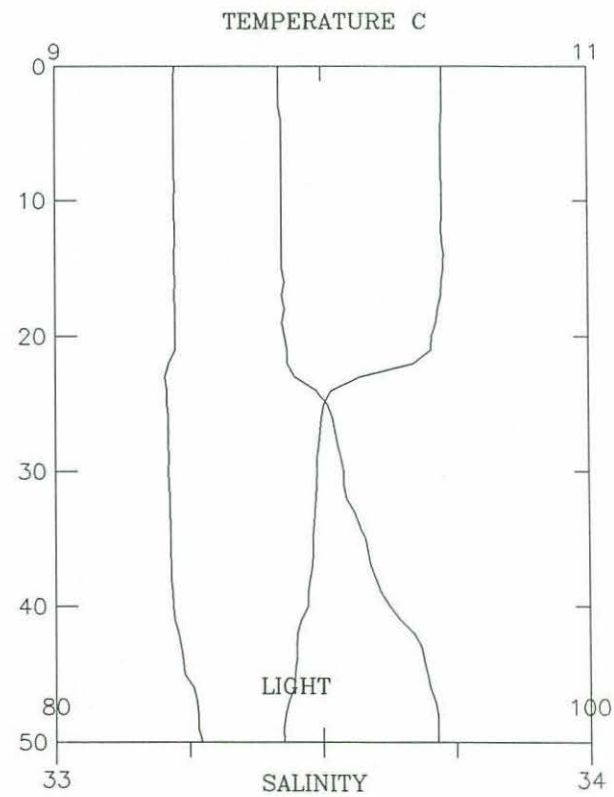




Cruise W8902 Station # 10 Depth m: 1880 Time: 1989-02-25 09:31
Position: 39 6.00'N 124 15.60'W Depth Deck Offset: 0.00

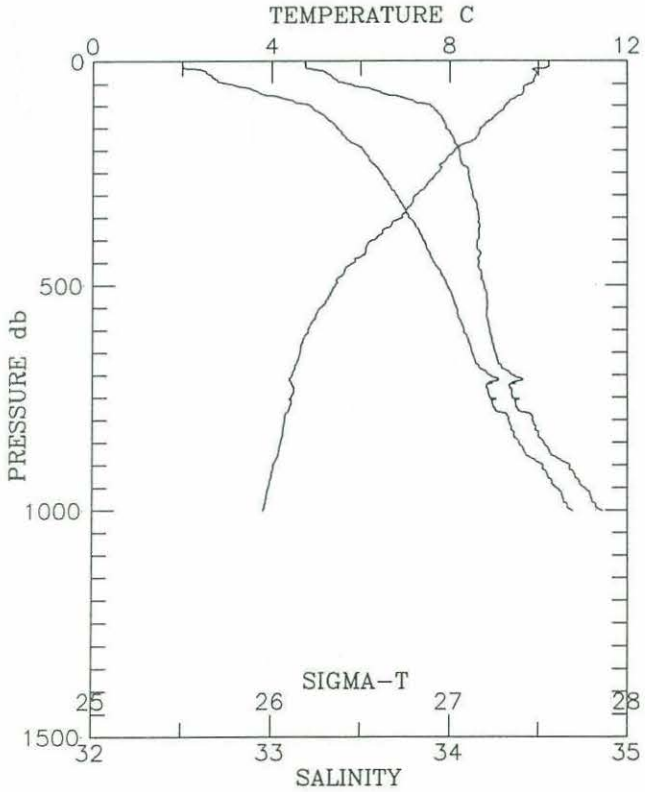
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.457	33.225	25.489	0.0000	88.4
10.0		10.455	33.224	25.489	0.0252	88.5
20.0		10.414	33.225	25.496	0.0503	88.6
30.0		9.980	33.212	25.560	0.0750	90.8
40.0		9.944	33.220	25.572	0.0995	92.5
50.0		9.852	33.273	25.629	0.1237	94.3
60.0		9.900	33.437	25.749	0.1471	94.6
80.0		9.584	33.759	26.053	0.1898	94.4
100.0		9.299	33.900	26.209	0.2283	94.7
150.0		8.766	34.003	26.375	0.3159	94.8
200.0		8.269	34.042	26.482	0.3987	95.6
250.0		7.904	34.091	26.574	0.4773	95.6
300.0		7.163	34.067	26.661	0.5520	96.0
400.0		6.071	34.117	26.846	0.6888	96.1
500.0		5.234	34.151	26.975	0.8103	96.1
600.0		4.803	34.220	27.079	0.9217	96.1
700.0		4.503	34.313	27.187	1.0237	96.1
800.0		4.342	34.419	27.288	1.1185	96.0
900.0		4.059	34.655	27.506	1.1960	95.9
1000.0		3.788	34.882	27.714	1.2552	96.0
1001.0		3.786	34.883	27.716	1.2557	96.0

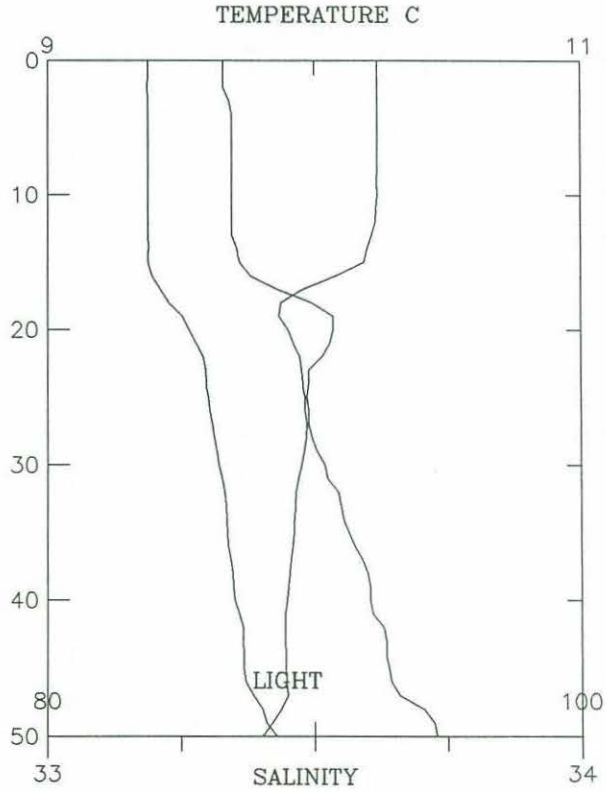




Cruise W8902 Station # 11 Depth m: 3030 Time: 1989-02-25 10:54
Position: 39 5.00'N 124 22.40'W Depth Deck Offset: 0.00

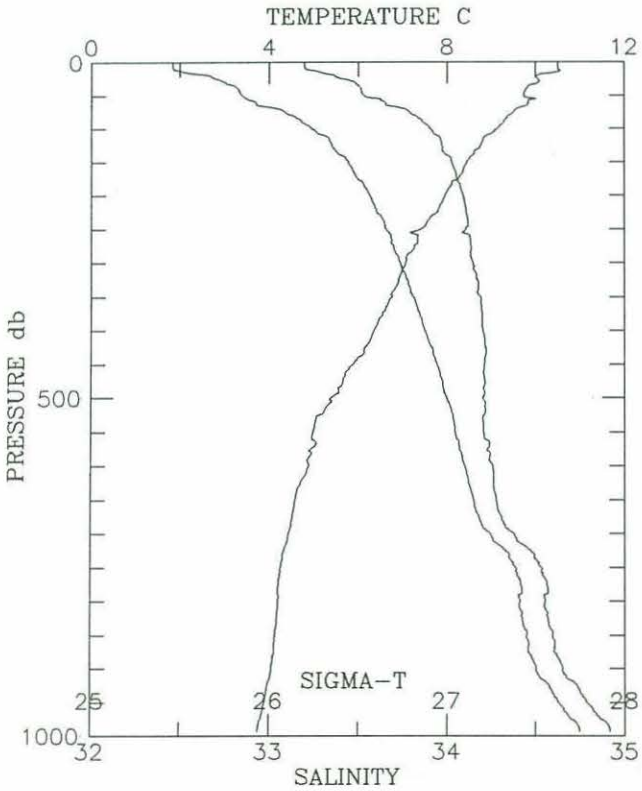
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.238	33.188	25.497	0.0000	86.6
10.0		10.237	33.188	25.498	0.0251	86.9
20.0		9.902	33.265	25.614	0.0498	90.7
30.0		9.953	33.321	25.650	0.0736	90.4
40.0		9.897	33.350	25.681	0.0971	92.1
50.0		9.803	33.429	25.759	0.1203	94.6
60.0		9.664	33.544	25.872	0.1425	94.8
80.0		9.490	33.734	26.049	0.1846	95.1
100.0		9.236	33.891	26.213	0.2231	95.0
150.0		8.692	33.979	26.368	0.3117	95.2
200.0		8.112	34.055	26.515	0.3942	95.7
250.0		7.725	34.105	26.611	0.4710	95.5
300.0		7.212	34.130	26.704	0.5438	95.8
400.0		6.274	34.157	26.852	0.6782	96.0
500.0		5.423	34.194	26.987	0.8001	96.1
600.0		4.821	34.226	27.082	0.9113	96.1
700.0		4.460	34.356	27.225	1.0137	96.1
800.0		4.297	34.466	27.330	1.1058	96.1
900.0		4.037	34.678	27.526	1.1847	95.9
1000.0		3.811	34.858	27.693	1.2454	95.9
1001.0		3.810	34.858	27.693	1.2459	96.0

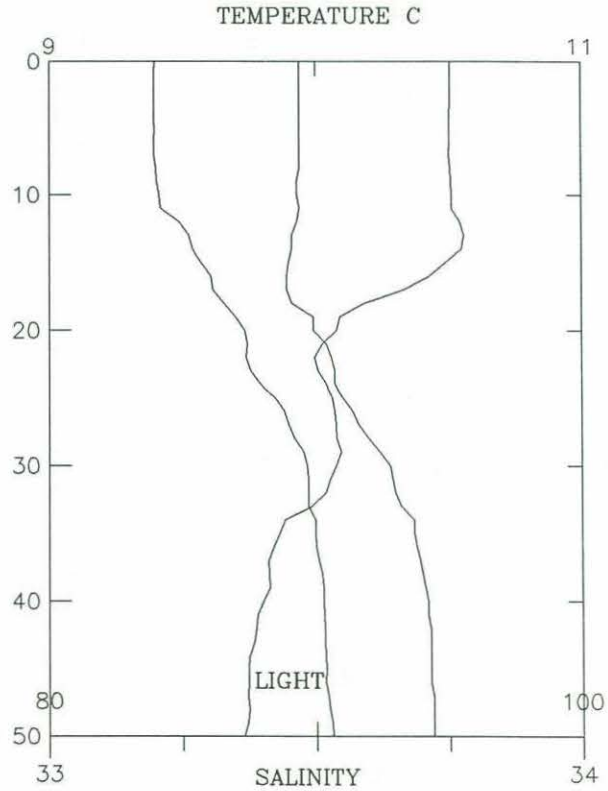




Cruise W8902 Station # 12 Depth m: 3360 Time: 1989-02-25 12:13
Position: 39 4.00'N 124 29.60'W Depth Deck Offset: 0.00

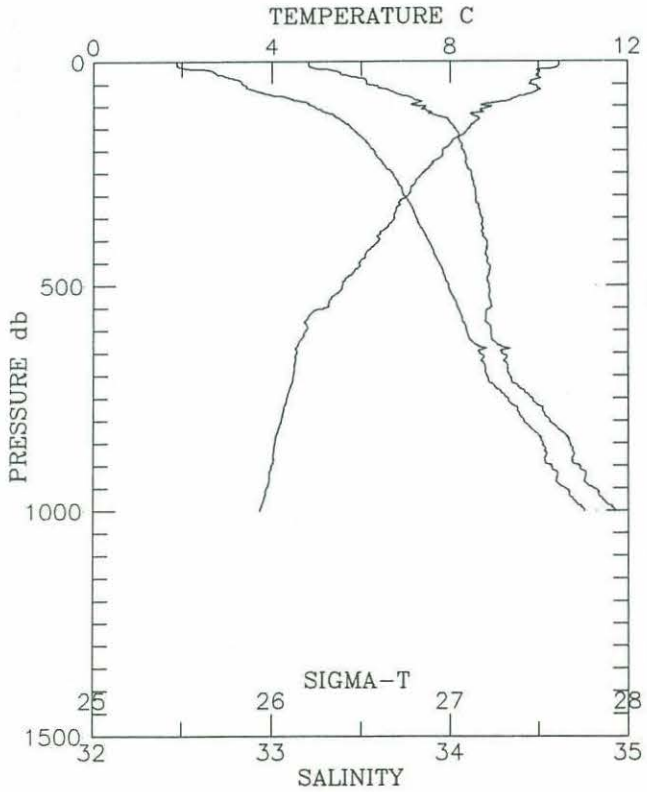
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.508	33.198	25.459	0.0000	89.4
10.0		10.513	33.207	25.465	0.0254	89.3
20.0		10.077	33.367	25.664	0.0501	89.9
30.0		10.075	33.483	25.755	0.0732	92.8
40.0		9.801	33.514	25.825	0.0955	94.2
50.0		9.729	33.531	25.851	0.1174	94.4
60.0		9.842	33.648	25.923	0.1389	94.9
80.0		9.408	33.817	26.127	0.1792	95.0
100.0		9.141	33.905	26.239	0.2166	94.7
150.0		8.446	34.027	26.443	0.3025	95.4
200.0		7.955	34.089	26.565	0.3818	95.6
250.0		7.407	34.105	26.657	0.4561	95.7
300.0		7.070	34.146	26.736	0.5267	95.7
400.0		6.358	34.201	26.875	0.6605	95.8
500.0		5.384	34.201	26.997	0.7803	96.0
600.0		4.886	34.257	27.099	0.8900	96.1
700.0		4.439	34.378	27.245	0.9906	96.1
800.0		4.210	34.556	27.411	1.0720	95.8
900.0		4.061	34.654	27.505	1.1462	96.0
993.0		3.757	34.919	27.747	1.2003	95.9

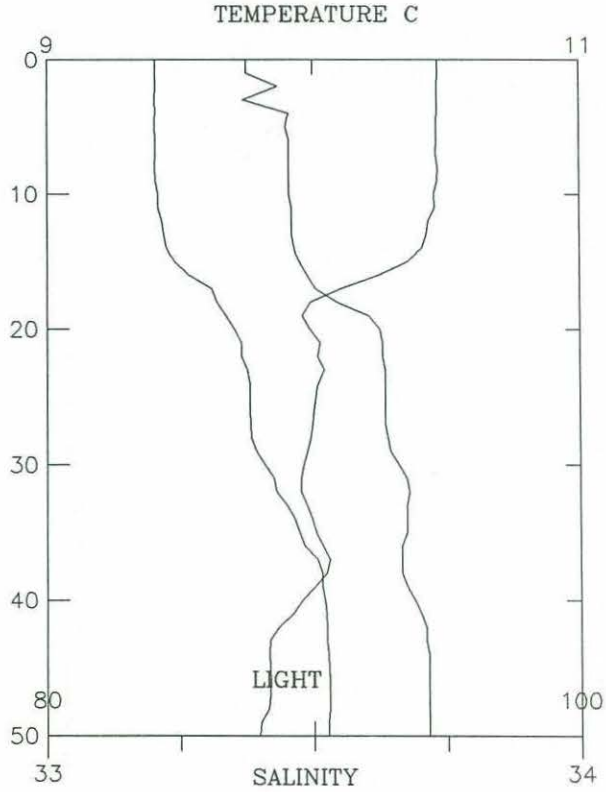




Cruise W8902 Station # 13 Depth m: 3407 Time: 1989-02-25 13:33
Position: 39 2.90'N 124 37.10'W Depth Deck Offset: 0.00

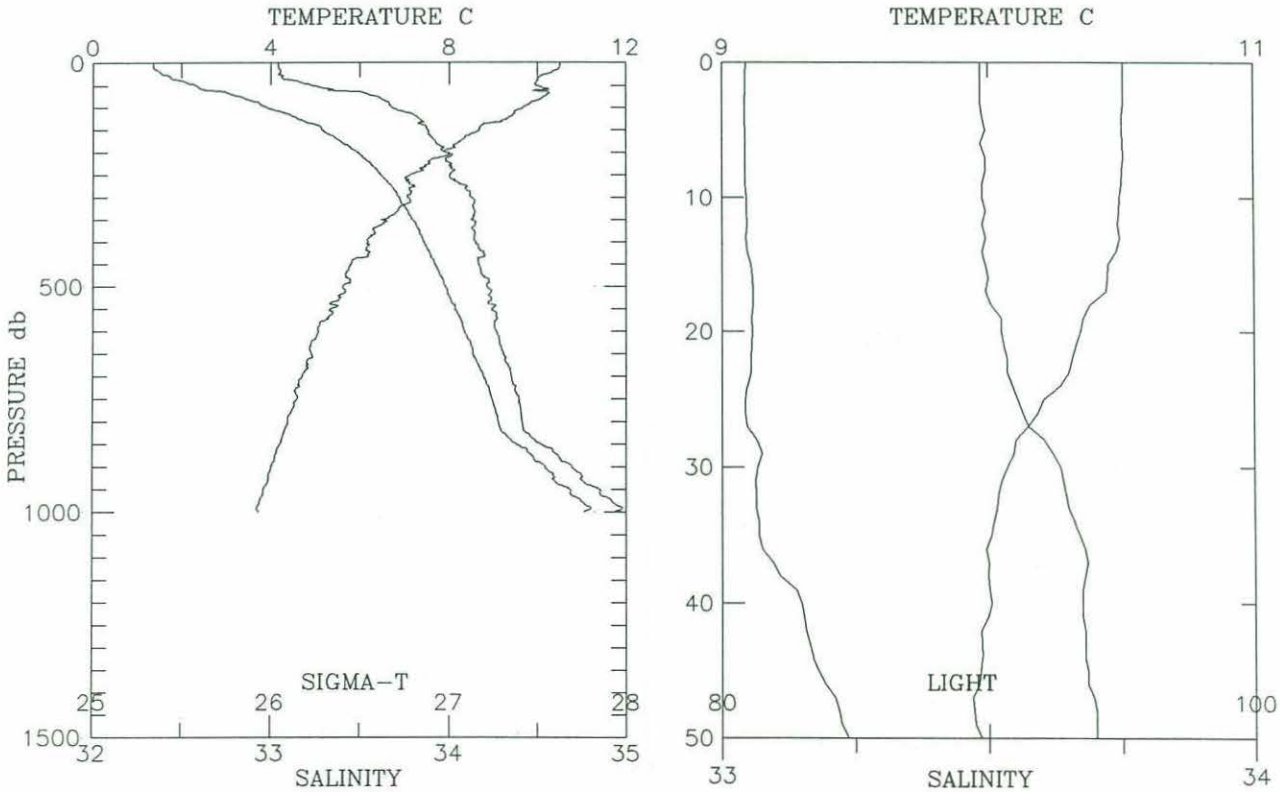
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.468	33.204	25.471	0.0000	87.5
10.0		10.454	33.210	25.478	0.0253	89.1
20.0		9.988	33.352	25.668	0.0499	92.5
30.0		9.964	33.409	25.716	0.0732	93.2
40.0		9.958	33.521	25.805	0.0959	93.8
50.0		9.796	33.527	25.836	0.1179	94.3
60.0		9.978	33.598	25.861	0.1397	94.7
80.0		9.486	33.782	26.087	0.1813	95.2
100.0		8.943	33.862	26.237	0.2191	95.2
150.0		8.417	34.029	26.449	0.3049	95.5
200.0		7.837	34.076	26.572	0.3836	95.9
250.0		7.398	34.123	26.672	0.4579	96.0
300.0		7.037	34.145	26.740	0.5279	95.9
400.0		6.377	34.205	26.876	0.6593	95.9
500.0		5.569	34.219	26.989	0.7797	96.1
600.0		4.753	34.229	27.092	0.8903	96.2
700.0		4.479	34.336	27.207	0.9901	96.2
800.0		4.206	34.561	27.416	1.0761	96.2
900.0		3.996	34.722	27.566	1.1448	96.1
1000.0		3.744	34.929	27.756	1.2006	96.1
1001.0		3.743	34.929	27.757	1.2010	96.1





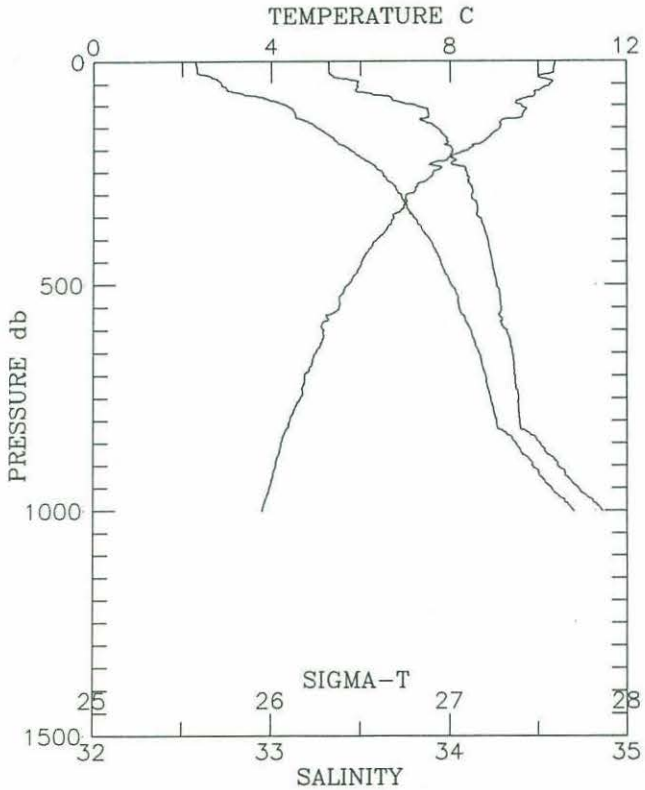
Cruise W8902 Station # 14 Depth m: 3695 Time: 1989-02-25 19:20
Position: 38 8.80'N 124 9.90'W Depth Deck Offset: 0.00

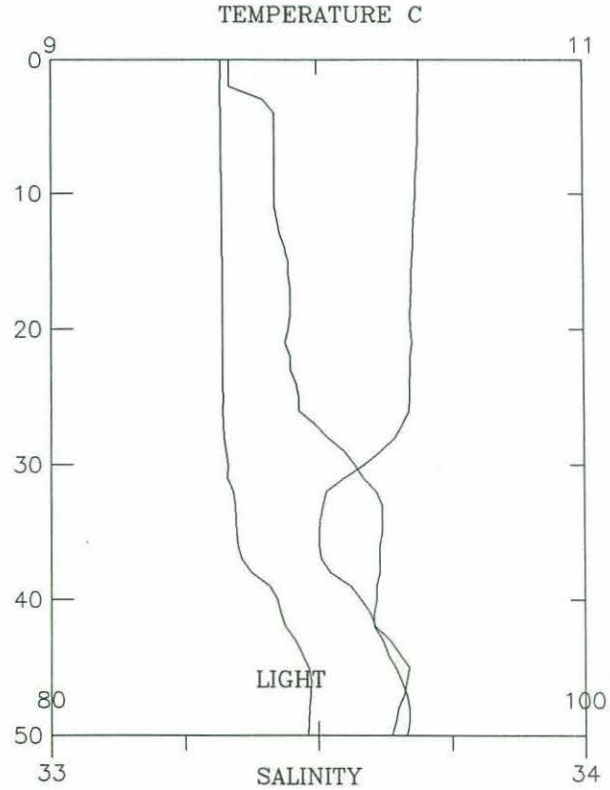
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.506	33.044	25.339	0.0000	89.7
10.0		10.492	33.045	25.343	0.0266	89.8
20.0		10.345	33.056	25.376	0.0530	90.5
30.0		10.070	33.066	25.431	0.0791	92.7
40.0		10.010	33.149	25.506	0.1046	93.5
50.0		9.971	33.237	25.581	0.1294	94.0
60.0		10.248	33.353	25.625	0.1536	93.6
80.0		10.090	33.622	25.861	0.1987	95.0
100.0		9.665	33.684	25.981	0.2410	95.1
150.0		8.684	33.881	26.292	0.3362	95.5
200.0		7.941	33.992	26.491	0.4207	95.9
250.0		7.115	34.004	26.618	0.4976	96.0
300.0		7.089	34.129	26.720	0.5693	96.0
400.0		6.189	34.152	26.859	0.7023	96.1
500.0		5.622	34.213	26.978	0.8240	96.1
600.0		5.076	34.267	27.085	0.9357	96.1
700.0		4.712	34.352	27.194	1.0381	96.0
800.0		4.394	34.414	27.279	1.1315	96.0
900.0		4.020	34.697	27.543	1.2112	95.9
1000.0		3.735	34.939	27.766	1.2652	96.0



Cruise W8902 Station # 15 Depth m: 3600 Time: 1989-02-25 20:39
Position: 38 12.50'N 124 5.20'W Depth Deck Offset: 0.00

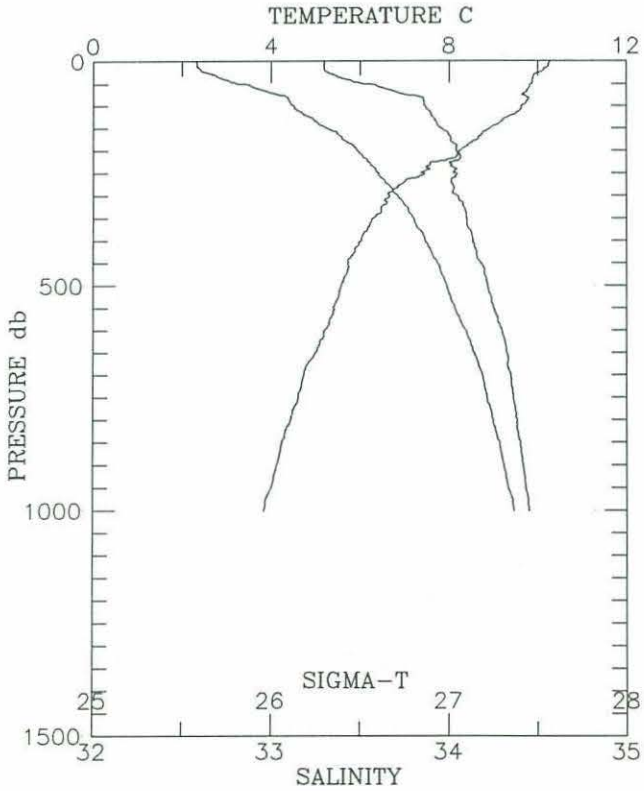
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.384	33.320	25.576	0.0000	86.7
10.0		10.368	33.321	25.579	0.0243	88.4
20.0		10.351	33.322	25.583	0.0486	88.9
30.0		10.176	33.332	25.620	0.0729	91.4
40.0		10.161	33.424	25.695	0.0964	92.2
50.0		10.276	33.481	25.720	0.1196	93.3
60.0		10.117	33.479	25.745	0.1426	94.0
80.0		9.862	33.658	25.928	0.1871	94.4
100.0		9.617	33.810	26.087	0.2278	94.2
150.0		9.124	33.924	26.256	0.3229	94.3
200.0		8.407	34.015	26.440	0.4095	95.4
250.0		7.624	34.094	26.617	0.4877	95.6
300.0		7.016	34.122	26.725	0.5598	96.0
400.0		6.347	34.213	26.886	0.6924	96.0
500.0		5.724	34.262	27.004	0.8119	96.0
600.0		5.183	34.324	27.118	0.9214	96.0
700.0		4.743	34.367	27.203	1.0220	96.0
800.0		4.417	34.394	27.260	1.1166	96.0
900.0		4.102	34.611	27.466	1.1989	96.1
1000.0		3.805	34.865	27.699	1.2617	96.1
1001.0		3.801	34.868	27.702	1.2623	96.1

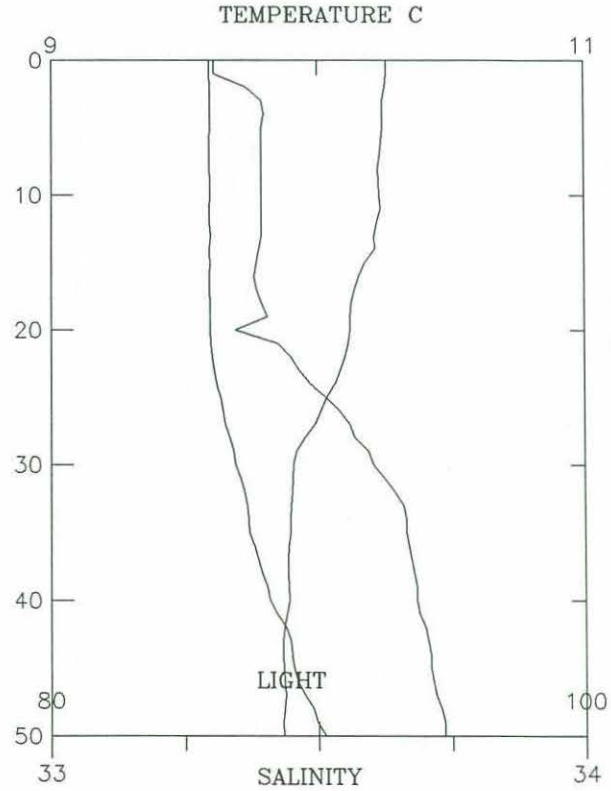




Cruise W8902 Station # 16 Depth m: 3510 Time: 1989-02-25 21:59
Position: 38 15.90'N 124 0.70'W Depth Deck Offset: 0.00

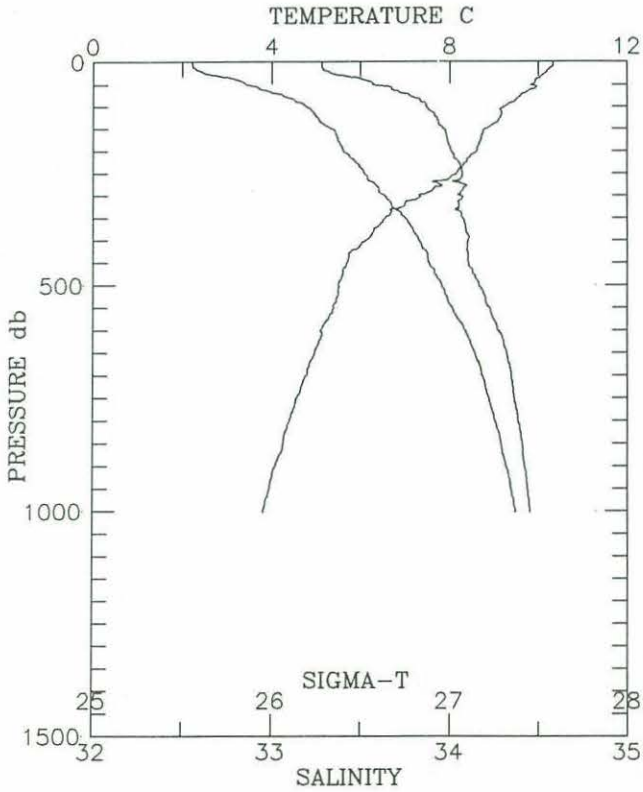
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.259	33.297	25.579	0.0000	86.1
10.0		10.233	33.298	25.584	0.0243	87.9
20.0		10.121	33.298	25.603	0.0485	86.9
30.0		9.908	33.345	25.676	0.0723	92.1
40.0		9.891	33.409	25.729	0.0955	93.7
50.0		9.869	33.513	25.813	0.1180	94.7
60.0		9.791	33.630	25.918	0.1395	94.9
80.0		9.754	33.846	26.093	0.1804	95.2
100.0		9.625	33.861	26.126	0.2194	94.5
150.0		8.918	33.955	26.313	0.3120	94.7
200.0		8.231	34.041	26.486	0.3957	95.2
250.0		7.404	34.037	26.604	0.4733	95.5
300.0		6.671	34.048	26.714	0.5458	96.1
400.0		6.025	34.135	26.866	0.6782	96.0
500.0		5.568	34.216	26.987	0.7988	96.0
600.0		5.207	34.296	27.093	0.9105	95.8
700.0		4.740	34.345	27.186	1.0129	95.9
800.0		4.443	34.381	27.247	1.1088	95.8
900.0		4.133	34.417	27.309	1.1991	95.9
1000.0		3.844	34.451	27.366	1.2844	95.8
1001.0		3.843	34.450	27.365	1.2852	95.8

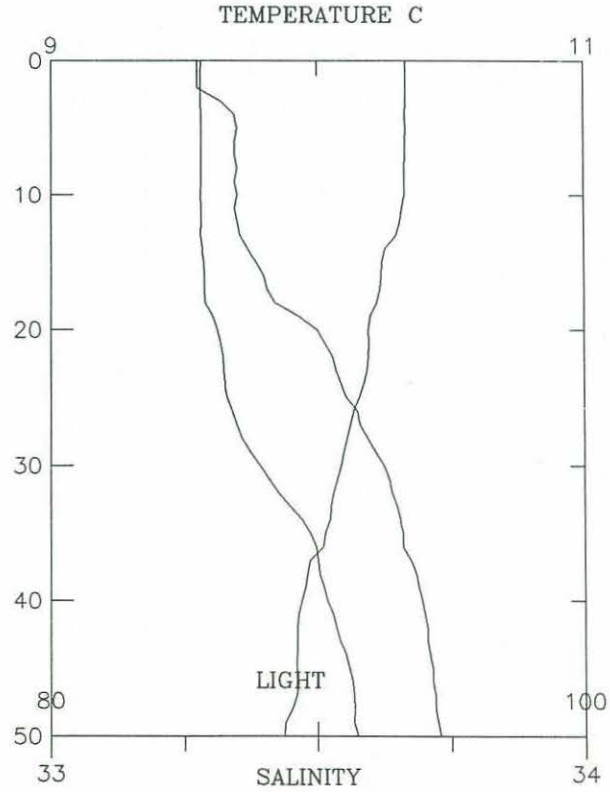




Cruise W8902 Station # 17 Depth m: 2670 Time: 1989-02-25 23:15
Position: 38 19.40'N 123 55.80'W Depth Deck Offset: 0.00

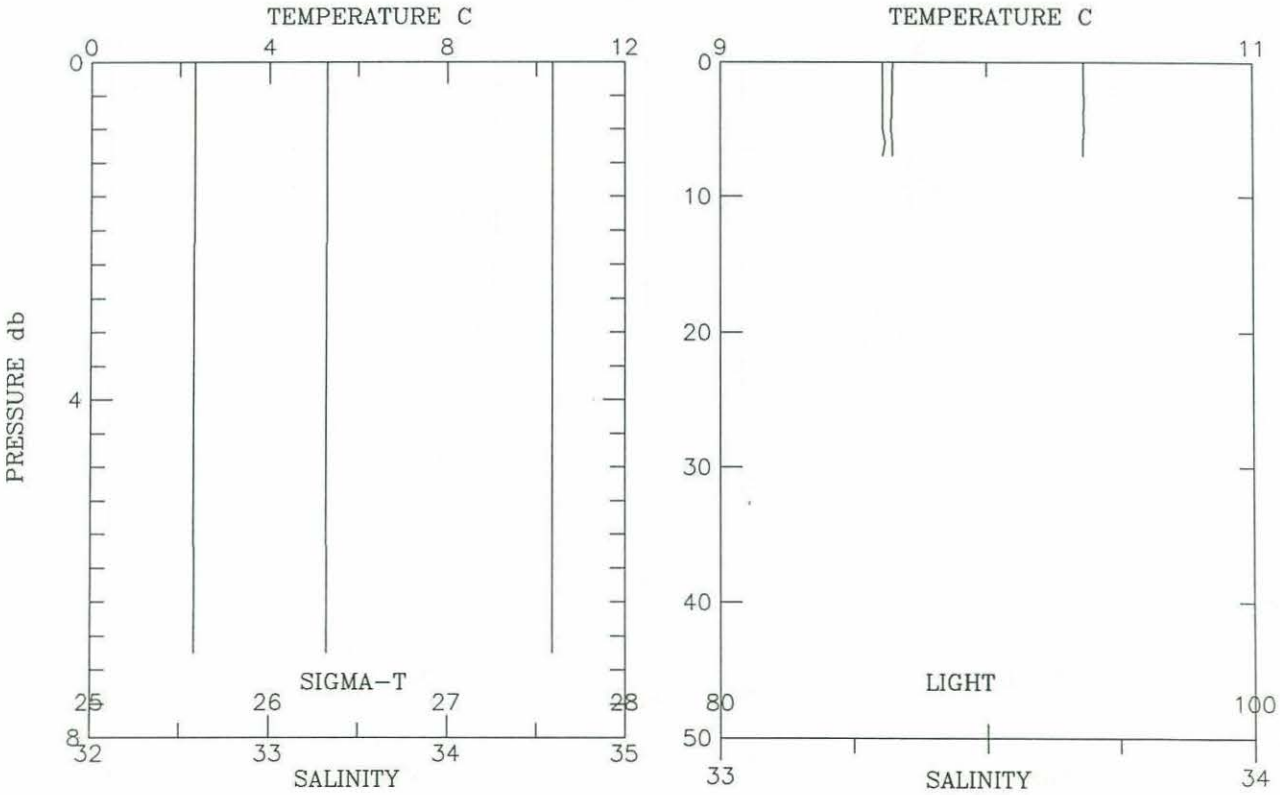
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.334	33.282	25.555	0.0000	85.5
10.0		10.327	33.281	25.555	0.0245	87.0
20.0		10.193	33.312	25.602	0.0489	90.0
30.0		10.090	33.392	25.682	0.0728	92.5
40.0		9.939	33.519	25.806	0.0955	93.9
50.0		9.874	33.575	25.861	0.1174	94.6
60.0		9.917	33.673	25.930	0.1387	95.1
80.0		9.525	33.813	26.105	0.1791	94.7
100.0		9.217	33.869	26.199	0.2171	94.3
150.0		8.798	33.968	26.343	0.3075	95.0
200.0		8.609	34.010	26.405	0.3928	95.2
250.0		8.148	34.070	26.521	0.4739	95.5
300.0		7.323	34.060	26.634	0.5505	95.8
400.0		6.116	34.104	26.830	0.6884	96.2
500.0		5.509	34.164	26.953	0.8127	96.2
600.0		5.091	34.271	27.087	0.9262	96.2
700.0		4.786	34.346	27.181	1.0286	95.8
800.0		4.407	34.384	27.253	1.1241	95.8
900.0		4.083	34.423	27.319	1.2135	95.9
1000.0		3.817	34.453	27.370	1.2979	95.8
1002.0		3.816	34.453	27.370	1.2995	95.8





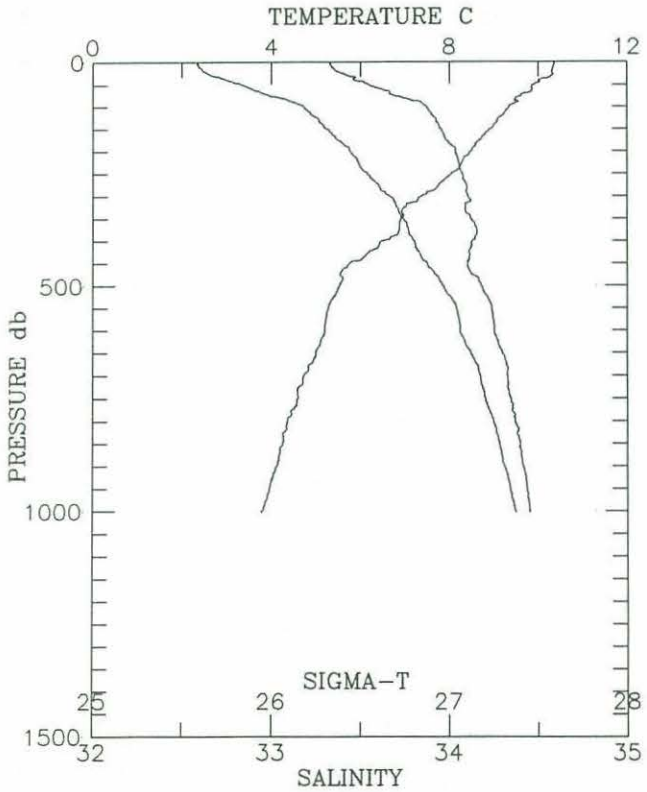
Cruise W8902 Station # 18 Depth m: 1920 Time: 1989-02-26 00:27
Position: 38 22.80'N 123 51.30'W Depth Deck Offset: 0.00

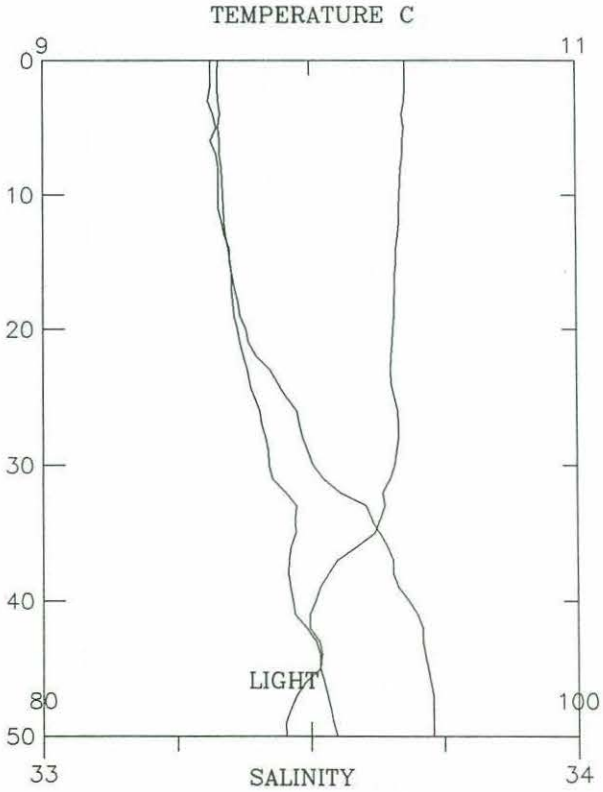
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.367	33.324	25.582	0.0000	86.1
7.0		10.365	33.323	25.581	0.0170	86.1



Cruise W8902 Station # 19 Depth m: 1920 Time: 1989-02-26 00:43
Position: 38 22.80'N 123 51.30'W Depth Deck Offset: 0.00

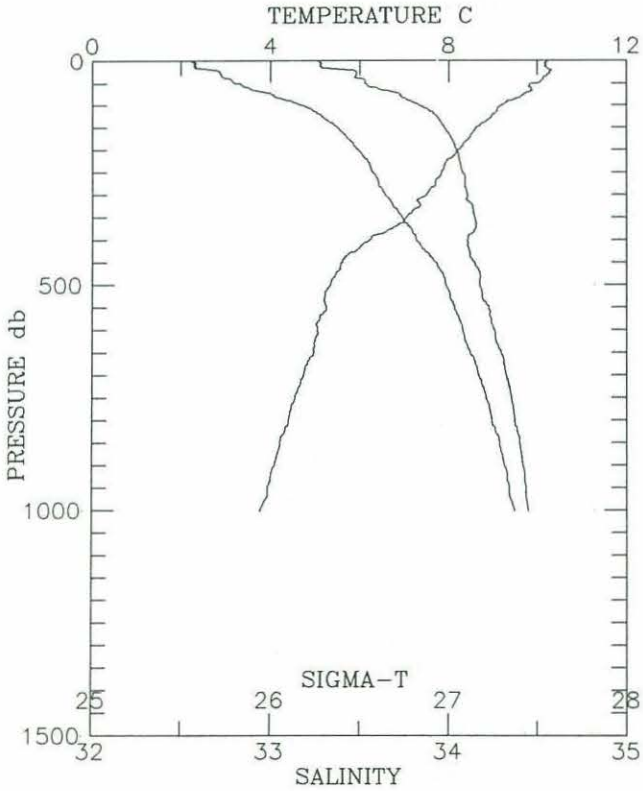
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.361	33.329	25.587	0.0000	86.3
10.0		10.340	33.338	25.597	0.0242	86.6
20.0		10.313	33.364	25.622	0.0482	87.6
30.0		10.318	33.423	25.667	0.0719	90.1
40.0		10.017	33.466	25.752	0.0950	93.7
50.0		9.906	33.549	25.835	0.1173	94.6
60.0		9.865	33.617	25.895	0.1390	94.7
80.0		9.484	33.740	26.054	0.1806	94.7
100.0		9.340	33.871	26.180	0.2191	94.3
150.0		8.911	33.953	26.313	0.3101	94.6
200.0		8.491	34.034	26.441	0.3952	95.2
250.0		8.051	34.073	26.538	0.4756	95.6
300.0		7.371	34.103	26.661	0.5512	95.9
400.0		6.466	34.127	26.803	0.6897	95.9
500.0		5.525	34.179	26.963	0.8156	96.1
600.0		5.193	34.252	27.060	0.9278	95.9
700.0		4.721	34.327	27.174	1.0323	95.9
800.0		4.357	34.369	27.247	1.1290	96.2
900.0		4.116	34.416	27.310	1.2192	96.0
1000.0		3.784	34.452	27.373	1.3039	95.9
1003.0		3.784	34.454	27.374	1.3064	95.9

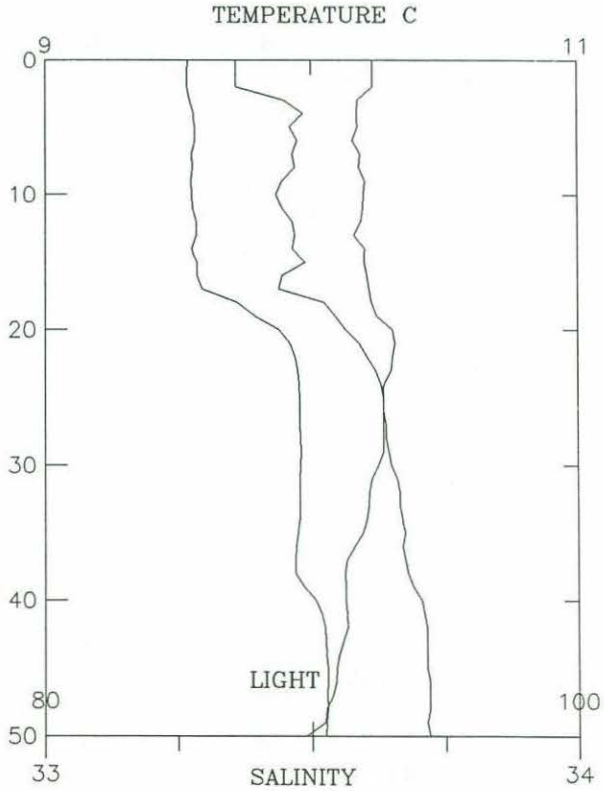




Cruise W8902 Station # 20 Depth m: 1458 Time: 1989-02-26 02:03
Position: 38 26.00'N 123 46.80'W Depth Deck Offset: 0.00

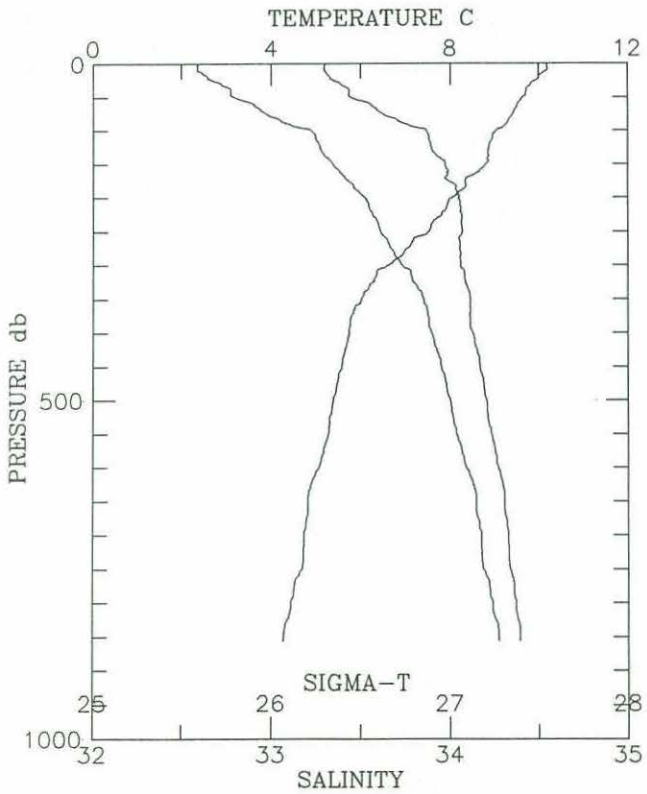
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.232	33.270	25.563	0.0000	87.2
10.0		10.196	33.277	25.574	0.0243	88.7
20.0		10.303	33.440	25.683	0.0485	91.3
30.0		10.250	33.480	25.723	0.0716	93.0
40.0		10.127	33.508	25.766	0.0944	94.1
50.0		9.979	33.526	25.805	0.1169	94.4
60.0		9.835	33.576	25.868	0.1388	94.7
80.0		9.639	33.733	26.023	0.1805	95.1
100.0		9.191	33.834	26.175	0.2195	95.5
150.0		8.619	33.977	26.377	0.3087	95.7
200.0		8.205	34.045	26.493	0.3912	95.8
250.0		7.847	34.077	26.572	0.4691	95.8
300.0		7.496	34.106	26.645	0.5441	95.9
400.0		6.219	34.108	26.820	0.6826	96.1
500.0		5.339	34.177	26.984	0.8044	96.2
600.0		5.053	34.257	27.080	0.9159	96.2
700.0		4.742	34.326	27.171	1.0197	96.0
800.0		4.414	34.375	27.245	1.1157	95.7
900.0		4.097	34.420	27.315	1.2055	95.7
1000.0		3.785	34.450	27.371	1.2902	96.0
1003.0		3.777	34.451	27.373	1.2927	96.0

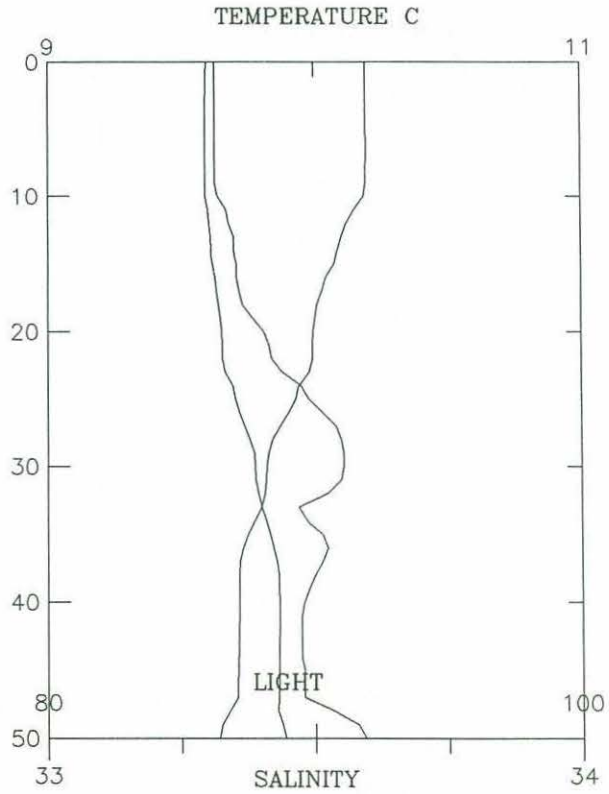




Cruise W8902 Station # 21 Depth m: 845 Time: 1989-02-26 03:29
Position: 38 28.90'N 123 42.90'W Depth Deck Offset: 0.00

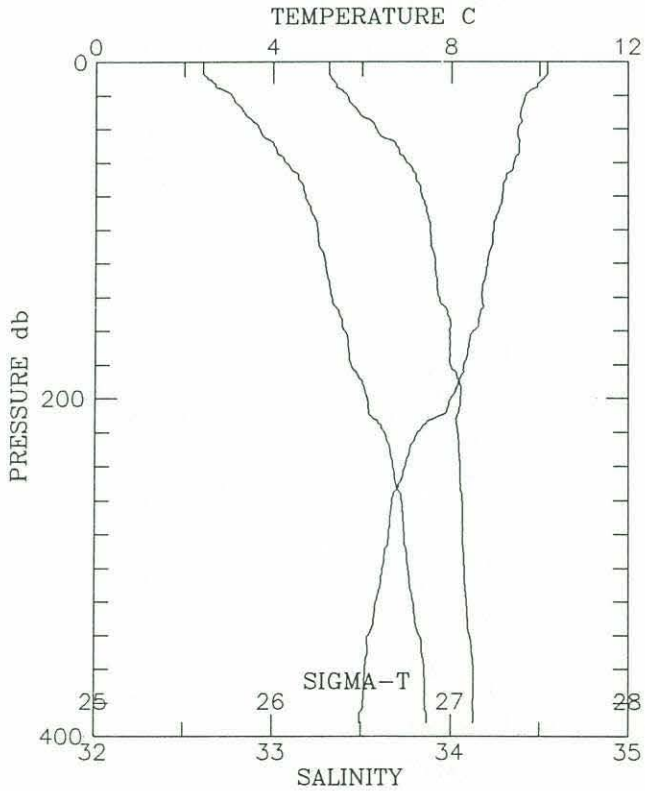
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.194	33.299	25.592	0.0000	86.3
10.0		10.188	33.296	25.590	0.0242	86.4
20.0		9.997	33.327	25.647	0.0481	88.1
30.0		9.822	33.389	25.724	0.0715	91.1
40.0		9.717	33.433	25.776	0.0942	89.6
50.0		9.640	33.444	25.797	0.1167	91.9
60.0		9.530	33.552	25.900	0.1385	87.5
80.0		9.379	33.660	26.009	0.1803	89.1
100.0		9.052	33.865	26.222	0.2192	90.1
150.0		8.807	33.974	26.346	0.3087	95.0
200.0		8.070	34.052	26.519	0.3914	95.7
250.0		7.518	34.067	26.611	0.4678	95.8
300.0		6.623	34.059	26.729	0.5397	95.9
400.0		5.732	34.127	26.896	0.6680	96.2
500.0		5.382	34.206	27.001	0.7865	96.2
600.0		5.066	34.271	27.090	0.8975	96.0
700.0		4.734	34.330	27.175	0.9995	95.5
800.0		4.446	34.372	27.240	1.0970	94.9
856.0		4.274	34.395	27.277	1.1485	95.1

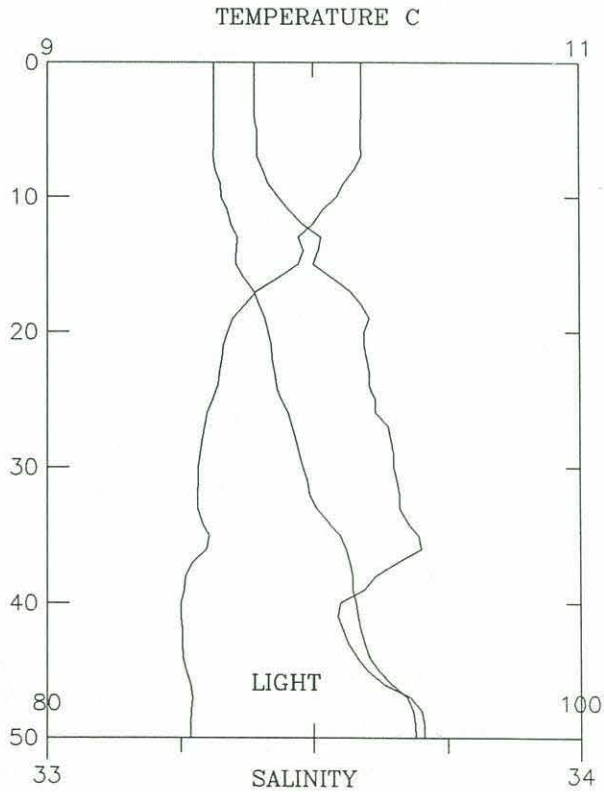




Cruise W8902 Station # 22 Depth m: 405 Time: 1989-02-26 04:35
Position: 38 30.90'N 123 40.30'W Depth Deck Offset: 0.00

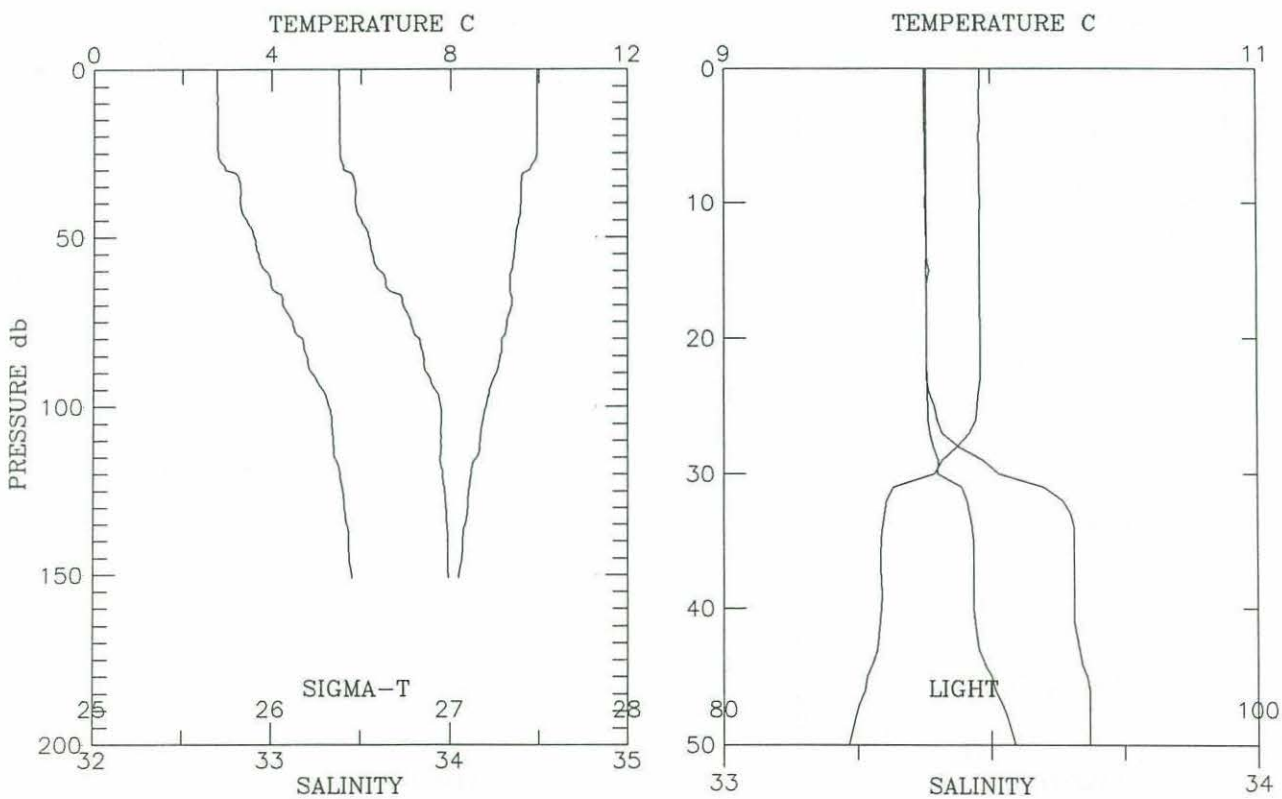
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.181	33.314	25.606	0.0000	87.8
10.0		10.089	33.327	25.631	0.0240	88.7
20.0		9.678	33.415	25.769	0.0472	91.9
30.0		9.567	33.481	25.838	0.0694	93.0
40.0		9.501	33.579	25.926	0.0909	91.0
50.0		9.538	33.690	26.006	0.1116	94.1
60.0		9.420	33.752	26.074	0.1317	93.9
80.0		9.154	33.835	26.182	0.1698	92.5
100.0		8.957	33.882	26.250	0.2066	92.0
150.0		8.648	33.980	26.375	0.2949	94.7
200.0		7.990	34.052	26.531	0.3768	95.7
250.0		6.848	34.052	26.693	0.4505	95.8
300.0		6.465	34.076	26.763	0.5192	95.6
392.0		5.970	34.126	26.866	0.6385	95.8





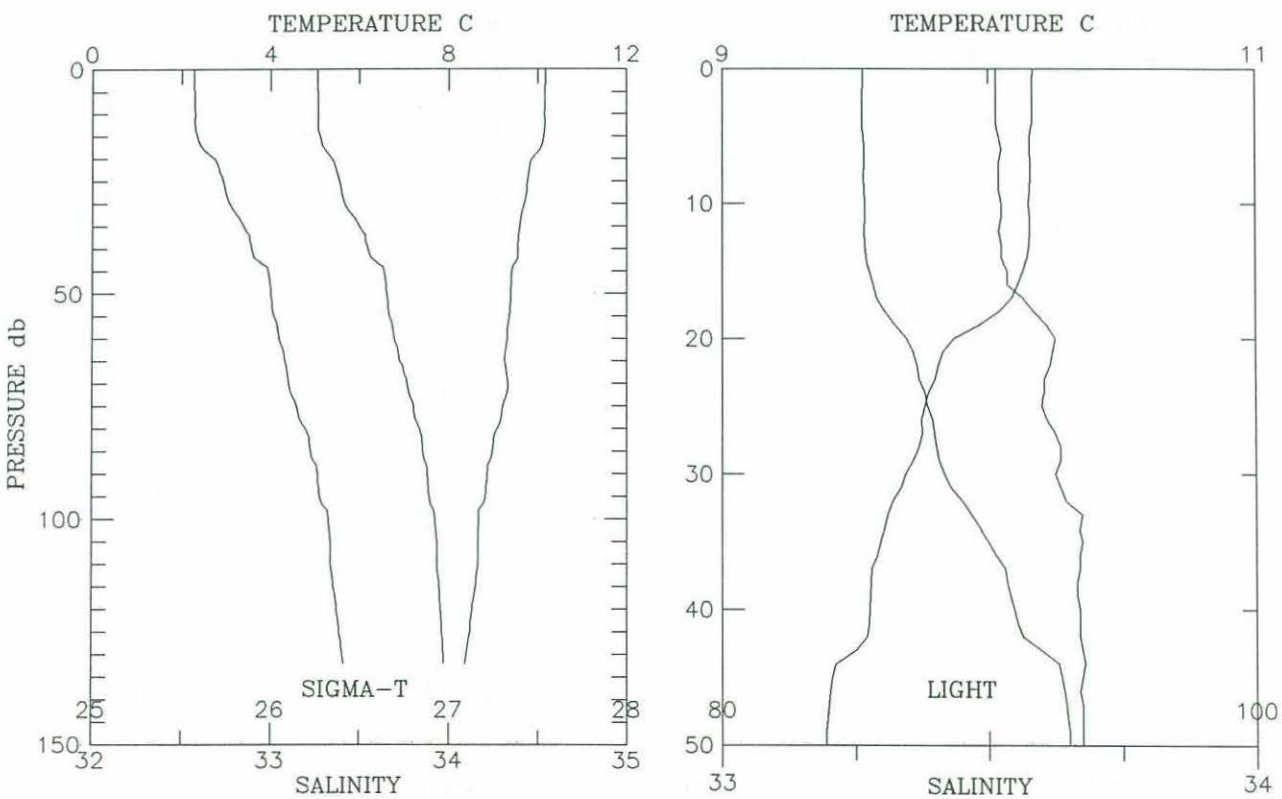
Cruise W8902 Station # 23 Depth m: 162 Time: 1989-02-26 05:22
Position: 38 32.70'N 123 37.30'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.960	33.377	25.692	0.0000	87.6
10.0		9.961	33.378	25.693	0.0232	87.6
20.0		9.962	33.380	25.694	0.0464	87.6
30.0		9.791	33.401	25.739	0.0696	90.3
40.0		9.588	33.467	25.824	0.0917	93.1
50.0		9.468	33.545	25.904	0.1134	93.7
60.0		9.373	33.605	25.967	0.1345	93.5
70.0		9.380	33.731	26.064	0.1548	93.3
80.0		9.158	33.825	26.174	0.1741	91.3
90.0		9.034	33.868	26.227	0.1927	92.4
100.0		8.812	33.945	26.322	0.2105	94.5
110.0		8.671	33.948	26.346	0.2278	93.6
120.0		8.465	33.957	26.385	0.2449	92.7
130.0		8.397	33.976	26.410	0.2616	93.6
140.0		8.280	33.985	26.435	0.2781	94.2
150.0		8.193	33.989	26.451	0.2945	93.4
151.0		8.190	33.989	26.452	0.2961	93.4



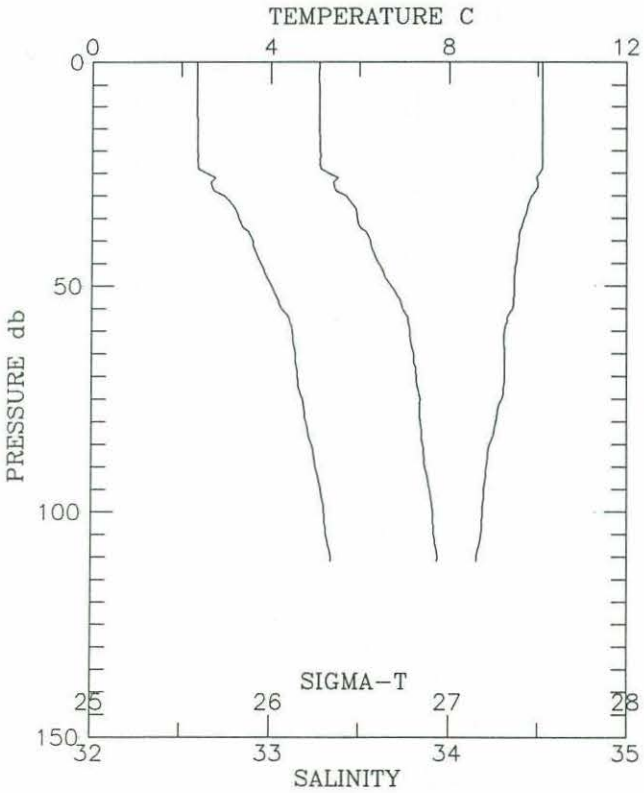
Cruise W8902 Station # 24 Depth m: 139 Time: 1989-02-26 06:03
Position: 38 35.10'N 123 34.20'W Depth Deck Offset: 0.00

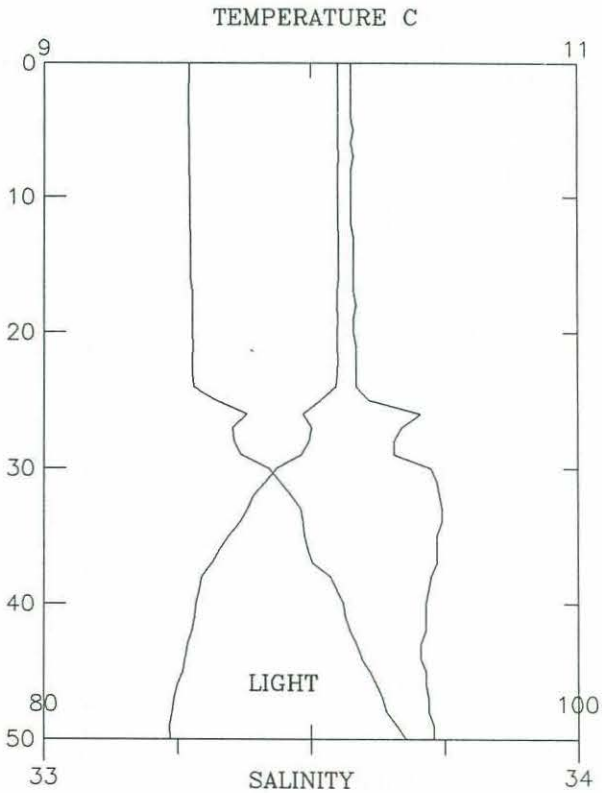
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.167	33.264	25.569	0.0000	90.3
10.0		10.152	33.268	25.575	0.0244	90.5
20.0		9.870	33.346	25.683	0.0485	92.5
30.0		9.688	33.417	25.769	0.0714	92.5
40.0		9.551	33.548	25.893	0.0933	93.4
50.0		9.389	33.651	26.000	0.1140	93.5
60.0		9.311	33.697	26.049	0.1342	93.4
70.0		9.328	33.770	26.103	0.1539	93.9
80.0		9.078	33.838	26.197	0.1729	93.9
90.0		8.863	33.883	26.266	0.1912	93.5
100.0		8.674	33.925	26.327	0.2089	94.1
110.0		8.651	33.936	26.339	0.2262	94.2
120.0		8.525	33.955	26.374	0.2434	92.6
130.0		8.403	33.971	26.405	0.2602	89.3
132.0		8.363	33.973	26.413	0.2635	88.9



Cruise W8902 Station # 25 Depth m: 119 Time: 1989-02-26 06:38
Position: 38 36.60'N 123 32.60'W Depth Deck Offset: 0.00

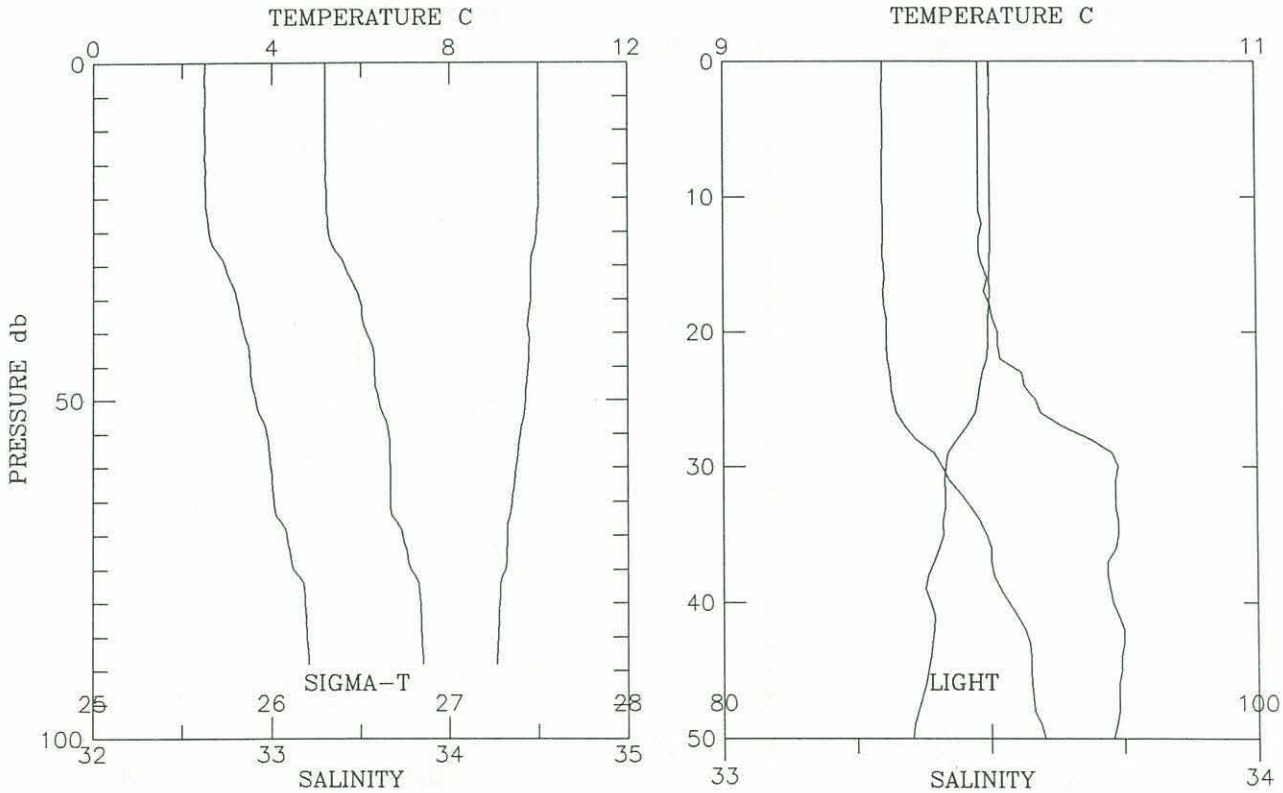
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.103	33.272	25.586	0.0000	91.5
10.0		10.104	33.273	25.587	0.0242	91.5
20.0		10.101	33.278	25.591	0.0485	91.6
30.0		9.873	33.421	25.741	0.0722	94.5
40.0		9.568	33.561	25.901	0.0943	94.3
50.0		9.471	33.677	26.007	0.1151	94.6
60.0		9.253	33.782	26.125	0.1349	93.4
70.0		9.252	33.819	26.154	0.1540	93.6
80.0		9.066	33.840	26.200	0.1727	92.2
90.0		8.853	33.868	26.255	0.1910	93.2
100.0		8.762	33.912	26.304	0.2088	91.7
110.0		8.638	33.939	26.344	0.2262	85.9
111.0		8.636	33.938	26.343	0.2280	85.9





