



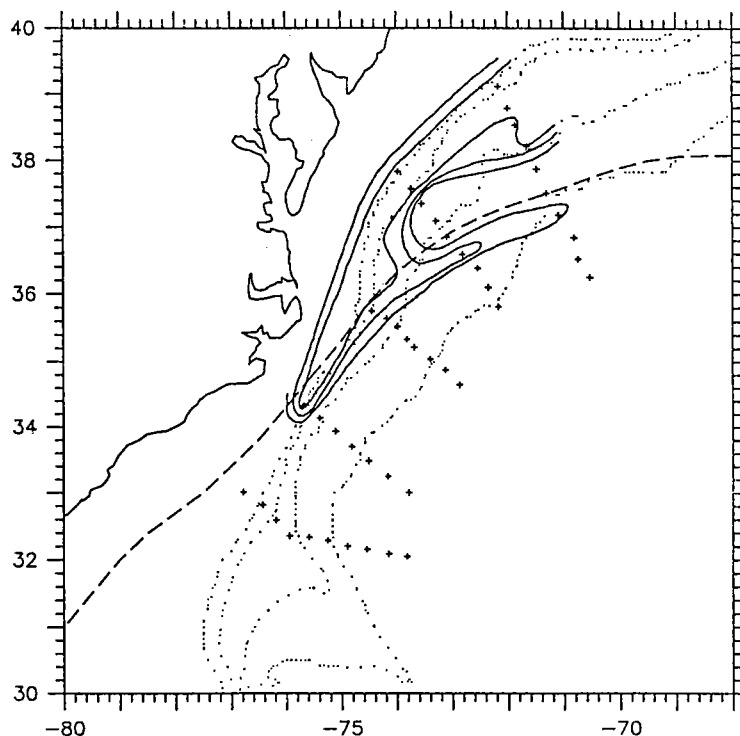
# Woods Hole Oceanographic Institution

WHOI-92-23

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## Hydrographic Data from Endeavor 214:

### A Study of the Gulf Stream—Deep Western Boundary Current Crossover



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Theresa K. McKee

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and

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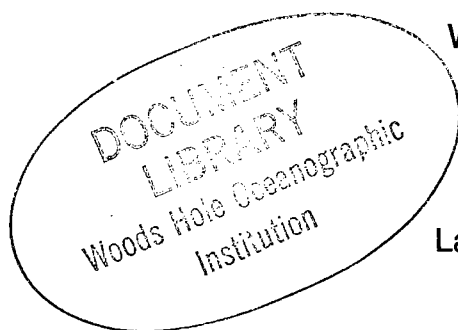
Lamont-Doherty Geological Observatory

May 1992

## Technical Report

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Office of Naval Research under Grant No. OCE90-09464.

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**Hydrographic Data from Endeavor 214:  
A Study of the Gulf Stream-Deep Western Boundary Current Crossover**

by

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May 1992

**Technical Report**

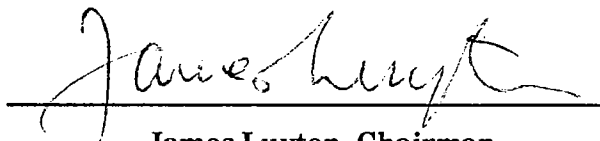


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**Approved for Distribution:**

  
**James Luyten, Chairman**  
Department of Physical Oceanography



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### 3 List of Participants

#### Woods Hole Oceanographic Institution

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Sara Gille	CTD watch stander
Elise Berliner	CTD watch stander
Barry Klinger	Oxygen Measurements

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William M. Smethie, Jr.	co-Principal Investigator
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Erik Fields	CTD/ADCP watch stander
Jie Lin	Oxygen Measurements
Jan Szelag	CTD hardware technician
Joe Lewkowicz	CTD software technician

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#### Scripps Institution of Oceanography

Doug Masten	Nutrient measurements
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## 4 Abstract

In late June, 1990, a 17-day cruise aboard R/V ENDEAVOR was undertaken to investigate the manner in which the Deep Western Boundary Current (DWBC) crosses under the Gulf Stream. Forty-four CTD casts, comprising five sections, were made along with bottle measurements of Dissolved Oxygen, Nitrate, Nitrite, Phosphate, Silica, F-11, and F-12. An acoustic transport float (POGO) was deployed at each station to obtain a measurement of the upper layer transport. The shipboard Acoustic Doppler Current Profiler (ADCP) measured currents throughout the cruise. This report presents vertical profiles and sections of the bottle and CTD data, a vector map of the average POGO currents, and listings of the bottle data.



## 5 Introduction

As the Gulf Stream leaves the continental shelf near Cape Hatteras and flows into deeper water, it crosses the equatorward flowing Deep Western Boundary Current (DWBC). The DWBC consists of three separate water mass components, which together span the water column from approximately 800 m to the bottom. At present, it is not understood just how the "crossover" occurs, particularly for the shallowest DWBC component which should encounter significant Gulf Stream flow to the northeast.

In June–July 1990 a hydrographic survey of the Gulf Stream – DWBC crossover was completed aboard R/V ENDEAVOR. The co-principal investigators were Robert Pickart from Woods Hole Oceanographic Institution (WHOI) and William Smethie from Lamont-Doherty Geological Observatory. The survey consisted of five sections across the continental slope, spanning the crossover region. Measurements of various chemical properties were carried out, as well as measurements of upper layer currents using acoustic transport floats. The main objective of the experiment was to determine the kinematics of the crossover, in particular to determine if water from the DWBC recirculates with the Gulf Stream. Ultimately, analysis of the data will contribute to a better understanding of how the two currents dynamically influence one another.

The hydrographic survey was carried out during the multi-year Gulf Stream Synoptic Ocean Prediction (SYNOP) experiment. During SYNOP, a line of bottom current meters was maintained from October, 1987 through August, 1990 across the DWBC at the Gulf Stream crossover. Our central section coincided with this current meter line. Although the hydrographic survey was not formally part of SYNOP, the concurrent data complement one other and will strengthen the respective analyses.

This report documents the CTD, water sample and acoustic float data collected during the 17-day hydrographic survey. The instrumentation and data processing are described, then the data are plotted as vertical profiles and vertical sections. Finally, water sample data listings are included.

## 6 Data Collection

### 6.1 CTD

Five sections were occupied (Figure 1): two upstream of the crossover (Sections 1 and 2), one at the crossover (Section 3), and two downstream (Sections 4 and 5). A total of 44 casts were made – 41 bottom casts plus three additional 1500 m casts on the last Section (Table 1). At each section an attempt was made to cross both the DWBC and the Gulf Stream. However, the Gulf Stream was not completely crossed on the southern two sections (where it is still near the continental shelf).

CTD operations during the cruise were handled by the Marine Technical Services Group from the University of Rhode Island (URI). A single Neil Brown Mark III CTD (no. 1088), mounted on a 24 10-liter bottle rosette, was used. The CTD was equipped with a Beckmann oxygen sensor; however, the oxygen current contained random jumps that could not be fixed. During the cruise it was thought that this was a software problem. Unfortunately, it was later determined that the

probe was faulty, making the oxygen data unusable.

For 43 out of 44 stations, the CTD gave complete data return. The exception was station 12 which had no data deeper than 2335 m, where the CTD failed; the last 625 m were lost.

Table 1. Hydrographic Station Dates, Positions, and Bottom Depths.

Station Number	Date (yyymmdd)	Time (GMT)	Latitude (° N)	Longitude (° W)	Depth (m)
1	90/06/24	1901	32 2.94	73 49.46	5062
2	90/06/25	0658	32 5.52	74 9.43	4833
3	90/06/25	1502	32 9.49	74 33.05	4618
4	90/06/25	2106	32 12.16	74 54.04	4313
5	90/06/26	0239	32 17.18	75 15.08	3933
6	90/06/26	0750	32 20.05	75 35.29	3377
7	90/06/26	1421	32 21.39	75 56.41	2660
8	90/06/26	2011	32 35.22	76 11.03	2117
9	90/06/27	1000	32 49.01	76 25.46	1129
10	90/06/27	1511	33 0.44	76 46.95	614
11	90/06/27	2352	34 19.49	75 41.20	1149
12	90/06/28	0503	34 8.33	75 23.55	2953
13	90/06/28	1019	33 56.17	75 6.54	3296
14	90/06/28	1541	33 42.02	74 49.13	3750
15	90/06/28	2058	33 28.91	74 30.81	4180
16	90/06/29	0322	33 15.03	74 10.03	4510
17	90/06/29	1014	33 0.15	73 47.17	4823
18	90/06/29	2350	34 39.11	72 52.06	4494
19	90/06/30	0539	34 52.52	73 7.28	4295
20	90/06/30	1122	35 2.37	73 23.65	4014
21	90/06/30	2324	35 13.00	73 41.00	3653
22	90/06/30	2217	35 20.32	73 48.97	3330
23	90/07/01	0427	35 31.60	73 59.02	3026
24	90/07/01	1139	35 38.51	74 10.97	2644
25	90/07/01	1701	35 45.02	74 27.17	1949
26	90/07/02	0758	37 49.88	73 58.40	1000( <i>est.</i> )
27	90/07/02	1205	37 34.40	73 44.18	2049
28	90/07/02	1624	37 21.06	73 32.74	2454
29	90/07/02	2056	37 5.56	73 17.54	2885
30	90/07/03	0304	36 51.13	73 5.60	3148
31	90/07/03	1017	36 34.91	72 48.67	3416
32	90/07/03	1816	36 22.74	72 32.24	3685
33	90/07/04	0115	36 5.93	72 20.90	3894
34	90/07/04	0727	35 48.96	72 10.20	4055
35	90/07/04	1816	36 15.01	70 32.29	4407
36	90/07/05	0135	36 31.18	70 44.73	4354
37	90/07/05	0915	36 50.66	70 49.39	4256
38	90/07/05	1412	37 11.01	71 5.69	4093
39	90/07/06	0032	37 30.51	71 18.57	3807
40	90/07/06	0543	37 52.17	71 29.04	3229
41	90/07/06	1039	38 12.84	71 39.74	2953
42	90/07/06	1502	38 31.90	71 51.89	2815
43	90/07/07	0900	38 47.00	72 0.00	2639
44	90/07/07	1629	39 6.67	72 9.69	1606

# ENDEAVOR 214 Station Locations

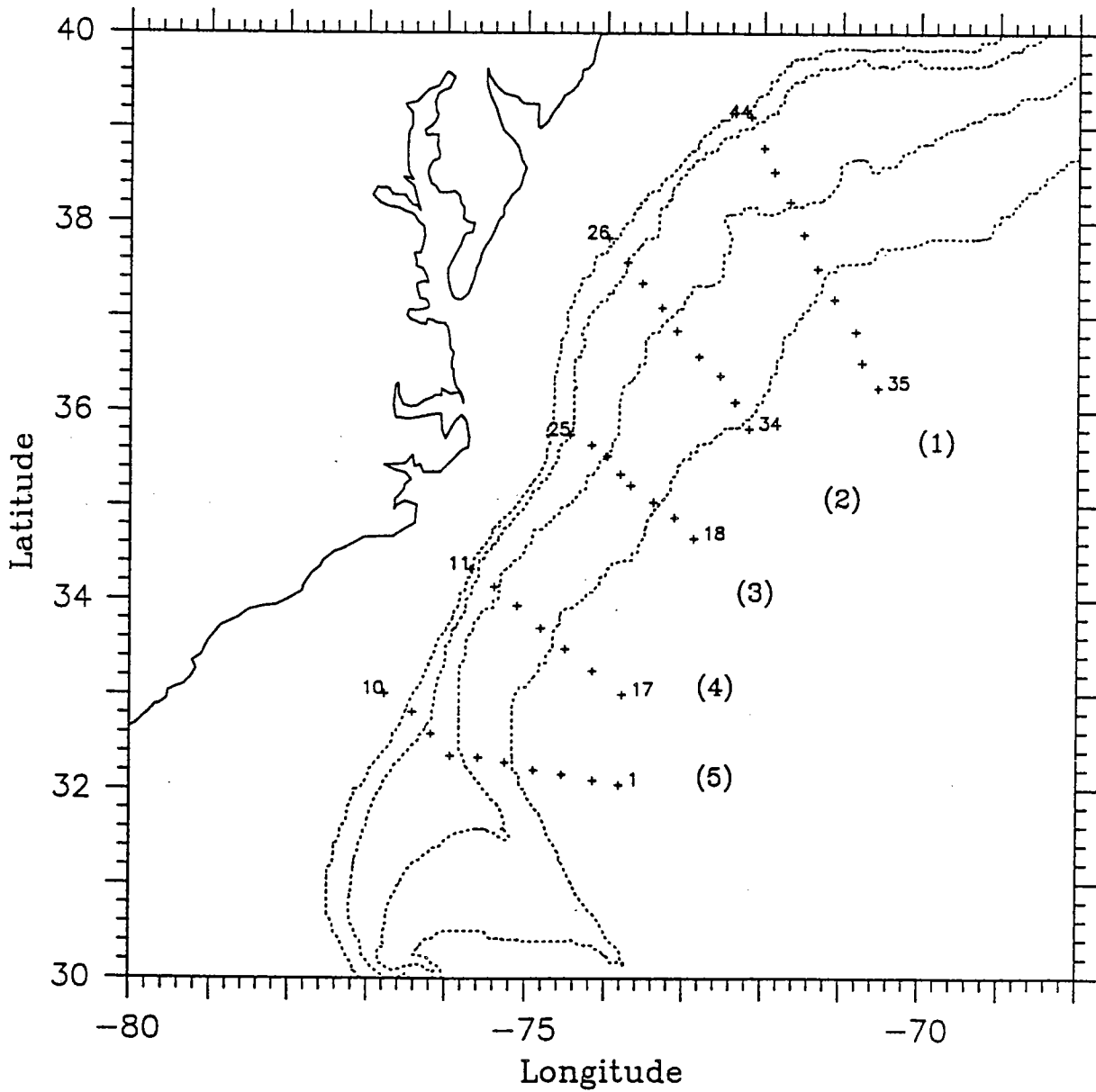


Figure 1: Map showing hydrographic station locations. Section numbers are in parentheses.

## 6.2 Water samples

At most stations, 24 water samples were collected using Scripps type 10-liter Niskin bottles. At some early stations 5-liter Niskin bottles were used, and 5-liter Niskin bottles were also occasionally used as replacements. All bottles were equipped with coated springs and baked O-rings to reduce contamination of the chlorofluorocarbons (CFCs) (standard Niskins were occasionally used as replacements). At shallow stations a smaller number of samples were collected. Measurements of dissolved oxygen, CFCs F-11 and F-12, and nutrients were routinely carried out. Funding for the nutrient measurements came under a separate NSF grant with M. McCartney as Principal Investigator.

### 6.2.1 Salinity

Salinity was measured using a standard AUTOSAL located in the ENDEAVOR's special purpose laboratory, which has the best temperature control of any working location on the ship. This task was handled by the URI Marine Technical Services Group, and upon completion of the cruise the data were in final form.

### 6.2.2 Oxygen

Oxygen was measured using a Winkler system operated by D. Kester's laboratory group at URI. The concentrations were determined using the Winkler (1888) titration method as modified by Carritt and Carpenter (1966).

### 6.2.3 Chlorofluorocarbons (CFCs)

The chlorofluorocarbons, F-11 and F-12, were measured on air and water samples. Water samples were collected using the 5- or 10-liter Niskin bottles attached to a rosette. Samples were drawn from these bottles into 100-cc glass syringes fitted with plastic valves. The samples were then stored (for no longer than 12 hours) in a sink continually flushed with clean surface seawater until analysis.

Water and air samples were analyzed using a purge and trap system interfaced to a gas chromatograph with an electron capture detector. The method is described in detail by Smethie et al. (1988). Calibration curves were run by introducing different size sample loops of standard gas into the system. The calibration points were fit with a polynomial equation, and this equation was used to calculate the sample concentrations as described by Bullister and Weiss (1988). System blanks, stripper blanks, and sample bottle blanks were measured during the cruise, and the data have been corrected for these blanks. Stripper blanks were generally zero for F-12 and between 0.008 and 0.015 pmol/kg for F-11. Sample bottle blanks were determined by tripping two or three bottles at the same depth and sampling the bottles at 2-hour intervals to measure CFC ingrowth. The F-12 blank was zero for both the 5- and 10-liter bottles. The F-11 blank for the 10-liter bottles was 0.014 pmol/kg at the beginning of the cruise and 0.006 pmol/kg at the end of the cruise. The



F-11 blank for the 5-liter bottles was 0.034 pmol/kg at the beginning and 0.026 pmol/kg at the end. A linear drift in the blank was assumed and a correction applied to the data.

The precision of the atmospheric measurements based on replicate measurements, was  $\pm 0.4\%$  for F-11 and F-12. The precision for water samples, based on differences between duplicate samples, was the larger of 0.004 or 0.8% for F-11 and 0.008 or 0.7% for F-12.

The fit to the calibration curves was  $\pm 1\%$  for both F-11 and F-12. Thus the overall accuracy is about  $\pm 1.5\%$  for both CFCs.

All concentrations are relative to the Scripps Institution of Oceanography 1986 scale.

#### 6.2.4 Nutrients

The measurement of nutrients was handled by the Scripps Institution of Oceanography (SIO) shipboard operations group. Silicate, Phosphate, Nitrate and Nitrite were measured on an auto-analyzer located in the special purpose lab. Post-cruise data processing was performed at SIO. Since these data are not formally part of our data set, they have not been subject to the same quality control (described later in the report) as the other properties.

### 6.3 CFC Air Samples

CFC air samples were collected at 10 locations along the cruise track. Samples were normally collected when the ship was underway between stations to insure a headwind across the sample intake at the bow and thus avoid contamination with the ship's atmosphere. Air samples were collected by pumping air from a mast on the ship's bow to the CFC analysis system in the main laboratory of the ship. The intake was located approximately 7 meters above the sea surface. The air stream was dried by passing it over magnesium perchlorate, and 4 cc aliquots were collected from the gas stream using a calibrated loop. The volume was corrected to STP using the temperature and pressure measured at the time the sample was collected.

The results are summarized in Table 2. Concentrations for F-11 and F-12 are slightly lower for samples collected along transects 4 and 5. Samples 7 and 9 have unusually high F-12 concentrations which suggests that these samples were contaminated with the ship's atmosphere.

**Table 2. Atmospheric Concentrations of F-11 and F-12.**

Sample	Date	Station	Latitude (° N)	Longitude (° W)	F-12 (pptv)	F-11 (pptv)
1	90/06/25	2-3	32 07.3	74 19.4	481.5	259.7
2	90/06/25	4-5	32 12.1	75 00.8	484.0	258.2
3	90/06/26	6-7	32 19.6	75 49.3	484.7	264.7
4	90/06/27	11	34 18.5	75 41.2	480.8	261.9
5	90/06/28	13-14	33 44.6	74 52.2	483.8	261.4
6	90/06/29	17-18	33 11.5	73 37.2	483.1	258.7
7	90/06/30	22-23	35 23.2	73 52.6	516.9	265.3
8	90/07/04	34-35	35 55.5	71 42.7	490.2	264.2
9	90/07/05	38	37 12.4	71 00.8	523.1	271.1
10	90/07/07	44	39 13.5	72 07.9	490.7	262.9

#### 6.4 POGO

An acoustic transport float, POGO (see Rossby et al., 1991), was deployed near the end of each CTD cast to obtain a measurement of the upper layer transport. Data were processed shortly after the cast using software written by T. Rossby's group at URI. Mean speed and bearing over a depth range of 250 m to 3000 m were computed (Table 3); the associated vectors are shown in Figure 2. Surface speed and bearing were also computed (Table 3).

#### 6.5 XBT

While in the Gulf Stream, XBTs were taken between the CTD stations for increased resolution. These data are not included in this report.

Table 3. Surface and Mean Current Data from POGO Floats.

Station Number	Surface			Mean	
	Depth (m)	Speed (cm/s)	Bearing ( $^{\circ}$ true)	Speed (cm/s)	Bearing ( $^{\circ}$ true)
1	3044.7	10.5	1	6.4	45
2	3049.0	18.7	133	3.9	22
3	3044.7	15.7	200	2.0	131
4	3062.4	23.7	166	2.7	251
5	3000.7	14.2	11	4.2	298
6	—	—	—	—	—
7	—	—	—	—	—
8	1060.0	66.1	93	32.5	19
9	262.0	203.2	36	126.8	49
10	—	—	—	—	—
11	492.0	150.8	23	137.8	34
12	2058.3	85.2	50	36.8	30
13	2058.3	27.1	78	19.2	21
14	3083.8	24.3	207	3.5	240
15	3005.6	15.3	192	4.3	242
16	2979.5	48.5	222	13.6	242
17	1104.4	17.4	144	8.3	255
18	1078.0	43.8	127	5.7	234
19	1086.8	89.2	80	15.6	51
20	1065.7	57.4	59	32.0	35
21	900.4	83.1	57	50.1	51
22	1092.1	48.7	66	62.4	58
23	1049.9	166.0	54	86.3	57
24	1083.3	133.5	48	64.4	57
25	1072.8	74.6	56	7.0	51
26	499.5	46.8	247	9.7	38
27	1067.5	53.4	273	24.1	232
28	1072.8	23.4	286	21.7	231
29	1106.2	11.6	170	8.6	228
30	1085.1	16.7	140	5.0	163
31	1055.2	83.9	38	22.8	66
32	1081.6	206.2	51	93.0	51
33	1106.2	136.1	58	99.3	48
34	1086.8	37.7	185	47.3	62
35	1081.6	68.8	55	23.8	55
36	1078.0	63.9	97	50.7	66
37	1088.6	162.8	91	89.6	67
38	1065.7	263.6	70	96.7	78
39	1083.3	51.9	60	3.2	186
40	1042.9	25.0	181	10.1	239
41	1041.1	12.4	184	11.7	241
42	1106.2	27.3	19	18.4	212
43	1076.3	5.3	319	10.1	252
44	1049.9	42.1	278	5.1	257

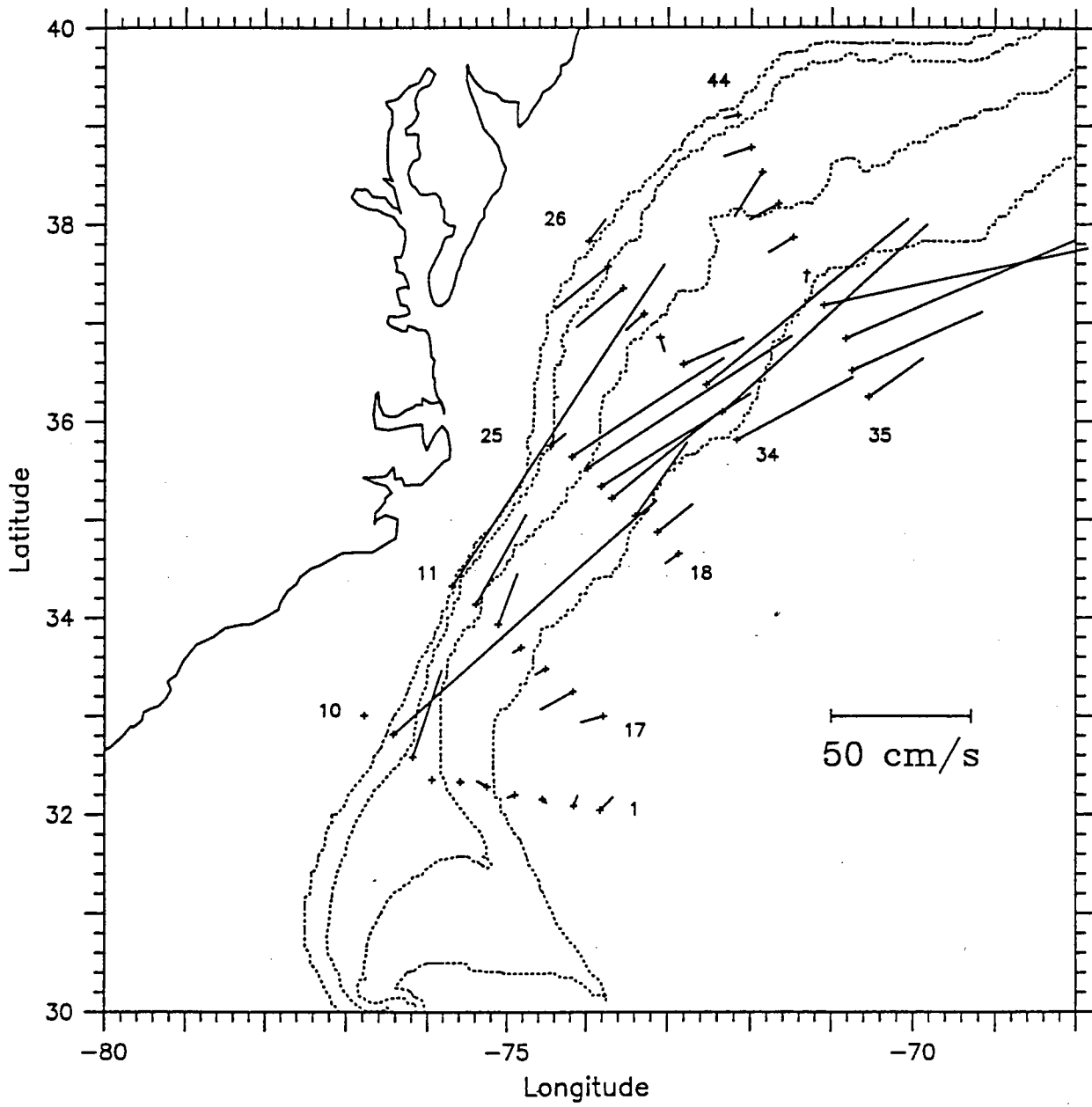


Figure 2: Map showing average POGO vectors.

## 7 CTD Calibration and Processing

CTD data acquisition and post-cast processing were accomplished on two MicroVAX II systems on ENDEAVOR using software written by the URI Marine Technical Services Group (for a description, see Hummon et al., 1991). By the end of the cruise, all processing steps were completed through pressure-averaging, leaving only the post-cruise calibrations to be done.

Laboratory calibrations of the CTD pressure, temperature and conductivity sensors were performed by Neil Brown Instrument Systems before and after the cruise. Based on the small amount of drift between calibrations, the pre-cruise pressure and temperature coefficients were used for the final data.

The bottle conductivity calibration was performed at WHOI by R. Pickart on a VAXstation 3100 using the water sample salinity data. Before this process was begun, a chronology of  $\Delta S$ 's was constructed,  $\Delta S$  being the difference between the raw CTD value and water sample value at each bottle depth (Figure 3). No systematic trend over the length of the cruise was observed, and, since the dependence of  $\Delta S$  on pressure was very small as well (not shown), the CTD values were calibrated as a function of conductivity only (no station trend or pressure trend included).

The bottle salinity calibration steps are summarized here:

1. Insert bottle salinity values into CTD "tag files" which contain the raw CTD variables at the bottle depths.
2. Insert upcast pressure coefficients into "header files."
3. Run the program TAGCAL to obtain calibration coefficients.  
*Note: only 32 stations were used for the calibration. The following stations were not used: 14, 30, 39, 41, 42; lower quality water sample data (Figure 3) 16, 21, 22, 25, 33, 34, 38; bad or missing "tag files"*
4. Apply conductivity coefficients to pressure averaged CTD files and compute salinities using SAL78 subroutine.

When these calibrated values were used to re-create the  $\Delta S$ 's, the resulting standard deviation of all values was .0040 PSU (Figure 4). The coefficients used for conductivity, pressure and temperature calibration are listed in Table 4.

A comparison was made between the deep T/S relation obtained from this data set and the standard Worthington-Metcalf curve for the western North Atlantic. The ENDEAVOR 214 data are consistently fresher between 2 and 4°C (maximum of .008 PSU fresher). It is well documented, however, that there has been a distinct freshening of the deep North Atlantic since the time the Worthington-Metcalf curve was created (e.g., M. Hall, 1991, personal communication), and our deep T/S curve is in agreement with more recent CTD surveys in this area of the North Atlantic.

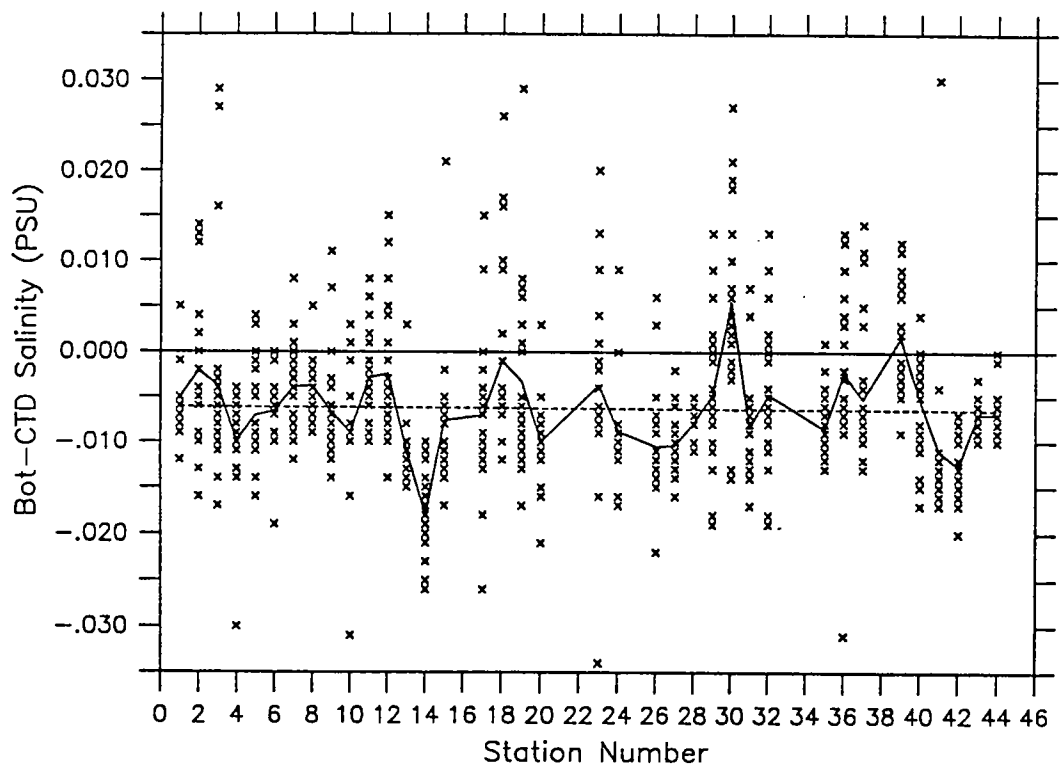


Figure 3: Plot of uncalibrated  $\Delta S$  (bottle salinity - raw CTD salinity) versus station number. X's mark the  $\Delta S$ . The solid line graphs the mean of each station group. The dashed line is the linear least squares fit to the mean.

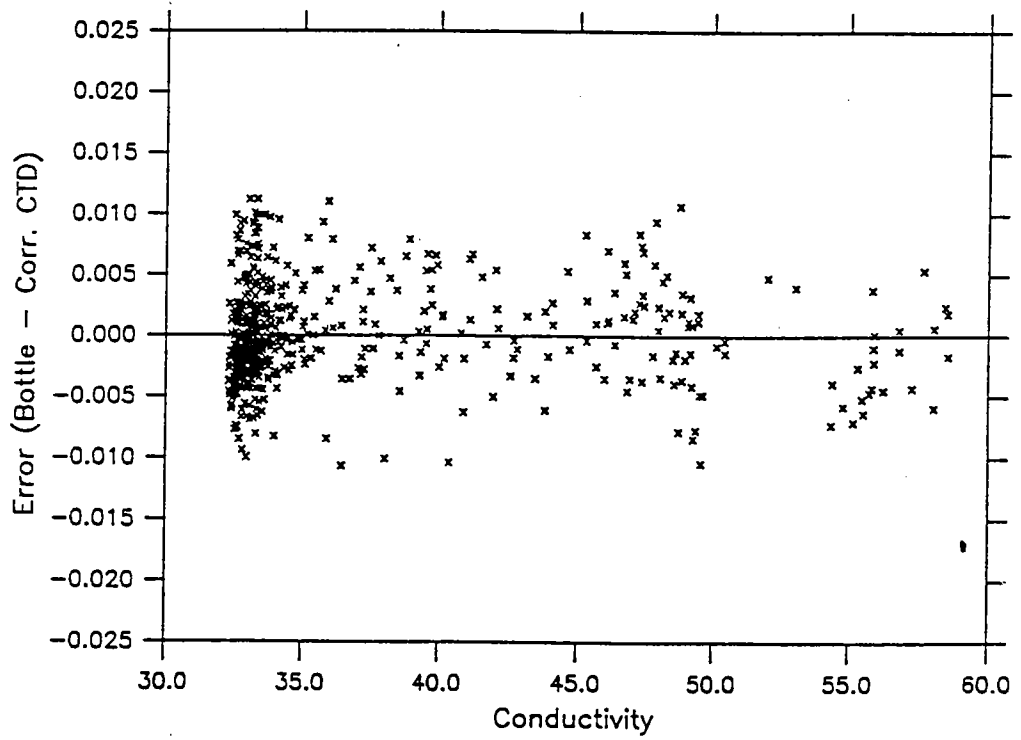


Figure 4: Plot of calibrated  $\Delta S$  (bottle salinity - calibrated CTD salinity) versus conductivity.

---

**Table 4. CTD Calibration Coefficients**

PRESSURE (laboratory, pre-cruise):

upcast:

$$A0 = -1.215764$$

$$A1 = .9987324$$

$$A2 = .0000008356674$$

$$A3 = -.0000000009893856$$

downcast:

$$A0 = -.7954182$$

$$A1 = .9994162$$

$$A2 = .0000004804482$$

$$A3 = -.0000000006912594$$

TEMPERATURE (laboratory, pre-cruise):

$$A0 = .003269084$$

$$A1 = .9999887$$

$$A2 = .0000001020303$$

CONDUCTIVITY (bottle):

$$A0 = -.00177182$$

$$A1 = .999933$$

---

## 8 Final Processing and Data Quality Control

Final processing of the data took place at Woods Hole Oceanographic Institution. CTD data underwent final editing, and the different water property data were merged with calibrated CTD pressures and temperatures to form a composite bottle data set.

Edited CTD and water sample ascii data were converted to standard binary file format for compatibility with existing WHOI hydrographic data analysis software.

## 8.1 CTD

The calibrated CTD profiles were interpolated onto a regular pressure grid, starting at 3 db with an increment of 2 db. Several stations required a small amount of further editing (to remove isolated spikes). These edits are summarized in Table 5.

---

**Table 5. Summary of Manually Edited CTD Files**

Station	Description of edit
21	linearly interpolated over salinity and temperature spike near 1900 db
24	linearly interpolated over salinity spike near 380 db
36	linearly interpolated over salinity and temperature spike near 950 db
14, 33, 42, 44	extrapolated over <10db in order to extend the data up to the 3 db starting point

---



## 8.2 Water Sample

### 8.2.1 Salinity

Two methods were employed to identify bad bottle values. First, vertical traces of bottle salinity were overplotted with CTD down-trace salinity measurements on a large-scale T/S plot. Suspicious bottles could be visually identified.

Each bottle salinity was then compared with the associated calibrated CTD up-trace value (recorded at the time of the bottle measurement) and CTD down-trace value at a matching potential temperature. If the up-trace and bottle agreed, then the bottle value was deemed good. If the two disagreed, then the down-trace value was used as a check to determine whether the bottle value was indeed bad or if, in fact, the up-trace was bad. In cases where the bottle was deemed bad, the up-trace value was inserted. When all three measurements disagreed substantially, the down-trace value was inserted into the bottle data set. The final salinity data set retained 80% of the original bottle values.

Some of the bad salinities were known to be caused by sample bottle leakage. In this case, other measured properties were also bad and were removed from the data set.

### 8.2.2 Oxygen and CFCs

For CFCs, the F-11:F-12 ratio was calculated. Unreasonable ratios were used to identify bad data.

In addition, profiles of bottle Oxygen and F-11 versus Pressure and versus Potential Temperature were prepared and reviewed. Values of Oxygen and F-11 that did not lie on the trend were examined. Editing these was a somewhat subjective process. Extremely bad values were easily identified and removed; dubious values were compared for coherence with adjacent data, and removed if deemed unreliable.

## 9 Description of Plots

Part 1 contains individual vertical profiles of Salinity, Oxygen, and F-11. Salinity is plotted as a function of Potential Temperature. For each cast, there are two plots, one showing the upper water column (8–29°C) and the other showing the deeper water (0–8°C). Symbols denote the bottle measurements; the solid line is the CTD down-trace. Oxygen and F-11 are plotted as a function of pressure for the whole water column and Potential Temperature for the deeper water only. The plots are presented in geographic order (North to South and shallow to deep) rather than in station numerical order.

Part 2 contains vertical sections of Potential Temperature, Salinity, and Sigma 0, 1.5, 3.0 from the CTD, and bottle Oxygen, F-11, and Silicate. Before being contoured, the CTD data were subsampled. All data were then regridded using spline-laplacian interpolation to 50 m in the vertical, and 10 km in the horizontal. The bathymetry is the digitized output from the ship's depth recorder. For the water sample properties, crosses denote the bottle locations. All sections are drawn to a scale of 1000 m = 100 km.

Part 3 contains individual station listings of the bottle data. In addition to the measured variables Pressure, Temperature, Salinity, Oxygen, and F-11, these present Depth, Potential Temperature (Theta), and Potential Density (Sigma 0, Sigma 1.5, Sigma 2.0, Sigma 3.0, Sigma 4.0).

To give a more complete data set, uptrace CTD salinities were substituted for bad or missing bottle salinities where possible. Where the uptrace values were questionable, down-trace CTD salinities were used. Uptrace substitutions are enclosed in double brackets ({{ }}). Down-trace substitutions are enclosed in double asterisks (\*\* \*\*).

Other chemical data (Phosphate, Nitrite, Nitrate, and F-12) are listed as well. These have not been edited to the same degree as the plotted data. In some cases, questionable Oxygen and F-11 data are presented. These are preceded by a pound sign (#). Other missing or edited data appear as blanks in the listing.

All plots were generated using PLOTPLUS software from PLOTPLUS Graphics, Sequim, Washington.

## 10 Acknowledgements

We are most grateful to Captain Tom Tyler and the crew of the R/V ENDEAVOR for their hard work and patience, which made this a very successful experiment. The POGO floats were ably built and tested by Jim Fontaine, with the help of Mike Mulrone. Tom Rossby and Randy Watts graciously donated miscellaneous equipment used in the POGO floats. Mike McCartney provided helpful suggestions for quality-controlling the water sample data. Staff assistants Veta Green, Anne-Marie Michael, and Barbara Gaffron were most helpful in the preparation of the report. This work was supported by grants from the National Science Foundation and the Office of Naval Research, OCE90-09464.

## 11 References

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- Winkler, L. W. 1888. Die Bestimmung des im Wasser gelosten Sauerstoffes. *Berichte der Deutschen Chemischen Gesellschaft*, **21**: 2843-2855.

## 12 Figure Captions for Data Presentations

- Figures 5 – 9. Bottle Salinity vs. Potential Temperature Profiles — Deep (0–8°C), Sections 1 – 5.
- Figures 10 – 14. Bottle Salinity vs. Potential Temperature Profiles — Shallow (8–29°C), Sections 1 – 5.
- Figures 15 – 19. Bottle Oxygen vs. Pressure Profiles, Sections 1 – 5.
- Figures 20 – 24. Bottle Oxygen vs. Potential Temperature Profiles — Deep, Sections 1 – 5.
- Figures 25 – 29. Bottle F-11 vs. Pressure Profiles, Sections 1 – 5.
- Figures 30 – 34. Bottle F-11 vs. Potential Temperature Profiles — Deep, Sections 1 – 5.
- Figure 35. Vertical Sections of CTD Potential Temperature, Salinity, and Sigma 0, 1.5, 3.0 for Section 1.
- Figure 36. Vertical Sections of Bottle Oxygen, F-11, and Silicate for Section 1.
- Figure 37. Vertical Sections of CTD Potential Temperature, Salinity, and Sigma 0, 1.5, 3.0 for Section 2.
- Figure 38. Vertical Sections of Bottle Oxygen, F-11, and Silicate for Section 2.
- Figure 39. Vertical Sections of CTD Potential Temperature, Salinity, and Sigma 0, 1.5, 3.0 for Section 3.
- Figure 40. Vertical Sections of Bottle Oxygen, F-11, and Silicate for Section 3.
- Figure 41. Vertical Sections of CTD Potential Temperature, Salinity, and Sigma 0, 1.5, 3.0 for Section 4.

Figure 42. Vertical Sections of Bottle Oxygen, F-11, and Silicate for Section 4.

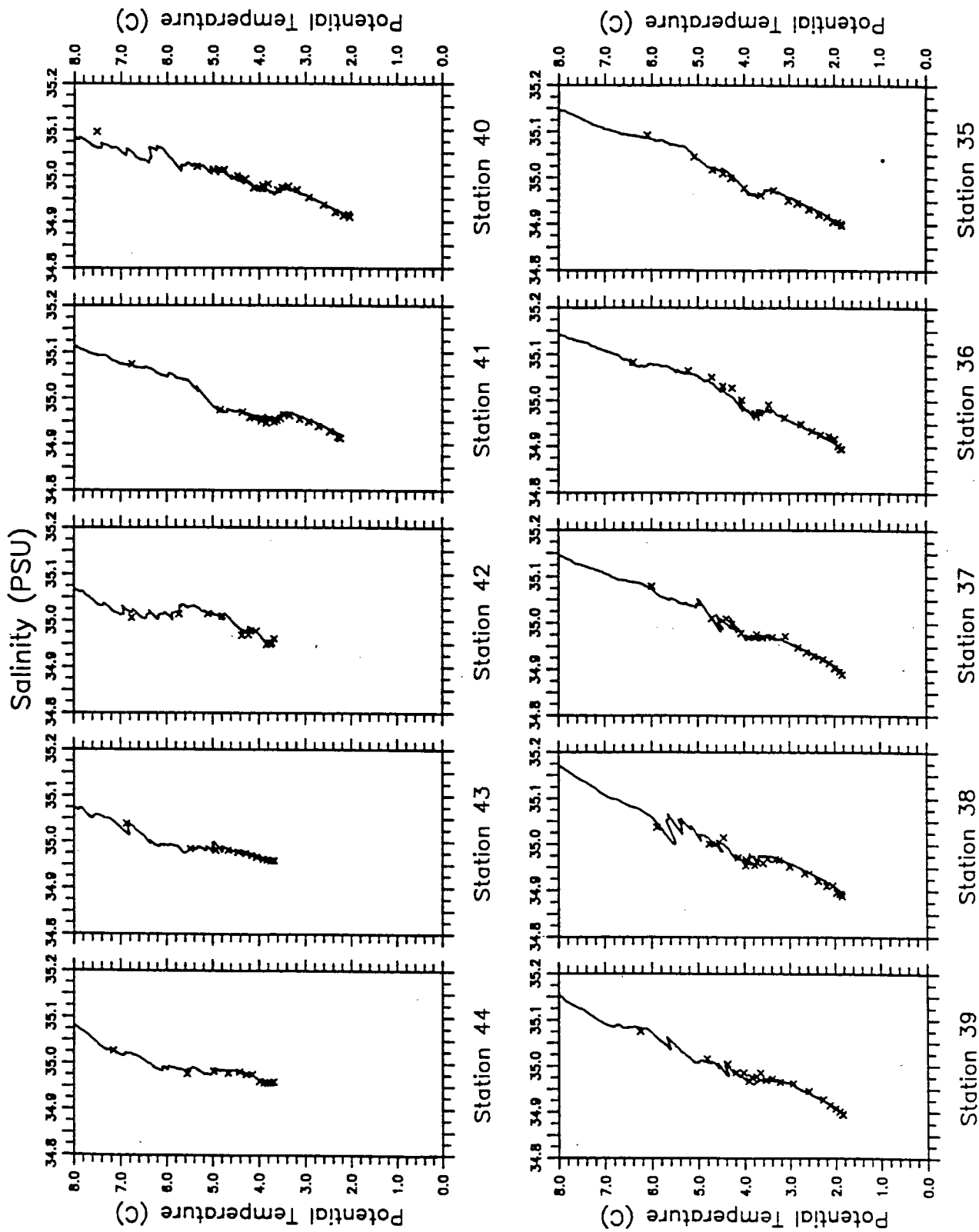
Figure 43. Vertical Sections of CTD Potential Temperature, Salinity, and Sigma 0, 1.5, 3.0 for Section 5.

Figure 44. Vertical Sections of Bottle Oxygen, F-11, and Silicate for Section 5.

