

# I.O.S.

CTD DATA FROM DISCOVERY GAP  
AND THE MADEIRA ABYSSAL PLAIN

BY  
P.M. SAUNDERS AND F. DOLAN

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OCEAN DISPOSAL OF HIGH LEVEL RADIOACTIVE WASTE  
A RESEARCH REPORT PREPARED FOR THE DEPARTMENT  
OF THE ENVIRONMENT

INSTITUTE OF  
OCEANOGRAPHIC  
SCIENCES

NATURAL ENVIRONMENT  
RESEARCH COUNCIL

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INSTITUTE OF OCEANOGRAPHIC SCIENCES

WORMLEY

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I.O.S. Report No. 236

March 1987

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**RADIOACTIVE WASTE MANAGEMENT**

Research Programme 1985/87

DoE Report No.: DoE/RW/87.036

Contract Title: Studies of large and local scale advection and dispersion relevant to the Great Meteor East Location.

DoE Reference: PECD7/9/216

Report Title: CTD Data from Discovery Gap and the Madeira Abyssal Plain Discovery Cruise 138

Author: P. M. Saunders and F. Dolan

Date of submission to DoE: 1st March 1987

## Period covered by Report:

This report presents lists and graphs of CTD data taken aboard RRS Discovery on Cruise 138 (17 June - 9 July, 1982). The data, especially that taken on the Madeira abyssal plain, is pertinent to the interpretation of current meter data at the GME study survey site and for the experimental study and the dispersion of SOFAR floats, both of which work is supported under this contract. Since the data was not published in the past, its appearance now seemed appropriate.

All CTD data is compared with reversing thermometer observations and with the determinations of salinity and dissolved oxygen derived from samples. A regional current profile is derived from the hydrographic data.

Keywords: 129,299 - Ocean circulation/dispersal, DoE sponsored research.

This work has been commissioned by the Department of the Environment as part of its radioactive waste management research programme. The results will be used in the formulation of Government policy, but at this stage they do not necessarily represent Government policy.



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## THE COLLECTION OF CTD DATA

The data described in this report was gathered aboard cruise 138 of the RRS Discovery in 1983. The cruise sailed from Gibraltar on 17 June 1983 and docked in Funchal, Madeira on the 9 July: Dr W.J. Gould was the principal scientist and the programme of work was described in Cruise Report No. 152 (1983). Data from seven of the stations on cruise 138 (Numbers 10810-10824) have been reported in Saunders and Manning (1984) but the other nineteen have not been reported to date. This omission is rectified by the appearance of this report.

Stations 10784-10793 (9 in all) were located near Discovery Gap, a deep channel between the Madeira and Iberian abyssal plains near  $37^{\circ} 30'N$   $17^{\circ}W$ : certain inferences concerning the currents have been derived from this data and published by the author (Saunders, 1987a). A group of ten stations in the form of a triangle (of side 500km approximately) were occupied on the deepest parts of the Madeira abyssal plain (see figure 1). These stations contribute important information both for the group of SOFAR floats deployed near  $32^{\circ}N$ ,  $24^{\circ}W$  at a depth of 3000m in February 1985 from the RRS Charles Darwin (see Cruise Report No. 173) and for the 3 year long currents measured near the Great Meteor East (GME) study site area near  $31^{\circ}30'N$   $25^{\circ}W$  (Saunders, 1987b, in course of preparation). A final group of stations were occupied on the lower continental rise, about 150 miles W of Madeira, and this data was included in the report of Saunders and Manning referred to earlier: they are not repeated here.

The CTD stations were made with a NBIS instrument equipped with a Beckman dissolved oxygen sensor, 1m path transmissometer from Sea Tech, Inc. with a General Oceanics Multisampler alongside: the latter was equipped with brand new bottles. A quite general review of our procedures is found in Saunders (1985). Table 1 gives details of the measurements and of their locations.

## RECONCILIATION OF CTD DATA WITH MULTISAMPLER DATA

The procedures adopted for cruise 138 are identical to those employed for cruise 139: for economy but comprehension we summarise them here.

## (a) Pressure

The calibration equation based on laboratory measurements was taken to be:-

$$p = 0.1 p_{raw} - 10$$

Differences between the pressure measured by the CTD and by pairs of reversing thermometers are shown in Table 2. The deep pressure differences are slightly larger than usually found but still quite small.

## (b) Temperature

The calibration equation used was:-

$$T = .00049943 T_{raw} + .027$$

The calibration of the same platinum resistance thermometer used on cruise 162 in September 1986 did not differ by more than a few millidegrees from the above, attesting to its stability. A comparison is made between CTD temperatures and reversing thermometers, separating deep and shallow measurements, in Table 2. On stations 10797, 10798 a second CTD unit was employed: on station 10803 both CTDs used on the cruise were lowered together. On the up cast temperature were measured at the same pressure: the differences were only .001 for temperatures less than 5°C.

## (c) Salinity

Salinity is not calibrated in the laboratory at IOS. In the N.E. Atlantic the sample measurements show remarkably little scatter about the expression (Saunders, 1986)

$$S = 34.698 + .098\theta$$

where  $\theta$  is the potential temperature. The cell factor required to bring the CTD salinities into agreement with the above equation in the interval  $2.1 < \theta < 2.3$  was calculated, applied and shown in Table 1. For the first seven stations the conductivity unit was stable but after being fouled by a large ( $1m^2$ ) mass of red biological matter on station 10795 (which data was discarded) the sensor began to drift. It was replaced on station 10809.

(d) Oxygen

The procedure used to determine dissolved oxygen is described in Saunders and Manning (1984). The calibration constants which were used were fitted to sample measurements taken on cruise 139 and the resulting oxygen estimates for cruise 138 are poor. Rescaling the concentrations to bring the 4000db value to  $5.67\text{ml l}^{-3}$  is suggested (see Saunders 1986).

(e) Transmittance

Potential Transmittance measurements, which takes account of the increasing mass of clear water in the 1m path of the instrument with increasing pressure, was calculated with the algorithm described in Saunders and Manning (1984). The mean potential transmittance for 16 stations at 4000db is 69.3% per metre with standard deviation  $\pm 2.5\%$ .

#### **COMPUTER PROCESSING OF CTD DATA**

Data processing ashore starts with raw one-second average values obtained from the ship-borne PDP11/34 system. The G-EXEC file handling package was employed on the Honeywell 66/DPS-300 at IOS Bidston. The computation path is described in general terms in Table 3: see also Saunders and Manning (1984) and Saunders (1985).

Standard plots and lists occupy the main body of the report. Derived quantities have been computed from algorithms published in the UNESCO Technical Paper on Marine Science No. 44 (Fofonoff and Millard, 1983).

#### **REGIONAL CURRENT PROFILE ON THE MADEIRA ABYSSAL PLAIN**

Data from 10 full-depth stations, 10797-10810 which are arranged in the form of a triangle with apex to the South (fig. 1), have been analysed and the results are presented in the form of current profile versus depth or hodograph. Fig. 2 (upper) reveals the current hodograph derived by fitting a plane surface to the dynamic heights printed in the station lists at 100, 200, 400db intervals. The fitting procedure provides estimates of the slope of the surface and its uncertainty (both in a least square sense): from these slopes, currents are derived via the geostrophic relation. The standard error of the current estimate

relative to an arbitrary origin at 5200db is plotted at 3 levels as crosses and is typically 20-35% of the magnitude of the current.

The lower half of figure 2 shows a second profile which is quite similar in character. This profile is constructed by making minimum adjustments to the slopes of density surfaces derived by fitting a plane to the distribution of density at fixed levels. These 'minimum' adjustments ensure

- (1) the 3 dimensional flow vector lies on the density surface
- (2) north-south components of the flow conserve potential vorticity.

Vertical integration then results in a current profile: if the adjustments were zero the profile shape would be identical to that in the upper figure. In this way, providing the 'minimum' adjustments are less than or comparable to the standard errors of the estimates from the data, the method provides an absolute velocity hodograph (Coats, 1981). The upper profile has also been converted to an absolute hodograph by minimising the residual in the density conservation equation, namely the extent to which the 3-dimensional flow vector does not lie on the density surface. No profile adjustment is made by this method which closely follows the work of Olbers et al., 1986.

Both profiles, it will be noted, predict an eastward component of the flow at all levels with a minimum absolute current near 2400db. The near bottom velocity is ENE, about 1cm/s, and the near surface flow is SE, about 4cm/s. The method averages the results for the region covered by the stations.

#### **ACKNOWLEDGEMENTS**

The authors are grateful to Messrs. J. Moorey (salinity, thermometers and oxygen), J. Smithers (CTD) and Dr. R. T. Pollard (CTD logging) who assisted at sea. Dr. W. J. Gould was the chief scientist on Cruise 138 and his contribution is also gratefully acknowledged.

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**TABLE 1**  
**HYDROGRAPHIC STATION LIST**

Station No	Time Down	Date 1983	Lat. N	Long. W	Water Depth m	Salra
10784	1630	19-VI	37 38.3	13 48.2	4506	.998729
10785	2249	20-VI	37 20.4	15 49.9	5056	.998823
19786	1702	21-VI	37 09.6	16 42.6	4174	.998786
10787	2244	21-VI	36 51.1	16 40.5	4654	.998786
10788	0402	22-VI	36 56.8	16 40.2	4721	.998794
10789	1225	22-VI	37 04.8	16 42.1	4485	.998781
10790	1942	22-VI	36 44.7	16 37.1	4056	.998783
10791-1	2100	23-VI	36 36.2	16 49.1		.998853
Yo-Yo-6	0216	24-VI	36 37.0	16 52.5	5105	
10792	0839	24-VI	36 30.0	17 26.1	5087	.998808
10793	1822	24-VI	36 29.7	18 31.8	5544	.998475
10797	2259	25-VI	34 59.6	21 19.4	5168	2nd inst
10798	1208	26-VI	34 37.3	23 01.3	5190	"
10799	2302	26-VI	34 39.9	24 19.7	5257	.998761
10802	1145	29-VI	34 27.2	26 01.5	5006	.998769
10803	0136	30-VI	33 00.5	25 16.4	5366	.996241
10804	1902	30-VI	31 30.1	24 22.1	5428	.997050
10805	1002	1-VII	30 00.2	23 30.8	5271	.996983
10807	1152	2-VII	31 40.8	22 34.8	5205	.994516
10809	0707	3-VII	32 59.9	23 30.1	5412	1.000105
10810	0752	4-VII	33 19.4	21 49.6	5314	1.000275

**TABLE 2**  
**FIT OF CTD DATA TO ROSETTE SAMPLE VALUES**

Variable	Range	Difference between CTD and Rosette		
		Mean	r.m.s.	Number
Pressure	0-2000db	0.46	2.02	13
	2000-6000db	4.33	6.57	30
Temperature	5-23 deg C	0.018	0.272	34
	2-5 deg C	0.003	0.017	30
Salinity (PSU)	0-2000db	0.007	0.019	52
	2000-6000db	0.001	0.004	48
Oxygen (ml/l)	0-2000db	0.15	0.16	7
	2000-6000db	-0.03	0.17	8

TABLE 3  
DATA PROCESSING PATH

<u>Stage</u>	
CTDIN	Input raw 1-second averaged data; sketch them
CTD0	Provisional edit of noisy variables
CTD1	Calibrate p, T; compute provisional S, θ; list
CTD2	Compute potential transmittance and salinity correction
CTD3	Lag oxygen current and correct salinity
CTD4	Calculate dissolved oxygen concentration
CTD5	Truncate data ends and identify suspect data
CTD6	Edit selected suspect data
CTD7	Create 5db average values for down lowering
CTD8	Fill data gaps at start of lowering
CTDPLOT	Plot 5db average values (0-2000db)
BOTPLT	Plot θ, S, Potran v pressure (p>3500db)
CTDARCH	Archive 5db average values to tape in GF3 format
CTD9	Construct a station list

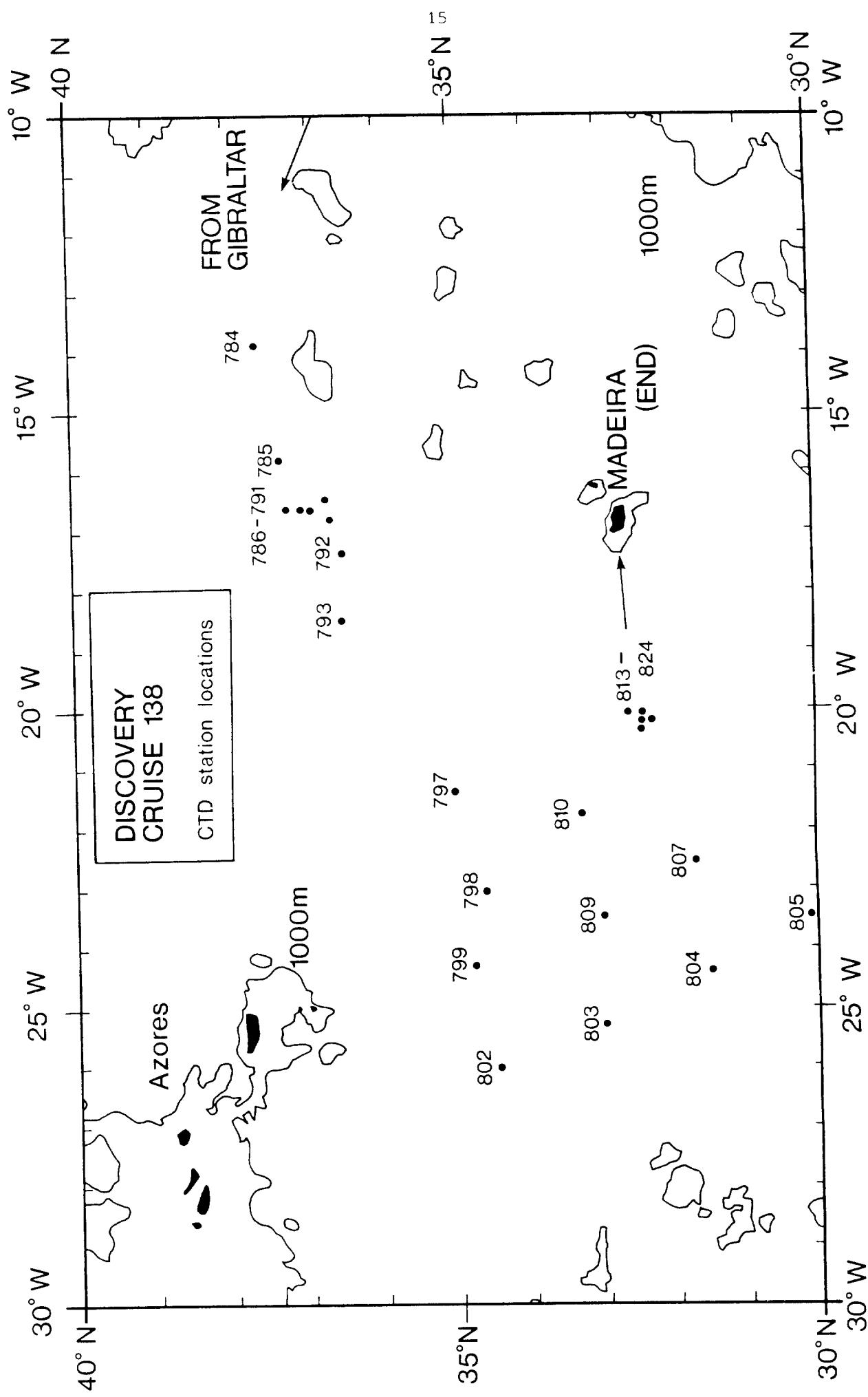


Figure 1 Location of CTD stations on Discovery Cruise 138

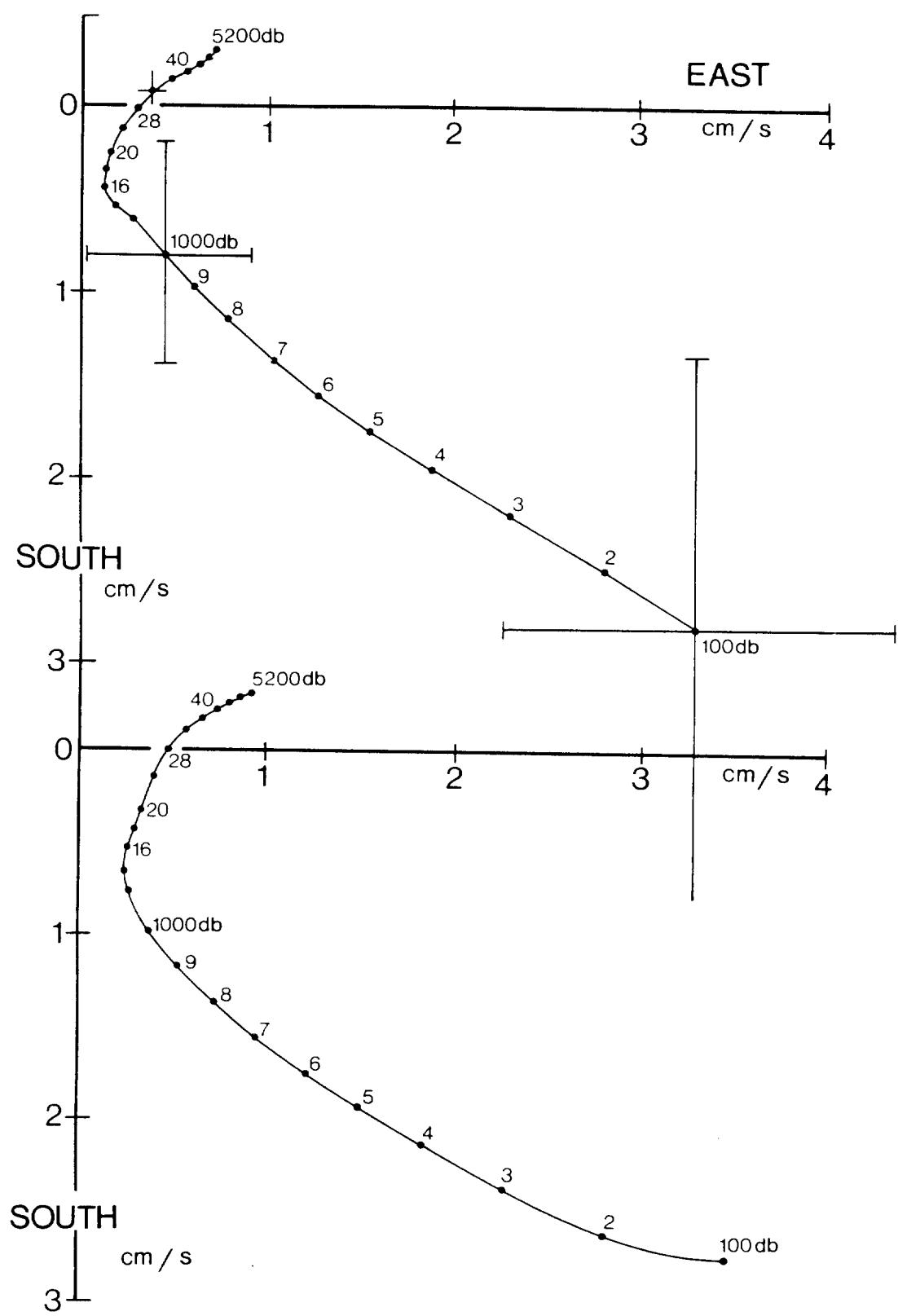
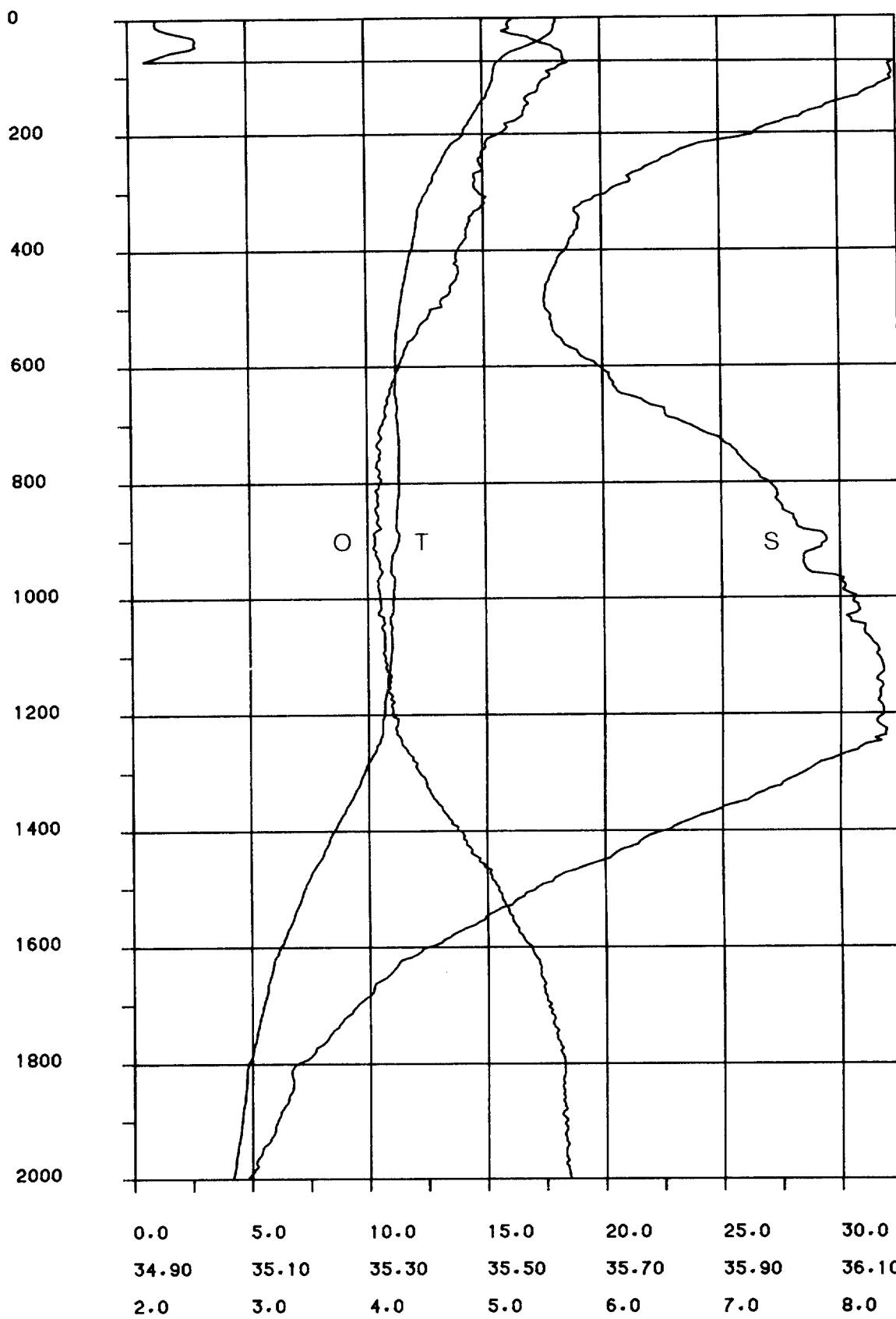
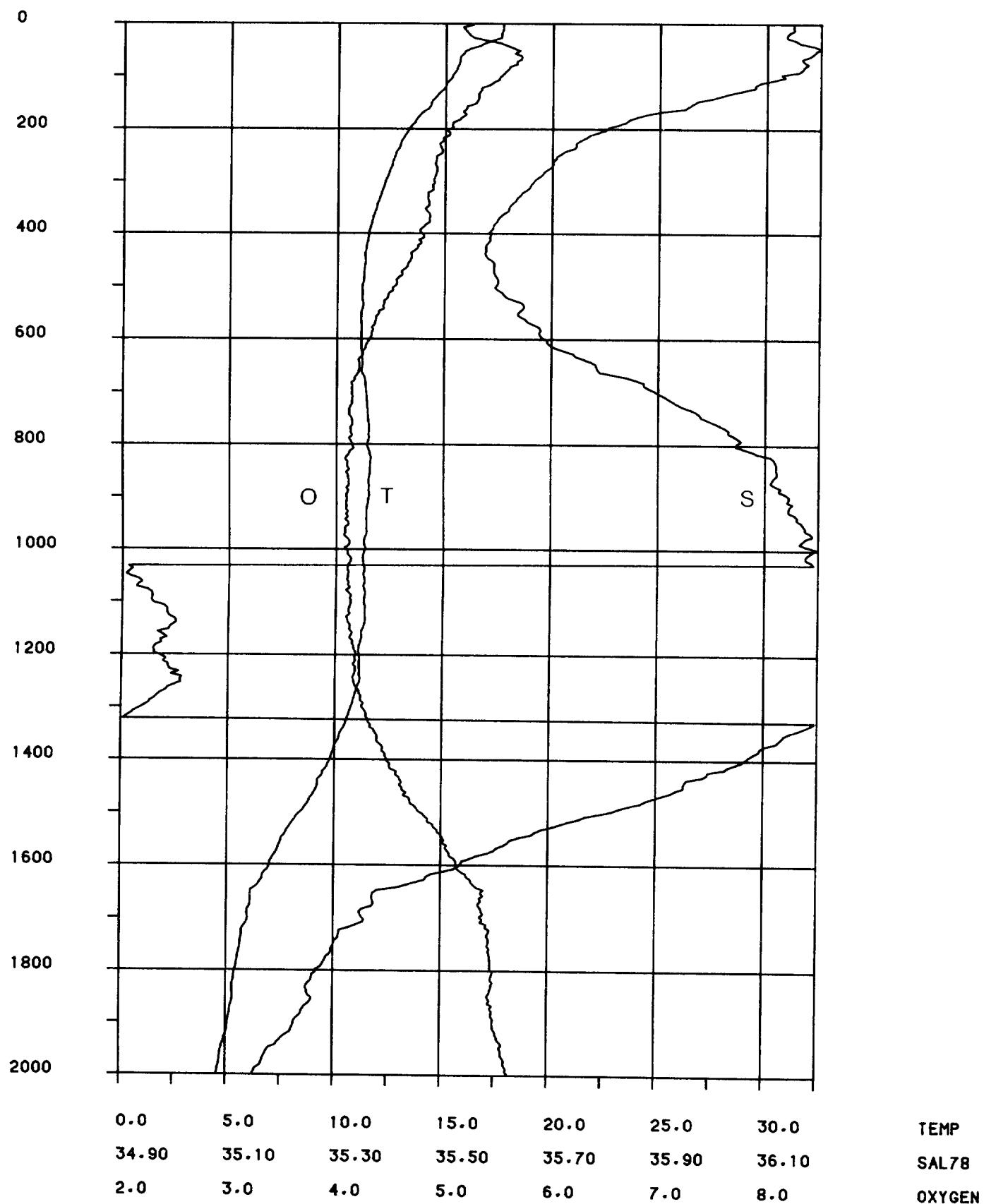


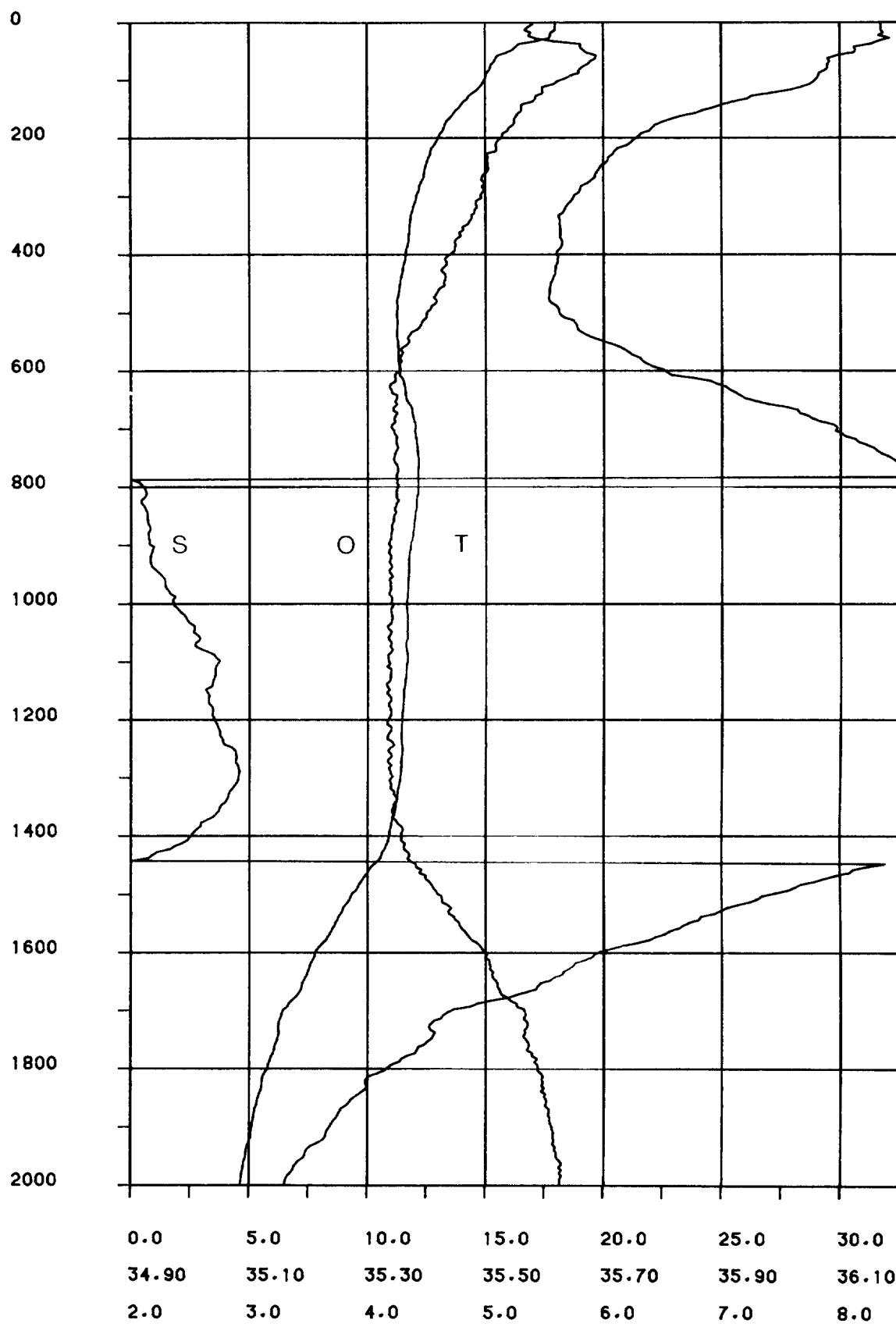
Figure 2 Current hodograph for Maderia Abyssal Plain based on stations 10797-10810

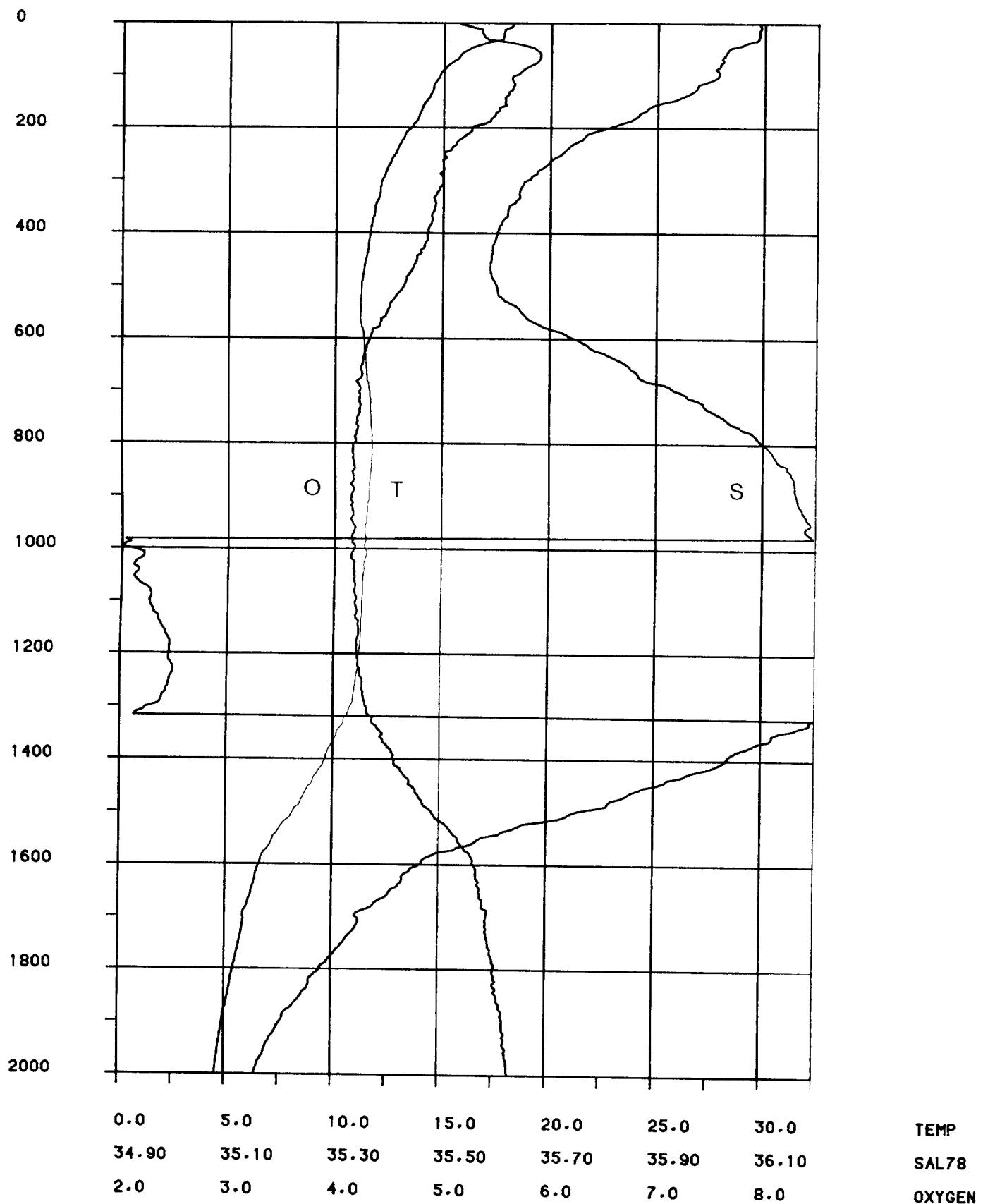
upper origin derived by method of Olbers et al.