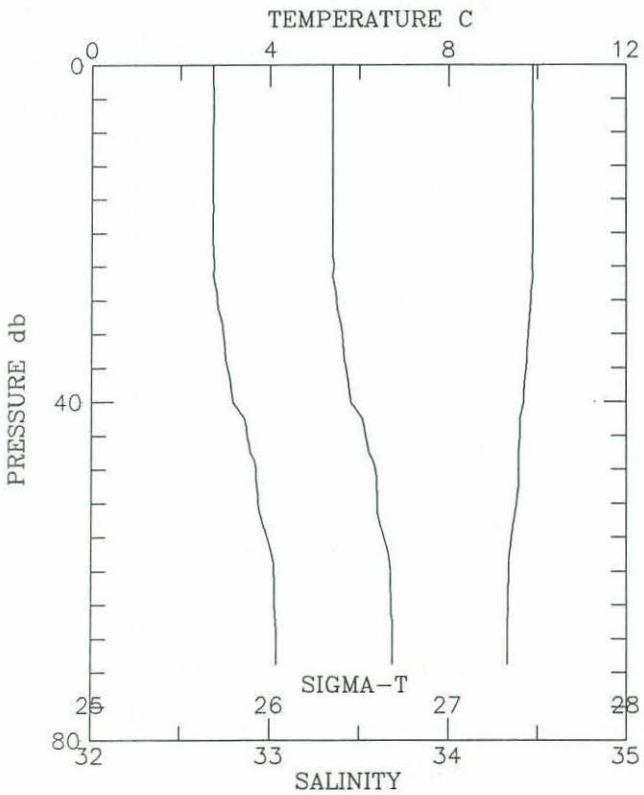
Cruise W8902 Station # 26 Depth m: 95 Time: 1989-02-26 07:14
Position: 38 38.50'N 123 30.40'W Depth Deck Offset: 0.00

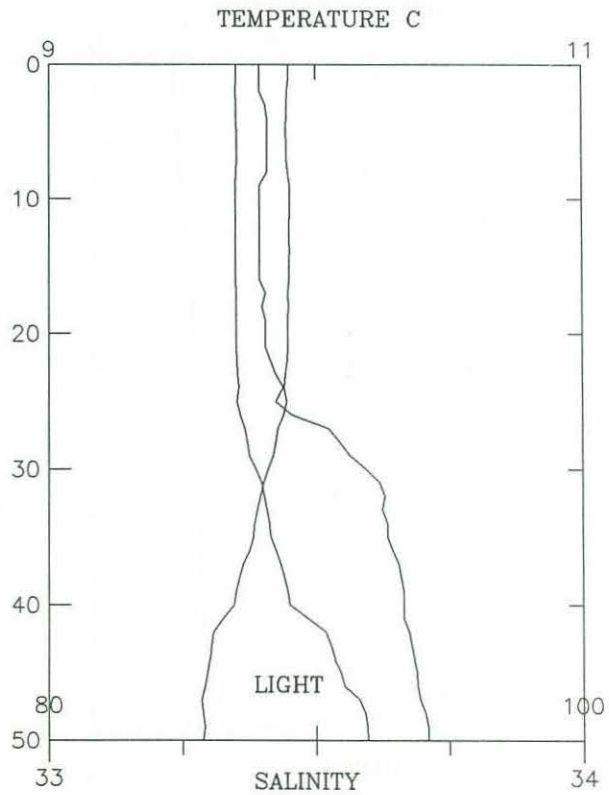
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.002	33.300	25.625	0.0000	89.6
5.0		10.003	33.300	25.625	0.0119	89.6
10.0		10.003	33.299	25.624	0.0239	89.6
15.0		10.001	33.301	25.626	0.0358	89.7
20.0		9.994	33.306	25.631	0.0477	90.3
25.0		9.955	33.318	25.647	0.0596	91.7
30.0		9.833	33.409	25.738	0.0713	94.8
35.0		9.823	33.493	25.806	0.0825	94.8
40.0		9.776	33.534	25.845	0.0936	94.6
45.0		9.765	33.575	25.879	0.1044	94.9
50.0		9.707	33.601	25.909	0.1151	94.6
55.0		9.589	33.657	25.972	0.1256	94.5
60.0		9.495	33.666	25.995	0.1359	94.4
65.0		9.402	33.667	26.011	0.1461	94.4
70.0		9.296	33.737	26.083	0.1561	94.3
75.0		9.261	33.782	26.123	0.1658	94.0
80.0		9.124	33.837	26.188	0.1752	88.0
85.0		9.092	33.844	26.199	0.1845	89.1
89.0		9.064	33.853	26.210	0.1919	75.3



Cruise W8902 Station # 27 Depth m: 79 Time: 1989-02-26 07:48
Position: 38 39.70'N 123 28.30'W Depth Deck Offset: 0.00

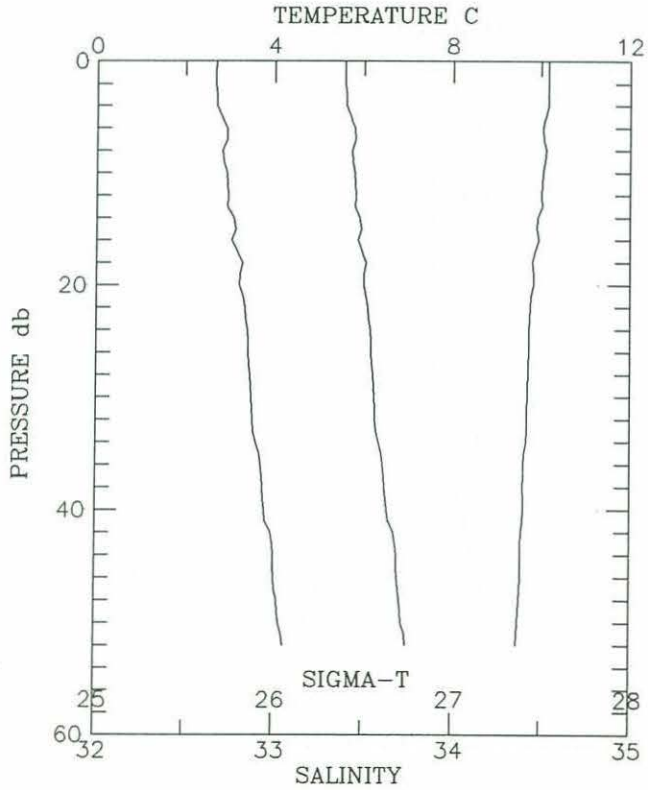
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.898	33.351	25.682	0.0000	87.9
5.0		9.889	33.352	25.684	0.0117	88.2
10.0		9.903	33.350	25.681	0.0233	87.9
15.0		9.901	33.350	25.681	0.0350	87.9
20.0		9.896	33.351	25.682	0.0467	88.1
25.0		9.892	33.352	25.684	0.0583	88.5
30.0		9.822	33.387	25.723	0.0699	91.9
35.0		9.766	33.415	25.754	0.0813	92.7
40.0		9.693	33.451	25.794	0.0926	93.3
45.0		9.594	33.547	25.886	0.1034	93.8
50.0		9.577	33.598	25.928	0.1140	94.2
55.0		9.443	33.625	25.971	0.1245	93.6
60.0		9.354	33.673	26.023	0.1347	88.8
65.0		9.342	33.679	26.030	0.1448	88.1
70.0		9.331	33.685	26.036	0.1548	86.7
71.0		9.331	33.685	26.036	0.1568	86.7

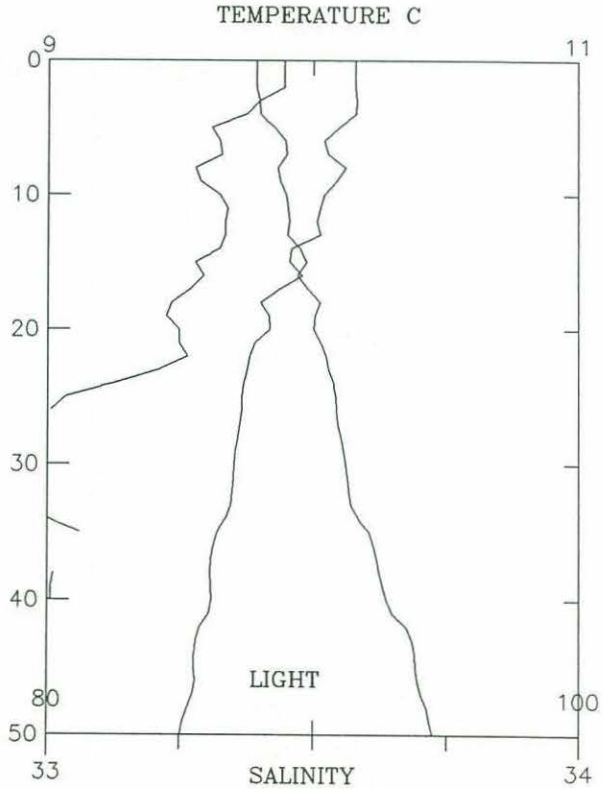




Cruise W8902 Station # 28 Depth m: 57 Time: 1989-02-26 11:00
Position: 38 14.00'N 123 1.80'W Depth Deck Offset: 0.00

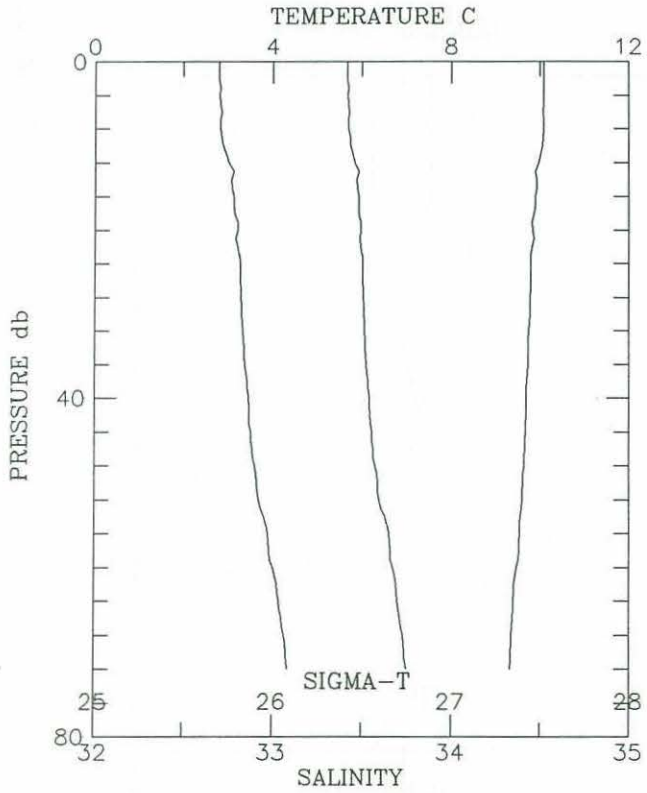
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.158	33.394	25.672	0.0000	88.9
5.0		10.097	33.427	25.708	0.0117	86.2
10.0		10.042	33.449	25.734	0.0231	86.5
15.0		9.913	33.488	25.787	0.0345	85.6
20.0		9.837	33.501	25.809	0.0456	85.0
25.0		9.735	33.543	25.859	0.0565	80.7
30.0		9.706	33.561	25.878	0.0673	76.2
35.0		9.640	33.605	25.923	0.0780	81.2
40.0		9.620	33.637	25.952	0.0885	80.1
45.0		9.555	33.692	26.005	0.0987	71.8
50.0		9.502	33.723	26.038	0.1088	69.4
52.0		9.473	33.748	26.063	0.1128	55.7

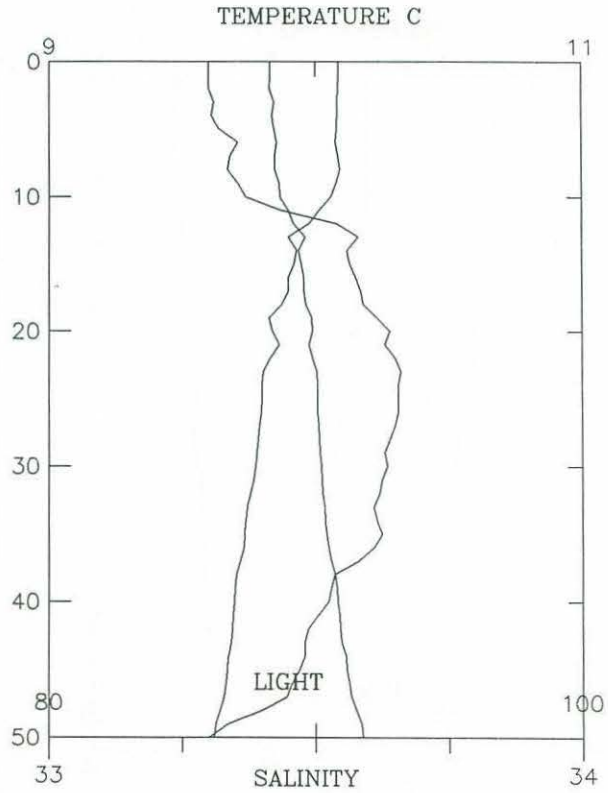




Cruise W8902 Station # 29 Depth m: 76 Time: 1989-02-26 11:32
Position: 38 13.60'N 123 4.50'W Depth Deck Offset: 0.00

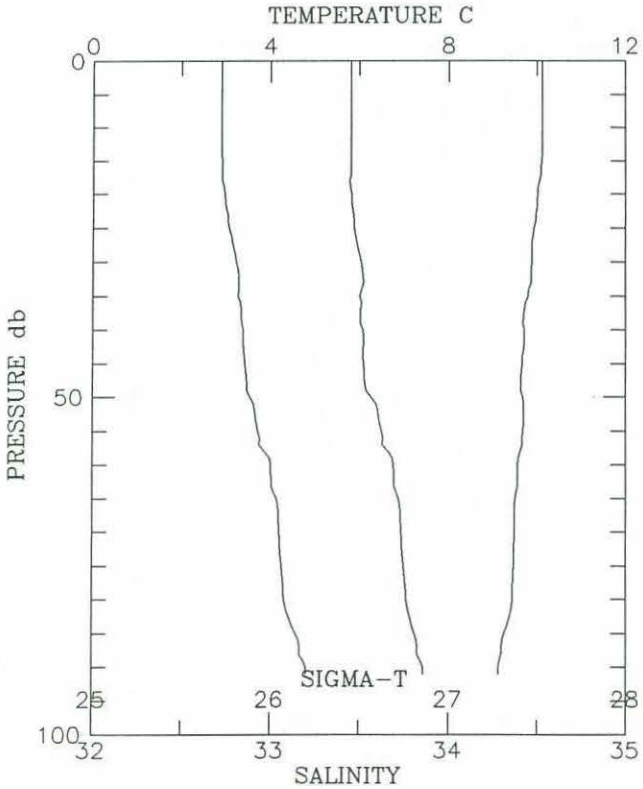
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.087	33.415	25.700	0.0000	86.0
5.0		10.080	33.423	25.708	0.0116	86.4
10.0		10.058	33.434	25.720	0.0231	87.4
15.0		9.921	33.474	25.774	0.0344	91.3
20.0		9.838	33.494	25.804	0.0456	92.8
25.0		9.799	33.504	25.818	0.0566	93.1
30.0		9.774	33.511	25.828	0.0676	92.7
35.0		9.733	33.521	25.842	0.0786	92.5
40.0		9.695	33.542	25.865	0.0895	90.5
45.0		9.668	33.559	25.883	0.1003	89.4
50.0		9.619	33.589	25.914	0.1110	86.0
55.0		9.553	33.645	25.969	0.1215	73.2
60.0		9.470	33.674	26.005	0.1318	73.1
65.0		9.398	33.705	26.041	0.1418	74.4
70.0		9.348	33.740	26.077	0.1518	65.7
72.0		9.336	33.749	26.085	0.1557	62.4

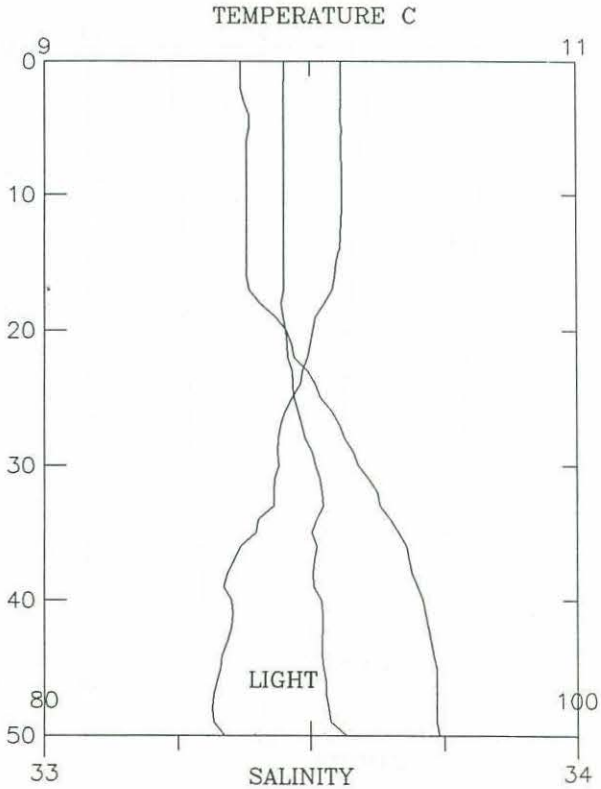




Cruise W8902 Station # 30 Depth m: 95 Time: 1989-02-26 12:09
Position: 38 12.50'N 123 9.80'W Depth Deck Offset: 0.00

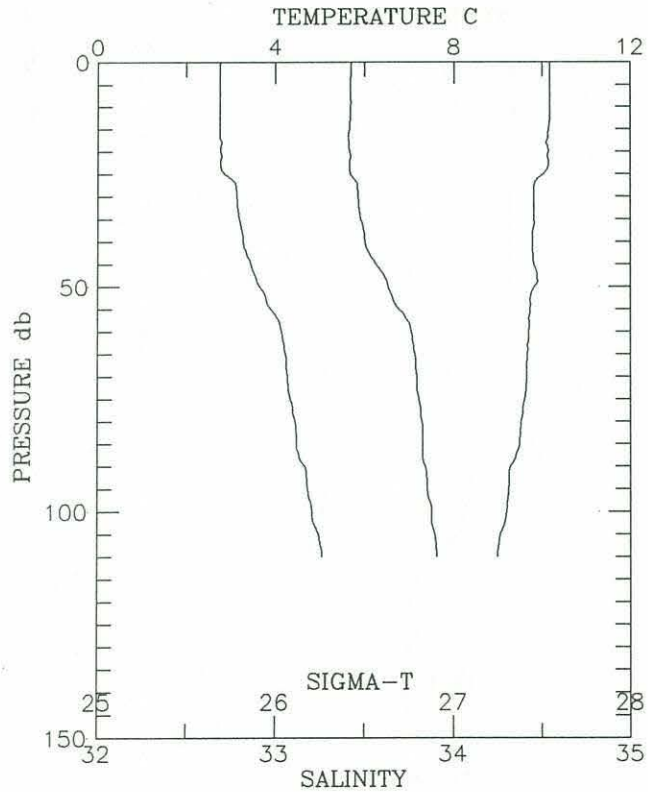
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.118	33.452	25.724	0.0000	87.4
5.0		10.118	33.451	25.723	0.0115	87.7
10.0		10.119	33.451	25.723	0.0229	87.6
15.0		10.097	33.451	25.727	0.0344	87.6
20.0		10.009	33.454	25.744	0.0458	89.1
25.0		9.933	33.470	25.769	0.0572	90.4
30.0		9.881	33.510	25.809	0.0683	91.8
35.0		9.793	33.503	25.818	0.0794	93.3
40.0		9.703	33.521	25.847	0.0903	94.2
45.0		9.662	33.525	25.857	0.1012	94.7
50.0		9.676	33.567	25.888	0.1120	94.8
55.0		9.681	33.625	25.932	0.1226	94.6
60.0		9.567	33.693	26.004	0.1330	92.8
65.0		9.500	33.723	26.039	0.1432	90.9
70.0		9.483	33.737	26.052	0.1532	83.3
75.0		9.467	33.750	26.065	0.1631	82.1
80.0		9.447	33.765	26.080	0.1730	82.3
85.0		9.259	33.812	26.146	0.1827	80.5
90.0		9.130	33.860	26.205	0.1921	66.7
91.0		9.129	33.861	26.206	0.1940	65.5

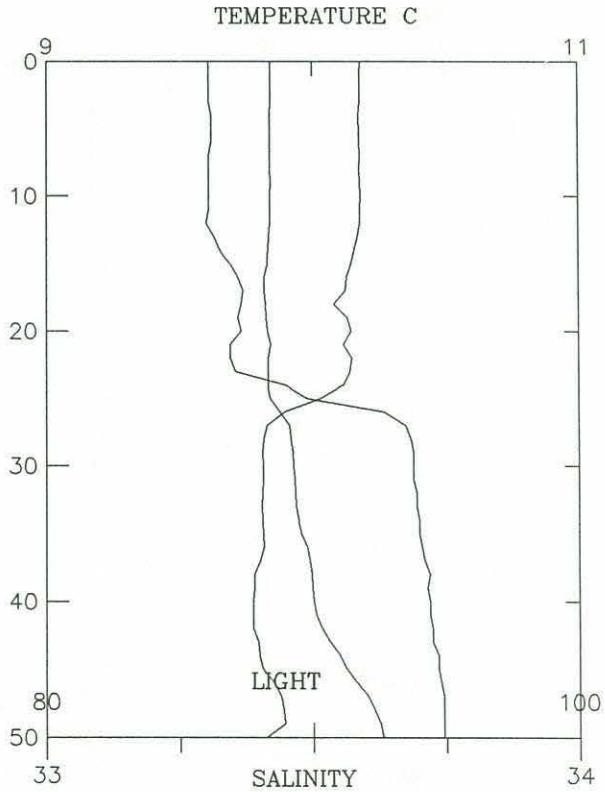




Cruise W8902 Station # 31 Depth m: 118 Time: 1989-02-26 12:51
Position: 38 11.50'N 123 16.10'W Depth Deck Offset: 0.00

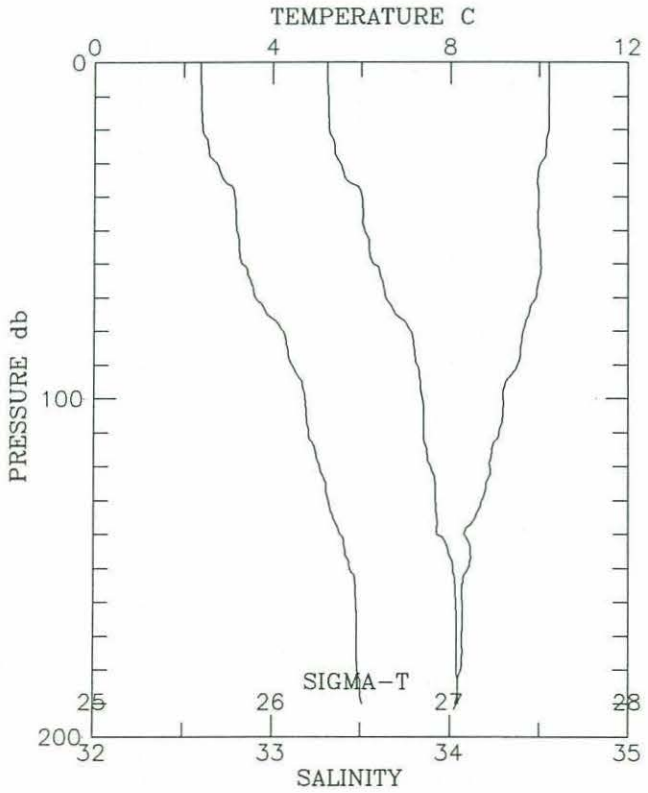
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.182	33.422	25.690	0.0000	86.1
10.0		10.182	33.420	25.688	0.0233	86.1
20.0		10.145	33.415	25.691	0.0465	87.3
30.0		9.814	33.464	25.784	0.0694	93.8
40.0		9.775	33.501	25.820	0.0917	94.4
50.0		9.823	33.631	25.913	0.1134	94.9
60.0		9.702	33.763	26.037	0.1340	94.5
70.0		9.645	33.793	26.070	0.1539	94.4
80.0		9.520	33.824	26.114	0.1735	94.2
90.0		9.280	33.843	26.167	0.1927	94.5
100.0		9.200	33.877	26.207	0.2114	94.3
110.0		8.993	33.908	26.264	0.2297	84.8

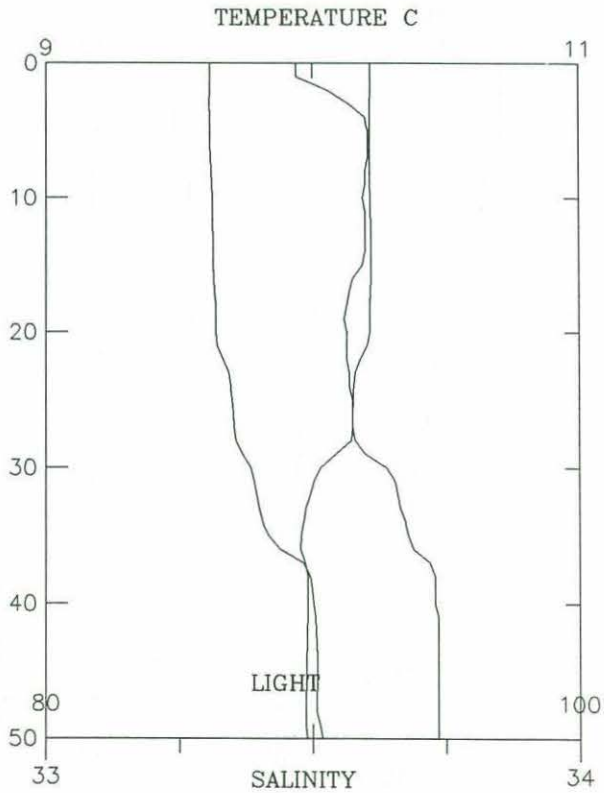




Cruise W8902 Station # 32 Depth m: 197 Time: 1989-02-26 13:32
Position: 38 10.30'N 123 22.30'W Depth Deck Offset: 0.00

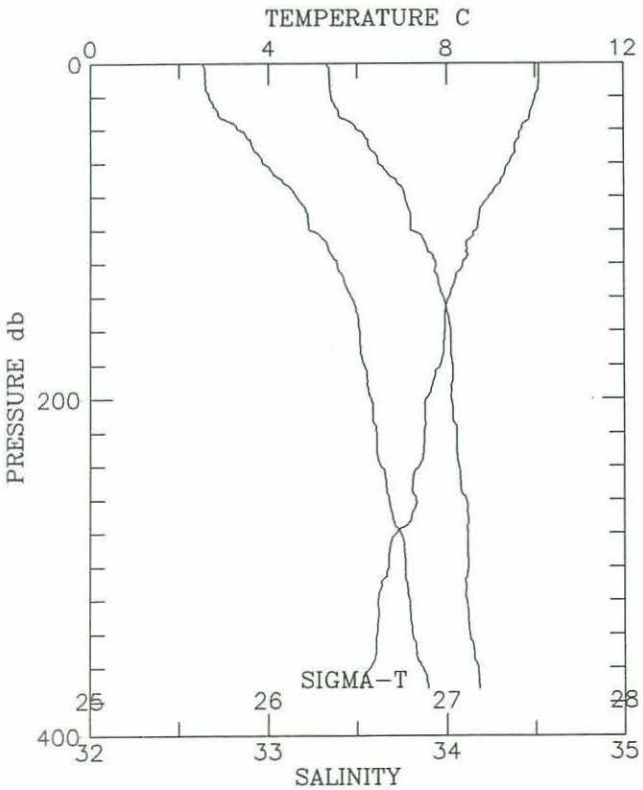
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.218	33.307	25.594	0.0000	89.4
10.0		10.219	33.312	25.598	0.0241	91.9
20.0		10.215	33.318	25.603	0.0483	91.3
30.0		10.030	33.384	25.686	0.0721	92.8
40.0		9.981	33.502	25.786	0.0949	94.6
50.0		9.980	33.518	25.799	0.1173	94.7
60.0		10.032	33.565	25.827	0.1395	95.0
70.0		9.926	33.637	25.901	0.1611	95.2
80.0		9.639	33.779	26.059	0.1818	95.1
90.0		9.504	33.817	26.111	0.2014	95.1
100.0		9.188	33.844	26.183	0.2204	94.6
110.0		9.103	33.853	26.204	0.2391	94.5
120.0		8.893	33.891	26.267	0.2574	94.2
130.0		8.711	33.918	26.316	0.2751	94.7
140.0		8.317	33.923	26.381	0.2924	95.3
150.0		8.414	34.015	26.438	0.3090	95.0
160.0		8.277	34.034	26.474	0.3252	94.9
170.0		8.274	34.037	26.477	0.3413	94.4
180.0		8.247	34.038	26.481	0.3574	93.2
190.0		8.122	34.049	26.509	0.3733	92.6

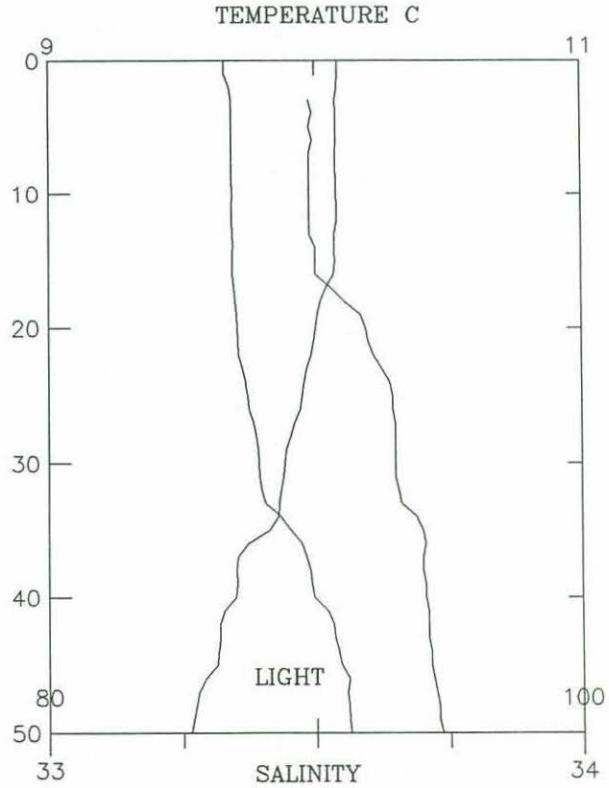




Cruise W8902 Station # 33 Depth m: 381 Time: 1989-02-26 14:17
Position: 38 9.10'N 123 28.40'W Depth Deck Offset: 0.00

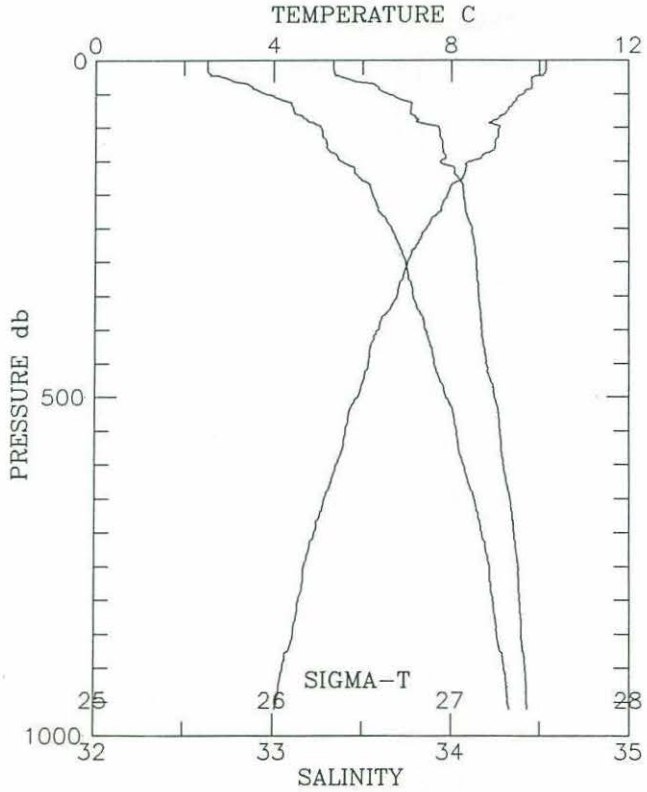
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.088	33.331	25.635	0.0000	49.1
10.0		10.080	33.345	25.647	0.0237	89.8
20.0		10.001	33.353	25.667	0.0473	91.9
30.0		9.885	33.393	25.717	0.0706	93.0
40.0		9.700	33.497	25.829	0.0931	94.1
50.0		9.529	33.564	25.910	0.1146	94.7
60.0		9.405	33.617	25.970	0.1355	94.8
80.0		8.951	33.765	26.159	0.1750	95.1
100.0		8.654	33.798	26.231	0.2120	95.3
150.0		7.956	34.007	26.501	0.2958	95.3
200.0		7.533	34.028	26.579	0.3735	95.8
250.0		7.236	34.077	26.659	0.4479	95.7
300.0		6.695	34.122	26.769	0.5175	95.6
372.0		6.091	34.184	26.897	0.6115	95.6

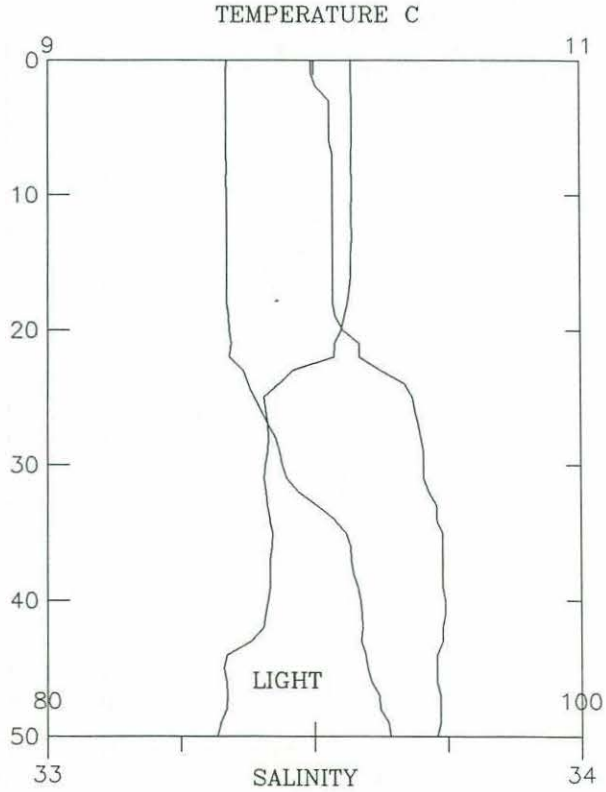




Cruise W8902 Station # 34 Depth m: 973 Time: 1989-02-26 15:09
Position: 38 8.60'N 123 34.30'W Depth Deck Offset: 0.00

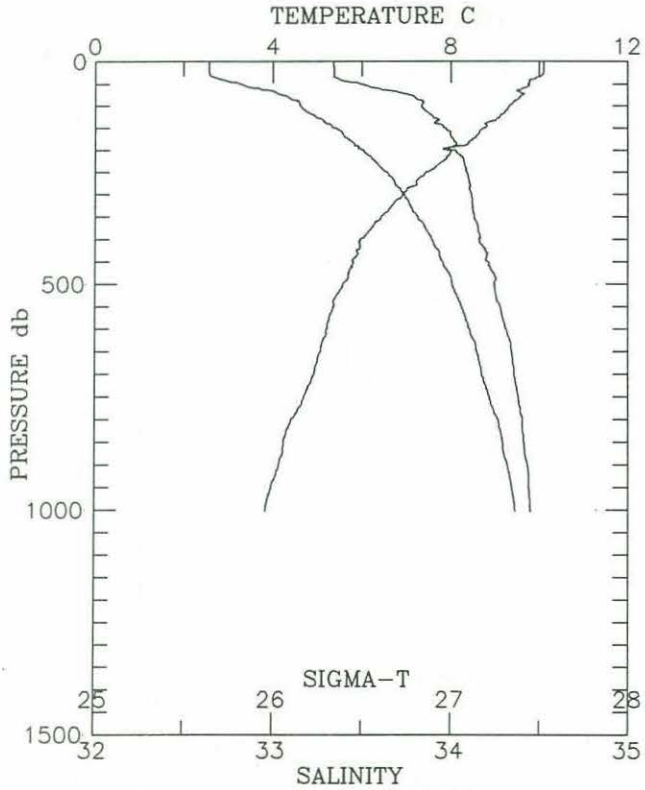
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.140	33.336	25.630	0.0000	89.9
10.0		10.142	33.336	25.630	0.0238	90.7
20.0		10.103	33.341	25.640	0.0476	91.1
30.0		9.816	33.440	25.765	0.0707	94.1
40.0		9.825	33.587	25.879	0.0927	94.9
50.0		9.637	33.642	25.953	0.1139	94.6
60.0		9.472	33.731	26.048	0.1342	94.3
80.0		9.226	33.769	26.118	0.1731	94.6
100.0		9.098	33.929	26.264	0.2103	94.6
150.0		8.436	33.940	26.376	0.2985	95.4
200.0		7.912	34.070	26.557	0.3784	95.9
250.0		7.442	34.118	26.662	0.4532	96.1
300.0		7.020	34.144	26.742	0.5235	96.0
400.0		6.358	34.173	26.854	0.6566	96.0
500.0		5.903	34.246	26.969	0.7795	96.1
600.0		5.418	34.298	27.070	0.8922	96.0
700.0		4.922	34.356	27.174	0.9963	96.0
800.0		4.572	34.388	27.238	1.0928	95.7
900.0		4.218	34.419	27.301	1.1848	95.4
961.0		4.050	34.431	27.328	1.2382	94.8

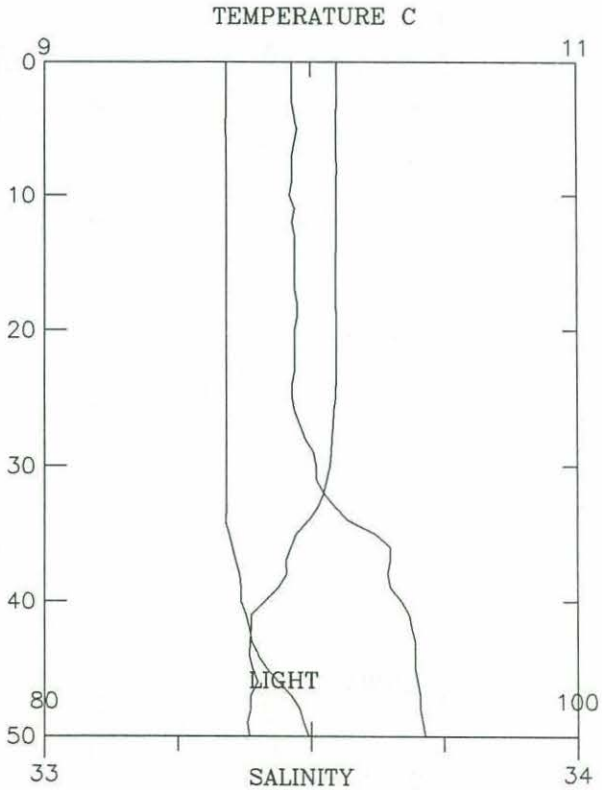




Cruise W8902 Station # 35 Depth m: 1677 Time: 1989-02-26 16:23
Position: 38 7.20'N 123 38.70'W Depth Deck Offset: 0.00

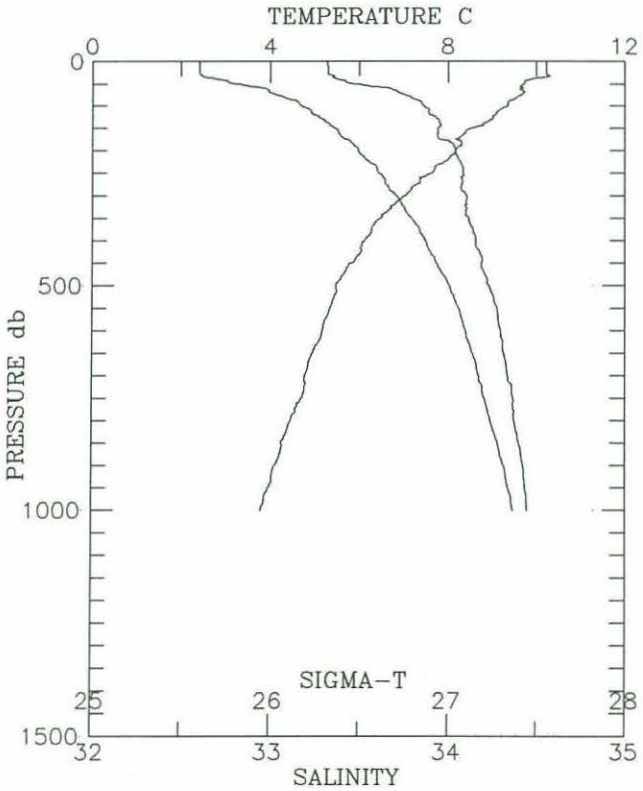
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.100	33.342	25.641	0.0000	89.3
10.0		10.098	33.342	25.642	0.0237	89.2
20.0		10.097	33.342	25.642	0.0474	89.4
30.0		10.073	33.342	25.646	0.0712	90.2
40.0		9.827	33.368	25.707	0.0947	93.4
50.0		9.769	33.495	25.816	0.1173	94.3
60.0		9.622	33.595	25.918	0.1391	94.5
80.0		9.557	33.798	26.087	0.1797	94.8
100.0		9.309	33.833	26.155	0.2182	93.7
150.0		8.745	33.971	26.353	0.3091	95.6
200.0		7.996	34.025	26.509	0.3918	95.8
250.0		7.435	34.091	26.642	0.4681	95.8
300.0		6.902	34.118	26.738	0.5392	95.8
400.0		5.956	34.161	26.896	0.6700	96.1
500.0		5.579	34.247	27.010	0.7883	96.0
600.0		5.213	34.314	27.107	0.8977	96.1
700.0		4.932	34.358	27.174	0.9997	96.1
800.0		4.415	34.406	27.270	1.0955	96.0
900.0		4.145	34.436	27.322	1.1846	96.1
1000.0		3.851	34.451	27.365	1.2691	96.0
1003.0		3.849	34.450	27.364	1.2716	96.0

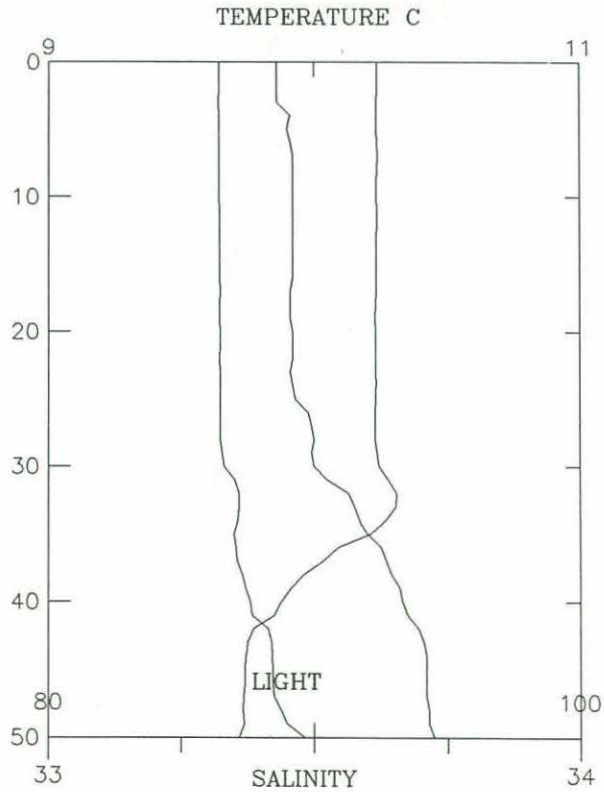




Cruise W8902 Station # 36 Depth m: 2805 Time: 1989-02-26 17:38
Position: 38 6.20'N 123 44.40'W Depth Deck Offset: 0.00

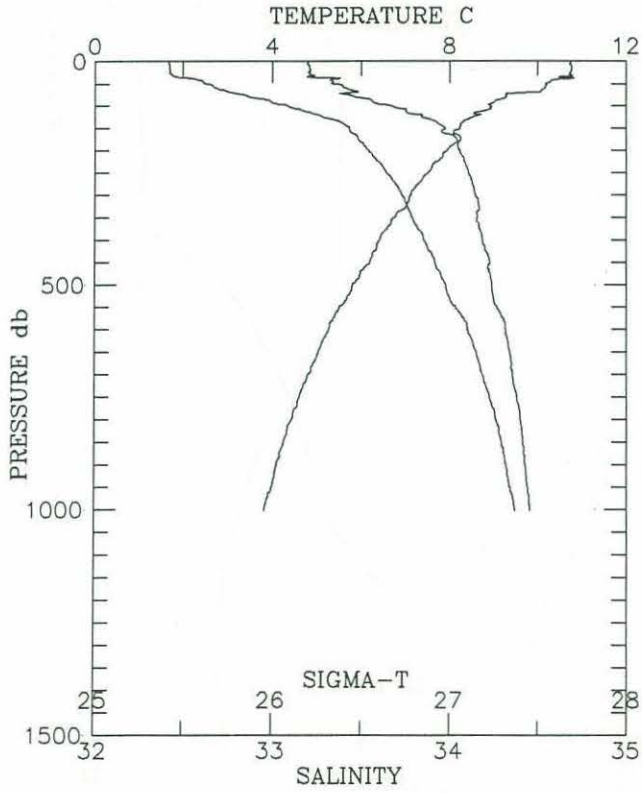
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.235	33.322	25.603	0.0000	88.6
10.0		10.234	33.322	25.603	0.0241	89.2
20.0		10.231	33.324	25.605	0.0482	89.2
30.0		10.243	33.332	25.609	0.0722	90.0
40.0		9.878	33.380	25.708	0.0960	93.3
50.0		9.719	33.483	25.814	0.1186	94.5
60.0		9.685	33.674	25.969	0.1401	95.0
80.0		9.563	33.791	26.081	0.1807	94.7
100.0		9.343	33.867	26.176	0.2190	94.1
150.0		8.512	33.942	26.366	0.3087	95.1
200.0		8.174	34.042	26.496	0.3913	95.7
250.0		7.631	34.086	26.610	0.4683	95.8
300.0		7.014	34.104	26.711	0.5409	96.0
400.0		6.104	34.157	26.874	0.6736	96.2
500.0		5.489	34.233	27.010	0.7937	96.2
600.0		5.178	34.299	27.099	0.9033	96.0
700.0		4.786	34.338	27.175	1.0059	95.9
800.0		4.467	34.376	27.240	1.1028	96.2
900.0		4.117	34.425	27.316	1.1933	96.0
1000.0		3.808	34.450	27.368	1.2780	96.2
1001.0		3.806	34.450	27.368	1.2789	96.2

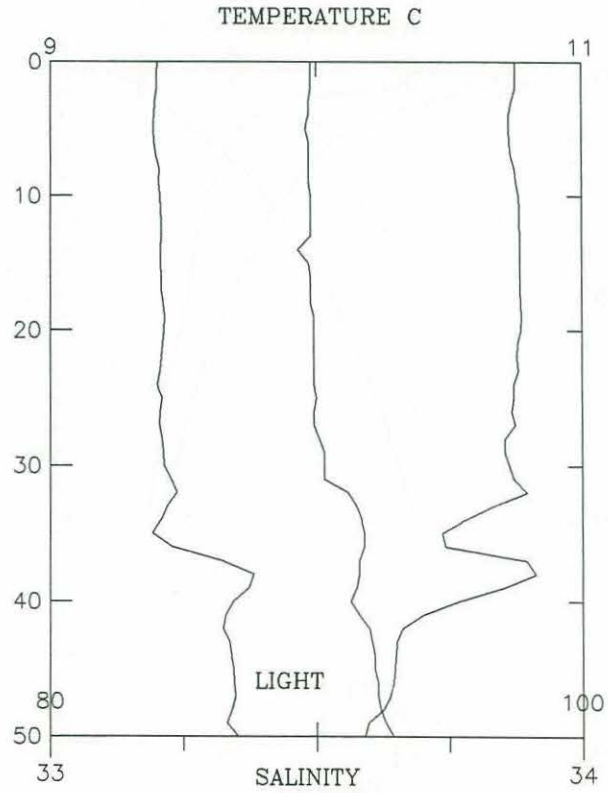




Cruise W8902 Station # 37 Depth m: 2725 Time: 1989-02-26 19:56
Position: 38 49.80'N 123 37.00'W Depth Deck Offset: 0.00

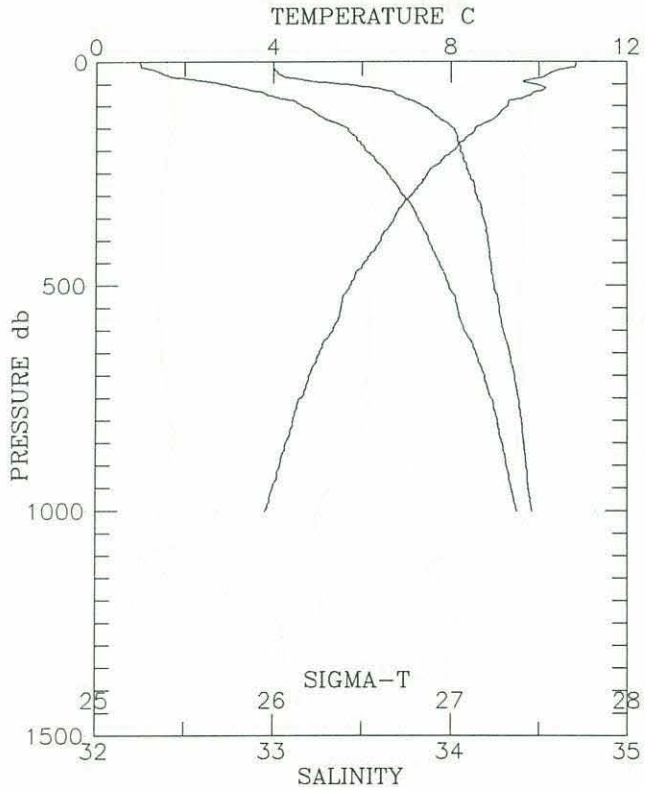
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.752	33.202	25.420	0.0000	89.8
10.0		10.765	33.207	25.422	0.0258	89.8
20.0		10.772	33.214	25.426	0.0516	89.9
30.0		10.727	33.214	25.434	0.0774	90.3
40.0		10.534	33.344	25.569	0.1027	91.3
50.0		10.182	33.352	25.635	0.1268	92.9
60.0		10.155	33.412	25.687	0.1504	93.7
80.0		9.287	33.472	25.876	0.1955	95.6
100.0		8.929	33.671	26.089	0.2366	95.7
150.0		8.243	33.977	26.434	0.3257	95.8
200.0		7.932	34.059	26.545	0.4057	95.9
250.0		7.510	34.108	26.645	0.4808	96.0
300.0		7.120	34.147	26.730	0.5516	96.0
400.0		6.418	34.186	26.856	0.6848	96.0
500.0		5.811	34.243	26.979	0.8070	96.1
600.0		5.288	34.318	27.101	0.9188	96.0
700.0		4.805	34.357	27.188	1.0206	96.1
800.0		4.443	34.402	27.263	1.1154	96.0
900.0		4.110	34.430	27.321	1.2042	96.1
1000.0		3.837	34.457	27.371	1.2887	96.1
1002.0		3.836	34.457	27.371	1.2904	96.1

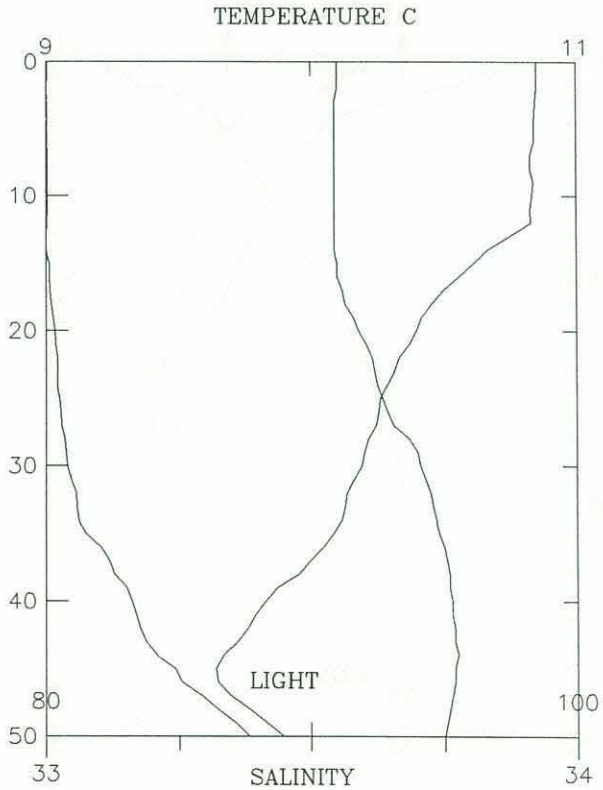




Cruise W8902 Station # 38 Depth m: 1776 Time: 1989-02-26 21:30
Position: 37 50.80'N 123 31.00'W Depth Deck Offset: 0.00

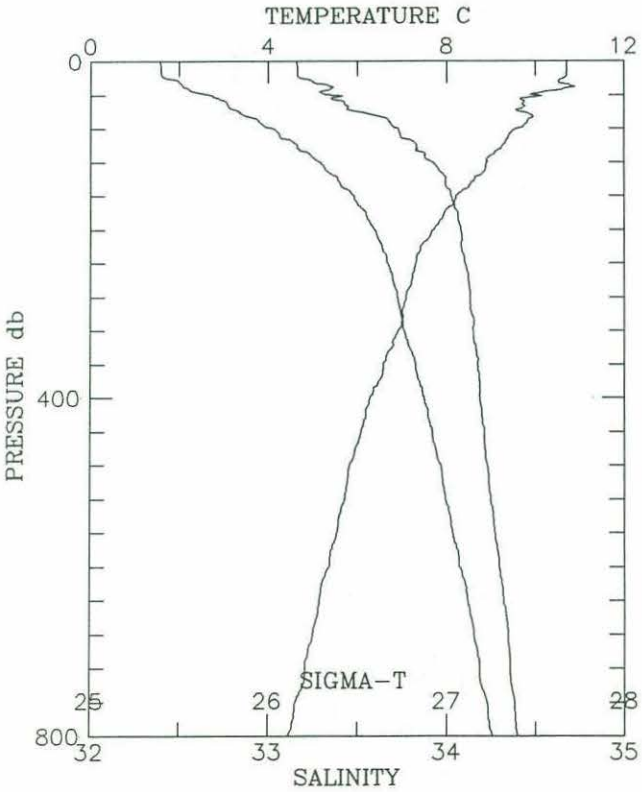
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.849	33.001	25.246	0.0000	91.0
10.0		10.834	33.002	25.250	0.0274	90.9
20.0		10.396	33.016	25.337	0.0545	91.8
30.0		10.193	33.040	25.390	0.0809	94.1
40.0		9.829	33.161	25.545	0.1065	95.3
50.0		9.895	33.383	25.707	0.1304	95.0
60.0		10.156	33.581	25.818	0.1530	95.1
80.0		9.670	33.733	26.018	0.1953	95.3
100.0		9.284	33.838	26.163	0.2341	95.4
150.0		8.547	34.011	26.415	0.3232	95.6
200.0		8.047	34.049	26.520	0.4039	95.9
250.0		7.476	34.100	26.644	0.4795	96.0
300.0		7.102	34.147	26.733	0.5505	96.0
400.0		6.423	34.209	26.874	0.6816	96.1
500.0		5.736	34.244	26.989	0.8023	96.2
600.0		5.358	34.294	27.074	0.9142	95.9
700.0		4.810	34.361	27.190	1.0169	95.9
800.0		4.449	34.400	27.261	1.1119	96.1
900.0		4.157	34.427	27.314	1.2015	96.1
1000.0		3.822	34.461	27.375	1.2863	96.0
1001.0		3.818	34.461	27.376	1.2871	96.0

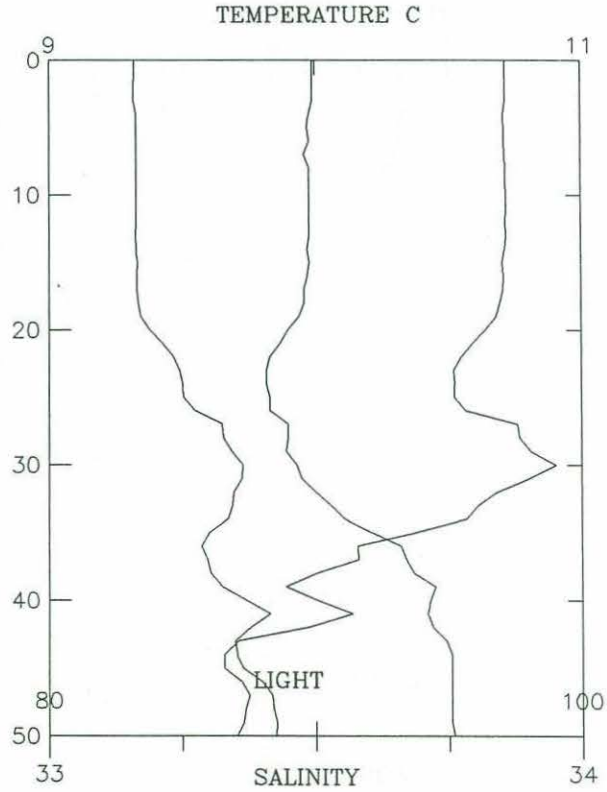




Cruise W8902 Station # 39 Depth m: 869 Time: 1989-02-26 22:44
Position: 37 51.20'N 123 26.60'W Depth Deck Offset: 0.00

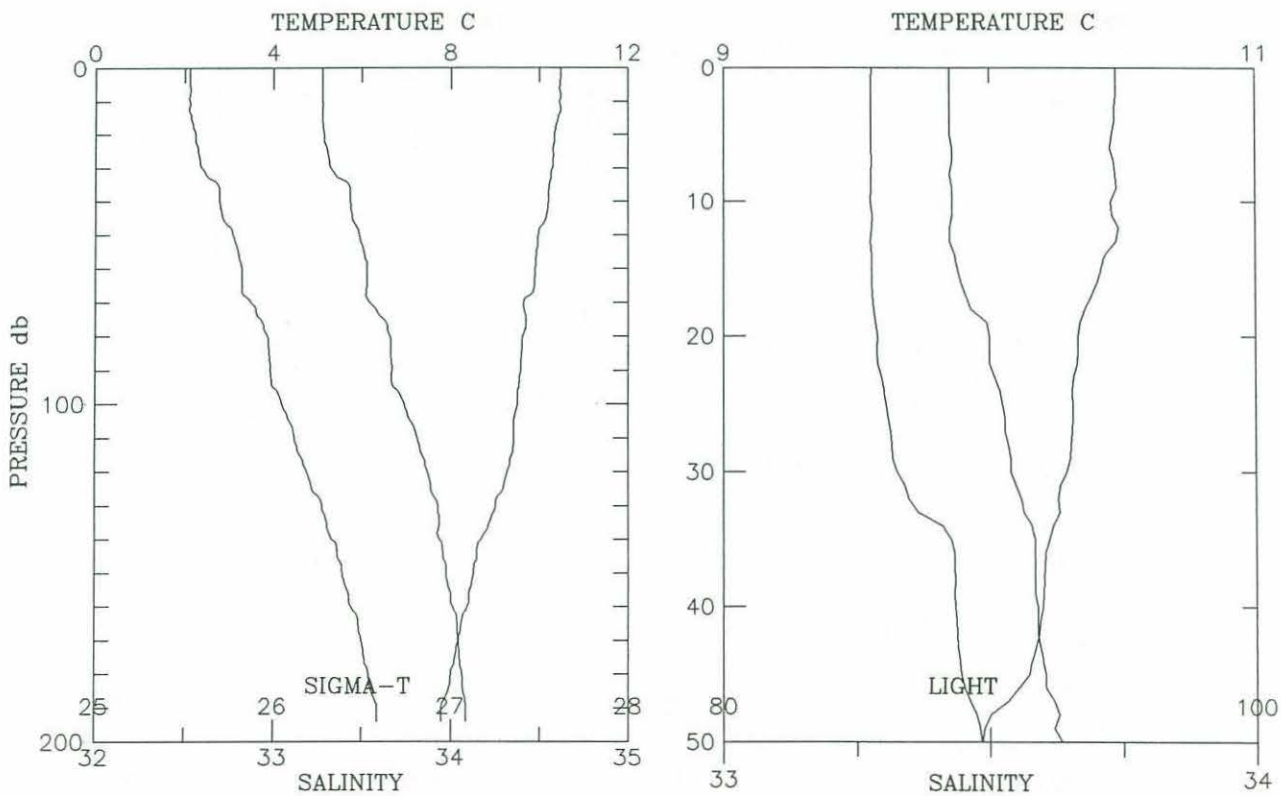
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.717	33.161	25.394	0.0000	89.9
10.0		10.719	33.164	25.396	0.0260	89.8
20.0		10.638	33.190	25.431	0.0521	89.0
30.0		10.903	33.364	25.520	0.0772	89.3
40.0		10.006	33.371	25.679	0.1015	94.3
50.0		9.708	33.426	25.772	0.1244	95.2
60.0		9.705	33.517	25.843	0.1468	95.3
80.0		9.559	33.726	26.031	0.1890	95.3
100.0		9.251	33.832	26.164	0.2282	95.4
150.0		8.496	34.002	26.416	0.3166	95.7
200.0		7.709	34.079	26.594	0.3949	96.0
250.0		7.262	34.116	26.686	0.4677	96.2
300.0		7.008	34.142	26.742	0.5374	96.0
400.0		6.286	34.187	26.874	0.6692	96.0
500.0		5.772	34.238	26.979	0.7902	96.0
600.0		5.376	34.294	27.072	0.9028	95.8
700.0		4.904	34.354	27.174	1.0065	95.7
799.0		4.461	34.397	27.257	1.1019	95.6





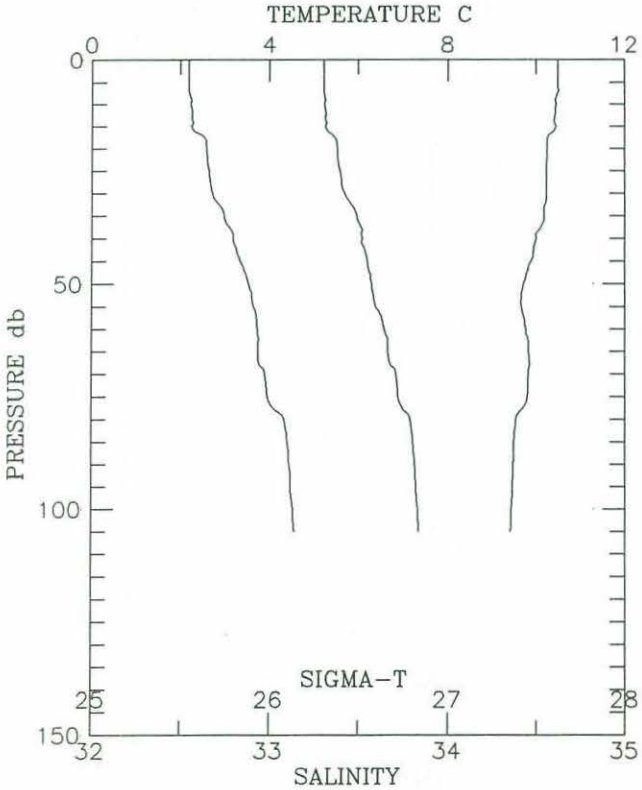
Cruise W8902 Station # 40 Depth m: 200 Time: 1989-02-26 23:43
Position: 37 51.80'N 123 24.40'W Depth Deck Offset: 0.00

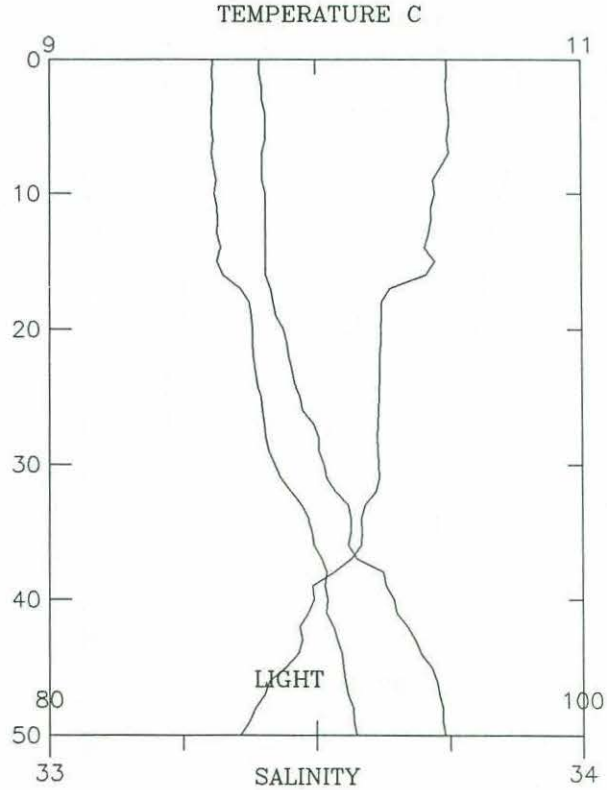
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.476	33.278	25.527	0.0000	88.5
10.0		10.457	33.276	25.529	0.0248	88.6
20.0		10.332	33.289	25.561	0.0495	90.0
30.0		10.288	33.325	25.596	0.0739	90.8
40.0		10.199	33.435	25.697	0.0974	91.8
50.0		9.970	33.484	25.773	0.1204	92.7
60.0		9.894	33.530	25.822	0.1427	93.9
70.0		9.630	33.542	25.875	0.1648	94.7
80.0		9.624	33.659	25.968	0.1859	94.8
90.0		9.568	33.669	25.984	0.2066	94.8
100.0		9.500	33.738	26.050	0.2270	94.5
110.0		9.419	33.812	26.121	0.2467	93.8
120.0		9.271	33.871	26.191	0.2658	91.5
130.0		9.000	33.928	26.279	0.2841	93.9
140.0		8.684	33.934	26.333	0.3018	95.2
150.0		8.511	33.975	26.392	0.3189	95.7
160.0		8.373	34.011	26.441	0.3355	95.2
170.0		8.166	34.044	26.499	0.3516	95.1
180.0		7.998	34.064	26.539	0.3673	95.3
190.0		7.793	34.086	26.587	0.3826	95.1
194.0		7.791	34.086	26.587	0.3886	95.1



Cruise W8902 Station # 41 Depth m: 109 Time: 1989-02-27 00:38
Position: 37 53.00'N 123 17.30'W Depth Deck Offset: 0.00

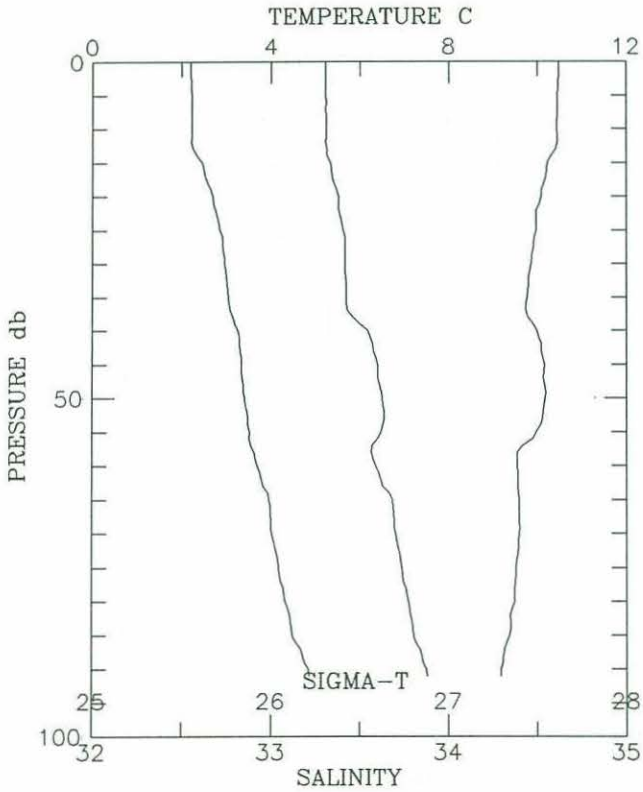
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.493	33.307	25.547	0.0000	87.9
10.0		10.447	33.310	25.557	0.0246	88.1
20.0		10.244	33.382	25.648	0.0488	88.8
30.0		10.234	33.422	25.681	0.0724	90.3
40.0		9.991	33.521	25.799	0.0952	92.9
50.0		9.713	33.574	25.886	0.1171	94.8
60.0		9.760	33.646	25.935	0.1383	95.0
70.0		9.820	33.712	25.976	0.1592	94.8
80.0		9.537	33.791	26.085	0.1796	93.9
90.0		9.475	33.817	26.115	0.1991	91.5
100.0		9.436	33.834	26.135	0.2184	89.6
105.0		9.422	33.839	26.141	0.2280	89.2

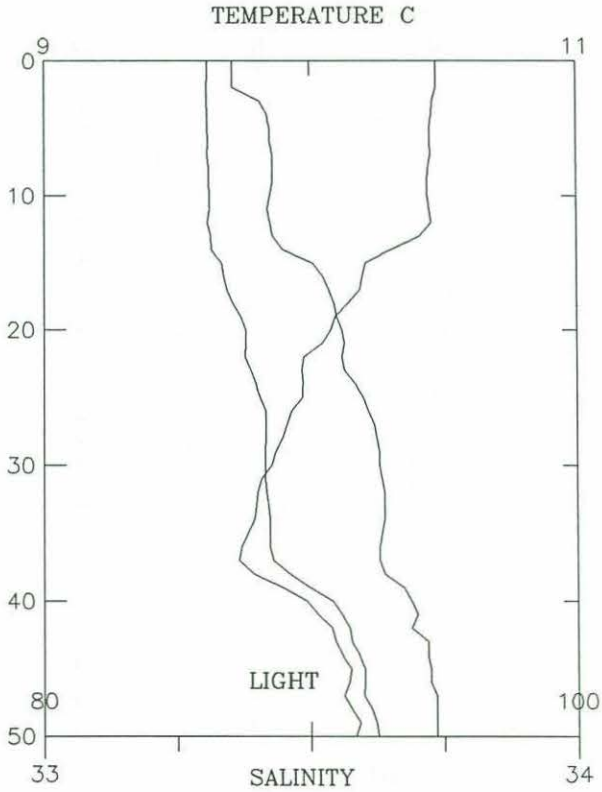




Cruise W8902 Station # 42 Depth m: 95 Time: 1989-02-27 01:31
Position: 37 54.10'N 123 9.90'W Depth Deck Offset: 0.00