## **13 Data Presentations**

### **13.1 Part 1. Property Plots**

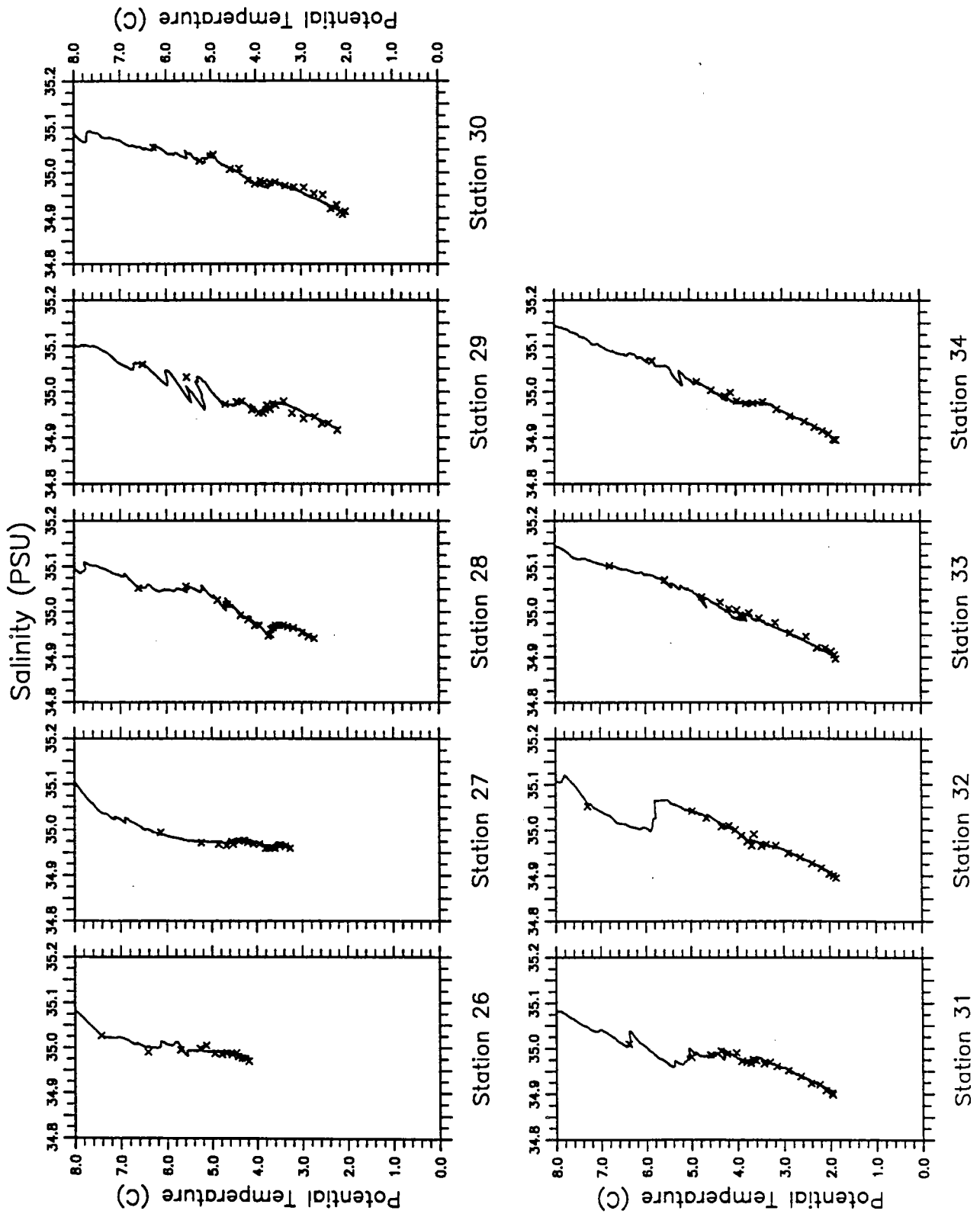




SECTION 1

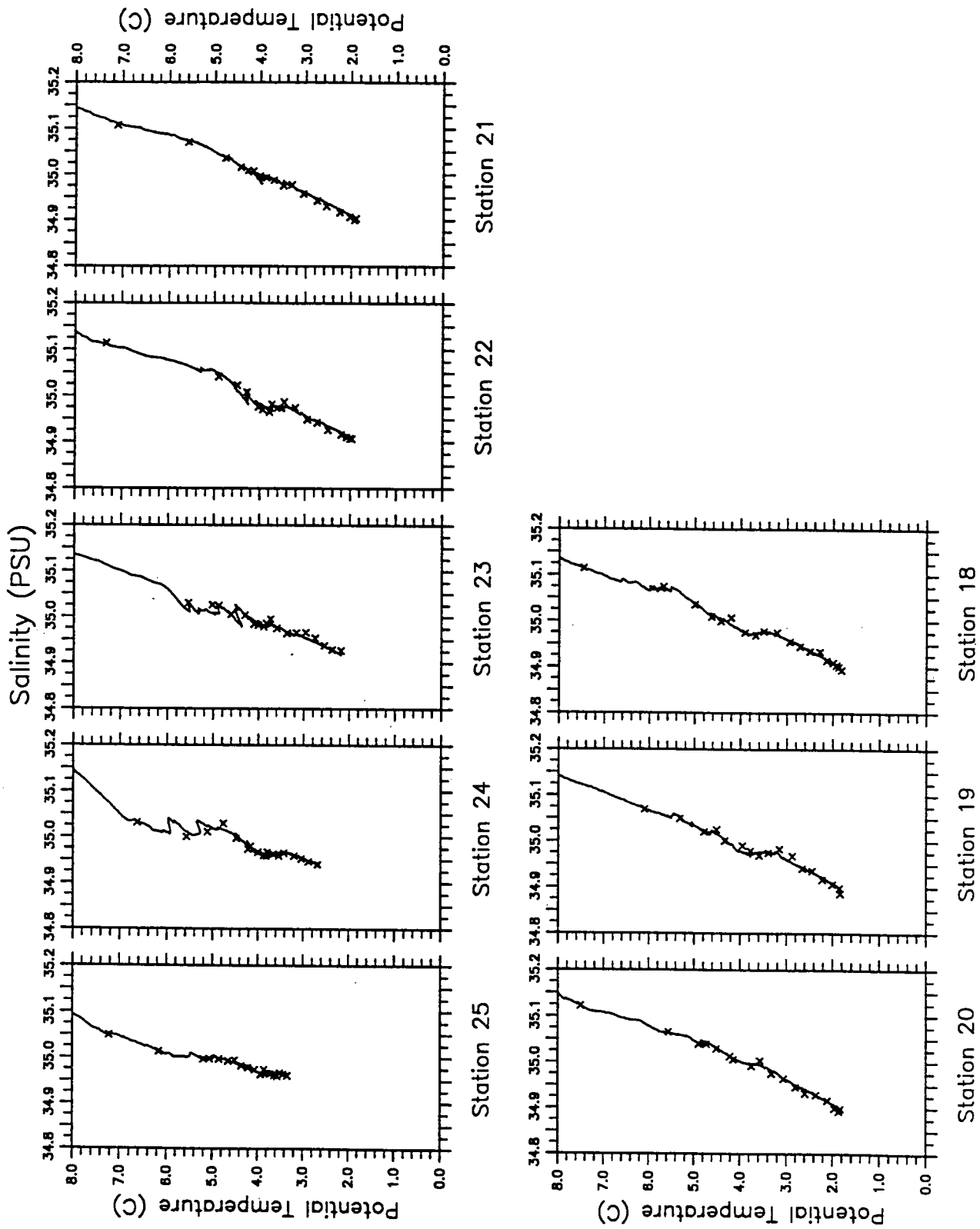
Figure 5.





SECTION 2

Figure 6.



SECTION 3

Figure 7.

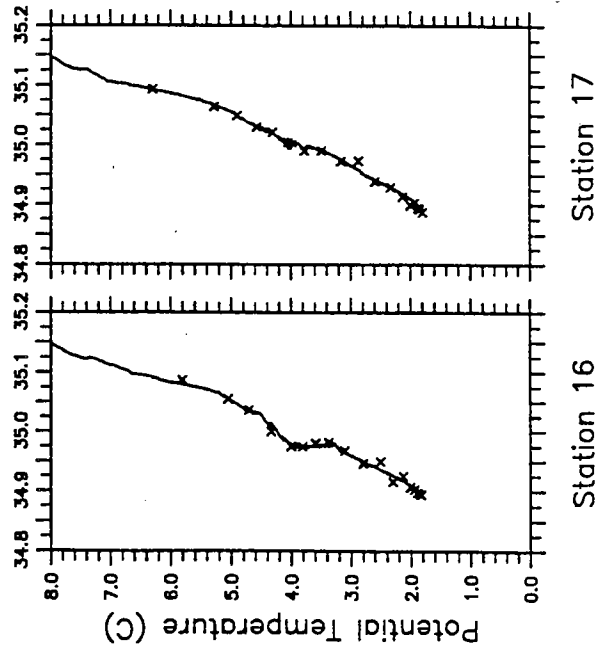
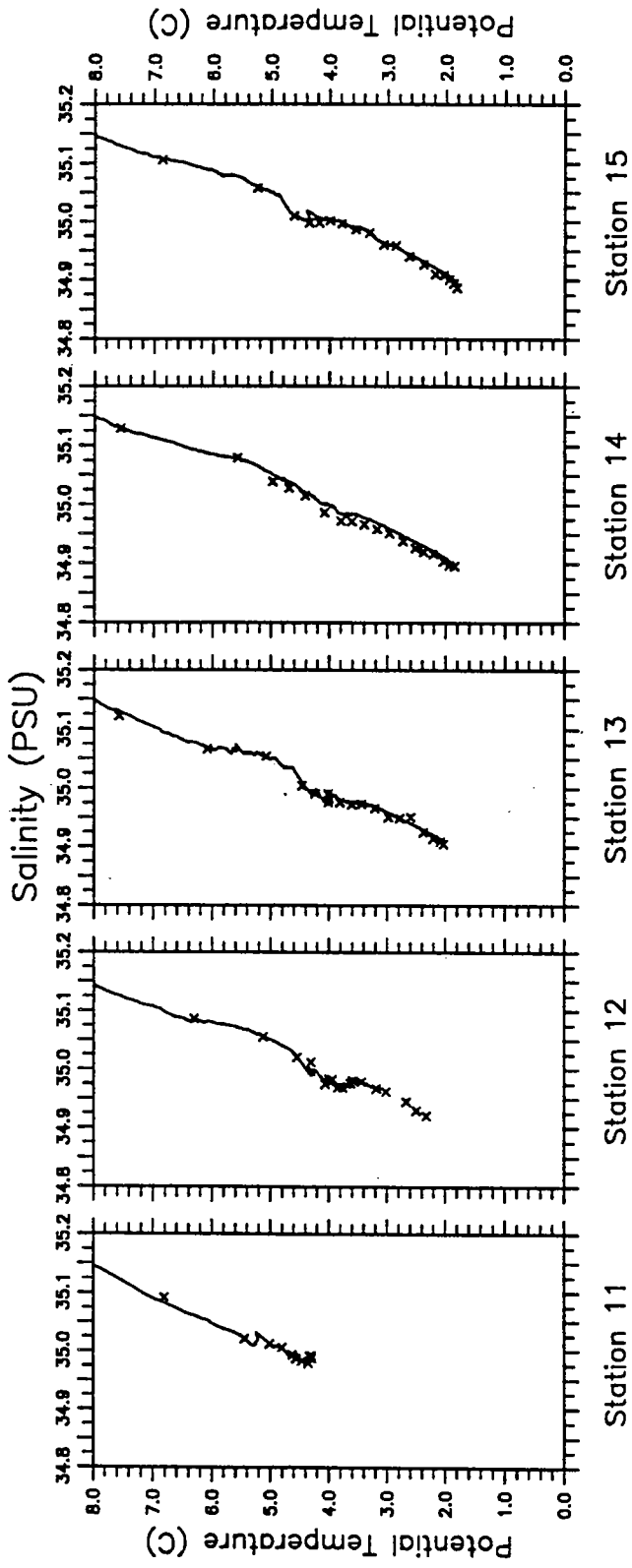
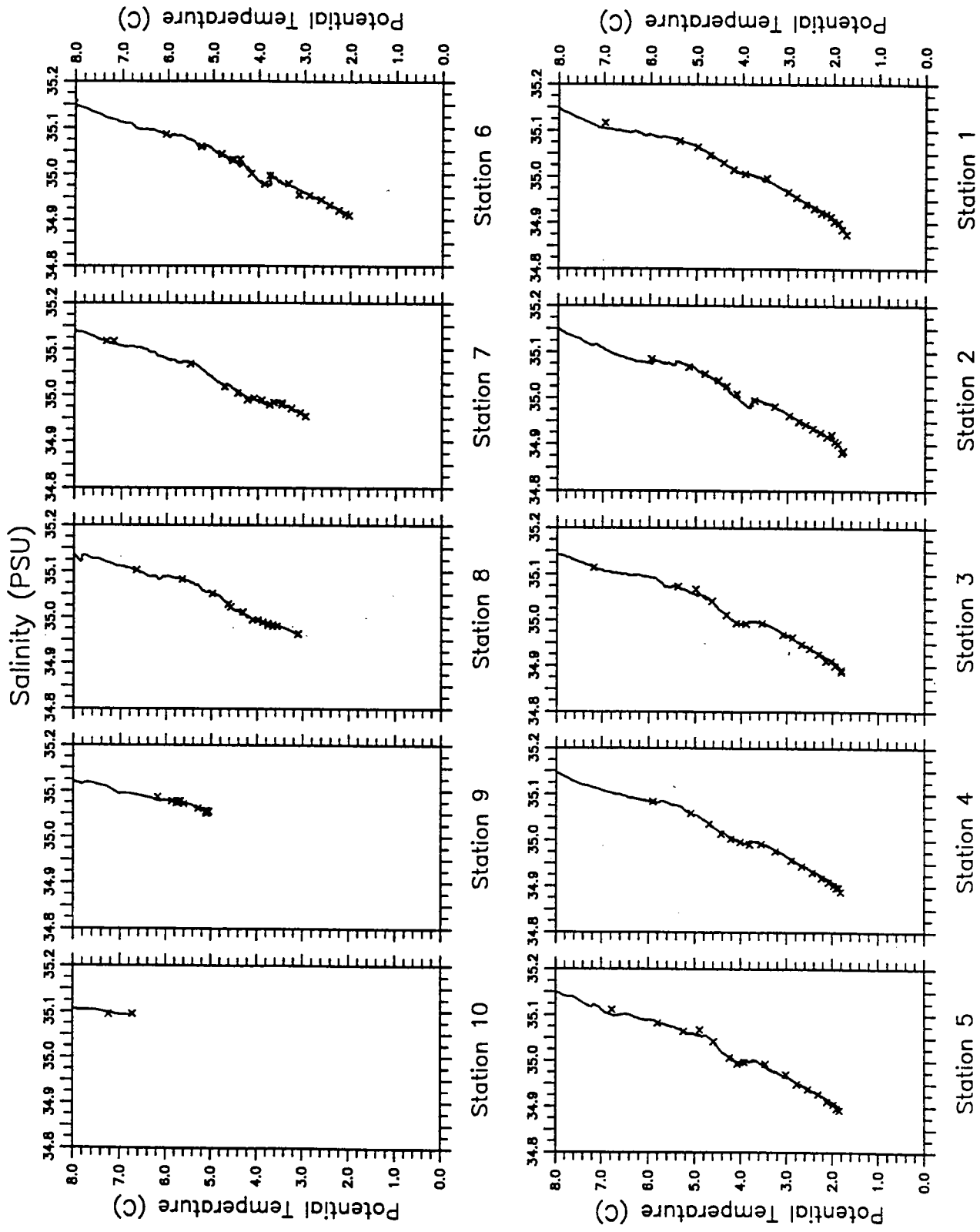


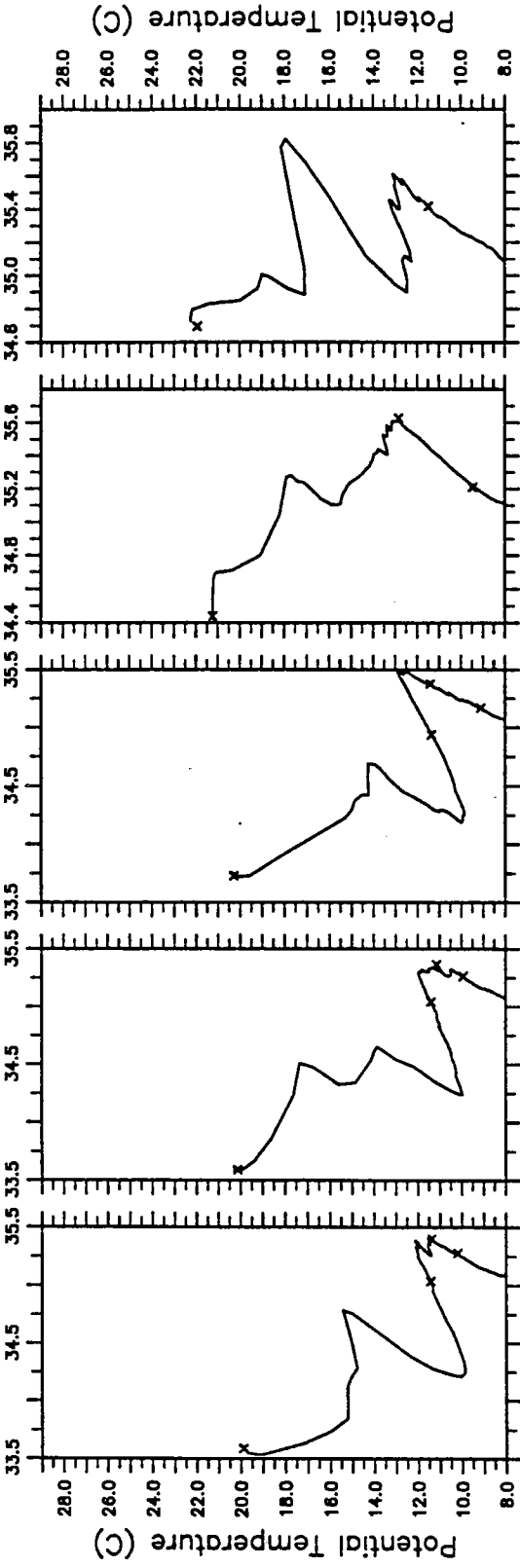
Figure 8.



SECTION 5

Figure 9.

Salinity (PSU)



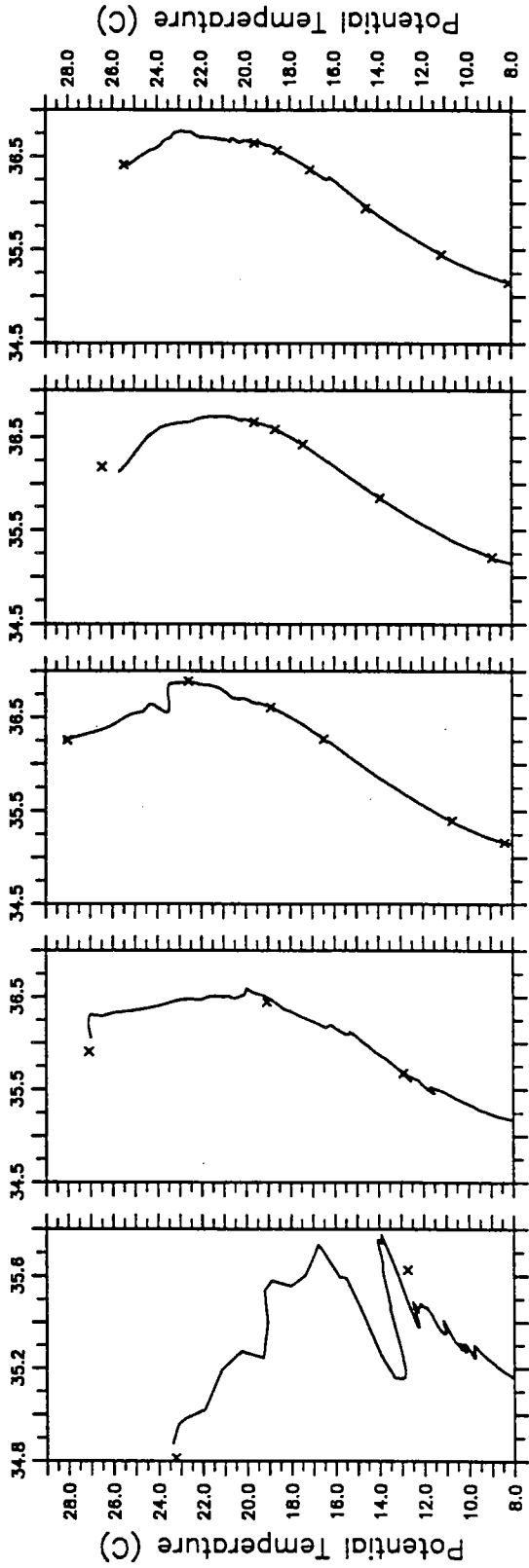
Station 40

Station 41

Station 42

Station 43

Station 44



Station 35

Station 36

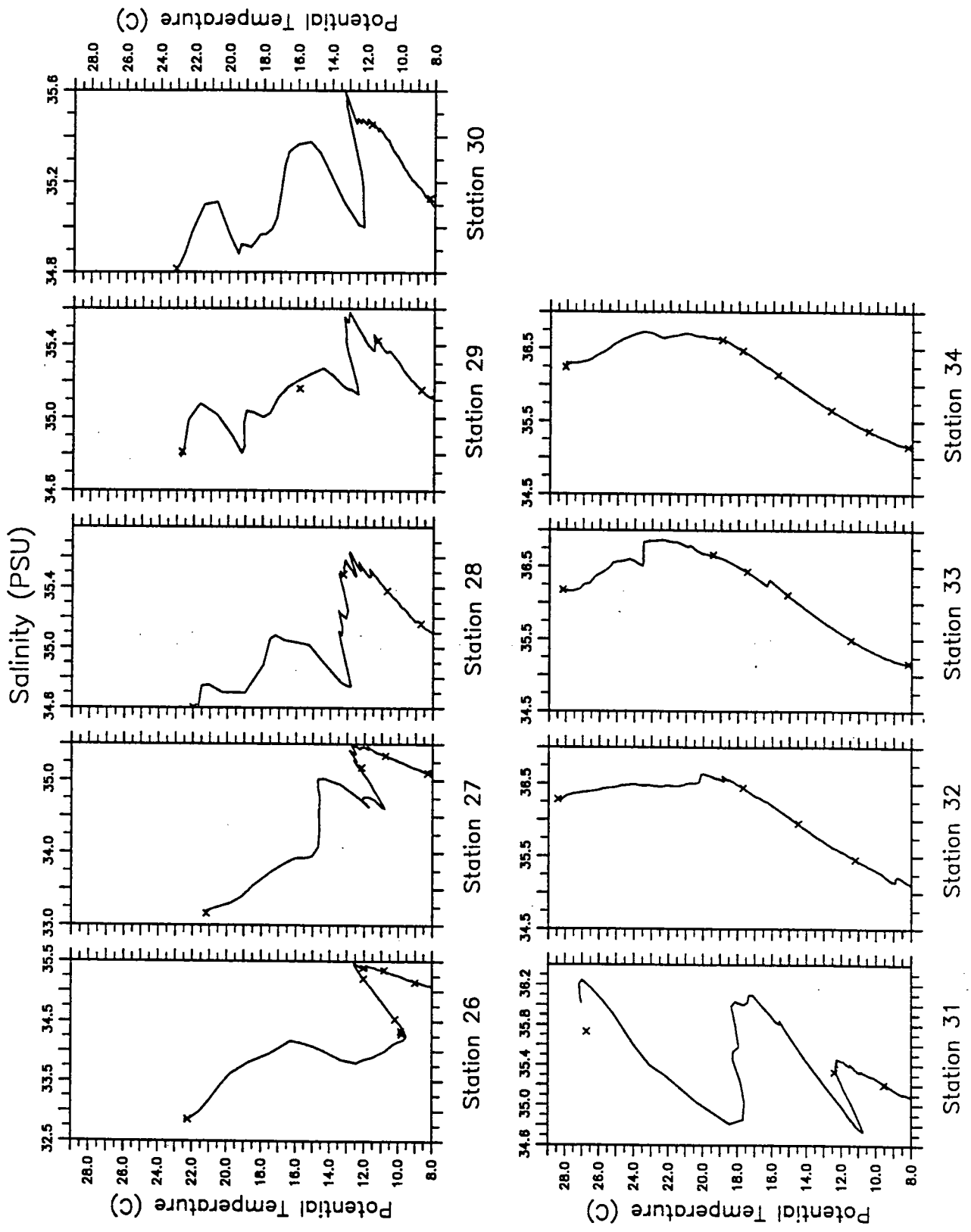
Station 37

Station 38

Station 39

SECTION 1

Figure 10.



SECTION 2

Figure 11.

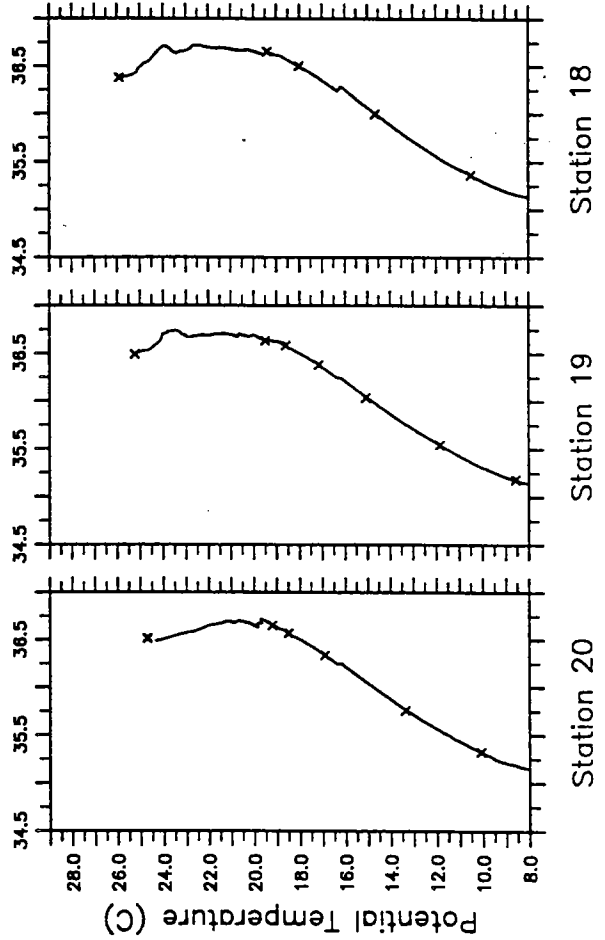
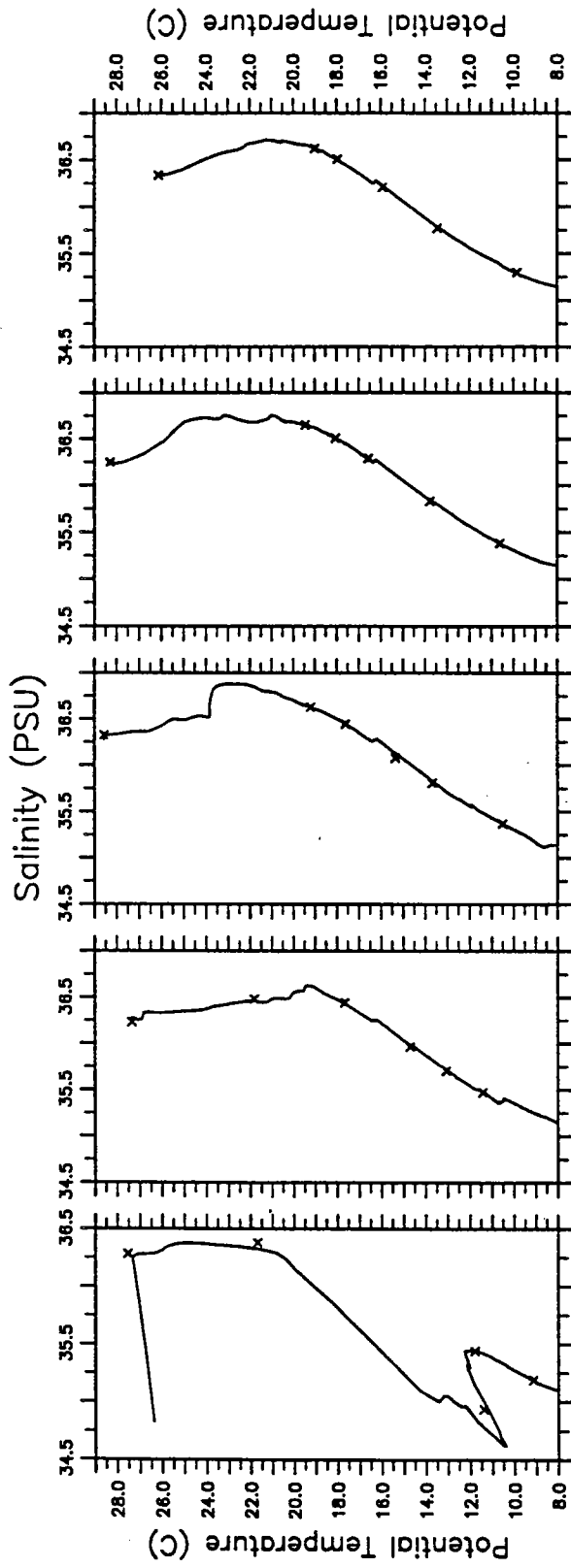
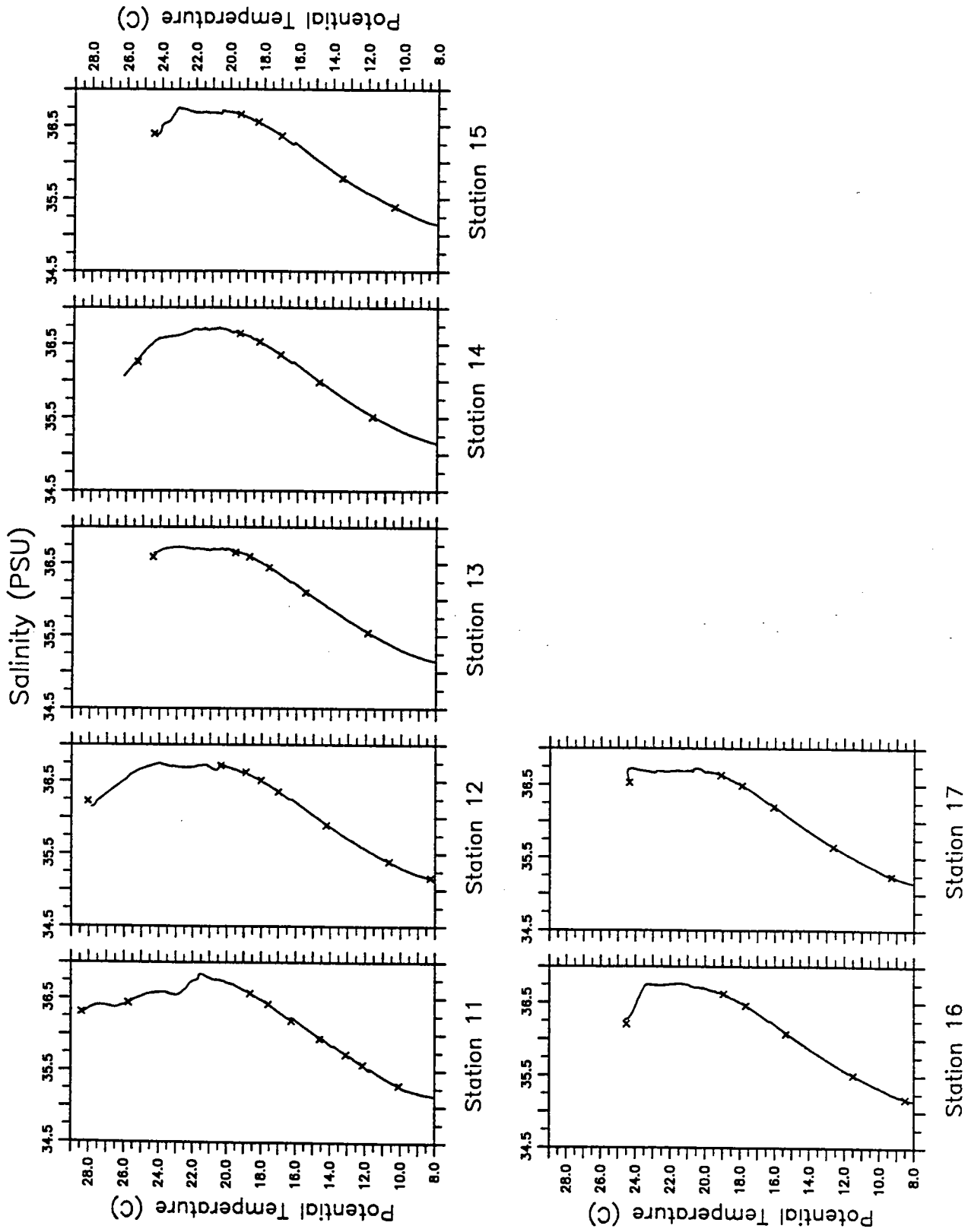


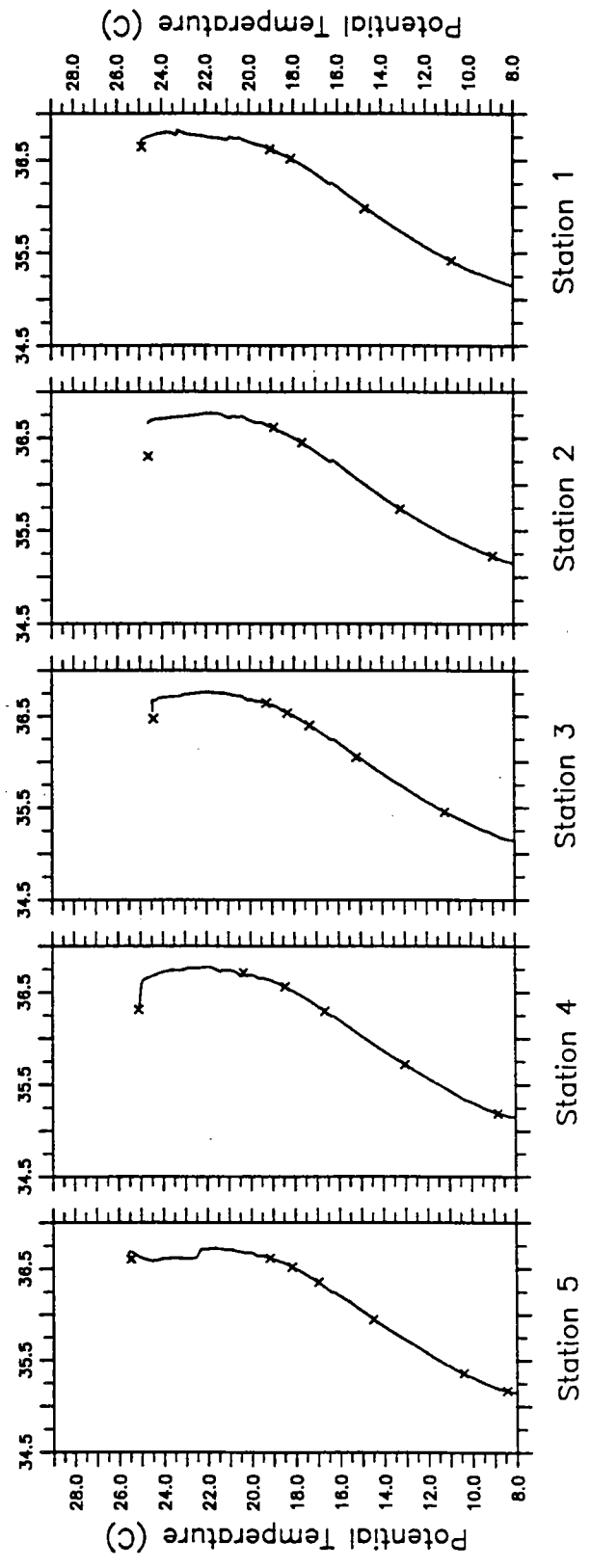
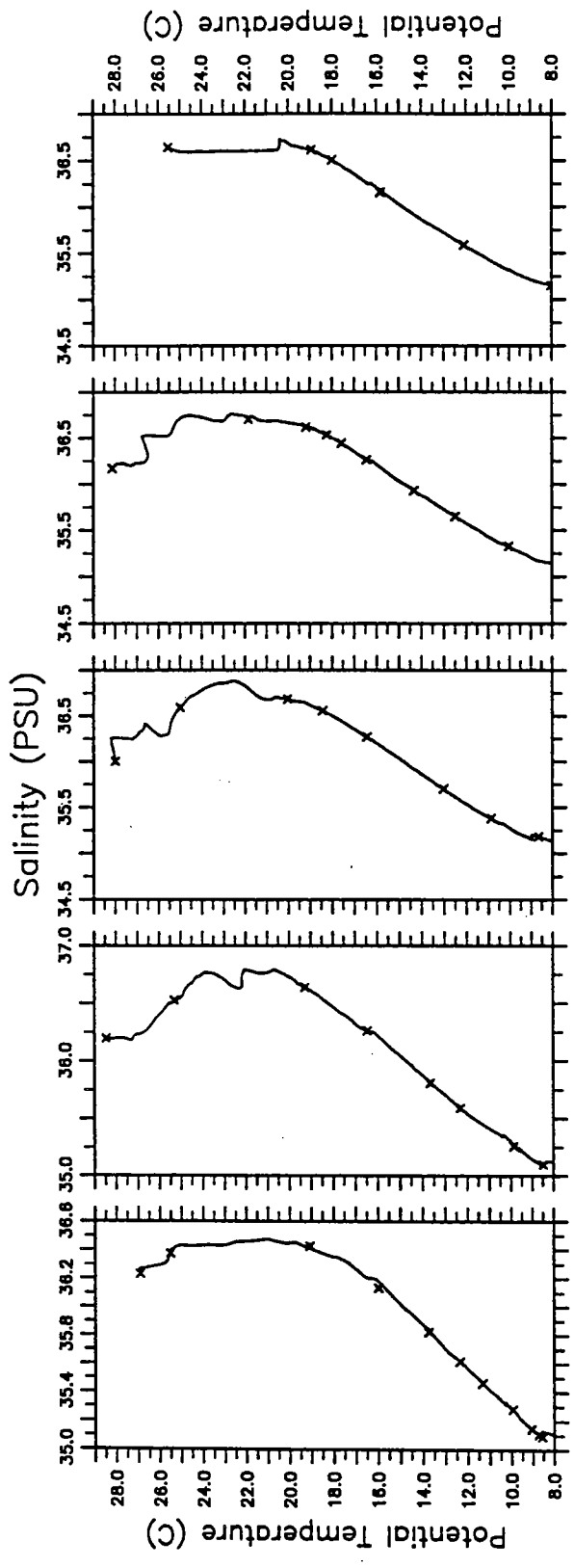
Figure 12.



SECTION 4

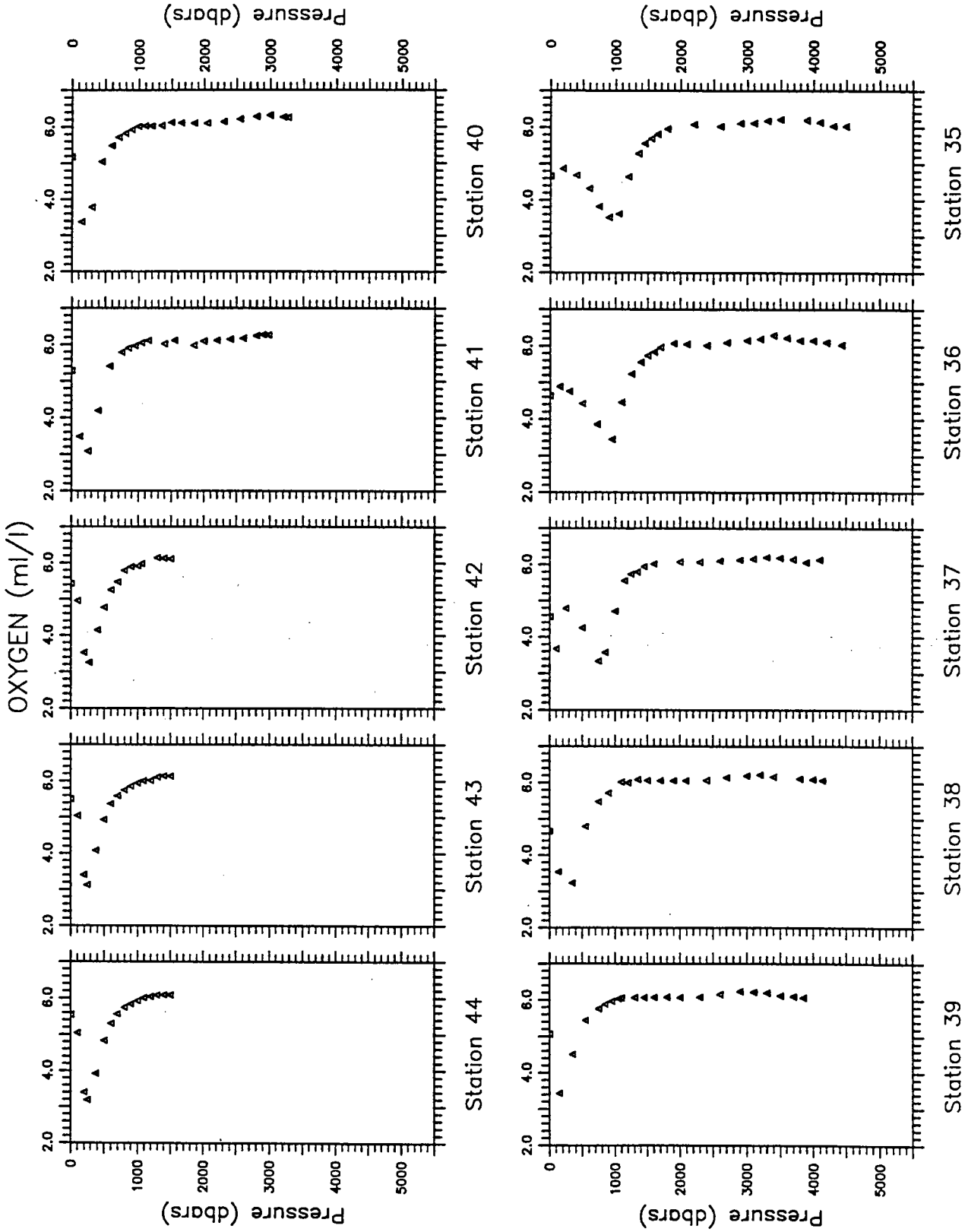
Figure 13.





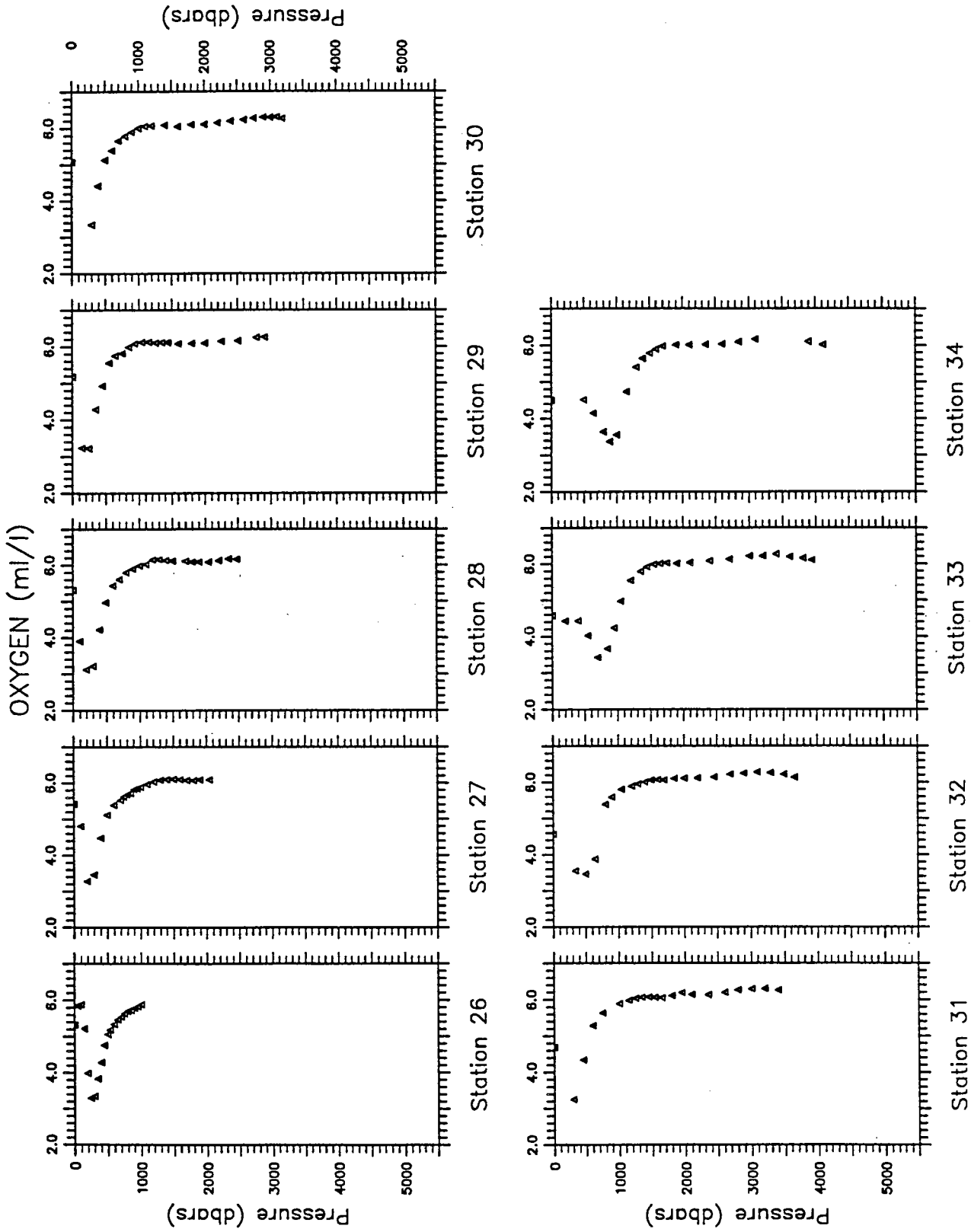
SECTION 5

Figure 14.



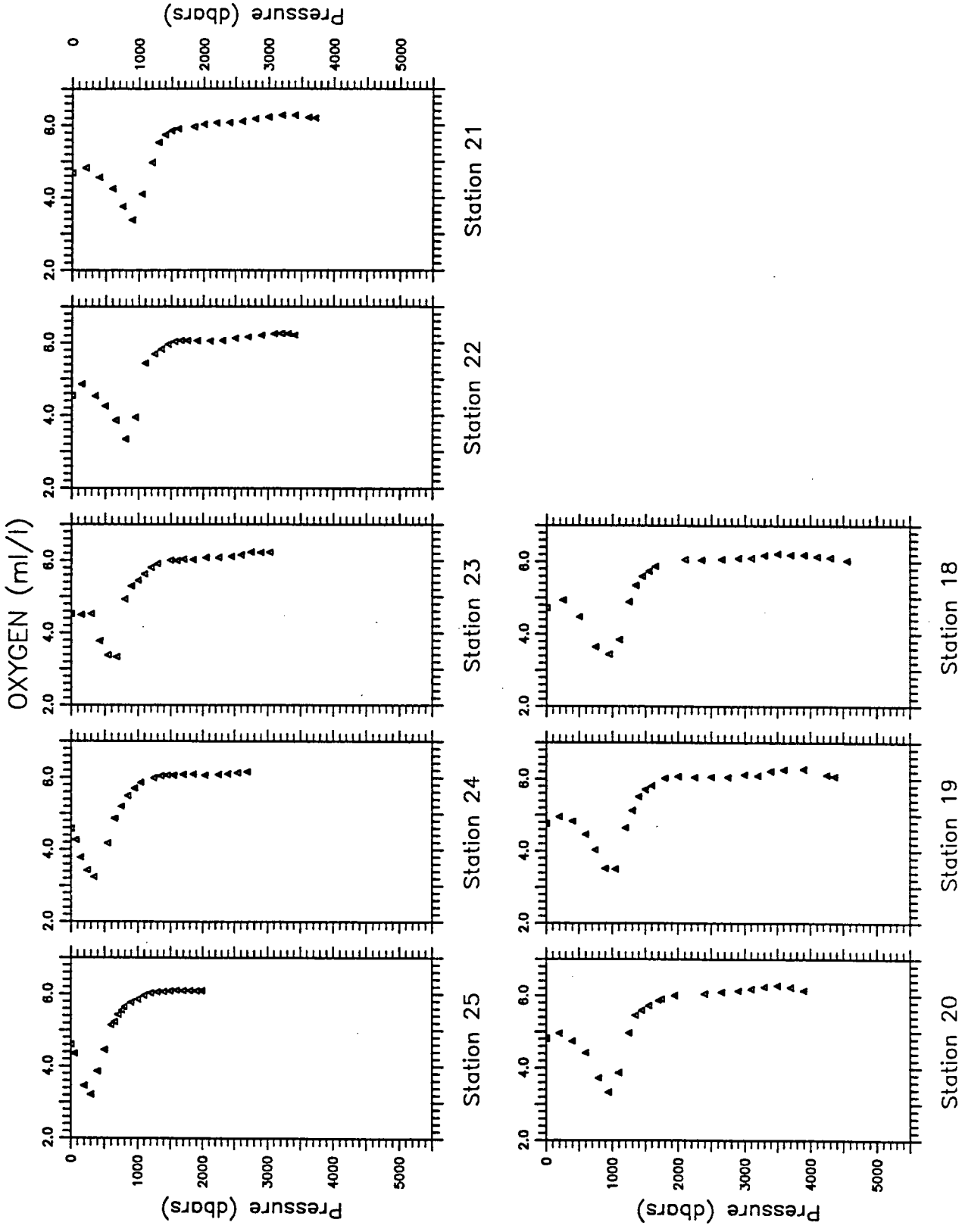
SECTION 1

Figure 15.



