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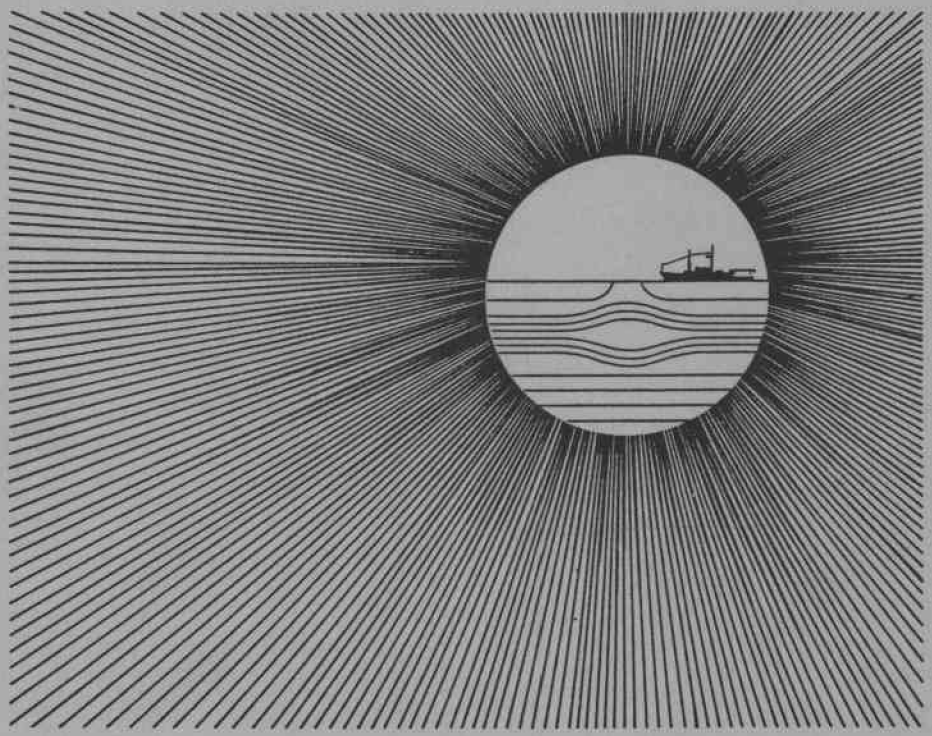

CTD Observations during Tropic Heat 9 November - 3 December 1984

by
T. K. Chereskin
C. A. Paulson
R. E. Schramm

College of Oceanography
Oregon State University

Reference 85-3
April 1985
DATA REPORT 113

National Science Foundation
OCE-8214639

OREGON STATE UNIVERSITY

College of Oceanography
Oregon State University
Corvallis, Oregon 97331

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Table of Contents

Introduction

Continuous profiles of temperature and conductivity versus pressure were measured during November-December 1984 at 140°W in the tropical Pacific from the R/V Wecoma as part of the Tropic Heat experiment. The observations were made with a Neil Brown Instruments Mark IIIb conductivity-temperature-depth probe (CTD). The times, locations and depths of the CTD stations are given in Table 1, and the locations are plotted in figure 1.

A total of 39 stations were occupied, most to a depth of 500 m, with occasional casts to 1000 m. With the exception of the first 3 stations the measurements fall into three groups: 1) a section from 3°S to the equator along 140°15'W (10 casts), 2) a daily station at the equator (10 days) at approximately 0°, 140°W within 1-2 miles of Halpern's buoy T44 (NOAA, Pacific Marine Environmental Laboratory), 3) and a section from the equator to 5°N along 140°15'W (16 casts). The first 3 CTD stations were test stations made primarily to calibrate other instruments used in the experiment.

The CTD measurements were complementary to the other oceanographic measurements that were made: 1) observations of temperature made with a towed thermistor chain from 3°N to 3°S along 140°15'W (C. Paulson, Oregon State University) 2) vertical profiles of temperature, conductivity and velocity shear made with a free-falling microstructure profiler called the RSVP (D. Caldwell, Oregon State University), and 3) continuous profiles of upper ocean (250 m) horizontal currents made with an

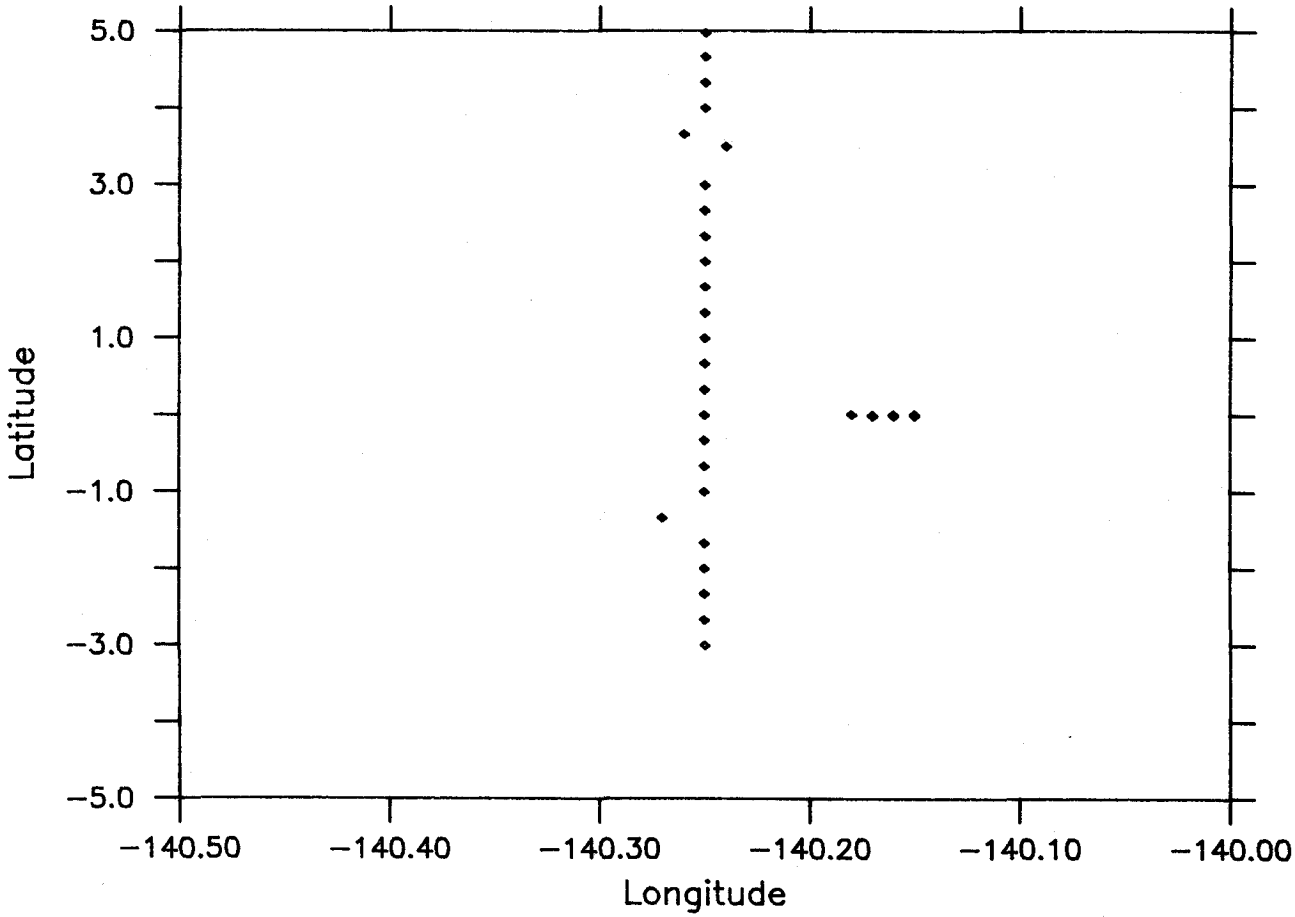

Figure 1. CTD station positions

Table 1. Time, location and depth of CTD stations

Station No.	Date (GMT)	Time (GMT)	Latitude (deg, min)	Longitude (deg, min)	Depth (m)
1	11-09-84	1922	18°31.1' N	155°28.2' W	300
2	11-12-84	1913	9 29.2 N	146 27.2 W	500
3	11-15-84	0339	3 0.0 N	140 15.1 W	500
4	11-18-84	2008	3 0.2 S	140 14.8 W	500
5	11-18-84	2228	2 40.0 S	140 15.0 W	500
6	11-19-84	0100	2 20.0 S	140 15.0 W	500
7	11-19-84	0320	2 0.1 S	140 15.0 W	500
8	11-19-84	0545	1 40.1 S	140 15.0 W	500
9	11-19-84	0808	1 20.1 S	140 16.2 W	500
10	11-19-84	1022	1 0.0 S	140 15.0 W	500
11	11-19-84	1304	0 40.0 S	140 15.0 W	500
12	11-19-84	1534	0 20.0 S	140 15.0 W	500
13	11-19-84	1805	0 0.1 S	140 15.1 W	500
14	11-21-84	2221	0 0.6 S	140 10.0 W	500
15	11-22-84	1809	0 0.5 S	140 9.5 W	500
16	11-23-84	1848	0 0.4 N	140 10.7 W	1000
17	11-24-84	2013	0 0.2 N	140 9.0 W	1000
18	11-25-84	2013	0 0.2 N	140 9.9 W	500
19	11-26-84	1857	0 0.8 N	140 9.0 W	500
20	11-27-84	1912	0 0.5 N	140 8.8 W	500
21	11-28-84	1919	0 0.5 N	140 9.4 W	1000
22	11-29-84	1808	0 0.5 S	140 9.9 W	500
23	11-30-84	1812	0 0.4 S	140 8.8 W	500
24	12-01-84	1910	0 0.0 S	140 15.1 W	1000
25	12-01-84	2241	0 20.0 N	140 15.0 W	500
26	12-02-84	0104	0 40.0 N	140 15.0 W	500
27	12-02-84	0324	0 59.9 N	140 15.0 W	1000
28	12-02-84	0632	1 19.9 N	140 15.1 W	500
29	12-02-84	0903	1 40.0 N	140 15.0 W	500
30	12-02-84	1147	2 0.0 N	140 15.0 W	1000
31	12-02-84	1444	2 19.9 N	140 15.0 W	500
32	12-02-84	1730	2 40.0 N	140 14.9 W	500
33	12-02-84	2014	2 59.9 N	140 15.0 W	1000
34	12-02-84	2306	3 21.8 N	140 14.5 W	500
35	12-03-84	0130	3 39.9 N	140 15.5 W	500
36	12-03-84	0406	3 59.8 N	140 15.2 W	1000
37	12-03-84	0653	4 19.8 N	140 15.0 W	500
38	12-03-84	0922	4 40.0 N	140 15.0 W	500
39	12-03-84	1208	4 59.9 N	140 15.2 W	1000

acoustic doppler log current profiler (L. Regier, Scripps Institution of Oceanography).

CTD station 3 corresponded to the deployment of the towed thermistor chain at 3°N 140°15'W. The chain was then towed from 3°N to 3°S and simultaneous RSVP measurements were made. From 3°S to the equator the first group of CTD measurements were made. Then followed an intensive microstructure sampling program on the equator at 140°W, together with the daily CTD casts of group 2. Finally, the CTD section from the equator to 5°N was made at the end of the experiment along 140°15'W. Doppler log current measurements were made continuously throughout the experiment.

Instrument Calibration and Sampling Procedures

The Neil Brown CTD was equipped with a platinum resistance thermometer (Model 171 BJ, manufactured by Rosemont), a four-electrode conductivity cell (manufactured by Neil Brown) and a 1600 db pressure transducer. The resolution of the temperature sensor is .0005 C with an accuracy of ± .005 C in the range -2 to 30 C. The conductivity sensor has a resolution of .005 mmhos with accuracy ± .001 mmhos in the range 1 to 65 mmhos. The pressure sensor has a resolution of .025 db with accuracy ± 1.6 db in the range 0 to 1600 db.

In situ calibration data were collected for the temperature and conductivity sensors. A Niskin bottle with protected reversing thermometers was mounted 1.5 m above the CTD sensor; at least one and sometimes two samples were taken at each station. The bottle was tripped at the bottom of a cast or during the up-cast (the sample was taken in a mixed layer) after soaking for 5 min at sample depth to allow the thermometers to equilibrate.

The sample conductivity was calculated using the CTD temperature data and sample salinity. CTD conductivity was corrected for the pressure and temperature effects on the cell prior to the comparison. The thermometers have an accuracy of ± 0.02 C and are corrected using the results of calibrations done once every two years. Water sample salinity is determined by a Guildline Model 8400 "Autosal" salinometer with a precision of better than ± .002 psu and accuracy .003 psu.

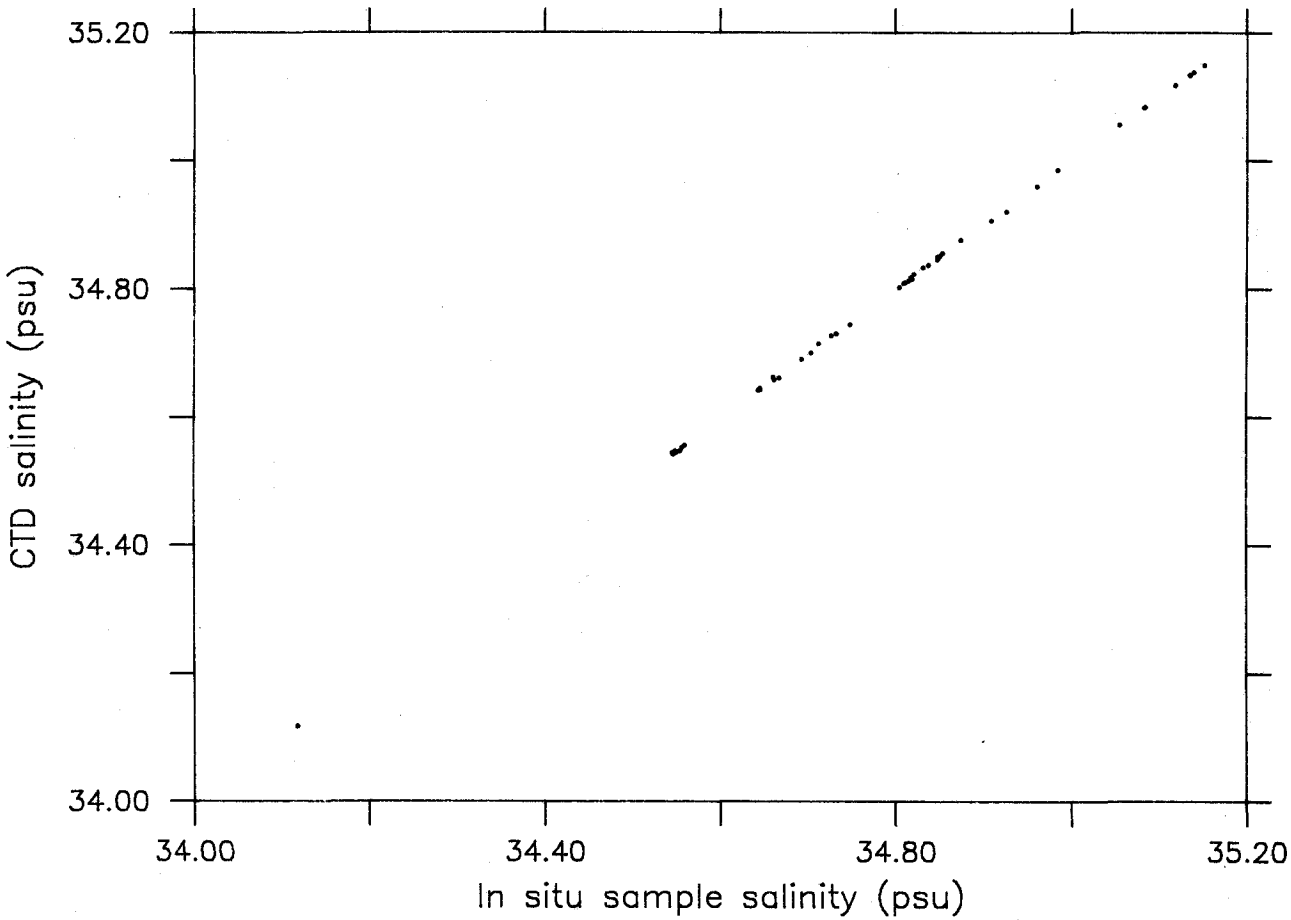

Figure 2. Comparison between CTD and in situ salinity

Results of the comparison between in situ sample data and the CTD are summarized in figures 2 and 3. The analysis of the bottle samples shows that the corrections for temperature are negligible and the rms salinity difference is .003 psu. Since these differences are within the sampling and instrumental errors, no further corrections were applied prior to processing the data.

The drop rate was 50 m/min at all stations, and the instrument sampling rate was 31.25 hz (sample period of 32 msec). The response time of the conductivity cell is determined by the drop rate and by the dimensions of the cell (0.4 cm x 0.4 cm x 3 cm); it is approximately 30 msec. The manufacturer states that conductivity can be determined on scales as small as 1.5 cm for a drop rate of 100 m/min. The time constant of the platinum resistance thermometer was determined by Adriana Huyer (personal communication) to be 235 msec. The constant was determined using hydrographic data processed in 1983; it was calculated from the slope of the phase spectrum between the measured temperature and conductivity as suggested by Millard et al. (1980). A second method of determining the time constant, that of minimizing salinity spikes (Fofonoff et al., 1974), was applied to the Tropic Heat data as an independent check, with virtually identical results.

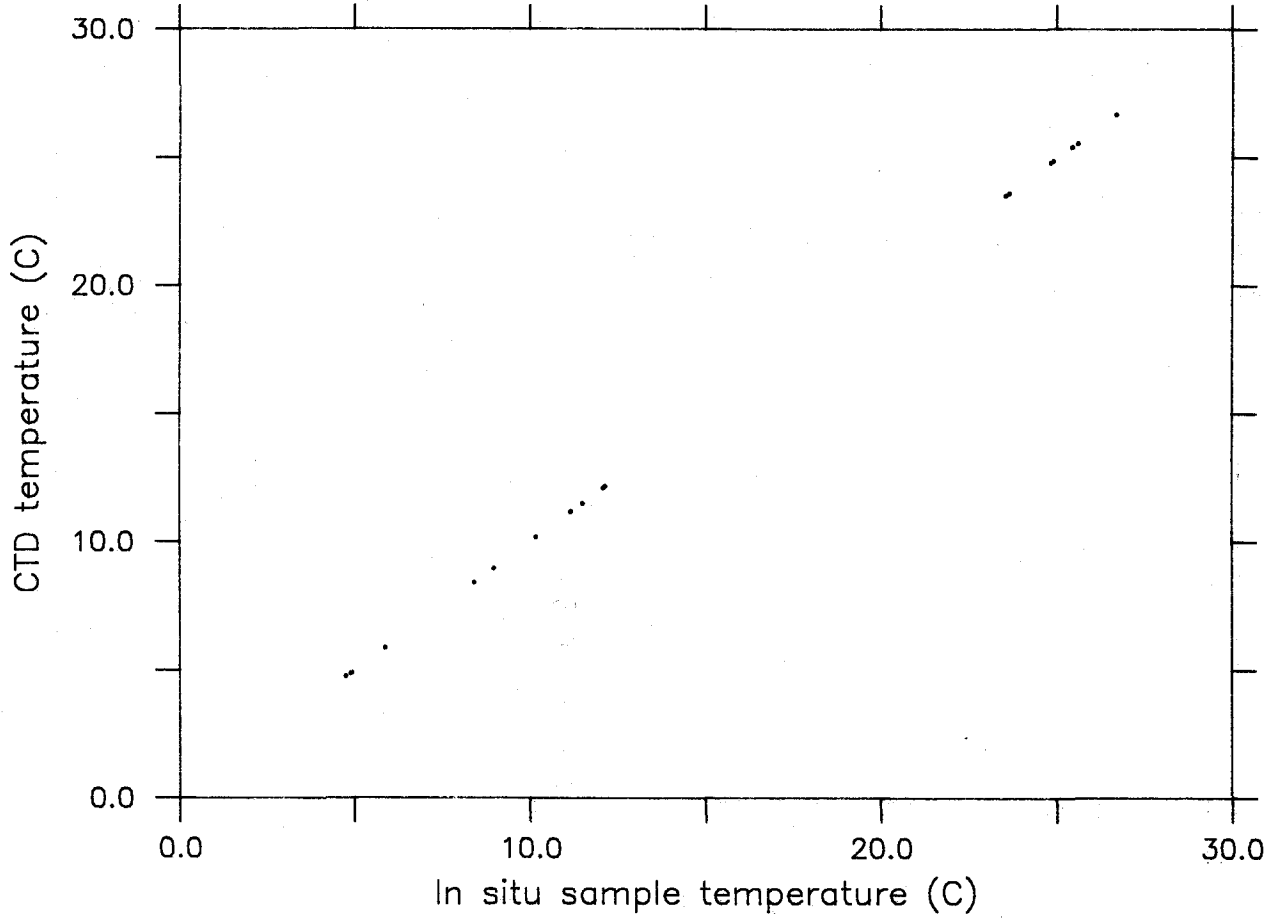

Figure 3. Comparison of CTD and in situ temperature

Data Processing Procedures

Because of the differences of the response times of the conductivity and temperature sensors, the conductivity data are filtered. The pressure data are also filtered to eliminate ascending data caused by wave action. A simple recusive filter of the form

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

is applied, where $C_0(n)$ is the observed value and $C(n)$ is the filtered value of the nth scan, and α is determined from the time constant of the platinum thermometer (τ) and the sampling period (Δt)

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

We used a value of $\alpha = .880$

The data are logged at sea on a Kennedy 9-track data logger. Data logging begins as soon as the CTD is in the water and continues until the CTD reaches its maximum depth. The first step in processing is to correct the conductivity data for cell variations due to temperature and pressure changes. The next step is to check for extraneous values and extreme gradients, then apply the recursive filter to pressure and conductivity and compute salinity from the algorithm given by Fofonoff and Millard (1983), based on the practical salinity scale adopted in 1978 and the international equation of state for seawater adopted in 1980. Data collected during descent are sorted into 1 db bins, and the extrema and averages computed for each bin. The data processing programs are documented in Gilbert, Huyer and Schramm (1981).

The processed data files containing integral pressure, average tem-

perature and salinity are used to calculate other parameters of interest such as potential temperature (theta), potential density anomaly (sigma-theta), specific volume anomaly, dynamic height, Brunt-Vaisala frequency and sound velocity.

Acknowledgements

We thank the personnel who participated in the CTD sampling program: Marc Willis, Marcia Campbell, Melora Park, and Robert Hodgson (Humboldt State). Jane Fleischbein processed the bottle samples. The cooperation of the captain, crew and scientists aboard the R/V Wecoma is gratefully acknowledged. We also thank Barbara Levine for designing and drawing the cover design. This work was supported by the National Science Foundation under grant OCE-8214639.

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Millard, R., J. Toole and M. Swartz 1980. A fast responding temperature measurement system for CTD applications. Ocean Engineering. 7, 413-427.

Data Presentation

Vertical Profiles and Listings

Vertical profiles of temperature, salinity and sigma-theta versus pressure are shown. Every station is plotted to 500 db; the deep stations are also shown plotted to 1000 db. The facing page gives the header information and a partial data listing.

The header information is:

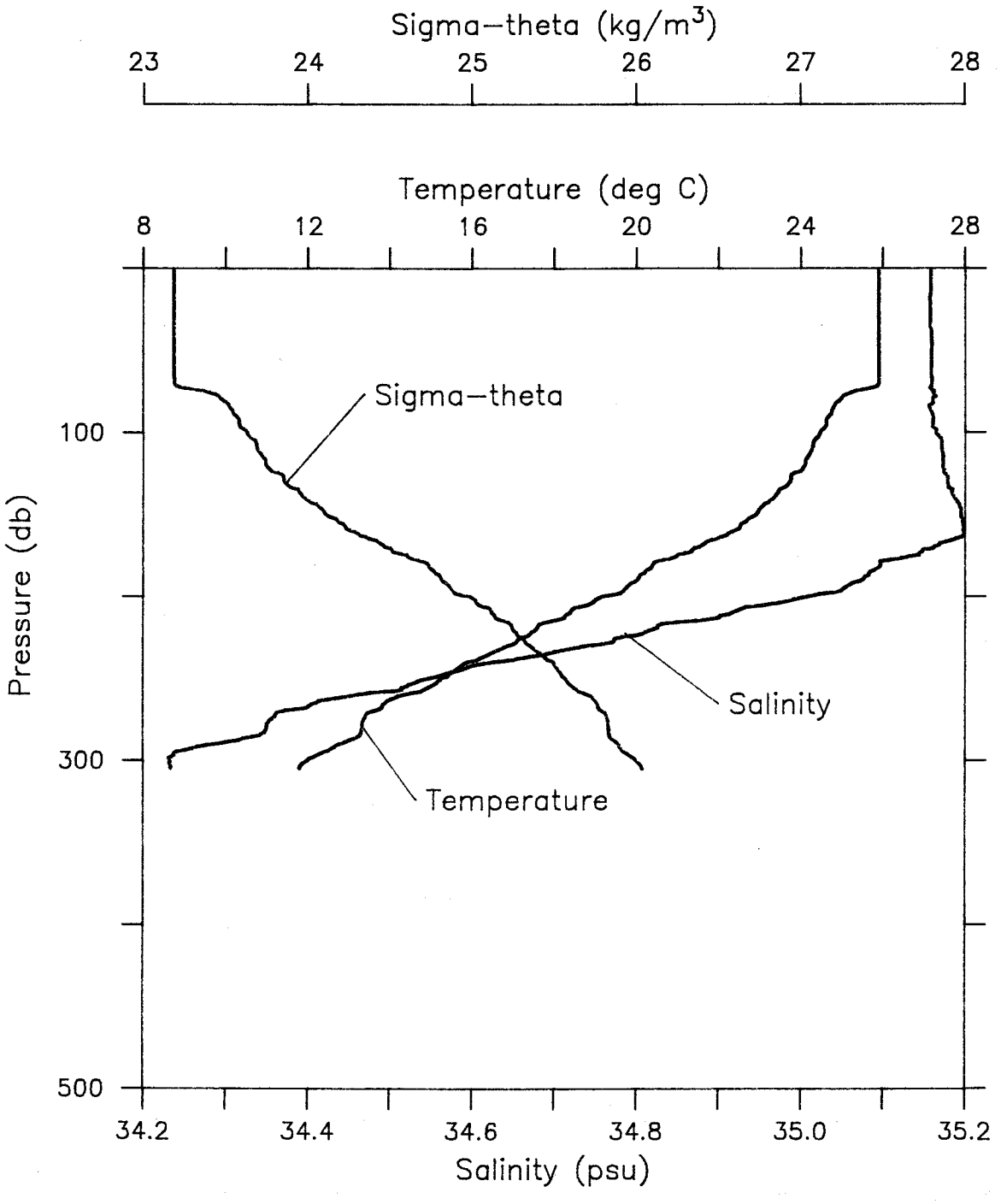
STA NO	Station number
LAT	Latitude, degrees and minutes
LONG	Longitude, degrees and minutes
DATE	Day-month-year
TIME	Time, Greenwich Mean Time (GMT)
PROBE	CTD identification number
DEPTH	Bottom depth in meters

Data listings give the values of observed and calculated parameters, interpolated to standard pressures, plus the values at the shallowest and deepest levels.

PRESS	Pressure, decibars
TEMP	Temperature, Celsius
SAL	Salinity, practical salinity unit (psu)
POTEN TEMP	Potential temperature, Celsius
SIGMA-THETA	Potential density anomaly, kilograms per cubic meter
SVA	Specific volume anomaly, centiliters/tonne (10^{-8} m^3/kg)
DELD	Dynamic height, dynamic meters (10 m^2/s^2)

STA NO 1 LAT: 18° 31.1 N LONG:155° 28.2 W
09 NOV 1984 1922 GMT PROBE 2561 DEPTH 2649M

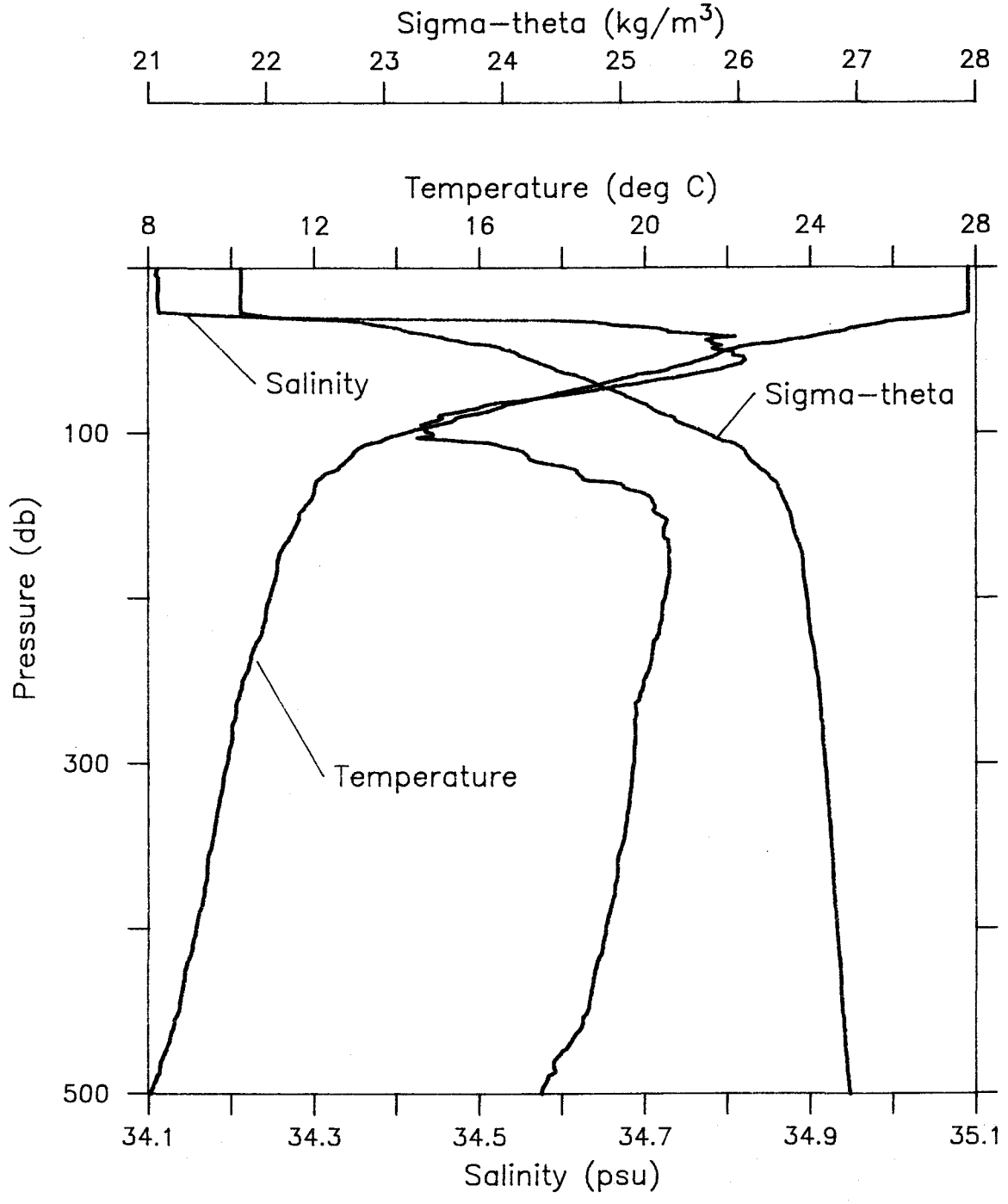
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	25.901	35.159	25.901	23.186	467.8	0.005
10	25.905	35.159	25.903	23.185	468.3	0.047
20	25.908	35.158	25.903	23.184	468.8	0.094
30	25.909	35.158	25.902	23.185	469.2	0.141
40	25.910	35.160	25.901	23.187	469.5	0.187
50	25.912	35.159	25.901	23.186	470.0	0.234
60	25.912	35.160	25.899	23.187	470.4	0.281
70	25.896	35.160	25.881	23.193	470.3	0.329
80	24.967	35.161	24.949	23.480	443.3	0.374
90	24.689	35.162	24.670	23.566	435.5	0.418
100	24.475	35.165	24.454	23.633	429.5	0.461
110	24.282	35.173	24.258	23.697	423.8	0.504
120	24.110	35.174	24.085	23.749	419.3	0.546
130	23.750	35.180	23.723	23.861	409.0	0.587
140	23.358	35.188	23.329	23.982	397.8	0.628
150	22.926	35.196	22.896	24.114	385.6	0.667
175	21.010	35.144	20.977	24.611	338.9	0.758
200	19.191	35.011	19.155	24.991	303.2	0.838
225	17.237	34.783	17.200	25.301	274.1	0.910
250	15.278	34.548	15.240	25.571	248.4	0.975
300	11.998	34.233	11.959	26.002	207.3	1.089
305	11.793	34.233	11.754	26.040	203.7	1.099


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Sigma–theta
Salinity
Temperature
Pressure (db)
100
300
500
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

STATION 1

STA NO 2 LAT: 9° 29.2 N LONG:146° 27.2 W
12 NOV 1984 1913 GMT PROBE 2561 DEPTH 5267M

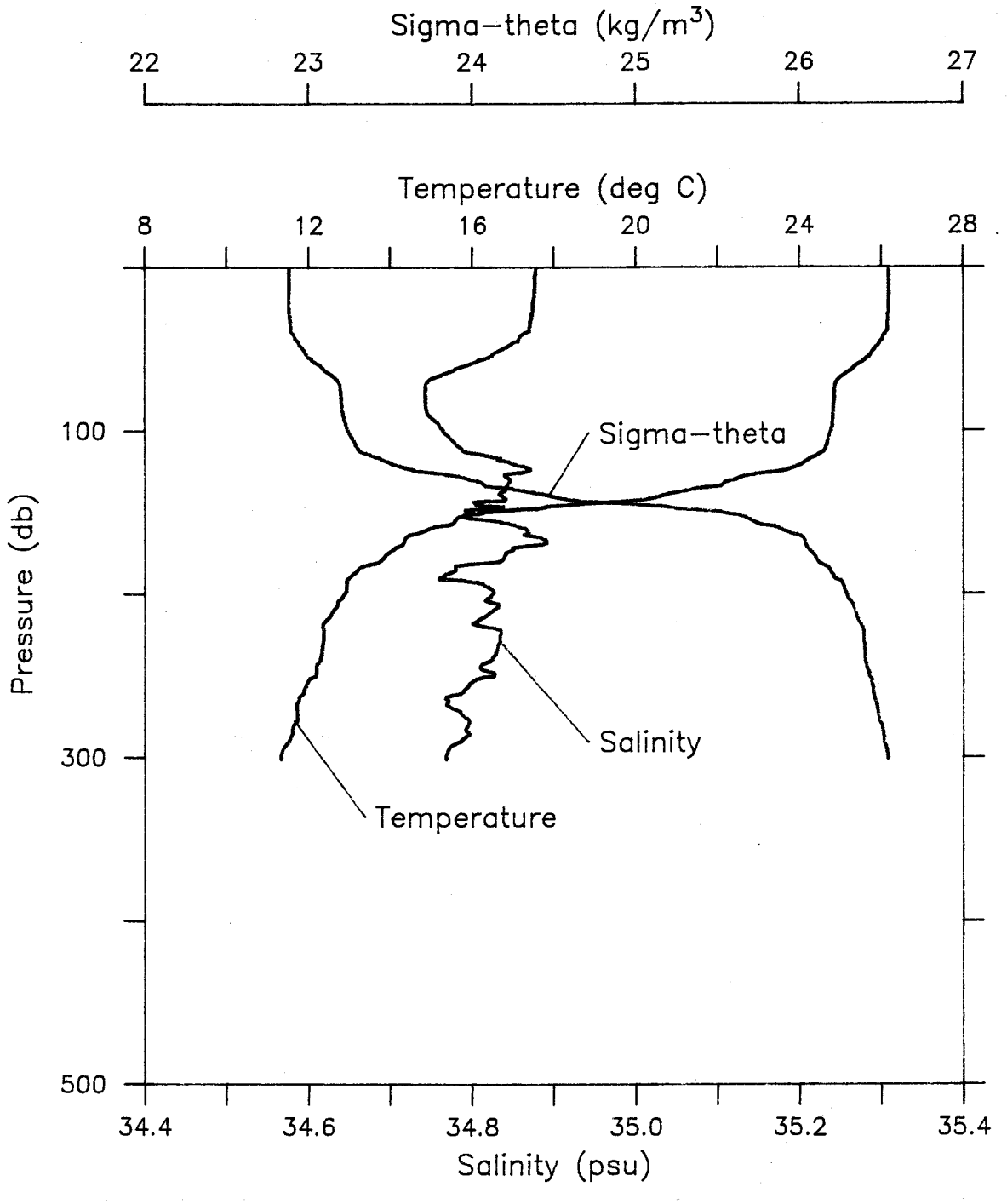
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
0	27.828	34.111	27.828	21.785	601.8	0.000
10	27.830	34.112	27.827	21.785	602.2	0.060
20	27.829	34.113	27.824	21.787	602.5	0.120
30	27.290	34.248	27.283	22.063	576.5	0.180
40	24.432	34.758	24.424	23.334	455.4	0.230
50	22.008	34.791	21.998	24.061	386.3	0.272
60	20.766	34.801	20.755	24.410	353.3	0.309
70	19.017	34.694	19.005	24.787	317.7	0.343
80	17.244	34.557	17.231	25.121	286.1	0.373
90	15.576	34.452	15.563	25.425	257.2	0.400
100	14.197	34.444	14.183	25.719	229.4	0.425
110	13.032	34.547	13.017	26.039	199.1	0.446
120	12.626	34.601	12.610	26.162	187.6	0.465
130	12.055	34.663	12.039	26.320	172.7	0.483
140	11.937	34.709	11.919	26.379	167.4	0.500
150	11.644	34.719	11.625	26.443	161.6	0.517
175	11.155	34.730	11.133	26.542	152.6	0.556
200	10.929	34.725	10.904	26.579	149.7	0.594
225	10.669	34.714	10.642	26.617	146.5	0.631
250	10.270	34.699	10.240	26.676	141.4	0.667
300	9.903	34.687	9.868	26.730	137.2	0.737
400	9.136	34.653	9.092	26.832	129.2	0.870
500	8.054	34.576	8.002	26.941	119.8	0.995
506	7.957	34.570	7.905	26.950	118.9	1.002


Sigma–theta (kg/m3)
21
22
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Salinity
Sigma–theta
Temperature
Pressure (db)
100
300
500
34.1
34.3
34.5
34.7
34.9
35.1
Salinity (psu)

STATION 2

STA NO 3 LAT: 3° 0.0 N LONG:140° 15.1 W
15 NOV 1984 0339 GMT PROBE 2561 DEPTH 4323M

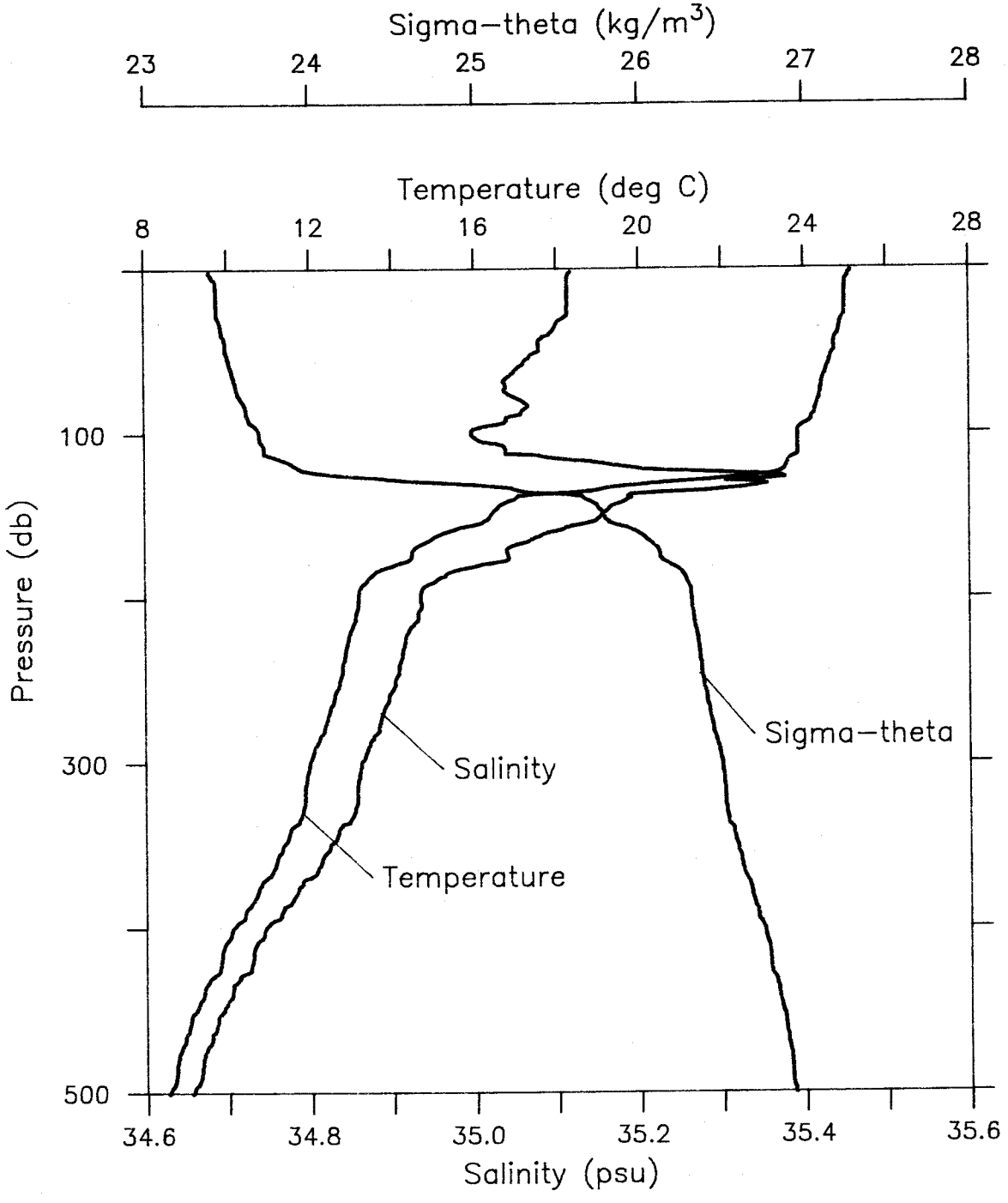
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	26.185	34.878	26.185	22.885	496.5	0.005
10	26.194	34.877	26.192	22.883	497.2	0.050
20	26.196	34.875	26.192	22.881	497.8	0.099
30	26.169	34.874	26.163	22.890	497.4	0.149
40	26.111	34.865	26.103	22.902	496.8	0.199
50	25.831	34.837	25.820	22.968	490.9	0.248
60	25.380	34.792	25.367	23.074	481.1	0.297
70	24.904	34.745	24.889	23.184	471.0	0.345
80	24.840	34.743	24.823	23.203	469.7	0.392
90	24.816	34.747	24.797	23.213	469.2	0.439
100	24.764	34.765	24.742	23.244	466.7	0.485
110	24.635	34.785	24.612	23.298	461.9	0.532
120	24.098	34.849	24.073	23.507	442.4	0.577
130	22.455	34.847	22.429	23.982	397.2	0.619
140	20.652	34.837	20.626	24.472	350.6	0.657
150	16.329	34.797	16.305	25.522	250.2	0.688
175	13.951	34.841	13.926	26.080	197.3	0.742
200	12.872	34.825	12.845	26.289	177.9	0.788
225	12.362	34.834	12.332	26.397	168.2	0.831
250	12.180	34.827	12.147	26.427	165.9	0.873
300	11.321	34.769	11.283	26.544	155.7	0.954
301	11.318	34.769	11.280	26.545	155.6	0.955


Sigma–theta (kg/m3)
22
23
24
25
26
27
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.4
34.6
34.8
35.0
35.2
35.4
Salinity (psu)

STATION 3

STA NO 4 LAT: 3° 0.2 S LONG:140° 14.8 W
18 NOV 1984 2008 GMT PROBE 2561 DEPTH 4509M

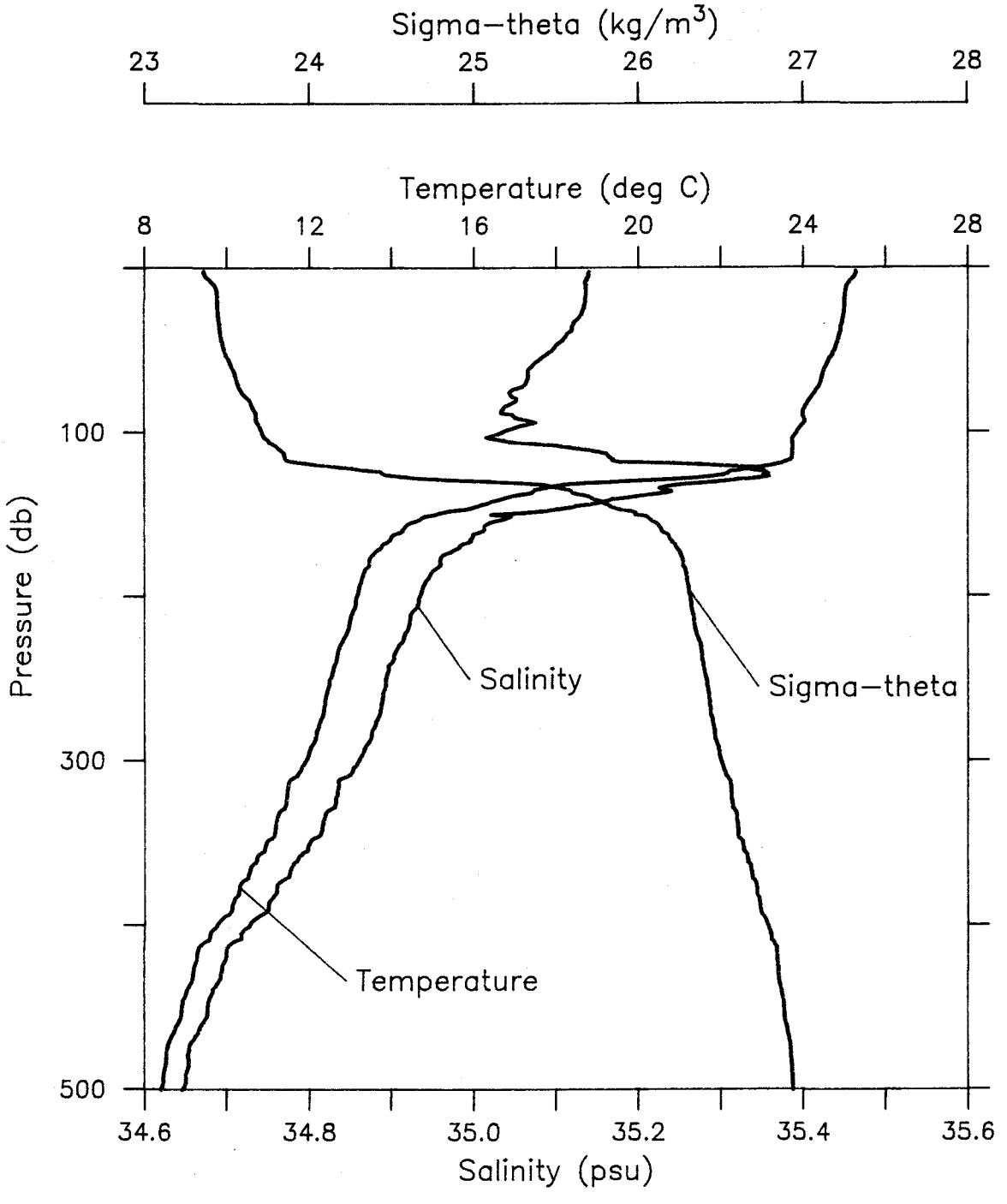
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	25.131	35.117	25.131	23.392	448.1	0.004
10	24.989	35.113	24.987	23.433	444.6	0.045
20	24.980	35.114	24.976	23.436	444.7	0.089
30	24.913	35.106	24.906	23.452	443.7	0.134
40	24.805	35.090	24.796	23.473	442.1	0.178
50	24.720	35.077	24.709	23.489	441.0	0.222
60	24.544	35.052	24.531	23.524	438.1	0.266
70	24.410	35.038	24.395	23.554	435.7	0.310
80	24.327	35.060	24.310	23.596	432.2	0.353
90	24.163	35.038	24.144	23.630	429.4	0.396
100	23.829	34.996	23.808	23.697	423.3	0.439
110	23.846	35.038	23.823	23.725	421.1	0.481
120	23.547	35.182	23.522	23.921	402.8	0.522
130	20.669	35.348	20.644	24.857	313.7	0.559
140	16.943	35.185	16.920	25.676	235.4	0.586
150	16.362	35.153	16.338	25.788	225.0	0.609
175	14.461	35.042	14.435	26.128	193.0	0.660
200	13.159	34.934	13.132	26.316	175.5	0.705
225	12.904	34.915	12.873	26.353	172.5	0.749
250	12.696	34.902	12.662	26.385	170.1	0.792
300	11.960	34.861	11.921	26.497	160.5	0.875
400	10.067	34.743	10.020	26.748	137.9	1.027
500	8.507	34.654	8.454	26.933	121.0	1.155
501	8.498	34.654	8.445	26.935	120.9	1.157


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Salinity
Temperature
Sigma–theta
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 4

STA NO 5 LAT: 2° 40.0 S LONG:140° 15.0 W
18 NOV 1984 2228 GMT PROBE 2561 DEPTH 4467M

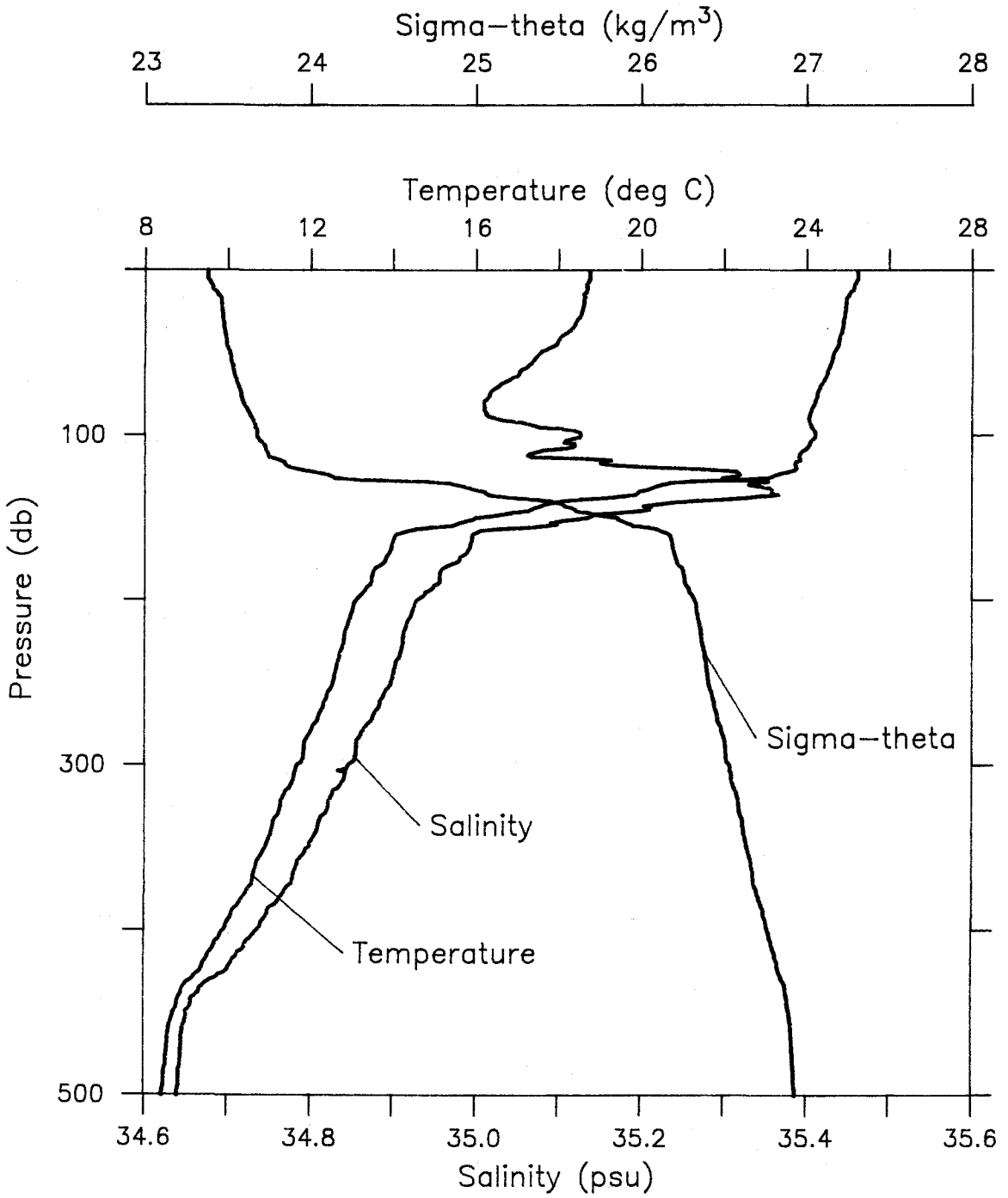
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
2	25.287	35.140	25.286	23.361	451.1	0.009
10	25.069	35.136	25.066	23.426	445.3	0.045
20	25.001	35.135	24.997	23.446	443.8	0.089
30	24.962	35.128	24.956	23.453	443.6	0.134
40	24.886	35.114	24.878	23.466	442.8	0.178
50	24.767	35.095	24.756	23.489	441.0	0.222
60	24.560	35.070	24.547	23.533	437.3	0.266
70	24.425	35.064	24.411	23.569	434.3	0.310
80	24.166	35.053	24.149	23.639	428.0	0.353
90	24.010	35.049	23.991	23.683	424.3	0.395
100	23.850	35.035	23.829	23.720	421.2	0.438
110	23.747	35.127	23.724	23.821	412.0	0.480
120	23.302	35.285	23.277	24.071	388.5	0.520
130	19.663	35.303	19.640	25.089	291.4	0.555
140	16.753	35.184	16.730	25.721	231.1	0.580
150	15.062	35.021	15.039	25.980	206.4	0.602
175	13.521	34.962	13.496	26.263	179.9	0.649
200	13.147	34.934	13.119	26.319	175.2	0.693
225	12.840	34.915	12.810	26.366	171.3	0.737
250	12.502	34.893	12.469	26.416	167.1	0.779
300	11.910	34.860	11.871	26.505	159.7	0.861
400	9.755	34.728	9.709	26.789	133.8	1.009
500	8.398	34.646	8.346	26.943	119.9	1.134
501	8.384	34.646	8.331	26.946	119.7	1.135