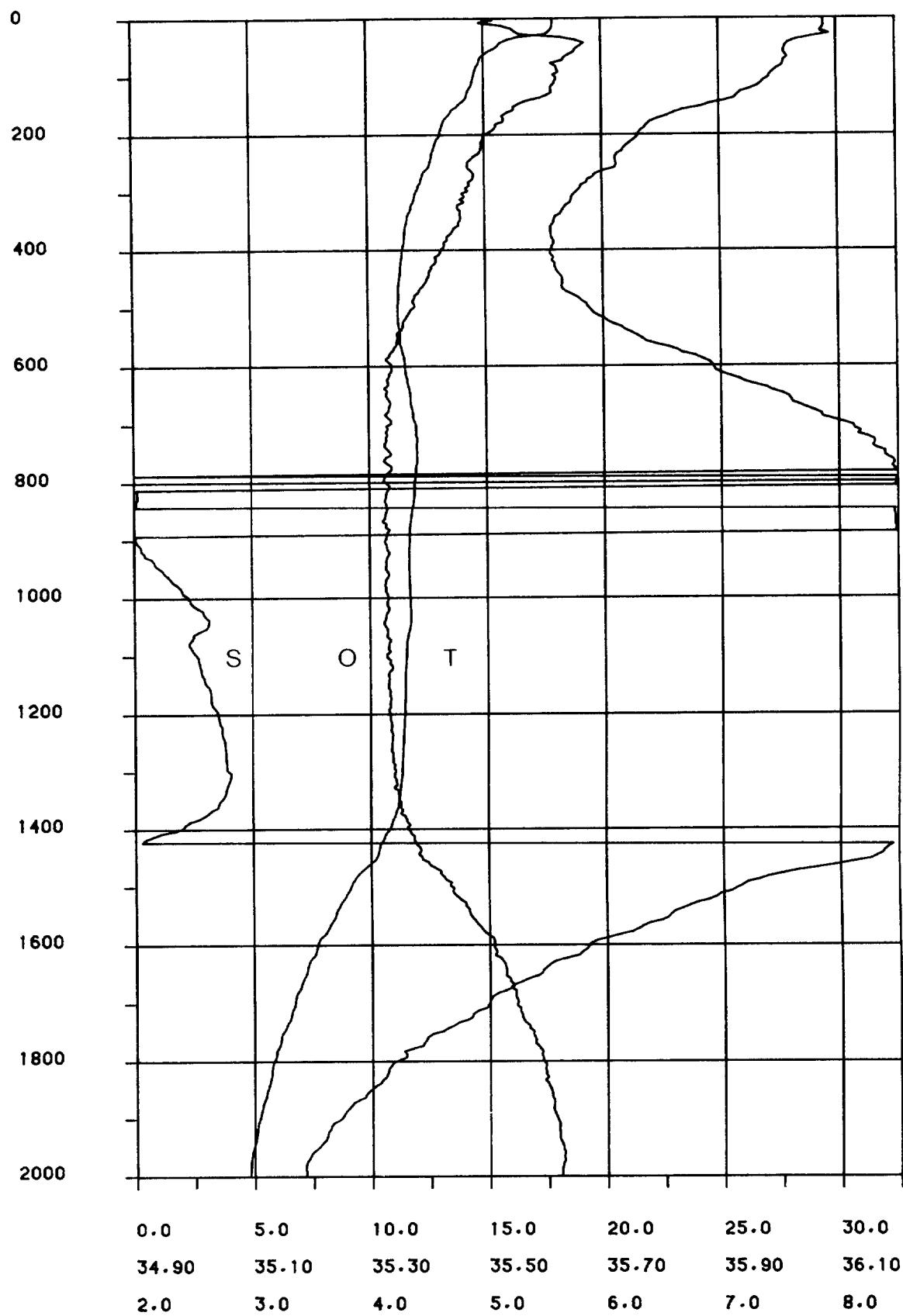
lower adjusted hodograph (Coats)

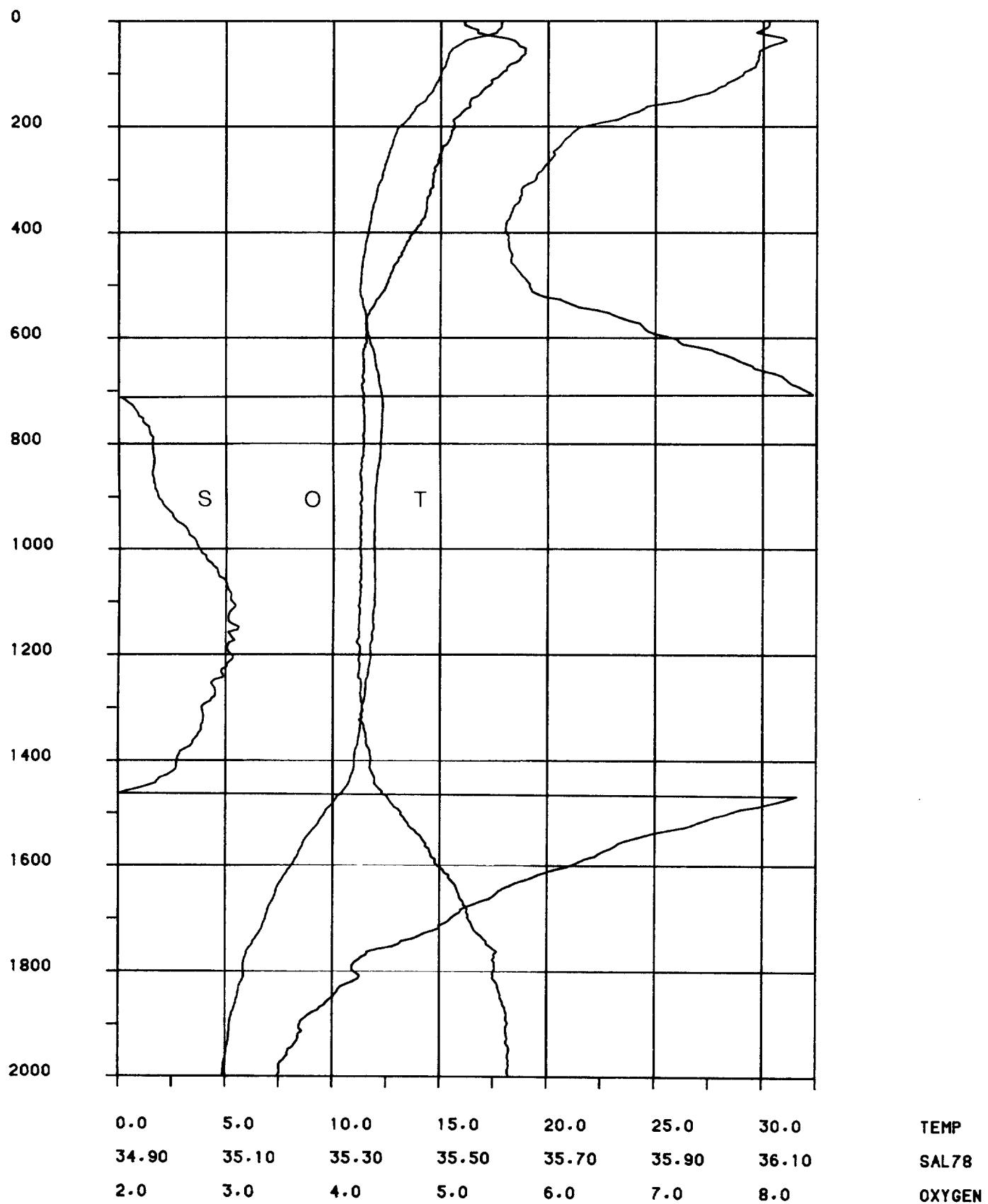


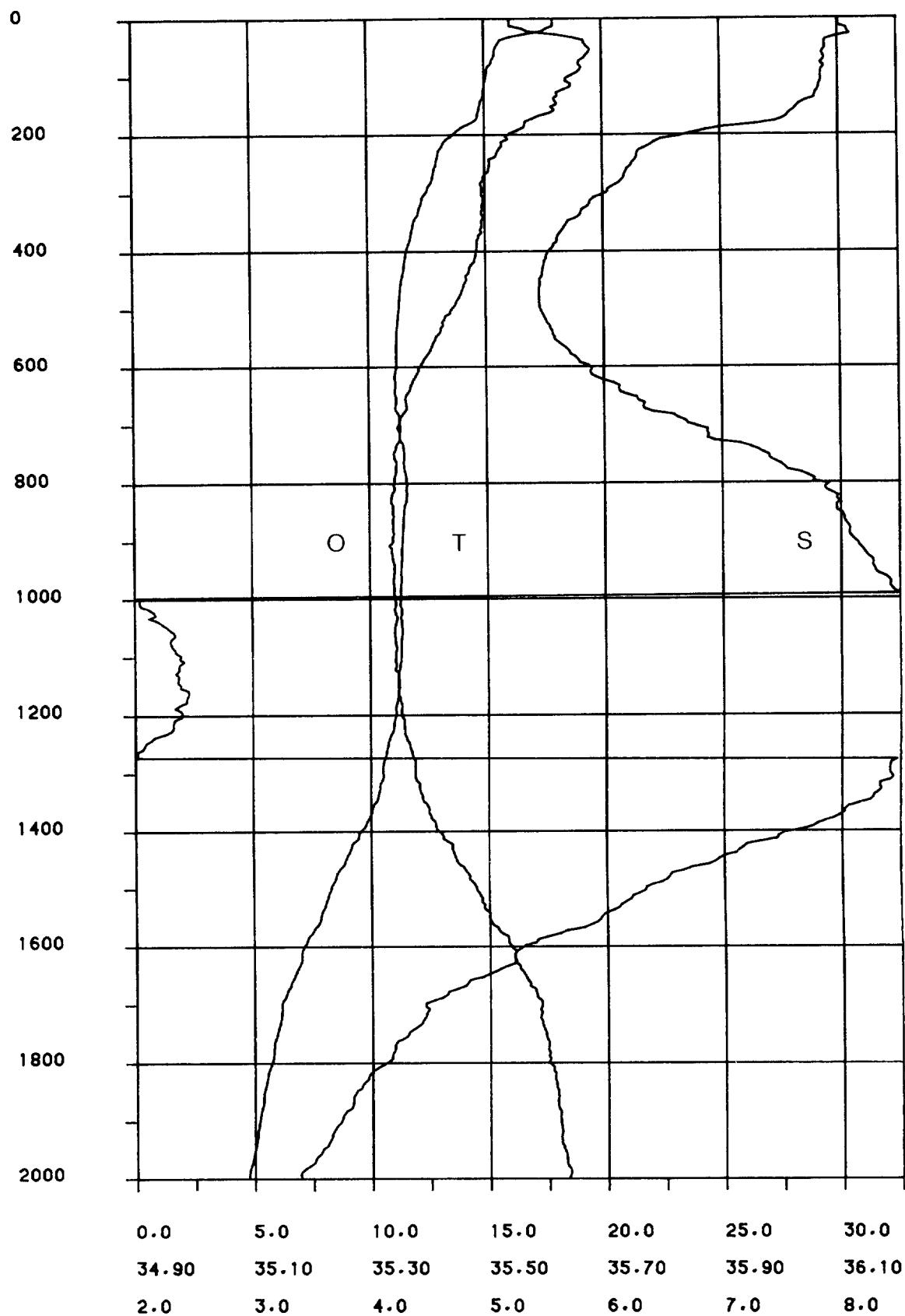


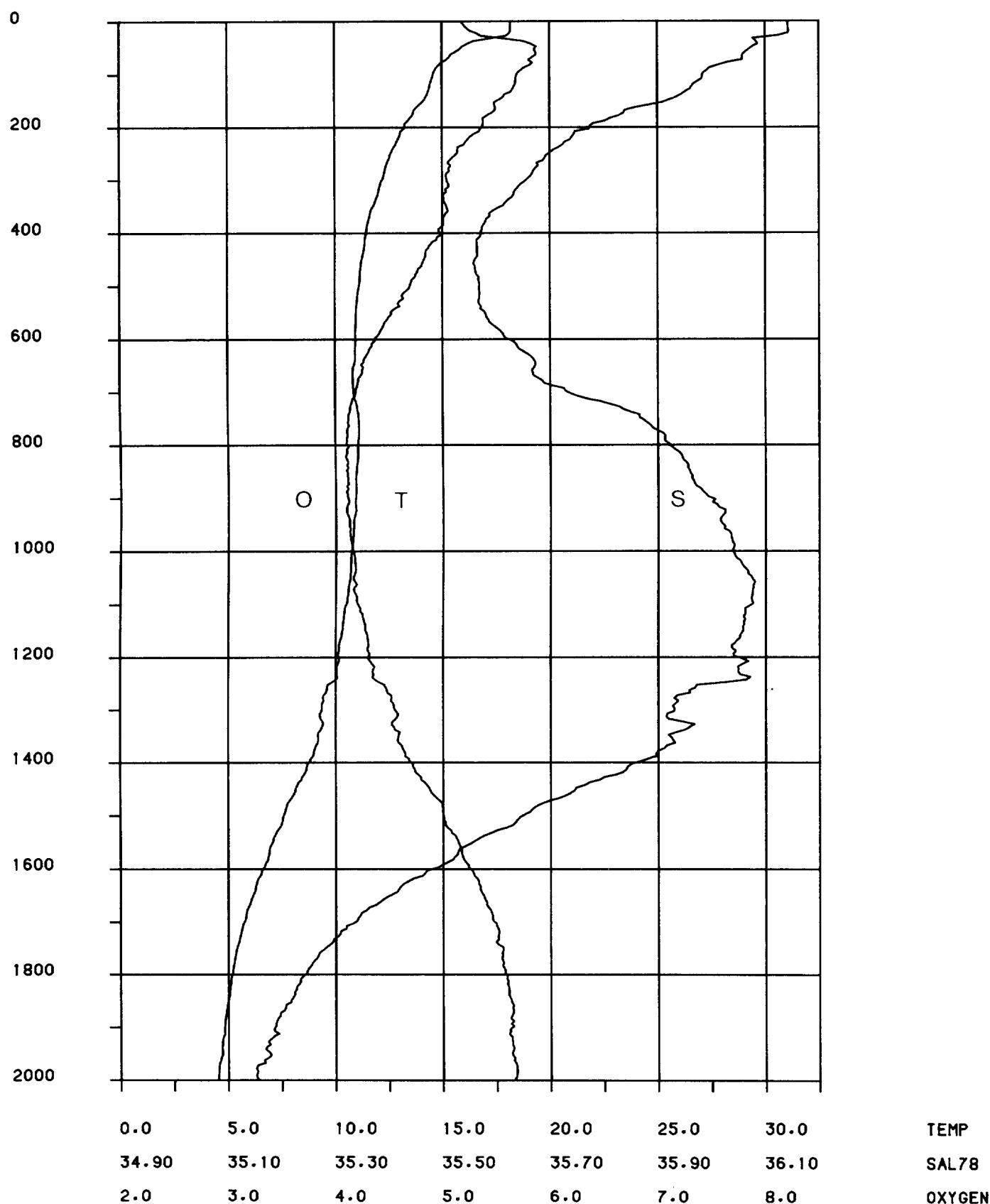






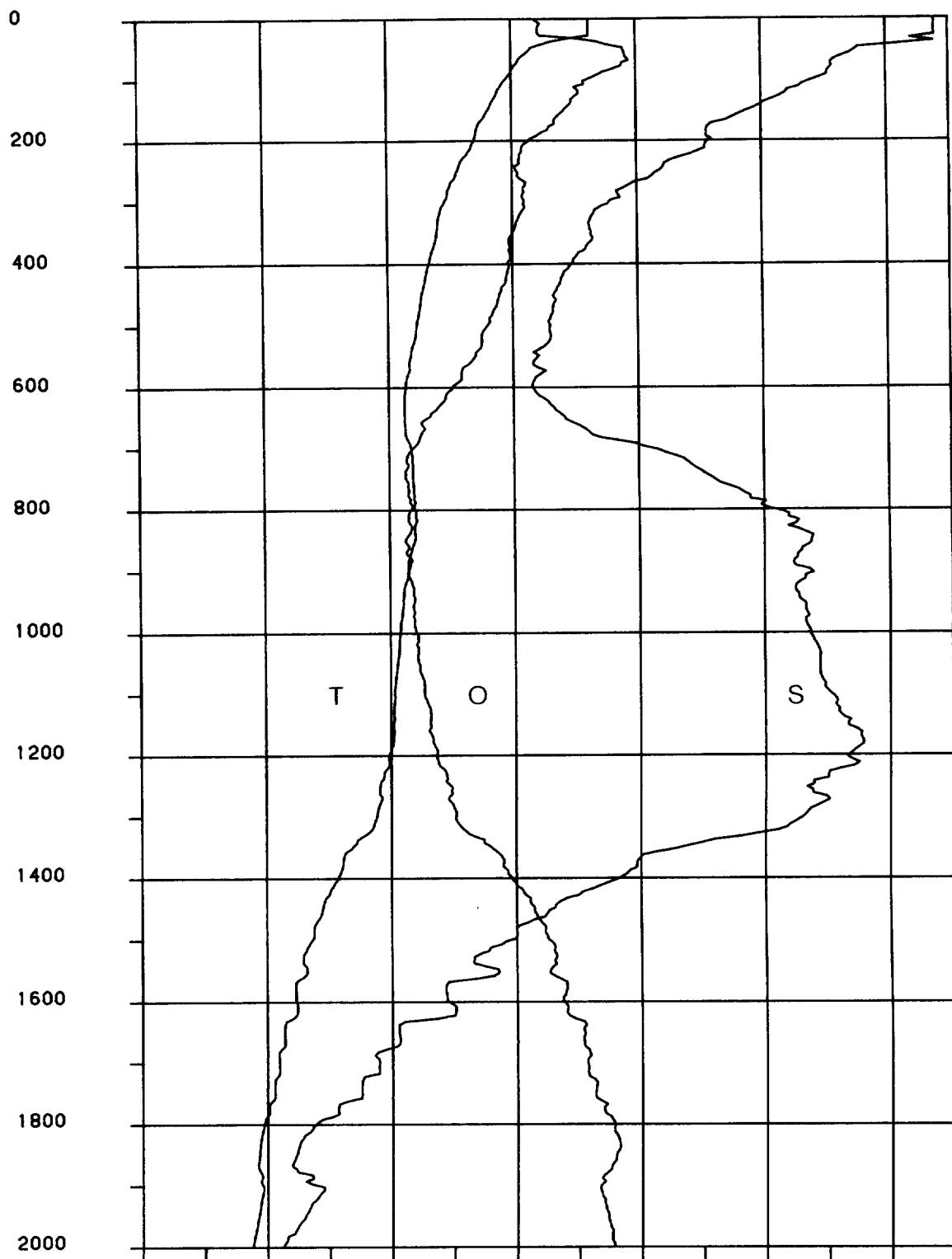




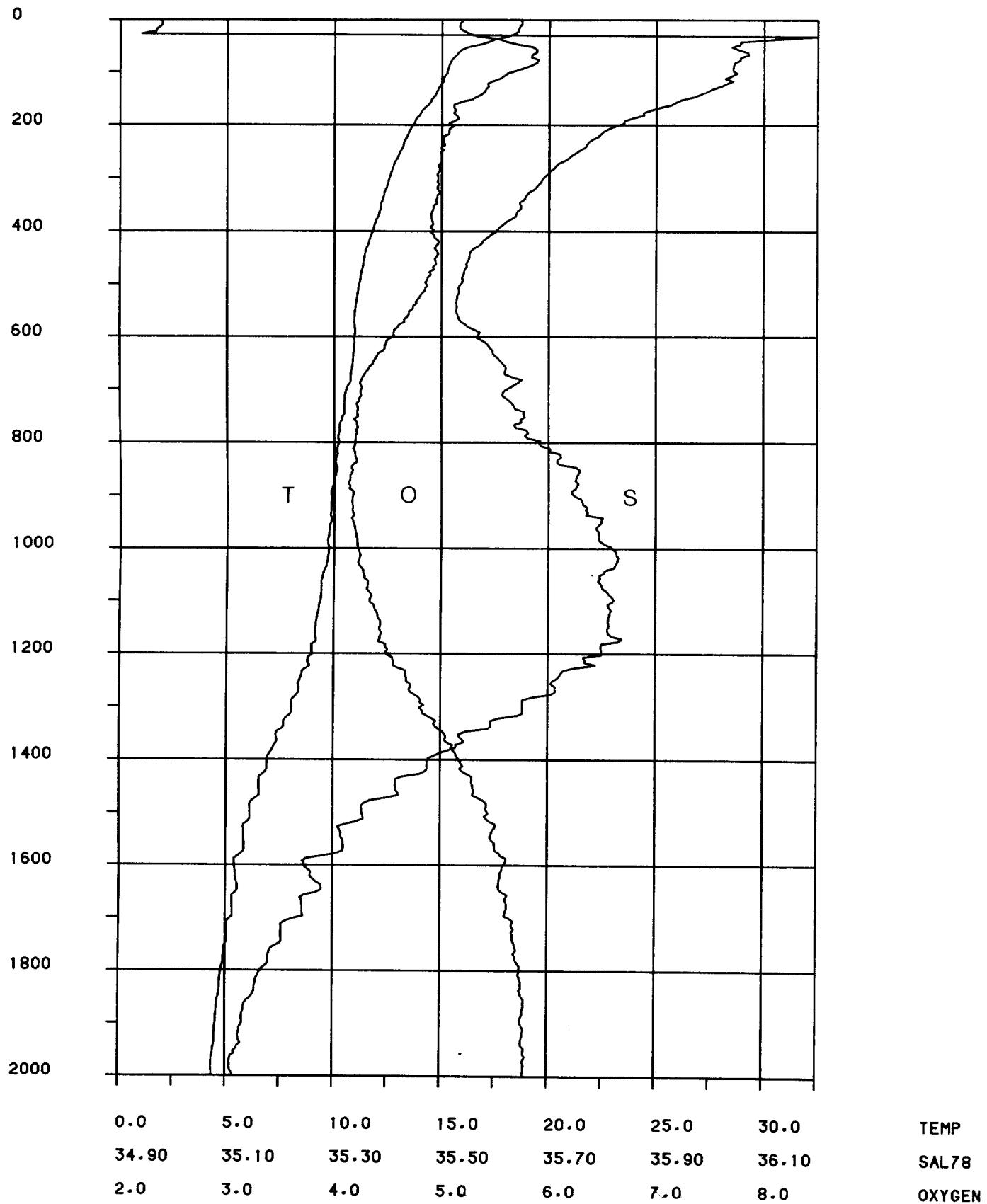


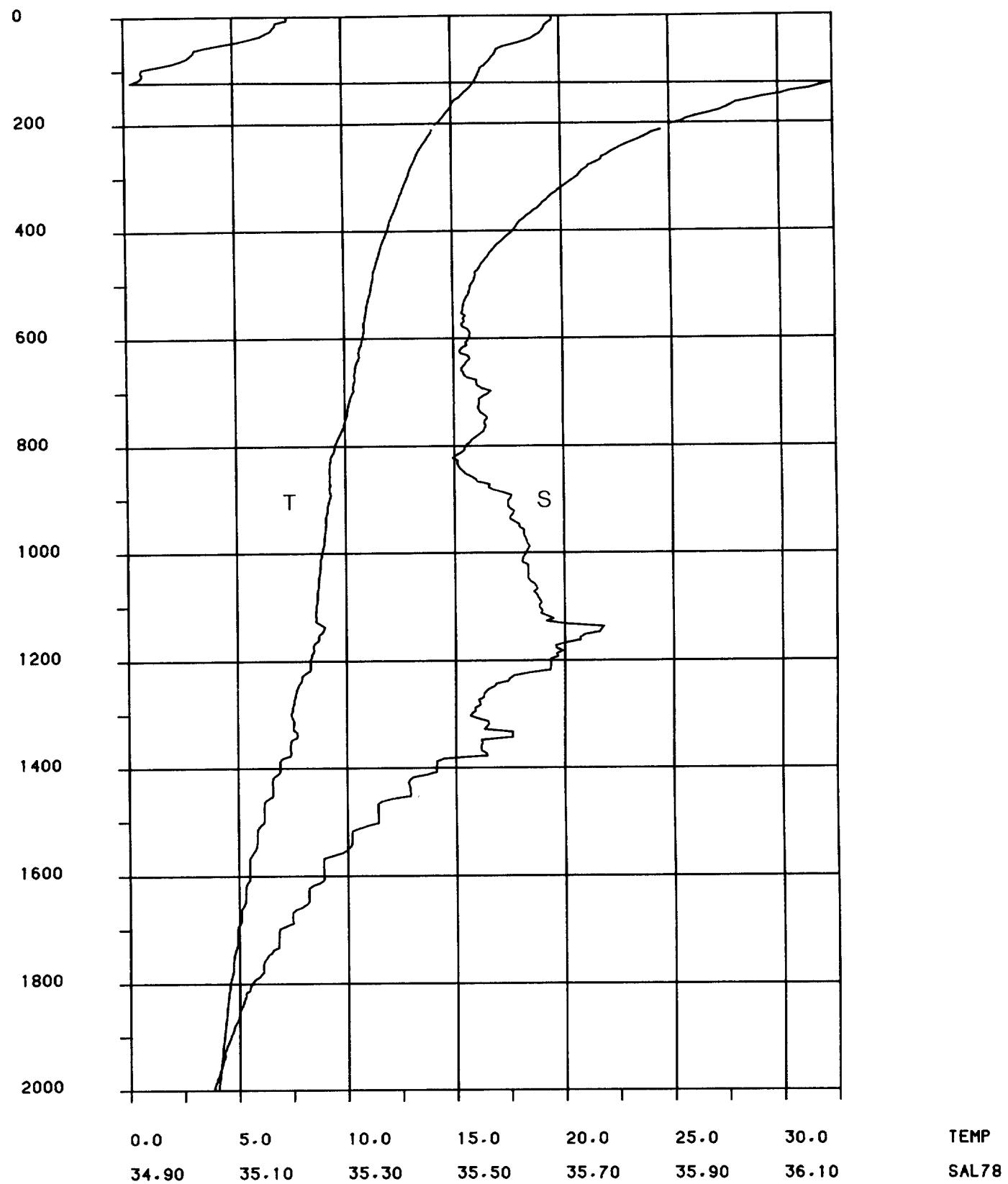
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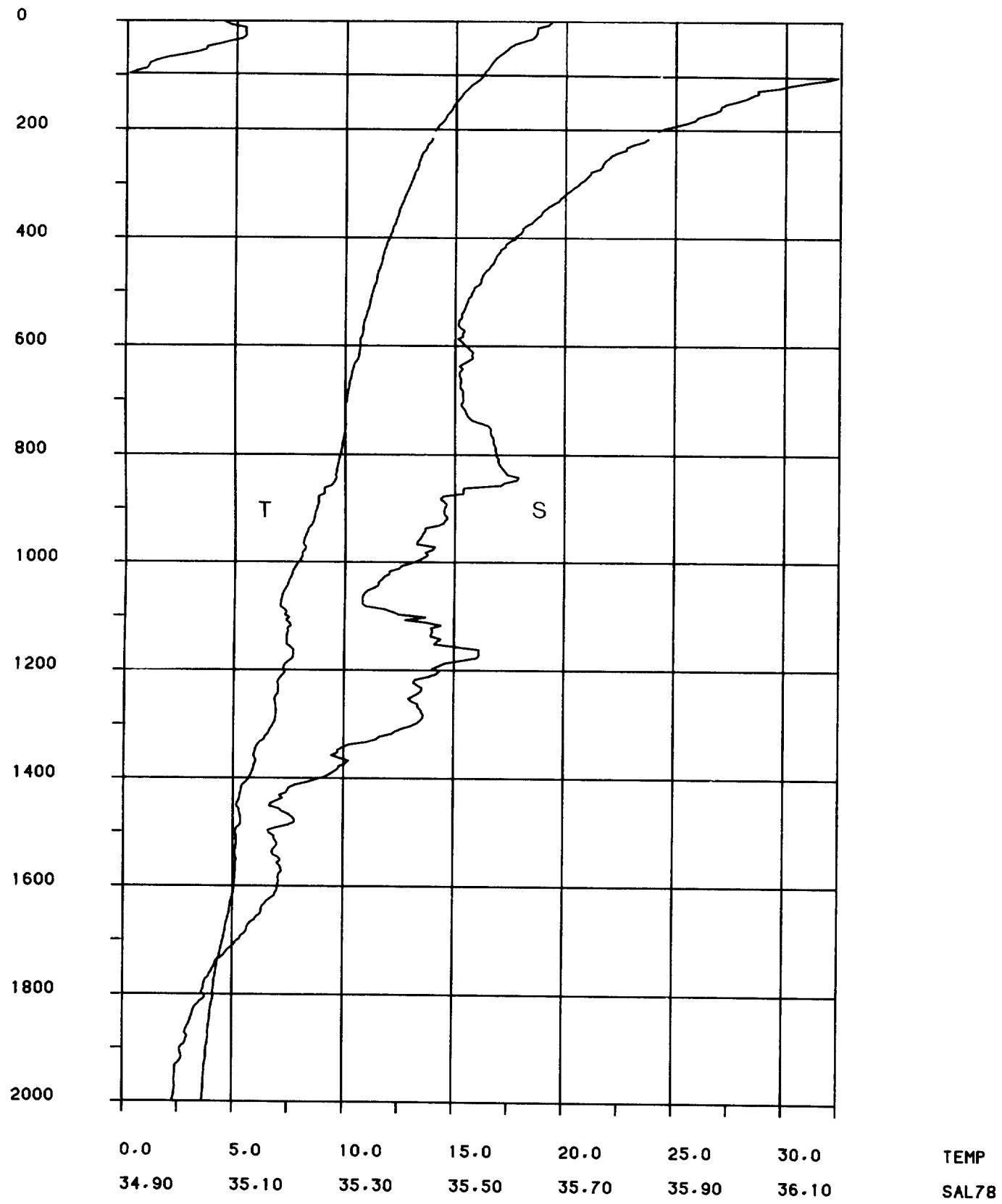
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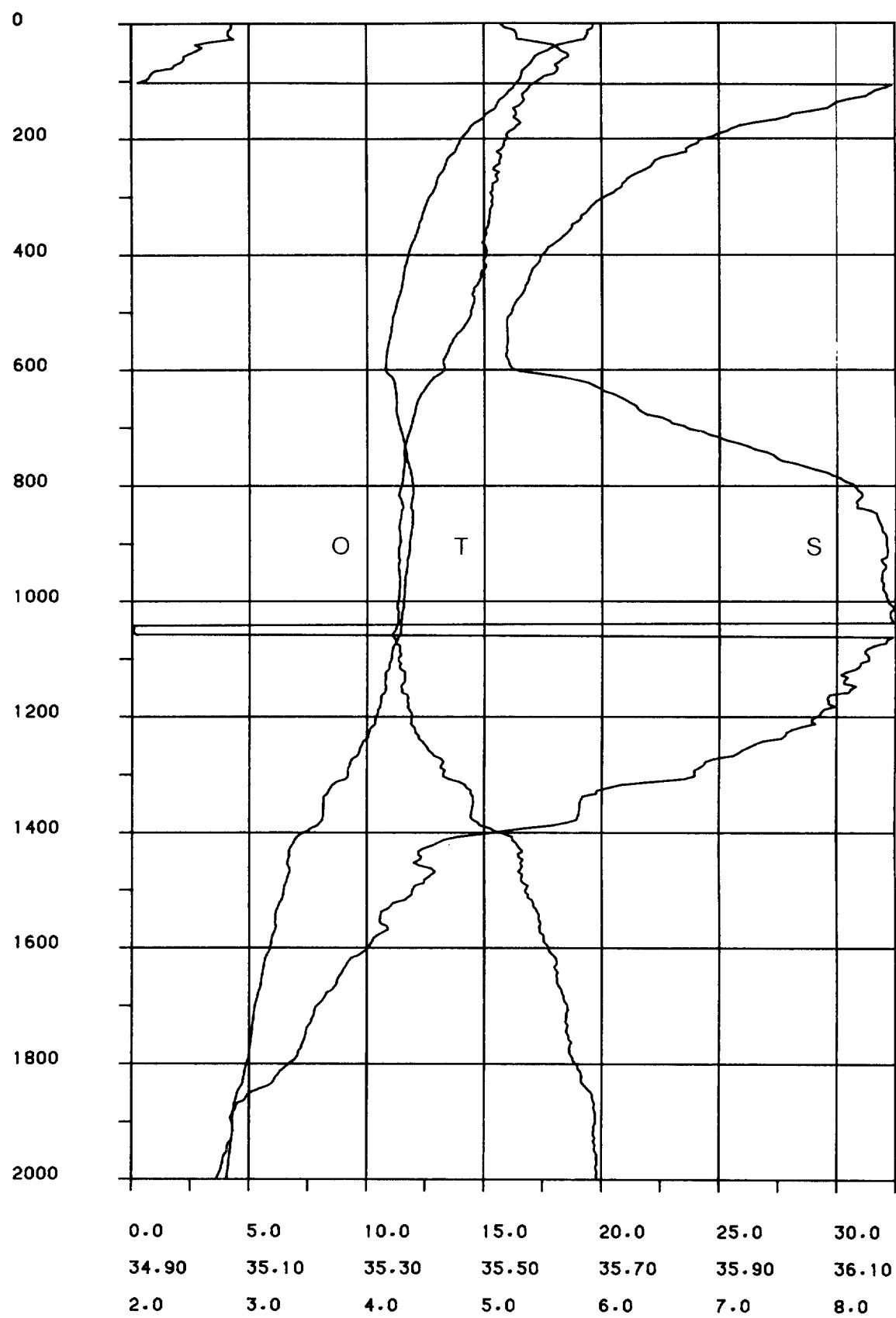


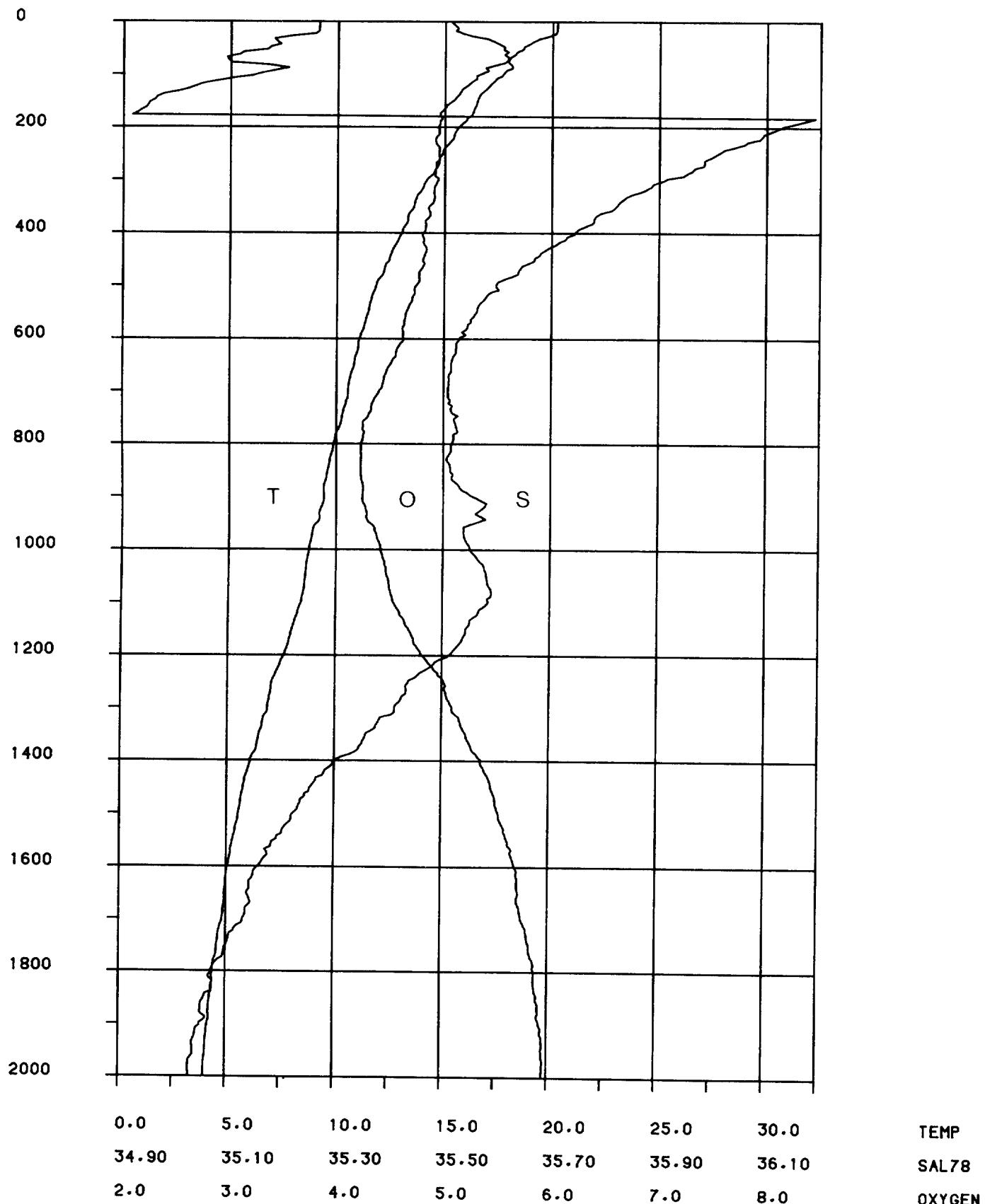
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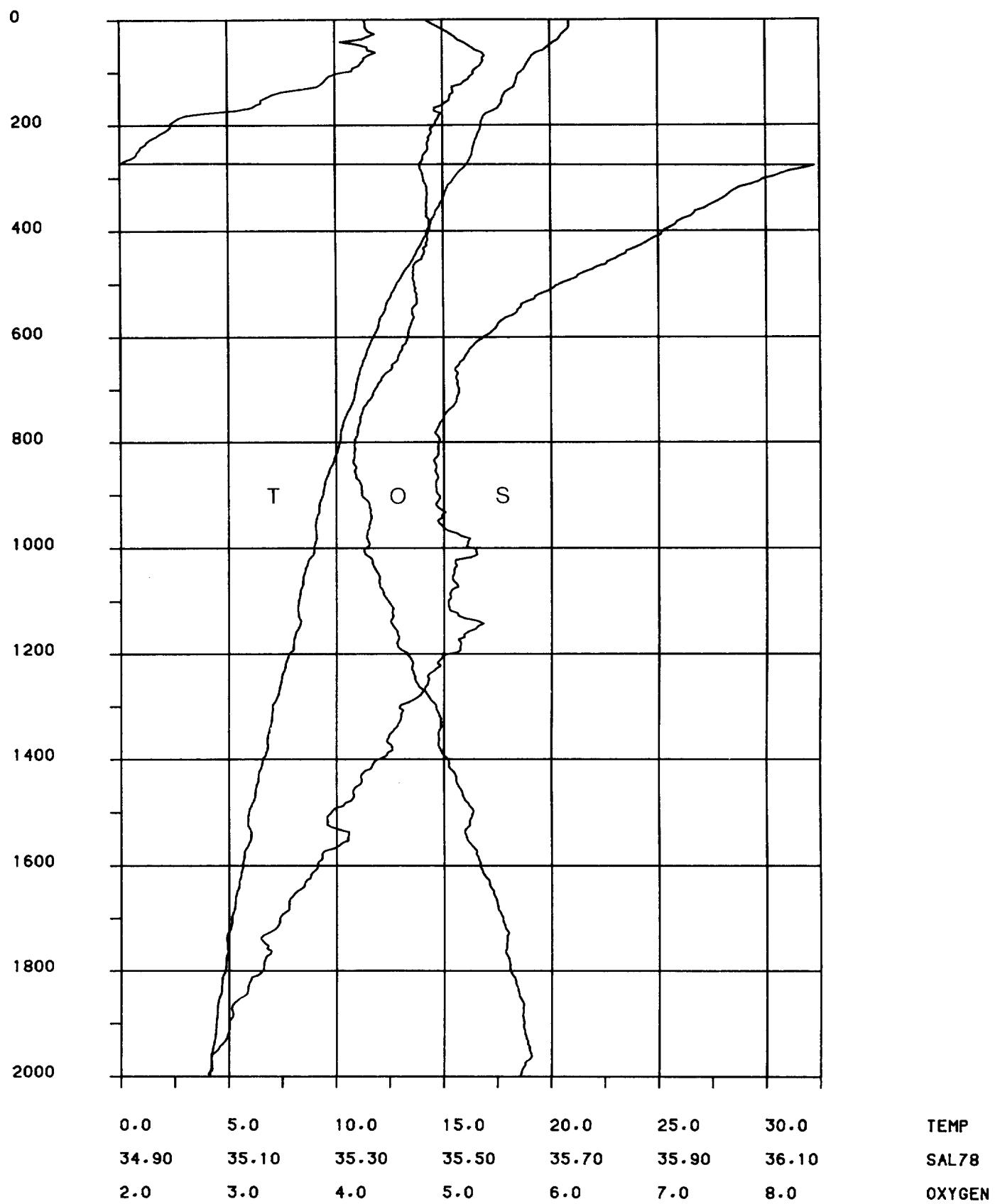