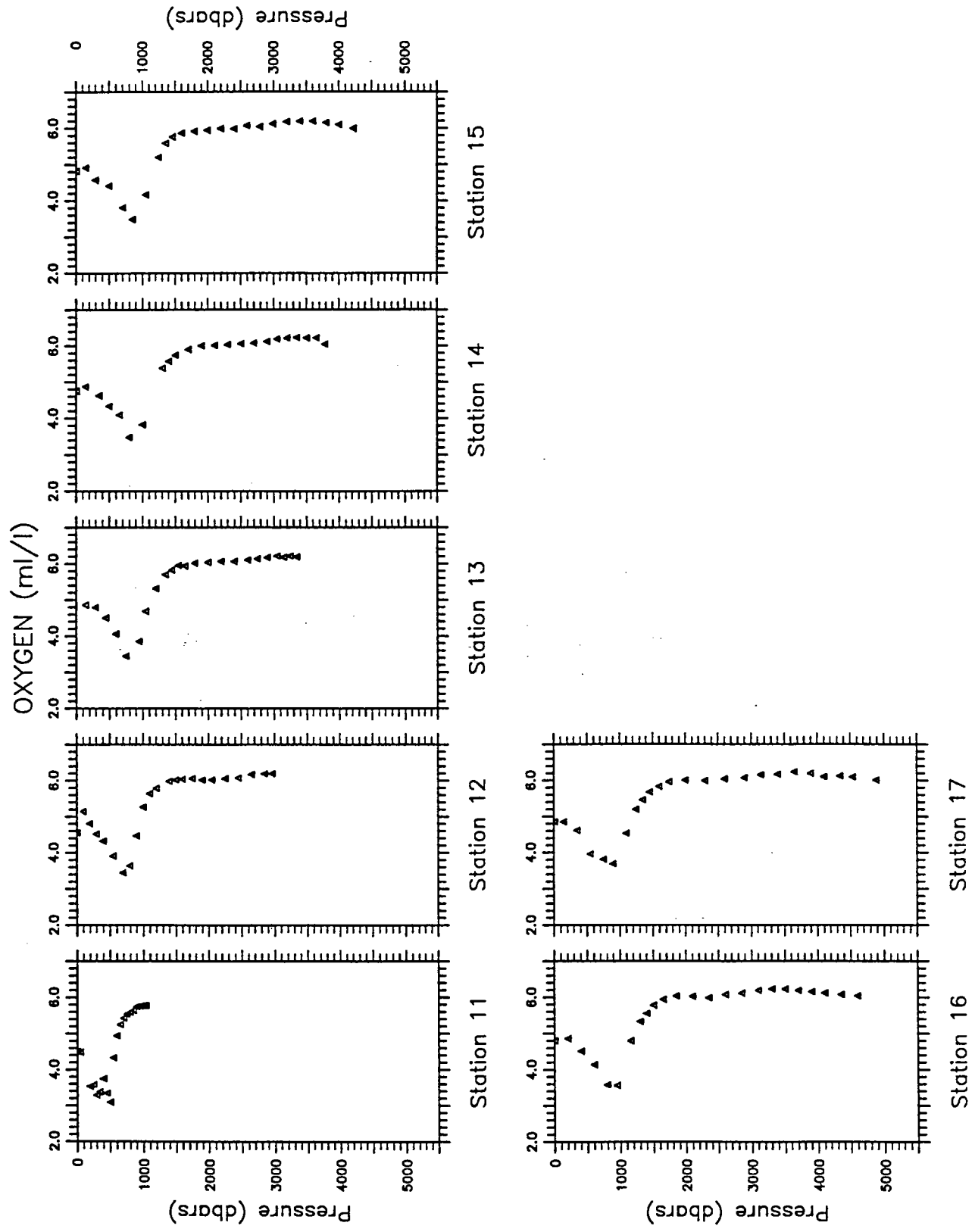
SECTION 2

Figure 16.



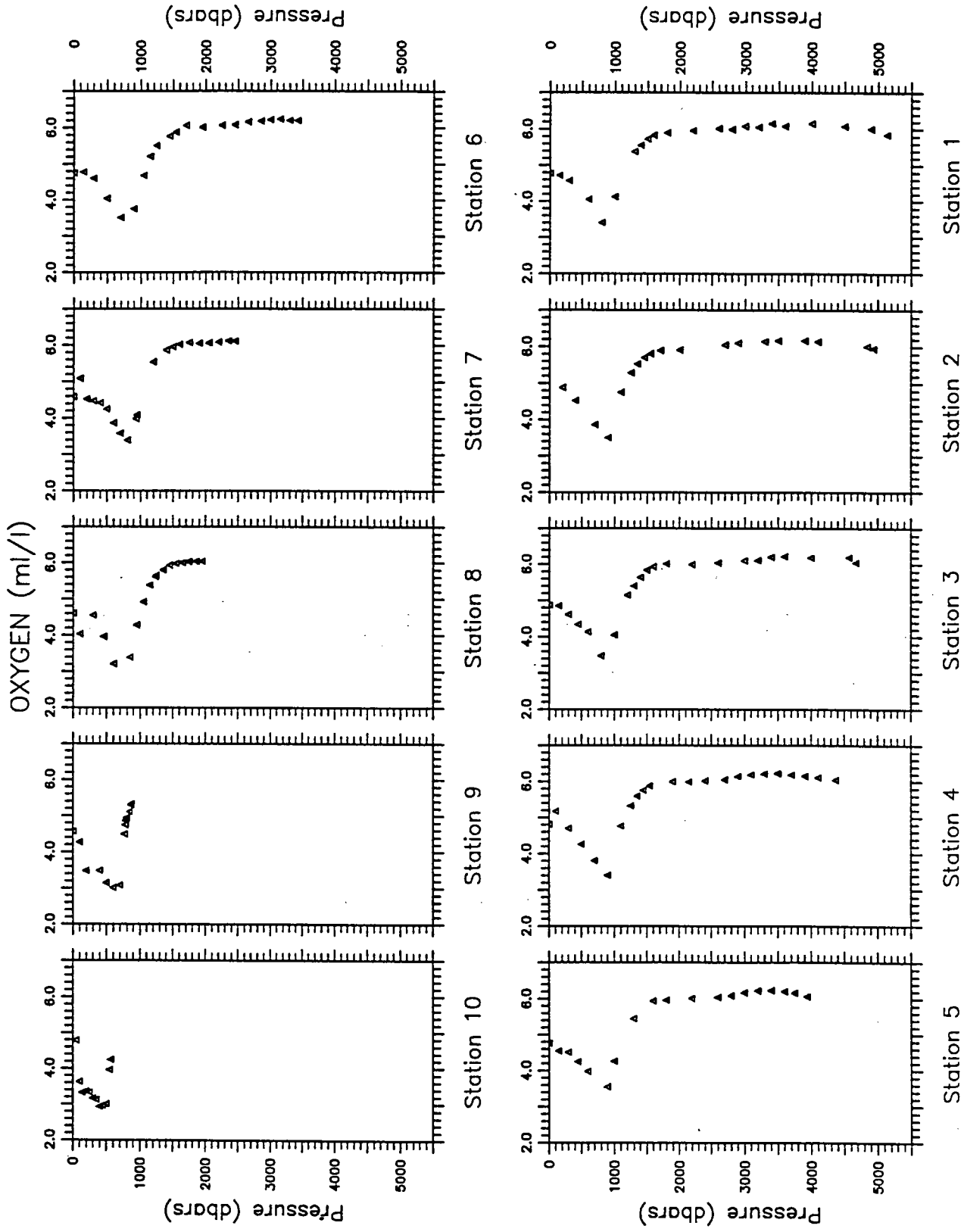
SECTION 3

Figure 17.



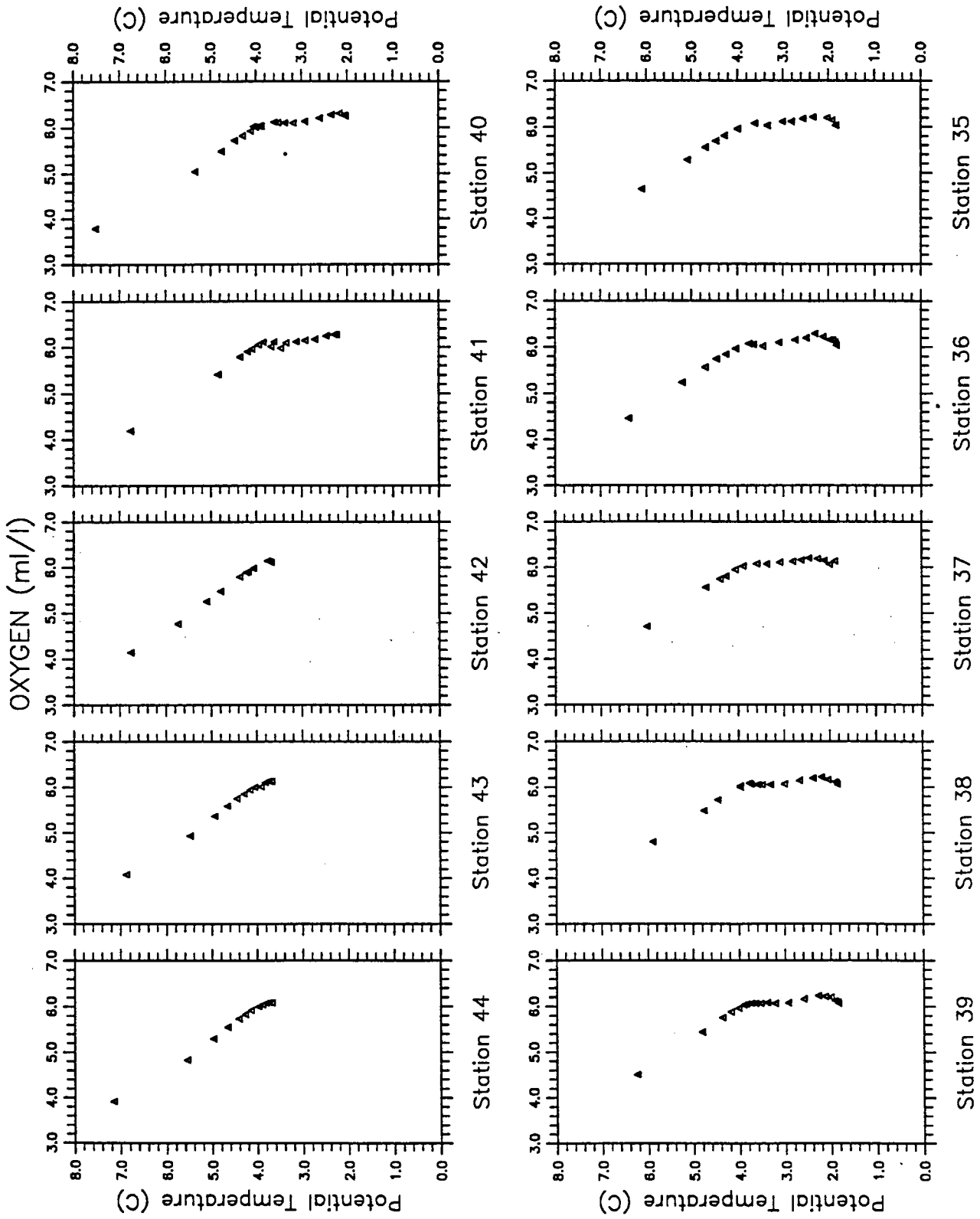
SECTION 4

Figure 18.



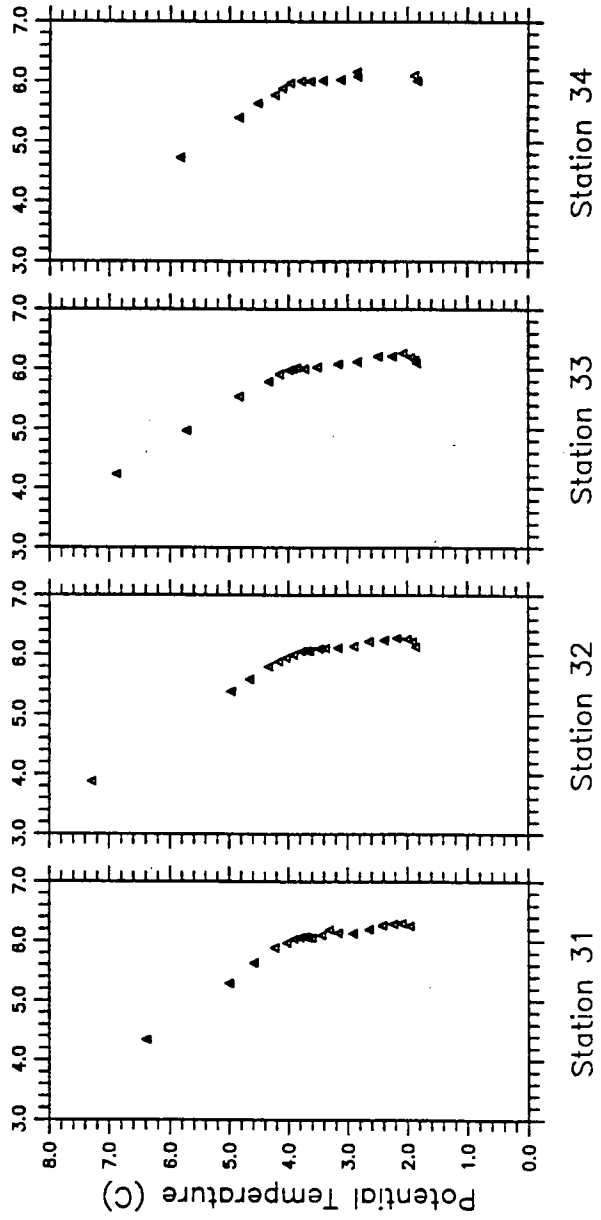
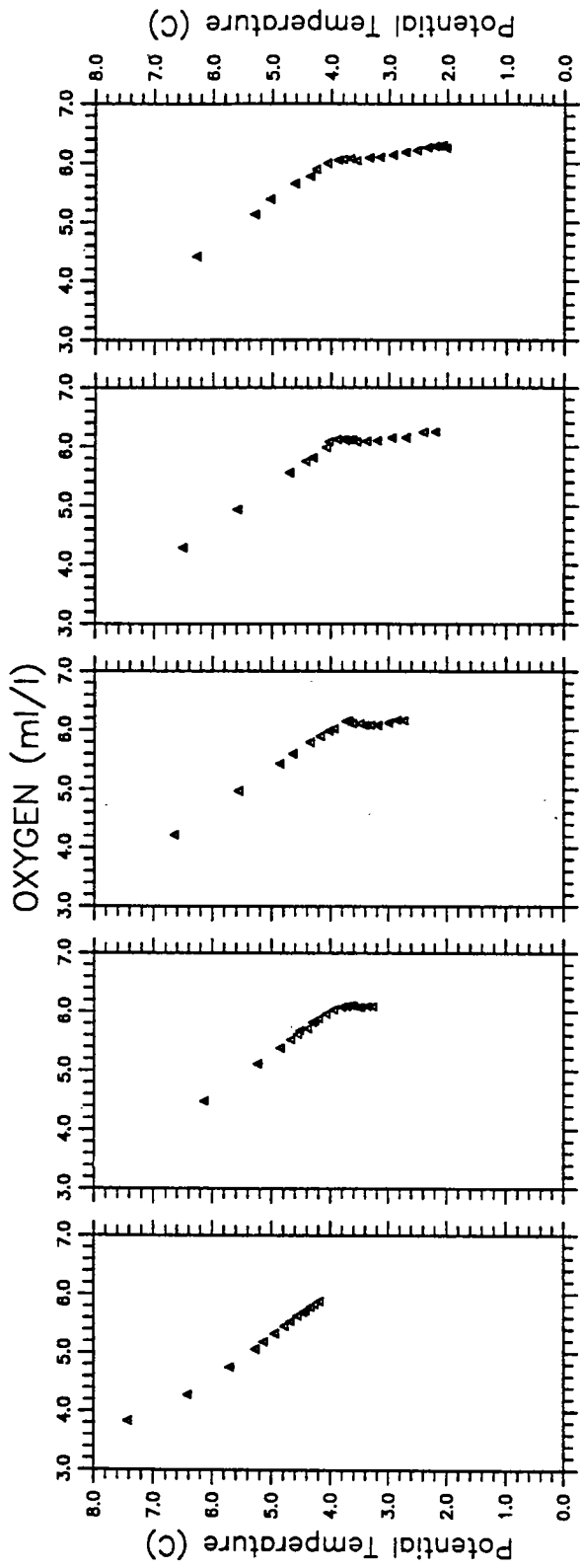
SECTION 5

Figure 19.



SECTION 1

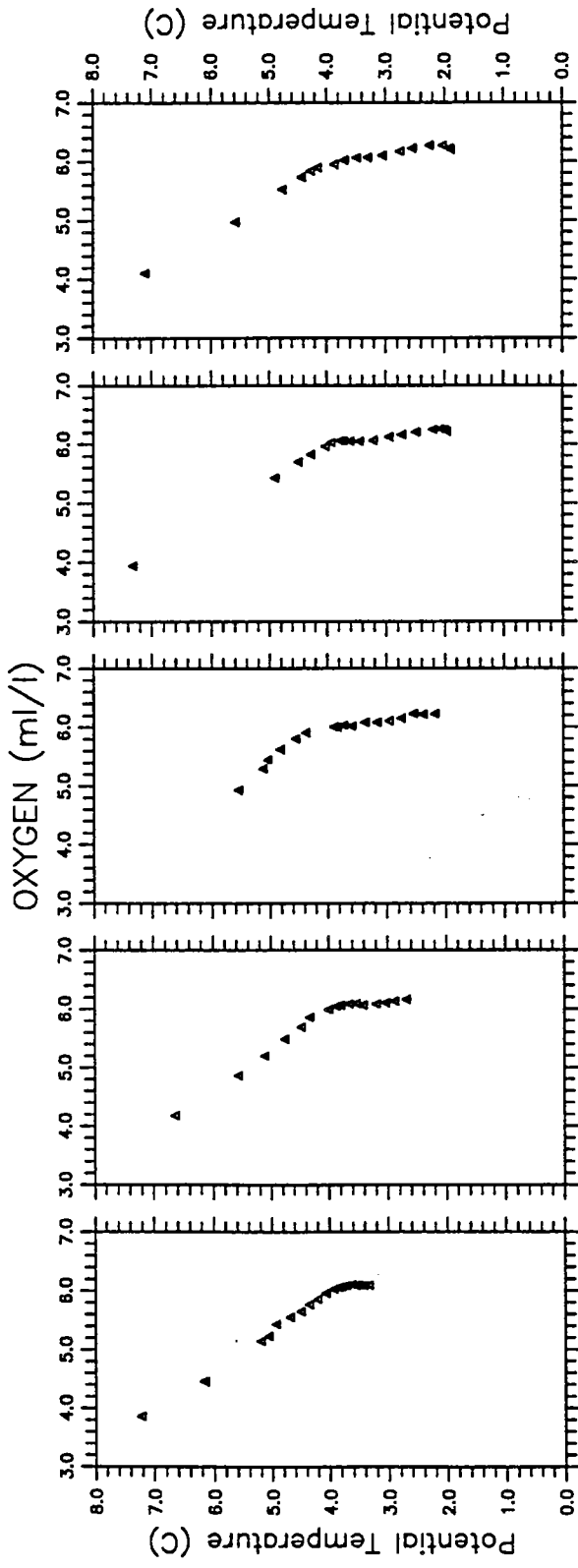
Figure 20.



SECTION 2

Figure 21.





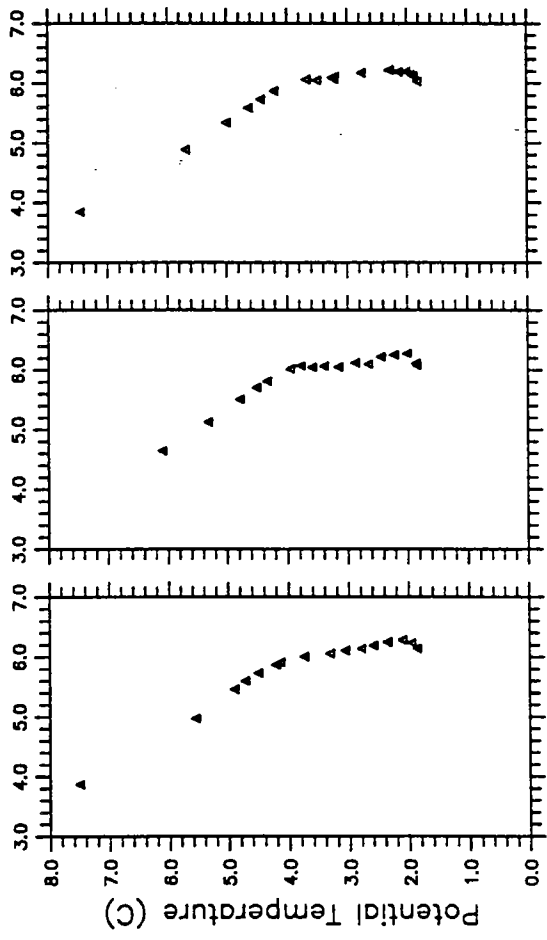
Station 21

Station 22

Station 23

Station 24

Station 25



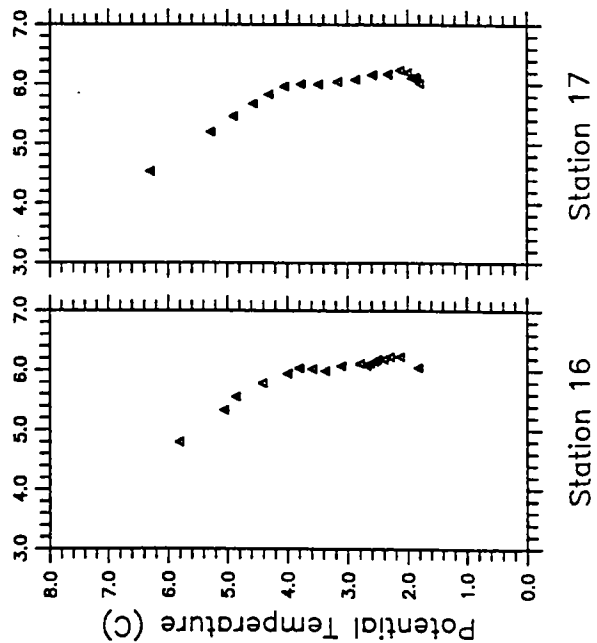
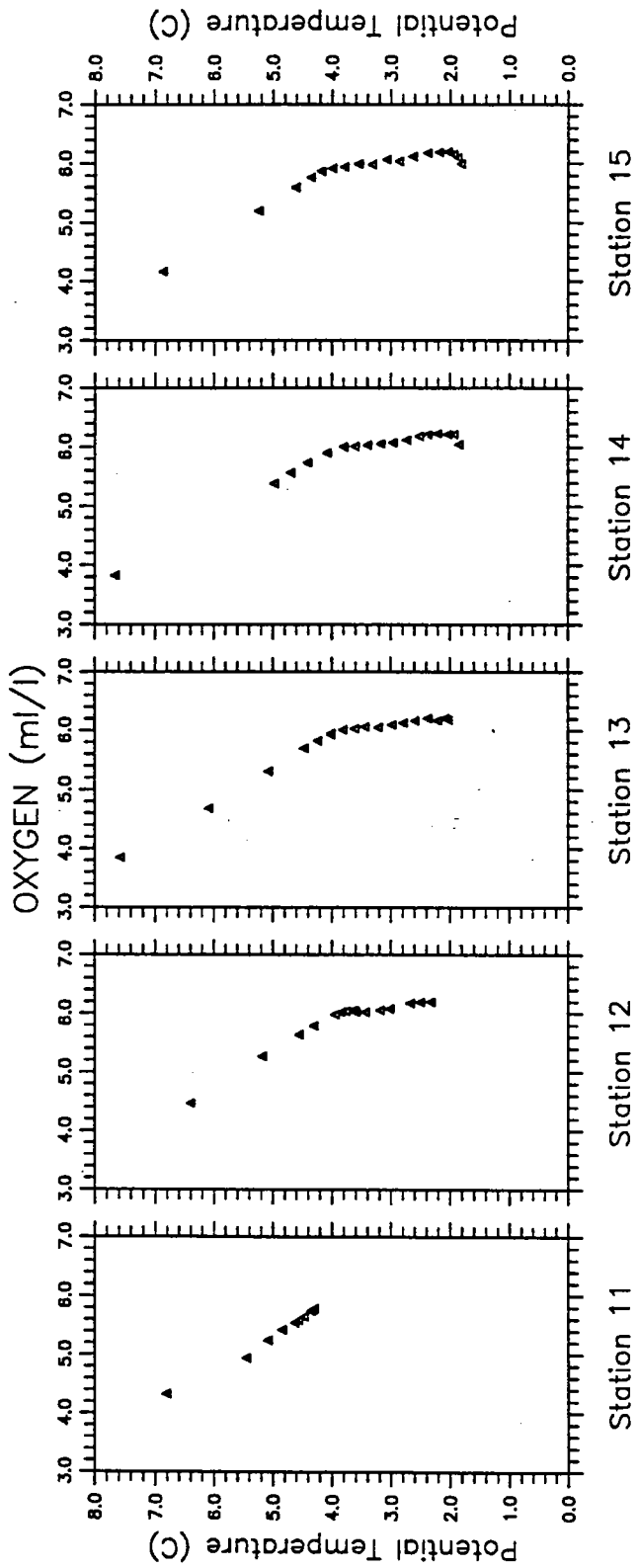
Station 18

Station 19

Station 20

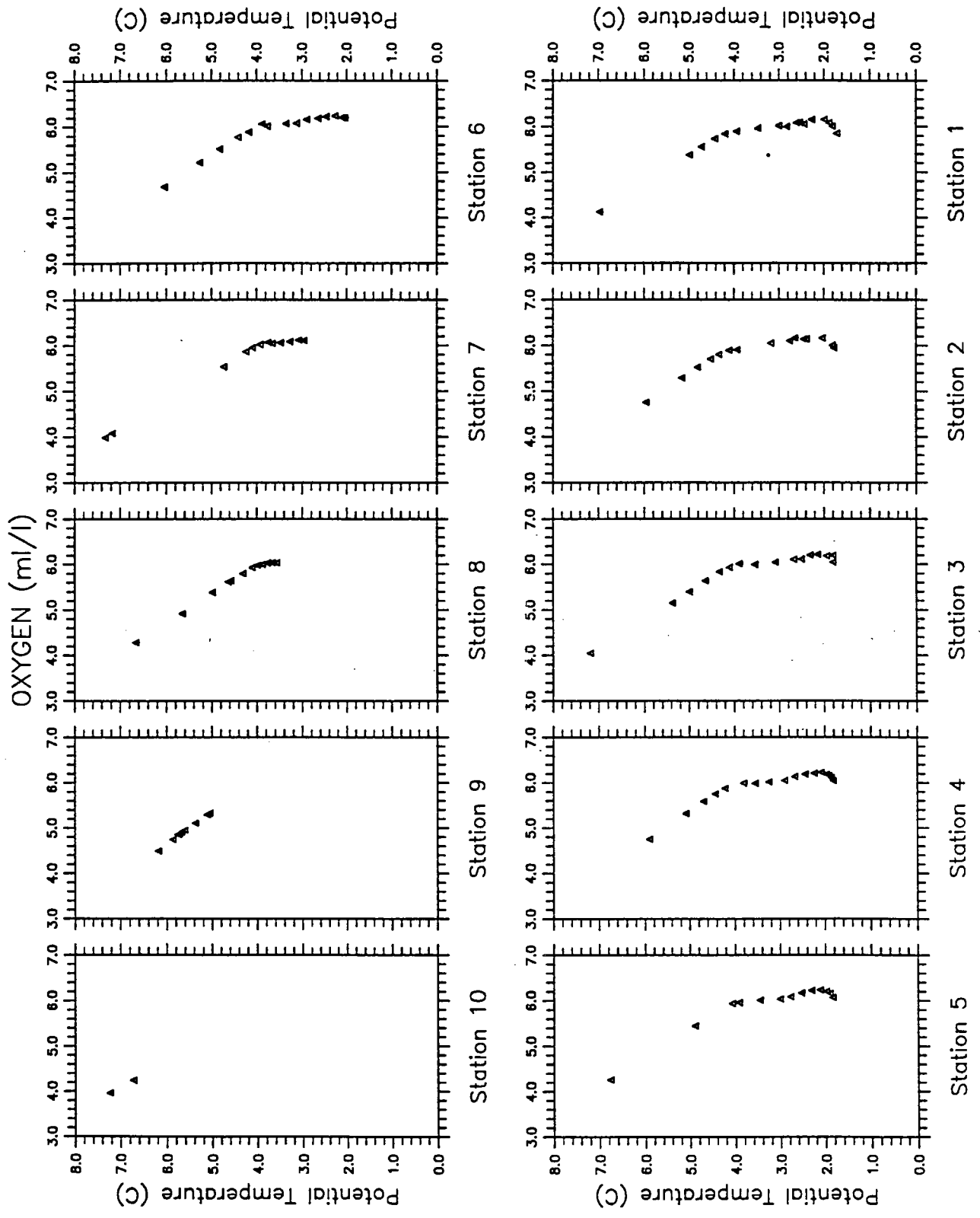
SECTION 3

Figure 22.



SECTION 4

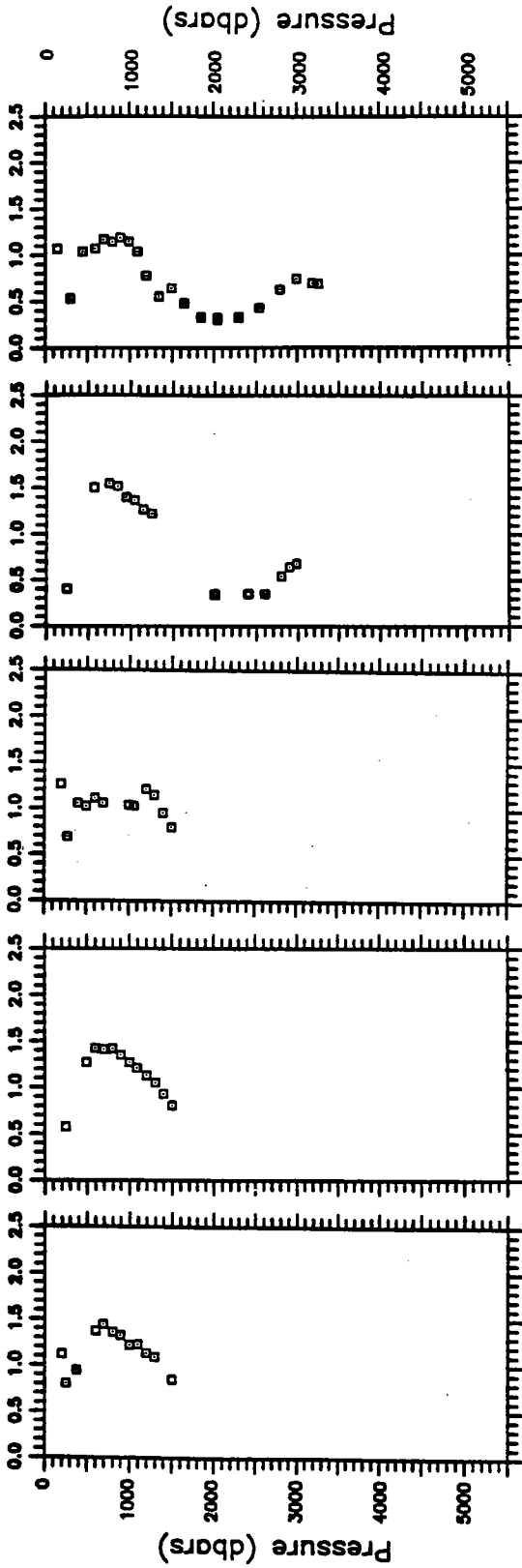
Figure 23.



SECTION 5

Figure 24.

F-11 (pm/kg)



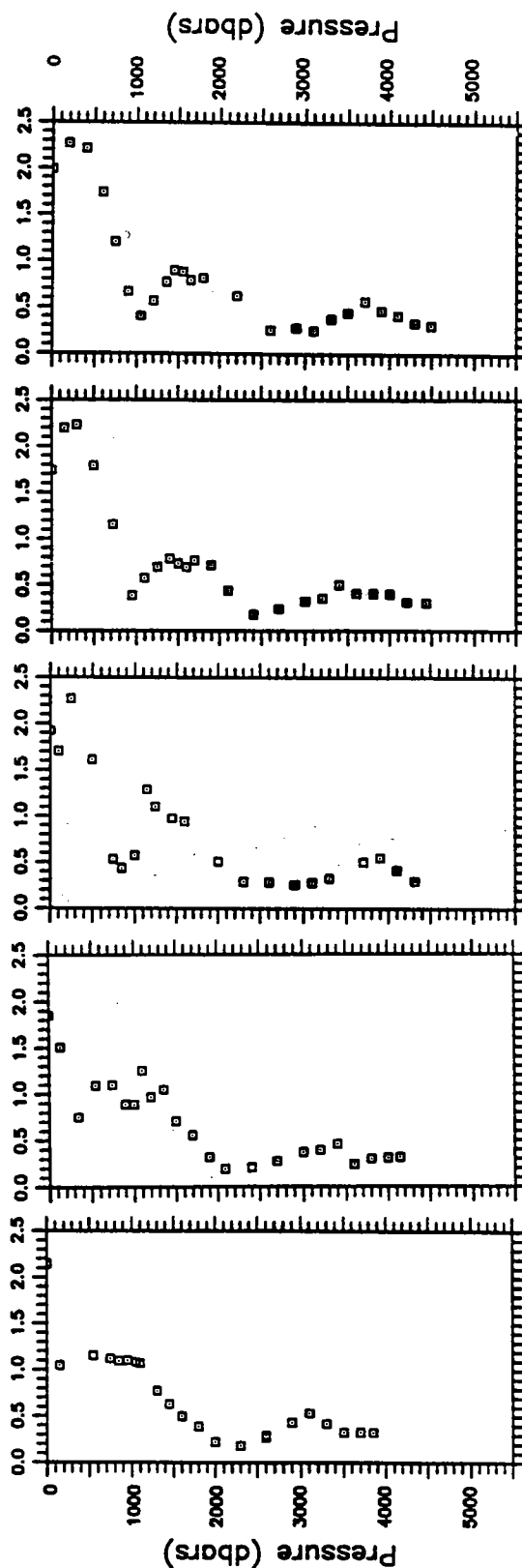
Station 40

Station 41

Station 42

Station 43

Station 44



Station 35

Station 36

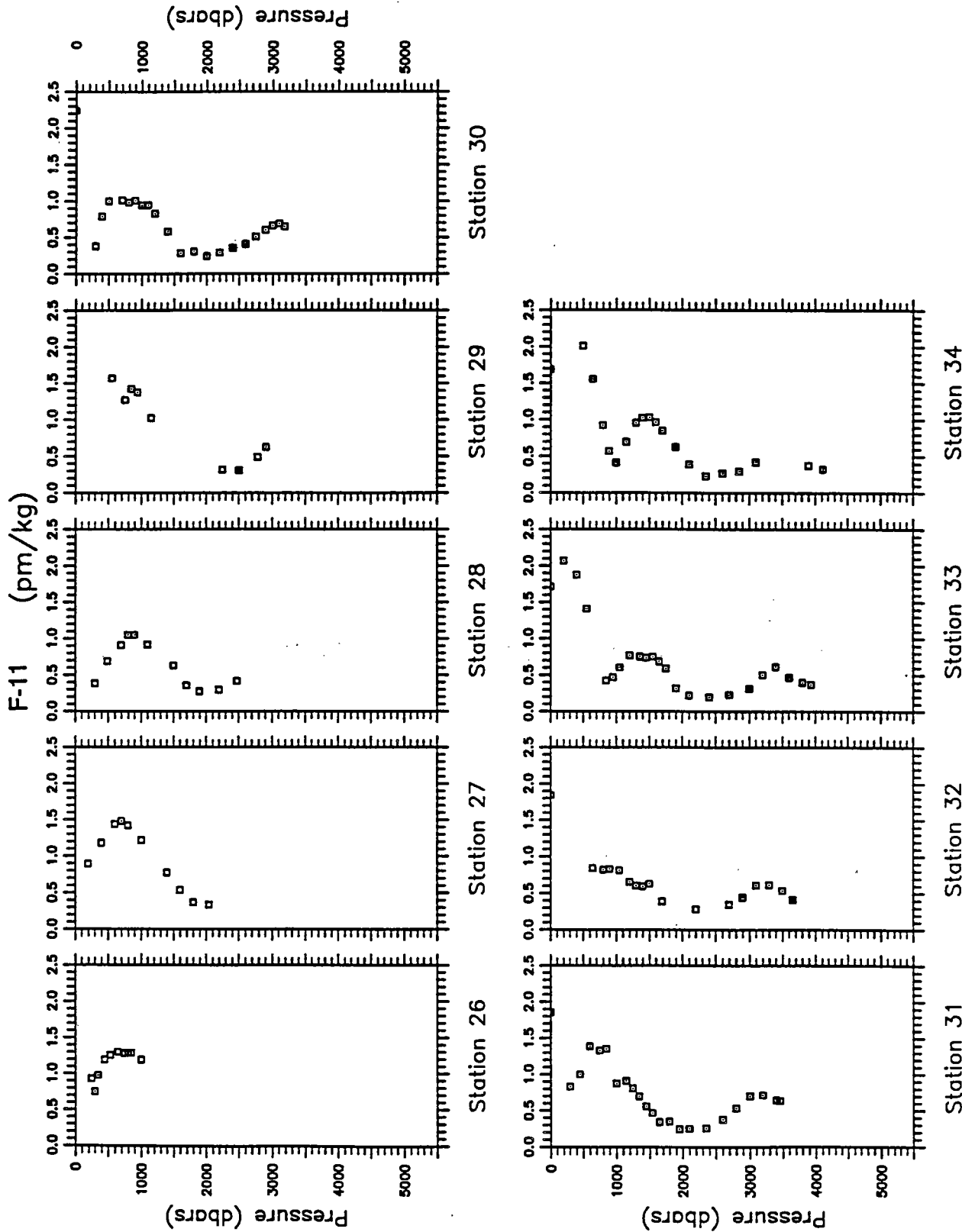
Station 37

Station 38

Station 39

SECTION 1

Figure 25.



SECTION 2

Figure 26.

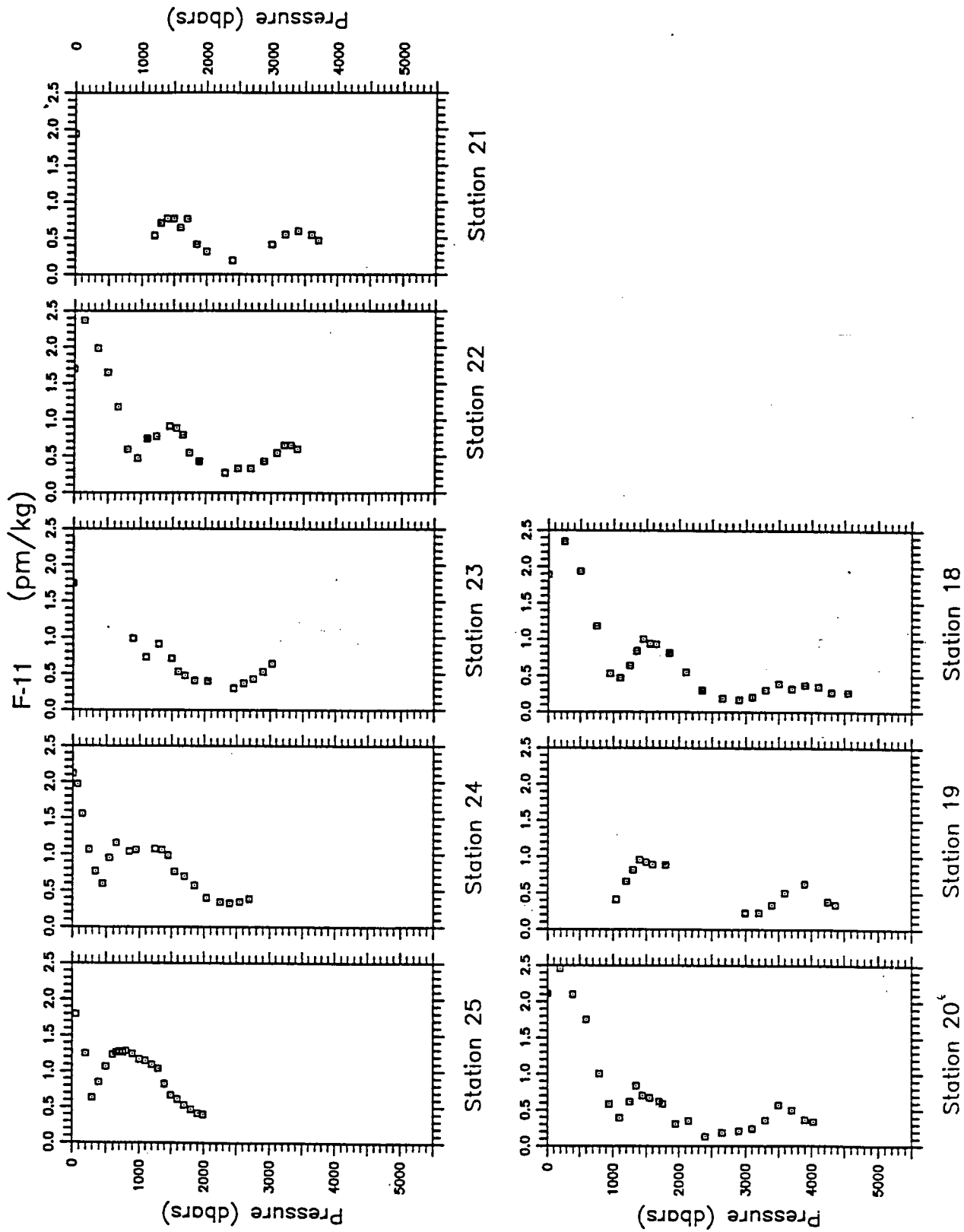
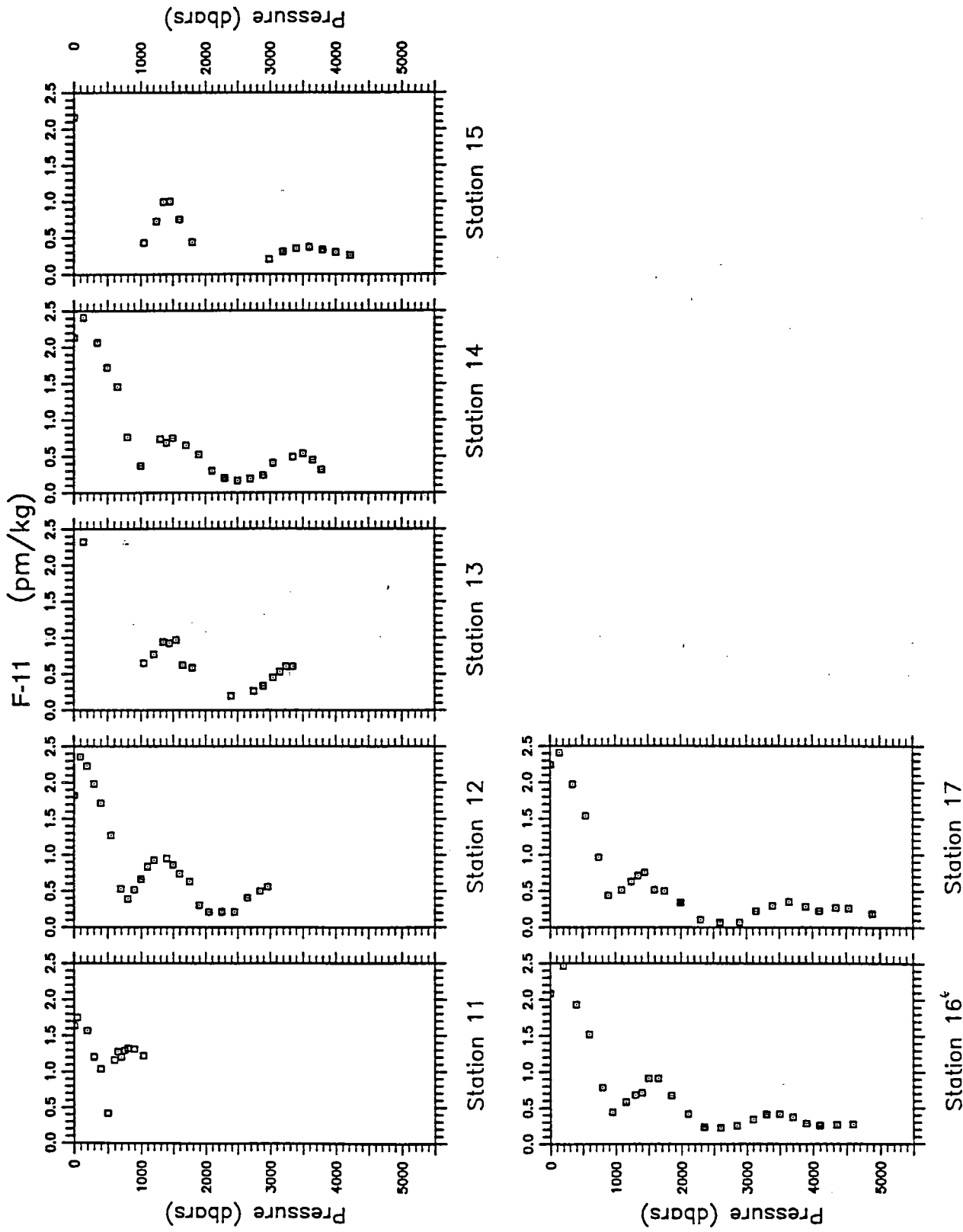
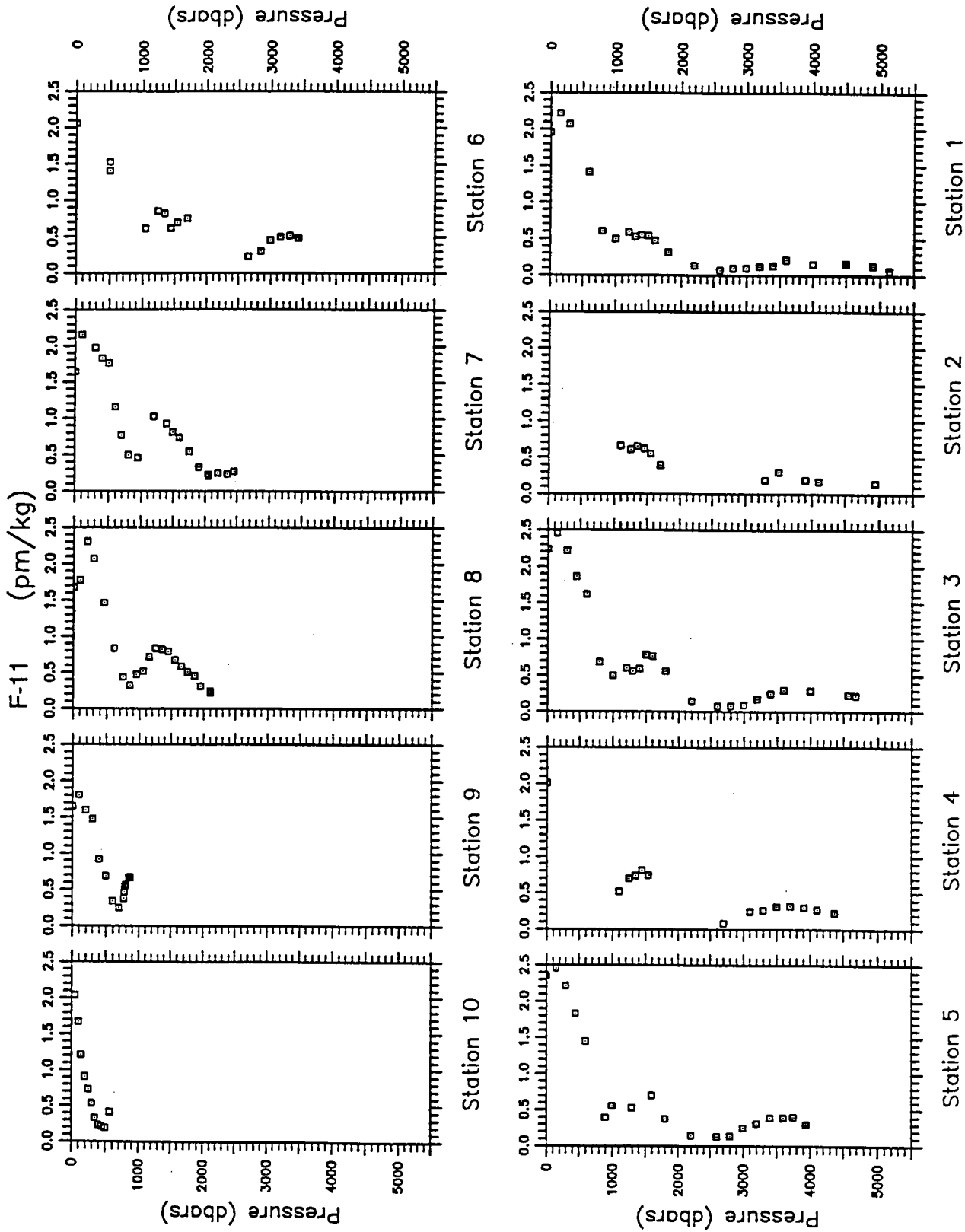


Figure 27.