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
100
300
500
Pressure (db)
Salinity
Sigma–theta
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 5

STA NO 6 LAT: 2° 20.0 S LONG:140° 15.0 W
19 NOV 1984 0100 GMT PROBE 2561 DEPTH 4345M

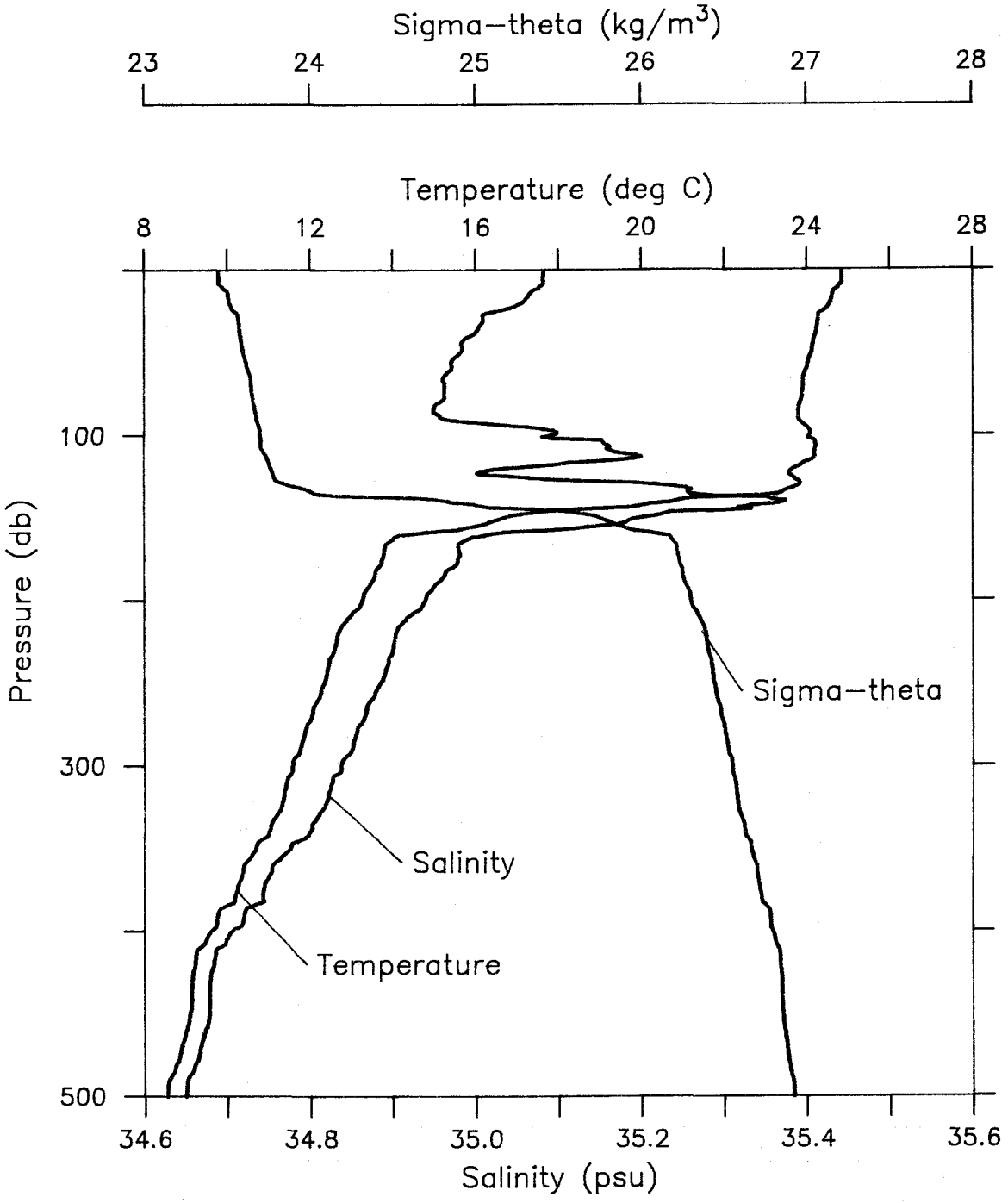
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
0	25.230	35.136	25.230	23.376	449.6	0.000
10	25.125	35.134	25.123	23.407	447.1	0.045
20	24.935	35.130	24.931	23.462	442.3	0.089
30	24.881	35.121	24.874	23.473	441.7	0.134
40	24.789	35.103	24.780	23.487	440.8	0.178
50	24.648	35.077	24.637	23.511	439.0	0.222
60	24.508	35.054	24.496	23.537	436.9	0.265
70	24.331	35.027	24.316	23.570	434.2	0.309
80	24.193	35.010	24.176	23.599	431.9	0.352
90	24.058	35.028	24.039	23.653	427.2	0.395
100	24.219	35.127	24.198	23.680	425.0	0.438
110	23.870	35.073	23.847	23.744	419.3	0.480
120	23.756	35.253	23.731	23.914	403.5	0.521
130	20.501	35.330	20.476	24.888	310.6	0.558
140	18.094	35.262	18.069	25.456	256.5	0.587
150	15.993	35.135	15.969	25.860	218.1	0.611
175	13.821	34.981	13.796	26.216	184.4	0.660
200	13.089	34.928	13.061	26.326	174.5	0.705
225	12.798	34.912	12.768	26.372	170.8	0.748
250	12.543	34.897	12.509	26.411	167.6	0.790
300	11.669	34.845	11.631	26.539	156.4	0.871
400	9.892	34.735	9.846	26.772	135.5	1.018
500	8.417	34.640	8.364	26.936	120.6	1.143
504	8.394	34.640	8.341	26.940	120.4	1.148


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 6

STA NO 7 LAT: 2° 0.1 S LONG:140° 15.0 W
19 NOV 1984 0320 GMT PROBE 2561 DEPTH 4298M

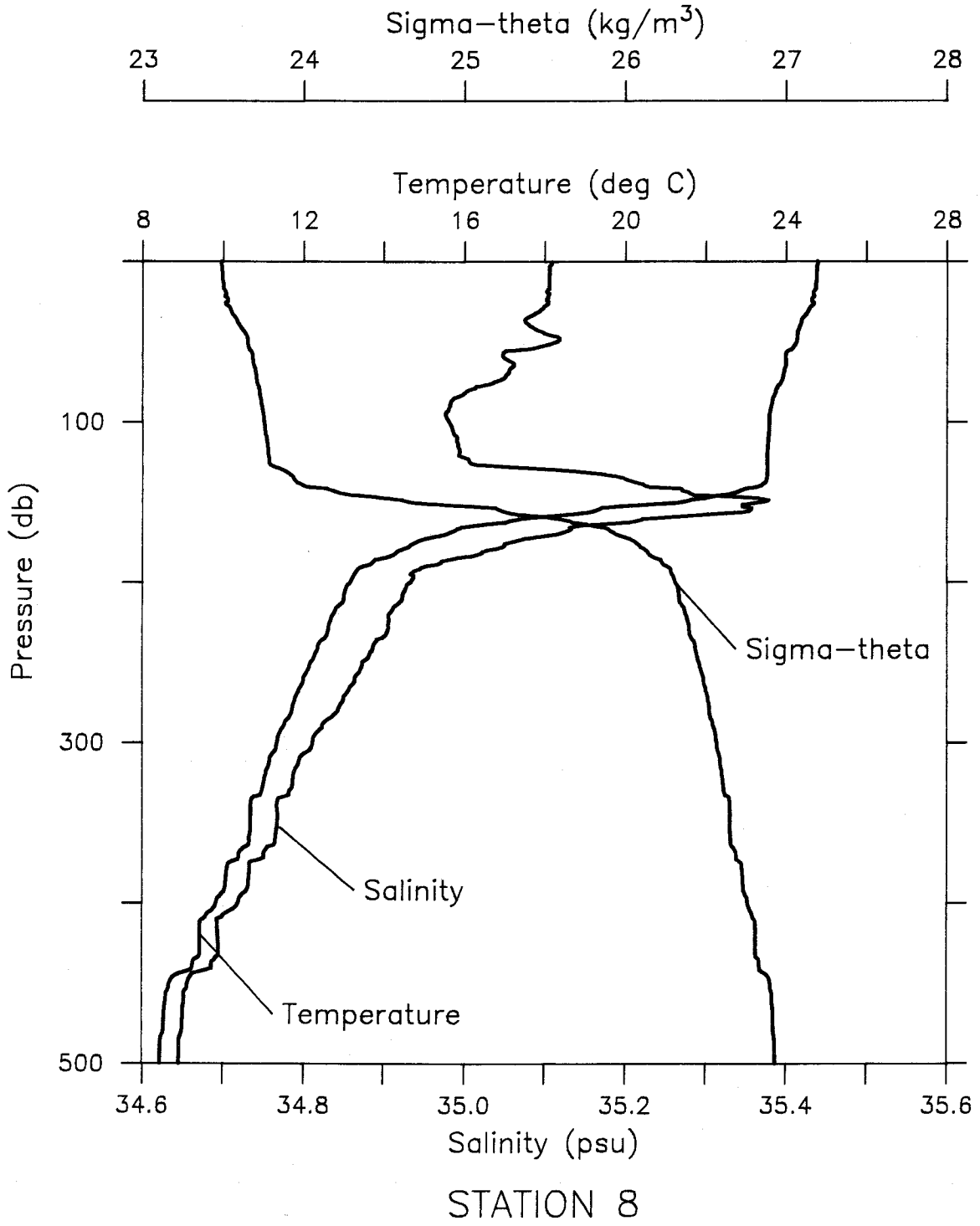
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.855	35.082	24.855	23.450	442.6	0.004
10	24.759	35.077	24.757	23.475	440.6	0.044
20	24.564	35.055	24.560	23.518	437.0	0.088
30	24.269	35.009	24.263	23.572	432.2	0.131
40	24.195	34.993	24.186	23.582	431.7	0.175
50	24.108	34.982	24.098	23.600	430.4	0.218
60	23.992	34.971	23.980	23.627	428.2	0.261
70	23.901	34.963	23.886	23.649	426.6	0.303
80	23.834	34.955	23.817	23.663	425.7	0.346
90	23.796	34.962	23.777	23.680	424.5	0.389
100	24.062	35.091	24.041	23.700	423.1	0.431
110	24.176	35.168	24.153	23.725	421.2	0.473
120	23.700	35.039	23.674	23.769	417.4	0.515
130	23.824	35.218	23.797	23.868	408.4	0.557
140	20.835	35.375	20.809	24.833	316.4	0.594
150	16.695	35.202	16.670	25.749	228.8	0.621
175	13.734	34.979	13.709	26.232	182.9	0.671
200	13.249	34.939	13.222	26.302	176.9	0.716
225	12.628	34.902	12.598	26.397	168.2	0.759
250	12.331	34.884	12.298	26.443	164.5	0.800
300	11.564	34.837	11.526	26.552	155.0	0.880
400	9.597	34.705	9.551	26.798	132.8	1.025
500	8.543	34.650	8.490	26.924	121.9	1.152
501	8.541	34.650	8.488	26.925	121.9	1.153


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 7

STA NO 8 LAT: 1° 40.1 S LONG:140° 15.0 W
19 NOV 1984 0545 GMT PROBE 2561 DEPTH 4304M

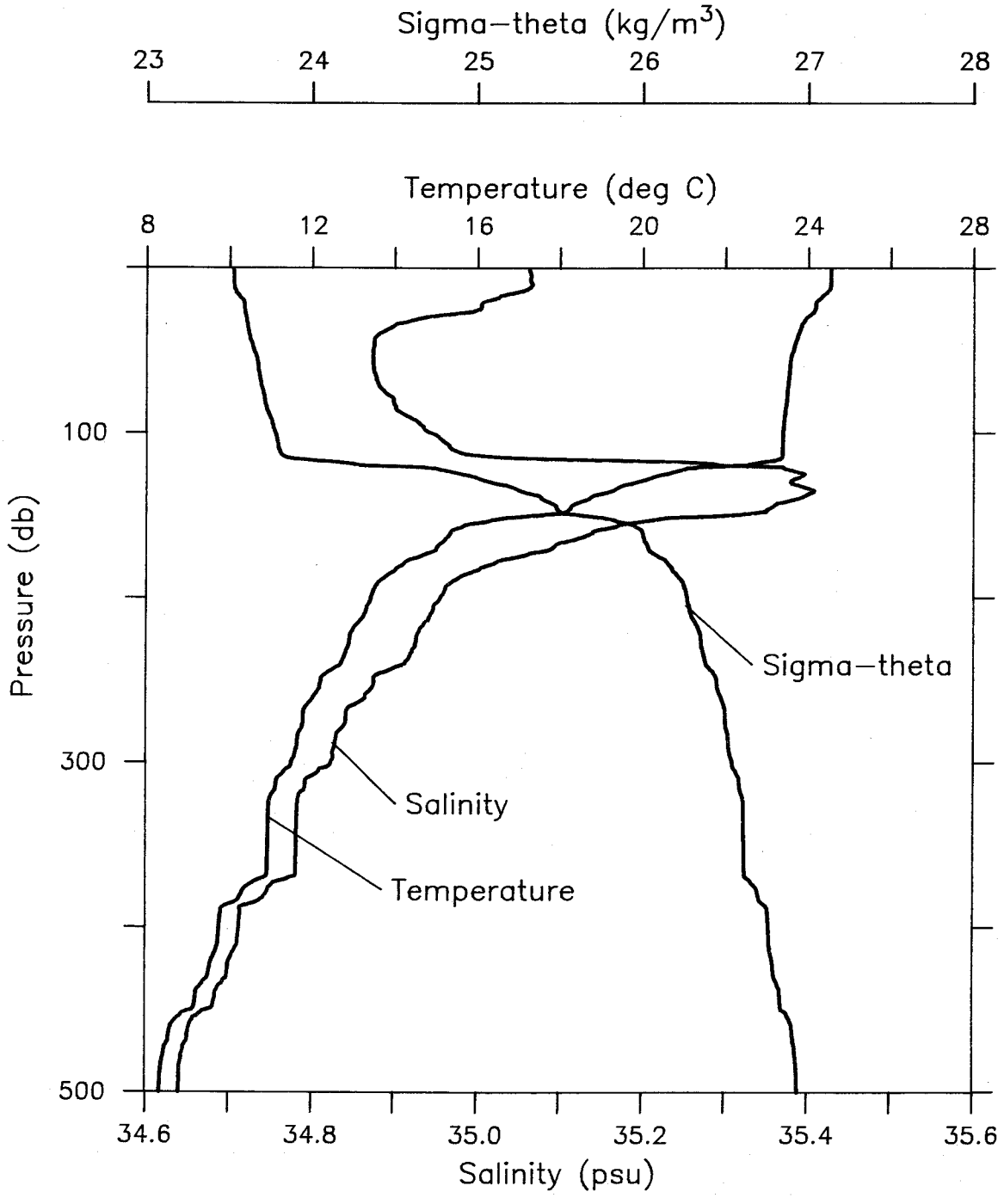
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
0	24.784	35.109	24.784	23.491	438.6	0.000
10	24.757	35.105	24.755	23.497	438.5	0.044
20	24.679	35.106	24.674	23.522	436.6	0.088
30	24.565	35.095	24.559	23.548	434.5	0.131
40	24.345	35.081	24.336	23.604	429.6	0.174
50	24.261	35.115	24.251	23.656	425.1	0.217
60	23.992	35.050	23.979	23.687	422.6	0.260
70	23.940	35.054	23.925	23.706	421.1	0.302
80	23.739	35.006	23.722	23.729	419.4	0.344
90	23.632	34.983	23.613	23.744	418.4	0.386
100	23.577	34.982	23.556	23.760	417.3	0.427
110	23.556	34.992	23.533	23.774	416.3	0.469
120	23.527	34.994	23.502	23.785	415.8	0.511
130	23.537	35.112	23.510	23.872	407.9	0.552
140	23.382	35.226	23.353	24.004	395.8	0.592
150	21.481	35.373	21.452	24.655	333.8	0.629
175	14.809	35.059	14.783	26.066	199.0	0.691
200	13.159	34.934	13.131	26.316	175.5	0.737
225	12.655	34.906	12.625	26.396	168.4	0.780
250	12.178	34.873	12.145	26.463	162.5	0.821
300	11.344	34.812	11.306	26.573	152.9	0.900
400	9.838	34.719	9.791	26.768	135.8	1.045
500	8.428	34.645	8.376	26.939	120.4	1.171
501	8.428	34.645	8.375	26.939	120.4	1.172


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 8

STA NO 9 LAT: 1° 20.1 S LONG:140° 16.2 W
19 NOV 1984 0808 GMT PROBE 2561 DEPTH 4451M

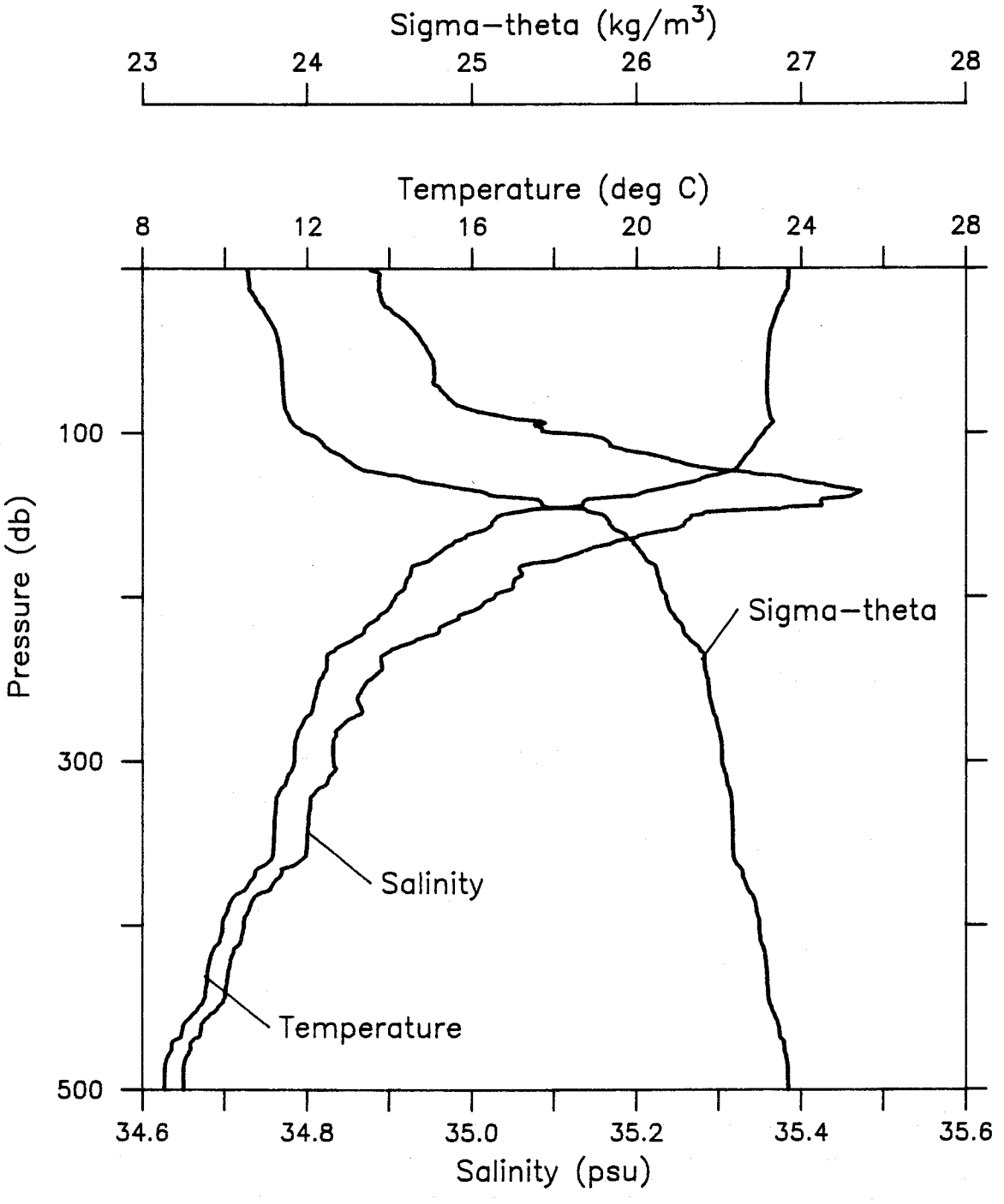
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.559	35.063	24.559	23.524	435.5	0.004
10	24.551	35.068	24.549	23.530	435.3	0.044
20	24.220	35.013	24.216	23.589	430.2	0.087
30	23.976	34.938	23.970	23.605	429.0	0.130
40	23.773	34.881	23.764	23.623	427.8	0.173
50	23.657	34.874	23.647	23.652	425.4	0.215
60	23.566	34.875	23.554	23.680	423.2	0.258
70	23.527	34.881	23.513	23.696	422.1	0.300
80	23.498	34.899	23.481	23.719	420.3	0.342
90	23.443	34.919	23.424	23.751	417.7	0.384
100	23.405	34.944	23.384	23.782	415.2	0.426
110	23.393	34.971	23.370	23.806	413.3	0.467
120	22.466	35.299	22.441	24.322	364.5	0.507
130	19.888	35.379	19.864	25.088	291.5	0.538
140	18.724	35.390	18.699	25.397	262.3	0.566
150	17.608	35.315	17.582	25.617	241.5	0.591
175	14.618	35.052	14.592	26.102	195.5	0.643
200	13.439	34.956	13.411	26.276	179.3	0.689
225	12.922	34.927	12.891	26.359	172.0	0.733
250	12.234	34.876	12.201	26.455	163.3	0.775
300	11.520	34.824	11.482	26.551	155.2	0.855
400	9.780	34.713	9.734	26.773	135.3	1.002
500	8.343	34.641	8.290	26.948	119.4	1.128
501	8.343	34.641	8.290	26.948	119.4	1.130


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 9

STA NO 10 LAT: 1° 0.0 S LONG:140° 15.0 W
19 NOV 1984 1022 GMT PROBE 2561 DEPTH 4319M

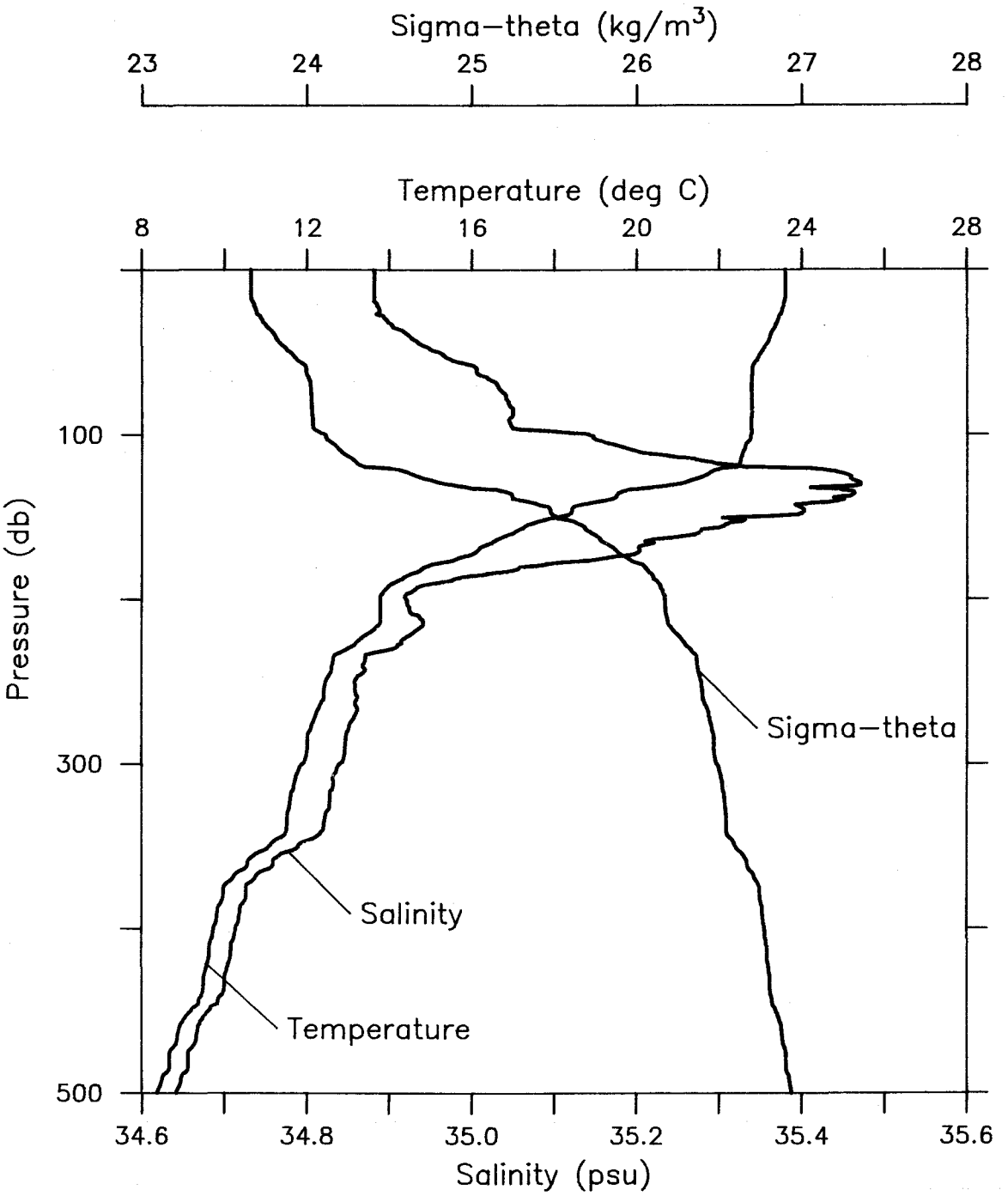
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	23.699	34.877	23.699	23.639	424.5	0.004
10	23.674	34.889	23.672	23.656	423.3	0.042
20	23.545	34.892	23.541	23.696	419.9	0.085
30	23.366	34.915	23.360	23.767	413.6	0.126
40	23.242	34.935	23.234	23.818	409.1	0.167
50	23.207	34.947	23.197	23.838	407.6	0.208
60	23.185	34.955	23.173	23.851	406.8	0.249
70	23.166	34.955	23.152	23.857	406.7	0.290
80	23.202	34.976	23.185	23.864	406.5	0.330
90	23.266	35.039	23.248	23.893	404.1	0.371
100	23.099	35.100	23.079	23.988	395.5	0.411
110	22.809	35.183	22.786	24.136	381.8	0.450
120	22.491	35.266	22.467	24.290	367.5	0.487
130	21.418	35.402	21.392	24.694	329.3	0.522
140	19.285	35.448	19.259	25.299	271.8	0.552
150	16.746	35.280	16.722	25.796	224.3	0.577
175	15.112	35.121	15.085	26.047	200.9	0.630
200	14.149	35.028	14.120	26.184	188.4	0.679
225	13.160	34.940	13.128	26.321	175.7	0.724
250	12.320	34.878	12.287	26.440	164.8	0.766
300	11.697	34.833	11.658	26.525	157.7	0.847
400	9.948	34.724	9.902	26.753	137.3	0.996
500	8.530	34.650	8.476	26.927	121.7	1.125
501	8.523	34.649	8.469	26.927	121.6	1.127


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 10

STA NO 11 LAT: 0° 40.0 S LONG:140° 15.0 W
19 NOV 1984 1304 GMT PROBE 2561 DEPTH 4337M

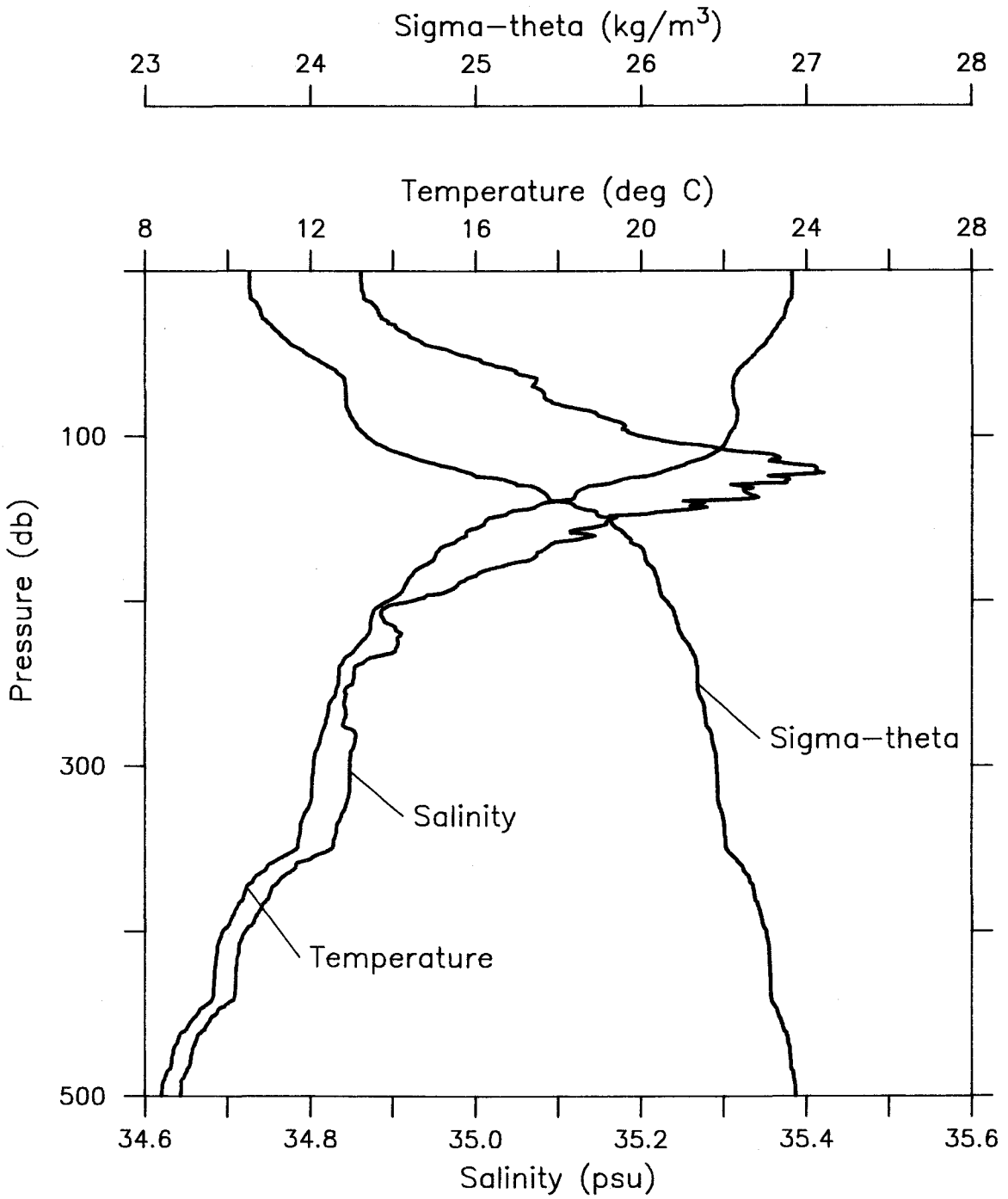
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
0	23.618	34.881	23.618	23.666	422.0	0.000
10	23.625	34.882	23.623	23.665	422.5	0.042
20	23.583	34.884	23.579	23.679	421.5	0.084
30	23.440	34.897	23.434	23.731	417.0	0.126
40	23.237	34.925	23.229	23.812	409.7	0.168
50	23.023	34.961	23.012	23.902	401.5	0.208
60	22.806	35.007	22.794	24.000	392.6	0.248
70	22.780	35.032	22.766	24.027	390.5	0.287
80	22.805	35.046	22.788	24.031	390.5	0.326
90	22.779	35.046	22.761	24.039	390.2	0.365
100	22.774	35.143	22.754	24.114	383.5	0.404
110	22.596	35.200	22.574	24.209	374.8	0.442
120	22.409	35.334	22.385	24.364	360.4	0.479
130	21.103	35.473	21.078	24.834	315.9	0.512
140	19.313	35.452	19.288	25.294	272.2	0.541
150	18.165	35.366	18.139	25.519	251.0	0.567
175	15.704	35.166	15.677	25.950	210.3	0.624
200	13.791	34.921	13.763	26.177	188.9	0.673
225	13.272	34.916	13.241	26.280	179.7	0.720
250	12.460	34.858	12.427	26.397	168.9	0.763
300	11.921	34.841	11.882	26.489	161.3	0.845
400	9.749	34.714	9.703	26.780	134.6	0.993
500	8.383	34.642	8.330	26.943	120.0	1.122
503	8.338	34.640	8.285	26.948	119.5	1.125


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 11

STA NO 12 LAT: 0° 20.0 S LONG:140° 15.0 W
19 NOV 1984 1534 GMT PROBE 2561 DEPTH 4325M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	23.668	34.862	23.668	23.636	424.8	0.004
10	23.676	34.863	23.674	23.635	425.3	0.043
20	23.559	34.877	23.555	23.681	421.4	0.085
30	23.422	34.892	23.416	23.733	416.8	0.127
40	23.164	34.921	23.156	23.830	407.9	0.168
50	22.811	34.977	22.800	23.975	394.6	0.208
60	22.380	35.045	22.368	24.150	378.3	0.247
70	22.215	35.069	22.201	24.215	372.5	0.284
80	22.271	35.093	22.255	24.218	372.6	0.322
90	22.323	35.163	22.305	24.257	369.3	0.359
100	22.126	35.198	22.106	24.340	361.9	0.395
110	21.805	35.322	21.784	24.525	344.6	0.431
120	20.757	35.413	20.734	24.882	310.9	0.464
130	19.039	35.308	19.015	25.254	275.6	0.493
140	17.941	35.251	17.917	25.486	253.7	0.519
150	16.332	35.171	16.308	25.809	223.0	0.543
175	14.999	35.069	14.972	26.032	202.3	0.596
200	13.919	34.926	13.890	26.153	191.1	0.645
225	13.248	34.907	13.216	26.278	179.8	0.691
250	12.686	34.851	12.653	26.348	173.7	0.735
300	12.085	34.848	12.045	26.463	163.8	0.819
400	9.893	34.722	9.846	26.762	136.5	0.973
500	8.400	34.643	8.347	26.942	120.1	1.102
502	8.391	34.643	8.338	26.943	120.1	1.104

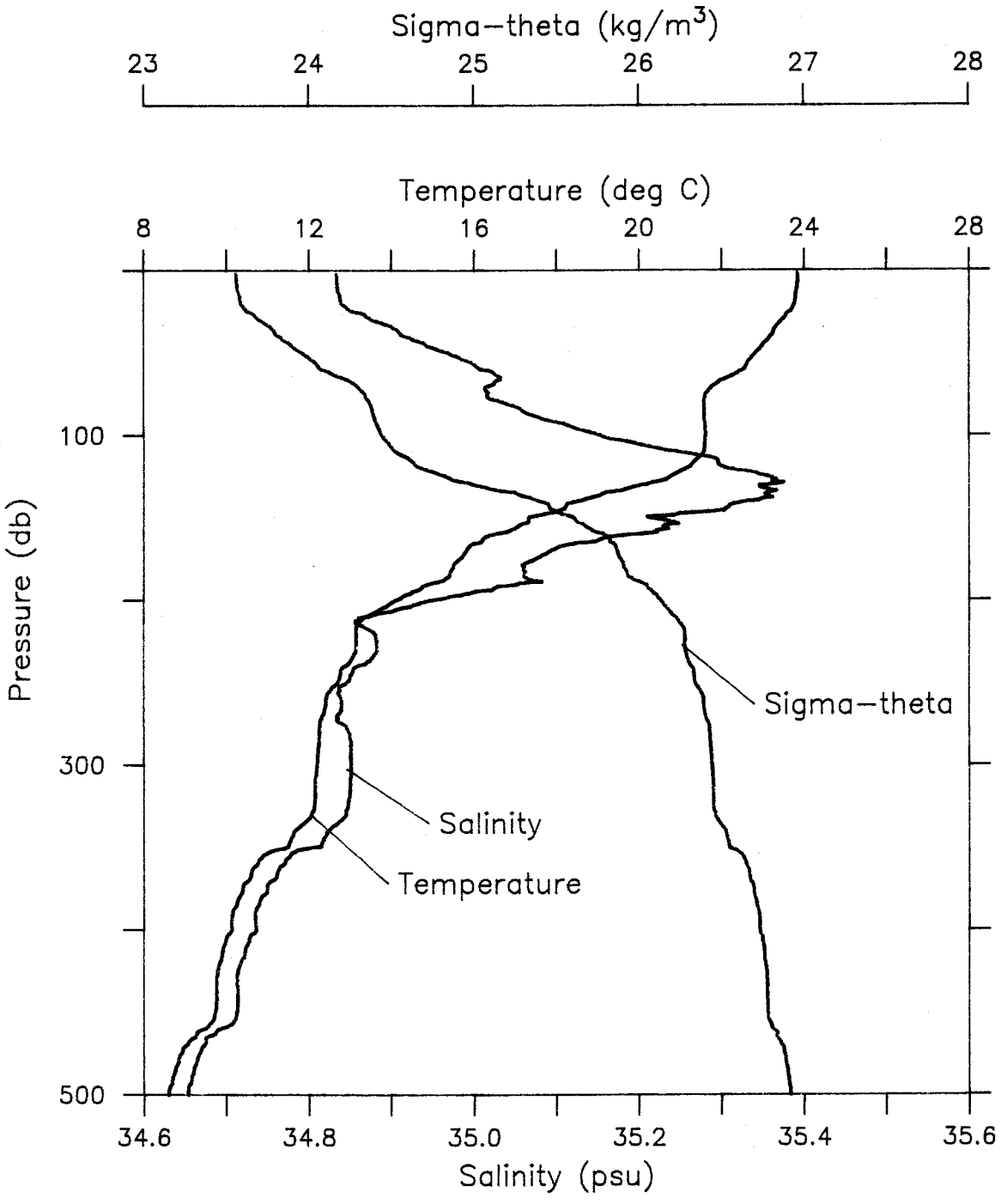

Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 12

STA NO 13 LAT: 0° 0.1 S LONG:140° 15.1 W
19 NOV 1984 1805 GMT PROBE 2561 DEPTH 4349M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
2	23.849	34.834	23.849	23.562	431.9	0.009
10	23.832	34.835	23.830	23.568	431.7	0.043
20	23.774	34.839	23.770	23.589	430.1	0.086
30	23.492	34.877	23.486	23.701	419.9	0.129
40	23.189	34.916	23.181	23.819	409.0	0.170
50	22.835	34.969	22.825	23.962	395.8	0.210
60	22.544	35.008	22.532	24.075	385.4	0.249
70	21.804	35.018	21.790	24.292	365.2	0.287
80	21.570	35.036	21.555	24.370	358.0	0.323
90	21.593	35.083	21.576	24.401	355.6	0.359
100	21.629	35.153	21.610	24.445	351.8	0.394
110	21.574	35.246	21.553	24.531	344.0	0.429
120	21.183	35.305	21.160	24.684	329.8	0.462
130	20.206	35.366	20.182	24.994	300.5	0.494
140	18.606	35.345	18.581	25.392	262.8	0.522
150	17.333	35.209	17.308	25.602	242.9	0.547
175	15.669	35.076	15.642	25.888	216.1	0.604
200	14.116	34.952	14.087	26.132	193.3	0.655
225	13.141	34.882	13.109	26.280	179.5	0.702
250	12.698	34.846	12.664	26.341	174.3	0.746
300	12.189	34.851	12.149	26.446	165.5	0.830
400	10.113	34.736	10.066	26.735	139.2	0.983
500	8.583	34.653	8.530	26.921	122.3	1.115
501	8.579	34.653	8.525	26.921	122.3	1.116

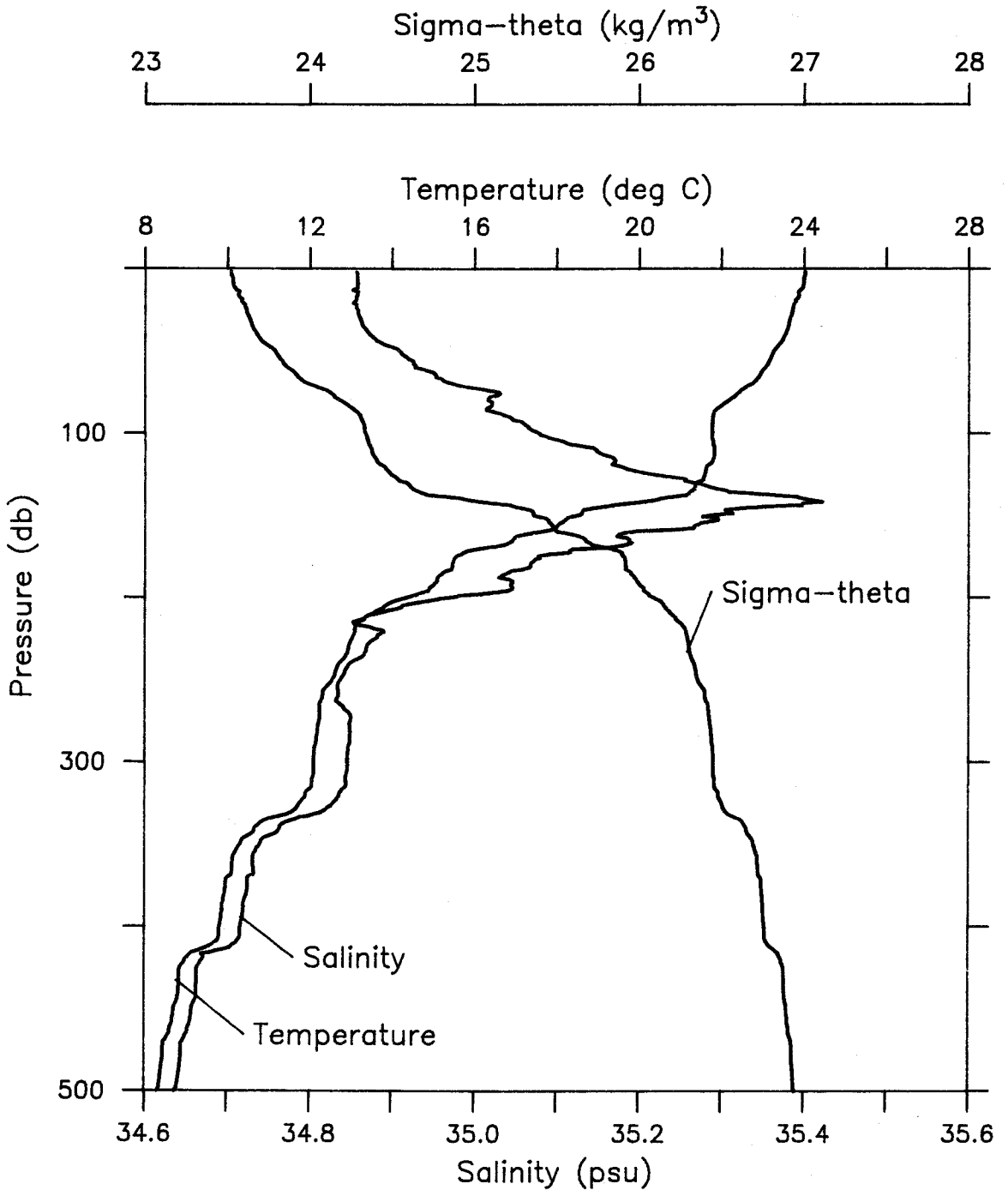
BAD WIRE ANGLE
STOP AT 150M TO FIX


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 13

STA NO 14 LAT: 0° 0.6 S LONG:140° 10.0 W
21 NOV 1984 2221 GMT PROBE 2561 DEPTH 4394M

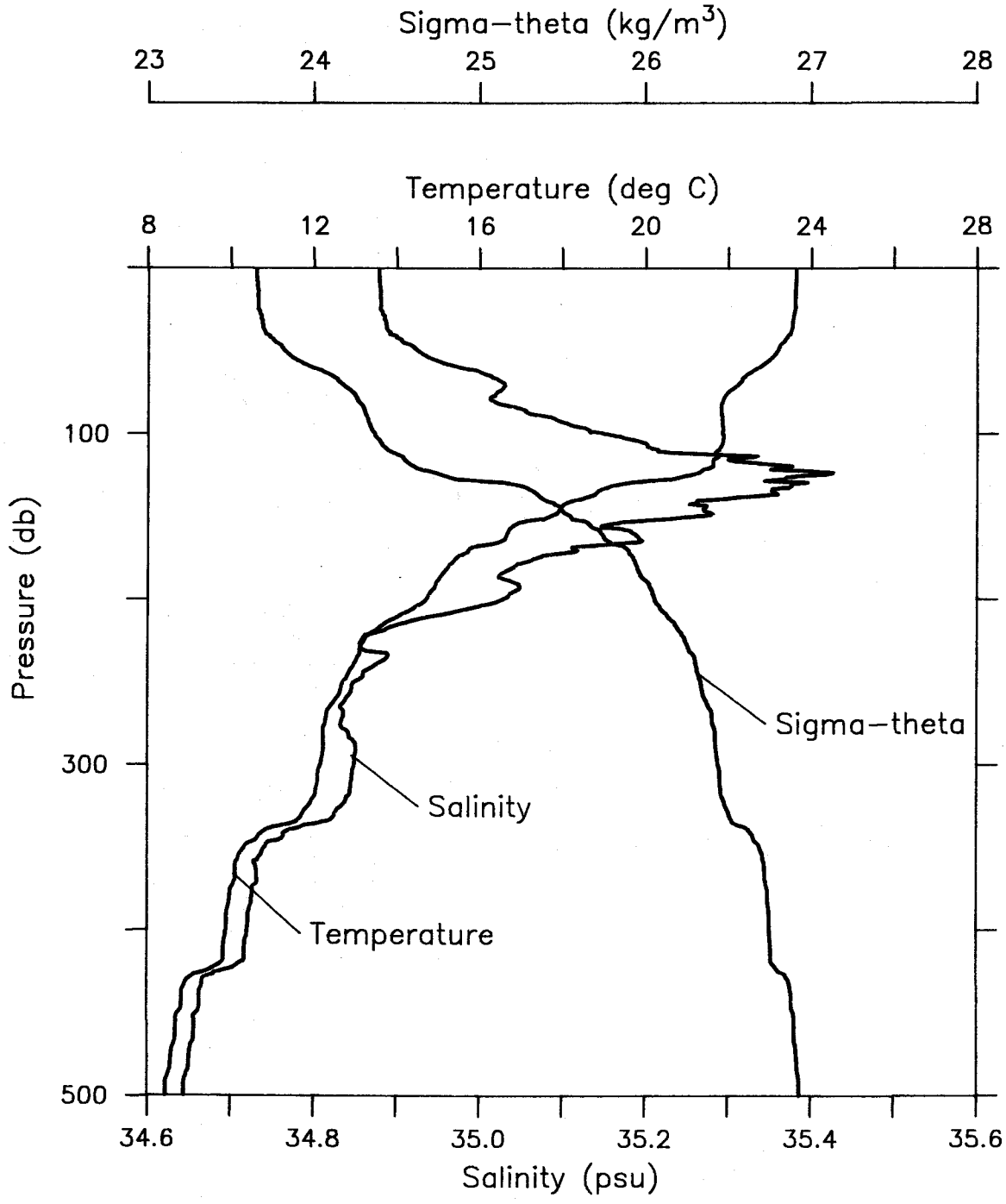
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
2	24.036	34.857	24.035	23.524	435.5	0.009
10	23.984	34.858	23.982	23.541	434.3	0.044
20	23.828	34.855	23.824	23.585	430.5	0.087
30	23.673	34.862	23.666	23.637	426.0	0.129
40	23.551	34.873	23.543	23.681	422.2	0.172
50	23.272	34.910	23.262	23.791	412.1	0.214
60	23.073	34.928	23.061	23.863	405.7	0.255
70	22.746	34.975	22.731	23.993	393.7	0.295
80	22.178	35.018	22.162	24.187	375.5	0.333
90	21.800	35.044	21.782	24.314	363.9	0.370
100	21.791	35.080	21.771	24.344	361.4	0.406
110	21.846	35.149	21.824	24.382	358.3	0.442
120	21.651	35.177	21.627	24.458	351.4	0.478
130	21.415	35.265	21.389	24.590	339.2	0.512
140	20.536	35.401	20.510	24.933	306.8	0.545
150	18.552	35.292	18.526	25.365	265.6	0.573
175	15.575	35.078	15.547	25.911	213.9	0.633
200	14.384	34.974	14.354	26.093	197.1	0.685
225	13.034	34.881	13.003	26.301	177.6	0.732
250	12.557	34.838	12.523	26.363	172.2	0.775
300	12.111	34.846	12.071	26.457	164.4	0.859
400	9.828	34.717	9.782	26.768	135.8	1.006
500	8.315	34.636	8.262	26.949	119.3	1.130
510	8.193	34.633	8.140	26.965	117.9	1.142