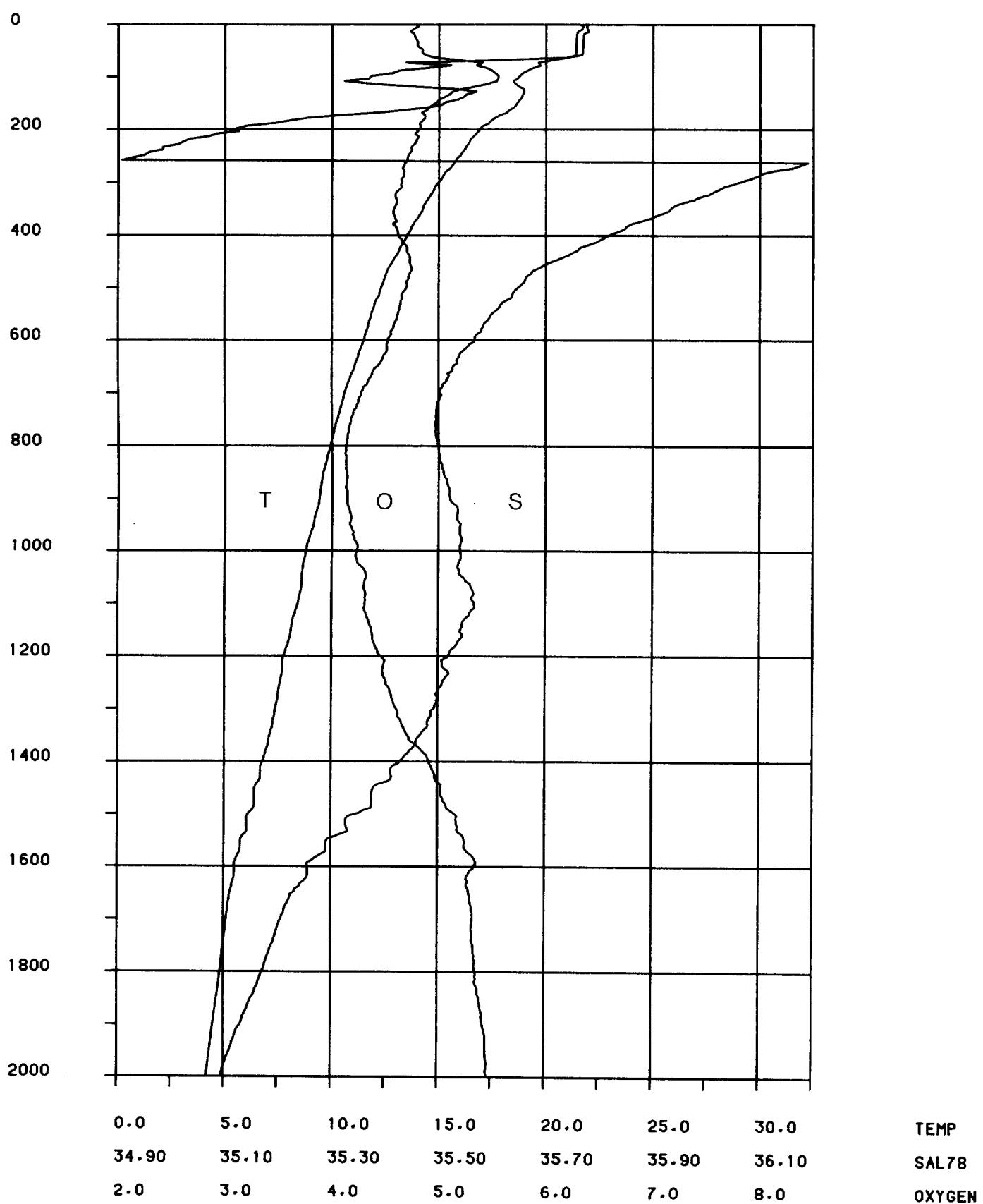


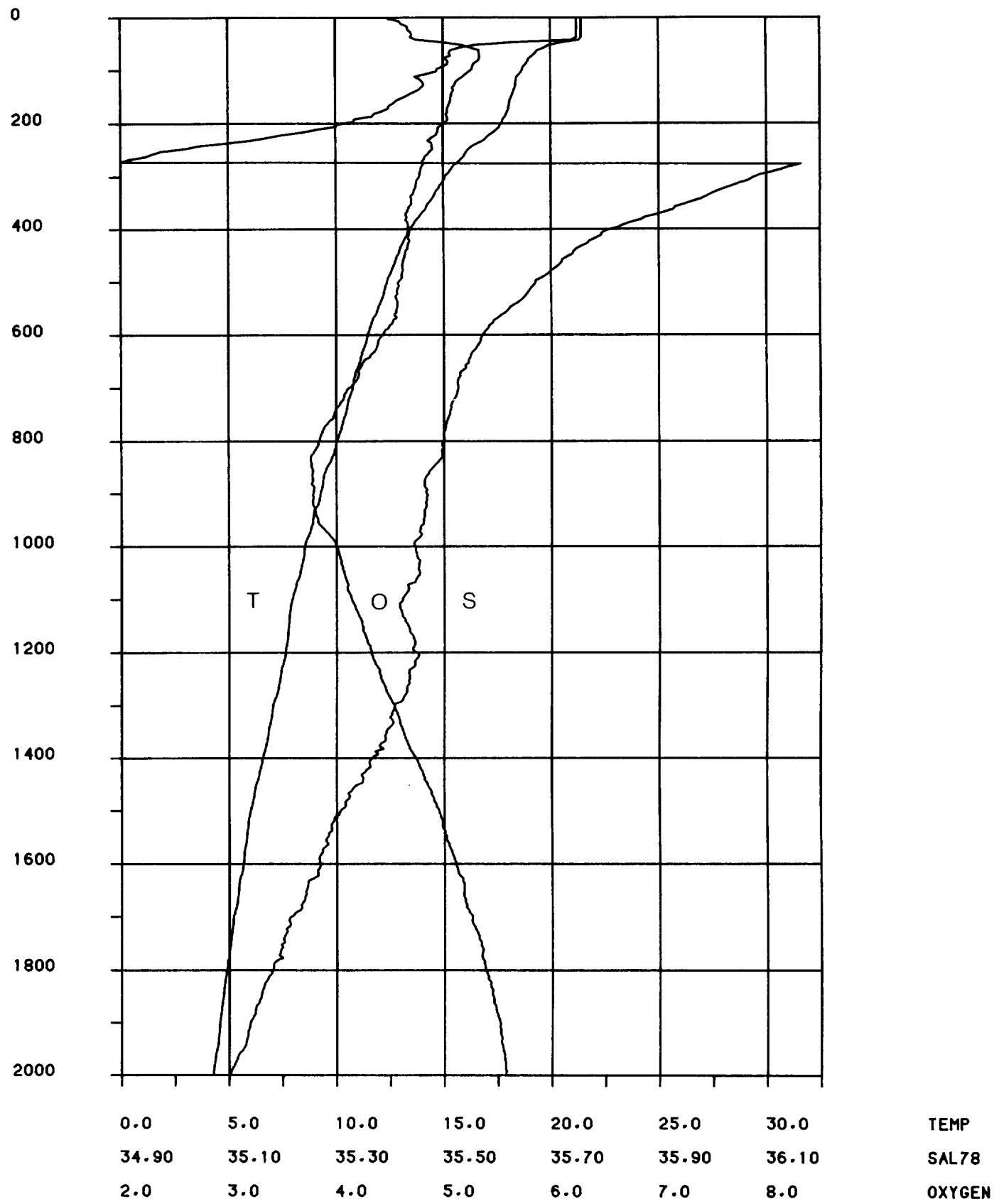


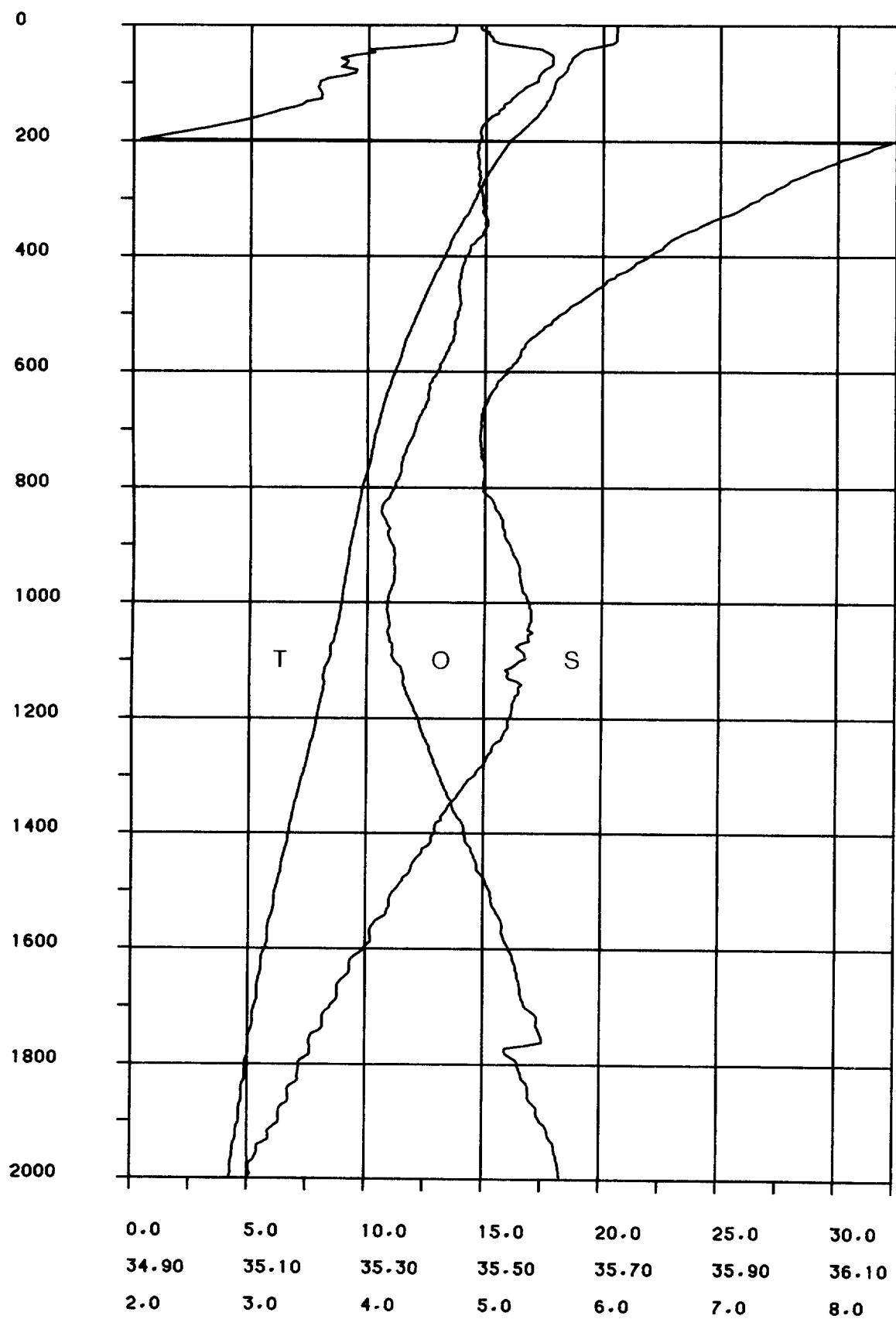


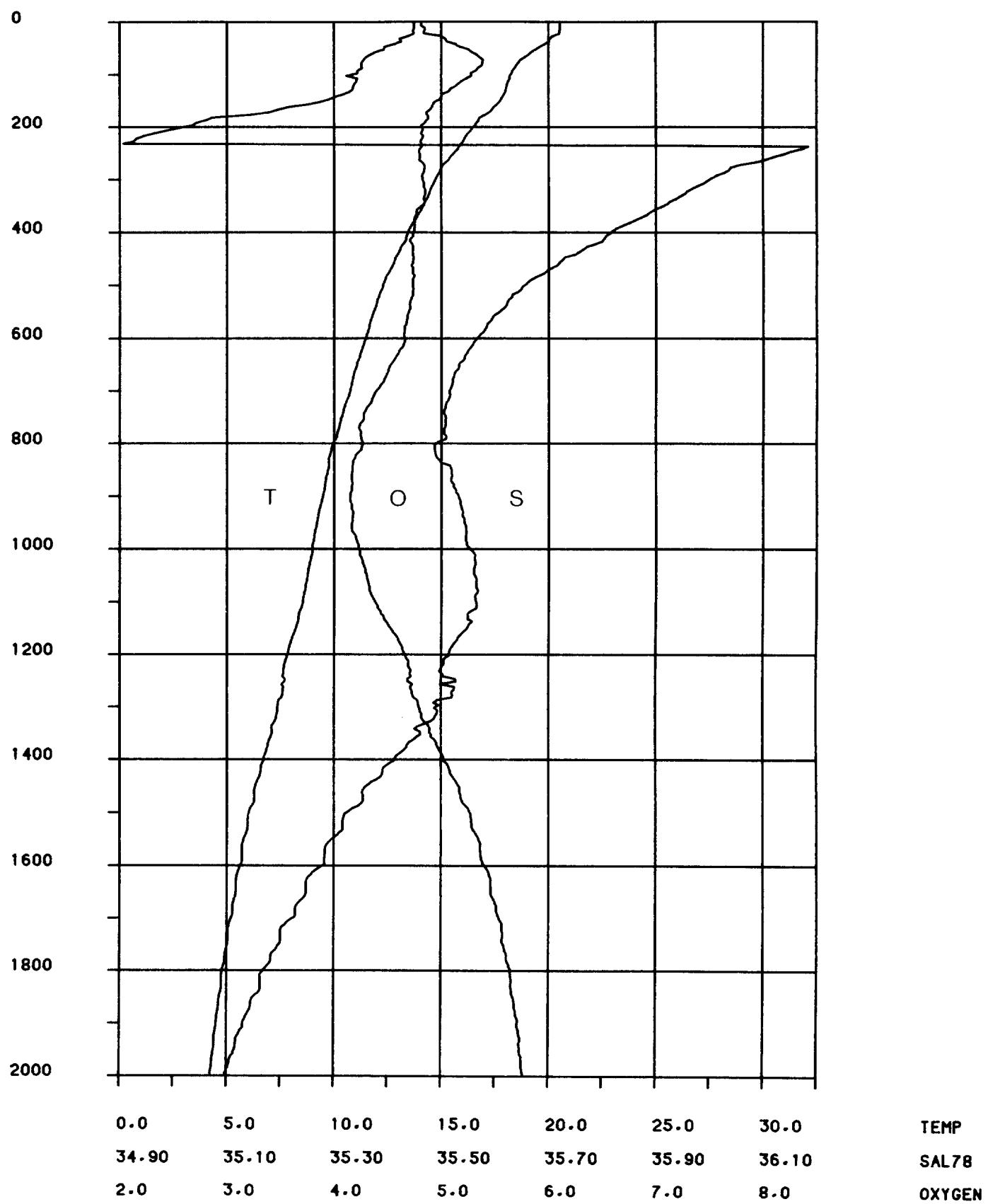


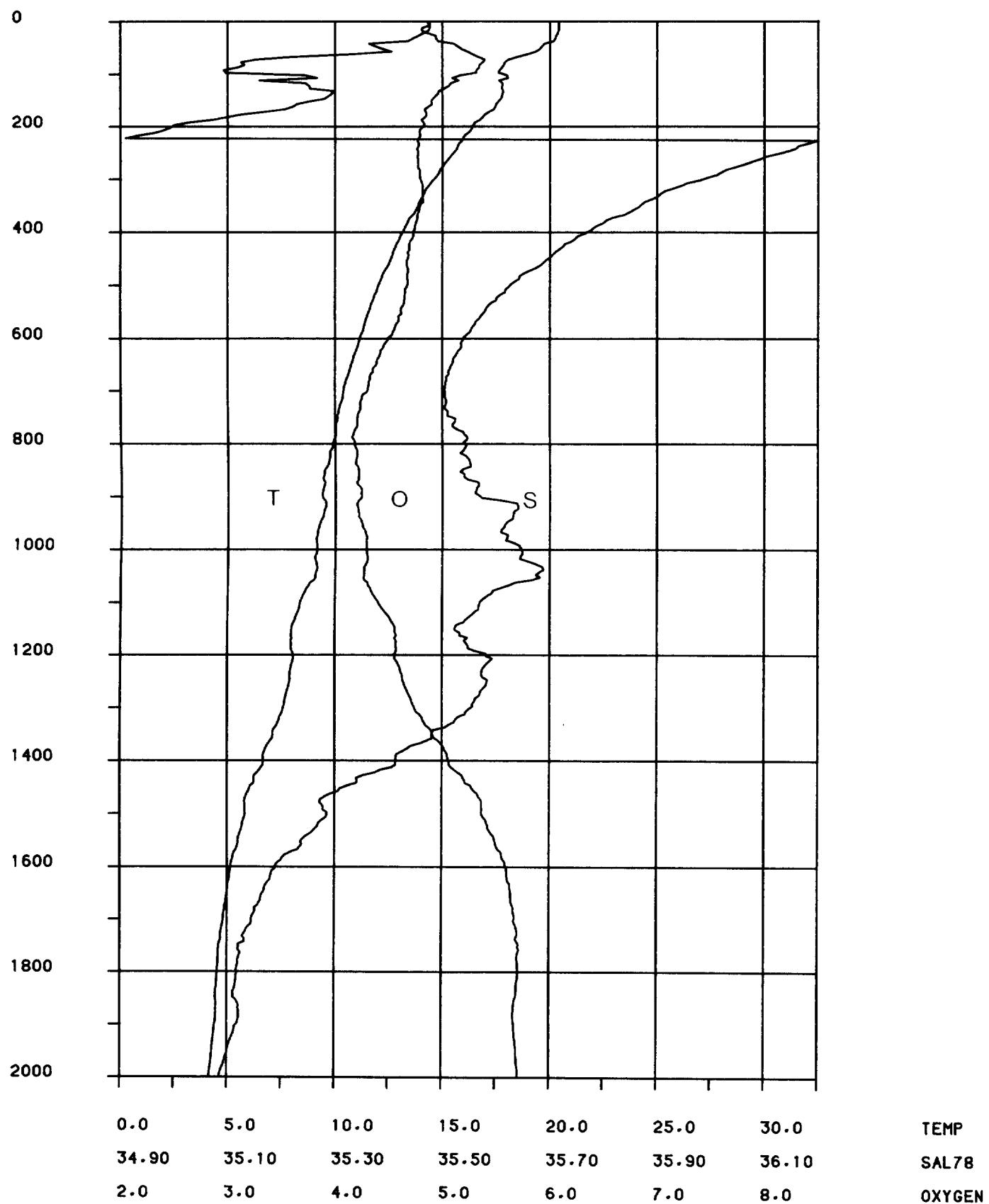


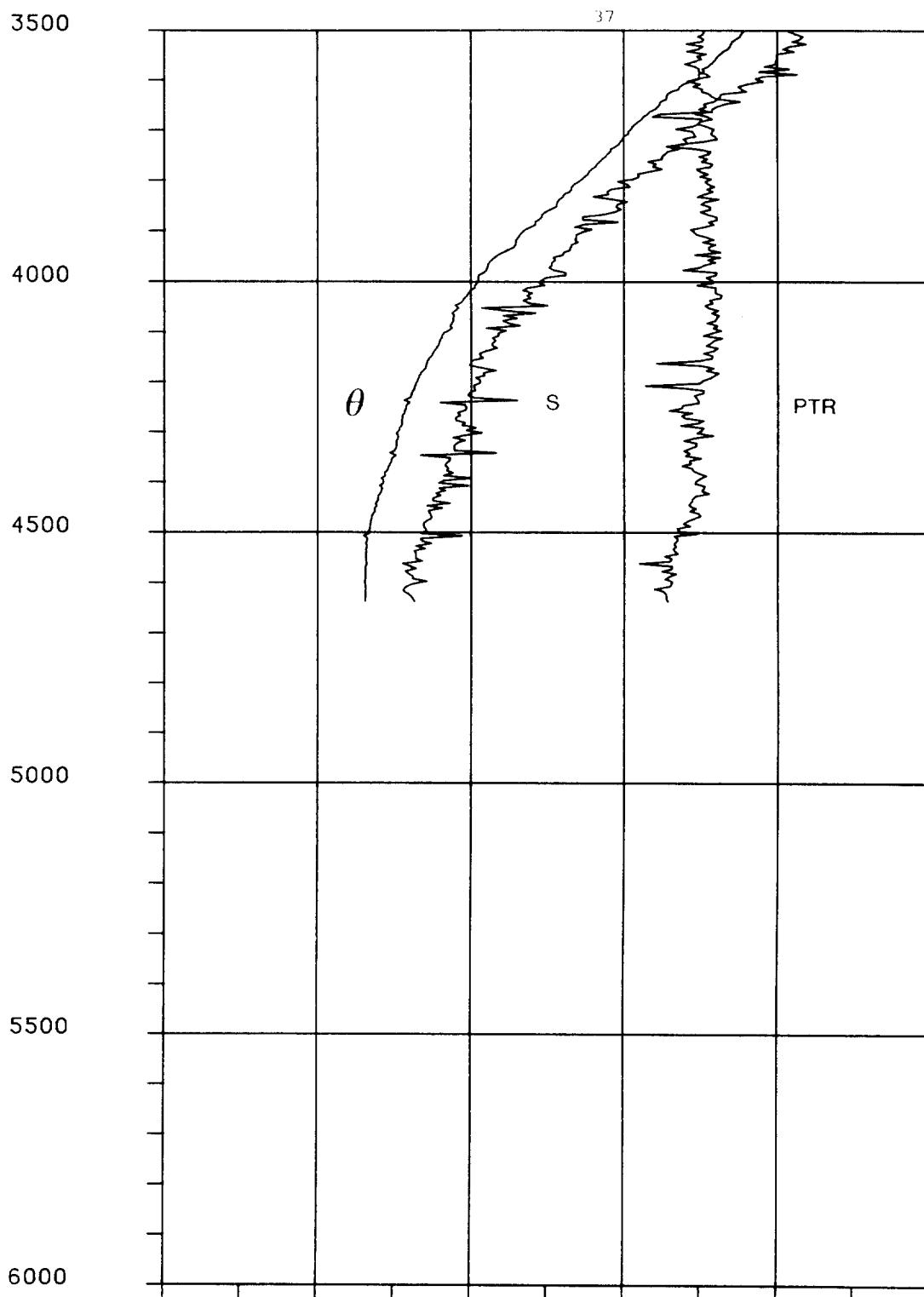






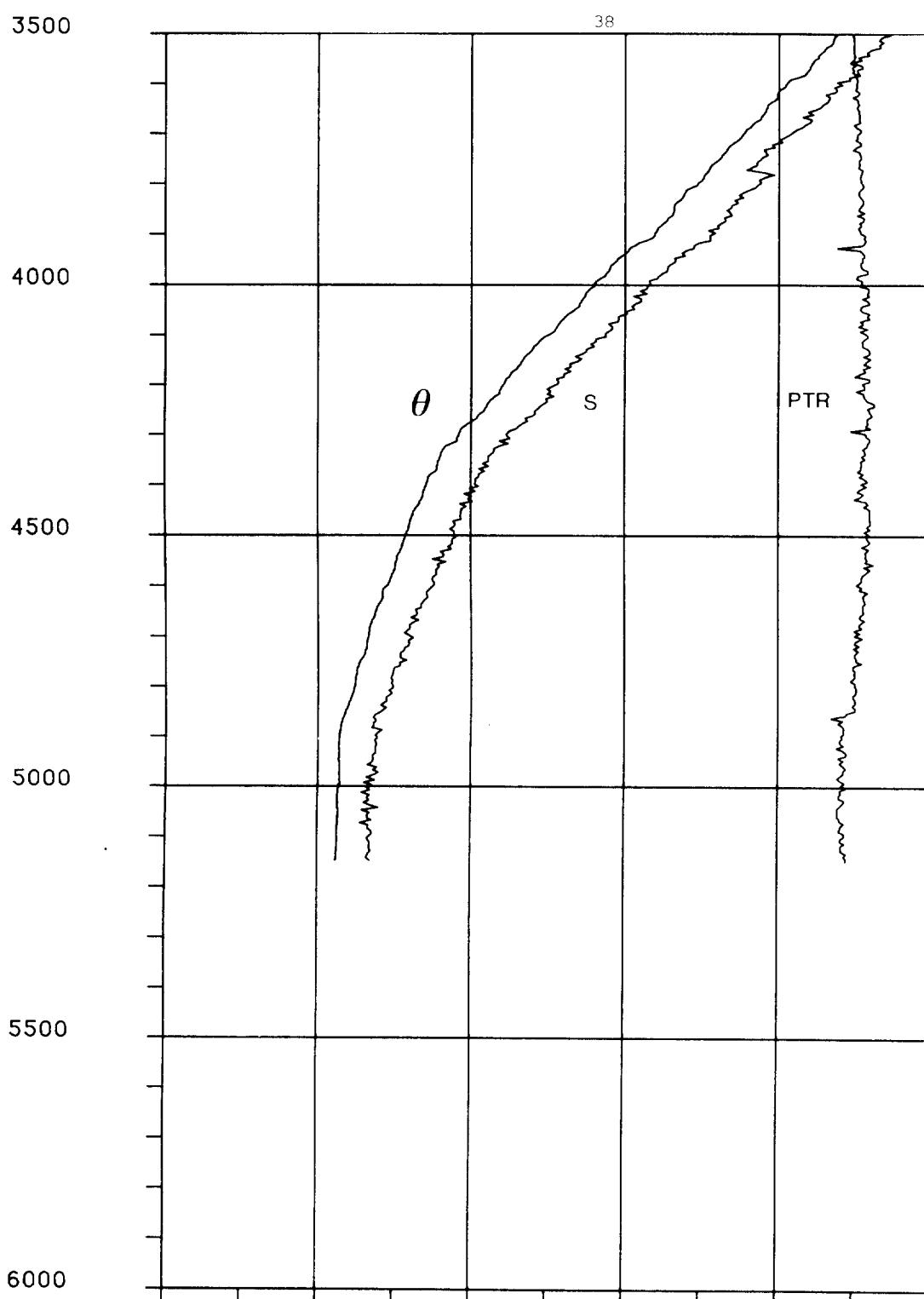






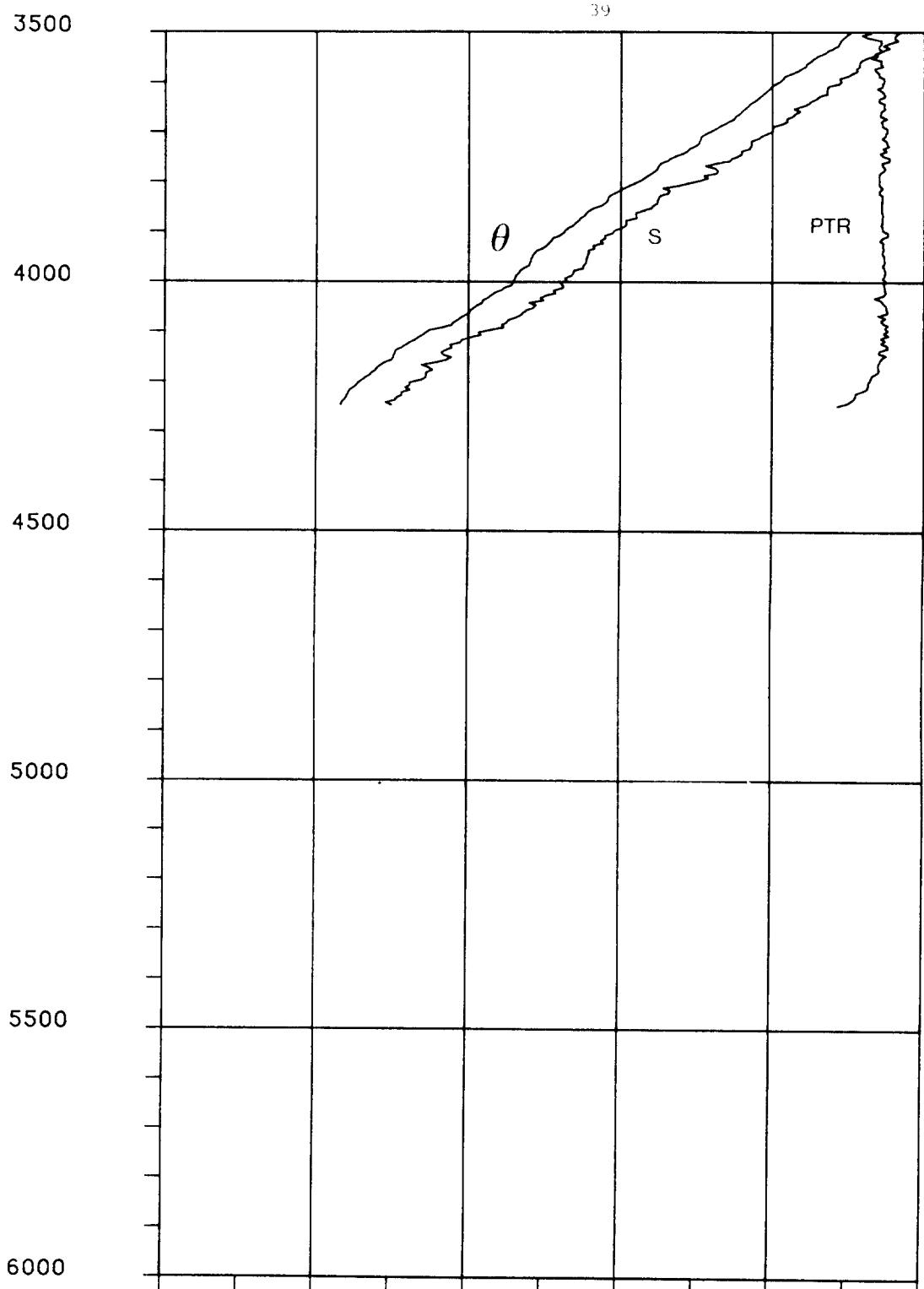
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34.88	34.89	34.90	34.91	34.92	34.93	SALIN
67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