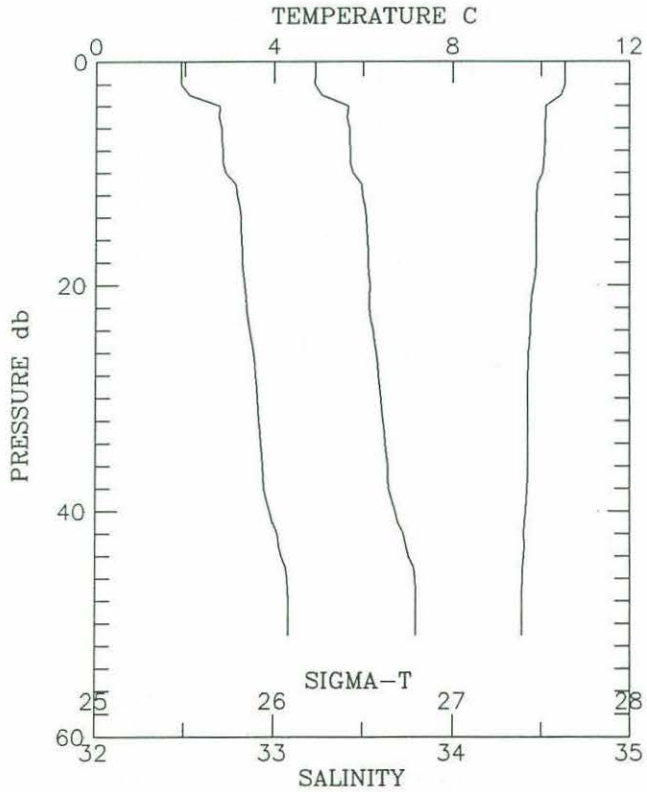
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.475	33.307	25.550	0.0000	87.1
5.0		10.453	33.308	25.555	0.0123	88.5
10.0		10.443	33.311	25.559	0.0245	88.5
15.0		10.210	33.334	25.616	0.0367	90.1
20.0		10.079	33.379	25.673	0.0486	91.2
25.0		9.970	33.405	25.712	0.0602	92.0
30.0		9.854	33.415	25.739	0.0717	92.6
35.0		9.765	33.424	25.761	0.0831	92.7
40.0		9.986	33.541	25.815	0.0943	93.8
45.0		10.152	33.601	25.834	0.1053	94.5
50.0		10.168	33.626	25.851	0.1163	94.7
55.0		9.972	33.621	25.880	0.1271	94.9
60.0		9.554	33.590	25.925	0.1378	94.8
65.0		9.596	33.685	25.992	0.1482	94.6
70.0		9.597	33.702	26.006	0.1584	94.3
75.0		9.522	33.738	26.046	0.1685	94.2
80.0		9.495	33.777	26.081	0.1785	94.4
85.0		9.369	33.803	26.122	0.1882	93.7
90.0		9.185	33.879	26.211	0.1976	85.8
91.0		9.178	33.883	26.215	0.1995	85.0

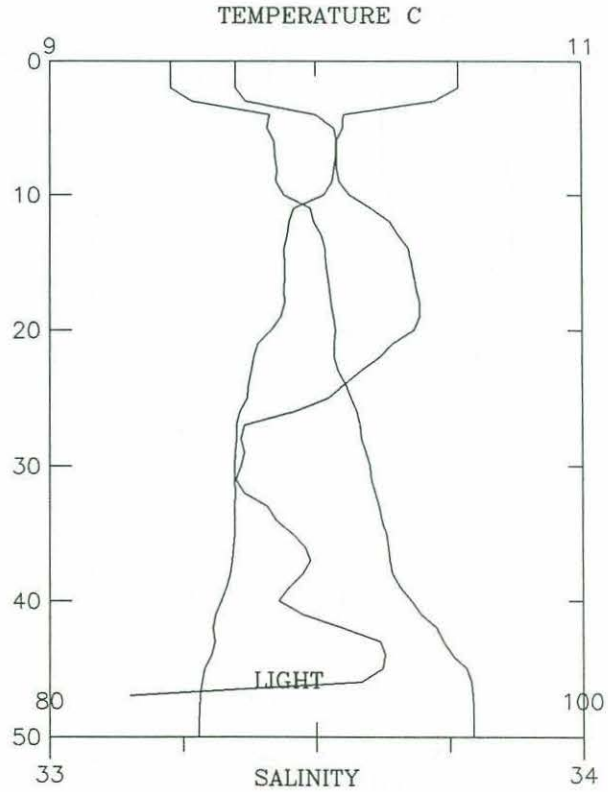




Cruise W8902 Station # 43 Depth m: 57 Time: 1989-02-27 02:45
Position: 37 56.40'N 122 56.20'W Depth Deck Offset: 0.00

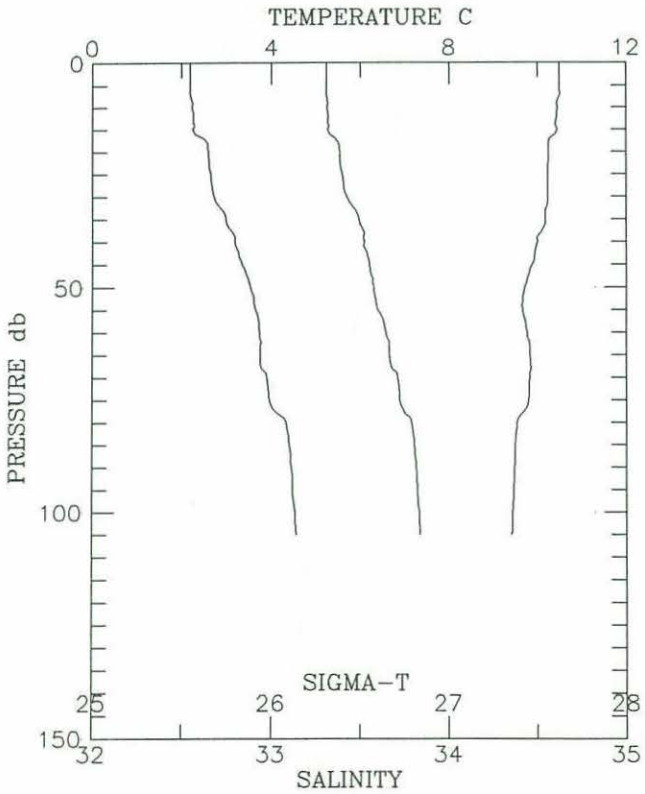
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.536	33.228	25.478	0.0000	87.0
5.0		10.105	33.410	25.693	0.0123	90.7
10.0		10.032	33.441	25.729	0.0238	91.3
15.0		9.884	33.520	25.816	0.0349	93.6
20.0		9.833	33.538	25.839	0.0459	93.7
25.0		9.742	33.567	25.876	0.0568	90.5
30.0		9.694	33.602	25.911	0.0675	87.2
35.0		9.694	33.632	25.935	0.0780	89.1
40.0		9.645	33.678	25.979	0.0884	88.6
45.0		9.581	33.782	26.071	0.0985	92.5
50.0		9.559	33.794	26.084	0.1083	57.3
51.0		9.559	33.793	26.083	0.1103	51.4

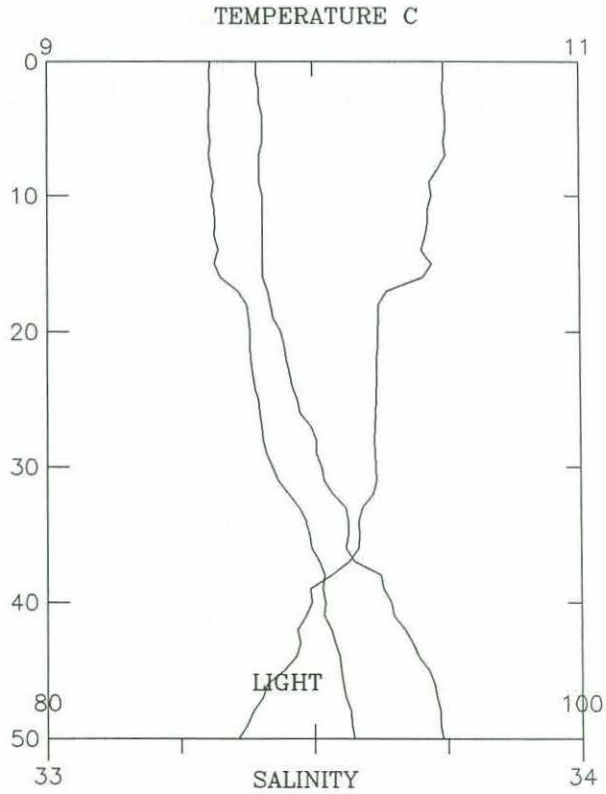




Cruise W8902 Station # 46 Depth m: 97 Time: 1989-02-27 11:28
Position: 38 49.60'N 123 43.90'W Depth Deck Offset: 0.00

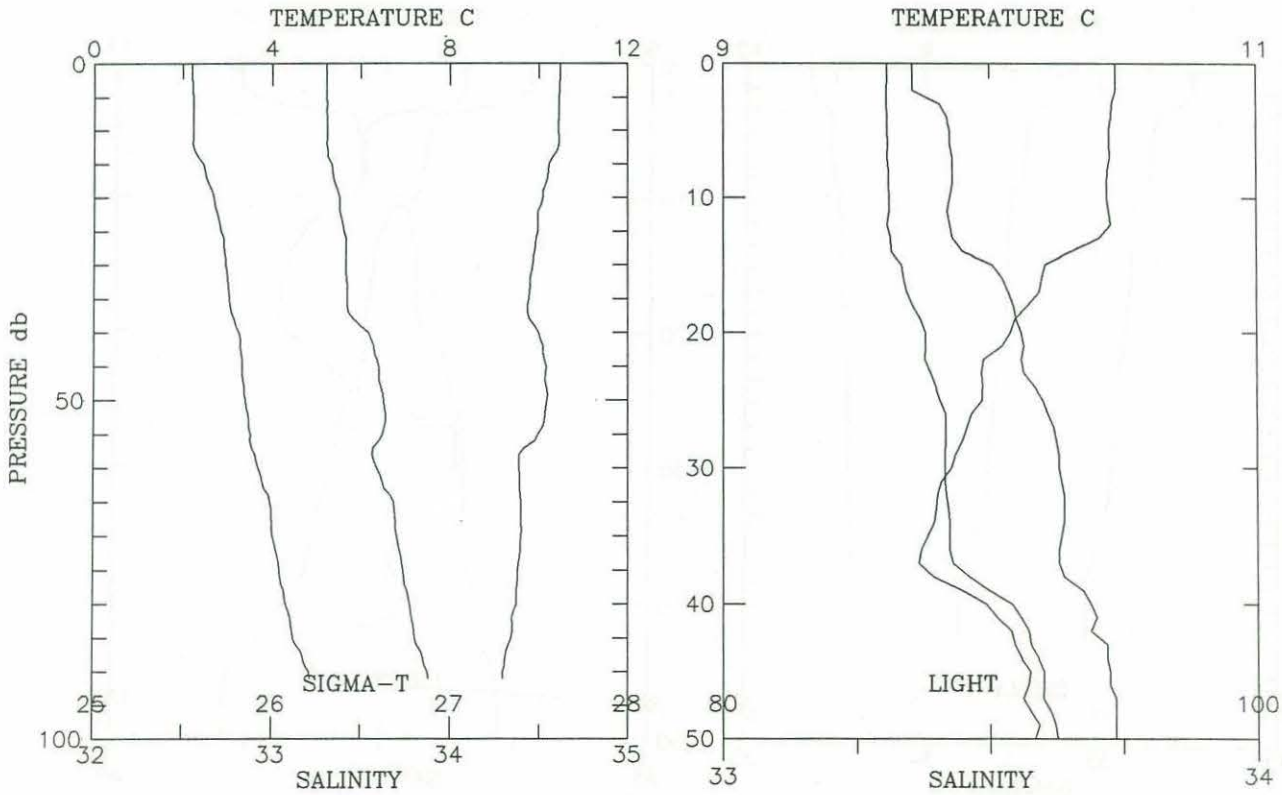
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.946	33.321	25.650	0.0000	83.9
5.0		9.944	33.320	25.650	0.0118	84.1
10.0		9.944	33.321	25.651	0.0236	84.1
15.0		9.920	33.327	25.659	0.0354	84.6
20.0		9.913	33.329	25.662	0.0472	84.8
25.0		9.658	33.412	25.769	0.0587	90.0
30.0		9.547	33.447	25.815	0.0699	91.8
35.0		9.475	33.509	25.875	0.0808	91.8
40.0		9.455	33.521	25.887	0.0916	91.9
45.0		9.413	33.523	25.896	0.1023	93.1
50.0		9.362	33.566	25.938	0.1128	93.3
55.0		9.322	33.616	25.983	0.1233	93.4
60.0		9.304	33.677	26.034	0.1334	90.9
65.0		9.312	33.711	26.059	0.1434	88.7
70.0		9.293	33.754	26.096	0.1533	91.5
75.0		9.210	33.782	26.131	0.1629	90.7
80.0		9.132	33.804	26.161	0.1725	89.3
85.0		8.941	33.866	26.240	0.1817	84.6
90.0		8.848	33.894	26.276	0.1907	84.9
93.0		8.822	33.902	26.287	0.1961	84.7





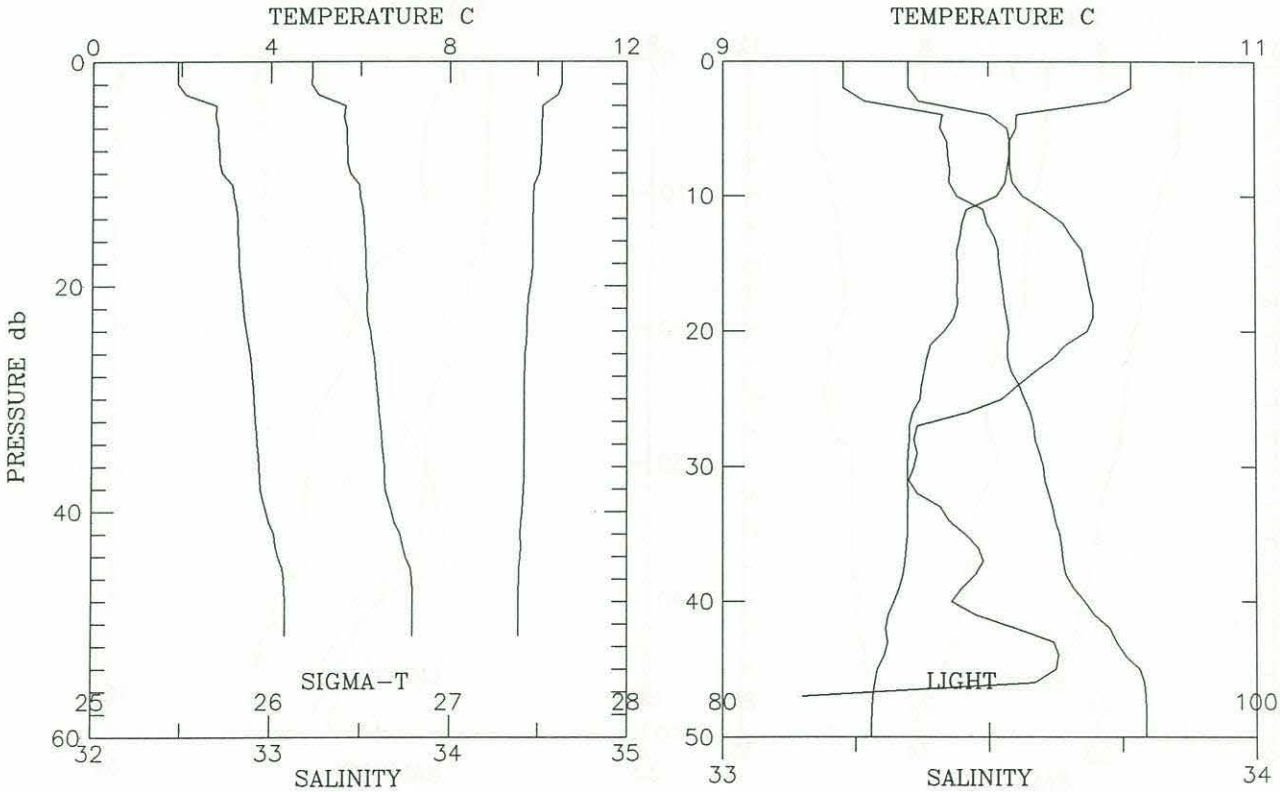
Cruise W8902 Station # 47 Depth m: 126 Time: 1989-02-27 12:00
Position: 38 48.00'N 123 46.00'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.821	33.259	25.623	0.0000	88.4
10.0		9.821	33.257	25.621	0.0239	89.2
20.0		9.824	33.257	25.620	0.0478	89.2
30.0		9.734	33.255	25.634	0.0717	91.2
40.0		9.636	33.300	25.685	0.0953	92.9
50.0		9.570	33.342	25.729	0.1186	93.9
60.0		9.491	33.490	25.857	0.1409	93.9
70.0		9.490	33.544	25.900	0.1624	94.1
80.0		9.228	33.655	26.029	0.1831	92.2
90.0		9.152	33.711	26.085	0.2031	90.8
100.0		8.902	33.829	26.217	0.2222	90.2
110.0		8.581	33.926	26.343	0.2399	91.9
120.0		8.490	33.946	26.373	0.2569	89.1
121.0		8.489	33.946	26.373	0.2586	88.9



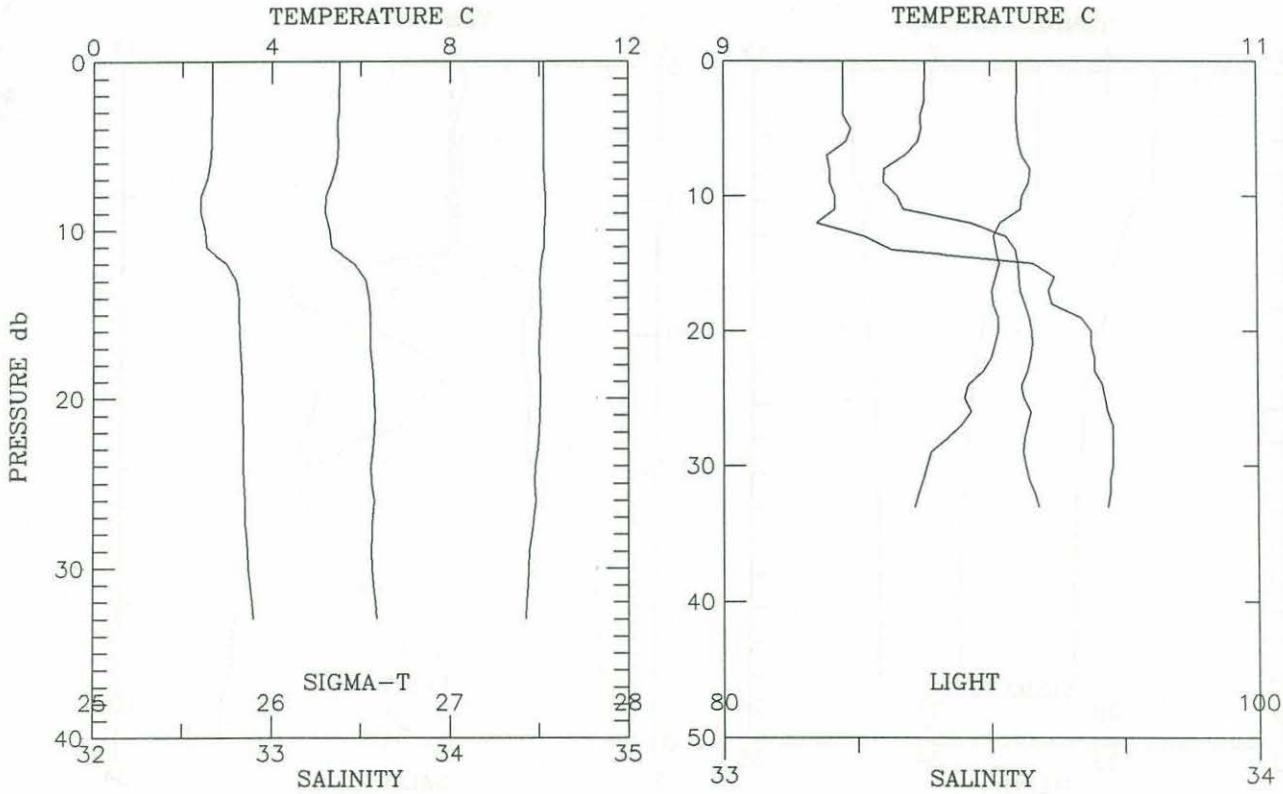
Cruise W8902 Station # 48 Depth m: 135 Time: 1989-02-27 12:33
Position: 38 47.00'N 123 47.60'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.046	33.208	25.545	0.0000	89.6
10.0		10.046	33.209	25.546	0.0246	89.6
20.0		10.080	33.372	25.667	0.0489	93.6
30.0		10.081	33.399	25.688	0.0723	94.4
40.0		9.984	33.445	25.741	0.0954	94.7
50.0		9.863	33.534	25.830	0.1178	95.0
60.0		9.736	33.660	25.950	0.1391	94.9
70.0		9.612	33.670	25.978	0.1599	94.9
80.0		9.351	33.720	26.060	0.1802	93.5
90.0		9.101	33.765	26.135	0.1997	90.1
100.0		9.023	33.786	26.164	0.2188	88.8
110.0		8.728	33.873	26.279	0.2373	90.5
120.0		8.372	33.970	26.409	0.2544	91.7
126.0		8.369	33.971	26.411	0.2644	91.7



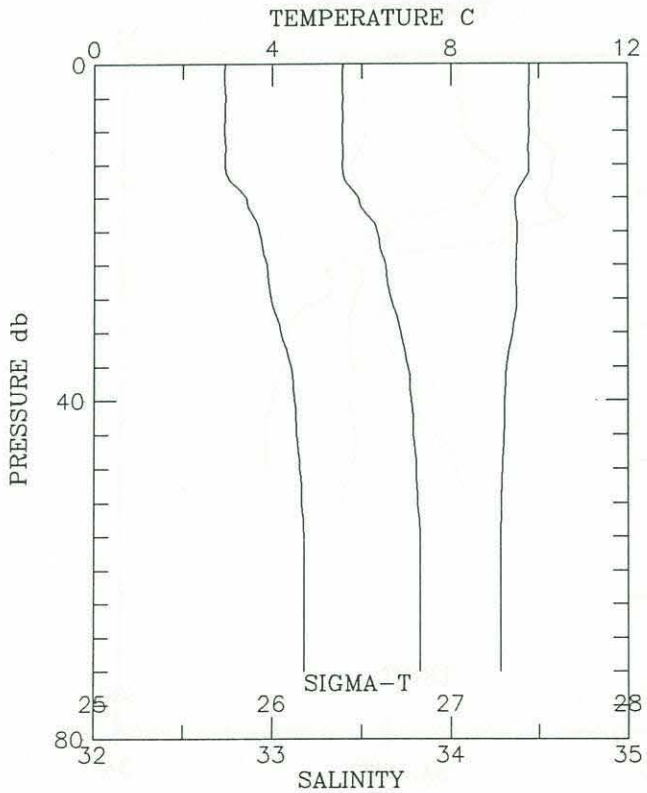
Cruise W8902 Station # 49 Depth m: 197 Time: 1989-02-27 13:13
Position: 38 45.60'N 123 49.50'W Depth Deck Offset: 0.00

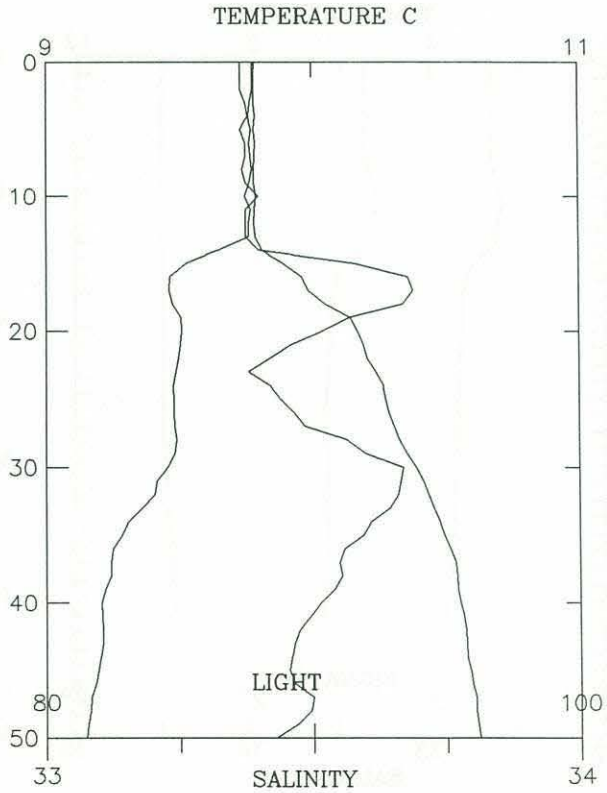
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.170	33.194	25.513	0.0000	89.7
10.0		10.170	33.195	25.514	0.0249	89.9
20.0		10.175	33.196	25.514	0.0499	89.9
30.0		10.092	33.306	25.614	0.0743	93.1
40.0		9.972	33.342	25.662	0.0981	94.2
50.0		9.912	33.424	25.736	0.1214	94.8
60.0		9.864	33.488	25.794	0.1441	94.9
70.0		9.856	33.536	25.833	0.1663	94.9
80.0		9.837	33.636	25.914	0.1879	94.8
90.0		9.651	33.705	25.999	0.2088	94.6
100.0		9.475	33.766	26.076	0.2289	94.7
110.0		9.318	33.825	26.147	0.2484	94.7
120.0		9.232	33.839	26.172	0.2674	94.6
130.0		8.842	33.898	26.280	0.2858	93.7
140.0		8.507	33.962	26.383	0.3033	94.2
150.0		8.067	33.964	26.451	0.3199	95.5
160.0		7.779	33.990	26.513	0.3358	95.3
170.0		7.780	33.999	26.520	0.3515	95.2
180.0		7.781	33.997	26.519	0.3672	95.2
187.0		7.771	34.002	26.524	0.3781	95.1



Cruise W8902 Station # 50 Depth m: 310 Time: 1989-02-27 14:13
Position: 38 44.40'N 123 51.20'W Depth Deck Offset: 0.00

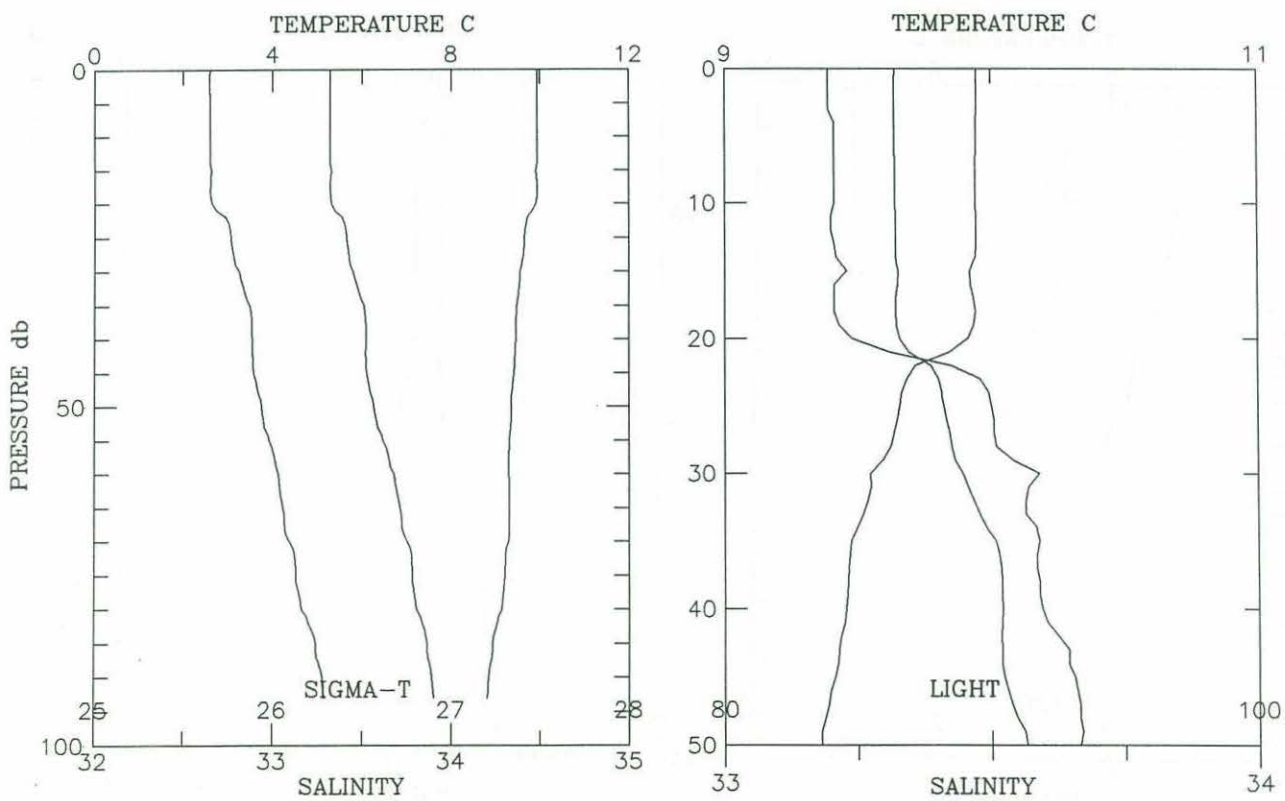
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.281	33.202	25.501	0.0000	87.2
10.0		10.257	33.204	25.506	0.0250	88.1
20.0		10.208	33.240	25.543	0.0500	90.1
30.0		9.985	33.322	25.645	0.0740	94.6
40.0		9.917	33.400	25.717	0.0974	94.8
50.0		9.912	33.465	25.768	0.1202	94.8
60.0		9.846	33.607	25.890	0.1421	94.8
80.0		9.388	33.740	26.070	0.1843	95.1
100.0		9.162	33.832	26.178	0.2229	94.9
150.0		8.519	34.018	26.424	0.3114	95.5
200.0		7.482	34.031	26.588	0.3899	96.0
250.0		6.833	34.036	26.683	0.4627	95.8
291.0		6.534	34.044	26.729	0.5200	95.8





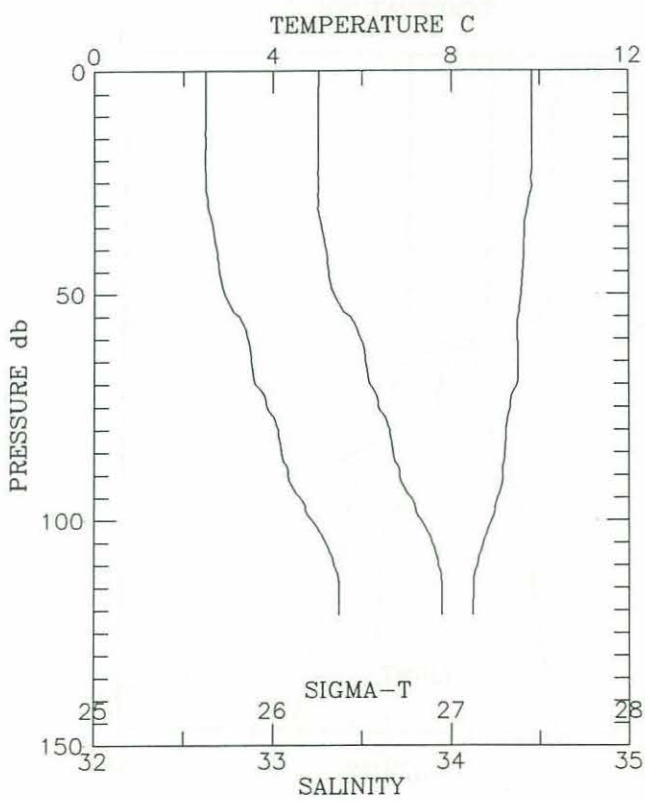
Cruise W8902 Station # 51 Depth m: 910 Time: 1989-02-27 14:54
Position: 38 42.90'N 123 53.30'W Depth Deck Offset: 0.00

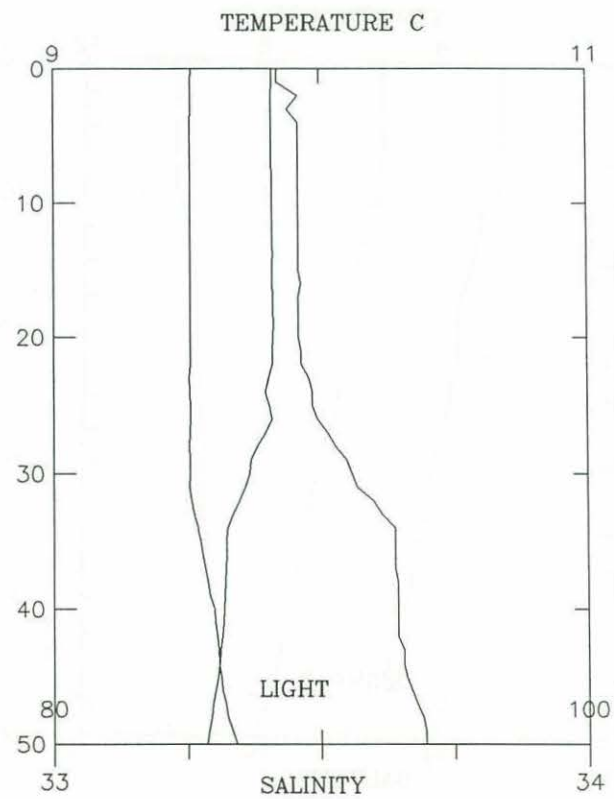
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.235	33.265	25.558	0.0000	90.0
10.0		10.221	33.263	25.559	0.0245	90.3
20.0		10.223	33.263	25.558	0.0490	90.3
30.0		10.217	33.266	25.562	0.0736	90.3
40.0		9.899	33.357	25.686	0.0978	93.8
50.0		9.936	33.456	25.757	0.1208	94.6
60.0		9.934	33.518	25.806	0.1433	94.9
80.0		9.265	33.581	25.965	0.1860	95.5
100.0		9.304	33.789	26.121	0.2263	95.3
150.0		8.637	33.987	26.382	0.3155	95.4
200.0		8.141	34.054	26.510	0.3978	95.5
250.0		7.071	34.013	26.632	0.4742	96.0
300.0		7.097	34.123	26.715	0.5458	96.0
400.0		5.978	34.122	26.861	0.6787	96.1
500.0		5.402	34.190	26.986	0.7987	96.2
600.0		5.031	34.273	27.095	0.9090	96.0
700.0		4.648	34.329	27.183	1.0115	95.7
800.0		4.441	34.368	27.237	1.1078	95.5
890.0		4.179	34.405	27.294	1.1902	95.5



Cruise W8902 Station # 52 Depth m: 880 Time: 1989-02-27 16:32
Position: 38 36.10'N 123 47.60'W Depth Deck Offset: 0.00

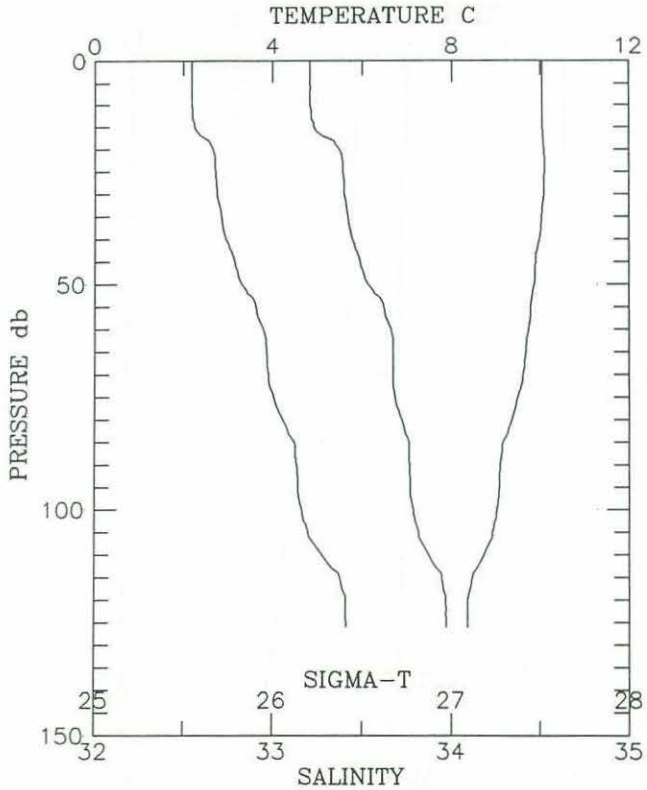
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.186	33.217	25.529	0.0000	88.1
10.0		10.181	33.214	25.527	0.0248	88.1
20.0		10.180	33.215	25.528	0.0496	88.1
30.0		10.139	33.217	25.536	0.0744	88.7
40.0		9.740	33.311	25.677	0.0988	93.1
50.0		9.698	33.472	25.809	0.1217	93.0
60.0		9.869	33.605	25.885	0.1435	94.6
80.0		9.564	33.781	26.073	0.1849	95.1
100.0		9.327	33.841	26.159	0.2236	93.7
150.0		8.819	33.971	26.341	0.3135	94.9
200.0		8.280	34.048	26.485	0.3967	95.4
250.0		7.601	34.073	26.604	0.4744	95.9
300.0		6.673	34.041	26.708	0.5468	96.0
400.0		5.703	34.128	26.900	0.6773	96.0
500.0		5.388	34.203	26.998	0.7956	95.9
600.0		5.106	34.269	27.083	0.9062	95.7
700.0		4.725	34.328	27.174	1.0091	95.4
800.0		4.475	34.367	27.232	1.1060	95.0
871.0		4.305	34.392	27.271	1.1720	95.1

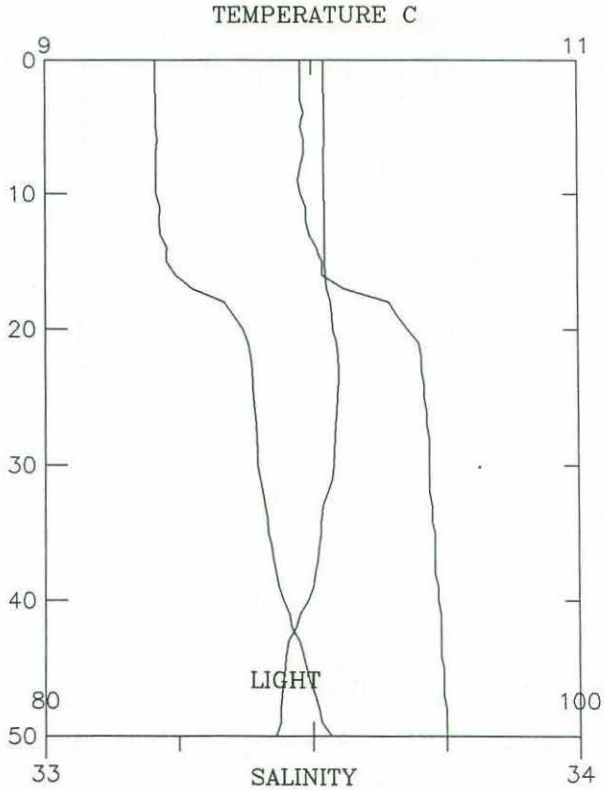




Cruise W8902 Station # 53 Depth m: 400 Time: 1989-02-27 17:40
Position: 38 37.50'N 123 45.60'W Depth Deck Offset: 0.00

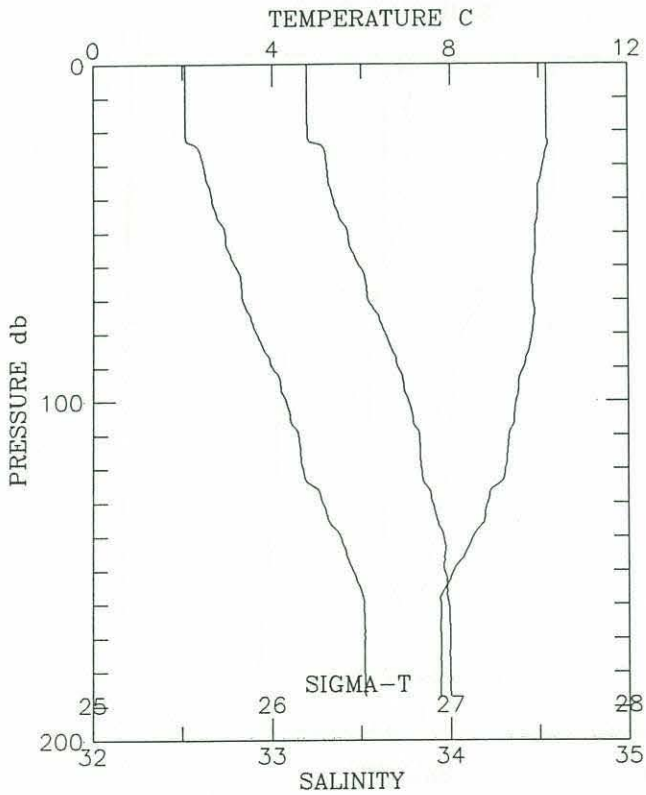
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.173	33.213	25.528	0.0000	90.1
10.0		10.171	33.212	25.527	0.0248	90.1
20.0		10.171	33.212	25.527	0.0496	90.1
30.0		10.028	33.270	25.597	0.0743	93.8
40.0		9.946	33.339	25.664	0.0981	94.6
50.0		9.903	33.411	25.728	0.1214	94.8
60.0		9.535	33.516	25.870	0.1438	94.6
80.0		9.416	33.653	25.997	0.1858	91.5
100.0		9.199	33.806	26.152	0.2250	92.5
150.0		8.663	33.995	26.384	0.3143	95.0
200.0		8.016	34.030	26.510	0.3961	95.6
250.0		7.138	34.041	26.645	0.4720	95.6
300.0		6.442	34.074	26.764	0.5426	95.5
392.0		5.933	34.119	26.865	0.6631	95.7

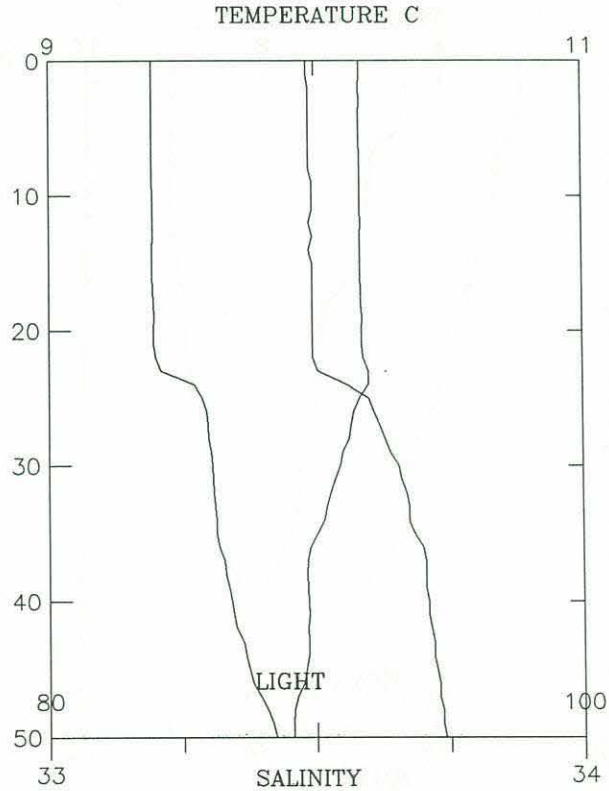




Cruise W8902 Station # 54 Depth m: 180 Time: 1989-02-27 18:34
Position: 38 39.50'N 123 43.10'W Depth Deck Offset: 0.00

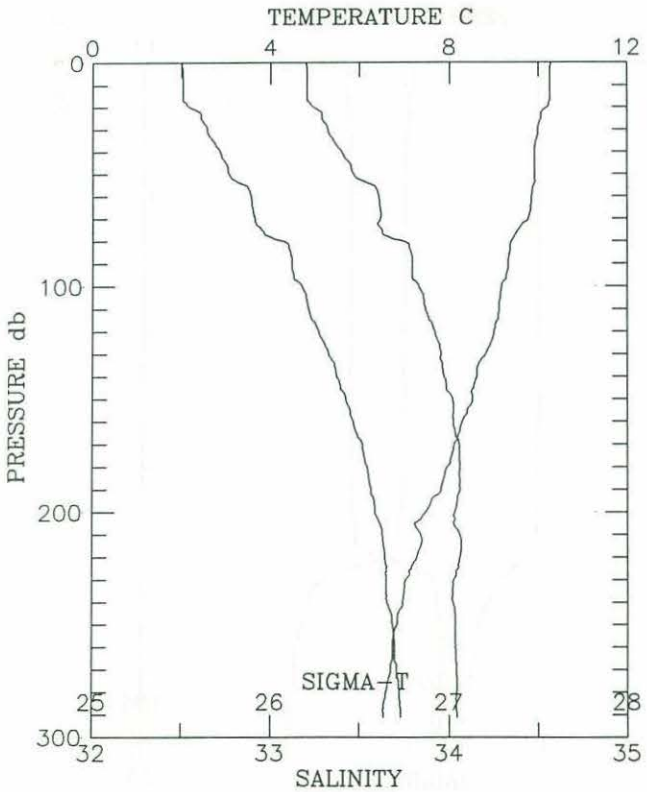
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.068	33.218	25.550	0.0000	89.2
10.0		10.031	33.219	25.557	0.0246	89.2
20.0		10.021	33.224	25.562	0.0491	89.8
30.0		10.068	33.306	25.618	0.0734	92.9
40.0		10.101	33.378	25.669	0.0970	94.2
50.0		9.933	33.495	25.788	0.1203	95.1
60.0		9.720	33.585	25.894	0.1421	95.0
70.0		9.528	33.638	25.967	0.1633	94.8
80.0		9.409	33.685	26.023	0.1837	94.7
90.0		9.218	33.792	26.138	0.2036	91.4
100.0		9.154	33.826	26.175	0.2226	94.8
110.0		8.985	33.892	26.253	0.2408	94.8
120.0		8.950	33.903	26.267	0.2588	94.9
130.0		8.863	33.919	26.294	0.2767	94.8
140.0		8.552	33.948	26.365	0.2940	93.3
150.0		8.179	33.980	26.446	0.3108	91.4
160.0		8.076	33.989	26.469	0.3270	90.1
170.0		8.047	33.991	26.475	0.3431	90.4

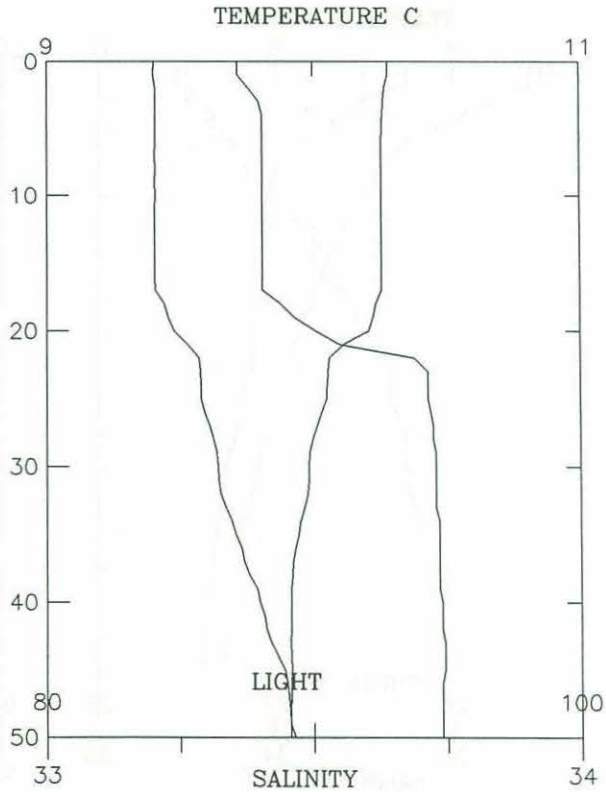




Cruise W8902 Station # 55 Depth m: 133 Time: 1989-02-27 19:09
Position: 38 41.10'N 123 41.00'W Depth Deck Offset: 0.00

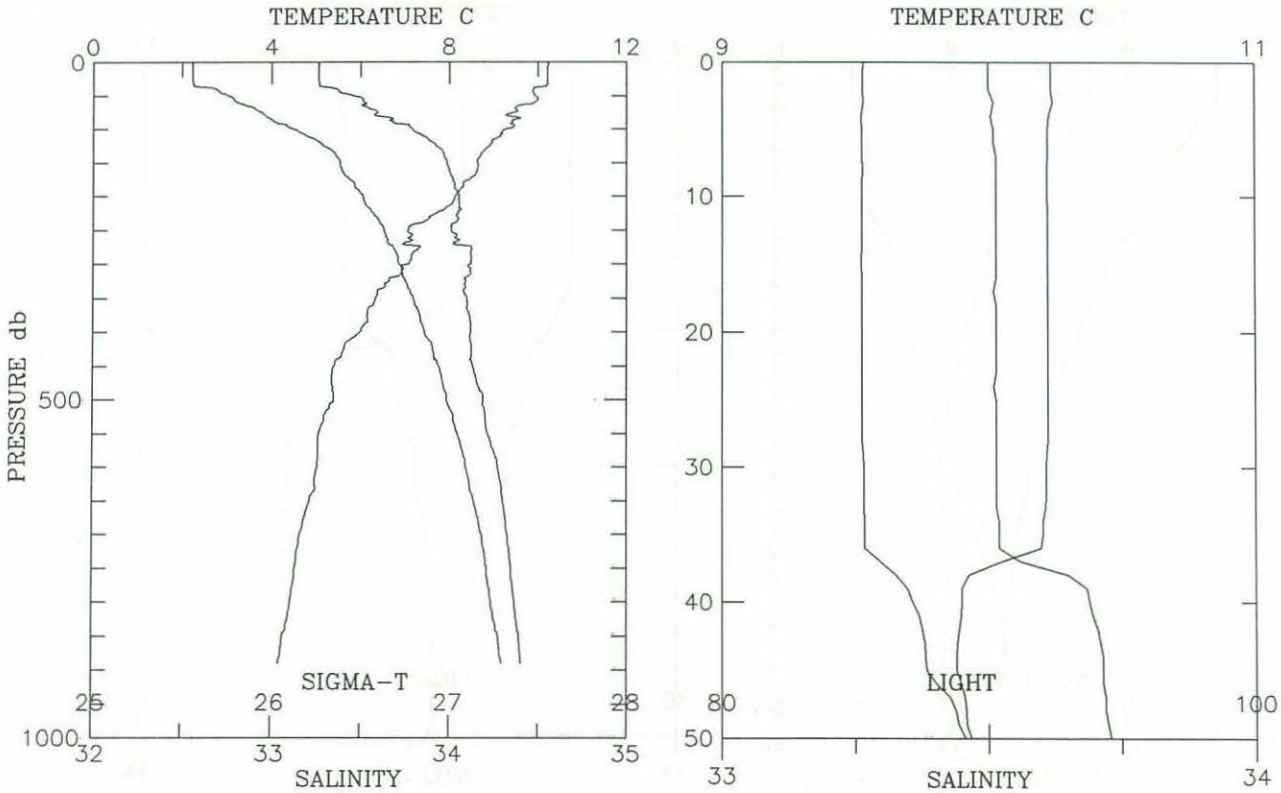
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.911	33.237	25.591	0.0000	89.2
10.0		9.892	33.236	25.593	0.0242	89.1
20.0		9.875	33.238	25.597	0.0484	89.4
30.0		9.815	33.250	25.617	0.0725	91.5
40.0		9.865	33.381	25.711	0.0961	94.8
50.0		9.641	33.421	25.779	0.1190	94.6
60.0		9.455	33.538	25.901	0.1408	93.9
70.0		9.421	33.642	25.988	0.1618	94.5
80.0		9.192	33.781	26.133	0.1816	94.3
90.0		8.952	33.862	26.235	0.2003	93.6
100.0		8.846	33.882	26.267	0.2183	92.5
110.0		8.598	33.934	26.347	0.2360	90.7
120.0		8.499	33.945	26.370	0.2530	90.9
125.0		8.392	33.951	26.392	0.2615	90.9





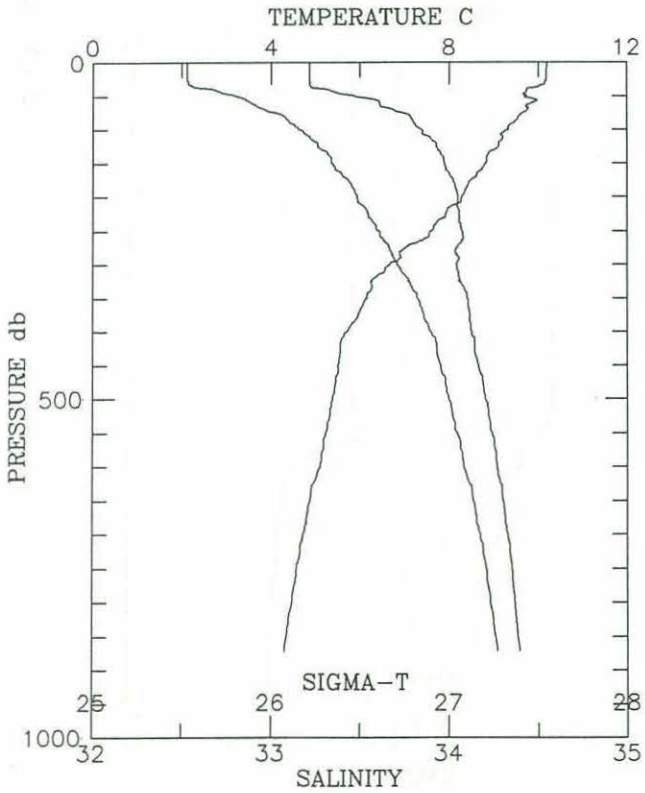
Cruise W8902 Station # 56 Depth m: 119 Time: 1989-02-27 20:27
Position: 38 42.30'N 123 38.90'W Depth Deck Offset: 0.00

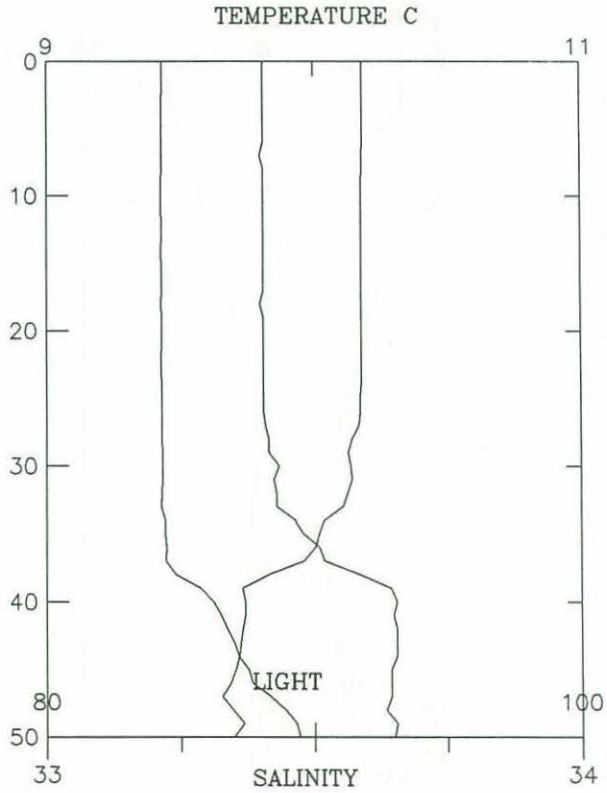
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.012	33.301	25.624	0.0000	85.7
10.0		9.994	33.299	25.625	0.0239	85.8
20.0		9.979	33.300	25.628	0.0478	85.9
30.0		9.959	33.299	25.631	0.0716	86.2
40.0		9.842	33.314	25.662	0.0954	88.1
50.0		9.554	33.411	25.785	0.1185	93.4
60.0		9.526	33.566	25.911	0.1402	94.6
70.0		9.349	33.624	25.985	0.1612	93.9
80.0		9.194	33.736	26.098	0.1813	92.4
90.0		9.182	33.841	26.182	0.2005	90.1
100.0		8.979	33.879	26.244	0.2190	92.6
110.0		8.694	33.929	26.328	0.2368	81.6
112.0		8.674	33.931	26.333	0.2403	81.1



Cruise W8902 Station # 57 Depth m: 99 Time: 1989-02-27 21:06
Position: 38 43.50'N 123 37.20'W Depth Deck Offset: 0.00

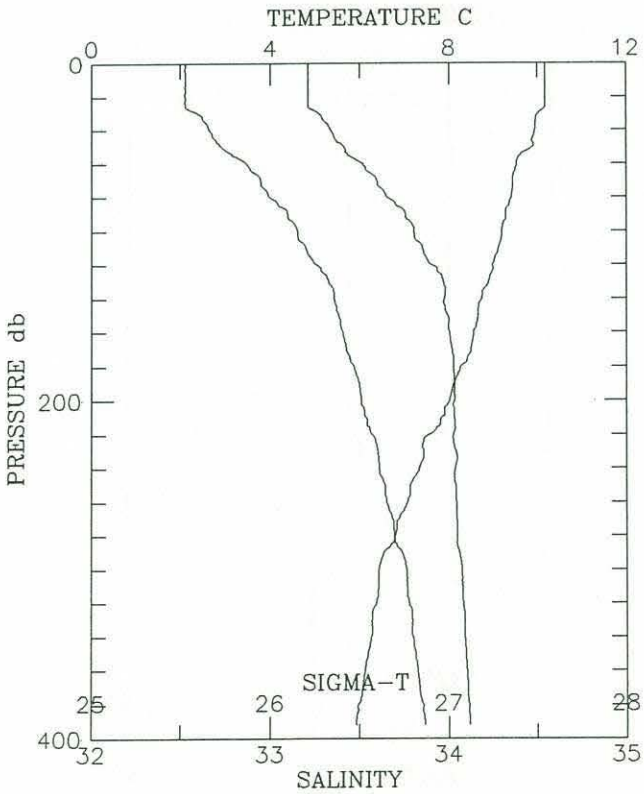
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.733	33.381	25.733	0.0000	91.2
5.0		9.726	33.380	25.733	0.0114	91.3
10.0		9.726	33.380	25.733	0.0228	91.2
15.0		9.715	33.384	25.738	0.0343	91.4
20.0		9.650	33.433	25.787	0.0456	92.5
25.0		9.531	33.560	25.906	0.0565	93.1
30.0		9.521	33.593	25.933	0.0670	93.5
35.0		9.459	33.646	25.984	0.0774	92.8
40.0		9.403	33.683	26.023	0.0875	86.0
45.0		9.380	33.687	26.030	0.0976	84.8
50.0		9.425	33.758	26.078	0.1075	92.7
55.0		9.320	33.797	26.125	0.1172	93.1
60.0		9.290	33.796	26.129	0.1268	92.1
65.0		9.178	33.830	26.174	0.1363	91.6
70.0		9.043	33.871	26.228	0.1455	90.6
75.0		8.979	33.883	26.247	0.1546	84.5
80.0		8.949	33.889	26.257	0.1637	78.7
85.0		8.925	33.893	26.263	0.1727	80.1
90.0		8.829	33.907	26.290	0.1816	79.2
94.0		8.831	33.907	26.289	0.1887	79.0

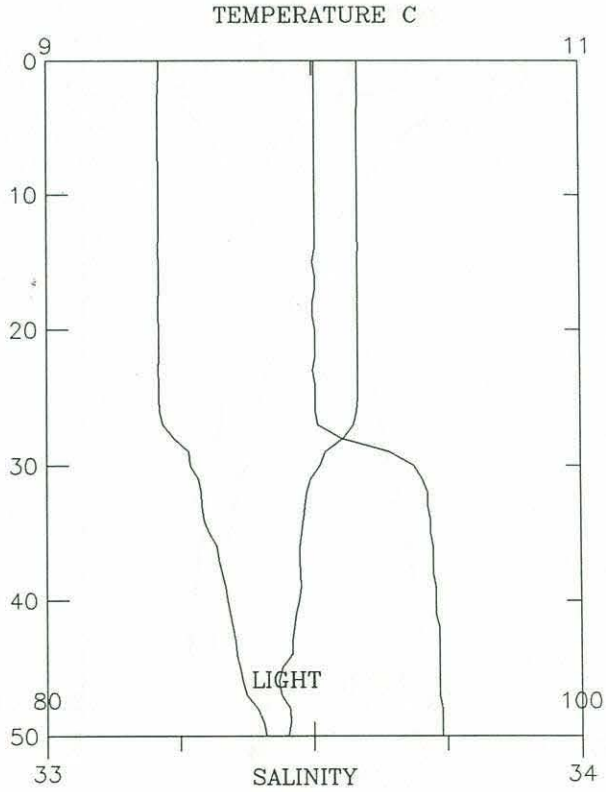




Cruise W8902 Station # 58 Depth m: 77 Time: 1989-02-27 21:44
Position: 38 44.90'N 123 35.80'W Depth Deck Offset: 0.00

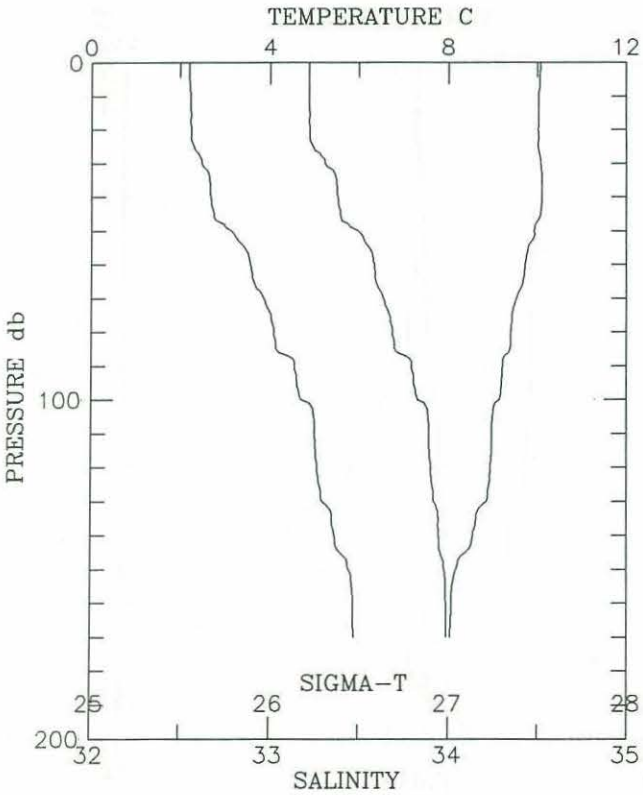
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.707	33.508	25.836	0.0000	84.8
5.0		9.702	33.507	25.836	0.0109	84.7
10.0		9.701	33.507	25.836	0.0219	84.8
15.0		9.654	33.517	25.852	0.0328	83.5
20.0		9.663	33.514	25.848	0.0436	83.9
25.0		9.610	33.527	25.867	0.0545	82.3
30.0		9.564	33.550	25.892	0.0653	85.3
35.0		9.441	33.628	25.973	0.0758	84.2
40.0		9.465	33.706	26.031	0.0859	90.4
45.0		9.412	33.727	26.056	0.0959	89.4
50.0		9.402	33.733	26.062	0.1058	89.1
55.0		9.392	33.737	26.067	0.1157	88.7
60.0		9.367	33.744	26.076	0.1256	86.4
65.0		9.347	33.757	26.090	0.1354	86.7
70.0		9.244	33.800	26.140	0.1451	83.1
73.0		9.165	33.832	26.178	0.1508	80.5

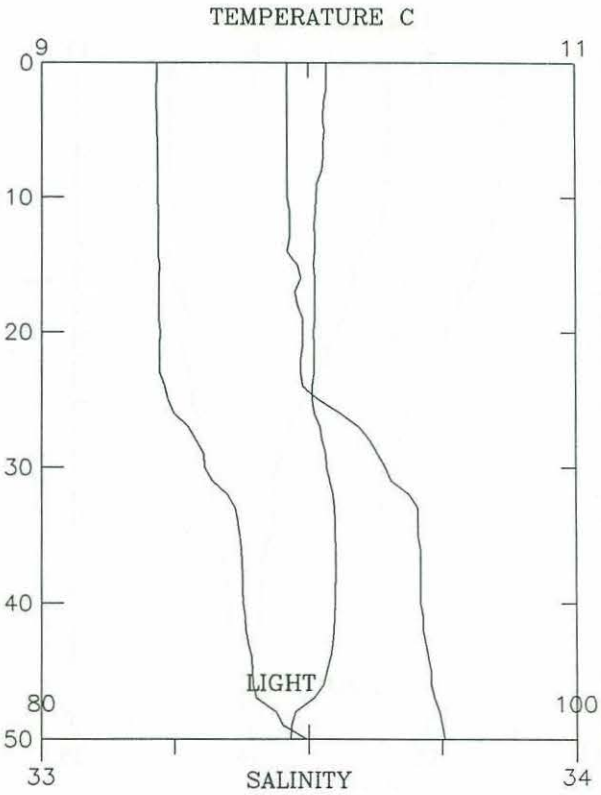




Cruise W8902 Station # 59 Depth m: 50 Time: 1989-02-27 22:10
Position: 38 45.70'N 123 34.80'W Depth Deck Offset: 0.00

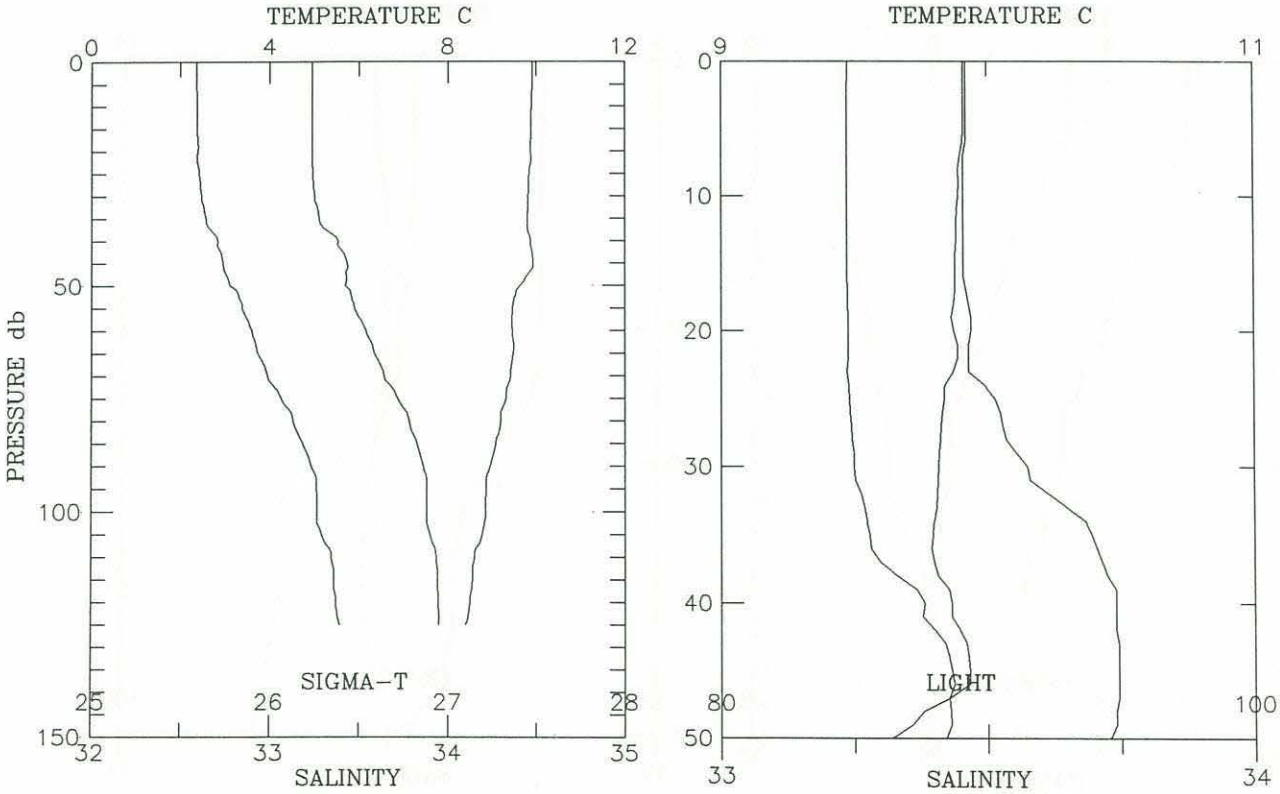
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.757	33.522	25.839	0.0000	79.1
5.0		9.754	33.521	25.838	0.0109	79.6
10.0		9.742	33.520	25.840	0.0218	79.6
15.0		9.588	33.540	25.881	0.0327	82.6
20.0		9.550	33.566	25.907	0.0434	84.5
25.0		9.544	33.572	25.913	0.0540	83.9
30.0		9.534	33.588	25.927	0.0645	83.5
35.0		9.530	33.598	25.935	0.0750	84.0
40.0		9.489	33.642	25.977	0.0854	85.8
45.0		9.437	33.682	26.016	0.0956	83.0
46.0		9.422	33.696	26.030	0.0976	83.6





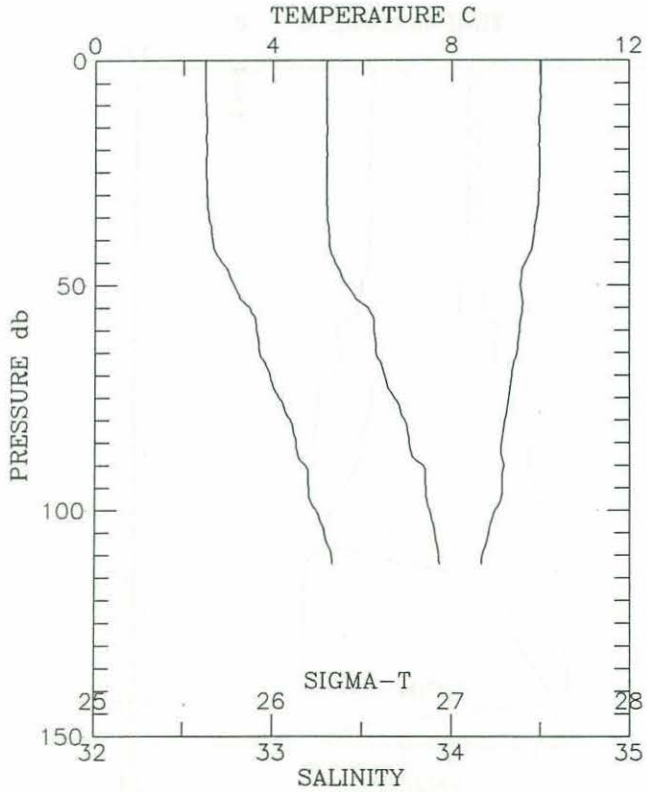
Cruise W8902 Station # 60 Depth m: 77 Time: 1989-02-28 00:00
Position: 38 39.50'N 123 27.80'W Depth Deck Offset: 0.00

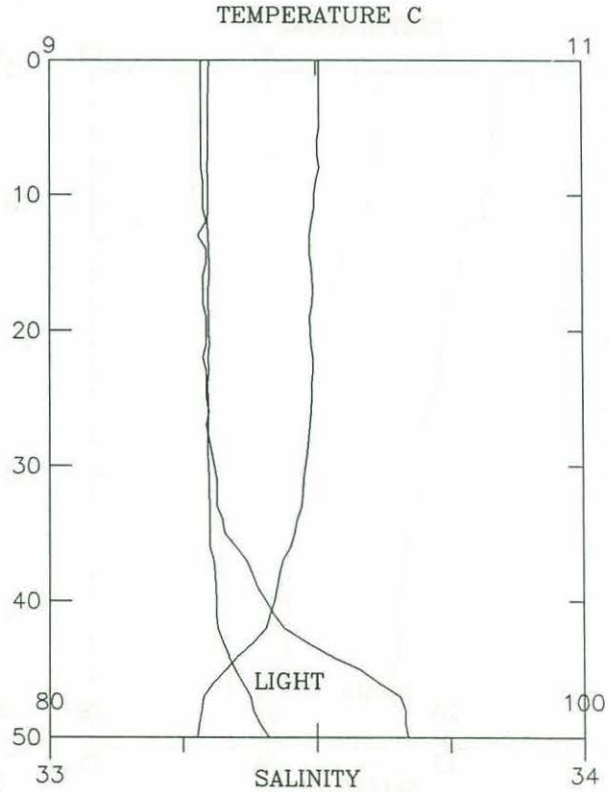
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.793	33.499	25.815	0.0000	87.0
5.0		9.794	33.498	25.814	0.0110	88.2
10.0		9.786	33.499	25.816	0.0221	88.3
15.0		9.769	33.503	25.822	0.0331	88.6
20.0		9.759	33.506	25.826	0.0441	89.0
25.0		9.754	33.509	25.829	0.0551	89.1
30.0		9.700	33.525	25.851	0.0660	90.1
35.0		9.556	33.583	25.919	0.0768	92.1
40.0		9.422	33.644	25.989	0.0871	94.1
45.0		9.360	33.660	26.012	0.0973	94.2
50.0		9.327	33.673	26.027	0.1074	94.2
55.0		9.278	33.736	26.084	0.1174	93.6
60.0		9.265	33.744	26.093	0.1272	89.7
65.0		9.261	33.745	26.094	0.1370	87.0
70.0		9.223	33.771	26.120	0.1467	74.9
73.0		9.184	33.800	26.150	0.1524	75.2