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 14

STA NO 15 LAT: 0° 0.5 S LONG:140° 9.5 W
22 NOV 1984 1809 GMT PROBE 2561 DEPTH 4394M

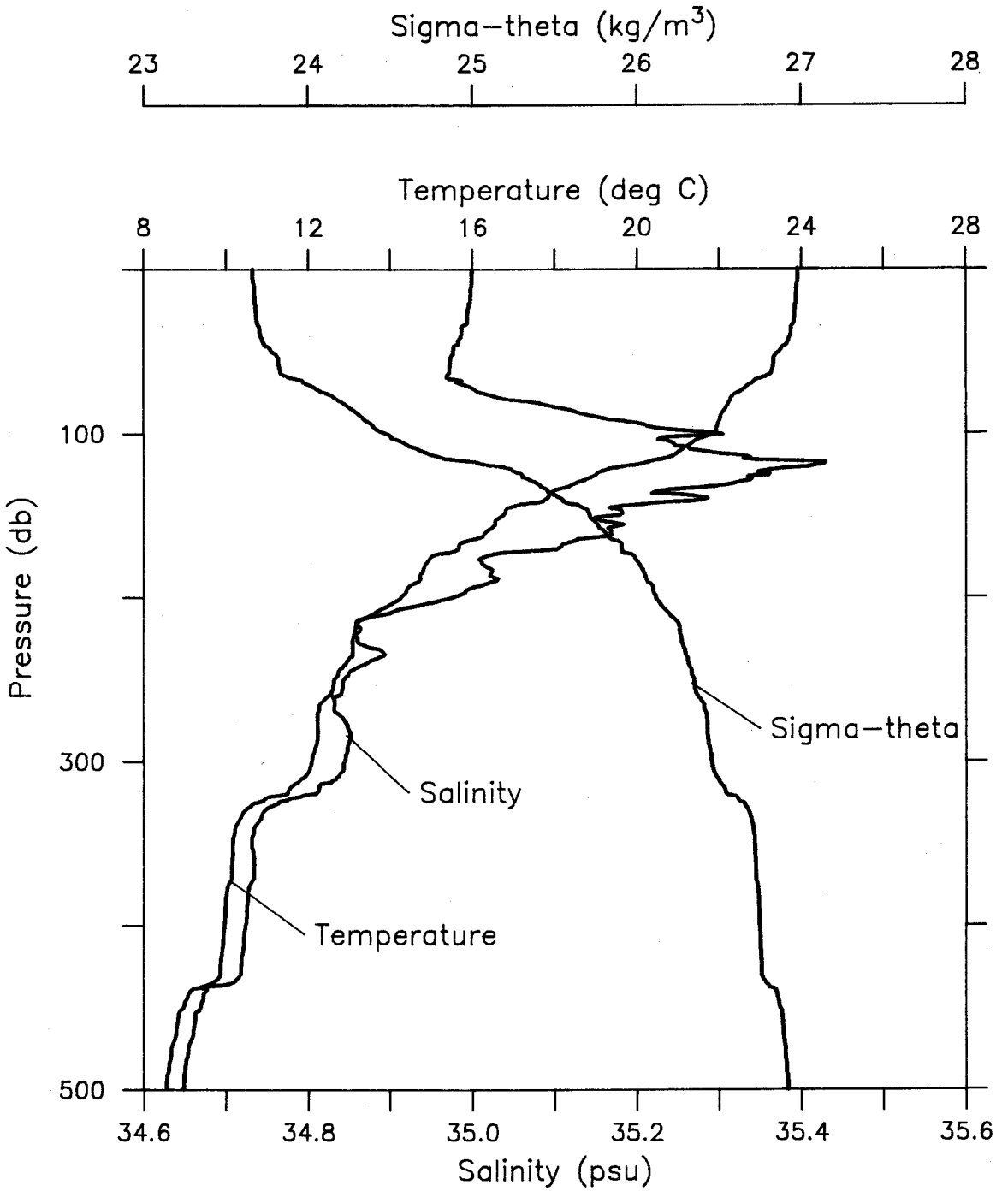
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	23.646	34.878	23.646	23.655	423.0	0.004
10	23.631	34.880	23.629	23.662	422.8	0.042
20	23.615	34.881	23.611	23.668	422.6	0.085
30	23.570	34.885	23.563	23.685	421.4	0.127
40	23.492	34.891	23.483	23.713	419.2	0.169
50	23.195	34.926	23.184	23.826	408.8	0.210
60	22.766	34.976	22.754	23.988	393.8	0.250
70	22.262	35.031	22.248	24.173	376.5	0.289
80	21.878	35.016	21.862	24.270	367.6	0.326
90	21.875	35.086	21.858	24.325	362.8	0.362
100	21.879	35.150	21.859	24.372	358.7	0.398
110	21.782	35.217	21.761	24.451	351.6	0.434
120	21.646	35.378	21.622	24.612	336.7	0.468
130	19.648	35.397	19.625	25.164	284.2	0.500
140	18.436	35.295	18.411	25.397	262.3	0.527
150	17.730	35.271	17.704	25.554	247.6	0.553
175	15.466	35.073	15.439	25.932	211.9	0.610
200	14.725	35.030	14.695	26.062	200.1	0.661
225	13.226	34.858	13.195	26.244	183.0	0.709
250	12.714	34.850	12.680	26.341	174.3	0.754
300	12.179	34.849	12.139	26.446	165.5	0.838
400	9.903	34.721	9.857	26.759	136.7	0.986
500	8.439	34.645	8.386	26.936	120.6	1.112
501	8.438	34.645	8.385	26.937	120.6	1.114


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

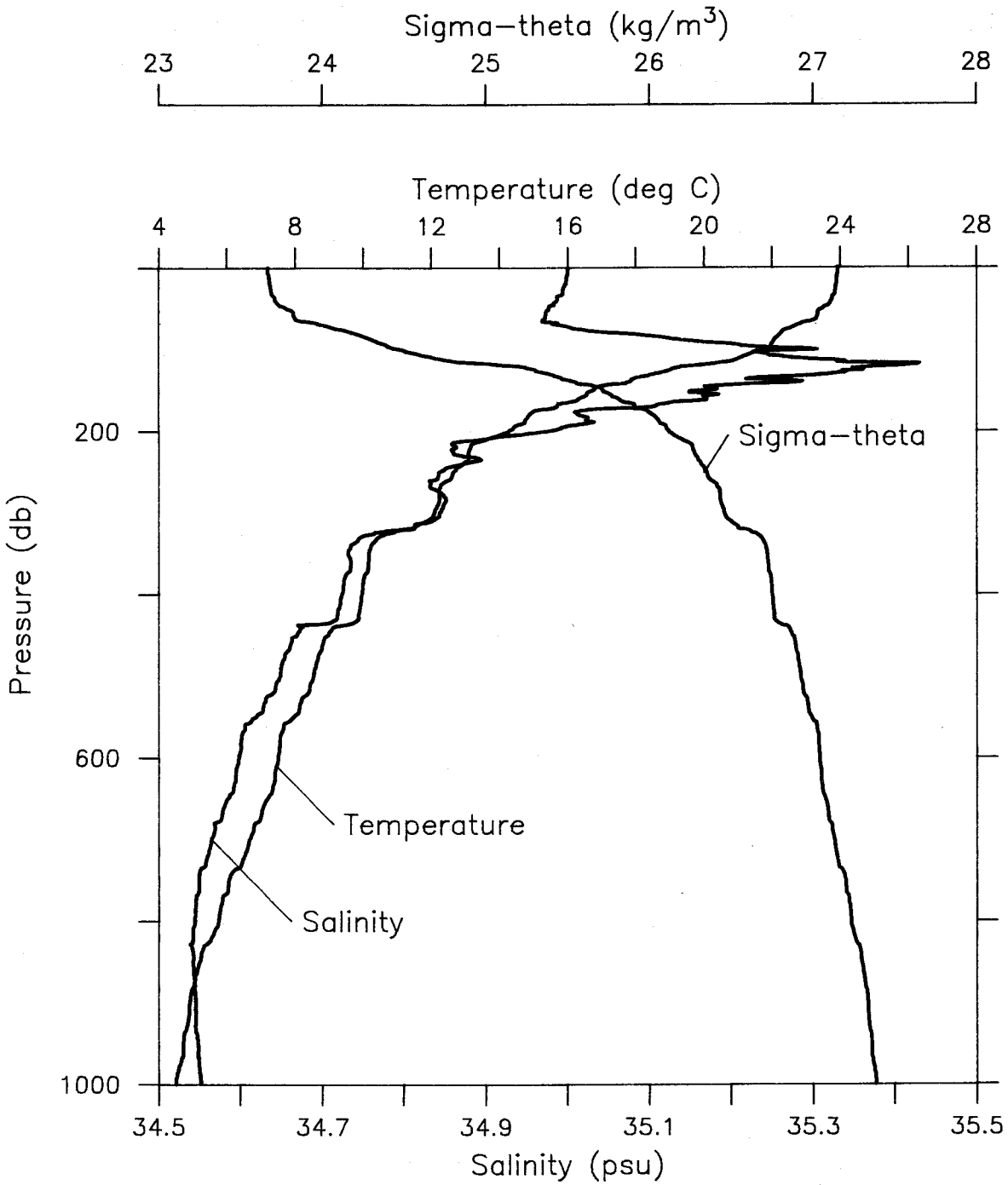
STATION 15

STA NO 16 LAT: 0° 0.4 N LONG:140° 10.7 W
23 NOV 1984 1848 GMT PROBE 2561 DEPTH 4389M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
0	23.921	35.000	23.921	23.666	421.9	0.000
10	23.890	34.999	23.888	23.676	421.4	0.042
20	23.877	34.998	23.873	23.679	421.5	0.084
30	23.833	34.994	23.827	23.689	421.0	0.126
40	23.741	34.987	23.732	23.712	419.3	0.168
50	23.483	34.977	23.473	23.780	413.2	0.210
60	23.309	34.973	23.297	23.829	409.0	0.251
70	22.782	34.986	22.767	23.991	393.8	0.292
80	22.268	35.047	22.252	24.184	375.8	0.330
90	22.034	35.150	22.016	24.329	362.5	0.367
100	21.908	35.293	21.888	24.473	349.1	0.402
110	21.105	35.265	21.083	24.674	330.3	0.436
120	19.890	35.415	19.868	25.115	288.6	0.468
130	18.575	35.326	18.552	25.385	263.1	0.495
140	17.816	35.287	17.793	25.544	248.1	0.521
150	16.759	35.180	16.735	25.716	231.9	0.545
175	15.017	35.017	14.990	25.988	206.4	0.600
200	14.266	34.977	14.237	26.120	194.4	0.650
225	13.094	34.861	13.063	26.273	180.2	0.696
250	12.635	34.844	12.602	26.352	173.2	0.741
300	12.091	34.844	12.052	26.459	164.2	0.824
400	9.959	34.724	9.912	26.752	137.4	0.969
500	8.541	34.648	8.488	26.924	122.0	1.098
600	7.498	34.598	7.439	27.041	111.5	1.214
800	5.759	34.544	5.689	27.232	93.8	1.420
1000	4.501	34.551	4.421	27.384	79.2	1.590
1003	4.495	34.551	4.415	27.385	79.2	1.592


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
100
300
500
Pressure (db)
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

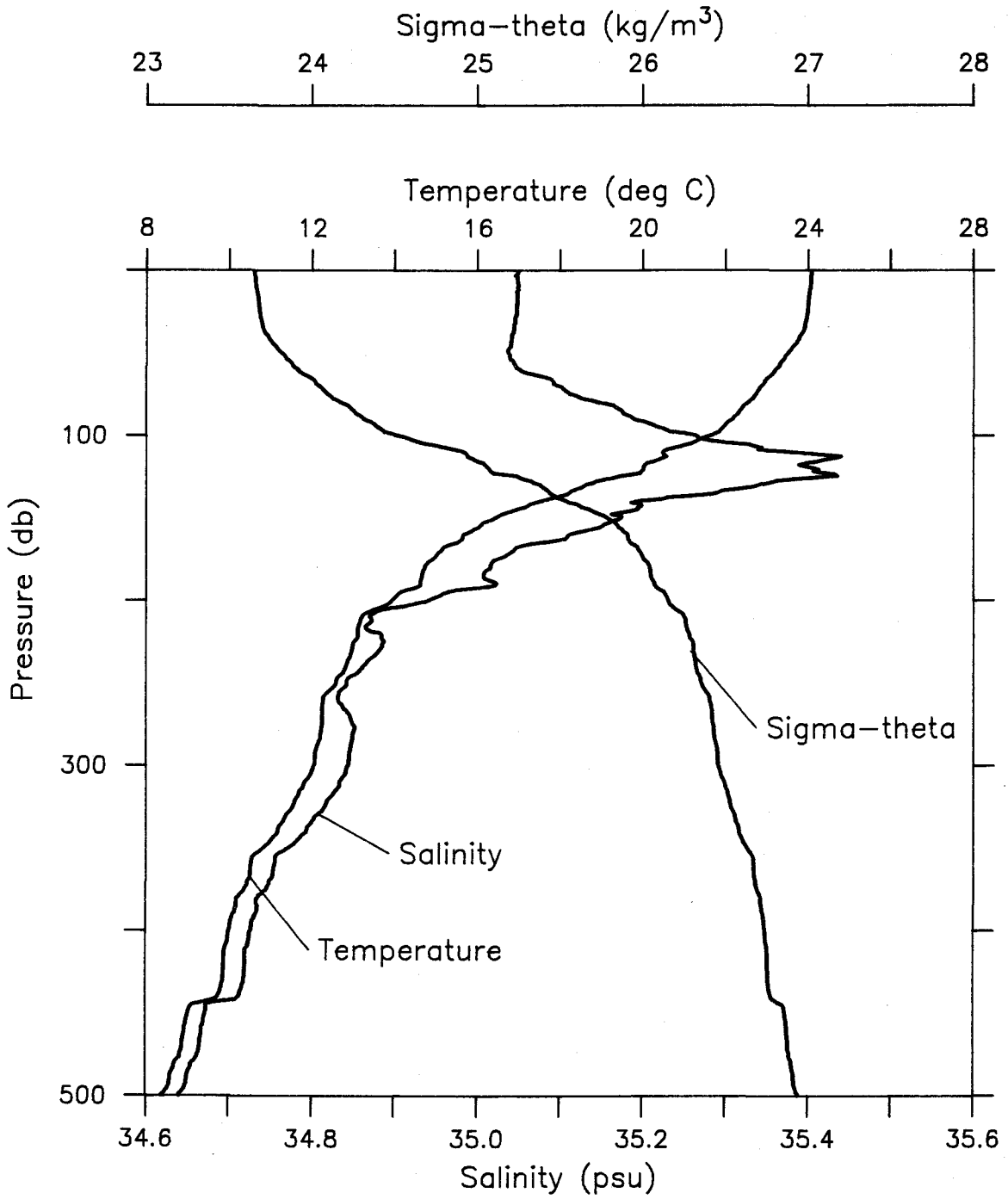
STATION 16


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
4
8
12
16
20
24
28
200
600
1000
Pressure (db)
Sigma–theta
Temperature
Salinity
34.5
34.7
34.9
35.1
35.3
35.5
Salinity (psu)

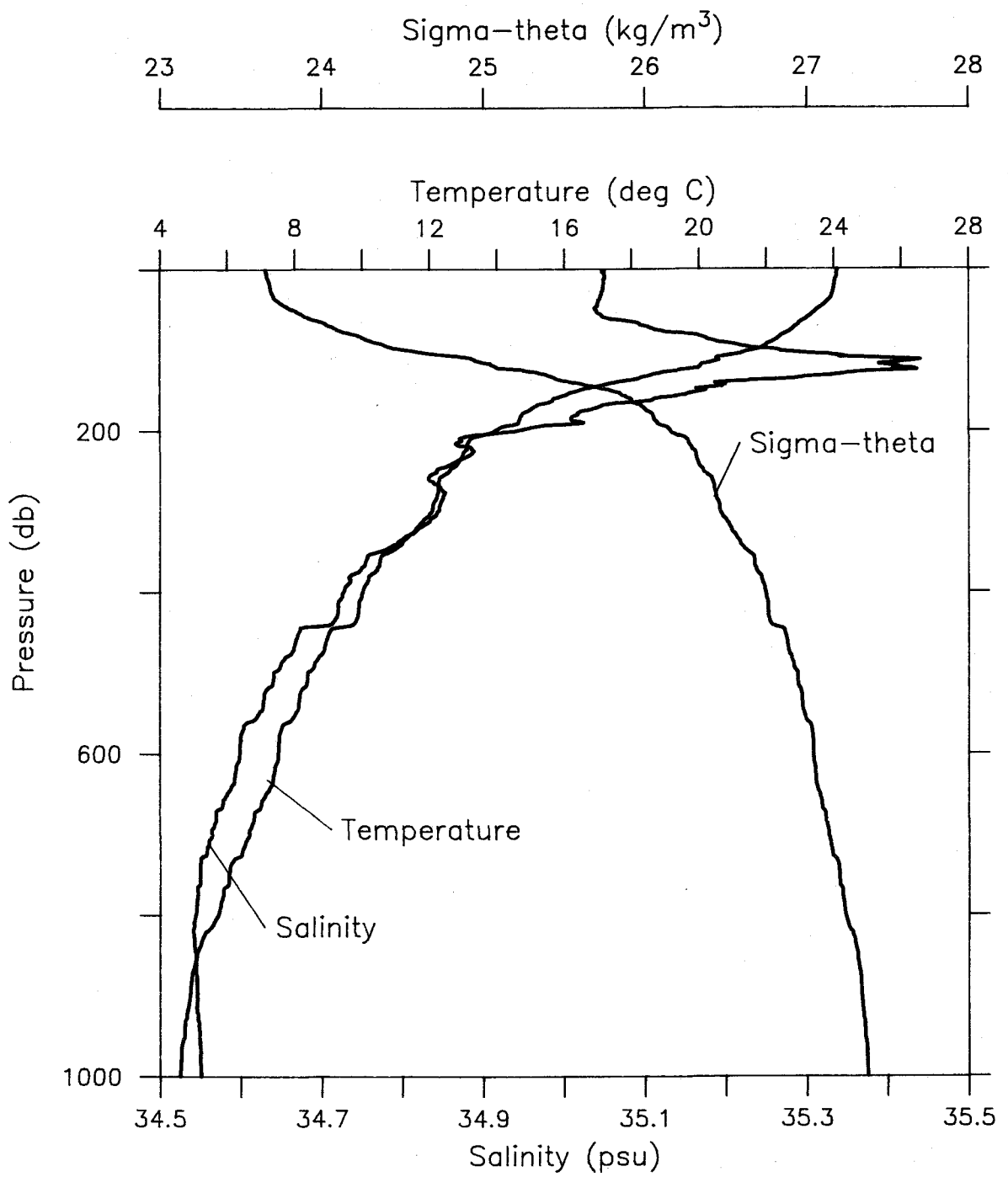
STATION 16

STA NO 17 LAT: 0° 0.2 N LONG:140° 9.0 W
24 NOV 1984 2013 GMT PROBE 2561 DEPTH 4391M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.092	35.049	24.092	23.653	423.2	0.004
10	24.063	35.050	24.061	23.663	422.7	0.042
20	24.001	35.048	23.997	23.681	421.4	0.084
30	23.950	35.046	23.944	23.694	420.5	0.127
40	23.799	35.041	23.791	23.736	417.0	0.169
50	23.517	35.037	23.506	23.817	409.7	0.210
60	23.218	35.051	23.206	23.914	400.8	0.250
70	22.895	35.098	22.880	24.044	388.9	0.290
80	22.566	35.146	22.550	24.175	376.8	0.328
90	22.186	35.189	22.168	24.316	363.7	0.365
100	21.678	35.264	21.658	24.515	345.1	0.401
110	20.494	35.369	20.473	24.919	306.9	0.433
120	20.031	35.407	20.009	25.071	292.8	0.463
130	18.651	35.344	18.628	25.380	263.6	0.491
140	17.553	35.198	17.529	25.540	248.4	0.517
150	16.441	35.175	16.417	25.786	225.2	0.541
175	14.941	35.025	14.915	26.011	204.2	0.594
200	13.958	34.943	13.929	26.158	190.7	0.643
225	13.025	34.888	12.994	26.308	176.8	0.689
250	12.589	34.842	12.556	26.359	172.5	0.733
300	12.066	34.844	12.026	26.464	163.7	0.816
400	10.011	34.727	9.964	26.745	138.1	0.965
500	8.372	34.640	8.319	26.943	120.0	1.095
600	7.498	34.598	7.439	27.041	111.5	1.211
800	5.719	34.544	5.649	27.236	93.3	1.416
1000	4.579	34.550	4.498	27.375	80.3	1.584
1002	4.569	34.550	4.489	27.377	80.1	1.586


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

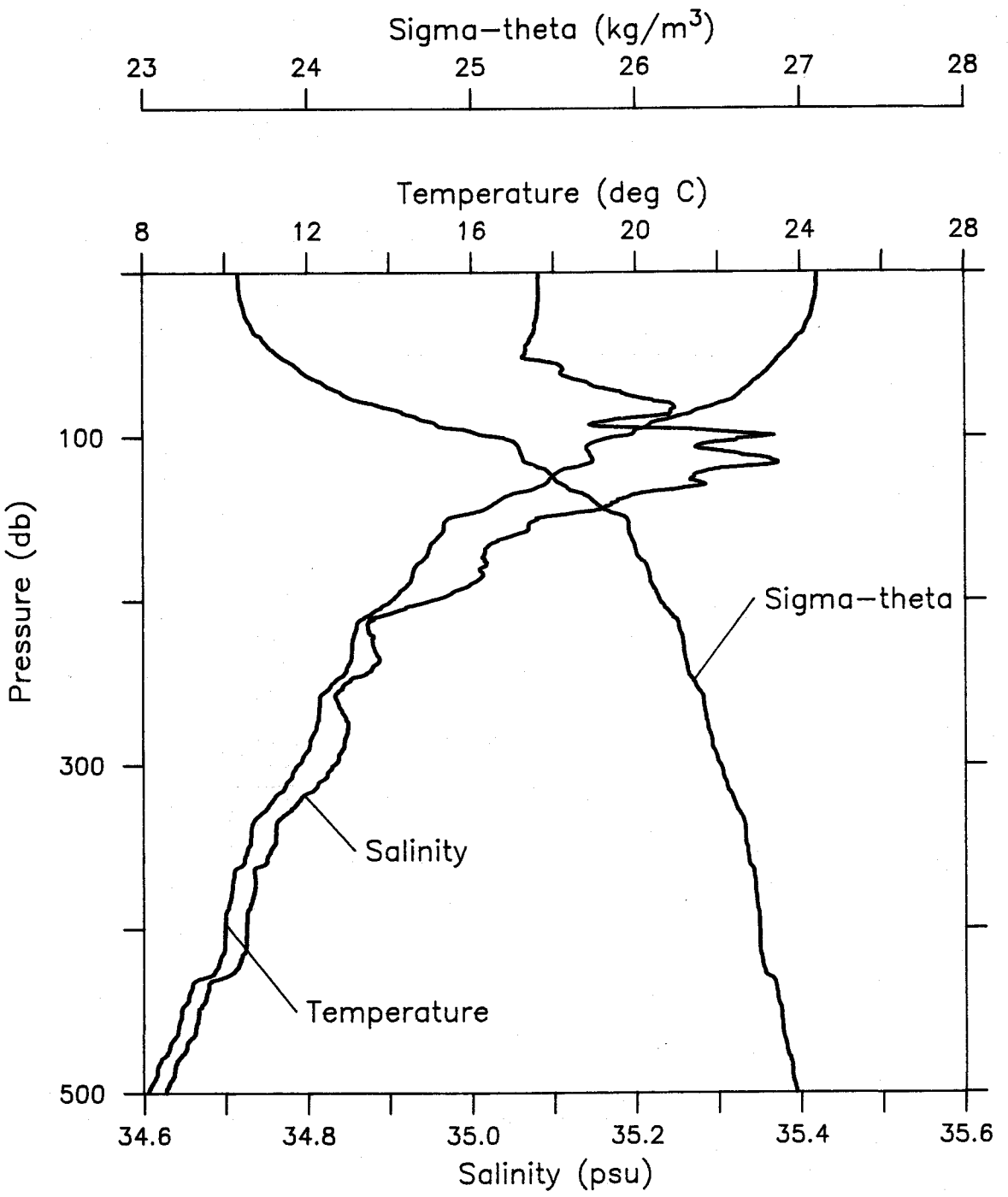
STATION 17


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
4
8
12
16
20
24
28
200
600
1000
Pressure (db)
Sigma–theta
Temperature
Salinity
34.5
34.7
34.9
35.1
35.3
35.5
Salinity (psu)

STATION 17

STA NO 18 LAT: 0° 0.2 N LONG:140° 9.9 W
25 NOV 1984 2013 GMT PROBE 2561 DEPTH 4394M

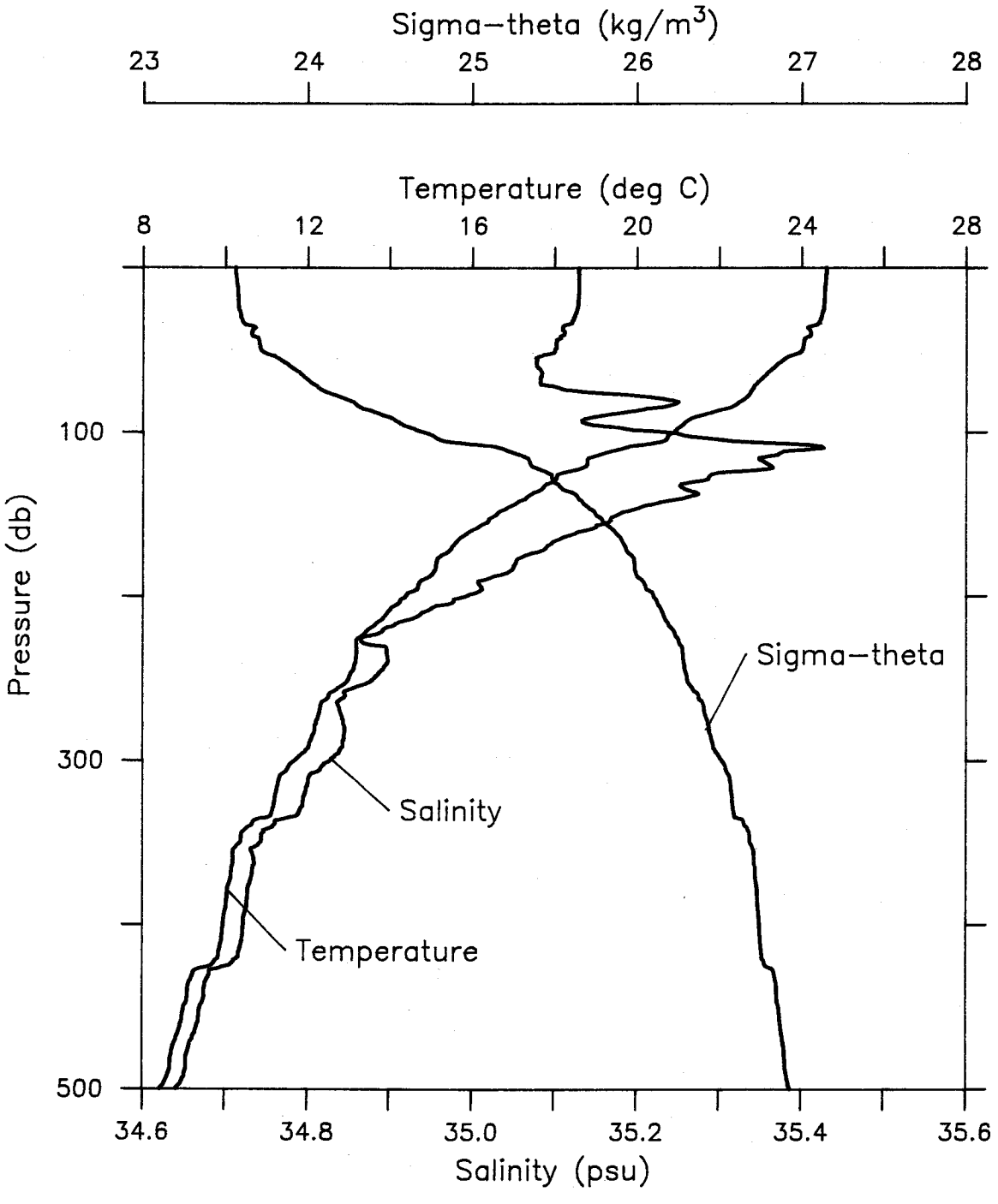
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.419	35.082	24.418	23.580	430.1	0.004
10	24.399	35.082	24.397	23.587	429.9	0.043
20	24.328	35.081	24.324	23.608	428.3	0.086
30	24.201	35.079	24.194	23.645	425.3	0.129
40	23.918	35.072	23.910	23.724	418.1	0.171
50	23.578	35.065	23.568	23.820	409.4	0.212
60	23.214	35.110	23.202	23.961	396.4	0.253
70	22.741	35.150	22.727	24.128	380.9	0.291
80	22.048	35.241	22.032	24.393	355.9	0.328
90	20.763	35.174	20.745	24.697	327.3	0.363
100	19.741	35.369	19.723	25.117	287.6	0.393
110	18.869	35.313	18.850	25.300	270.5	0.421
120	18.251	35.303	18.230	25.448	256.6	0.447
130	17.741	35.285	17.718	25.561	246.2	0.473
140	16.627	35.179	16.605	25.746	228.7	0.496
150	15.435	35.079	15.412	25.942	210.1	0.518
175	14.831	35.017	14.805	26.028	202.6	0.570
200	14.054	34.952	14.025	26.146	191.9	0.619
225	13.091	34.879	13.060	26.288	178.8	0.665
250	12.636	34.848	12.603	26.355	173.0	0.710
300	11.769	34.833	11.730	26.511	159.1	0.792
400	9.969	34.725	9.922	26.751	137.5	0.938
500	8.109	34.628	8.058	26.973	116.8	1.065
502	8.108	34.628	8.057	26.973	116.8	1.067


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
100
300
500
Pressure (db)
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 18

STA NO 19 LAT: 0° 0.8 N LONG:140° 9.0 W
26 NOV 1984 1857 GMT PROBE 2561 DEPTH 4388M

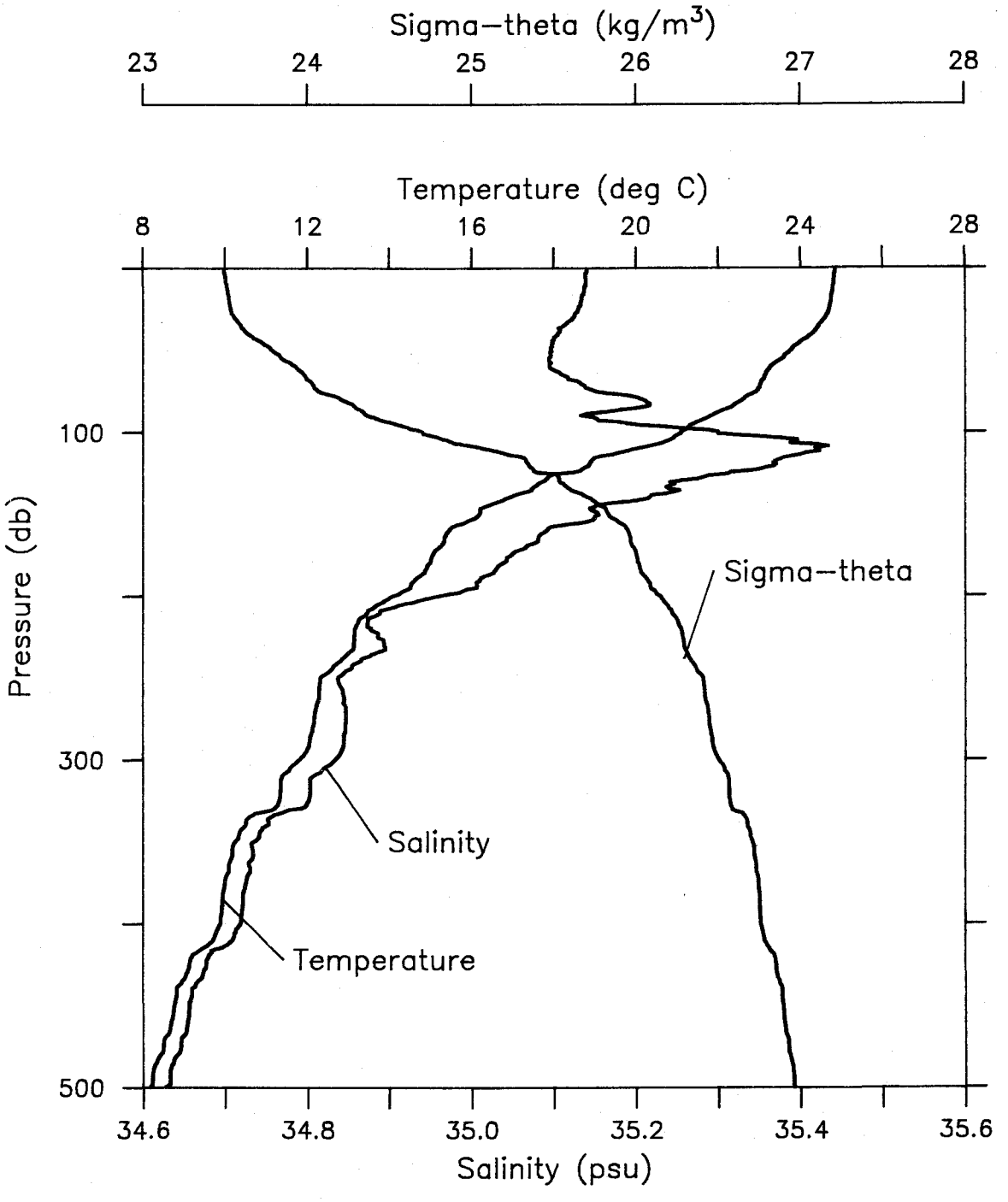
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
0	24.602	35.129	24.602	23.561	431.9	0.000
10	24.571	35.129	24.569	23.571	431.4	0.043
20	24.540	35.128	24.536	23.580	431.0	0.086
30	24.477	35.124	24.471	23.597	429.9	0.129
40	24.232	35.112	24.224	23.662	424.1	0.172
50	24.017	35.100	24.006	23.717	419.3	0.214
60	23.379	35.078	23.366	23.888	403.3	0.255
70	22.934	35.082	22.920	24.021	391.1	0.295
80	22.604	35.232	22.588	24.230	371.6	0.333
90	21.578	35.159	21.560	24.462	349.7	0.369
100	20.909	35.228	20.890	24.699	327.5	0.403
110	19.677	35.427	19.657	25.179	282.0	0.434
120	18.789	35.361	18.768	25.357	265.4	0.461
130	17.980	35.277	17.957	25.496	252.4	0.487
140	17.317	35.261	17.293	25.645	238.4	0.512
150	16.608	35.178	16.584	25.751	228.6	0.535
175	15.264	35.066	15.237	25.971	208.1	0.589
200	14.400	34.994	14.370	26.105	196.0	0.640
225	13.281	34.868	13.249	26.241	183.3	0.688
250	12.997	34.882	12.962	26.310	177.4	0.732
300	11.708	34.828	11.669	26.519	158.3	0.816
400	9.956	34.723	9.909	26.752	137.5	0.961
500	8.427	34.641	8.374	26.936	120.7	1.089
501	8.408	34.640	8.355	26.938	120.5	1.091


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 19

STA NO 20 LAT: 0° 0.5 N LONG:140° 8.8 W
27 NOV 1984 1912 GMT PROBE 2561 DEPTH 4388M

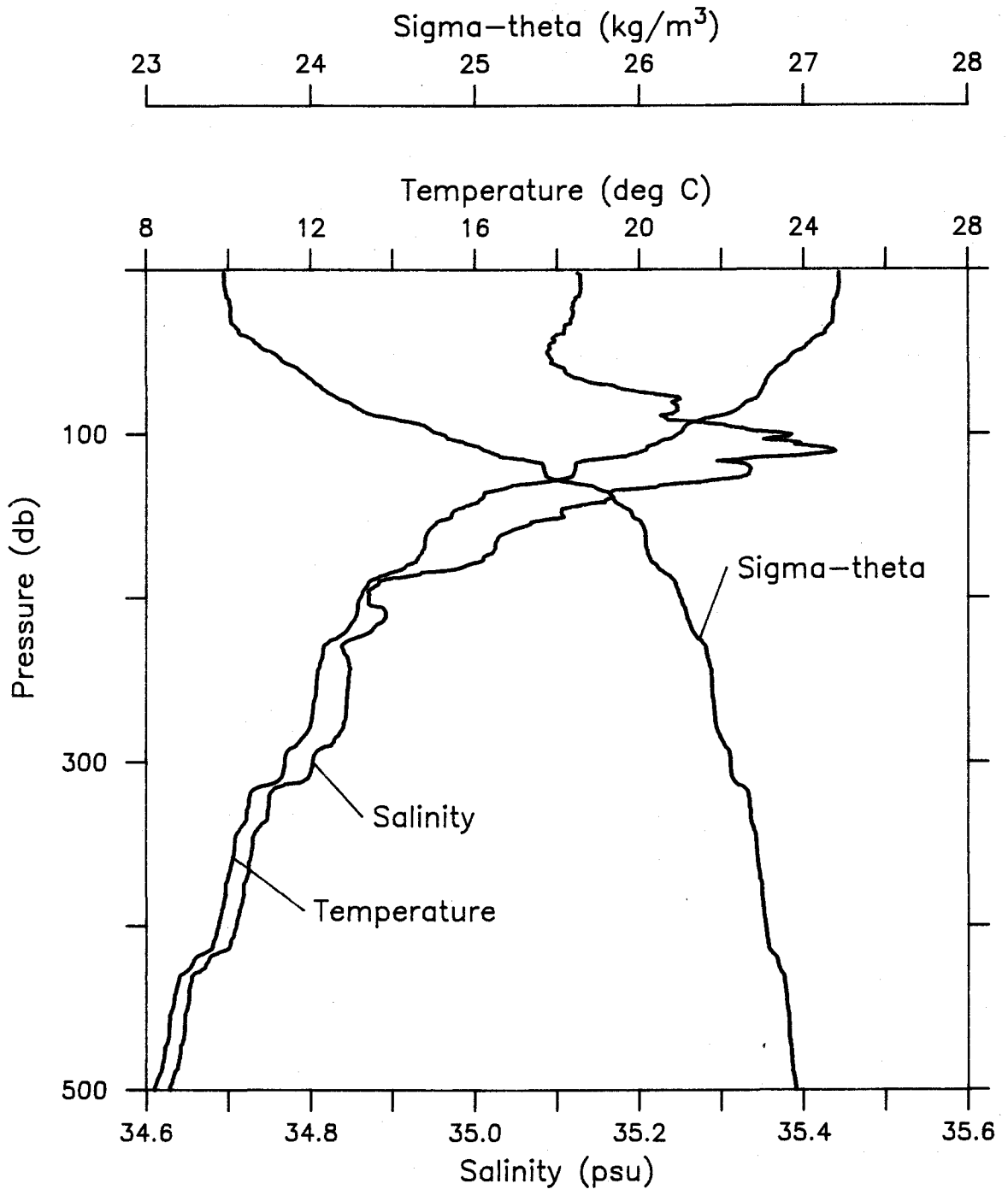
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.847	35.140	24.847	23.495	438.2	0.004
10	24.799	35.139	24.797	23.510	437.3	0.044
20	24.733	35.133	24.729	23.526	436.2	0.087
30	24.615	35.124	24.608	23.556	433.8	0.131
40	24.305	35.105	24.297	23.634	426.7	0.174
50	23.787	35.096	23.777	23.782	413.1	0.216
60	23.287	35.095	23.275	23.928	399.6	0.257
70	23.038	35.131	23.024	24.028	390.4	0.296
80	22.620	35.206	22.604	24.205	373.9	0.335
90	21.841	35.132	21.824	24.369	358.6	0.371
100	21.099	35.300	21.080	24.702	327.3	0.405
110	20.076	35.418	20.056	25.067	292.8	0.437
120	18.856	35.371	18.834	25.348	266.2	0.464
130	17.772	35.255	17.750	25.530	249.1	0.490
140	16.938	35.217	16.915	25.702	233.0	0.514
150	16.190	35.154	16.166	25.829	221.1	0.537
175	15.059	35.049	15.032	26.003	205.0	0.589
200	14.115	34.962	14.086	26.140	192.5	0.640
225	13.130	34.885	13.099	26.285	179.1	0.686
250	12.315	34.837	12.282	26.409	167.7	0.729
300	11.814	34.834	11.776	26.503	159.8	0.812
400	9.880	34.719	9.833	26.761	136.5	0.956
500	8.172	34.627	8.120	26.964	117.8	1.081
503	8.086	34.626	8.034	26.976	116.6	1.084


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

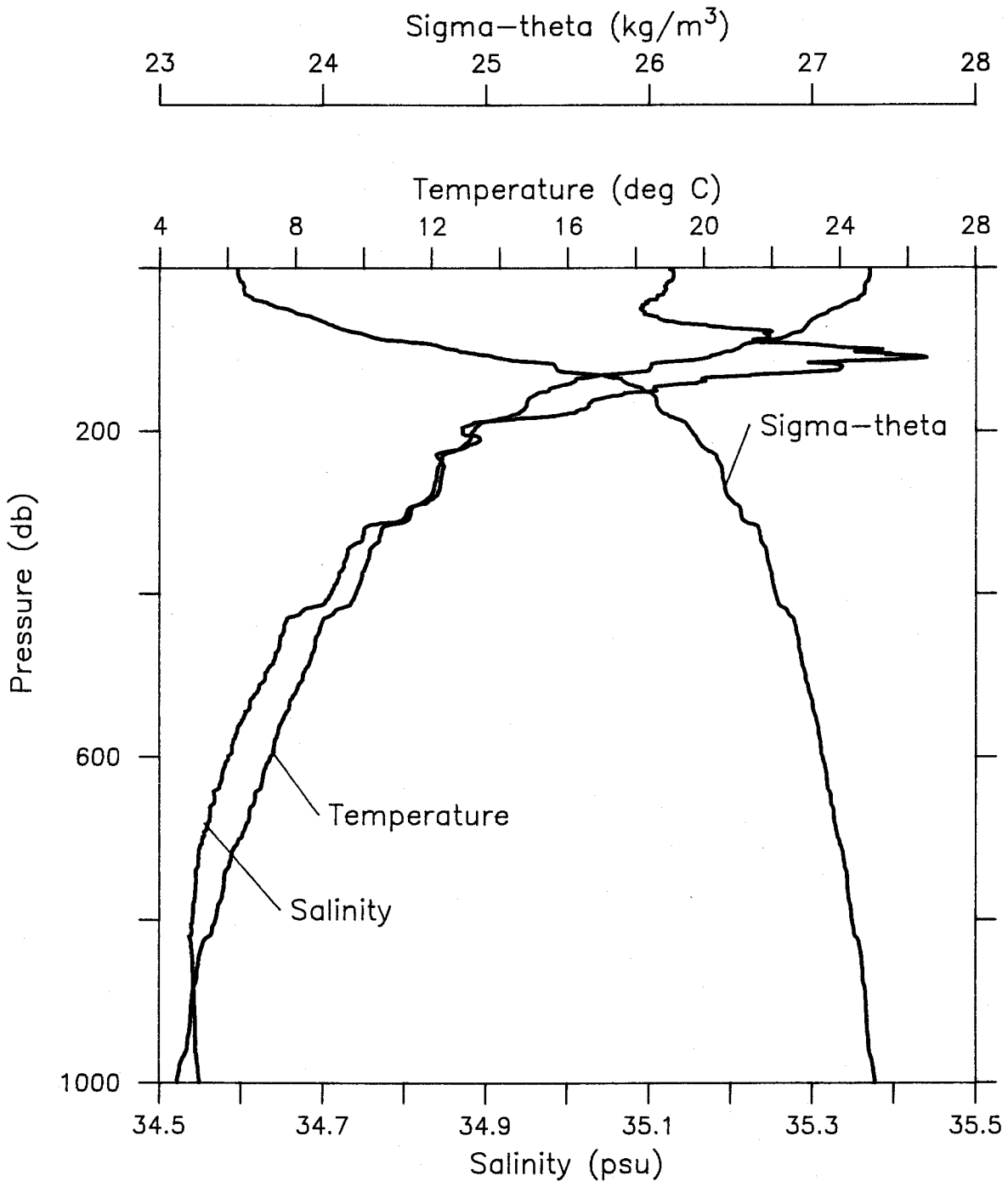
STATION 20

STA NO 21 LAT: 0° 0.5 N LONG:140° 9.4 W
28 NOV 1984 1919 GMT PROBE 2561 DEPTH 4391M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
2	24.879	35.125	24.878	23.474	440.3	0.009
10	24.870	35.129	24.868	23.481	440.0	0.044
20	24.743	35.120	24.739	23.513	437.4	0.088
30	24.716	35.117	24.709	23.519	437.2	0.132
40	24.462	35.099	24.453	23.583	431.6	0.175
50	23.850	35.088	23.840	23.757	415.4	0.217
60	23.332	35.109	23.320	23.925	399.8	0.258
70	23.057	35.153	23.043	24.039	389.4	0.298
80	22.714	35.245	22.698	24.208	373.7	0.336
90	21.792	35.233	21.775	24.459	350.0	0.372
100	20.968	35.371	20.948	24.792	318.7	0.406
110	20.161	35.437	20.141	25.059	293.5	0.436
120	18.448	35.334	18.428	25.423	259.0	0.464
130	17.563	35.273	17.541	25.595	242.9	0.489
140	16.134	35.161	16.112	25.847	219.0	0.512
150	15.437	35.108	15.414	25.965	208.0	0.533
175	14.635	35.011	14.609	26.066	198.9	0.584
200	13.211	34.871	13.183	26.257	181.1	0.631
225	12.621	34.852	12.591	26.360	171.7	0.675
250	12.151	34.846	12.118	26.448	164.0	0.717
300	11.372	34.803	11.334	26.561	154.1	0.797
400	9.758	34.710	9.712	26.775	135.1	0.938
500	8.205	34.630	8.153	26.960	118.2	1.063
600	7.256	34.583	7.197	27.063	109.1	1.176
800	5.640	34.540	5.571	27.243	92.5	1.376
1000	4.513	34.549	4.433	27.381	79.5	1.546
1002	4.512	34.549	4.433	27.381	79.6	1.548


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

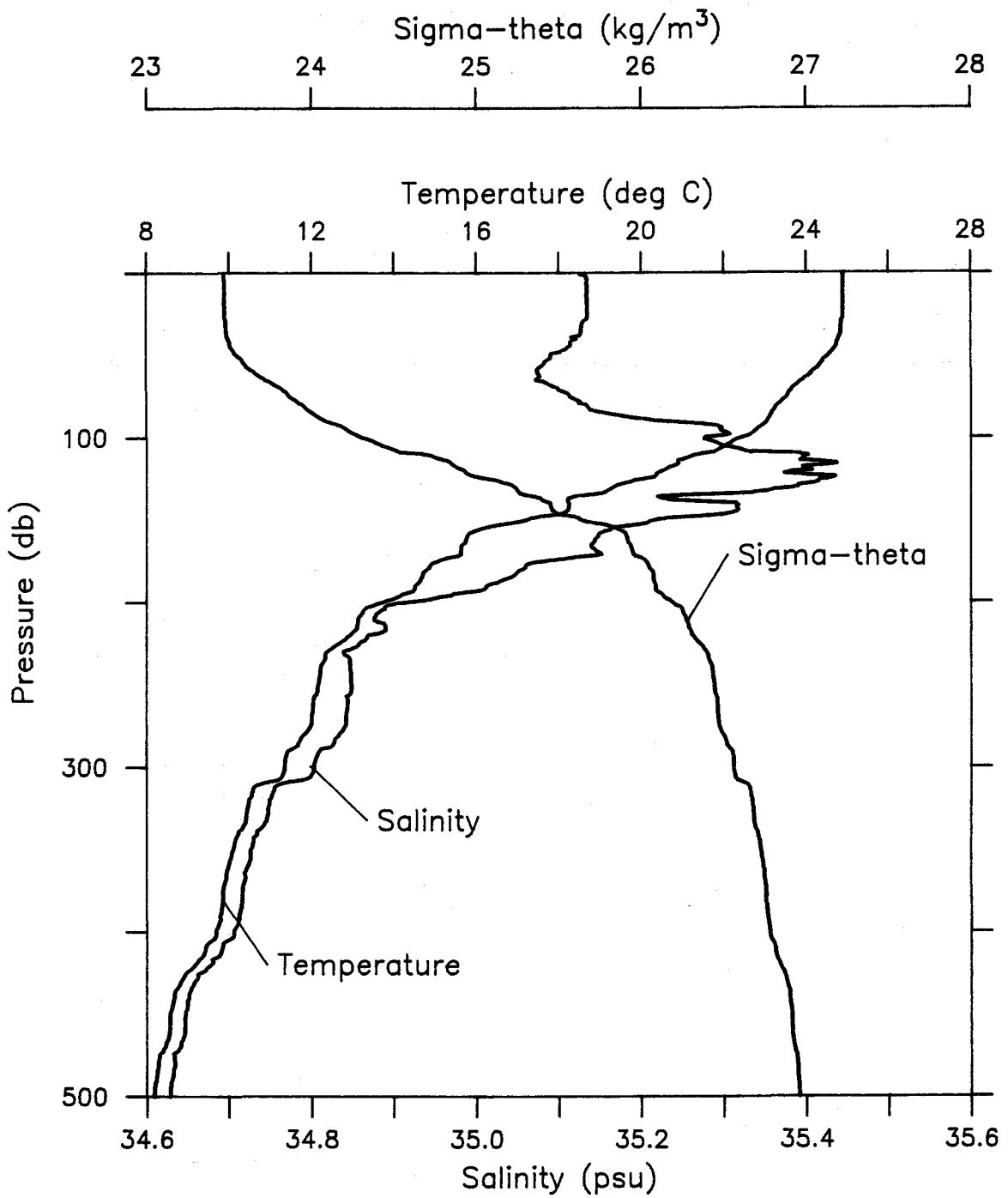
STATION 21


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
4
8
12
16
20
24
28
200
600
1000
Pressure (db)
Sigma–theta
Temperature
Salinity
34.5
34.7
34.9
35.1
35.3
35.5
Salinity (psu)

STATION 21

STA NO 22 LAT: 0° 0.5 S LONG:140° 9.9 W
29 NOV 1984 1808 GMT PROBE 2561 DEPTH 4388M

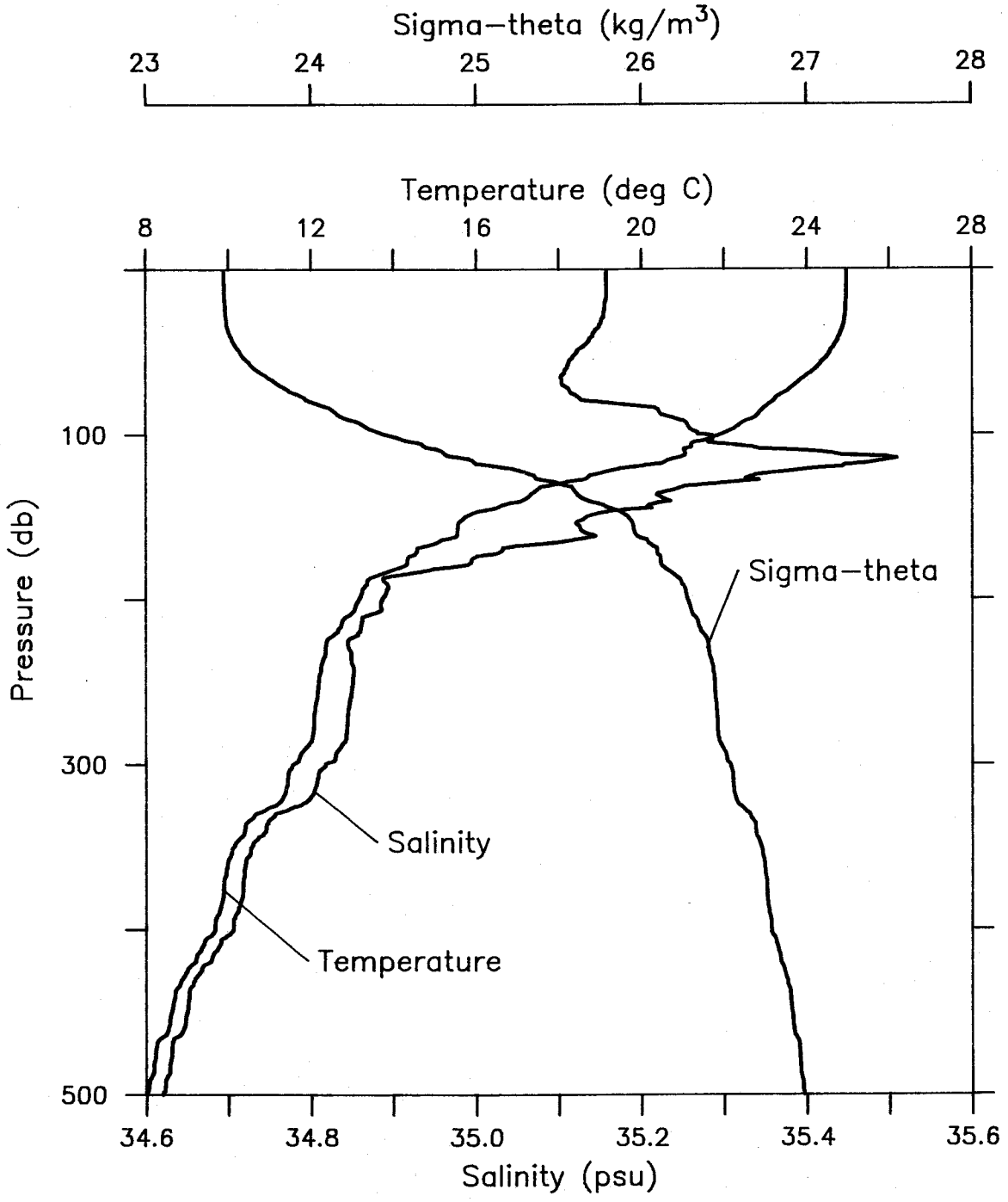
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.901	35.126	24.900	23.468	440.8	0.004
10	24.900	35.135	24.898	23.476	440.5	0.044
20	24.905	35.136	24.900	23.476	441.0	0.088
30	24.861	35.129	24.855	23.485	440.5	0.132
40	24.792	35.122	24.783	23.501	439.4	0.176
50	24.552	35.091	24.541	23.550	435.2	0.220
60	24.152	35.075	24.139	23.659	425.2	0.263
70	23.667	35.099	23.653	23.821	410.2	0.305
80	23.312	35.134	23.295	23.951	398.2	0.345
90	23.070	35.222	23.051	24.088	385.5	0.385
100	22.449	35.278	22.429	24.309	364.8	0.422
110	21.456	35.394	21.435	24.676	330.2	0.457
120	20.554	35.409	20.531	24.933	306.0	0.489
130	19.344	35.390	19.320	25.238	277.1	0.518
140	18.268	35.316	18.243	25.455	256.7	0.545
150	17.228	35.219	17.203	25.635	239.7	0.570
175	15.076	35.088	15.050	26.029	202.5	0.624
200	13.732	34.920	13.704	26.188	187.8	0.673
225	12.666	34.858	12.636	26.356	172.2	0.718
250	12.165	34.849	12.132	26.447	164.0	0.759
300	11.350	34.803	11.312	26.566	153.6	0.839
400	9.681	34.706	9.635	26.784	134.2	0.979
500	8.180	34.629	8.128	26.963	117.8	1.103
502	8.162	34.628	8.109	26.966	117.6	1.105