\_0TXY DISCO 138 10784 37 38N 13 48W



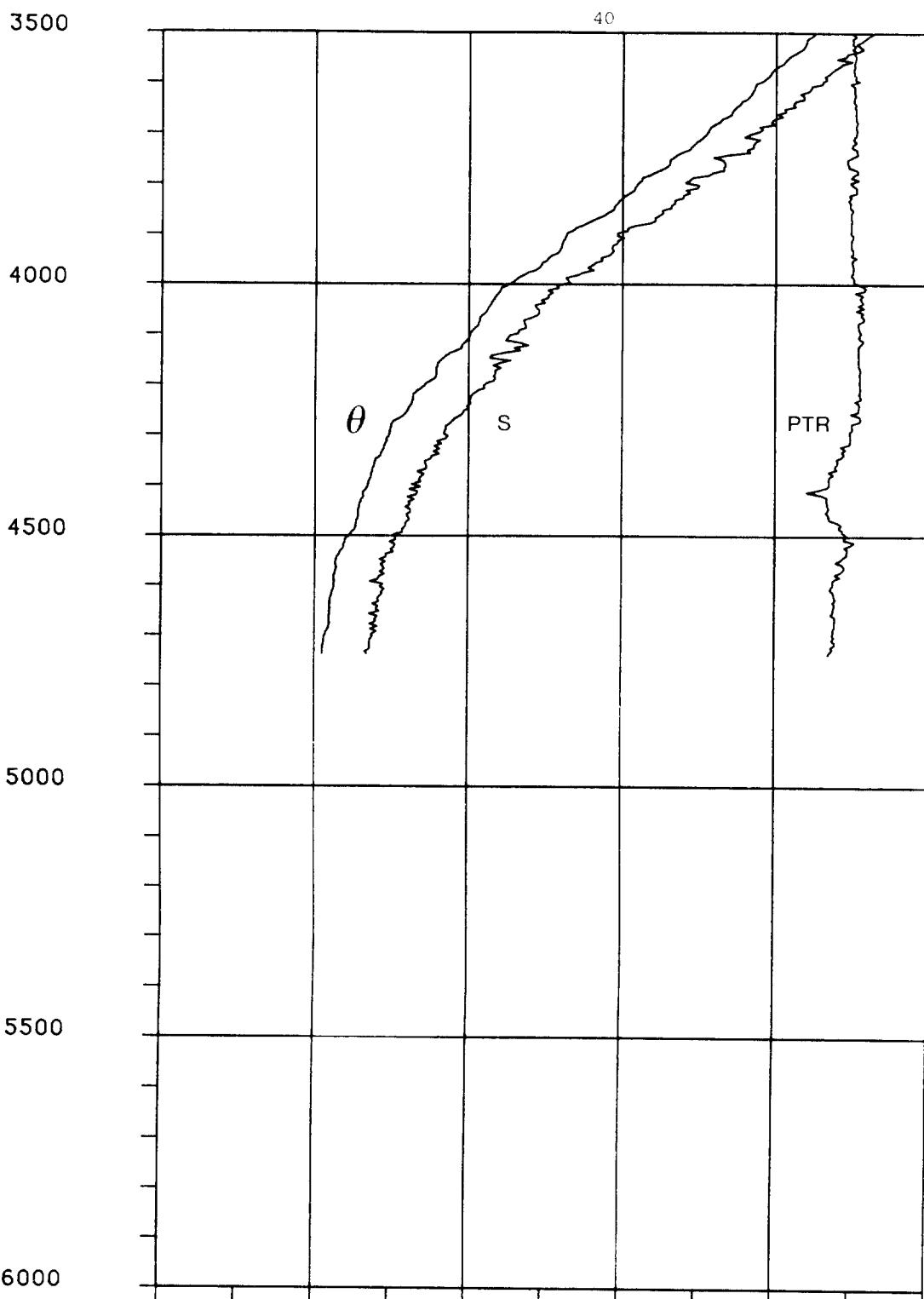
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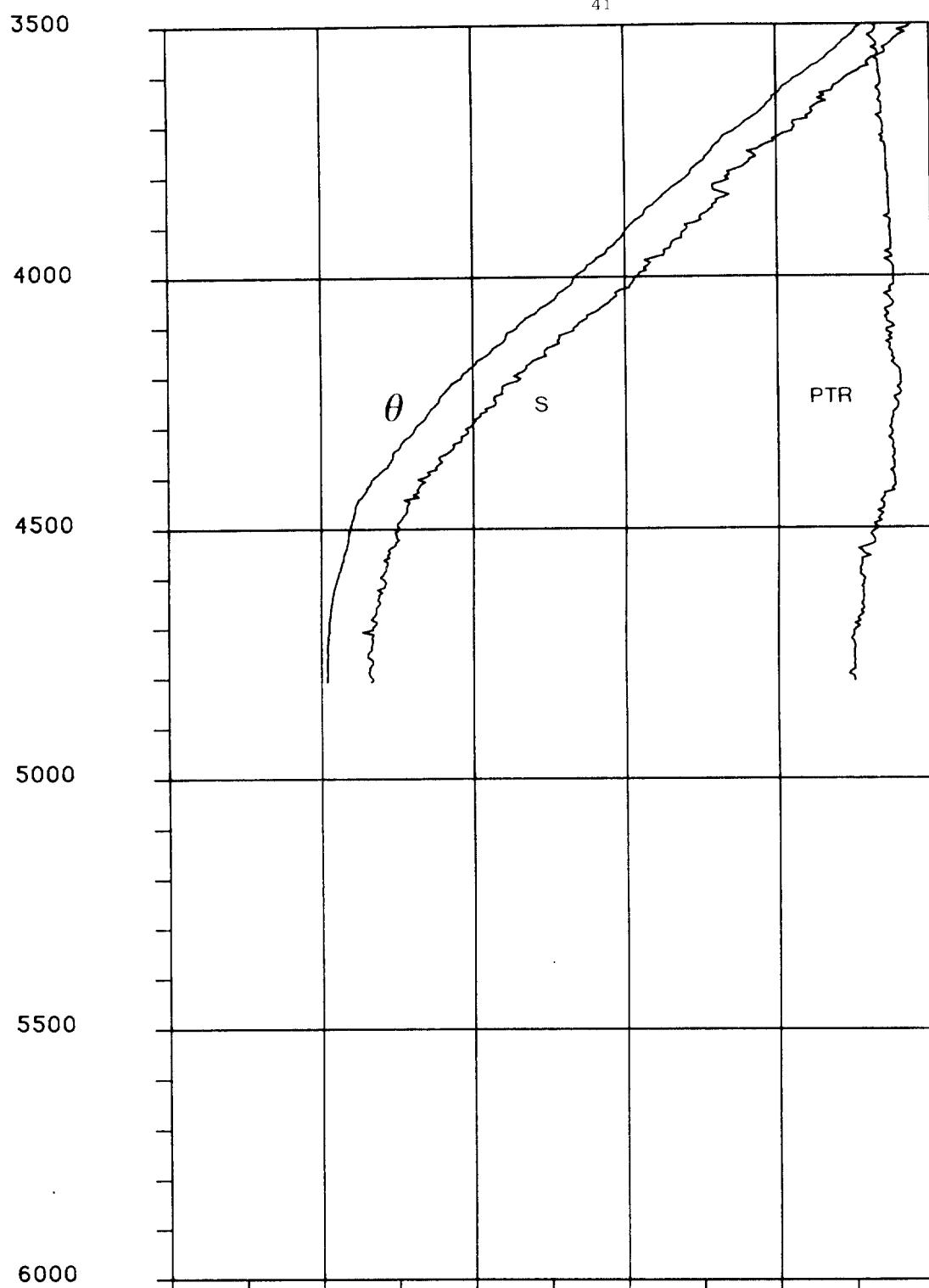
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67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

\_0TXY DISCO 138 10786 37 10N 16 43W



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67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

-OTXY DISCO 138 10787 36 51N 16 41W



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67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

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42

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4500

5000

5500

6000

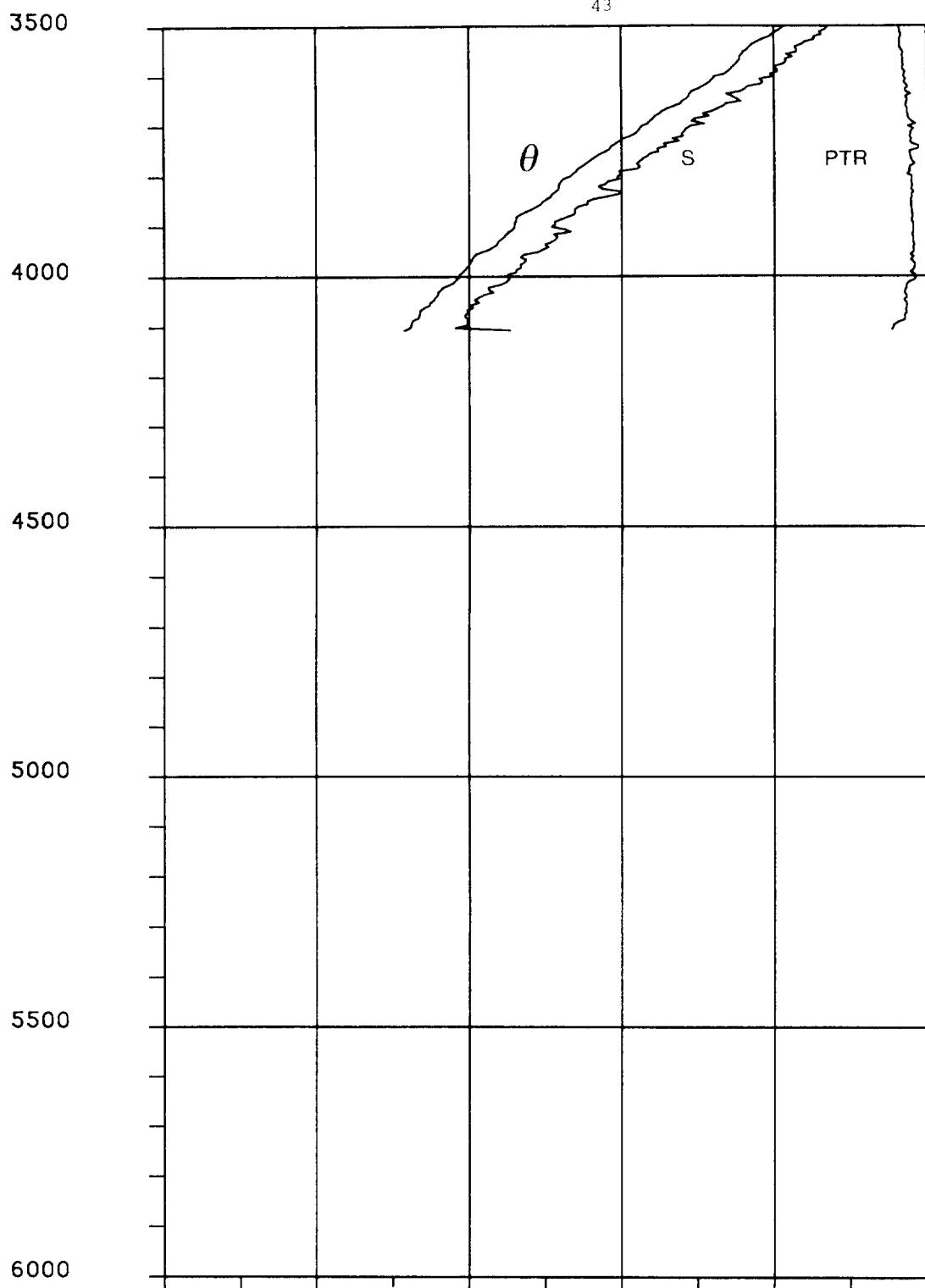
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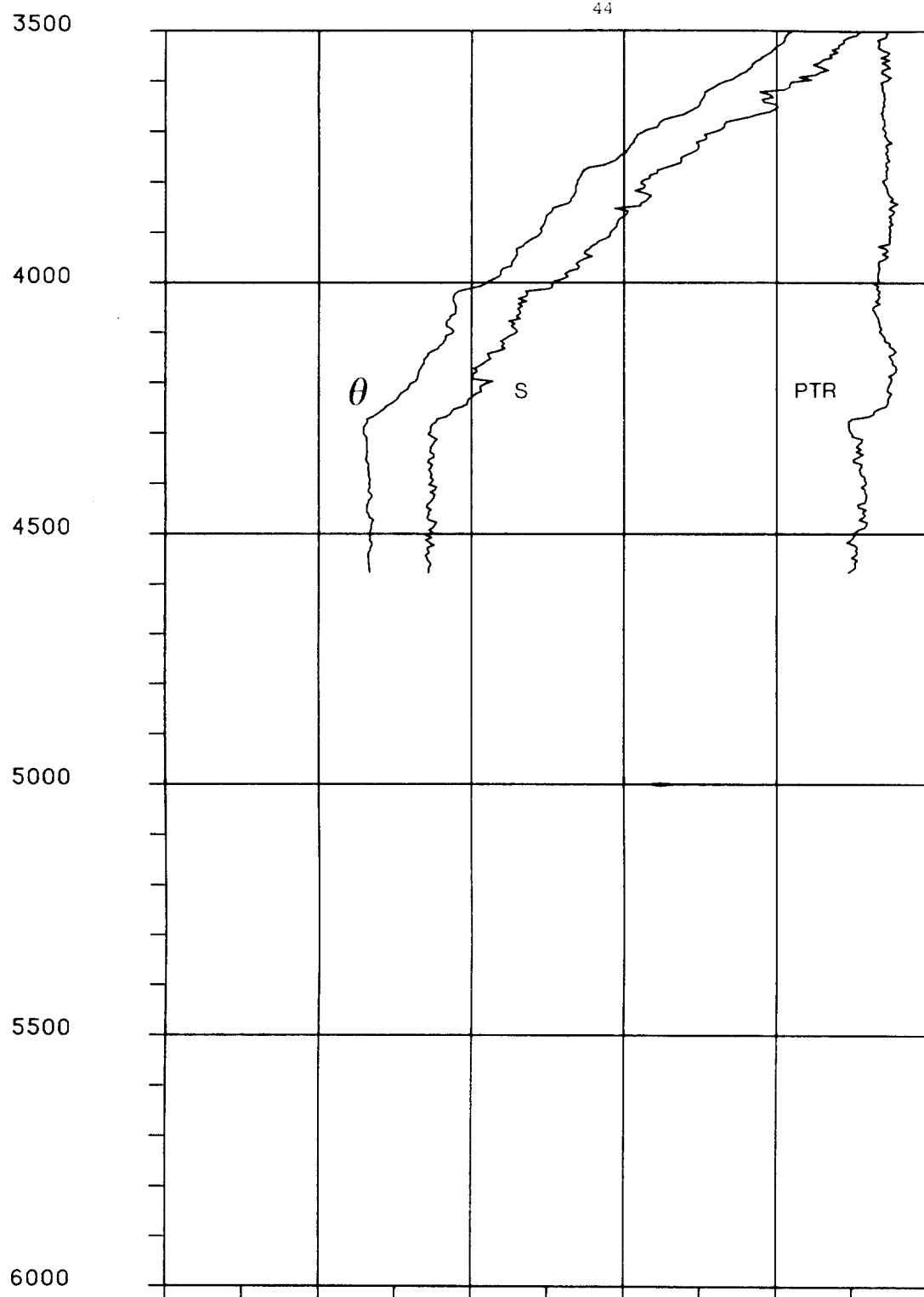
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34.88	34.89	34.90	34.91	34.92	34.93	SAL78
67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

\_OTXY DISCO 138 10789 37 05N 16 42W



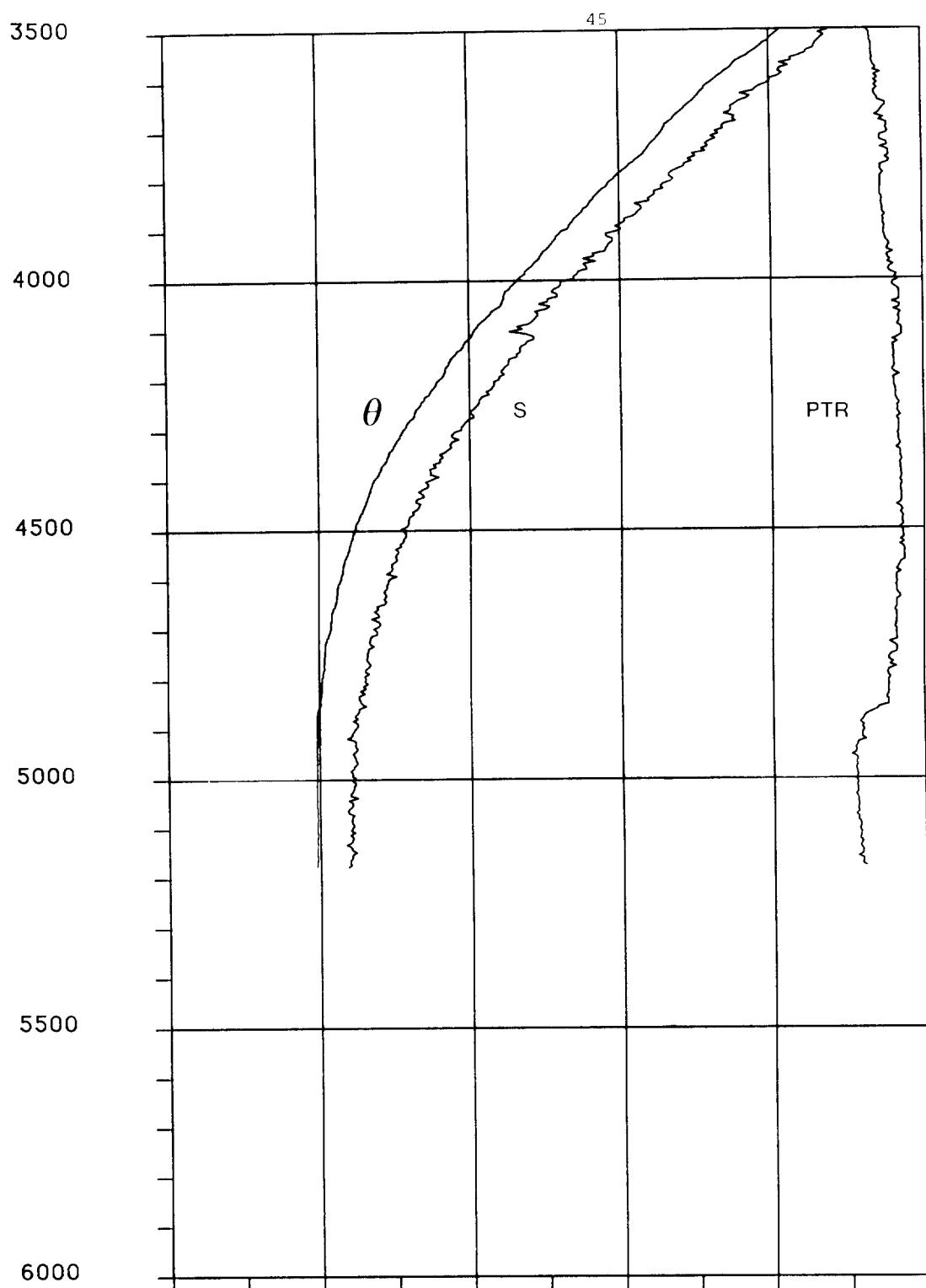
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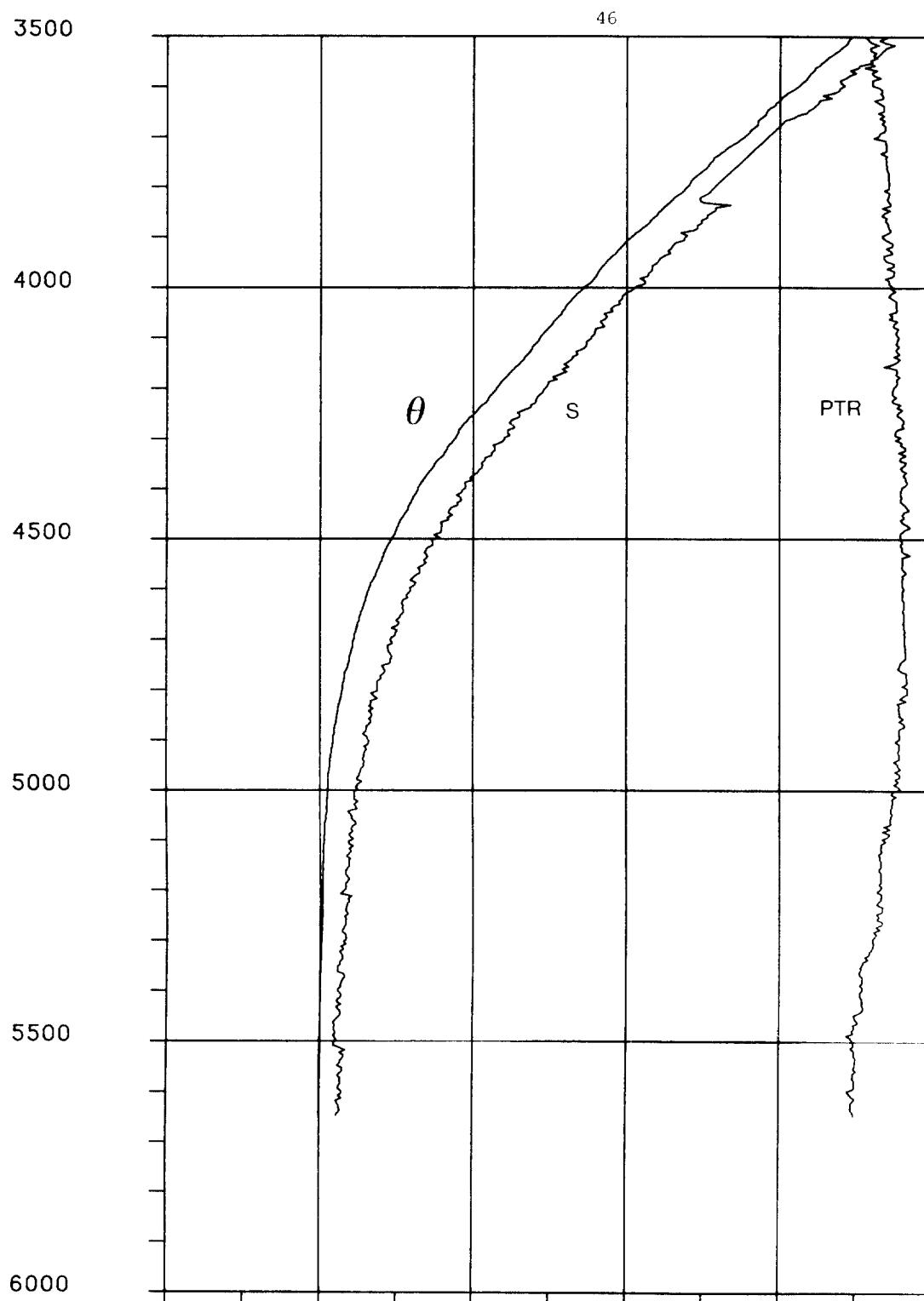
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-OTXY DISCO 138 10791 36 36N 16 49W



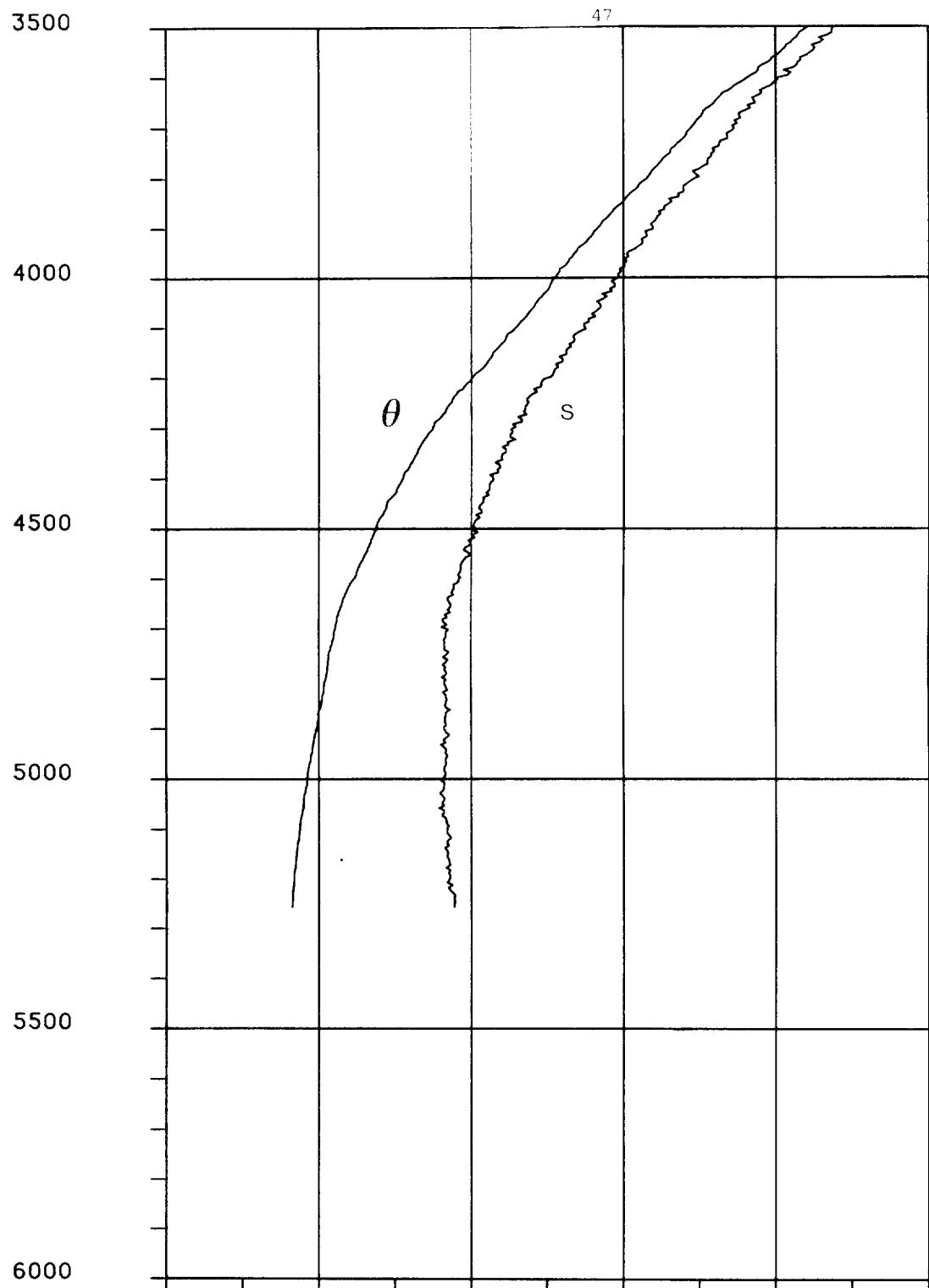
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67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

\_OTXY DISCO 138 10792 36 30N 17 26W



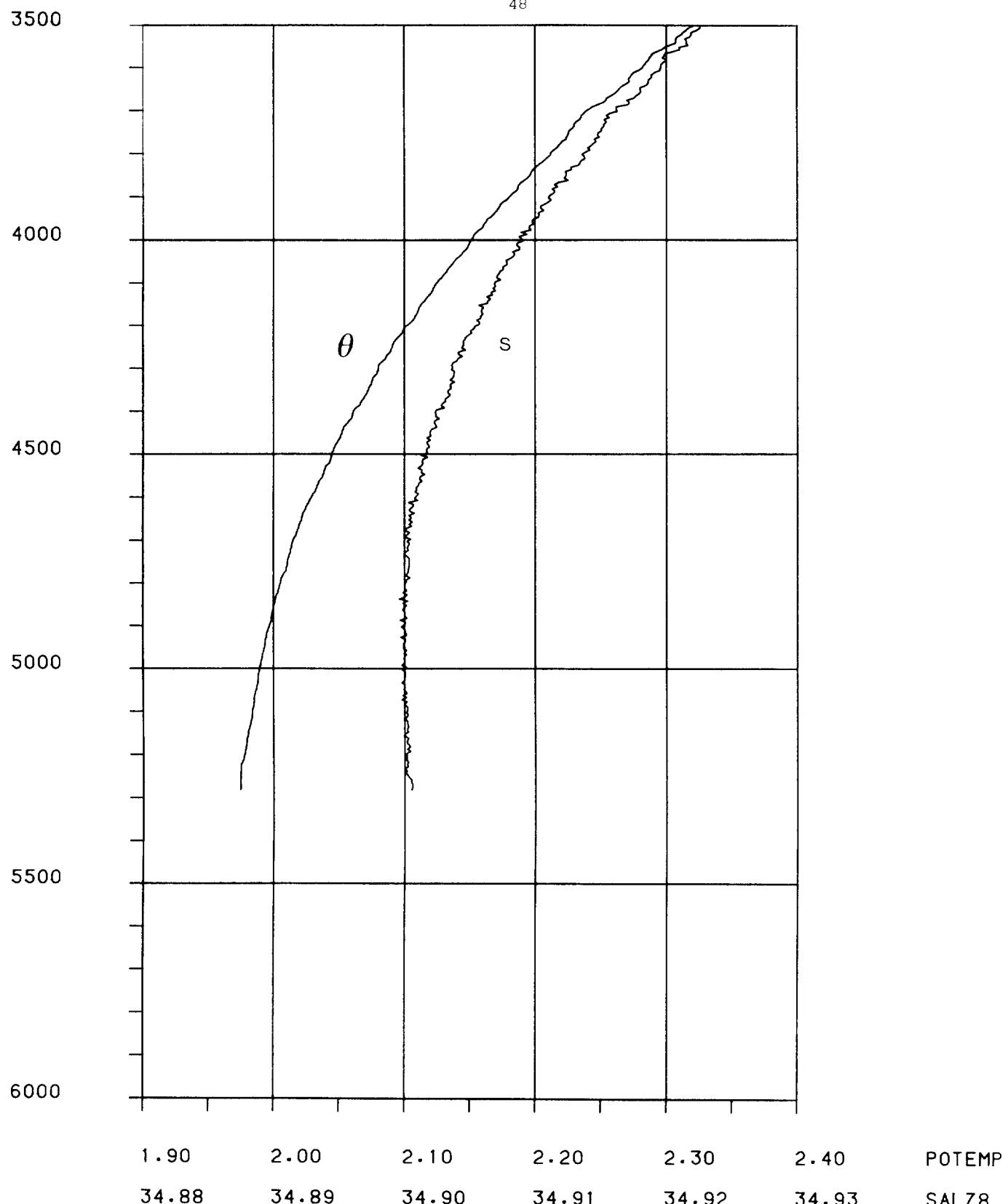
POTEMP	SAL78	POTRAN
1.90	34.88	67.00
2.00	34.89	67.50
2.10	34.90	68.00
2.20	34.91	68.50
2.30	34.92	69.00
2.40	34.93	69.50

-OTXY DISCO 138 10793 36 30N 18 32W

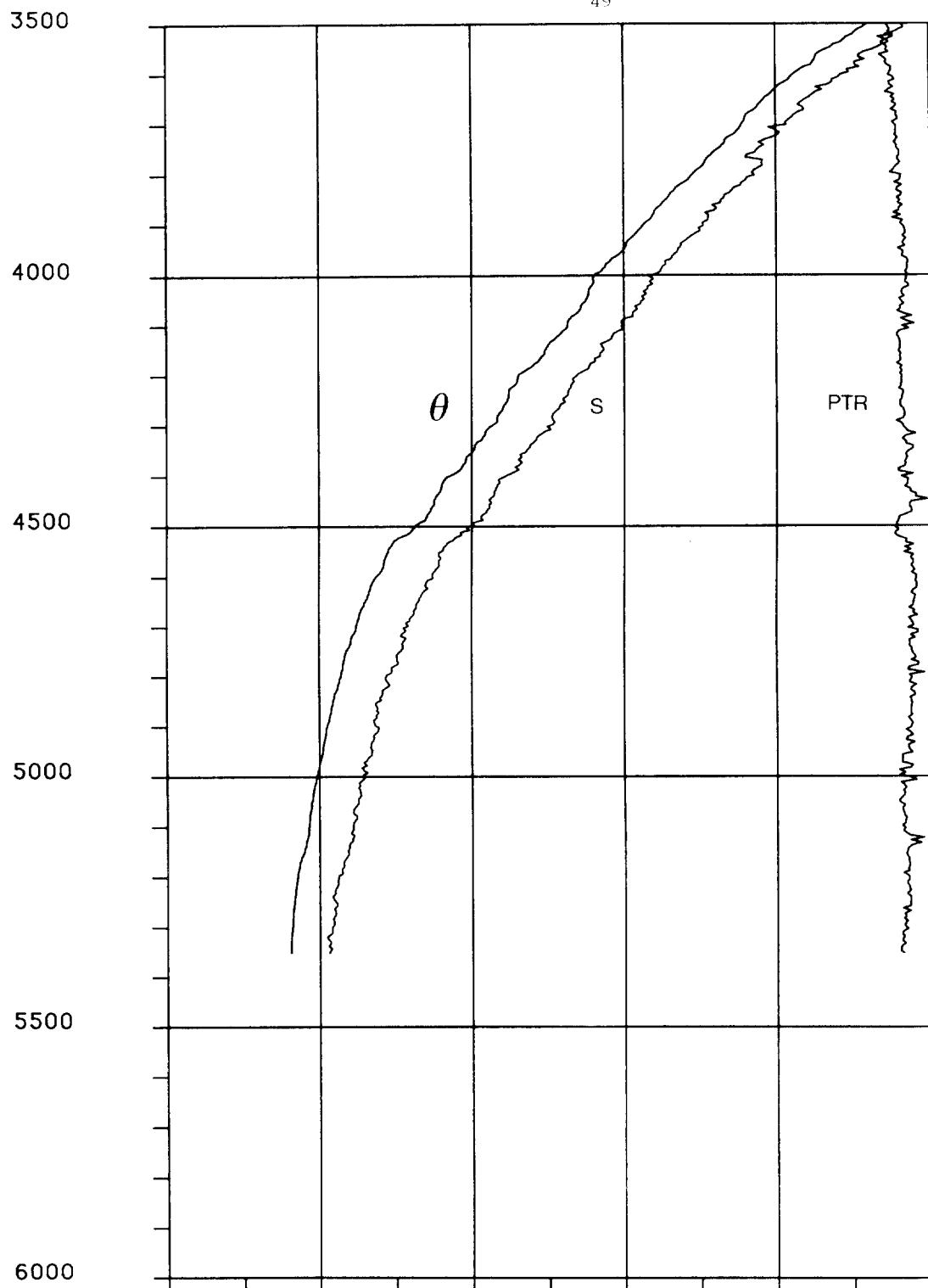


1.90	2.00	2.10	2.20	2.30	2.40	POTEMP
34.88	34.89	34.90	34.91	34.92	34.93	SAL78

-0TXY DISCO 138 10797 35 00N 21 19W

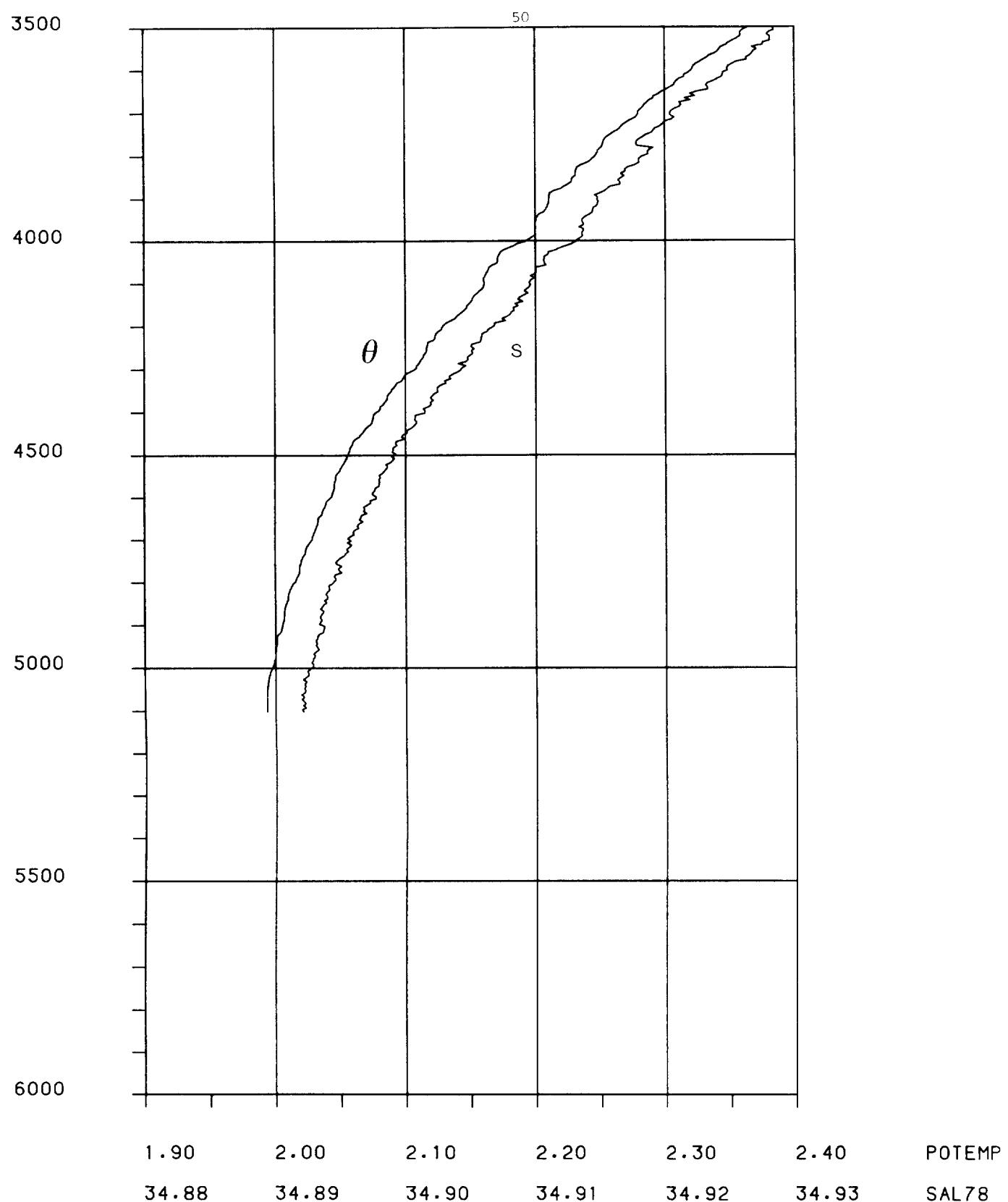


\_OTXY DISCO 138 10798 34 37N 23 01W

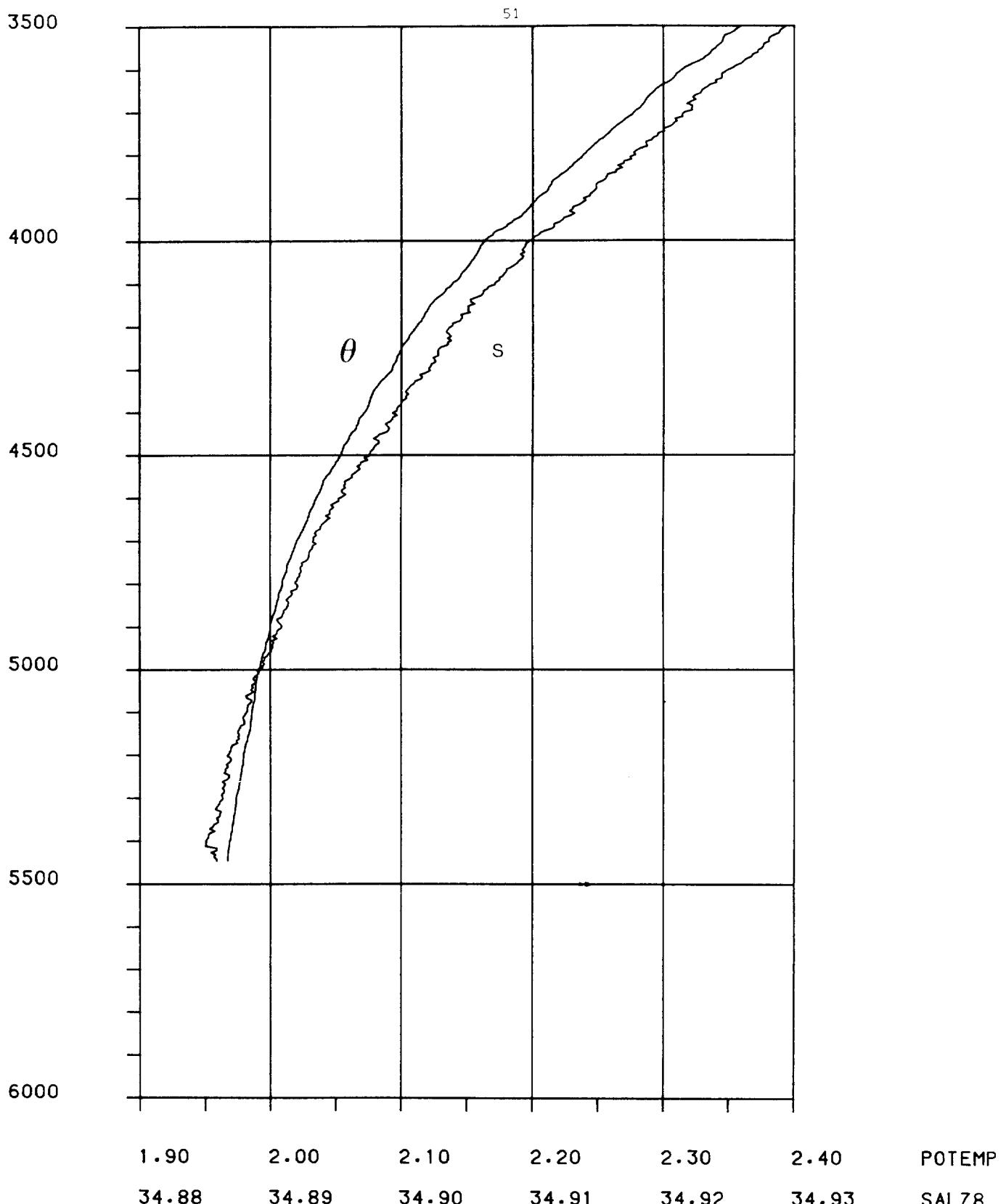


1.90	2.00	2.10	2.20	2.30	2.40	POTEMP
34.88	34.89	34.90	34.91	34.92	34.93	SAL78
67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