SECTION 4

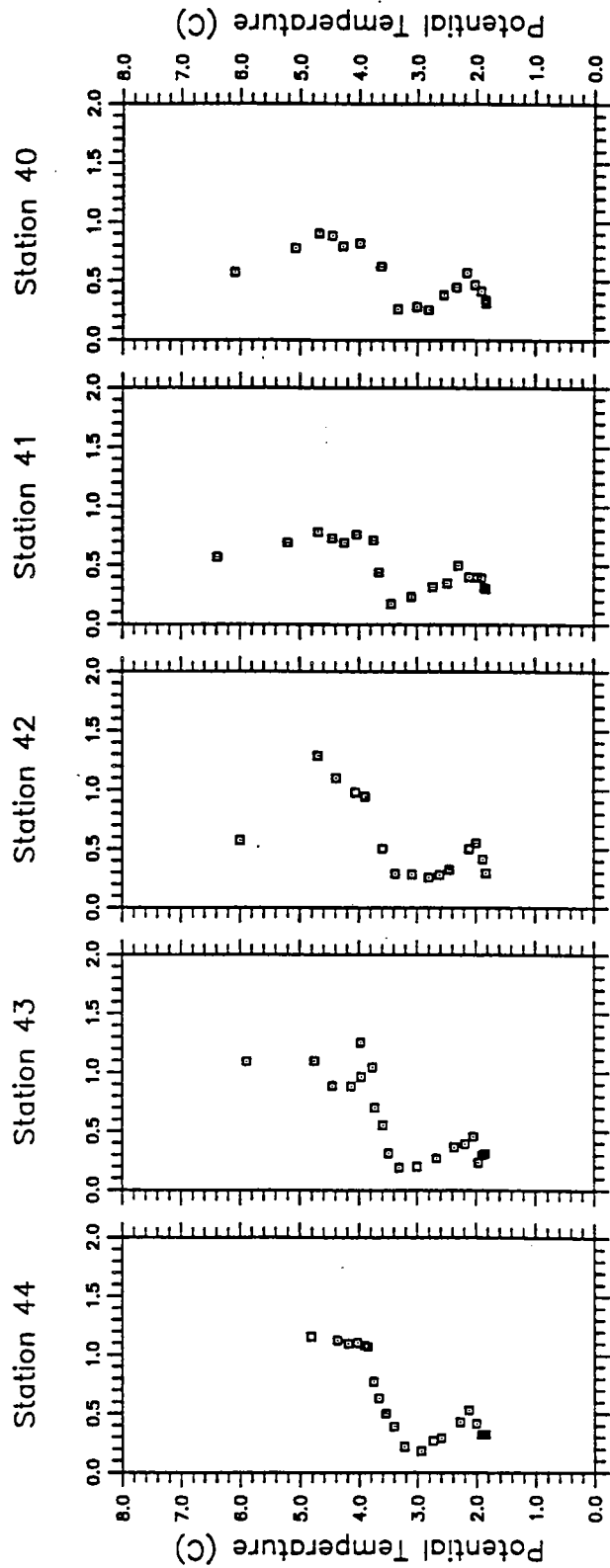
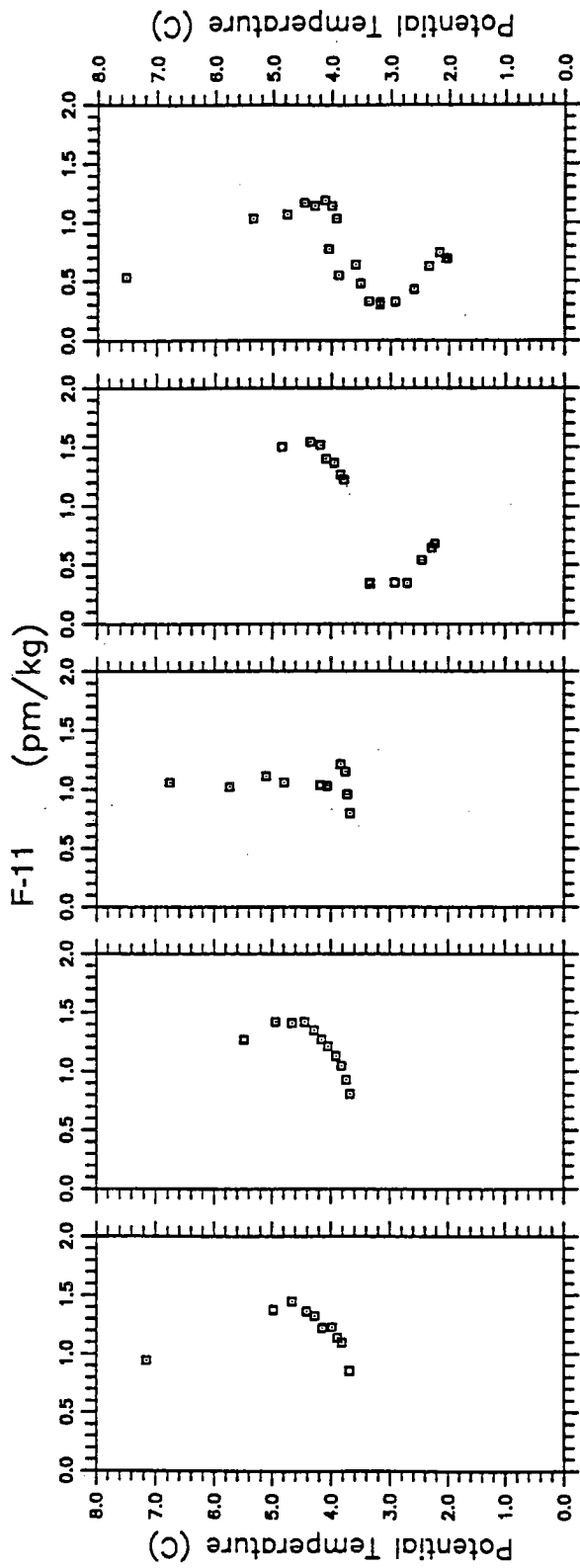
Figure 28.



SECTION 5

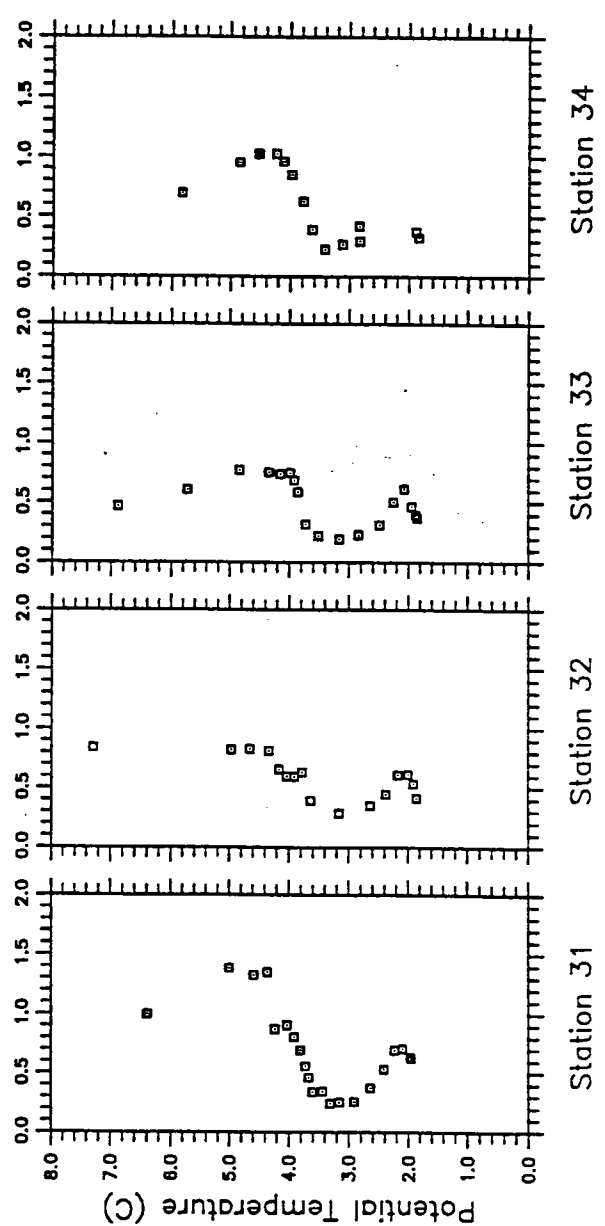
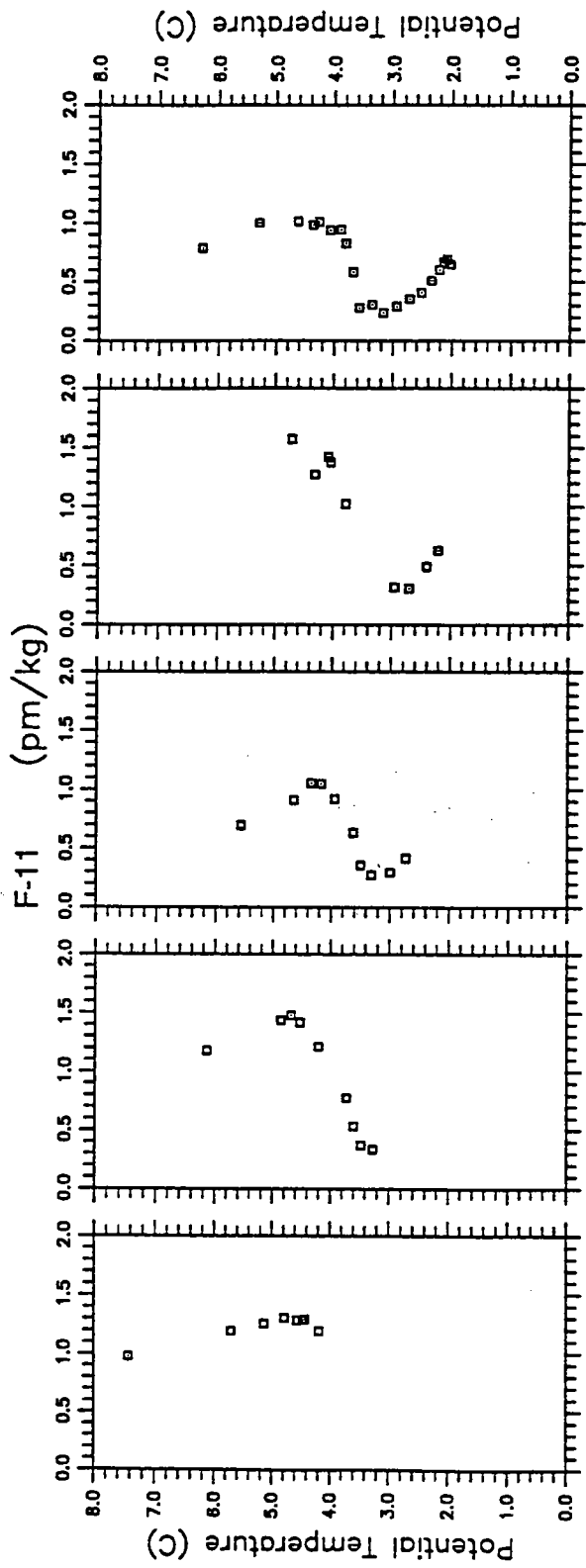
Figure 29.





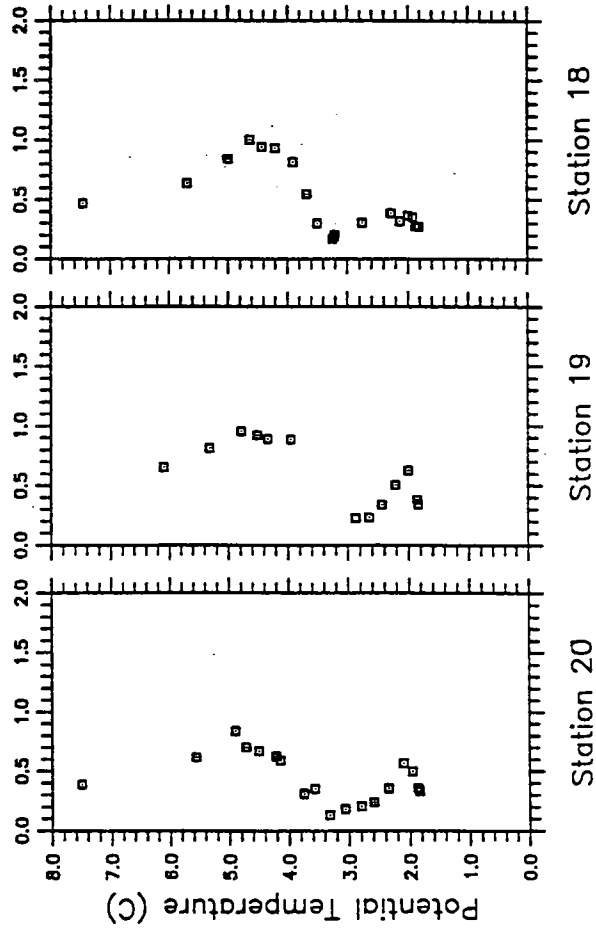
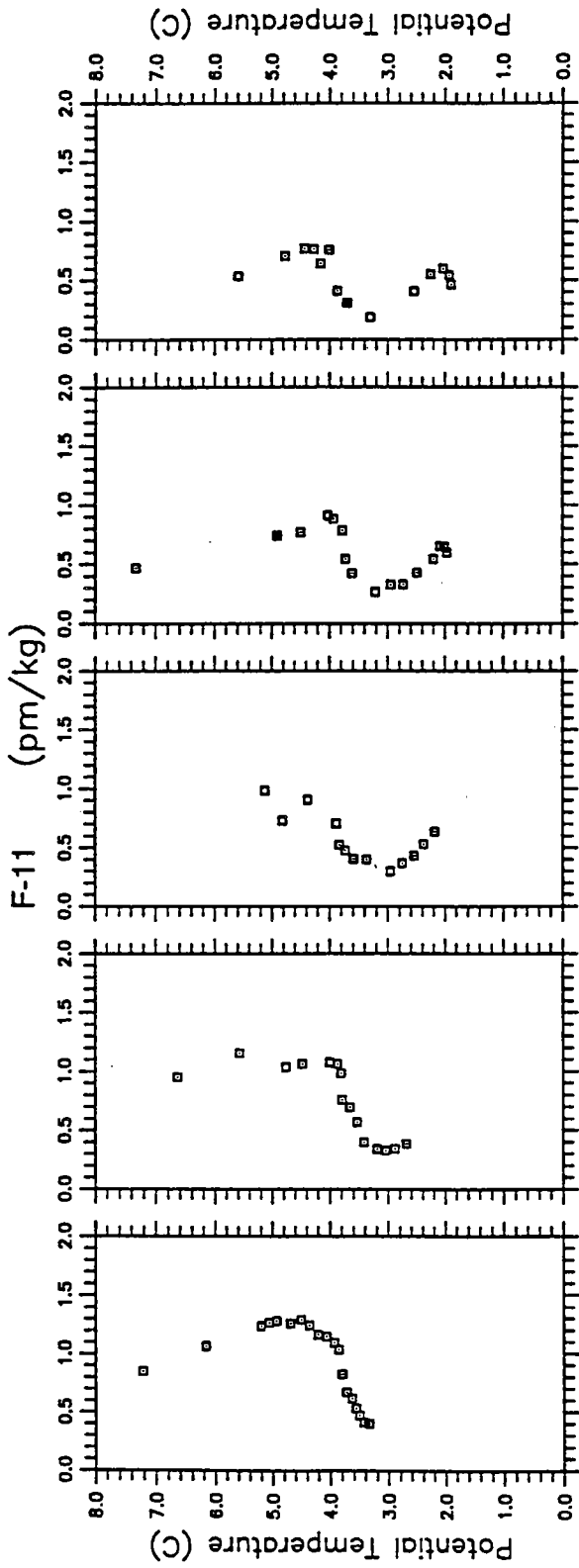
SECTION 1

Figure 30.



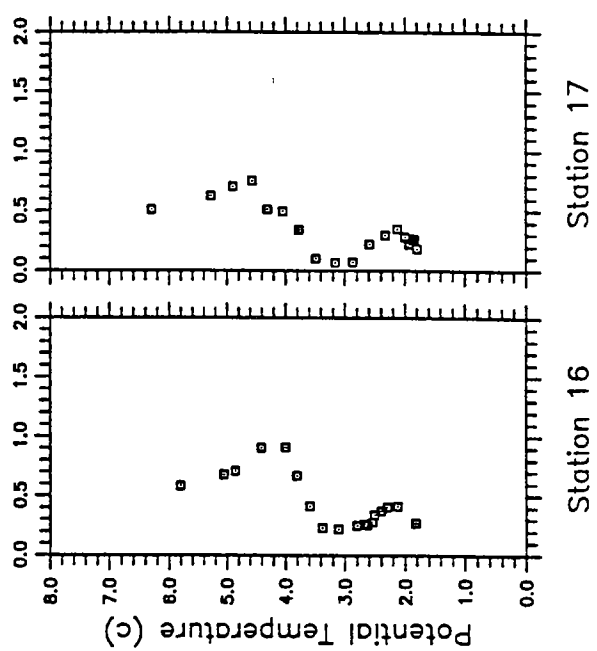
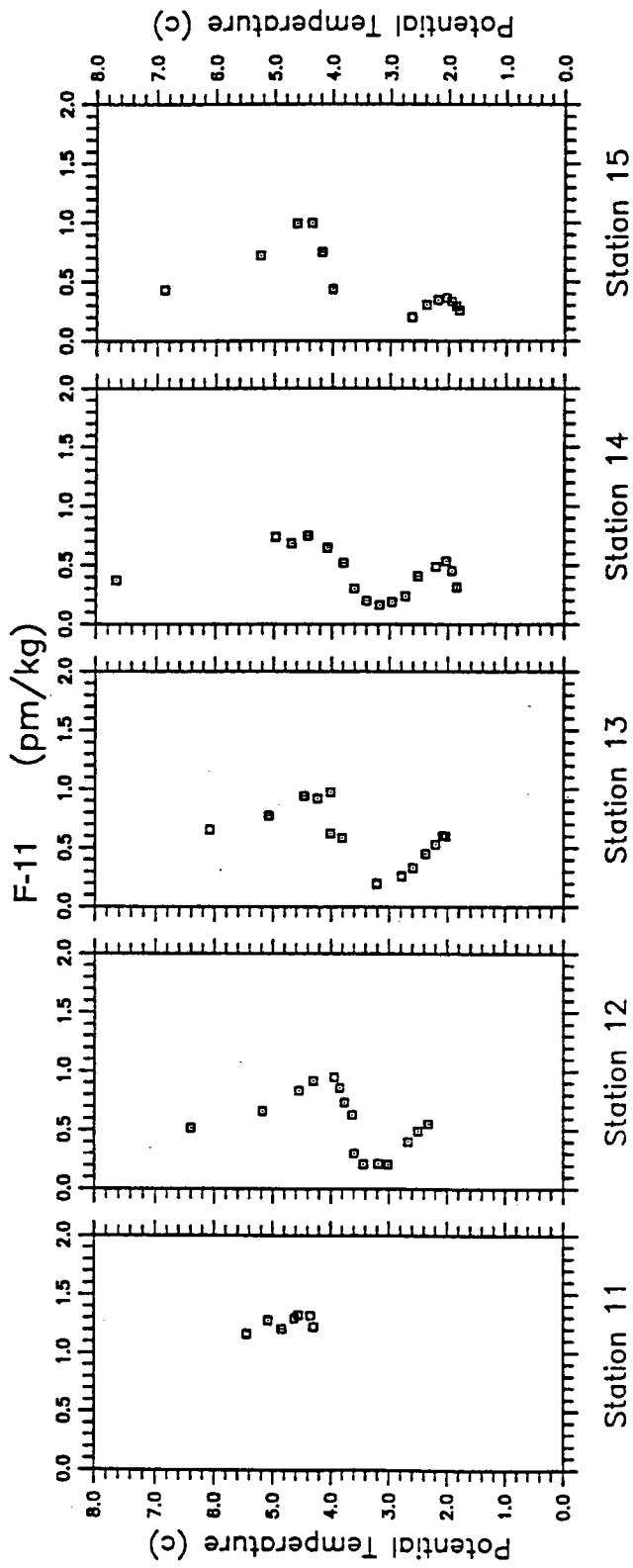
SECTION 2

Figure 31.



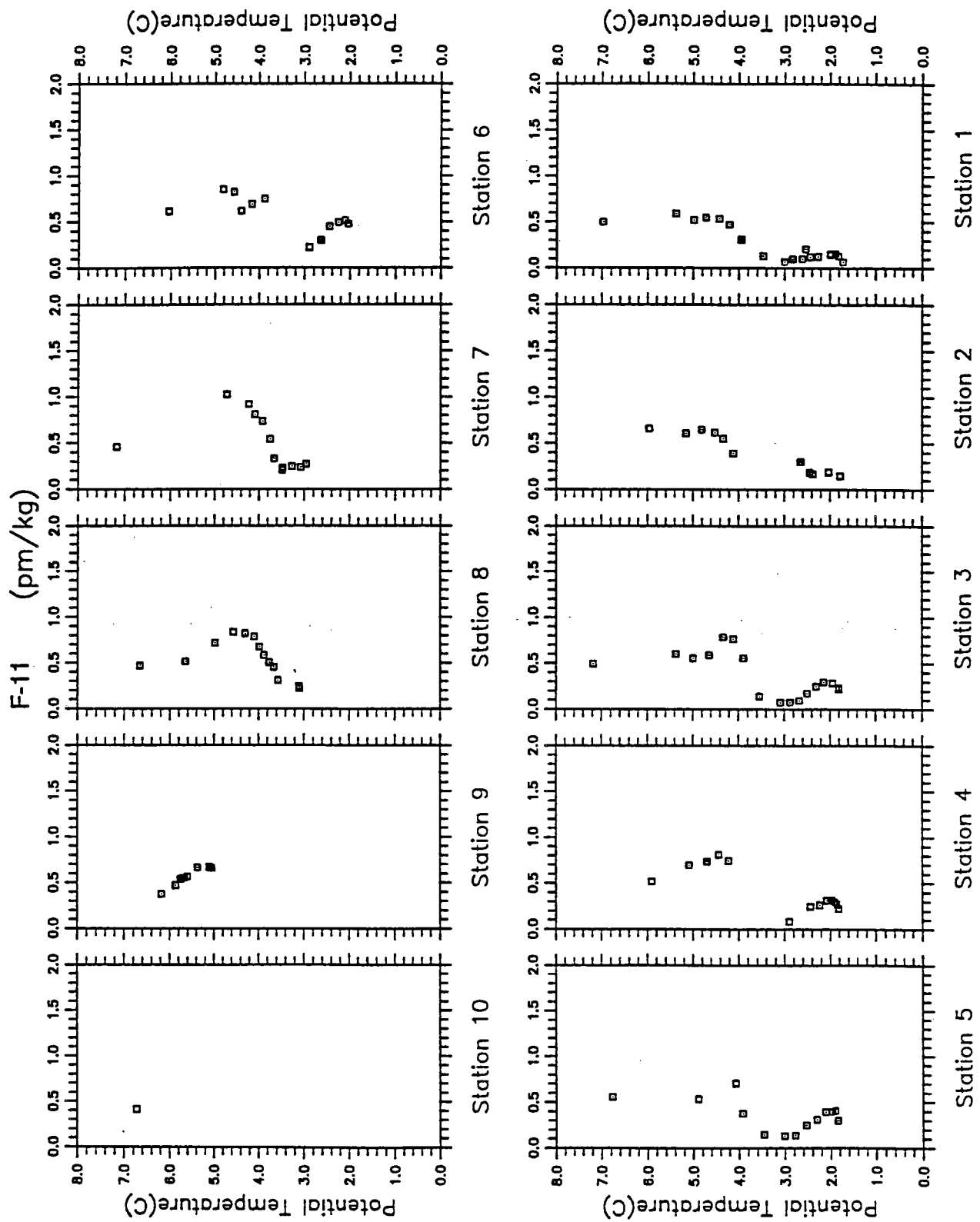
SECTION 3

Figure 32.



SECTION 4

Figure 33.



SECTION 5

Figure 34.

## 13.2 Part 2. Vertical Sections

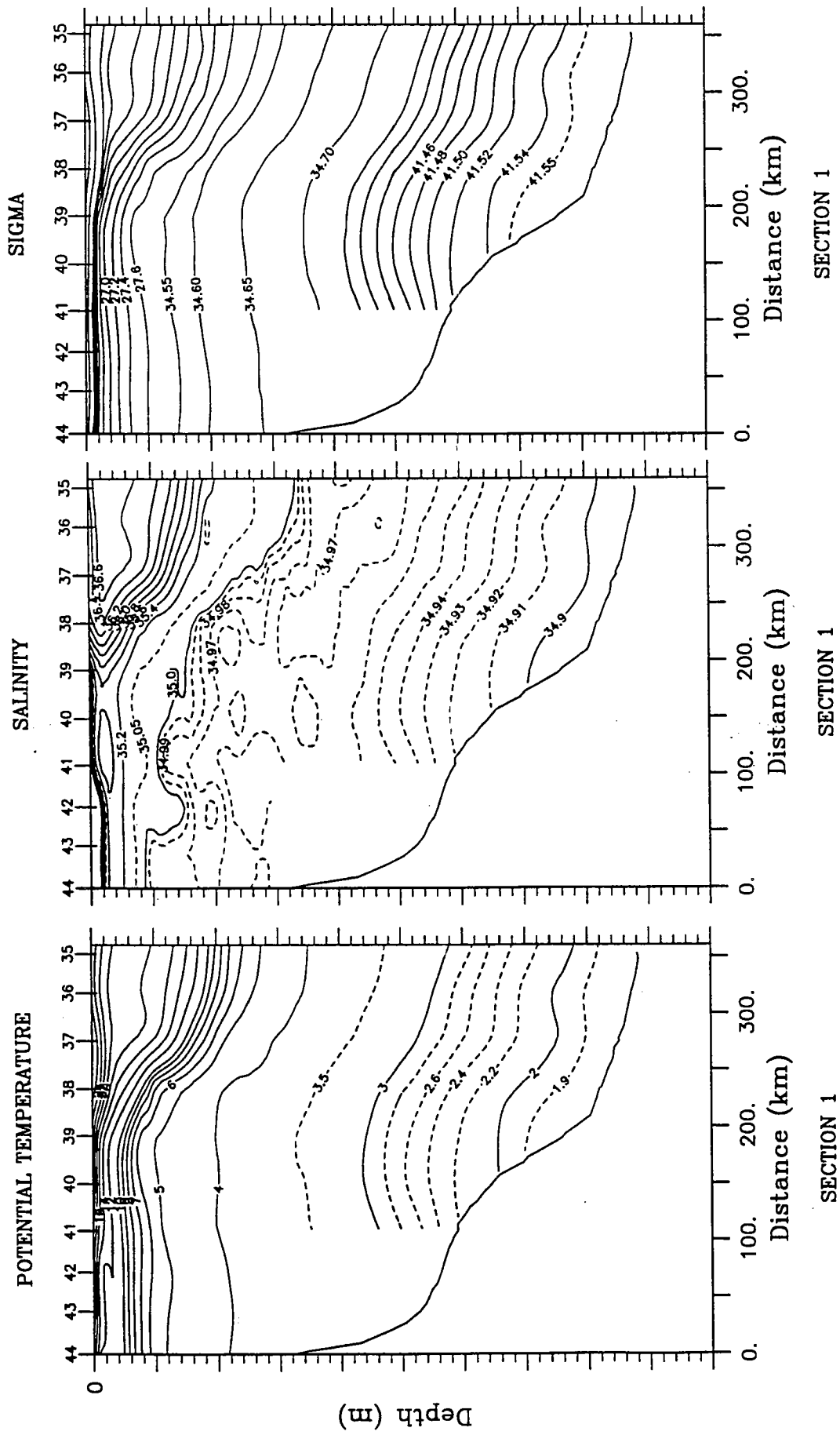


Figure 35.

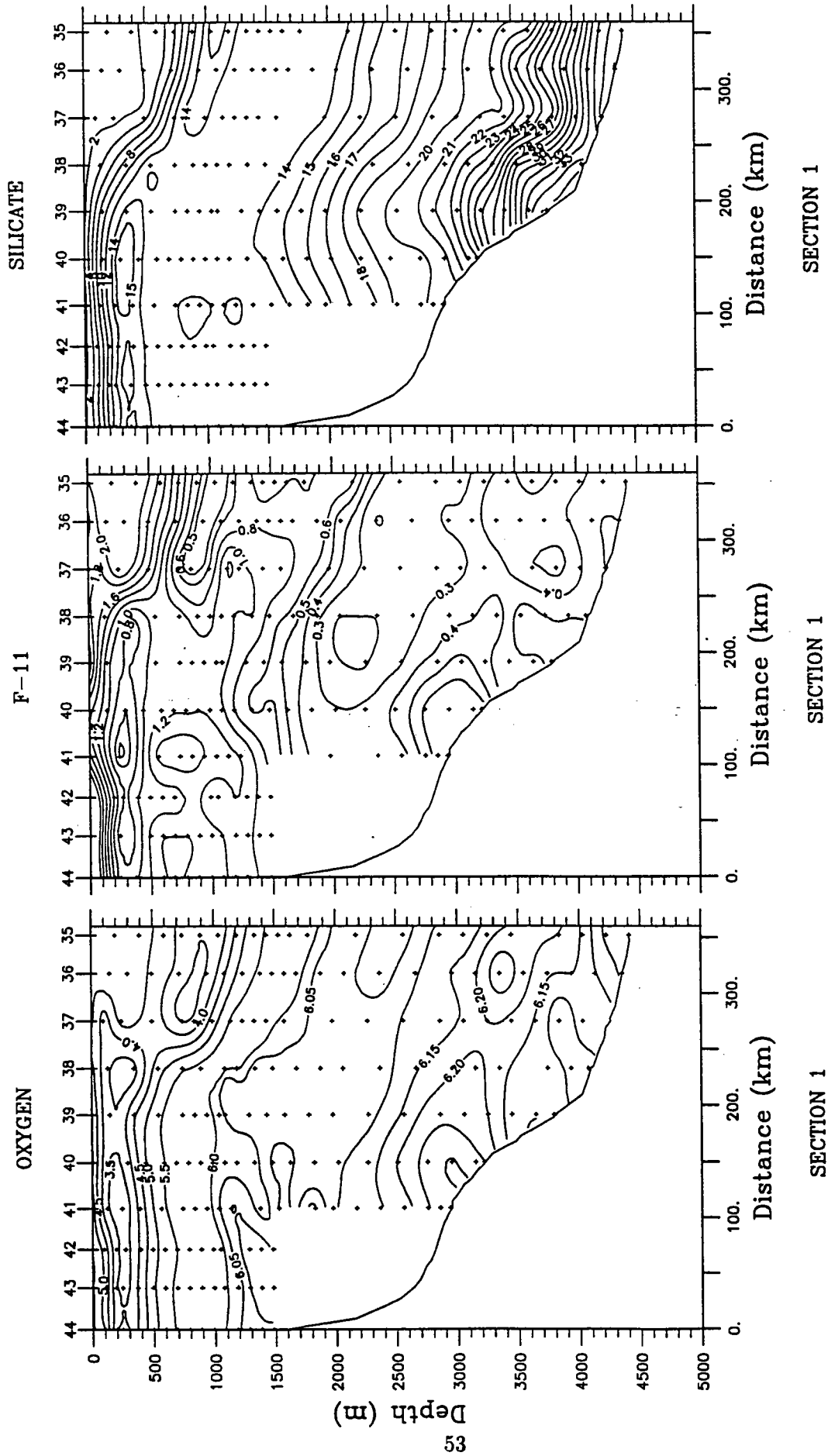


Figure 36.



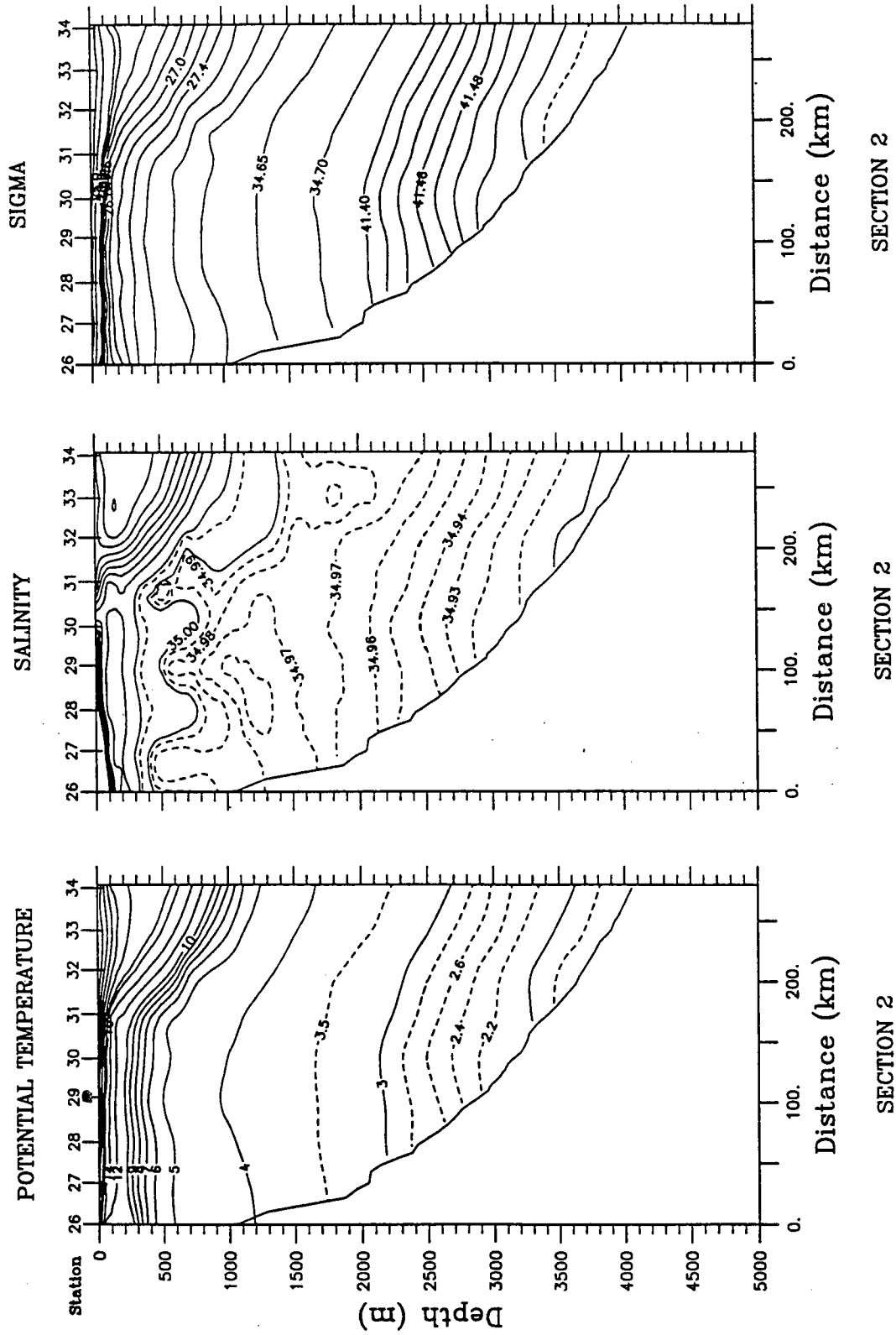


Figure 37.

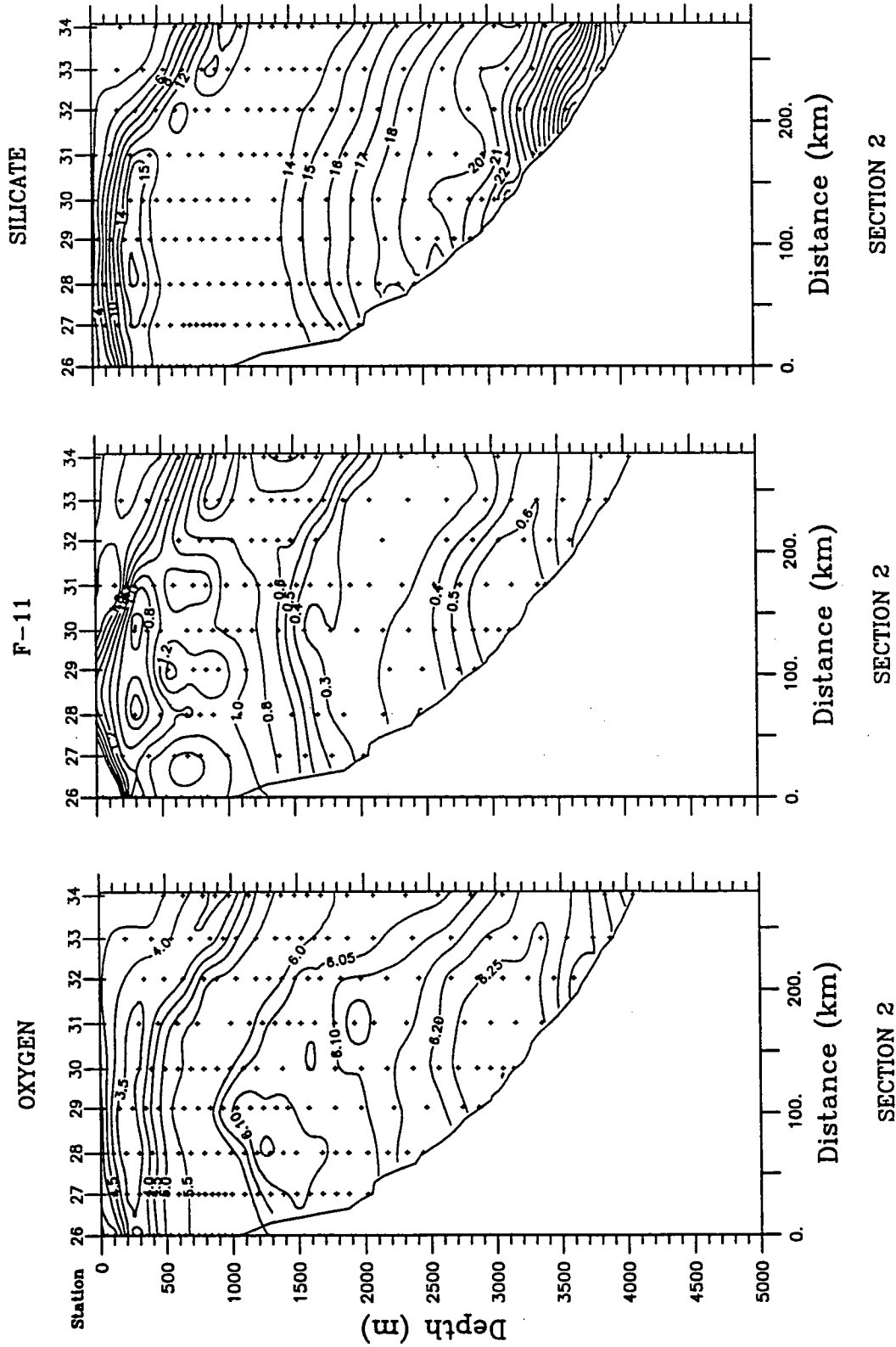
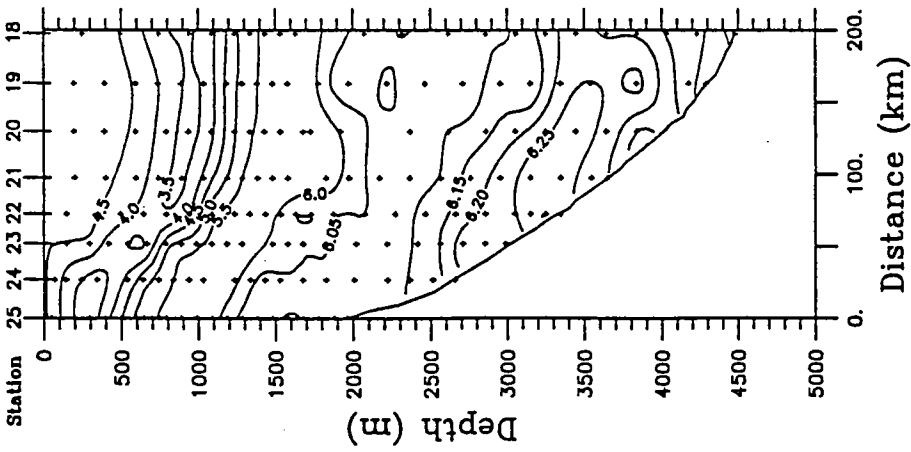


Figure 38.

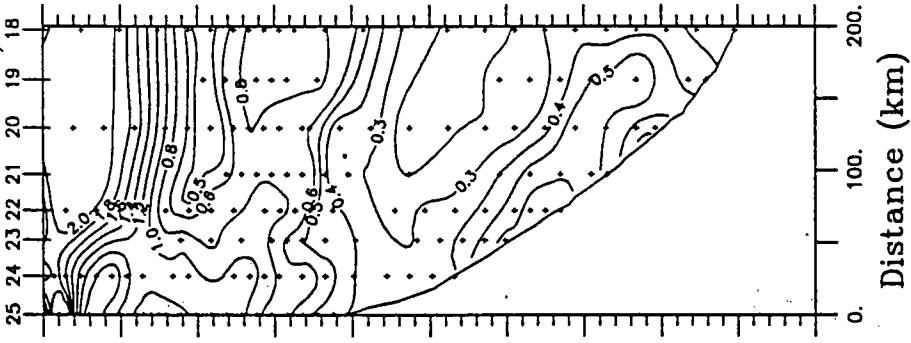


OXYGEN



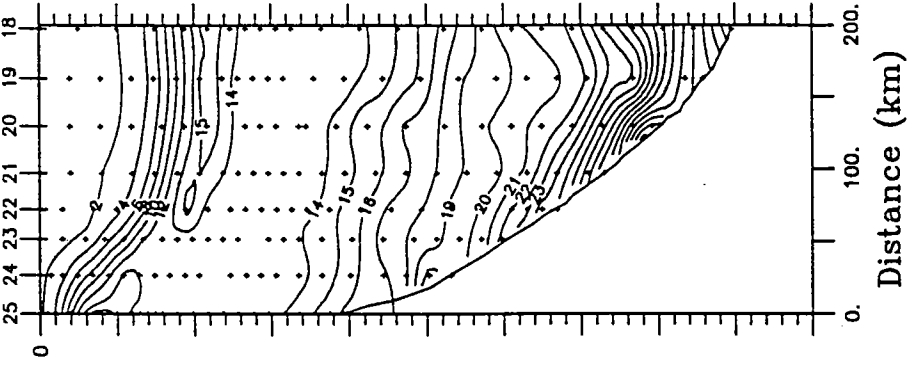
SECTION 3

F-11



SECTION 3

SILICATE



SECTION 3

Figure 40.