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 22

STA NO 23 LAT: 0° 0.4 S LONG:140° 8.8 W
30 NOV 1984 1812 GMT PROBE 2561 DEPTH 4376M

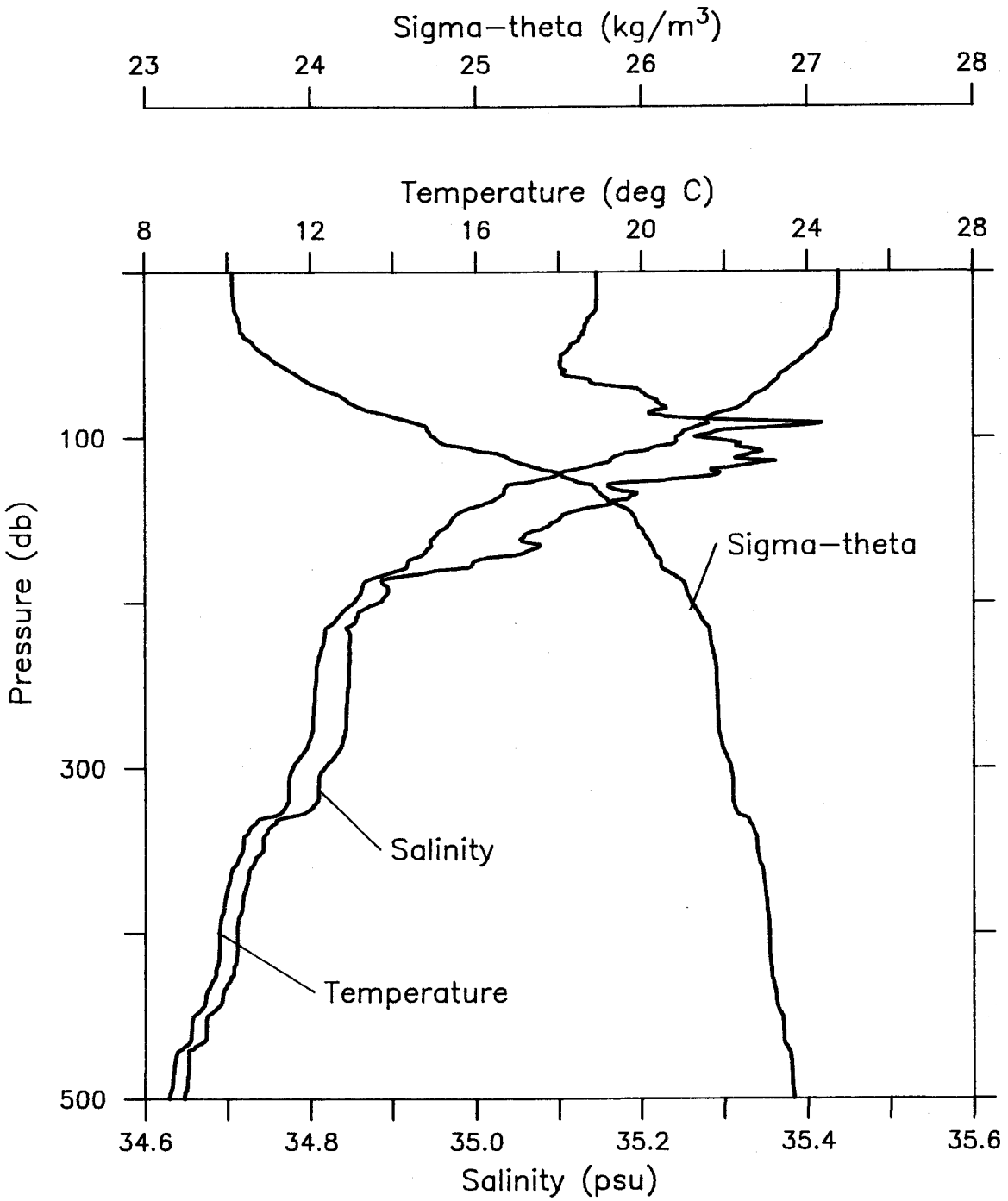
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.966	35.157	24.966	23.472	440.4	0.004
10	24.955	35.157	24.953	23.476	440.5	0.044
20	24.939	35.156	24.935	23.481	440.5	0.088
30	24.909	35.152	24.902	23.488	440.3	0.132
40	24.800	35.141	24.792	23.512	438.4	0.176
50	24.561	35.122	24.551	23.571	433.2	0.220
60	24.249	35.110	24.236	23.656	425.5	0.263
70	23.726	35.104	23.712	23.807	411.5	0.305
80	23.194	35.139	23.178	23.989	394.5	0.345
90	22.732	35.238	22.714	24.198	375.0	0.383
100	21.942	35.268	21.922	24.445	351.8	0.419
110	21.032	35.385	21.011	24.785	319.7	0.453
120	19.815	35.442	19.793	25.155	284.8	0.484
130	18.025	35.299	18.003	25.502	251.9	0.510
140	17.131	35.230	17.108	25.666	236.4	0.535
150	15.726	35.134	15.702	25.919	212.4	0.557
175	14.342	34.996	14.316	26.118	193.9	0.608
200	13.153	34.886	13.126	26.280	178.9	0.654
225	12.378	34.845	12.348	26.402	167.7	0.698
250	12.172	34.851	12.139	26.447	164.0	0.739
300	11.543	34.817	11.505	26.540	156.1	0.820
400	9.656	34.705	9.610	26.788	133.8	0.963
500	7.997	34.620	7.946	26.984	115.7	1.085
503	7.968	34.616	7.917	26.985	115.6	1.089


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

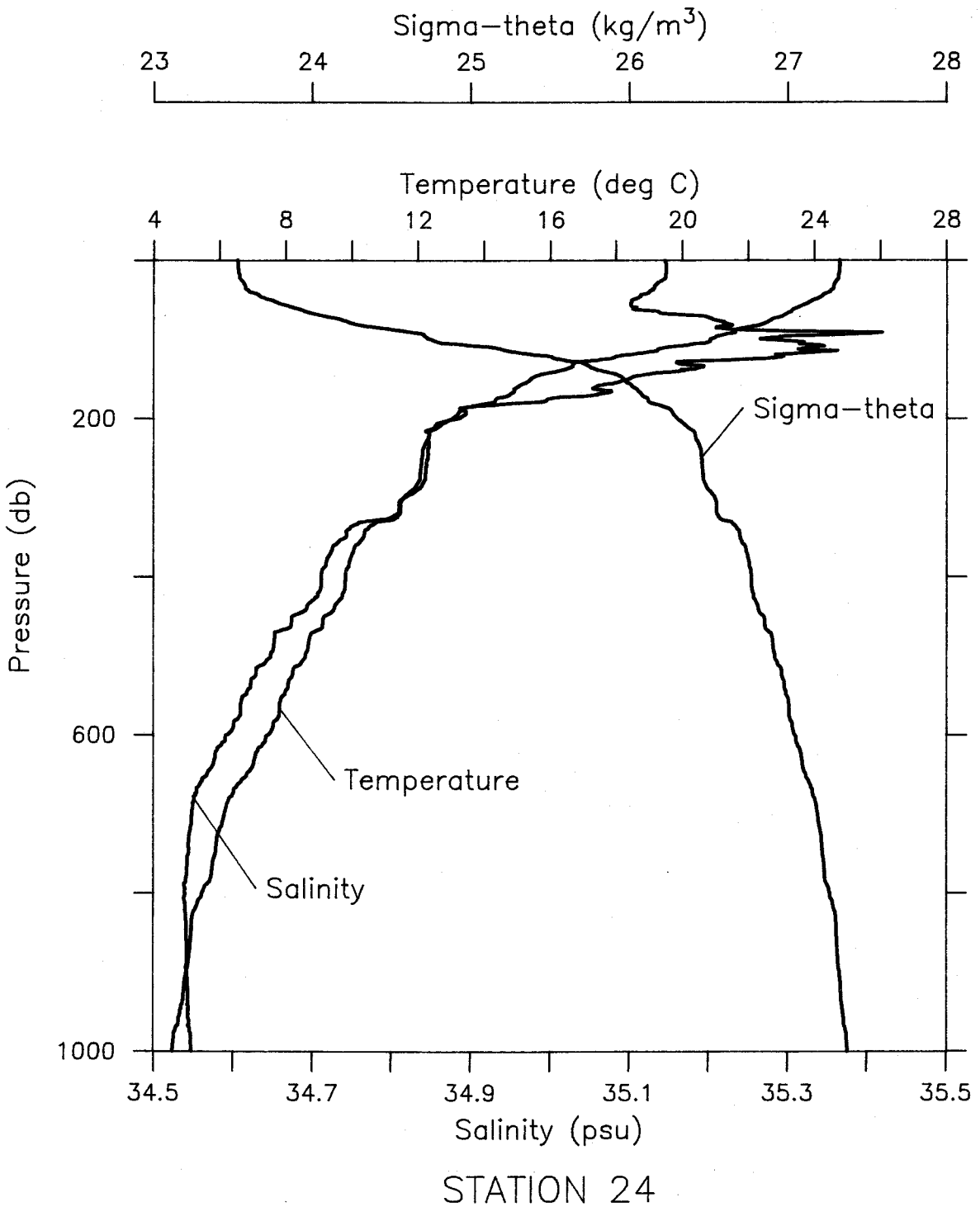
STATION 23

STA NO 24 LAT: 0° 0.0 N LONG:140° 15.1 W
01 DEC 1984 1910 GMT PROBE 2561 DEPTH 4333M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
0	24.754	35.145	24.754	23.527	435.2	0.000
10	24.745	35.146	24.743	23.531	435.2	0.044
20	24.720	35.146	24.715	23.539	434.9	0.087
30	24.598	35.134	24.592	23.568	432.6	0.130
40	24.462	35.125	24.453	23.603	429.7	0.174
50	24.001	35.104	23.990	23.725	418.5	0.216
60	23.490	35.109	23.478	23.879	404.2	0.257
70	23.064	35.175	23.049	24.054	388.0	0.297
80	22.488	35.222	22.472	24.255	369.2	0.334
90	21.527	35.302	21.509	24.585	338.0	0.370
100	20.821	35.264	20.802	24.750	322.6	0.403
110	19.587	35.333	19.567	25.131	286.6	0.434
120	18.372	35.283	18.351	25.403	260.9	0.461
130	16.732	35.158	16.711	25.705	232.2	0.486
140	16.217	35.169	16.195	25.834	220.3	0.509
150	15.407	35.100	15.384	25.965	208.0	0.530
175	14.356	34.997	14.330	26.116	194.1	0.580
200	13.041	34.883	13.014	26.300	176.9	0.626
225	12.297	34.846	12.267	26.419	166.1	0.669
250	12.115	34.846	12.082	26.454	163.3	0.710
300	11.559	34.816	11.520	26.538	156.4	0.791
400	9.790	34.711	9.744	26.770	135.6	0.935
500	8.578	34.647	8.524	26.917	122.6	1.065
600	7.476	34.593	7.416	27.040	111.5	1.181
800	5.452	34.539	5.383	27.265	90.1	1.379
1000	4.557	34.548	4.477	27.376	80.2	1.549
1002	4.540	34.548	4.460	27.377	80.0	1.550


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
8
12
16
20
24
28
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

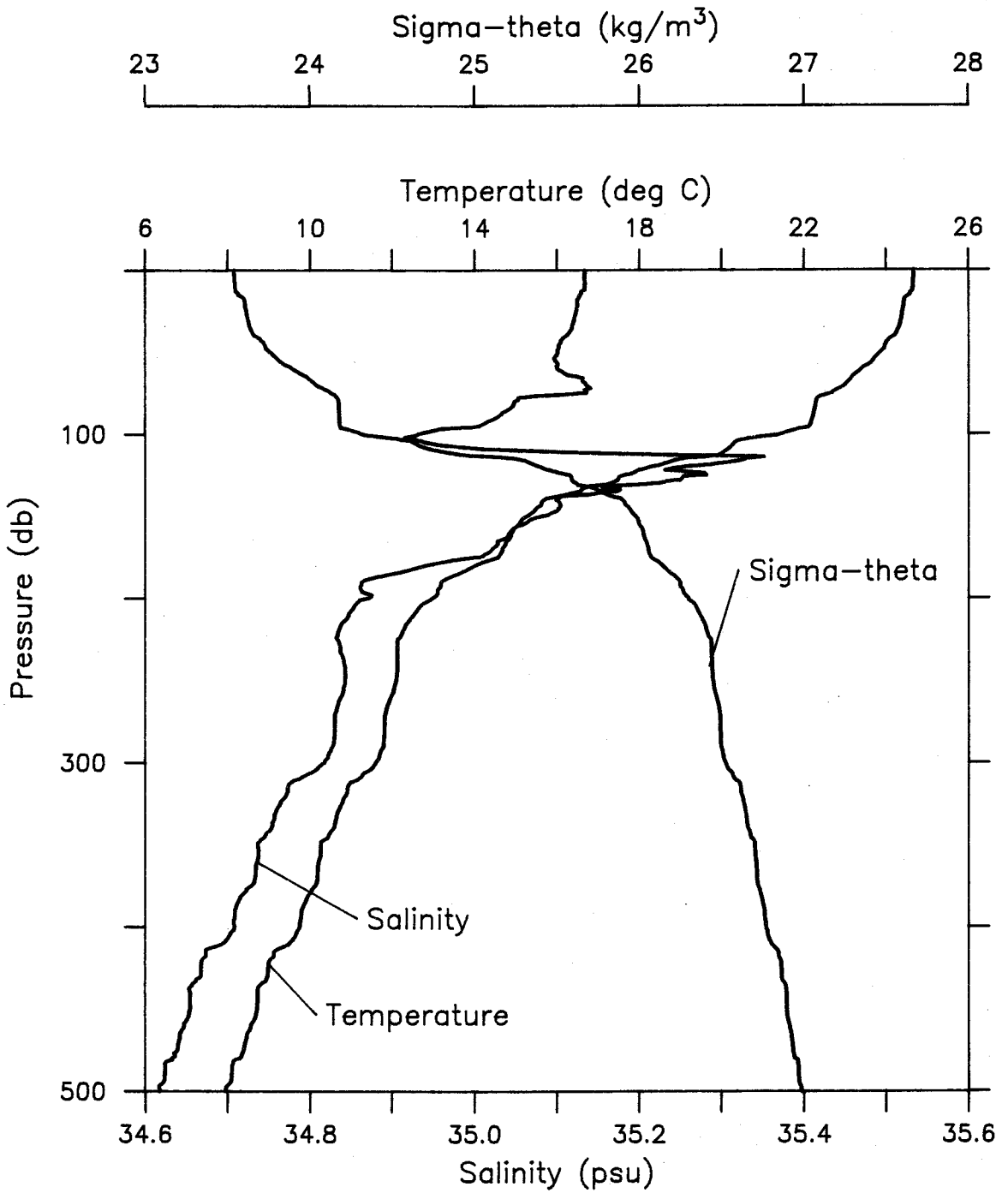
STATION 24


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
4
8
12
16
20
24
28
Sigma–theta
Temperature
Salinity
Pressure (db)
200
600
1000
34.5
34.7
34.9
35.1
35.3
35.5
Salinity (psu)

STATION 24

STA NO 25 LAT: 0° 20.0 N LONG:140° 15.0 W
01 DEC 1984 2241 GMT PROBE 2561 DEPTH 4366M

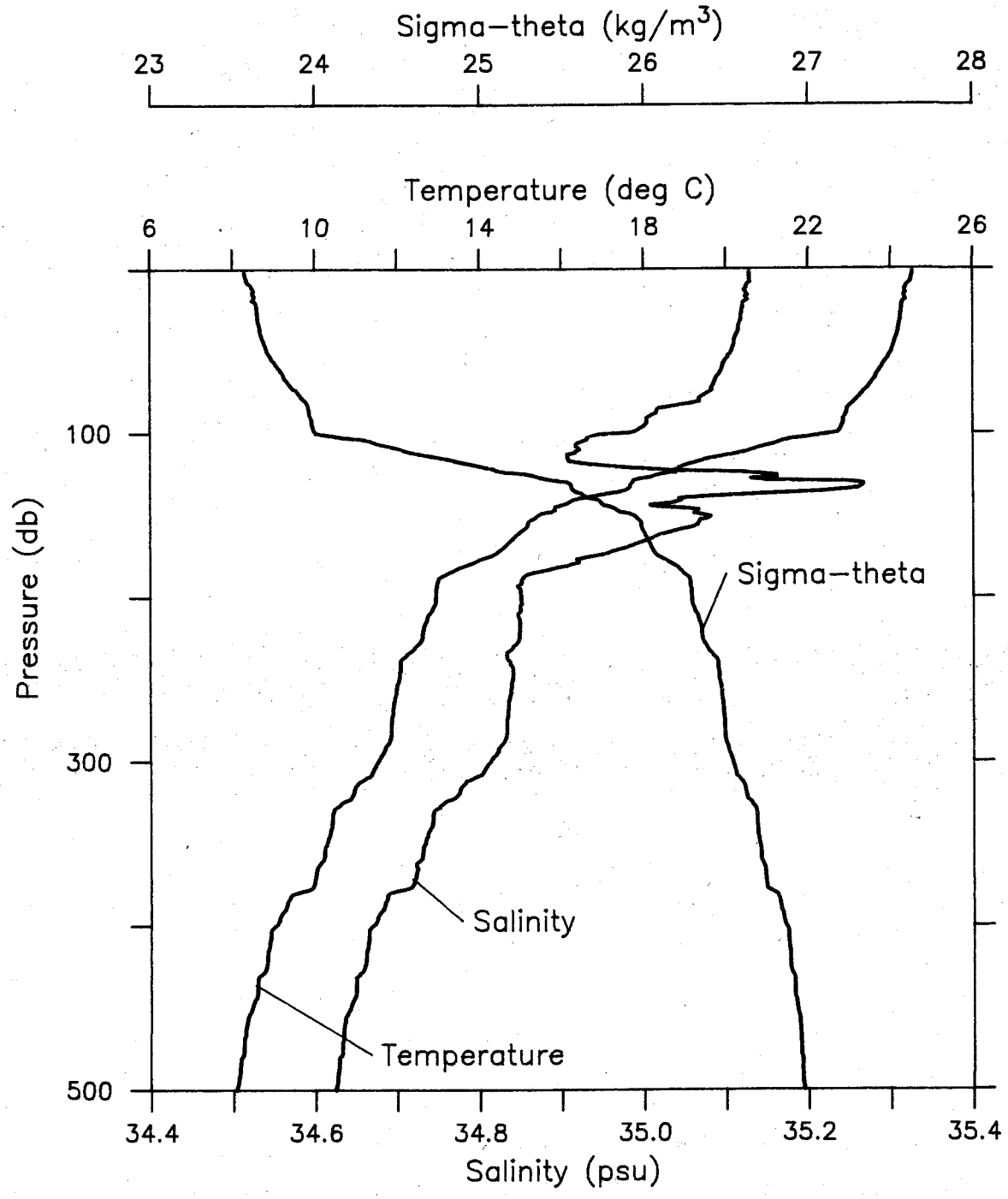
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
0	24.675	35.133	24.675	23.542	433.7	0.000
10	24.652	35.135	24.650	23.551	433.3	0.043
20	24.432	35.125	24.427	23.610	428.1	0.086
30	24.366	35.121	24.360	23.628	426.9	0.129
40	24.216	35.112	24.208	23.666	423.7	0.172
50	23.872	35.101	23.862	23.760	415.1	0.214
60	23.418	35.101	23.406	23.894	402.8	0.255
70	23.011	35.136	22.997	24.039	389.3	0.294
80	22.297	35.049	22.281	24.177	376.5	0.332
90	22.218	35.027	22.201	24.183	376.4	0.370
100	21.467	34.931	21.447	24.321	363.6	0.407
110	20.109	35.054	20.089	24.781	320.0	0.441
120	18.279	35.257	18.259	25.406	260.6	0.470
130	17.294	35.225	17.272	25.623	240.2	0.494
140	15.678	35.099	15.656	25.903	213.5	0.517
150	15.255	35.081	15.232	25.984	206.1	0.538
175	14.572	35.006	14.546	26.076	198.0	0.588
200	12.971	34.872	12.943	26.305	176.4	0.635
225	12.133	34.834	12.103	26.441	163.9	0.677
250	12.106	34.843	12.073	26.454	163.3	0.718
300	11.611	34.818	11.572	26.529	157.3	0.798
400	9.756	34.709	9.710	26.774	135.1	0.941
500	7.954	34.619	7.903	26.989	115.2	1.064
505	7.953	34.618	7.902	26.989	115.2	1.070


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.6
34.8
35.0
35.2
35.4
35.6
Salinity (psu)

STATION 25

STA NO 26 LAT: 0° 40.0 N LONG:140° 15.0 W
02 DEC 1984 0104 GMT PROBE 2561 DEPTH 4345M

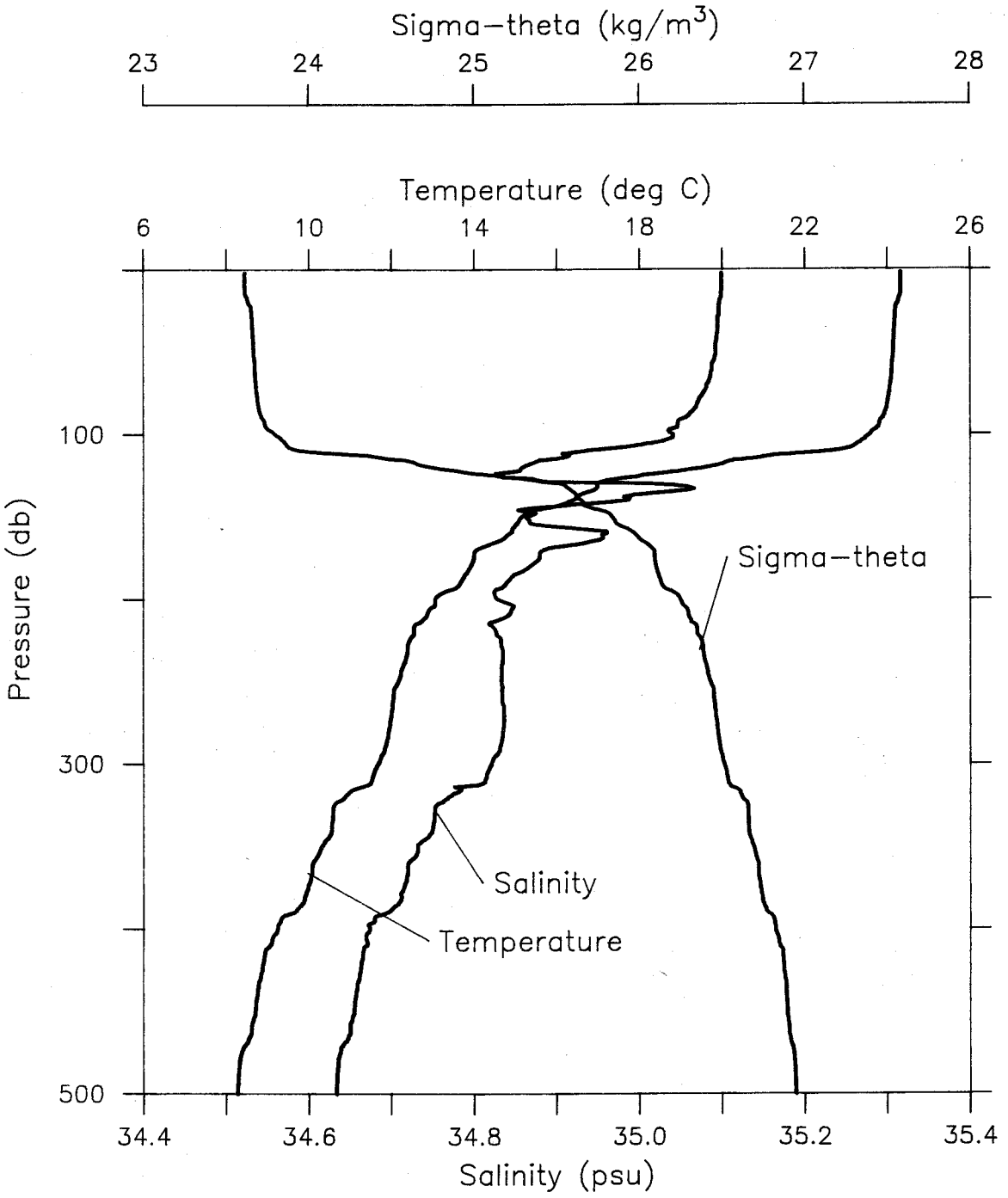
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
2	24.553	35.130	24.553	23.576	430.6	0.009
10	24.403	35.126	24.401	23.619	426.9	0.043
20	24.319	35.123	24.315	23.642	425.1	0.086
30	24.253	35.118	24.247	23.659	423.9	0.128
40	24.178	35.113	24.169	23.679	422.5	0.170
50	24.038	35.108	24.027	23.716	419.3	0.212
60	23.796	35.095	23.783	23.779	413.7	0.254
70	23.537	35.085	23.523	23.848	407.6	0.295
80	23.176	35.068	23.160	23.941	399.1	0.335
90	22.894	35.007	22.876	23.977	396.1	0.375
100	22.713	34.982	22.692	24.010	393.4	0.415
110	20.680	34.923	20.660	24.529	344.1	0.451
120	18.979	34.957	18.957	25.001	299.3	0.483
130	17.738	35.250	17.716	25.534	248.7	0.511
140	16.415	35.043	16.393	25.691	233.9	0.535
150	15.447	35.074	15.424	25.936	210.7	0.558
175	14.270	34.939	14.244	26.089	196.6	0.608
200	12.941	34.852	12.914	26.296	177.3	0.654
225	12.610	34.849	12.579	26.360	171.8	0.698
250	12.051	34.841	12.018	26.463	162.5	0.739
300	11.527	34.814	11.488	26.541	156.1	0.819
400	9.026	34.669	8.982	26.862	126.2	0.960
500	8.082	34.625	8.030	26.975	116.6	1.080
505	8.024	34.621	7.973	26.980	116.1	1.086


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.4
34.6
34.8
35.0
35.2
35.4
Salinity (psu)

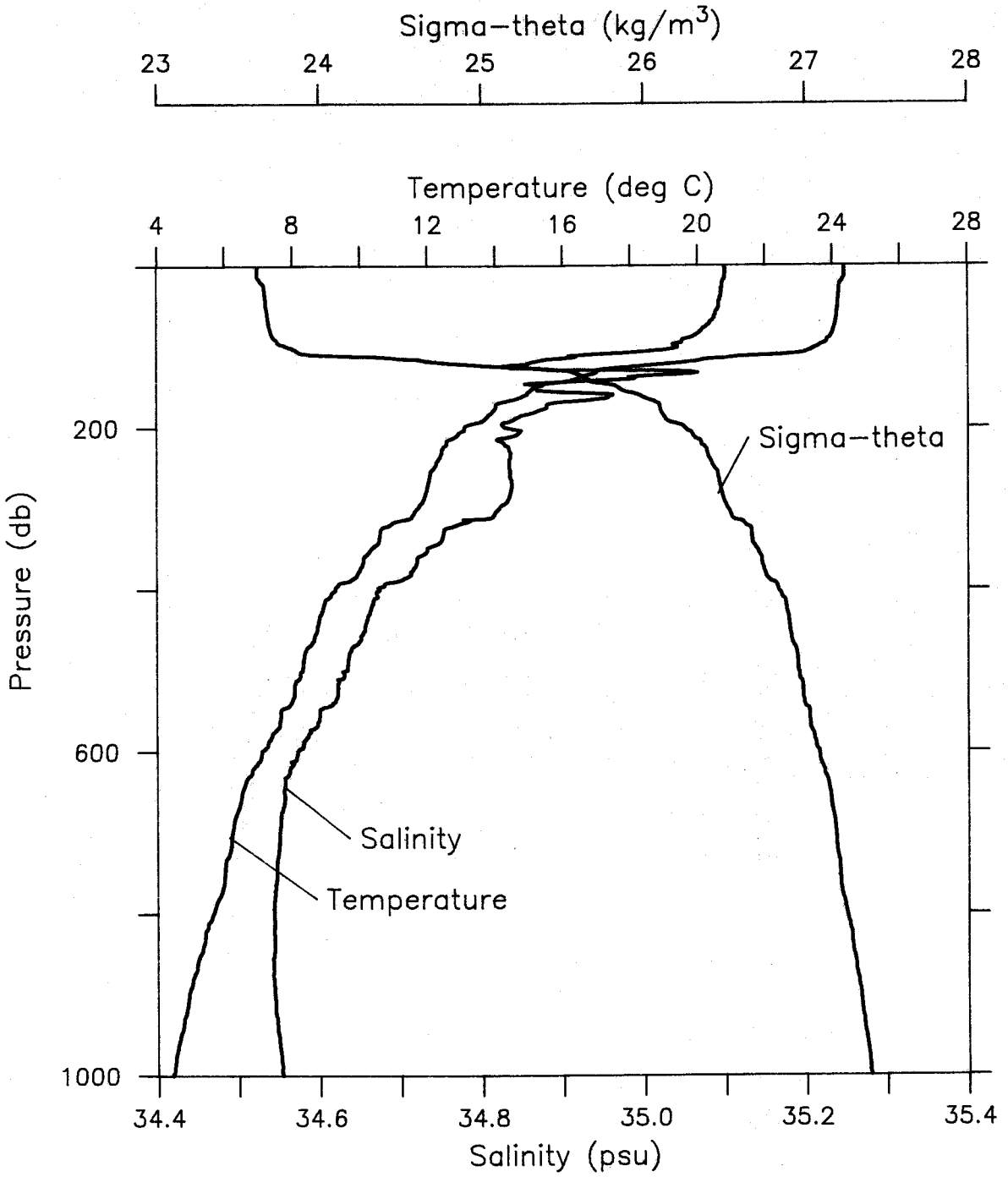
STATION 26

STA NO 27 LAT: 0° 59.9 N LONG:140° 15.0 W
02 DEC 1984 0324 GMT PROBE 2561 DEPTH 3855M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
2	24.339	35.101	24.339	23.618	426.5	0.009
10	24.346	35.100	24.344	23.617	427.1	0.043
20	24.268	35.097	24.264	23.638	425.5	0.085
30	24.185	35.096	24.179	23.662	423.6	0.128
40	24.164	35.094	24.156	23.668	423.5	0.170
50	24.148	35.093	24.138	23.672	423.5	0.212
60	24.117	35.088	24.104	23.679	423.3	0.255
70	24.076	35.081	24.061	23.687	423.0	0.297
80	24.016	35.072	23.999	23.698	422.4	0.339
90	23.896	35.056	23.878	23.722	420.6	0.382
100	23.589	35.042	23.568	23.802	413.3	0.423
110	22.797	34.937	22.775	23.952	399.3	0.464
120	19.643	34.859	19.621	24.754	322.8	0.499
130	16.971	35.006	16.949	25.532	248.7	0.528
140	16.388	34.987	16.366	25.654	237.3	0.552
150	15.158	34.865	15.135	25.839	219.8	0.575
175	14.005	34.880	13.980	26.099	195.5	0.627
200	13.078	34.829	13.051	26.251	181.6	0.674
225	12.449	34.834	12.419	26.380	169.9	0.718
250	12.177	34.834	12.144	26.433	165.3	0.760
300	11.680	34.821	11.642	26.519	158.3	0.841
400	9.257	34.675	9.213	26.829	129.5	0.984
500	8.279	34.634	8.227	26.952	119.0	1.107
600	7.071	34.572	7.013	27.080	107.2	1.221
800	5.622	34.543	5.552	27.247	92.1	1.418
1000	4.415	34.554	4.336	27.396	78.0	1.587
1005	4.388	34.555	4.309	27.399	77.6	1.591


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.4
34.6
34.8
35.0
35.2
35.4
Salinity (psu)

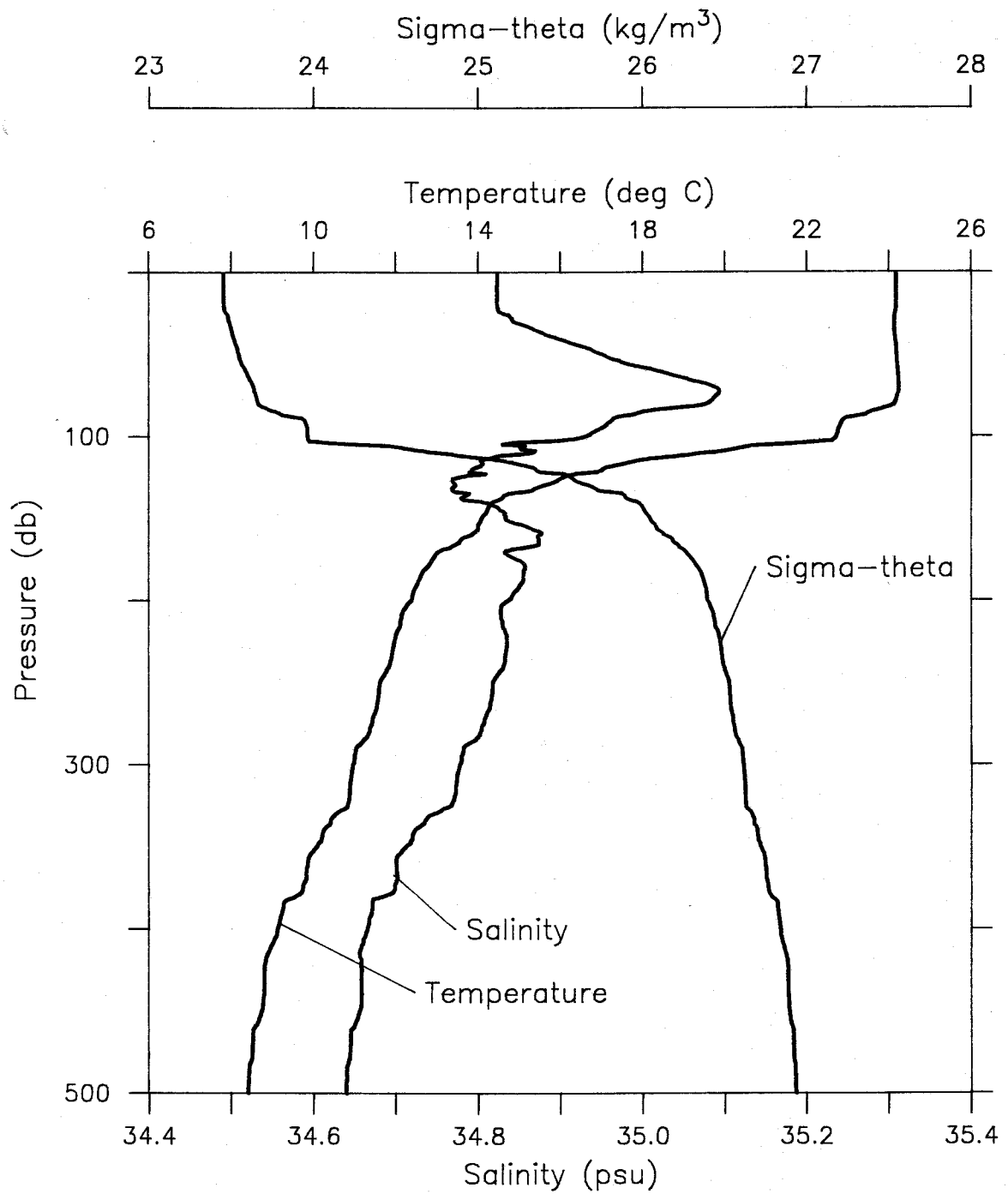
STATION 27


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
4
8
12
16
20
24
28
Pressure (db)
200
600
1000
Sigma–theta
Salinity
Temperature
34.4
34.6
34.8
35.0
35.2
35.4
Salinity (psu)

STATION 27

STA NO 28 LAT: 1° 19.9 N LONG:140° 15.1 W
02 DEC 1984 0632 GMT PROBE 2561 DEPTH 4449M

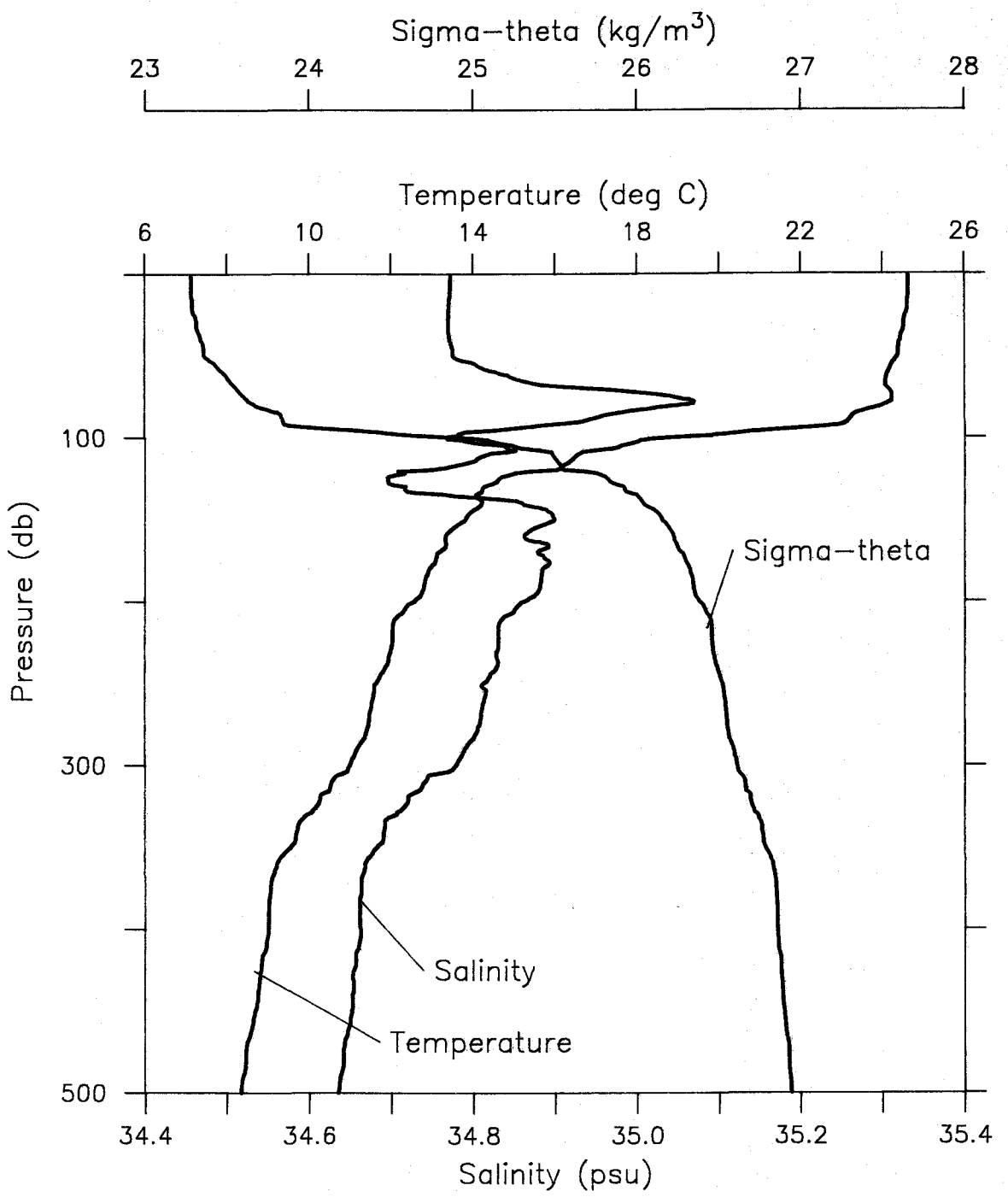
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.184	34.824	24.184	23.455	442.1	0.004
10	24.185	34.823	24.183	23.455	442.5	0.044
20	24.179	34.824	24.174	23.458	442.7	0.088
30	24.129	34.843	24.123	23.488	440.2	0.133
40	24.165	34.894	24.156	23.517	437.9	0.177
50	24.204	34.951	24.194	23.548	435.3	0.220
60	24.238	35.017	24.226	23.589	431.9	0.264
70	24.256	35.087	24.242	23.637	427.7	0.307
80	24.139	35.079	24.122	23.667	425.4	0.349
90	22.884	34.963	22.866	23.946	399.1	0.391
100	22.720	34.931	22.700	23.969	397.3	0.431
110	19.730	34.865	19.710	24.736	324.2	0.467
120	17.028	34.792	17.008	25.354	265.3	0.496
130	15.562	34.773	15.542	25.678	234.6	0.521
140	14.356	34.805	14.336	25.966	207.2	0.543
150	14.080	34.833	14.059	26.046	199.9	0.563
175	12.891	34.847	12.867	26.301	176.0	0.610
200	12.378	34.837	12.351	26.395	167.7	0.653
225	11.965	34.835	11.935	26.474	160.7	0.694
250	11.612	34.817	11.581	26.527	156.2	0.734
300	10.958	34.778	10.921	26.617	148.5	0.810
400	9.130	34.665	9.086	26.843	128.2	0.950
500	8.404	34.640	8.351	26.938	120.4	1.073
504	8.400	34.639	8.347	26.938	120.5	1.078


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.4
34.6
34.8
35.0
35.2
35.4
Salinity (psu)

STATION 28

STA NO 29 LAT: 1° 40.0 N LONG:140° 15.0 W
02 DEC 1984 0904 GMT PROBE 2561 DEPTH 4388M

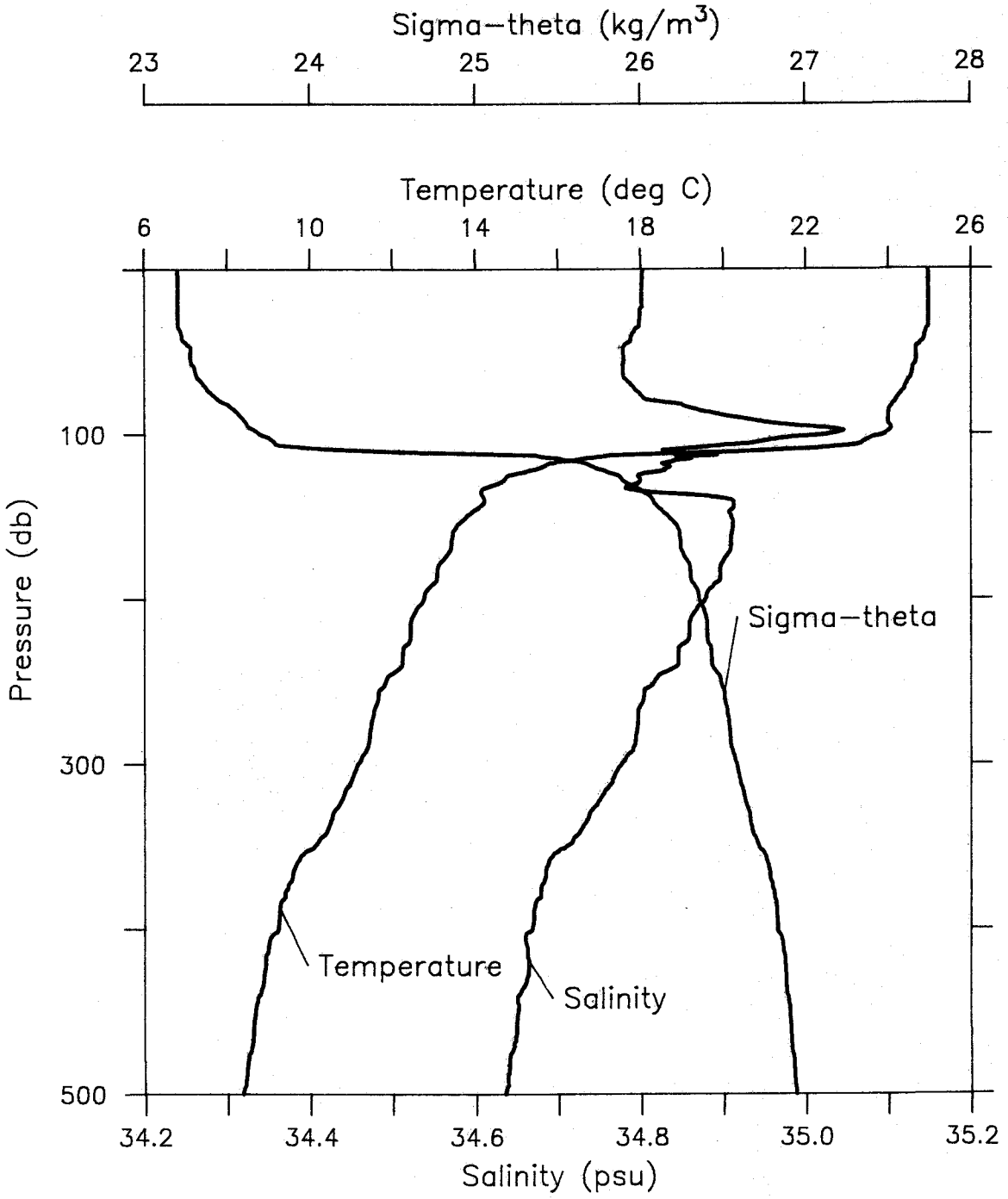
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.630	34.773	24.630	23.283	458.5	0.005
10	24.636	34.772	24.634	23.282	459.1	0.046
20	24.608	34.770	24.603	23.289	458.8	0.092
30	24.514	34.770	24.508	23.318	456.5	0.138
40	24.438	34.772	24.429	23.343	454.5	0.183
50	24.378	34.775	24.367	23.364	453.0	0.228
60	24.139	34.828	24.126	23.476	442.7	0.273
70	24.133	34.934	24.118	23.558	435.3	0.317
80	24.079	35.061	24.062	23.671	425.0	0.360
90	23.163	34.935	23.145	23.844	408.8	0.402
100	19.043	34.767	19.026	24.838	314.0	0.439
110	16.572	34.820	16.554	25.482	252.7	0.467
120	15.999	34.747	15.980	25.559	245.6	0.492
130	14.259	34.718	14.240	25.919	211.3	0.514
140	14.212	34.860	14.192	26.040	200.2	0.535
150	13.810	34.900	13.789	26.155	189.5	0.554
175	13.080	34.892	13.056	26.299	176.4	0.600
200	12.565	34.863	12.538	26.379	169.3	0.643
225	12.020	34.831	11.991	26.460	162.0	0.684
250	11.629	34.813	11.597	26.520	156.8	0.724
300	10.991	34.779	10.954	26.612	149.0	0.801
400	9.000	34.663	8.956	26.862	126.3	0.934
500	8.326	34.635	8.274	26.946	119.6	1.057
503	8.269	34.632	8.217	26.953	119.0	1.061


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
Pressure (db)
100
300
500
Sigma–theta
Salinity
Temperature
34.4
34.6
34.8
35.0
35.2
35.4
Salinity (psu)

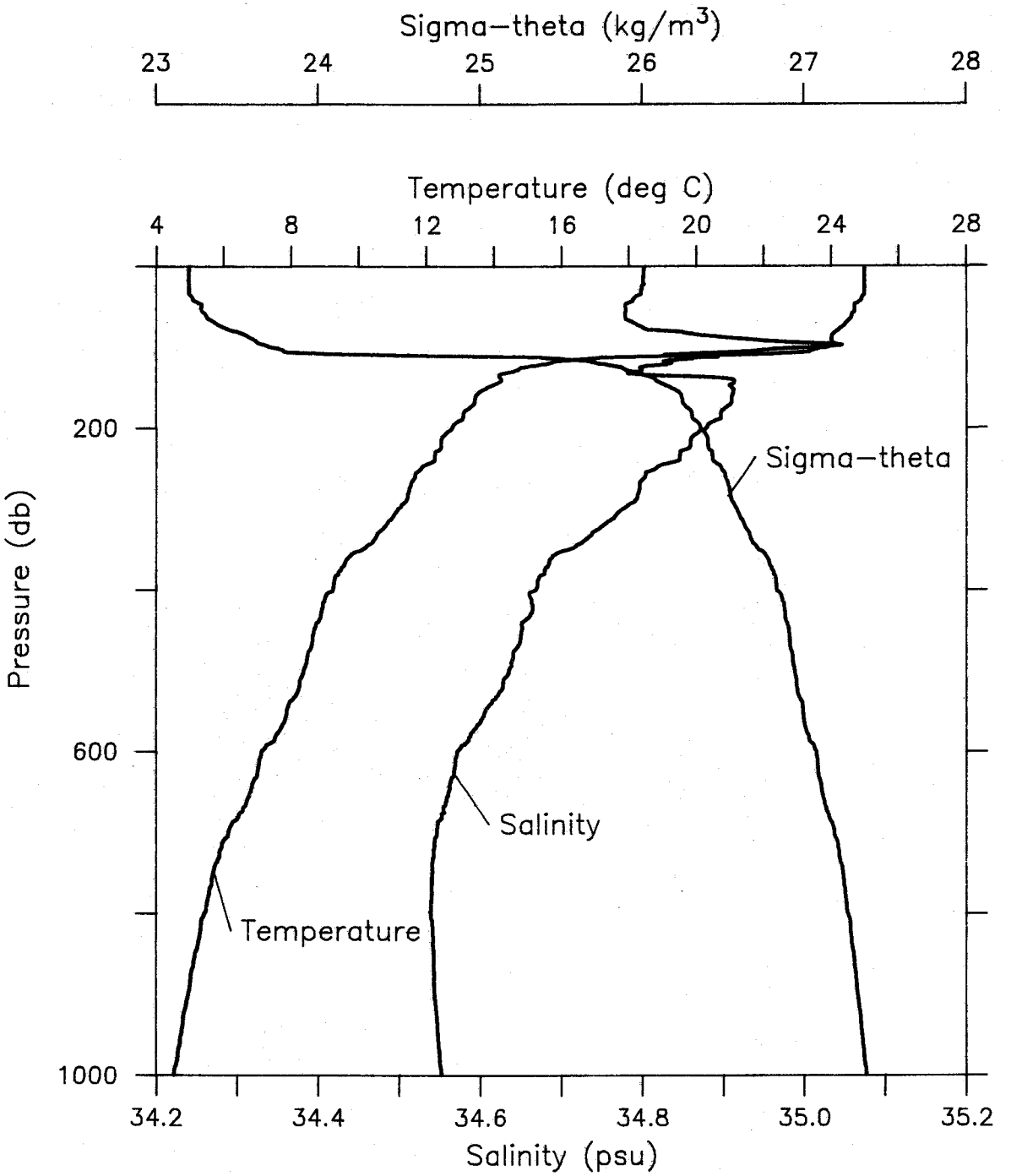
STATION 29

STA NO 30 LAT: 2° 0.0 N LONG:140° 15.0 W
02 DEC 1984 1147 GMT PROBE 2561 DEPTH 4394M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	24.970	34.802	24.970	23.203	466.2	0.005
10	24.983	34.801	24.980	23.199	467.0	0.047
20	24.984	34.801	24.980	23.199	467.4	0.093
30	24.977	34.798	24.971	23.199	467.8	0.140
40	24.877	34.789	24.868	23.223	465.9	0.187
50	24.674	34.779	24.663	23.277	461.2	0.233
60	24.591	34.778	24.579	23.303	459.3	0.279
70	24.442	34.787	24.427	23.355	454.7	0.325
80	24.170	34.819	24.153	23.460	445.0	0.370
90	23.988	34.917	23.969	23.590	433.2	0.414
100	23.916	35.030	23.895	23.697	423.4	0.457
110	21.273	34.826	21.252	24.294	366.5	0.498
120	15.602	34.836	15.583	25.717	230.6	0.524
130	14.537	34.796	14.518	25.920	211.3	0.546
140	14.222	34.910	14.202	26.076	196.8	0.567
150	13.778	34.910	13.757	26.169	188.1	0.586
175	13.252	34.902	13.228	26.272	178.9	0.632
200	12.745	34.878	12.718	26.356	171.5	0.675
225	12.411	34.857	12.381	26.405	167.4	0.717
250	11.831	34.817	11.798	26.485	160.2	0.759
300	11.153	34.776	11.116	26.581	152.1	0.837
400	9.222	34.668	9.178	26.830	129.4	0.976
500	8.354	34.635	8.301	26.942	120.1	1.100
600	7.116	34.571	7.058	27.073	107.9	1.215
800	5.416	34.538	5.348	27.268	89.7	1.412
1000	4.511	34.551	4.431	27.384	79.3	1.581
1003	4.505	34.553	4.425	27.385	79.2	1.583