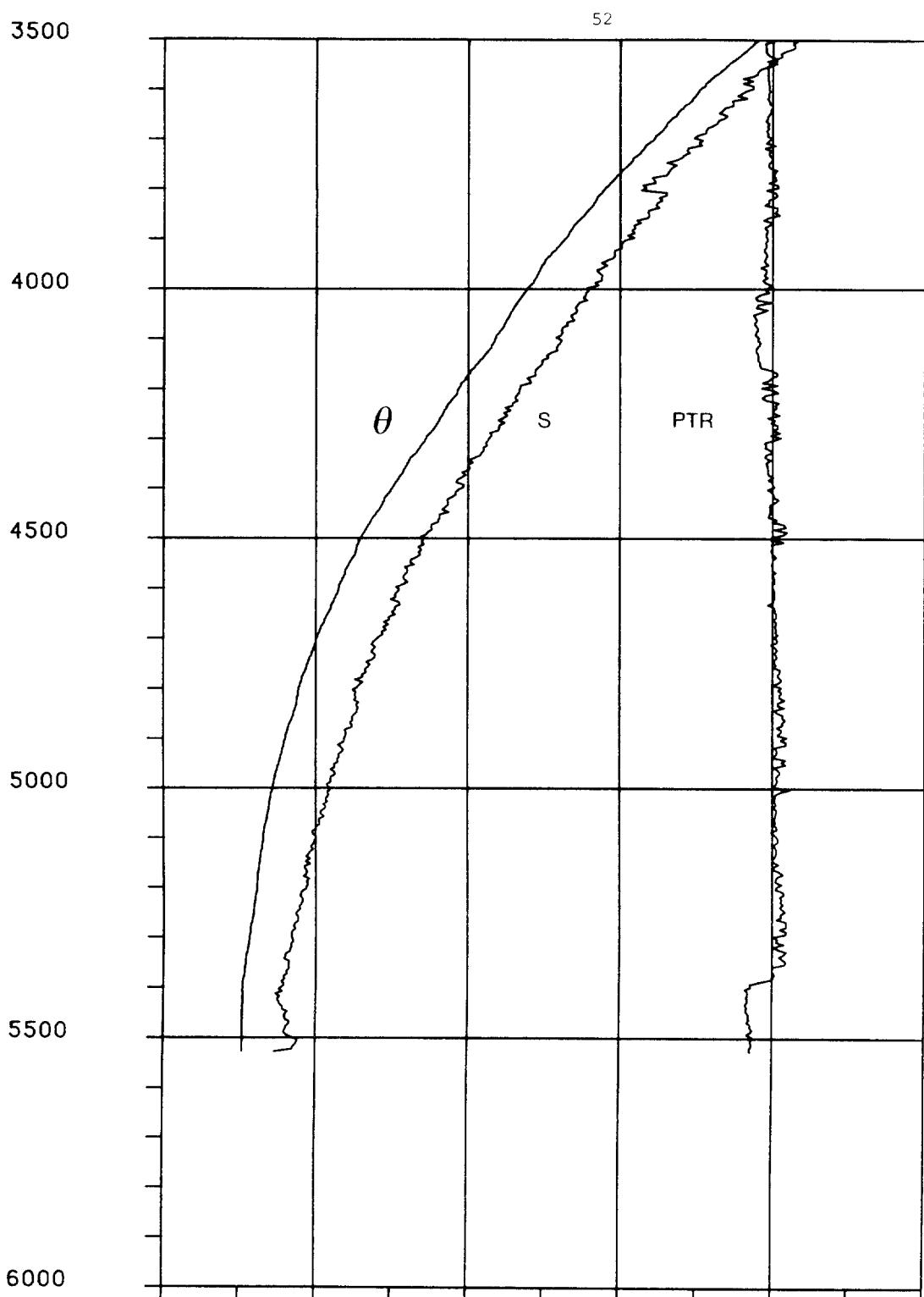
-0TXY      DISCO 138 10799 34 40N 24 20W



-OTXY DISCO 138 10802 34 27N 26 02W

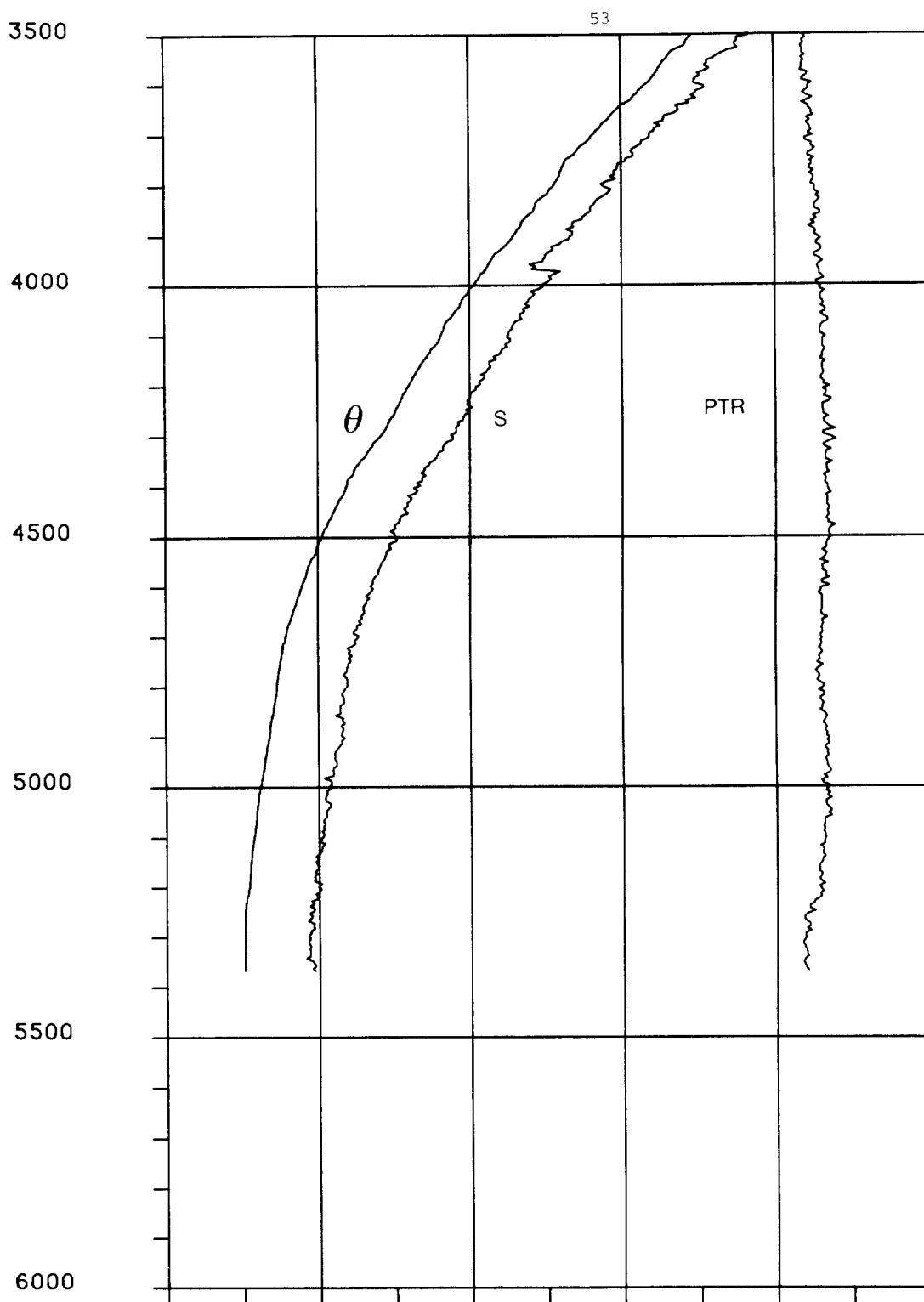


-0TXY DISCO 138 10803 33 01N 25 16W



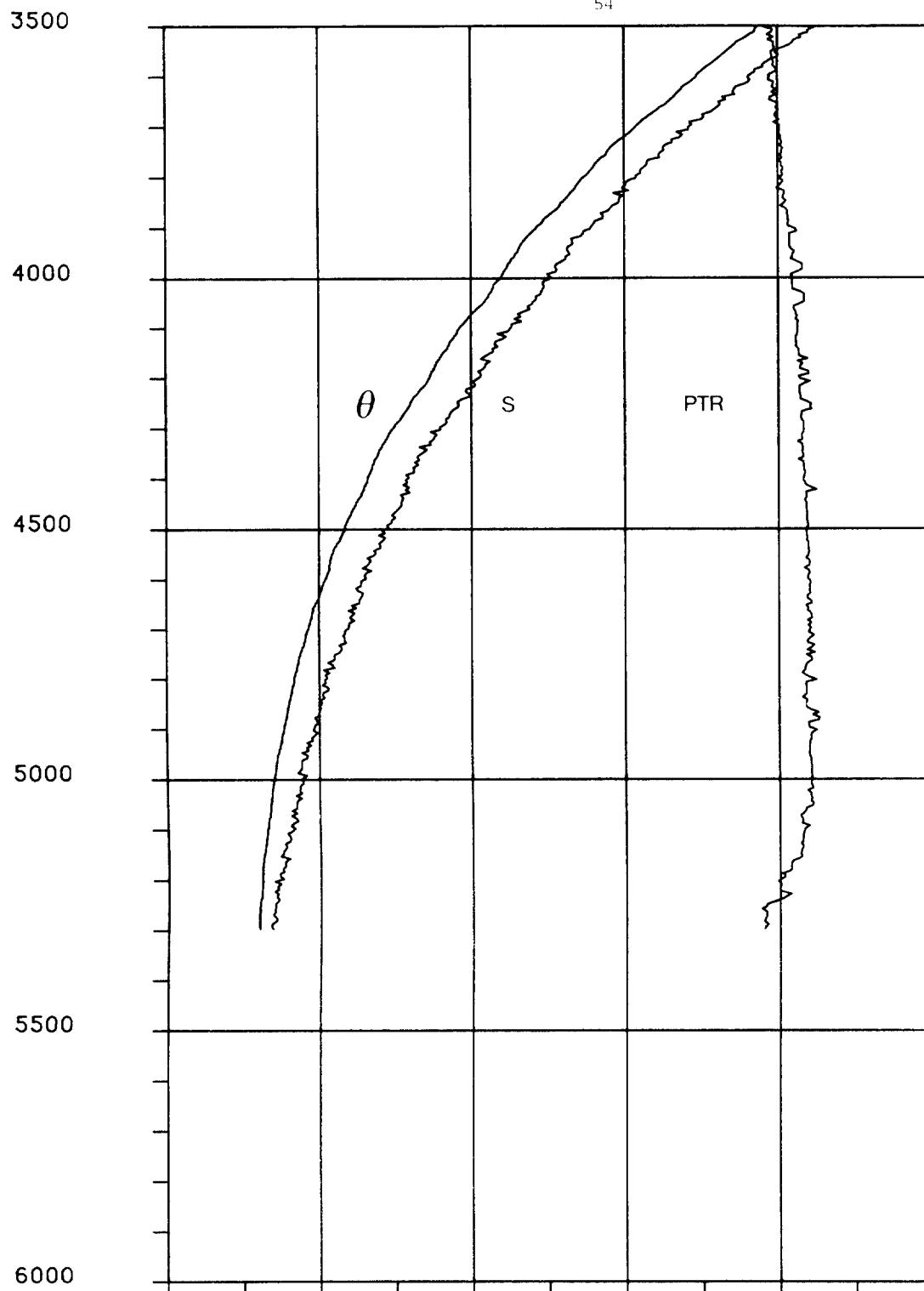
1.90	2.00	2.10	2.20	2.30	2.40	POTEMP
34.88	34.89	34.90	34.91	34.92	34.93	SAL78
67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

-0TXY DISCO 138 10804 31 30N 24 22W



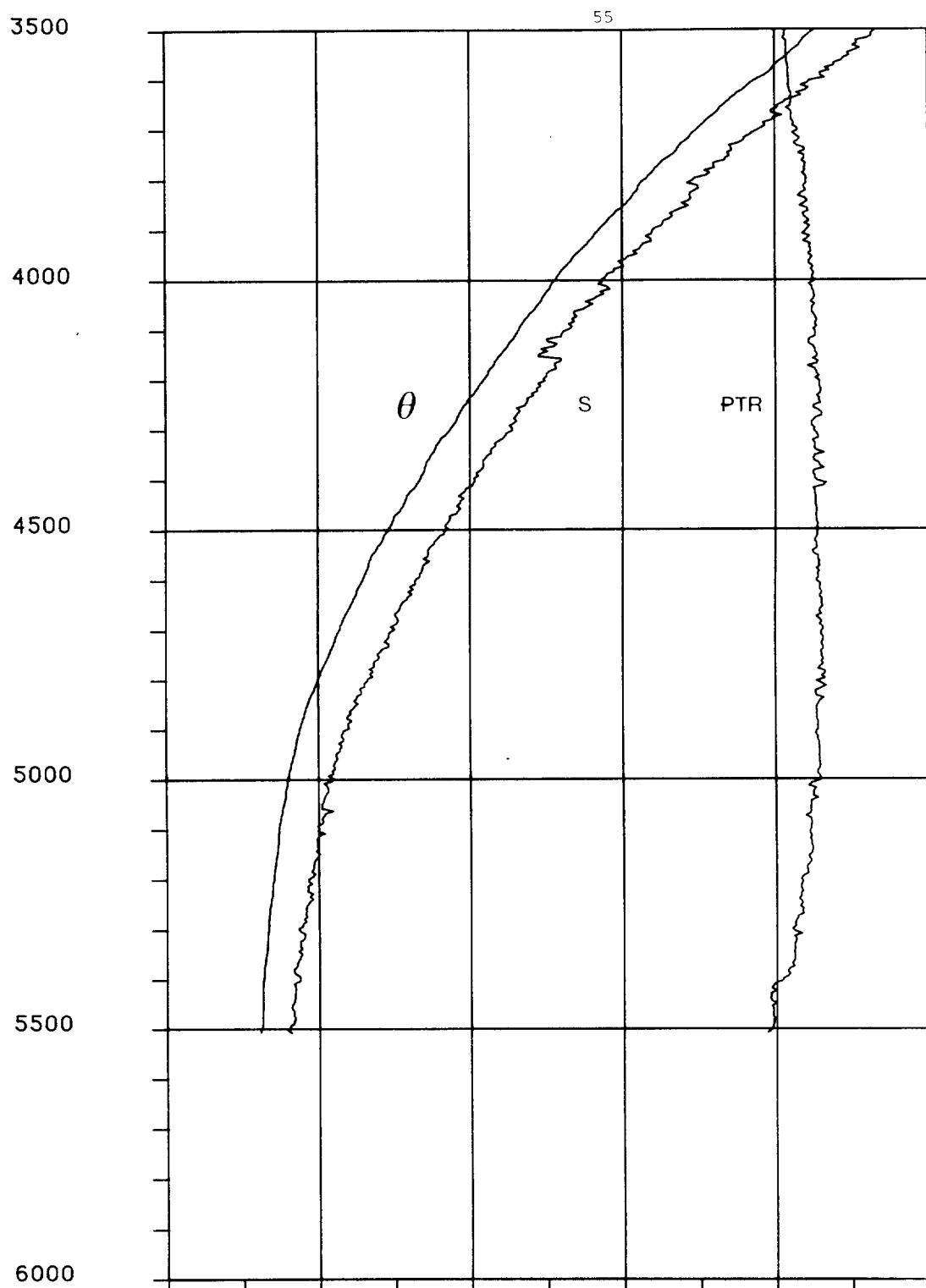
1.90	2.00	2.10	2.20	2.30	2.40	POTEMP
34.88	34.89	34.90	34.91	34.92	34.93	SAL78
67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

-0TXY DISCO 138 10805 30 00N 23 31W



1.90	2.00	2.10	2.20	2.30	2.40	POTEMP
34.88	34.89	34.90	34.91	34.92	34.93	SAL78
67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

-OTXY DISCO 138 10807 31 41N 22 35W



1.90	2.00	2.10	2.20	2.30	2.40	POTEMP
34.88	34.89	34.90	34.91	34.92	34.93	SAL78
67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

-OTXY DISCO 138 10809 33 00N 23 30W

3500

56

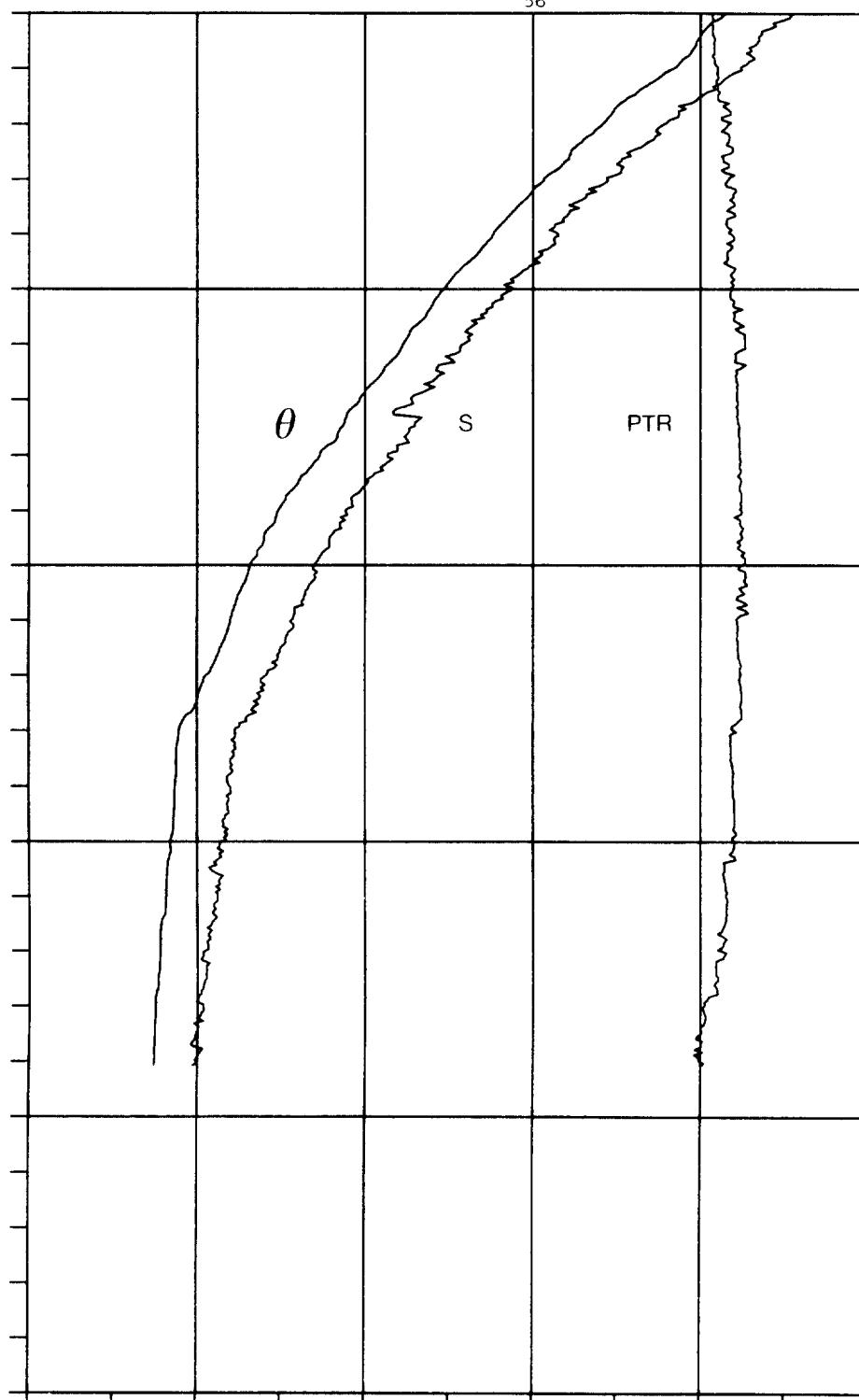
4000

4500

5000

5500

6000



1.90	2.00	2.10	2.20	2.30	2.40	POTEMP
34.88	34.89	34.90	34.91	34.92	34.93	SAL78
67.00	67.50	68.00	68.50	69.00	69.50	POTRAN

LOTXY

DISCO 138 10810 33 19N 21 50W

## DISCOVERY 138 STATION 10784

P-DR	T-DEGC	SAL-PSU	POTRAN	DO-ML/I.	POTEMP	SIGMA0	SIG4000	DYNHT-M	SNDV-M/S	DEPTH-M	SVANOM	BVFRC-C/HR
10.	18.094	36.246	61.157	5.22	18.0922	26.2052	42.8275	0.018	1517.6	10.	0.1806E 03	-9.990
20.	18.031	36.262	60.823	5.21	18.0270	26.2331	42.8591	0.036	1517.6	20.	0.1783E 03	2.967
30.	17.827	36.301	60.744	5.32	17.8217	26.3139	42.9519	0.054	1517.2	30.	0.1710E 03	5.058
50.	16.841	36.309	60.503	5.61	16.8332	26.5606	43.2616	0.086	1514.7	50.	0.1483E 03	6.251
75.	15.698	36.212	62.272	5.71	15.6866	26.7533	43.5327	0.120	1511.5	74.	0.1308E 03	4.951
100.	15.456	36.192	63.974	5.57	15.4399	26.7935	43.5901	0.152	1511.1	99.	0.1278E 03	2.263
125.	15.249	36.158	65.267	5.47	15.2296	26.8152	43.6270	0.184	1510.9	124.	0.1265E 03	1.675
150.	14.859	36.090	66.190	5.38	14.8361	26.8499	43.6906	0.215	1510.0	149.	0.1240E 03	2.126
200.	14.161	35.960	66.462	5.14	14.1315	26.9017	43.7953	0.276	1508.4	198.	0.1205E 03	1.852
250.	13.202	35.792	66.577	4.98	13.1670	26.9737	43.9414	0.335	1505.9	248.	0.1148E 03	2.198
300.	12.592	35.711	66.608	4.97	12.5509	27.0345	44.0500	0.391	1504.6	298.	0.1102E 03	2.014
400.	11.941	35.638	66.832	4.78	11.8883	27.1071	44.1748	0.499	1504.0	397.	0.1057E 03	1.565
500.	11.428	35.604	67.087	4.60	11.3639	27.1795	44.2886	0.602	1503.8	496.	0.1011E 03	1.563
600.	11.237	35.694	67.294	4.28	11.1604	27.2872	44.4098	0.700	1504.9	695.	0.9337E 02	1.861
700.	11.312	35.843	67.436	4.13	11.2211	27.3922	44.5060	0.790	1507.0	694.	0.8624E 02	1.808
800.	11.370	35.980	67.372	4.11	11.2655	27.4909	44.5974	0.873	1509.1	793.	0.7973E 02	1.753
900.	11.327	36.078	67.311	4.06	11.2090	27.5771	44.6855	0.950	1510.7	891.	0.7423E 02	1.655
1000.	11.108	36.126	67.364	4.11	10.9782	27.6571	44.7822	1.021	1511.6	990.	0.6895E 02	1.630
1200.	10.686	36.172	67.423	4.21	10.5320	27.7745	44.9338	1.153	1513.5	1188.	0.6214E 02	1.418
1400.	8.522	35.802	67.779	4.77	8.3623	27.8483	45.1976	1.269	1508.6	1385.	0.5378E 02	1.478
1600.	6.226	35.400	68.166	5.37	6.0692	27.8605	45.4263	1.370	1502.6	1582.	0.4837E 02	1.235
1800.	4.840	35.177	68.301	5.65	4.6801	27.8526	45.5572	1.465	1500.1	1779.	0.4617E 02	0.917
2000.	4.184	35.093	68.385	5.69	4.0134	27.8586	45.6314	1.556	1500.6	1976.	0.4479E 02	0.789
2200.	3.828	35.059	68.463	5.64	3.6432	27.8609	45.6808	1.645	1502.5	2172.	0.4387E 02	0.710
2400.	3.486	35.019	68.541	5.62	3.2874	27.8735	45.7218	1.732	1504.4	2369.	0.4337E 02	0.637
2600.	3.140	34.982	68.570	5.66	2.9271	27.8774	45.7639	1.818	1506.2	2565.	0.4246E 02	0.669
2800.	2.952	34.963	68.429	5.65	2.7230	27.8808	45.7890	1.903	1508.8	2761.	0.4236E 02	0.539
3000.	2.820	34.948	68.522	5.68	2.5735	27.8823	45.8066	1.988	1511.6	2957.	0.4264E 02	0.459
3200.	2.705	34.936	68.641	5.66	2.4395	27.8842	45.8229	2.073	1514.5	3152.	0.4288E 02	0.457
3400.	2.597	34.925	68.691	5.64	2.3131	27.8860	45.8383	2.159	1517.5	3348.	0.4309E 02	0.455
3600.	2.552	34.919	68.725	5.67	2.2468	27.8866	45.8461	2.246	1520.7	3543.	0.4383E 02	0.333
3800.	2.497	34.910	68.776	5.69	2.1717	27.8858	45.8535	2.334	1523.9	3738.	0.4457E 02	0.329
4000.	2.452	34.905	68.789	5.72	2.1046	27.8868	45.8619	2.424	1527.1	3933.	0.4516E 02	0.359
4200.	2.434	34.901	68.752	5.76	2.0646	27.8869	45.8663	2.515	1530.5	4128.	0.4608E 02	0.268
4400.	2.436	34.898	68.734	5.79	2.0427	27.8866	45.8685	2.608	1534.0	4323.	0.4721E 02	0.191
4500.	2.439	34.897	68.708	5.80	2.0334	27.8865	45.8694	2.656	1535.7	4420.	0.4778E 02	0.178
4600.	2.449	34.897	68.655	5.84	2.0308	27.8865	45.8696	2.704	1537.5	4517.	0.4843E 02	0.095

		DISCOVERY 138		STATION 10785								
P-DEG	T-DEG	SAL-PSU	POTRAN	DO-ML/1.	POTEMP	SIGMA0	SIG4000	DYNHIT-M	SNDV-M/S	DEPTH-M	SWANOM	BVFRC-C/HR
10.	17.677	36.150	60.112	5.17	17.6750	26.2342	42.8851	0.018	1516.3	10.	0.1778E 03	-9.990
20.	17.604	36.139	59.976	5.21	17.6008	26.2443	42.9001	0.036	1516.2	20.	0.1772E 03	1.786
30.	17.389	36.145	60.525	5.32	17.3837	26.3020	42.9716	0.053	1515.8	30.	0.1721E 03	4.281
50.	16.052	36.196	62.940	5.66	16.0443	26.6583	43.4141	0.084	1512.2	50.	0.1389E 03	7.511
75.	15.626	36.172	63.602	5.67	15.6141	26.7390	43.5242	0.118	1511.2	74.	0.1321E 03	3.201
100.	15.306	36.120	64.321	5.52	15.2901	26.7798	43.5882	0.150	1510.6	99.	0.1291E 03	2.286
125.	14.890	36.067	66.931	5.33	14.8714	26.8242	43.6630	0.182	1509.6	124.	0.1256E 03	2.394
150.	14.334	35.966	67.631	5.29	14.3116	26.8681	43.7487	0.213	1508.2	149.	0.1221E 03	2.395
200.	13.312	35.802	67.938	5.04	13.2834	26.9571	43.9160	0.272	1505.5	198.	0.1149E 03	2.420
250.	12.658	35.713	68.009	4.94	12.6241	27.0215	44.0314	0.328	1504.0	248.	0.1100E 03	2.064
300.	12.205	35.666	68.032	4.90	12.1649	27.0755	44.1213	0.382	1503.3	298.	0.1061E 03	1.892
400.	11.452	35.585	68.290	4.78	11.4009	27.1574	44.2642	0.486	1502.2	397.	0.1005E 03	1.663
500.	11.160	35.597	68.404	4.53	11.0969	27.2231	44.3533	0.584	1502.9	496.	0.9671E 02	1.470
600.	11.123	35.687	68.510	4.30	11.0465	27.3026	44.4344	0.679	1504.5	595.	0.9177E 02	1.588
700.	11.370	35.896	68.578	4.14	11.2787	27.4228	44.5307	0.766	1507.3	694.	0.8346E 02	1.915
800.	11.436	36.046	68.649	4.14	11.3309	27.5297	44.6294	0.846	1509.4	793.	0.7621E 02	1.823
900.	11.508	36.145	68.631	4.09	11.3888	27.5959	44.6884	0.920	1511.4	891.	0.7282E 02	1.429
1000.	11.330	36.193	68.683	4.09	11.1982	27.6686	44.7747	0.990	1512.5	990.	0.6834E 02	1.550
1200.	11.104	36.267	68.718	4.19	10.9463	27.7735	44.8973	1.122	1515.1	1188.	0.6328E 02	1.318
1400.	9.777	36.065	68.779	4.48	9.6044	27.8521	45.0895	1.243	1513.5	1385.	0.5724E 02	1.360
1600.	6.971	35.535	68.965	5.14	6.8053	27.8675	45.3619	1.350	1505.7	1582.	0.5048E 02	1.352
1800.	5.397	35.268	69.058	5.48	5.2292	27.8604	45.5094	1.447	1502.5	1779.	0.4786E 02	0.982
2000.	4.533	35.145	69.030	5.64	4.3575	27.8635	45.6006	1.542	1502.1	1976.	0.4604E 02	0.856
2200.	3.965	35.066	69.102	5.72	3.7775	27.8620	45.6592	1.634	1503.1	2172.	0.4533E 02	0.700
2400.	3.594	35.026	69.049	5.72	3.3929	27.8683	45.7056	1.723	1504.8	2369.	0.4448E 02	0.688
2600.	3.265	34.994	69.030	5.70	3.0499	27.8759	45.7493	1.811	1506.8	2565.	0.4340E 02	0.697
2800.	3.004	34.966	69.061	5.72	2.7738	27.8786	45.7814	1.898	1509.0	2761.	0.4292E 02	0.602
3000.	2.848	34.949	69.138	5.73	2.6001	27.8806	45.8020	1.983	1511.7	2957.	0.4300E 02	0.499
3200.	2.734	34.939	69.192	5.70	2.4675	27.8841	45.8197	2.070	1514.7	3152.	0.4313E 02	0.481
3400.	2.674	34.931	69.214	5.69	2.3983	27.8845	45.8288	2.156	1517.8	3348.	0.4386E 02	0.348
3600.	2.611	34.924	5.69	2.3051	27.8858	45.8390	2.245	1521.0	3543.	0.4443E 02	0.382	
3800.	2.575	34.919	5.71	2.2473	27.8865	45.8459	2.334	1524.2	3738.	0.4523E 02	0.320	
4000.	2.529	34.912	5.75	2.1798	27.8863	45.8531	2.426	1527.5	3933.	0.4596E 02	0.333	
4200.	2.492	34.905	5.78	2.1206	27.8863	45.8596	2.518	1530.7	4128.	0.4673E 02	0.323	
4400.	2.465	34.900	5.81	2.0705	27.8862	45.8650	2.612	1534.1	4323.	0.4755E 02	0.304	
4500.	2.463	34.899	5.83	2.0572	27.8862	45.8665	2.660	1535.8	4420.	0.4808E 02	0.223	
4600.	2.463	34.898	5.84	2.0448	27.8860	45.8677	2.709	1537.5	4517.	0.4863E 02	0.208	
4700.	2.463	34.896	5.86	2.0325	27.8859	45.8689	2.758	1539.3	4614.	0.4918E 02	0.210	
4800.	2.467	34.895	5.88	2.0235	27.8856	45.8696	2.807	1541.0	4711.	0.4977E 02	0.171	
4900.	2.470	34.894	5.90	2.0141	27.8855	45.8706	2.857	1542.8	4808.	0.5035E 02	0.191	
5000.	2.482	34.893	5.92	2.0133	27.8852	45.8703	2.908	1544.6	4906.	0.5105E 02	-0.080	
5100.	2.495	34.893	5.94	2.0127	27.8853	45.8704	2.959	1546.3	5002.	0.5173E 02	0.057	

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## DISCOVERY 138 STATION 10786