Cruise W8902 Station # 61 Depth m: 91 Time: 1989-02-28 00:35
Position: 38 38.50'N 123 29.60'W Depth Deck Offset: 0.00

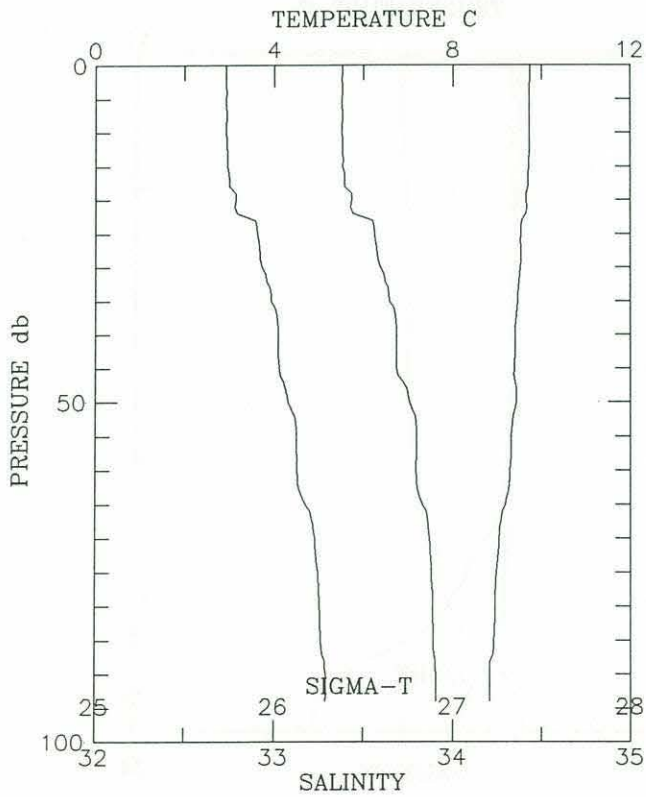
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.822	33.471	25.788	0.0000	72.9
5.0		9.823	33.471	25.788	0.0112	85.3
10.0		9.822	33.471	25.788	0.0223	85.4
15.0		9.822	33.471	25.788	0.0335	85.4
20.0		9.817	33.475	25.792	0.0446	85.7
25.0		9.794	33.491	25.808	0.0558	86.7
30.0		9.757	33.524	25.840	0.0668	88.5
35.0		9.656	33.614	25.927	0.0776	93.2
40.0		9.433	33.656	25.997	0.0880	94.2
45.0		9.319	33.714	26.060	0.0980	93.9
50.0		9.293	33.798	26.130	0.1078	94.0
55.0		9.227	33.830	26.166	0.1172	93.8
60.0		9.117	33.851	26.200	0.1266	92.6
65.0		9.122	33.849	26.198	0.1358	92.7
70.0		9.026	33.865	26.226	0.1450	88.1
75.0		9.014	33.867	26.229	0.1542	87.7
80.0		9.007	33.868	26.231	0.1633	86.3
85.0		8.979	33.873	26.239	0.1724	83.3
86.0		8.963	33.877	26.245	0.1742	82.6

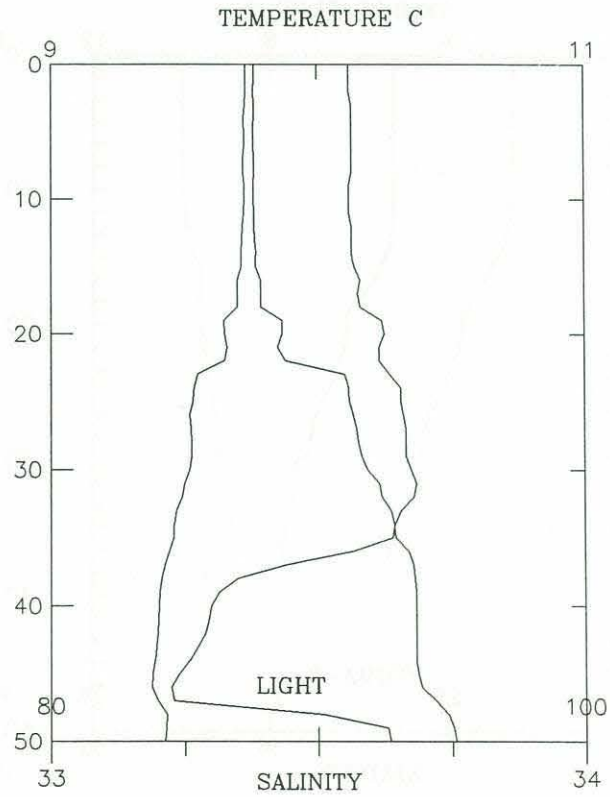




Cruise W8902 Station # 62 Depth m: 121 Time: 1989-02-28 01:31
Position: 38 36.10'N 123 32.30'W Depth Deck Offset: 0.00

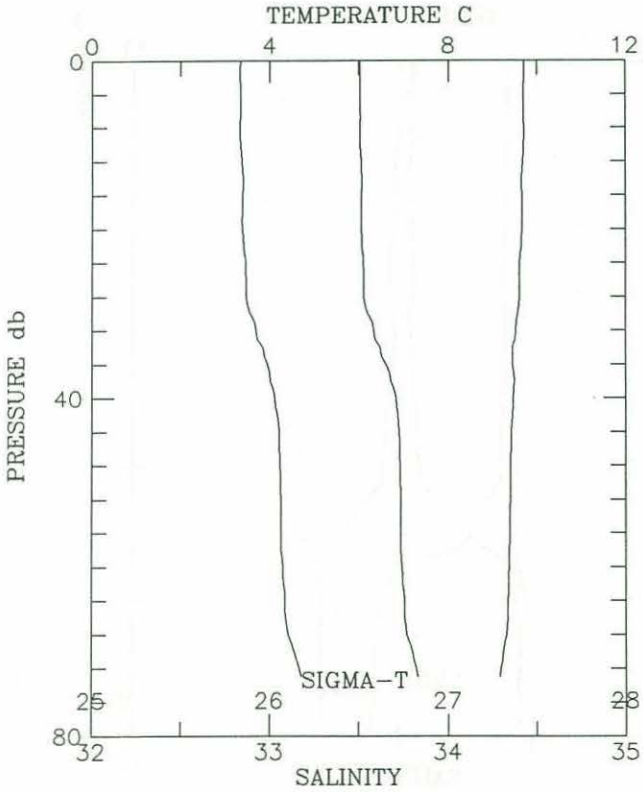
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.790	33.435	25.765	0.0000	89.1
10.0		9.788	33.435	25.766	0.0225	89.8
20.0		9.792	33.436	25.766	0.0451	89.8
30.0		9.772	33.442	25.774	0.0676	90.5
40.0		9.733	33.452	25.788	0.0901	91.7
50.0		9.553	33.539	25.886	0.1122	93.5
60.0		9.506	33.595	25.937	0.1335	93.7
70.0		9.318	33.733	26.076	0.1538	93.6
80.0		9.210	33.789	26.137	0.1732	93.6
90.0		8.961	33.882	26.249	0.1919	94.0
100.0		8.806	33.919	26.303	0.2097	93.7
110.0		8.647	33.953	26.354	0.2271	92.2
117.0		8.618	33.957	26.362	0.2391	88.9

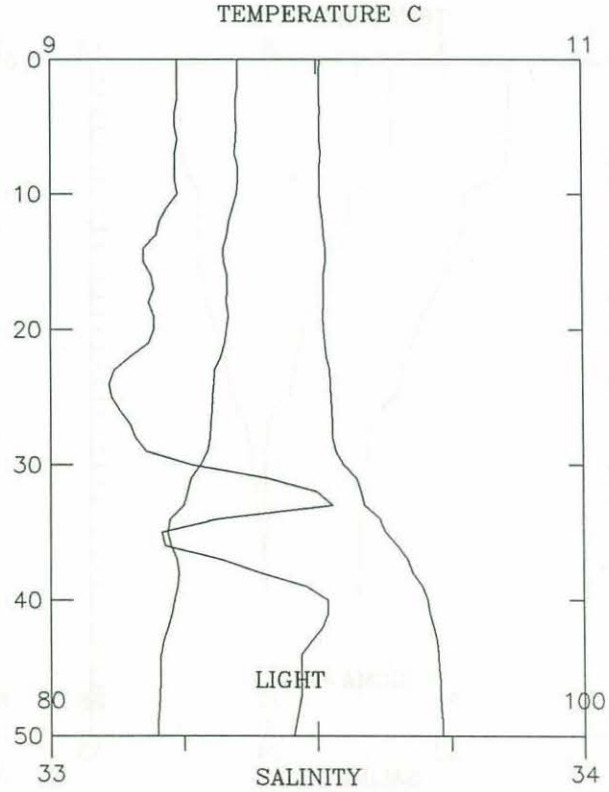




Cruise W8902 Station # 63 Depth m: 140 Time: 1989-02-28 02:04
Position: 38 34.90'N 123 34.20'W Depth Deck Offset: 0.00

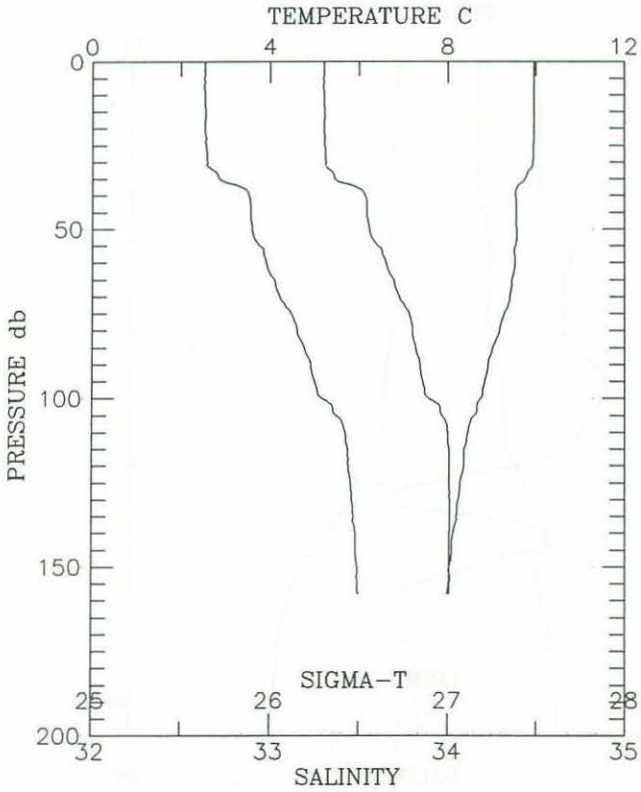
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.849	33.353	25.692	0.0000	86.0
10.0		9.851	33.353	25.691	0.0232	91.3
20.0		9.852	33.353	25.691	0.0465	91.3
30.0		9.844	33.357	25.695	0.0698	91.5
40.0		9.800	33.378	25.719	0.0929	92.2
50.0		9.694	33.428	25.776	0.1158	93.0
60.0		9.546	33.559	25.902	0.1376	93.2
70.0		9.448	33.656	25.994	0.1586	93.6
80.0		9.297	33.726	26.074	0.1789	93.4
90.0		9.050	33.837	26.200	0.1981	93.4
100.0		8.712	33.919	26.317	0.2161	92.1
110.0		8.481	33.953	26.380	0.2333	92.2
120.0		8.395	33.967	26.404	0.2501	92.8
130.0		8.253	33.982	26.437	0.2666	89.4
136.0		8.224	33.982	26.442	0.2764	88.0

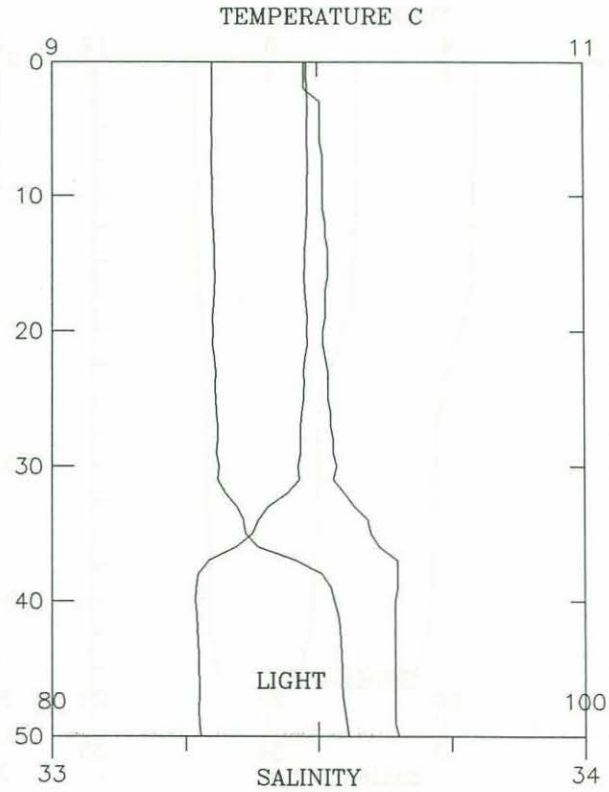




Cruise W8902 Station # 64 Depth m: 163 Time: 1989-02-28 03:08
Position: 38 32.27'N 123 37.30'W Depth Deck Offset: 0.00

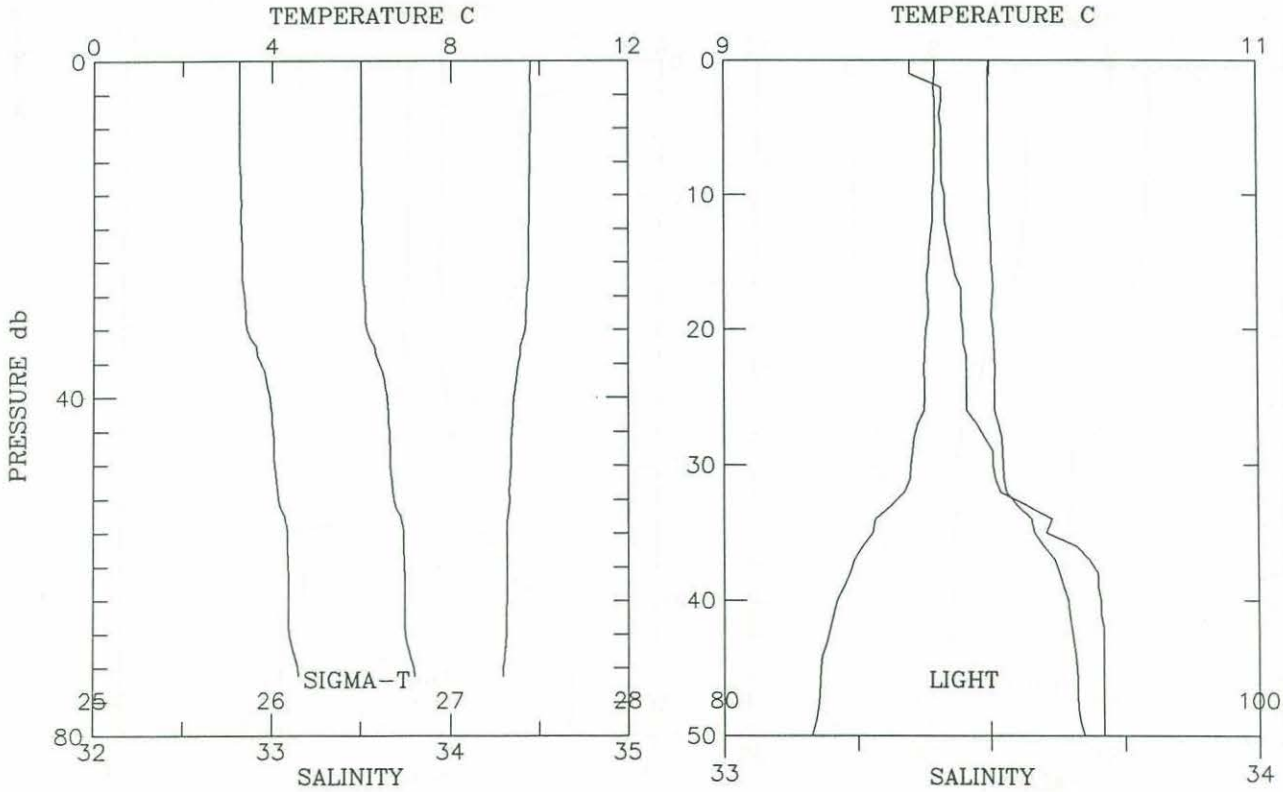
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0		9.960	33.302	25.633	0.0000	89.5
10.0		9.962	33.302	25.633	0.0242	90.2
20.0		9.960	33.303	25.634	0.0480	90.2
30.0		9.924	33.314	25.649	0.0718	90.7
40.0		9.538	33.531	25.882	0.0945	92.9
50.0		9.555	33.557	25.899	0.1159	93.0
60.0		9.522	33.651	25.978	0.1369	93.7
70.0		9.408	33.728	26.057	0.1572	93.1
80.0		9.174	33.801	26.152	0.1765	93.5
90.0		8.910	33.845	26.228	0.1952	93.4
100.0		8.746	33.892	26.291	0.2133	93.4
110.0		8.454	34.001	26.422	0.2302	94.9
120.0		8.370	34.008	26.440	0.2466	94.9
130.0		8.243	34.011	26.461	0.2629	94.8
140.0		8.120	34.010	26.479	0.2790	94.4
150.0		8.033	34.007	26.490	0.2949	93.6
158.0		7.989	34.007	26.496	0.3077	93.3





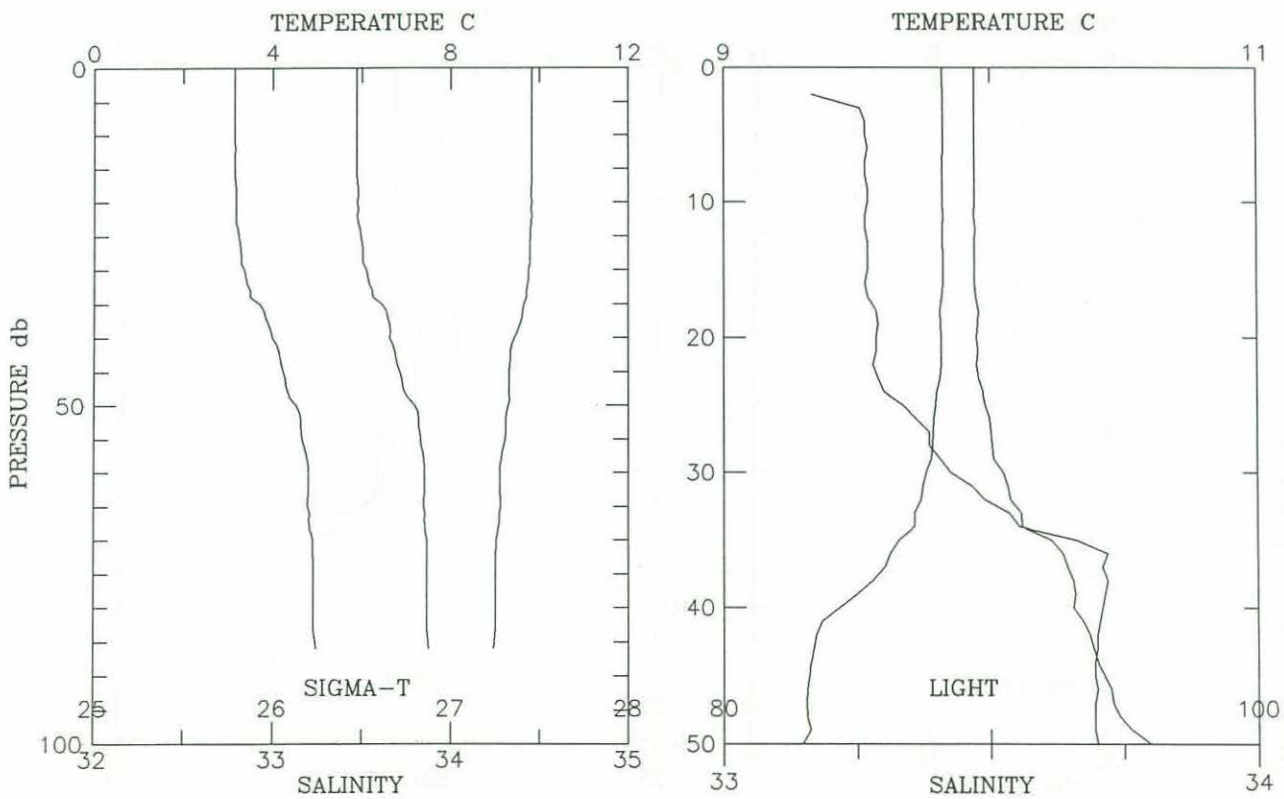
Cruise W8902 Station # 65 Depth m: 452 Time: 1989-02-28 04:06
Position: 38 30.40'N 123 40.40'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.046	33.277	25.599	0.0000	89.0
10.0		10.046	33.277	25.599	0.0241	89.0
20.0		10.045	33.277	25.599	0.0482	89.1
30.0		10.020	33.284	25.609	0.0724	89.4
40.0		9.747	33.364	25.717	0.0961	92.9
50.0		9.522	33.489	25.852	0.1186	94.2
60.0		9.404	33.593	25.952	0.1398	93.1
80.0		9.350	33.707	26.050	0.1807	92.8
100.0		9.167	33.827	26.173	0.2196	92.7
150.0		8.317	33.997	26.439	0.3080	93.9
200.0		7.144	34.039	26.642	0.3849	95.4
250.0		6.825	34.076	26.715	0.4556	95.1
300.0		6.437	34.097	26.783	0.5237	95.2
400.0		5.995	34.131	26.867	0.6530	95.2
450.0		5.614	34.179	26.952	0.7142	95.2



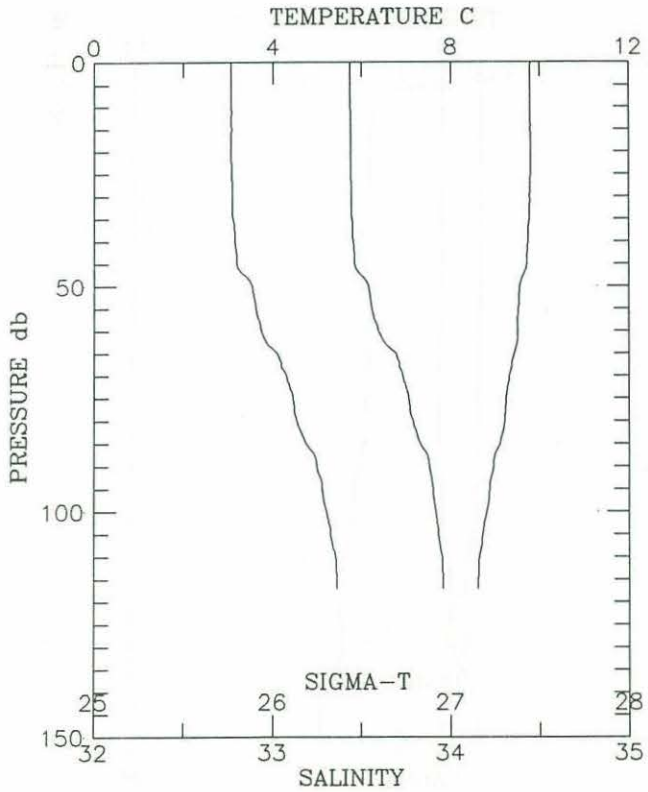
Cruise W8902 Station # 66 Depth m: 873 Time: 1989-02-28 05:03
Position: 38 28.80'N 123 42.90'W Depth Deck Offset: 0.00

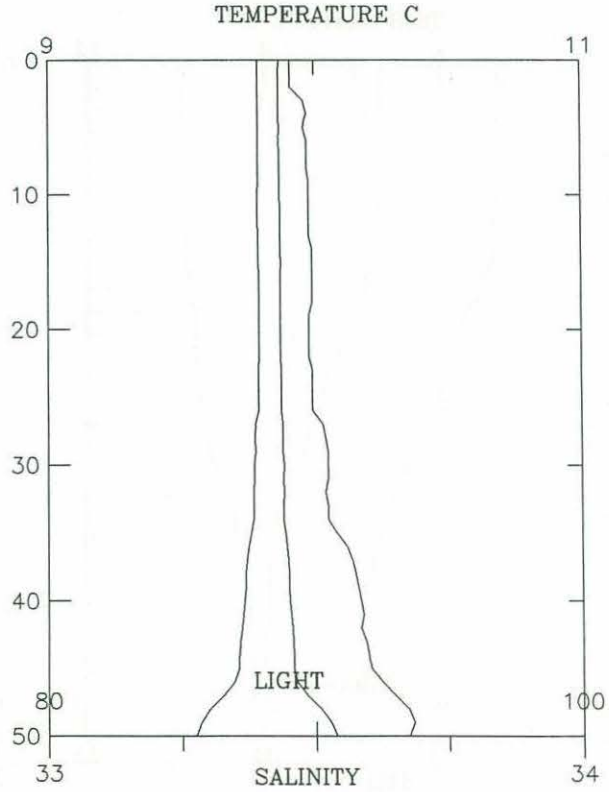
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.055	33.274	25.595	0.0000	89.6
10.0		10.050	33.272	25.595	0.0242	89.9
20.0		10.047	33.272	25.595	0.0483	89.8
30.0		9.995	33.295	25.622	0.0725	90.8
40.0		9.597	33.477	25.830	0.0956	94.0
50.0		9.457	33.586	25.938	0.1171	93.2
60.0		9.423	33.646	25.991	0.1379	91.7
80.0		9.363	33.765	26.093	0.1780	92.7
100.0		9.242	33.872	26.197	0.2161	93.8
150.0		8.419	34.036	26.454	0.3028	95.6
200.0		7.704	34.044	26.567	0.3817	95.7
250.0		6.788	34.065	26.711	0.4551	95.7
300.0		6.420	34.086	26.776	0.5235	95.9
400.0		5.917	34.131	26.876	0.6523	95.9
500.0		5.599	34.209	26.977	0.7721	95.5
600.0		5.152	34.267	27.077	0.8847	95.9
700.0		4.860	34.318	27.151	0.9891	95.6
800.0		4.477	34.374	27.238	1.0870	95.3
868.0		4.370	34.384	27.257	1.1504	95.2



Cruise W8902 Station # 67 Depth m: 969 Time: 1989-02-28 06:38
Position: 38 19.70'N 123 40.20'W Depth Deck Offset: 0.00

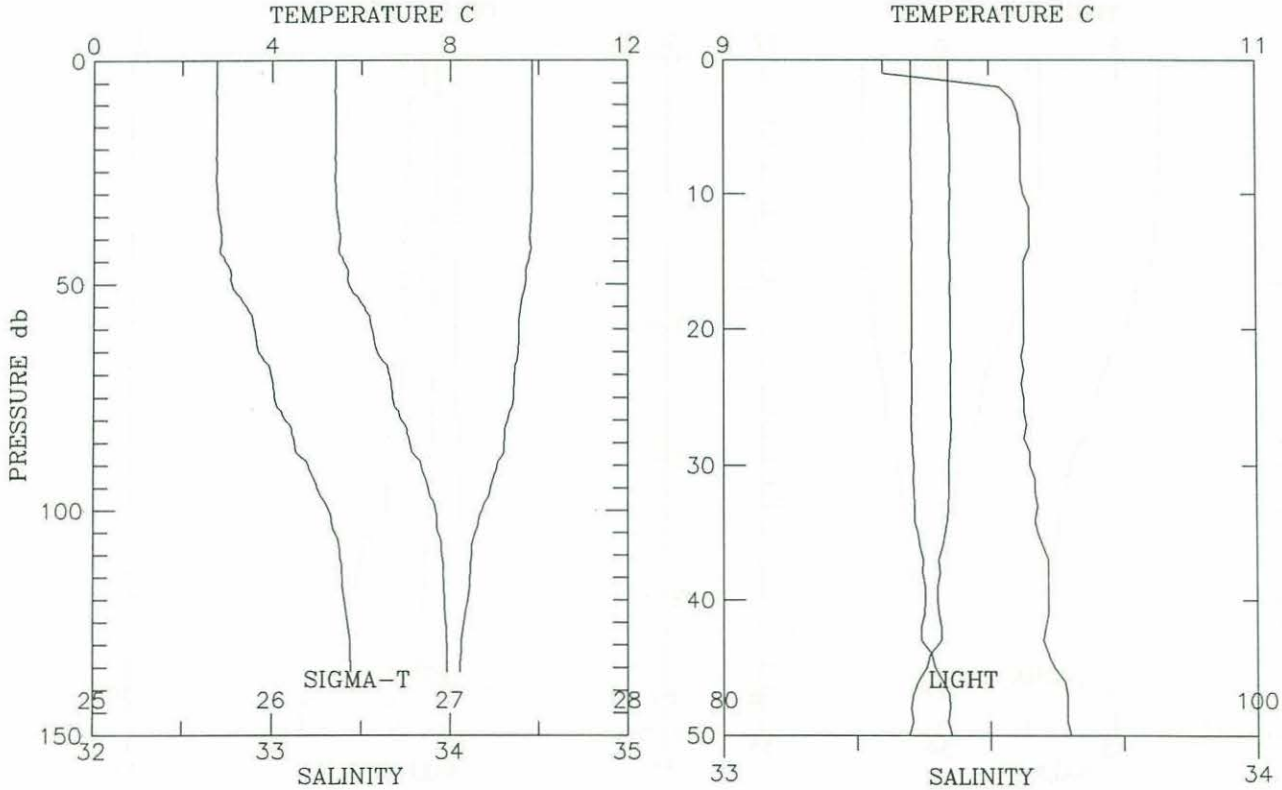
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.941	33.399	25.712	0.0000	90.1
10.0		9.942	33.397	25.710	0.0230	90.1
20.0		9.930	33.400	25.715	0.0461	90.2
30.0		9.654	33.495	25.835	0.0687	91.7
40.0		9.516	33.639	25.970	0.0899	92.6
50.0		9.382	33.685	26.028	0.1101	91.4
60.0		9.309	33.745	26.087	0.1300	91.1
80.0		9.117	33.848	26.198	0.1683	92.5
100.0		8.980	33.893	26.255	0.2050	92.9
150.0		8.570	34.008	26.409	0.2918	94.8
200.0		7.867	34.008	26.515	0.3734	95.0
250.0		7.009	34.059	26.676	0.4476	95.8
300.0		6.723	34.147	26.784	0.5170	95.9
400.0		6.080	34.206	26.915	0.6442	96.0
500.0		5.470	34.255	27.030	0.7611	95.9
600.0		5.214	34.303	27.098	0.8700	95.9
700.0		4.802	34.372	27.200	0.9730	95.9
800.0		4.530	34.393	27.247	1.0684	95.9
900.0		4.099	34.423	27.317	1.1591	95.1
951.0		3.998	34.434	27.336	1.2030	95.1





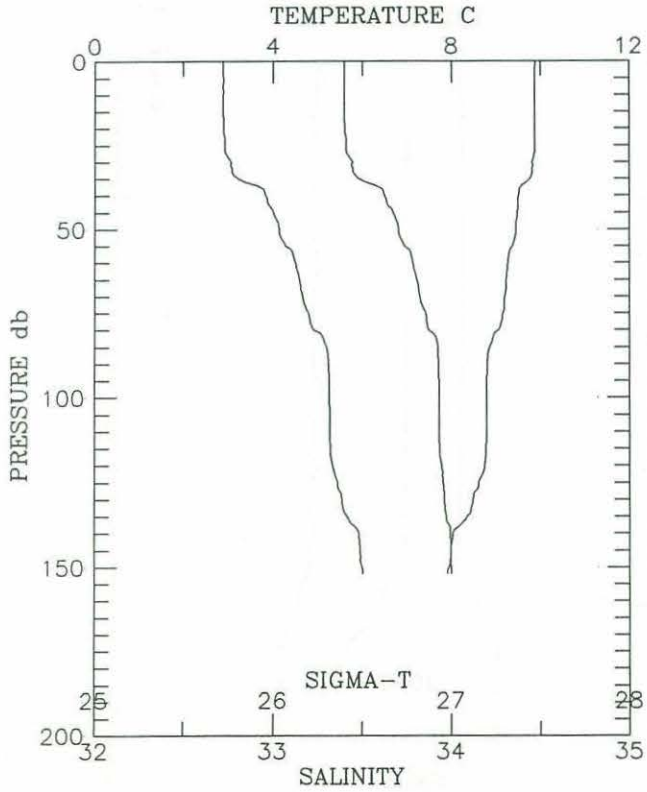
Cruise W8902 Station # 68 Depth m: 353 Time: 1989-02-28 08:37
Position: 38 23.50'N 123 35.20'W Depth Deck Offset: 0.00

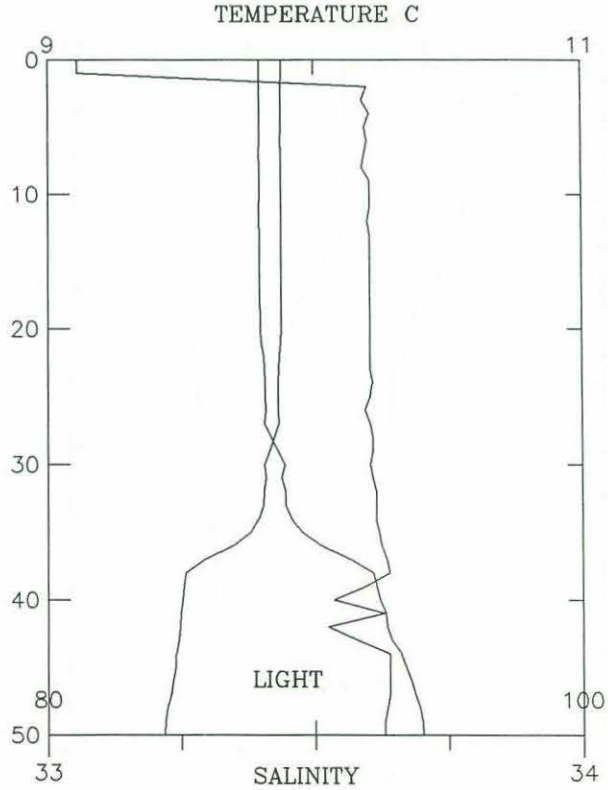
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.936	33.439	25.744	0.0000	88.8
10.0		9.939	33.437	25.742	0.0227	89.5
20.0		9.939	33.438	25.743	0.0455	89.5
30.0		9.618	33.517	25.858	0.0681	92.0
40.0		9.216	33.721	26.083	0.0886	93.3
50.0		8.997	33.866	26.231	0.1071	91.7
60.0		8.891	33.942	26.307	0.1250	94.4
80.0		8.620	33.979	26.379	0.1594	94.8
100.0		8.436	33.989	26.415	0.1927	94.8
150.0		8.033	34.020	26.500	0.2734	95.0
200.0		7.074	34.053	26.662	0.3492	95.8
250.0		6.650	34.073	26.736	0.4186	95.9
300.0		6.449	34.113	26.794	0.4857	95.0
352.0		6.060	34.146	26.870	0.5519	95.4



Cruise W8902 Station # 69 Depth m: 156 Time: 1989-02-28 09:59
Position: 38 27.00'N 123 30.50'W Depth Deck Offset: 0.00

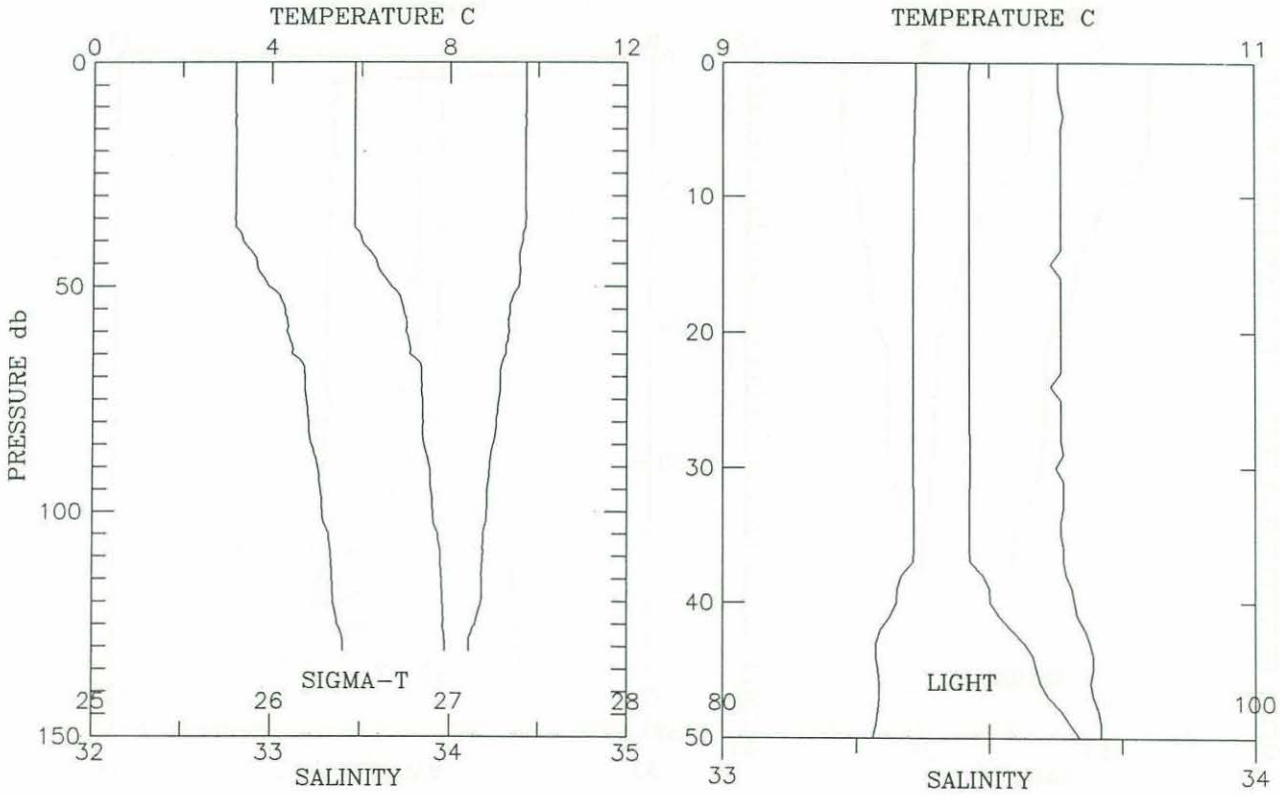
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.879	33.398	25.722	0.0000	81.1
10.0		9.876	33.398	25.722	0.0229	92.1
20.0		9.876	33.400	25.724	0.0459	92.1
30.0		9.814	33.444	25.769	0.0688	92.1
40.0		9.505	33.621	25.958	0.0907	90.7
50.0		9.438	33.702	26.032	0.1111	92.6
60.0		9.263	33.785	26.125	0.1307	92.3
70.0		9.203	33.823	26.165	0.1498	92.5
80.0		9.071	33.869	26.222	0.1684	93.3
90.0		8.803	33.929	26.311	0.1861	93.4
100.0		8.790	33.932	26.315	0.2036	93.5
110.0		8.785	33.933	26.317	0.2211	93.5
120.0		8.754	33.945	26.331	0.2386	93.6
130.0		8.491	33.962	26.385	0.2557	93.3
140.0		8.033	33.993	26.479	0.2723	93.4
150.0		7.941	34.003	26.500	0.2882	92.6
152.0		7.919	34.002	26.503	0.2914	92.8





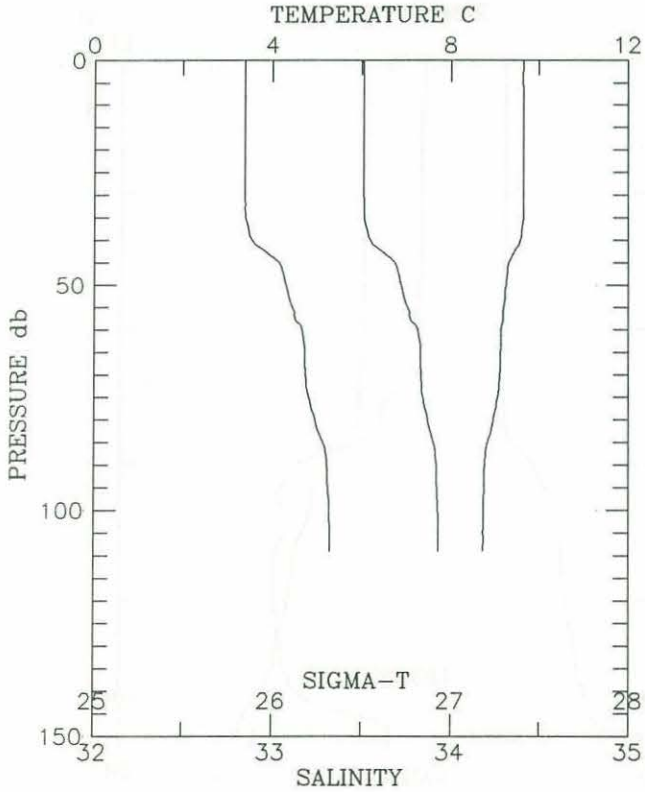
Cruise W8902 Station # 70 Depth m: 135 Time: 1989-02-28 11:02
Position: 38 28.90'N 123 27.70'W Depth Deck Offset: 0.00

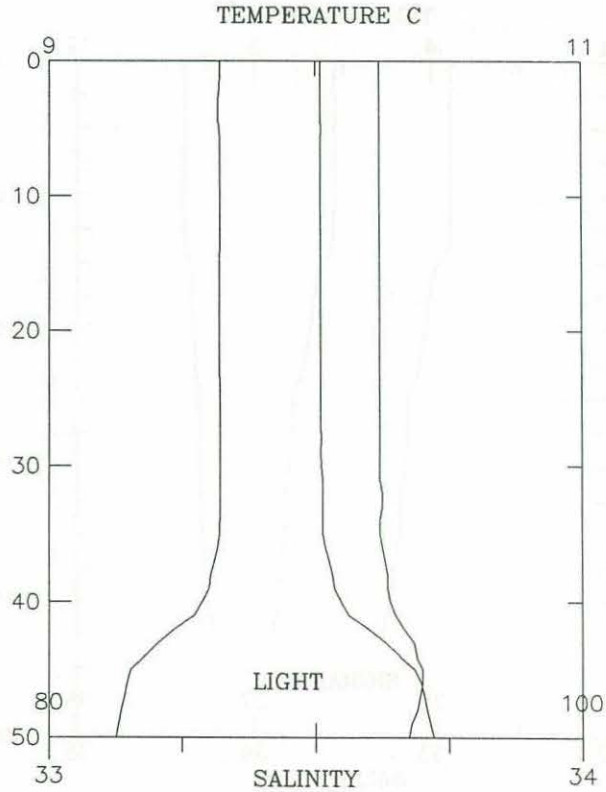
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.726	33.464	25.799	0.0000	92.6
10.0		9.718	33.462	25.798	0.0222	92.7
20.0		9.714	33.463	25.800	0.0445	92.7
30.0		9.714	33.464	25.801	0.0667	92.5
40.0		9.651	33.501	25.840	0.0889	93.2
50.0		9.561	33.670	25.987	0.1101	94.2
60.0		9.336	33.755	26.090	0.1298	93.4
70.0		9.144	33.843	26.190	0.1489	93.4
80.0		9.049	33.851	26.211	0.1675	93.4
90.0		8.906	33.889	26.263	0.1858	93.7
100.0		8.842	33.907	26.288	0.2036	93.9
110.0		8.755	33.951	26.336	0.2211	92.1
120.0		8.714	33.962	26.351	0.2384	91.0
130.0		8.442	33.975	26.403	0.2553	87.0
131.0		8.441	33.976	26.404	0.2570	87.1



Cruise W8902 Station # 71 Depth m: 114 Time: 1989-02-28 11:45
Position: 38 30.70'N 123 25.40'W Depth Deck Offset: 0.00

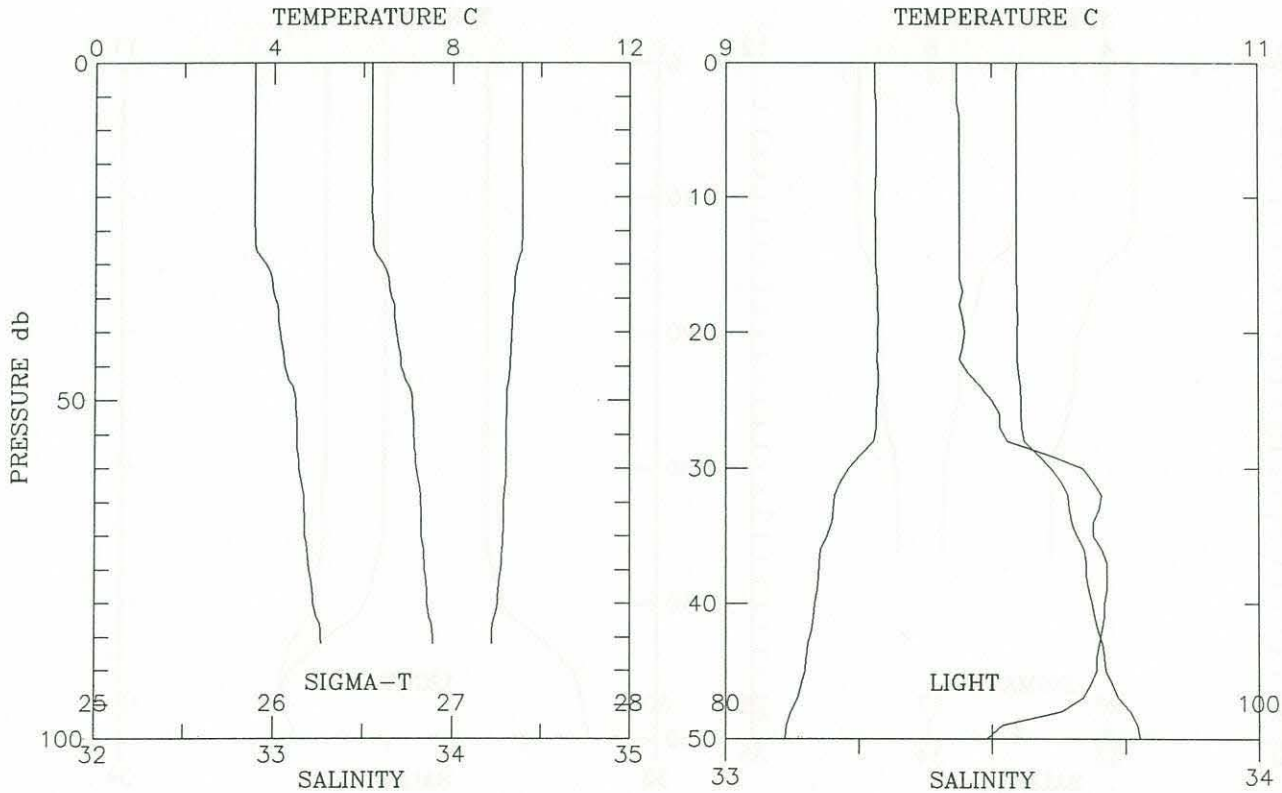
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.643	33.510	25.848	0.0000	92.4
10.0		9.643	33.510	25.848	0.0217	92.4
20.0		9.642	33.510	25.849	0.0435	92.4
30.0		9.644	33.511	25.849	0.0653	92.4
40.0		9.576	33.548	25.889	0.0870	92.8
50.0		9.250	33.721	26.077	0.1073	93.5
60.0		9.148	33.816	26.168	0.1266	89.8
70.0		9.116	33.834	26.187	0.1453	88.9
80.0		8.962	33.872	26.241	0.1638	88.6
90.0		8.774	33.920	26.308	0.1816	88.0
100.0		8.742	33.930	26.321	0.1991	86.2
109.0		8.738	33.931	26.323	0.2148	84.9





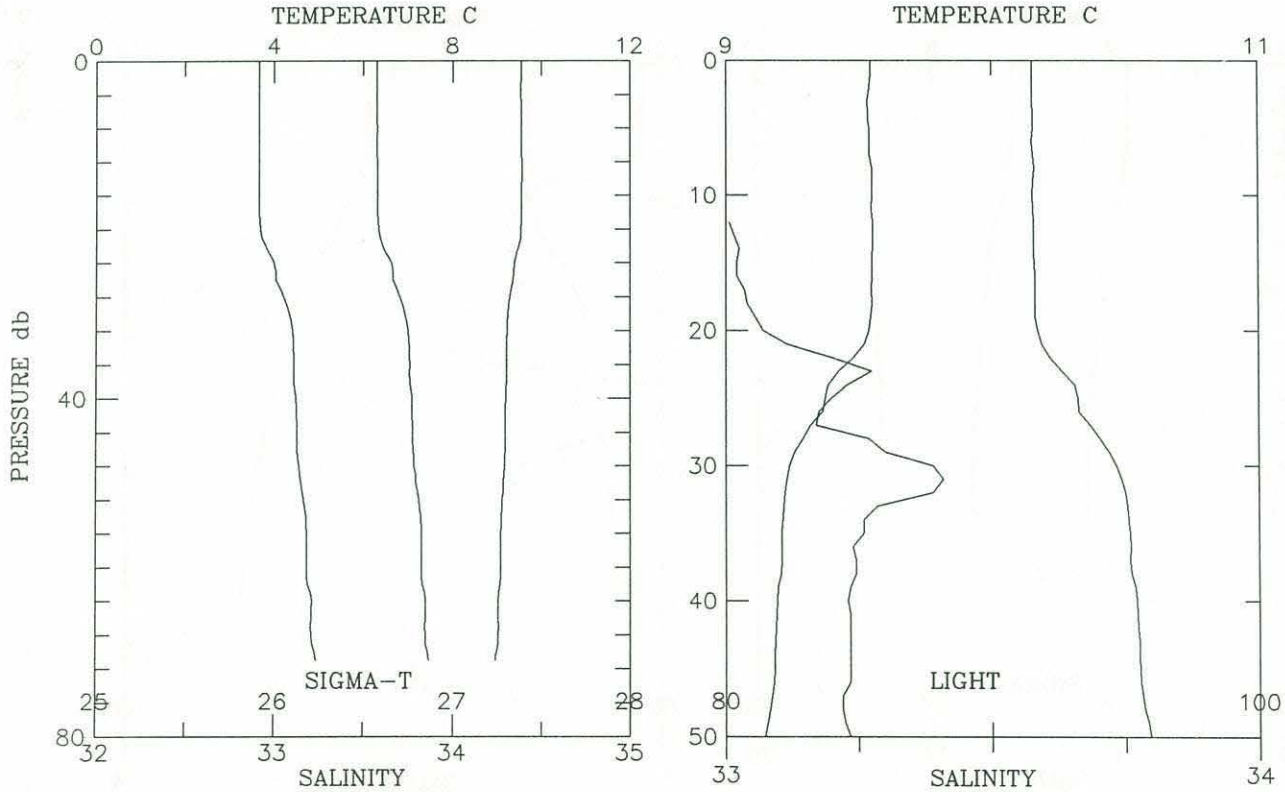
Cruise W8902 Station # 72 Depth m: 96 Time: 1989-02-28 12:27
Position: 38 32.20'N 123 23.40'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.562	33.548	25.891	0.0000	88.7
5.0		9.566	33.547	25.890	0.0107	88.8
10.0		9.561	33.547	25.891	0.0213	88.8
15.0		9.564	33.547	25.890	0.0320	88.8
20.0		9.572	33.548	25.890	0.0427	89.0
25.0		9.568	33.555	25.896	0.0534	90.0
30.0		9.463	33.611	25.957	0.0640	93.4
35.0		9.379	33.659	26.008	0.0742	93.8
40.0		9.335	33.687	26.037	0.0843	94.2
45.0		9.298	33.712	26.063	0.0943	93.9
50.0		9.222	33.777	26.125	0.1040	89.8
55.0		9.216	33.783	26.131	0.1136	89.6
60.0		9.216	33.797	26.142	0.1231	91.0
65.0		9.159	33.824	26.172	0.1326	91.1
70.0		9.148	33.828	26.177	0.1420	90.6
75.0		9.092	33.846	26.200	0.1513	90.4
80.0		9.022	33.860	26.223	0.1605	88.9
85.0		8.889	33.891	26.268	0.1695	85.8
86.0		8.888	33.892	26.269	0.1713	85.8



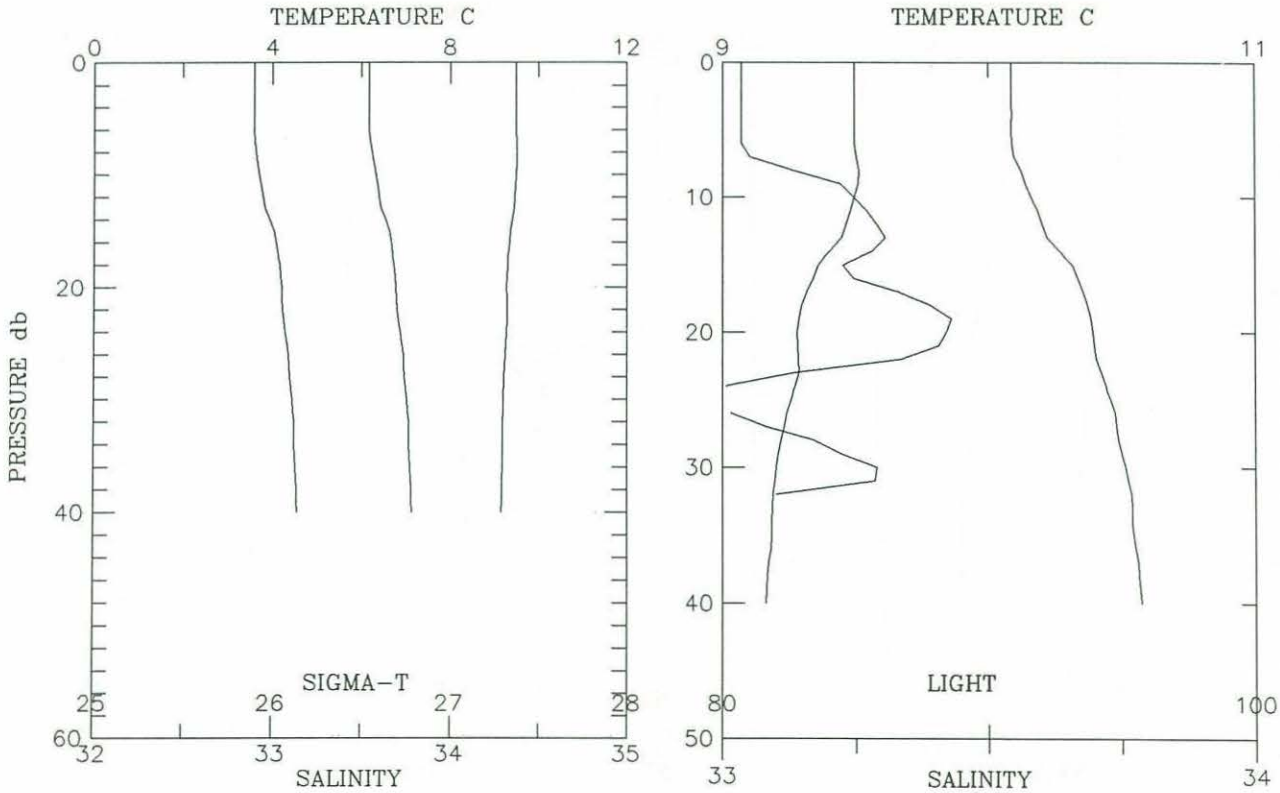
Cruise W8902 Station # 73 Depth m: 78 Time: 1989-02-28 13:03
Position: 38 33.40'N 123 21.90'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.546	33.577	25.917	0.0000	79.8
5.0		9.542	33.578	25.918	0.0105	79.7
10.0		9.552	33.577	25.916	0.0211	79.9
15.0		9.552	33.580	25.918	0.0316	80.4
20.0		9.540	33.586	25.925	0.0422	81.4
25.0		9.375	33.661	26.010	0.0525	84.0
30.0		9.239	33.733	26.089	0.0625	87.8
35.0		9.211	33.759	26.113	0.0722	85.2
40.0		9.193	33.771	26.125	0.0818	84.6
45.0		9.182	33.777	26.132	0.0914	84.7
50.0		9.148	33.796	26.152	0.1009	84.7
55.0		9.089	33.825	26.184	0.1103	85.1
60.0		9.082	33.828	26.188	0.1196	84.7
65.0		9.026	33.849	26.213	0.1289	83.2
70.0		8.990	33.860	26.228	0.1381	82.0
71.0		8.971	33.867	26.236	0.1399	81.8



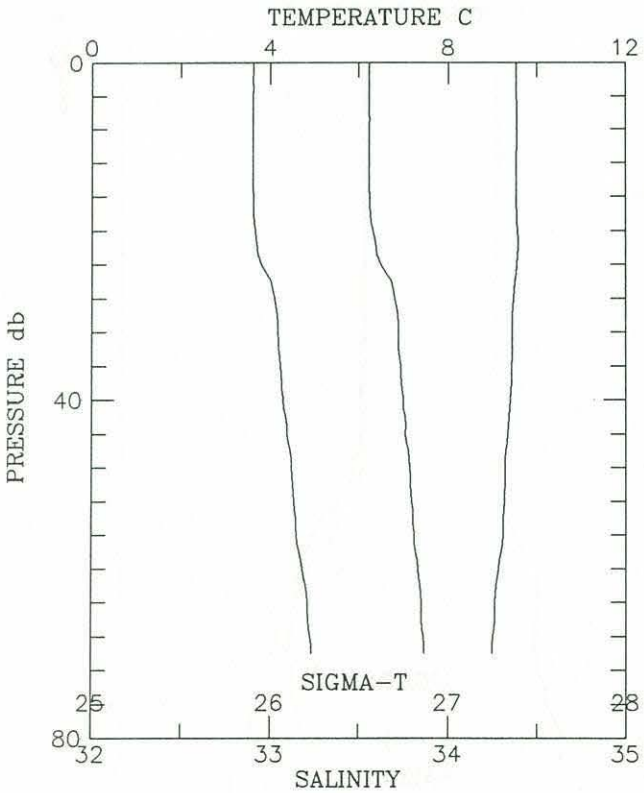
Cruise W8902 Station # 74 Depth m: 50 Time: 1989-02-28 14:10
Position: 38 28.40'N 123 14.00'W Depth Deck Offset: 0.00

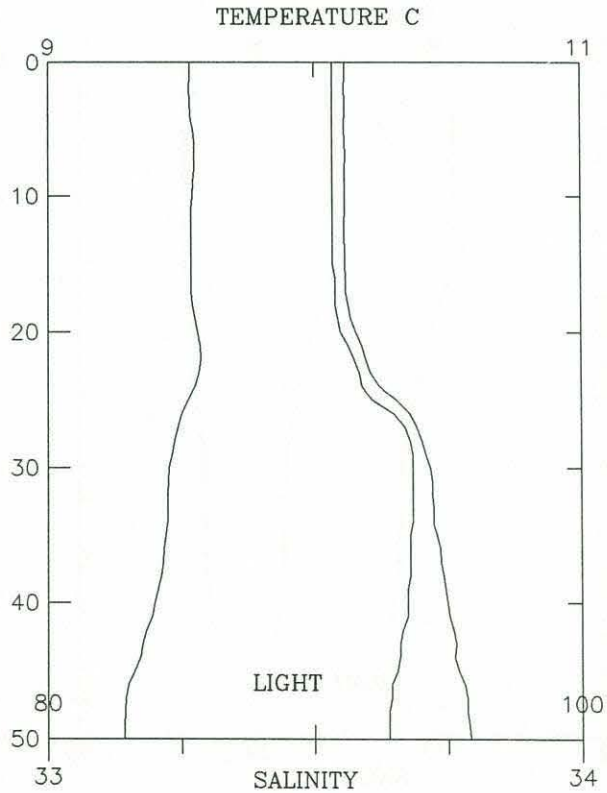
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.493	33.544	25.900	0.0000	80.7
5.0		9.493	33.544	25.899	0.0106	80.7
10.0		9.494	33.582	25.929	0.0212	84.9
15.0		9.357	33.659	26.011	0.0316	84.5
20.0		9.278	33.697	26.054	0.0416	88.4
25.0		9.256	33.730	26.083	0.0514	78.6
30.0		9.200	33.758	26.114	0.0611	85.8
35.0		9.182	33.772	26.128	0.0707	77.4
40.0		9.160	33.787	26.143	0.0803	72.7



Cruise W8902 Station # 75 Depth m: 77 Time: 1989-02-28 14:35
Position: 38 27.30'N 123 15.50'W Depth Deck Offset: 0.00

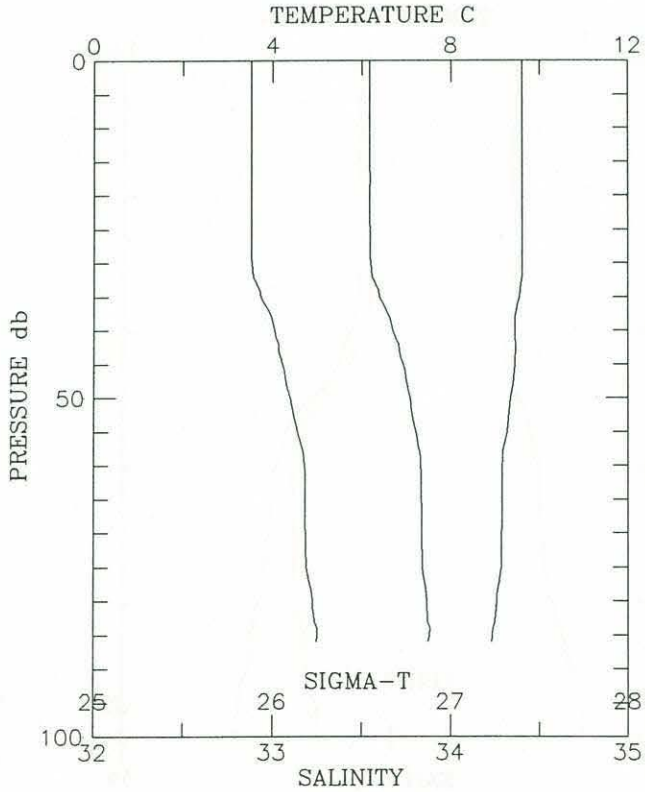
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.533	33.559	25.905	0.0000	90.7
5.0		9.544	33.558	25.902	0.0106	90.7
10.0		9.542	33.559	25.903	0.0212	90.7
15.0		9.537	33.559	25.904	0.0318	90.7
20.0		9.560	33.579	25.916	0.0424	91.0
25.0		9.525	33.654	25.980	0.0529	92.2
30.0		9.453	33.717	26.041	0.0630	93.7
35.0		9.440	33.730	26.054	0.0730	93.6
40.0		9.399	33.749	26.075	0.0829	93.5
45.0		9.323	33.769	26.103	0.0926	93.1
50.0		9.284	33.791	26.127	0.1023	92.8
55.0		9.243	33.809	26.147	0.1118	92.5
60.0		9.141	33.835	26.184	0.1212	92.8
65.0		9.052	33.852	26.212	0.1305	90.6
70.0		8.993	33.868	26.233	0.1396	83.3

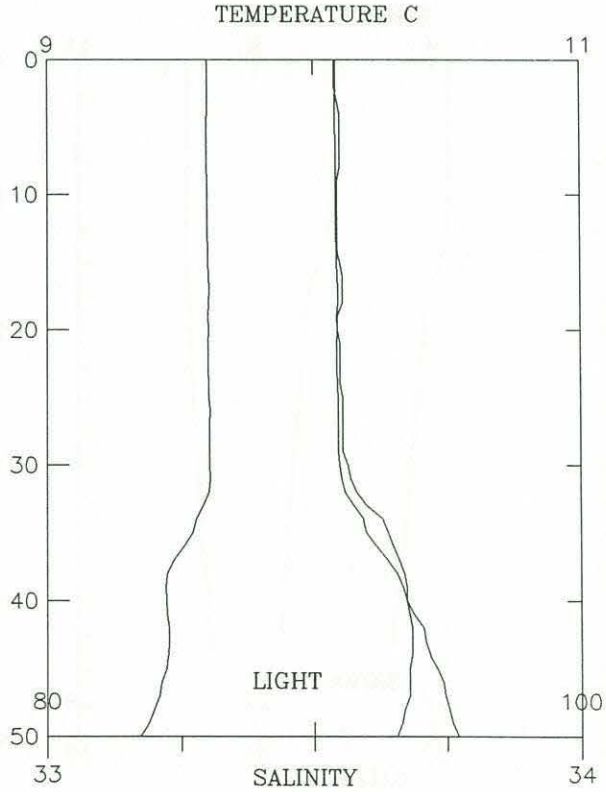




Cruise W8902 Station # 76 Depth m: 95 Time: 1989-02-28 15:03
Position: 38 26.00'N 123 17.10'W Depth Deck Offset: 0.00

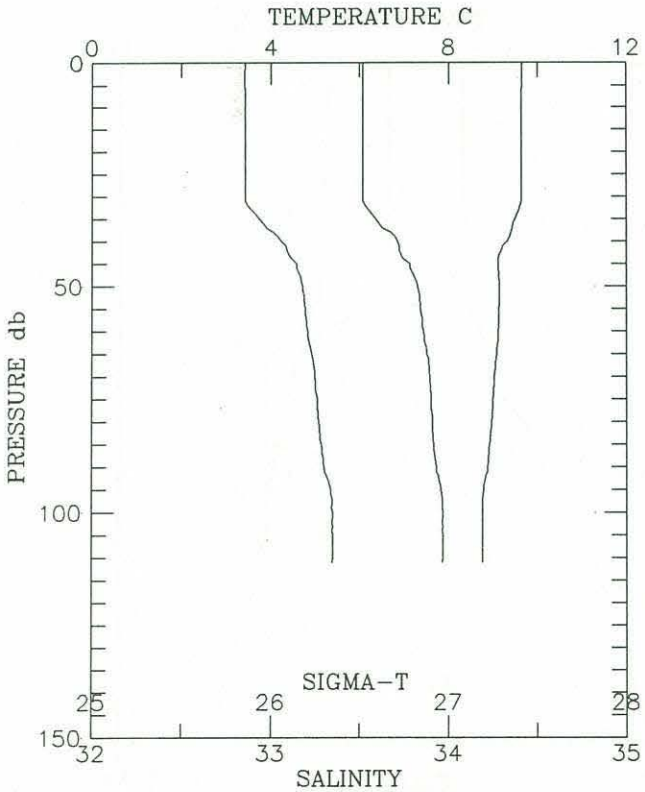
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.601	33.543	25.881	0.0000	90.8
5.0		9.598	33.542	25.881	0.0107	91.0
10.0		9.601	33.543	25.881	0.0214	90.9
15.0		9.604	33.544	25.881	0.0322	91.0
20.0		9.604	33.545	25.882	0.0429	90.9
25.0		9.606	33.546	25.883	0.0536	91.1
30.0		9.608	33.549	25.885	0.0644	91.3
35.0		9.546	33.599	25.934	0.0750	92.8
40.0		9.444	33.675	26.010	0.0853	93.5
45.0		9.445	33.732	26.054	0.0953	93.6
50.0		9.348	33.771	26.101	0.1051	93.1
55.0		9.267	33.805	26.140	0.1148	92.6
60.0		9.161	33.832	26.178	0.1242	91.4
65.0		9.152	33.835	26.182	0.1336	91.1
70.0		9.146	33.838	26.186	0.1429	90.9
75.0		9.132	33.840	26.189	0.1522	90.9
80.0		9.032	33.866	26.225	0.1615	89.7
85.0		8.935	33.883	26.254	0.1706	80.4
86.0		8.929	33.875	26.249	0.1724	78.8

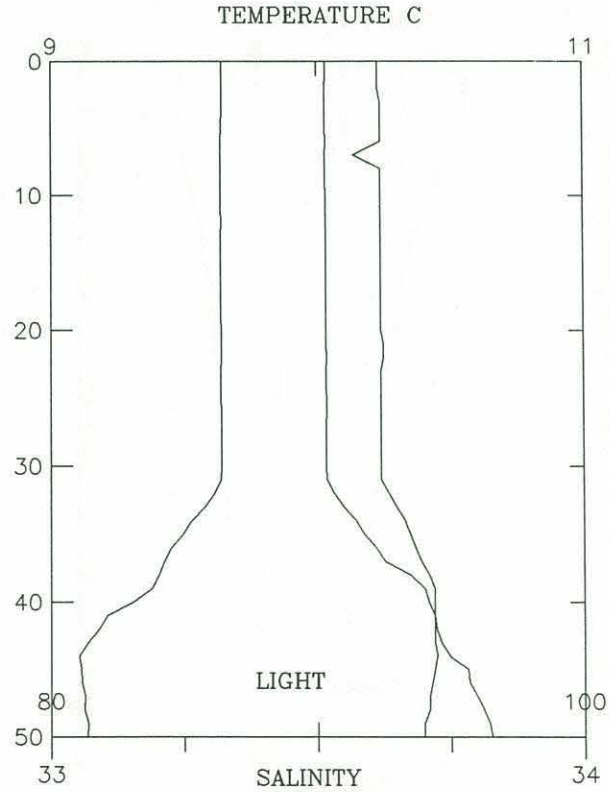




Cruise W8902 Station # 77 Depth m: 116 Time: 1989-02-28 15:46
Position: 38 23.10'N 123 20.90'W Depth Deck Offset: 0.00

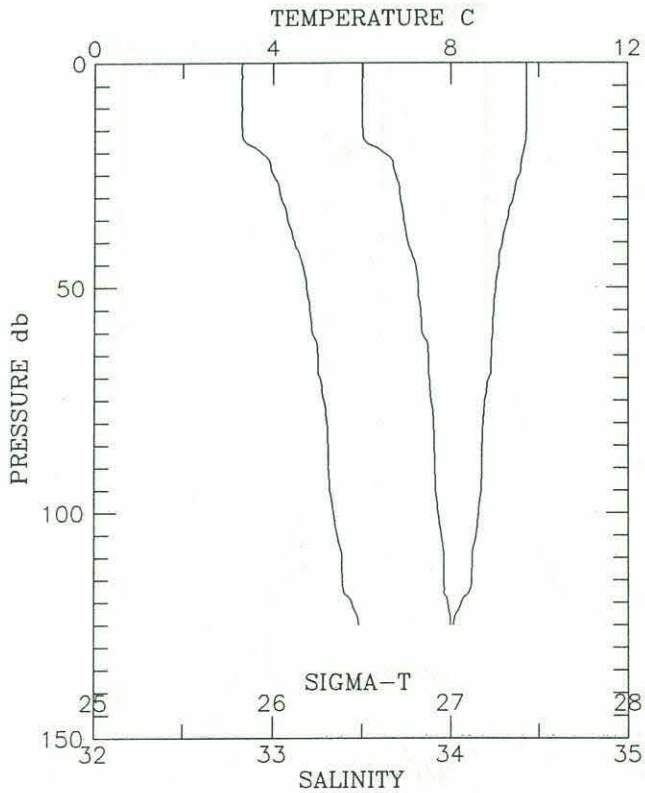
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.645	33.517	25.854	0.0000	92.3
10.0		9.640	33.517	25.854	0.0217	92.4
20.0		9.641	33.517	25.854	0.0434	92.4
30.0		9.641	33.517	25.854	0.0651	92.4
40.0		9.310	33.709	26.058	0.0861	94.4
50.0		9.136	33.826	26.178	0.1052	94.0
60.0		9.117	33.860	26.208	0.1238	93.8
70.0		9.030	33.896	26.249	0.1420	93.4
80.0		8.970	33.910	26.270	0.1600	93.5
90.0		8.884	33.931	26.300	0.1778	93.2
100.0		8.759	33.967	26.348	0.1951	88.6
110.0		8.760	33.967	26.348	0.2123	88.4
111.0		8.760	33.966	26.347	0.2140	88.5