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
Pressure (db)
100
300
500
Sigma–theta
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

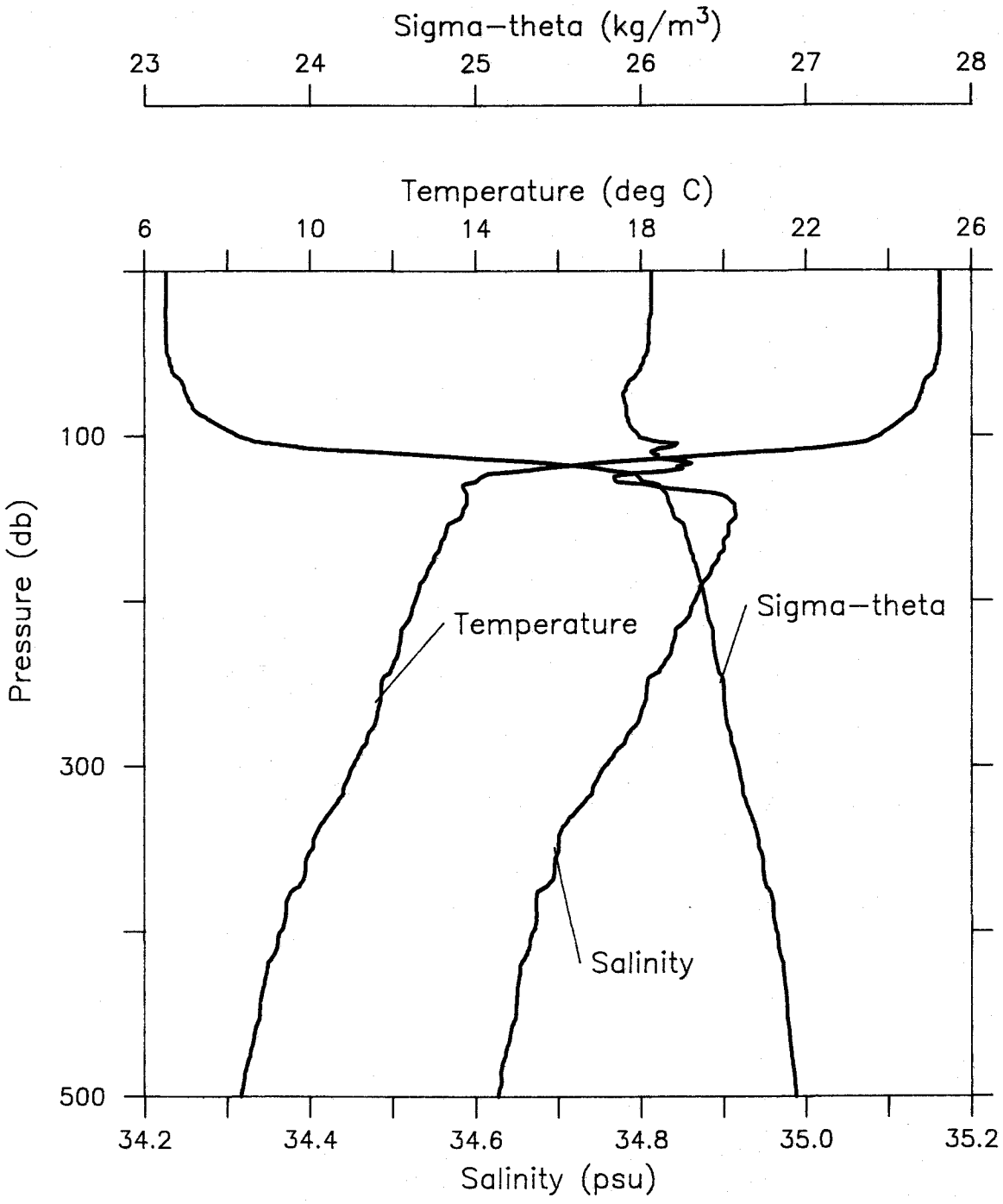
STATION 30


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
4
8
12
16
20
24
28
Pressure (db)
200
600
1000
Sigma–theta
Salinity
Temperature
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

STATION 30

STA NO 31 LAT: 2° 19.9 N LONG:140° 15.0 W
02 DEC 1984 1444 GMT PROBE 2561 DEPTH 4340M

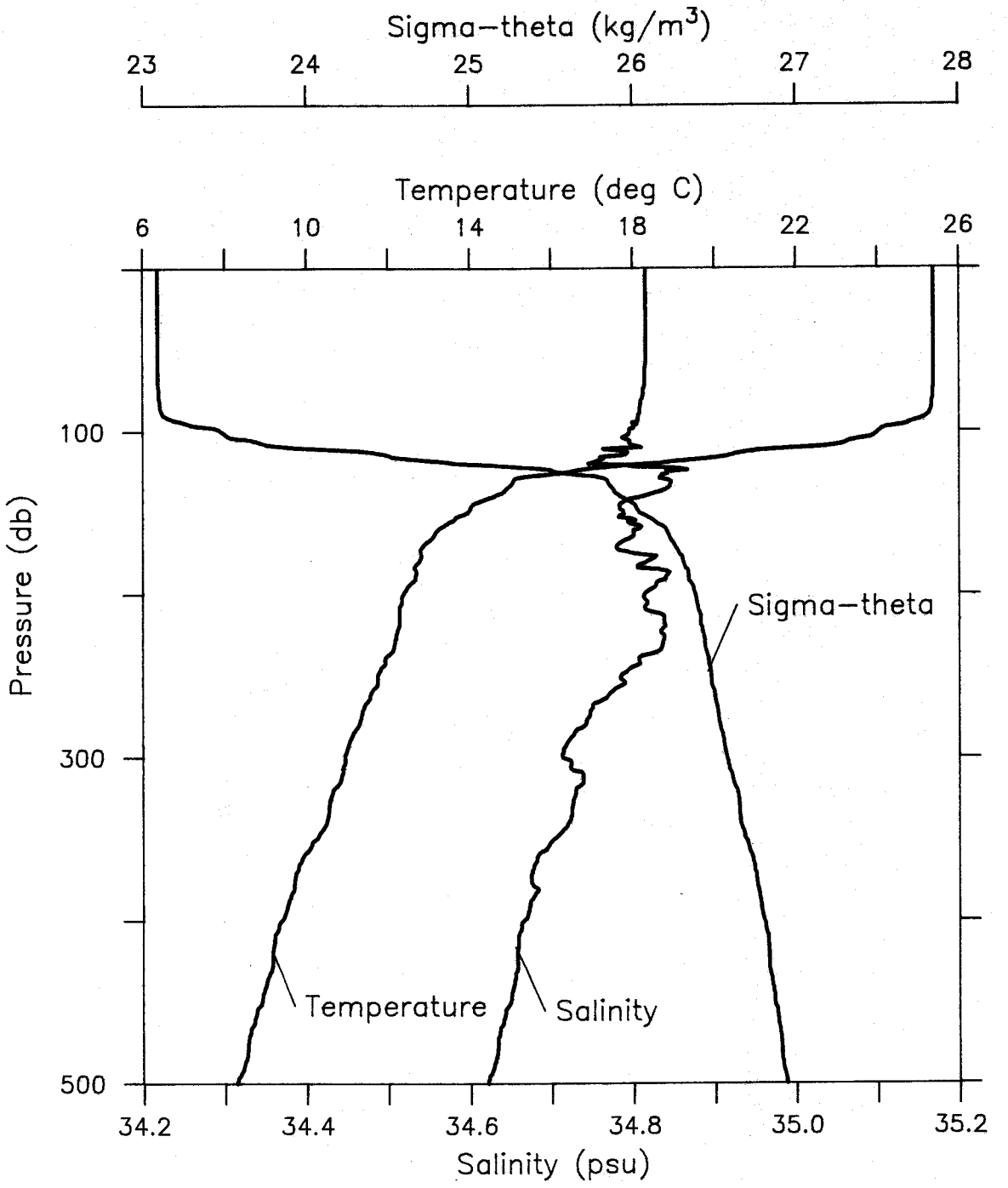
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	25.242	34.813	25.242	23.128	473.3	0.005
10	25.240	34.813	25.238	23.129	473.6	0.047
20	25.248	34.812	25.243	23.127	474.3	0.095
30	25.240	34.810	25.234	23.128	474.6	0.142
40	25.235	34.809	25.226	23.130	474.9	0.190
50	25.207	34.806	25.196	23.137	474.7	0.237
60	25.100	34.799	25.087	23.164	472.5	0.285
70	24.822	34.781	24.807	23.236	466.1	0.331
80	24.688	34.780	24.671	23.276	462.7	0.378
90	24.346	34.785	24.327	23.383	452.9	0.424
100	23.792	34.797	23.771	23.557	436.7	0.468
110	20.934	34.811	20.913	24.375	358.7	0.510
120	15.528	34.850	15.509	25.744	227.9	0.538
130	13.682	34.809	13.664	26.110	193.1	0.559
140	13.790	34.909	13.770	26.166	188.1	0.578
150	13.605	34.913	13.584	26.208	184.4	0.596
175	12.989	34.893	12.965	26.318	174.5	0.641
200	12.533	34.865	12.506	26.387	168.5	0.684
225	12.168	34.839	12.138	26.438	164.2	0.725
250	11.718	34.807	11.686	26.500	158.8	0.766
300	11.037	34.756	11.000	26.586	151.5	0.844
400	9.294	34.669	9.249	26.819	130.5	0.984
500	8.317	34.626	8.265	26.941	120.1	1.109
501	8.316	34.626	8.263	26.941	120.1	1.110


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
100
300
500
Pressure (db)
Temperature
Sigma–theta
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

STATION 31

STA NO 32 LAT: 2° 40.0 N LONG:140° 14.9 W
02 DEC 1984 1730 GMT PROBE 2561 DEPTH 4185M

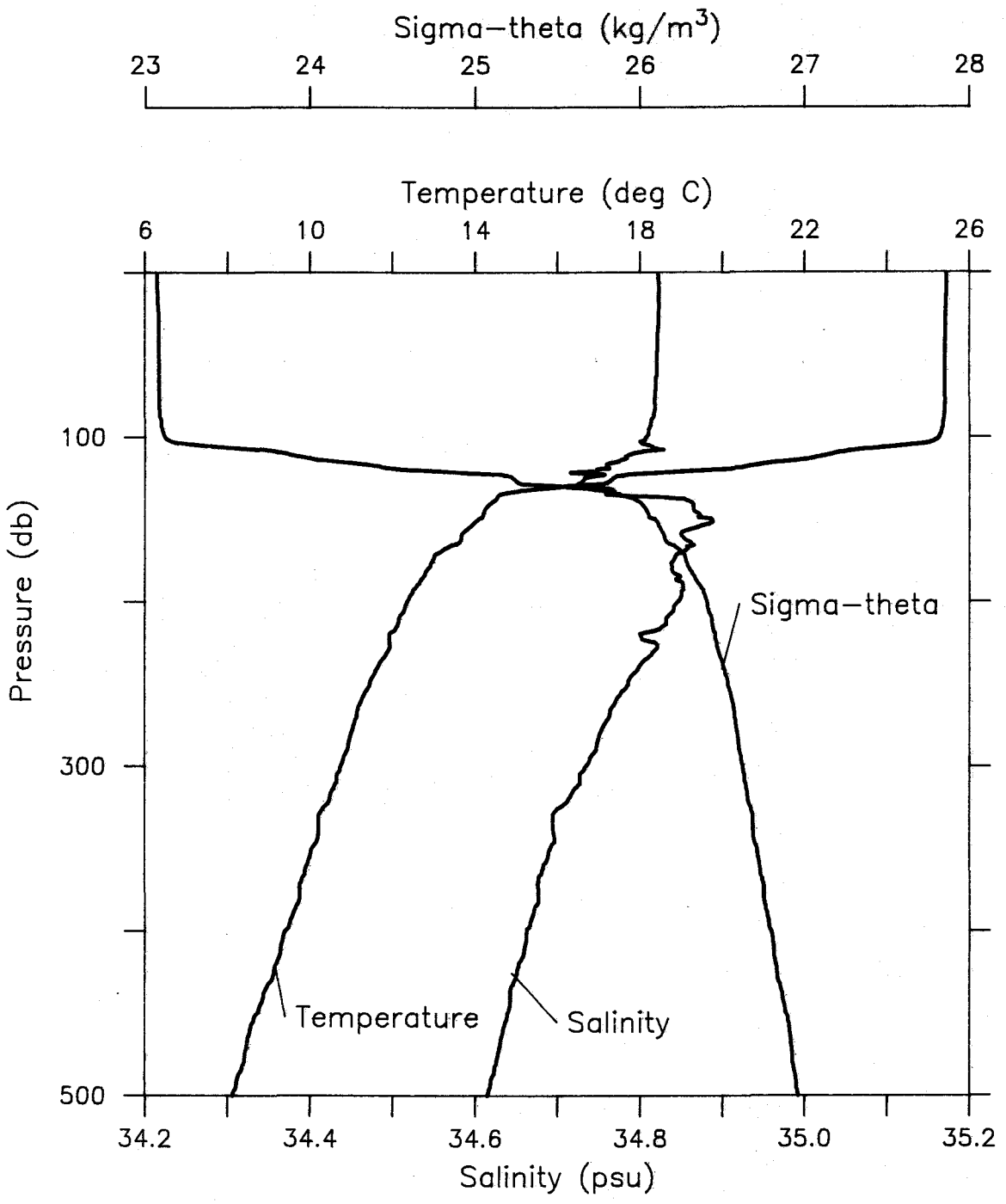
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	25.379	34.816	25.378	23.089	477.1	0.005
10	25.378	34.816	25.376	23.089	477.5	0.048
20	25.380	34.816	25.375	23.090	477.8	0.095
30	25.379	34.816	25.373	23.090	478.2	0.143
40	25.381	34.816	25.373	23.090	478.7	0.191
50	25.383	34.816	25.372	23.090	479.1	0.239
60	25.381	34.815	25.368	23.091	479.6	0.287
70	25.376	34.814	25.361	23.092	479.8	0.335
80	25.350	34.811	25.332	23.099	479.7	0.383
90	25.257	34.806	25.238	23.124	477.7	0.431
100	24.053	34.796	24.032	23.479	444.1	0.477
110	22.553	34.811	22.531	23.926	401.8	0.520
120	18.612	34.745	18.591	24.931	305.8	0.555
130	15.072	34.844	15.053	25.841	219.0	0.580
140	14.601	34.814	14.580	25.920	211.6	0.601
150	13.948	34.788	13.926	26.039	200.5	0.622
175	12.803	34.800	12.779	26.282	177.8	0.668
200	12.363	34.814	12.336	26.380	169.0	0.712
225	12.191	34.838	12.162	26.433	164.7	0.753
250	11.733	34.785	11.701	26.479	160.7	0.794
300	10.925	34.713	10.888	26.573	152.7	0.872
400	9.385	34.665	9.340	26.801	132.3	1.014
500	8.276	34.621	8.224	26.943	119.9	1.140
502	8.262	34.620	8.209	26.944	119.8	1.143


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
Pressure (db)
100
300
500
Sigma–theta
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

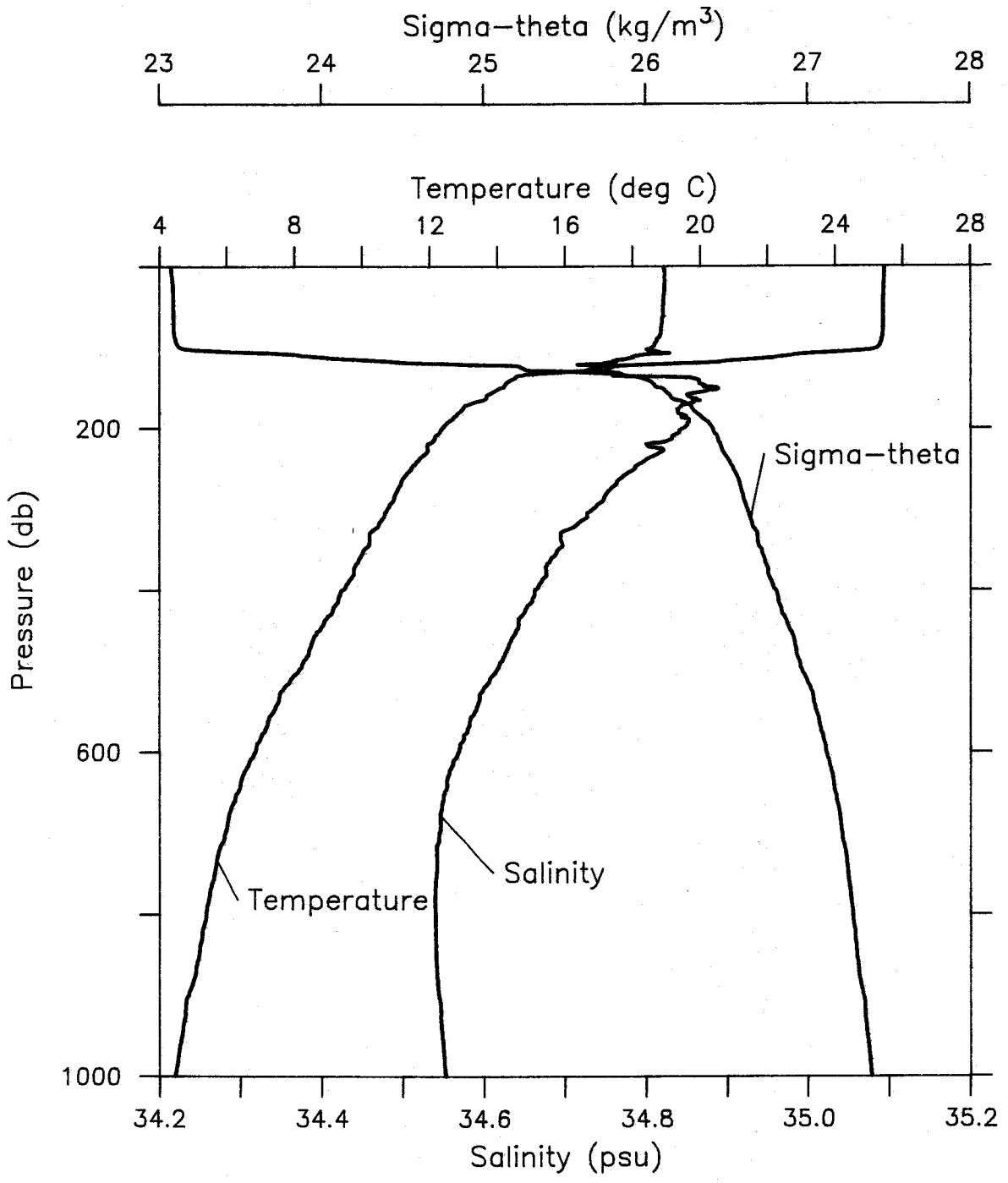
STATION 32

STA NO 33 LAT: 2° 59.9 N LONG:140° 15.0 W
02 DEC 1984 2014 GMT PROBE 2561 DEPTH 4333M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	25.446	34.823	25.446	23.073	478.6	0.005
10	25.443	34.823	25.441	23.075	478.8	0.048
20	25.435	34.823	25.430	23.078	478.9	0.096
30	25.416	34.822	25.409	23.084	478.9	0.144
40	25.409	34.821	25.400	23.086	479.1	0.192
50	25.406	34.820	25.395	23.086	479.5	0.239
60	25.409	34.820	25.396	23.086	480.0	0.287
70	25.404	34.819	25.388	23.088	480.3	0.335
80	25.400	34.818	25.383	23.089	480.6	0.383
90	25.356	34.813	25.337	23.099	480.1	0.432
100	25.272	34.808	25.250	23.122	478.4	0.479
110	22.749	34.792	22.727	23.856	408.5	0.525
120	20.081	34.747	20.059	24.554	341.9	0.563
130	16.259	34.741	16.238	25.494	252.1	0.591
140	14.388	34.864	14.367	26.005	203.6	0.613
150	14.062	34.887	14.040	26.092	195.5	0.633
175	12.967	34.841	12.943	26.282	177.9	0.680
200	12.352	34.846	12.325	26.408	166.5	0.723
225	11.932	34.818	11.903	26.467	161.4	0.764
250	11.437	34.785	11.405	26.535	155.4	0.804
300	10.733	34.734	10.696	26.624	147.8	0.879
400	9.389	34.663	9.344	26.799	132.5	1.020
500	8.110	34.614	8.058	26.963	117.8	1.145
600	6.828	34.568	6.771	27.110	104.1	1.255
800	5.367	34.540	5.300	27.276	89.0	1.445
1000	4.449	34.553	4.370	27.392	78.4	1.612
1005	4.436	34.553	4.357	27.393	78.3	1.616


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
100
300
500
Pressure (db)
Sigma–theta
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

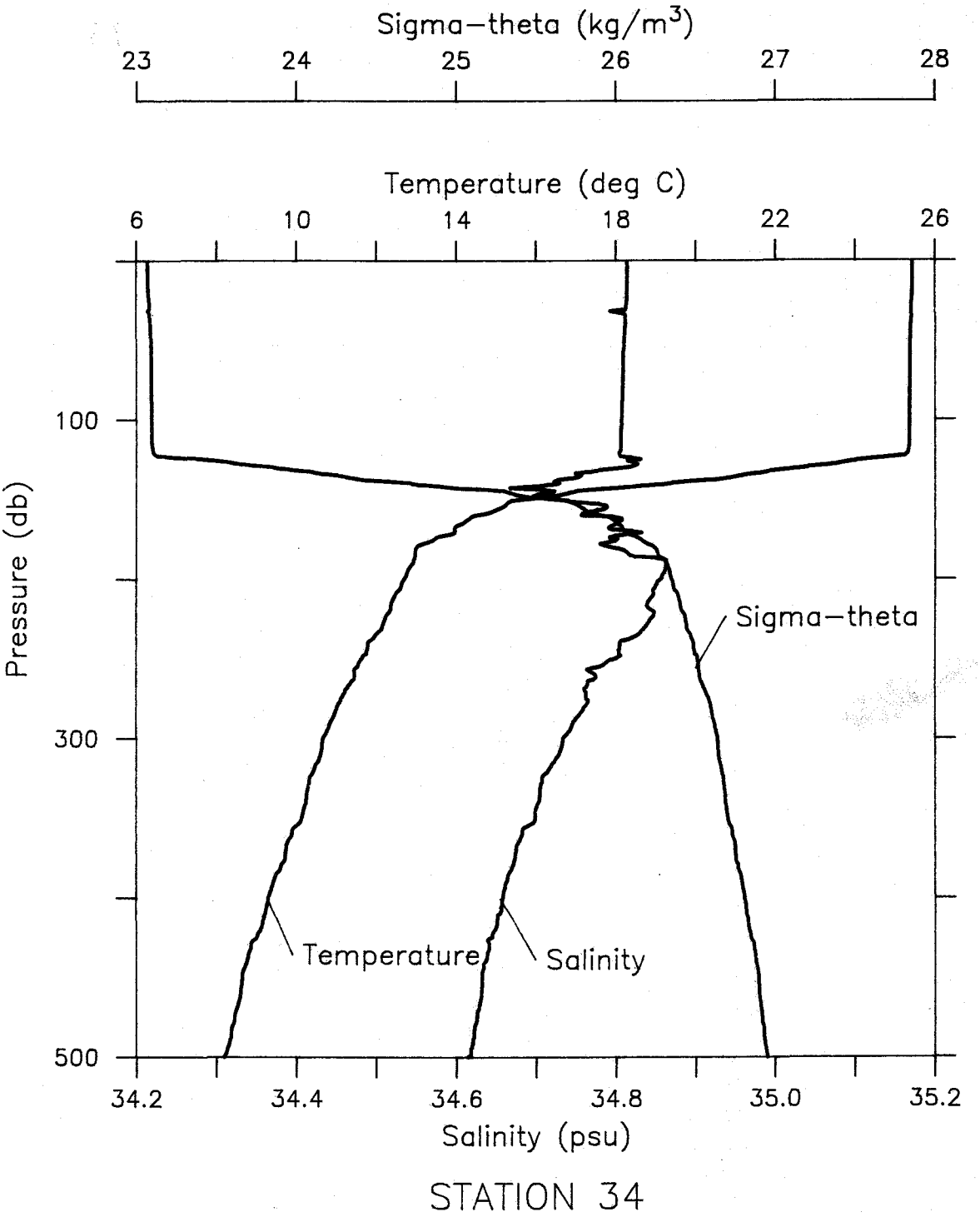
STATION 33


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
4
8
12
16
20
24
28
200
600
1000
Pressure (db)
Sigma–theta
Salinity
Temperature
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

STATION 33

STA NO 34 LAT: 3° 21.8 N LONG:140° 14.5 W
02 DEC 1984 2306 GMT PROBE 2561 DEPTH 4311M

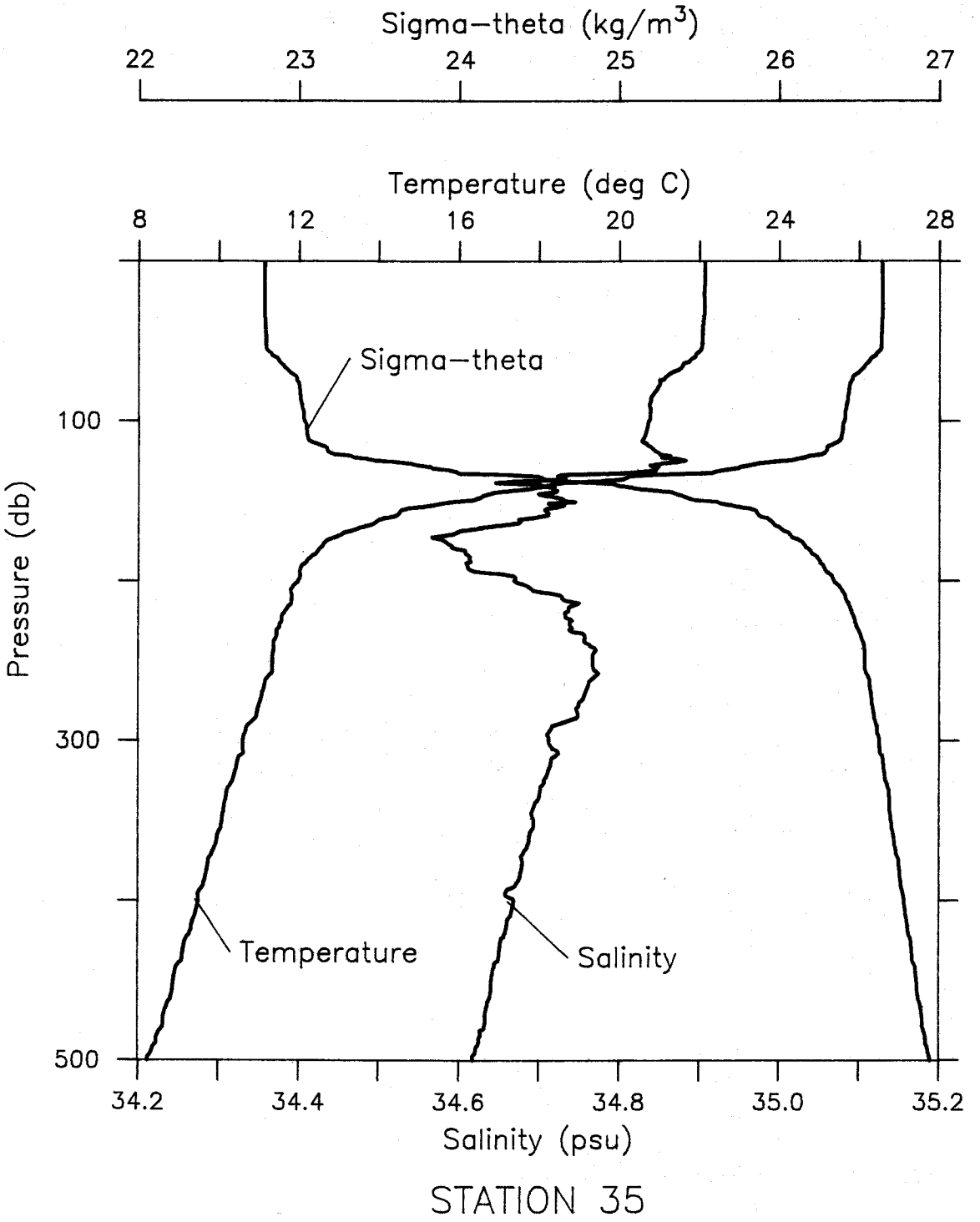
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	25.434	34.815	25.433	23.071	478.8	0.005
10	25.431	34.815	25.429	23.072	479.1	0.048
20	25.427	34.814	25.422	23.073	479.4	0.096
30	25.402	34.812	25.395	23.081	479.2	0.144
40	25.376	34.811	25.367	23.088	478.9	0.192
50	25.366	34.809	25.355	23.091	479.1	0.240
60	25.364	34.809	25.351	23.092	479.5	0.287
70	25.360	34.809	25.345	23.093	479.8	0.335
80	25.361	34.808	25.343	23.093	480.2	0.383
90	25.354	34.807	25.334	23.095	480.5	0.431
100	25.356	34.807	25.334	23.095	480.9	0.480
110	25.349	34.806	25.325	23.097	481.2	0.528
120	25.321	34.805	25.294	23.106	480.8	0.576
130	22.826	34.816	22.799	23.854	409.5	0.621
140	19.410	34.730	19.385	24.717	327.0	0.658
150	15.755	34.721	15.731	25.595	243.1	0.687
175	13.445	34.802	13.421	26.155	190.1	0.739
200	12.692	34.856	12.665	26.348	172.2	0.784
225	12.205	34.843	12.175	26.434	164.6	0.826
250	11.629	34.799	11.597	26.509	157.8	0.866
300	10.657	34.733	10.620	26.636	146.5	0.942
400	9.290	34.658	9.245	26.811	131.3	1.082
500	8.173	34.614	8.121	26.952	118.8	1.207
505	8.054	34.612	8.002	26.969	117.3	1.213


Sigma–theta (kg/m3)
23
24
25
26
27
28
Temperature (deg C)
6
10
14
18
22
26
Pressure (db)
100
300
500
Sigma–theta
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

STATION 34

STA NO 35 LAT: 3° 39.9 N LONG:140° 15.5 W
03 DEC 1984 0130 GMT PROBE 2561 DEPTH 4262M

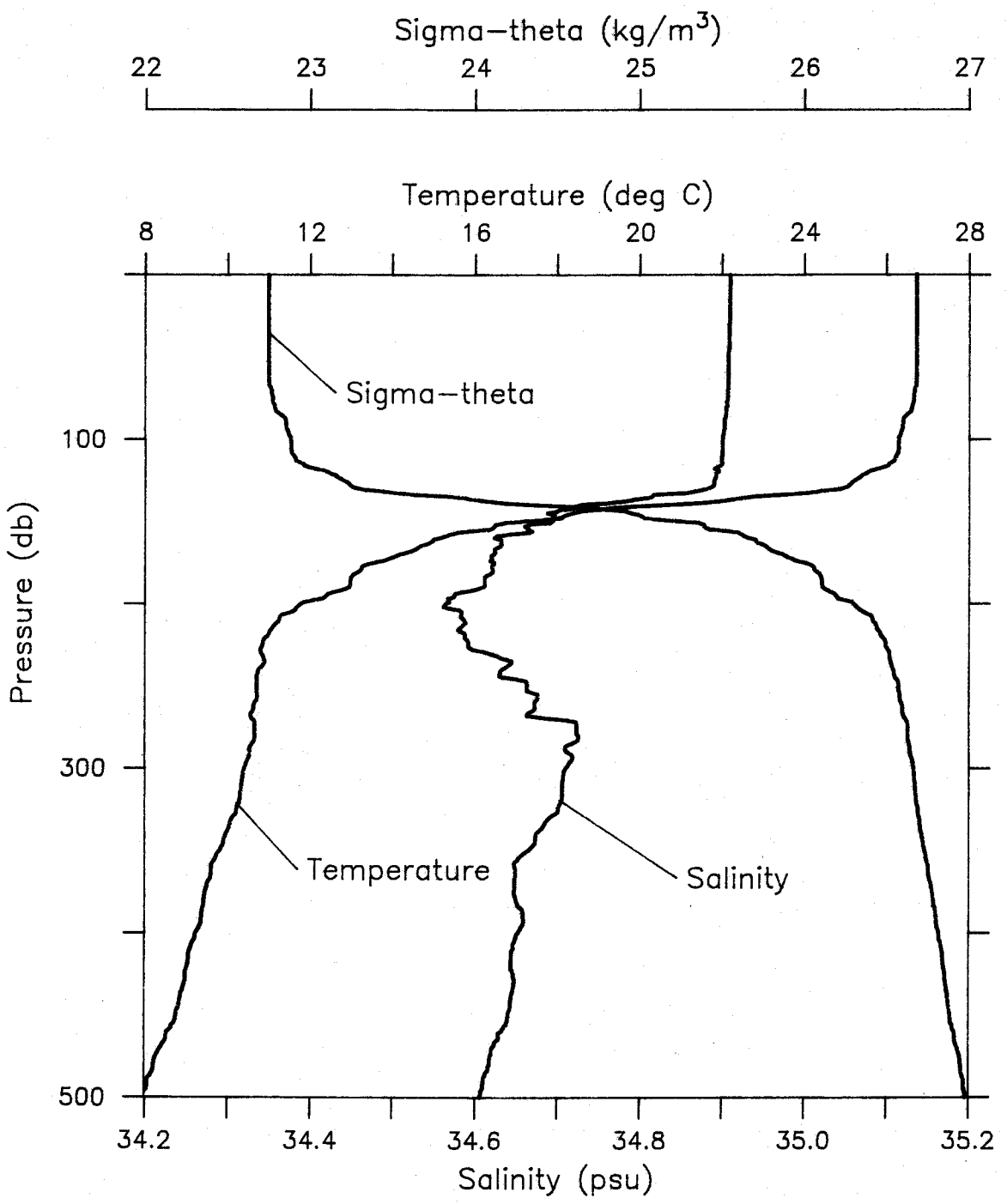
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	26.573	34.907	26.573	22.785	506.1	0.005
10	26.582	34.907	26.580	22.783	506.7	0.051
20	26.581	34.905	26.577	22.783	507.2	0.101
30	26.585	34.906	26.578	22.783	507.6	0.152
40	26.560	34.904	26.551	22.790	507.4	0.203
50	26.550	34.903	26.539	22.793	507.6	0.254
60	26.344	34.894	26.330	22.852	502.4	0.304
70	25.967	34.865	25.951	22.948	493.7	0.354
80	25.742	34.847	25.724	23.005	488.6	0.403
90	25.672	34.837	25.652	23.020	487.7	0.452
100	25.627	34.836	25.605	23.034	486.8	0.501
110	25.543	34.831	25.519	23.057	485.1	0.549
120	25.133	34.850	25.106	23.197	472.1	0.597
130	22.941	34.842	22.914	23.840	410.8	0.641
140	18.309	34.701	18.285	24.974	302.4	0.677
150	16.274	34.726	16.250	25.481	254.1	0.705
175	12.689	34.581	12.665	26.136	191.7	0.758
200	11.964	34.669	11.939	26.344	172.3	0.803
225	11.564	34.742	11.535	26.477	160.2	0.844
250	11.333	34.766	11.301	26.539	154.9	0.883
300	10.605	34.712	10.569	26.629	147.2	0.959
400	9.500	34.669	9.454	26.785	133.9	1.100
500	8.227	34.617	8.175	26.947	119.4	1.227
505	8.148	34.614	8.096	26.956	118.5	1.233


Sigma–theta (kg/m3)
22
23
24
25
26
27
Temperature (deg C)
8
12
16
20
24
28
Sigma–theta
100
300
500
Pressure (db)
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

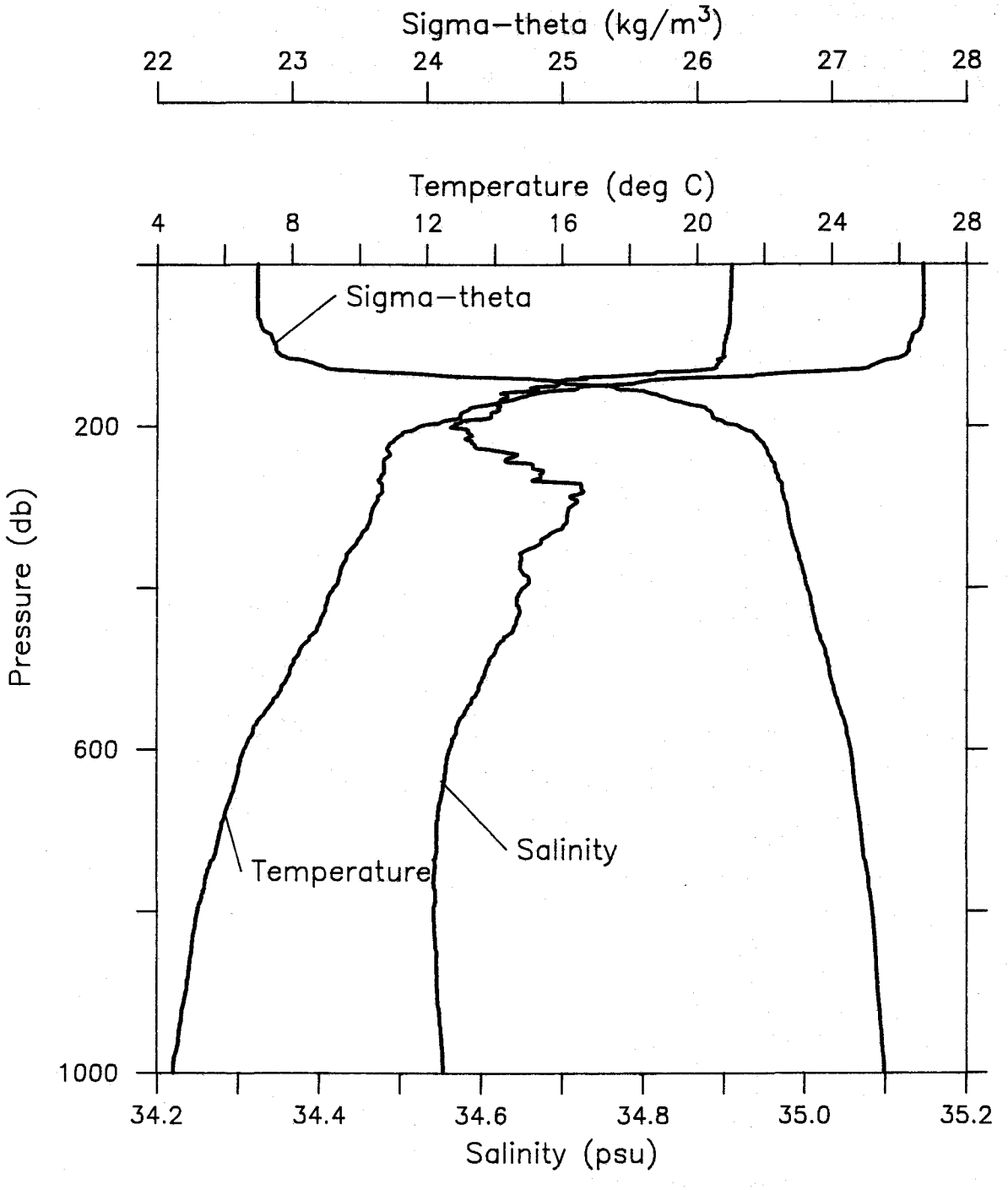
STATION 35

STA NO 36 LAT: 3° 59.8 N LONG:140° 15.2 W
03 DEC 1984 0406 GMT PROBE 2561 DEPTH 4344M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
0	26.708	34.909	26.708	22.744	509.9	0.000
10	26.716	34.908	26.713	22.742	510.6	0.051
20	26.719	34.908	26.714	22.741	511.2	0.102
30	26.717	34.908	26.710	22.743	511.5	0.153
40	26.719	34.908	26.710	22.743	512.0	0.204
50	26.709	34.907	26.698	22.746	512.2	0.256
60	26.708	34.907	26.694	22.747	512.5	0.307
70	26.659	34.906	26.643	22.763	511.5	0.358
80	26.598	34.905	26.580	22.782	510.1	0.409
90	26.378	34.902	26.358	22.849	504.1	0.460
100	26.274	34.899	26.251	22.881	501.5	0.510
110	26.218	34.899	26.193	22.899	500.2	0.560
120	25.534	34.895	25.508	23.108	480.6	0.610
130	24.917	34.883	24.888	23.288	463.8	0.657
140	20.890	34.728	20.863	24.325	364.6	0.699
150	17.273	34.693	17.248	25.220	279.1	0.730
175	13.559	34.623	13.535	25.993	205.5	0.789
200	11.768	34.564	11.743	26.300	176.4	0.837
225	10.824	34.592	10.797	26.494	158.2	0.878
250	10.692	34.663	10.662	26.574	151.2	0.917
300	10.384	34.709	10.349	26.665	143.6	0.991
400	9.210	34.652	9.166	26.819	130.5	1.128
500	7.940	34.605	7.889	26.981	115.9	1.252
600	6.569	34.561	6.513	27.139	101.0	1.361
800	5.171	34.541	5.105	27.299	86.4	1.548
1000	4.461	34.553	4.382	27.390	78.6	1.713
1003	4.456	34.553	4.376	27.391	78.6	1.716


Sigma–theta (kg/m3)
22
23
24
25
26
27
Temperature (deg C)
8
12
16
20
24
28
Sigma–theta
Pressure (db)
100
300
500
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

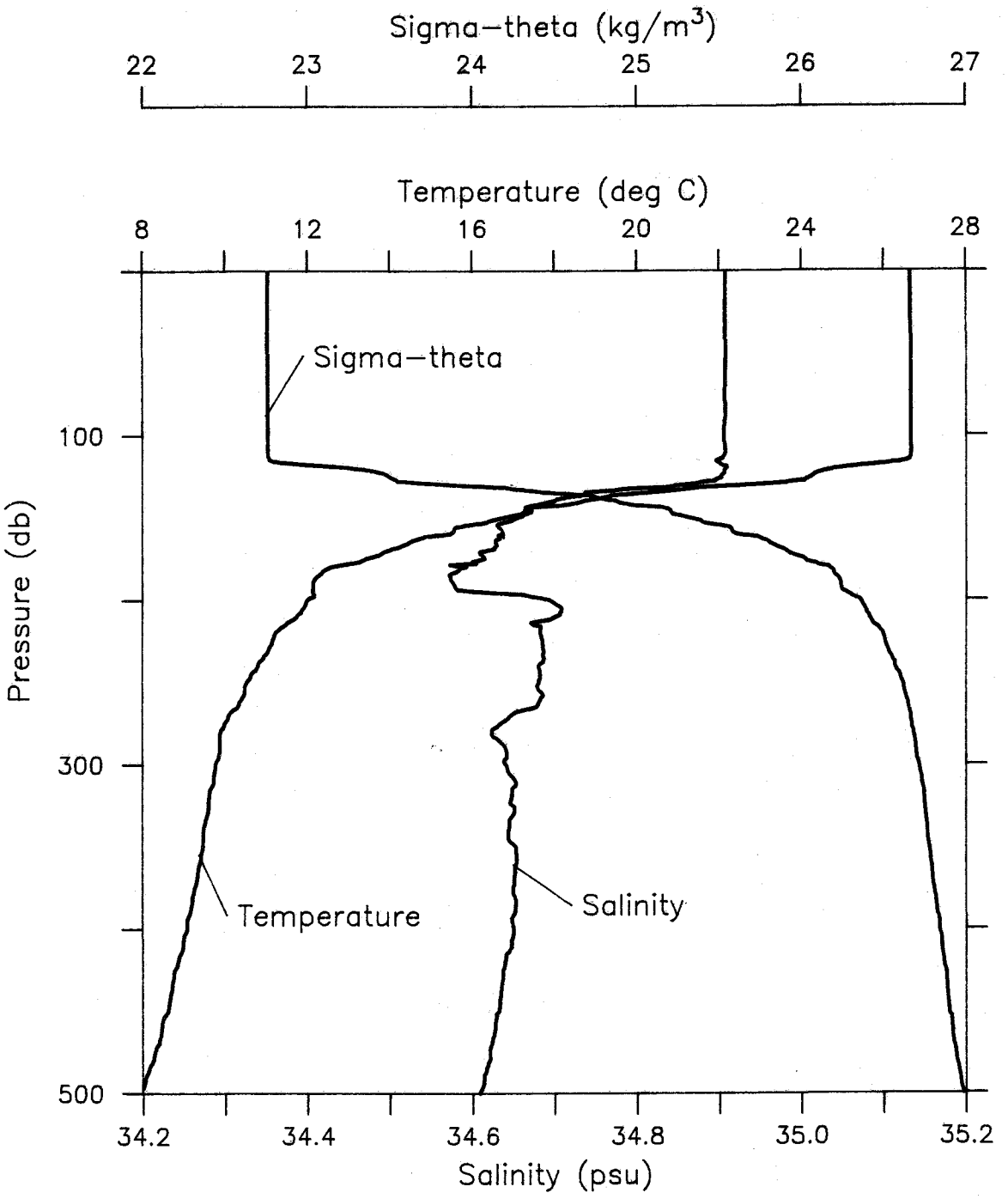
STATION 36


Sigma–theta (kg/m3)
22
23
24
25
26
27
28
Temperature (deg C)
4
8
12
16
20
24
28
Sigma–theta
200
600
1000
Pressure (db)
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

STATION 36

STA NO 37 LAT: 4° 19.8 N LONG:140° 15.0 W
03 DEC 1984 0653 GMT PROBE 2561 DEPTH 4305M

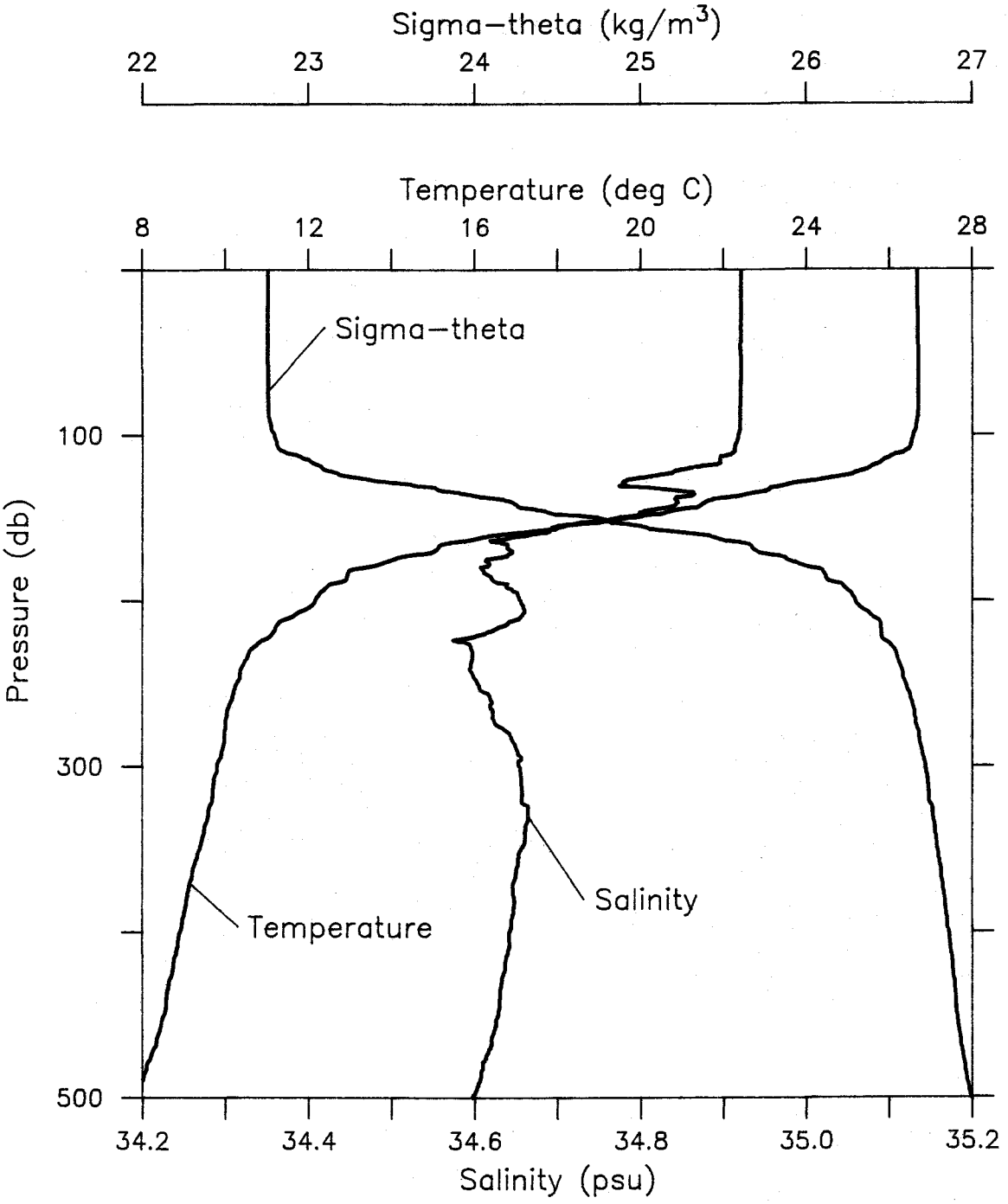
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	26.651	34.909	26.650	22.762	508.3	0.005
10	26.661	34.908	26.659	22.759	509.0	0.051
20	26.666	34.907	26.661	22.758	509.6	0.102
30	26.670	34.907	26.663	22.757	510.1	0.153
40	26.674	34.907	26.665	22.757	510.6	0.204
50	26.673	34.908	26.662	22.758	511.0	0.255
60	26.674	34.907	26.660	22.758	511.5	0.306
70	26.675	34.908	26.659	22.759	511.8	0.357
80	26.677	34.907	26.659	22.758	512.3	0.408
90	26.678	34.907	26.657	22.759	512.8	0.460
100	26.670	34.906	26.647	22.761	513.0	0.511
110	26.683	34.908	26.658	22.759	513.6	0.562
120	25.102	34.909	25.076	23.252	466.9	0.613
130	23.145	34.869	23.118	23.802	414.5	0.657
140	18.712	34.700	18.687	24.872	312.1	0.692
150	16.799	34.656	16.775	25.304	271.0	0.721
175	13.410	34.615	13.386	26.018	203.1	0.779
200	11.990	34.694	11.964	26.359	170.9	0.826
225	11.139	34.685	11.111	26.511	156.8	0.867
250	10.524	34.681	10.494	26.618	147.0	0.905
300	9.762	34.641	9.728	26.718	138.2	0.976
400	9.070	34.650	9.026	26.840	128.3	1.109
500	7.923	34.608	7.872	26.985	115.5	1.231
502	7.903	34.608	7.852	26.989	115.2	1.234


Sigma–theta (kg/m3)
22
23
24
25
26
27
Temperature (deg C)
8
12
16
20
24
28
Sigma–theta
100
300
500
Pressure (db)
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