P-DR	T-DEGC	SAL-PSU	POTRAN	DO-ML/L	POTEMP	SIGMA0	SIG4000	DYNHT-M	SNDV-M/S	DEPTH-M	SVANOM	BVFRC-C/HR
10.	17.992	36.170	60.434	5.36	17.9898	26.1722	42.8028	0.018	1517.2	10.	0.1837E 03	-9.990
20.	17.802	36.171	60.076	5.38	17.7982	26.2200	42.8626	0.037	1516.9	20.	0.1795E 03	3.888
30.	17.459	36.175	60.639	5.51	17.4538	26.3078	42.9722	0.054	1516.0	30.	0.1715E 03	5.280
50.	16.055	36.126	62.482	5.85	16.0467	26.6043	43.3617	0.085	1512.1	50.	0.1441E 03	6.852
75.	15.260	36.080	62.370	5.85	15.2484	26.7506	43.5631	0.119	1510.0	74.	0.1310E 03	4.312
100.	14.983	36.059	62.899	5.65	14.9677	26.7967	43.6290	0.151	1509.5	99.	0.1274E 03	2.426
125.	14.414	35.969	66.932	5.46	14.3950	26.8526	43.7272	0.182	1508.0	124.	0.1228E 03	2.688
150.	13.849	35.879	67.949	5.31	13.8275	26.9039	43.8213	0.213	1506.5	149.	0.1186E 03	2.586
200.	13.039	35.756	68.117	5.14	13.0110	26.9776	43.9577	0.270	1504.5	198.	0.1129E 03	2.200
250.	12.493	35.696	68.146	5.03	12.4593	27.0408	44.0636	0.325	1503.4	248.	0.1081E 03	2.038
300.	12.114	35.651	68.208	4.97	12.0738	27.0816	44.1347	0.379	1502.9	298.	0.1055E 03	1.648
400.	11.654	35.623	68.267	4.70	11.6021	27.1495	44.2396	0.482	1503.0	397.	0.1015E 03	1.501
500.	11.283	35.627	68.457	4.51	11.2191	27.2244	44.3442	0.581	1503.4	496.	0.9671E 02	1.574
600.	11.402	35.805	68.615	4.27	11.3238	27.3435	44.4503	0.674	1505.6	595.	0.8829E 02	1.924
700.	12.051	36.094	68.605	4.22	11.9562	27.4486	44.4988	0.759	1509.9	694.	0.8203E 02	1.736
800.	12.176	36.222	68.643	4.26	12.0672	27.5265	44.5649	0.838	1512.1	793.	0.7772E 02	1.545
900.	11.854	36.235	68.651	4.19	11.7328	27.6009	44.6645	0.914	1512.7	891.	0.7299E 02	1.590
1000.	11.693	36.273	68.727	4.22	11.5585	27.6637	44.7396	0.985	1513.8	990.	0.6954E 02	1.442
1200.	11.492	36.342	68.756	4.18	11.3307	27.7603	44.8521	1.120	1516.5	1188.	0.6545E 02	1.264
1400.	10.938	36.301	68.783	4.29	10.7545	27.8348	44.9728	1.247	1517.9	1385.	0.6225E 02	1.193
1600.	7.811	35.691	68.998	5.00	7.6337	27.8715	45.2872	1.363	1509.1	1582.	0.5316E 02	1.514
1800.	5.757	35.332	69.139	5.45	5.5844	27.8680	45.4813	1.464	1504.0	1779.	0.4870E 02	1.149
2000.	4.628	35.159	69.135	5.63	4.4508	27.8639	45.5914	1.559	1502.6	1976.	0.4647E 02	0.906
2200.	4.071	35.083	69.199	5.69	3.8817	27.8645	45.6508	1.651	1503.5	2172.	0.4567E 02	0.715
2400.	3.590	35.025	69.226	5.70	3.3888	27.8685	45.7063	1.741	1504.8	2369.	0.4443E 02	0.738
2600.	3.250	34.991	69.201	5.71	3.0355	27.8750	45.7500	1.829	1506.7	2565.	0.4339E 02	0.692
2800.	2.995	34.963	69.257	5.75	2.7652	27.8774	45.7812	1.915	1509.0	2761.	0.4296E 02	0.593
3000.	2.839	34.949	69.296	5.74	2.5914	27.8810	45.8033	2.001	1511.7	2957.	0.4290E 02	0.522
3200.	2.749	34.940	69.311	5.70	2.4825	27.8836	45.8176	2.087	1514.7	3152.	0.4329E 02	0.431
3400.	2.674	34.932	69.338	5.68	2.3877	27.8852	45.8294	2.174	1517.8	3348.	0.4380E 02	0.400
3600.	2.610	34.924	69.365	5.69	2.3037	27.8863	45.8397	2.262	1520.9	3543.	0.4437E 02	0.381
3800.	2.538	34.915	69.351	5.69	2.2109	27.8864	45.8498	2.352	1524.1	3738.	0.4489E 02	0.386
4000.	2.477	34.906	69.369	5.74	2.1294	27.8862	45.8586	2.442	1527.2	3933.	0.4547E 02	0.368
4200.	2.397	34.897	69.317	5.74	2.0287	27.8866	45.8699	2.533	1530.3	4128.	0.4574E 02	0.429

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## DISCOVERY 138 STATION 10787

P-#R	T-DEGC	SAL-PSU	POTRAN	DO-ML/L.	POTEMP	SIGMA0	SIG4000	DYNHMT-M	SNDV-M/S	DEPTH-M	SVANOM	RVFR-C/HR
10.	17.998	36.092	60.470	5.30	17.9968	26.1103	42.7424	0.019	1517.2	10.	0.1896E 03	-9.990
20.	17.793	36.090	60.026	5.36	17.7897	26.1599	42.8051	0.038	1516.7	20.	0.1852E 03	3.957
30.	17.744	36.087	59.964	5.40	17.7387	26.1707	42.8191	0.056	1516.8	30.	0.1846E 03	1.846
50.	16.176	36.032	58.924	5.85	16.1681	26.5040	43.2556	0.090	1512.3	50.	0.1536E 03	7.268
75.	15.400	36.020	59.223	5.87	15.3881	26.6731	43.4775	0.126	1510.3	74.	0.1383E 03	4.635
100.	14.811	36.014	61.358	5.67	14.7957	26.7997	43.6452	0.159	1508.9	99.	0.1271E 03	4.015
125.	14.499	35.972	66.020	5.64	14.4807	26.8366	43.7051	0.191	1508.3	124.	0.1243E 03	2.179
150.	14.168	35.921	67.298	5.57	14.1462	26.8686	43.7621	0.222	1507.6	149.	0.1220E 03	2.040
200.	13.473	35.808	67.734	5.27	13.4446	26.9288	43.8757	0.282	1506.0	198.	0.1177E 03	1.990
250.	12.747	35.721	67.921	5.01	12.7126	27.0099	44.0130	0.339	1504.3	248.	0.1112E 03	2.310
300.	12.145	35.657	67.961	4.99	12.1047	27.0797	44.1303	0.393	1503.0	298.	0.1057E 03	2.151
400.	11.589	35.601	68.107	4.86	11.5370	27.1446	44.2403	0.496	1502.7	397.	0.1019E 03	1.477
500.	11.195	35.600	68.289	4.63	11.1318	27.2194	44.3468	0.596	1503.0	496.	0.9708E 02	1.576
600.	11.323	35.746	68.338	4.32	11.2459	27.3116	44.4261	0.691	1505.3	595.	0.9118E 02	1.689
700.	11.592	35.939	68.464	4.23	11.4997	27.4144	44.5039	0.778	1508.1	694.	0.8456E 02	1.764
800.	11.733	36.102	68.526	4.18	11.6264	27.5173	44.5926	0.860	1510.4	793.	0.7786E 02	1.778
900.	11.577	36.164	68.506	4.15	11.4577	27.5975	44.6842	0.934	1511.6	891.	0.7279E 02	1.617
1000.	11.431	36.215	68.568	4.18	11.2982	27.6675	44.7652	1.005	1512.9	990.	0.6865E 02	1.515
1200.	11.175	36.291	68.593	4.22	11.0169	27.7791	44.8967	1.136	1515.4	1188.	0.6294E 02	1.361
1400.	9.648	36.034	68.699	4.56	9.4767	27.8496	45.0984	1.257	1513.0	1385.	0.5709E 02	1.348
1600.	6.585	35.463	68.900	5.32	6.4238	27.8632	45.3945	1.362	1504.1	1582.	0.4945E 02	1.398
1800.	5.384	35.277	68.948	5.51	5.2166	27.8696	45.5194	1.458	1502.4	1779.	0.4697E 02	0.962
2000.	4.550	35.155	68.906	5.65	4.3734	27.8693	45.6046	1.551	1502.2	1976.	0.4560E 02	0.811
2200.	3.937	35.069	68.990	5.73	3.7501	27.8674	45.6673	1.641	1502.9	2172.	0.4468E 02	0.723
2400.	3.551	35.027	69.045	5.73	3.3504	27.8735	45.7151	1.729	1504.6	2369.	0.4375E 02	0.697
2600.	3.226	34.990	69.051	5.75	3.0120	27.8758	45.7532	1.816	1506.6	2565.	0.4317E 02	0.631
2800.	3.000	34.967	69.125	5.74	2.7703	27.8802	45.7833	1.902	1509.0	2761.	0.4275E 02	0.591
3000.	2.853	34.952	69.177	5.74	2.6051	27.8822	45.8030	1.987	1511.8	2957.	0.4289E 02	0.488
3200.	2.743	34.942	69.205	5.76	2.4711	27.8853	45.8199	2.073	1514.7	3152.	0.4309E 02	0.469
3400.	2.649	34.930	69.233	5.72	2.3631	27.8861	45.8330	2.159	1517.7	3348.	0.4351E 02	0.418
3600.	2.595	34.923	69.257	5.74	2.2891	27.8864	45.8413	2.247	1520.9	3543.	0.4423E 02	0.342
3800.	2.536	34.915	69.247	5.75	2.2097	27.8862	45.8498	2.337	1524.1	3738.	0.4489E 02	0.352
4000.	2.474	34.906	69.269	5.78	2.1263	27.8864	45.8591	2.427	1527.2	3933.	0.4542E 02	0.378
4200.	2.442	34.901	69.275	5.82	2.0717	27.8868	45.8654	2.519	1530.5	4128.	0.4617E 02	0.320
4400.	2.427	34.897	69.173	5.85	2.0343	27.8862	45.8689	2.612	1533.9	4323.	0.4716E 02	0.245
4500.	2.427	34.895	69.230	5.86	2.0219	27.8860	45.8702	2.659	1535.6	4420.	0.4770E 02	0.207
4600.	2.430	34.894	69.187	5.88	2.0124	27.8861	45.8713	2.707	1537.4	4517.	0.4825E 02	0.201
4700.	2.436	34.894	69.191	5.86	2.0066	27.8861	45.8719	2.756	1539.1	4614.	0.4886E 02	0.150

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## DISCOVERY 138 STATION 10788

P-DR	T-DEGC	SAL-PSU	POTRAN	DO-ML/I.	POTEMP	SIGMA0	SIG4000	DYNHT-M	SNDD-M/S	DEPTH-M	SVANOM	RVFR-C/HR
10.	17.931	36.079	60.096	5.05	17.9290	26.1171	42.7537	0.019	1517.0	10.	0.1889E 03	-9.990
20.	17.843	36.075	59.397	5.25	17.8400	26.1362	42.7785	0.038	1516.9	20.	0.1875E 03	2.457
30.	17.038	36.073	58.828	5.48	17.0329	26.3296	43.0238	0.056	1514.6	30.	0.1693E 03	7.854
50.	15.521	36.012	59.069	5.80	15.5128	26.6389	43.4350	0.086	1510.3	50.	0.1407E 03	6.985
75.	14.795	36.010	62.933	5.62	14.7839	26.7994	43.6458	0.119	1508.4	74.	0.1263E 03	4.516
100.	14.563	35.985	65.990	5.60	14.5484	26.8319	43.6954	0.150	1508.1	99.	0.1240E 03	2.040
125.	14.322	35.944	67.098	5.57	14.3038	26.8531	43.7349	0.181	1507.7	124.	0.1227E 03	1.657
150.	13.892	35.876	67.663	5.27	13.8704	26.8923	43.8067	0.211	1506.6	149.	0.1197E 03	2.259
200.	13.100	35.761	67.922	5.01	13.0717	26.9692	43.9446	0.269	1504.7	198.	0.1137E 03	2.244
250.	12.673	35.724	67.905	4.86	12.6388	27.0271	44.0357	0.325	1504.1	248.	0.1095E 03	1.946
300.	12.066	35.655	67.990	4.83	12.0261	27.0933	44.1500	0.378	1502.8	298.	0.1043E 03	2.099
400.	11.468	35.611	68.093	4.63	11.4164	27.1755	44.2803	0.479	1502.3	397.	0.9886E 02	1.654
500.	11.262	35.677	68.300	4.38	11.1978	27.2670	44.3872	0.575	1503.3	496.	0.9268E 02	1.718
600.	11.563	35.887	68.421	4.70	11.4844	27.3772	44.4693	0.664	1506.3	595.	0.8533E 02	1.831
700.	11.994	36.117	68.450	4.17	11.8999	27.4768	44.5308	0.747	1509.7	694.	0.7930E 02	1.715
800.	11.932	36.197	68.454	4.14	11.8244	27.5536	44.6112	0.824	1511.2	793.	0.7479E 02	1.565
900.	11.692	36.203	68.470	4.13	11.5712	27.6065	44.6833	0.897	1512.1	891.	0.7217E 02	1.344
1000.	11.720	36.292	68.517	4.16	11.5855	27.6736	44.7469	0.967	1513.9	990.	0.6868E 02	1.447
1200.	11.452	36.342	68.542	4.17	11.2919	27.7673	44.8621	1.101	1516.4	1188.	0.6471E 02	1.256
1400.	10.789	36.275	68.583	4.32	10.6010	27.8408	44.9913	1.227	1517.3	1385.	0.6126E 02	1.208
1600.	7.693	35.670	68.833	5.04	7.5190	27.8725	45.2991	1.341	1508.6	1582.	0.5264E 02	1.484
1800.	5.811	35.340	68.944	5.46	5.6374	27.8680	45.4761	1.443	1504.2	1779.	0.4892E 02	1.092
2000.	4.766	35.186	68.939	5.61	4.6159	27.8675	45.5781	1.538	1503.3	1976.	0.4694E 02	0.887
2200.	4.032	35.082	68.959	5.72	3.8437	27.8681	45.6582	1.630	1503.4	2172.	0.4513E 02	0.830
2400.	3.595	35.030	69.071	5.76	3.3944	27.8713	45.7083	1.719	1504.8	2369.	0.4422E 02	0.698
2600.	3.294	34.996	69.178	5.76	3.0779	27.8749	45.7454	1.808	1506.9	2565.	0.4367E 02	0.629
2800.	3.065	34.972	69.208	5.76	2.8339	27.8782	45.7745	1.895	1509.3	2761.	0.4337E 02	0.577
3000.	2.873	34.951	69.280	5.82	2.6244	27.8803	45.7992	1.981	1511.9	2957.	0.4321E 02	0.544
3200.	2.766	34.942	69.296	5.76	2.4995	27.8833	45.8155	2.068	1514.8	3152.	0.4345E 02	0.462
3400.	2.686	34.933	69.305	5.75	2.3997	27.8850	45.8280	2.155	1517.9	3348.	0.4392E 02	0.411
3600.	2.623	34.925	69.335	5.74	2.3161	27.8856	45.8376	2.244	1521.0	3543.	0.4455E 02	0.368
3800.	2.569	34.917	69.362	5.74	2.2413	27.8854	45.8456	2.333	1524.2	3738.	0.4522E 02	0.341
4000.	2.516	34.911	69.378	5.76	2.1671	27.8867	45.8549	2.424	1527.4	3933.	0.4580E 02	0.380
4200.	2.463	34.903	69.399	5.81	2.0922	27.8866	45.8630	2.517	1530.6	4128.	0.4640E 02	0.361
4400.	2.427	34.897	69.378	5.85	2.0342	27.8862	45.8690	2.610	1533.9	4323.	0.4716E 02	0.318
4500.	2.424	34.895	69.321	5.86	2.0188	27.8862	45.8707	2.657	1535.6	4420.	0.4765E 02	0.244
4600.	2.428	34.894	69.278	5.88	2.0104	27.8860	45.8714	2.705	1537.4	4517.	0.4824E 02	0.163
4700.	2.435	34.893	69.259	5.90	2.0050	27.8859	45.8719	2.754	1539.1	4614.	0.4886E 02	0.142
4800.	2.446	34.893	69.247	5.91	2.0039	27.8860	45.8721	2.803	1540.9	4712.	0.4951E 02	0.076

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DISCOVERY 138 STATION 10789									
P-DR	T-DEGC	SAL-PSU	POTRAN	DO-ML/I.	POTEMP	SIGMAO	SIG4000	DYNHT-M	SNDD-M/S DEPTH-M
10.	17.833	36.110	61.020	5.25	17.8317	26.1651	42.8070	0.018	1516.7
20.	17.639	36.093	60.913	5.35	17.6360	26.2004	42.8551	0.037	1516.3
30.	16.904	36.123	62.039	5.52	16.8992	26.4014	43.1027	0.054	1514.3
50.	15.679	36.108	63.656	5.76	15.6715	26.6766	43.4596	0.083	1510.9
75.	15.292	36.091	63.711	5.73	15.2802	26.7515	43.5616	0.117	1510.1
100.	15.017	36.064	64.289	5.57	15.0018	26.7931	43.6230	0.149	1509.6
125.	14.716	36.023	66.104	5.43	14.6969	26.8285	43.6806	0.181	1509.0
150.	14.301	35.954	67.312	5.28	14.2792	26.8655	43.7488	0.211	1508.0
200.	13.096	35.768	67.966	5.13	13.0681	26.9750	43.9506	0.270	1504.7
250.	12.604	35.712	67.918	5.00	12.5701	27.0311	44.0452	0.326	1503.8
300.	12.240	35.677	67.949	4.93	12.1997	27.0769	44.1198	0.379	1503.4
400.	11.637	35.623	68.052	4.74	11.5851	27.1525	44.2440	0.483	1502.9
500.	11.285	35.666	68.254	4.49	11.2206	27.2547	44.3733	0.580	1503.4
600.	11.700	35.930	68.394	4.31	11.6210	27.3850	44.4653	0.669	1506.8
700.	12.248	36.182	68.427	4.28	12.1520	27.4788	44.5118	0.751	1510.6
800.	12.226	36.263	68.413	4.29	12.1167	27.5485	44.5821	0.829	1512.3
900.	11.970	36.274	68.460	4.27	11.8479	27.6088	44.6625	0.903	1513.1
1000.	11.929	36.351	68.521	4.25	11.7932	27.6793	44.7351	0.973	1514.7
1200.	11.774	36.410	68.523	4.25	11.6102	27.7607	44.8290	1.107	1517.6
1400.	11.000	36.309	68.615	4.35	10.8155	27.8295	44.9625	1.236	1518.1
1600.	8.079	35.742	68.816	4.98	7.9000	27.8726	45.2637	1.353	1510.2
1800.	5.856	35.340	68.968	5.50	5.6820	27.8625	45.4663	1.455	1504.4
2000.	4.866	35.197	68.957	5.64	4.6849	27.8677	45.5713	1.551	1503.6
2200.	4.091	35.089	69.040	5.74	3.9019	27.8674	45.6515	1.644	1503.6
2400.	3.563	35.023	69.079	5.78	3.3622	27.8688	45.7094	1.733	1504.7
2600.	3.284	34.995	69.040	5.76	3.0682	27.8750	45.7464	1.821	1506.9
2800.	3.032	34.968	69.119	5.81	2.8009	27.8782	45.7782	1.908	1509.2
3000.	2.861	34.950	69.230	5.81	2.6128	27.8799	45.8000	1.994	1511.8
3200.	2.746	34.940	69.250	5.77	2.4794	27.8837	45.8181	2.080	1514.7
3400.	2.687	34.933	69.234	5.73	2.4003	27.8852	45.8280	2.168	1517.9
3600.	2.616	34.925	69.261	5.73	2.3098	27.8861	45.8388	2.256	1521.0
3800.	2.562	34.916	69.242	5.75	2.2346	27.8856	45.8464	2.346	1524.2
4000.	2.506	34.910	69.291	5.78	2.1574	27.8866	45.8559	2.437	1527.4
4200.	2.457	34.903	69.275	5.80	2.0869	27.8867	45.8637	2.529	1530.6
4400.	2.418	34.896	69.263	5.85	2.0251	27.8864	45.8702	2.622	1533.9
4500.	2.413	34.894	69.192	5.86	2.0088	27.8861	45.8716	2.669	1535.6

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BVFR-C/HR

## DISCOVERY 138 STATION 10790

P- $\eta$ R	T- $\eta$ CC	SAL-PSU	POTRAN	DO-ML/L	POTEMP	SIGMA0	SIG4000	DYNHT-M	SNTV-M/S	DEPTH-M	SVANOM	BVFR-C/HR
10.	17.928	36.101	60.486	5.22	17.9262	26.1349	42.7712	0.019	1517.0	10.	0.1872E 03	-9.990
20.	17.534	36.116	60.897	5.35	17.5301	26.2437	42.9046	0.037	1516.0	20.	0.1773E 03	5.865
30.	16.352	36.108	61.553	5.67	16.3472	26.5202	43.2581	0.054	1512.6	30.	0.1513E 03	9.361
50.	15.484	36.078	62.378	5.88	15.4758	26.6979	43.4949	0.082	1510.3	50.	0.1351E 03	5.301
75.	15.304	36.073	62.328	5.81	15.2927	26.7348	43.5445	0.115	1510.1	74.	0.1325E 03	2.167
100.	15.075	36.071	61.131	5.72	15.0596	26.7856	43.6113	0.147	1509.8	99.	0.1285E 03	2.543
125.	14.955	36.064	64.935	5.64	14.9356	26.8078	43.6423	0.179	1509.8	124.	0.1272E 03	1.684
150.	14.792	36.031	67.325	5.59	14.7693	26.8192	43.6660	0.211	1509.7	149.	0.1269E 03	1.223
200.	13.649	35.841	68.130	5.20	13.6200	26.9178	43.8512	0.273	1506.6	198.	0.1188E 03	2.547
250.	12.925	35.749	68.164	5.04	12.8903	26.9959	43.9851	0.330	1505.0	248.	0.1126E 03	2.268
300.	12.471	35.703	68.159	4.97	12.4299	27.0521	44.0769	0.386	1504.2	298.	0.1085E 03	1.927
400.	11.637	35.607	68.312	4.92	11.5849	27.1403	44.2322	0.491	1502.9	397.	0.1023E 03	1.727
500.	11.299	35.593	68.438	4.71	11.2355	27.1944	44.3138	0.592	1503.4	496.	0.9955E 02	1.346
600.	11.172	35.676	68.620	4.43	11.0956	27.2853	44.4135	0.689	1504.7	595.	0.9346E 02	1.707
700.	11.324	35.850	68.740	4.25	11.2335	27.3951	44.5077	0.778	1507.1	694.	0.8598E 02	1.840
800.	11.605	36.067	68.772	4.21	11.4993	27.5142	44.6003	0.860	1510.0	793.	0.7794E 02	1.896
900.	11.394	36.125	68.796	4.20	11.2761	27.6014	44.7032	0.934	1511.0	891.	0.7209E 02	1.693
1000.	11.312	36.206	68.824	4.22	11.1804	27.6821	44.7892	1.004	1512.4	990.	0.6705E 02	1.610
1200.	11.075	36.279	68.836	4.27	10.9177	27.7881	44.9138	1.132	1515.0	1188.	0.6185E 02	1.326
1400.	9.553	36.016	68.952	4.58	9.3832	27.8513	45.1084	1.252	1512.6	1385.	0.5665E 02	1.305
1600.	7.116	35.557	69.073	5.18	6.9482	27.8651	45.3459	1.360	1506.3	1582.	0.5123E 02	1.263
1800.	5.714	35.323	69.132	5.50	5.5419	27.8663	45.4839	1.459	1503.8	1779.	0.4867E 02	0.985
2000.	4.740	35.178	69.121	5.67	4.5608	27.8673	45.5835	1.554	1503.0	1976.	0.4669E 02	0.883
2200.	3.939	35.069	69.173	5.79	3.7521	27.8670	45.6666	1.646	1503.0	2172.	0.4473E 02	0.841
2400.	3.570	35.028	69.251	5.77	3.3696	27.8723	45.7120	1.735	1504.7	2369.	0.4397E 02	0.677
2600.	3.274	34.996	69.266	5.74	3.0592	27.8762	45.7486	1.822	1506.8	2565.	0.4344E 02	0.627
2800.	3.025	34.968	69.268	5.80	2.7947	27.8785	45.7791	1.908	1509.1	2761.	0.4307E 02	0.586
3000.	2.860	34.950	69.350	5.80	2.6122	27.8802	45.8003	1.994	1511.8	2957.	0.4313E 02	0.504
3200.	2.735	34.938	69.338	5.75	2.4690	27.8834	45.8189	2.081	1514.7	3153.	0.4319E 02	0.492
3400.	2.643	34.929	69.373	5.74	2.3573	27.8851	45.8326	2.167	1517.7	3348.	0.4355E 02	0.431
3600.	2.570	34.920	69.426	5.74	2.2645	27.8860	45.8436	2.255	1520.8	3543.	0.4405E 02	0.392
3800.	2.493	34.910	69.444	5.76	2.1671	27.8860	45.8542	2.343	1523.9	3738.	0.4451E 02	0.396
4000.	2.440	34.903	69.463	5.79	2.0934	27.8862	45.8624	2.433	1527.1	3933.	0.4511E 02	0.356

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## DISCOVERY 138 STATION 10791

P-DR	T-DEGC	SAL-PSU	POTRAN	DO-ML/L	POTEMP	SIGMA0	SIG4000	DYNHHT-M	SNDV-M/S	DEPTH-M	SWANOM	BVFRC-HR
10.	18.192	36.143	60.350	5.22	18.1906	26.1012	42.199	0.019	1517.8	10.	0.1905E 03	-9.990
20.	18.165	36.143	60.415	5.29	18.1611	26.090	42.7295	0.038	1517.9	20.	0.1901E 03	1.574
30.	17.622	36.100	60.194	5.46	17.6172	26.2101	42.8659	0.057	1516.4	30.	0.1808E 03	5.673
50.	15.900	36.074	62.305	5.87	15.8925	26.5998	43.3688	0.088	1511.5	50.	0.1445E 03	7.853
75.	15.101	36.043	62.408	5.82	15.0896	26.7576	43.5820	0.122	1509.4	74.	0.1303E 03	4.479
100.	14.600	35.984	64.645	5.70	14.5851	26.8231	43.6840	0.154	1508.2	99.	0.1248E 03	2.894
125.	14.423	35.962	66.239	5.66	14.4047	26.8451	43.7193	0.185	1508.0	124.	0.1235E 03	1.681
150.	14.138	35.916	67.524	5.51	14.1164	26.8713	43.7671	0.216	1507.5	149.	0.1218E 03	1.848
200.	13.243	35.774	68.032	5.37	13.2145	26.9497	43.9143	0.275	1505.2	198.	0.1156E 03	2.270
250.	12.613	35.698	68.076	5.14	12.5794	27.0185	44.0322	0.332	1503.9	248.	0.1103E 03	2.129
300.	12.214	35.656	68.186	5.04	12.138	27.0660	44.1114	0.386	1503.3	298.	0.1070E 03	1.774
400.	11.459	35.572	68.371	4.98	11.4078	27.1463	44.2528	0.490	1502.3	397.	0.1016E 03	1.648
500.	11.131	35.569	68.547	4.70	11.0681	27.2069	44.3402	0.590	1502.8	496.	0.9819E 02	1.420
600.	10.962	35.624	68.676	4.37	10.8861	27.2828	44.4289	0.686	1503.9	595.	0.9343E 02	1.568
700.	10.862	35./34	68.818	4.19	10.7734	27.3890	44.5411	0.776	1505.3	694.	0.8587E 02	1.841
800.	11.072	35.923	68.871	4.11	10.9693	27.5008	44.6322	0.857	1507.9	793.	0.7830E 02	1.845
900.	10.943	36.000	68.908	4.12	10.8277	27.5867	44.7271	0.933	1509.2	891.	0.7262E 02	1.666
1000.	10.744	36.040	68.937	4.16	10.6170	27.6560	44.8121	1.003	1510.3	990.	0.6829E 02	1.521
1200.	10.135	36.049	68.985	4.31	9.9861	27.7745	44.9812	1.131	1511.4	1188.	0.6075E 02	1.450
1400.	8.762	35.859	69.008	4.70	8.6006	27.8557	45.1830	1.245	1509.5	1385.	0.5384E 02	1.389
1600.	6.633	35.481	69.064	5.26	6.4710	27.8808	45.3973	1.347	1504.3	1582.	0.4893E 02	1.211
1800.	5.189	35.244	69.128	5.59	5.0242	27.8661	45.5354	1.442	1501.6	1779.	0.4645E 02	0.959
2000.	4.530	35.153	69.120	5.67	4.3542	27.8700	45.6073	1.534	1502.1	1976.	0.4543E 02	0.767
2200.	4.011	35.080	69.144	5.71	3.8233	27.8681	45.6603	1.625	1503.3	2172.	0.4502E 02	0.663
2400.	3.664	35.042	69.146	5.72	3.4613	27.8743	45.7042	1.714	1505.1	2369.	0.4434E 02	0.670
2600.	3.239	34.986	69.233	5.85	3.0242	27.8720	45.7483	1.802	1506.7	2565.	0.4359E 02	0.658
2800.	3.001	34.964	69.255	5.85	2.7709	27.8772	45.7804	1.888	1509.0	2761.	0.4301E 02	0.613
3000.	2.856	34.951	69.277	5./8	2.6081	27.8816	45.8022	1.974	1511.8	2957.	0.4297E 02	0.521
3200.	2.757	34.941	69.294	5.75	2.4900	27.8840	45.8172	2.060	1514.8	3153.	0.4331E 02	0.441
3400.	2.653	34.931	69.324	5.73	2.3672	27.8865	45.8329	2.147	1517.7	3348.	0.4351E 02	0.462
3600.	2.574	34.922	69.355	5.73	2.2688	27.8870	45.8441	2.235	1520.8	3543.	0.4399E 02	0.397
3800.	2.495	34.911	69.352	5.76	2.1695	27.8868	45.8548	2.323	1523.9	3739.	0.4445E 02	0.395
4000.	2.457	34.905	69.329	5.82	2.1100	27.8871	45.8615	2.413	1527.2	3933.	0.4520E 02	0.322
4200.	2.431	34.901	69.374	5.83	2.0616	27.8876	45.8673	2.504	1530.5	4128.	0.4599E 02	0.306
4400.	2.426	34.897	69.294	5.84	2.0330	27.8868	45.8697	2.597	1533.9	4323.	0.4709E 02	0.203
4500.	2.439	34.897	69.257	5.86	2.0334	27.8867	45.8696	2.644	1535.7	4420.	0.4777E 02	-0.062

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DISCOVERY 138 STATION 10792											
P-DB	T-DEGC	SAL-PSU	POTRAN	DO-ML/I.	POTTEMP	SIGMA0	SIGMA4000	DYNHT-M	SNDV-N/S DEPTH-M	SVANOM	BVFRC/HR
10.	18.124	36.178	62.588	5.23	18.1220	26.1453	42.7674	0.019	1517.6	10.	0.1863E 03 -9.990
20.	18.129	36.178	62.586	5.22	18.1251	26.1445	42.7664	0.037	1517.8	20.	0.1867E 03 -0.502
30.	17.708	36.159	62.776	5.38	17.7031	26.2340	42.8830	0.056	1516.7	30.	0.1785E 03 5.345
50.	15.754	36.053	64.519	5.90	15.7466	26.6166	43.3960	0.087	1511.1	50.	0.1429E 03 7.781
75.	15.172	36.012	64.420	5.89	15.1609	26.7177	43.5380	0.121	1509.6	74.	0.1341E 03 3.586
100.	14.751	35.987	65.619	5.61	14.7356	26.7919	43.6423	0.154	1508.7	99.	0.1278E 03 3.077
125.	14.376	35.934	66.885	5.52	14.3576	26.8333	43.7116	0.185	1507.8	124.	0.1246E 03 2.310
150.	14.052	35.881	67.693	5.42	14.0302	26.8629	43.7657	0.216	1507.2	149.	0.1225E 03 1.961
200.	13.477	35.816	68.115	5.14	13.4490	26.9345	43.8809	0.276	1506.0	198.	0.1171E 03 2.157
250.	12.806	35.734	68.066	5.04	12.7712	27.0086	44.0071	0.333	1504.5	248.	0.1113E 03 2.209
300.	12.287	35.655	68.106	5.09	12.2467	27.0510	44.0909	0.388	1503.5	298.	0.1084E 03 1.694
400.	11.648	35.595	68.275	4.97	11.5958	27.1287	44.2201	0.494	1502.9	397.	0.1034E 03 1.614
500.	11.143	35.559	68.459	4.79	11.0798	27.1971	44.3297	0.595	1502.8	496.	0.9913E 02 1.521
600.	10.678	35.532	68.612	4.51	10.6041	27.2618	44.4329	0.692	1502.8	595.	0.9504E 02 1.490
700.	10.887	35.719	68.707	4.19	10.7983	27.3727	44.5232	0.784	1505.4	694.	0.8744E 02 1.842
800.	11.037	35.915	68.799	4.17	10.9340	27.5011	44.6355	0.866	1507.8	793.	0.7822E 02 1.989
900.	10.774	35.975	68.826	4.15	10.6598	27.5973	44.7518	0.941	1508.6	891.	0.7131E 02 1.784
1000.	10.400	35.974	68.868	4.21	10.2747	27.6653	44.8507	1.010	1509.0	990.	0.6670E 02 1.546
1200.	9.924	36.034	68.922	4.37	9.7765	27.7987	45.0229	1.135	1510.6	1188.	0.5796E 02 1.511
1400.	7.854	35.666	68.998	4.96	7.7011	27.8420	45.2527	1.246	1505.9	1385.	0.5228E 02 1.297
1600.	6.181	35.391	69.030	5.38	6.0252	27.8591	45.4293	1.345	1502.4	1582.	0.4833E 02 1.119
1800.	4.862	35.177	69.069	5.78	4.7021	27.8505	45.5529	1.439	1500.2	1779.	0.4644E 02 0.885
2000.	4.385	35.122	69.078	5.79	4.2118	27.8611	45.6134	1.532	1501.5	1976.	0.4554E 02 0.745
2200.	3.779	35.043	69.145	5.87	3.5944	27.8618	45.6782	1.622	1502.2	2172.	0.4433E 02 0.748
2400.	3.349	34.993	69.208	5.90	3.1521	27.8657	45.7286	1.710	1503.8	2369.	0.4326E 02 0.703
2600.	3.111	34.974	69.197	5.87	2.9898	27.8739	45.7635	1.796	1506.1	2565.	0.4259E 02 0.632
2800.	2.912	34.956	69.242	5.82	2.6838	27.8791	45.7916	1.880	1508.6	2761.	0.4223E 02 0.575
3000.	2.781	34.945	69.242	5.78	2.5351	27.8828	45.8111	1.965	1511.5	2957.	0.4231E 02 0.493
3200.	2.700	34.936	69.290	5.76	2.4346	27.8848	45.8240	2.050	1514.5	3153.	0.4279E 02 0.409
3400.	2.631	34.928	69.315	5.76	2.3458	27.8856	45.8344	2.136	1517.6	3348.	0.4340E 02 0.373
3600.	2.568	34.920	69.353	5.77	2.2629	27.8863	45.8440	2.223	1520.8	3543.	0.4401E 02 0.367
3800.	2.521	34.914	69.364	5.78	2.1950	27.8866	45.8518	2.312	1524.0	3739.	0.4472E 02 0.338
4000.	2.480	34.907	69.414	5.82	2.1322	27.8862	45.8582	2.402	1527.2	3934.	0.4550E 02 0.315
4200.	2.450	34.902	69.402	5.85	2.0797	27.8867	45.8645	2.494	1530.6	4128.	0.4626E 02 0.317
4400.	2.430	34.897	69.423	5.89	2.0366	27.8865	45.8690	2.588	1533.9	4323.	0.4715E 02 0.279
4500.	2.429	34.896	69.424	5.92	2.0241	27.8861	45.8700	2.635	1535.7	4420.	0.4771E 02 0.189
4600.	2.432	34.895	69.407	5.92	2.0145	27.8862	45.8711	2.683	1537.4	4517.	0.4827E 02 0.197
4700.	2.437	34.894	69.408	5.95	2.0076	27.8860	45.8717	2.732	1539.2	4615.	0.4888E 02 0.147
4800.	2.444	34.893	69.385	5.97	2.0020	27.8859	45.8722	2.781	1540.9	4712.	0.4950E 02 0.144
4900.	2.454	34.892	69.298	5.98	1.9983	27.8856	45.8724	2.831	1542.7	4809.	0.5015E 02 0.083
5000.	2.467	34.892	69.273	6.00	1.9983	27.8856	45.8723	2.881	1544.5	4906.	0.5084E 02 -0.042
5100.	2.480	34.892	69.284	6.03	1.9981	27.8854	45.8722	2.932	1546.3	5003.	0.5153E 02 -0.053