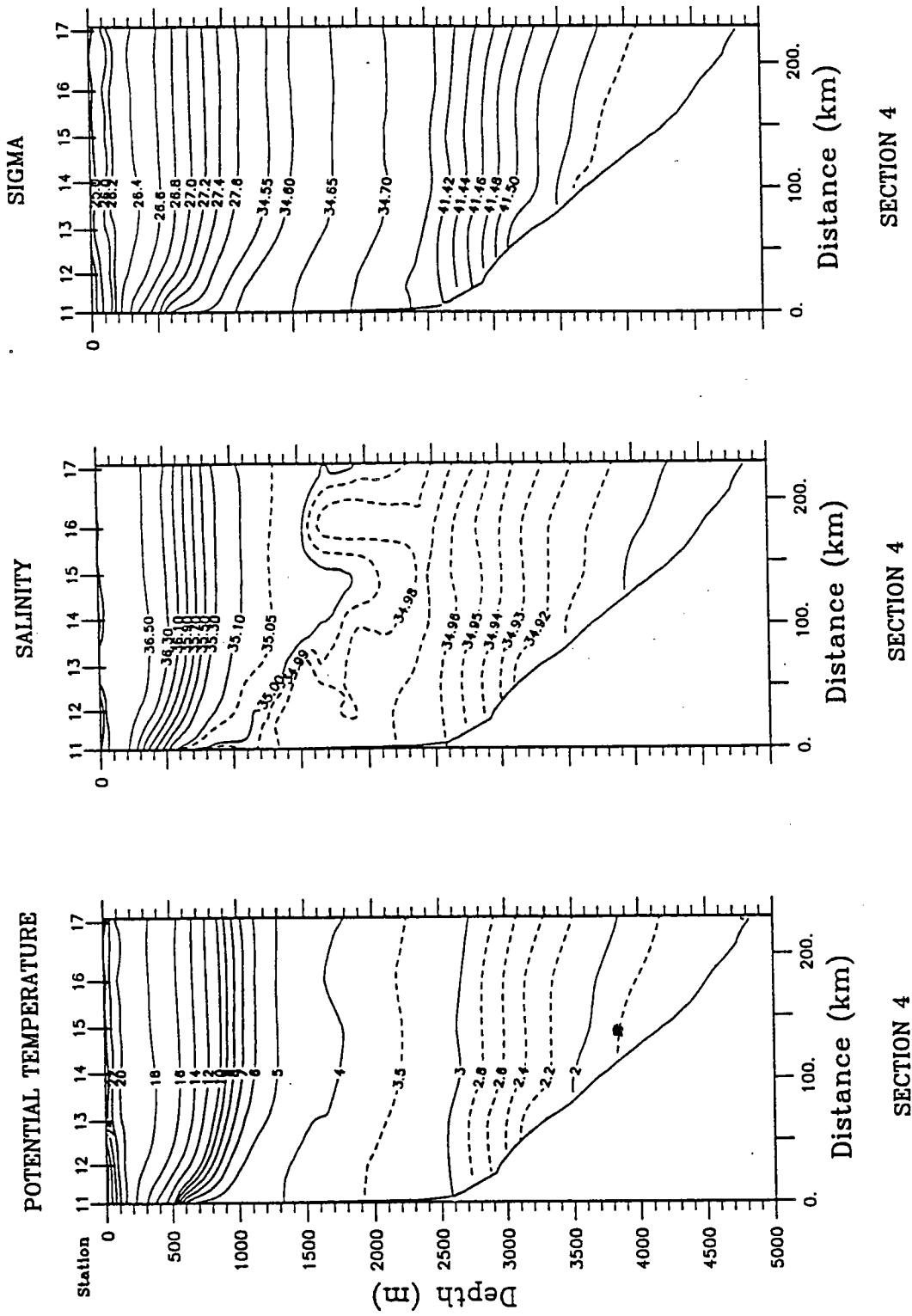
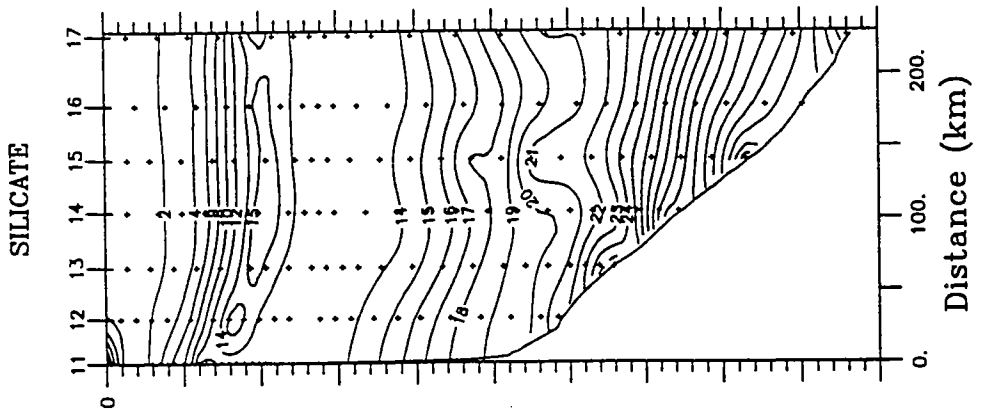
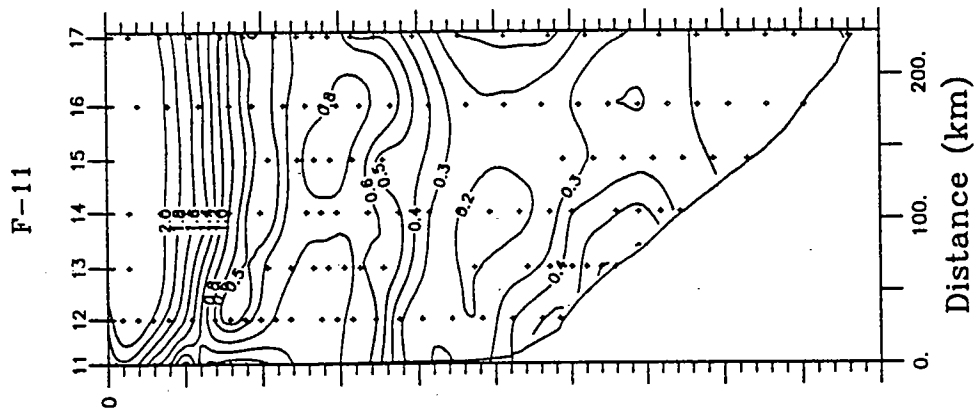


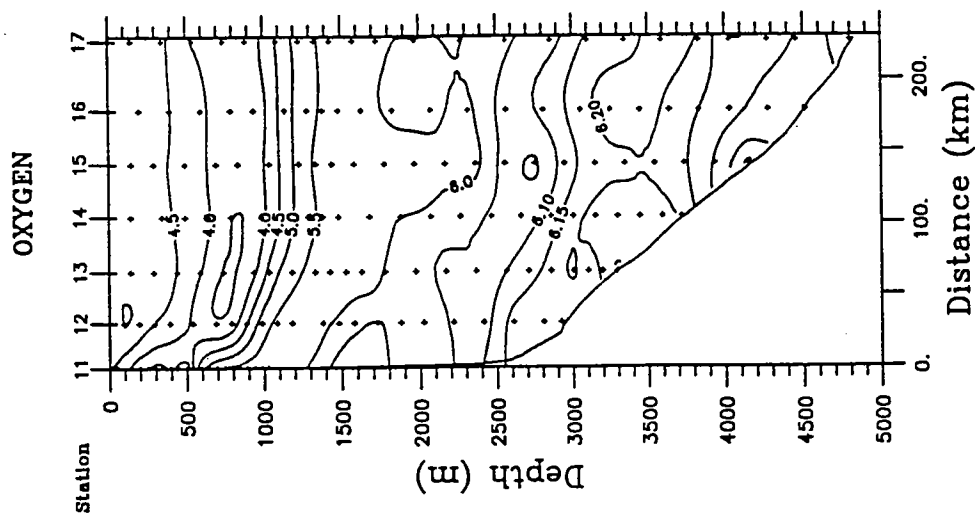
Figure 41.



SECTION 4

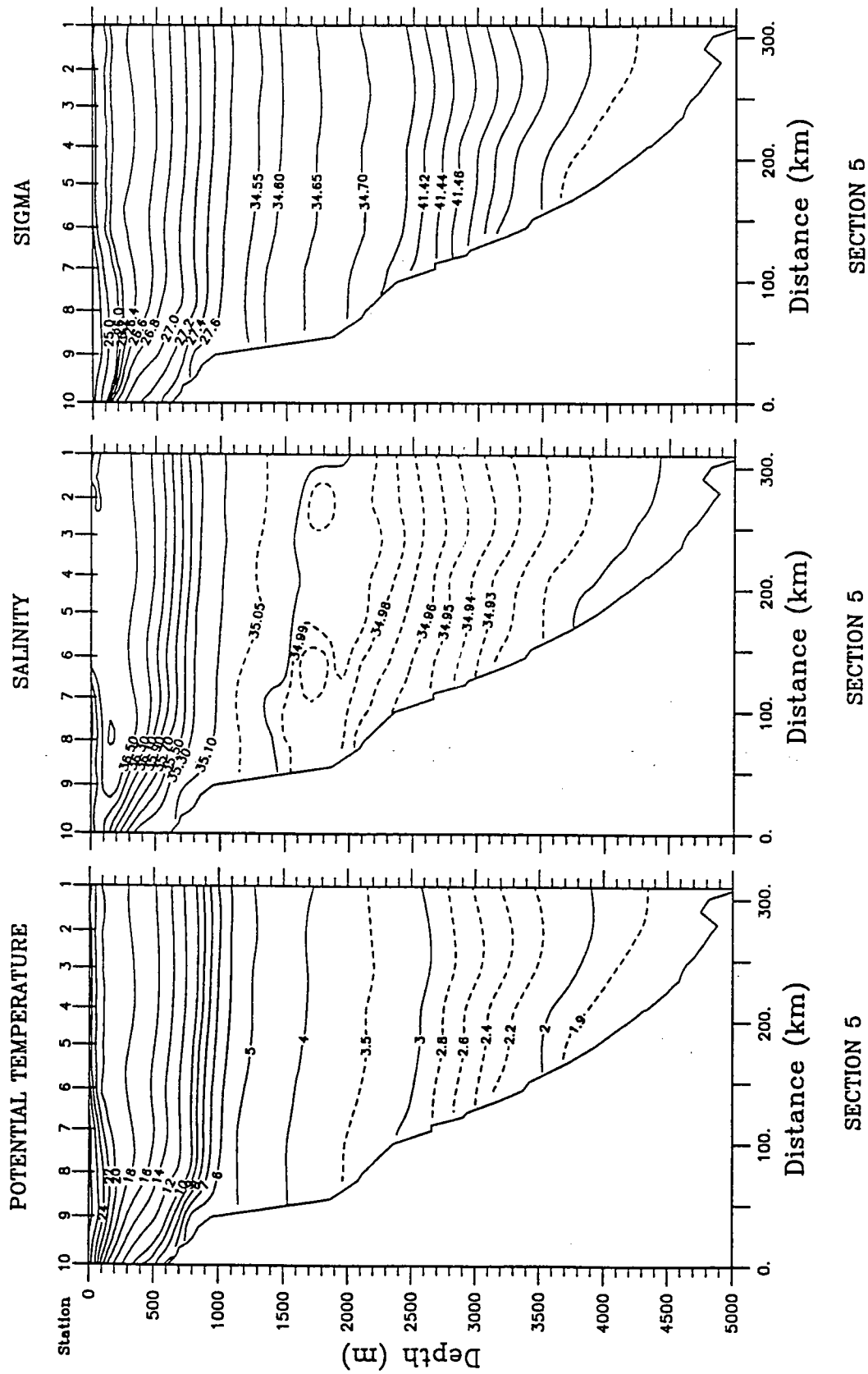


SECTION 4



SECTION 4

Figure 42.



SECTION 5

SECTION 5

SECTION 5

Figure 43.

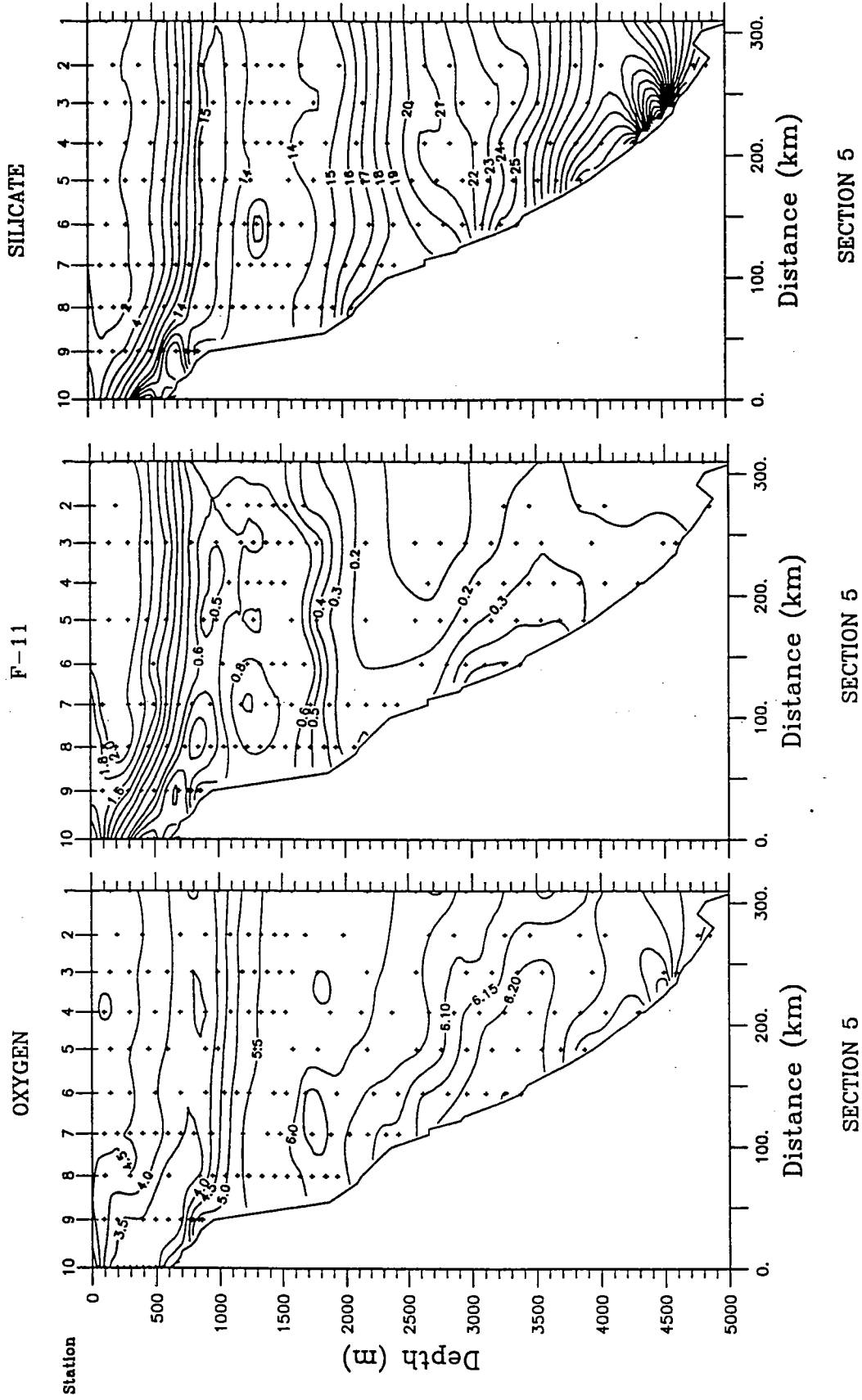


Figure 44.





### **13.3 Part 3. Bottle Data Listings for Individual Stations**



ENDEAVOR 214 Station 1 90-6-24 Lat: 32.049 Lon: -73.824 Sonic Depth: 5062

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C		kg/m**3	kg/m**3	kg/m**3	kg/m**3	ml/l	umol/kg	umol/kg	umol/kg	umol/kg	pm/kg	pm/kg
4.8	4.7	24.901	{36.644}	24.900	24.616	30.870	32.910	36.922	40.849}}	4.780	1.0	0.09	0.00	0.00	1.064	1.956
148.9	147.8	19.060	36.618	19.033	26.251	32.631	34.711	38.803	42.807	4.721	1.2	0.11	0.02	1.40	1.153	2.217
299.1	296.8	18.153	36.515	18.101	26.409	32.812	34.900	39.006	43.024	4.572	1.6	0.23	0.00	3.80	1.057	2.070
599.0	594.0	14.834	35.977	14.742	26.783	33.278	35.395	39.560	43.633	4.051	4.9	0.69	0.00	11.80	0.745	1.407
798.2	791.1	10.890	35.415	10.789	27.138	33.753	35.909	40.150	44.297	3.402	11.6	1.37	0.00	21.30	0.327	0.601
998.1	988.7	7.075	35.116	6.975	27.514	34.259	36.457	40.779	45.005	4.126	15.0	1.50	0.00	22.80	0.265	0.497
1199.9	1188.1	5.485	35.077	5.378	27.692	34.495	36.712	41.071	45.332	14.0	14.0	1.36	0.00	20.10	0.325	0.590
1298.4	1285.4	5.098	35.064	4.985	27.728	34.546	36.768	41.136	45.407	5.378	13.7	1.32	0.00	19.60	0.270	0.522
1392.7	1378.4	4.840	35.046	4.721	27.744	34.573	36.798	41.172	45.449	5.553	13.6	1.31	0.00	19.10	0.292	0.549
1498.4	1482.7	4.547	35.030	4.421	27.765	34.605	36.834	41.216	45.499	5.729	13.2	1.27	0.00	18.70	0.276	0.536
1592.0	1574.9	4.334	35.015	4.201	27.777	34.626	36.857	41.245	45.533	5.835	13.4	1.25	0.00	18.50	0.255	0.472
1799.4	1779.2	4.094	{35.006}	3.944	27.797	34.655	36.890	41.284	45.579}}	5.894						
2200.6	2173.8	3.658	34.997	3.476	27.837	34.714	36.955	41.361	45.667	5.956	17.1	1.27	0.00	18.60	0.082	0.129
2595.1	2561.2	3.218	34.967	3.004	27.858	34.755	37.002	41.420	45.737	6.015	20.5	1.32	0.00	18.70	0.052	0.067
2796.9	2759.1	3.056	{34.955}	2.825	27.866	34.769	37.019	41.441	45.763}}	5.993	21.6	1.29	0.01	18.60	0.069	0.096
2995.0	2953.2	2.862	34.940	2.615	27.872	34.784	37.037	41.465	45.792	6.079	22.8	1.28	0.00	18.60	0.064	0.097
3195.7	3149.6	2.699	34.931	2.434	27.881	34.800	37.055	41.488	45.820	6.050	23.7	1.33	0.00	18.40	0.070	0.118
3395.7	3345.2	2.552	34.922	2.269	27.887	34.814	37.071	41.508	45.844	6.150	25.0	1.29	0.00	18.40	0.079	0.127
3596.7	3541.6	2.462	{34.919}	2.160	27.894	34.825	37.084	41.524	45.863}}	6.081	25.1	1.27	0.00	18.00	0.121	0.207
3796.0	3736.1	2.380	{34.914}	2.058	27.898	34.833	37.093	41.536	45.878}}							
3999.0	3934.0	2.330	34.903	1.987	27.895	34.834	37.094	41.539	45.883	6.153	29.7	1.31	0.00	18.80	0.080	0.149
4194.6	4116.6	2.284	{34.900}	1.884	27.901	34.844	37.106	41.553	45.900}}	6.079	33.6	1.35	0.00	19.10	0.094	0.159
4394.0	4304.8	2.262	34.886	1.814	27.895	34.841	37.104	41.554	45.902	6.006	37.9	1.45	0.00	19.90	0.082	0.131
5133.4	5037.2	2.191	34.875	1.715	27.894	34.844	37.109	41.561	45.911	5.848	47.0	1.66	0.00	21.50	0.058	0.066

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ENDEAVOR 214 Station 2 90- 6-25 Lat: 32.092 Lon: -74.157 Sonic Depth: 4833

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SIO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
0.9	24.613	{36.304	24.613	24.613	24.447	30.709	32.751	36.769	40.701}}	4.885	1.9	0.14	0.01	1.80	1.179	2.585
199.6	198.1	18.926	{36.616	18.890	26.286	32.670	34.751	38.845	42.851}}	4.522	2.6	0.32	0.00	5.30		
398.9	395.7	17.673	{36.449	17.604	26.481	32.897	34.989	39.104	43.129	3.863	7.5	1.01	0.00	15.60		
700.2	694.1	13.229	{35.737	13.129	26.939	33.481	35.614	39.808	43.910	3.498	15.0	1.61	0.00	23.90		
899.2	891.0	9.054	{35.230	8.952	27.306	33.983	36.159	40.438	44.622	4.752	14.9	1.46	0.00	21.40	0.290	0.659
1098.1	1087.5	6.064	{35.084	5.962	27.624	34.406	36.616	40.961	45.209	5.285	14.1	1.37	0.00	19.90	0.298	0.605
1249.1	1236.7	5.265	{35.067	5.155	27.710	34.522	36.741	41.106	45.372}}	5.524	13.6	1.34	0.00	19.30	0.331	0.650
1348.5	1334.7	4.926	{35.052	4.810	27.739	34.564	36.788	41.160	45.435	5.700	13.6	1.61	0.00	19.00	0.307	0.615
1457.5	1442.3	4.638	{35.038	4.514	27.761	34.597	36.825	41.205	45.486	5.802	13.5	1.29	0.00	18.80	0.281	0.552
1548.8	1532.3	4.463	{35.026	4.333	27.771	34.615	36.845	41.229	45.515	5.892	14.2	1.31	0.00	18.70	0.214	0.390
1699.9	1681.2	4.254	{35.009	4.112	27.782	34.634	36.867	41.256	45.547	5.906	14.5	1.30	0.00	18.60		
2001.7	1978.3	3.886	{34.995	3.720	27.812	34.679	36.917	41.316	45.617}}	6.048	21.0	1.36	0.00	18.70		
2398.9	2368.6	3.480	{34.982	3.281	27.844	34.729	36.972	41.383	45.694}}	6.096	21.7	1.33	0.00	18.60		
2699.1	2663.2	3.191	{34.962	2.967	27.858	34.756	37.003	41.422	45.741}}	6.140	23.6	1.43	0.00	18.50		
2900.1	2860.2	2.999	{34.949	2.759	27.867	34.773	37.023	41.447	45.771	6.163	23.8	1.33	0.00	18.10	0.154	0.301
3099.9	3055.8	2.866	{34.942	2.608	27.875	34.787	37.039	41.468	45.795}}	6.166	28.5	1.49	0.00	18.60	0.111	0.189
3299.2	3250.8	2.721	{34.934	2.445	27.882	34.801	37.056	41.488	45.820	6.139	30.4	1.41	0.00	18.90	0.095	0.168
3500.0	3447.1	2.572	{34.925	2.278	27.889	34.816	37.072	41.509	45.845}}	6.008	38.7	1.46	0.00	20.10		
3700.3	3642.7	2.447	{34.916	2.134	27.894	34.826	37.085	41.525	45.865}}	5.949	40.9	1.53	0.00	20.50	0.106	0.146
3900.4	3837.9	2.362	{34.921	2.029	27.906	34.843	37.103	41.546	45.889							
4100.6	4033.1	2.312	{34.906	1.957	27.900	34.840	37.101	41.546	45.891}}							
4401.3	4325.8	2.279	{34.901	1.890	27.901	34.844	37.106	41.553	45.899}}							
4844.2	4756.5	2.248	{34.882	1.807	27.892	34.839	37.102	41.552	45.900							
4940.7	4850.1	2.232	{34.886	1.779	27.897	34.845	37.109	41.559	45.908}}							

ENDEAVOR 214 Station 3 90-6-25 Lat: 32.158 Lon: -74.551 Sonic Depth: 4618

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C	kg/m**3	kg/m**3	kg/m**3	kg/m**3	ml/l	ml/l	umol/kg	umol/kg	umol/kg	umol/kg	pm/kg	pm/kg
1.2	1.2	24.401	{36.474	24.401	24.640	30.905	32.948	36.967	40.901}	4.876	1.2	0.09	0.00	0.00	1.132	2.237
144.9	143.9	19.282	36.645	19.256	26.214	32.589	34.567	38.755	42.756	4.846	1.5	0.09	0.02	1.00	1.189	2.454
295.4	293.1	18.342	36.537	18.290	26.378	32.777	34.863	38.966	42.981	4.612	1.7	0.19	0.00	3.70	1.073	2.216
445.2	441.6	17.372	36.400	17.296	26.519	32.943	35.037	39.157	43.188	4.334	2.7	0.35	0.00	6.60	0.902	1.863
597.0	592.0	15.270	36.050	15.177	26.743	33.226	35.339	39.496	43.562	4.132	4.4	0.62	0.00	11.00	0.758	1.619
796.6	789.5	11.264	35.454	11.161	27.100	33.704	35.856	40.089	44.229	3.474	11.3	1.27	0.00	20.90	0.342	0.685
996.3	986.9	7.288	35.114	7.187	27.483	34.220	36.416	40.734	44.955	4.047	15.4	1.51	0.00	23.30	0.250	0.495
1195.9	1184.1	5.483	35.073	5.376	27.689	34.492	36.709	41.068	45.329	5.146	14.2	1.35	0.00	20.40	0.313	0.601
1296.2	1283.2	5.109	35.067	4.996	27.729	34.547	36.768	41.136	45.406	5.398	13.9	1.32	0.00	19.70	0.291	0.555
1397.0	1382.6	4.760	{35.041	4.641	27.749	34.581	36.807	41.184	45.462}	5.634	13.7	1.29	0.00	19.20	0.309	0.589
1496.2	1480.5	4.454	35.011	4.329	27.760	34.604	36.834	41.218	45.504	5.834	13.3	1.27	0.00	18.70	0.388	0.785
1595.7	1578.5	4.241	34.993	4.109	27.769	34.622	36.854	41.245	45.536	5.927	13.3	1.26	0.00	18.50	0.370	0.764
1797.0	1776.8	4.044	34.992	3.895	27.791	34.652	36.887	41.282	45.579	6.010	13.8	1.26	0.00	18.40	0.291	0.557
2196.2	2169.5	3.727	34.993	3.544	27.827	34.702	36.942	41.346	45.650	5.992	16.7	1.27	0.00	18.70	0.104	0.139
2597.1	2563.1	3.303	34.968	3.088	27.852	34.744	36.990	41.406	45.722	6.040	20.1	1.31	0.00	18.70	0.058	0.073
2797.3	2759.4	3.112	34.963	2.880	27.867	34.768	37.017	41.438	45.759		20.7	1.29	0.00	18.70	0.063	0.075
2996.5	2954.6	2.928	34.947	2.679	27.872	34.782	37.033	41.459	45.785	6.103	22.5	1.29	0.00	18.60	0.071	0.092
3197.5	3151.3	2.771	{34.938	2.504	27.880	34.797	37.051	41.482	45.812}	6.107	22.3	1.28	0.00	18.30	0.112	0.173
3397.1	3346.5	2.594	34.925	2.310	27.886	34.811	37.068	41.504	45.839	6.201	23.5	1.28	0.00	18.10	0.146	0.246
3597.7	3542.5	2.445	34.910	2.143	27.888	34.820	37.079	41.519	45.859	6.217	25.0	1.31	0.00	18.10	0.170	0.297
3796.8	3736.8	2.350	{34.911	2.029	27.898	34.835	37.095	41.539	45.881}							
3998.2	3933.2	2.288	34.900	1.946	27.896	34.836	37.098	41.543	45.888	6.182	29.8	1.28	0.00	18.80	0.184	0.286
4568.9	4488.9	2.219	{34.891	1.812	27.899	34.845	37.108	41.558	45.906}	6.196	24.0	1.28	0.00	18.10	0.128	0.229
4671.8	4588.9	2.232	34.887	1.812	27.896	34.842	37.105	41.555	45.903	6.043	38.2	1.43	0.00	19.90	0.135	0.220

ENDEAVOR 214 Station 4 90- 6-25 Lat: 32.203 Lon: -74.901 Sonic Depth: 4313

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C	kg/m**3	kg/m**3	kg/m**3	kg/m**3	ml/l	ml/l	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg
3.2	3.2	25.102	36.313	25.101	24.305	30.558	32.597	36.608	40.535	4.810	1.5	0.12	0.00	0.00	1.068	2.007
99.0	98.3	20.349	{36.714	20.330	25.982	32.332	34.402	38.474	42.459}}	5.170	1.4	0.04	0.00	0.00		
297.4	295.1	18.485	36.561	18.432	26.361	32.756	34.840	38.942	42.954	4.697	1.9	0.16	0.00	2.90		
496.9	492.9	16.729	36.294	16.647	26.593	33.035	35.135	39.266	43.307	4.254	3.5	0.45	0.00	7.90		
697.6	691.5	13.123	35.717	13.024	26.944	33.490	35.624	39.820	43.925	3.807	7.6	0.99	0.00	15.90		
897.0	888.9	8.894	35.192	8.793	27.302	33.984	36.162	40.445	44.632	3.405	15.8	1.57	0.00	24.70		
1098.3	1087.7	6.009	35.083	5.907	27.630	34.414	36.625	40.971	45.221	4.758	14.9	1.39	0.00	21.50	0.287	0.519
1247.3	1234.9	5.197	35.058	5.088	27.711	34.526	36.746	41.112	45.380	5.318	13.9	1.31	0.00	19.90	0.369	0.696
1345.6	1331.8	4.809	35.035	4.694	27.738	34.568	36.793	41.169	45.446	5.588	13.6	1.27	0.00	19.20	0.390	0.736
1442.8	1427.8	4.552	35.014	4.431	27.751	34.591	36.820	41.202	45.485	5.751	13.4	1.25	0.00	18.90	0.409	0.811
1540.4	1524.0	4.349	35.003	4.221	27.765	34.613	36.845	41.232	45.520	5.876	13.5	1.23	0.00	18.70	0.392	0.743
1695.6	1676.9	4.150	{34.996	4.010	27.782	34.638	36.872	41.265	45.558}}		14.9		0.00			
1895.2	1873.5	3.964	34.991	3.807	27.799	34.663	36.900	41.298	45.596	5.993	14.7	1.25	0.00	18.40		
2146.2	2120.4	3.731	34.992	3.553	27.826	34.700	36.940	41.343	45.648	5.986	16.6	1.25	0.00	18.70		
2399.4	2369.1	3.444	34.976	3.246	27.843	34.729	36.973	41.385	45.697	6.014	19.1	1.27	0.00	18.80		
2699.4	2663.5	3.117	34.956	2.895	27.860	34.761	37.009	41.430	45.750	6.049	21.4	1.27	0.00	18.80	0.076	0.083
2897.9	2858.0	2.908	34.944	2.670	27.870	34.780	37.032	41.459	45.785	6.134	21.0	1.26	0.00	18.40		
3098.6	3054.5	2.691	34.930	2.437	27.880	34.799	37.054	41.487	45.819	6.183	22.1	1.23	0.00	18.20	0.145	0.246
3298.2	3249.8	2.506	34.918	2.235	27.887	34.815	37.072	41.510	45.848	6.206	24.3	1.25	0.00	18.20	0.152	0.263
3497.6	3444.7	2.369	34.909	2.080	27.892	34.827	37.087	41.529	45.870	6.225	25.9	1.26	0.00	18.30	0.170	0.315
3698.7	3641.1	2.277	34.902	1.969	27.896	34.835	37.096	41.541	45.885	6.185	28.6	1.26	0.00	18.60	0.177	0.323
3903.1	3840.5	2.239	34.897	1.909	27.896	34.838	37.100	41.547	45.893	6.154	31.0	1.30	0.00	19.00	0.175	0.302
4103.6	4036.0	2.213	34.897	1.861	27.900	34.844	37.107	41.555	45.902	6.111	33.2	1.34	0.00	19.30	0.164	0.273
4367.9	4293.4	2.204	34.888	1.821	27.896	34.842	37.105	41.554	45.902	6.044	36.8	1.40	0.00	19.70	0.156	0.225

ENDEAVOR 214 Station 5 90- 6-26 Lat: 32.286 Lon: -75.251 Sonic Depth: 3933

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2	Phos umol/kg	NO2	NO3	F12 pm/kg	F11 kg
0.4	0.4	25.468	{36.603	25.468	24.411	30.655	32.690	36.696	40.617	4.760	1.8	0.09	0.00	0.10	1.050	2.358
146.4	145.3	19.186	36.617	19.159	26.218	32.595	34.674	38.764	42.766	4.543	1.8	0.15	0.01	2.20	1.105	2.458
295.5	293.2	18.220	36.520	18.168	26.396	32.798	34.884	38.990	43.007	4.507	2.2	0.24	0.01	4.20	1.050	2.214
445.2	441.6	17.036	36.356	16.961	26.566	32.999	35.096	39.221	43.257	4.252	3.2	0.44	0.00	7.60	0.856	1.833
596.5	591.5	14.595	35.946	14.504	26.811	33.313	35.432	39.601	43.679	3.981	5.5	0.78	0.01	12.80	0.676	1.448
795.7	788.6	10.492	{35.357	10.394	27.163	33.791	35.952	40.201	44.356							
895.0	886.9	8.533	35.170	8.435	27.341	34.036	36.217	40.507	44.702	3.546	15.6	1.57	0.00	24.40	0.222	0.396
996.1	986.7	6.869	35.111	6.771	27.538	34.291	36.491	40.818	45.048	4.261	15.3	1.54	0.00	22.80	0.282	0.556
1095.8	1085.2	5.903	35.082	5.802	27.643	34.431	36.642	40.992	45.243	15.0	1.41	1.41	0.00	21.40		
1196.0	1184.2	5.347	{35.064	5.241	27.698	34.507	36.725	41.087	45.352							
1295.1	1282.1	5.001	35.067	4.889	27.741	34.563	36.786	41.157	45.429	5.448	14.0	1.34	0.00	19.80	0.298	0.532
1396.4	1382.0	4.705	{35.042	4.587	27.756	34.590	36.817	41.195	45.474							
1496.3	1480.6	4.370	{35.006	4.246	27.765	34.612	36.843	41.230	45.518							
1596.9	1579.7	4.201	34.993	4.069	27.773	34.627	36.861	41.252	45.544	5.937	13.4	1.28	0.00	18.70	0.364	0.704
1796.4	1776.2	4.068	34.997	3.919	27.792	34.652	36.887	41.282	45.578	5.961	14.4	1.27	0.00	18.70	0.210	0.375
2196.7	2169.9	3.641	34.993	3.460	27.836	34.714	36.955	41.361	45.667	6.010	16.9	1.30	0.01	18.70	0.094	0.146
2596.9	2562.9	3.224	34.970	3.010	27.860	34.756	37.003	41.421	45.739	6.038	20.2	1.30	0.00	18.70	0.075	0.130
2796.6	2758.7	3.007	34.949	2.777	27.865	34.771	37.021	41.444	45.768	6.086	21.2	1.29	0.01	18.60	0.098	0.135
2997.5	2955.5	2.762	34.938	2.536	27.877	34.793	37.046	41.476	45.806	6.168	21.6	1.30	0.00	18.20	0.146	0.247
3196.7	3150.5	2.568	34.927	2.306	27.888	34.813	37.070	41.506	45.841	6.225	22.7	1.26	0.00	18.10	0.171	0.308
3397.4	3346.8	2.398	34.911	2.119	27.891	34.824	37.083	41.524	45.864	6.236	24.6	1.27	0.00	18.20	0.205	0.392
3594.7	3539.5	2.275	34.905	1.978	27.897	34.836	37.097	41.542	45.886	6.203	27.5	1.29	0.00	18.50	0.229	0.393
3746.8	3688.0	2.217	34.896	1.905	27.896	34.838	37.100	41.547	45.893	6.162	30.1	1.31	0.00	18.80	0.225	0.404
3937.0	3873.5	2.177	34.892	1.845	27.897	34.842	37.105	41.553	45.901	6.064	34.7	1.36	0.00	19.40	0.189	0.299



ENDEAVOR 214 Station 6 90-6-26 Lat: 32.334 Lon: -75.588 Sonic Depth: 3377

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12	F11
3.0	3.0	25.548	36.644	25.547	24.417	30.659	32.694	36.699	40.618	4.754	1.5	0.09	0.00	0.00	1.055	2.056
146.1	145.0	18.939	36.613	18.913	26.278	32.661	34.742	38.836	42.841	4.774	1.3	0.11	0.01	1.90		
296.0	293.7	18.029	36.502	17.977	26.430	32.836	34.925	39.033	43.053	4.601	1.8	0.27	0.00	4.60		
495.9	491.9	15.889	{36.154	15.810	26.681	33.145	35.253	39.398	{43.453}}	4.031	4.1	0.59	0.00	10.30	0.714	1.526
495.8	491.8	15.890	{36.155	15.811	26.681	33.146	35.253	39.398	{43.454}}	4.043	4.1	0.62	0.00	10.30	0.729	1.403
697.6	691.5	12.171	{35.589	12.077	27.032	33.607	35.750	39.965	{44.087}}	3.507	9.2	1.17	0.00	18.90		
896.5	888.4	8.122	{35.152	8.026	27.390	34.098	36.285	40.584	{44.787}}	3.757	15.3	1.54	0.00	23.80		
1046.0	1036.0	6.138	35.085	6.041	27.615	34.394	36.603	40.946	45.193	4.684	14.9	1.43	0.00	21.40	0.297	0.612
1146.7	1135.5	5.369	35.059	5.268	27.691	34.498	36.716	41.078	45.342	5.210	14.0	1.36	0.00	20.00		
1245.9	1233.5	4.923	35.043	4.817	27.731	34.556	36.779	41.152	45.426	5.508	13.6	1.29	0.00	19.40	0.413	0.849
1345.9	1332.1	4.687	35.030	4.574	27.748	34.582	36.809	41.188	45.468		13.5	1.29	0.00	18.90	0.371	0.820
1345.9	1332.1	4.685	{35.029	4.572	27.747	34.582	36.808	41.187	{45.467}}							
1445.3	1430.2	4.526	35.031	4.405	27.768	34.608	36.837	41.220	45.504	5.768	13.5	1.27	0.00	18.80	0.318	0.614
1544.9	1528.4	4.293	35.000	4.165	27.769	34.619	36.851	41.240	45.529	5.879	13.0	1.23	0.00	18.40	0.359	0.690
1696.6	1677.9	4.017	34.978	3.878	27.782	34.643	36.879	41.275	45.571	6.060	13.1	1.23	0.00	18.30	0.372	0.751
1945.6	1923.0	3.923	34.996	3.762	27.808	34.674	36.911	41.309	45.609	6.007	14.8	1.26	0.00	18.50		
2247.6	2220.0	3.539	34.979	3.354	27.835	34.717	36.959	41.368	45.678	6.061	16.6	1.24	0.00	18.40		
2445.0	2413.9	3.322	34.955	3.122	27.838	34.730	36.975	41.390	45.705	6.072	18.2	1.25	0.00	18.40		
2647.8	2612.8	3.113	34.953	2.896	27.857	34.758	37.007	41.427	45.748	6.154	19.2	1.24	0.00	18.30	0.125	0.221
2847.0	2808.1	2.878	{34.944	2.646	27.872	34.784	37.035	41.462	{45.789}}	6.178	19.9	1.24	0.00	18.00	0.153	0.299
2997.4	2955.4	2.705	34.932	2.461	27.879	34.798	37.052	41.484	45.816	6.215	20.5	1.22	0.00	17.80	0.242	0.448
3148.4	3103.2	2.512	34.921	2.257	27.888	34.815	37.072	41.509	45.846	6.235	22.9	1.24	0.00	17.90	0.267	0.495
3297.0	3248.6	2.376	34.914	2.108	27.894	34.828	37.087	41.528	45.868	6.198	25.4	1.26	0.00	18.00	0.263	0.513
3425.0	3373.7	2.317	34.910	2.037	27.897	34.833	37.093	41.536	45.879	6.191	27.6	1.28	0.00	18.30	0.252	0.479

ENDEAVOR 214 Station 7 90-6-26 Lat: 32.356 Lon: -75.940 Sonic Depth: 2660

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SI02	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C		kg/m**3				ml/l	umol/kg	umol/kg			pm/kg	
2.0	2.0	28.130	{36.169}	28.130	23.234	23.432	31.454	35.431	39.324}}	4.589	2.0	0.08	0.00	0.10	0.912	1.643
96.6	95.9	21.842	{36.700}	21.823	25.562	31.878	33.938	37.990	41.955}}	5.088	1.3	0.06	0.00	0.10	1.115	2.156
197.1	195.6	19.207	36.618	19.171	26.215	32.592	34.671	38.761	42.763	4.522	1.5	0.12	0.01	2.20	1.094	
297.0	294.7	18.287	36.534	18.235	26.390	32.790	34.876	38.991	42.996	4.474	1.9	0.21	0.00	4.10	1.045	1.978
397.5	394.3	17.638	36.444	17.570	26.486	32.903	34.995	39.110	43.136	4.418	2.4	0.31	0.00	5.80	0.940	1.830
496.5	492.5	16.527	36.261	16.445	26.615	33.062	35.164	39.298	43.343	4.251	3.4	0.49	0.00	8.50	0.852	1.762
596.0	591.0	14.418	35.932	14.328	26.838	33.345	35.466	39.638	43.719	3.867	5.6	0.79	0.00	13.40	0.607	1.155
695.9	689.8	12.577	35.652	12.481	27.003	33.565	35.704	39.910	44.025	3.581	8.8	1.10	0.00	18.10	0.375	0.769
800.9	793.7	10.130	35.327	10.033	27.202	33.843	36.007	40.263	44.425	3.390	13.5	1.46	0.00	22.80	0.269	0.496
932.0	923.5	7.424	35.117	7.329	27.465	34.198	36.392	40.706	44.924	3.984	15.5	1.55	0.00	23.50	0.241	
945.0	936.3	7.266	35.117	7.171	27.487	34.226	36.421	40.739	44.961	4.083	15.3	1.54	0.00	23.20	0.251	0.459
1095.2	1084.6	5.584	{35.067}	5.486	27.670	34.470	36.686	41.042	45.301}}							
1195.1	1183.3	4.828	35.018	4.727	27.721	34.550	36.775	41.150	45.426	5.534	13.6	1.30	0.00	19.40	0.504	1.024
1294.9	1281.9	4.546	{35.004}	4.439	27.742	34.582	36.811	41.193	45.476}}							
1394.3	1379.9	4.343	34.989	4.229	27.753	34.601	36.832	41.220	45.508	5.862	13.1	1.23	0.01	18.50	0.457	0.921
1494.0	1478.3	4.213	34.993	4.091	27.771	34.624	36.857	41.248	45.539	5.951	13.1	1.23	0.01	18.30	0.406	0.808
1596.0	1578.8	4.053	34.989	3.923	27.786	34.645	36.880	41.275	45.571	6.016	13.4	1.21	0.00	18.30	0.358	0.733
1745.8	1726.4	3.890	{34.979}	3.748	27.796	34.663	36.900	41.299	45.599}}	6.068	13.9	1.23	0.00	18.30	0.290	0.543
1897.8	1876.0	3.811	34.984	3.656	27.809	34.679	36.918	41.319	45.621	6.043	14.9	1.22	0.00	18.30	0.189	0.331
2050.2	2026.0	3.646	34.984	3.479	27.827	34.704	36.945	41.350	45.657	6.061	16.1	1.24	0.00	18.40	0.131	0.205
2046.1	2021.9	3.644	34.979	3.477	27.823	34.700	36.941	41.347	45.653	6.056	16.1	1.23	0.00	18.40	0.143	0.231
2197.2	2170.4	3.449	34.971	3.271	27.837	34.722	36.966	41.377	45.688	6.080	17.2	1.23	0.00	18.30	0.248	
2347.9	2318.5	3.265	34.962	3.075	27.848	34.741	36.988	41.404	45.720	6.116	18.3	1.24	0.00	18.20	0.138	0.238
2449.5	2418.3	3.158	34.954	2.960	27.852	34.750	36.998	41.417	45.736	6.106	18.7	1.24	0.00	18.20	0.154	0.272

ENDEAVOR 214 Station 8 90-6-26 Lat: 32.587 Lon: -76.184 Sonic Depth: 2117

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11 pm/kg
5.1	5.0	27.989	{36.004	27.988	23.156	29.358	31.381	35.361	39.256	4.605	2.2	0.05	0.00	0.00	0.939	1.674
102.1	101.3	25.035	36.594	25.013	24.544	30.797	32.835	36.847	40.772	4.032	1.6	0.13	0.09	1.20	0.963	1.775
200.9	199.4	20.071	36.683	20.033	26.039	32.395	34.467	38.544	42.533		1.4	0.09	0.01	1.50	1.104	2.305
299.0	296.7	18.489	36.556	18.436	26.356	32.751	34.836	38.937	42.950	4.546	1.9	0.20	0.00	3.50	1.062	2.072
455.4	451.7	16.507	36.270	16.432	26.625	33.073	35.174	39.309	43.353	3.958	3.9	0.55	0.00	9.50	0.766	1.463
602.1	597.0	13.115	35.702	13.030	26.932	33.477	35.611	39.807	43.912	3.212	9.5	1.17	0.00	18.90	0.403	0.834
744.8	738.2	10.959	35.383	10.865	27.099	33.713	35.868	40.108	44.253		13.9	1.52	0.00	23.90	0.253	0.438
849.4	841.8	8.744	35.184	8.650	27.319	34.006	36.185	40.470	44.661	3.393	15.9	1.61	0.00	24.90	0.171	0.319
947.5	938.8	6.750	35.102	6.658	27.547	34.303	36.505	40.834	45.067	4.280	15.4	1.48	0.00	22.60	0.243	0.468
1051.6	1041.5	5.749	35.082	5.654	27.662	34.455	36.668	41.021	45.276	4.918	14.6	1.39	0.00	21.00	0.265	0.515
1148.8	1137.6	5.086	35.051	4.987	27.717	34.536	36.757	41.126	45.396	5.384	13.8	1.31	0.00	19.80	0.361	0.718
1234.3	1222.0	4.732	35.028	4.629	27.740	34.572	36.799	41.176	45.454	5.613	13.3	1.28	0.00	19.00		
1244.2	1231.8	4.678	35.022	4.574	27.742	34.576	36.803	41.181	45.461	5.644	13.3	1.27	0.00	19.00	0.425	0.834
1348.7	1334.9	4.417	35.011	4.306	27.762	34.607	36.837	41.222	45.509	5.796	13.2	1.24	0.00	18.50	0.403	0.820
1449.5	1434.3	4.221	34.994	4.103	27.771	34.623	36.856	41.246	45.538	5.927	13.2	1.24	0.00	18.40	0.399	0.787
1548.2	1531.6	4.107	34.994	3.981	27.784	34.641	36.875	41.269	45.563	5.976	13.5	1.23	0.00	18.40	0.364	0.673
1650.6	1632.6	4.014	34.989	3.880	27.790	34.652	36.887	41.283	45.580	5.994	14.2	1.23	0.00	18.30	0.303	0.582
1744.2	1724.7	3.908	34.982	3.766	27.796	34.665	36.899	41.298	45.597	6.025	14.3	1.24	0.00	18.30	0.265	0.508
1747.4	1727.9	3.908	34.986	3.766	27.799	34.665	36.902	41.301	45.600	6.032	14.3	1.23	0.00	18.30	0.263	0.503
1858.1	1836.9	3.815	34.980	3.664	27.805	34.675	36.913	41.315	45.616	6.031	15.0	1.24	0.00	18.20	0.221	0.453
1851.0	1829.9	3.816	34.983	3.665	27.807	34.677	36.916	41.317	45.618	6.036	15.0	1.23	0.00	18.20	0.223	0.456
1947.7	1925.0	3.727	34.980	3.568	27.815	34.688	36.928	41.331	45.636	6.035	15.5	1.23	0.00	18.20	0.197	0.308
2101.2	2076.0	3.268	34.964	3.102	27.847	34.739	36.985	41.401	45.716	6.082	18.2	1.24	0.00	18.30	0.130	0.220
2097.6	2072.5	3.275	34.963	3.109	27.846	34.738	36.983	41.398	45.714		18.2	1.24	0.00	18.30	0.148	0.242