STATION 37

STA NO 38 LAT: 4° 40.0 N LONG:140° 15.0 W
03 DEC 1984 0922 GMT PROBE 2561 DEPTH 4442M

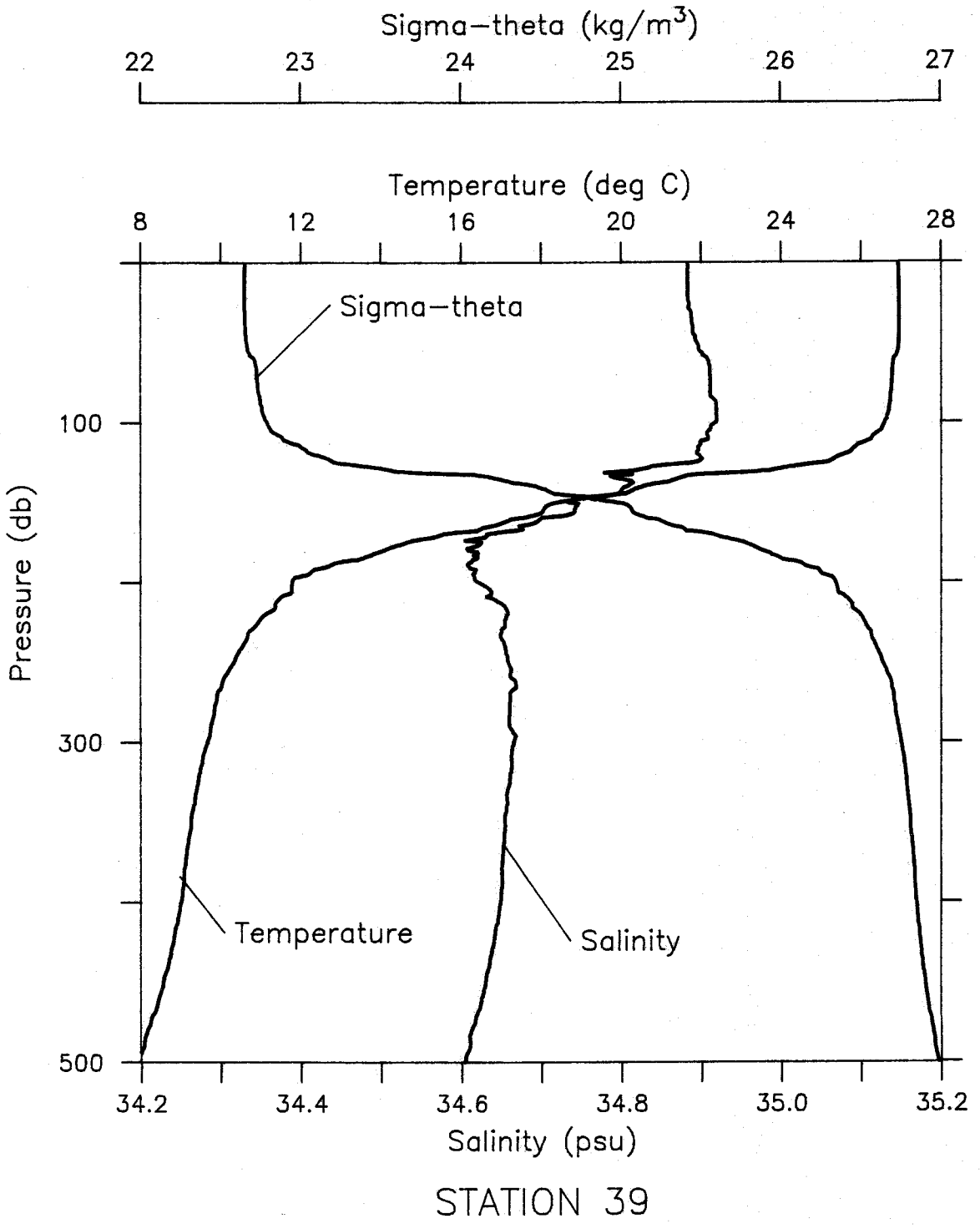
PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	26.691	34.922	26.690	22.760	508.5	0.005
10	26.685	34.922	26.682	22.762	508.8	0.051
20	26.694	34.922	26.689	22.760	509.4	0.102
30	26.705	34.921	26.698	22.757	510.2	0.153
40	26.704	34.922	26.695	22.758	510.5	0.204
50	26.707	34.921	26.696	22.757	511.1	0.255
60	26.708	34.921	26.695	22.758	511.5	0.306
70	26.708	34.920	26.692	22.758	511.9	0.357
80	26.701	34.920	26.682	22.761	512.1	0.408
90	26.684	34.920	26.664	22.766	512.0	0.460
100	26.578	34.917	26.555	22.799	509.4	0.511
110	26.387	34.914	26.362	22.857	504.2	0.562
120	25.522	34.860	25.496	23.086	482.7	0.611
130	23.550	34.783	23.523	23.619	432.0	0.657
140	21.616	34.844	21.588	24.216	375.2	0.698
150	19.478	34.790	19.451	24.746	324.7	0.733
175	14.060	34.615	14.035	25.883	216.1	0.799
200	12.150	34.657	12.123	26.299	176.6	0.847
225	10.842	34.588	10.814	26.489	158.8	0.889
250	10.273	34.604	10.243	26.601	148.4	0.927
300	9.798	34.654	9.764	26.722	137.9	0.998
400	8.904	34.642	8.860	26.861	126.3	1.130
500	7.804	34.597	7.754	26.994	114.5	1.251
504	7.797	34.597	7.746	26.995	114.4	1.256


Sigma–theta (kg/m3)
22
23
24
25
26
27
Temperature (deg C)
8
12
16
20
24
28
Sigma–theta
100
300
500
Pressure (db)
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

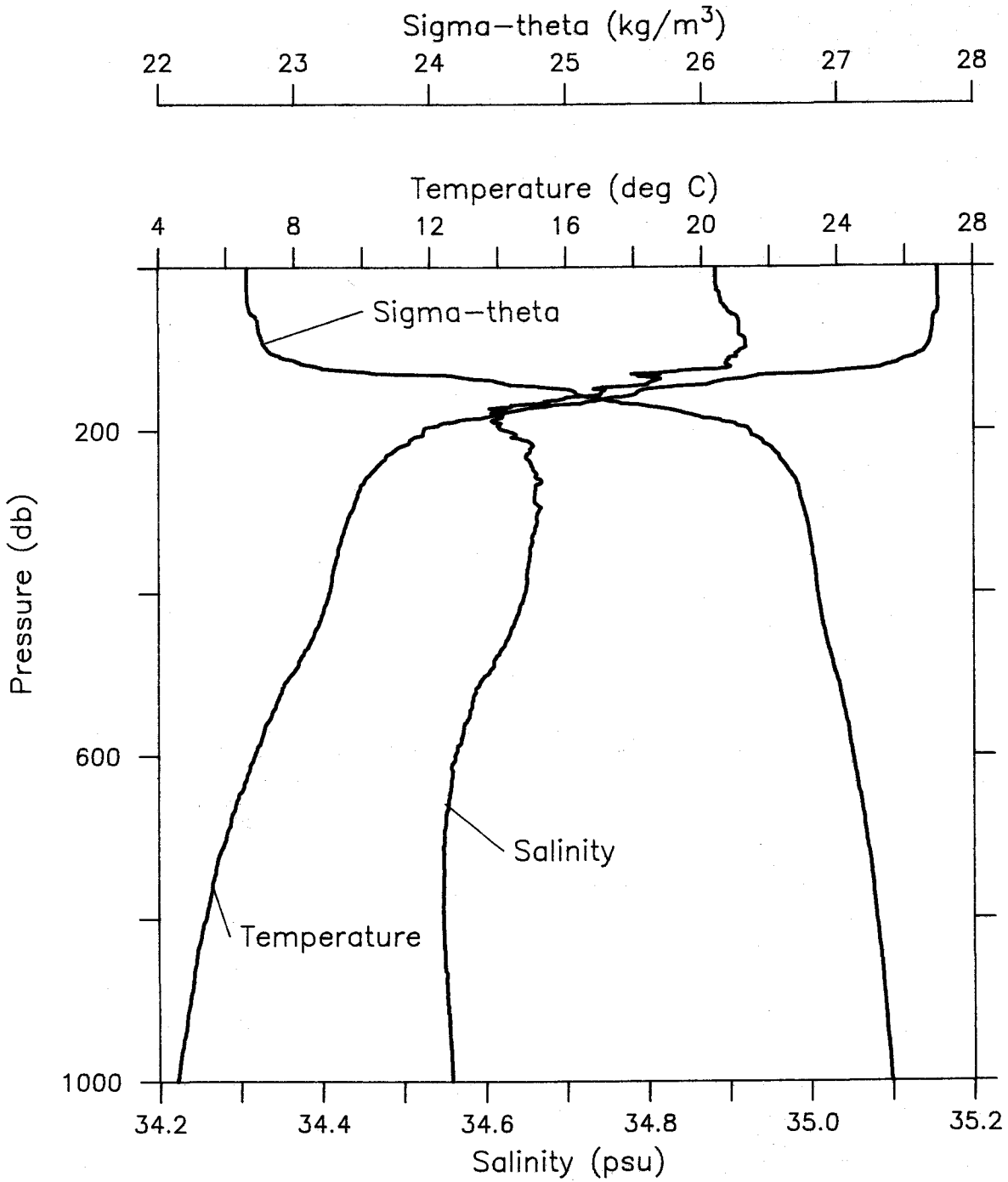
STATION 38

STA NO 39 LAT: 4° 59.9 N LONG:140° 15.9 W
03 DEC 1984 1208 GMT PROBE 2561 DEPTH 4524M

PRESS (DB)	TEMP (C)	SAL (PSU)	POTEN TEMP (C)	SIGMA THETA (KG/M^3)	SVA (CL/T)	DELD (DYN M)
1	26.935	34.884	26.935	22.653	518.7	0.005
10	26.955	34.883	26.952	22.647	519.7	0.052
20	26.960	34.883	26.955	22.646	520.3	0.104
30	26.958	34.886	26.951	22.650	520.4	0.156
40	26.951	34.890	26.942	22.655	520.3	0.208
50	26.938	34.895	26.927	22.664	520.0	0.260
60	26.827	34.908	26.814	22.710	516.0	0.312
70	26.780	34.911	26.764	22.728	514.8	0.363
80	26.754	34.912	26.736	22.737	514.3	0.415
90	26.701	34.919	26.681	22.760	512.6	0.466
100	26.593	34.918	26.570	22.795	509.8	0.517
110	26.270	34.908	26.245	22.890	501.1	0.568
120	25.627	34.895	25.601	23.080	483.4	0.617
130	23.843	34.821	23.816	23.562	437.5	0.664
140	20.585	34.809	20.559	24.469	350.9	0.702
150	18.474	34.732	18.448	24.957	304.4	0.736
175	14.659	34.626	14.633	25.764	227.5	0.804
200	11.782	34.623	11.756	26.343	172.4	0.853
225	10.940	34.655	10.912	26.523	155.6	0.894
250	10.322	34.659	10.293	26.636	145.2	0.932
300	9.662	34.665	9.628	26.754	134.8	1.001
400	9.001	34.649	8.957	26.850	127.3	1.131
500	7.902	34.603	7.851	26.985	115.5	1.253
600	6.807	34.562	6.751	27.108	104.2	1.363
800	5.364	34.548	5.296	27.282	88.4	1.553
1000	4.497	34.558	4.417	27.390	78.7	1.719
1003	4.486	34.558	4.406	27.392	78.5	1.721


Sigma–theta (kg/m3)
22
23
24
25
26
27
Temperature (deg C)
8
12
16
20
24
28
Sigma–theta
Pressure (db)
100
300
500
Temperature
Salinity
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

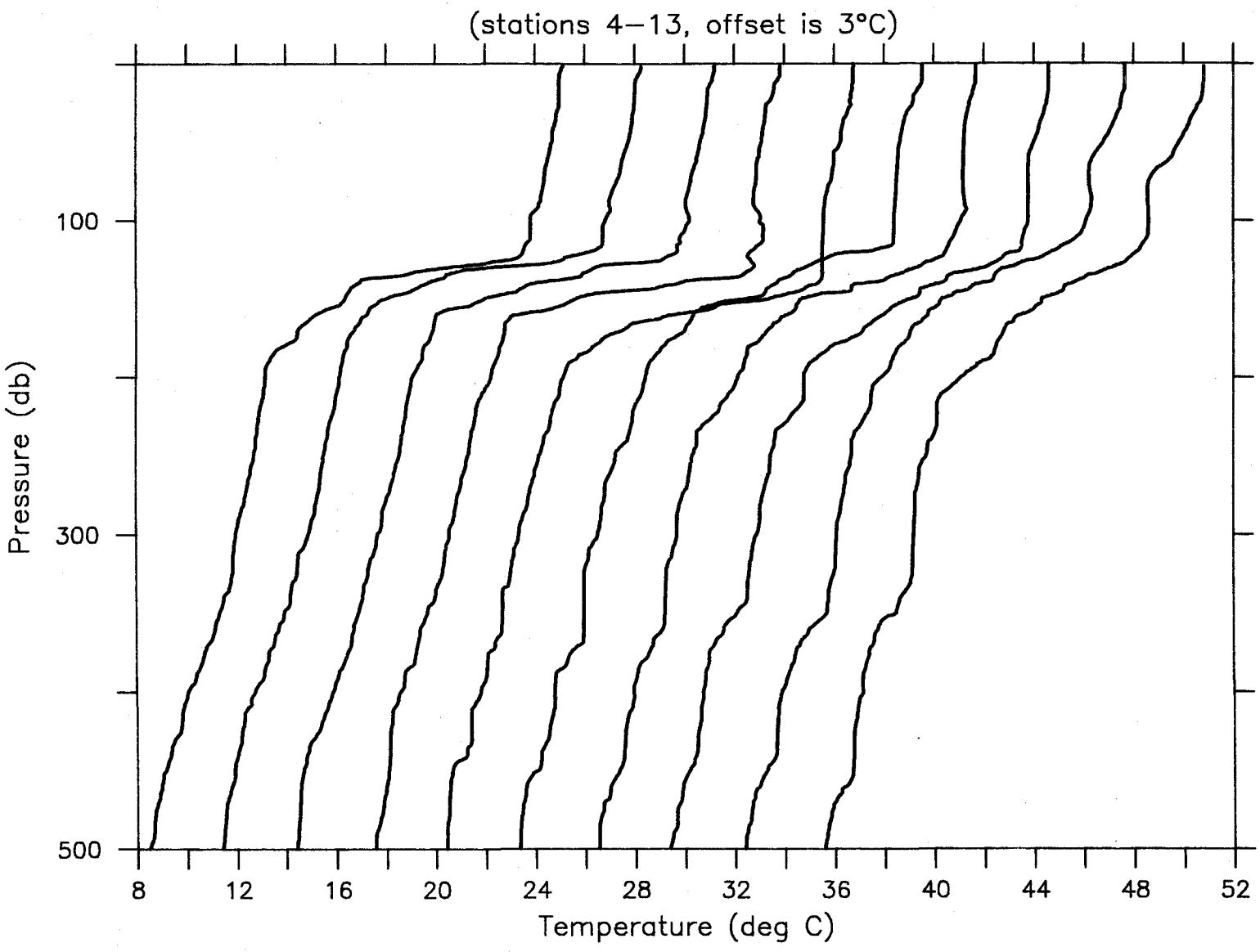
STATION 39


Sigma–theta (kg/m3)
22
23
24
25
26
27
28
Temperature (deg C)
4
8
12
16
20
24
28
Sigma–theta
200
600
1000
Pressure (db)
Salinity
Temperature
34.2
34.4
34.6
34.8
35.0
35.2
Salinity (psu)

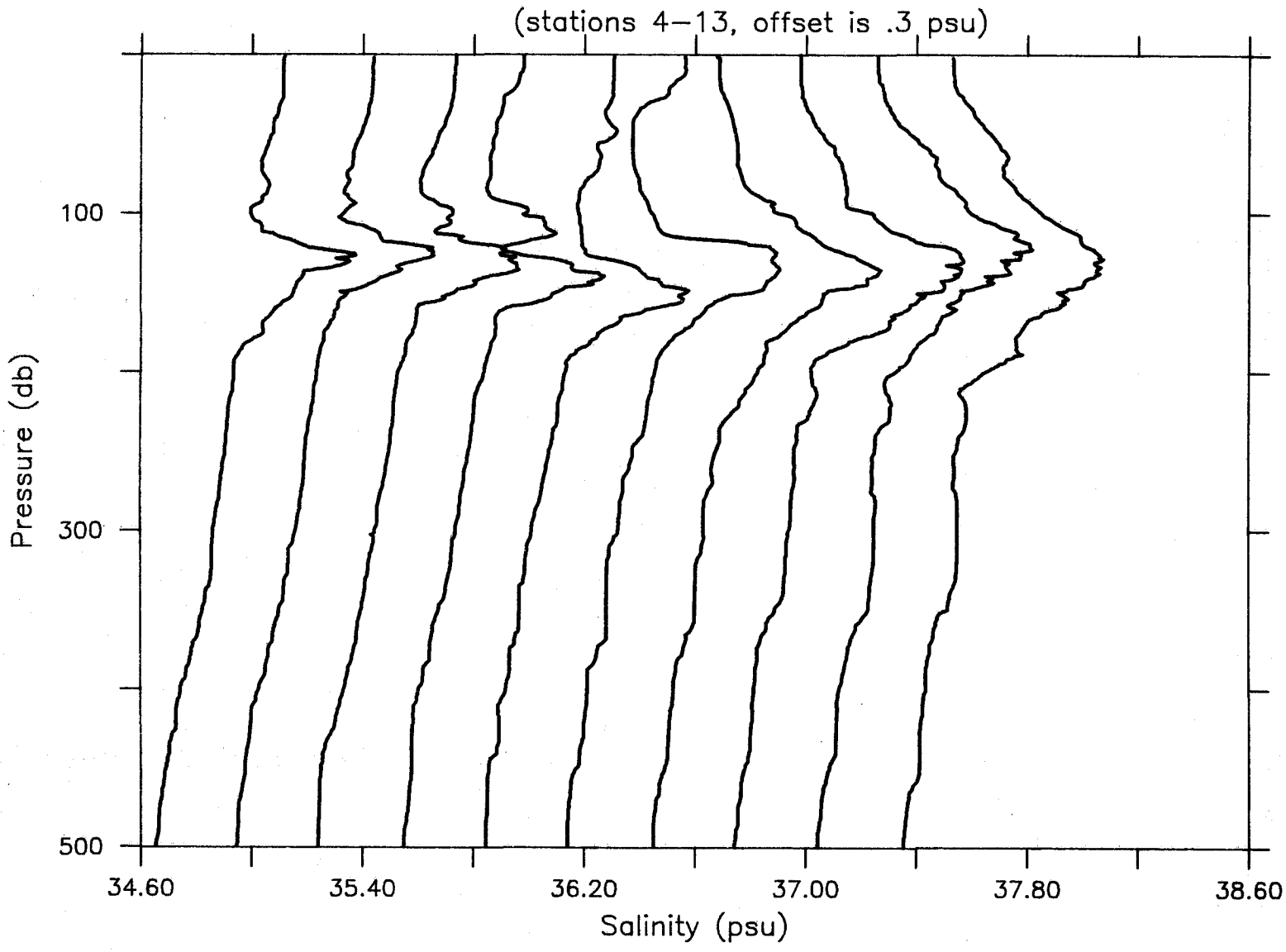
STATION 39

Sequential Profiles

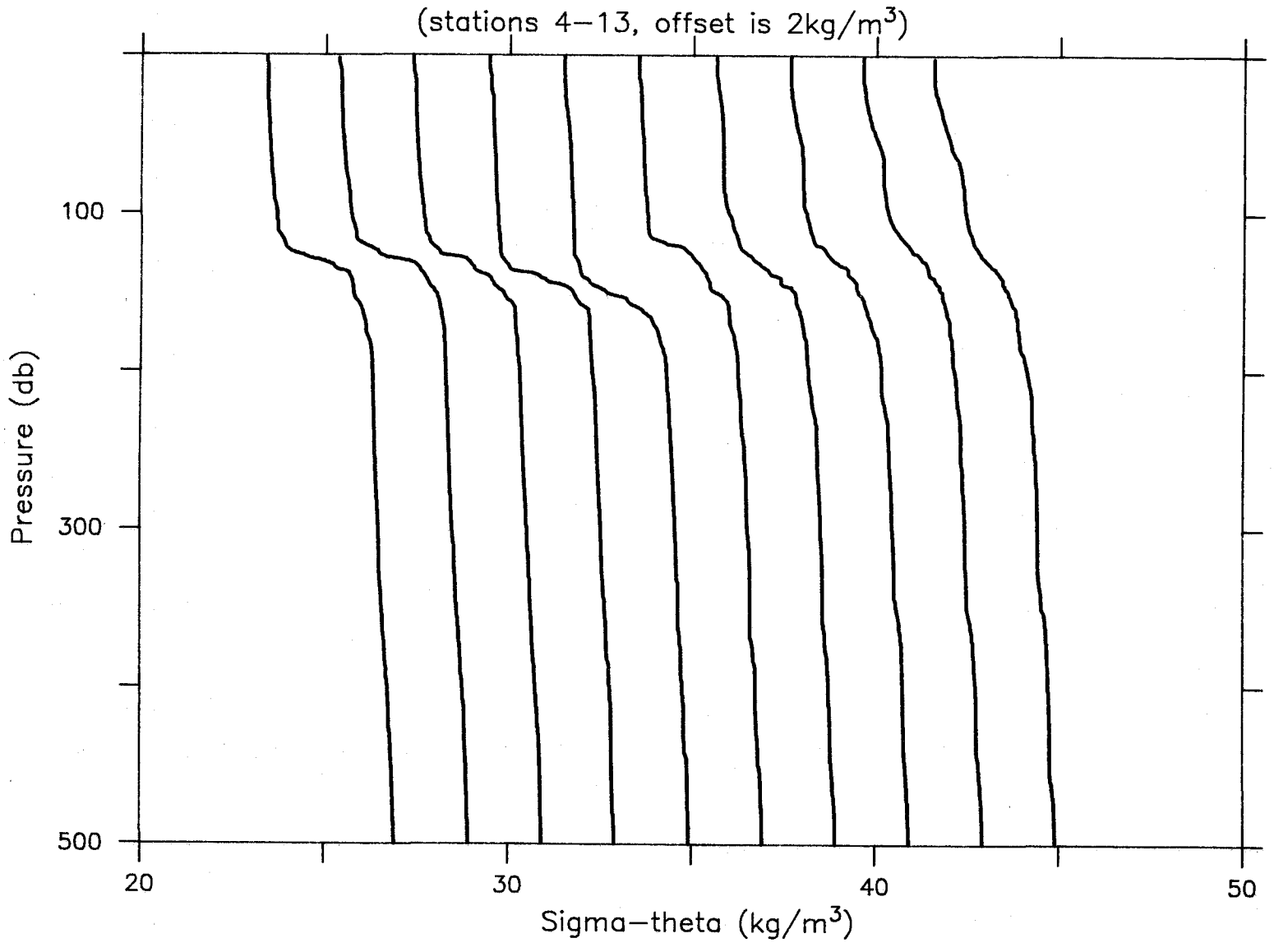
On the following pages are sets of sequential profiles of temperature, salinity and sigma-theta. There is one set for the section from 3°S to the equator along 140°15'W, two sets for the time series at 0°, 140°W, and two sets for the section from the equator to 5°N along 140°15'W.



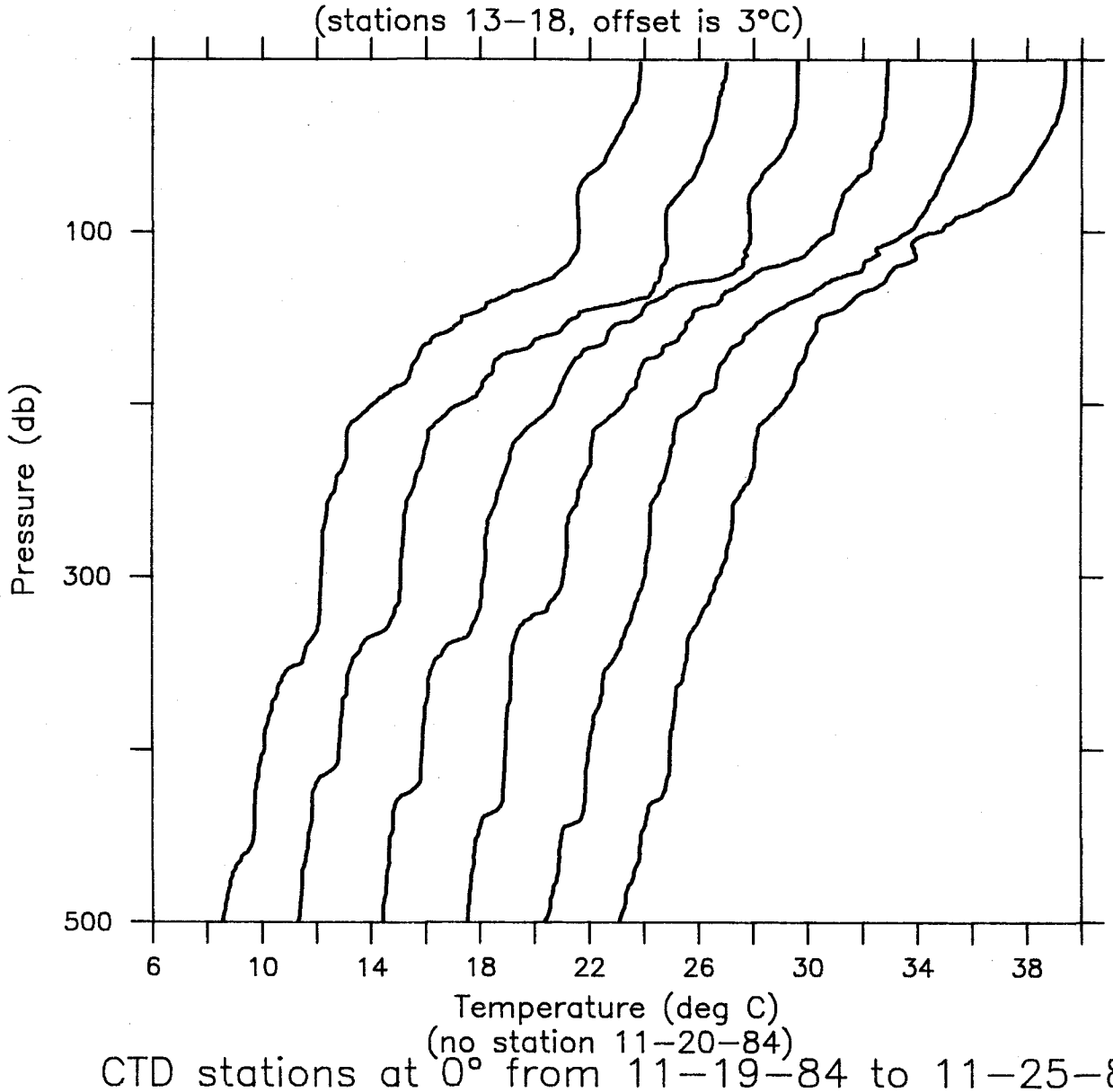
CTD stations from 3°S to 0° along 140°15'W



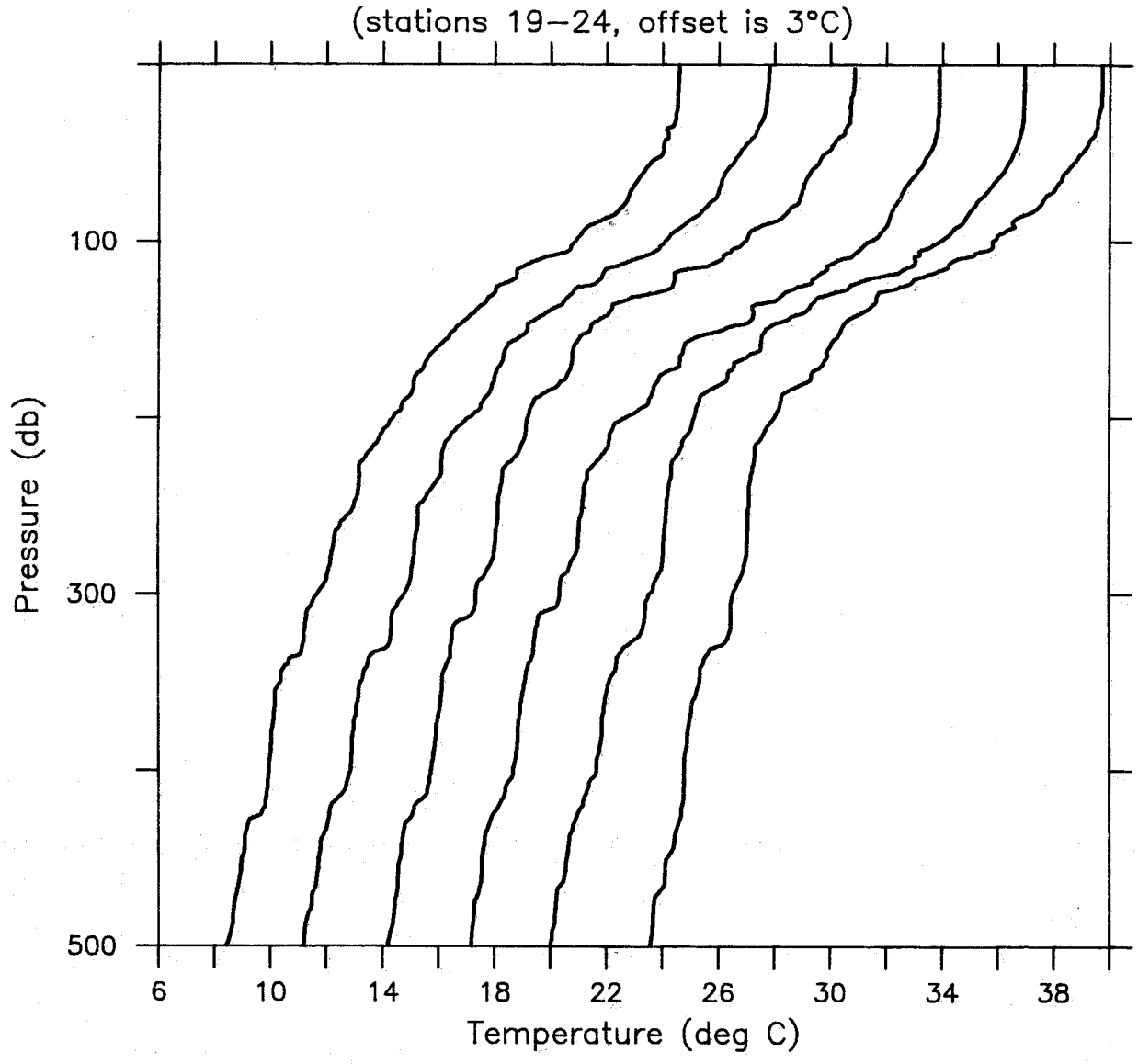
CTD stations from 3°S to 0° along 140°15'W



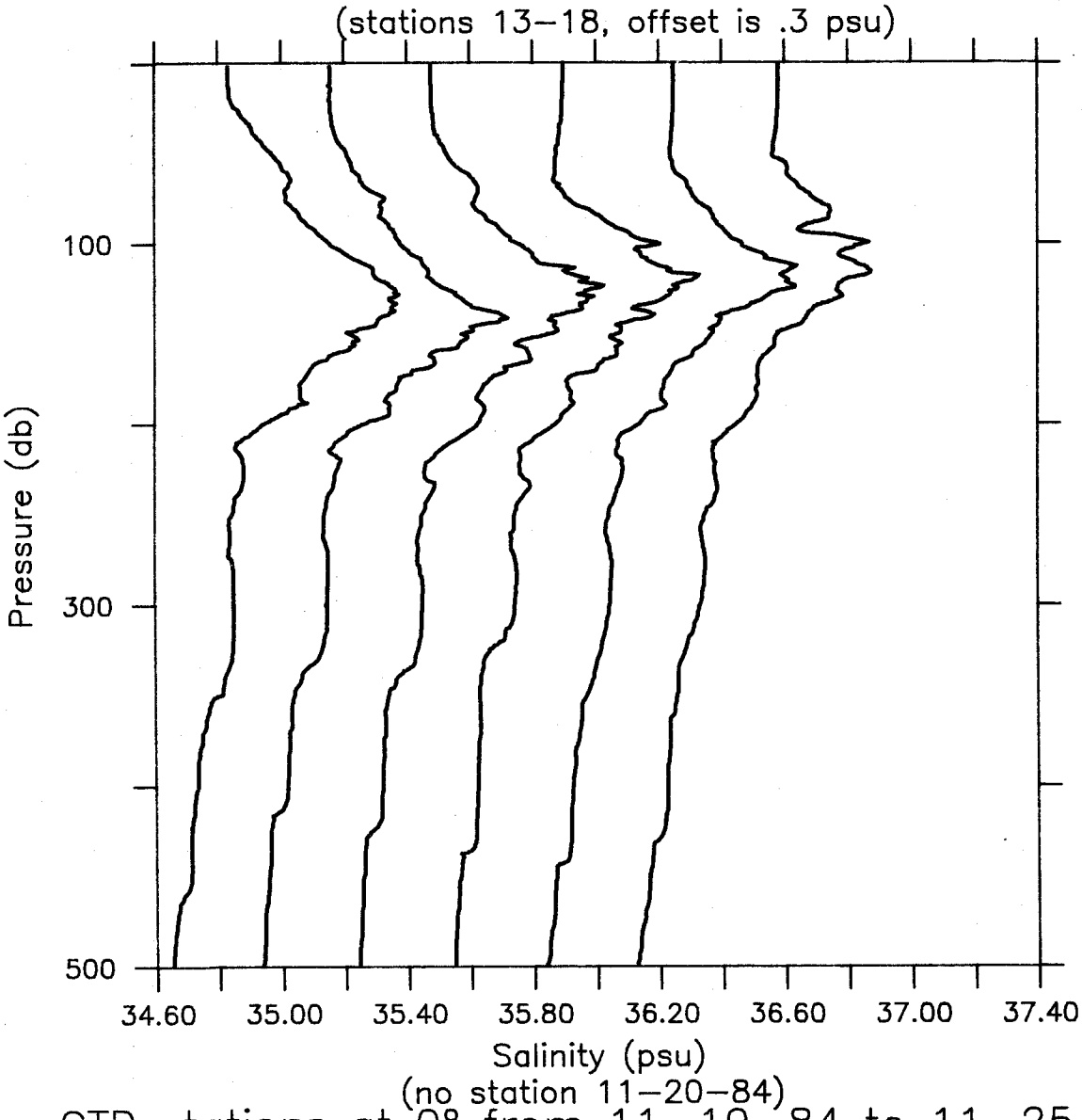
CTD stations from 3°S to 0° along 140°15'W



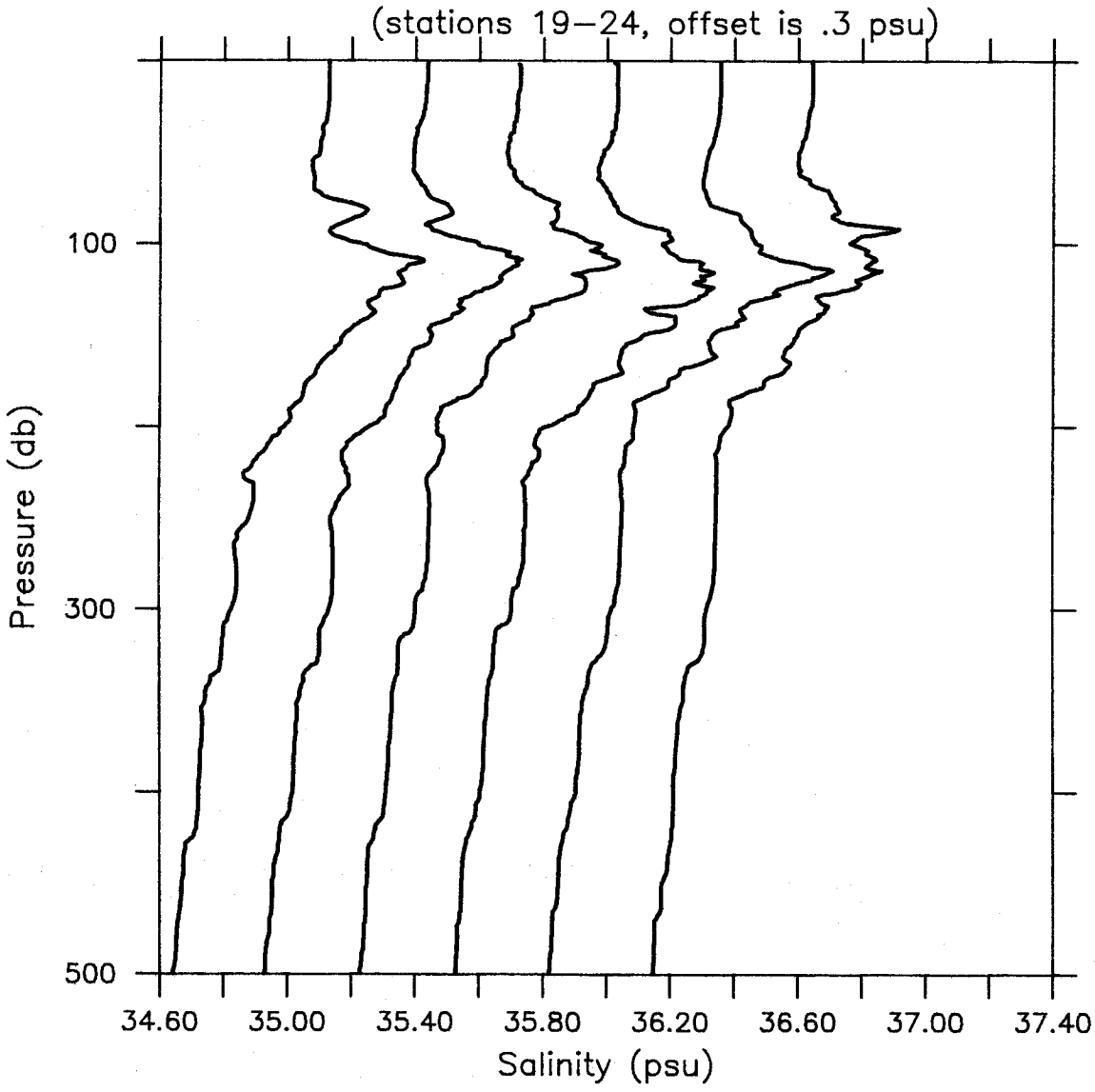
CTD stations at 0° from 11–19–84 to 11–25–84



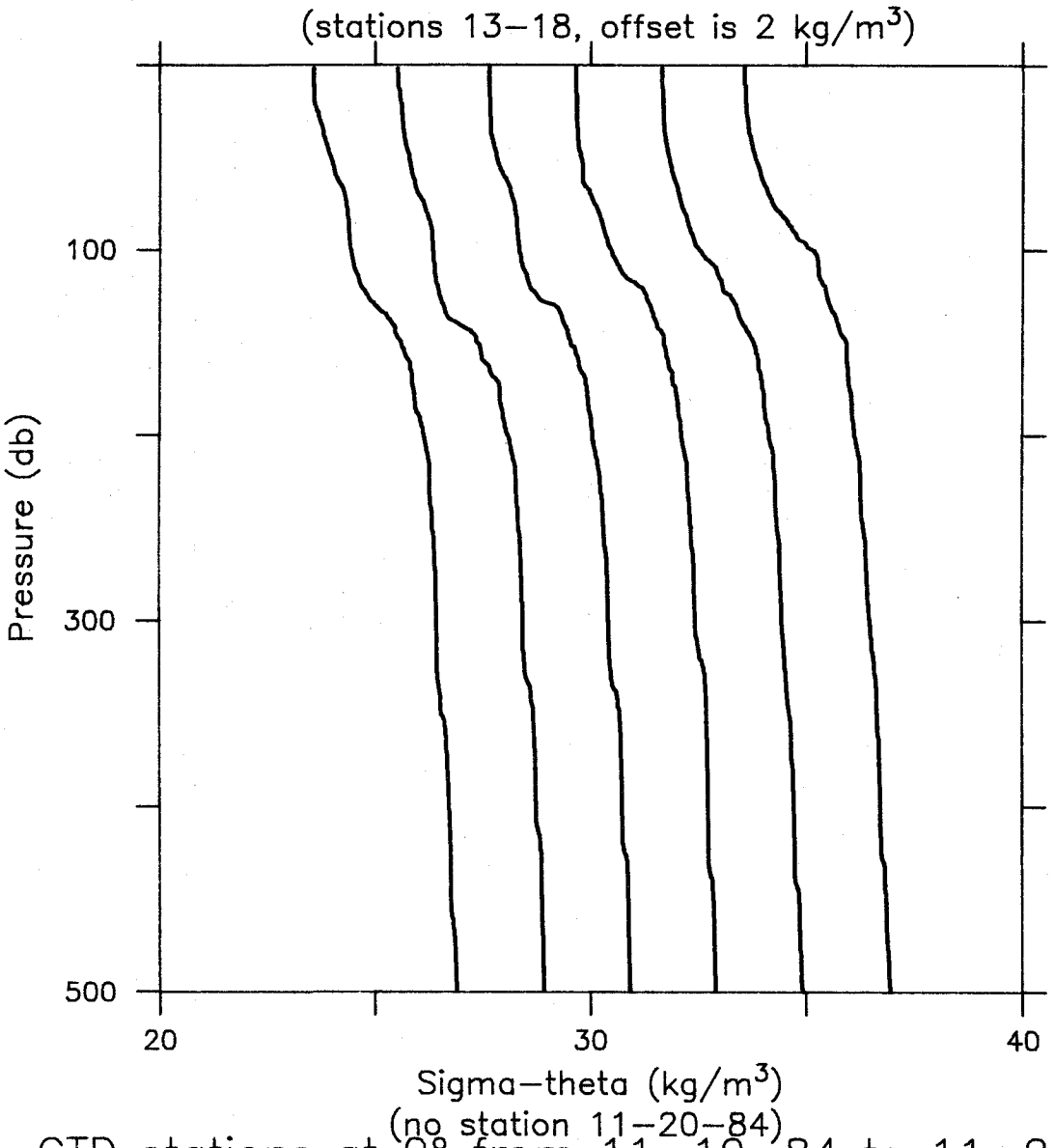
CTD stations at 0° from 11–26–84 to 12–01–84



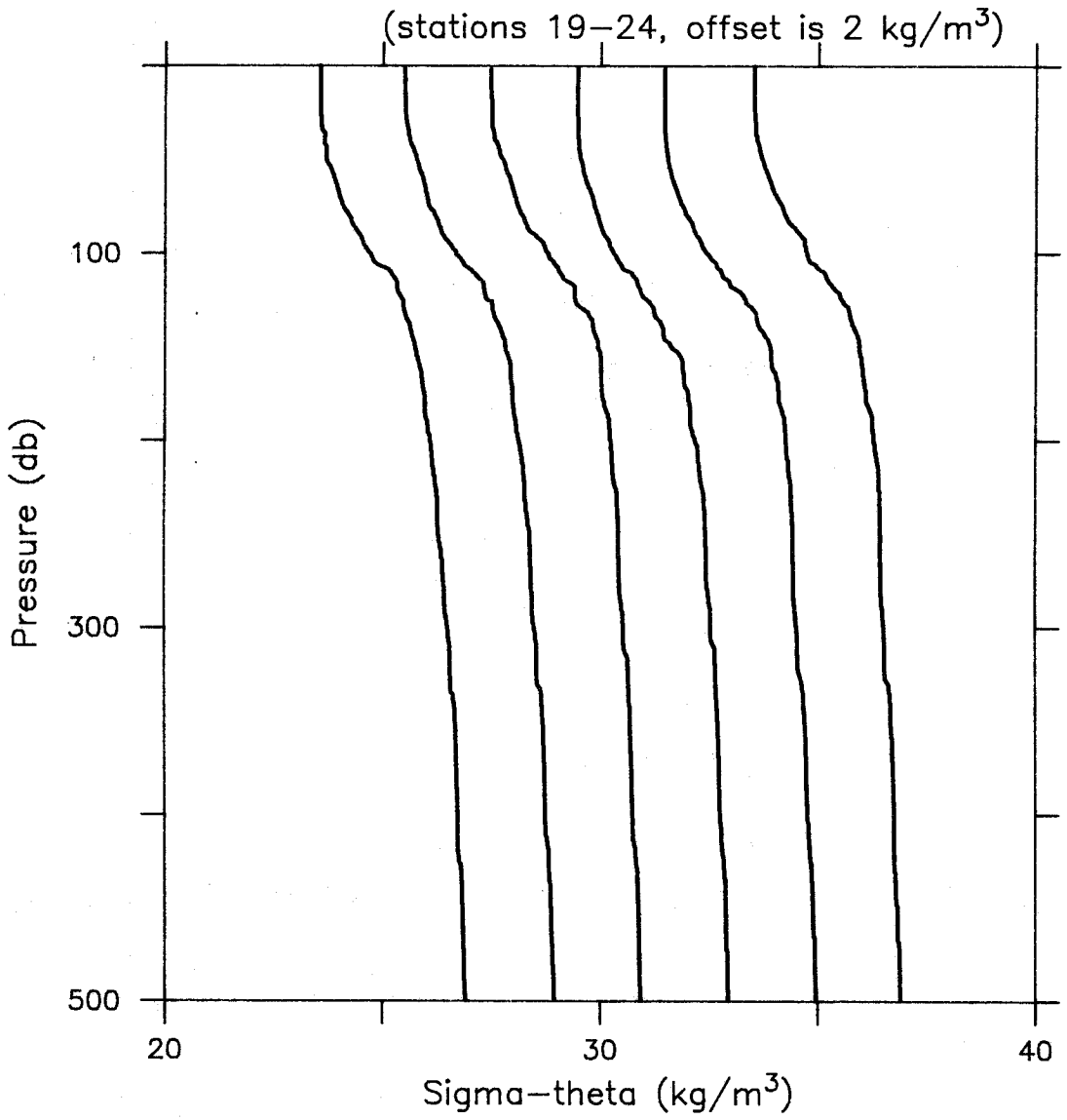
CTD stations at 0° from 11–19–84 to 11–25–84



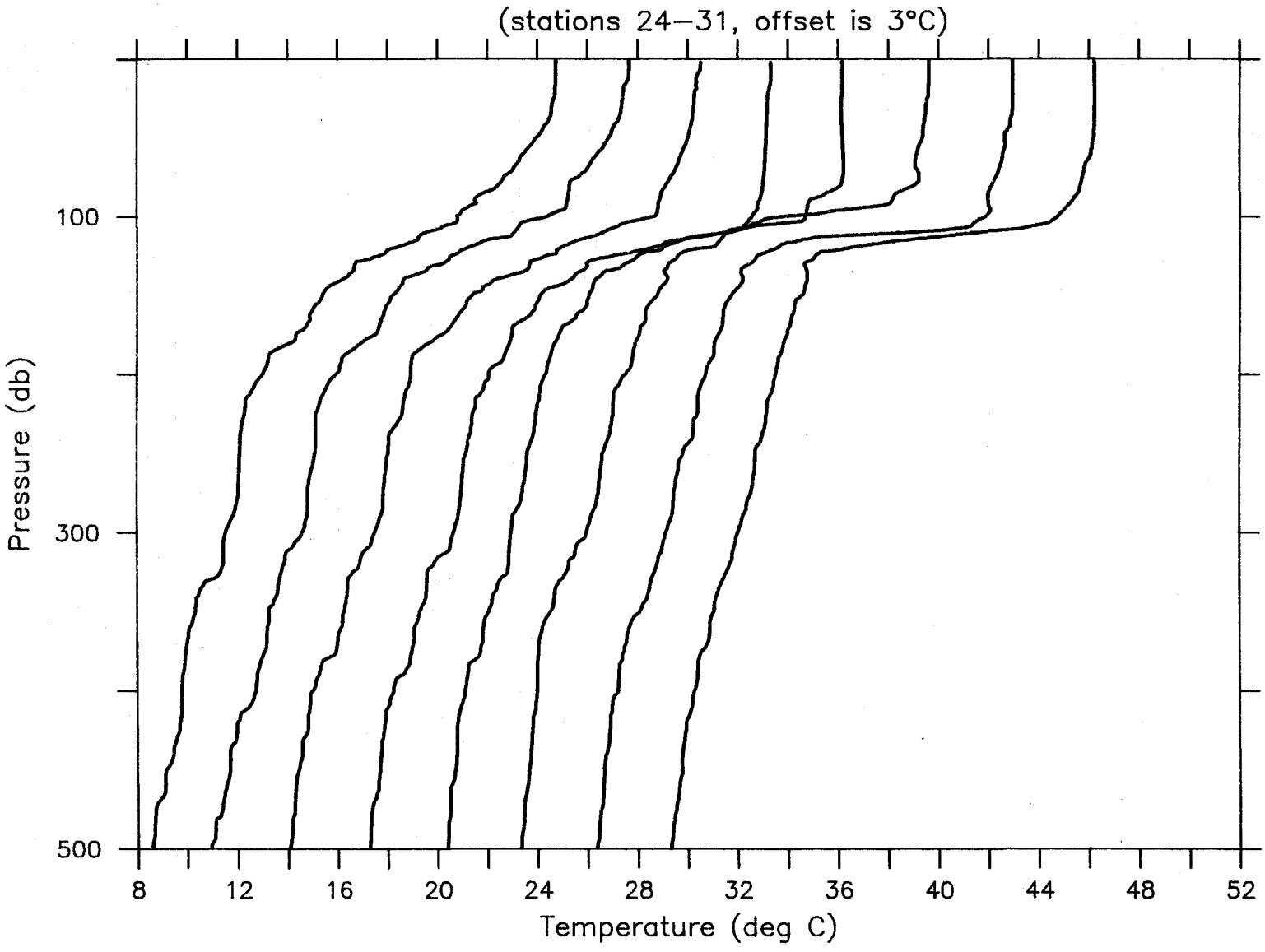
CTD stations at 0° from 11–26–84 to 12–01–84



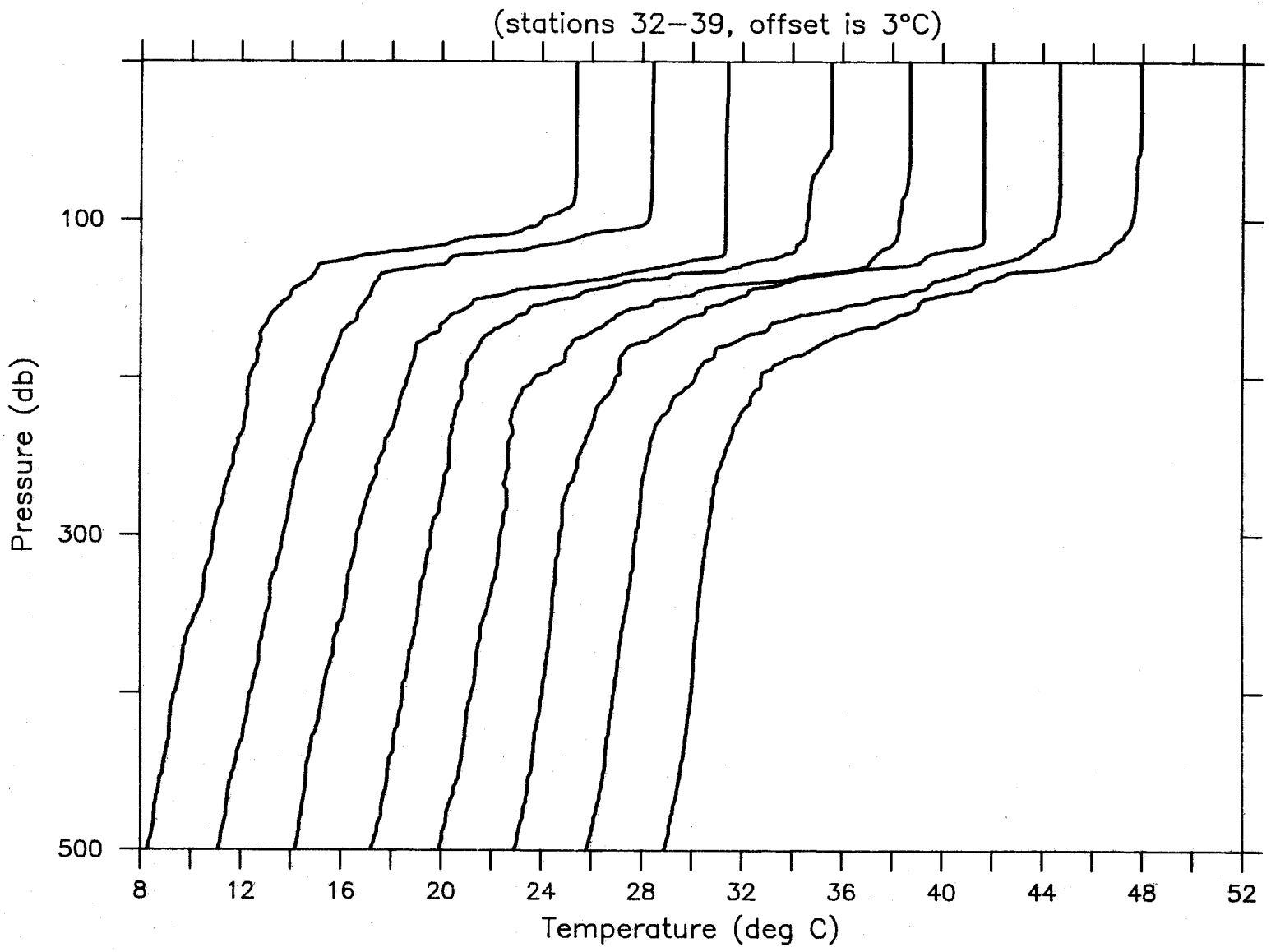
CTD stations at 0° from 11–19–84 to 11–25–84