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## DISCOVERY 138 STATION 10793

P-DR	T-DEGC	SAL-PSU	POTRAN	DO-NL/L.	POTEMP	SIGCM40	SIG4000	DYNHT-M	SNDV-M/S	DEPTH-M	SVA-NOM	RVFR-C/HR
10.	18.706	36.278	63.028	5.17	18.7043	26.0748	42.6586	0.019	1519.4	10.	0.1930E 03	-9.990
20.	18.586	36.268	62.577	5.19	18.5827	26.0981	42.6896	0.039	1519.2	20.	0.1911E 03	2.715
30.	18.237	36.220	61.886	5.30	18.2314	26.1501	42.7644	0.057	1518.3	30.	0.1866E 03	4.062
50.	16.548	36.048	61.624	5.78	16.5398	26.4287	43.1554	0.092	1513.5	50.	0.1607E 03	6.651
75.	15.526	36.056	63.554	5.87	15.5144	26.6723	43.4673	0.129	1510.8	74.	0.1384E 03	5.557
100.	15.262	36.046	64.171	5.66	15.2466	26.7250	43.5384	0.163	1510.4	99.	0.1342E 03	2.589
125.	14.954	36.025	67.446	5.43	14.9348	26.7776	43.6131	0.196	1509.8	124.	0.1300E 03	2.596
150.	14.587	35.959	67.899	5.30	14.5645	26.8079	43.6709	0.228	1509.0	149.	0.1279E 03	1.989
200.	13.684	35.832	68.147	5.09	13.6550	26.9035	43.8345	0.290	1506.7	198.	0.1201E 03	2.497
250.	13.091	35.755	68.282	5.00	13.0562	26.9677	43.9444	0.349	1505.5	248.	0.1153E 03	2.057
300.	12.578	35.691	68.405	4.97	12.5368	27.0214	44.0385	0.405	1504.6	298.	0.1114E 03	1.892
400.	11.810	35.603	68.472	4.92	11.7571	27.1046	44.1833	0.514	1503.5	397.	0.1058E 03	1.675
500.	11.176	35.537	68.658	4.86	11.1129	27.1737	44.3043	0.617	1502.9	496.	0.1014E 03	1.542
600.	10.953	35.567	68.692	4.55	10.8775	27.2403	44.3887	0.717	1503.8	595.	0.9740E 02	1.479
700.	10.591	35.623	68.794	4.26	10.5039	27.3511	44.5277	0.811	1504.2	694.	0.8902E 02	1.911
800.	10.233	35.683	68.860	4.20	10.1349	27.4630	44.6677	0.896	1504.7	793.	0.8041E 02	1.926
900.	9.894	35.747	68.956	4.18	9.7853	27.5732	44.8047	0.971	1505.2	891.	0.7186E 02	1.916
1000.	9.760	35.818	68.963	4.23	9.6394	27.6536	44.8950	1.040	1506.5	990.	0.6642E 02	1.618
1200.	8.985	35.799	69.024	4.50	8.8460	27.7698	45.0780	1.164	1506.9	1188.	0.5821E 02	1.463
1400.	6.923	35.477	69.094	5.17	6.7800	27.8255	45.3238	1.272	1502.1	1385.	0.5084E 02	1.377
1600.	5.419	35.247	69.139	5.59	5.2722	27.8388	45.4842	1.370	1499.2	1582.	0.4731E 02	1.056
1800.	4.806	35.165	69.126	5./4	4.6468	27.8473	45.5555	1.464	1499.9	1779.	0.4651E 02	0.756
2000.	4.366	35.114	69.151	5.78	4.1923	27.8562	45.6107	1.557	1501.4	1976.	0.4589E 02	0.707
2200.	3.828	35.078	69.190	5.90	3.6426	27.8855	45.6959	1.646	1502.5	2172.	0.4245E 02	0.970
2400.	3.521	35.016	69.175	5.87	3.3210	27.8672	45.7122	1.733	1504.5	2369.	0.4414E 02	0.183
2600.	3.230	34.985	69.239	5.90	3.0154	27.8721	45.7494	1.821	1506.6	2565.	0.4352E 02	0.635
2800.	3.006	34.964	69.239	5.87	2.7754	27.8769	45.7796	1.907	1509.0	2761.	0.4308E 02	0.593
3000.	2.849	34.962	69.272	5.84	2.6013	27.8906	45.8115	1.993	1511.8	2957.	0.4211E 02	0.655
3200.	2.746	34.939	69.262	5.82	2.4798	27.8833	45.8176	2.079	1514.7	3153.	0.4330E 02	0.225
3400.	2.677	34.931	69.276	5.80	2.3910	27.8845	45.8284	2.166	1517.8	3348.	0.4389E 02	0.382
3600.	2.618	34.924	69.315	5.80	2.3120	27.8854	45.8378	2.254	1521.0	3543.	0.4453E 02	0.365
3800.	2.561	34.916	69.356	5.81	2.239/	27.8847	45.8451	2.344	1524.2	3739.	0.4531E 02	0.326
4000.	2.521	34.911	69.365	5.84	2.1721	27.8861	45.8538	2.435	1527.4	3934.	0.4590E 02	0.367
4200.	2.486	34.905	69.371	5.87	2.1152	27.8861	45.8600	2.528	1530.7	4128.	0.4668E 02	0.316
4400.	2.458	34.899	69.397	5.90	2.0636	27.8860	45.8656	2.622	1534.0	4323.	0.4749E 02	0.308
4500.	2.452	34.898	69.396	5.92	2.0464	27.8859	45.8674	2.670	1535.8	4420.	0.4798E 02	0.250
4600.	2.450	34.896	69.404	5.94	2.0317	27.8858	45.8689	2.718	1537.5	4517.	0.4850E 02	0.231
4700.	2.452	34.895	69.408	5.95	2.0219	27.8856	45.8697	2.767	1539.2	4615.	0.4908E 02	0.178
4800.	2.457	34.894	69.418	5.97	2.0142	27.8855	45.8705	2.816	1541.0	4712.	0.4968E 02	0.168
4900.	2.464	34.893	69.385	5.99	2.0082	27.8855	45.8711	2.866	1542.7	4809.	0.5029E 02	0.158
5000.	2.473	34.892	69.383	6.00	2.0047	27.8851	45.8712	2.917	1544.5	4906.	0.5096E 02	0.062
5100.	2.484	34.892	69.384	6.02	2.0025	27.8850	45.8714	2.968	1546.3	5003.	0.5162E 02	0.087
5200.	2.497	34.892	69.325	6.05	2.0015	27.8848	45.8712	3.020	1548.1	5100.	0.5232E 02	-0.062
5300.	2.509	34.892	69.307	6.07	2.0009	27.8848	45.8713	3.073	1549.9	5197.	0.5300E 02	0.069
5400.	2.522	34.891	69.269	6.09	2.0001	27.8845	45.8711	3.126	1551.7	5294.	0.5371E 02	-0.073
5500.	2.535	34.891	69.241	6.10	1.9996	27.8844	45.8711	3.180	1553.5	5390.	0.5441E 02	-0.023
5600.	2.549	34.891	69.227	6.12	1.9994	27.8848	45.8715	3.235	1555.3	5487.	0.5508E 02	0.109

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DISCOVERY 138		STATION 10797										
P-DB	T-DEGC	SAL-PSU	POTRAN	DO-ML/L	POTEMP	SIGMA0	SIG4000	DYNH-T-M	SNDV-M/S	DEPTH-M	SVANOM	BVFVR-C/HR
10.	19.585	36.490		19.5832	26.0101	42.5358	0.020	1522.1	10.	0.1991E 03	-9.990	
20.	19.325	36.476		19.3214	26.0679	42.6095	0.040	1521.6	20.	0.1940E 03	4.272	
30.	19.155	36.465		19.1496	26.1040	42.6562	0.059	1521.2	30.	0.1910E 03	3.383	
50.	18.125	36.395		18.1163	26.3129	42.9301	0.096	1518.6	50.	0.1719E 03	5.756	
75.	16.934	36.320		16.9215	26.5474	43.2424	0.135	1515.4	74.	0.1505E 03	5.457	
100.	16.338	36.232		16.3219	26.6219	43.3584	0.172	1513.9	99.	0.1442E 03	3.089	
125.	16.025	36.205		16.0054	26.6750	43.4331	0.207	1513.3	124.	0.1400E 03	2.605	
150.	15.429	36.089		15.4054	26.7219	43.5235	0.242	1511.8	149.	0.1363E 03	2.475	
200.	14.336	35.910		14.3067	26.8261	43.7085	0.308	1508.9	198.	0.1277E 03	2.612	
250.	13.503	35.798		13.4678	26.9159	43.8614	0.370	1506.9	248.	0.1204E 03	2.431	
300.	12.969	35.728		12.9274	26.9723	43.9593	0.429	1505.9	298.	0.1163E 03	1.938	
400.	12.021	35.611		11.9676	27.0707	44.1330	0.541	1504.2	397.	0.1092E 03	1.824	
500.	11.269	35.534		11.2048	27.1541	44.2776	0.647	1503.2	496.	0.1033E 03	1.693	
600.	10.827	35.528		10.7520	27.2325	44.3918	0.748	1503.3	595.	0.9798E 02	1.624	
700.	10.377	35.565		10.2915	27.3432	44.5385	0.842	1503.4	694.	0.8943E 02	1.922	
800.	9.533	35.521		9.4391	27.4547	44.7210	0.927	1502.0	793.	0.7997E 02	1.991	
900.	9.270	35.600		9.1659	27.5617	44.8486	1.003	1502.8	892.	0.7172E 02	1.878	
1000.	8.913	35.630		8.7989	27.6447	44.9617	1.072	1503.2	990.	0.6540E 02	1.691	
1200.	8.348	35.674		8.2146	27.7710	45.1367	1.193	1504.4	1188.	0.5641E 02	1.489	
1400.	6.914	35.464		6.7715	27.8169	45.3165	1.302	1502.0	1385.	0.5160E 02	1.201	
1600.	5.496	35.256		5.3481	27.8370	45.4749	1.400	1499.5	1582.	0.4777E 02	1.081	
1800.	4.565	35.122		4.4087	27.8395	45.5723	1.493	1498.9	1779.	0.4617E 02	0.837	
2000.	4.038	35.053		3.8692	27.8419	45.6304	1.585	1500.0	1976.	0.4559E 02	0.685	
3.606	35.005			3.4251	27.8486	45.6833	1.675	1501.5	2173.	0.4460E 02	0.708	
3.325	34.983			3.1289	27.8600	45.7256	1.764	1503.6	2369.	0.4364E 02	0.684	
3.072	34.960			2.8604	27.8661	45.7601	1.850	1505.9	2565.	0.4304E 02	0.620	
2.928	34.951			2.6997	27.8733	45.7843	1.936	1508.7	2761.	0.4286E 02	0.547	
3.000.	2.797	34.941		2.5501	27.8787	45.8056	2.022	1511.5	2957.	0.4279E 02	0.520	
3.200.	2.711	34.934		2.4458	27.8817	45.8198	2.107	1514.6	3153.	0.4316E 02	0.432	
2.600.	2.649	34.927		2.3637	27.8836	45.8305	2.194	1517.7	3349.	0.4374E 02	0.381	
2.800.	2.588	34.920		2.2826	27.8849	45.8406	2.282	1520.9	3544.	0.4430E 02	0.379	
3.800.	2.542	34.915		2.2156	27.8859	45.8489	2.372	1524.1	3739.	0.4497E 02	0.350	
4.000.	2.504	34.910		2.1550	27.8868	45.8563	2.462	1527.4	3934.	0.4567E 02	0.339	
4.200.	2.471	34.905		2.1006	27.8875	45.8630	2.554	1530.7	4129.	0.4640E 02	0.329	
4.400.	2.449	34.901		2.0548	27.8884	45.8688	2.648	1534.0	4324.	0.4719E 02	0.313	
4.500.	2.443	34.900		2.0373	27.8887	45.8711	2.695	1535.7	4421.	0.4763E 02	0.278	
4.600.	2.441	34.899		2.0230	27.8892	45.8730	2.743	1537.4	4518.	0.4811E 02	0.261	
4.700.	2.441	34.898		2.0106	27.8894	45.8746	2.792	1539.2	4615.	0.4862E 02	0.238	
4.800.	2.447	34.898		2.0045	27.8898	45.8757	2.840	1540.9	4712.	0.4919E 02	0.195	
4.900.	2.454	34.898		1.9983	27.8903	45.8769	2.890	1542.7	4809.	0.4975E 02	0.203	
5.000.	2.460	34.898		1.9922	27.8907	45.8779	2.940	1544.5	4907.	0.5032E 02	0.192	
5.100.	2.469	34.898		1.9873	27.8914	45.8791	2.991	1546.2	5004.	0.5089E 02	0.203	
5.200.	2.478	34.899		1.9835	27.8918	45.8799	3.042	1548.0	5101.	0.5149E 02	0.177	

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## DISCOVERY 138 STATION 10798

P-DB	T-DEGC	SAL-PSU	POTRAN	DO-ML/L	POTEMP	SIGMA0	SIG4000	DYNHT-M	SNDV-N/S	DEPTH-M	SVANOM	BVFR-C/HR
10.	18.936	36.403	18.9341	26.1117	42.6785	0.020	1520.2	10.	0.1894E 03	-9.990		
20.	18.670	36.416	18.6666	26.1908	42.7735	0.038	1519.6	20.	0.1823E 03	4.992		
30.	18.514	36.413	18.5085	26.2283	42.8208	0.056	1519.4	30.	0.1792E 03	3.447		
50.	17.380	36.345	17.3712	26.4584	43.1238	0.090	1516.3	50.	0.1580E 03	6.039		
75.	16.668	36.249	16.6555	26.5563	43.2703	0.128	1514.5	74.	0.1496E 03	3.531		
100.	16.208	36.200	16.1921	26.6271	43.3730	0.165	1513.5	99.	0.1437E 03	3.008		
125.	15.520	36.068	15.5008	26.6845	43.4800	0.200	1511.6	124.	0.1390E 03	2.726		
150.	14.992	36.001	14.9692	26.7514	43.5852	0.234	1510.3	149.	0.1334E 03	2.940		
200.	14.073	35.874	14.0437	26.8541	43.7562	0.298	1508.0	198.	0.1249E 03	2.586		
250.	13.397	35.781	13.3619	26.9247	43.8784	0.360	1506.6	248.	0.1195E 03	2.157		
300.	12.931	35.725	12.8890	26.9775	43.9674	0.419	1505.8	298.	0.1158E 03	1.871		
400.	11.986	35.609	11.9327	27.0757	44.1407	0.531	1504.1	397.	0.1087E 03	1.823		
500.	11.228	35.531	11.1645	27.1598	44.2865	0.636	1503.1	496.	0.1027E 03	1./00		
600.	10.665	35.519	10.5903	27.2546	44.4271	0.735	1502.7	595.	0.9569E 02	1.791		
700.	10.058	35.515	9.9743	27.3592	44.5816	0.827	1502.2	694.	0.8746E 02	1.891		
800.	9.784	35.576	9.6887	27.4552	44.6994	0.911	1503.0	793.	0.8036E 02	1.780		
900.	8.707	35.482	8.6070	27.5587	44.8962	0.986	1500.6	892.	0.7088E 02	1.981		
1000.	7.890	35.427	7.7841	27.6420	45.0522	1.053	1499.1	990.	0.6336E 02	1.790		
1200.	7.257	35.467	7.1337	27.7680	45.2348	1.169	1500.0	1188.	0.5372E 02	1.499		
1400.	5.698	35.258	5.5685	27.8113	45.4283	1.270	1497.0	1385.	0.4812E 02	1.220		
1600.	5.054	35.181	4.9113	27.8296	45.5116	1.364	1497.6	1582.	0.4675E 02	0.830		
1800.	4.120	35.047	3.9700	27.8267	45.6053	1.456	1497.0	1779.	0.4537E 02	0.792		
2000.	3.628	34.990	3.4656	27.8329	45.6640	1.546	1498.2	1976.	0.4438E 02	0.710		
2200.	3.465	34.987	3.2866	27.8478	45.6972	1.635	1500.9	2173.	0.4390E 02	0.626		
2400.	3.250	34.975	3.0550	27.8604	45.7338	1.722	1503.3	2369.	0.4315E 02	0.651		
2600.	3.074	34.963	2.8626	27.8681	45.7618	1.808	1505.9	2565.	0.4287E 02	0.572		
2800.	2.920	34.950	2.6919	27.8730	45.848	1.893	1508.7	2761.	0.4284E 02	0.523		
3000.	2.814	34.943	2.5669	27.8783	45.8034	1.979	1511.6	2957.	0.4295E 02	0.490		
3200.	2.709	34.932	2.4433	27.8808	45.8192	2.065	1514.5	3153.	0.4322E 02	0.451		
3400.	2.648	34.926	2.3622	27.8828	45.8299	2.152	1517.7	3349.	0.4379E 02	0.384		
3600.	2.588	34.920	2.2823	27.8843	45.8400	2.240	1520.8	3544.	0.4436E 02	0.378		
3800.	2.539	34.914	2.2123	27.8854	45.8487	2.329	1524.1	3739.	0.4499E 02	0.359		
4000.	2.500	34.909	2.1514	27.8866	45.8565	2.420	1527.3	3934.	0.4565E 02	0.349		
4200.	2.473	34.906	2.1023	27.8879	45.8631	2.512	1530.7	4129.	0.4639E 02	0.325		
4400.	2.455	34.902	2.0613	27.8887	45.8684	2.606	1534.0	4324.	0.4724E 02	0.297		
4500.	2.450	34.902	2.0445	27.8893	45.8708	2.653	1535.8	4421.	0.4767E 02	0.289		
4600.	2.447	34.901	2.0292	27.8900	45.8732	2.701	1537.5	4518.	0.4811E 02	0.283		
4700.	2.445	34.900	2.0152	27.8907	45.8754	2.749	1539.2	4615.	0.4856E 02	0.279		
4800.	2.448	34.900	2.0054	27.8913	45.8770	2.798	1540.9	4713.	0.4907E 02	0.239		
4900.	2.452	34.900	1.9970	27.8918	45.8784	2.848	1542.7	4810.	0.4961E 02	0.224		
5000.	2.458	34.900	1.9894	27.8925	45.8799	2.897	1544.5	4907.	0.5014E 02	0.229		
5100.	2.465	34.900	1.9838	27.8931	45.8811	2.948	1546.2	5004.	0.5050E 02	0.207		
5200.	2.472	34.900	1.9776	27.8936	45.8823	2.999	1548.0	5101.	0.5126E 02	0.202		

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## DISCOVERY 138 STATION 10799

P-DB	T-DEGC	SAL-PSU	POTRAN	DO-ML/L	POTEMP	SIGMAO	SIG4000	DYNHT-M	SNDV-M/S	DEPTH-M	SVANOM	BVFRC-C/HR
10.	19.536	36.368	62.341	5.22	19.5341	25.9300	42.4615	0.021	1521.9	10.	0.2067E 03	-9.990
20.	19.386	36.365	62.264	5.28	19.3822	25.9671	42.5077	0.041	1521.6	20.	0.2036E 03	3.424
30.	18.996	36.354	62.390	5.37	18.9908	26.0599	42.6244	0.061	1520.7	30.	0.1951E 03	5.430
50.	17.544	36.306	63.168	5.68	17.5359	26.3880	43.0439	0.097	1516.8	50.	0.1647E 03	7.207
75.	16.842	36.272	64.089	5.62	16.8293	26.5325	43.2346	0.136	1515.0	74.	0.1519E 03	4.283
100.	16.455	36.218	63.758	5.46	16.4390	26.5838	43.3128	0.173	1514.2	99.	0.1478E 03	2.561
125.	15.913	36.154	65.491	5.33	15.8935	26.6609	43.4278	0.210	1512.9	124.	0.1413E 03	3.145
150.	15.377	36.072	66.486	5.26	15.3537	26.7208	43.5263	0.244	1511.6	149.	0.1364E 03	2.783
200.	14.035	35.877	67.643	5.19	14.0060	26.8645	43.7692	0.309	1507.9	198.	0.1240E 03	3.061
250.	13.323	35.780	68.033	5.09	13.2880	26.9392	43.8983	0.369	1506.3	248.	0.1181E 03	2.219
300.	12.683	35.705	68.295	5.07	12.6420	27.0117	44.0205	0.427	1504.9	298.	0.1124E 03	2.193
400.	11.778	35.599	68.595	5.02	11.7252	27.1074	44.1886	0.536	1503.4	397.	0.1055E 03	1.799
500.	11.187	35.546	68.841	4.89	11.1238	27.1790	44.3085	0.639	1502.9	496.	0.1009E 03	1.564
600.	10.810	35.554	68.924	4.66	10.7352	27.2553	44.4153	0.738	1503.3	595.	0.9582E 02	1.596
700.	11.426	35.844	69.011	4.37	11.3348	27.3720	44.4768	0.830	1507.4	694.	0.8830E 02	1.841
800.	11.971	36.129	68.979	4.29	11.8632	27.4936	44.5500	0.914	1511.3	793.	0.8046E 02	1.882
900.	11.829	36.185	68.983	4.28	11.7080	27.5666	44.6334	0.993	1512.5	892.	0.7614E 02	1.542
1000.	11.568	36.188	68.971	4.27	11.4342	27.6211	44.7090	1.067	1513.3	990.	0.7325E 02	1.374
1200.	10.398	36.066	69.116	4.38	10.2470	27.7423	44.9274	1.205	1512.4	1188.	0.6440E 02	1.535
1400.	7.326	35.516	69.290	5.13	7.1794	27.7999	45.2612	1.323	1503.7	1385.	0.5448E 02	1.546
1600.	5.880	35.301	69.487	5.55	5.7214	27.8259	45.4266	1.428	1501.1	1582.	0.5024E 02	1.126
1800.	4.888	35.167	69.502	5.78	4.7272	27.8395	45.5399	1.525	1500.3	1779.	0.4757E 02	0.953
2000.	4.052	35.044	69.504	5.96	3.8838	27.8338	45.6210	1.619	1500.0	1976.	0.4640E 02	0.63
2200.	3.700	35.015	69.566	5.99	3.5169	27.8477	45.6728	1.711	1501.9	2173.	0.4518E 02	0.737
2400.	3.319	34.978	69.589	5.99	3.1229	27.8558	45.7223	1.800	1503.6	2369.	0.4397E 02	0.717
2600.	3.108	34.962	69.446	5.98	2.8957	27.8646	45.7549	1.887	1506.1	2565.	0.4341E 02	0.617
2800.	2.990	34.959	69.464	5.91	2.7597	27.8742	45.7787	1.974	1509.0	2761.	0.4321E 02	0.553
3000.	2.864	34.948	69.426	5.82	2.6165	27.8783	45.7981	2.060	1511.8	2957.	0.4332E 02	0.493
3200.	2.753	34.939	69.382	5.82	2.4862	27.8824	45.8161	2.147	1514.7	3153.	0.4342E 02	0.488
3400.	2.688	34.932	69.364	5.84	2.4020	27.8842	45.8269	2.234	1517.9	3349.	0.4401E 02	0.383
3600.	2.619	34.925	69.370	5.84	2.3123	27.8857	45.8381	2.323	1521.0	3544.	0.4451E 02	0.398
3800.	2.573	34.918	69.389	5.86	2.2457	27.8864	45.8461	2.413	1524.2	3739.	0.4521E 02	0.344
4000.	2.530	34.912	69.424	5.88	2.1805	27.8865	45.8533	2.504	1527.5	3934.	0.4595E 02	0.333
4200.	2.502	34.907	69.404	5.87	2.1308	27.8866	45.8588	2.597	1530.8	4129.	0.4680E 02	0.298
4400.	2.480	34.902	69.424	5.90	2.0856	27.8865	45.8637	2.691	1534.1	4324.	0.4769E 02	0.288
4600.	2.470	34.900	69.387	5.95	2.0631	27.8863	45.8661	2.739	1535.8	4421.	0.4812E 02	0.290
4800.	2.456	34.897	69.453	5.99	2.0374	27.8866	45.8690	2.787	1537.5	4518.	0.4850E 02	0.323
5000.	2.4474	34.892	69.411	6.06	1.9929	27.8860	45.8733	3.037	1539.2	4615.	0.4905E 02	0.204
5100.	2.4455	34.896	69.438	5.98	2.0243	27.8862	45.8701	2.836	1541.0	4712.	0.4963E 02	0.189
5200.	2.4457	34.894	69.437	6.02	2.0139	27.8860	45.8710	2.885	1541.7	4810.	0.5018E 02	0.211
5300.	2.4460	34.894	69.438	6.03	2.0049	27.8863	45.8722	2.935	1542.7	4907.	0.5079E 02	0.152
5400.	2.4467	34.893	69.417	6.03	1.9982	27.8861	45.8728	2.986	1544.5	4907.	0.5142E 02	0.137
5500.	2.4474	34.892	69.411	6.06	1.9929	27.8860	45.8733	3.037	1546.3	5004.	0.5203E 02	0.169
5600.	2.4480	34.891	69.427	6.10	1.9983	27.8858	45.8740	3.089	1548.0	5101.	0.5268E 02	0.114

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P-DEG	T-DEGC	SAL-PSU	POTRAN	DO-ML/1.	POTEMP	SIGMA0	SIG4000	DYNHT-M	SNDV-M/S	DFPTH-M	SVANOM	BVFRC-HR
10.	20.212	36.564	5.11	20.2104	25.9008	42.3878	0.021	1524.0	10.	0.2095E 03	-9.990	
20.	20.181	36.562	5.13	20.1773	25.9075	42.3965	0.042	1524.0	20.	0.2093E 03	1.454	
30.	19.638	36.497	5.32	19.6328	26.0019	42.5246	0.063	1522.6	30.	0.2007E 03	5.478	
50.	18.653	36.472	5.55	18.6442	26.2389	42.8216	0.100	1520.2	50.	0.1790E 03	6.123	
75.	17.963	36.399	5.57	17.9501	26.3579	42.9854	0.143	1518.5	74.	0.1686E 03	3.890	
100.	17.702	36.450	5.32	17.6850	26.4618	43.1048	0.184	1518.2	99.	0.1596E 03	3.631	
125.	16.999	36.328	5.18	16.9783	26.5402	43.2313	0.223	1516.4	124.	0.1530E 03	3.176	
150.	16.507	36.254	5.07	16.4829	26.6013	43.3265	0.261	1515.3	149.	0.1480E 03	2.805	
200.	15.652	36.126	4.95	15.6200	26.7018	43.4878	0.333	1513.3	198.	0.1400E 03	2.555	
250.	14.885	36.008	4.94	14.8468	26.7843	43.6263	0.402	1511.6	248.	0.1335E 03	2.329	
300.	14.170	35.909	4.94	14.1261	26.8640	43.7592	0.467	1510.0	298.	0.1272E 03	2.298	
400.	13.010	35.743	4.81	12.9542	26.9788	43.9634	0.590	1507.7	397.	0.1186E 03	1.971	
500.	11.824	35.597	4.74	11.7583	27.0998	44.1785	0.704	1505.2	496.	0.1090E 03	2.044	
600.	11.051	35.529	4.62	10.9748	27.1924	44.3341	0.809	1504.1	595.	0.1020E 03	1.793	
700.	10.540	35.508	4.40	10.4535	27.2701	44.4539	0.909	1503.9	694.	0.9653E 02	1.637	
800.	9.872	35.515	4.23	9.7765	27.3933	44.6319	1.000	1503.2	793.	0.8630E 02	2.058	
900.	9.435	35.556	4.25	9.3295	27.4998	44.7742	1.083	1503.3	892.	0.7782E 02	1.901	
1000.	8.739	35.551	4.42	8.6260	27.6103	44.9442	1.155	1502.4	990.	0.6822E 02	1.990	
1200.	7.615	35.512	4.81	7.4879	27.7530	45.1869	1.279	1501.5	1188.	0.5610E 02	1.646	
1400.	6.080	35.300	5.36	5.9468	27.7966	45.3768	1.385	1498.6	1385.	0.5075E 02	1.213	
1600.	5.053	35.159	5.69	4.9102	27.8117	45.4945	1.484	1497.6	1582.	0.4839E 02	0.933	
1800.	4.377	35.073	5.87	4.2239	27.8203	45.5729	1.579	1498.1	1779.	0.4710E 02	0.788	
2000.	3.978	35.031	5.95	3.8107	27.8305	45.6255	1.673	1499.7	1976.	0.4634E 02	0.700	
2200.	3.565	34.994	6.01	3.3843	27.8437	45.6829	1.764	1501.3	2173.	0.4482E 02	0.765	
2400.	3.307	34.975	6.00	3.1109	27.8547	45.7225	1.853	1503.5	2369.	0.4400E 02	0.664	
2600.	3.076	34.961	5.96	2.8643	27.8662	45.7598	1.940	1505.9	2565.	0.4306E 02	0.665	
2800.	2.984	34.956	5.91	2.7542	27.8728	45.7780	2.026	1508.9	2762.	0.4329E 02	0.480	
3000.	2.852	34.950	5.86	2.6039	27.8811	45.8021	2.112	1511.8	2957.	0.4298E 02	0.562	
3200.	2.775	34.941	5.83	2.5085	27.8821	45.8134	2.199	1514.8	3153.	0.4363E 02	0.378	
3400.	2.694	34.933	5.80	2.4074	27.8843	45.8265	2.287	1517.9	3349.	0.4404E 02	0.423	
3600.	2.627	34.925	5.81	2.3208	27.8852	45.8367	2.375	1521.0	3544.	0.4462E 02	0.380	
3800.	2.574	34.918	5.82	2.2463	27.8863	45.8459	2.465	1524.2	3739.	0.4523E 02	0.369	
4000.	2.542	34.913	5.85	2.1928	27.8865	45.8519	2.556	1527.5	3934.	0.4607E 02	0.305	
4200.	2.500	34.907	5.89	2.1288	27.8866	45.8591	2.649	1530.8	4129.	0.4678E 02	0.339	
4400.	2.472	34.901	5.92	2.0777	27.8866	45.8646	2.744	1534.1	4324.	0.4760E 02	0.305	
4500.	2.462	34.899	5.94	2.0555	27.8864	45.8669	2.791	1535.8	4421.	0.4804E 02	0.284	
4600.	2.461	34.898	5.96	2.0423	27.8864	45.8683	2.840	1537.5	4518.	0.4857E 02	0.226	
4700.	2.458	34.896	5.97	2.0278	27.8859	45.8694	2.889	1539.2	4615.	0.4912E 02	0.206	
4800.	2.458	34.894	5.99	2.0147	27.8860	45.8709	2.938	1541.0	4713.	0.4964E 02	0.236	
4900.	2.461	34.894	5.99	2.0053	27.8860	45.8720	2.988	1542.7	4810.	0.5020E 02	0.200	
5000.	2.466	34.893	6.03	1.9973	27.8860	45.8729	3.038	1544.5	4907.	0.5079E 02	0.182	
5100.	2.475	34.892	6.03	1.9935	27.8858	45.8731	3.089	1546.3	5004.	0.5144E 02	0.098	

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## DISCOVERY 138 STATION 10803

P-DR	T-DEGC	SAL-PSU	POTRAN	DO-ML/I.	POTEMP	SIGMAO	SIG4000	DYNHT-M	SNDV-M/S	DEPTH-M	SVANOM	RVFR-C/HR
10.	20.911	36.657	4.93	20.9086	25.7827	42.2275	0.022	1526.0	10.	0.2208E 03	-9.990	
20.	20.786	36.661	5.02	20.7819	25.8203	42.2721	0.044	1525.8	20.	0.2176E 03	3.448	
30.	20.530	36.669	5.10	20.5241	25.8962	42.3627	0.065	1525.3	30.	0.2108E 03	4.901	
50.	19.952	36.652	5.25	19.9423	26.0394	42.5400	0.107	1524.0	50.	0.1980E 03	4.762	
75.	19.075	36.655	5.38	19.0613	26.2719	42.8249	0.153	1522.0	74.	0.1769E 03	5.430	
100.	18.625	36.618	5.29	18.6069	26.3599	42.9414	0.196	1521.1	99.	0.1694E 03	3.349	
125.	18.353	36.571	5.13	18.3312	26.3943	42.9939	0.238	1520.7	124.	0.1671E 03	2.098	
150.	17.779	36.468	5.07	17.7532	26.4595	43.0977	0.279	1519.3	149.	0.1618E 03	2.903	
200.	16.786	36.295	4.93	16.7529	26.5684	43.2750	0.358	1517.0	198.	0.1530E 03	2.661	
250.	16.387	36.234	4.85	16.3459	26.6180	43.3528	0.433	1516.5	248.	0.1499E 03	1.800	
300.	15.544	36.106	4.82	15.4964	26.7147	43.5096	0.507	1514.6	298.	0.1421E 03	2.527	
400.	14.291	35.911	4.88	14.2317	26.8425	43.7302	0.643	1512.1	397.	0.1325E 03	2.076	
500.	12.854	35.716	4.74	12.7841	26.9921	43.9901	0.770	1508.8	496.	0.1202E 03	2.267	
600.	11.760	35.575	4.67	11.6809	27.0977	44.1830	0.886	1506.6	595.	0.1118E 03	1.933	
700.	10.933	35.529	4.37	10.8449	27.2163	44.3682	0.993	1505.3	694.	0.1021E 03	2.026	
800.	10.198	35.492	4.18	10.1002	27.3197	44.5325	1.091	1504.3	793.	0.9373E 02	1.910	
900.	9.398	35.491	4.24	9.2935	27.4550	44.7343	1.178	1503.1	892.	0.8192E 02	2.177	
1000.	8.987	35.551	4.28	8.8725	27.5706	44.8835	1.255	1503.3	991.	0.7246E 02	1.979	
1200.	7.840	35.512	4.66	7.7109	27.7195	45.1337	1.386	1502.3	1188.	0.5981E 02	1.677	
1400.	6.605	35.379	5.04	6.4656	27.7915	45.3214	1.499	1500.7	1385.	0.5294E 02	1.326	
1600.	5.660	35.265	5.34	5.5100	27.8245	45.4468	1.601	1500.2	1583.	0.4954E 02	1.043	
1800.	4.839	35.163	5.62	4.6790	27.8414	45.5465	1.697	1500.1	1780.	0.4720E 02	0.918	
2000.	4.162	35.069	5.70	3.9914	27.8421	45.6179	1.790	1500.5	1976.	0.44618E 02	0.748	
2200.	3.814	35.038	5.78	3.6297	27.8545	45.6675	1.881	1502.4	2173.	0.4519E 02	0.716	
2400.	3.570	35.018	5.77	3.3669	27.8641	45.7040	1.971	1504.7	2370.	0.4472E 02	0.635	
2600.	3.280	34.990	5.78	3.0644	27.8712	45.7433	2.060	1506.8	2566.	0.4392E 02	0.661	
2800.	3.028	34.966	5.77	2.7972	27.8770	45.7774	2.147	1509.1	2762.	0.4322E 02	0.633	
3000.	2.875	34.953	5.75	2.6265	27.8812	45.7997	2.233	1511.9	2958.	0.4315E 02	0.527	
3200.	2.778	34.943	5.75	2.5114	27.8832	45.8142	2.320	1514.8	3154.	0.4355E 02	0.432	
3400.	2.690	34.934	5.75	2.4036	27.8852	45.8277	2.407	1517.9	3349.	0.4393E 02	0.429	
3600.	2.622	34.925	5.79	2.3154	27.8859	45.8380	2.496	1521.0	3544.	0.4451E 02	0.380	
3800.	2.567	34.918	5.79	2.2397	27.8864	45.8467	2.585	1524.2	3740.	0.4516E 02	0.357	
4000.	2.512	34.910	5.84	2.1637	27.8863	45.8549	2.676	1527.4	3935.	0.4580E 02	0.356	
4200.	2.483	34.904	5.87	2.1115	27.8857	45.8600	2.769	1530.7	4130.	0.4668E 02	0.288	
4400.	2.466	34.899	5.91	2.0720	27.8854	45.8641	2.863	1534.1	4324.	0.4763E 02	0.263	
4500.	2.460	34.898	5.92	2.0536	27.8854	45.8661	2.911	1535.8	4422.	0.4811E 02	0.264	
4600.	2.453	34.895	5.94	2.0353	27.8851	45.8678	2.959	1537.5	4519.	0.4860E 02	0.250	
4700.	2.451	34.893	5.96	2.0205	27.8846	45.8690	3.008	1539.2	4616.	0.4915E 02	0.212	
4800.	2.452	34.892	5.98	2.0094	27.8845	45.8700	3.058	1540.9	4713.	0.4971E 02	0.201	
4900.	2.455	34.891	6.00	1.9999	27.8843	45.8710	3.108	1542.7	4810.	0.5028E 02	0.189	
5000.	2.460	34.889	6.03	1.9916	27.8836	45.8712	3.158	1544.5	4907.	0.5093E 02	0.117	
5100.	2.467	34.888	6.05	1.9858	27.8833	45.8715	3.210	1546.2	5004.	0.5156E 02	0.122	
5200.	2.474	34.887	6.06	1.9794	27.8827	45.8716	3.261	1548.0	5101.	0.5222E 02	0.096	
5300.	2.481	34.886	6.09	1.9737	27.8828	45.8723	3.314	1549.8	5198.	0.5283E 02	0.172	
5400.	2.490	34.885	6.09	1.9688	27.8822	45.8723	3.367	1551.5	5295.	0.5351E 02	0.062	