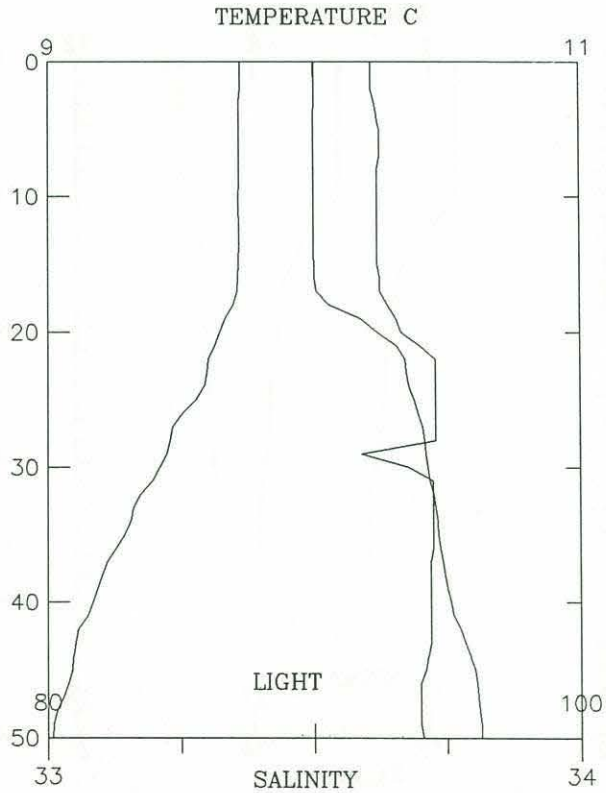




Cruise W8902 Station # 78 Depth m: 137 Time: 1989-02-28 16:32
Position: 38 21.00'N 123 23.70'W Depth Deck Offset: 0.00

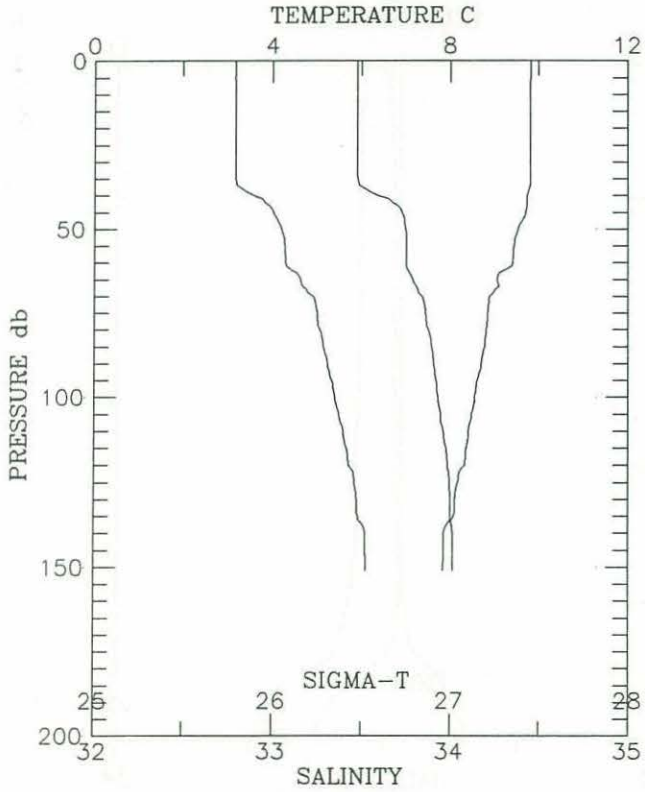
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.724	33.502	25.829	0.0000	92.2
10.0		9.716	33.500	25.829	0.0219	92.4
20.0		9.647	33.620	25.934	0.0437	93.3
30.0		9.422	33.715	26.045	0.0641	93.6
40.0		9.169	33.757	26.119	0.0836	94.4
50.0		9.018	33.814	26.187	0.1025	94.1
60.0		8.945	33.838	26.217	0.1209	94.2
70.0		8.859	33.879	26.263	0.1390	94.3
80.0		8.732	33.902	26.301	0.1568	94.4
90.0		8.708	33.909	26.310	0.1743	94.3
100.0		8.629	33.928	26.337	0.1917	94.3
110.0		8.484	33.960	26.385	0.2088	94.0
120.0		8.238	33.984	26.441	0.2255	92.5
125.0		8.060	33.999	26.479	0.2336	89.9

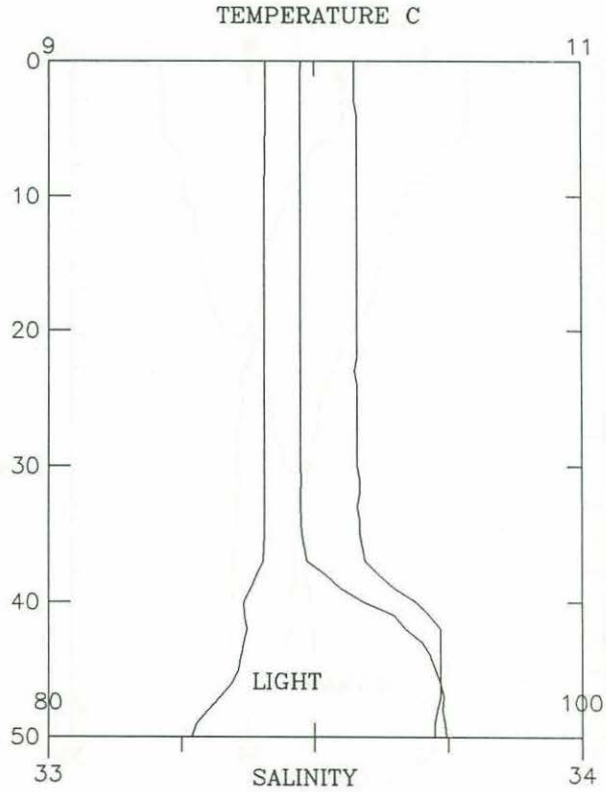




Cruise W8902 Station # 79 Depth m: 161 Time: 1989-02-28 17:06
Position: 38 19.70'N 123 25.30'W Depth Deck Offset: 0.00

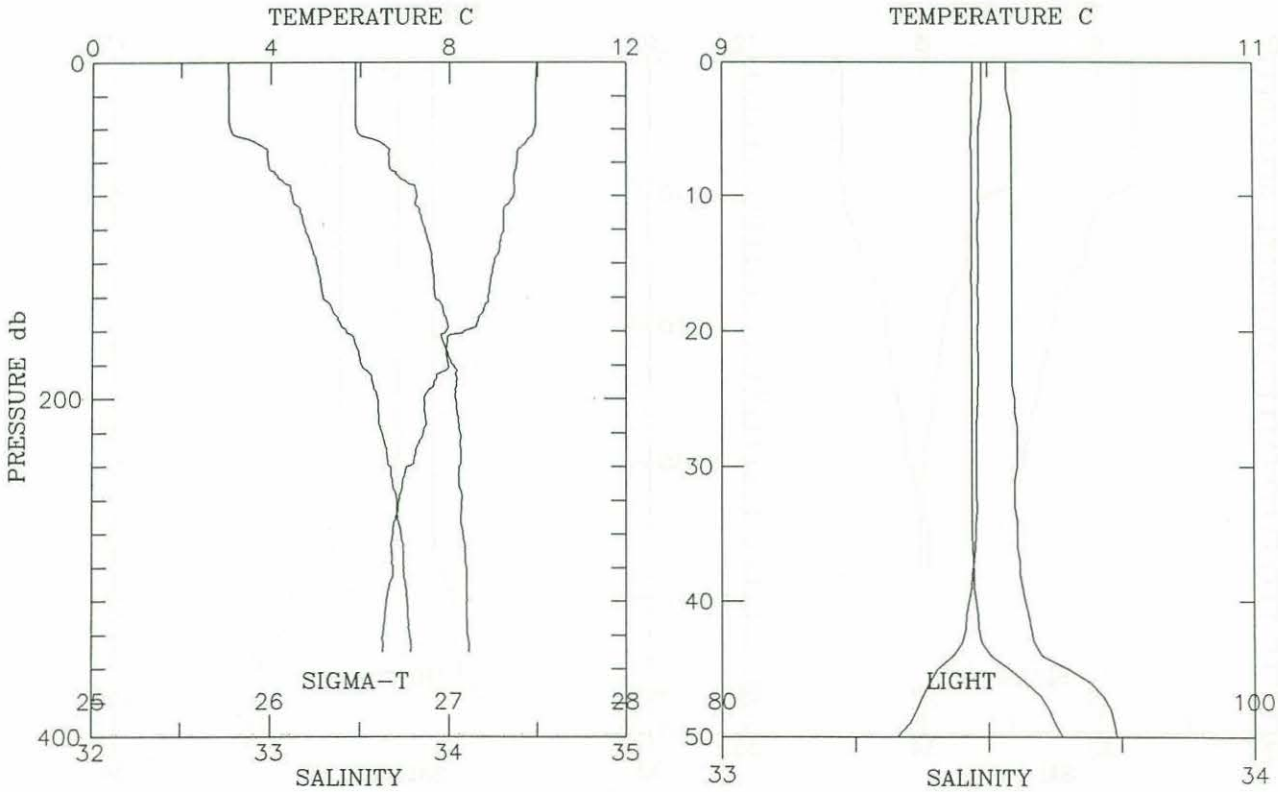
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.816	33.475	25.792	0.0000	91.5
10.0		9.812	33.474	25.792	0.0223	91.6
20.0		9.812	33.474	25.792	0.0446	91.6
30.0		9.812	33.474	25.792	0.0669	91.6
40.0		9.734	33.591	25.897	0.0891	93.8
50.0		9.540	33.747	26.051	0.1095	94.5
60.0		9.414	33.751	26.074	0.1293	94.3
70.0		8.892	33.843	26.230	0.1483	94.1
80.0		8.822	33.876	26.267	0.1663	94.1
90.0		8.710	33.908	26.309	0.1841	94.2
100.0		8.562	33.931	26.350	0.2014	94.2
110.0		8.415	33.962	26.397	0.2184	94.0
120.0		8.339	33.985	26.427	0.2350	93.1
130.0		8.110	34.002	26.474	0.2511	93.3
140.0		7.860	34.015	26.521	0.2670	93.7
150.0		7.843	34.017	26.525	0.2826	94.0
151.0		7.843	34.017	26.525	0.2842	94.0





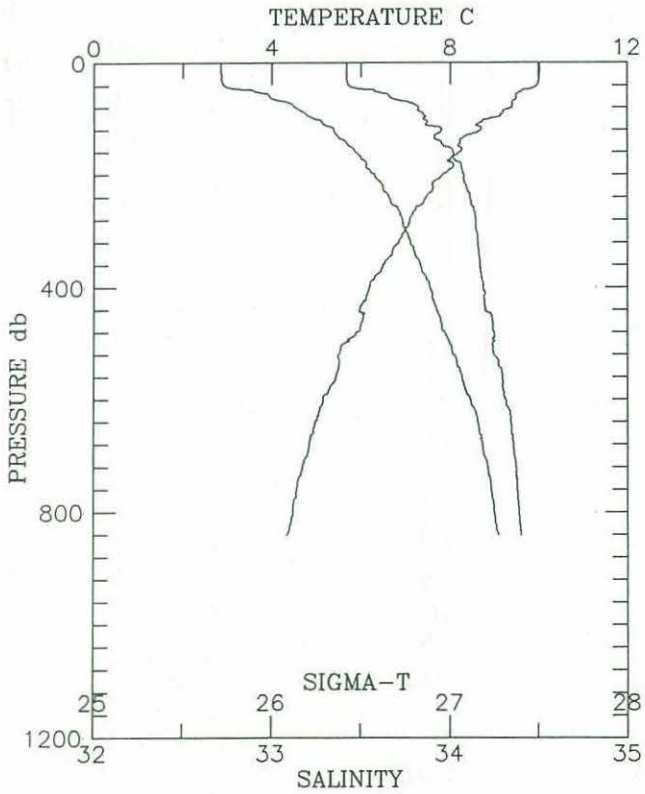
Cruise W8902 Station # 80 Depth m: 365 Time: 1989-02-28 18:17
Position: 38 15.60'N 123 30.90'W Depth Deck Offset: 0.00

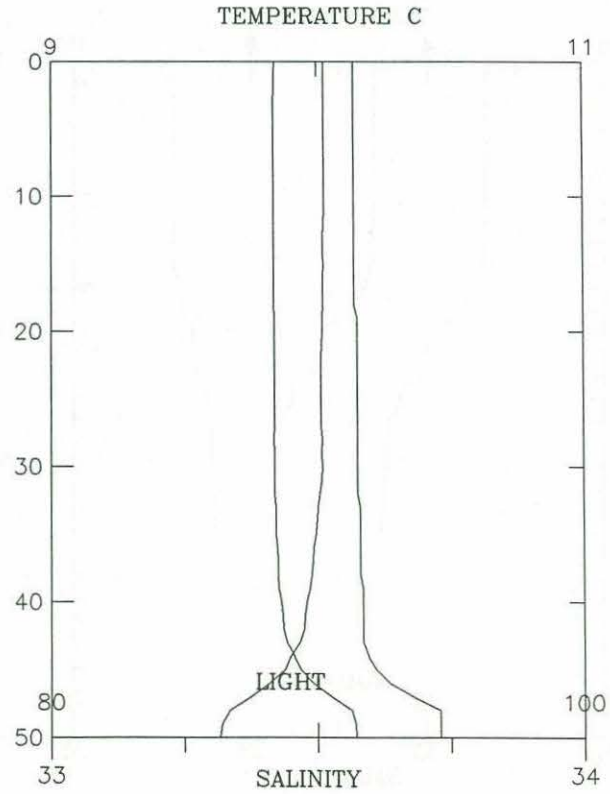
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.978	33.472	25.763	0.0000	90.7
10.0		9.964	33.470	25.764	0.0226	90.9
20.0		9.962	33.470	25.764	0.0451	90.9
30.0		9.956	33.470	25.765	0.0677	91.1
40.0		9.928	33.477	25.775	0.0903	91.4
50.0		9.659	33.639	25.947	0.1121	94.8
60.0		9.524	33.660	25.985	0.1328	94.6
80.0		9.447	33.815	26.119	0.1726	94.4
100.0		9.224	33.862	26.192	0.2106	94.3
150.0		8.717	33.969	26.356	0.3006	94.0
200.0		7.436	34.037	26.599	0.3802	95.5
250.0		6.949	34.056	26.682	0.4534	95.8
300.0		6.740	34.099	26.745	0.5229	96.0
350.0		6.503	34.113	26.787	0.5904	95.3



Cruise W8902 Station # 81 Depth m: 853 Time: 1989-02-28 19:18
Position: 38 13.40'N 123 34.10'W Depth Deck Offset: 0.00

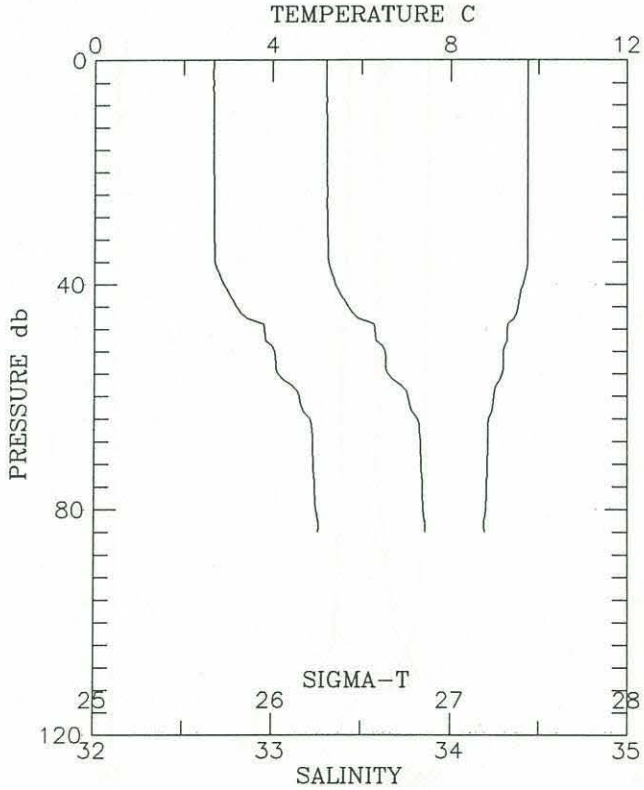
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.028	33.421	25.715	0.0000	91.4
10.0		10.028	33.419	25.713	0.0230	91.4
20.0		10.019	33.420	25.716	0.0461	91.5
30.0		10.019	33.420	25.716	0.0691	91.5
40.0		9.960	33.432	25.735	0.0921	91.7
50.0		9.635	33.572	25.898	0.1144	94.6
60.0		9.489	33.656	25.988	0.1352	94.5
80.0		9.394	33.822	26.133	0.1748	94.5
100.0		8.870	33.848	26.237	0.2123	94.5
150.0		8.169	33.961	26.433	0.2982	95.5
200.0		7.829	34.077	26.574	0.3772	95.8
250.0		7.392	34.116	26.668	0.4510	96.0
300.0		6.970	34.150	26.753	0.5205	95.9
400.0		6.190	34.186	26.885	0.6510	95.8
500.0		5.604	34.237	26.999	0.7713	95.8
600.0		5.155	34.314	27.114	0.8813	95.7
700.0		4.801	34.364	27.194	0.9818	95.6
800.0		4.484	34.391	27.251	1.0767	95.3
841.0		4.352	34.402	27.274	1.1145	95.2

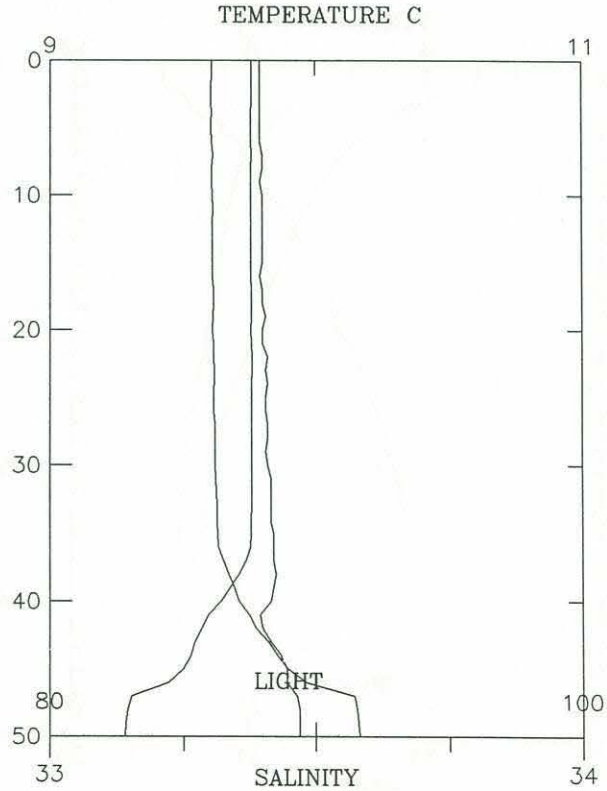




Cruise W8902 Station # 207 Depth m: 95 Time: 1989-03-05 10:32
Position: 39 9.90'N 123 48.20'W Depth Deck Offset: 0.00

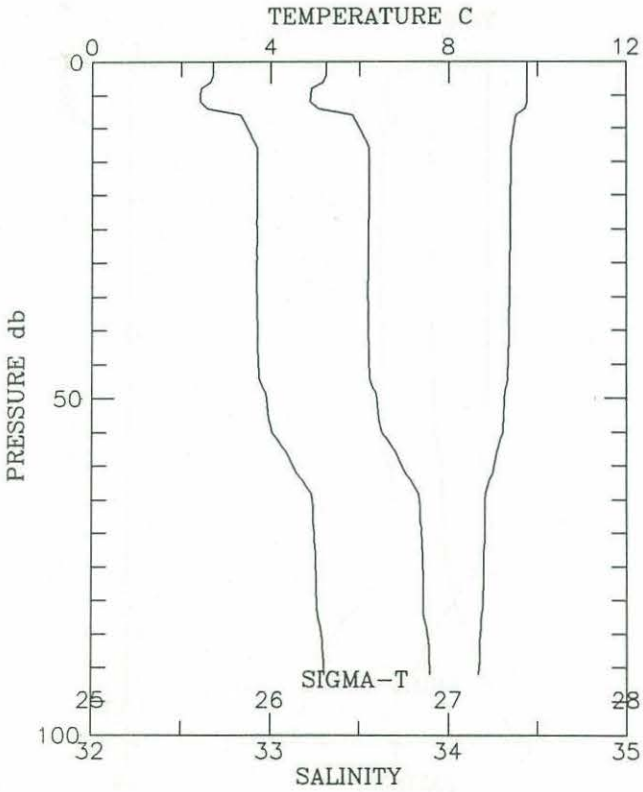
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.757	33.304	25.669	0.0000	87.9
5.0		9.755	33.303	25.668	0.0117	87.9
10.0		9.756	33.305	25.670	0.0235	88.0
15.0		9.756	33.305	25.670	0.0352	88.0
20.0		9.757	33.305	25.670	0.0469	88.0
25.0		9.759	33.308	25.672	0.0587	88.1
30.0		9.759	33.310	25.673	0.0704	88.2
35.0		9.755	33.315	25.678	0.0822	88.4
40.0		9.642	33.355	25.728	0.0938	88.3
45.0		9.500	33.448	25.823	0.1050	88.9
50.0		9.279	33.582	25.964	0.1156	89.4
55.0		9.196	33.639	26.022	0.1258	90.0
60.0		8.982	33.763	26.153	0.1356	90.1
65.0		8.852	33.825	26.222	0.1449	89.6
70.0		8.845	33.834	26.230	0.1541	89.3
75.0		8.820	33.844	26.242	0.1632	88.5
80.0		8.802	33.849	26.249	0.1722	88.3
84.0		8.771	33.858	26.260	0.1794	87.9

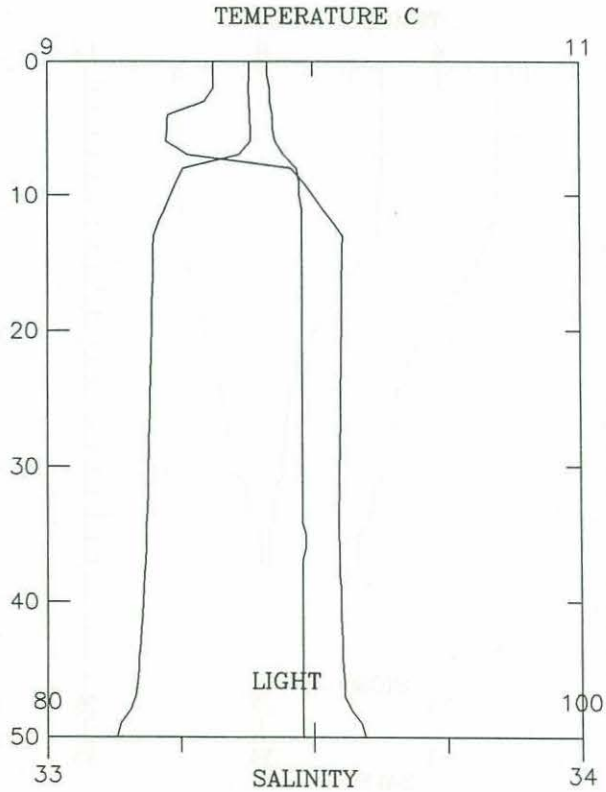




Cruise W8902 Station # 208 Depth m: 101 Time: 1989-03-05 10:59
Position: 39 10.00'N 123 48.50'W Depth Deck Offset: 0.00

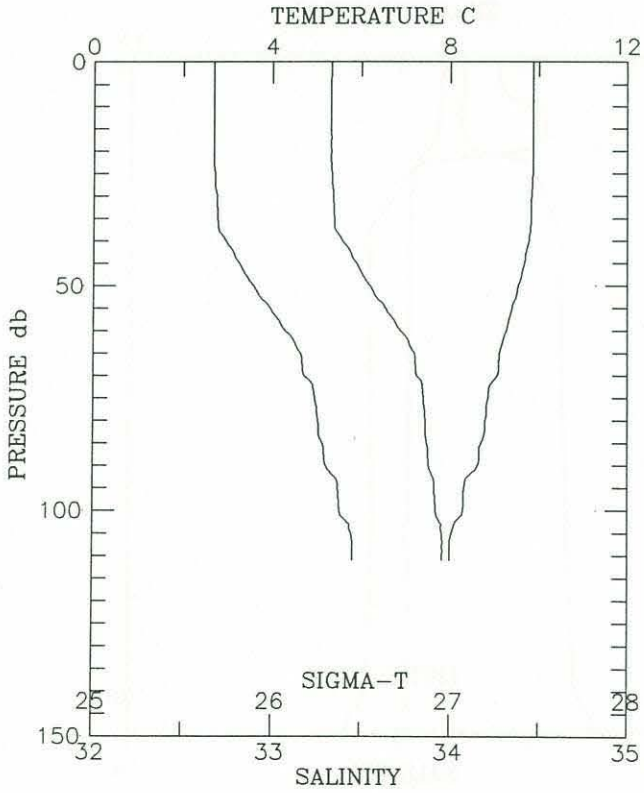
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.762	33.314	25.676	0.0000	88.3
5.0		9.766	33.226	25.606	0.0118	88.5
10.0	*	9.465	33.500	25.870	0.0232	89.5
15.0	*	9.396	33.555	25.924	0.0338	89.6
20.0	*	9.391	33.553	25.923	0.0444	89.6
25.0	*	9.384	33.551	25.923	0.0549	89.6
30.0	*	9.378	33.549	25.922	0.0655	89.6
35.0		9.370	33.548	25.923	0.0760	89.7
40.0		9.357	33.551	25.927	0.0866	89.6
45.0		9.341	33.555	25.933	0.0971	89.6
50.0		9.259	33.596	25.978	0.1076	89.6
55.0		9.221	33.626	26.008	0.1178	90.1
60.0		9.018	33.739	26.128	0.1277	90.2
65.0		8.825	33.838	26.236	0.1370	89.7
70.0		8.820	33.850	26.247	0.1461	89.1
75.0		8.790	33.857	26.257	0.1551	88.6
80.0		8.777	33.860	26.261	0.1641	88.4
85.0		8.717	33.882	26.288	0.1731	88.6
90.0		8.685	33.895	26.303	0.1819	89.2
91.0		8.675	33.897	26.306	0.1836	89.4

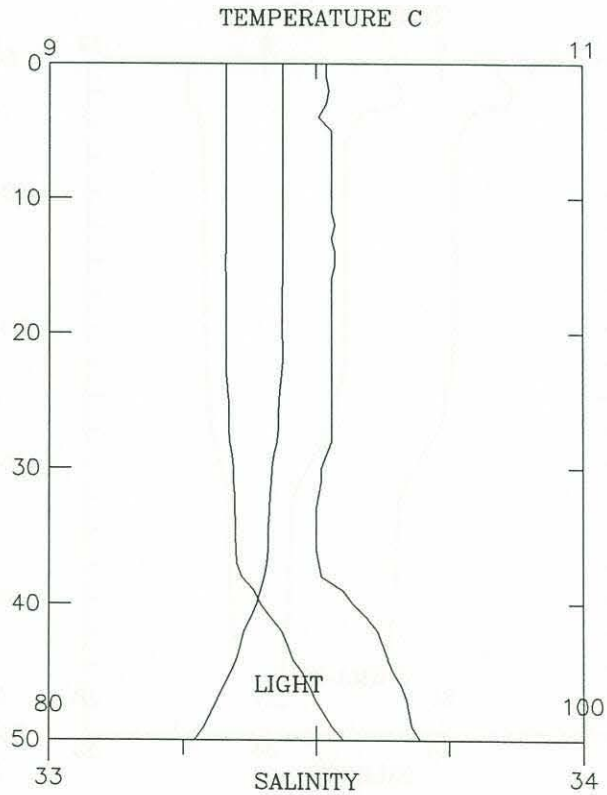




Cruise W8902 Station # 209 Depth m: 116 Time: 1989-03-05 11:41
Position: 39 9.60'N 123 51.50'W Depth Deck Offset: 0.00

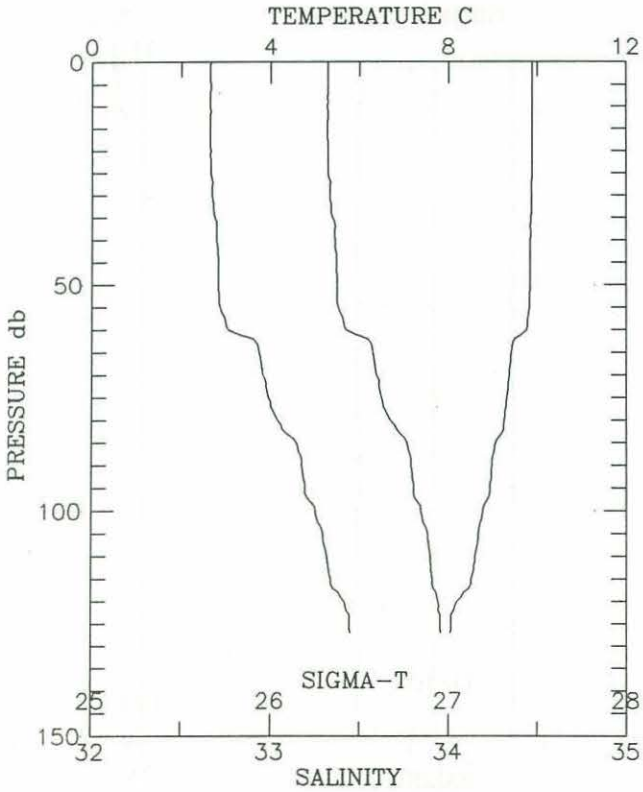
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.874	33.331	25.670	0.0000	90.4
10.0		9.874	33.330	25.670	0.0235	90.6
20.0		9.871	33.331	25.671	0.0469	90.6
30.0		9.834	33.344	25.687	0.0704	90.2
40.0		9.774	33.395	25.737	0.0936	91.4
50.0		9.541	33.551	25.897	0.1158	93.9
60.0		9.271	33.722	26.075	0.1364	94.5
70.0		9.064	33.813	26.179	0.1554	94.1
80.0		8.797	33.862	26.260	0.1736	94.0
90.0		8.633	33.882	26.301	0.1914	94.2
100.0		8.298	33.921	26.382	0.2085	94.1
110.0		8.008	33.959	26.455	0.2249	91.2
111.0		8.008	33.959	26.455	0.2265	91.1

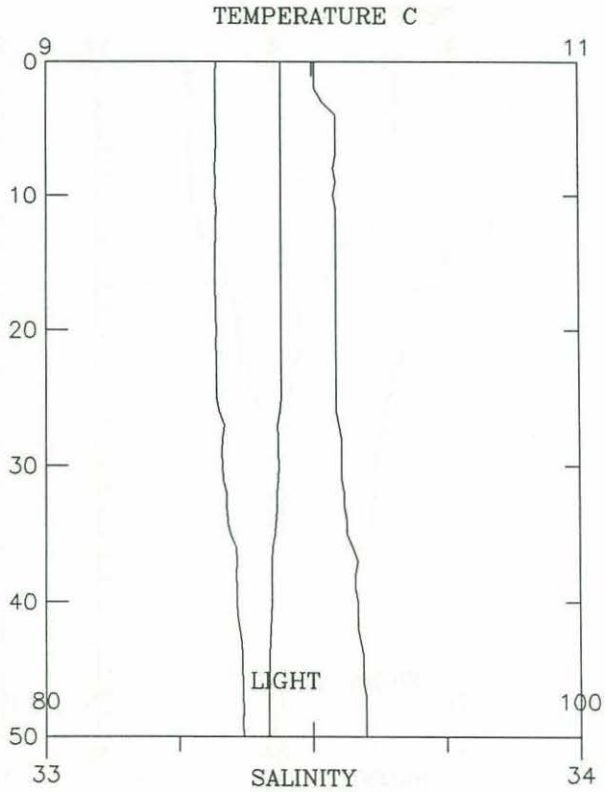




Cruise W8902 Station # 210 Depth m: 130 Time: 1989-03-05 12:37
Position: 39 9.20'N 123 54.30'W Depth Deck Offset: 0.00

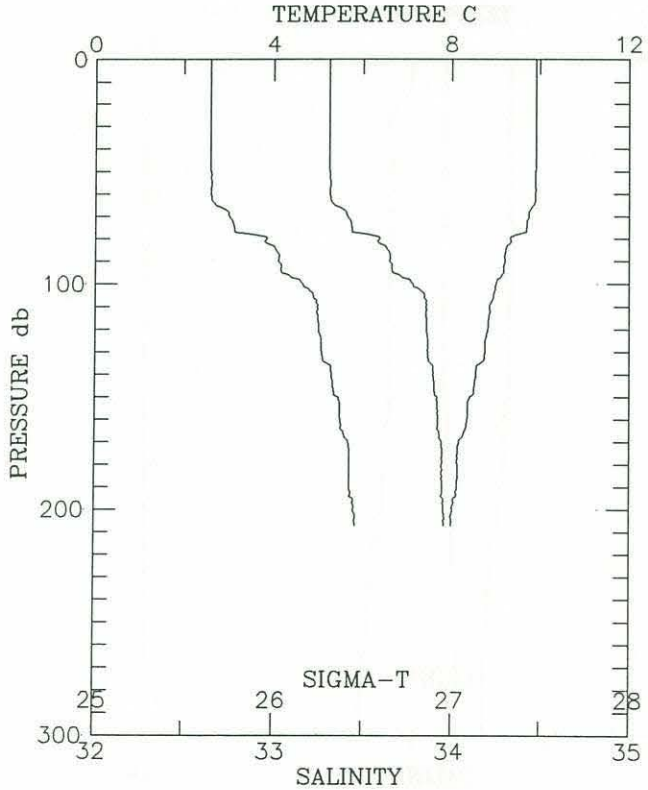
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.884	33.321	25.661	0.0000	90.1
10.0		9.884	33.319	25.659	0.0235	90.8
20.0		9.884	33.321	25.661	0.0471	90.9
30.0		9.873	33.332	25.671	0.0707	91.1
40.0		9.847	33.359	25.697	0.0940	91.7
50.0		9.835	33.371	25.708	0.1172	92.0
60.0		9.769	33.424	25.760	0.1403	92.9
70.0		9.372	33.593	25.958	0.1615	94.7
80.0		9.252	33.676	26.042	0.1820	94.9
90.0		8.977	33.791	26.176	0.2013	95.0
100.0		8.778	33.846	26.250	0.2199	94.9
110.0		8.606	33.899	26.318	0.2377	94.0
120.0		8.193	33.942	26.414	0.2549	93.8
127.0		8.054	33.957	26.447	0.2664	90.8

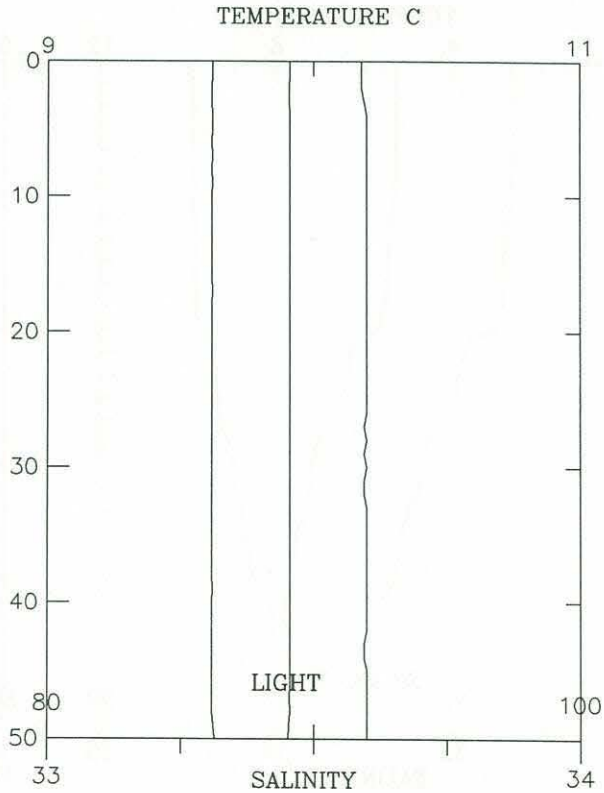




Cruise W8902 Station # 211 Depth m: 212 Time: 1989-03-05 13:27
Position: 39 8.94'N 123 57.24'W Depth Deck Offset: 0.00

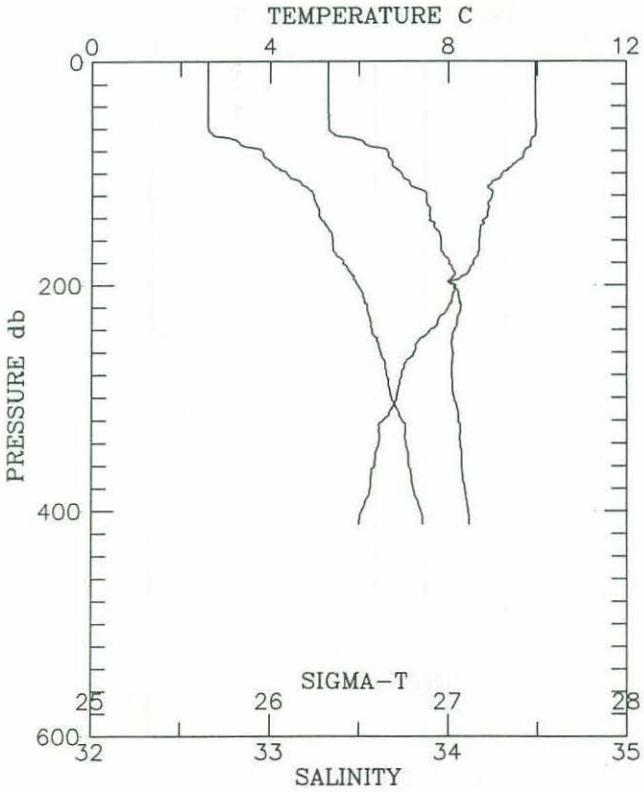
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.910	33.310	25.648	0.0000	91.8
10.0		9.910	33.309	25.647	0.0237	92.0
20.0		9.910	33.309	25.647	0.0474	92.0
30.0		9.910	33.309	25.647	0.0711	92.0
40.0		9.910	33.309	25.647	0.0948	92.0
50.0		9.903	33.314	25.652	0.1186	92.0
60.0		9.903	33.313	25.651	0.1423	92.1
70.0		9.749	33.412	25.754	0.1656	93.3
80.0		9.332	33.595	25.966	0.1878	94.9
90.0		9.210	33.650	26.028	0.2083	95.1
100.0		9.002	33.781	26.164	0.2280	95.2
110.0		8.862	33.857	26.246	0.2465	95.1
120.0		8.825	33.859	26.253	0.2647	95.1
130.0		8.757	33.866	26.269	0.2827	94.9
140.0		8.563	33.897	26.323	0.3005	94.9
150.0		8.416	33.921	26.364	0.3179	94.8
160.0		8.361	33.924	26.375	0.3349	94.6
170.0		8.176	33.946	26.420	0.3519	92.6
180.0		8.147	33.948	26.426	0.3685	91.9
190.0		8.144	33.949	26.427	0.3851	91.6
200.0		8.031	33.957	26.450	0.4015	91.2
207.0		8.005	33.963	26.459	0.4130	90.9

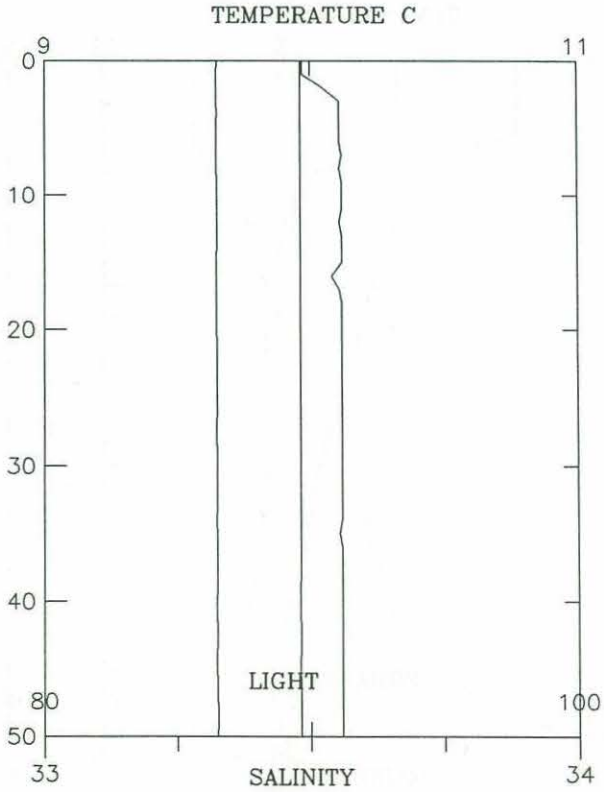




Cruise W8902 Station # 212 Depth m: 410 Time: 1989-03-05 14:11
Position: 39 8.57'N 123 59.54'W Depth Deck Offset: 0.00

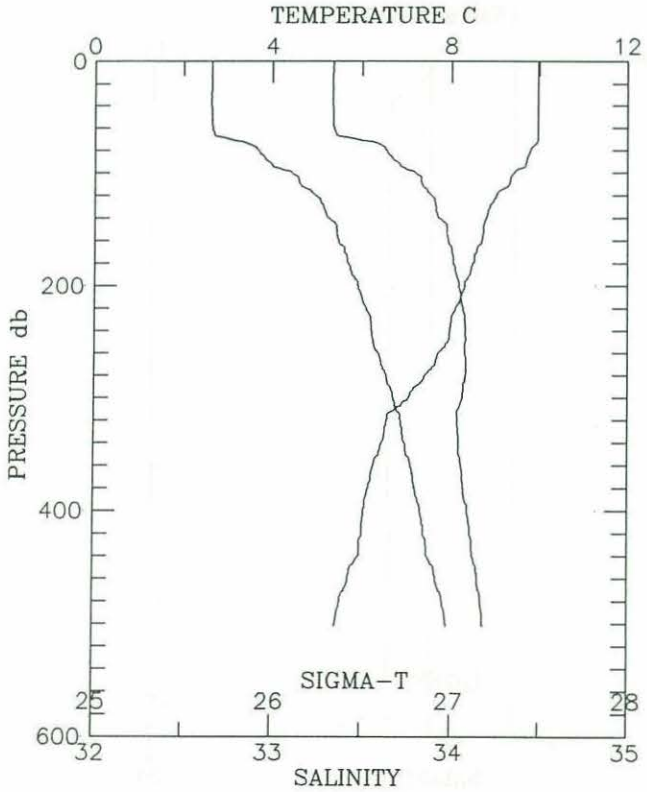
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.964	33.325	25.651	0.0000	89.7
10.0		9.963	33.325	25.651	0.0236	91.2
20.0		9.963	33.324	25.650	0.0473	91.2
30.0		9.963	33.325	25.651	0.0710	91.2
40.0		9.962	33.324	25.650	0.0947	91.2
50.0		9.964	33.326	25.652	0.1184	91.2
60.0		9.965	33.328	25.653	0.1421	91.2
80.0		9.711	33.657	25.952	0.1872	94.9
100.0		9.210	33.732	26.092	0.2280	95.0
150.0		8.713	33.932	26.328	0.3196	95.3
200.0		8.159	34.036	26.493	0.4039	95.5
250.0		7.321	34.018	26.601	0.4815	95.8
300.0		6.828	34.032	26.680	0.5547	95.7
400.0		6.054	34.112	26.844	0.6898	95.1
412.0		5.989	34.118	26.857	0.7051	94.4

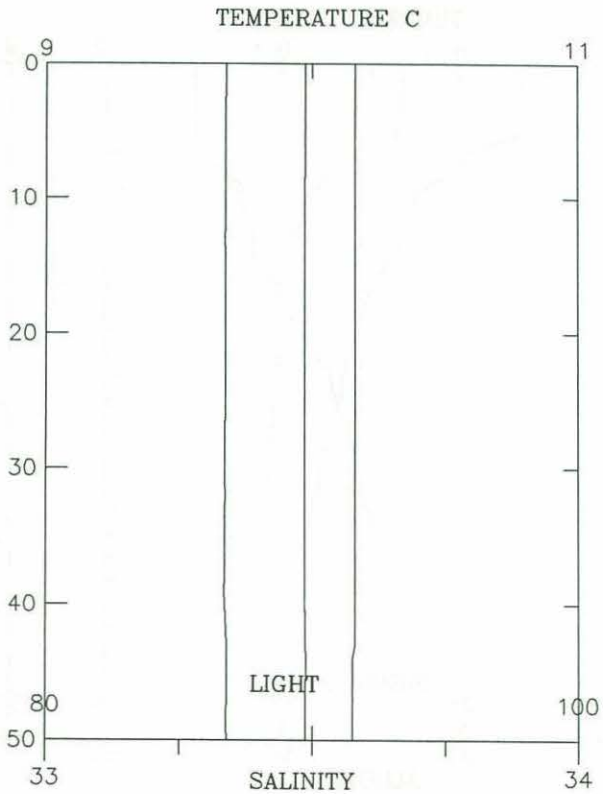




Cruise W8902 Station # 213 Depth m: 565 Time: 1989-03-05 15:10
Position: 39 8.00'N 124 2.73'W Depth Deck Offset: 0.00

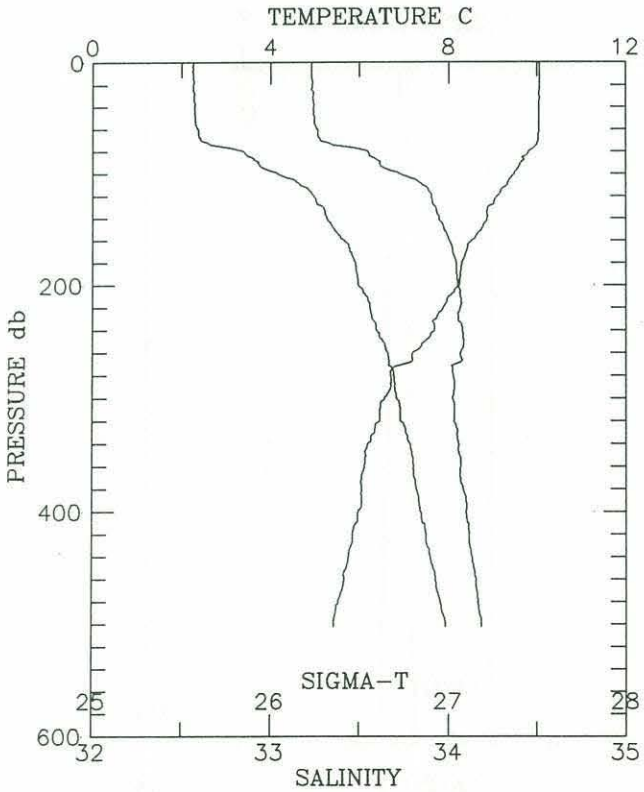
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.974	33.338	25.659	0.0000	91.6
10.0		9.973	33.336	25.658	0.0236	91.6
20.0		9.972	33.336	25.658	0.0472	91.6
30.0		9.971	33.335	25.657	0.0708	91.6
40.0		9.972	33.335	25.657	0.0944	91.6
50.0		9.975	33.339	25.660	0.1181	91.5
60.0		9.974	33.345	25.665	0.1417	91.6
80.0		9.798	33.636	25.921	0.1868	94.9
100.0		9.425	33.799	26.110	0.2280	94.7
150.0		8.729	33.976	26.359	0.3188	95.3
200.0		8.309	34.047	26.479	0.4023	95.4
250.0		7.934	34.080	26.561	0.4808	95.6
300.0		7.055	34.067	26.677	0.5551	95.9
400.0		6.055	34.094	26.830	0.6914	95.8
500.0		5.438	34.184	26.978	0.8151	95.6
502.0		5.432	34.184	26.978	0.8174	95.6

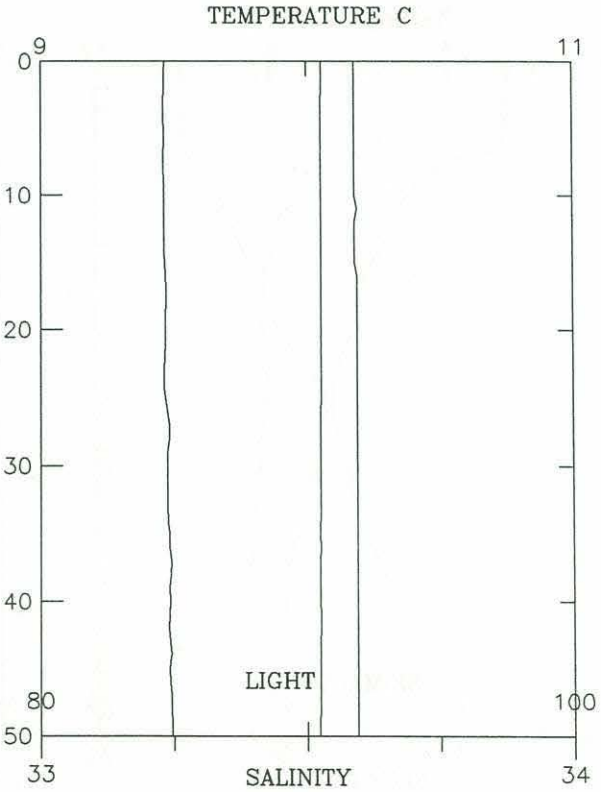




Cruise W8902 Station # 214 Depth m: 920 Time: 1989-03-05 16:43
Position: 39 7.33'N 124 8.97'W Depth Deck Offset: 0.00

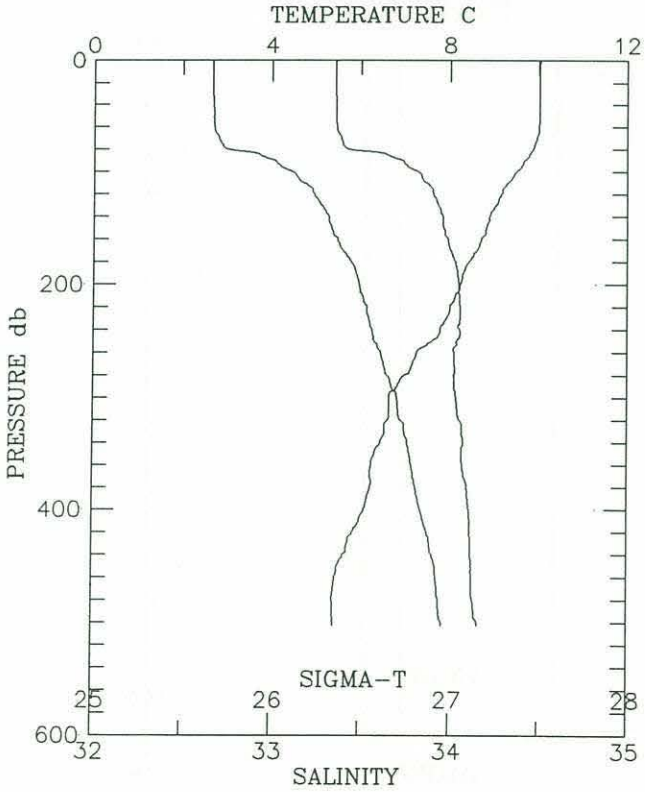
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.055	33.233	25.564	0.0000	91.8
10.0		10.053	33.232	25.563	0.0245	91.8
20.0		10.053	33.234	25.565	0.0490	91.9
30.0		10.052	33.238	25.568	0.0734	91.9
40.0		10.050	33.243	25.572	0.0979	91.9
50.0		10.047	33.247	25.576	0.1224	91.9
60.0		10.035	33.266	25.593	0.1468	92.2
80.0		9.809	33.547	25.850	0.1942	94.6
100.0		9.481	33.723	26.042	0.2365	94.2
150.0		8.727	33.976	26.359	0.3275	95.2
200.0		8.243	34.051	26.492	0.4093	95.5
250.0		7.452	34.084	26.634	0.4859	95.9
300.0		6.557	34.025	26.711	0.5575	96.0
400.0		5.978	34.100	26.845	0.6911	95.9
500.0		5.426	34.188	26.982	0.8135	95.6
502.0		5.424	34.188	26.982	0.8158	95.6

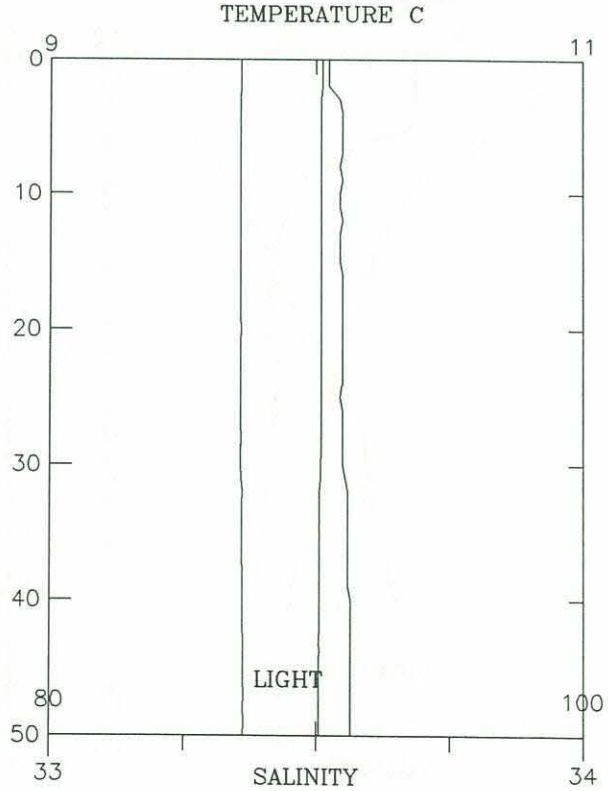




Cruise W8902 Station # 215 Depth m: 1140 Time: 1989-03-05 20:25
Position: 38 51.89'N 124 0.59'W Depth Deck Offset: 0.00

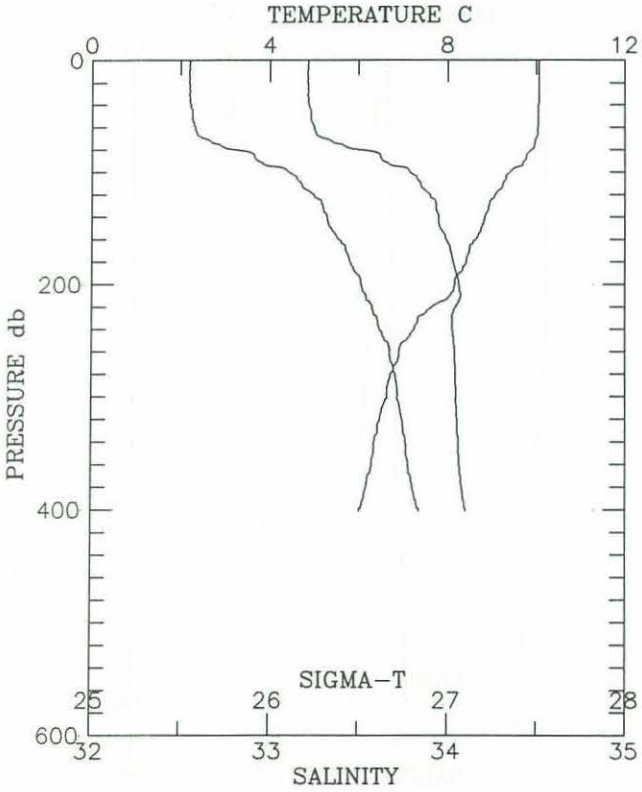
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.025	33.359	25.667	0.0000	90.5
10.0		10.020	33.357	25.666	0.0235	90.9
20.0		10.019	33.358	25.667	0.0470	91.0
30.0		10.018	33.357	25.667	0.0705	91.0
40.0		10.012	33.361	25.671	0.0941	91.3
50.0		10.010	33.362	25.672	0.1176	91.3
60.0		10.007	33.366	25.676	0.1411	91.5
80.0		9.863	33.430	25.750	0.1877	93.5
100.0		9.482	33.821	26.118	0.2289	95.0
150.0		8.815	33.965	26.337	0.3198	95.0
200.0		8.240	34.051	26.493	0.4029	95.6
250.0		7.591	34.039	26.579	0.4810	95.8
300.0		6.655	34.038	26.708	0.5542	95.8
400.0		6.095	34.113	26.840	0.6891	96.0
500.0		5.426	34.160	26.960	0.8118	96.1
503.0		5.426	34.161	26.961	0.8153	96.1

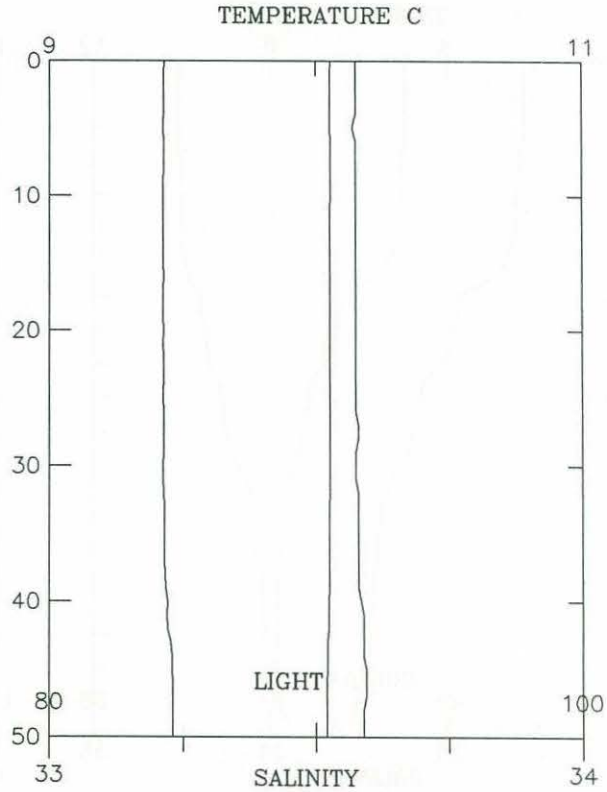




Cruise W8902 Station # 216 Depth m: 415 Time: 1989-03-05 21:40
Position: 38 52.91'N 123 58.19'W Depth Deck Offset: 0.00

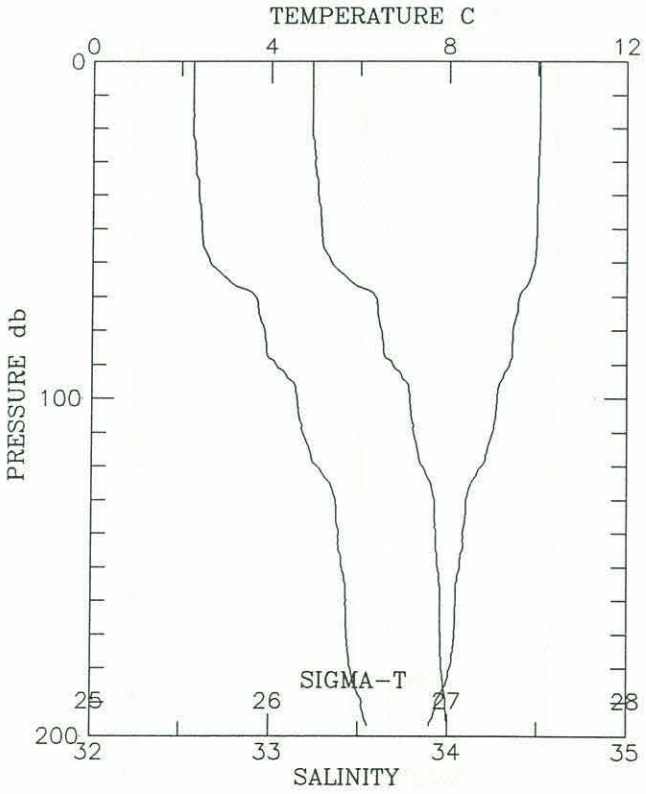
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.055	33.215	25.550	0.0000	91.5
10.0		10.057	33.213	25.548	0.0246	91.5
20.0		10.054	33.214	25.549	0.0492	91.5
30.0		10.054	33.213	25.548	0.0739	91.5
40.0		10.049	33.221	25.555	0.0986	91.7
50.0		10.043	33.231	25.564	0.1231	91.8
60.0		10.032	33.250	25.581	0.1476	91.9
80.0		9.897	33.515	25.810	0.1952	94.3
100.0		9.409	33.790	26.106	0.2369	95.1
150.0		8.747	33.963	26.346	0.3276	95.4
200.0		8.163	34.064	26.515	0.4100	95.4
250.0		7.064	34.034	26.649	0.4858	94.2
300.0		6.637	34.048	26.718	0.5566	94.8
400.0		6.027	34.102	26.840	0.6913	95.1
401.0		6.026	34.103	26.841	0.6926	95.2

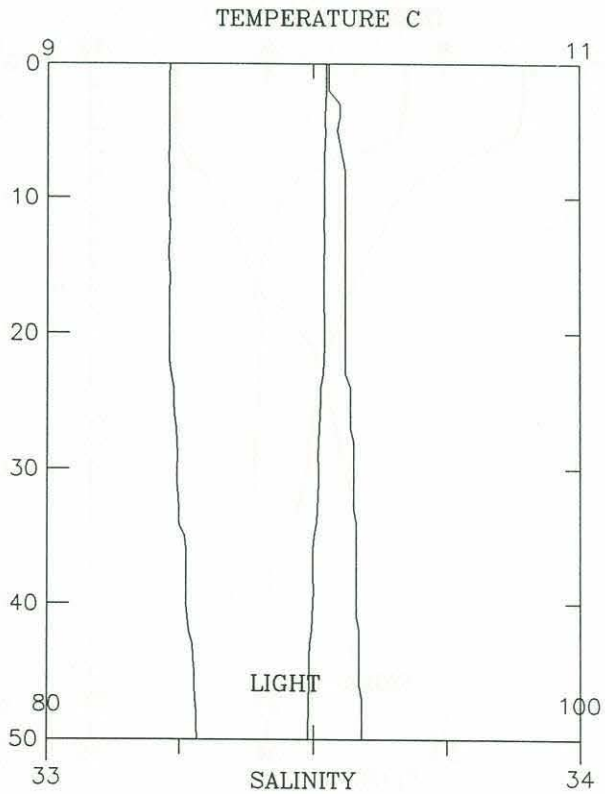




Cruise W8902 Station # 217 Depth m: 207 Time: 1989-03-05 22:48
Position: 38 53.57'N 123 55.51'W Depth Deck Offset: 0.00

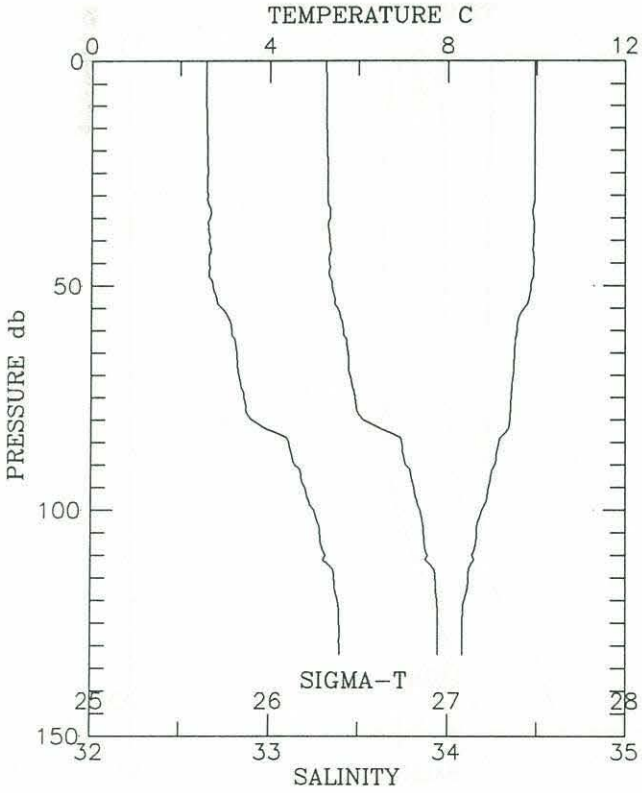
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.050	33.232	25.564	0.0000	90.6
10.0		10.041	33.230	25.564	0.0245	91.2
20.0		10.041	33.231	25.564	0.0489	91.2
30.0		10.019	33.246	25.580	0.0734	91.5
40.0		9.999	33.263	25.597	0.0977	91.6
50.0		9.979	33.283	25.615	0.1218	91.8
60.0		9.939	33.337	25.664	0.1457	92.3
70.0		9.596	33.588	25.917	0.1683	94.5
80.0		9.443	33.622	25.969	0.1893	93.0
90.0		9.370	33.688	26.032	0.2099	94.0
100.0		9.096	33.783	26.151	0.2294	94.8
110.0		8.997	33.804	26.183	0.2484	94.8
120.0		8.744	33.857	26.263	0.2668	94.3
130.0		8.402	33.923	26.368	0.2843	93.4
140.0		8.331	33.933	26.386	0.3013	93.0
150.0		8.261	33.944	26.406	0.3182	92.6
160.0		8.172	33.957	26.429	0.3348	92.2
170.0		8.148	33.960	26.435	0.3513	92.2
180.0		8.054	33.966	26.454	0.3677	92.3
190.0		7.746	33.992	26.520	0.3838	92.2
197.0		7.597	34.003	26.550	0.3947	92.2

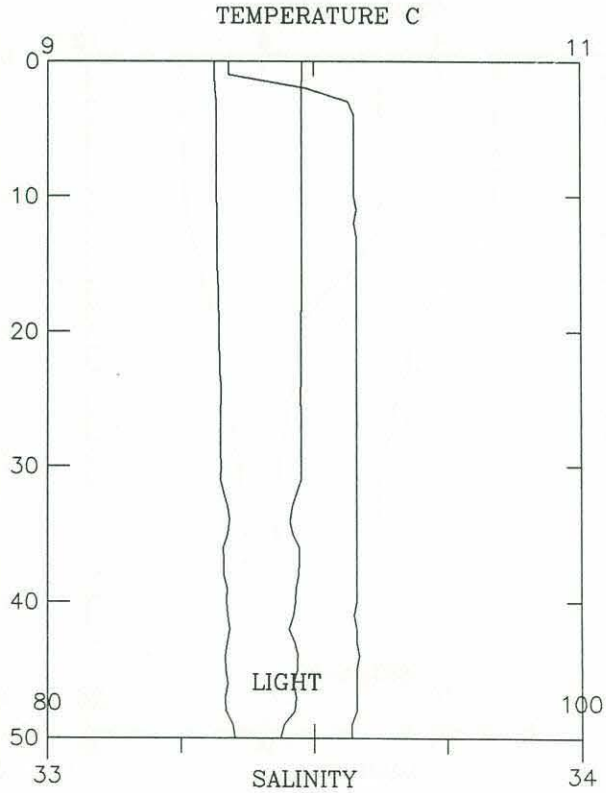




Cruise W8902 Station # 218 Depth m: 135 Time: 1989-03-05 23:46
Position: 38 54.36'N 123 53.40'W Depth Deck Offset: 0.00

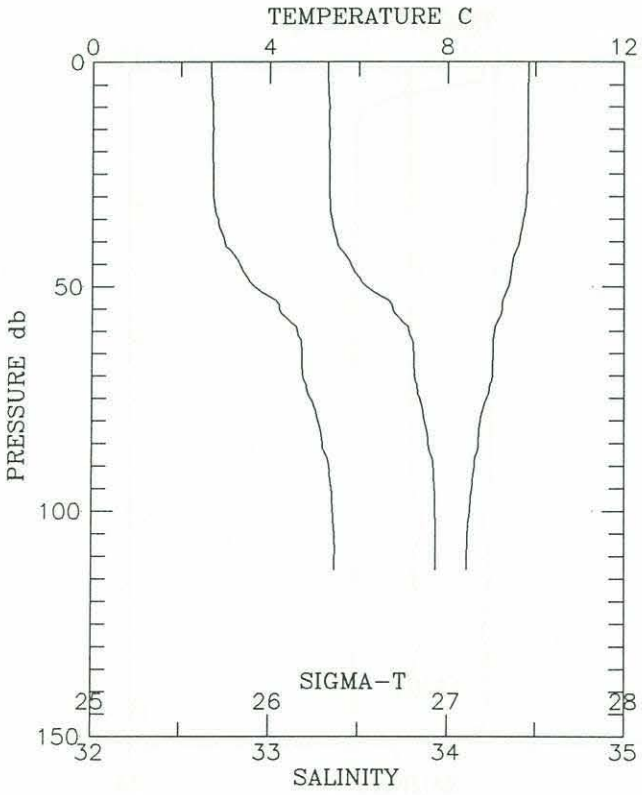
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.956	33.314	25.644	0.0000	86.8
10.0		9.954	33.317	25.646	0.0237	91.5
20.0		9.953	33.322	25.650	0.0474	91.6
30.0		9.951	33.325	25.653	0.0710	91.6
40.0		9.931	33.335	25.664	0.0946	91.6
50.0		9.875	33.351	25.686	0.1182	91.4
60.0		9.555	33.415	25.789	0.1411	89.1
70.0		9.474	33.451	25.830	0.1633	88.9
80.0		9.399	33.527	25.902	0.1851	89.5
90.0		9.067	33.766	26.142	0.2049	92.8
100.0		8.775	33.848	26.251	0.2236	93.6
110.0		8.555	33.890	26.318	0.2414	92.5
120.0		8.380	33.944	26.388	0.2585	90.3
130.0		8.337	33.946	26.396	0.2753	88.6
132.0		8.335	33.946	26.396	0.2787	89.8

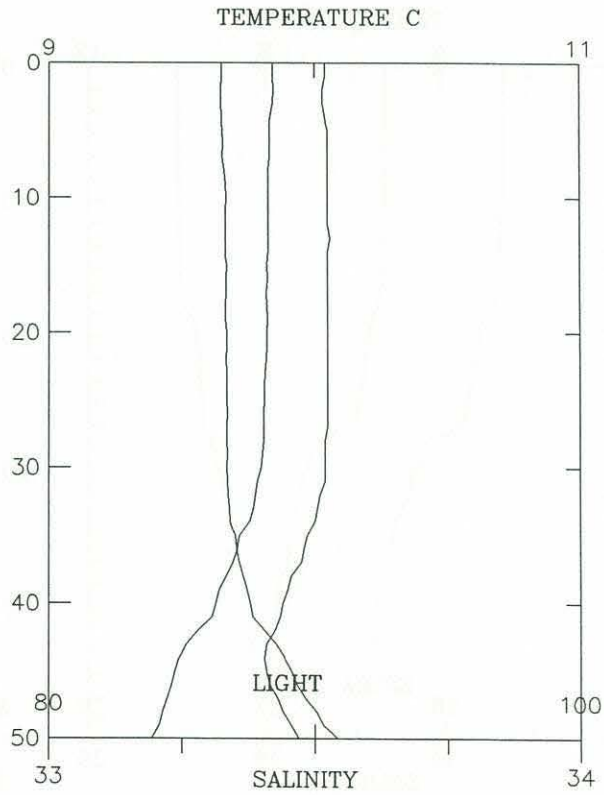




Cruise W8902 Station # 219 Depth m: 115 Time: 1989-03-06 00:33
Position: 38 54.96'N 123 50.88'W Depth Deck Offset: 0.00

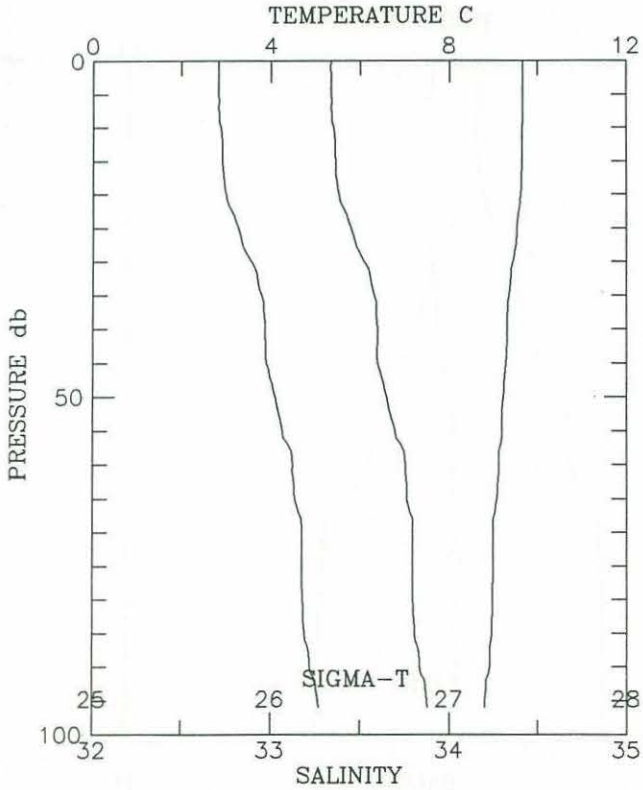
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.842	33.325	25.671	0.0000	90.4
10.0		9.826	33.334	25.681	0.0234	90.5
20.0		9.821	33.335	25.682	0.0468	90.5
30.0		9.799	33.335	25.686	0.0702	90.4
40.0		9.629	33.379	25.749	0.0933	88.8
50.0		9.386	33.543	25.916	0.1153	89.4
60.0		9.062	33.784	26.157	0.1352	93.5
70.0		9.027	33.814	26.185	0.1539	93.7
80.0		8.754	33.870	26.272	0.1722	91.4
90.0		8.616	33.922	26.334	0.1898	90.0
100.0		8.510	33.932	26.358	0.2070	89.6
110.0		8.450	33.934	26.369	0.2240	86.6
113.0		8.448	33.934	26.369	0.2291	86.1