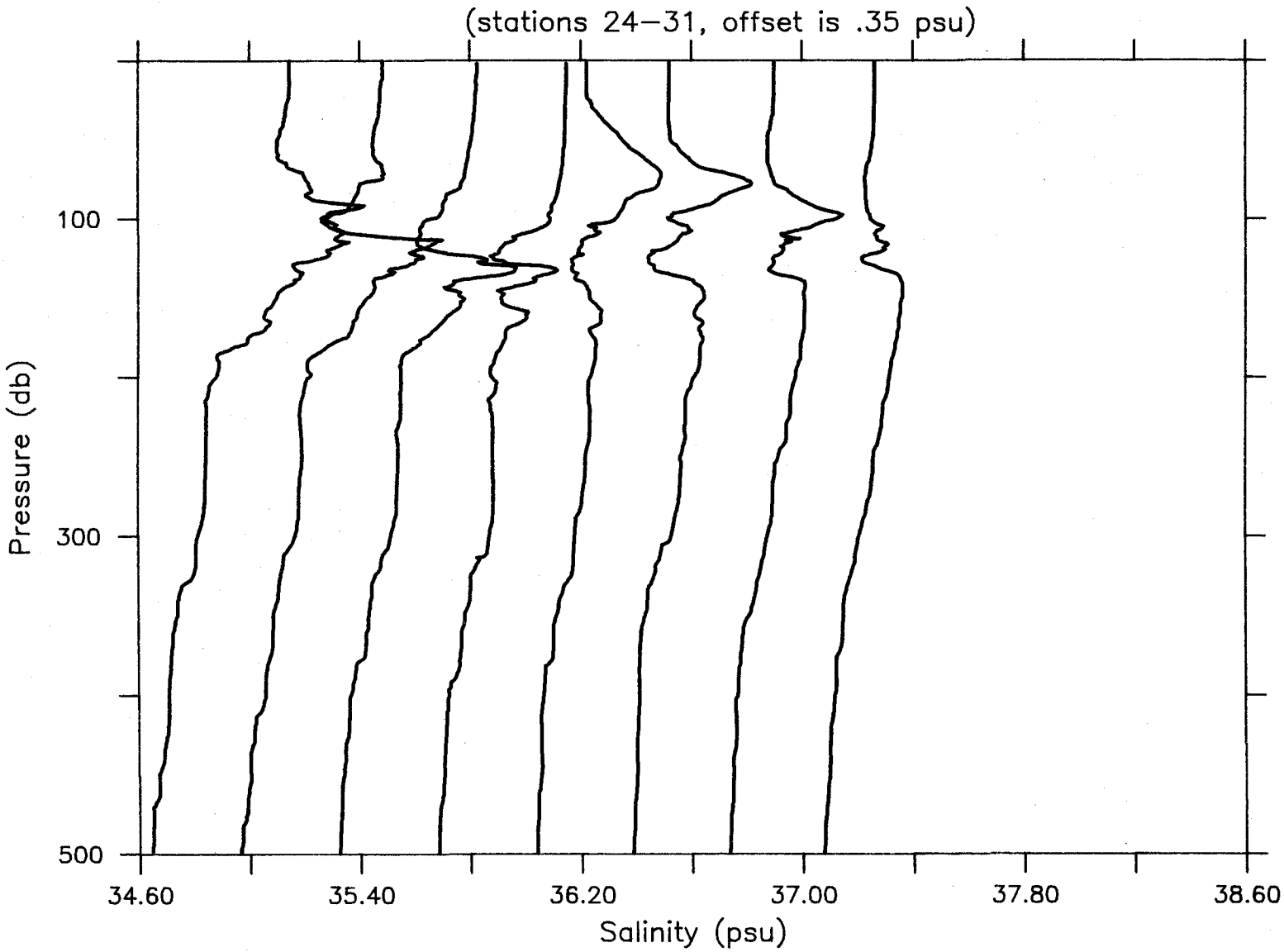
CTD stations at 0° from 11–26–84 to 12–01–84



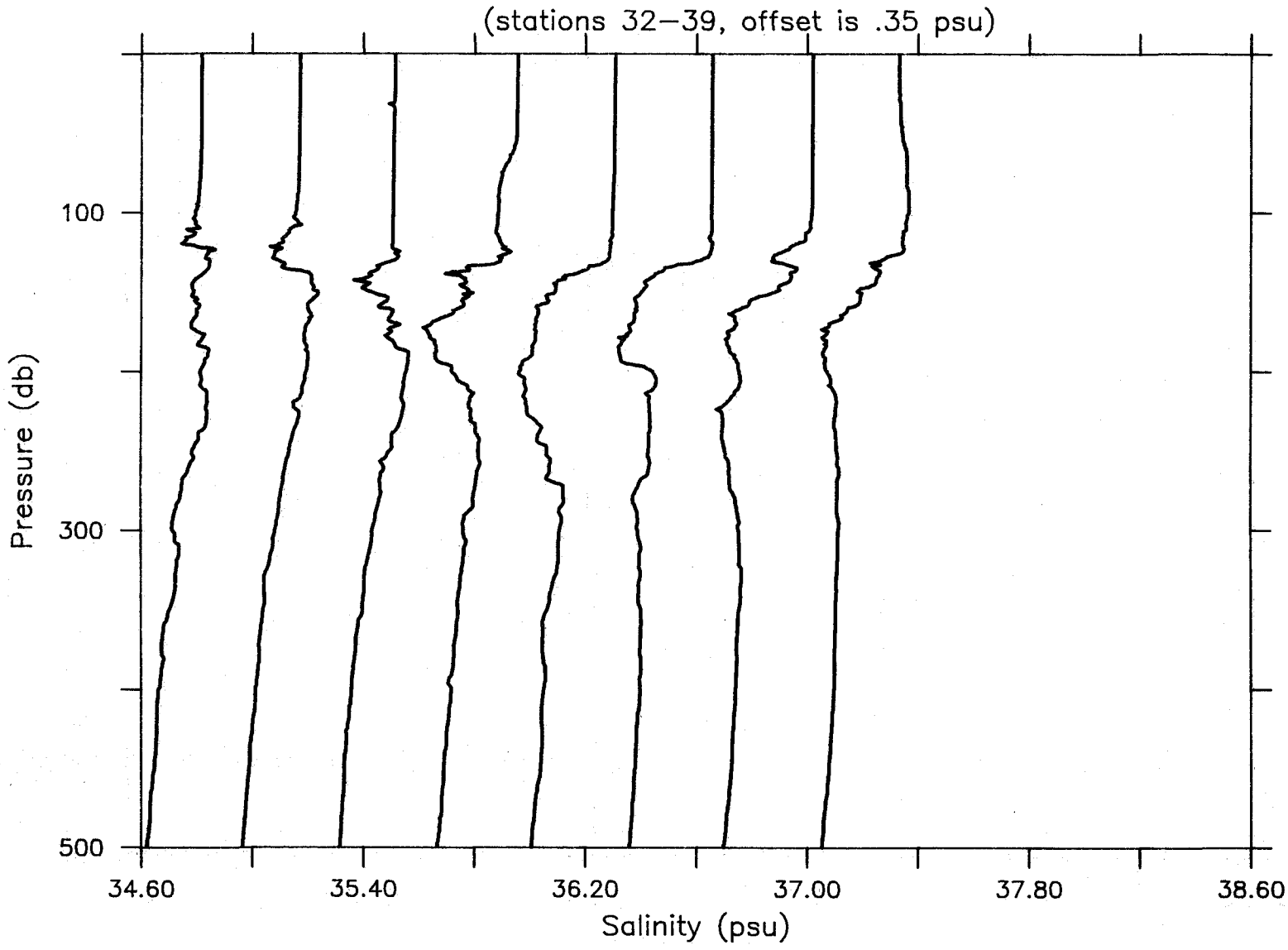
CTD stations from 0° to 2°20'N along 140°15'W



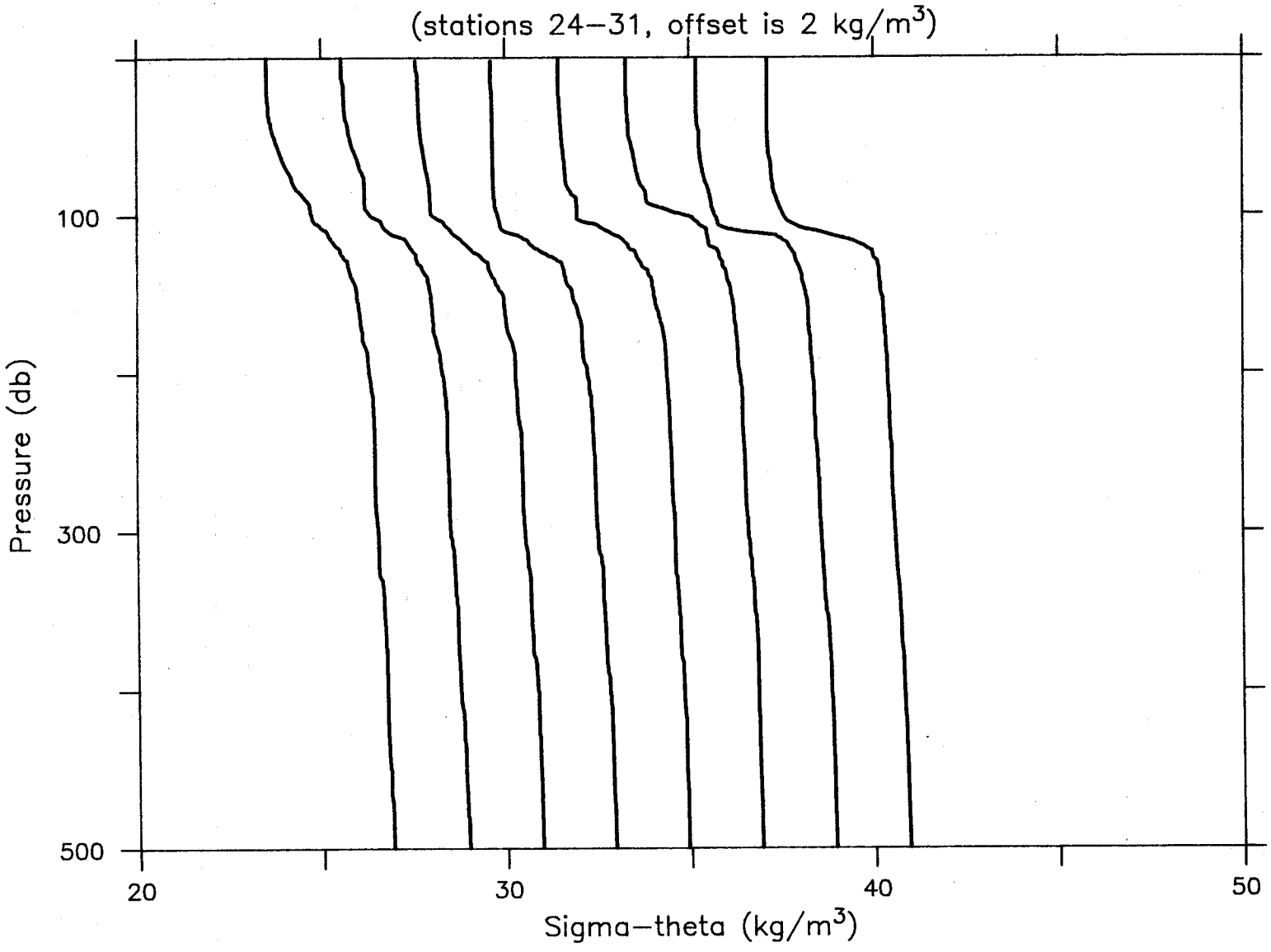
CTD stations from 2°40'N to 5°N along 140°15'W



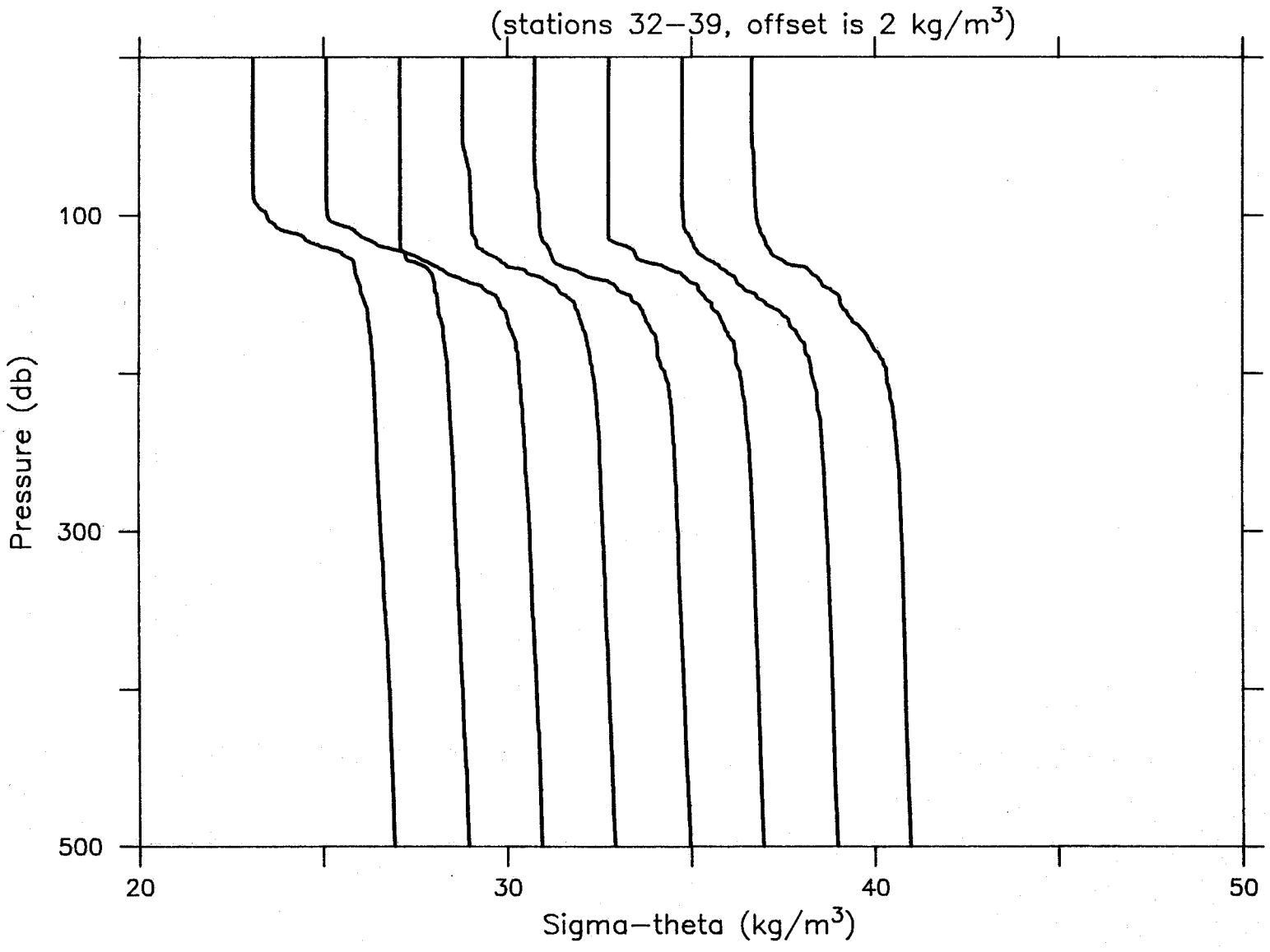
CTD stations from 0° to 2°20'N along 140°15'W



CTD stations from 2°40'N to 5°N along 140°15'W



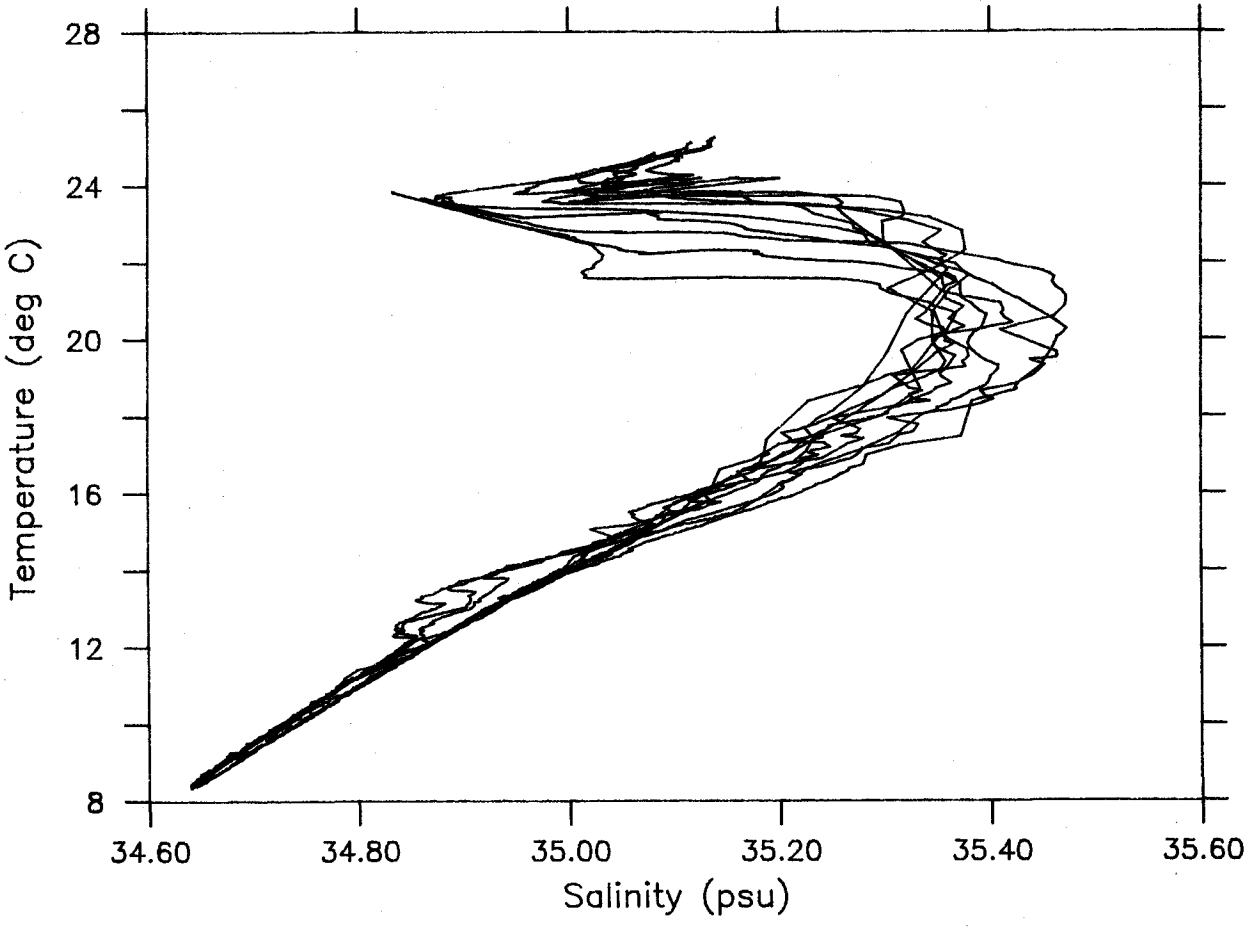
CTD stations from 0° to 2°20'N along 140°15'W



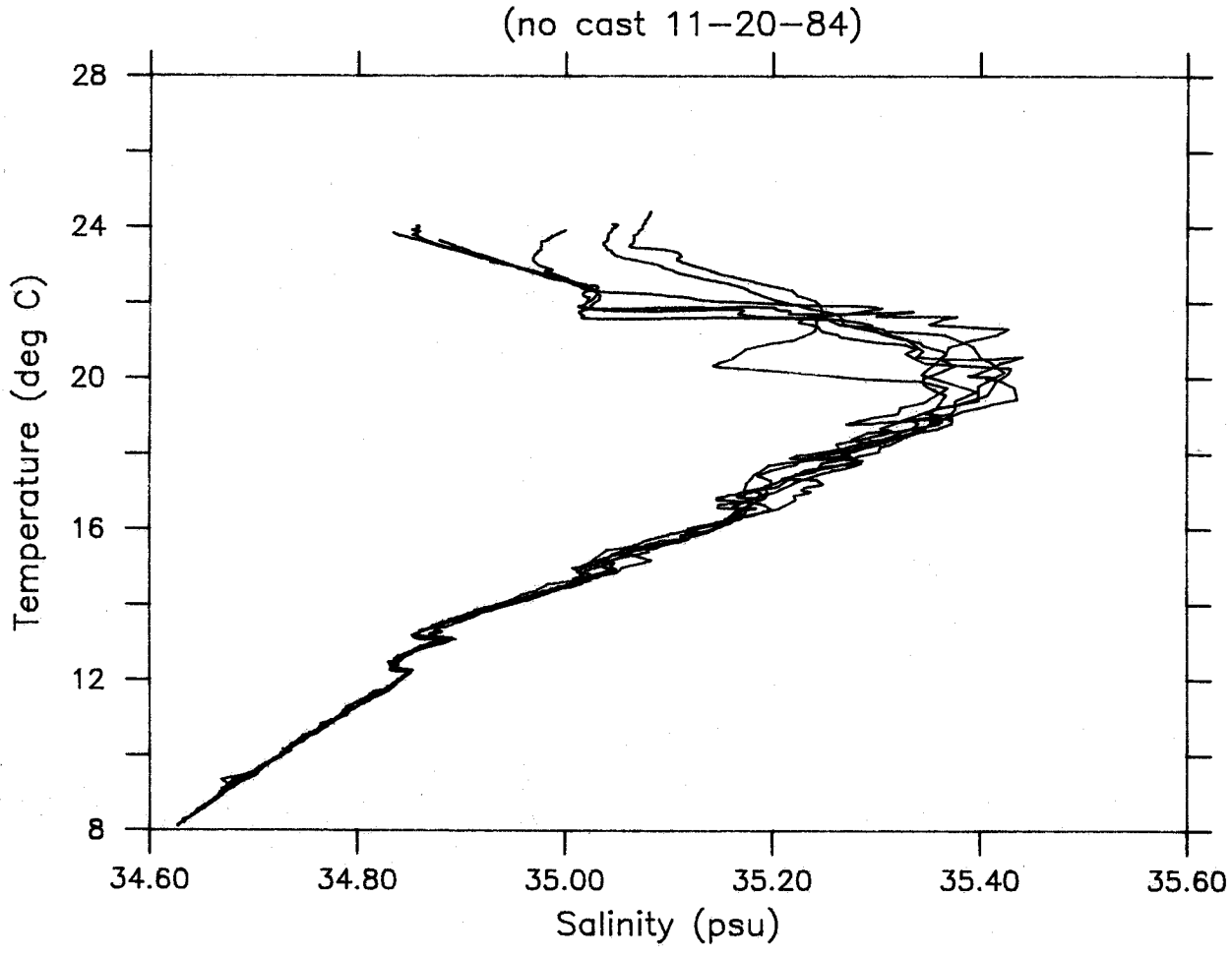
CTD stations from 2°40'N to 5°N along 140°15'W

Temperature-Salinity Diagrams

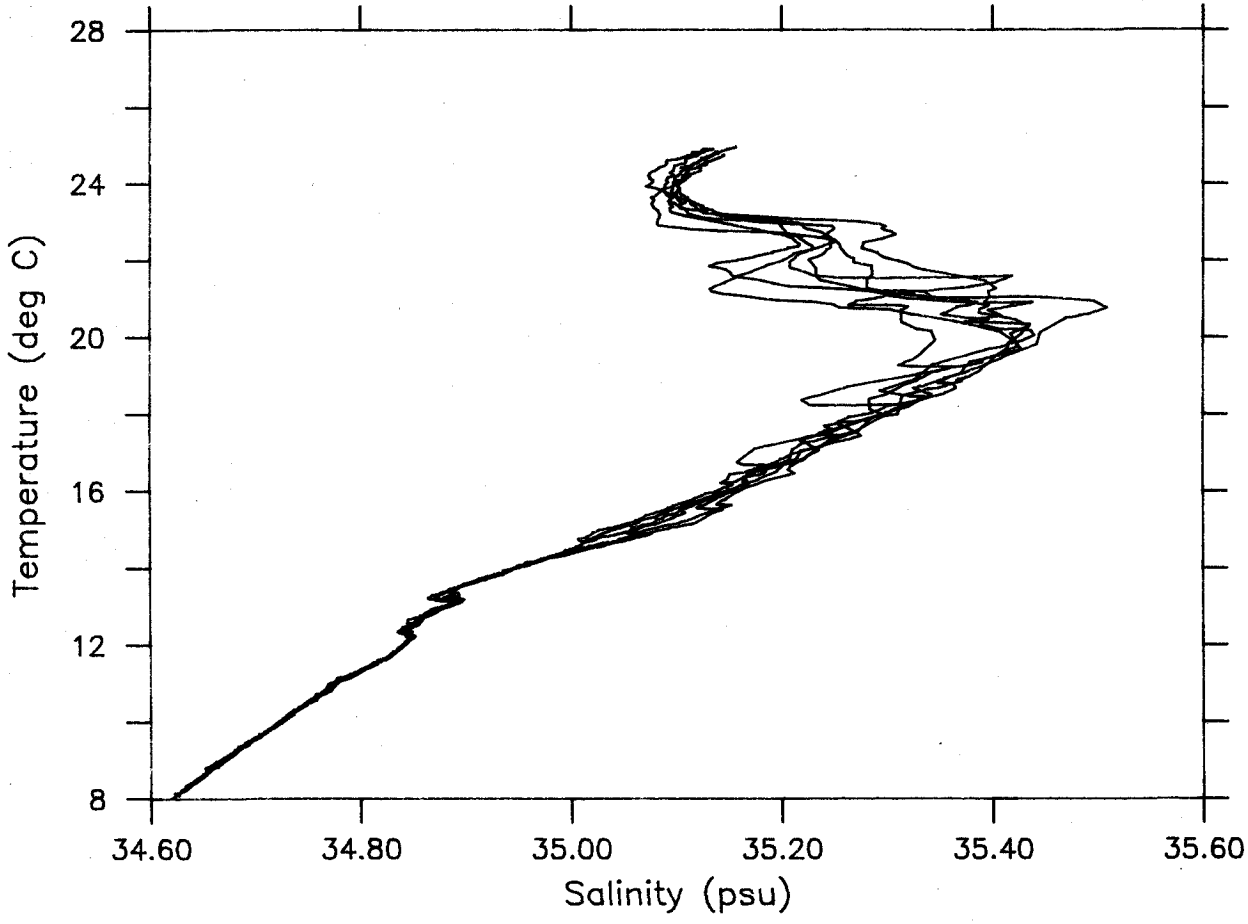
On the follwing pages are temperature-salinity (T-S) diagrams from the surface to 500 db. The grouping of stations in each diagram correspond to the sets of sequential plots in the previous section.



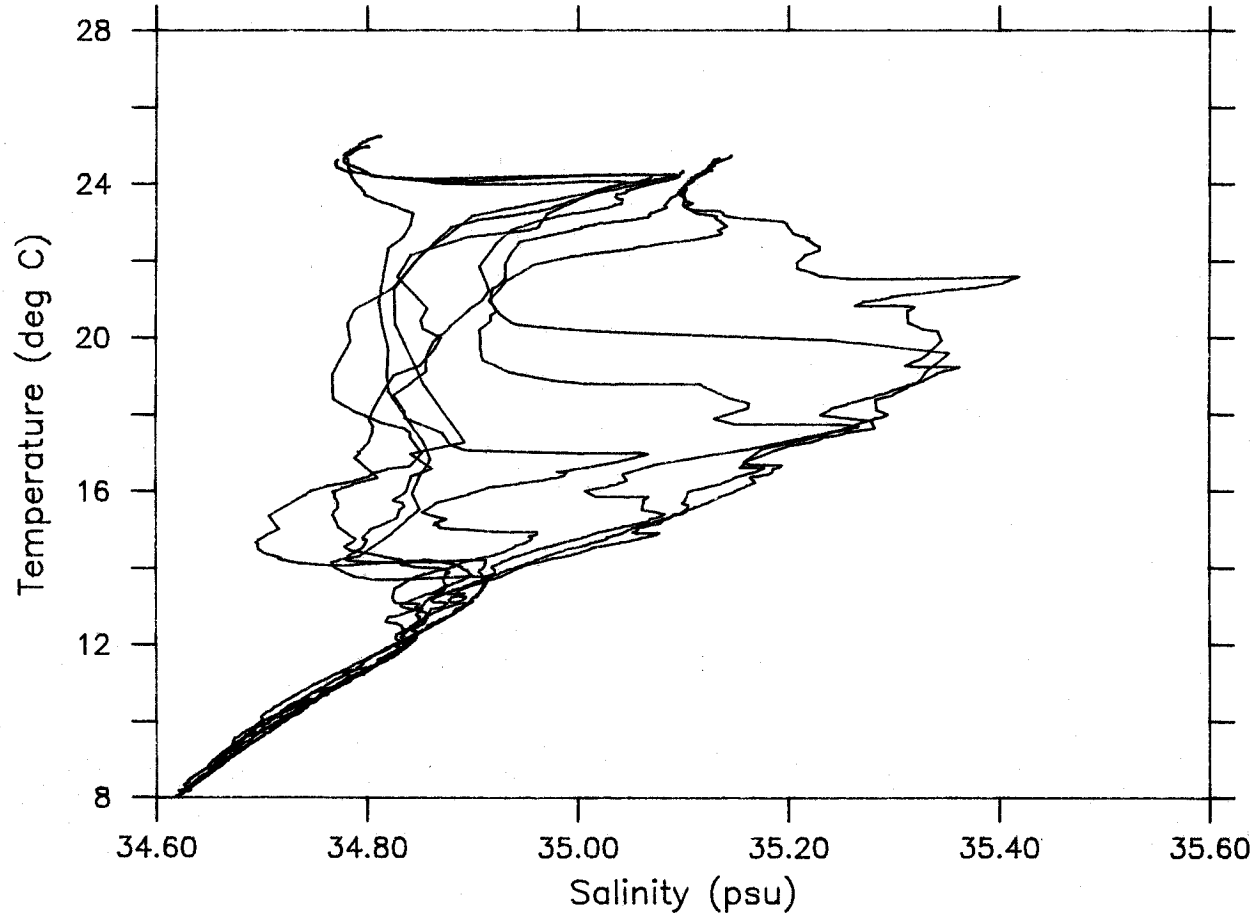
CTD stations from 3°S to 0° along 140°15'W



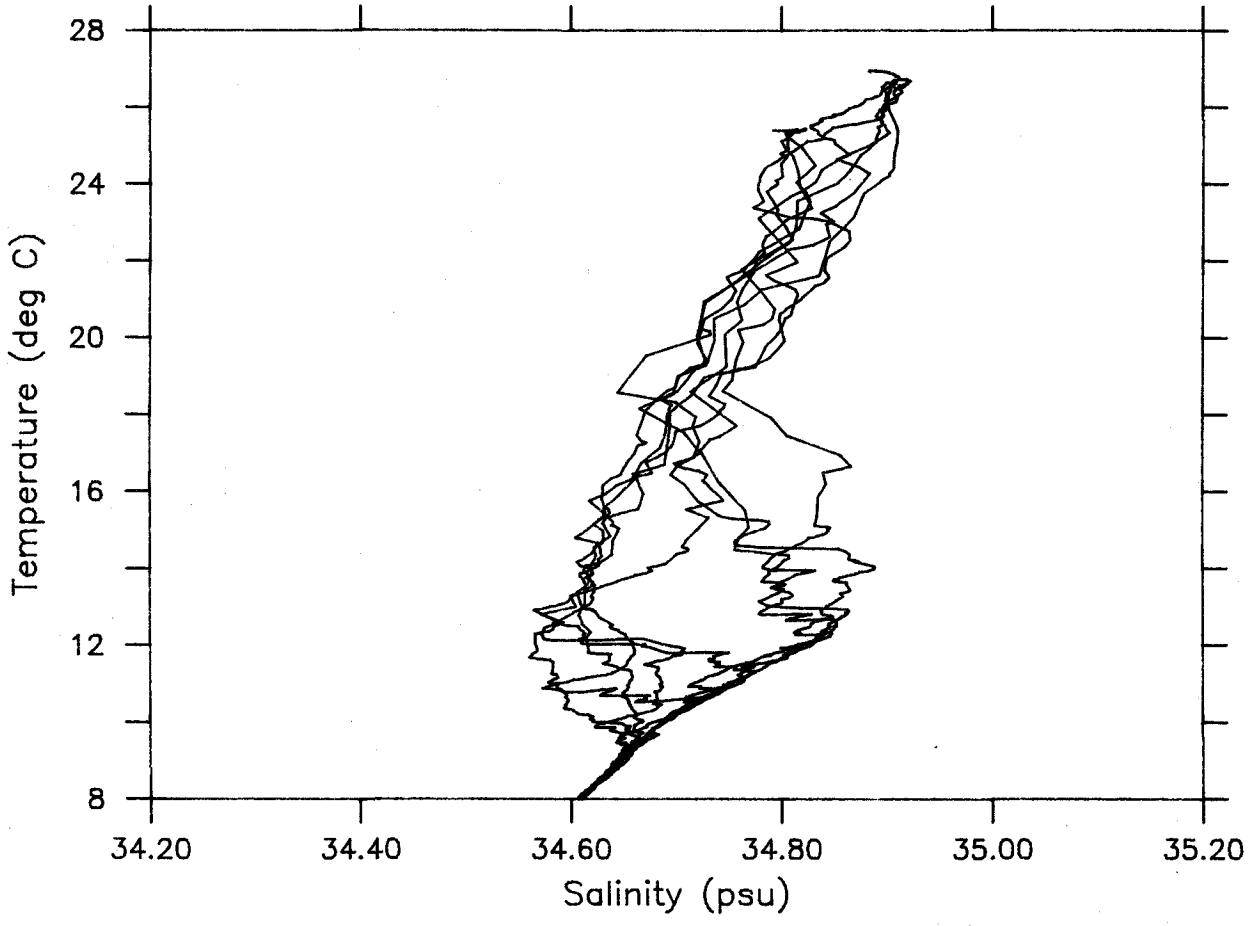
CTD stations at 0° from 11–19 to 11–25–84



CTD stations at 0° from 11–26 to 12–1–84



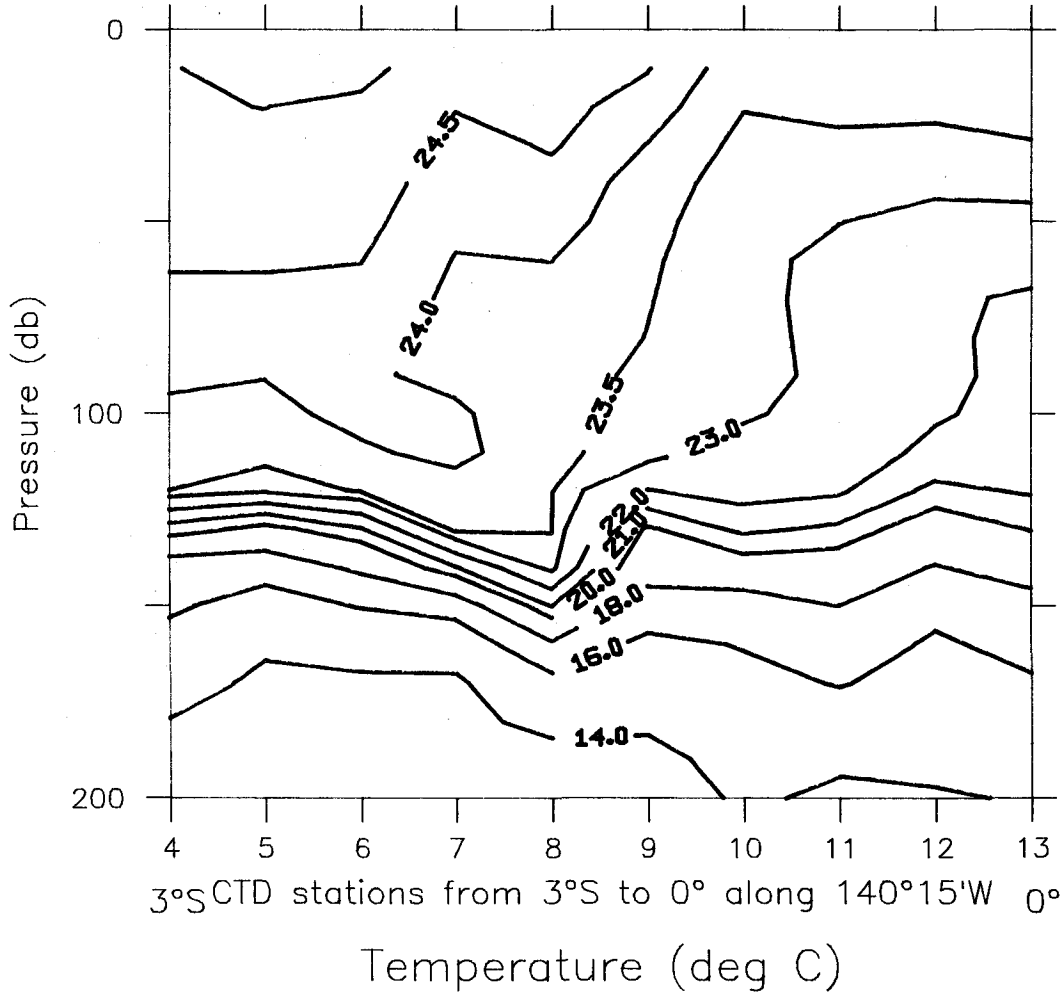
CTD stations from 0° to 2°20'N along 140°15'W

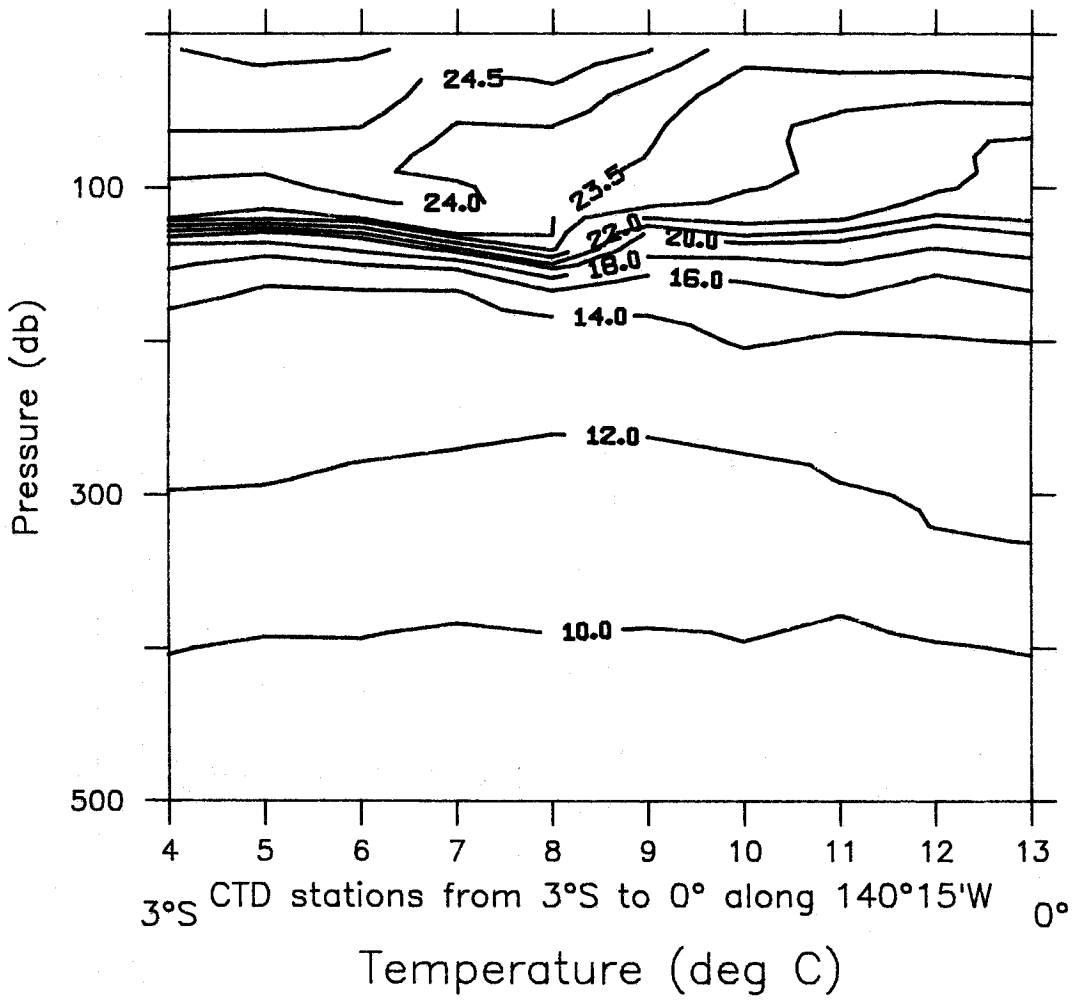


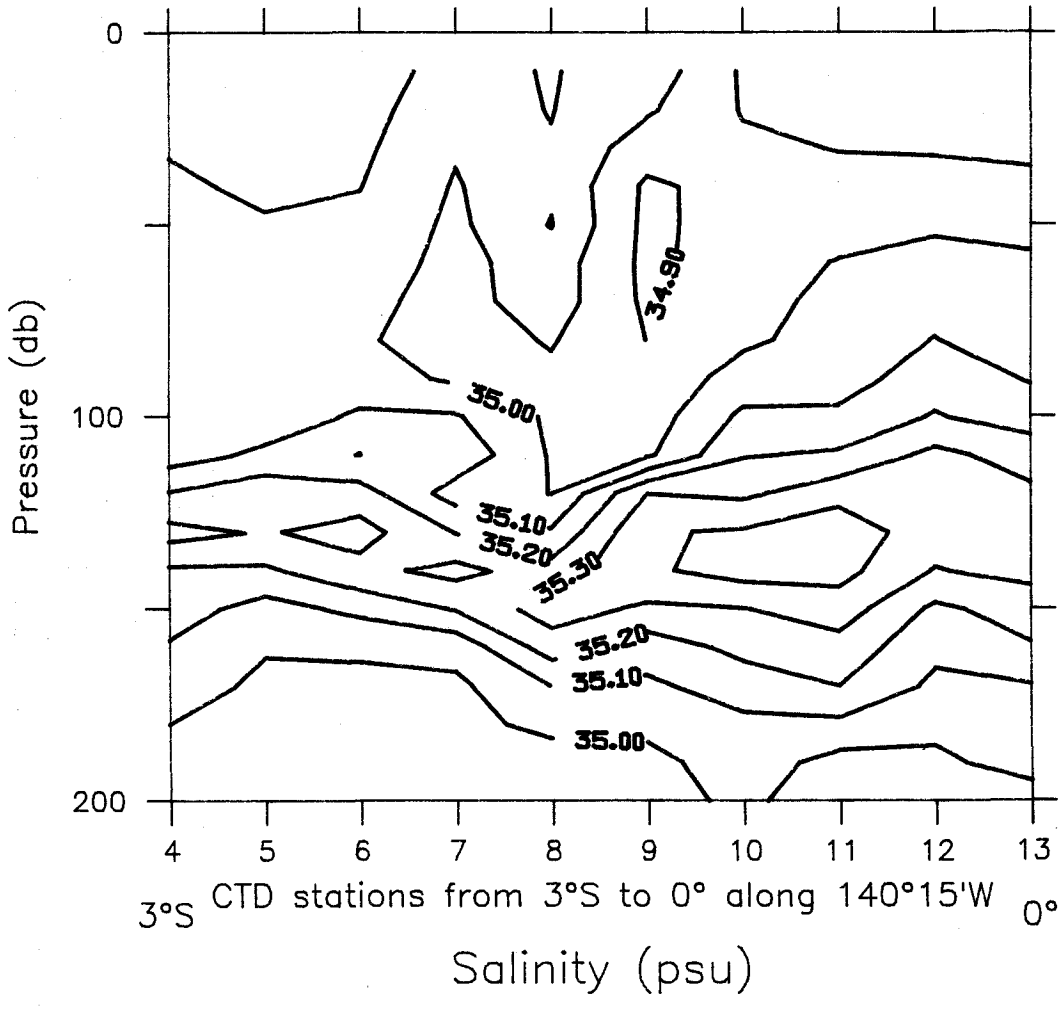
CTD stations from 2°40'N to 5°N along 140°15'W

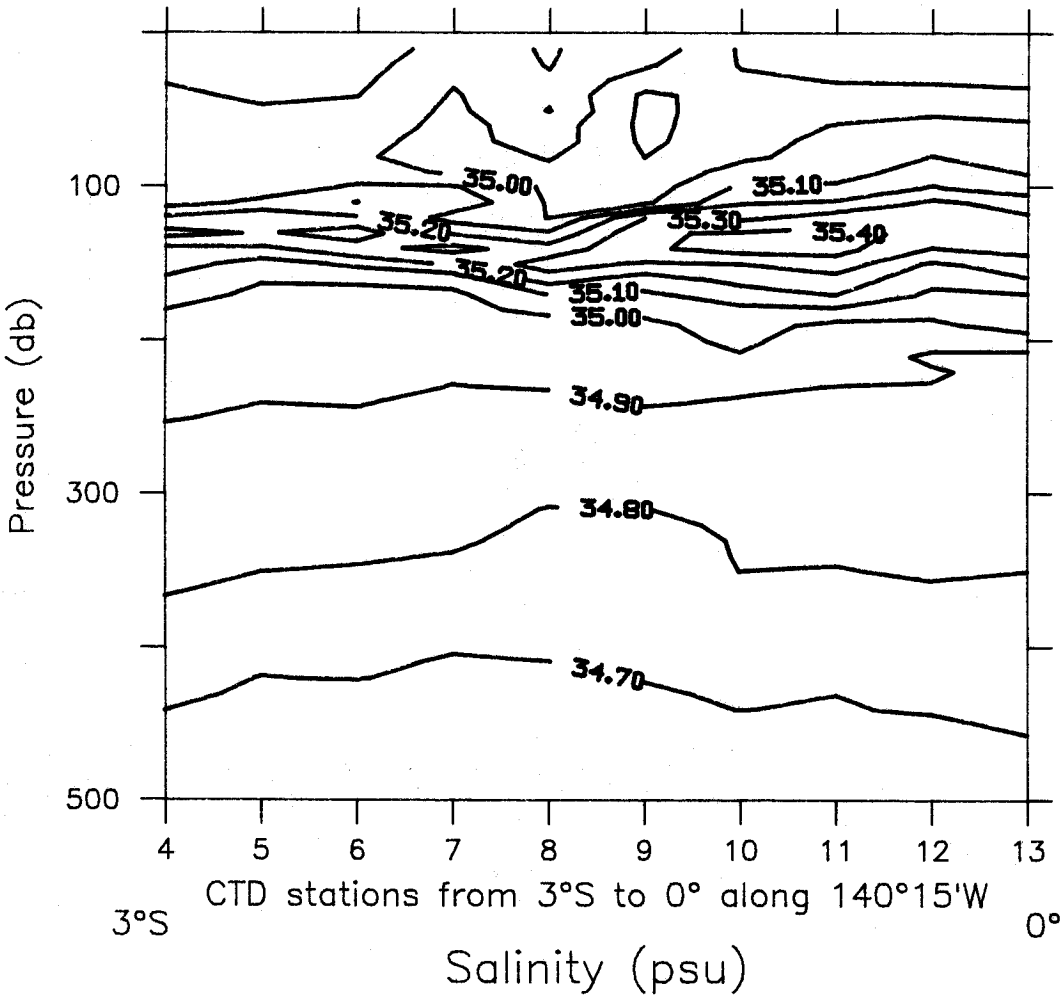
Vertical Sections

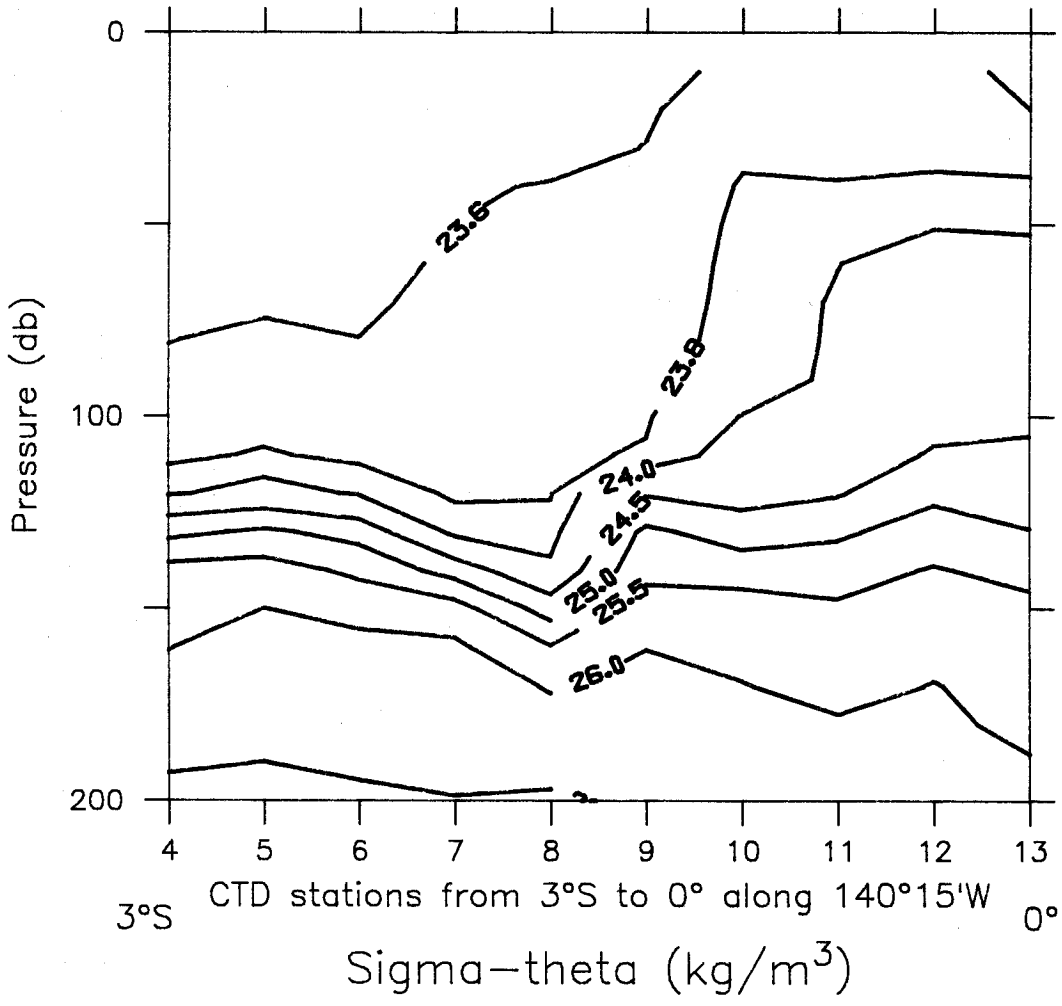
On the following pages are three sets of vertical sections, one set each for the section from 3°S to the equator along 140°15'W, the time series at 0°, 140°W, and the section from the equator to 5°N along 140°15'W. For each section and each parameter there are two plots, one to a depth of 200 db followed by one to 500 db. The contouring uses data averaged over 10 db intervals; the average is assigned to the mid-point of the interval. The first depth interval is centered at 10 db; the last depth interval is centered at 490 db. Contours were done by computer using a linear interpolation scheme. No further smoothing was done to the data. Note that the contour intervals are not uniform.