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## DISCOVERY 138 STATION 10804

P-DB	T-DEGC	SAL-PSU	POTRAN	NO-ML/1.	POTEMP	SIGMA0	SIG4000	DYNHT-M	SNDV-M/S	DEPTH-M	SVANOM	BWFR-C/HR
10.	21.614	37.079	64.472	4.75	21.6118	25.9096	42.3051	0.021	1528.3	10.	0.2087E 03	-9.990
20.	21.439	37.071	64.084	4.78	21.4352	25.9523	42.3579	0.042	1528.0	20.	0.2051E 03	3.677
30.	21.426	37.070	64.064	4.80	21.4201	25.9559	42.3623	0.062	1528.1	30.	0.2052E 03	1.057
50.	21.406	37.069	64.082	4.85	21.3957	25.9617	42.3695	0.103	1528.4	50.	0.2055E 03	0.958
75.	19.697	36.781	63.985	5.39	19.6829	26.2061	42.7190	0.152	1523.9	74.	0.1832E 03	5.578
100.	18.736	36.672	63.801	5.56	18.7178	26.3732	42.9466	0.196	1521.5	99.	0.1682E 03	4.614
125.	18.994	36.852	65.194	5.17	18.9716	26.4457	42.9994	0.237	1522.8	124.	0.1624E 03	3.014
150.	18.650	36.809	65.644	4.96	18.6235	26.5023	43.0782	0.277	1522.2	149.	0.1579E 03	2.694
200.	16.900	36.424	66.992	4.81	16.8664	26.6411	43.3370	0.354	1517.5	199.	0.1462E 03	3.019
250.	15.951	36.240	67.261	4.71	15.9111	26.7231	43.4866	0.425	1515.2	428.	0.1398E 03	2.332
300.	14.964	36.059	67.441	4.65	14.9179	26.8077	43.6435	0.493	1512.8	298.	0.1330E 03	2.383
400.	13.516	35.811	67.779	4.63	13.4587	26.9330	43.8786	0.622	1509.5	397.	0.1234E 03	2.069
500.	12.310	35.647	68.063	4.70	12.2425	27.0458	44.0862	0.740	1506.9	496.	0.1146E 03	1.980
600.	11.497	35.567	68.243	4.53	11.4194	27.1401	44.2459	0.851	1505.7	595.	0.1075E 03	1.811
700.	10.594	35.503	68.407	4.28	10.5068	27.2570	44.4367	0.954	1504.1	694.	0.9782E 02	2.023
800.	9.919	35.500	68.531	4.13	9.8228	27.3734	44.6086	1.048	1503.3	793.	0.8824E 02	2.005
900.	9.405	35.522	68.565	4.15	9.2996	27.4788	44.7567	1.131	1503.2	892.	0.7971E 02	1.905
1000.	8.783	35.541	68.584	4.24	8.6699	27.5957	44.9261	1.205	1502.6	991.	0.6967E 02	2.027
1200.	7.771	35.518	68.677	4.47	7.6434	27.7343	45.1544	1.333	1502.1	1188.	0.5825E 02	1.612
1400.	6.792	35.429	68.778	4.92	6.6505	27.8052	45.3168	1.444	1501.5	1386.	0.5228E 02	1.269
1600.	5.488	35.256	68.866	5.34	5.3399	27.8378	45.4766	1.545	1499.5	1583.	0.4766E 02	1.140
1800.	4.835	35.171	68.911	5.36	4.6752	27.8486	45.5539	1.639	1500.1	1780.	0.4651E 02	0.796
2000.	4.209	35.094	68.938	5.47	4.0384	27.8573	45.6276	1.730	1500.7	1977.	0.4503E 02	0.801
2200.	3.792	35.047	68.972	5.55	3.6078	27.8643	45.6792	1.819	1502.3	2173.	0.4418E 02	0.701
2400.	3.406	35.005	68.936	5.67	3.2086	27.8698	45.7266	1.907	1504.0	2370.	0.4323E 02	0.691
2600.	3.154	34.981	68.960	5.70	2.9410	27.8754	45.7604	1.992	1506.3	2566.	0.4273E 02	0.612
2800.	2.945	34.961	68.937	5.72	2.7162	27.8797	45.7887	2.078	1508.8	2762.	0.4241E 02	0.573
3000.	2.798	34.946	68.959	5.73	2.5519	27.8820	45.8086	2.162	1511.5	2958.	0.4251E 02	0.491
3200.	2.697	34.935	68.967	5.75	2.4318	27.8841	45.8236	2.248	1514.5	3154.	0.4283E 02	0.441
3400.	2.619	34.926	68.975	5.76	2.3345	27.8850	45.8350	2.334	1517.6	3349.	0.4336E 02	0.390
3600.	2.557	34.919	68.989	5.77	2.2522	27.8859	45.8448	2.421	1520.7	3545.	0.4394E 02	0.373
3800.	2.516	34.912	68.999	5.81	2.1898	27.8855	45.8513	2.510	1524.0	3740.	0.4477E 02	0.307
4000.	2.487	34.908	68.981	5.85	2.1388	27.8867	45.8580	2.600	1527.3	3935.	0.4552E 02	0.323
4200.	2.464	34.903	68.985	5.88	2.0935	27.8868	45.8631	2.692	1530.6	4130.	0.4639E 02	0.286
4400.	2.444	34.900	68.995	5.92	2.0500	27.8873	45.8683	2.786	1534.0	4325.	0.4723E 02	0.295
4500.	2.434	34.897	68.996	5.94	2.0291	27.8869	45.8702	2.833	1535.7	4422.	0.4771E 02	0.261
4600.	2.432	34.895	69.003	5.95	2.0149	27.8868	45.8716	2.881	1537.4	4519.	0.5043E 02	0.174
4700.	2.430	34.894	69.011	5.97	2.0006	27.8868	45.8733	2.930	1539.1	4617.	0.4823E 02	0.228
4800.	2.431	34.893	69.025	5.99	1.9888	27.8866	45.8743	2.979	1540.9	4714.	0.4928E 02	0.202
4900.	2.435	34.892	69.038	6.01	1.9800	27.8867	45.8755	3.028	1542.6	4811.	0.4984E 02	0.205
5000.	2.439	34.891	69.032	6.03	1.9717	27.8866	45.8762	3.078	1544.4	4908.	0.5043E 02	0.174
5100.	2.446	34.890	69.017	6.05	1.9657	27.8864	45.8767	3.129	1546.1	5005.	0.5105E 02	0.137
5200.	2.455	34.889	69.013	6.07	1.9614	27.8862	45.8770	3.180	1547.9	5102.	0.5169E 02	0.118
5300.	2.464	34.888	69.011	6.10	1.9567	27.8858	45.8771	3.232	1549.7	5199.	0.5235E 02	0.101
5400.	2.472	34.888	68.920	6.11	1.9521	27.8856	45.8774	3.285	1551.5	5296.	0.5299E 02	0.118
5500.	2.486	34.889	68.933	6.10	1.9519	27.8863	45.8781	3.338	1553.3	5393.	0.5362E 02	0.146

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## DISCOVERY 138 STATION 10805

P-DR	T-DEGC	SAL-PSU	POTRAN	DO-MI/L	POTEMP	SIGMAO	SIG4000	DYNHT-M	SNDV-M/S	DEPTH-M	SVANOM	RVFR-C/HR
10.	21.425	37.048	65.019	4.60	21.4228	25.9387	42.3455	0.021	1527.8	10.	0.2059E 03	-9.990
20.	21.427	37.048	65.038	4.67	21.4230	25.9386	42.3454	0.041	1527.9	20.	0.2064E 03	-0.156
30.	21.428	37.048	65.028	4.70	21.4222	25.9386	42.3454	0.062	1528.1	30.	0.2068E 03	0.098
50.	20.192	36.894	64.898	5.08	20.1826	26.1597	42.6408	0.102	1524.9	50.	0.1866E 03	5.925
75.	19.068	36.807	65.277	5.34	19.0549	26.3903	42.9401	0.146	1522.1	74.	0.1656E 03	5.408
100.	18.657	36.788	66.177	5.26	18.6395	26.4820	43.0574	0.186	1521.4	99.	0.1579E 03	3.414
125.	18.363	36.763	66.073	5.11	18.3407	26.5384	43.1328	0.225	1520.9	124.	0.1535E 03	2.684
150.	18.166	36.729	66.519	5.07	18.1403	26.5630	43.1707	0.263	1520.7	149.	0.1521E 03	1.780
200.	17.698	36.618	67.609	5.01	17.6639	26.5962	43.2364	0.339	1520.1	199.	0.1507E 03	1.480
250.	16.136	36.298	67.746	4.89	16.0959	26.7254	43.4751	0.412	1515.8	248.	0.1397E 03	2.928
300.	15.087	36.081	67.737	4.77	15.0410	26.7978	43.6245	0.480	1513.2	298.	0.1340E 03	2.220
400.	13.406	35.813	67.888	4.68	13.3493	26.9526	43.9063	0.609	1509.1	397.	0.1214E 03	2.294
500.	12.361	35.671	68.054	4.58	12.2933	27.0540	44.0900	0.726	1507.1	496.	0.1138E 03	1.875
600.	11.457	35.572	68.280	4.43	11.3791	27.1519	44.2607	0.836	1505.6	595.	0.1063E 03	1.851
700.	10.758	35.527	68.448	4.12	10.6699	27.2460	44.4119	0.939	1504.7	694.	0.9911E 02	1.811
800.	10.027	35.499	68.563	3.84	9.9307	27.3542	44.5806	1.034	1503.7	793.	0.9022E 02	1.948
900.	9.258	35.468	68.633	3.78	9.1539	27.4597	44.7514	1.119	1502.6	892.	0.8120E 02	1.948
1000.	8.532	35.446	68.670	4.00	8.4207	27.5597	44.9142	1.196	1501.5	991.	0.7246E 02	1.911
1200.	7.630	35.447	68.770	4.32	7.5030	27.6995	45.1339	1.329	1501.4	1188.	0.6109E 02	1.604
1400.	6.559	35.366	68.867	4.73	6.4199	27.7868	45.3213	1.442	1500.5	1386.	0.5323E 02	1.384
1600.	5.653	35.269	68.899	5.11	5.5037	27.8280	45.4508	1.544	1500.2	1583.	0.4919E 02	1.093
1800.	4.898	35.181	68.955	5.38	4.7375	27.8494	45.5483	1.639	1500.3	1780.	0.4672E 02	0.931
2000.	4.261	35.102	68.988	5.58	4.0896	27.8580	45.6229	1.731	1501.0	1977.	0.4522E 02	0.804
2200.	3.751	35.041	69.018	5.70	3.5668	27.8636	45.6828	1.820	1502.1	2174.	0.4402E 02	0.743
2400.	3.394	35.003	69.041	5.76	3.1965	27.8689	45.7270	1.908	1504.0	2370.	0.4324E 02	0.669
2600.	3.120	34.977	69.048	5.73	2.9075	27.8753	45.7640	1.993	1506.1	2566.	0.4252E 02	0.641
2800.	2.917	34.958	69.024	5.73	2.6881	27.8797	45.7916	2.078	1508.6	2763.	0.4221E 02	0.568
3000.	2.745	34.942	69.061	5.73	2.4995	27.8833	45.8155	2.162	1511.3	2959.	0.4199E 02	0.542
3200.	2.640	34.930	69.084	5.72	2.3760	27.8849	45.8304	2.246	1514.2	3154.	0.4231E 02	0.436
3400.	2.573	34.923	69.080	5.72	2.2897	27.8860	45.8408	2.332	1517.4	3350.	0.4289E 02	0.374
3600.	2.520	34.915	69.118	5.75	2.2163	27.8861	45.8490	2.418	1520.6	3545.	0.4360E 02	0.338
3800.	2.481	34.909	69.125	5.79	2.1557	27.8860	45.8555	2.506	1523.8	3741.	0.4439E 02	0.309
4000.	2.450	34.905	69.143	5.83	2.1029	27.8872	45.8624	2.595	1527.1	3936.	0.4511E 02	0.327
4200.	2.429	34.901	69.167	5.86	2.0596	27.8873	45.8672	2.687	1530.5	4131.	0.4600E 02	0.278
4400.	2.411	34.897	69.170	5.90	2.0185	27.8874	45.8718	2.779	1533.8	4325.	0.4688E 02	0.279
4500.	2.407	34.895	69.177	5.91	2.0023	27.8875	45.8737	2.827	1535.6	4423.	0.4735E 02	0.258
4600.	2.406	34.894	69.162	5.93	1.9891	27.8873	45.8750	2.874	1537.3	4520.	0.4789E 02	0.213
4700.	2.407	34.893	69.149	5.95	1.9785	27.8874	45.8763	2.922	1539.0	4617.	0.4842E 02	0.215
4800.	2.414	34.892	69.157	5.97	1.9728	27.8873	45.8768	2.971	1540.8	4714.	0.4903E 02	0.137
4900.	2.422	34.892	69.169	5.99	1.9677	27.8875	45.8775	3.020	1542.6	4811.	0.4963E 02	0.167
5000.	2.429	34.891	69.172	6.02	1.9617	27.8873	45.8780	3.070	1544.3	4909.	0.5025E 02	0.135
5100.	2.437	34.890	69.160	6.04	1.9572	27.8872	45.8784	3.121	1546.1	5006.	0.5087E 02	0.134
5200.	2.447	34.890	69.142	6.06	1.9539	27.8873	45.8789	3.172	1547.9	5103.	0.5150E 02	0.133
5300.	2.458	34.889	69.093	6.06	1.9510	27.8870	45.8789	3.224	1549.7	5200.	0.5217E 02	0.057

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## DISCOVERY 138 STATION 10807

P-DR	T-DEGC	SAL-PSU	POTRAN	DO-ML/L	POTEMP	SIGMA0	SIG4000	DYNHT-M	SNDV-M/S	DEPTH-M	SVANOM	BVFR-C/HR
10.	20.600	36.750	64.307	5.00	20.5984	25.9380	42.3983	0.021	1525.2	10.	0.2060E 03	-9.990
20.	20.582	36.748	64.270	5.05	20.5786	25.9415	42.4030	0.041	1525.3	20.	0.2061E 03	1.043
30.	20.502	36.737	64.291	5.10	20.4961	25.9555	42.4220	0.062	1525.3	30.	0.2052E 03	2.109
50.	18.932	36.595	63.736	5.55	18.9233	26.2614	42.8242	0.100	1521.1	50.	0.1768E 03	6.963
75.	18.492	36.568	63.993	5.53	18.4793	26.3542	42.9448	0.143	1520.2	74.	0.1690E 03	3.433
100.	17.977	36.518	64.894	5.43	17.9599	26.4466	43.0706	0.184	1519.1	99.	0.1611E 03	3.431
125.	17.760	36.521	65.953	5.24	17.7383	26.5037	43.1416	0.224	1518.9	124.	0.1566E 03	2.697
150.	17.347	36.443	66.937	5.12	17.3213	26.5455	43.2117	0.263	1518.0	149.	0.1535E 03	2.325
200.	16.069	36.202	67.579	4.96	16.0370	26.6649	43.4210	0.337	1514.7	199.	0.1436E 03	2.795
250.	15.220	36.063	67.680	4.95	15.1814	26.7524	43.5699	0.407	1512.7	248.	0.1367E 03	2.400
300.	14.590	35.967	67.831	4.98	14.5450	26.8187	43.6828	0.474	1511.5	298.	0.1317E 03	2.098
400.	13.301	35.780	68.022	4.84	13.2438	26.9485	43.9108	0.600	1508.7	397.	0.1217E 03	2.095
500.	12.147	35.632	68.101	4.77	12.0800	27.0652	44.1184	0.717	1506.3	496.	0.1126E 03	2.007
600.	11.201	35.538	68.300	4.60	11.1242	27.1721	44.3018	0.825	1504.6	595.	0.1041E 03	1.931
700.	10.417	35.494	68.418	4.41	10.3313	27.2805	44.4746	0.925	1503.5	694.	0.9536E 02	1.942
800.	9.793	35.498	68.501	4.24	9.6975	27.3933	44.6389	1.016	1502.9	793.	0.8616E 02	1.971
900.	9.287	35.543	68.576	4.22	9.1830	27.5140	44.8011	1.098	1502.8	892.	0.7620E 02	2.026
1000.	8.930	35.576	68.612	4.18	8.8158	27.5997	44.9168	1.170	1503.2	991.	0.6962E 02	1.716
1200.	7.891	35.544	68.683	4.44	7.7619	27.7371	45.1460	1.298	1502.5	1188.	0.5832E 02	1.608
1400.	6.725	35.417	68.743	4.84	6.5847	27.8051	45.3230	1.408	1501.2	1386.	0.5208E 02	1.287
1600.	5.728	35.298	68.784	5.22	5.5776	27.8416	45.4565	1.507	1500.5	1583.	0.4823E 02	1.084
1800.	4.885	35.188	68.805	5.30	4.7248	27.8561	45.5560	1.602	1500.3	1780.	0.4605E 02	0.905
2000.	4.224	35.098	68.737	5.67	4.0532	27.8589	45.6276	1.693	1500.8	1977.	0.4496E 02	0.760
2200.	3.707	35.034	68.796	5.80	3.5243	27.8621	45.6859	1.782	1501.9	2173.	0.4392E 02	0.722
2400.	3.343	34.995	68.832	5.86	3.1464	27.8675	45.7309	1.869	1503.7	2370.	0.4306E 02	0.675
2600.	3.115	34.975	68.853	5.83	2.9026	27.8744	45.7636	1.954	1506.1	2566.	0.4257E 02	0.608
2800.	2.930	34.958	68.873	5.80	2.7015	27.8790	45.7896	2.039	1508.7	2762.	0.4236E 02	0.553
3000.	2.801	34.947	68.905	5.78	2.5541	27.8826	45.8089	2.124	1511.5	2958.	0.4247E 02	0.490
3200.	2.697	34.936	68.916	5.75	2.4318	27.8849	45.8244	2.209	1514.5	3154.	0.4276E 02	0.447
3400.	2.615	34.926	68.962	5.76	2.3302	27.8855	45.8360	2.295	1517.5	3349.	0.4328E 02	0.393
3600.	2.552	34.918	68.972	5.78	2.2474	27.8860	45.8455	2.382	1520.7	3545.	0.4389E 02	0.364
3800.	2.500	34.911	69.008	5.80	2.1739	27.8862	45.8536	2.471	1523.9	3740.	0.4456E 02	0.347
4000.	2.466	34.905	69.045	5.85	2.1190	27.8861	45.8596	2.561	1527.2	3935.	0.4537E 02	0.304
4200.	2.442	34.900	69.069	5.89	2.0725	27.8862	45.8648	2.652	1530.5	4130.	0.4623E 02	0.289
4400.	2.425	34.896	69.082	5.93	2.0320	27.8857	45.8688	2.746	1533.9	4325.	0.4777E 02	0.260
4500.	2.421	34.894	69.091	5.94	2.0165	27.8858	45.8705	2.793	1535.6	4422.	0.4766E 02	0.248
4600.	2.421	34.893	69.097	5.96	2.0039	27.8857	45.8718	2.841	1537.3	4519.	0.4820E 02	0.215
4700.	2.422	34.892	69.102	5.98	1.9925	27.8851	45.8731	2.889	1539.1	4617.	0.4873E 02	0.213
4800.	2.425	34.890	69.111	6.00	1.9833	27.8853	45.8737	2.938	1540.8	4714.	0.4933E 02	0.161
4900.	2.431	34.890	69.111	6.02	1.9765	27.8852	45.8743	2.988	1542.6	4811.	0.4993E 02	0.158
5000.	2.437	34.889	69.104	6.04	1.9700	27.8851	45.8750	3.038	1544.4	4908.	0.5053E 02	0.162
5100.	2.446	34.888	69.082	6.07	1.9654	27.8850	45.8754	3.089	1546.1	5005.	0.5116E 02	0.124
5200.	2.455	34.887	69.000	6.08	1.9618	27.8845	45.8753	3.141	1547.9	5102.	0.5184E 02	0.023

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## DISCOVERY 138 STATION 10809

P-DB	T-DEGC	SAL-PSU	POTRAN	DO-ML/I.	POTEMP	SIGMA0	SIG4000	DYNHT-M	SNDDY-M/S	DFPTH-M	SVANOM	RVFR-C/HR
10.	20.559	36.750	63.868	4.83	20.5573	25.9488	42.4115	0.020	1525.1	10.	0.2050E 03	-9.990
20.	20.528	36.749	63.921	4.84	20.5238	25.9573	42.4219	0.041	1525.2	20.	0.2046E 03	1.634
30.	20.142	36.731	64.255	5.02	20.1359	26.0480	42.5355	0.061	1524.3	30.	0.1964E 03	5.360
50.	19.504	36.694	64.123	5.21	19.4952	26.1894	42.7154	0.099	1522.8	50.	0.1837E 03	4.732
75.	18.642	36.653	64.058	5.39	18.6292	26.3817	42.9610	0.143	1520.8	74.	0.1664E 03	4.941
100.	18.239	36.634	65.202	5.28	18.2219	26.4697	43.0745	0.184	1520.0	99.	0.1590E 03	3.345
125.	18.033	36.636	65.962	5.11	18.0114	26.5240	43.1419	0.223	1519.8	124.	0.1548E 03	2.629
150.	17.742	36.582	66.795	4.96	17.7160	26.5556	43.1933	0.261	1519.3	149.	0.1526E 03	2.022
200.	16.517	36.323	67.743	4.82	16.4841	26.6536	43.3770	0.335	1516.2	198.	0.1448E 03	2.538
250.	15.604	36.146	67.667	4.80	15.5647	26.7299	43.5192	0.406	1514.0	248.	0.1390E 03	2.252
300.	14.738	36.001	67.832	4.83	14.6922	26.8128	43.6658	0.474	1512.0	298.	0.1324E 03	2.352
400.	13.461	35.818	67.960	4.74	13.4035	26.9449	43.8946	0.602	1509.3	397.	0.1222E 03	2.111
500.	12.288	35.656	68.158	4.74	12.2206	27.0566	44.0984	0.720	1506.8	496.	0.1135E 03	1.968
600.	11.472	35.567	68.315	4.66	11.3941	27.1453	44.2530	0.830	1505.6	595.	0.1070E 03	1.762
700.	10.752	35.516	68.421	4.40	10.6648	27.2383	44.4050	0.933	1504.7	694.	0.9981E 02	1.805
800.	9.959	35.492	68.518	4.27	9.8630	27.3601	44.5922	1.027	1503.5	793.	0.8955E 02	2.062
900.	9.487	35.532	68.605	4.15	9.3819	27.4730	44.7437	1.112	1503.5	892.	0.8042E 02	1.959
1000.	9.004	35.554	68.641	4.23	8.8894	27.5707	44.8821	1.188	1503.4	991.	0.7249E 02	1.846
1200.	7.843	35.515	68.670	4.66	7.7138	27.7218	45.1357	1.320	1502.3	1188.	0.5961E 02	1.689
1400.	6.728	35.413	68.784	5.02	6.5878	27.8015	45.3192	1.431	1501.2	1385.	0.5242E 02	1.347
1600.	5.645	35.279	68.817	5.41	5.4953	27.8373	45.4605	1.531	1500.1	1583.	0.4831E 02	1.102
1800.	4.795	35.168	68.886	5.65	4.6358	27.8506	45.5598	1.626	1499.9	1780.	0.4616E 02	0.900
2000.	4.242	35.095	68.910	5.77	4.0701	27.8546	45.6218	1.718	1500.9	1976.	0.4533E 02	0.716
2200.	3.813	35.045	68.966	5.82	3.6282	27.8604	45.6733	1.808	1500.4	2173.	0.4655E 02	0.694
2400.	3.429	35.004	68.954	5.85	3.2311	27.8668	45.7213	1.896	1500.1	2370.	0.4364E 02	0.700
2600.	3.164	34.980	68.937	5.83	2.9506	27.8739	45.7580	1.983	1500.3	2566.	0.4293E 02	0.642
2800.	2.988	34.965	69.003	5.80	2.7576	27.8791	45.7837	2.068	1500.0	2762.	0.4275E 02	0.552
3000.	2.843	34.951	68.978	5.78	2.5957	27.8822	45.8040	2.154	1511.7	2958.	0.4282E 02	0.500
3200.	2.742	34.940	68.975	5.76	2.4755	27.8844	45.8192	2.240	1514.7	3154.	0.4316E 02	0.442
3400.	2.657	34.931	69.012	5.77	2.3719	27.8860	45.8319	2.327	1517.7	3349.	0.4359E 02	0.415
3600.	2.594	34.923	69.046	5.78	2.2885	27.8863	45.8413	2.415	1520.9	3544.	0.4424E 02	0.362
3800.	2.541	34.915	69.101	5.80	2.2145	27.8859	45.8490	2.504	1524.1	3740.	0.4496E 02	0.335
4000.	2.504	34.909	69.125	5.84	2.1556	27.8860	45.8555	2.594	1527.4	3935.	0.4575E 02	0.317
4200.	2.480	34.905	69.137	5.87	2.1090	27.8867	45.8613	2.687	1530.7	4130.	0.4656E 02	0.306
4400.	2.461	34.900	69.133	5.90	2.0669	27.8865	45.8657	2.781	1534.1	4324.	0.4748E 02	0.272
4500.	2.452	34.898	69.138	5.91	2.0459	27.8867	45.8682	2.828	1535.8	4422.	0.4791E 02	0.292
4600.	2.447	34.896	69.137	5.95	2.0291	27.8864	45.8698	2.877	1537.5	4519.	0.4842E 02	0.242
4700.	2.444	34.895	69.154	5.97	2.0136	27.8865	45.8715	2.925	1539.2	4616.	0.4891E 02	0.249
4800.	2.442	34.893	69.149	5.99	1.9994	27.8863	45.8729	2.974	1540.9	4713.	0.4944E 02	0.228
4900.	2.442	34.892	69.137	6.01	1.9875	27.8861	45.8740	3.024	1542.6	4810.	0.4998E 02	0.210
5000.	2.447	34.891	69.145	6.03	1.9796	27.8860	45.8747	3.074	1544.4	4907.	0.5058E 02	0.171
5100.	2.454	34.890	69.113	6.05	1.9736	27.8857	45.8752	3.125	1546.2	5004.	0.5121E 02	0.134
5200.	2.464	34.889	69.084	6.07	1.9703	27.8854	45.8753	3.177	1548.0	5101.	0.5187E 02	0.083
5300.	2.474	34.889	69.056	6.08	1.9667	27.8852	45.8755	3.229	1549.7	5198.	0.5253E 02	0.098
5400.	2.484	34.889	69.020	6.10	1.9633	27.8855	45.8761	3.282	1551.5	5295.	0.5315E 02	0.156
5500.	2.496	34.888	68.984	6.15	1.9618	27.8850	45.8758	3.335	1553.3	5392.	0.5386E 02	-0.0187

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## DISCOVERY 138 STATION 10810

P-DB	T-DEGC	SAL-PSU	POTRAN	DO-ML/L	POTEMP	SIGMA0	SIC4000	DYNHT-M	SNDV-M/S	DEPTH-M	SVANOM	RVFR-C/HR
10.	20.422	36.776	64.965	4.85	20.4202	26.0060	42.4759	0.020	1524.8	10.	0.1995E 03	-9.990
20.	20.383	36.770	64.940	4.83	20.3794	26.0119	42.4844	0.040	1524.8	20.	0.1994E 03	1.368
30.	20.266	36.750	64.602	4.94	20.2603	26.0290	42.5088	0.060	1524.7	30.	0.1982E 03	2.327
50.	19.573	36.682	64.301	5.16	19.5635	26.1624	42.6846	0.098	1523.0	50.	0.1863E 03	4.598
75.	17.989	36.438	64.481	5.39	17.9758	26.3812	43.0061	0.142	1518.6	74.	0.1664E 03	5.279
100.	17.802	36.470	64.245	5.24	17.7846	26.4528	43.0890	0.183	1518.5	99.	0.1605E 03	3.016
125.	17.772	36.553	66.570	5.04	17.7510	26.5246	43.1609	0.223	1519.0	124.	0.1546E 03	3.009
150.	17.652	36.565	67.248	4.90	17.6268	26.5647	43.2085	0.261	1519.0	149.	0.1518E 03	2.258
200.	16.393	36.296	67.783	4.82	16.3610	26.6623	43.3945	0.335	1515.8	198.	0.1440E 03	2.535
250.	15.519	36.133	67.838	4.77	15.4803	26.7393	43.5346	0.405	1513.8	248.	0.1381E 03	2.259
300.	14.614	35.986	67.950	4.79	14.5692	26.8280	43.6899	0.472	1511.6	298.	0.1309E 03	2.431
400.	13.143	35.770	68.198	4.73	13.0866	26.9724	43.9466	0.597	1508.2	397.	0.1193E 03	2.212
500.	12.017	35.626	68.350	4.67	11.9507	27.0854	44.1486	0.712	1505.9	496.	0.1105E 03	1.976
600.	11.155	35.539	68.479	4.49	11.0790	27.1814	44.3146	0.819	1504.5	595.	0.1032E 03	1.831
700.	10.394	35.504	68.609	4.30	10.3082	27.2925	44.4881	0.918	1503.4	694.	0.9421E 02	1.962
800.	9.910	35.452	68.676	4.18	9.8143	27.4075	44.6422	1.007	1503.4	793.	0.8504E 02	1.969
900.	9.408	35.571	68.713	4.25	9.3027	27.5164	44.7926	1.087	1503.2	892.	0.7621E 02	1.932
1000.	9.147	35.648	68.704	4.29	9.0316	27.6209	44.9177	1.159	1504.0	991.	0.6813E 02	1.861
1200.	8.053	35.582	68.774	4.56	7.9226	27.7431	45.1368	1.285	1503.2	1188.	0.5820E 02	1.539
1400.	6.671	35.414	68.836	5.06	6.5309	27.8098	45.3327	1.393	1501.0	1385.	0.5147E 02	1.321
1600.	5.156	35.189	68.867	5.59	5.0122	27.8241	45.4962	1.492	1498.1	1583.	0.4764E 02	1.070
1800.	4.543	35.117	68.853	5.71	4.3875	27.8378	45.5729	1.586	1498.8	1780.	0.4623E 02	0.809
2000.	4.152	35.084	68.908	5.71	3.9822	27.8551	45.6314	1.677	1500.5	1976.	0.4495E 02	0.770
2200.	3.704	35.032	68.925	5.77	3.5208	27.8608	45.6850	1.766	1501.9	2173.	0.4402E 02	0.707
2400.	3.378	34.999	68.951	5.79	3.1809	27.8672	45.7270	1.853	1503.9	2369.	0.4330E 02	0.658
2600.	3.142	34.978	68.982	5.77	2.9293	27.8745	45.7608	1.939	1506.2	2566.	0.4274E 02	0.620
2800.	2.955	34.960	68.989	5.75	2.7253	27.8784	45.7864	2.024	1508.8	2762.	0.4259E 02	0.546
3000.	2.832	34.949	68.982	5.73	2.5847	27.8820	45.8051	2.109	1511.7	2958.	0.4275E 02	0.482
3200.	2.733	34.939	69.001	5.72	2.4668	27.8844	45.8201	2.195	1514.6	3153.	0.4309E 02	0.440
3400.	2.646	34.930	69.022	5.72	2.3602	27.8859	45.8331	2.282	1517.7	3349.	0.4350E 02	0.419
3600.	2.590	34.922	69.052	5.73	2.2843	27.8864	45.8418	2.369	1520.9	3544.	0.4419E 02	0.350
3800.	2.533	34.914	69.083	5.76	2.2068	27.8864	45.8503	2.458	1524.0	3740.	0.4485E 02	0.353
4000.	2.495	34.909	69.091	5.80	2.1469	27.8867	45.8571	2.549	1527.3	3935.	0.4560E 02	0.325
4200.	2.468	34.903	69.109	5.83	2.0971	27.8860	45.8619	2.641	1530.6	4129.	0.4650E 02	0.279
4400.	2.442	34.899	69.121	5.87	2.0486	27.8868	45.8680	2.735	1534.0	4324.	0.4725E 02	0.319
4500.	2.437	34.897	69.124	5.89	2.0316	27.8867	45.8697	2.782	1535.7	4421.	0.4775E 02	0.246
4600.	2.438	34.896	69.109	5.90	2.0200	27.8866	45.8709	2.830	1537.4	4519.	0.4830E 02	0.204
4700.	2.436	34.894	69.120	5.92	2.0059	27.8865	45.8723	2.879	1539.1	4616.	0.4882E 02	0.230
4800.	2.431	34.892	69.100	5.95	1.9894	27.8863	45.8740	2.928	1540.9	4713.	0.4931E 02	0.249
4900.	2.442	34.892	69.095	5.97	1.9869	27.8862	45.8742	2.977	1542.6	4810.	0.4997E 02	0.090
5000.	2.452	34.892	69.100	5.99	1.9842	27.8861	45.8744	3.028	1544.4	4907.	0.5062F 02	0.096
5100.	2.463	34.891	69.077	6.01	1.9817	27.8861	45.8746	3.079	1546.2	5004.	0.5127E 02	0.093
5200.	2.472	34.890	69.065	6.03	1.9782	27.8858	45.8747	3.130	1548.0	5101.	0.5194E 02	0.080
5300.	2.483	34.890	69.010	6.04	1.9753	27.8859	45.8751	3.183	1549.8	5198.	0.5258F 02	0.126
5400.	2.496	34.890	69.003	6.09	1.9745	27.8856	45.8750	3.236	1551.6	5295.	0.5329E 02	-0.069

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