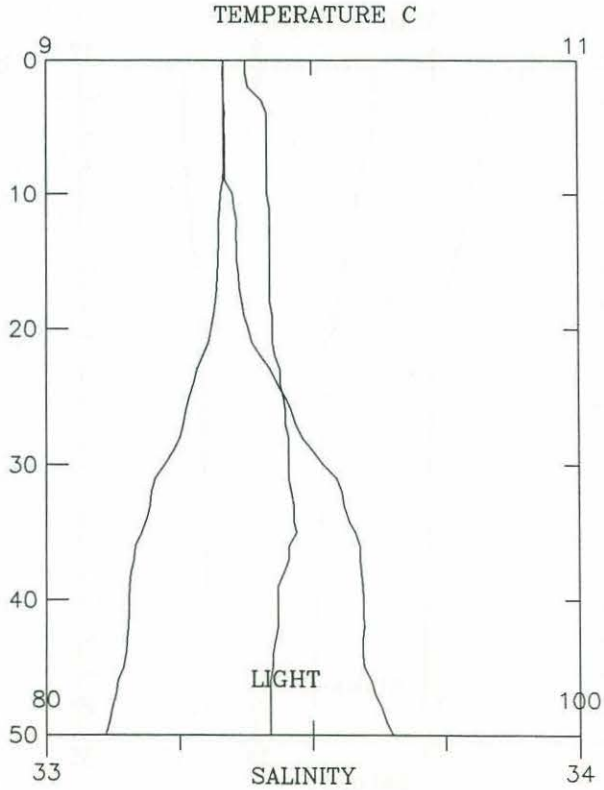




Cruise W8902 Station # 220 Depth m: 99 Time: 1989-03-06 01:07
Position: 38 55.90'N 123 48.07'W Depth Deck Offset: 0.00

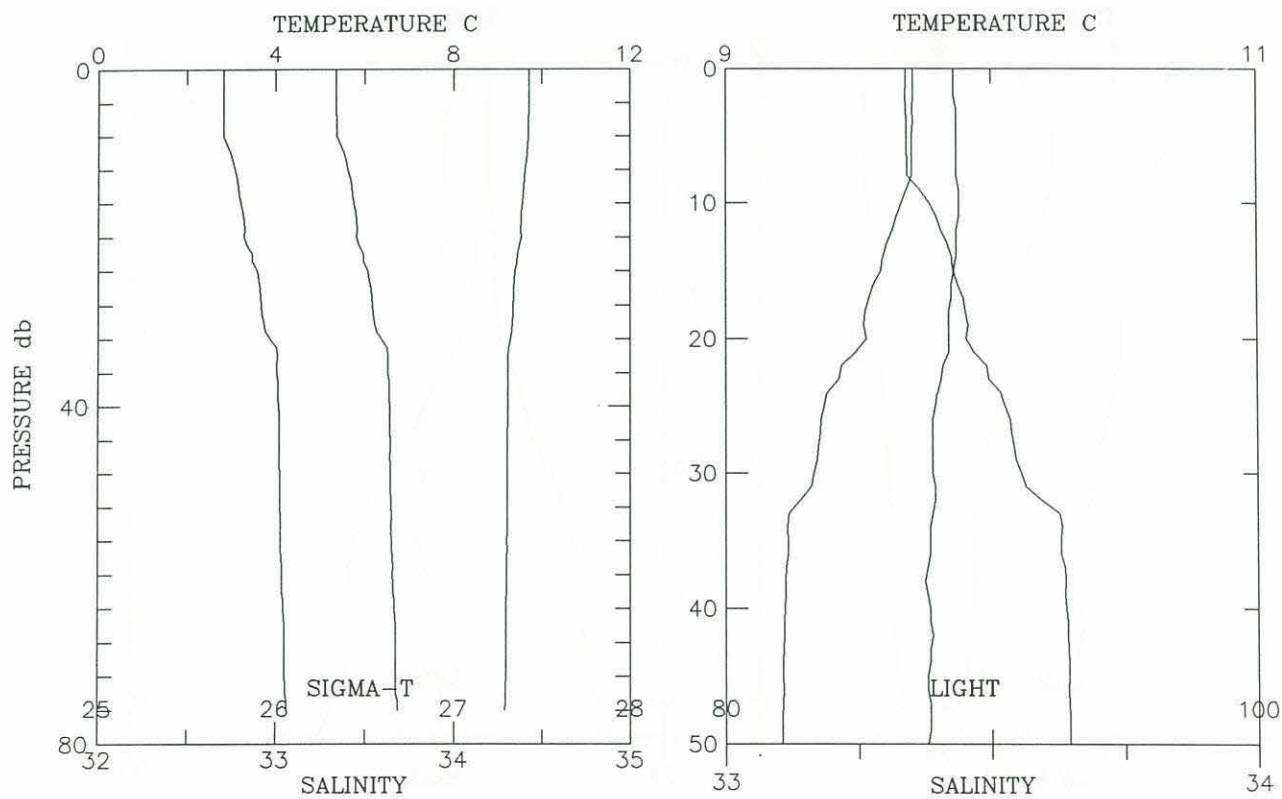
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.669	33.334	25.707	0.0000	87.5
5.0		9.668	33.335	25.708	0.0115	88.3
10.0		9.655	33.351	25.722	0.0231	88.3
15.0		9.647	33.359	25.730	0.0346	88.4
20.0		9.619	33.380	25.751	0.0460	88.5
25.0		9.538	33.449	25.818	0.0572	88.9
30.0		9.446	33.521	25.890	0.0681	89.1
35.0		9.358	33.581	25.951	0.0786	89.4
40.0		9.309	33.596	25.970	0.0890	88.7
45.0		9.290	33.597	25.974	0.0993	88.5
50.0		9.222	33.650	26.026	0.1095	88.4
55.0		9.195	33.696	26.067	0.1195	89.0
60.0		9.119	33.755	26.124	0.1293	89.3
65.0		9.085	33.763	26.136	0.1389	89.0
70.0		8.994	33.794	26.175	0.1483	88.0
75.0		8.989	33.795	26.176	0.1577	87.9
80.0		8.981	33.796	26.178	0.1671	87.7
85.0		8.958	33.806	26.190	0.1765	87.4
90.0		8.920	33.834	26.218	0.1857	87.8
95.0		8.809	33.874	26.266	0.1948	85.6
96.0		8.803	33.876	26.269	0.1966	85.5





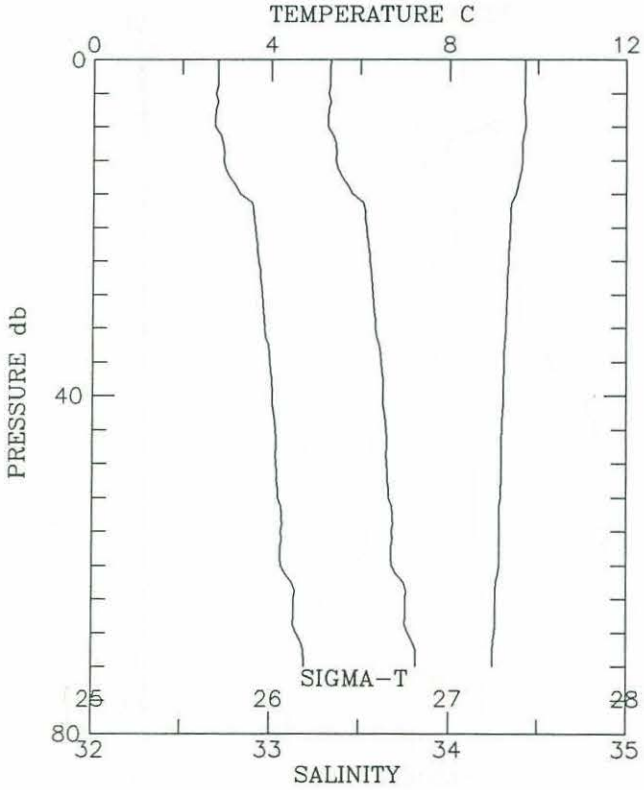
Cruise W8902 Station # 221 Depth m: 79 Time: 1989-03-06 01:34
Position: 38 56.11'N 123 47.20'W Depth Deck Offset: 0.00

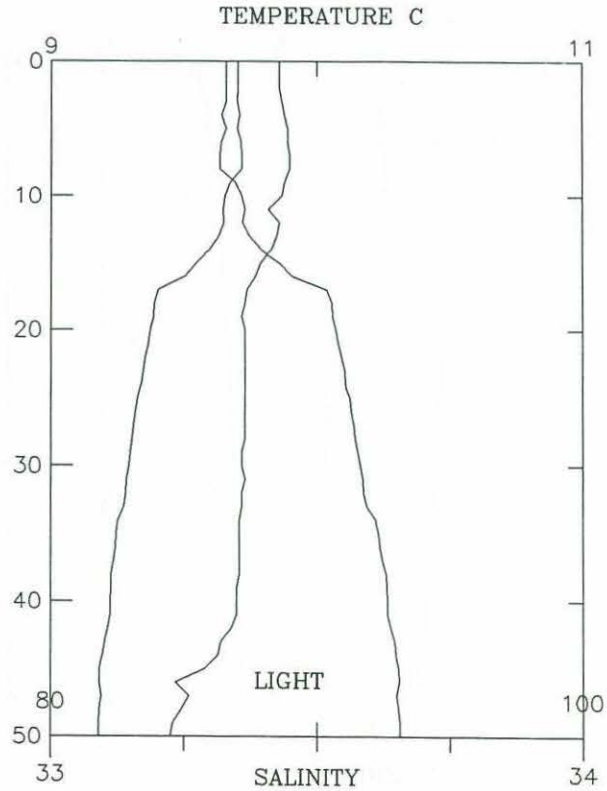
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.706	33.340	25.705	0.0000	88.6
5.0		9.703	33.341	25.707	0.0116	88.7
10.0		9.662	33.384	25.747	0.0231	88.8
15.0		9.585	33.429	25.795	0.0343	88.6
20.0		9.530	33.453	25.823	0.0454	88.4
25.0		9.371	33.526	25.906	0.0562	87.9
30.0		9.330	33.556	25.935	0.0667	87.8
35.0		9.234	33.630	26.009	0.0770	87.7
40.0		9.221	33.640	26.019	0.0871	87.7
45.0		9.215	33.644	26.023	0.0972	87.6
50.0		9.212	33.646	26.025	0.1073	87.6
55.0		9.208	33.650	26.029	0.1174	87.5
60.0		9.198	33.657	26.036	0.1275	87.2
65.0		9.181	33.670	26.048	0.1375	86.5
70.0		9.176	33.674	26.052	0.1475	86.2
75.0		9.161	33.685	26.063	0.1574	86.1
76.0		9.160	33.685	26.063	0.1594	85.6



Cruise W8902 Station # 222 Depth m: 75 Time: 1989-03-06 02:34
Position: 38 50.75'N 123 42.59'W Depth Deck Offset: 0.00

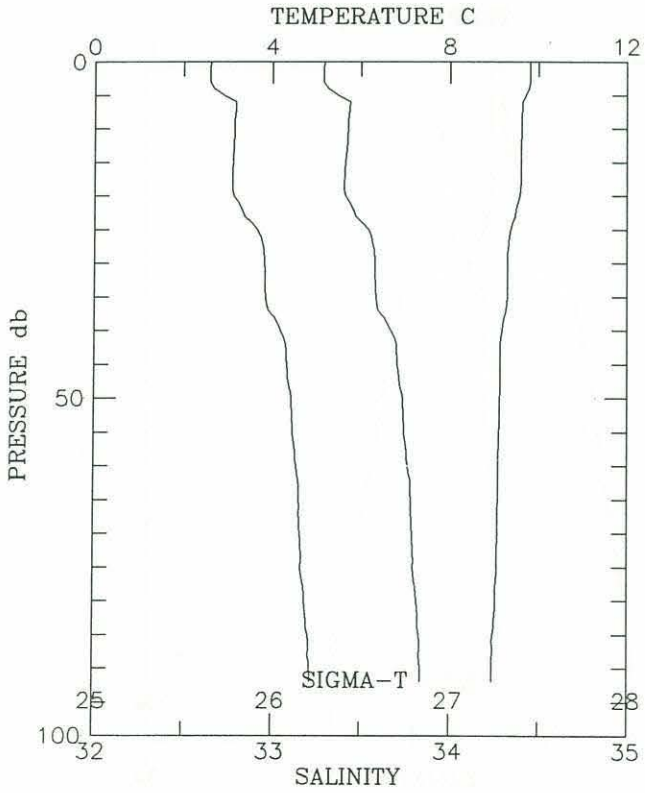
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.705	33.331	25.698	0.0000	88.6
5.0		9.701	33.331	25.699	0.0116	88.9
10.0		9.656	33.360	25.729	0.0232	88.7
15.0		9.546	33.430	25.802	0.0346	87.9
20.0		9.374	33.536	25.913	0.0453	87.3
25.0		9.325	33.562	25.941	0.0558	87.3
30.0		9.293	33.581	25.961	0.0663	87.2
35.0		9.246	33.616	25.995	0.0766	87.1
40.0		9.225	33.632	26.011	0.0867	87.0
45.0		9.184	33.653	26.034	0.0968	85.8
50.0		9.180	33.655	26.036	0.1069	84.5
55.0		9.137	33.688	26.069	0.1168	83.0
60.0		9.145	33.681	26.062	0.1268	83.4
65.0		9.055	33.757	26.136	0.1364	84.3
70.0		8.993	33.814	26.191	0.1459	84.9
72.0		8.991	33.816	26.193	0.1496	84.6

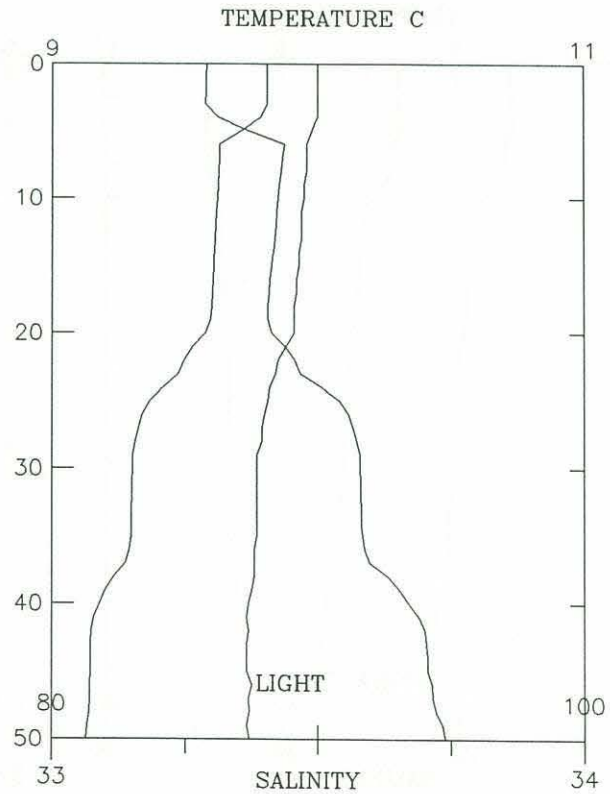




Cruise W8902 Station # 223 Depth m: 95 Time: 1989-03-06 03:00
Position: 38 49.83'N 123 43.95'W Depth Deck Offset: 0.00

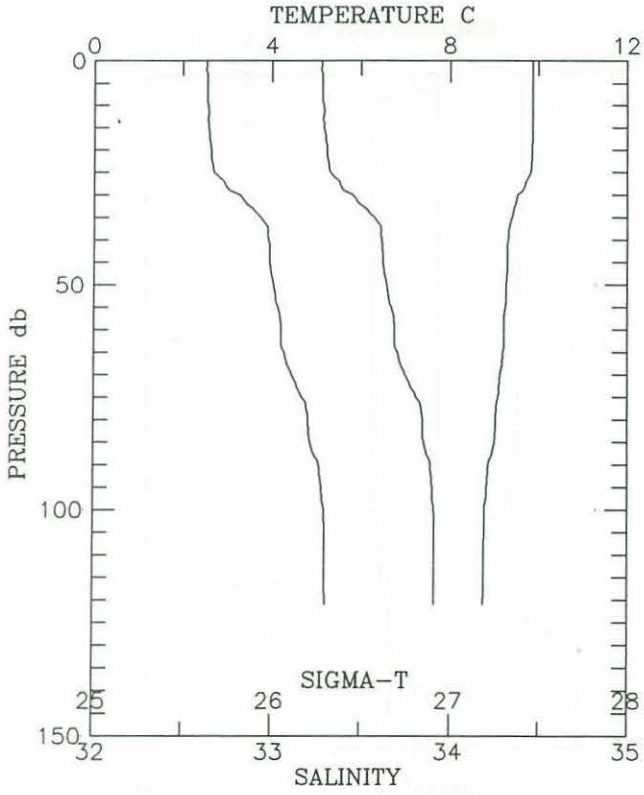
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.809	33.291	25.650	0.0000	90.0
5.0	*	9.713	33.370	25.728	0.0118	89.8
10.0		9.621	33.425	25.786	0.0230	89.5
15.0		9.608	33.413	25.779	0.0342	89.3
20.0		9.576	33.413	25.784	0.0454	89.1
25.0		9.368	33.541	25.918	0.0563	88.1
30.0		9.301	33.580	25.959	0.0668	87.7
35.0		9.296	33.585	25.963	0.0771	87.7
40.0		9.178	33.671	26.049	0.0873	87.4
45.0		9.145	33.707	26.083	0.0972	87.3
50.0		9.128	33.739	26.110	0.1069	87.4
55.0		9.117	33.747	26.118	0.1166	87.4
60.0		9.096	33.770	26.140	0.1262	87.7
65.0		9.087	33.786	26.154	0.1357	87.8
70.0		9.079	33.794	26.161	0.1452	87.4
75.0		9.070	33.798	26.166	0.1546	87.2
80.0		9.036	33.820	26.188	0.1640	87.2
85.0		8.981	33.835	26.209	0.1733	85.7
90.0		8.967	33.841	26.216	0.1826	85.2
92.0		8.965	33.842	26.217	0.1862	85.0

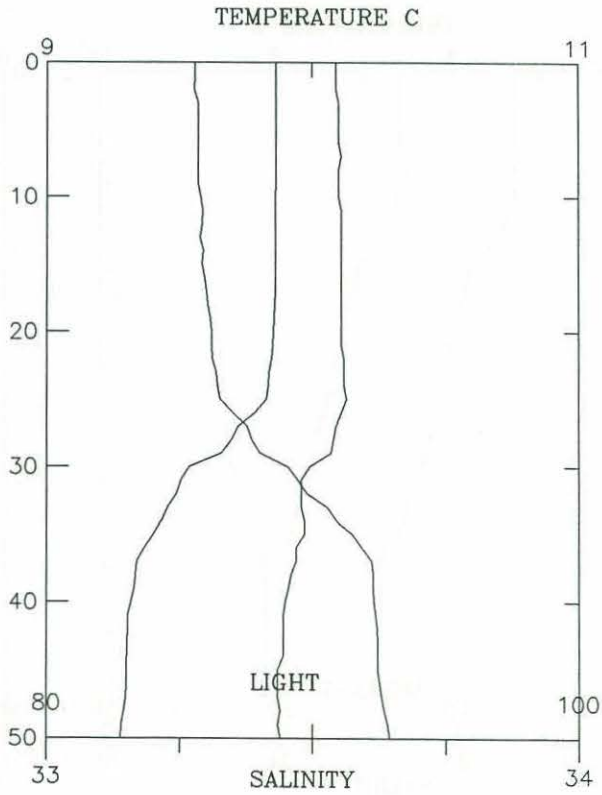




Cruise W8902 Station # 224 Depth m: 125 Time: 1989-03-06 03:32
Position: 38 48.09'N 123 46.07'W Depth Deck Offset: 0.00

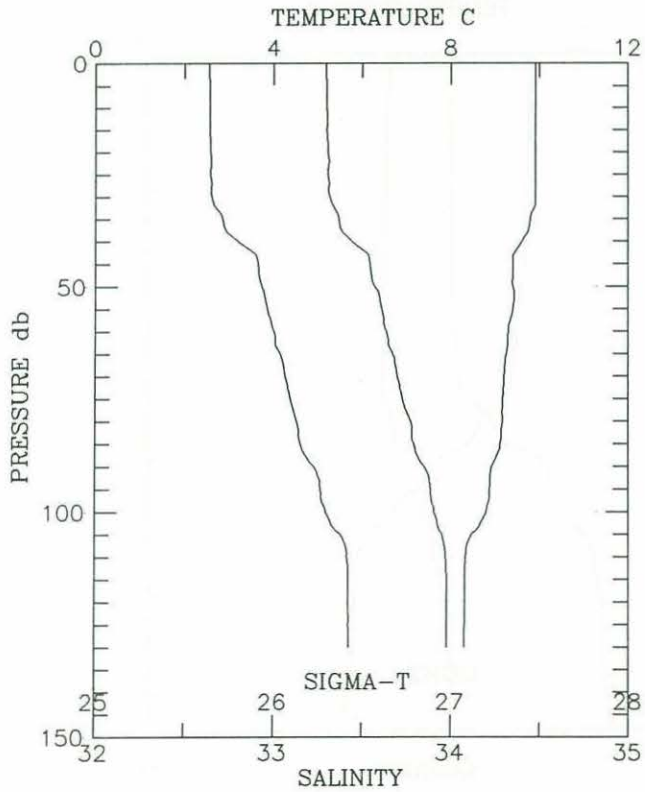
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.866	33.280	25.632	0.0000	90.9
10.0		9.863	33.291	25.641	0.0238	91.0
20.0		9.855	33.311	25.658	0.0475	91.1
30.0		9.537	33.454	25.822	0.0707	89.9
40.0		9.317	33.615	25.983	0.0918	89.0
50.0		9.277	33.645	26.013	0.1122	88.8
60.0		9.226	33.688	26.055	0.1323	88.9
70.0		9.144	33.747	26.114	0.1521	89.1
80.0		9.035	33.847	26.210	0.1709	92.0
90.0		8.874	33.893	26.271	0.1892	88.6
100.0		8.792	33.911	26.298	0.2070	86.6
110.0		8.775	33.915	26.304	0.2247	83.0
120.0		8.769	33.915	26.305	0.2423	81.1
121.0		8.765	33.915	26.306	0.2441	80.2

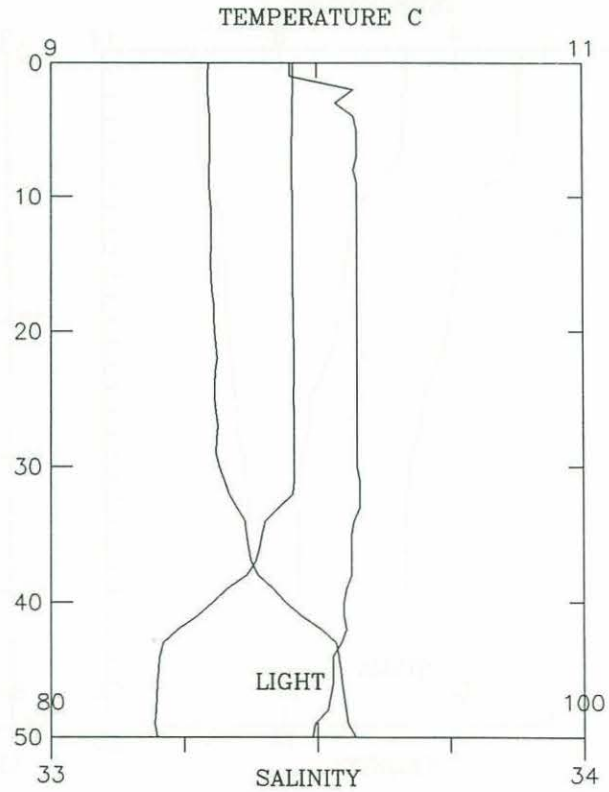




Cruise W8902 Station # 225 Depth m: 134 Time: 1989-03-06 04:04
Position: 38 47.02'N 123 47.57'W Depth Deck Offset: 0.00

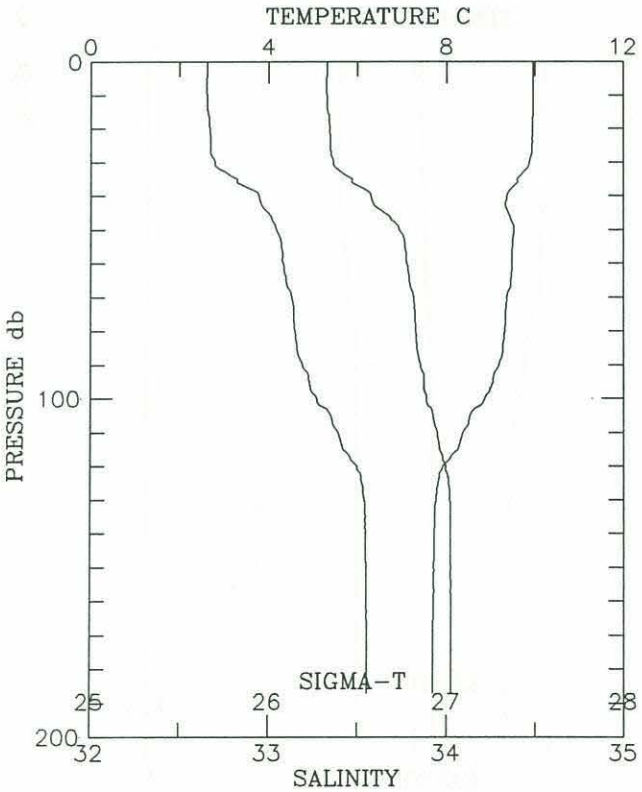
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.911	33.296	25.637	0.0000	89.0
10.0		9.908	33.299	25.640	0.0238	91.5
20.0		9.911	33.307	25.646	0.0475	91.5
30.0		9.913	33.316	25.652	0.0712	91.5
40.0		9.606	33.440	25.800	0.0943	91.0
50.0		9.399	33.572	25.936	0.1157	89.8
60.0		9.299	33.639	26.005	0.1364	89.3
70.0		9.204	33.700	26.068	0.1565	89.2
80.0		9.166	33.775	26.133	0.1760	91.3
90.0		8.930	33.853	26.231	0.1950	92.0
100.0		8.805	33.908	26.294	0.2130	94.2
110.0		8.342	33.974	26.417	0.2300	89.5
120.0		8.324	33.979	26.424	0.2465	86.9
130.0		8.316	33.980	26.426	0.2630	87.0

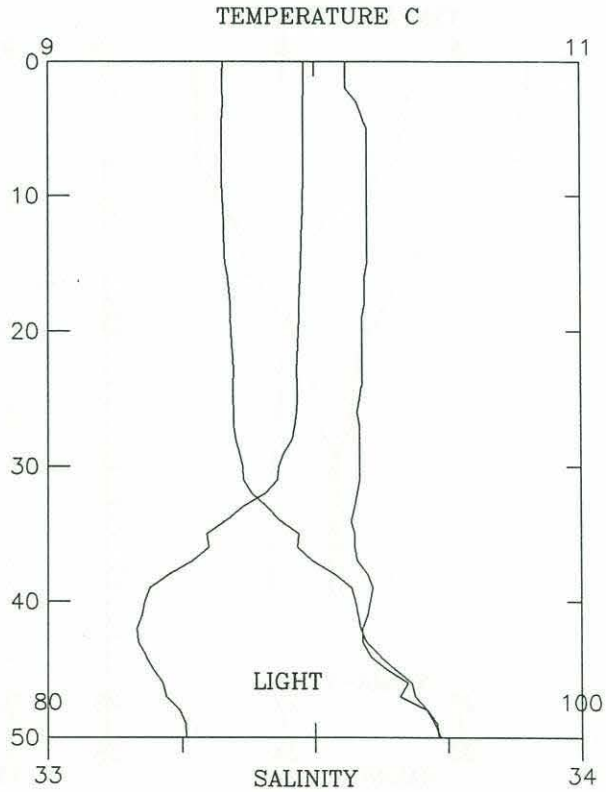




Cruise W8902 Station # 226 Depth m: 186 Time: 1989-03-06 04:34
Position: 38 45.70'N 123 49.40'W Depth Deck Offset: 0.00

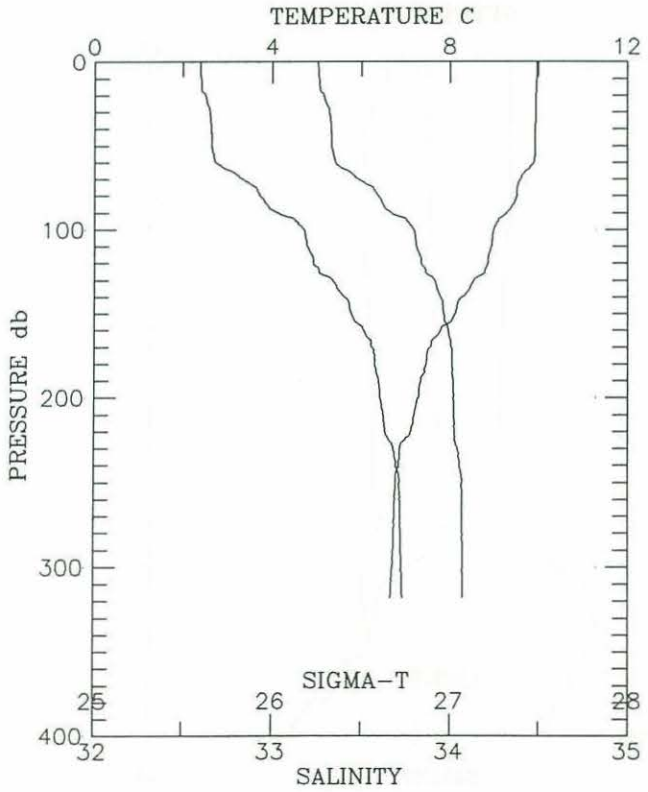
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.961	33.328	25.654	0.0000	91.2
10.0		9.958	33.327	25.654	0.0236	92.0
20.0		9.939	33.343	25.669	0.0472	91.8
30.0		9.864	33.364	25.698	0.0706	91.7
40.0		9.360	33.577	25.946	0.0928	92.1
50.0		9.516	33.732	26.043	0.1132	94.7
60.0		9.474	33.777	26.084	0.1330	94.9
70.0		9.356	33.816	26.134	0.1525	95.2
80.0		9.312	33.828	26.151	0.1716	95.2
90.0		9.177	33.855	26.193	0.1905	95.2
100.0		8.857	33.890	26.272	0.2088	94.7
110.0		8.372	33.950	26.394	0.2261	94.2
120.0		7.922	33.997	26.498	0.2425	94.9
130.0		7.766	34.019	26.538	0.2581	93.7
140.0		7.728	34.024	26.547	0.2735	92.8
150.0		7.719	34.026	26.550	0.2889	93.0
160.0		7.715	34.026	26.551	0.3042	93.1
170.0		7.707	34.027	26.553	0.3196	92.8
180.0		7.705	34.026	26.552	0.3350	92.5
187.0		7.705	34.026	26.552	0.3457	92.4

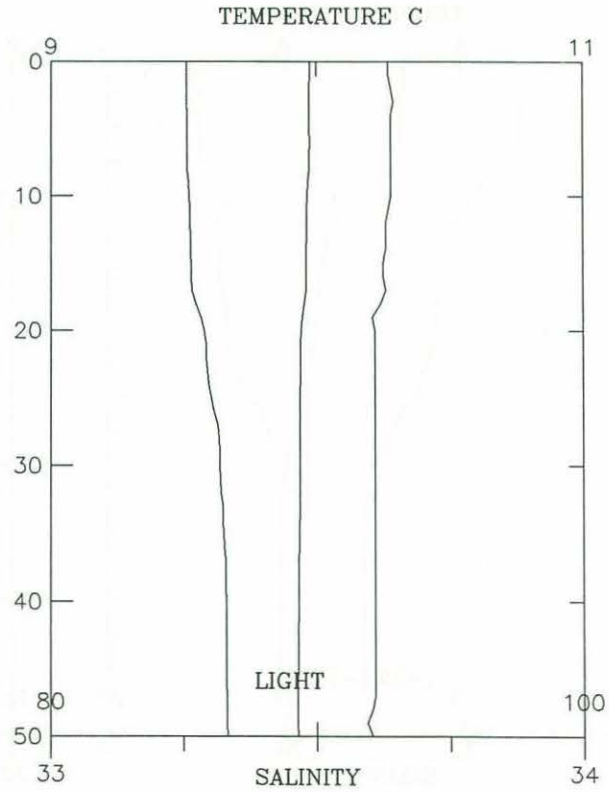




Cruise W8902 Station # 227 Depth m: 302 Time: 1989-03-06 05:05
Position: 38 44.40'N 123 51.00'W Depth Deck Offset: 0.00

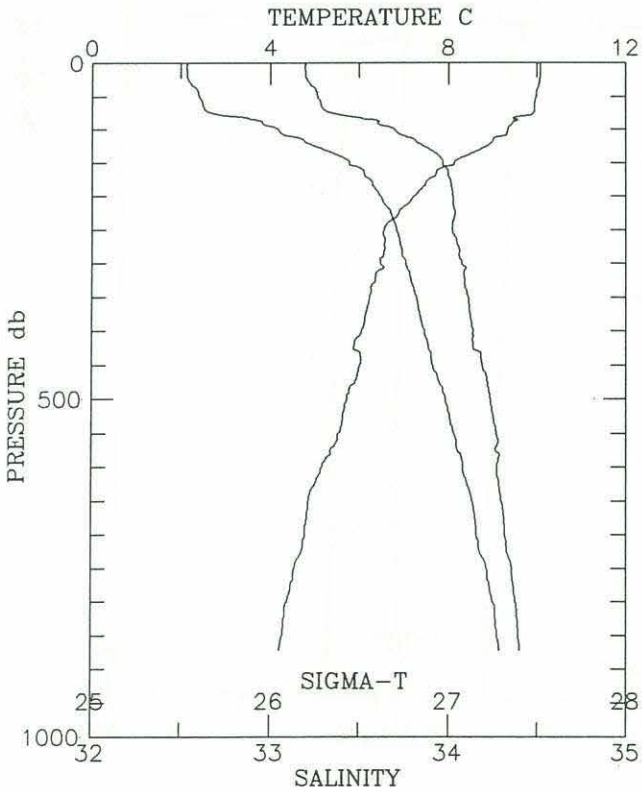
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.976	33.257	25.596	0.0000	92.7
10.0		9.967	33.261	25.600	0.0242	92.8
20.0		9.941	33.290	25.627	0.0482	92.2
30.0		9.938	33.319	25.651	0.0720	92.2
40.0		9.932	33.330	25.660	0.0957	92.2
50.0		9.930	33.333	25.663	0.1193	92.1
60.0		9.895	33.354	25.685	0.1429	92.1
80.0		9.518	33.593	25.933	0.1870	94.1
100.0		8.988	33.798	26.179	0.2271	93.0
150.0		8.116	33.965	26.444	0.3158	93.1
200.0		7.293	34.020	26.606	0.3925	94.9
250.0		6.775	34.069	26.716	0.4646	95.5
300.0		6.706	34.074	26.730	0.5340	95.3
318.0		6.671	34.075	26.735	0.5589	95.2

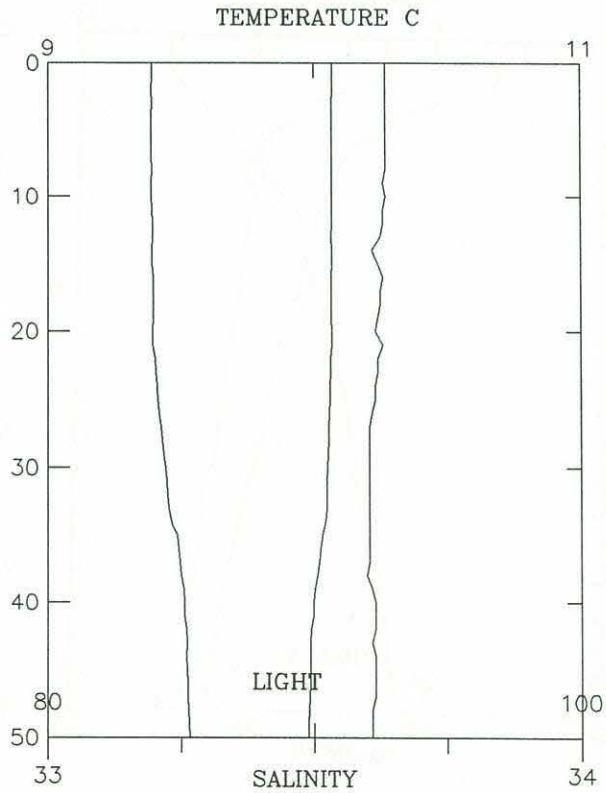




Cruise W8902 Station # 228 Depth m: 910 Time: 1989-03-06 05:44
Position: 38 42.90'N 123 53.20'W Depth Deck Offset: 0.00

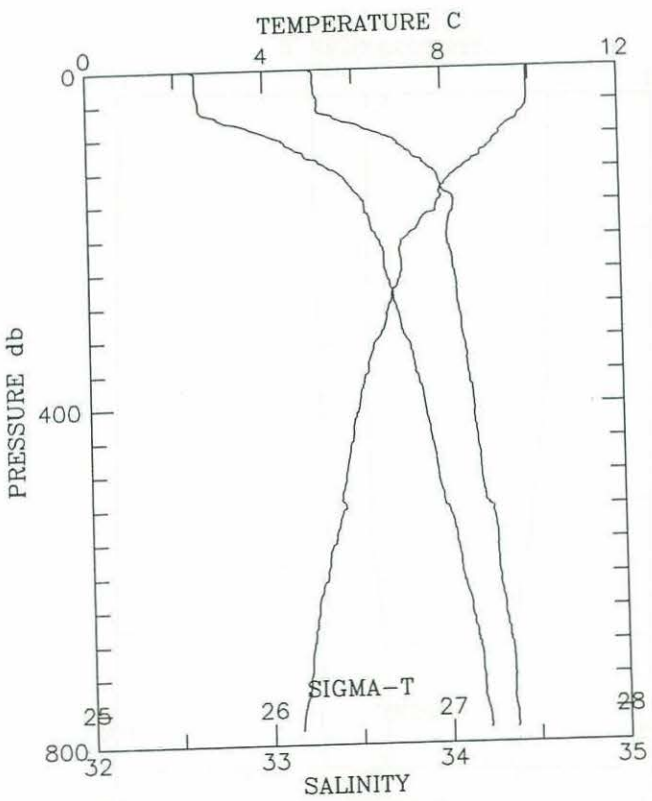
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.070	33.196	25.532	0.0000	92.7
10.0		10.069	33.195	25.532	0.0248	92.7
20.0		10.067	33.197	25.534	0.0495	92.3
30.0		10.052	33.222	25.556	0.0742	92.1
40.0		10.000	33.256	25.591	0.0987	92.3
50.0		9.978	33.266	25.603	0.1229	92.2
60.0		9.946	33.282	25.620	0.1470	92.9
80.0		9.672	33.442	25.791	0.1945	92.6
100.0		9.337	33.696	26.043	0.2364	94.6
150.0		8.131	33.969	26.445	0.3273	93.4
200.0		7.229	34.027	26.621	0.4043	95.0
250.0		6.557	34.022	26.708	0.4758	96.1
300.0		6.481	34.075	26.760	0.5447	96.3
400.0		6.054	34.139	26.865	0.6754	96.1
500.0		5.727	34.236	26.983	0.7976	96.2
600.0		5.168	34.274	27.080	0.9099	96.0
700.0		4.792	34.319	27.159	1.0136	95.6
800.0		4.393	34.377	27.249	1.1105	95.5
872.0		4.224	34.402	27.287	1.1762	95.4

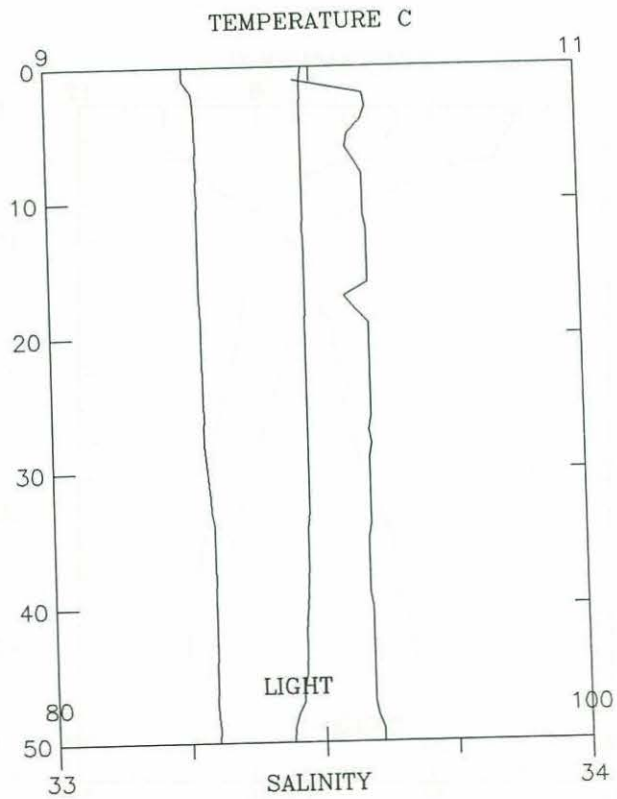




Cruise W8902 Station # 229 Depth m: 869 Time: 1989-03-06 07:20
Position: 38 36.20'N 123 47.40'W Depth Deck Offset: 0.00

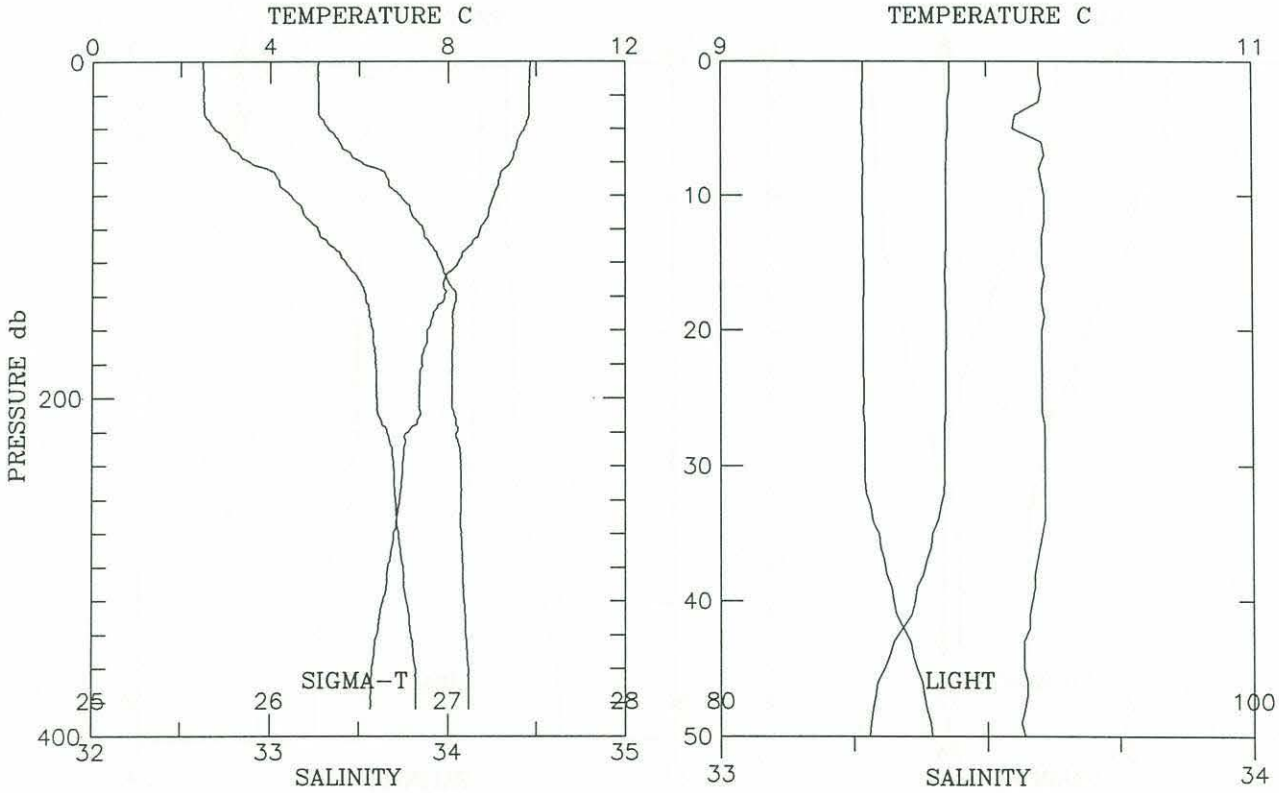
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0		9.973	33.262	25.600	0.0000	54.6
10.0		9.961	33.283	25.619	0.0240	91.9
20.0		9.960	33.284	25.620	0.0480	92.0
30.0		9.959	33.291	25.625	0.0719	91.9
40.0		9.945	33.301	25.635	0.0958	91.9
50.0		9.881	33.302	25.647	0.1196	92.2
60.0		9.715	33.417	25.764	0.1428	93.5
80.0		9.297	33.685	26.041	0.1853	93.8
100.0		8.862	33.824	26.219	0.2238	93.8
150.0		7.932	34.034	26.525	0.3079	95.4
200.0		7.165	34.019	26.624	0.3836	96.0
250.0		6.978	34.066	26.687	0.4557	95.6
300.0		6.673	34.094	26.750	0.5253	95.9
400.0		6.038	34.155	26.880	0.6556	95.8
500.0		5.647	34.202	26.966	0.7773	95.8
600.0		5.276	34.287	27.078	0.8897	95.8
700.0		4.879	34.354	27.177	0.9934	95.9
783.0		4.635	34.366	27.214	1.0752	95.6





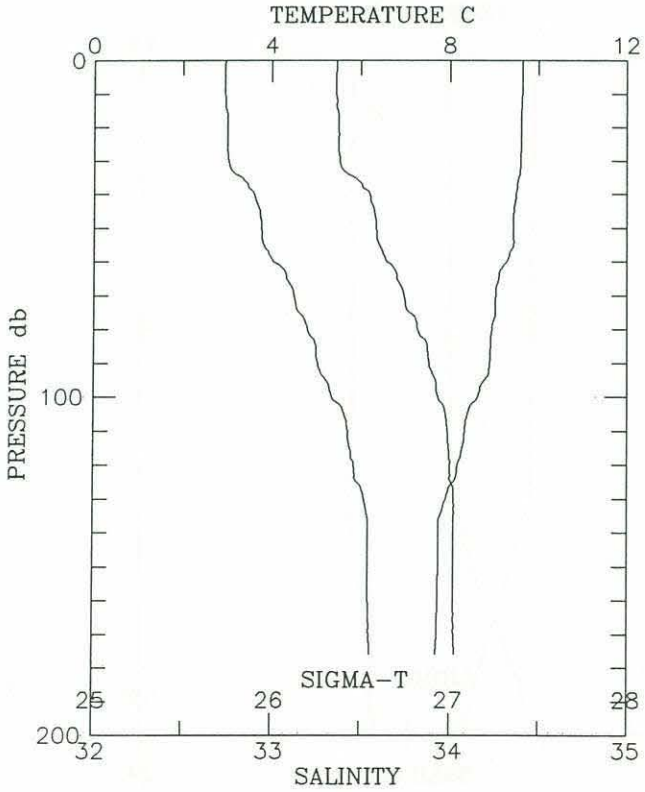
Cruise W8902 Station # 230 Depth m: 397 Time: 1989-03-06 08:18
Position: 38 37.60'N 123 45.70'W Depth Deck Offset: 0.00

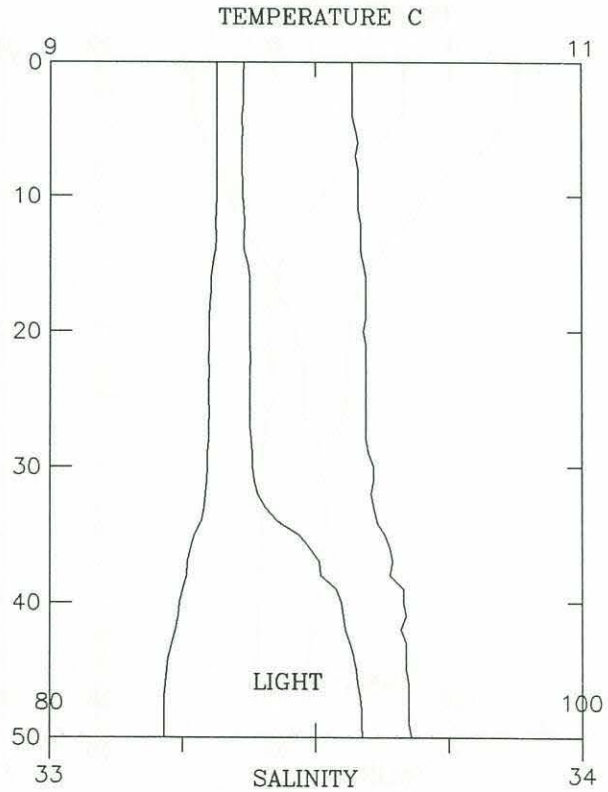
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.861	33.269	25.624	0.0000	92.0
10.0		9.848	33.268	25.626	0.0239	92.2
20.0		9.846	33.269	25.627	0.0478	92.1
30.0		9.840	33.271	25.629	0.0717	92.2
40.0		9.728	33.324	25.689	0.0953	91.7
50.0		9.559	33.396	25.772	0.1182	91.4
60.0		9.414	33.513	25.888	0.1403	92.0
80.0		9.042	33.728	26.116	0.1807	92.9
100.0		8.726	33.857	26.266	0.2181	92.7
150.0		7.668	34.028	26.559	0.2998	95.9
200.0		7.353	34.022	26.600	0.3751	95.8
250.0		6.946	34.075	26.698	0.4473	95.3
300.0		6.644	34.084	26.746	0.5170	95.5
384.0		6.267	34.117	26.821	0.6288	95.6



Cruise W8902 Station # 231 Depth m: 181 Time: 1989-03-06 09:03
Position: 38 39.50'N 123 43.10'W Depth Deck Offset: 0.00

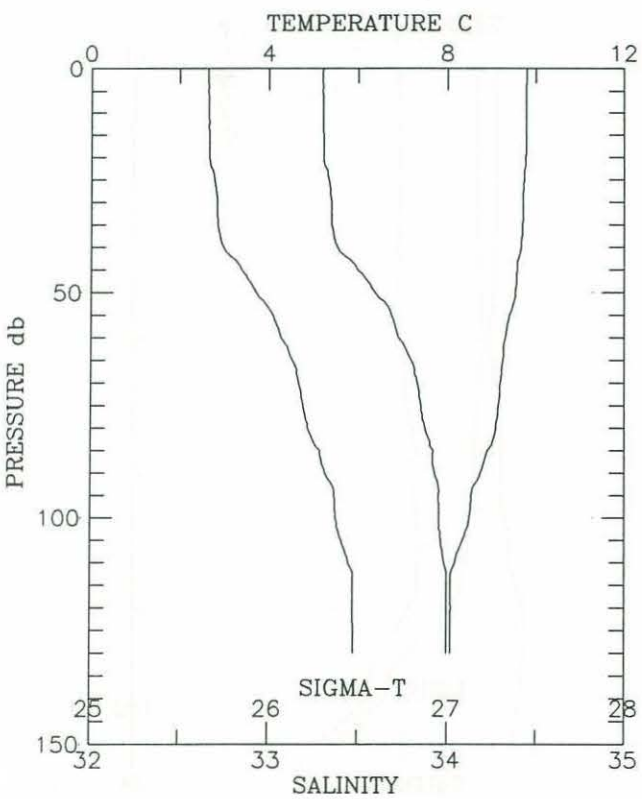
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.630	33.365	25.737	0.0000	91.4
10.0		9.629	33.363	25.735	0.0228	91.6
20.0		9.600	33.377	25.751	0.0456	91.8
30.0		9.592	33.382	25.756	0.0683	92.2
40.0		9.489	33.549	25.904	0.0904	93.3
50.0		9.431	33.588	25.944	0.1115	93.6
60.0		9.287	33.645	26.011	0.1322	94.2
70.0		9.036	33.743	26.128	0.1518	94.2
80.0		8.948	33.821	26.203	0.1707	94.3
90.0		8.897	33.885	26.261	0.1889	94.8
100.0		8.635	33.934	26.341	0.2066	94.9
110.0		8.333	33.988	26.429	0.2233	95.2
120.0		8.181	34.002	26.463	0.2396	95.2
130.0		7.913	34.025	26.521	0.2555	95.2
140.0		7.756	34.022	26.542	0.2709	91.8
150.0		7.753	34.022	26.542	0.2864	91.7
160.0		7.742	34.024	26.545	0.3018	92.1
170.0		7.728	34.026	26.549	0.3172	92.4
176.0		7.702	34.029	26.555	0.3264	93.1

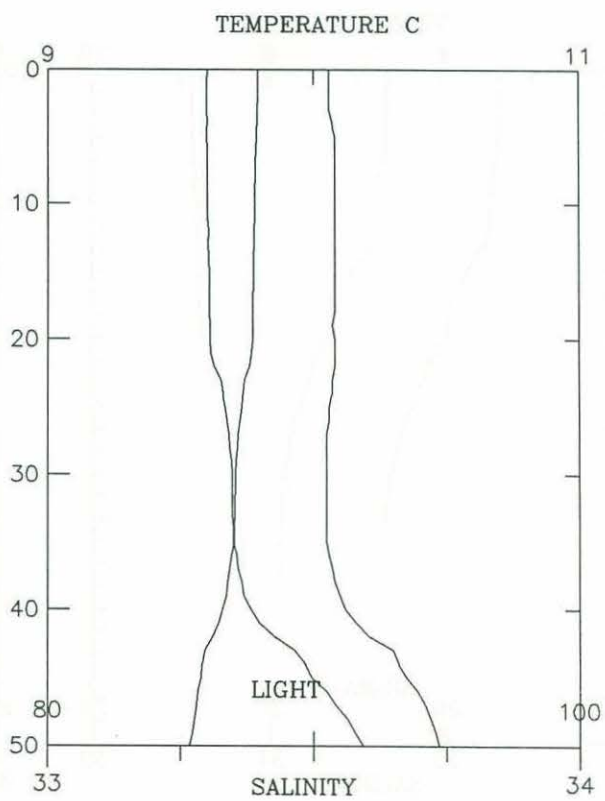




Cruise W8902 Station # 232 Depth m: 134 Time: 1989-03-06 09:37
Position: 38 41.20'N 123 41.00'W Depth Deck Offset: 0.00

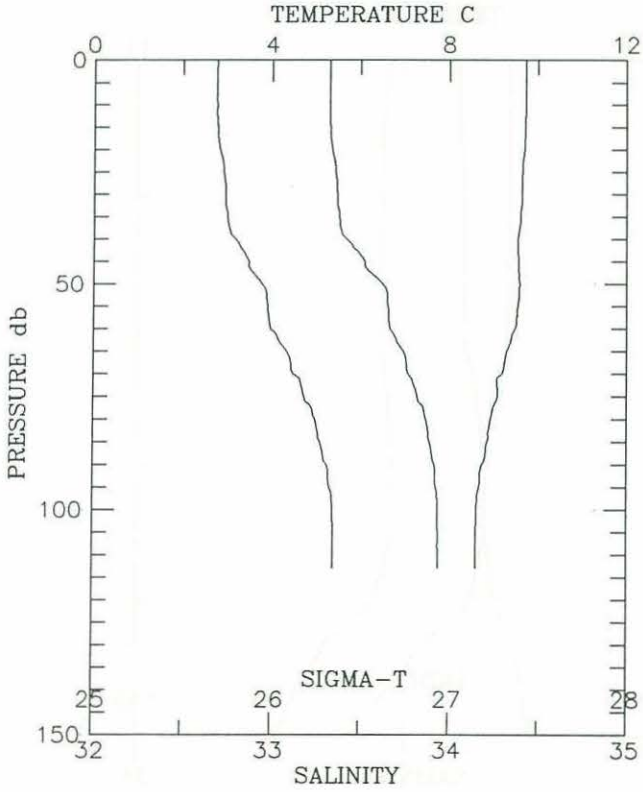
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.792	33.301	25.660	0.0000	90.6
10.0		9.779	33.301	25.662	0.0235	90.8
20.0		9.772	33.306	25.667	0.0471	90.8
30.0		9.706	33.348	25.711	0.0704	90.5
40.0		9.660	33.383	25.746	0.0934	91.2
50.0		9.536	33.594	25.931	0.1153	94.7
60.0		9.312	33.725	26.070	0.1356	95.5
70.0		9.201	33.829	26.169	0.1548	95.4
80.0		9.096	33.874	26.221	0.1734	95.4
90.0		8.754	33.928	26.318	0.1913	95.2
100.0		8.501	33.954	26.377	0.2083	95.1
110.0		8.171	33.983	26.450	0.2249	95.1
120.0		8.084	33.998	26.475	0.2410	90.4
130.0		8.073	33.999	26.477	0.2570	90.5

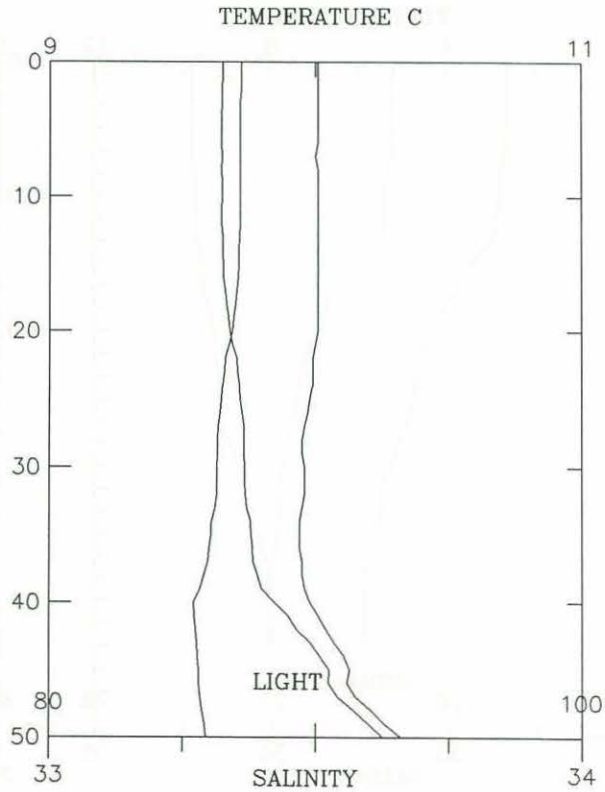




Cruise W8902 Station # 233 Depth m: 117 Time: 1989-03-06 10:11
Position: 38 42.50'N 123 38.90'W Depth Deck Offset: 0.00

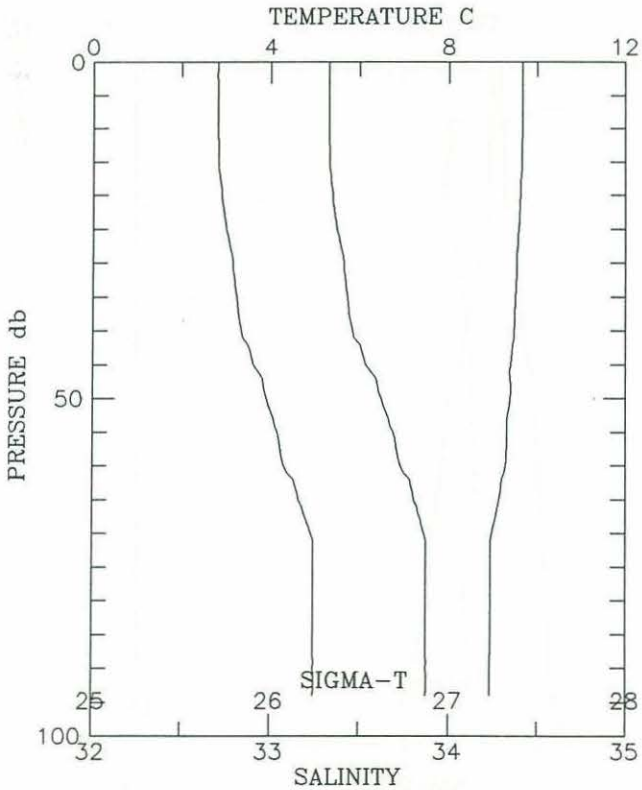
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.721	33.325	25.691	0.0000	90.1
10.0		9.717	33.324	25.691	0.0233	90.1
20.0		9.687	33.339	25.707	0.0465	90.1
30.0		9.630	33.367	25.738	0.0695	89.6
40.0		9.543	33.422	25.796	0.0922	89.8
50.0		9.589	33.627	25.948	0.1138	93.2
60.0		9.491	33.667	25.995	0.1345	93.3
70.0		9.197	33.767	26.121	0.1542	92.8
80.0		8.937	33.871	26.244	0.1729	93.1
90.0		8.750	33.922	26.313	0.1908	94.1
100.0		8.630	33.941	26.347	0.2081	87.8
110.0		8.620	33.942	26.349	0.2253	86.2
113.0		8.618	33.942	26.350	0.2305	86.1

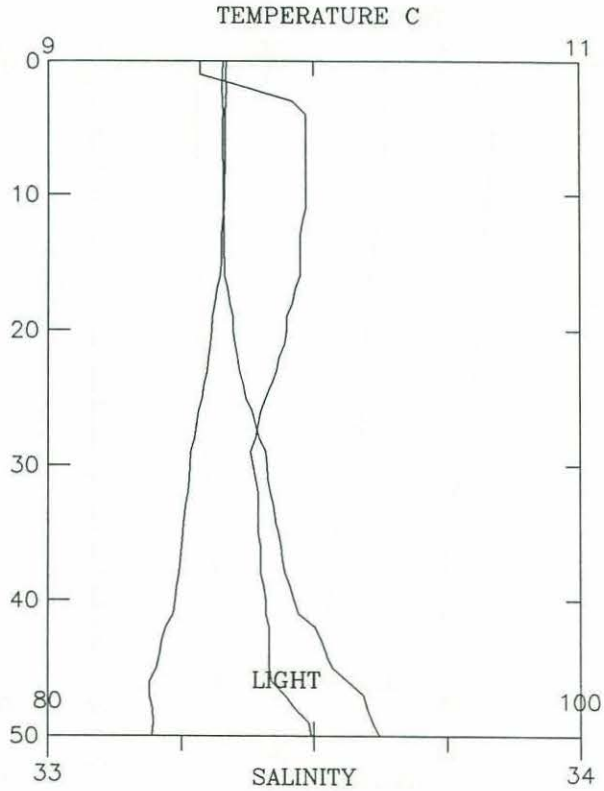




Cruise W8902 Station # 234 Depth m: 97 Time: 1989-03-06 10:50
Position: 38 44.10'N 123 37.60'W Depth Deck Offset: 0.00

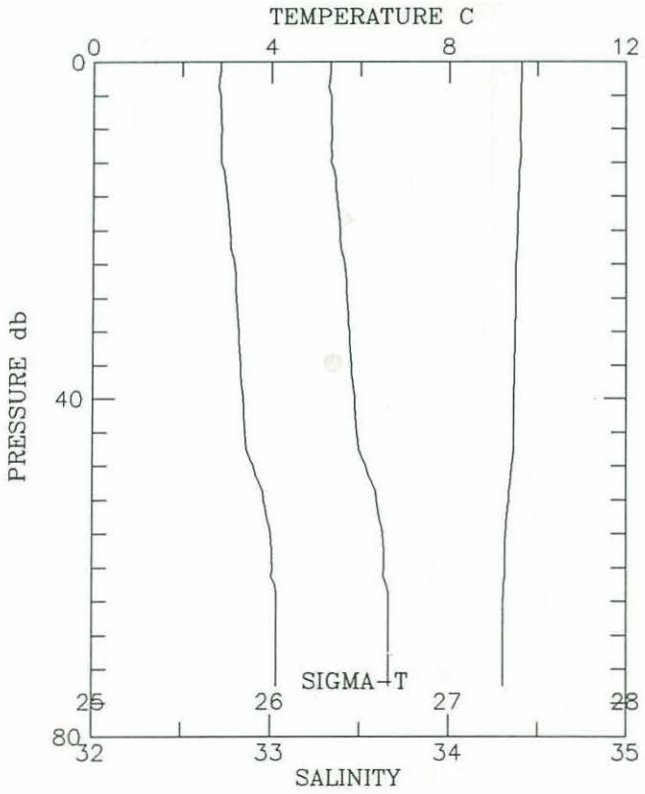
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.670	33.329	25.702	0.0000	85.7
5.0		9.665	33.328	25.702	0.0116	89.7
10.0		9.664	33.329	25.703	0.0232	89.7
15.0		9.650	33.332	25.708	0.0347	89.5
20.0		9.615	33.348	25.726	0.0462	89.0
25.0		9.578	33.372	25.751	0.0577	88.2
30.0		9.533	33.412	25.789	0.0689	87.7
35.0		9.505	33.434	25.811	0.0801	87.9
40.0		9.476	33.462	25.838	0.0911	88.2
45.0		9.407	33.536	25.907	0.1019	88.3
50.0		9.389	33.623	25.978	0.1123	89.9
55.0		9.320	33.690	26.041	0.1225	89.5
60.0		9.282	33.730	26.079	0.1325	90.6
65.0		9.148	33.807	26.161	0.1421	91.8
70.0		8.982	33.863	26.231	0.1513	91.0
75.0		8.948	33.875	26.246	0.1604	86.7
80.0		8.946	33.875	26.246	0.1695	87.7
85.0		8.944	33.875	26.246	0.1786	88.0
90.0		8.943	33.875	26.246	0.1876	87.8
94.0		8.942	33.875	26.246	0.1949	87.0

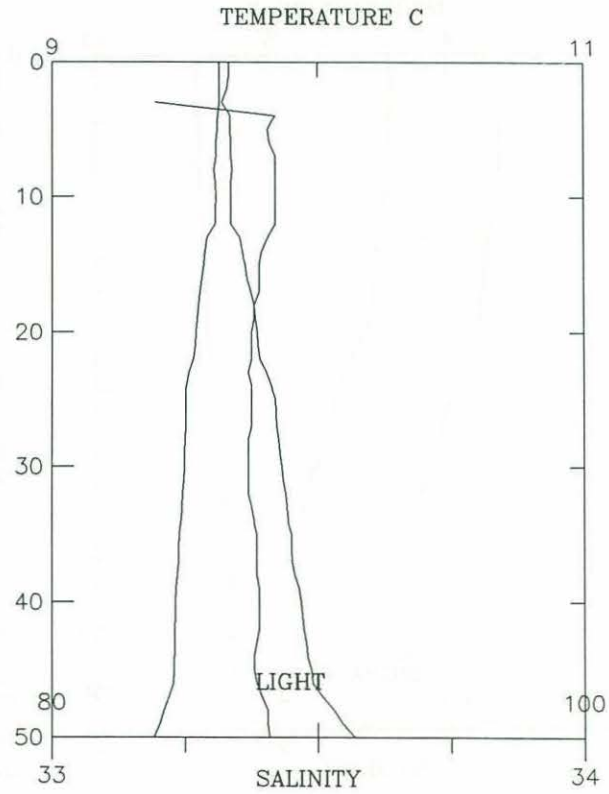




Cruise W8902 Station # 235 Depth m: 78 Time: 1989-03-06 11:22
Position: 38 44.80'N 123 35.80'W Depth Deck Offset: 0.00

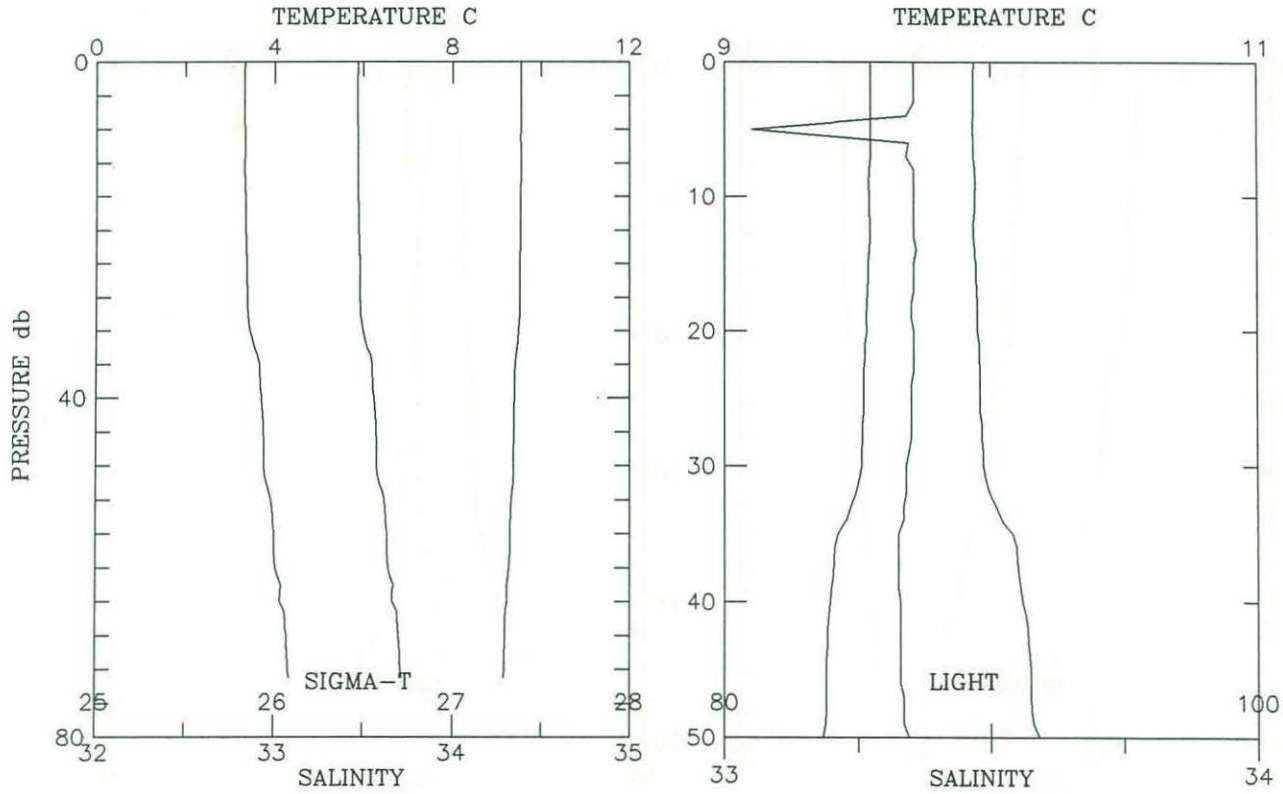
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.630	33.333	25.712	0.0000	64.5
5.0		9.623	33.335	25.714	0.0115	88.1
10.0		9.616	33.336	25.716	0.0230	88.4
15.0		9.571	33.363	25.745	0.0345	87.8
20.0		9.542	33.386	25.768	0.0458	87.5
25.0		9.504	33.420	25.800	0.0571	87.5
30.0		9.498	33.432	25.811	0.0682	87.4
35.0		9.479	33.450	25.828	0.0792	87.7
40.0		9.465	33.469	25.845	0.0902	87.8
45.0		9.459	33.488	25.861	0.1011	87.6
50.0		9.385	33.569	25.936	0.1118	88.2
55.0		9.293	33.622	25.993	0.1222	87.7
60.0		9.266	33.639	26.010	0.1324	87.1
65.0		9.235	33.663	26.034	0.1425	83.1
70.0		9.235	33.664	26.035	0.1526	81.4
74.0		9.234	33.663	26.034	0.1606	82.6