ENDEAVOR 214 Station 9 90-6-27 Lat: 32.817 Lon: -76.424 Sonic Depth: 1129

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
1.5	1.5	28.462	36.197	28.462	23.145	29.338	31.357	35.331	39.220	4.562	2.4	0.05	0.01	0.10	0.969	1.651
95.1	94.4	25.334	36.529	25.313	24.403	30.650	32.687	36.695	40.618	4.267	2.0	0.06	0.15	0.30	0.968	1.803
195.0	193.5	19.301	36.641	19.265	26.209	32.583	34.661	38.749	42.750	3.479	3.4	0.44	0.01	7.90	0.857	1.598
295.7	293.4	16.506	36.262	16.458	26.613	33.060	35.161	39.296	43.340		3.9	0.53	0.00	9.50	0.766	1.476
397.0	393.8	13.713	35.808	13.656	26.885	33.412	35.539	39.724	43.817	3.488	7.8	0.99	0.00	16.40	0.491	0.918
496.3	492.3	12.360	35.595	12.293	26.995	33.564	35.704	39.915	44.033	3.146	10.8	1.27	0.00	20.60	0.358	0.685
597.4	592.3	9.940	{35.259}	9.869	27.177	33.824	35.990	40.250	44.415	3.010	16.4	1.64	0.00	25.70	0.194	0.344
696.1	690.0	8.556	35.097	8.480	27.277	33.971	36.152	40.442	44.636	3.081	18.8	1.80	0.00	27.50	0.133	0.248
766.0	759.2	6.252	35.086	6.181	27.597	34.371	36.579	40.919	45.162	4.490	15.8	1.48	0.00	22.50	0.204	0.377
775.7	768.8	5.937	{35.078}	5.867	27.632	34.417	36.628	40.976	45.226	4.745	15.1	1.42	0.00	21.60	0.246	0.468
780.9	773.9	5.831	35.074	5.762	27.642	34.431	36.643	40.993	45.246	4.857	14.8	1.41	0.00	21.20	0.273	0.537
785.1	778.1	5.803	35.077	5.733	27.648	34.438	36.651	41.001	45.255	4.861	14.7	1.40	0.00	20.90	0.289	0.539
789.0	781.9	5.778	35.075	5.708	27.649	34.440	36.653	41.005	45.259	4.881	14.8	1.39	0.00	21.00	0.273	0.554
792.3	785.2	5.760	{35.078}	5.690	27.654	34.446	36.659	41.011	45.265							
794.3	787.2	5.741	35.078	5.671	27.656	34.449	36.662	41.014	45.269	4.913	14.9	1.39	0.00	21.00	0.289	0.551
798.3	791.1	5.672	35.072	5.602	27.660	34.455	36.669	41.023	45.280	4.951	14.7	1.39	0.00	21.00	0.293	0.569
840.4	832.8	5.356	{35.062}	5.284	27.691	34.498	36.716	41.078	45.341	5.106	14.1	1.35	0.00	20.30	0.336	0.664
861.0	853.2	5.185	{35.057}	5.112	27.707	34.521	36.741	41.106	45.374							
860.1	852.3	5.190	35.054	5.117	27.705	34.518	36.738	41.103	45.371	5.302	13.9	1.33	0.00	19.90	0.344	0.672
861.0	853.2	5.186	35.052	5.113	27.703	34.517	36.737	41.103	45.370	5.292	13.9	1.33	0.00	19.90	0.349	0.669
862.1	854.3	5.183	35.051	5.110	27.703	34.517	36.737	41.102	45.370	5.291	13.8	1.34	0.00	19.70	0.343	0.675
865.9	858.1	5.163	{35.056}	5.090	27.709	34.523	36.744	41.110	45.378	5.303	13.9	1.33	0.00	19.90	0.388	0.669
862.9	855.1	5.148	35.052	5.075	27.708	34.523	36.743	41.110	45.378	5.316	13.7	1.33	0.00	19.80	0.340	0.657
871.6	863.7	5.122	{35.055}	5.049	27.714	34.529	36.750	41.117	45.386	5.328	13.7	1.33	0.00	19.90	0.341	0.658

ENDEAVOR 214 Station 10 90- 6-27 Lat: 33.007 Lon: -76.783 Sonic Depth: 614

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2	Phos umol/kg	NO2	NO3	F12	F11
1.6	1.6	26.909	{36.231	26.909	23.677	29.897	31.925	35.916	39.822}}	4.782	1.8	0.04	0.00	0.10	0.995	2.038
45.7	45.4	25.535	{36.373	25.525	24.220	30.464	32.500	36.507	40.428}}	3.629	4.0	0.47	0.08	7.90	0.840	1.671
96.1	95.4	19.085	36.429	19.068	26.098	32.479	34.559	38.651	42.656	3.324	6.1	0.82	0.02	13.60	0.638	1.212
139.5	138.5	16.000	{36.136	15.978	26.628	33.089	35.195	39.337	43.390}}	3.364	8.7	1.05	0.01	17.10	0.487	0.905
195.7	194.2	13.771	35.824	13.743	26.879	33.403	35.530	39.713	43.804	3.332	10.0	1.20	0.01	19.50	0.392	0.730
246.2	244.3	12.387	35.616	12.354	27.000	33.566	35.706	39.915	44.032	3.167	12.7	1.39	0.01	22.10	0.299	0.533
295.7	293.4	11.371	35.465	11.333	27.077	33.675	35.826	40.056	44.192	3.122	15.3	1.57	0.01	24.70	0.194	0.328
344.7	342.0	9.992	35.283	9.952	27.182	33.825	35.990	40.249	44.413	2.932	18.3	1.77	0.01	27.30	0.142	0.234
395.5	392.3	9.100	35.148	9.056	27.225	33.899	36.074	40.352	44.534	2.968	19.0	1.82	0.00	27.80	0.133	0.209
445.3	441.7	8.772	35.110	8.724	27.249	33.934	36.113	40.398	44.587	3.010	19.1	1.82	0.00	27.90	0.184	0.192
495.4	491.4	8.613	35.094	8.560	27.262	33.953	36.134	40.422	44.615	3.963	16.6	1.58	0.00	24.20		
545.3	540.8	7.286	35.094	7.232	27.460	34.197	36.392	40.709	44.929	4.244	15.8	1.53	0.00	23.00		
565.1	560.4	6.775	{35.095	6.722	27.533	34.287	36.488	40.816	45.048}}							

ENDEAVOR 214 Station 11 90- 6-27 Lat: 34.325 Lon: -75.687 Sonic Depth: 1149

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SI02	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C						ml/l	-----umol/kg	-----umol/kg	-----umol/kg	-----umol/kg	-----pm/kg	-----pm/kg
3.2	3.2	28.393	36.307	28.392	23.251	29.444	31.463	35.437	39.326	4.504	12.8	1.26	0.00	18.70	0.911	1.637
47.4	47.1	25.749	36.443	25.738	24.206	30.446	32.480	36.484	40.402	4.479	12.8	1.26	0.00	18.60		
46.5	46.2	25.760	{36.441}	25.750	24.201	30.441	32.475	36.478	{40.396}}		1.9	0.04	0.00	0.00		
47.0	46.7	25.750	{36.441}	25.740	24.205	30.444	32.479	36.482	{40.400}}		1.3	0.04	0.00	0.00		
47.5	47.2	25.750	{36.443}	25.739	24.206	30.445	32.480	36.483	{40.401}}							
47.7	47.4	25.735	36.440	25.724	24.208	30.448	32.483	36.486	40.405	4.486					0.933	1.752
198.5	196.9	18.652	36.571	18.617	26.322	32.712	34.795	38.894	42.904	3.533					0.834	1.569
248.3	246.4	17.604	36.422	17.562	26.471	32.888	34.980	39.096	43.122	3.578	1.0	0.03	0.00	0.00		
298.9	296.5	16.277	{36.191}	16.229	26.612	33.066	35.169	39.307	{43.356}}	3.286	3.2	0.45	0.00	8.20	0.639	1.206
341.1	338.4	14.646	{35.945}	14.595	26.791	33.290	35.409	39.576	{43.652}}	3.380	3.7	0.54	0.00	9.60		
396.3	393.1	13.138	35.729	13.082	26.942	33.486	35.619	39.814	43.917	3.746	5.5	0.78	0.00	13.30	0.535	1.040
447.0	443.3	12.175	35.588	12.115	27.024	33.598	35.741	39.955	44.076	3.338	7.0	0.94	0.00	15.40		
498.7	494.6	10.139	{35.300}	10.080	27.173	33.812	35.976	40.231	{44.393}}	3.092	7.5	0.99	0.00	16.00	0.234	0.416
548.2	543.6	6.863	35.092	6.811	27.518	34.269	36.469	40.795	45.025	4.332	9.7	1.22	0.00	19.80		
598.1	593.0	5.494	35.021	5.443	27.639	34.441	36.657	41.015	45.275	4.941	14.8	1.57	0.00	24.40	0.556	1.163
648.6	642.9	5.066	{35.012}	5.013	27.683	34.501	36.723	41.091	{45.361**}	5.246	14.8	1.48	0.02	22.40	0.621	1.280
699.0	692.8	4.858	{35.006}	4.801	27.703	34.529	36.753	41.126	{45.401**}	5.427	14.1	1.40	0.01	20.90	0.594	1.206
748.9	742.2	4.687	34.994	4.627	27.713	34.546	36.772	41.150	45.429	5.545	13.5	1.33	0.01	20.00	0.630	1.296
796.4	789.1	4.619	34.987	4.556	27.716	34.551	36.778	41.158	45.438	5.590	13.5	1.31	0.00	19.60	0.642	1.326
845.0	837.2	4.532	34.983	4.465	27.723	34.562	36.790	41.172	45.454	5.647	13.2	1.30	0.00	19.30	0.636	1.318
895.3	887.0	4.423	34.979	4.352	27.732	34.575	36.805	41.189	45.475	5.743	12.8	1.28	0.00	18.80		
947.7	938.8	4.407	34.991	4.332	27.744	34.588	36.818	41.202	45.488	5.758	12.8	1.28	0.00	18.70		
992.6	983.1	4.383	34.992	4.304	27.748	34.592	36.823	41.208	45.495	5.775	12.7	1.27	0.00	18.70		
1033.1	1023.1	4.380	34.987	4.298	27.744	34.589	36.820	41.205	45.492	5.783	12.9	1.27	0.00	18.80	0.589	1.223

ENDEAVOR 214 Station 12 90- 6-28 Lat: 34.139 Lon: -75.393 Sonic Depth: 2953

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
0.1	28.068	36.221	28.068	23.293	29.492	31.514	35.491	39.385	4.553	2.1	0.05	0.00	0.00	0.00	0.934	1.824
94.8	20.379	36.714	20.361	25.974	32.323	34.393	38.465	42.449	5.145	1.2	0.04	0.00	0.00	0.00	1.174	2.356
195.4	18.925	36.619	18.890	26.289	32.672	34.753	38.847	42.853	4.802	1.4	0.10	0.01	0.01	1.70	1.163	2.232
295.2	18.062	36.511	18.011	26.428	32.834	34.922	39.030	43.049	4.513	2.0	0.23	0.00	0.00	4.40	1.009	1.984
395.7	17.063	36.354	16.997	26.556	32.988	35.085	39.210	43.245	4.321	2.9	0.40	0.00	0.00	7.10	0.890	1.716
545.9	14.321	35.895	14.239	26.829	33.338	35.460	39.634	43.716	3.908	5.8	0.80	0.00	0.00	13.50	0.631	1.271
695.0	10.751	35.393	10.664	27.143	33.763	35.920	40.163	44.313	3.446	12.3	1.39	0.00	0.00	22.20	0.290	0.530
796.7	8.354	35.168	8.268	27.365	34.065	36.249	40.543	44.741	3.636	15.6	1.57	0.09	0.09	24.30	0.208	0.389
896.2	6.390	35.086	6.306	27.581	34.350	36.556	40.894	45.134	4.466	15.1	1.46	0.00	0.00	22.00	0.266	0.516
995.8	5.211	35.055	5.126	27.704	34.517	36.737	41.102	45.369	5.265	13.8	1.32	0.00	0.00	19.90	0.325	0.660
1096.1	4.639	35.020	4.549	27.743	34.578	36.805	41.184	45.465	5.640	13.2	1.27	0.00	0.00	19.00	0.415	0.834
1196.3	4.405	35.012	4.308	27.763	34.608	36.838	41.223	45.509	5.789	13.1	1.24	0.00	0.00	18.60	0.459	0.921
1296.2	4.168	34.975	4.064	27.760	34.614	36.848	41.239	45.531								
1396.8	4.052	34.983	3.941	27.779	34.638	36.873	41.267	45.563	5.982	13.3	1.23	0.00	0.00	18.30	0.471	0.950
1495.6	3.962	34.969	3.843	27.778	34.641	36.877	41.274	45.572	6.020	13.5	1.22	0.00	0.00	18.20	0.448	0.859
1596.2	3.892	34.969	3.764	27.786	34.652	36.889	41.288	45.588	6.040	13.8	1.22	0.00	0.00	18.20	0.385	0.736
1745.8	3.766	34.976	3.626	27.806	34.677	36.916	41.318	45.621	6.058	14.5	1.22	0.00	0.00	18.10	0.329	0.631
1897.6	3.749	34.981	3.595	27.813	34.685	36.925	41.328	45.631	6.021	15.2	1.23	0.00	0.00	18.20	0.165	0.301
2047.0	3.606	34.979	3.440	27.826	34.705	36.946	41.353	45.660	6.021	16.3	1.24	0.00	0.00	18.40	0.123	0.210
2246.3	3.370	34.967	3.188	27.841	34.730	36.975	41.388	45.701	6.055	17.7	1.22	0.00	0.00	18.20	0.125	0.214
2445.4	3.217	34.962	3.018	27.853	34.749	36.996	41.413	45.731	6.077	18.8	1.24	0.00	0.00	18.30	0.124	0.208
2645.6	2.885	34.945	2.673	27.871	34.781	37.032	41.459	45.785	6.173	19.4	1.21	0.00	0.00	17.90	0.212	0.403
2845.5	2.729	34.930	2.500	27.874	34.791	37.045	41.476	45.807	6.190	20.4	1.21	0.00	0.00	17.70	0.251	0.495
2963.7	2.564	34.921	2.326	27.882	34.806	37.062	41.498	45.833	6.197	22.1	1.22	0.00	0.00	17.70	0.294	0.557

ENDEAVOR 214 Station 13 90- 6-28 Lat: 33.936 Lon: -75.109 Sonic Depth: 3296

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C		--kg/m <sup>3</sup>	--kg/m <sup>3</sup>	--kg/m <sup>3</sup>	--kg/m <sup>3</sup>	ml/l	-----umol/kg	-----umol/kg	-----umol/kg	-----umol/kg	-----pm/kg	-----pm/kg
0.2	0.2	24.400	{36.586	24.400	24.724	30.989	33.031	37.050	40.983}}							
141.3	140.3	19.593	36.649	19.567	26.136	32.503	34.579	38.663	42.659	4.858	1.4	0.07	0.00	0.90	1.199	2.322
291.3	289.0	18.796	36.592	18.744	26.305	32.693	34.775	38.871	42.879	4.787	1.6	0.12	0.03	2.20		
444.5	440.8	17.678	36.442	17.601	26.477	32.893	34.985	39.099	43.125	4.498	2.4	0.28	0.00	5.30		
593.1	588.0	15.566	{36.096	15.472	26.712	33.187	35.297	39.448	43.509}}	4.054	4.5	0.63	0.00	10.80		
745.7	739.0	12.011	35.543	11.911	27.029	33.609	35.754	39.972	44.097	3.443	10.1	1.21	0.00	19.60		
943.3	934.5	7.675	35.122	7.577	27.433	34.157	36.348	40.657	44.870	3.850	15.5	1.53	0.00	23.80		
1045.4	1035.3	6.183	35.066	6.085	27.594	34.372	36.580	40.923	45.168	4.682	14.7	1.43	0.00	21.60	0.321	0.652
1196.3	1184.4	5.183	35.054	5.079	27.709	34.524	36.744	41.111	45.379	5.311	13.7	1.31	0.00	19.50	0.393	0.772
1346.3	1332.3	4.582	35.004	4.470	27.739	34.577	36.806	41.187	45.469	5.697	13.2	1.26	0.00	18.90	0.473	0.943
1441.6	1426.4	4.357	34.991	4.238	27.754	34.601	36.833	41.219	45.508	5.824	13.2	1.25	0.00	18.50	0.453	0.922
1545.5	1528.8	4.139	34.976	4.013	27.766	34.622	36.856	41.249	45.542	5.951	13.2	1.24	0.00	18.20	0.478	0.972
1646.5	1628.4	4.154	34.990	4.018	27.776	34.632	36.866	41.259	45.552	5.932	13.4	1.24	0.00	18.30	0.315	0.621
1796.3	1775.9	3.961	34.976	3.814	27.787	34.651	36.887	41.285	45.583	6.012	13.9	1.23	0.00	18.20	0.310	0.586
1996.7	1973.0	3.777	34.972	3.613	27.804	34.676	36.915	41.317	45.620	6.031	14.6	1.23	0.00	18.20		
2196.9	2169.8	3.618	34.973	3.437	27.822	34.701	36.942	41.349	45.656	6.062	16.0	1.24	0.00	18.30		
2396.4	2365.8	3.415	34.966	3.218	27.838	34.725	36.970	41.382	45.695	6.054	17.7	1.25	0.00	18.40	0.116	0.196
2597.5	2563.1	3.193	34.951	2.980	27.848	34.745	36.993	41.411	45.730	6.099	18.9	1.24	0.00	18.30		
2747.1	2709.8	3.011	34.949	2.786	27.864	34.769	37.019	41.443	45.766	6.130	19.6	1.24	0.00	18.20	0.144	0.261
2897.1	2856.8	2.833	34.951	2.596	27.882	34.795	37.048	41.476	45.804	6.169	20.3	1.23	0.00	17.90	0.173	0.333
3047.3	3003.8	2.627	34.925	2.379	27.880	34.803	37.058	41.492	45.826	6.211	21.2	1.22	0.00	17.80	0.239	0.451
3148.1	3102.5	2.462	34.914	2.208	27.886	34.815	37.073	41.512	45.850	6.171	22.9	1.23	0.00	17.90	0.271	0.530
3246.1	3198.4	2.347	34.909	2.085	27.892	34.826	37.086	41.528	45.869	6.213	24.7	1.23	0.00	17.90	0.319	0.603
3343.4	3293.5	2.302	34.905	2.031	27.893	34.830	37.090	41.533	45.876	6.187	25.7	1.26	0.00	17.90	0.322	0.602



ENDEAVOR 214 Station 14 90-6-28 Lat: 33.700 Lon: -74.819 Sonic Depth: 3750

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C		--kg/m**3			ml/l		umol/kg				pm/kg	
2.7	2.7	25.339	{36.255	25.338	24.188	30.437	32.474	36.483	40.407	4.749	1.4	0.04	0.00	0.00	1.126	2.135
144.1	143.0	19.376	{36.646	19.350	26.190	32.562	34.640	38.727	42.726	4.866	1.3	0.06	0.02	0.90	1.200	2.414
346.9	344.2	18.272	{36.531	18.211	26.394	32.794	34.881	38.986	43.002	4.620	1.7	0.19	0.00	3.80	1.078	2.065
498.1	494.0	17.084	{36.353	17.000	26.554	32.986	35.083	39.208	43.243	4.329	3.0	0.39	0.00	7.10	0.882	1.720
649.2	643.6	14.868	{35.979	14.768	26.779	33.274	35.391	39.554	43.628	4.086	4.9	0.69	0.00	11.90	0.737	1.456
797.0	789.8	11.808	35.509	11.702	27.042	33.629	35.776	39.998	44.128	3.478					0.384	0.762
996.7	987.2	7.664	{35.129	7.560	27.440	34.165	36.356	40.666	44.879	3.827	15.8	1.55	0.00	24.10	0.187	0.369
1196.9	1185.0	5.688	{35.079	5.579	27.669	34.465	36.679	41.033	45.290							
1302.2	1288.9	5.088	35.039	4.975	27.709	34.528	36.750	41.119	45.390	5.385	13.6	1.30	0.00	19.60	0.371	0.737
1397.5	1382.9	4.819	35.028	4.699	27.732	34.562	36.787	41.163	45.440	5.567	13.0	1.28	0.00	19.20	0.342	0.686
1496.9	1481.0	4.541	35.015	4.415	27.754	34.594	36.823	41.205	45.489	5.735	13.0	1.25	0.00	18.80	0.385	0.749
1698.8	1679.8	4.223	34.986	4.082	27.767	34.620	36.853	41.244	45.536	5.901	13.2	1.24	0.00	18.40	0.332	0.647
1897.1	1875.1	3.956	34.972	3.799	27.785	34.650	36.886	41.284	45.583	6.005	13.8	1.23	0.00	18.40	0.277	0.521
2097.8	2072.5	3.786	34.971	3.612	27.803	34.675	36.914	41.317	45.620	6.012	14.9	1.24	0.00	18.40	0.165	0.300
2295.5	2266.8	3.591	34.966	3.401	27.820	34.700	36.942	41.350	45.658	6.033	16.2	1.24	0.00	18.40	0.124	0.199
2498.5	2466.1	3.384	34.958	3.177	27.835	34.725	36.969	41.383	45.697	6.057	17.8	1.24	0.00	18.40	0.111	0.163
2697.0	2660.8	3.190	34.951	2.967	27.849	34.747	36.995	41.414	45.733	6.076	19.2	1.25	0.00	18.30	0.107	0.189
2898.1	2857.8	2.974	34.938	2.734	27.860	34.767	37.018	41.443	45.768	6.120	20.0	1.24	0.00	18.20	0.134	0.238
3048.6	3005.2	2.776	34.926	2.525	27.869	34.785	37.038	41.469	45.799	6.188	20.2	1.22	0.00	17.80	0.201	0.406
3198.9	3152.3	2.641	34.920	2.377	27.877	34.799	37.054	41.489	45.822	6.215	21.5	1.23	0.00	17.80		
3348.7	3298.7	2.487	34.916	2.211	27.887	34.816	37.074	41.513	45.851	6.233	22.3	1.22	0.00	17.90	0.240	0.490
3499.5	3446.1	2.326	34.904	2.038	27.892	34.828	37.088	41.532	45.874	6.218	25.2	1.27	0.00	18.00	0.266	0.535
3649.5	3592.6	2.237	34.898	1.935	27.895	34.836	37.097	41.544	45.889	6.220	29.0	1.34	0.00	18.50	0.233	0.452
3780.5	3720.4	2.163	{34.896	1.849	27.901	34.845	37.108	41.556	45.903	6.045	34.7	1.38	0.00	19.40	0.170	0.315

ENDEAVOR 214 Station 15 90- 6-28 Lat: 33.482 Lon: -74.513 Sonic Depth: 4180

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2	Phos	NO2	NO3	F12	F11
-----kg/m*3----- -----umol/kg----- -----pm/kg-----																
2.9	2.9	24.475	{36.388	24.474	24.552	30.816	32.859	36.878	40.811	4.815	1.2	0.02	0.00	0.00	1.068	2.164
146.4	145.3	19.399	36.653	19.372	26.190	32.562	34.639	38.726	42.724	4.916	1.2	0.03	0.06	0.70		
292.6	290.3	18.400	36.549	18.348	26.373	32.770	34.855	38.958	42.972	4.572	1.7	0.16	0.01	3.60		
496.5	492.4	17.074	36.358	16.990	26.560	32.993	35.090	39.214	43.250	4.411	2.6	0.35	0.00	6.90		
701.4	695.2	13.575	{35.779	13.473	26.900	33.433	35.562	39.750	43.846	3.810	6.8	0.91	0.00	15.50		
844.2	836.5	10.629	{35.388	10.524	27.164	33.788	35.947	40.193	44.345	3.483	11.8	1.33	0.00	21.50		
1049.1	1039.0	6.974	35.106	6.870	27.521	34.270	36.469	40.794	45.022	4.164	15.4	1.49	0.00	23.30	0.212	0.432
1244.9	1232.4	5.356	35.057	5.246	27.692	34.500	36.719	41.081	45.345	5.198	13.7	1.31	0.00	20.30	0.357	0.721
1353.4	1339.4	4.729	35.009	4.614	27.727	34.560	36.786	41.164	45.443	5.593	13.1	1.26	0.00	19.30	0.498	0.993
1456.3	1440.9	4.478	34.997	4.356	27.746	34.589	36.818	41.202	45.488	5.762	12.8	1.24	0.00	18.80	0.502	0.999
1600.3	1582.9	4.314	34.997	4.181	27.765	34.614	36.846	41.235	45.524	5.867	13.1	1.25	0.00	18.80	0.381	0.752
1794.5	1774.2	4.146	35.001	3.996	27.788	34.644	36.878	41.271	45.565	5.914	13.6	1.23	0.00	18.70	0.240	0.437
1991.0	1967.5	3.959	34.996	3.793	27.805	34.669	36.906	41.304	45.603	5.942	14.7	1.23	0.00	18.80		
2194.6	2167.7	3.734	34.986	3.551	27.821	34.695	36.935	41.339	45.644	5.989	16.0	1.23	0.00	18.70		
2395.2	2368.7	3.521	34.980	3.322	27.839	34.722	36.965	41.375	45.685	5.978	18.3	1.25	0.00	18.80		
2591.1	2556.9	3.289	34.960	3.074	27.846	34.740	36.986	41.402	45.718	6.067	18.3	1.23	0.00	18.60		
2791.1	2753.0	3.097	34.958	2.866	27.864	34.766	37.015	41.436	45.758	6.034	21.6	1.26	0.00	19.00		
2989.7	2947.6	2.882	34.940	2.635	27.870	34.782	37.034	41.461	45.788	6.114	21.7	1.25	0.00	18.60	0.108	0.201
3197.4	3150.9	2.649	34.926	2.385	27.881	34.803	37.058	41.492	45.825	6.173	22.4	1.23	0.00	18.30	0.157	0.306
3398.6	3347.6	2.466	34.910	2.185	27.885	34.815	37.073	41.512	45.851	6.188	24.3	1.24	0.00	18.30	0.175	0.347
3599.7	3544.1	2.337	34.908	2.038	27.895	34.831	37.091	41.535	45.877	6.193	26.5	1.25	0.00	18.50	0.194	0.365
3800.1	3739.6	2.268	34.901	1.949	27.897	34.837	37.098	41.544	45.888	6.156	29.5	1.27	0.00	18.80	0.171	0.334
4000.9	3935.4	2.213	34.894	1.873	27.897	34.840	37.103	41.550	45.897	6.095	32.7	1.31	0.00	19.40	0.159	0.295
4220.2	4149.1	2.182	34.887	1.817	27.896	34.841	37.105	41.554	45.902	5.990	37.5	1.38	0.00	20.00	0.143	0.257

ENDEAVOR 214 Station 16 90- 6-29 Lat: 33.250 Lon: -74.167 Sonic Depth: 4510

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SI02	Phos umol/kg	NO2	NO3	F12 pM/kg	F11
3.1	3.1	24.504	{36.203}	24.503	24.403	30.669	32.712	36.731	40.665	4.792	1.3	0.02	0.00	0.10	1.118	2.080
199.2	197.7	18.981	36.621	18.945	26.276	32.658	34.739	38.832	42.837	4.857	1.4	0.07	0.01	1.60	1.177	2.464
397.7	394.5	17.747	36.459	17.678	26.471	32.885	34.976	39.089	43.114	4.510	2.2	0.26	0.01	5.00	1.002	1.932
598.5	593.4	15.444	{36.074}	15.350	26.723	33.200	35.312	39.465	43.529	4.144	4.1	0.59	0.00	10.40	0.784	1.517
797.7	790.5	11.597	{35.504}	11.492	27.078	33.671	35.820	40.047	44.180	3.574	10.0	1.19	0.00	19.30	0.409	0.781
948.6	939.8	8.607	{35.179}	8.502	27.338	34.030	36.211	40.500	44.693	3.561	15.1	1.53	0.00	23.70	0.205	0.440
1152.1	1140.8	5.918	35.086	5.812	27.645	34.432	36.644	40.993	45.244	4.792	14.4	1.38	0.00	21.10	0.290	0.580
1297.8	1284.6	5.169	35.055	5.055	27.713	34.528	36.749	41.116	45.385	5.328	13.5	1.29	0.00	19.70	0.331	0.677
1398.7	1384.1	4.831	{35.036}	4.711	27.737	34.566	36.791	41.166	45.443	5.553	13.2	1.26	0.00	19.00	0.351	0.708
1497.6	1481.7	4.457	{35.000}	4.332	27.750	34.594	36.824	41.209	45.495	5.784	12.9	1.23	0.00	18.50	0.445	0.907
1648.1	1630.0	4.137	34.975	4.001	27.766	34.623	36.857	41.250	45.544	5.945	12.9	1.22	0.00	18.30	0.453	0.911
1847.0	1825.8	3.960	{34.974}	3.808	27.785	34.650	36.886	41.284	45.582	6.036	13.5	1.22	0.00	18.10	0.339	0.671
2098.7	2073.5	3.763	34.980	3.589	27.812	34.685	36.925	41.328	45.631	6.026	14.6	1.21	0.00	18.10	0.222	0.413
2347.4	2317.9	3.569	34.982	3.374	27.835	34.717	36.959	41.367	45.676	5.989	16.3	1.22	0.00	18.30	0.131	0.234
2598.8	2564.6	3.323	34.968	3.107	27.850	34.742	36.988	41.403	45.718	6.074	17.8	1.23	0.00	18.30	0.124	0.222
2849.5	2810.3	3.038	34.947	2.802	27.861	34.766	37.015	41.439	45.761	6.116	19.6	1.23	0.00	18.10	0.127	0.251
3099.6	3055.3	2.768	34.950	2.512	27.889	34.805	37.059	41.490	45.820	6.188	20.7	1.23	0.00	17.90	0.178	0.337
3299.9	3251.2	2.575	34.916	2.302	27.880	34.805	37.062	41.498	45.833	6.228	22.0	1.23	0.00	17.90	0.190	0.405
3500.5	3447.3	2.420	34.925	2.129	27.901	34.834	37.092	41.533	45.873	6.228	24.0	1.23	0.00	18.00	0.199	0.412
3700.1	3642.1	2.319	{34.907}	2.009	27.897	34.834	37.095	41.539	45.882	6.188	27.1	1.27	0.00	18.00	0.173	0.372
3899.7	3836.8	2.269	{34.903}	1.938	27.899	34.839	37.101	41.547	45.892	6.150	30.2	1.28	0.00	18.80	0.149	0.282
4099.2	4031.3	2.241	{34.898}	1.869	27.899	34.842	37.104	41.551	45.898	6.120	32.4	1.31	0.00	19.20	0.124	0.254
4350.7	4276.2	2.225	{34.895}	1.844	27.900	34.845	37.108	41.556	45.903	6.081	34.6	1.35	0.00	19.50	0.138	0.264
4595.6	4514.4	2.236	{34.894}	1.825	27.900	34.846	37.109	41.558	45.906	6.045	36.0	1.36	0.00	19.60	0.134	0.272

ENDEAVOR 214 Station 17 90- 6-29 Lat: 33.002 Lon: -73.786 Sonic Depth: 4823

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
6.0	5.9	24.375	(36.529	24.374	24.690	30.955	32.998	37.017	40.951	4.853	1.1	0.02	0.00	0.10	1.069	2.244
146.0	144.9	19.138	36.634	19.112	26.243	32.621	34.700	38.791	42.794	4.849	1.3	0.05	0.02	1.40	1.185	2.408
347.2	344.5	17.973	36.489	17.913	26.436	32.844	34.933	39.043	43.063	4.612	1.9	0.22	0.00	4.50	0.995	1.974
548.2	543.6	16.170	(36.196	16.081	26.650	33.108	35.212	39.353	43.404	3.960	3.4	0.52	0.00	9.30	0.793	1.537
747.3	740.7	12.729	35.651	12.625	26.973	33.531	35.669	39.873	43.985	3.810	8.2	1.05	0.00	17.40	0.508	0.962
895.7	887.5	9.405	35.245	9.301	27.261	33.926	36.098	40.370	44.547	3.688	14.2	1.52	0.00	24.00	0.228	0.437
1097.0	1086.4	6.404	35.093	6.299	27.587	34.357	36.563	40.901	45.141	4.532	14.8	1.43	0.00	21.90	0.251	0.512
1244.7	1232.2	5.392	35.064	5.281	27.693	34.500	36.718	41.079	45.343	5.195	13.8	1.32	0.00	20.20	0.323	0.625
1345.2	1331.4	5.019	35.049	4.902	27.726	34.547	36.770	41.140	45.413	5.458	13.2	1.28	0.00	19.50	0.347	0.706
1446.7	1431.5	4.696	35.030	4.573	27.748	34.582	36.809	41.188	45.468	5.676	12.9	1.25	0.00	18.90	0.373	0.753
1594.9	1577.6	4.445	35.021	4.311	27.770	34.614	36.844	41.229	45.515	5.826	13.0	1.23	0.00	18.80	0.263	0.513
1747.4	1727.8	4.195	35.004	4.049	27.784	34.639	36.872	41.264	45.556	5.959	13.1	1.22	0.00	18.70	0.262	0.498
1996.4	1972.9	3.942	34.990	3.776	27.802	34.667	36.904	41.302	45.601	6.002	14.4	1.22	0.00	18.60	0.177	0.340
2296.7	2268.1	3.679	34.990	3.487	27.831	34.707	36.948	41.354	45.660	5.997	16.9	1.24	0.00	18.60	0.066	0.101
2597.1	2562.9	3.383	34.972	3.166	27.847	34.737	36.982	41.396	45.709	6.040	19.2	1.26	0.00	18.70	0.049	0.066
2898.4	2858.3	3.112	34.973	2.869	27.876	34.777	37.026	41.447	45.768	6.077	21.1	1.27	0.00	18.80	0.056	0.069
3146.7	3101.4	2.854	(34.939	2.591	27.873	34.787	37.039	41.468	45.796	6.157	21.1	1.22	0.00	18.30	0.114	0.221
3398.4	3347.6	2.614	34.929	2.330	27.888	34.812	37.068	41.503	45.838	6.167	22.6	1.22	0.00	17.90	0.141	0.296
3648.8	3592.1	2.437	34.913	2.130	27.892	34.824	37.093	41.524	45.864	6.237	24.5	1.23	0.00	18.20	0.180	0.351
3898.3	3835.5	2.334	34.899	2.002	27.891	34.829	37.089	41.534	45.877	6.194	27.7	1.27	0.00	18.40	0.154	0.283
4098.2	4030.4	2.285	34.911	1.931	27.906	34.847	37.108	41.554	45.899	6.104	30.8	1.30	0.00	19.00	0.117	0.224
4347.3	4273.0	2.257	34.894	1.875	27.897	34.840	37.102	41.550	45.897	6.124	32.9	1.31	0.00	19.20	0.138	0.270
4535.9	4456.5	2.250	34.892	1.846	27.897	34.842	37.105	41.553	45.900	6.096	34.4	1.34	0.00	19.40	0.139	0.261
4887.2	4797.8	2.246	34.887	1.799	27.897	34.844	37.107	41.557	45.905	6.013	39.0	1.40	0.00	20.20	0.113	0.185

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ENDEAVOR 214 Station 18 90-6-29 Lat: 34.652 Lon: -72.868 Sonic Depth: 4494

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C	kg/m*3	kg/m*3	kg/m*3	kg/m*3	kg/m*3	ml/l	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg
3.0	3.0	25.905	36.378	25.904	24.105	30.342	32.376	36.378	40.294	4.717	1.5	0.02	0.00	0.10	1.048	1.890
249.2	247.3	19.442	36.654	19.396	26.184	32.556	34.633	38.719	42.717	4.930	1.3	0.03	0.01	0.80	1.196	2.346
498.7	494.6	18.094	36.502	18.007	26.422	32.828	34.916	39.025	43.044	4.476	1.9	0.23	0.01	4.50	0.997	1.938
748.4	741.6	14.765	35.996	14.650	26.818	33.315	35.433	39.599	43.674	3.644	5.3	0.76	0.00	13.10	0.611	1.184
948.6	939.7	10.595	35.363	10.476	27.153	33.779	35.938	40.186	44.339	3.438	12.9	1.40	0.00	22.80	0.277	0.530
1099.0	1088.2	7.574	35.114	7.460	27.444	34.172	36.364	40.676	44.892	3.848	15.5	1.54	0.00	23.90	0.235	0.468
1248.2	1235.5	5.809	35.074	5.694	27.650	34.442	36.655	41.007	45.261	4.885	14.4	1.36	0.00	20.90	0.313	0.637
1348.7	1334.6	5.121	35.035	5.003	27.703	34.521	36.742	41.111	45.381	5.342	13.7	1.29	0.00	19.90	0.407	0.839
1448.1	1432.7	4.756	35.009	4.632	27.725	34.557	36.783	41.160	45.439	5.590	13.2	1.25	0.00	19.30	0.501	1.002
1548.4	1531.5	4.559	34.999	4.428	27.740	34.580	36.808	41.191	45.474	5.730	12.9	1.24	0.00	18.90	0.463	0.940
1648.8	1630.5	4.345	35.007	4.207	27.770	34.618	36.850	41.238	45.526	5.870	12.9	1.23	0.00	18.70	0.443	0.931
1849.0	1827.6	4.061	{34.975}	3.907	27.776	34.636	36.872	41.267	45.563}}		13.0	1.19	0.00	18.40	0.400	0.814
2099.1	2073.6	3.855	34.969	3.680	27.795	34.664	36.902	41.303	45.605}}	6.061	13.8	1.20	0.00	18.30	0.286	0.547
2348.1	2318.3	3.700	34.978	3.503	27.820	34.696	36.936	41.342	45.647}}	6.049	15.1	1.23	0.00	18.30	0.167	0.299
2649.3	2613.7	3.443	34.975	3.220	27.845	34.732	36.976	41.389	45.701}}	6.066	17.3	1.24	0.00	18.30	0.111	0.190
2899.6	2859.1	3.185	{34.955}	2.941	27.855	34.754	37.002	41.421	45.741}}	6.097	19.3	1.23	0.00	18.30	0.099	0.168
3100.8	3056.1	2.978	{34.945}	2.717	27.867	34.776	37.026	41.452	45.777}}	6.104	20.8	1.23	0.00	18.40	0.108	0.206
3299.4	3250.3	2.774	{34.935}	2.496	27.878	34.795	37.049	41.480	45.811}}	6.175	21.3	1.23	0.00	18.30	0.152	0.304
3500.0	3446.4	2.578	34.934	2.283	27.896	34.822	37.078	41.515	45.851}}	6.222	22.3	1.21	0.00	18.10	0.188	0.387
3700.8	3642.4	2.448	{34.915}	2.135	27.893	34.825	37.084	41.524	45.864}}	6.191	25.0	1.23	0.00	18.40	0.157	0.319
3901.1	3837.7	2.336	34.910	2.003	27.899	34.837	37.098	41.524	45.885}}	6.193	27.3	1.26	0.00	18.60	0.184	0.367
4100.0	4031.6	2.281	34.905	1.927	27.901	34.842	37.104	41.550	45.895}}	6.145	29.9	1.27	0.00	18.80	0.164	0.351
4301.9	4228.2	2.254	34.901	1.878	27.902	34.845	37.108	41.555	45.901}}	6.116	32.9	1.31	0.00	19.30	0.157	0.274
4554.8	4474.2	2.225	34.894	1.820	27.901	34.847	37.110	41.559	45.907}}	6.032	36.7	1.36	0.00	19.90	0.139	0.272

ENDEAVOR 214 Station 19 90- 6-30 Lat: 34.875 Lon: -73.121 Sonic Depth: 4295

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SI02	Phos umol/kg	NO2	NO3	F12	F11
0.6	0.6	25.226	36.490	25.226	24.400	30.649	32.687	36.696	40.620	4.759	1.5	0.02	0.00	0.10		
196.2	194.7	19.534	36.635	19.498	26.143	32.512	34.589	38.674	42.671	4.953	1.1	0.03	0.02	0.90		
395.9	392.7	18.665	{36.585	18.594	26.338	32.729	34.812	38.911	42.921	4.826	1.4	0.12	0.01	2.50		
597.1	591.9	17.261	36.381	17.159	26.537	32.965	35.061	39.183	43.215	4.461	2.4	0.33	0.00	6.40		
743.8	737.1	15.201	{36.034	15.085	26.751	33.237	35.351	39.509	43.576	4.033	4.6	0.68	0.00	11.70		
895.5	887.2	11.948	{35.542	11.828	27.044	33.627	35.772	39.992	44.119	3.518	9.8	1.19	0.00	19.60		
1045.9	1035.7	8.677	35.183	8.560	27.332	34.022	36.202	40.490	44.682	3.505	15.4	1.57	0.00	24.60	0.199	0.410
1195.1	1183.1	6.213	35.069	6.100	27.595	34.372	36.580	40.922	45.167	4.643	14.6	1.42	0.00	21.90	0.325	0.655
1297.5	1284.2	5.433	{35.049	5.317	27.677	34.483	36.701	41.061	45.324	5.127	13.6	1.32	0.00	20.20	0.401	0.815
1396.9	1382.2	4.904	35.020	4.783	27.716	34.543	36.767	41.141	45.416	5.513	13.1	1.28	0.00	19.60	0.467	0.955
1496.7	1480.6	4.639	35.025	4.512	27.751	34.588	36.815	41.195	45.477	5.703	13.0	1.26	0.00	19.10	0.475	0.923
1596.2	1578.6	4.467	35.001	4.332	27.752	34.595	36.825	41.210	45.496	5.813	12.8	1.23	0.00	18.90	0.441	0.891
1797.6	1777.0	4.101	34.990	3.952	27.783	34.642	36.877	41.271	45.566	6.018	12.8	1.21	0.00	18.50	0.429	0.885
1997.2	1973.4	3.944	34.979	3.778	27.793	34.658	36.895	41.294	45.593	6.072	13.2	1.20	0.00	18.40		
2247.5	2219.4	3.784	34.969	3.595	27.803	34.676	36.915	41.318	45.622	6.047	14.5	1.21	0.00	18.40		
2496.5	2463.8	3.607	34.975	3.396	27.828	34.708	36.950	41.358	45.666	6.064	16.1	1.21	0.00	18.40		
2746.2	2708.7	3.392	34.983	3.159	27.857	34.747	36.992	41.405	45.719	6.051	18.9	1.24	0.00	18.60		
2996.9	2954.3	3.129	34.968	2.876	27.871	34.773	37.021	41.442	45.763	6.124	19.1	1.23	0.00	18.20	0.121	0.226
3198.1	3151.2	2.924	34.941	2.654	27.869	34.780	37.032	41.459	45.786	6.097	20.5	1.22	0.00	18.30	0.117	0.230
3397.8	3346.4	2.728	34.936	2.441	27.884	34.803	37.058	41.490	45.822	6.219	20.8	1.21	0.00	18.00	0.171	0.337
3597.5	3541.5	2.522	34.917	2.218	27.887	34.816	37.074	41.512	45.850	6.254	21.9	1.20	0.00	17.80	0.243	0.504
3898.8	3835.4	2.338	34.907	2.006	27.897	34.835	37.095	41.539	45.882	6.275	24.3	1.21	0.00	17.80	0.290	0.626
4247.7	4175.4	2.224	34.907	1.855	27.909	34.853	37.115	41.563	45.910	6.114	32.5	1.31	0.00	19.10	0.184	0.383
4364.9	4289.5	2.219	34.887	1.836	27.894	34.839	37.102	41.551	45.898	6.075	34.7	1.34	0.00	19.40	0.340	

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03

ENDEAVOR 214 Station 20 90- 6-30 Lat: 35.040 Lon: -73.394 Sonic Depth: 4014

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C		-kg/m**3	-kg/m**3			ml/l	umol/kg	umol/kg			pm/kg	
0.7	0.7	24.715	{36.516	24.715	24.576	30.835	32.875	36.891	40.821	4.811	1.2	0.02	0.00	0.10	1.101	2.108
196.5	195.0	19.234	36.652	19.198	26.234	32.610	34.689	38.778	42.779	4.956	1.2	0.03	0.01	1.10	1.208	2.458
394.2	391.0	18.568	{36.569	18.498	26.350	32.744	34.828	38.928	42.940	4.740	1.4	0.14	0.00	3.00	1.132	2.100
596.7	591.5	17.011	{36.339	16.911	26.565	32.999	35.097	39.223	43.260	4.415	2.6	0.37	0.00	7.00	0.907	1.754
796.8	789.5	13.475	35.757	13.360	26.907	33.443	35.573	39.763	43.861	3.718	7.0	0.95	0.00	15.90	0.542	1.002
944.2	935.3	10.208	35.324	10.092	27.190	33.828	35.992	40.247	44.408	3.331	12.7	1.43	0.00	22.80	0.271	0.581
1095.1	1084.3	7.616	35.122	7.502	27.444	34.170	36.363	40.673	44.888	3.869	15.4	1.54	0.00	23.80	0.204	0.389
1246.8	1234.1	5.670	{35.065	5.557	27.660	34.457	36.672	41.027	45.284	4.968					0.314	0.616
1346.9	1332.8	5.017	35.039	4.900	27.718	34.540	36.763	41.133	45.405	5.457	13.2	1.27	0.00	19.40	0.382	0.836
1444.2	1428.8	4.852	35.039	4.727	27.738	34.566	36.791	41.166	45.442	5.594	13.0	1.25	0.00	19.20	0.356	0.703
1549.1	1532.2	4.637	35.029	4.505	27.755	34.592	36.819	41.200	45.481	5.725	13.1	1.24	0.00	18.90	0.349	0.670
1697.5	1678.4	4.357	35.012	4.214	27.773	34.621	36.853	41.240	45.529	5.868	12.9	1.22	0.00	18.60	0.321	0.624
1746.2	1726.4	4.287	35.005	4.140	27.775	34.627	36.859	41.248	45.538	5.908	13.0	1.22	0.00	18.50	0.317	0.590
1945.4	1922.4	3.911	34.991	3.750	27.805	34.671	36.909	41.308	45.607	6.002	14.5	1.22	0.00	18.40	0.175	0.308
2147.0	2120.7	3.744	35.003	3.566	27.833	34.707	36.946	41.350	45.654		15.9	1.23	0.00	18.60	0.218	0.352
2398.4	2367.5	3.524	34.975	3.325	27.835	34.718	36.961	41.370	45.680	6.053	17.3	1.23	0.00	18.50	0.078	0.129
2653.3	2617.6	3.287	34.964	3.066	27.850	34.744	36.990	41.407	45.723	6.105	18.3	1.22	0.00	18.30	0.107	0.181
2900.1	2859.5	3.037	34.946	2.796	27.861	34.766	37.016	41.439	45.762	6.136	20.0	1.22	0.00	18.40	0.103	0.206
3097.4	3052.6	2.850	34.932	2.592	27.868	34.781	37.034	41.462	45.790	6.186	21.0	1.22	0.00	18.20	0.141	0.240
3296.8	3247.7	2.630	{34.929	2.356	27.885	34.808	37.064	41.499	45.833	6.244	21.3	1.22	0.00	17.80	0.172	0.356
3498.8	3445.1	2.400	34.917	2.110	27.896	34.830	37.089	41.530	45.870	6.280	22.6	1.22	0.00	17.70	0.282	0.567
3697.4	3638.9	2.262	34.900	1.954	27.895	34.835	37.096	41.542	45.887	6.233	26.6	1.26	0.00	18.30	0.257	0.497
3898.1	3834.7	2.192	34.893	1.864	27.897	34.841	37.103	41.551	45.898	6.143	31.9	1.31	0.00	19.10	0.184	0.362
4026.5	3959.8	2.178	34.899	1.836	27.904	34.849	37.112	41.560	45.908		34.4	1.35	0.00	19.40	0.177	0.335