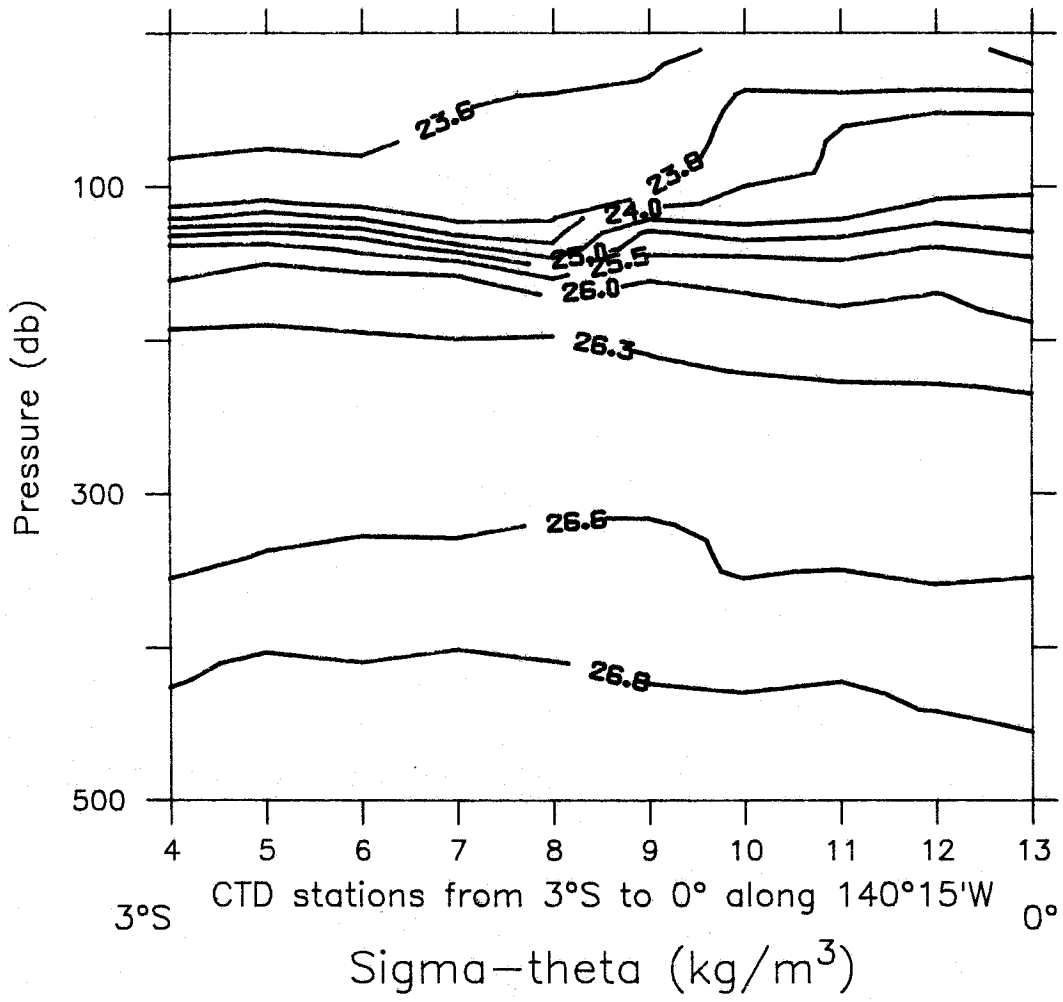

0
100
200
Pressure (db)
24.5
24.0
23.5
23.0
22.0
21.0
20.0
19.0
16.0
14.0
4
5
6
7
8
9
10
11
12
13
3°S CTD stations from 3°S to 0° along 140°15'W 0°
Temperature (deg C)

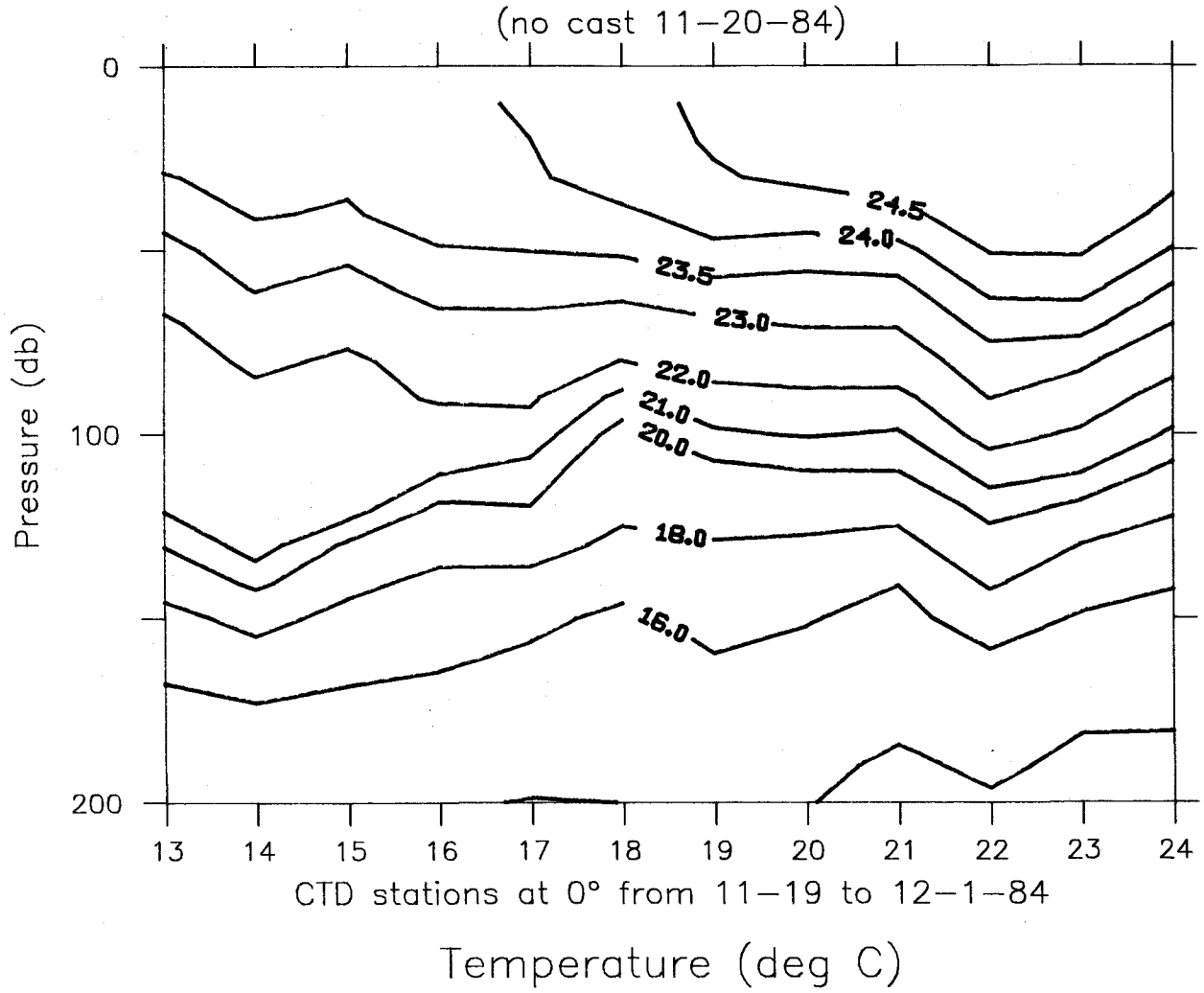

24.5
24.0
23.5
22.0
20.0
18.0
16.0
14.0
12.0
10.0
100
300
500
Pressure (db)
4
5
6
7
8
9
10
11
12
13
3°S
CTD stations from 3°S to 0° along 140°15'W
0°
Temperature (deg C)

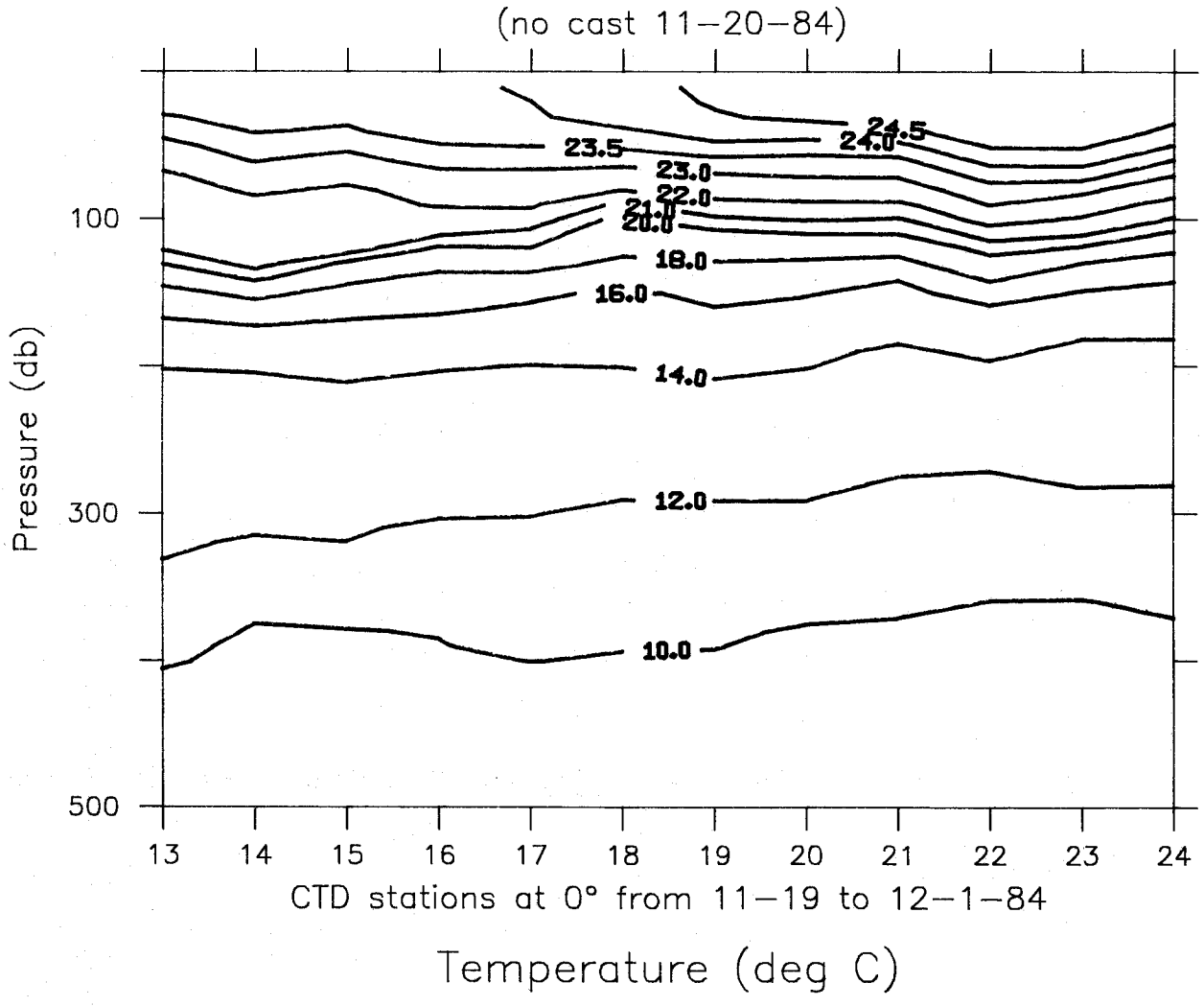

0
100
200
Pressure (db)
34.90
35.00
35.10
35.20
35.30
35.20
35.10
35.00
4
5
6
7
8
9
10
11
12
13
3°S
CTD stations from 3°S to 0° along 140°15'W
0°
Salinity (psu)

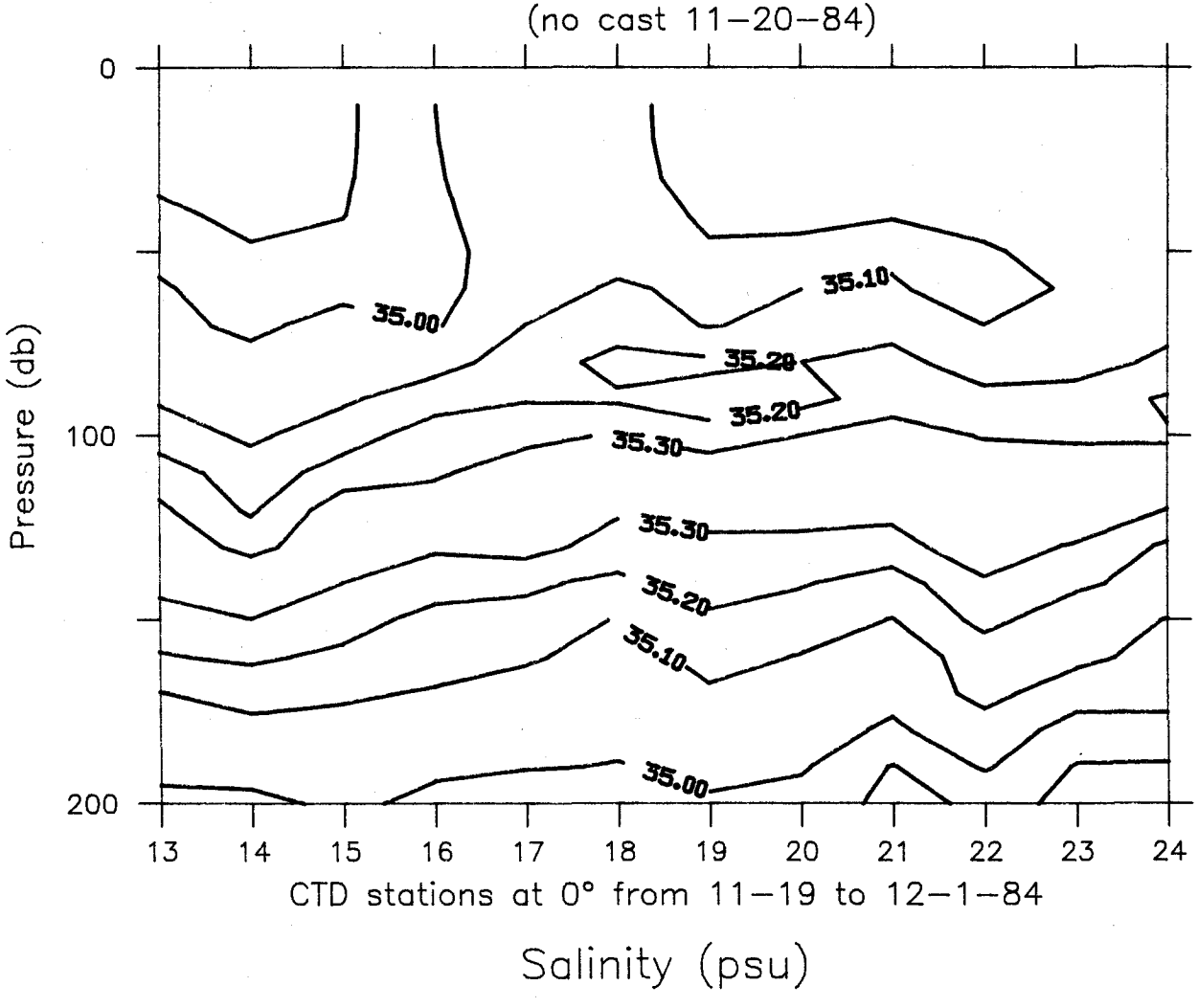

Pressure (db)
100
300
500
35.00
35.10
35.20
35.30
35.40
35.20
35.10
35.00
34.90
34.80
34.70
4
5
6
7
8
9
10
11
12
13
CTD stations from 3°S to 0° along 140°15'W
3°S
0°
Salinity (psu)

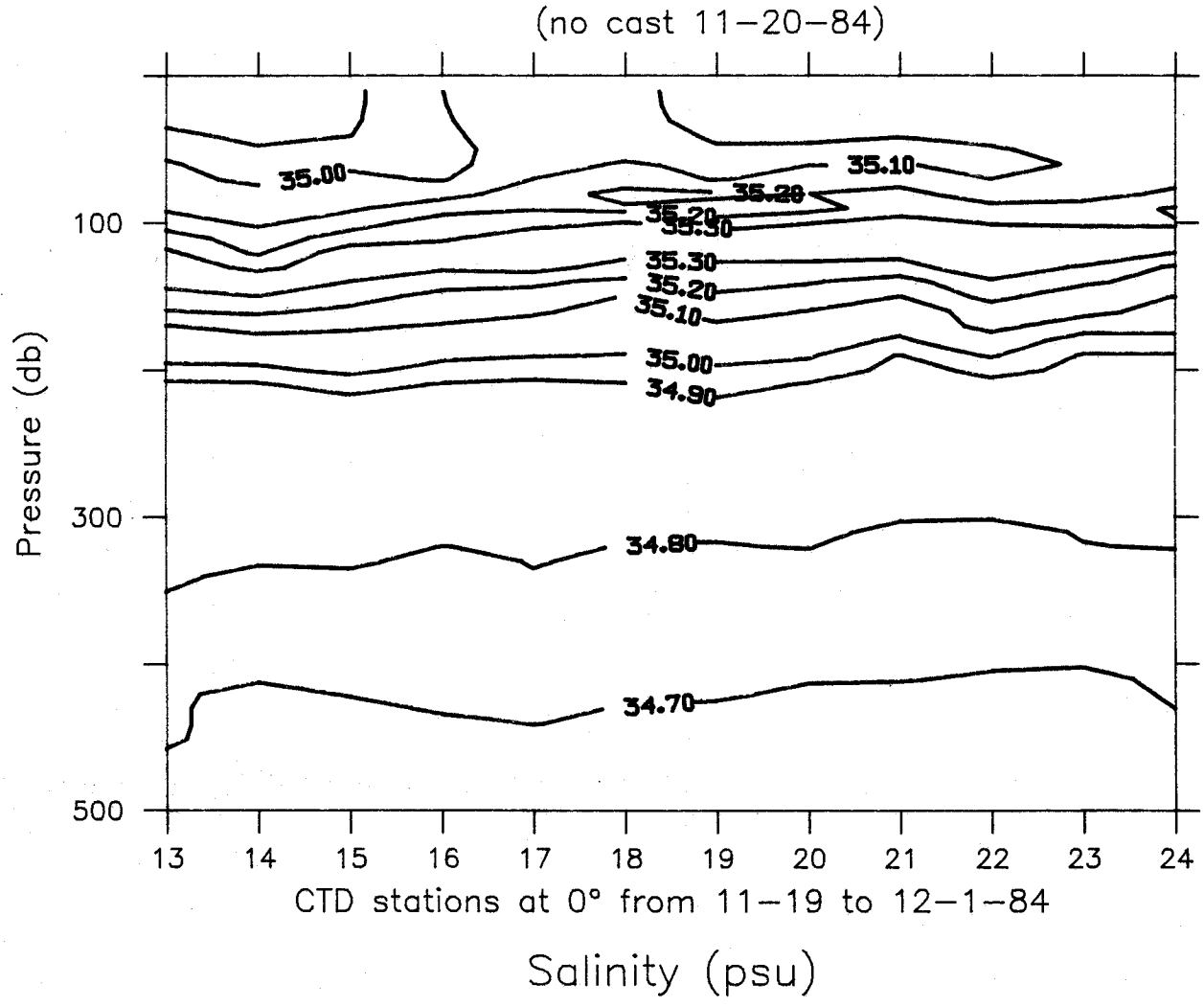

0
100
200
Pressure (db)
23.6
23.8
24.0
24.5
25.0
25.5
26.0
4
5
6
7
8
9
10
11
12
13
3°S
CTD stations from 3°S to 0° along 140°15'W
0°
Sigma–theta (kg/m3)

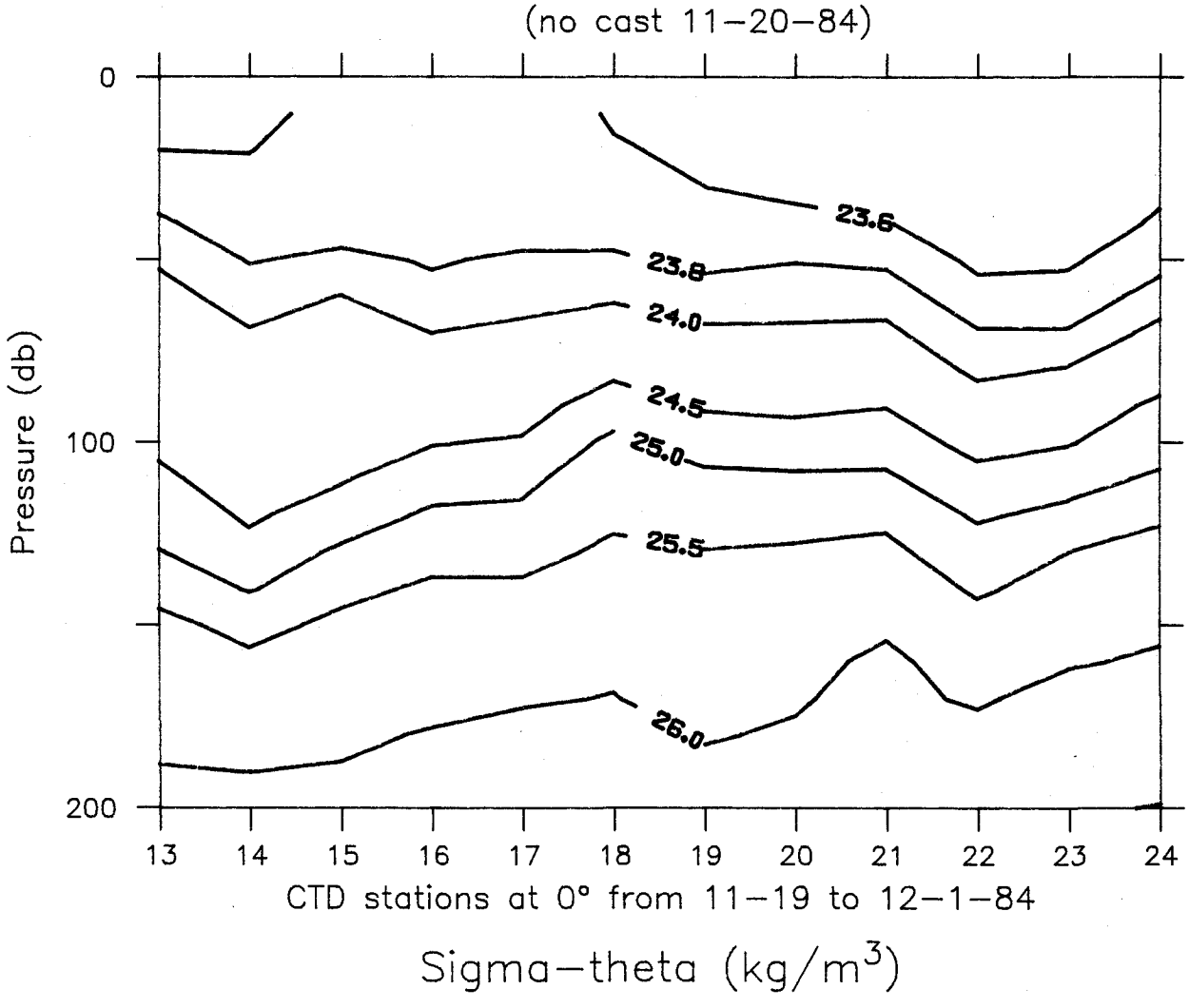

23.6
23.8
24.0
25.0
25.5
26.0
26.3
26.6
26.8
100
300
500
Pressure (db)
4
5
6
7
8
9
10
11
12
13
3°S
CTD stations from 3°S to 0° along 140°15'W
0°
Sigma-theta (kg/m3)

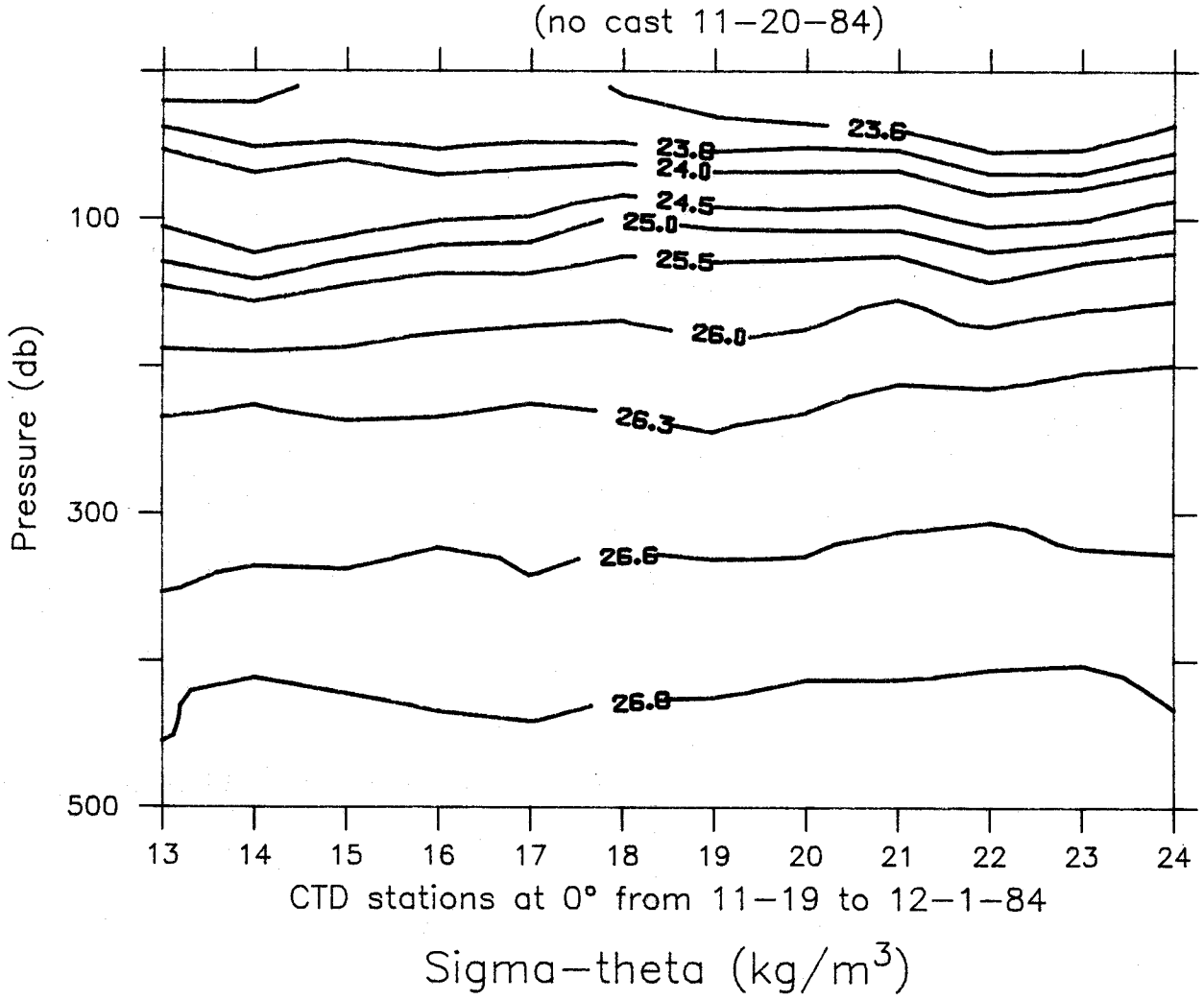

(no cast 11–20–84)
0
100
200
Pressure (db)
24.5
24.0
23.5
23.0
22.0
21.0
20.0
18.0
16.0
13
14
15
16
17
18
19
20
21
22
23
24
CTD stations at 0° from 11–19 to 12–1–84
Temperature (deg C)

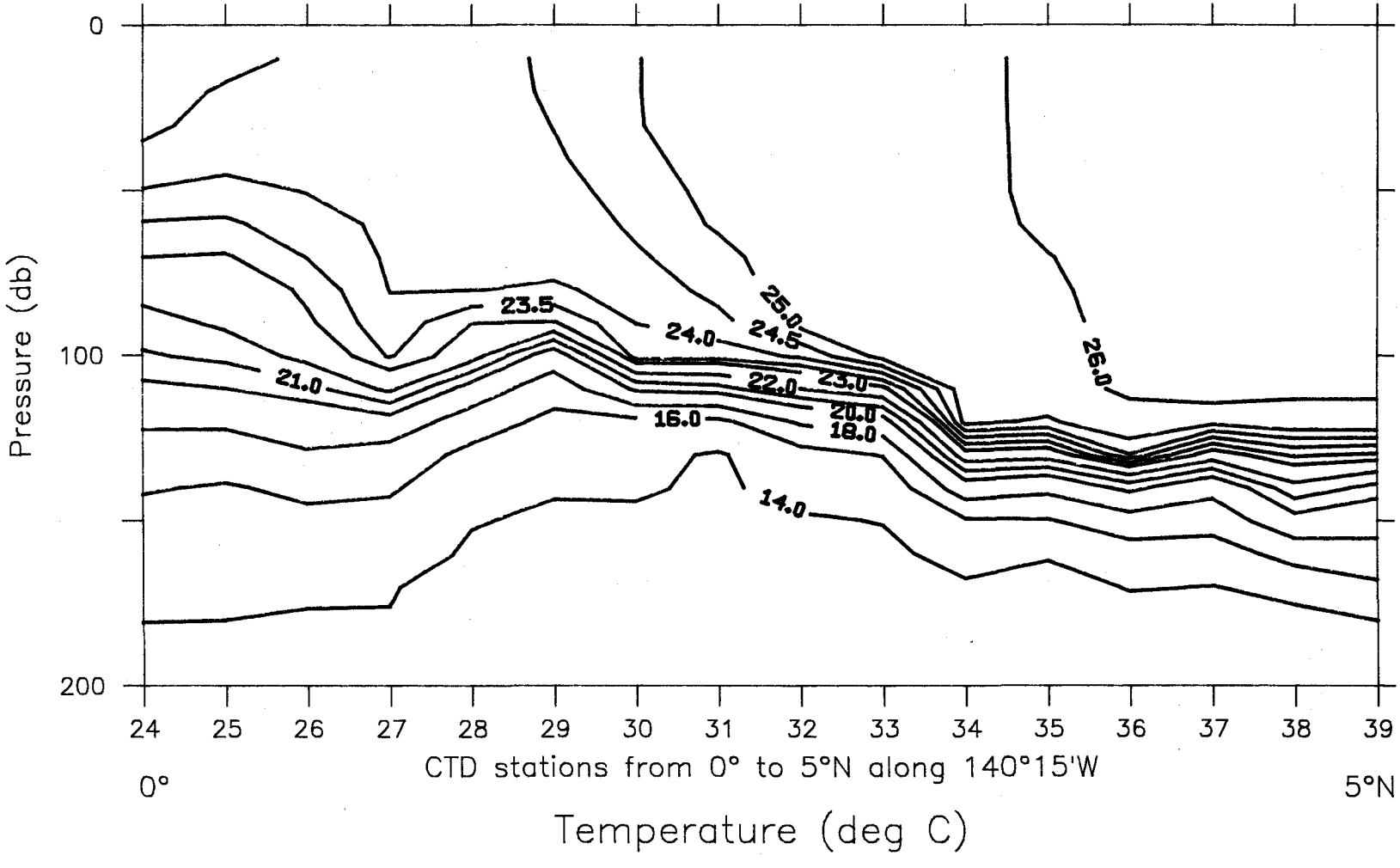

(no cast 11–20–84)
24.5
24.0
23.5
23.0
22.0
21.0
20.0
18.0
16.0
14.0
12.0
10.0
Pressure (db)
100
300
500
13
14
15
16
17
18
19
20
21
22
23
24
CTD stations at 0° from 11–19 to 12–1–84
Temperature (deg C)

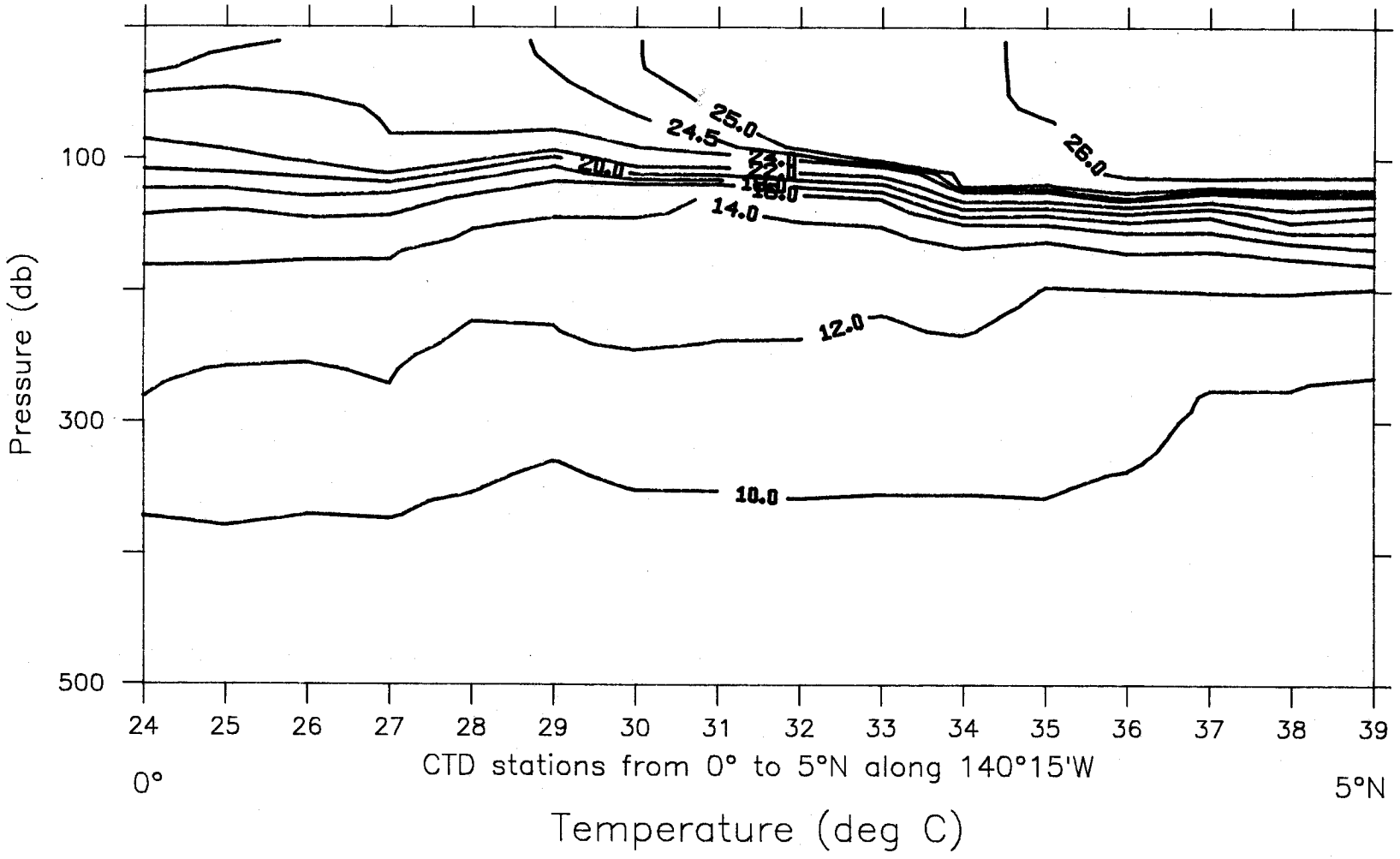

(no cast 11–20–84)
0
100
200
Pressure (db)
35.00
35.10
35.20
35.30
35.20
35.30
35.20
35.10
35.00
13
14
15
16
17
18
19
20
21
22
23
24
CTD stations at 0° from 11–19 to 12–1–84
Salinity (psu)

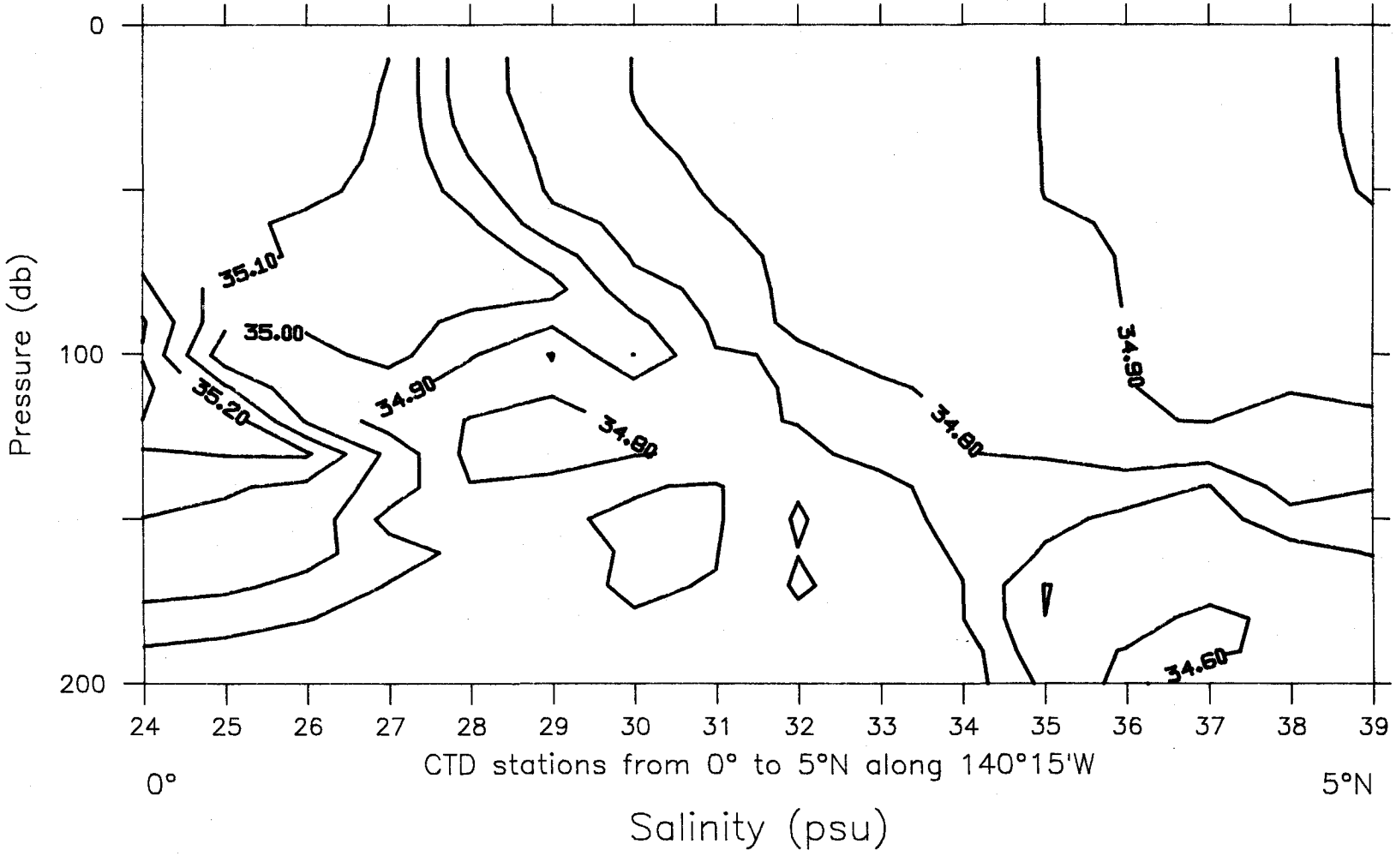

(no cast 11–20–84)
35.00
35.10
35.20
35.30
35.30
35.20
35.10
35.00
34.90
34.80
34.70
100
300
500
Pressure (db)
13
14
15
16
17
18
19
20
21
22
23
24
CTD stations at 0° from 11–19 to 12–1–84
Salinity (psu)

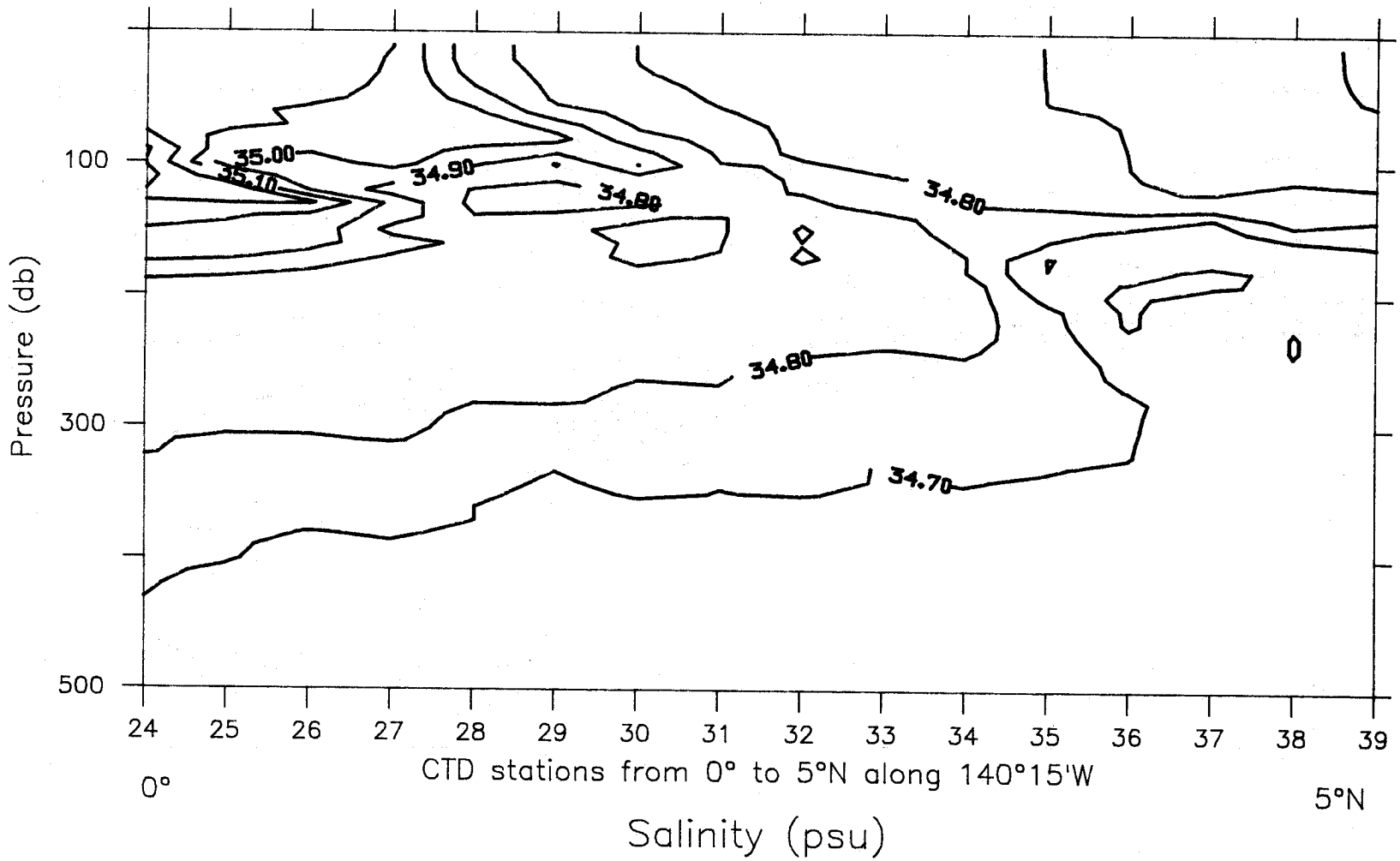

(no cast 11–20–84)
0
100
200
Pressure (db)
23.6
23.8
24.0
24.5
25.0
25.5
26.0
13
14
15
16
17
18
19
20
21
22
23
24
CTD stations at 0° from 11–19 to 12–1–84
Sigma–theta (kg/m3)

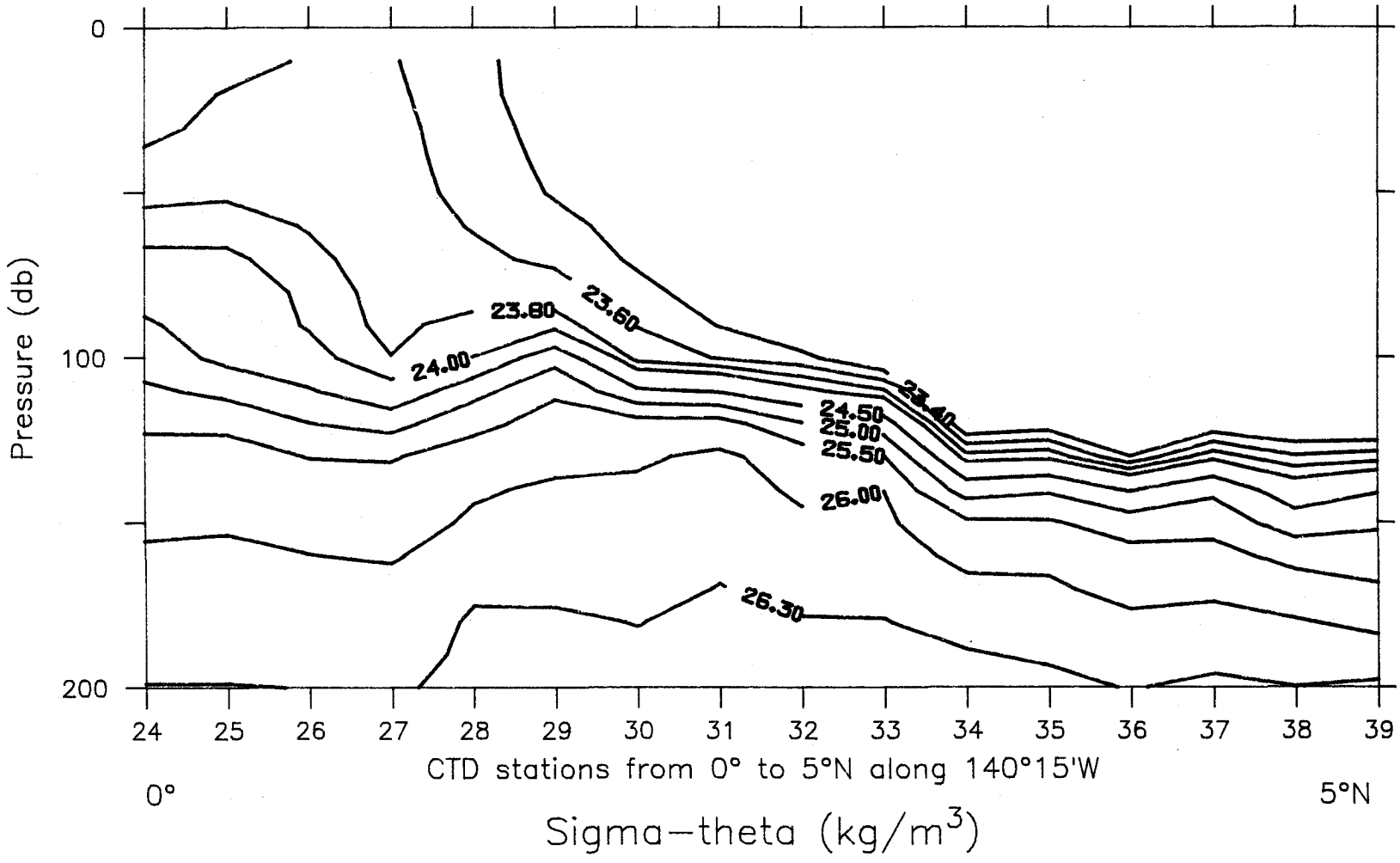

(no cast 11–20–84)
23.6
23.8
24.0
24.5
25.0
25.5
26.0
26.3
26.6
26.8
100
300
500
Pressure (db)
13
14
15
16
17
18
19
20
21
22
23
24
CTD stations at 0° from 11–19 to 12–1–84
Sigma–theta (kg/m3)

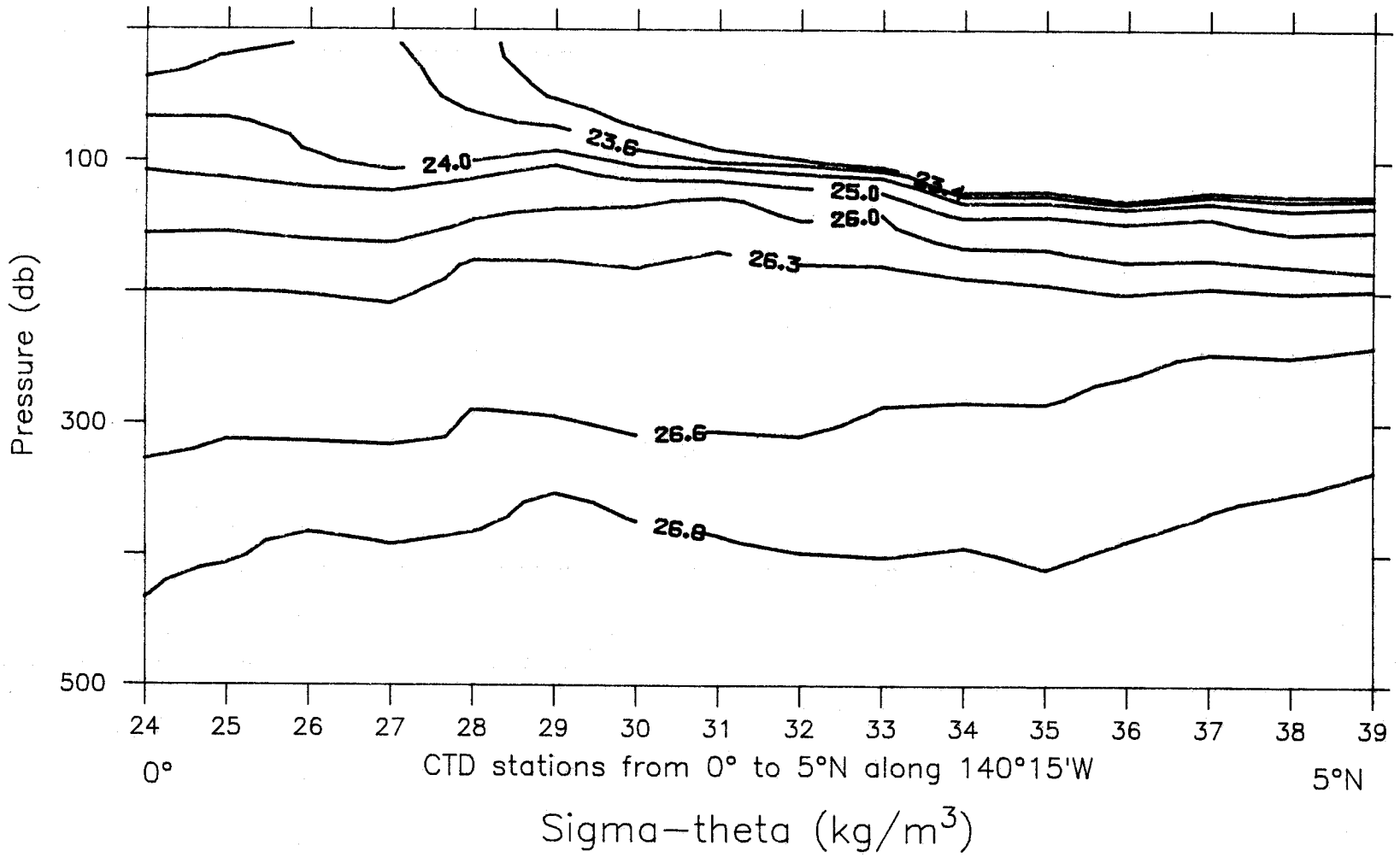

0
100
200
Pressure (db)
23.5
24.0
25.0
24.5
26.0
21.0
22.0
23.0
20.0
18.0
16.0
14.0
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
0°
CTD stations from 0° to 5°N along 140°15'W
5°N
Temperature (deg C)


Pressure (db)
100
300
500
25.0
24.5
26.0
20.0
14.0
12.0
10.0
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
0°
CTD stations from 0° to 5°N along 140°15'W
5°N
Temperature (deg C)


0
100
200
Pressure (db)
35.10
35.00
35.20
34.90
34.90
34.80
34.90
34.60
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
0°
CTD stations from 0° to 5°N along 140°15'W
5°N
Salinity (psu)


Pressure (db)
100
300
500
35.00
35.10
34.90
34.80
34.80
34.80
34.70
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
0°
CTD stations from 0° to 5°N along 140°15'W
5°N
Salinity (psu)


0
100
200
Pressure (db)
23.60
23.80
24.00
24.50
25.00
25.50
26.00
26.30
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
CTD stations from 0° to 5°N along 140°15'W
0°
5°N
Sigma–theta (kg/m3)


Pressure (db)
100
300
500
24.0
23.6
23.1
25.0
26.0
26.3
26.6
26.8
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
0°
CTD stations from 0° to 5°N along 140°15'W
5°N
Sigma–theta (kg/m3)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