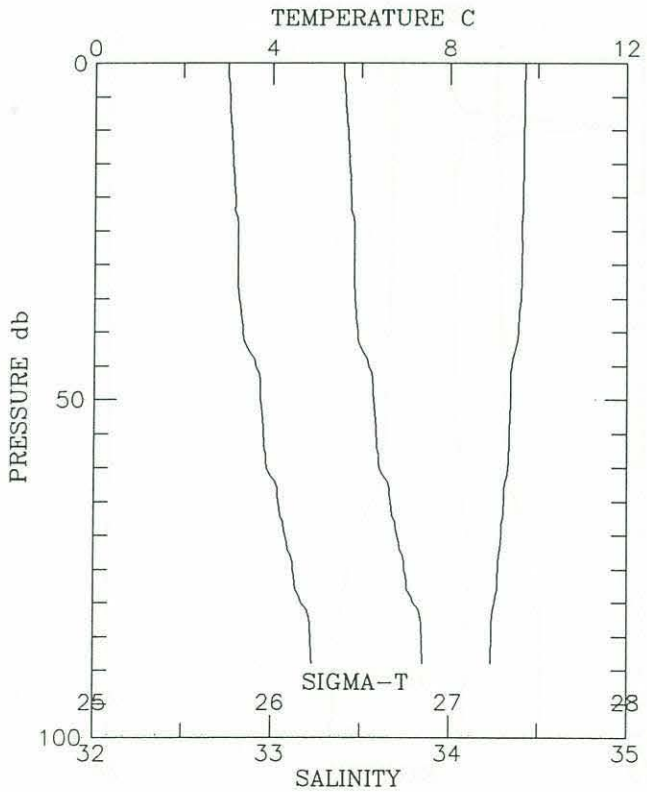
Cruise W8902 Station # 237 Depth m: 77 Time: 1989-03-06 12:29
Position: 38 39.75'N 123 27.94'W Depth Deck Offset: 0.00

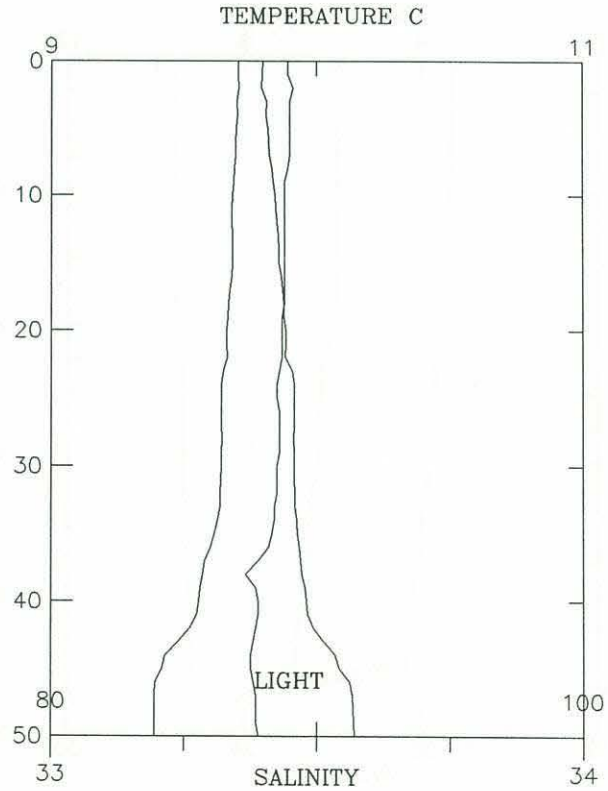
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.547	33.469	25.832	0.0000	87.1
5.0		9.547	33.466	25.829	0.0110	81.0
10.0		9.541	33.470	25.833	0.0219	87.1
15.0		9.538	33.472	25.835	0.0329	87.1
20.0		9.532	33.475	25.839	0.0438	87.1
25.0		9.520	33.480	25.845	0.0548	87.0
30.0		9.512	33.486	25.851	0.0657	86.8
35.0		9.424	33.541	25.908	0.0765	86.5
40.0		9.394	33.560	25.928	0.0870	86.6
45.0		9.380	33.575	25.942	0.0976	86.6
50.0		9.367	33.591	25.956	0.1080	86.9
55.0		9.305	33.631	25.998	0.1183	86.8
60.0		9.277	33.640	26.009	0.1285	85.3
65.0		9.195	33.688	26.060	0.1386	80.6
70.0		9.172	33.705	26.077	0.1485	79.5
73.0		9.158	33.717	26.089	0.1544	80.0



Cruise W8902 Station # 238 Depth m: 92 Time: 1989-03-06 13:06
Position: 38 38.72'N 123 29.83'W Depth Deck Offset: 0.00

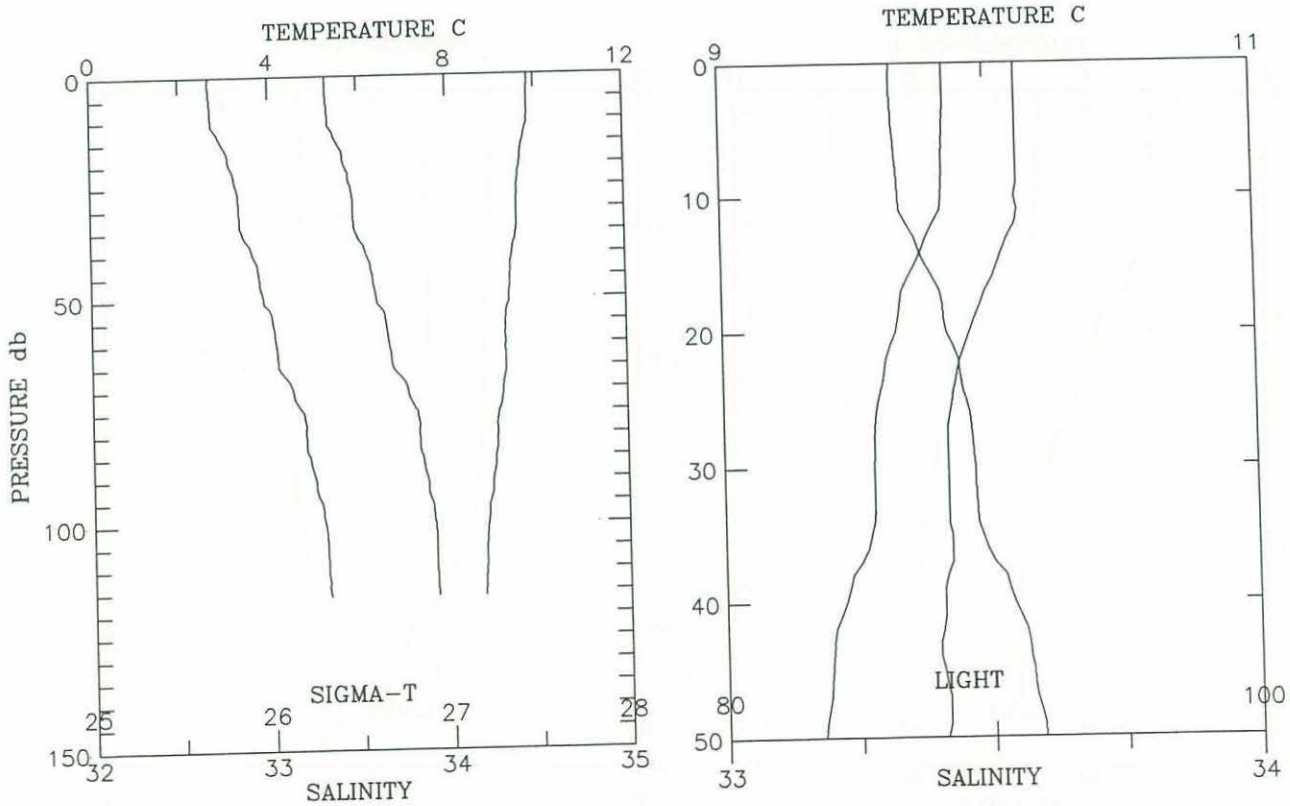
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.706	33.398	25.750	0.0000	88.9
5.0		9.697	33.408	25.759	0.0113	89.0
10.0		9.683	33.422	25.773	0.0226	88.8
15.0		9.683	33.429	25.778	0.0339	88.8
20.0		9.661	33.442	25.792	0.0450	88.7
25.0		9.641	33.458	25.808	0.0562	88.5
30.0		9.641	33.458	25.808	0.0673	88.5
35.0		9.616	33.464	25.816	0.0784	88.3
40.0		9.557	33.481	25.839	0.0894	87.8
45.0		9.417	33.543	25.911	0.1002	87.5
50.0		9.389	33.571	25.937	0.1107	87.8
55.0		9.362	33.587	25.954	0.1212	87.7
60.0		9.335	33.606	25.973	0.1316	87.7
65.0		9.237	33.670	26.039	0.1417	87.2
70.0		9.175	33.708	26.079	0.1517	86.7
75.0		9.108	33.748	26.121	0.1614	86.5
80.0		9.042	33.798	26.170	0.1710	87.0
85.0		8.961	33.847	26.222	0.1802	85.3
89.0		8.944	33.853	26.229	0.1876	83.8





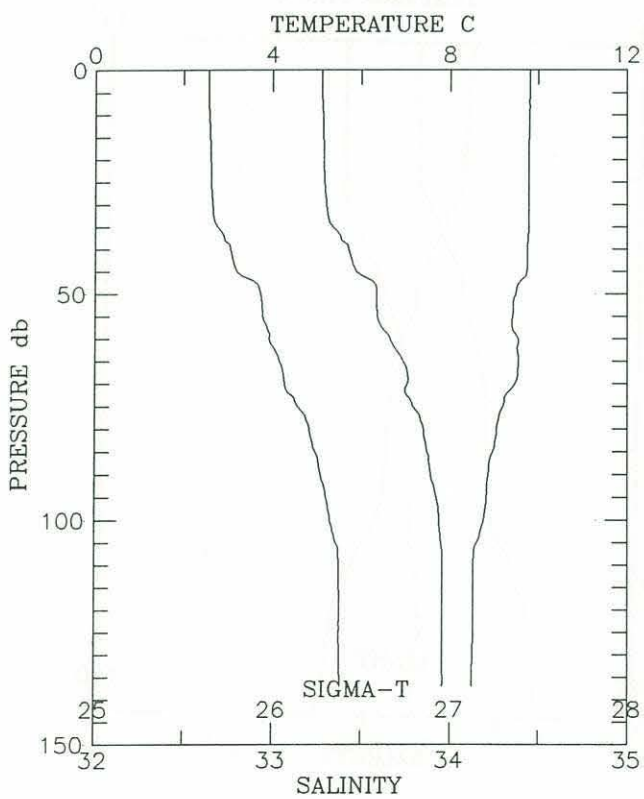
Cruise W8902 Station # 239 Depth m: 120 Time: 1989-03-06 13:48
Position: 38 36.36'N 123 32.40'W Depth Deck Offset: 0.00

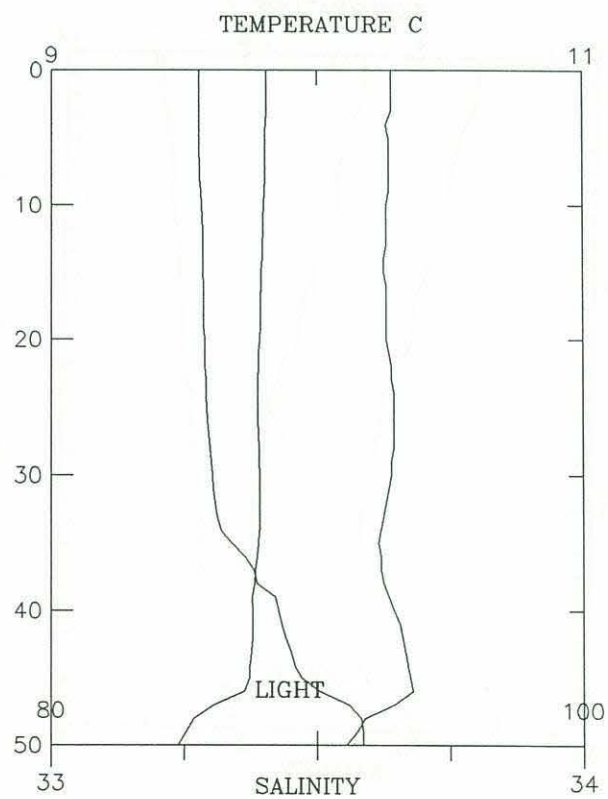
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.847	33.324	25.669	0.0000	91.2
10.0		9.833	33.335	25.680	0.0234	91.1
20.0		9.650	33.422	25.778	0.0463	89.3
30.0		9.562	33.471	25.831	0.0685	88.4
40.0		9.448	33.540	25.903	0.0902	88.2
50.0		9.361	33.594	25.960	0.1112	88.2
60.0		9.262	33.662	26.029	0.1316	87.6
70.0		9.203	33.766	26.120	0.1515	92.3
80.0		9.062	33.828	26.191	0.1704	93.4
90.0		8.952	33.871	26.242	0.1889	92.9
100.0		8.816	33.909	26.293	0.2068	85.3
110.0		8.766	33.916	26.306	0.2245	84.5
116.0		8.728	33.922	26.317	0.2350	83.0



Cruise W8902 Station # 240 Depth m: 140 Time: 1989-03-06 14:16
Position: 38 35.05'N 123 34.12'W Depth Deck Offset: 0.00

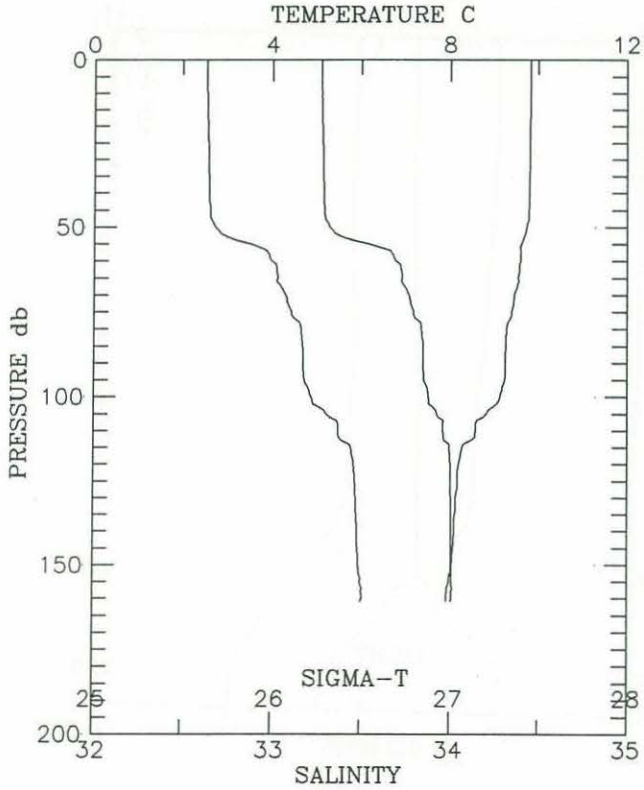
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.809	33.278	25.639	0.0000	92.8
10.0		9.799	33.283	25.645	0.0237	92.6
20.0		9.784	33.289	25.652	0.0474	92.6
30.0		9.784	33.304	25.664	0.0710	92.8
40.0		9.759	33.428	25.765	0.0943	92.9
50.0		9.480	33.586	25.934	0.1162	91.1
60.0		9.547	33.664	25.984	0.1371	92.9
70.0		9.479	33.761	26.071	0.1572	94.3
80.0		9.054	33.851	26.210	0.1763	93.7
90.0		8.863	33.893	26.273	0.1945	94.1
100.0		8.758	33.940	26.326	0.2121	94.4
110.0		8.533	33.958	26.375	0.2293	89.0
120.0		8.523	33.959	26.378	0.2462	87.6
130.0		8.517	33.959	26.379	0.2632	85.5
137.0		8.503	33.959	26.381	0.2751	85.5

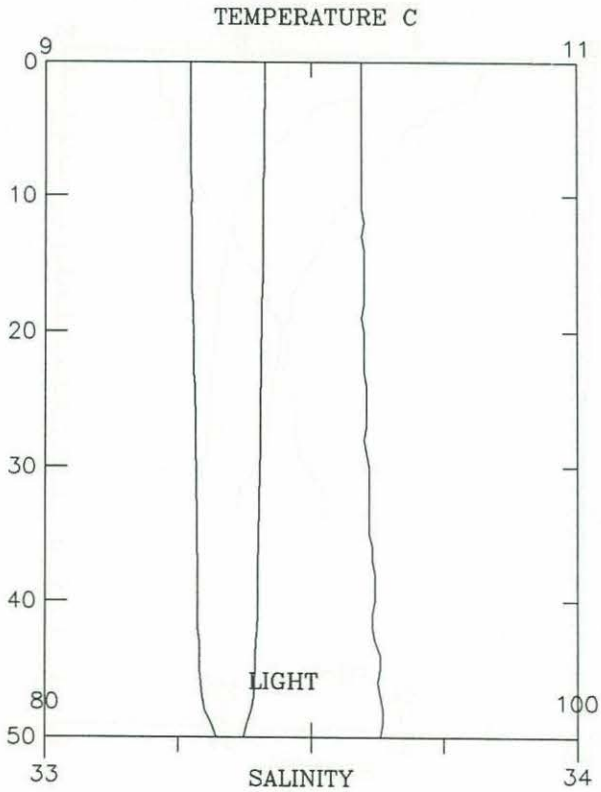




Cruise W8902 Station # 241 Depth m: 164 Time: 1989-03-06 14:51
Position: 38 32.80'N 123 37.30'W Depth Deck Offset: 0.00

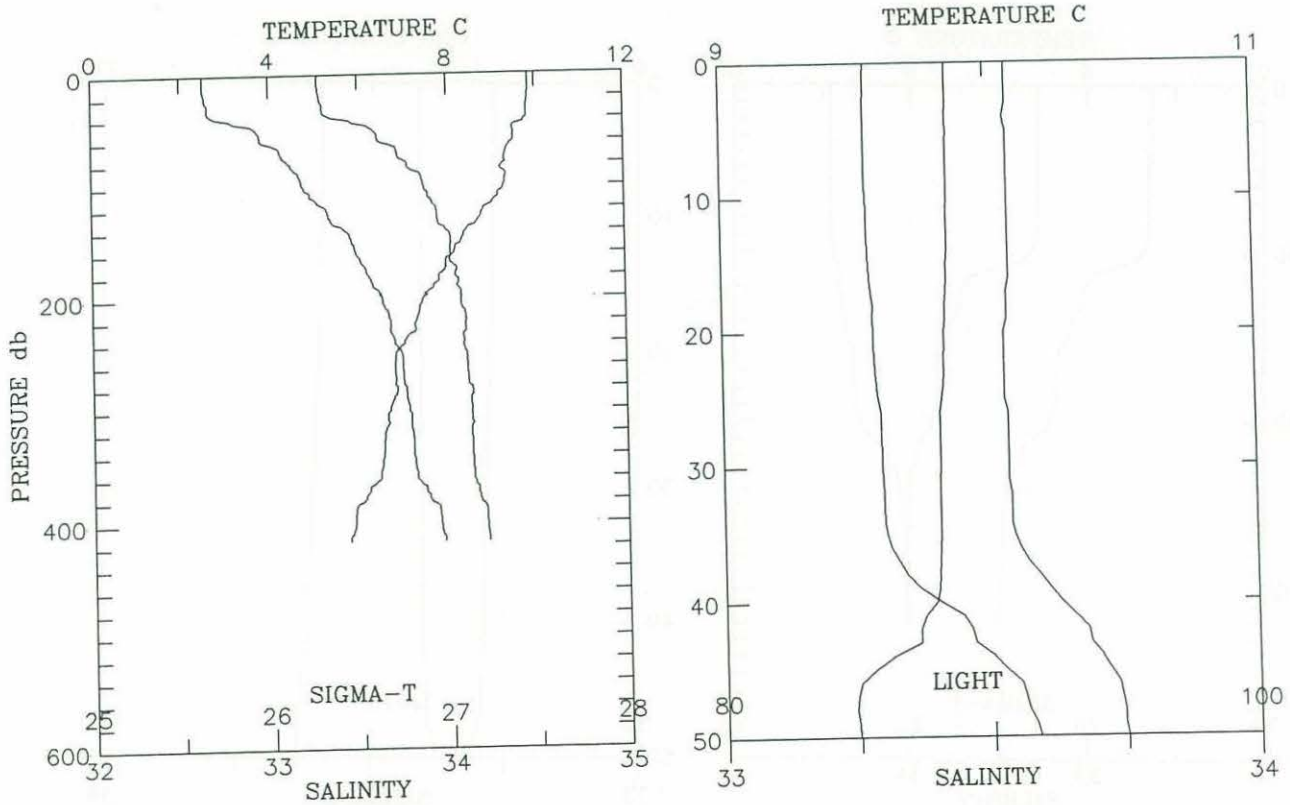
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.825	33.274	25.634	0.0000	91.9
10.0		9.818	33.276	25.636	0.0238	91.9
20.0		9.813	33.280	25.640	0.0476	92.0
30.0		9.808	33.284	25.644	0.0714	92.2
40.0		9.798	33.287	25.648	0.0951	92.4
50.0		9.745	33.322	25.684	0.1188	92.6
60.0		9.603	33.693	25.998	0.1406	95.1
70.0		9.466	33.767	26.078	0.1607	95.3
80.0		9.290	33.839	26.163	0.1800	95.4
90.0		9.255	33.850	26.177	0.1989	95.4
100.0		9.143	33.879	26.218	0.2176	95.2
110.0		8.586	33.963	26.371	0.2352	94.6
120.0		8.209	34.004	26.461	0.2517	94.9
130.0		8.141	34.007	26.473	0.2678	94.9
140.0		8.102	34.009	26.481	0.2839	94.5
150.0		8.051	34.009	26.488	0.2999	93.4
160.0		7.936	34.014	26.509	0.3157	90.7
161.0		7.935	34.007	26.504	0.3173	90.7





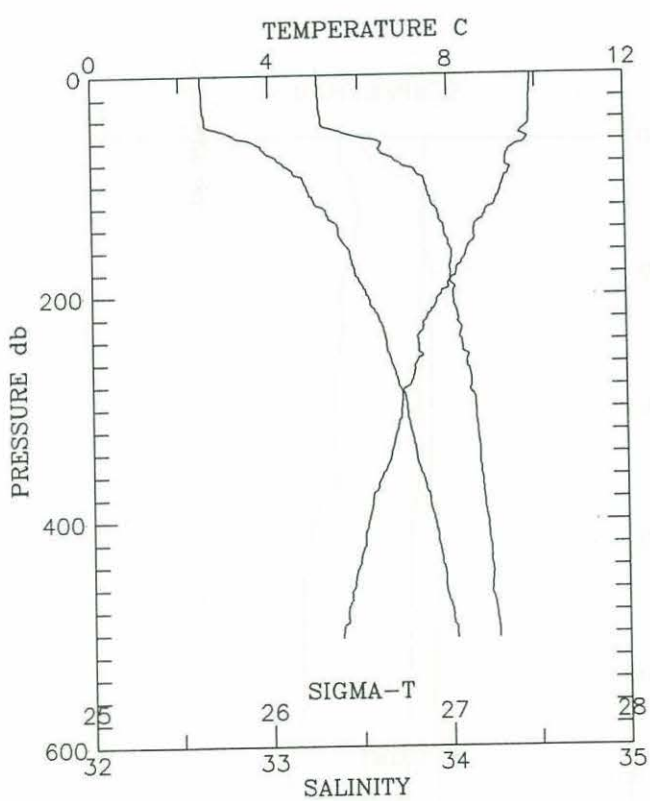
Cruise W8902 Station # 242 Depth m: 425 Time: 1989-03-06 15:29
Position: 38 30.72'N 123 40.28'W Depth Deck Offset: 0.00

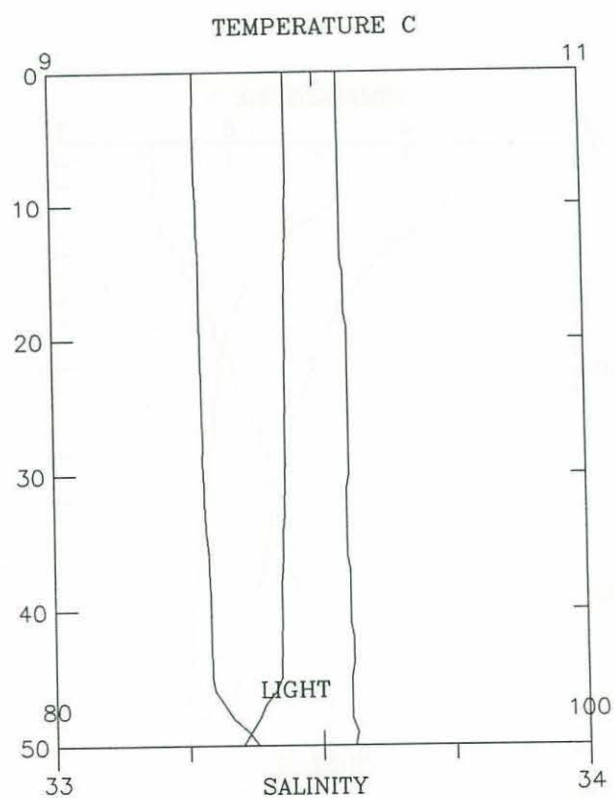
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.857	33.276	25.630	0.0000	90.8
10.0		9.854	33.275	25.630	0.0239	90.8
20.0		9.836	33.286	25.641	0.0477	90.6
30.0		9.815	33.299	25.655	0.0714	90.7
40.0		9.794	33.404	25.740	0.0949	92.6
50.0		9.496	33.585	25.931	0.1166	95.0
60.0		9.495	33.616	25.955	0.1376	95.3
80.0		9.268	33.775	26.116	0.1774	95.5
100.0		9.272	33.868	26.188	0.2154	95.4
150.0		8.285	34.017	26.459	0.3026	95.5
200.0		7.417	34.069	26.628	0.3802	96.0
250.0		6.798	34.098	26.736	0.4515	95.6
300.0		6.664	34.124	26.774	0.5196	95.6
400.0		5.847	34.205	26.944	0.6487	95.4
416.0		5.740	34.213	26.963	0.6677	95.3



Cruise W8902 Station # 243 Depth m: 850 Time: 1989-03-06 16:12
Position: 38 28.84'N 123 42.89'W Depth Deck Offset: 0.00

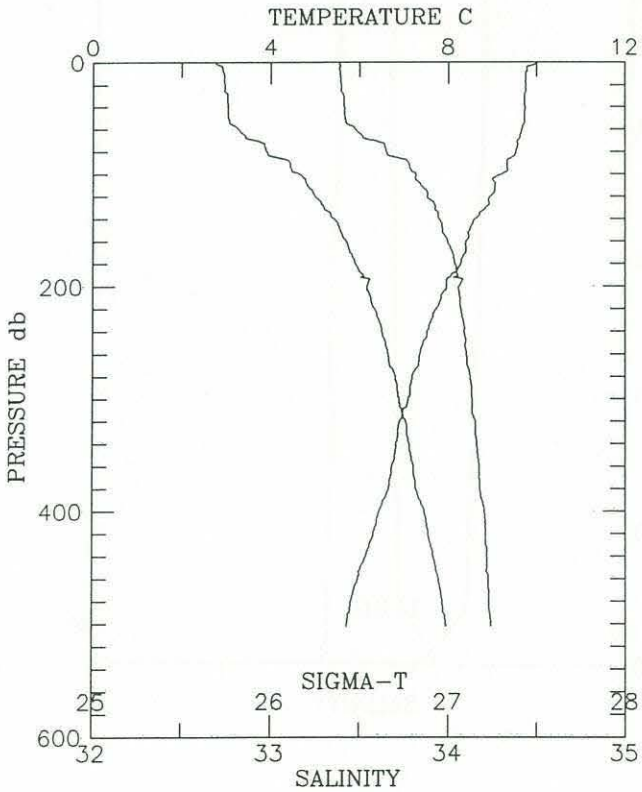
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.892	33.275	25.623	0.0000	90.9
10.0		9.887	33.276	25.625	0.0239	90.9
20.0		9.876	33.280	25.630	0.0478	91.1
30.0		9.870	33.282	25.632	0.0717	91.1
40.0		9.852	33.293	25.644	0.0955	91.1
50.0		9.700	33.379	25.736	0.1191	91.2
60.0		9.766	33.617	25.911	0.1412	95.1
80.0		9.306	33.734	26.078	0.1823	95.4
100.0		9.223	33.874	26.201	0.2205	95.4
150.0		8.563	33.996	26.401	0.3088	95.6
200.0		7.786	34.022	26.538	0.3897	95.8
250.0		7.315	34.084	26.654	0.4643	95.9
300.0		6.904	34.145	26.758	0.5345	96.2
400.0		6.127	34.207	26.910	0.6644	96.3
500.0		5.550	34.262	27.025	0.7822	96.0
504.0		5.540	34.264	27.028	0.7867	96.0

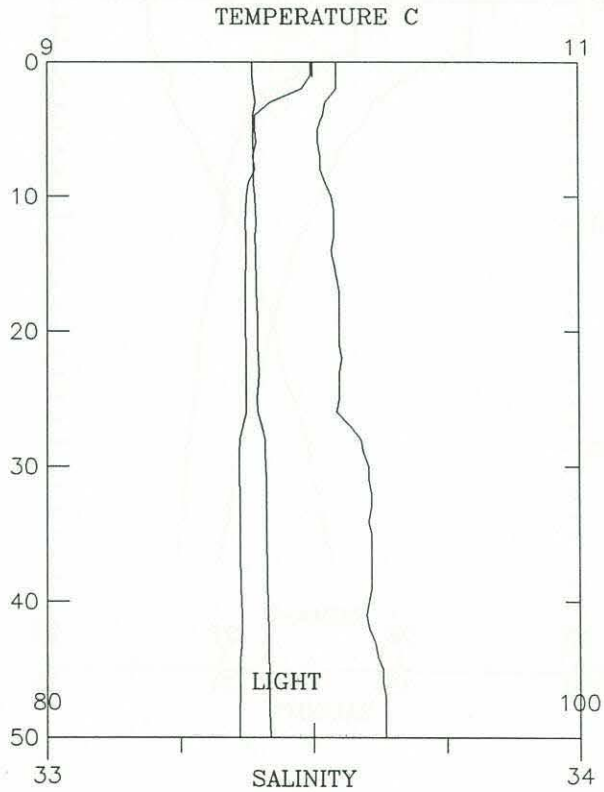




Cruise W8902 Station # 244 Depth m: 1020 Time: 1989-03-06 20:38
Position: 38 19.70'N 123 40.20'W Depth Deck Offset: 0.00

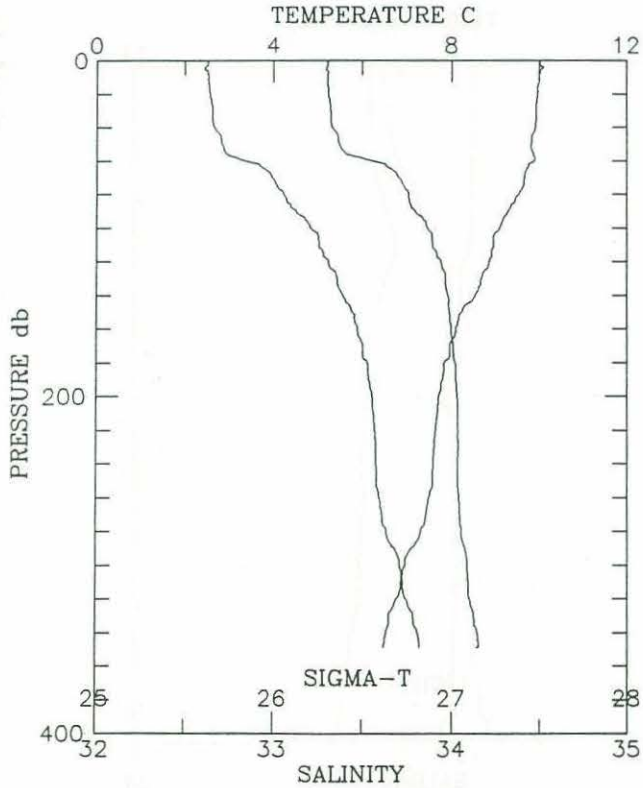
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.993	33.386	25.693	0.0000	90.9
10.0		9.750	33.391	25.738	0.0230	90.7
20.0		9.747	33.396	25.742	0.0458	91.0
30.0		9.722	33.411	25.758	0.0686	92.1
40.0		9.729	33.414	25.759	0.0912	92.1
50.0		9.721	33.419	25.764	0.1139	92.7
60.0		9.666	33.477	25.818	0.1364	93.7
80.0		9.526	33.652	25.978	0.1791	94.2
100.0		9.227	33.817	26.156	0.2186	94.8
150.0		8.479	33.968	26.392	0.3080	95.3
200.0		7.957	34.059	26.542	0.3889	95.7
250.0		7.433	34.097	26.648	0.4642	96.1
300.0		7.102	34.136	26.724	0.5354	96.1
400.0		6.449	34.206	26.867	0.6690	96.2
500.0		5.726	34.241	26.987	0.7903	96.3
502.0		5.718	34.241	26.988	0.7926	96.3

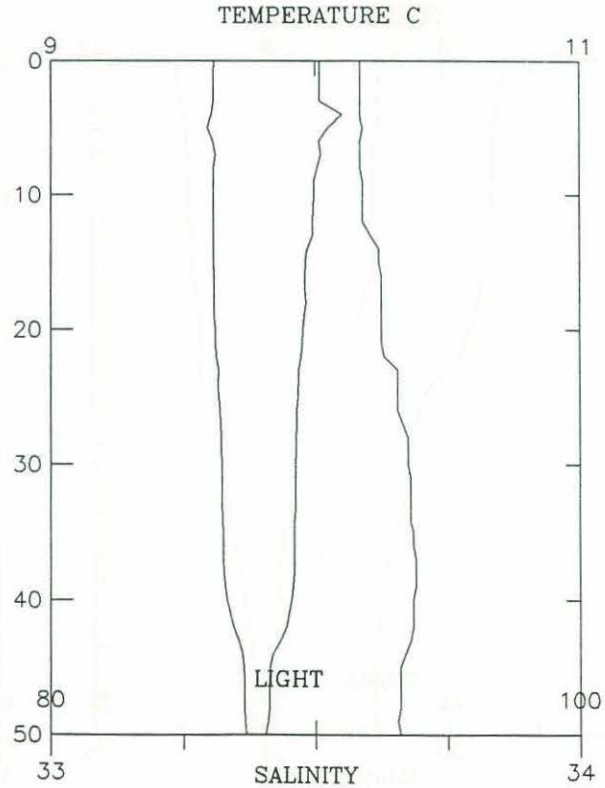




Cruise W8902 Station # 245 Depth m: 345 Time: 1989-03-06 21:42
Position: 38 23.60'N 123 35.20'W Depth Deck Offset: 0.00

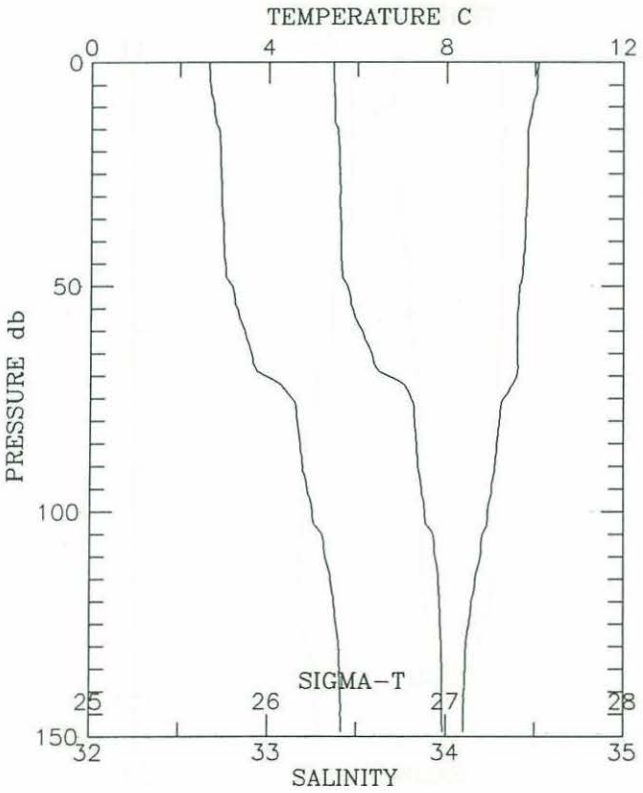
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.018	33.309	25.629	0.0000	91.7
10.0		9.995	33.308	25.632	0.0239	91.8
20.0		9.953	33.311	25.641	0.0477	92.5
30.0		9.926	33.323	25.655	0.0714	93.5
40.0		9.910	33.333	25.666	0.0950	93.7
50.0		9.812	33.370	25.711	0.1183	93.2
60.0		9.880	33.554	25.843	0.1412	95.2
80.0		9.535	33.759	26.060	0.1823	95.1
100.0		9.095	33.863	26.213	0.2208	94.9
150.0		8.225	33.986	26.444	0.3078	94.7
200.0		7.705	34.031	26.556	0.3869	95.0
250.0		7.566	34.036	26.581	0.4633	94.0
300.0		6.953	34.088	26.707	0.5373	94.9
349.0		6.482	34.145	26.815	0.6038	94.3

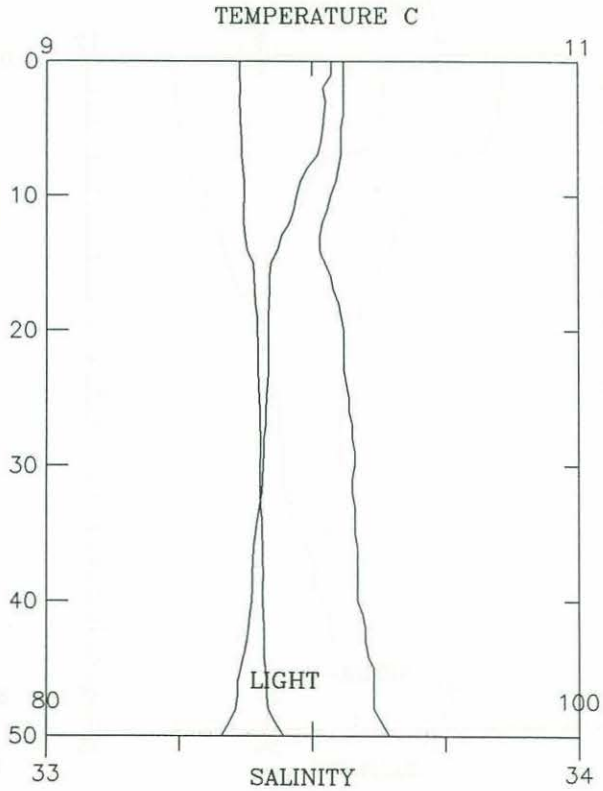




Cruise W8902 Station # 246 Depth m: 154 Time: 1989-03-06 23:36
Position: 38 27.00'N 123 30.50'W Depth Deck Offset: 0.00

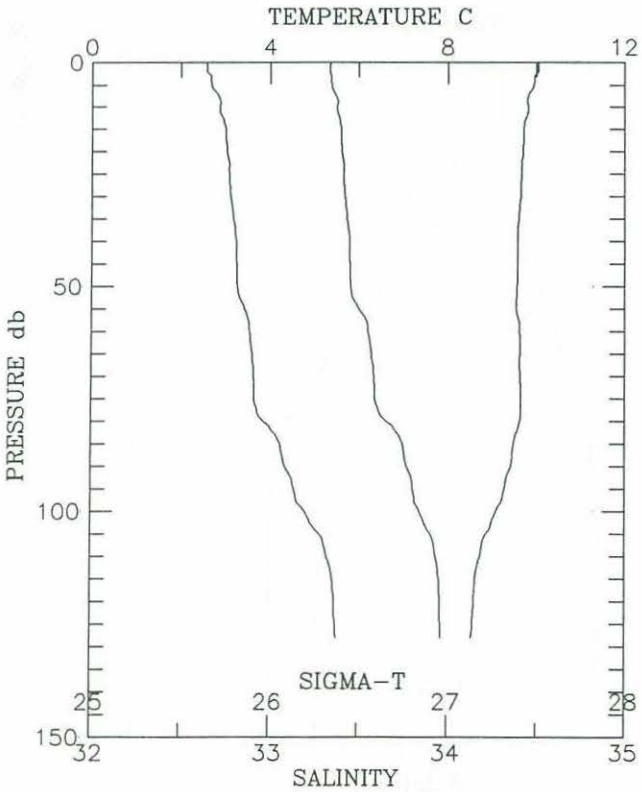
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.073	33.364	25.662	0.0000	91.2
10.0		9.942	33.373	25.691	0.0234	90.7
20.0		9.836	33.397	25.728	0.0465	91.2
30.0		9.816	33.402	25.735	0.0694	91.6
40.0		9.772	33.407	25.746	0.0923	91.7
50.0		9.659	33.446	25.796	0.1150	92.9
60.0		9.603	33.530	25.870	0.1370	93.7
70.0		9.589	33.670	25.982	0.1584	94.7
80.0		9.203	33.822	26.164	0.1777	94.5
90.0		9.100	33.843	26.197	0.1965	94.3
100.0		8.942	33.880	26.251	0.2149	94.1
110.0		8.779	33.940	26.323	0.2326	94.4
120.0		8.580	33.966	26.374	0.2498	93.8
130.0		8.451	33.975	26.401	0.2667	92.0
140.0		8.413	33.980	26.411	0.2834	91.2
149.0		8.396	33.982	26.415	0.2984	91.0

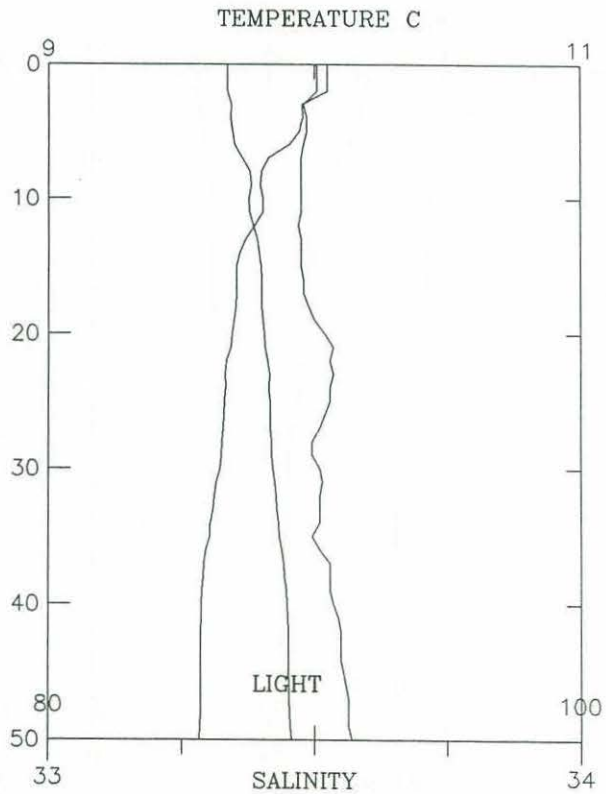




Cruise W8902 Station # 247 Depth m: 133 Time: 1989-03-07 00:10
Position: 38 29.02'N 123 27.90'W Depth Deck Offset: 0.00

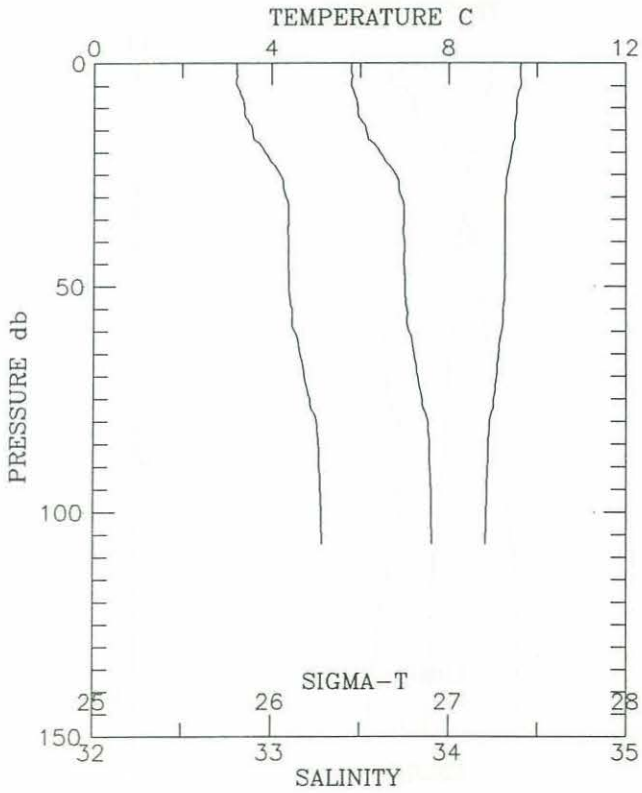
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.048	33.337	25.646	0.0000	90.1
10.0		9.807	33.377	25.717	0.0234	89.5
20.0		9.691	33.405	25.758	0.0461	90.4
30.0		9.643	33.421	25.779	0.0687	90.2
40.0		9.573	33.448	25.811	0.0910	90.7
50.0		9.566	33.456	25.818	0.1132	91.4
60.0		9.621	33.555	25.887	0.1350	92.9
70.0		9.635	33.589	25.911	0.1564	93.8
80.0		9.634	33.660	25.967	0.1776	94.7
90.0		9.424	33.772	26.089	0.1976	94.9
100.0		9.092	33.846	26.200	0.2168	94.2
110.0		8.740	33.935	26.325	0.2347	92.1
120.0		8.599	33.961	26.368	0.2519	89.3
128.0		8.549	33.964	26.378	0.2655	87.0

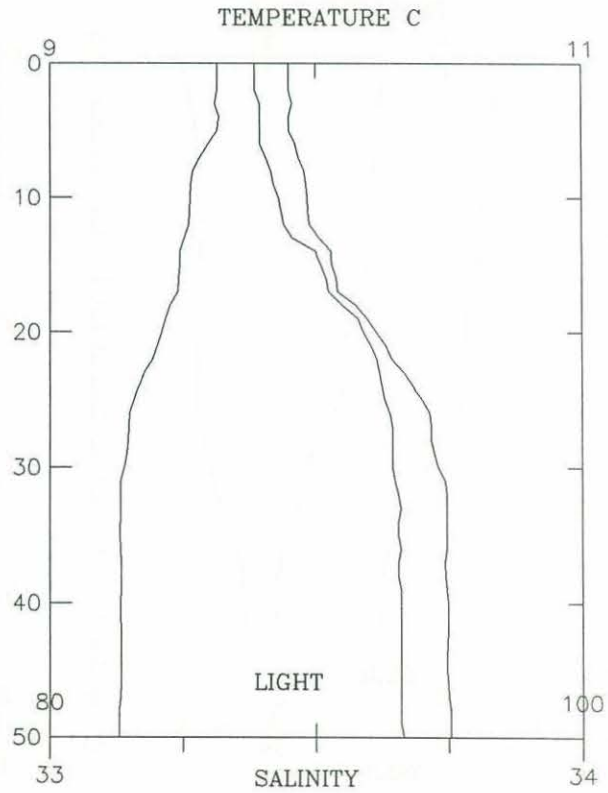




Cruise W8902 Station # 248 Depth m: 113 Time: 1989-03-07 00:40
Position: 38 30.76'N 123 25.39'W Depth Deck Offset: 0.00

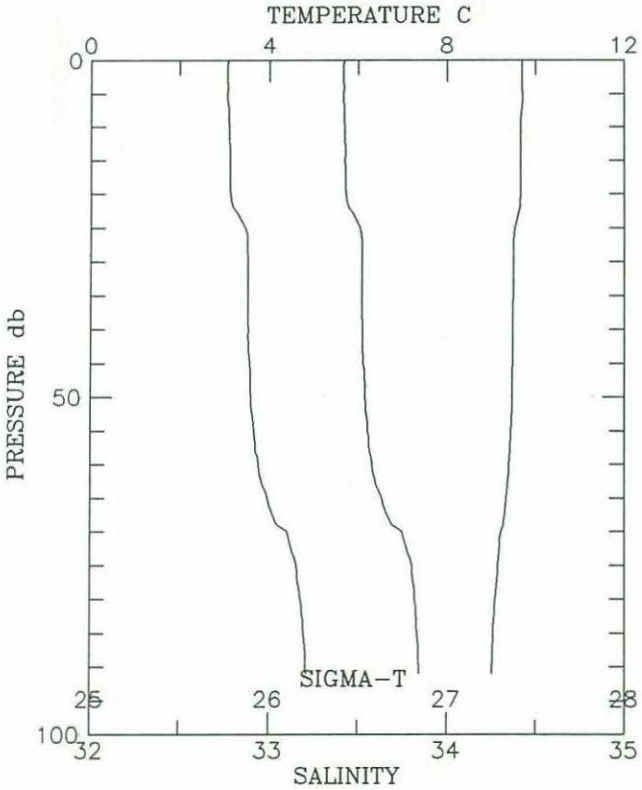
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.628	33.450	25.804	0.0000	87.7
10.0		9.528	33.484	25.847	0.0221	88.6
20.0		9.421	33.614	25.966	0.0434	91.8
30.0		9.279	33.731	26.080	0.0634	92.9
40.0		9.265	33.749	26.096	0.0829	93.2
50.0		9.261	33.754	26.101	0.1024	93.3
60.0		9.195	33.777	26.130	0.1218	93.0
70.0		9.083	33.826	26.186	0.1407	92.1
80.0		8.923	33.884	26.257	0.1591	89.9
90.0		8.884	33.895	26.271	0.1771	88.3
100.0		8.852	33.904	26.284	0.1949	86.6
107.0		8.842	33.906	26.287	0.2074	85.9

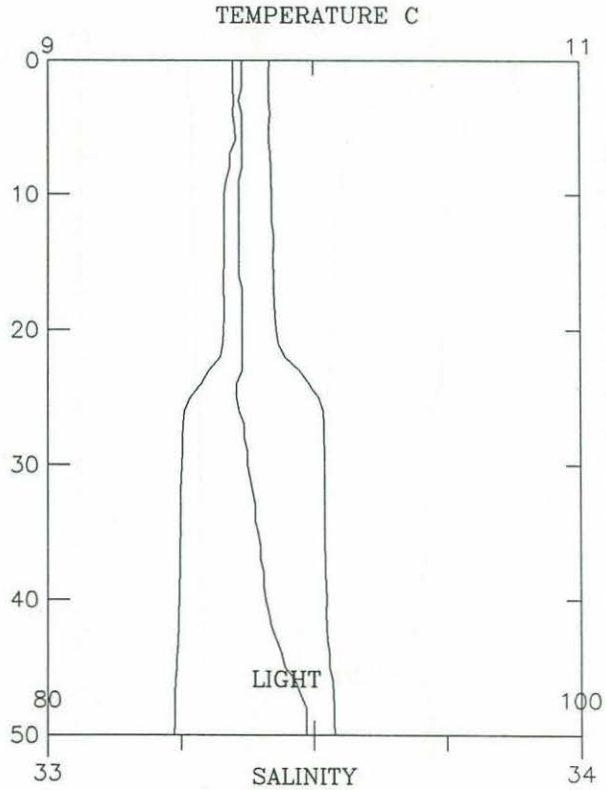




Cruise W8902 Station # 249 Depth m: 96 Time: 1989-03-07 01:11
Position: 38 32.15'N 123 23.51'W Depth Deck Offset: 0.00

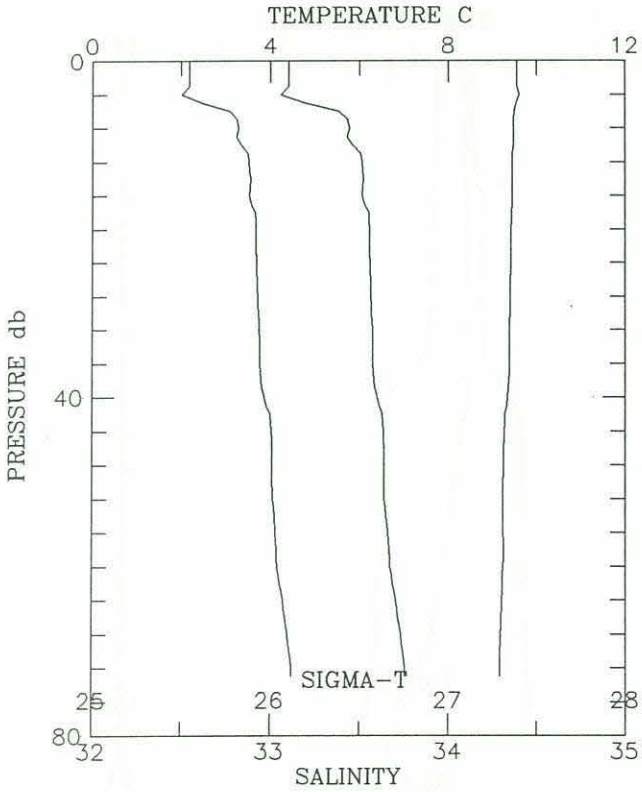
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.698	33.418	25.767	0.0000	87.3
5.0		9.704	33.417	25.765	0.0113	87.3
10.0		9.663	33.422	25.776	0.0225	87.2
15.0		9.662	33.424	25.778	0.0338	87.2
20.0		9.662	33.430	25.783	0.0450	87.3
25.0		9.535	33.510	25.866	0.0560	87.1
30.0		9.503	33.521	25.880	0.0668	87.5
35.0		9.498	33.521	25.880	0.0776	87.9
40.0		9.493	33.524	25.884	0.0883	88.2
45.0		9.484	33.530	25.890	0.0991	88.9
50.0		9.475	33.539	25.898	0.1098	89.7
55.0		9.451	33.556	25.916	0.1204	89.8
60.0		9.406	33.580	25.942	0.1310	88.8
65.0		9.337	33.633	25.994	0.1414	88.1
70.0		9.219	33.747	26.102	0.1515	87.5
75.0		9.156	33.803	26.156	0.1611	89.2
80.0		9.100	33.821	26.179	0.1705	88.1
85.0		9.051	33.834	26.197	0.1799	84.5
90.0		9.028	33.845	26.210	0.1891	82.3
91.0		9.025	33.846	26.211	0.1910	82.1

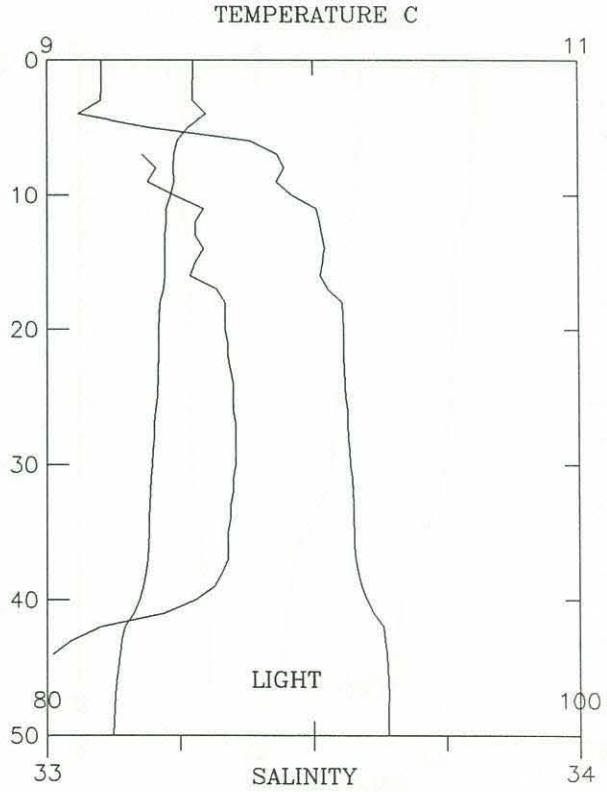




Cruise W8902 Station # 250 Depth m: 79 Time: 1989-03-07 01:40
Position: 38 33.24'N 123 22.14'W Depth Deck Offset: 0.00

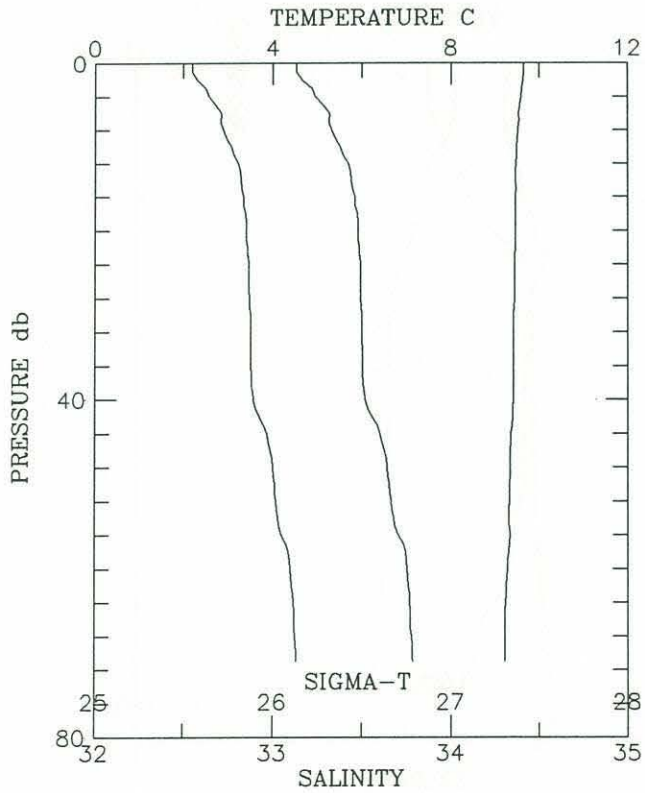
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.551	33.103	25.545	0.0000	71.4
5.0		9.533	33.192	25.618	0.0123	73.0
10.0		9.468	33.460	25.838	0.0235	84.8
15.0		9.444	33.519	25.888	0.0342	85.6
20.0		9.422	33.558	25.922	0.0449	86.7
25.0		9.415	33.561	25.925	0.0554	87.0
30.0		9.396	33.570	25.935	0.0659	87.1
35.0		9.384	33.577	25.943	0.0764	86.8
40.0		9.347	33.600	25.967	0.0868	85.6
45.0		9.267	33.639	26.010	0.0971	79.6
50.0		9.248	33.640	26.014	0.1072	76.9
55.0		9.243	33.659	26.030	0.1173	77.9
60.0		9.244	33.674	26.041	0.1274	80.6
65.0		9.207	33.713	26.078	0.1373	79.7
70.0		9.172	33.748	26.111	0.1471	78.1
73.0		9.162	33.758	26.120	0.1529	78.6

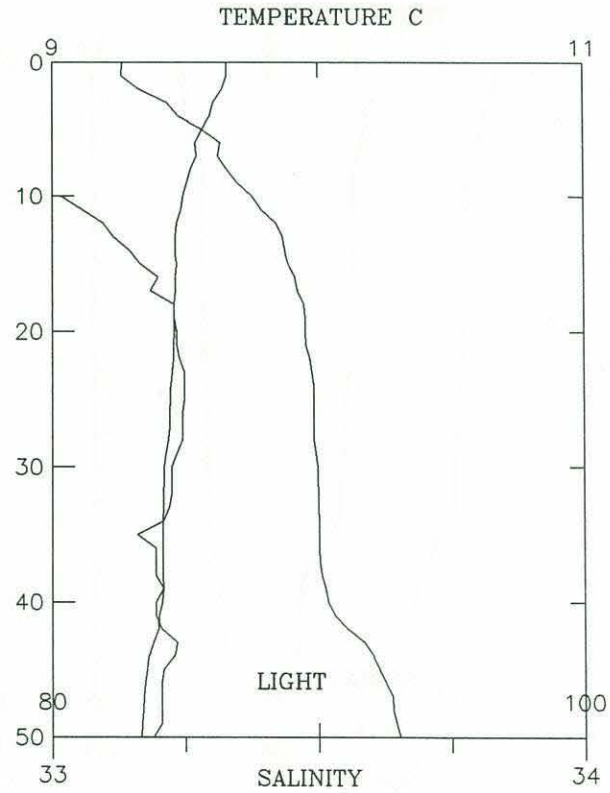




Cruise W8902 Station # 251 Depth m: 75 Time: 1989-03-07 02:41
Position: 38 27.36'N 123 15.61'W Depth Deck Offset: 0.00

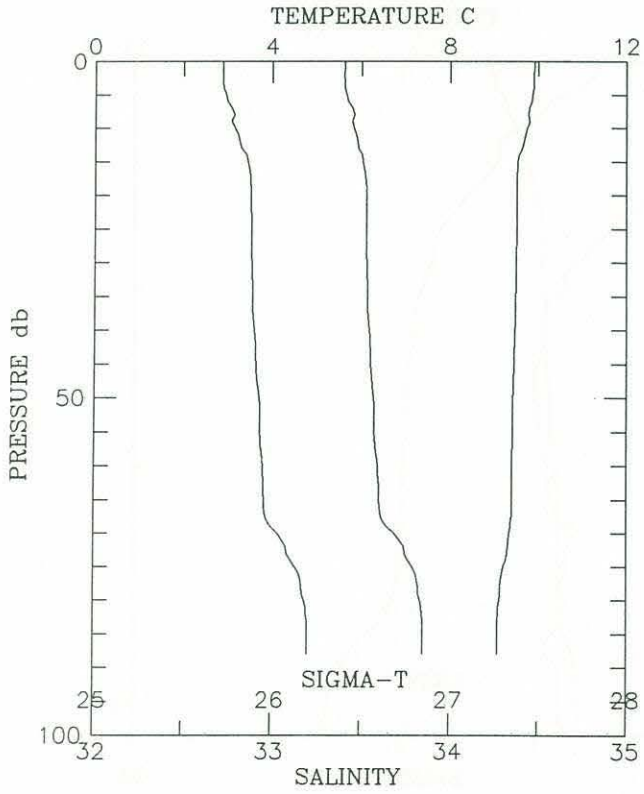
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.658	33.132	25.550	0.0000	76.4
5.0		9.566	33.282	25.682	0.0120	78.6
10.0		9.493	33.377	25.769	0.0235	80.3
15.0		9.469	33.444	25.825	0.0346	83.3
20.0		9.459	33.476	25.852	0.0455	84.7
25.0		9.445	33.492	25.866	0.0564	85.0
30.0		9.422	33.499	25.876	0.0672	84.5
35.0		9.415	33.501	25.878	0.0780	83.2
40.0		9.414	33.518	25.892	0.0887	83.9
45.0		9.355	33.614	25.976	0.0992	84.2
50.0		9.332	33.653	26.011	0.1095	83.8
55.0		9.323	33.687	26.039	0.1196	85.4
60.0		9.280	33.754	26.098	0.1294	85.7
65.0		9.234	33.771	26.119	0.1391	81.3
70.0		9.220	33.785	26.132	0.1488	80.5
71.0		9.219	33.786	26.133	0.1507	80.1

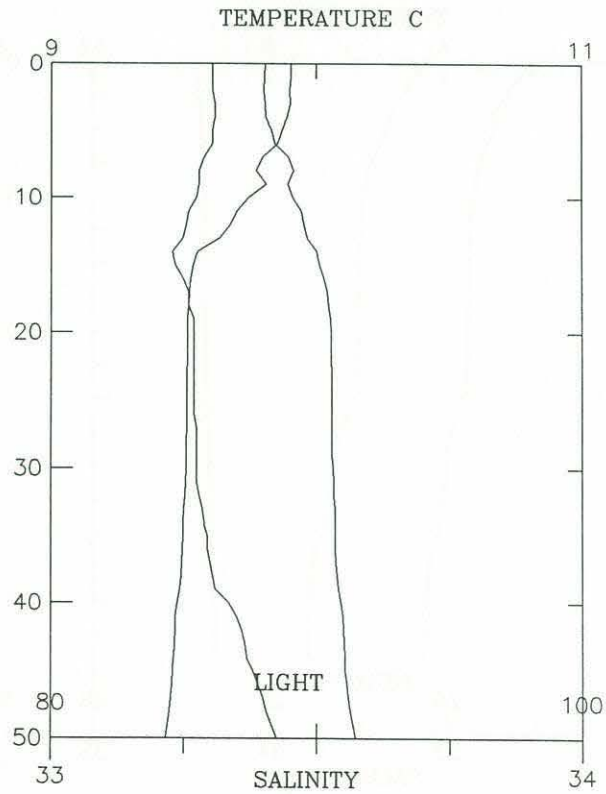




Cruise W8902 Station # 252 Depth m: 94 Time: 1989-03-07 03:12
Position: 38 26.08'N 123 16.02'W Depth Deck Offset: 0.00

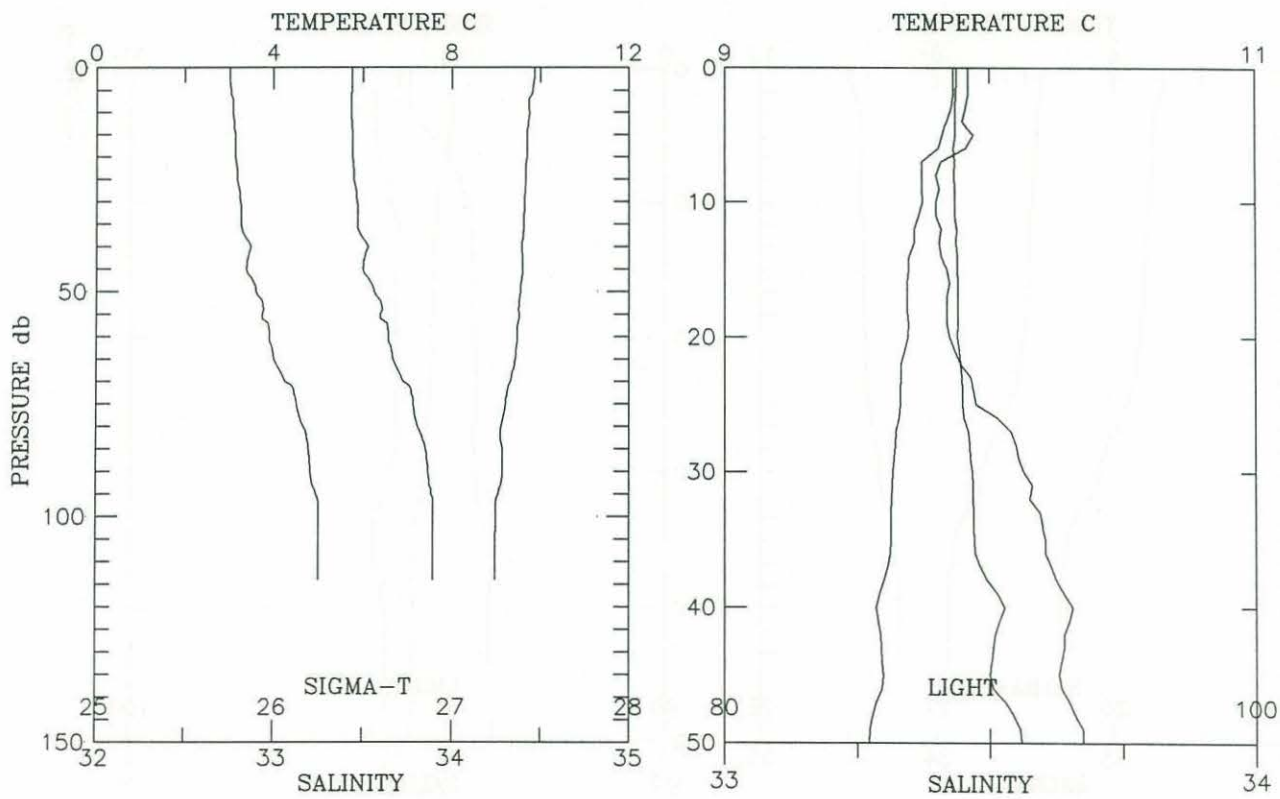
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.907	33.404	25.722	0.0000	86.1
5.0		9.873	33.416	25.737	0.0115	86.1
10.0		9.746	33.456	25.789	0.0227	85.5
15.0		9.537	33.507	25.863	0.0337	84.7
20.0		9.515	33.528	25.883	0.0445	85.4
25.0		9.513	33.529	25.884	0.0552	85.4
30.0		9.510	33.532	25.887	0.0660	85.5
35.0		9.497	33.536	25.892	0.0767	85.9
40.0		9.476	33.547	25.904	0.0874	86.7
45.0		9.461	33.554	25.912	0.0980	87.6
50.0		9.433	33.573	25.932	0.1086	88.5
55.0		9.426	33.578	25.937	0.1191	88.6
60.0		9.420	33.597	25.953	0.1296	89.1
65.0		9.420	33.606	25.960	0.1400	89.4
70.0		9.361	33.693	26.037	0.1503	91.6
75.0		9.233	33.794	26.137	0.1602	92.0
80.0		9.132	33.837	26.187	0.1696	88.2
85.0		9.098	33.851	26.203	0.1789	82.7
88.0		9.098	33.851	26.203	0.1845	82.9





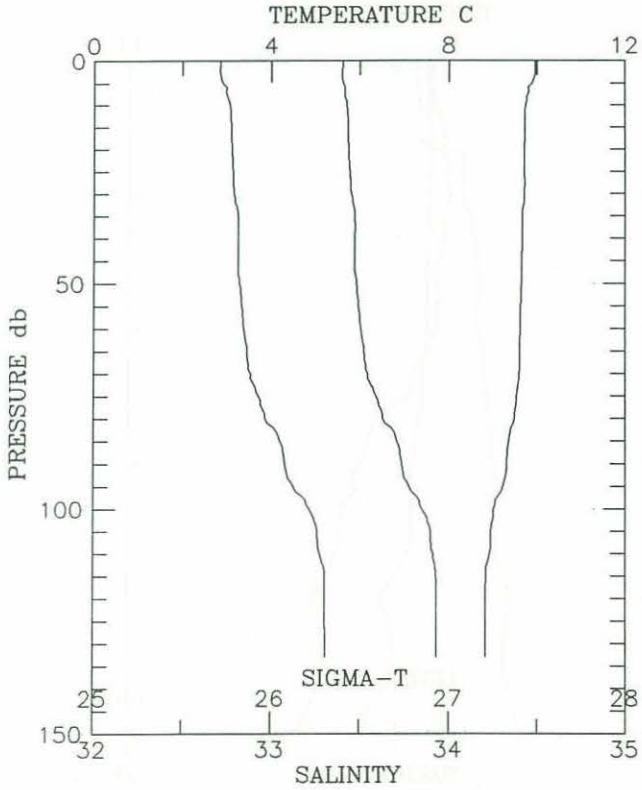
Cruise W8902 Station # 253 Depth m: 118 Time: 1989-03-07 03:53
Position: 38 23.18'N 123 20.96'W Depth Deck Offset: 0.00

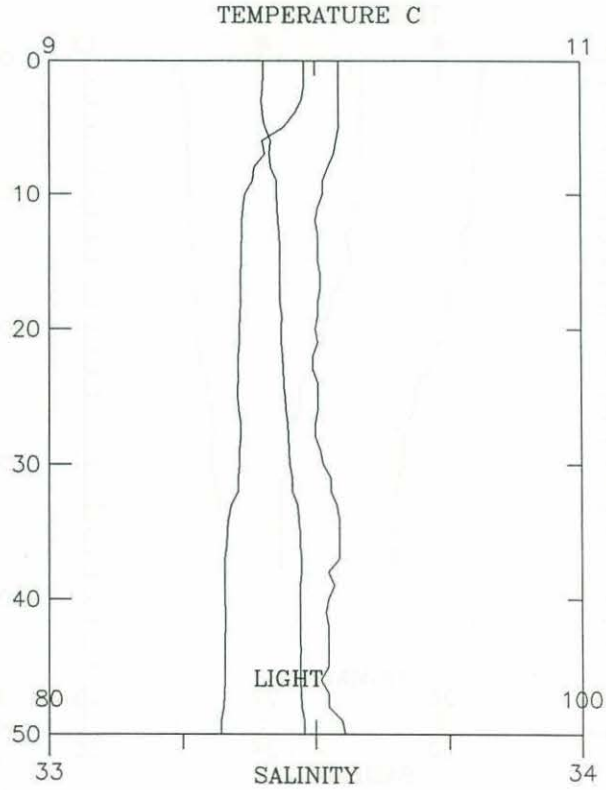
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.864	33.438	25.755	0.0000	89.2
10.0		9.748	33.435	25.772	0.0226	88.0
20.0		9.692	33.440	25.785	0.0450	88.5
30.0		9.634	33.467	25.816	0.0673	91.3
40.0		9.571	33.528	25.874	0.0893	93.1
50.0		9.545	33.560	25.903	0.1109	93.5
60.0		9.471	33.642	25.979	0.1318	93.9
70.0		9.330	33.724	26.067	0.1521	93.8
80.0		9.116	33.809	26.168	0.1714	94.4
90.0		9.144	33.867	26.208	0.1900	94.3
100.0		8.990	33.897	26.256	0.2083	86.8
110.0		8.985	33.896	26.256	0.2263	86.5
114.0		8.985	33.897	26.257	0.2336	86.5