ENDEAVOR 214 Station 21 90- 6-30 Lat: 39.397 Lon: -72.071 Sonic Depth: 3653

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11 pm/kg
3.7	3.6	26.124	36.333	26.123	24.003	30.236	32.269	36.268	40.182	4.683	1.7	0.03	0.00	0.10	1.023	1.939
201.3	199.7	19.019	36.619	18.983	26.265	32.646	34.726	38.819	42.823	4.826	1.5	0.07	0.01	1.60		
400.9	397.5	18.022	36.505	17.952	26.438	32.845	34.934	39.043	43.063	4.562	2.0	0.20	0.00	4.20		
598.9	593.5	16.000	36.203	15.903	26.697	33.158	35.265	39.408	43.462	4.246	3.6	0.50	0.00	9.00		
747.6	740.5	13.549	35.771	13.441	26.901	33.434	35.564	39.752	43.849	3.753	7.0	0.94	0.00	15.70		
898.5	889.8	9.944	35.297	9.836	27.212	33.860	36.026	40.286	44.452	3.377	13.5	1.47	0.00	23.40		
1046.5	1035.9	7.217	35.107	7.111	27.488	34.228	36.425	40.744	44.967	4.105	15.1	1.49	0.00	23.20		
1198.2	1185.7	5.698	35.070	5.589	27.660	34.456	36.670	41.024	45.281	4.973	14.1	1.37	0.00	21.00	0.274	0.534
1299.1	1285.2	4.882	35.035	4.771	27.730	34.556	36.781	41.154	45.430	5.524	13.2	1.27	0.00	19.40	0.378	0.706
1398.6	1383.3	4.553	{35.015	4.436	27.751	34.591	36.819	41.201	45.485}}	5.736	12.9	1.24	0.00	19.00	0.391	0.770
1497.0	1480.3	4.400	35.008	4.275	27.763	34.609	36.840	41.226	45.513	5.846	12.8	1.24	0.00	18.80	0.376	0.765
1598.5	1580.3	4.287	35.007	4.154	27.776	34.626	36.858	41.247	45.537	5.900	12.9	1.23	0.00	18.70	0.323	0.642
1699.7	1679.9	4.152	{34.996	4.011	27.782	34.638	36.872	41.265	45.558}}							
1848.9	1826.7	4.022	34.992	3.869	27.794	34.655	36.891	41.287	45.584	5.954	13.8	1.22	0.00	18.60	0.229	0.411
1999.4	1974.8	3.868	34.987	3.702	27.807	34.675	36.913	41.313	45.614	6.025	14.5	1.22	0.00	18.50	0.175	0.309
2198.2	2170.1	3.672	34.975	3.490	27.818	34.695	36.936	41.341	45.647	6.064	15.5	1.22	0.00	18.50		
2398.0	2366.2	3.503	34.977	3.304	27.838	34.722	36.965	41.376	45.686	6.067	16.7	1.24	0.00	18.40		
2600.8	2565.1	3.269	34.957	3.054	27.846	34.740	36.987	41.403	45.720	6.100	18.0	1.22	0.00	18.40		
2798.7	2759.1	2.985	34.942	2.755	27.861	34.768	37.018	41.443	45.767	6.172	19.1	1.21	0.00	18.20		
2998.4	2954.6	2.797	34.930	2.551	27.870	34.785	37.038	41.468	45.797	6.223	19.6	1.21	0.00	17.90	0.205	0.409
3200.1	3151.9	2.515	34.917	2.254	27.885	34.812	37.069	41.507	45.843	6.274	21.1	1.20	0.00	17.70	0.278	0.552
3400.3	3347.5	2.305	34.907	2.028	27.895	34.832	37.092	41.536	45.878	6.274	24.0	1.21	0.00	18.00	0.292	0.598
3602.6	3545.1	2.222	34.900	1.925	27.898	34.839	37.100	41.547	45.892	6.216	27.6	1.26	0.00	18.50	0.266	0.544
3708.2	3648.1	2.200	34.904	1.893	27.903	34.846	37.108	41.555	45.901	6.200	30.0	1.29	0.00	18.90	0.247	0.466

OR



ENDEAVOR 214 Station 22 90- 6-30 Lat: 35.339 Lon: -73.816 Sonic Depth: 3330

PR, dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SI02 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
2.4	2.4	28.291	36.245	28.290	23.238	29.433	31.453	35.428	39.319	4.534	2.0	0.02	0.00	0.10	0.952	1.699
148.0	146.9	19.468	36.648	19.441	26.168	32.538	34.615	38.701	42.699	4.855	1.4	0.04	0.03	1.10	1.189	2.367
349.4	346.6	18.106	36.505	18.045	26.415	32.820	34.908	39.015	43.034	4.530	1.9	0.21	0.00	4.40	1.036	1.981
498.2	494.0	16.649	36.290	16.567	26.609	33.053	35.153	39.285	43.328	4.251	3.2	0.44	0.00	8.20	0.834	1.647
647.8	642.1	13.884	35.830	13.789	26.874	33.397	35.523	39.705	43.796	3.860	6.3	0.85	0.00	14.50	0.607	1.178
797.6	790.3	10.719	{35.380	10.619	27.140	33.762	35.920	40.164	{44.314}}	3.342	12.3	1.38	0.00	22.30	0.307	0.591
950.4	941.4	7.426	35.113	7.329	27.462	34.194	36.388	40.703	44.921	3.945	15.6	1.52	0.00	23.90	0.234	0.469
1099.7	1088.8	4.997	35.041	4.904	27.719	34.541	36.763	41.134	45.406	5.430	13.4	1.27	0.00	19.80	0.368	0.740
1246.2	1233.5	4.598	35.022	4.495	27.750	34.588	36.816	41.196	45.478	5.693	13.0	1.23	0.00	19.00	0.388	0.769
1347.3	1333.2	4.393	35.008	4.282	27.763	34.608	36.839	41.224	45.511	5.823	13.1	1.22	0.00	18.80		
1450.7	1435.2	4.142	34.976	4.025	27.765	34.621	36.854	41.247	45.540	5.956	12.9	1.22	0.00	18.50	0.450	0.912
1551.0	1534.0	4.058	34.970	3.932	27.770	34.629	36.864	41.259	45.554	6.028	13.0	1.20	0.00	18.50	0.418	0.881
1649.1	1630.7	3.914	34.965	3.781	27.781	34.647	36.884	41.282	45.581	6.059	13.5	1.20	0.00	18.30	0.399	0.787
1749.1	1729.2	3.868	34.982	3.726	27.800	34.668	36.905	41.305	45.605	6.058	13.7	1.22	0.00	18.40	0.299	0.544
1899.4	1877.1	3.772	34.973	3.617	27.804	34.676	36.915	41.317	45.620	6.050	14.7	1.22	0.00	18.50	0.231	0.425
2100.3	2074.7	3.627	34.987	3.455	27.831	34.709	36.951	41.357	45.664	6.046	15.9	1.22	0.00	18.50		
2299.7	2270.6	3.406	34.974	3.218	27.844	34.732	36.976	41.388	45.701	6.061	17.3	1.23	0.00	18.40	0.156	0.267
2499.3	2466.5	3.152	34.949	2.949	27.849	34.748	36.996	41.415	45.734	6.124	18.0	1.22	0.00	18.20	0.175	0.329
2697.6	2661.0	2.952	34.942	2.733	27.863	34.771	37.021	41.446	45.771	6.160	19.3	1.21	0.00	18.10	0.173	0.331
2897.7	2857.1	2.730	34.926	2.496	27.871	34.789	37.042	41.474	45.804	6.206	20.1	1.22	0.00	17.90	0.222	0.429
3093.9	3049.1	2.453	34.916	2.205	27.888	34.817	37.075	41.514	45.852	6.250	22.1	1.20	0.00	17.90	0.264	0.544
3198.6	3151.6	2.339	34.911	2.082	27.894	34.828	37.088	41.530	45.871	6.260	22.8	1.19	0.00	17.80	0.317	0.652
3299.8	3250.5	2.275	34.908	2.009	27.897	34.835	37.095	41.539	45.882	6.250	24.6	1.21	0.00	18.00	0.323	0.649
3400.3	3348.7	2.244	34.907	1.969	27.900	34.839	37.100	41.545	45.889	6.216	26.8	1.24	0.00	18.20	0.300	0.598

ENDEAVOR 214 Station 23 90-7-1 Lat: 35.527 Lon: -73.984 Sonic Depth: 3026

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
0.1	0.1	28.561	{36.323	28.561	23.207	29.397	31.415	35.387	39.275}	4.529	1.9	0.05	0.00	0.10	0.921	1.744
147.1	146.0	19.228	36.627	19.201	26.214	32.590	34.659	38.759	42.760	4.499	1.5	0.11	0.01	2.50		
296.2	293.8	17.652	36.444	17.601	26.478	32.894	34.986	39.101	43.127	4.524	2.1	0.28	0.00	5.20		
420.8	417.3	15.406	{36.078	15.340	26.728	33.206	35.318	39.471	43.535}	3.777	4.8	0.70	0.00	12.10		
545.6	540.9	13.766	{35.808	13.687	26.878	33.404	35.531	39.715	43.808}	3.388	7.6	1.01	0.00	16.90		
670.9	664.9	10.598	35.367	10.515	27.149	33.774	35.933	40.179	44.332	3.337	12.4	1.41	0.00	22.30		
796.0	788.7	5.619	35.030	5.549	27.633	34.431	36.646	41.001	45.259	4.927	14.1	1.37	0.00	20.80		
895.7	887.3	5.102	{35.026	5.027	27.693	34.510	36.731	41.099	45.369}	5.293	13.4	1.30	0.00	19.70	0.479	0.985
995.7	986.1	4.967	**35.024	4.883	27.708	34.531	36.754	41.125	45.398**	5.446	13.3	1.28	0.00	19.50		
1097.1	1086.2	4.703	**35.005	4.612	27.724	34.557	36.783	41.161	45.440**	5.625	13.1	1.26	0.00	19.10	0.364	0.731
1195.9	1183.8	4.404	{35.003	4.307	27.756	34.601	36.831	41.216	45.502}	5.804	12.8	1.24	0.00	18.60		
1296.0	1282.6	4.206	{34.984	4.102	27.762	34.615	36.848	41.239	45.530}	5.909	12.8	1.22	0.00	18.40	0.445	0.907
1396.2	1381.4	4.119	{34.982	4.007	27.771	34.628	36.862	41.255	45.548}							
1496.5	1480.3	4.009	34.979	3.889	27.781	34.642	36.878	41.274	45.570	6.008	13.3	1.21	0.00	18.40	0.364	0.707
1596.5	1578.8	3.961	34.986	3.832	27.793	34.656	36.892	41.289	45.587	5.997	13.6	1.22	0.00	18.50	0.270	0.527
1696.7	1677.5	3.870	34.995	3.733	27.810	34.677	36.915	41.314	45.614	6.034	13.9	1.22	0.00	18.30	0.252	0.476
1846.8	1825.3	3.742	{34.975	3.593	27.808	34.681	36.920	41.323	45.626}	6.022	14.7	1.22	0.00	18.20	0.216	0.405
2045.8	2021.1	3.533	34.964	3.368	27.822	34.703	36.946	41.354	45.663	6.080	15.5	1.21	0.00	18.10	0.204	0.400
2246.4	2218.2	3.349	{34.965	3.168	27.841	34.731	36.976	41.390	45.703}	6.081	17.4	1.23	0.00	18.00	0.164	0.299
2446.9	2415.1	3.159	34.966	2.961	27.862	34.760	37.007	41.426	45.745	6.107	18.3	1.22	0.00	17.90	0.195	0.368
2597.2	2562.5	2.965	34.954	2.756	27.871	34.777	37.027	41.452	45.776	6.151	18.6	1.21	0.00	17.70	0.223	0.432
2747.9	2710.2	2.769	34.938	2.549	27.876	34.791	37.044	41.474	45.803	6.232	19.7	1.20	0.00	17.70	0.264	0.529
2895.5	2854.8	2.615	34.929	2.383	27.883	34.805	37.061	41.495	45.828	6.220	20.5	1.21	0.00	17.70	0.264	0.529
3031.7	2988.1	2.428	34.927	2.186	27.898	34.828	37.086	41.525	45.864	6.226	22.3	1.20	0.00	17.70	0.318	0.639

ENDEAVOR 214 Station 24 90-7-1 Lat: 35.642 Lon: -74.183 Sonic Depth: 2644

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
1.2	1.2	27.331	{36.229}	27.331	23.539	29.751	31.777	35.763	39.664	4.575	1.6	0.03	0.00	0.20	0.981	2.118
72.0	71.5	21.844	36.483	21.830	25.395	31.713	33.773	37.826	41.792	4.264	2.2	0.16	0.54	2.30	0.954	1.972
144.6	143.5	17.687	36.443	17.662	26.462	32.877	34.968	39.082	43.107	3.781	3.2	0.46	0.02	8.40	0.817	1.559
245.0	243.1	14.742	{35.964}	14.705	26.782	33.278	35.395	39.560	43.635	3.426	6.5	0.88	0.01	15.10	0.561	1.065
344.0	341.3	13.116	{35.704}	13.068	26.926	33.470	35.604	39.799	43.903	3.238	8.9	1.14	0.00	18.90	0.410	0.765
445.9	442.2	11.476	35.471	11.419	27.066	33.662	35.811	40.039	44.174		11.8	1.37	0.00	22.10	0.296	0.593
543.1	538.5	6.687	35.031	6.636	27.494	34.252	36.454	40.784	45.018	4.177	14.9	1.51	0.00	23.10	0.466	0.950
645.1	639.4	5.631	{35.000}	5.575	27.607	34.403	36.618	40.973	45.231	4.864	14.0	1.39	0.00	21.20	0.553	1.155
746.0	739.2	5.175	35.011	5.113	27.671	34.485	36.705	41.071	45.339	5.201	13.4	1.32	0.00	20.10		
844.3	836.5	4.833	35.029	4.764	27.726	34.553	36.777	41.151	45.427	5.490	12.9	1.28	0.00	19.40	0.513	1.039
945.4	936.4	4.552	34.997	4.476	27.733	34.571	36.799	41.180	45.463	5.694	12.8	1.26	0.00	18.90	0.518	1.062
1041.1	1030.9	4.298	{34.973}	4.216	27.742	34.591	36.822	41.210	45.499	5.860	12.5	1.23	0.00	18.60	0.612	#1.284
1144.3	1132.8	4.250	{34.980}	4.159	27.754	34.604	36.836	41.225	45.515							
1245.7	1233.0	4.098	34.967	4.000	27.760	34.617	36.851	41.244	45.538	5.988	12.6	1.22	0.00	18.40	0.516	1.077
1351.4	1337.2	3.979	34.960	3.872	27.768	34.630	36.866	41.262	45.559	6.045	12.8	1.21	0.00	18.20	0.521	1.062
1447.2	1431.7	3.924	34.958	3.809	27.773	34.637	36.874	41.272	45.570	6.066	12.9	1.20	0.00	18.30	0.485	0.986
1545.9	1528.9	3.912	34.967	3.789	27.782	34.647	36.884	41.282	45.581	6.063	13.1	1.21	0.00	18.30	0.383	0.762
1696.0	1676.8	3.795	34.963	3.659	27.792	34.662	36.901	41.302	45.604	6.088	13.6	1.21	0.00	17.90	0.329	0.696
1849.2	1827.6	3.686	34.959	3.537	27.801	34.676	36.916	41.321	45.626	6.095	14.4	1.20	0.00	18.00	0.300	0.571
2032.7	2008.2	3.584	34.965	3.420	27.817	34.697	36.939	41.346	45.654	6.066	15.6	1.21	0.00	18.20	0.220	0.400
2248.0	2219.8	3.379	34.959	3.197	27.834	34.723	36.967	41.380	45.693	6.084	16.9	1.22	0.00	18.00	0.183	0.341
2396.8	2365.8	3.234	34.953	3.040	27.844	34.739	36.986	41.403	45.720	6.103	17.7	1.21	0.00	17.90	0.180	0.326
2547.0	2513.3	3.092	34.947	2.886	27.853	34.755	37.003	41.424	45.745	6.132	20.5	1.21	0.00	17.80	0.184	0.345
2694.6	2658.0	2.907	34.940	2.689	27.865	34.775	37.026	41.452	45.778	6.160	19.3	1.21	0.00	17.60	0.211	0.385

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ENDEAVOR 214 Station 25 90-7-1 Lat: 35.750 Lon: -74.453 Sonic Depth: 1949

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos	NO2	NO3	F12 pm/kg	F11
2.7	2.7	27.536	{36.282	27.535	23.513	29.721	31.746	35.729	39.628}}	4.598	1.6	0.03	0.00	0.10		
49.8	49.5	21.706	{36.381	21.696	25.354	31.676	33.738	37.793	41.761}}	4.356	2.8	0.20	0.20	3.00	0.949	1.797
100.4	99.6	11.408	{34.937	11.395	26.655	33.257	35.409	39.641	43.779}}		3.9	0.64	0.03	8.90	1.591	3.079
198.7	197.1	11.811	35.441	11.785	26.973	33.558	35.705	39.926	44.054	3.463	9.8	1.17	0.01	18.90	0.664	1.248
297.5	295.1	9.162	35.188	9.129	27.245	33.916	36.090	40.366	44.546	3.215	14.9	1.57	0.01	24.40	0.321	0.634
396.7	393.4	7.257	35.049	7.218	27.427	34.164	36.360	40.677	44.898	3.864	15.5	1.55	0.01	23.50	0.427	0.850
498.5	494.3	6.208	35.013	6.163	27.542	34.317	36.525	40.867	45.111	4.460	14.8	1.46	0.01	21.80	0.514	1.067
598.5	593.3	5.248	34.996	5.198	27.649	34.460	36.679	41.043	45.309	5.146	13.7	1.35	0.00	20.30	0.600	1.237
649.0	643.3	5.117	34.997	5.063	27.666	34.482	36.703	41.070	45.339	5.235	13.6	1.33	0.00	20.00	0.609	1.267
699.6	693.3	4.910	{34.996	4.853	27.689	34.513	36.737	41.109	45.382}}	5.432	13.2	1.30	0.00	19.50	0.628	1.283
749.5	742.7	4.709	{34.992	4.649	27.709	34.541	36.767	41.144	45.423}}	5.556	13.0	1.28	0.00	19.30	0.610	1.263
796.7	789.3	4.566	34.994	4.503	27.727	34.565	36.792	41.173	45.455	5.653	13.0	1.26	0.00	19.00	0.643	1.292
895.6	887.2	4.427	34.982	4.356	27.734	34.577	36.807	41.191	45.476	5.770	12.8	1.25	0.00	18.30	0.621	1.246
998.1	988.4	4.289	34.978	4.210	27.746	34.595	36.827	41.214	45.503	5.861	12.8	1.23	0.00	18.60	0.566	1.167
1097.4	1086.5	4.150	34.973	4.064	27.758	34.613	36.846	41.237	45.530	5.964	12.7	1.22	0.00	18.30	0.567	1.149
1197.3	1185.2	4.027	34.963	3.933	27.764	34.623	36.859	41.253	45.549	6.031	12.8	1.22	0.00	18.20	0.546	1.098
1298.3	1284.9	3.954	34.973	3.852	27.780	34.643	36.879	41.276	45.573	6.059	13.1	1.21	0.00	18.00	0.517	1.039
1398.6	1383.7	3.909	34.966	3.799	27.780	34.645	36.882	41.280	45.578	6.067	13.2	1.22	0.00	18.10	0.413	0.825
1496.7	1480.5	3.840	34.964	3.722	27.786	34.654	36.892	41.292	45.592	6.089	13.6	1.22	0.00	18.20	0.343	0.670
1597.3	1579.6	3.756	34.961	3.630	27.793	34.665	36.904	41.306	45.609	6.106	14.0	1.22	0.00	18.20	0.330	0.614
1698.1	1678.9	3.698	34.959	3.563	27.798	34.672	36.912	41.316	45.620	6.095	14.5	1.22	0.00	18.20	0.284	0.531
1800.1	1779.4	3.647	{34.966	3.504	27.810	34.686	36.927	41.332	45.638}}	6.094	15.1	1.22	0.00	18.20	0.260	0.470
1900.2	1877.8	3.580	34.963	3.428	27.815	34.694	36.936	41.343	45.651	6.091	15.5	1.22	0.00	18.10	0.232	0.415
1985.9	1962.1	3.496	34.960	3.337	27.821	34.704	36.947	41.357	45.666	6.097	16.2	1.22	0.00	18.20	0.245	0.400

ENDEAVOR 214 Station 26 90- 7- 2 Lat: 37.831 Lon: -73.973 Sonic Depth: 1000 (est.)

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C						ml/l	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg	umol/kg
-0.6	-0.6	22.223	32.860	22.223	22.532	28.874	30.942	35.010	38.991	5.310	1.0	0.11	0.00	0.10	1.285	2.552
45.9	45.6	9.834	{34.341	9.829	26.467	33.125	35.294	39.561	43.734}}							
45.8	45.5	9.844	{34.335	9.839	26.460	33.118	35.287	39.554	43.727}}							
44.8	44.5	9.791	{34.293	9.786	26.436	33.096	35.266	39.534	43.708}}							
44.8	44.5	9.791	{34.292	9.786	26.435	33.095	35.265	39.533	43.707}}							
95.7	94.9	10.196	{34.538	10.185	26.560	33.204	35.370	39.628	43.792}}		2.2	0.41	0.06	1.90	1.933	3.846
144.0	142.9	12.035	{35.213	12.016	26.752	33.333	35.477	39.696	43.821}}		2.4	0.52	0.02	6.40		
195.5	193.9	12.038	{35.397	12.012	26.895	33.474	35.618	39.836	43.960}}		3.6	0.64	0.02	9.00	1.474	2.849
245.9	243.9	10.864	{35.354	10.834	27.082	33.697	35.853	40.093	44.239}}		7.9	1.00	0.01	15.80		
295.5	293.1	9.042	35.149	9.010	27.234	33.909	36.085	40.363	44.546		11.6	1.35	0.00	21.40	0.452	0.931
346.1	343.3	7.463	35.027	7.429	27.380	34.110	36.303	40.616	44.833		14.5	1.54	0.00	24.30	0.345	0.748
396.4	393.1	6.457	{34.990	6.421	27.490	34.256	36.461	40.797	45.035}}		15.0	1.53	0.00	23.60	0.450	0.976
445.0	441.2	5.745	34.995	5.707	27.586	34.378	36.592	40.944	45.198		14.9	1.48	0.00	22.40		
494.8	490.6	5.315	34.998	5.274	27.641	34.450	36.668	41.030	45.294		14.1	1.40	0.00	21.30	0.550	1.194
529.8	525.2	5.178	35.004	5.135	27.663	34.476	36.696	41.062	45.329		13.7	1.35	0.00	20.40		
592.8	587.5	4.995	34.987	4.947	27.671	34.492	36.714	41.084	45.356		13.4	1.32	0.00	20.20	0.584	1.257
645.4	639.6	4.839	34.985	4.787	27.688	34.515	36.739	41.113	45.388		13.1	1.30	0.00	19.70		
696.7	690.3	4.738	34.988	4.682	27.702	34.533	36.759	41.135	45.413		12.7	1.28	0.00	19.40	1.303	
746.1	739.2	4.618	34.985	4.559	27.714	34.549	36.776	41.156	45.436		12.7	1.27	0.00	19.30		
795.5	788.0	4.527	{34.988	4.464	27.727	34.566	36.794	41.176	45.458}}		12.7	1.25	0.00	19.10	1.281	
845.0	836.9	4.490	34.980	4.423	27.725	34.565	36.794	41.177	45.461		12.6	1.24	0.00	18.90	1.285	1.285
895.0	886.5	4.408	34.977	4.337	27.732	34.576	36.806	41.190	45.476		12.7	1.23	0.00	18.70	1.291	
945.7	936.6	4.342	34.976	4.268	27.739	34.585	36.816	41.202	45.490		12.7	1.23	0.00	18.70	1.298	
1000.1	990.2	4.262	34.970	4.184	27.743	34.593	36.825	41.213	45.503		12.7	1.23	0.00	18.60	1.194	

ENDEAVOR 214 Station 27 90- 7- 2 Lat: 37.573 Lon: -73.736 Sonic Depth: 2049

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
1.1	1.1	21.182	{33.160	21.182	23.046	29.409	31.483	35.564	39.557	5.424	1.0	0.11	0.00	0.00	1.380	2.616
97.0	96.2	12.169	{35.177	12.156	26.697	33.274	35.417	39.633	43.756	4.804	4.7	0.70	0.02	10.30		
196.4	194.8	10.805	35.340	10.781	27.081	33.697	35.854	40.095	44.243	3.281	12.0	1.36	0.00	21.80	0.444	0.893
296.3	293.9	8.307	35.100	8.276	27.311	34.011	36.195	40.489	44.688	3.454	15.4	1.58	0.00	24.60		
396.9	393.6	6.171	34.995	6.136	27.531	34.308	36.516	40.858	45.103	4.481	14.3	1.44	0.00	21.90	0.560	1.179
496.7	492.5	5.279	34.972	5.238	27.625	34.435	36.654	41.017	45.282	5.115	13.4	1.34	0.00	20.20		
596.9	591.6	4.902	34.969	4.854	27.668	34.492	36.716	41.088	45.362	5.388	12.8	1.29	0.00	19.60	0.676	1.437
697.5	691.1	4.731	34.966	4.675	27.686	34.517	36.743	41.119	45.397	5.528	12.7	1.26	0.00	19.20	0.695	1.481
746.4	739.5	4.621	34.974	4.562	27.705	34.540	36.767	41.147	45.427	5.625	12.4	1.26	0.00	19.00		
796.7	789.2	4.583	34.969	4.520	27.706	34.542	36.770	41.151	45.432	5.691	12.6	1.24	0.00	18.80	0.663	1.419
849.8	841.7	4.455	34.976	4.388	27.726	34.568	36.797	41.180	45.465	5.717	12.5	1.24	0.00	18.80		
897.1	888.5	4.373	34.977	4.303	27.736	34.581	36.811	41.197	45.484	5.822	12.2	1.22	0.00	18.60		
947.8	938.6	4.340	34.977	4.265	27.740	34.586	36.817	41.204	45.491	5.848	12.3	1.22	0.00	18.60		
1000.3	990.5	4.280	34.973	4.201	27.743	34.593	36.824	41.212	45.501	5.882	12.1	1.22	0.00	18.50	0.586	1.215
1099.2	1088.1	4.161	34.970	4.075	27.755	34.609	36.842	41.233	45.525	5.964	12.4	1.21	0.00	18.40		
1197.5	1185.2	4.037	34.969	3.943	27.768	34.627	36.862	41.256	45.551	6.034	12.8	1.21	0.00	18.30		
1297.0	1283.4	3.903	34.960	3.802	27.775	34.640	36.877	41.274	45.573	6.080	12.8	1.20	0.00	18.10		
1397.1	1382.0	3.830	34.960	3.721	27.783	34.651	36.889	41.289	45.590	6.095	13.1	1.20	0.00	18.00	0.376	0.774
1498.3	1481.8	3.762	34.961	3.645	27.792	34.663	36.902	41.303	45.606	6.109	13.7	1.20	0.00	18.10		
1597.6	1579.6	3.723	34.960	3.597	27.796	34.669	36.908	41.311	45.614	6.098	13.9	1.21	0.00	18.20	0.538	
1697.3	1677.8	3.652	34.967	3.518	27.809	34.685	36.925	41.330	45.636	6.076	14.5	1.21	0.00	18.10		
1800.8	1779.8	3.612	34.967	3.469	27.814	34.692	36.933	41.339	45.646	6.071	14.9	1.21	0.00	18.10	0.185	0.370
1897.3	1874.7	3.520	34.964	3.369	27.821	34.703	36.945	41.354	45.663	6.090	15.5	1.21	0.00	18.10		
2041.7	2016.7	3.429	34.960	3.266	27.828	34.714	36.958	41.369	45.681	6.091	16.1	1.21	0.00	18.10	0.174	0.336

ENDEAVOR 214 Station 28 90-7-2 Lat: 37.351 Lon: -73.546 Sonic Depth: 2454

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SI02	Phos umol/kg	NO2	NO3	F12 pm/kg	F11 kg
1.4	1.4	21.994	{34.601	21.994	23.918	30.249	32.314	36.375	40.349	5.317	1.4	0.05	0.00	0.00		
98.5	97.7	13.281	*35.486	13.267	26.716	33.257	35.389	39.583	43.684	** 3.901	7.2	0.90	0.04	14.60		
196.5	194.9	10.735	{35.378	10.711	27.123	33.741	35.898	40.141	44.290	{ 3.121	13.5	1.45	0.03	23.30		
295.3	292.9	8.744	{35.163	8.712	27.292	33.977	36.156	40.440	44.630	{ 3.217	16.4	1.63	0.01	25.50	0.195	0.381
395.8	392.5	6.649	{35.052	6.612	27.513	34.272	36.474	40.805	45.039	{ 4.215	15.5	1.51	0.00	22.90		
488.9	484.6	5.607	35.056	5.565	27.652	34.449	36.663	41.018	45.275	4.969	14.3	1.36	0.01	20.80	0.326	0.692
595.8	590.5	4.915	35.026	4.867	27.712	34.535	36.758	41.129	45.403	5.433	13.6	1.27	0.00	19.50		
690.0	683.7	4.697	35.016	4.642	27.729	34.561	36.787	41.164	45.442	5.602	13.2	1.27	0.00	19.30	0.436	0.910
795.3	787.8	4.412	34.992	4.350	27.743	34.586	36.815	41.200	45.485	5.795	12.9	1.23	0.00	18.90	0.513	1.052
895.6	887.1	4.248	34.983	4.179	27.754	34.604	36.836	41.224	45.514	5.896	12.9	1.22	0.00	18.60	0.508	1.049
995.8	986.0	4.109	34.970	4.032	27.759	34.615	36.849	41.241	45.534	5.984	12.7	1.22	0.00	18.40		
1097.9	1086.8	4.025	34.970	3.940	27.769	34.628	36.863	41.257	45.553	6.025	13.1	1.21	0.00	18.30	0.427	0.918
1196.8	1184.5	3.826	34.947	3.734	27.772	34.639	36.877	41.277	45.577	6.148	12.8	1.19	0.00	18.10		
1296.2	1282.6	3.785	34.950	3.685	27.779	34.648	36.887	41.288	45.589	6.161	13.1	1.19	0.00	18.10	0.495	#1.037
1396.8	1381.8	3.781	34.962	3.672	27.790	34.660	36.898	41.299	45.601	6.130	13.6	1.20	0.00	18.10		
1495.3	1478.9	3.740	34.965	3.623	27.797	34.669	36.908	41.310	45.613	6.115	13.8	1.21	0.00	18.10	0.312	0.630
1596.3	1578.4	3.699	34.970	3.574	27.806	34.680	36.919	41.323	45.627	6.111	14.6	1.21	0.00	18.20	0.187	0.357
1695.1	1675.7	3.623	34.970	3.490	27.814	34.691	36.932	41.338	45.644	6.082	15.3	1.21	0.00	18.20		
1796.5	1775.6	3.550	34.970	3.408	27.822	34.703	36.944	41.352	45.660	6.086	15.8	1.22	0.00	18.20	0.149	0.273
1895.4	1872.8	3.464	34.967	3.314	27.829	34.713	36.956	41.366	45.676	6.082	16.6	1.22	0.00	18.30		
2042.5	2017.5	3.353	34.964	3.191	27.839	34.727	36.972	41.385	45.698	6.082	17.5	1.23	0.00	18.30		
2196.5	2168.8	3.172	34.954	2.998	27.849	34.745	36.992	41.411	45.729	6.124	18.1	1.22	0.00	18.10	0.158	0.295
2347.0	2316.6	3.039	34.946	2.853	27.856	34.758	37.007	41.429	45.751	6.172	18.0	1.21	0.00	17.90		
2470.9	2438.2	2.931	34.941	2.735	27.862	34.770	37.020	41.445	45.770	6.165	18.8	1.21	0.00	17.80	0.204	0.416

ENDEAVOR 214 Station 29 90-7-2 Lat: 37.093 Lon: -73.292 Sonic Depth: 2885

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12	F11
3.8	3.7	22.691	34.812	22.690	23.881	30.196	32.255	36.306	40.270	5.176	1.3	0.05	0.00	0.10		
42.6	42.3	15.871	{35.162	15.864	25.904	32.377	34.487	38.638	42.698}}		1.9	0.15	0.00	0.10		
145.2	144.1	11.333	35.426	11.315	27.050	33.650	35.800	40.031	44.168	3.234	11.3	1.31	0.01	21.30		
246.9	244.9	8.773	35.156	8.746	27.281	33.965	36.144	40.428	44.616	3.223	16.0	1.62	0.01	25.70		
348.6	345.8	6.548	35.059	6.516	27.532	34.294	36.497	40.830	45.067	4.282	15.2	1.48	0.01	22.90		
445.7	441.9	5.579	{35.031	5.541	27.635	34.433	36.648	41.004	45.261}}	4.929	14.1	1.38	0.01	21.10		
550.6	545.8	4.722	{34.972	4.679	27.690	34.521	36.747	41.123	45.401}}	5.552	12.8	1.26	0.00	19.40	0.754	1.569
639.7	634.0	4.480	34.978	4.430	27.723	34.563	36.792	41.174	45.458	5.749	12.4	1.23	0.00	18.90		
747.1	740.2	4.367	34.979	4.309	27.737	34.582	36.812	41.197	45.484	5.814	12.6	1.22	0.00	18.80	0.614	1.270
843.0	835.0	4.146	34.960	4.082	27.746	34.600	36.833	41.224	45.516	5.986	12.1	1.20	0.00	18.30	0.689	1.423
937.6	928.6	4.000	{34.953	3.929	27.756	34.616	36.852	41.246	45.542}}	6.081	12.1	1.19	0.00	18.10	0.668	1.376
1045.5	1035.1	3.918	{34.953	3.838	27.766	34.629	36.865	41.262	45.560}}	6.119	12.6	1.19	0.00	18.10		
1147.6	1136.0	3.867	34.959	3.779	27.777	34.642	36.879	41.278	45.577	6.122	12.8	1.19	0.00	18.20	0.511	1.021
1248.8	1235.9	3.848	34.970	3.752	27.788	34.655	36.892	41.291	45.591	6.102	13.0	1.20	0.00	18.10		
1345.2	1330.9	3.787	34.962	3.683	27.789	34.658	36.896	41.297	45.599	6.114	13.4	1.20	0.00	18.10		
1437.0	1421.5	3.736	34.973	3.624	27.803	34.675	36.914	41.316	45.619	6.110	13.9	1.20	0.00	18.20		
1597.6	1579.7	3.682	34.970	3.557	27.808	34.682	36.922	41.326	45.630	6.074	14.9	1.21	0.00	18.10		
1796.8	1775.9	3.528	34.979	3.386	27.832	34.713	36.955	41.363	45.671	6.088	15.8	1.21	0.00	18.30		
1994.7	1970.5	3.359	34.953	3.202	27.829	34.717	36.962	41.375	45.688	6.093	17.1	1.22	0.00	18.50		
2247.1	2218.6	3.127	34.941	2.949	27.843	34.742	36.989	41.409	45.728		18.2	1.21	0.00	18.30	0.171	0.317
2500.8	2467.6	2.905	34.945	2.707	27.868	34.777	37.028	41.453	45.778	6.153	19.7	1.22	0.00	18.20	0.153	0.305
2649.7	2613.6	2.760	34.930	2.550	27.870	34.785	37.038	41.468	45.797	#6.14	19.0	1.18	0.00	17.70		
2782.5	2743.8	2.623	34.931	2.402	27.883	34.804	37.059	41.493	45.826	6.245	20.3	1.19	0.00	17.90	0.252	0.491
2905.4	2864.2	2.437	34.916	2.208	27.888	34.817	37.075	41.513	45.851	6.250	22.4	1.20	0.00	17.90	0.311	0.625



ENDEAVOR 214 Station 30 90-7-3 Lat: 36.852 Lon: -73.093 Sonic Depth: 3148

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C			kg/m**3		ml/l		umol/kg				pm/kg	
0.4	0.4	23.072	34.815	23.072	23.774	30.081	32.137	36.183	40.142	5.072	1.1	0.06	0.00	0.00	1.224	2.243
147.6	146.5	11.745	{35.453}	11.726	26.994	33.581	35.728	39.950	44.079}}							
296.6	294.2	8.335	{35.130}	8.304	27.330	34.030	36.213	40.506	44.704}}	3.344	16.2	1.63	0.01	25.70	0.202	0.380
392.6	389.3	6.310	35.055	6.275	27.561	34.332	36.538	40.876	45.118	4.414	14.6	1.45	0.00	22.50	0.403	0.789
497.1	492.9	5.288	{35.025}	5.247	27.666	34.475	36.693	41.056	45.321}}	5.133	13.4	1.33	0.01	20.40	0.501	0.999
597.6	592.3	4.991	{35.038}	4.942	27.712	34.533	36.755	41.124	45.396}}	5.389	13.3	1.29	0.00	19.70	#0.740	
696.6	690.3	4.620	{35.007}	4.565	27.731	34.566	36.793	41.172	45.452}}	5.654	12.8	1.25	0.00	19.10	0.503	1.013
795.3	787.9	4.424	35.008	4.362	27.754	34.596	36.826	41.210	45.495	5.782	12.6	1.23	0.00	18.50	0.483	0.982
895.5	887.0	4.232	{34.983}	4.163	27.756	34.606	36.838	41.227	45.517}}	5.897	12.5	1.22	0.00	18.50	0.511	1.010
997.1	987.3	4.087	{34.975}	4.010	27.765	34.622	36.856	41.248	45.542}}	5.997	12.5	1.22	0.00	18.40	0.468	0.941
1094.9	1083.9	3.971	34.982	3.887	27.784	34.645	36.881	41.276	45.573	6.052	12.5	1.20	0.00	18.20	0.493	0.946
1196.8	1184.6	3.892	34.979	3.800	27.790	34.655	36.892	41.290	45.588	6.069	13.0	1.20	0.00	18.20	0.432	0.829
1396.8	1381.8	3.784	34.977	3.675	27.801	34.671	36.909	41.310	45.612	6.083	13.6	1.21	0.00	18.20	0.303	0.582
1596.5	1578.7	3.690	{34.979}	3.565	27.814	34.688	36.927	41.331	45.635}}	6.044	14.9	1.22	0.00	18.50	0.164	0.281
1798.8	1777.9	3.491	34.971	3.350	27.829	34.711	36.954	41.363	45.672	6.094	15.9	1.23	0.00	18.30	0.176	0.305
1998.3	1974.1	3.322	34.968	3.165	27.844	34.734	36.979	41.393	45.707	6.101	17.1	1.23	0.00	18.40	0.145	0.239
2197.5	2169.9	3.113	34.967	2.940	27.864	34.763	37.011	41.431	45.750	6.138	18.3	1.22	0.00	18.30	0.171	0.289
2397.5	2366.3	2.908	34.954	2.720	27.874	34.782	37.033	41.458	45.783	6.188	19.0	1.21	0.00	18.00	0.190	0.354
2596.6	2561.6	2.726	34.951	2.522	27.889	34.805	37.058	41.489	45.819	6.218	20.1	1.20	0.00	17.90	0.210	0.406
2748.2	2710.2	2.562	34.921	2.346	27.880	34.804	37.059	41.495	45.829	6.264	20.4	1.20	0.00	17.80	0.273	0.511
2895.9	2854.9	2.441	34.929	2.213	27.898	34.826	37.084	41.523	45.860	6.287	20.9	1.18	0.00	17.50	0.301	0.601
2998.0	2954.9	2.376	34.920	2.139	27.896	34.829	37.087	41.528	45.867	6.289	21.6	1.19	0.00	17.60	0.328	0.663
3096.6	3051.4	2.330	34.908	2.084	27.891	34.826	37.085	41.527	45.868	6.300	22.4	1.21	0.00	17.70	0.356	0.690
3179.5	3132.4	2.278	34.915	2.025	27.902	34.839	37.099	41.542	45.885	6.257	24.6	1.23	0.00	17.90	0.336	0.650

ENDEAVOR 214 Station 31 90-7-3 Lat: 36.582 Lon: -72.811 Sonic Depth: 3416

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SI02	Phos umol/kg	NO2	NO3	F12	F11
					-----kg/m*3	-----kg/m*3	-----kg/m*3	-----kg/m*3	-----kg/m*3		-----umol/kg				-----pm/kg	-----pm/kg
1.1	1.1	26.726	{35.731	26.726	23.358	29.586	31.616	35.612	39.522	4.686	1.5	0.03	0.00	0.10	1.003	1.853
147.5	146.4	12.404	{35.329	12.384	26.771	33.340	35.480	39.691	43.809	4.74	5.2	0.72	0.02	11.00	1.270	2.560
298.7	296.3	9.568	35.203	9.534	27.190	33.848	36.017	40.285	44.457	3.251	14.2	1.52	0.01	24.20	0.367	0.832
446.3	442.5	6.431	35.010	6.390	27.510	34.277	36.482	40.818	45.058	4.341	14.7	1.46	0.00	22.60	0.503	0.996
596.2	591.0	5.050	34.981	5.001	27.660	34.479	36.701	41.069	45.340	5.288	13.0	1.30	0.00	19.90	0.668	1.386
747.6	740.7	4.644	34.986	4.585	27.712	34.546	36.773	41.152	45.432	5.636	12.4	1.25	0.00	19.00	0.645	1.325
843.8	835.9	4.425	34.995	4.359	27.744	34.587	36.816	41.200	45.486	5.63	12.6	1.26	0.00	19.00	0.676	1.349
1001.6	991.8	4.308	34.988	4.229	27.752	34.600	36.832	41.219	45.507	5.890	12.7	1.22	0.00	18.60	0.426	0.870
1144.4	1132.8	4.116	34.990	4.026	27.776	34.631	36.865	41.257	45.550	5.974	12.7	1.21	0.00	18.30	0.453	0.906
1244.7	1231.9	4.003	34.972	3.906	27.774	34.634	36.870	41.265	45.561	6.037	12.8	1.21	0.00	18.30	0.405	0.804
1340.5	1326.4	3.913	34.970	3.808	27.782	34.647	36.883	41.281	45.580	6.063	13.1	1.21	0.00	18.20	0.359	0.693
1446.2	1430.6	3.835	34.968	3.721	27.790	34.657	36.895	41.295	45.596	6.071	13.4	1.21	0.00	18.10	0.293	0.558
1539.5	1522.5	3.792	34.976	3.671	27.801	34.671	36.909	41.310	45.612	6.063	14.0	1.21	0.00	18.10	0.245	0.462
1645.5	1627.0	3.736	34.973	3.606	27.805	34.678	36.917	41.319	45.623	6.053	14.7	1.21	0.00	18.20	0.187	0.339
1797.6	1776.8	3.583	34.967	3.441	27.817	34.696	36.937	41.344	45.651	6.102	15.3	1.21	0.00	18.10	0.194	0.346
1949.1	1925.7	3.467	34.970	3.312	27.832	34.716	36.959	41.369	45.679	6.192	16.3	1.22	0.00	18.10	0.141	0.242
2097.0	2071.2	3.330	34.961	3.163	27.839	34.729	36.974	41.388	45.702	6.138	17.0	1.22	0.00	18.10	0.144	0.252
2348.8	2318.6	3.099	34.952	2.912	27.855	34.755	37.003	41.424	45.744	6.131	18.5	1.22	0.00	18.20	0.133	0.258
2597.4	2562.4	2.853	34.939	2.646	27.869	34.780	37.031	41.459	45.785	6.194	19.3	1.20	0.00	17.90	0.200	0.377
2797.3	2758.4	2.641	34.924	2.419	27.876	34.797	37.052	41.485	45.818	6.264	19.5	1.19	0.00	17.60	0.261	0.532
3002.5	2959.4	2.476	34.921	2.236	27.889	34.817	37.075	41.513	45.850	6.291	19.6	1.17	0.00	17.30	0.338	0.696
3196.6	3149.3	2.355	34.908	2.098	27.890	34.824	37.083	41.525	45.866	6.300	21.5	1.18	0.00	17.40	0.347	0.708
3399.7	3347.8	2.236	34.902	1.961	27.896	34.836	37.097	41.542	45.887	6.259	25.2	1.22	0.00	17.90	0.321	0.639
3458.1	3404.8	2.233	34.899	1.952	27.895	34.835	37.096	41.542	45.886	6.259	26.2	1.23	0.00	18.10	0.311	0.627

ENDEAVOR 214 Station 32 90-7-3 Lat: 36.379 Lon: -72.537 Sonic Depth: 3685

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C		kg/m**3				ml/l	umol/kg	umol/kg			pm/kg	pm/kg
1.3	1.3	28.444	36.280	28.444	23.213	29.406	31.425	35.398	39.287	4.558	1.6	0.03	0.00	0.00	0.952	1.843
195.0	193.4	17.719	36.444	17.686	26.457	32.872	34.963	39.076	43.101		3.7	0.53	0.00	0.00		
339.8	337.1	14.524	35.949	14.473	26.820	33.323	35.442	39.612	43.690	3.554	5.9	0.86	0.00	0.00	14.60	
495.4	491.2	11.241	{35.458	11.178	27.100	33.703	35.856	40.088	{44.228}}	3.465	10.7	1.27	0.00	0.00	20.60	
639.8	634.1	7.352	35.052	7.288	27.419	34.154	36.349	40.665	44.884	3.879	15.0	1.53	0.00	0.00	23.60	0.841
800.0	792.6	5.037	35.042	4.971	27.712	34.531	36.753	41.122	45.393	5.383	13.1	1.30	0.00	0.00	19.70	0.820
896.9	888.4	4.732	35.027	4.659	27.736	34.567	36.793	41.169	45.447	5.586	13.1	1.27	0.00	0.00	19.20	0.830
1045.3	1035.0	4.417	35.008	4.333	27.757	34.601	36.831	41.215	45.501	5.799	12.8	1.24	0.00	0.00	18.70	0.813
1197.7	1185.5	4.261	35.010	4.165	27.777	34.627	36.859	41.247	45.537	5.887	13.1	1.23	0.00	0.00	18.60	0.656
1296.6	1283.1	4.139	35.001	4.036	27.783	34.639	36.872	41.264	45.557	5.948	13.0	1.22	0.00	0.00	18.50	0.601
1398.3	1383.4	4.020	34.988	3.909	27.786	34.647	36.882	41.277	45.573	5.998	13.0	1.22	0.00	0.00	18.40	0.593
1496.2	1479.9	3.898	34.975	3.779	27.789	34.655	36.892	41.290	45.589	6.056	13.3	1.22	0.00	0.00	18.20	0.630
1597.7	1579.9	3.818	34.966	3.691	27.791	34.660	36.898	41.299	45.600	6.067	13.9	1.21	0.00	0.00	18.20	
1691.8	1672.6	3.774	34.991	3.639	27.816	34.687	36.926	41.328	45.630	6.057	14.2	1.22	0.00	0.00	18.40	0.392
1846.4	1824.8	3.624	{34.965	3.477	27.811	34.689	36.930	41.336	{45.642}}	6.100	14.8	1.22	0.00	0.00	18.20	
1998.7	1974.6	3.534	34.969	3.373	27.825	34.707	36.949	41.357	45.666	6.107	15.5	1.22	0.00	0.00	18.10	
2200.4	2172.8	3.338	34.966	3.161	27.843	34.733	36.978	41.392	45.706	6.115	16.8	1.22	0.00	0.00	18.10	
2447.9	2415.9	3.096	34.949	2.899	27.854	34.754	37.003	41.424	45.744	6.139	18.7	1.23	0.00	0.00	18.00	
2697.1	2660.2	2.860	34.940	2.643	27.870	34.781	37.033	41.460	45.787	6.218	19.4	1.21	0.00	0.00	18.00	0.351
2897.9	2857.0	2.614	34.927	2.382	27.882	34.804	37.059	41.493	45.827	6.243	20.3	1.21	0.00	0.00	17.80	0.446
3100.7	3055.5	2.425	34.917	2.176	27.891	34.822	37.080	41.519	45.858	6.280	21.2	1.20	0.00	0.00	17.50	0.611
3297.2	3247.7	2.271	34.904	2.006	27.894	34.832	37.093	41.537	45.880	6.263	24.7	1.23	0.00	0.00	18.00	0.618
3495.3	3441.2	2.202	34.900	1.917	27.898	34.840	37.101	41.548	45.893	6.219	27.9	1.26	0.00	0.00	18.50	0.538
3652.0	3594.2	2.160	34.895	1.860	27.899	34.843	37.105	41.553	45.900	6.132	32.4	1.32	0.00	0.00	19.10	0.413