Cruise W8902 Station # 254 Depth m: 137 Time: 1989-03-07 04:27
Position: 38 21.12'N 123 23.80'W Depth Deck Offset: 0.00

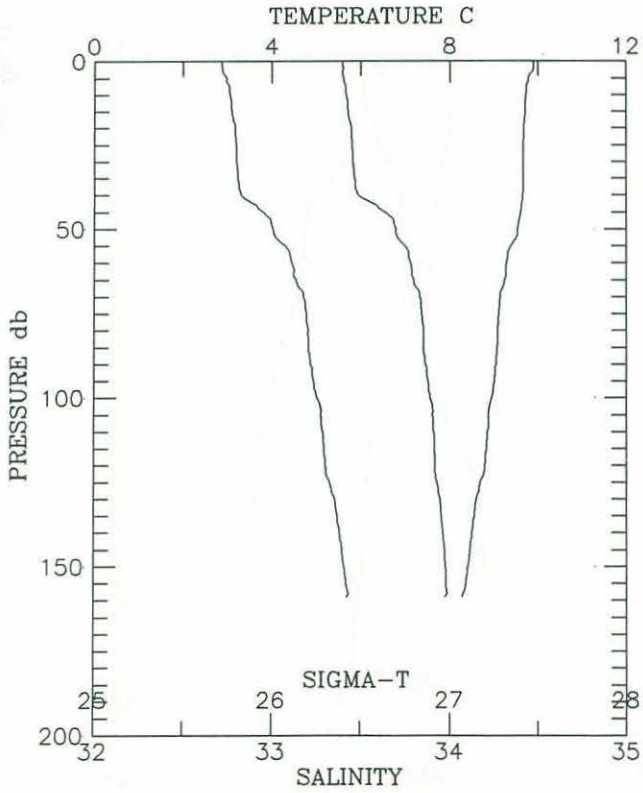
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.960	33.403	25.712	0.0000	90.9
10.0		9.736	33.427	25.768	0.0229	90.3
20.0		9.715	33.436	25.778	0.0453	90.0
30.0		9.714	33.452	25.791	0.0678	90.3
40.0		9.660	33.471	25.815	0.0900	90.5
50.0		9.644	33.479	25.824	0.1121	91.1
60.0		9.619	33.505	25.848	0.1341	92.8
70.0		9.589	33.548	25.887	0.1558	93.6
80.0		9.481	33.631	25.969	0.1770	94.0
90.0		9.313	33.739	26.081	0.1970	94.0
100.0		9.000	33.852	26.220	0.2162	94.2
110.0		8.927	33.913	26.279	0.2343	93.3
120.0		8.842	33.931	26.306	0.2520	88.2
130.0		8.832	33.932	26.309	0.2697	87.7
133.0		8.831	33.933	26.310	0.2750	88.0

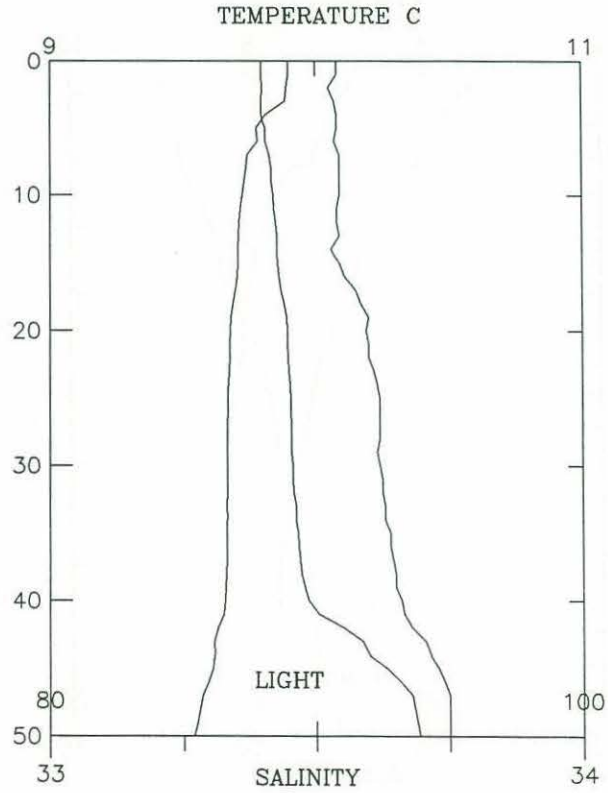




Cruise W8902 Station # 255 Depth m: 163 Time: 1989-03-07 04:54
Position: 38 19.85'N 123 25.44'W Depth Deck Offset: 0.00

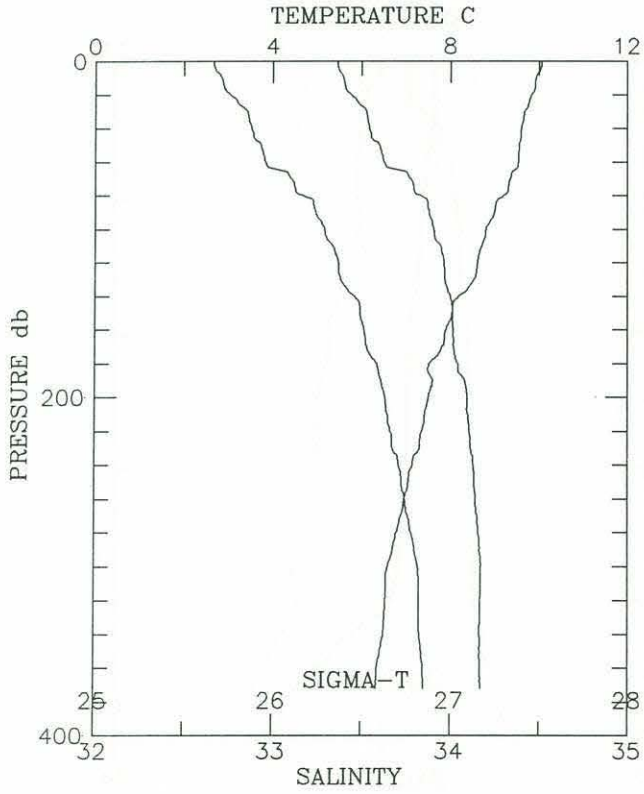
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.899	33.399	25.719	0.0000	90.8
10.0		9.724	33.420	25.765	0.0228	90.9
20.0		9.677	33.447	25.793	0.0453	91.9
30.0		9.666	33.456	25.802	0.0675	92.4
40.0		9.657	33.485	25.826	0.0897	93.2
50.0		9.539	33.694	26.009	0.1107	95.0
60.0		9.291	33.778	26.115	0.1305	94.4
70.0		9.139	33.830	26.180	0.1496	94.2
80.0		9.080	33.852	26.207	0.1682	94.0
90.0		9.046	33.863	26.221	0.1867	93.9
100.0		8.952	33.890	26.257	0.2049	93.8
110.0		8.853	33.911	26.289	0.2228	93.6
120.0		8.794	33.918	26.304	0.2406	93.6
130.0		8.597	33.945	26.356	0.2580	93.3
140.0		8.504	33.963	26.384	0.2751	93.2
150.0		8.416	33.977	26.408	0.2919	92.8
159.0		8.285	33.971	26.424	0.3069	91.3

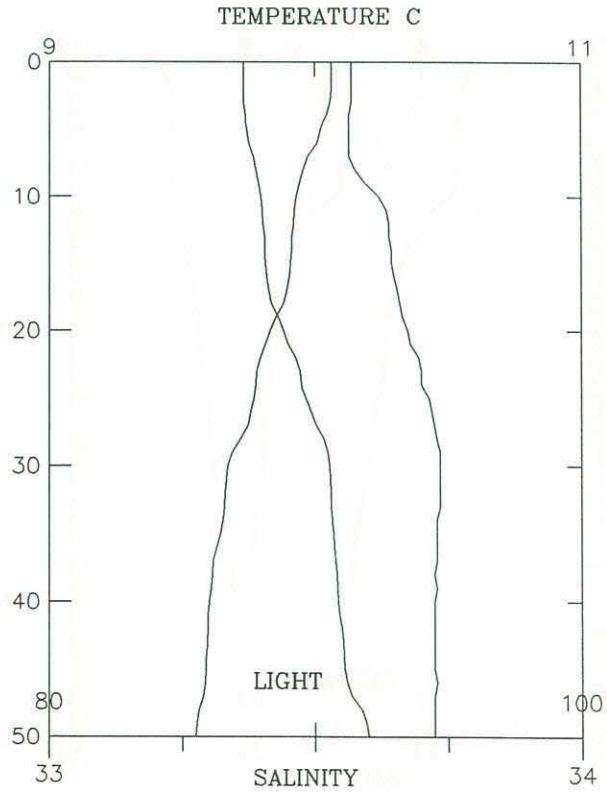




Cruise W8902 Station # 256 Depth m: 192 Time: 1989-03-07 05:46
Position: 38 15.61'N 123 31.02'W Depth Deck Offset: 0.00

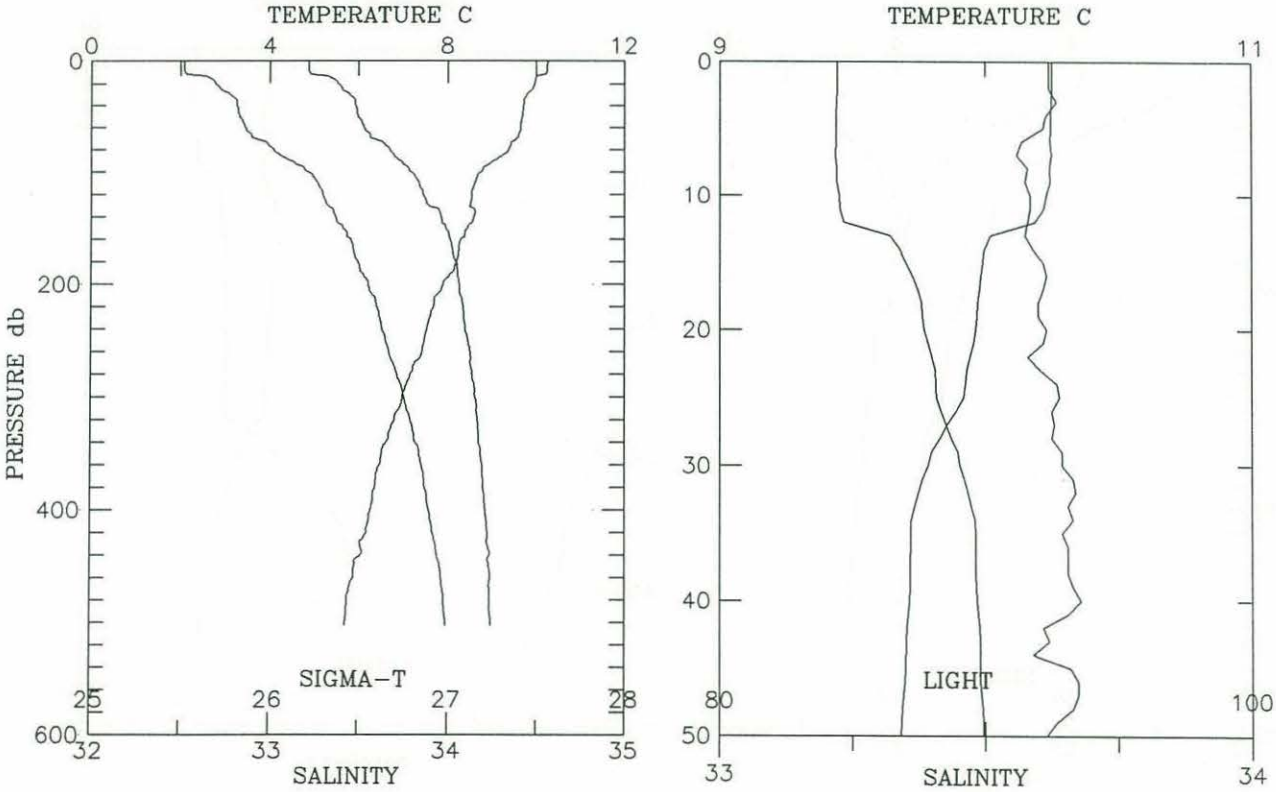
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.065	33.366	25.666	0.0000	91.4
10.0		9.929	33.398	25.713	0.0233	92.4
20.0		9.830	33.441	25.763	0.0463	93.5
30.0		9.671	33.528	25.858	0.0684	94.7
40.0		9.601	33.544	25.882	0.0901	94.5
50.0		9.550	33.601	25.935	0.1114	94.5
60.0		9.526	33.628	25.960	0.1324	94.5
80.0		9.202	33.834	26.173	0.1717	94.2
100.0		8.811	33.907	26.293	0.2080	94.2
150.0		8.037	34.013	26.494	0.2924	94.5
200.0		7.516	34.096	26.634	0.3689	96.1
250.0		7.068	34.137	26.730	0.4402	96.2
300.0		6.609	34.173	26.820	0.5072	96.1
372.0		6.350	34.171	26.853	0.6002	95.4





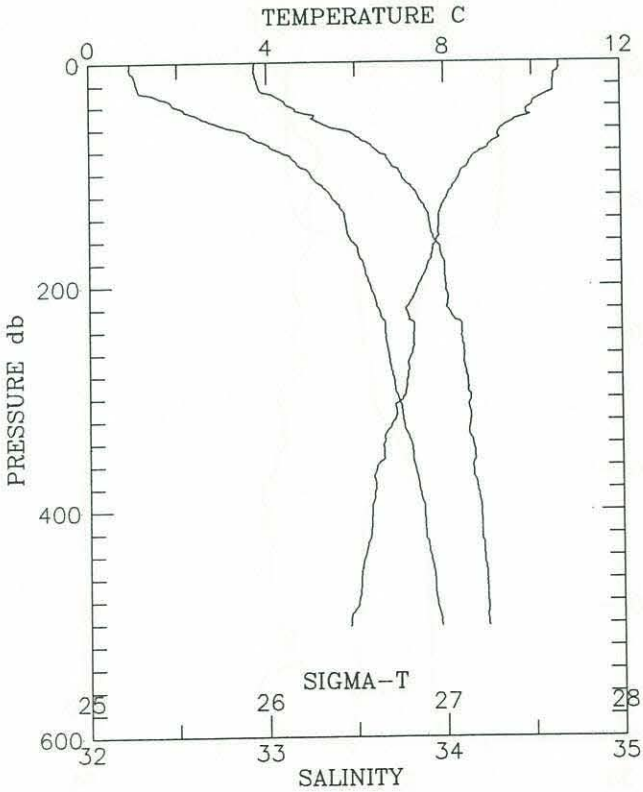
Cruise W8902 Station # 257 Depth m: 715 Time: 1989-03-07 06:28
Position: 38 13.63'N 123 33.95'W Depth Deck Offset: 0.00

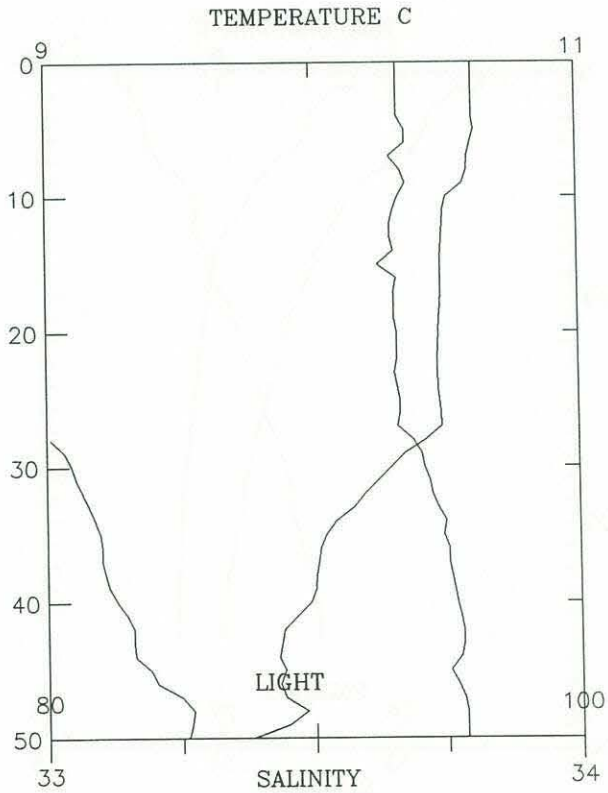
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.253	33.221	25.521	0.0000	92.4
10.0		10.231	33.225	25.527	0.0249	91.7
20.0		9.965	33.385	25.697	0.0487	92.3
30.0		9.785	33.452	25.780	0.0716	92.9
40.0		9.714	33.484	25.816	0.0938	93.6
50.0		9.684	33.497	25.831	0.1159	92.3
60.0		9.646	33.531	25.864	0.1377	93.7
80.0		9.371	33.677	26.023	0.1798	94.9
100.0		8.746	33.795	26.215	0.2185	95.2
150.0		8.435	33.989	26.415	0.3061	95.5
200.0		7.897	34.066	26.555	0.3862	96.0
250.0		7.482	34.115	26.654	0.4608	96.2
300.0		6.985	34.156	26.756	0.5312	96.3
400.0		6.279	34.215	26.897	0.6605	96.2
500.0		5.723	34.245	26.991	0.7798	96.0
503.0		5.713	34.246	26.993	0.7833	95.8



Cruise W8902 Station # 259 Depth m: 885 Time: 1989-03-07 07:36
Position: 38 8.01'N 123 33.82'W Depth Deck Offset: 0.00

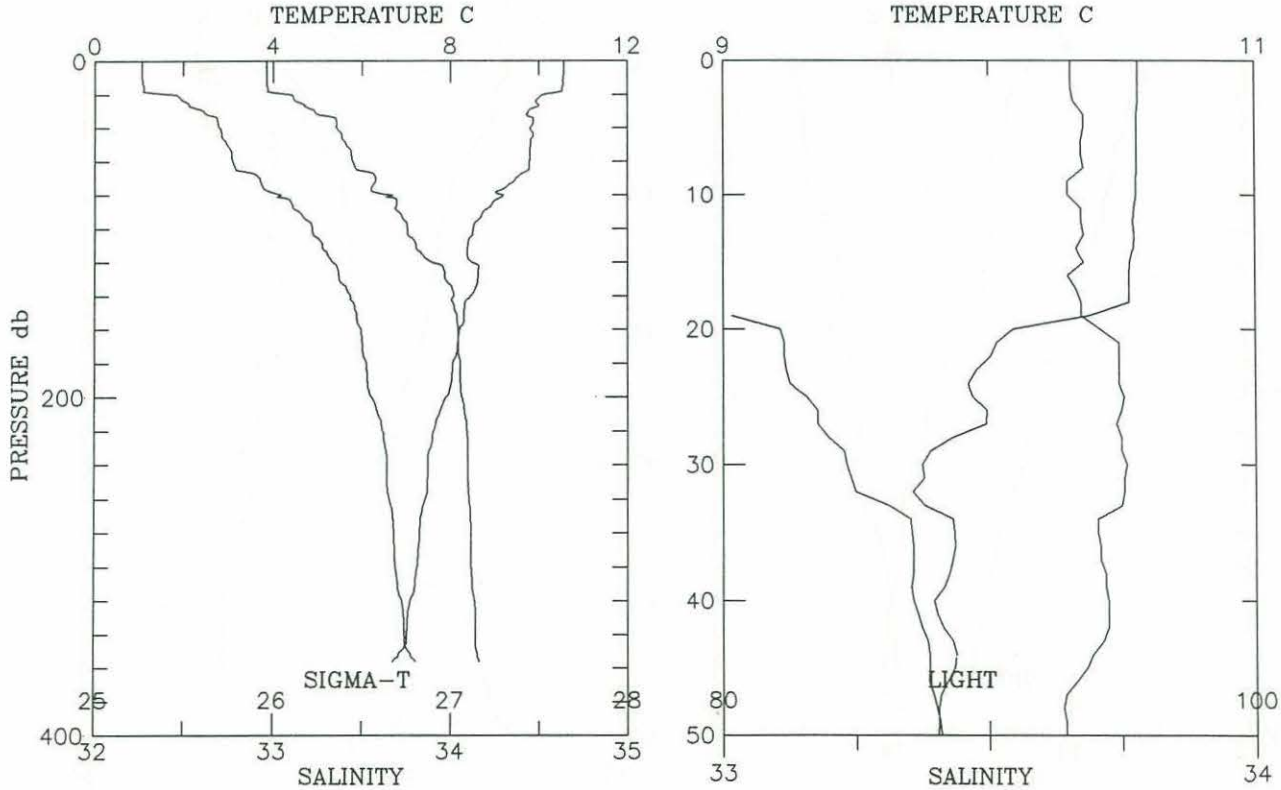
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.614	32.934	25.235	0.0000	93.3
10.0		10.513	32.935	25.253	0.0276	93.3
20.0		10.477	32.953	25.273	0.0549	93.2
30.0		10.297	33.045	25.376	0.0820	94.2
40.0		9.987	33.130	25.495	0.1077	95.4
50.0		9.764	33.261	25.634	0.1322	95.7
60.0		9.284	33.394	25.816	0.1553	95.7
80.0		8.809	33.628	26.074	0.1971	95.8
100.0		8.369	33.753	26.240	0.2350	95.8
150.0		7.859	33.923	26.449	0.3200	96.1
200.0		7.390	34.007	26.582	0.3983	96.3
250.0		7.289	34.099	26.669	0.4717	96.3
300.0		7.044	34.142	26.737	0.5423	96.1
400.0		6.329	34.199	26.878	0.6738	96.3
500.0		5.832	34.235	26.969	0.7962	96.1
502.0		5.825	34.237	26.972	0.7985	96.1





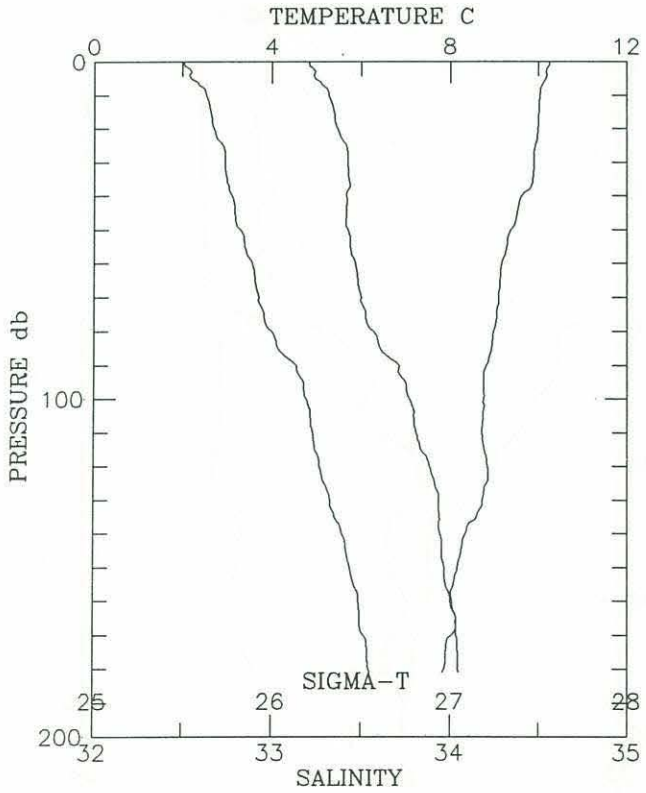
Cruise W8902 Station # 260 Depth m: 373 Time: 1989-03-07 08:38
Position: 38 9.10'N 123 28.30'W Depth Deck Offset: 0.00

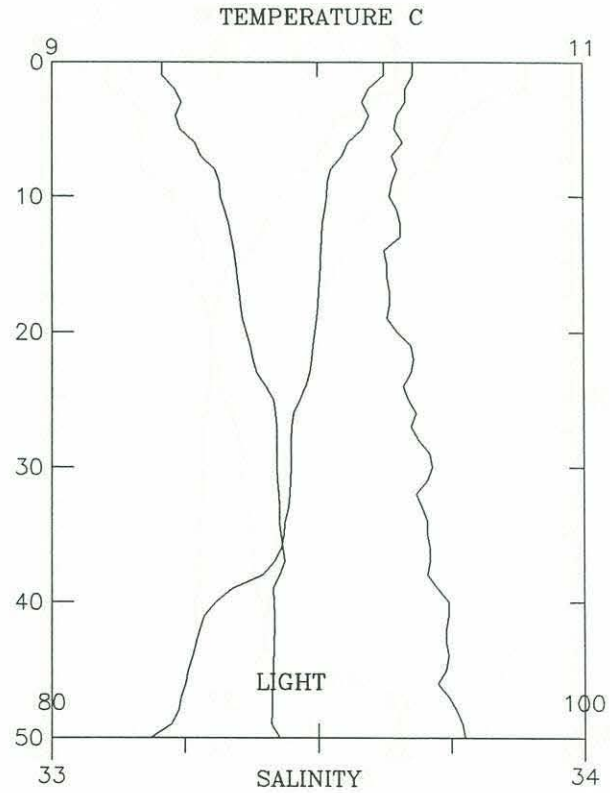
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.564	32.963	25.266	0.0000	93.1
10.0		10.556	32.963	25.267	0.0273	93.0
20.0		10.094	33.107	25.459	0.0544	94.2
30.0		9.748	33.232	25.614	0.0793	95.2
40.0		9.792	33.357	25.704	0.1028	94.5
50.0		9.807	33.409	25.742	0.1258	92.9
60.0		9.788	33.447	25.775	0.1485	93.8
80.0		9.195	33.672	26.048	0.1914	95.5
100.0		8.518	33.756	26.219	0.2297	95.4
150.0		8.314	34.034	26.469	0.3156	95.8
200.0		7.907	34.067	26.555	0.3946	95.9
250.0		7.489	34.101	26.642	0.4689	96.0
300.0		7.252	34.119	26.690	0.5409	96.1
356.0		6.688	34.164	26.803	0.6188	95.2



Cruise W8902 Station # 261 Depth m: 195 Time: 1989-03-07 09:31
Position: 38 10.40'N 123 22.20'W Depth Deck Offset: 0.00

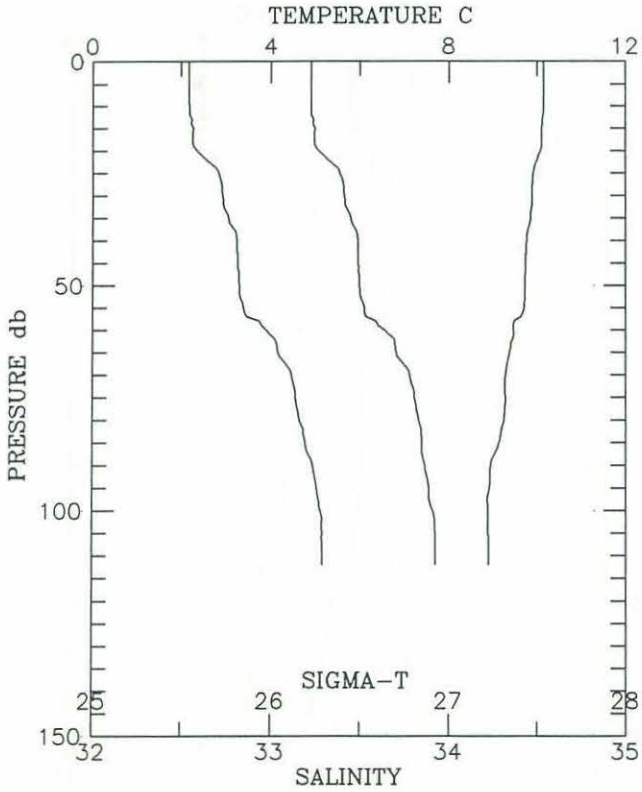
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.250	33.208	25.511	0.0000	93.6
10.0		10.034	33.317	25.633	0.0244	92.7
20.0		9.988	33.366	25.678	0.0480	93.0
30.0		9.898	33.423	25.738	0.0711	94.3
40.0		9.616	33.417	25.780	0.0938	94.9
50.0		9.372	33.427	25.828	0.1162	95.5
60.0		9.167	33.466	25.891	0.1380	95.1
70.0		9.096	33.498	25.927	0.1593	95.3
80.0		8.985	33.568	26.000	0.1802	95.1
90.0		8.824	33.715	26.140	0.2002	95.3
100.0		8.758	33.772	26.195	0.2191	95.8
110.0		8.722	33.810	26.230	0.2376	95.8
120.0		8.850	33.884	26.268	0.2558	95.3
130.0		8.737	33.937	26.328	0.2735	94.8
140.0		8.350	33.942	26.391	0.2907	95.1
150.0		8.165	33.967	26.439	0.3073	95.2
160.0		8.040	34.003	26.485	0.3236	94.8
170.0		8.030	34.036	26.513	0.3395	94.5
180.0		7.873	34.045	26.542	0.3550	93.8
181.0		7.834	34.049	26.551	0.3566	93.6

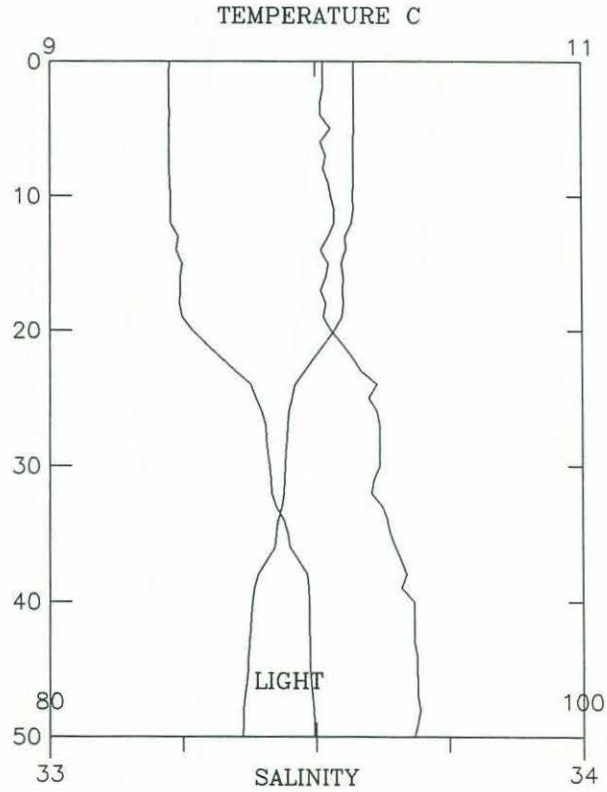




Cruise W8902 Station # 262 Depth m: 117 Time: 1989-03-07 10:20
Position: 38 11.40'N 123 16.10'W Depth Deck Offset: 0.00

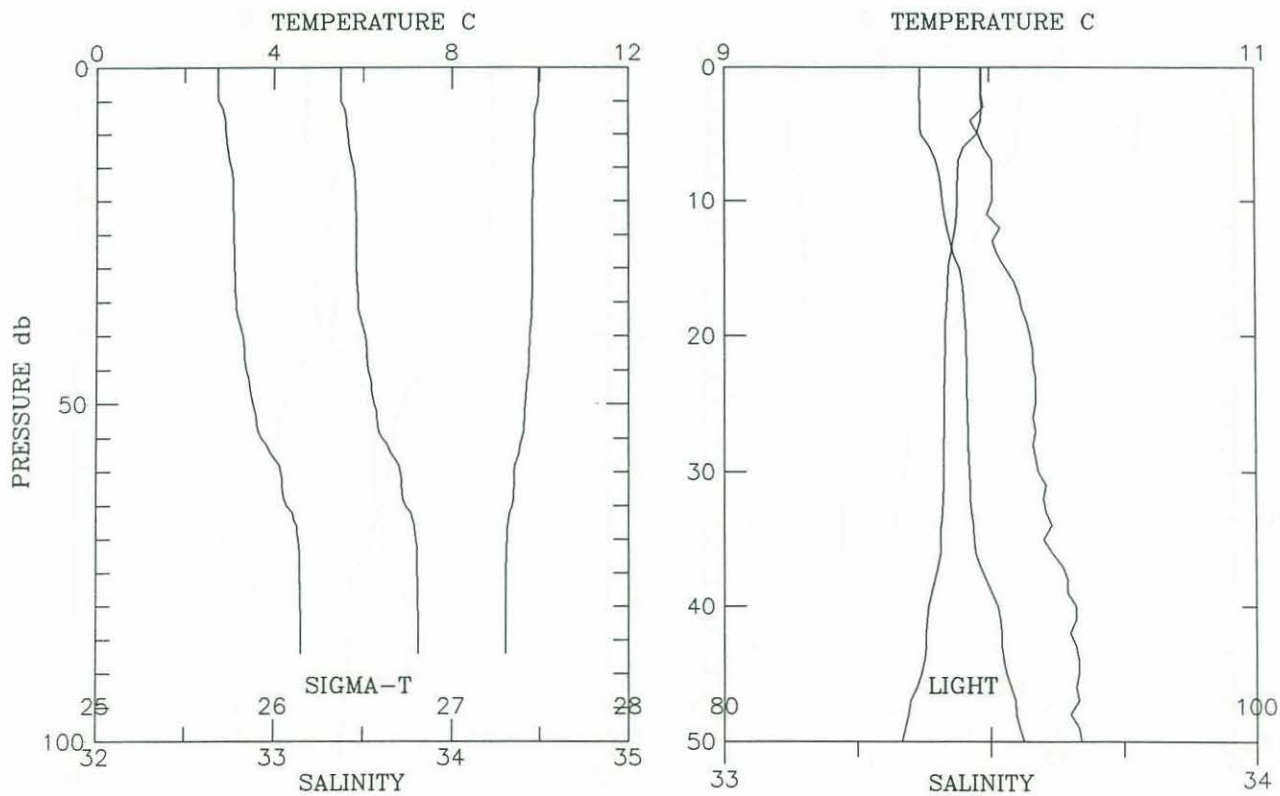
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.147	33.226	25.542	0.0000	90.3
10.0		10.141	33.227	25.544	0.0247	90.6
20.0		10.070	33.269	25.589	0.0492	90.6
30.0		9.884	33.413	25.733	0.0725	92.4
40.0		9.760	33.487	25.811	0.0951	93.7
50.0		9.725	33.497	25.825	0.1173	93.7
60.0		9.464	33.636	25.976	0.1389	95.2
70.0		9.283	33.780	26.118	0.1589	94.9
80.0		9.249	33.829	26.162	0.1781	94.5
90.0		8.955	33.865	26.237	0.1967	94.7
100.0		8.893	33.910	26.282	0.2147	91.7
110.0		8.906	33.926	26.292	0.2325	88.9
112.0		8.905	33.927	26.293	0.2360	89.0





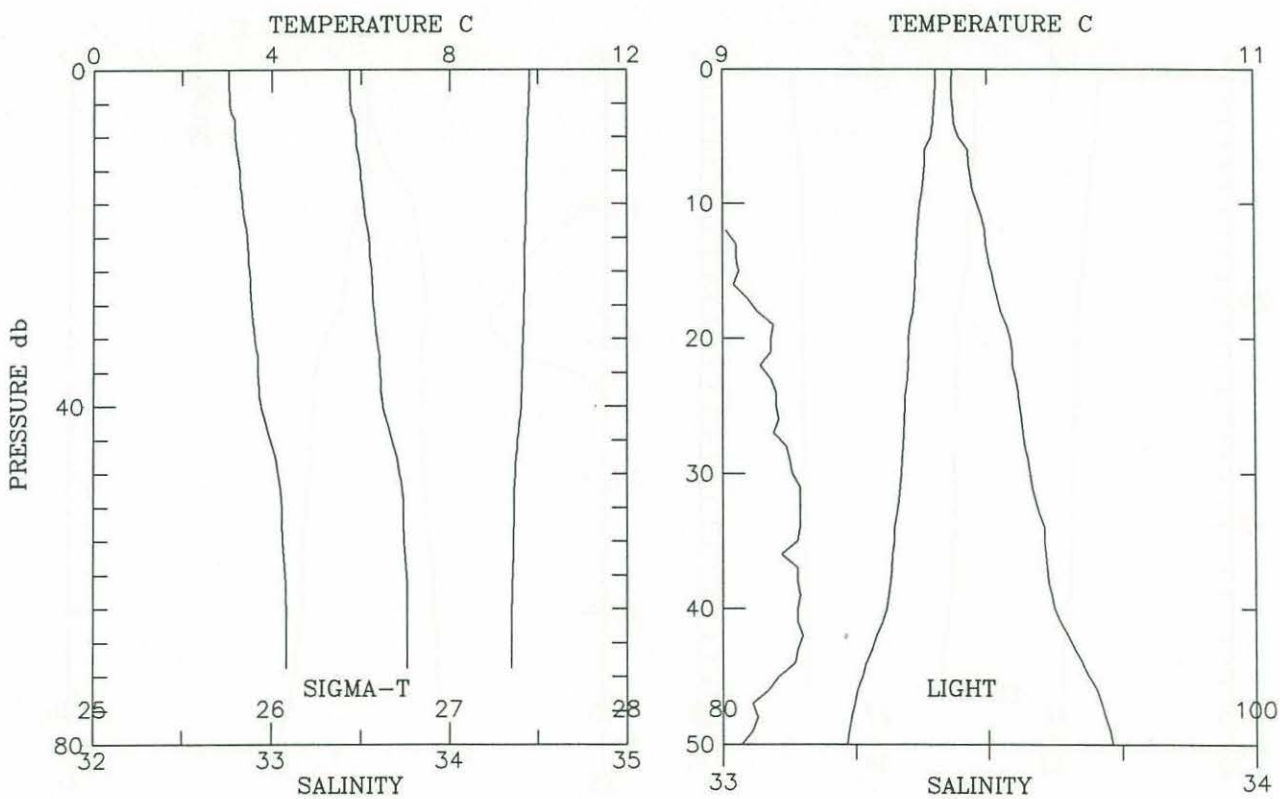
Cruise W8902 Station # 263 Depth m: 93 Time: 1989-03-07 11:05
Position: 38 12.50'N 123 9.70'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.969	33.371	25.686	0.0000	89.7
5.0		9.955	33.372	25.689	0.0117	89.6
10.0		9.878	33.412	25.733	0.0231	90.1
15.0		9.846	33.443	25.762	0.0345	90.6
20.0		9.833	33.455	25.774	0.0458	91.5
25.0		9.829	33.458	25.777	0.0571	91.7
30.0		9.825	33.461	25.780	0.0683	91.8
35.0		9.815	33.470	25.789	0.0795	92.0
40.0		9.767	33.514	25.831	0.0906	93.2
45.0		9.742	33.529	25.847	0.1016	93.3
50.0		9.669	33.562	25.885	0.1124	93.4
55.0		9.595	33.608	25.933	0.1231	93.4
60.0		9.423	33.710	26.041	0.1334	92.6
65.0		9.367	33.738	26.072	0.1433	92.3
70.0		9.249	33.798	26.138	0.1530	87.0
75.0		9.234	33.807	26.147	0.1625	85.3
80.0		9.223	33.810	26.151	0.1721	81.3
85.0		9.219	33.811	26.153	0.1816	78.7
87.0		9.219	33.811	26.153	0.1854	78.3



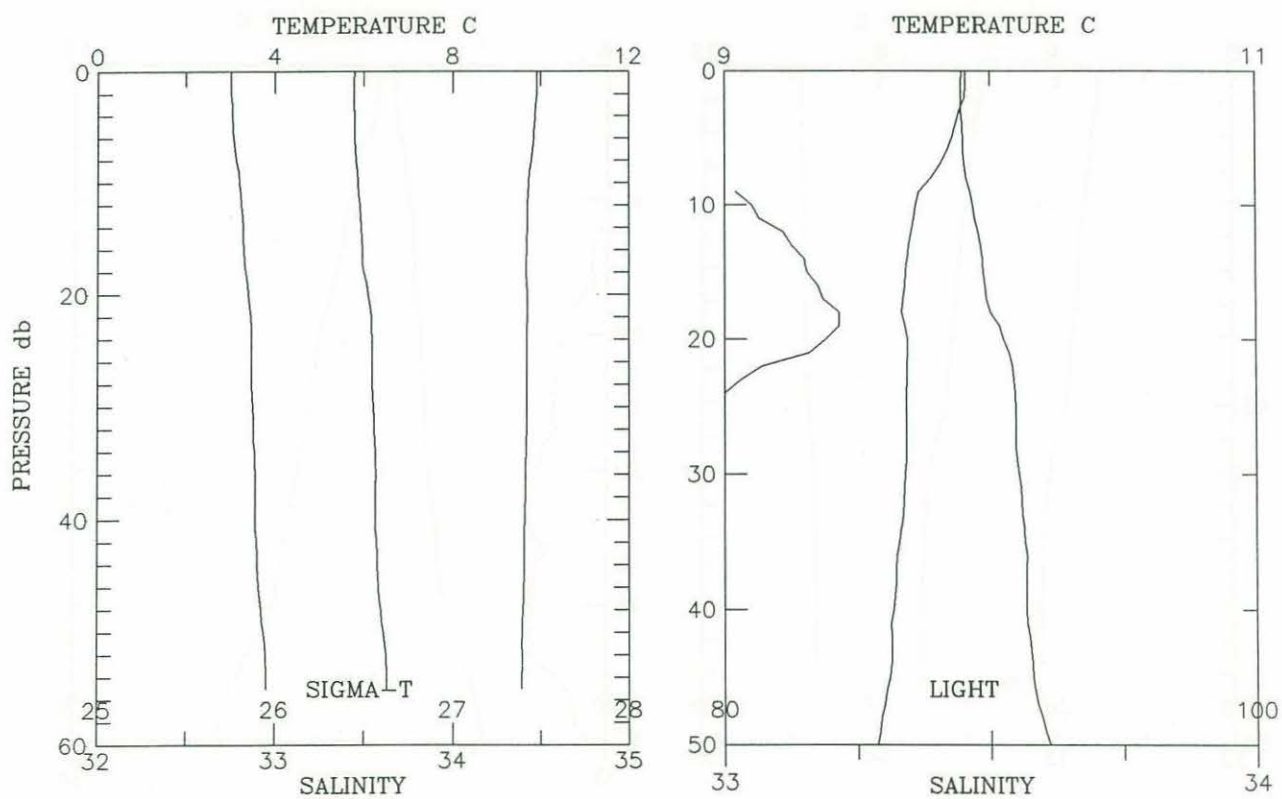
Cruise W8902 Station # 264 Depth m: 75 Time: 1989-03-07 11:45
Position: 38 13.70'N 123 4.40'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.806	33.435	25.763	0.0000	79.6
5.0		9.788	33.445	25.774	0.0113	79.3
10.0		9.747	33.481	25.809	0.0224	79.5
15.0		9.729	33.508	25.833	0.0334	80.6
20.0		9.703	33.543	25.864	0.0443	81.8
25.0		9.689	33.560	25.880	0.0551	82.0
30.0		9.672	33.579	25.897	0.0659	82.6
35.0		9.646	33.606	25.923	0.0765	82.8
40.0		9.618	33.624	25.942	0.0870	82.8
45.0		9.524	33.688	26.007	0.0973	82.1
50.0		9.467	33.732	26.051	0.1074	80.7
55.0		9.453	33.742	26.061	0.1173	80.1
60.0		9.424	33.758	26.078	0.1272	77.9
65.0		9.408	33.761	26.083	0.1371	74.0
70.0		9.409	33.762	26.084	0.1469	72.6
71.0		9.408	33.762	26.084	0.1489	72.0



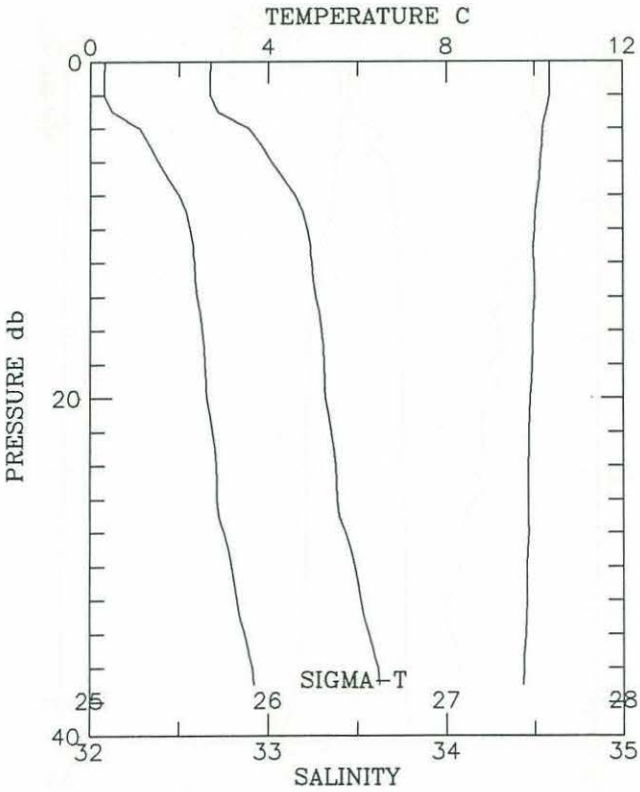
Cruise W8902 Station # 265 Depth m: 58 Time: 1989-03-07 12:19
Position: 38 14.00'N 123 2.00'W Depth Deck Offset: 0.00

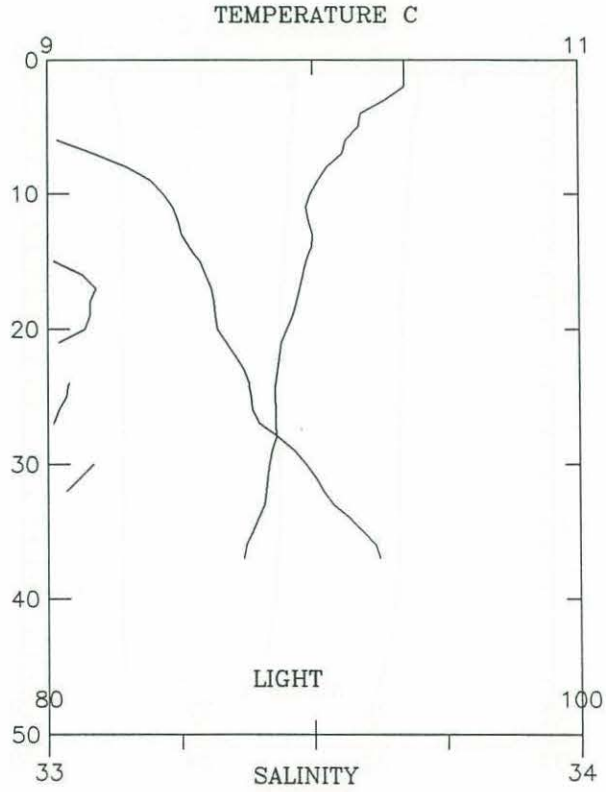
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.907	33.447	25.755	0.0000	79.1
5.0		9.858	33.449	25.765	0.0113	79.9
10.0		9.720	33.467	25.802	0.0225	81.0
15.0		9.682	33.487	25.824	0.0336	83.1
20.0		9.686	33.524	25.852	0.0445	83.8
25.0		9.683	33.548	25.871	0.0553	79.4
30.0		9.679	33.554	25.877	0.0661	78.0
35.0		9.657	33.565	25.889	0.0769	74.9
40.0		9.635	33.567	25.894	0.0876	73.1
45.0		9.619	33.579	25.906	0.0983	72.1
50.0		9.573	33.611	25.939	0.1089	68.7
55.0		9.557	33.629	25.955	0.1193	73.9



Cruise W8902 Station # 266 Depth m: 40 Time: 1989-03-07 15:23
Position: 37 57.11'N 122 50.32'W Depth Deck Offset: 0.00

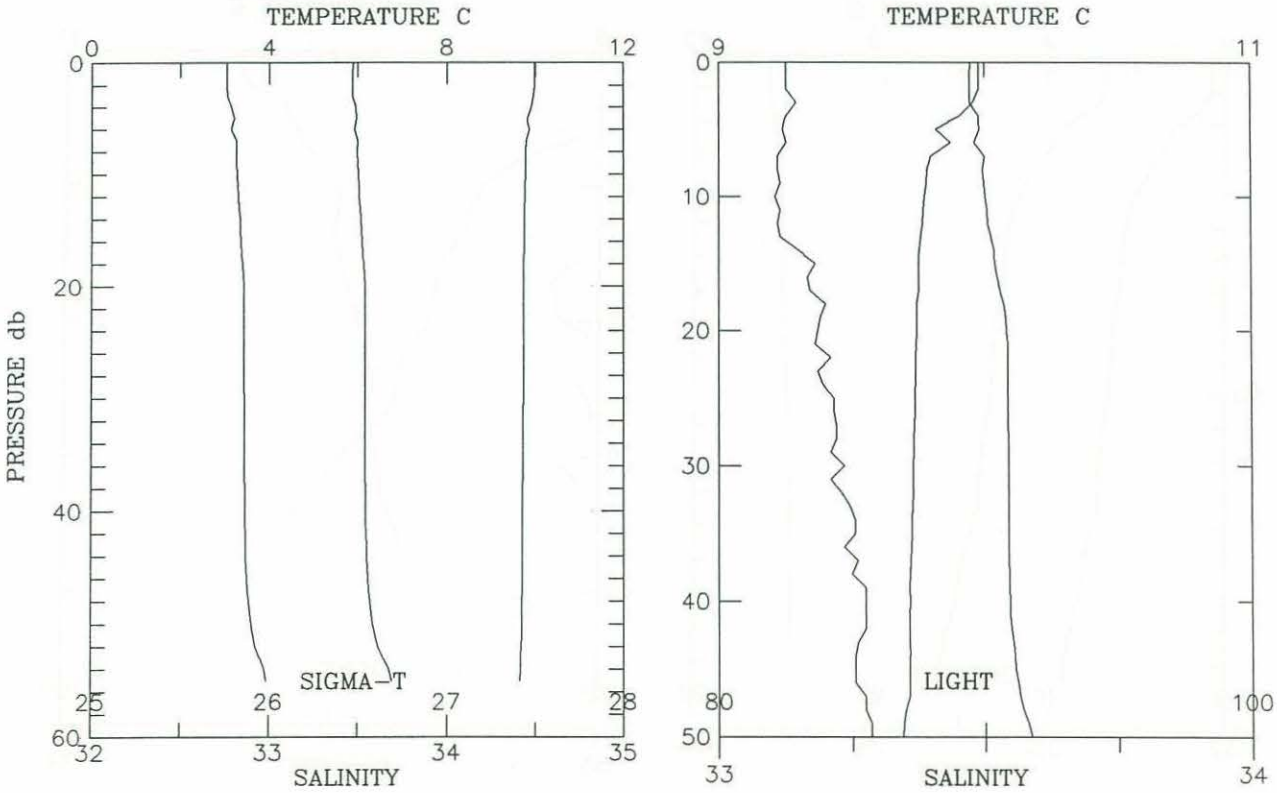
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.347	32.676	25.080	0.0000	70.4
2.0		10.347	32.675	25.079	0.0058	70.4
4.0		10.184	32.892	25.276	0.0115	70.7
6.0		10.125	33.018	25.384	0.0168	76.1
8.0		10.054	33.149	25.498	0.0220	77.9
10.0		9.991	33.218	25.562	0.0269	77.6
12.0		9.983	33.245	25.585	0.0318	76.8
14.0		9.995	33.268	25.601	0.0366	77.6
16.0		9.962	33.298	25.630	0.0414	81.3
18.0		9.936	33.313	25.646	0.0462	81.6
20.0		9.900	33.320	25.657	0.0509	81.4
22.0		9.873	33.353	25.688	0.0556	79.7
24.0		9.858	33.379	25.711	0.0603	80.8
26.0		9.856	33.385	25.715	0.0649	80.4
28.0		9.860	33.434	25.753	0.0695	79.0
30.0		9.833	33.486	25.798	0.0740	81.7
32.0		9.821	33.519	25.826	0.0784	80.7
34.0		9.792	33.567	25.868	0.0828	78.6
36.0		9.747	33.615	25.913	0.0871	77.1
37.0		9.737	33.624	25.922	0.0892	74.6





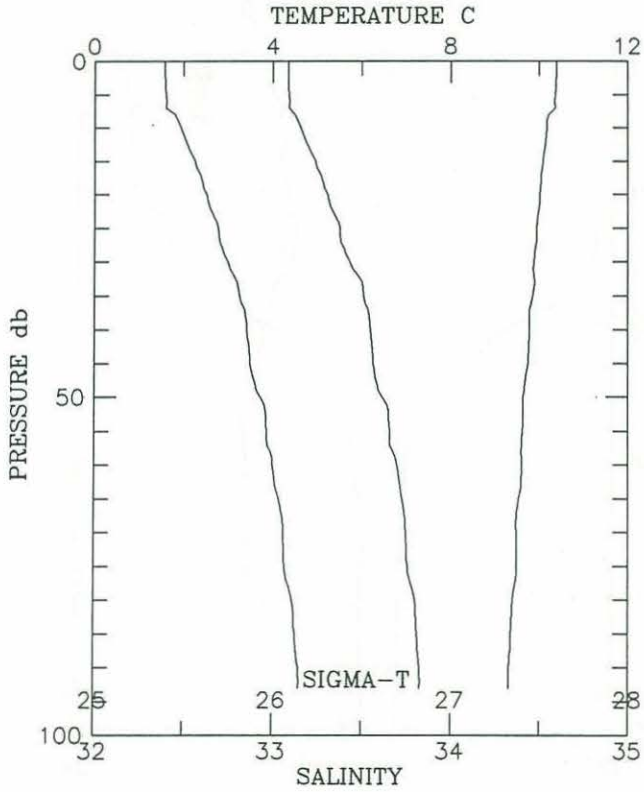
Cruise W8902 Station # 267 Depth m: 59 Time: 1989-03-07 16:03
Position: 37 56.36'N 122 56.16'W Depth Deck Offset: 0.00

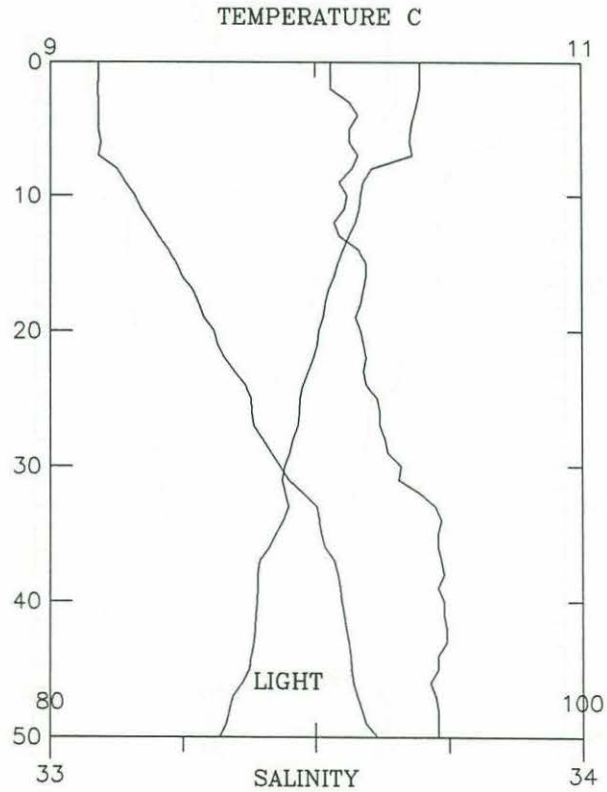
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	9.980	33.473	25.763	0.0000	82.5
5.0		9.817	33.491	25.805	0.0112	82.4
10.0		9.773	33.501	25.820	0.0223	82.1
15.0		9.752	33.520	25.838	0.0333	83.6
20.0		9.743	33.542	25.857	0.0442	83.7
25.0		9.737	33.544	25.859	0.0550	84.3
30.0		9.729	33.545	25.862	0.0659	84.7
35.0		9.723	33.545	25.863	0.0767	85.1
40.0		9.715	33.548	25.866	0.0876	85.5
45.0		9.715	33.558	25.874	0.0984	85.1
50.0		9.691	33.588	25.901	0.1092	85.7
55.0		9.657	33.691	25.987	0.1196	76.9



Cruise W8902 Station # 268 Depth m: 98 Time: 1989-03-07 17:16
Position: 37 54.08'N 123 10.08'W Depth Deck Offset: 0.00

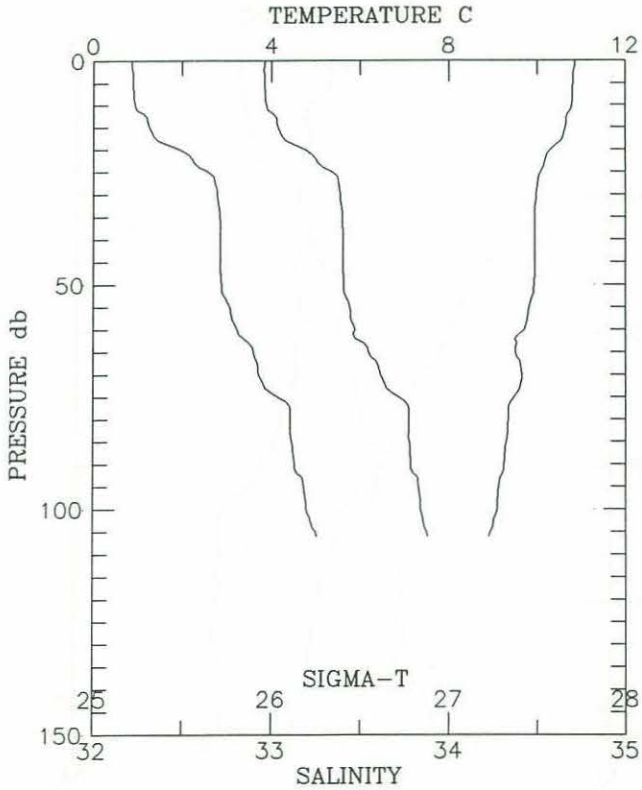
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.394	33.090	25.395	0.0000	90.6
5.0		10.360	33.091	25.401	0.0130	91.3
10.0		10.170	33.159	25.486	0.0259	91.2
15.0		10.085	33.239	25.563	0.0383	91.9
20.0		10.013	33.310	25.630	0.0504	91.7
25.0		9.942	33.379	25.697	0.0622	92.3
30.0		9.884	33.434	25.749	0.0738	93.2
35.0		9.849	33.511	25.815	0.0850	94.6
40.0		9.780	33.549	25.856	0.0959	94.8
45.0		9.751	33.567	25.875	0.1068	94.6
50.0		9.638	33.615	25.931	0.1174	94.6
55.0		9.620	33.658	25.968	0.1279	94.7
60.0		9.608	33.700	26.003	0.1382	94.9
65.0		9.530	33.730	26.039	0.1483	94.6
70.0		9.481	33.750	26.062	0.1583	94.6
75.0		9.489	33.760	26.069	0.1682	93.8
80.0		9.399	33.800	26.115	0.1780	93.4
85.0		9.365	33.812	26.130	0.1877	93.0
90.0		9.317	33.827	26.150	0.1973	91.8
93.0		9.312	33.828	26.151	0.2030	90.6

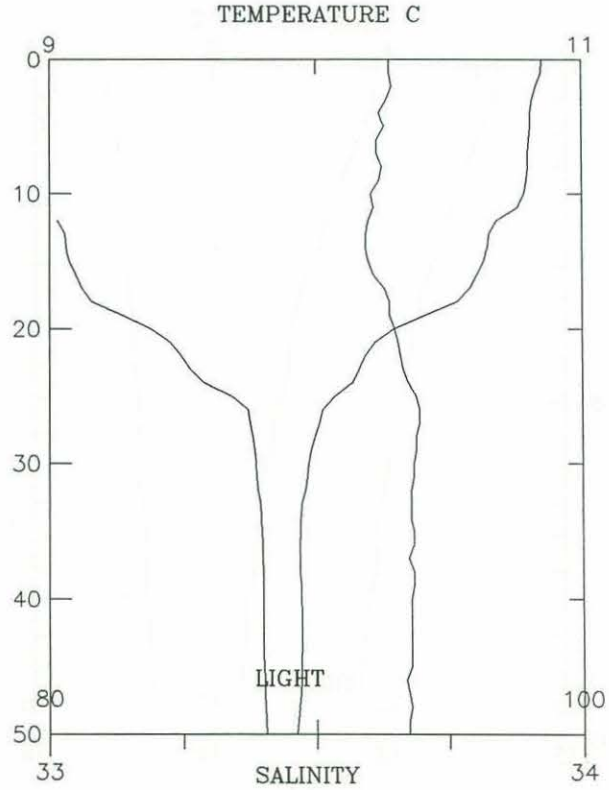




Cruise W8902 Station # 269 Depth m: 110 Time: 1989-03-07 18:03
Position: 37 52.81'N 123 17.30'W Depth Deck Offset: 0.00

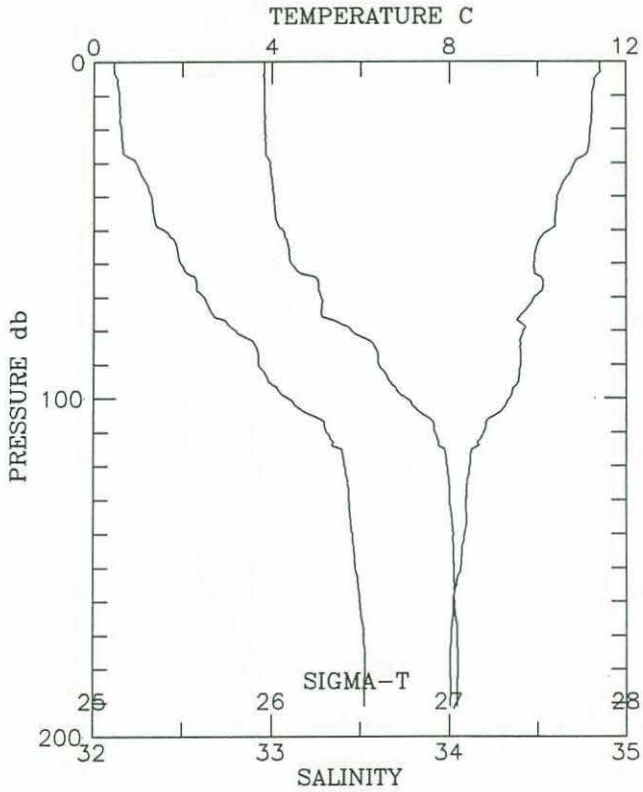
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	10.851	32.963	25.216	0.0000	92.8
10.0		10.783	32.971	25.234	0.0277	92.1
20.0		10.296	33.190	25.489	0.0545	93.0
30.0		9.973	33.386	25.697	0.0784	93.7
40.0		9.943	33.400	25.713	0.1016	93.6
50.0		9.925	33.405	25.720	0.1247	93.5
60.0		9.714	33.472	25.807	0.1474	94.3
70.0		9.648	33.615	25.930	0.1689	94.6
80.0		9.338	33.775	26.105	0.1891	94.1
90.0		9.248	33.788	26.130	0.2085	93.8
100.0		9.093	33.843	26.198	0.2274	92.2
106.0		8.907	33.881	26.257	0.2384	92.2

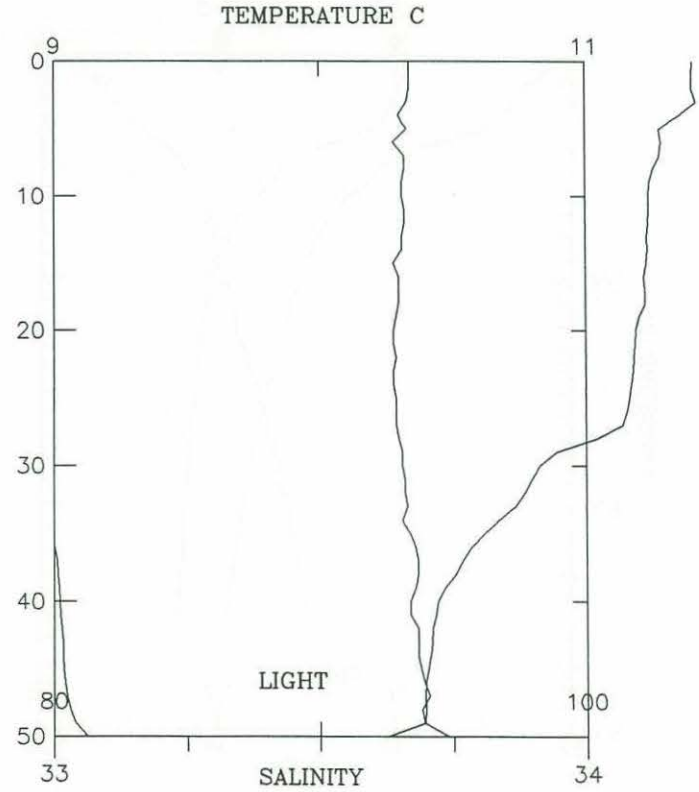




Cruise W8902 Station # 270 Depth m: 195 Time: 1989-03-07 18:54
Position: 37 51.72'N 123 24.37'W Depth Deck Offset: 0.00

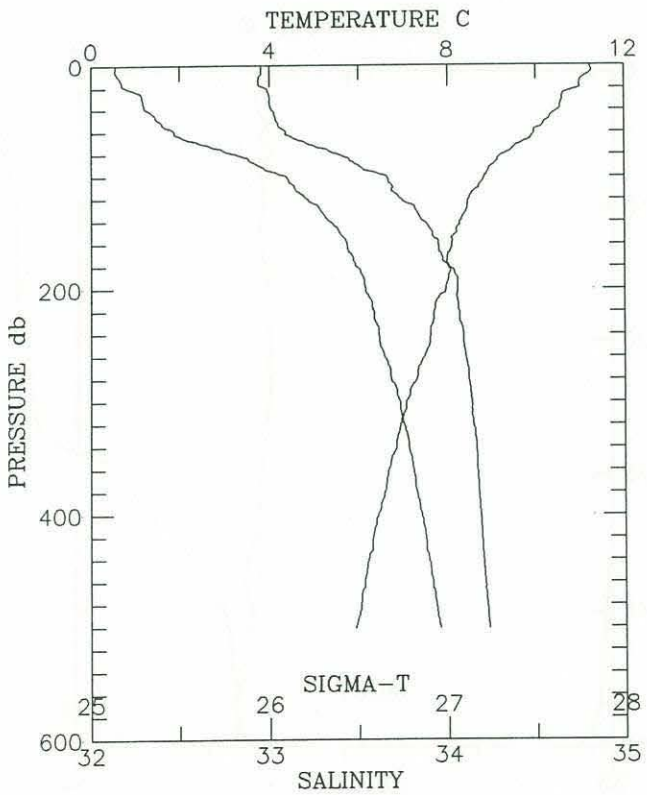
PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	11.406	32.958	25.113	0.0000	93.4
10.0		11.239	32.959	25.144	0.0286	93.1
20.0		11.190	32.962	25.155	0.0571	92.8
30.0		10.825	32.989	25.241	0.0853	93.1
40.0		10.440	33.011	25.325	0.1125	93.4
50.0		10.256	33.062	25.396	0.1392	94.8
60.0		9.914	33.106	25.488	0.1648	95.0
70.0		9.917	33.279	25.622	0.1895	94.3
80.0		9.664	33.448	25.796	0.2129	95.0
90.0		9.600	33.600	25.926	0.2344	94.9
100.0		9.353	33.759	26.090	0.2549	94.6
110.0		8.780	33.919	26.307	0.2734	93.7
120.0		8.459	33.985	26.408	0.2905	94.3
130.0		8.374	34.002	26.435	0.3070	94.5
140.0		8.340	34.021	26.454	0.3233	94.8
150.0		8.255	34.028	26.472	0.3395	94.6
160.0		8.097	34.029	26.497	0.3555	94.5
170.0		8.053	34.045	26.516	0.3713	94.4
180.0		8.024	34.049	26.523	0.3870	94.4
190.0		8.026	34.047	26.522	0.4027	94.4
191.0		8.026	34.047	26.522	0.4043	94.3

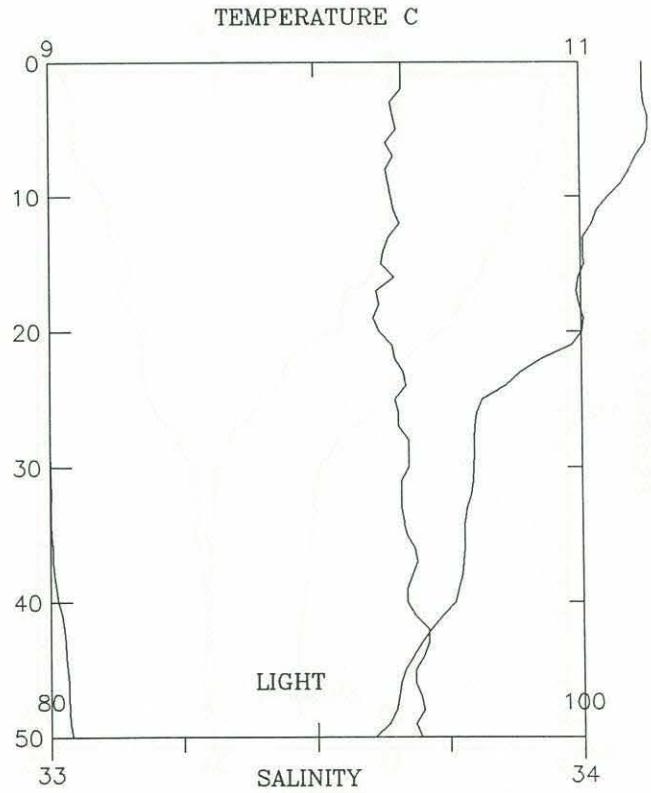




Cruise W8902 Station # 271 Depth m: 845 Time: 1989-03-07 19:24
Position: 37 51.33'N 123 26.56'W Depth Deck Offset: 0.00

PRESSURE (d-bars)	Interp	TEMP (deg C)	SALINITY (0/00)	SIGMA-T	DELTA-D	CHANNELA (%light)
0.0	E	11.240	32.953	25.139	0.0000	93.3
10.0		11.106	32.939	25.152	0.0285	92.9
20.0		11.002	32.978	25.201	0.0567	92.4
30.0		10.595	33.001	25.290	0.0841	93.5
40.0		10.521	33.014	25.313	0.1111	93.4
50.0		10.217	33.041	25.386	0.1377	93.9
60.0		9.962	33.093	25.470	0.1636	94.7
80.0		9.254	33.385	25.814	0.2117	95.5
100.0		8.828	33.659	26.096	0.2536	95.7
150.0		8.193	33.915	26.393	0.3447	96.0
200.0		7.955	34.056	26.539	0.4253	95.9
250.0		7.585	34.091	26.621	0.5009	95.7
300.0		7.062	34.137	26.731	0.5727	95.5
400.0		6.431	34.185	26.854	0.7062	95.8
500.0		5.925	34.230	26.954	0.8302	95.8
501.0		5.924	34.231	26.955	0.8314	95.7





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16. Abstract (Limit: 200 words)

CTD observations were made off the northern California coast during R/V *Wecoma* cruise W8902 February 22 - March 10, 1989 as part of the Shelf MIxed Layer Experiment (SMILE). The surveys consisted of three sampling plans – a large-scale grid of four cross-shelf transects extending to both sides of Point Arena and Point Reyes, a small-scale grid of five cross-shelf transects located near the central SMILE mooring site, and an expanded small-scale grid of nine cross-shelf transects. All of the cross-shelf transects extended beyond the shelf break and the maximum sampling depth at each station was near-bottom or 1000 m. The average along-shelf separation between cross-shelf transects was about 15 km for the small-scale surveys and 50 km for the large-scale grid.

The primary objectives of the hydrographic measurement program were to observe and characterize the temperature, salinity, density, and light transmission fields and their temporal and spatial variability in the surface boundary layer along the continental shelf and slope near the SMILE moored array, and to acquire estimates of the cross- and along-shelf scales over which the mixed-layer depth varies. This report presents a summary in graphic and tabular form of the hydrographic observations made during cruise W8902 on the R/V *Wecoma*.

17. Document Analysis a. Descriptors

1. hydrography/CTD
2. N. California coastal region
3. SMILE (Shelf Mixed Layer Experiment)

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

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