ENDEAVOR 214 Station 33 90- 7- 4 Lat: 36.099 Lon: -72.348 Sonic Depth: 3894

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2	Phos umol/kg	NO2	NO3	F12	F11 pm/kg
2.5	2.5	28.201	36.175	28.200	23.215	29.412	31.433	35.410	39.302	4.574	1.8	0.01	0.00	0.00	0.930	1.713
199.4	197.8	19.491	36.662	19.454	26.175	32.545	34.622	38.707	42.705	4.427	1.2	0.10	0.01	2.40	1.065	2.068
399.3	396.0	17.546	36.432	17.478	26.499	32.919	35.011	39.128	43.156	4.427	2.0	0.29	0.00	5.90	0.938	1.878
550.3	545.6	15.210**	36.108	15.124	26.800	33.283	35.397	39.554	43.620**	4.023	4.4	0.65	0.00	11.60	0.730	1.412
698.5	692.2	11.547	35.491	11.456	27.074	33.669	35.818	40.045	44.179	3.419	10.5	1.25	0.00	20.60		
848.9	841.0	8.287	35.170	8.196	27.378	34.081	36.265	40.560	44.760	3.664	15.2	1.54	0.00	24.40	0.225	0.423
949.0	940.0	6.878	{35.101	6.785	27.528	34.280	36.481	40.807	45.037}}	4.231	15.3	1.48	0.00	23.10	0.245	0.467
1048.4	1038.1	5.654	{35.070	5.560	27.663	34.460	36.675	41.030	45.287}}	4.969	14.3	1.35	0.00	21.00	0.304	0.604
1200.0	1187.8	4.842	{35.033	4.741	27.732	34.560	36.784	41.159	45.435}}	5.536	13.2	1.26	0.00	19.50	0.392	0.770
1350.2	1335.9	4.452	35.021	4.341	27.767	34.610	36.840	41.224	45.509	5.789	13.0	1.23	0.00	19.00	0.372	0.754
1449.8	1434.2	4.276	35.007	4.157	27.775	34.626	36.858	41.247	45.536	5.912	13.1	1.22	0.00	18.80	0.384	0.738
1549.2	1532.1	4.115	35.004	3.989	27.791	34.648	36.882	41.275	45.569	5.980	13.1	1.21	0.00	18.50	0.384	0.751
1646.3	1627.9	4.051	34.994	3.917	27.790	34.650	36.885	41.280	45.576	6.003	13.2	1.21	0.00	18.60	0.349	0.686
1751.6	1731.5	4.006	34.987	3.862	27.790	34.652	36.888	41.285	45.582	6.023	13.7	1.21	0.00	18.30	0.310	0.589
1899.9	1877.5	3.888	34.998	3.732	27.812	34.680	36.917	41.316	45.616	6.004	14.7	1.22	0.00	18.50	0.178	0.318
2098.5	2072.7	3.691	34.986	3.518	27.824	34.700	36.940	41.345	45.650	6.031	15.7	1.22	0.00	18.60	0.134	0.220
2399.3	2368.2	3.361	34.976	3.164	27.851	34.740	36.985	41.399	45.713	6.081	17.7	1.22	0.00	18.50	0.131	0.195
2699.4	2662.6	3.066	34.954	2.845	27.863	34.766	37.015	41.437	45.759	6.123	19.6	1.22	0.00	18.30	0.125	0.228
2999.3	2956.3	2.737	34.946	2.492	27.888	34.805	37.059	41.490	45.820	6.210	21.1	1.21	0.00	18.10	0.163	0.313
3199.4	3152.1	2.515	{34.921	2.254	27.888	34.815	37.072	41.510	45.847}}	6.214	21.2	1.19	0.00	17.70	0.272	0.503
3397.6	3345.9	2.352	34.920	2.074	27.902	34.836	37.096	41.538	45.879	6.268	23.1	1.20	0.00	17.70	0.317	0.613
3601.3	3544.8	2.247	34.913	1.950	27.906	34.846	37.107	41.553	45.897	6.197	27.5	1.25	0.00	18.40	0.246	0.465
3801.5	3740.1	2.196	34.905	1.878	27.905	34.848	37.111	41.558	45.904	6.153	31.1	1.29	0.00	19.00	0.212	0.399
3935.2	3870.5	2.180	34.896	1.848	27.900	34.845	37.108	41.556	45.903	6.101	33.8	1.32	0.00	19.40	0.210	0.371

ENDEAVOR 214 Station 34 90- 7- 4 Lat: 35.816 Lon: -72.170 Sonic Depth: 4055

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SI02	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
1.1	1.1	28.096	36.240	28.096	23.298	29.497	31.518	35.495	39.388	4.496	1.7	0.03	0.00	0.10	0.934	1.690
227.2	225.5	19.020	{36.620	18.979	26.267	32.648	34.728	38.821	42.826}}		1.7	0.21	0.02	4.00		
495.0	490.9	17.872	36.470	17.786	26.453	32.864	34.954	39.066	43.089	4.509	1.9	0.24	0.00	4.90	0.999	2.011
645.5	639.8	15.839	36.140	15.735	26.687	33.153	35.261	39.408	43.464	4.143	3.9	0.55	0.00	9.90	0.802	1.557
795.6	788.2	12.751	35.658	12.640	26.976	33.533	35.671	39.874	43.986	3.635	8.2	1.04	0.00	17.40	0.497	0.923
891.1	882.8	10.560	35.373	10.449	27.165	33.792	35.952	40.200	44.353	3.368	12.4	1.38	0.00	22.20	0.311	0.567
995.6	985.9	8.350	35.157	8.241	27.361	34.062	36.246	40.540	44.739	3.552	15.6	1.55	0.00	24.30	0.216	0.413
1146.2	1134.7	5.937	35.066	5.831	27.627	34.413	36.625	40.974	45.225	4.729	14.6	1.39	0.00	21.40	0.344	0.693
1295.9	1282.5	4.952	{35.021	4.841	27.710	34.534	36.758	41.130	45.404}}		13.3	1.27	0.00	19.60	0.478	0.954
1393.0	1378.2	4.639	35.003	4.522	27.732	34.569	36.796	41.176	45.458	5.634	12.9	1.25	0.00	19.30	0.510	1.024
1498.9	1482.6	4.355	34.991	4.231	27.755	34.602	36.834	41.221	45.509	5.774	12.8	1.23	0.00	18.80	0.496	1.027
1595.2	1577.5	4.237	34.998	4.105	27.774	34.626	36.859	41.249	45.540	5.886	12.9	1.22	0.00	18.70	0.496	0.963
1699.2	1680.0	4.112	34.980	3.972	27.773	34.631	36.866	41.259	45.554	5.973	13.0	1.21	0.00	18.60	0.429	0.851
1899.4	1877.0	3.940	34.974	3.783	27.788	34.653	36.890	41.289	45.588	6.007	13.5	1.20	0.00	18.50	0.337	0.625
2099.4	2073.7	3.803	34.975	3.629	27.805	34.676	36.915	41.317	45.620	6.006	14.6	1.20	0.00	18.40	0.215	0.392
2349.9	2319.8	3.616	34.978	3.420	27.828	34.707	36.949	41.356	45.664	6.016	16.1	1.22	0.00	18.60	0.132	0.227
2600.7	2565.9	3.335	{34.977	3.119	27.856	34.747	36.993	41.408	45.723**	6.032	17.3	1.20	0.00	18.20	0.155	0.269
2852.2	2812.3	3.068	34.947	2.831	27.858	34.762	37.011	41.434	45.756	6.088	19.0	1.21	0.00	18.20	0.160	0.298
3100.0	3055.0	2.772	{34.935	2.516	27.877	34.793	37.047	41.477	45.808}}	6.164	20.1	1.19	0.00	18.00	0.222	0.421
3298.3	3248.9	2.565	{34.923	2.293	27.886	34.812	37.069	41.505	45.841}}							
3498.2	3444.2	2.404	{34.915	2.114	27.894	34.828	37.087	41.528	45.868}}							
3698.3	3639.6	2.293	{34.908	1.984	27.899	34.838	37.098	41.543	45.887}}							
3898.0	3834.3	2.215	34.896	1.886	27.897	34.840	37.102	41.550	45.896	6.100	31.2	1.30	0.00	19.10	0.200	0.375
4116.0	4046.8	2.186	{34.895	1.833	27.901	34.846	37.109	41.558	45.905}}	6.011	35.9	1.35	0.00	19.70	0.172	0.326

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ENDEAVOR 214 Station 35 90- 7- 4 Lat: 36.250 Lon: -70.538 Sonic Depth: 4407

PR	DE	T	S	Theta	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2	SiO2	Phos	NO2	NO3	F12	F11
dbars	meters	deg C	PSU	deg C		kg/m <sup>3</sup>	kg/m <sup>3</sup>	kg/m <sup>3</sup>	kg/m <sup>3</sup>	ml/l	umol/kg	umol/kg	umol/kg	umol/kg	pm/kg	pm/kg
2.5	2.5	25.470	36.410	25.469	24.265	30.510	32.546	36.553	40.474	4.663	1.8	0.03	0.00	0.10	1.022	1.988
196.2	194.6	19.623	36.651	19.587	26.132	32.499	34.575	38.658	42.654	4.866	1.4	0.04	0.01	1.10	1.198	2.271
398.0	394.7	18.622	36.568	18.551	26.336	32.728	34.812	38.911	42.922	4.682	1.8	0.12	0.01	2.90	1.130	2.217
598.6	593.4	17.183	36.360	17.082	26.540	32.970	35.066	39.190	43.224	4.319	2.8	0.36	0.00	7.10	0.904	1.743
746.8	740.0	14.647	{35.942	14.533	26.802	33.303	35.422	39.590	43.668}}	3.819	5.5	0.76	0.00	13.50	0.635	1.206
898.8	890.3	11.232	35.447	11.116	27.103	33.708	35.861	40.095	44.236	3.514	11.1	1.29	0.00	21.20	0.352	0.669
1048.8	1038.5	8.231	35.149	8.117	27.374	34.079	36.264	40.561	44.763	3.616	15.5	1.54	0.00	24.30	0.218	0.401
1198.9	1186.7	6.206	35.092	6.092	27.614	34.391	36.599	40.941	45.187	4.640	14.6	1.40	0.00	21.60	0.300	0.571
1350.6	1336.3	5.202	35.045	5.083	27.701	34.516	36.737	41.103	45.371	5.280	13.4	1.29	0.00	20.00	0.395	0.774
1450.0	1434.4	4.817	35.017	4.692	27.724	34.554	36.780	41.155	45.433	5.554	13.1	1.25	0.00	19.40	0.457	0.900
1551.0	1533.9	4.594	35.009	4.462	27.744	34.582	36.811	41.192	45.475	5.691	12.8	1.24	0.00	18.90	0.454	0.882
1648.8	1630.3	4.419	34.999	4.280	27.756	34.601	36.832	41.218	45.505	5.808	12.8	1.22	0.00	18.80	0.408	0.794
1797.2	1776.4	4.148	34.978	3.998	27.769	34.626	36.860	41.253	45.547	5.955	13.1	1.21	0.00	18.50	0.418	0.817
2200.1	2172.6	3.809	34.962	3.625	27.795	34.666	36.905	41.308	45.610	6.078	14.0	1.20	0.00	18.30	0.340	0.623
2597.7	2562.8	3.568	34.973	3.347	27.831	34.713	36.956	41.365	45.674	6.026	16.5	1.21	0.00	18.40	0.154	0.257
2898.4	2857.5	3.256	34.951	3.010	27.845	34.741	36.988	41.406	45.724	6.112	18.1	1.21	0.00	18.20	0.167	0.282
3097.8	3052.7	3.078	34.945	2.815	27.858	34.762	37.012	41.435	45.757	6.115	19.6	1.22	0.00	18.30	0.142	0.253
3299.5	3250.0	2.835	34.932	2.556	27.871	34.786	37.039	41.468	45.797	6.178	20.2	1.20	0.00	18.00	0.200	0.379
3498.4	3444.3	2.631	34.921	2.335	27.881	34.805	37.061	41.496	45.831	6.216	21.2	1.19	0.00	17.90	0.236	0.445
3699.8	3640.9	2.472	{34.916	2.158	27.892	34.823	37.082	41.522	45.861}}							
3899.4	3835.5	2.352	34.905	2.019	27.894	34.831	37.092	41.535	45.878	6.200	25.8	1.23	0.00	18.20	0.246	0.467
4097.4	4028.5	2.266	34.905	1.913	27.903	34.844	37.106	41.552	45.898	6.144	29.7	1.28	0.00	18.80	0.210	0.415
4297.5	4223.4	2.219	34.901	1.844	27.905	34.849	37.112	41.560	45.908	6.038	34.2	1.32	0.00	19.30	0.182	0.338
4489.2	4409.8	2.226	34.897	1.828	27.903	34.848	37.111	41.560	45.908	6.032	35.6	1.37	0.00	19.70	0.168	0.311

CS

ENDEAVOR 214 Station 36 90-7-5 Lat: 36.520 Lon: -70.745 Sonic Depth: 4354

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2	Phos	NO2	NO3	F12	F11
-----kg/m**3 -----ml/l -----umol/kg ----- -----pm/kg-----																
2.6	26.458	36.179	26.457	23.781	30.009	32.040	36.037	39.948	4.631	1.5	0.01	0.00	0.00	0.10	0.960	1.741
150.2	149.1	19.608{(36.661	19.580	26.142	32.509	34.584	38.668	42.664}}	4.889	1.0	0.02	0.05	0.05	0.60	1.163	2.195
298.7	296.3	18.705	36.584	18.652	26.323	32.712	34.795	38.893	4.755	1.1	0.10	0.00	0.00	2.40	1.117	2.227
497.8	493.6	17.479	36.423	17.394	26.513	32.934	35.028	39.146	4.423	2.1	0.30	0.00	0.00	6.00	0.942	1.787
722.5	715.9	13.996	35.845	13.889	26.865	33.385	35.510	39.690	43.778	3.858	5.8	0.83	0.00	14.30	0.616	1.158
948.0	938.9	9.001{(35.208	8.893	27.299	33.978	36.154	40.434	44.620}}	3.448	14.5	1.52	0.00	0.00	24.20	0.205	0.381
1098.0	1087.0	6.496	35.083	6.390	27.568	34.334	36.539	40.874	45.113	4.457	14.6	1.43	0.00	22.20	0.293	0.568
1248.9	1236.0	5.315	35.065	5.205	27.703	34.513	36.732	41.095	45.360	5.234	13.4	1.29	0.00	20.00	0.350	0.691
1397.3	1382.4	4.820	35.051	4.700	27.750	34.580	36.805	41.180	45.457	5.560	12.8	1.24	0.00	19.10	0.405	0.782
1498.6	1482.3	4.585	35.032	4.458	27.762	34.601	36.829	41.211	45.493	5.740	12.7	1.23	0.00	18.80	0.377	0.728
1599.4	1581.6	4.389	35.028	4.255	27.781	34.628	36.859	41.245	45.532	5.841	12.8	1.22	0.00	18.70	0.358	0.691
1699.0	1679.6	4.181	35.002	4.040	27.784	34.639	36.872	41.264	45.557	5.963	12.7	1.20	0.00	18.40	0.378	0.761
1899.5	1877.0	3.911	34.973	3.754	27.790	34.657	36.894	41.293	45.593	6.072	13.2	1.19	0.00	18.20	0.364	0.714
2099.2	2073.4	3.831{(34.975	3.656	27.802	34.672	36.911	41.312	45.614}}	6.055	14.0	1.21	0.00	0.00	18.40	0.251	0.438
2399.5	2368.3	3.655	34.992	3.453	27.836	34.714	36.955	41.361	45.668	6.019	16.2	1.23	0.00	18.50	0.113	0.173
2699.4	2662.5	3.324	34.964	3.098	27.847	34.740	36.986	41.401	45.717	6.097	17.3	1.21	0.00	18.30	0.124	0.235
3001.4	2958.3	2.985	34.950	2.734	27.869	34.777	37.027	41.452	45.777	6.156	19.0	1.21	0.00	18.10	0.176	0.318
3198.4	3151.0	2.756	34.935	2.490	27.879	34.796	37.050	41.482	45.812	6.196	20.3	1.21	0.00	18.10	0.178	0.350
3400.6	3348.7	2.584	34.927	2.300	27.889	34.814	37.070	41.507	45.842	6.294	21.1	1.19	0.00	17.80	0.260	0.497
3601.1	3544.5	2.415	34.924	2.114	27.902	34.835	37.094	41.535	45.875	6.227	24.3	1.22	0.00	18.20	0.213	0.402
3801.0	3739.5	2.302	34.918	1.981	27.908	34.846	37.107	41.552	45.895	6.157	27.1	1.24	0.00	18.50	0.220	0.400
4001.7	3935.1	2.249	34.902	1.907	27.901	34.842	37.104	41.551	45.897	6.154	29.8	1.27	0.00	18.90	0.206	0.395
4201.0	4129.3	2.218	34.896	1.855	27.900	34.844	37.107	41.555	45.902	6.103	33.2	1.32	0.00	19.40	0.172	0.310
4431.3	4353.4	2.216	34.895	1.826	27.901	34.847	37.110	41.559	45.907	6.037	36.2	1.36	0.00	19.80	0.170	0.302

ENDEAVOR 214 Station 37 90-7-5 Lat: 36.844 Lon: -70.823 Sonic Depth: 4256

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
7.3	7.2	28.014	36.253	28.012	23.335	29.535	31.557	35.535	39.429	4.553	1.7	0.02	0.00	0.00	0.951	1.922
96.1	95.3	22.589	36.891	22.569	25.495	31.793	33.847	37.888	41.842	3.672	1.7	0.21	0.02	4.00	0.921	1.704
246.9	245.0	18.913	36.605	18.869	26.283	32.667	34.749	38.843	42.849	4.788	1.2	0.09	0.01	1.90	1.157	2.272
496.5	492.3	16.558	36.265	16.476	26.611	33.057	35.159	39.292	43.336	4.253	2.9	0.44	0.00	8.20	0.840	1.613
744.3	737.4	10.772	35.395	10.679	27.142	33.761	35.919	40.161	44.311	3.338	11.9	1.37	0.00	22.10	0.304	0.534
843.8	835.9	8.436	35.163	8.344	27.350	34.047	36.230	40.522	44.719	3.574	14.7	1.54	0.00	24.20	0.211	0.434
996.8	987.0	6.088	35.079	5.996	27.616	34.397	36.606	40.951	45.198	4.707	14.3	1.40	0.00	19.20	0.298	0.573
1145.0	1133.4	4.792	35.011	4.696	27.719	34.549	36.774	41.150	45.427	5.557	12.7	1.26	0.00	19.20	0.513	1.290
1245.7	1232.8	4.492	35.010	4.390	27.752	34.594	36.823	41.206	45.491	5.736	12.4	1.23	0.00	18.70	0.548	1.103
1345.5	1331.2	4.373	{34.998}	4.263	27.756	34.603	36.834	41.220	45.507}}	5.800	12.3	1.21	0.00	18.40	0.455	#0.896
1445.4	1429.8	4.177	34.979	4.050	27.763	34.618	36.851	41.243	45.535	5.943	12.4	1.20	0.00	18.30	0.490	0.977
1596.4	1578.6	4.024	34.969	3.895	27.773	34.634	36.869	41.265	45.561	6.021	12.6	1.19	0.00	18.20	0.458	0.944
1796.9	1776.0	3.868	34.976	3.722	27.796	34.664	36.901	41.301	45.602							
1996.6	1972.4	3.757	34.969	3.593	27.803	34.676	36.916	41.319	45.622	6.071	13.9	1.19	0.00	18.20	0.253	0.505
2296.2	2266.8	3.570	34.970	3.380	27.825	34.706	36.949	41.357	45.666	6.068	15.6	1.20	0.00	18.20	0.157	0.291
2597.3	2562.3	3.307	34.972	3.091	27.854	34.747	36.993	41.408	45.724	6.105	17.0	1.20	0.00	18.20	0.166	0.285
2898.5	2857.5	3.045	34.948	2.804	27.862	34.766	37.016	41.439	45.762	6.123	19.3	1.20	0.00	18.20	0.125	0.258
3098.0	3052.7	2.875	34.938	2.617	27.870	34.783	37.035	41.463	45.790	6.154	19.9	1.20	0.00	18.20	0.148	0.280
3297.0	3247.4	2.729	34.930	2.453	27.878	34.797	37.052	41.484	45.816	6.199	21.0	1.19	0.00	18.10	0.171	0.325
3498.3	3444.0	2.548	{34.923}	2.254	27.889	34.816	37.073	41.511	45.848}}	6.188	21.0	1.18	0.00	17.70	0.272	0.522
3697.4	3638.4	2.425	34.915	2.113	27.895	34.828	37.087	41.528	45.868	6.147	23.3	1.21	0.00	17.90	0.257	0.501
3898.8	3834.8	2.325	34.904	1.993	27.895	34.834	37.094	41.539	45.882	6.058	25.7	1.22	0.00	18.30	0.278	0.551
4098.1	4029.0	2.238	34.896	1.886	27.897	34.840	37.103	41.550	45.896	6.132	30.7	1.27	0.00	19.00	0.217	0.413
4311.1	4236.4	2.205	34.890	1.829	27.897	34.842	37.105	41.554	45.902		35.4	1.37	0.01	19.70	0.156	0.297



ENDEAVOR 214 Station 38 90-7-5 Lat: 37.183 Lon: -71.095 Sonic Depth: 4093

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SI02	Phos umol/kg	NO2	NO3	F12	F11
0.6	0.6	27.064	{35.905}	27.064	23.381	29.601	31.629	35.620	39.526	4.663	1.2	0.02	0.00	0.10	1.000	1.850
132.0	131.0	19.084	{36.443}	19.060	26.110	32.491	34.571	38.664	42.668	3.535	3.5	0.46	0.14	8.50	0.823	1.505
346.5	343.7	12.932	35.673	12.884	26.939	33.489	35.624	39.823	43.930	3.230	9.0	1.15	0.00	19.30	0.408	0.747
547.0	542.3	5.937	{35.037}	5.889	27.596	34.381	36.592	40.940	45.190	4.797	14.0	1.38	0.00	21.40	0.515	1.090
746.2	739.3	4.817	35.001	4.757	27.704	34.532	36.757	41.131	45.407	5.479	12.8	1.27	0.00	19.50	0.547	1.097
897.8	889.3	4.527	35.015	4.455	27.749	34.588	36.816	41.198	45.481	5.716	12.7	1.23	0.00	18.90	0.446	0.885
1000.6	990.8	4.209	{34.972}	4.131	27.751	34.602	36.835	41.225	45.515	5.699	12.7	1.24	0.00	19.00	0.445	0.881
1095.8	1084.8	4.056	34.954	3.971	27.753	34.611	36.846	41.239	45.534	6.021	12.1	1.19	0.00	18.40	0.617	1.252
1198.4	1186.1	4.054	34.967	3.960	27.764	34.623	36.858	41.251	45.546	5.995	12.5	1.20	0.00	18.40	0.481	0.961
1351.3	1336.9	3.875	{34.955}	3.769	27.775	34.641	36.878	41.277	45.576	6.089	12.7	1.18	0.00	18.30	0.521	1.043
1499.8	1483.4	3.850	34.962	3.732	27.784	34.651	36.889	41.289	45.589	6.063	13.0	1.19	0.00	18.40	0.374	0.703
1698.3	1678.8	3.726	34.959	3.591	27.796	34.669	36.908	41.311	45.615	6.056	14.0	1.19	0.00	18.30	0.294	0.554
1897.9	1875.3	3.645	34.969	3.492	27.813	34.690	36.931	41.336	45.642	6.054	15.1	1.20	0.00	18.50	0.175	0.315
2087.1	2061.3	3.477	34.968	3.309	27.830	34.715	36.958	41.368	45.678	6.055	16.3	1.21	0.00	18.40	0.105	0.192
2096.0	2070.1	3.405	34.966	3.237	27.836	34.723	36.967	41.379	45.691							
2400.6	2369.2	3.200	34.952	3.006	27.846	34.743	36.990	41.408	45.726	6.069	18.3	1.21	0.00	18.20	0.130	0.202
2700.3	2663.2	2.891	34.937	2.673	27.865	34.775	37.026	41.453	45.779	6.145	19.6	1.21	0.00	18.20	0.151	0.272
3000.9	2957.6	2.616	34.921	2.373	27.878	34.800	37.056	41.490	45.824	6.197	21.3	1.19	0.00	18.10	0.193	0.366
3197.3	3149.8	2.444	34.910	2.185	27.885	34.815	37.073	41.512	45.851	6.220	23.4	1.20	0.00	18.20	0.201	0.391
3399.8	3347.7	2.326	{34.911}	2.049	27.897	34.833	37.093	41.536	45.878	6.163	24.9	1.22	0.00	18.30	0.238	0.458
3598.7	3541.9	2.258	34.896	1.961	27.892	34.831	37.092	41.538	45.882		30.0	1.28	0.00	19.10	0.133	0.235
3800.3	3738.6	2.215	34.893	1.897	27.894	34.837	37.099	41.546	45.892	6.117	31.4	1.28	0.00	19.20	0.163	0.297
3997.3	3930.6	2.199	34.893	1.859	27.897	34.841	37.104	41.552	45.899	6.094	33.4	1.31	0.00	19.50	0.170	0.306
4143.3	4072.9	2.199	34.888	1.843	27.894	34.839	37.102	41.550	45.898	6.063	34.6	1.33	0.00	19.60	0.163	0.314

ENDEAVOR 214 Station 39 90- 7- 6 Lat: 37.508 Lon: -71.310 Sonic Depth: 3807

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11 kg
2.8	2.8	23.228	{34.813	23.227	23.728	30.031	32.087	36.130	40.087	5.065	1.4	0.06	0.00	0.00	1.198	2.146
149.4	148.2	12.740	{35.625	12.720	26.935	33.490	35.627	39.829	43.940	3.433	9.0	1.11	0.01	17.60	0.563	1.047
348.8	346.0	6.279	35.075	6.248	27.580	34.352	36.558	40.897	45.139	4.508	14.8	1.45	0.01	21.80		
548.8	544.0	4.860	35.015	4.816	27.709	34.534	36.758	41.131	45.405	5.439	13.1	1.30	0.00	19.10	0.578	1.155
748.6	741.7	4.430	35.004	4.372	27.750	34.592	36.821	41.205	45.490	5.755	12.5	1.25	0.00	18.50	0.551	1.124
848.3	840.3	4.254	34.986	4.188	27.755	34.605	36.836	41.225	45.514	5.879	12.6	1.23	0.00	18.30	0.545	1.097
948.3	939.1	4.103	34.985	4.030	27.771	34.627	36.861	41.253	45.546	5.962	12.7	1.22	0.00	18.10	0.546	1.104
1049.1	1038.6	3.991	34.967	3.910	27.769	34.630	36.865	41.260	45.556	6.032	12.7	1.22	0.00	17.90	0.543	1.082
1098.6	1087.5	3.934	34.975	3.850	27.782	34.645	36.881	41.278	45.575	6.055	12.7	1.21	0.00	17.90	0.531	1.069
1299.3	1285.7	3.847	34.977	3.746	27.794	34.661	36.898	41.298	45.597	6.068	13.4	1.22	0.00	17.90	0.395	0.773
1449.1	1433.3	3.772	34.985	3.659	27.809	34.680	36.918	41.319	45.621	6.069	13.9	1.22	0.00	18.00	0.331	0.632
1599.0	1581.0	3.668	34.969	3.543	27.808	34.683	36.923	41.328	45.632	6.070	14.7	1.22	0.00	17.90	0.268	0.500
1799.6	1778.6	3.542	34.972	3.400	27.825	34.705	36.947	41.355	45.663	6.080	15.4	1.23	0.00	18.00	0.205	0.390
1998.8	1974.5	3.386	{34.965	3.228	27.835	34.723	36.967	41.379	45.692	6.066	16.9	1.24	0.00	18.10	0.133	0.221
2299.4	2269.8	3.122	34.962	2.939	27.860	34.759	37.007	41.427	45.746	6.079	19.3	1.25	0.00	18.20	0.110	0.182
2600.2	2565.0	2.801	34.945	2.595	27.878	34.791	37.043	41.472	45.800	6.157	20.5	1.23	0.00	18.10	0.157	0.293
2899.8	2858.6	2.506	34.927	2.276	27.891	34.817	37.074	41.511	45.847	6.234	22.0	1.22	0.00	17.80	0.223	0.431
3101.0	3055.5	2.376	{34.915	2.129	27.893	34.826	37.085	41.525	45.865	6.220	23.6	1.23	0.00	17.90	0.268	0.531
3299.6	3249.7	2.270	34.907	2.004	27.897	34.835	37.095	41.539	45.883	6.201	27.0	1.26	0.00	18.30	0.215	0.416
3500.0	3445.5	2.200	{34.901	1.915	27.899	34.841	37.102	41.549	45.894	6.124	29.0	1.31	0.00	18.80	0.173	0.323
3700.5	3641.2	2.161	34.895	1.855	27.899	34.843	37.106	41.554	45.901	6.102	33.5	1.34	0.00	19.30	0.177	0.325
3850.6	3787.6	2.159	{34.894	1.837	27.900	34.844	37.107	41.556	45.903	6.068	35.2	1.36	0.00	19.60	0.167	0.324

ENDEAVOR 214 Station 40 90-7-6 Lat: 37.869 Lon: -71.484 Sonic Depth: 3229

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
1.9	1.9	21.939	{34.694	21.939	24.004	30.336	32.400	36.462	40.436	5.182	1.6	0.10	0.00	0.00		
144.1	143.0	11.484	35.416	11.466	27.014	33.609	35.759	39.986	44.120	3.374	10.8	1.26	0.02	20.10	0.553	1.072
294.1	291.7	7.544	{35.096	7.515	27.421	34.148	36.340	40.650	44.865	3.785	16.3	1.59	0.01	24.40	0.278	0.533
444.1	440.3	5.384	35.021	5.347	27.651	34.456	36.674	41.034	45.296	5.043	14.2	1.37	0.00	20.70	0.515	1.036
594.0	588.7	4.809	35.013	4.762	27.713	34.540	36.765	41.139	45.415	5.483	13.4	1.30	0.00	19.50	0.526	1.070
694.5	688.1	4.523	35.000	4.469	27.736	34.574	36.803	41.184	45.467	5.716	13.0	1.26	0.00	18.80	0.584	1.170
794.0	786.5	4.356	34.993	4.294	27.749	34.595	36.825	41.211	45.497	5.822	13.0	1.25	0.00	18.70	0.577	1.143
894.3	885.8	4.186	34.973	4.117	27.752	34.605	36.838	41.228	45.519	5.921	13.1	1.24	0.00	18.40	0.588	1.190
994.2	984.4	4.077	34.973	4.000	27.765	34.622	36.856	41.249	45.543	6.007	12.9	1.23	0.00	18.20	0.567	1.145
1093.6	1082.5	4.011	34.971	3.927	27.771	34.631	36.866	41.261	45.556	6.029	13.0	1.23	0.00	18.20	0.516	1.037
1194.4	1182.1	4.014	{34.979	3.921	27.778	34.638	36.873	41.268	45.564	6.025	13.1	1.23	0.00	18.30	0.397	0.778
1343.8	1329.4	3.912	{34.982	3.807	27.792	34.657	36.893	41.291	45.589	5.031	13.8	1.23	0.00	18.30	0.294	0.554
1493.6	1477.2	3.713	34.969	3.597	27.803	34.676	36.915	41.318	45.621	6.118	14.0	1.22	0.00	18.10	0.324	0.643
1644.0	1625.3	3.644	34.975	3.515	27.816	34.692	36.932	41.337	45.642	6.103	14.8	1.22	0.00	18.10	0.257	0.480
1844.1	1822.2	3.515	34.977	3.369	27.832	34.713	36.956	41.364	45.673	6.096	15.9	1.24	0.00	18.10	0.179	0.326
2044.0	2018.9	3.342	34.970	3.180	27.844	34.734	36.978	41.392	45.705	6.096	17.1	1.23	0.00	18.10	0.164	0.299
2295.3	2265.7	3.106	34.953	2.924	27.855	34.754	37.002	41.422	45.742	6.134	18.2	1.23	0.00	18.00	0.177	0.325
2545.3	2511.1	2.808	34.937	2.607	27.870	34.783	37.035	41.464	45.791	6.206	19.5	1.22	0.01	17.80	0.222	0.432
2793.6	2754.4	2.569	34.921	2.348	27.880	34.803	37.059	41.494	45.829	6.277	19.7	1.20	0.00	17.50	0.313	0.627
2993.4	2950.1	2.406	34.914	2.169	27.889	34.820	37.078	41.518	45.857	6.310	20.6	1.20	0.00	17.40	0.372	0.743
3195.5	3147.8	2.320	34.917	2.064	27.900	34.835	37.095	41.537	45.879	6.264	23.2	1.23	0.00	17.60	0.358	0.698
3265.6	3216.3	2.300	{34.911	2.037	27.898	34.834	37.094	41.537	45.880	6.253	23.8	1.23	0.00	17.70	0.334	0.692

ENDEAVOR 214 Station 41 90- 7- 6 Lat: 38.214 Lon: -71.662 Sonic Depth: 2953

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2	Phos umol/kg	NO2	NO3	F12	F11 pm/kg
1.5	1.5	21.241	34.438	21.241	24.002	30.352	32.422	36.494	40.479	5.284	1.2	0.10	0.00	0.00		
122.8	121.9	12.859	35.626	12.842	26.910	33.462	35.598	39.798	43.907	3.485	8.5	1.07	0.01	17.60		
244.9	242.9	9.479	35.211	9.451	27.210	33.870	36.041	40.310	44.484	3.085	15.1	1.61	0.00	25.20	0.217	0.401
395.0	391.7	6.797	35.074	6.760	27.511	34.264	36.465	40.792	45.023	4.193	14.6	1.49	0.00	22.90		
569.7	564.7	4.888	{34.975	4.842	27.674	34.499	36.723	41.095	45.369}}	5.409	12.7	1.30	0.00	19.50	0.727	1.502
745.6	738.6	4.415	34.970	4.357	27.724	34.567	36.797	41.181	45.467	5.789	12.0	1.24	0.00	18.70	0.751	1.546
845.5	837.5	4.258	34.958	4.193	27.733	34.582	36.814	41.202	45.492	5.904	11.8	1.22	0.00	18.40	0.737	1.518
945.6	936.4	4.166	34.957	4.093	27.742	34.596	36.829	41.220	45.511	5.967	11.8	1.22	0.00	18.30	0.676	1.400
1046.7	1036.2	4.032	34.951	3.951	27.752	34.611	36.846	41.241	45.536	6.052	12.0	1.21	0.00	18.00	0.667	1.365
1146.2	1134.5	3.932	34.946	3.844	27.760	34.623	36.859	41.256	45.554	6.111	12.0	1.20	0.00	17.90	0.628	1.266
1247.0	1234.0	3.882	{34.955	3.786	27.773	34.638	36.875	41.274	45.573}}		11.7	1.17	0.00	17.40	0.614	1.222
1391.8	1376.7	3.781	34.948	3.673	27.779	34.649	36.887	41.288	45.590	6.019	12.5	1.21	0.00	17.90		
1545.7	1528.4	3.729	34.952	3.608	27.788	34.661	36.900	41.303	45.606	6.116	13.2	1.21	0.00	17.90		
1696.9	1677.3	3.677	34.956	3.543	27.798	34.673	36.913	41.317	45.622	#5.77	14.1	1.21	0.00	18.00		
1846.8	1824.9	3.614	34.964	3.467	27.812	34.690	36.931	41.337	45.644	5.980	14.8	1.21	0.00	18.10		
1996.1	1971.7	3.506	34.963	3.346	27.823	34.706	36.948	41.357	45.667	6.093	15.6	1.21	0.00	18.10	0.184	0.337
2197.4	2169.5	3.302	34.955	3.126	27.838	34.729	36.975	41.389	45.704	6.117	17.0	1.21	0.00	18.10		
2398.1	2366.6	3.124	34.949	2.932	27.851	34.750	36.998	41.418	45.738	6.146	17.7	1.21	0.00	17.90	0.178	0.348
2596.7	2561.4	2.922	34.939	2.714	27.863	34.771	37.022	41.447	45.772	6.172	19.2	1.21	0.00	17.90	0.178	0.347
2797.4	2758.1	2.688	34.928	2.465	27.876	34.794	37.048	41.480	45.812	6.245	19.5	1.19	0.00	17.40	0.270	0.542
2898.0	2856.6	2.523	34.916	2.293	27.880	34.806	37.063	41.499	45.835	6.275	20.5	1.20	0.00	17.40	0.328	0.644
2978.4	2935.3	2.477	34.913	2.240	27.883	34.811	37.068	41.506	45.843	6.269	21.0	1.19	0.00	17.40	0.340	0.680

ENDEAVOR 214 Station 42 90- 7- 6 Lat: 38.532 Lon: -71.865 Sonic Depth: 2815

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12	F11
2.5	20.272	33.729	20.272	23.722	30.100	32.180	36.270	40.273	5.429	1.5	0.15	0.00	0.00	0.00	1.375	2.634
96.5	11.360	{34.938	11.348	26.664	33.268	35.420	39.653	{43.792}	4.954	5.1	0.74	0.02	10.50	1.465	2.961	
196.5	11.430	35.376	11.405	26.994	33.592	35.742	39.971	44.106	3.522	10.4	1.21	0.01	19.20	0.650	1.262	
271.2	9.124	35.170	9.094	27.236	33.909	36.084	40.360	44.542	3.251	14.8	1.55	0.00	24.40	0.357	0.688	
396.6	6.800	35.006	6.763	27.457	34.210	36.411	40.739	44.970	4.144	14.8	1.48	0.00	22.80	0.526	1.057	
496.2	5.776	35.014	5.733	27.598	34.389	36.602	40.953	45.207	4.769	13.9	1.39	0.00	21.20	0.511	1.023	
596.7	5.152	35.015	5.103	27.675	34.490	36.710	41.076	45.344	5.252	13.2	1.32	0.00	19.90	0.558	1.113	
696.1	4.854	35.010	4.798	27.707	34.533	36.757	41.130	45.405	5.477	12.8	1.28	0.00	19.30	0.534	1.059	
796.3	4.430	34.968	4.368	27.722	34.564	36.794	41.178	45.463	5.791	12.1	1.24	0.00	18.60	0.713	1.497	
895.5	4.293	34.970	4.223	27.739	34.587	36.819	41.206	45.495	5.891	12.1	1.22	0.00	18.40	0.667	1.342	
996.1	4.250	34.979	4.172	27.751	34.602	36.834	41.222	45.512	5.910	12.3	1.22	0.00	18.30	0.517	1.039	
1057.0	4.145	34.977	4.063	27.761	34.616	36.849	41.241	45.533	5.978	12.6	1.21	0.00	18.30	0.508	1.029	
1196.6	3.930	34.949	3.837	27.763	34.626	36.863	41.260	45.557		12.3	1.19	0.00	18.00	0.606	1.213	
1296.6	3.855	34.949	3.754	27.771	34.638	36.875	41.274	45.574	6.143	12.3	1.18	0.00	17.90	0.577	1.151	
1395.7	3.831	34.952	3.722	27.777	34.645	36.883	41.283	45.583	6.127	12.9	1.19	0.00	17.90	0.474	0.957	
1497.2	3.790	34.961	3.672	27.789	34.659	36.897	41.298	45.600	6.108	13.2	1.19	0.00	18.00	0.405	0.799	

ENDEAVOR 214 Station 43 90-7-7 Lat: 39.100 Lon: -72.167 Sonic Depth: 2639

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11 pm/kg
2.8	2.8	20.142	33.591	20.141	23.652	30.034	32.114	36.208	40.213	5.504	1.7	0.27	0.00	0.00	1.424	2.696
103.0	102.2	11.410	{35.043	11.397	26.737	33.338	35.489	39.720	{43.858}	5.039	5.2	0.76	0.02	10.70		
195.5	193.9	11.163	{35.367	11.139	27.036	33.642	35.795	40.029	{44.170}	3.405	11.2	1.30	0.00	20.70		
247.5	245.5	9.958	35.265	9.929	27.172	33.816	35.981	40.240	44.405	3.122	14.3	1.55	0.00	24.40	0.298	0.575
374.2	371.0	6.908	{35.039	6.873	27.467	34.217	36.416	40.741	{44.970}	4.080	15.3	1.54	0.00	23.50		
496.7	492.4	5.523	34.984	5.481	27.605	34.406	36.622	40.979	45.239	4.931	13.8	1.40	0.00	20.90	0.629	1.269
598.8	593.4	4.987	34.981	4.938	27.668	34.488	36.711	41.081	45.353	5.366	13.4	1.37	0.00	19.70	0.712	1.421
698.3	691.8	4.708	34.982	4.652	27.701	34.533	36.759	41.136	45.414	5.587	12.7	1.29	0.00	19.20	0.700	1.410
799.2	791.6	4.503	34.978	4.440	27.722	34.561	36.790	41.172	45.456	5.748	12.5	1.26	0.00	18.90	0.691	1.420
900.0	891.3	4.354	34.975	4.283	27.736	34.582	36.813	41.199	45.486	5.851	12.7	1.25	0.00	18.50	0.646	1.352
1001.8	991.8	4.232	34.971	4.154	27.747	34.598	36.830	41.219	45.510	5.941	12.4	1.24	0.00	18.40	0.626	1.270
1084.5	1073.4	4.131	34.967	4.046	27.755	34.610	36.844	41.236	45.529	6.000	12.4	1.23	0.00	18.30	0.596	1.212
1200.1	1187.6	4.001	34.963	3.907	27.767	34.627	36.863	41.258	45.554	6.012	12.6	1.23	0.00	18.20	0.548	1.131
1300.8	1286.9	3.921	34.961	3.819	27.774	34.638	36.875	41.272	45.570	6.105	12.6	1.24	0.00	18.10	0.473	1.047
1400.3	1385.0	3.850	34.958	3.740	27.780	34.647	36.885	41.284	45.584	6.134	13.0	1.22	0.00	18.00	0.472	0.929
1499.6	1482.9	3.791	34.959	3.673	27.787	34.657	36.896	41.297	45.598	6.128	13.3	1.23	0.00	18.00	0.411	0.806

ENDEAVOR 214 Station 44 90- 7- 7 Lat: 39.111 Lon: -72.161 Sonic Depth: 1606

PR dbars	DE meters	T deg C	S PSU	Theta deg C	Sig 0	Sig 1.5	Sig 2.0	Sig 3.0	Sig 4.0	O2 ml/l	SiO2 umol/kg	Phos umol/kg	NO2	NO3	F12 pm/kg	F11
2.9	2.9	19.880	33.589	19.879	23.719	30.107	32.189	36.287	40.295	5.539	1.7	0.15	0.00	0.00	1.456	2.714
100.6	99.8	11.447	{35.037	11.434	26.725	33.325	35.476	39.707	43.844}	5.044	5.0	0.75	0.01	10.40	1.459	2.940
199.9	198.3	11.400	35.399	11.375	27.018	33.616	35.766	39.996	44.132	3.400	10.7	1.27	0.00	20.00	0.589	1.124
249.3	247.3	10.230	35.277	10.200	27.134	33.770	35.932	40.186	44.345	3.188	13.4	1.47	0.00	23.10	0.416	0.801
373.7	370.6	7.192	35.027	7.156	27.418	34.158	36.355	40.674	44.896	3.919	15.3	1.54	0.00	23.60	0.479	0.945
500.8	496.4	5.594	34.977	5.551	27.591	34.389	36.604	40.960	45.218	4.832	14.3	1.40	0.00	21.10	1.254	1.254
602.5	597.1	5.022	34.983	4.973	27.665	34.485	36.707	41.076	45.347	5.300	13.5	1.33	0.00	19.80	0.676	1.376
695.6	689.1	4.714	34.979	4.659	27.698	34.529	36.756	41.132	45.411	5.558	13.0	1.29	0.00	19.30	0.710	1.446
801.2	793.5	4.475	34.982	4.412	27.728	34.569	36.798	41.181	45.465	5.738	12.9	1.26	0.00	18.90	0.670	1.364
894.9	886.3	4.341	34.976	4.271	27.738	34.585	36.816	41.202	45.489	5.835	12.9	1.25	0.00	18.60	0.638	1.326
1000.4	990.4	4.221	34.976	4.143	27.752	34.603	36.836	41.225	45.516	5.922	12.9	1.25	0.00	18.40	0.605	1.221
1095.8	1084.6	4.064	34.962	3.979	27.758	34.616	36.851	41.244	45.539	6.006	12.9	1.23	0.00	18.30	0.611	1.229
1195.5	1183.0	3.979	34.959	3.886	27.766	34.627	36.863	41.259	45.555	6.041	13.0	1.24	0.00	18.20	0.568	1.137
1296.5	1282.7	3.913	34.957	3.812	27.772	34.636	36.873	41.270	45.569	6.080	13.4	1.22	0.00	18.20	0.549	1.096
1400.4	1385.1	3.857	34.957	3.747	27.778	34.645	36.883	41.282	45.582	6.089	13.4	1.24	0.00	18.10	0.965	0.965
1497.9	1481.2	3.805	34.960	3.687	27.787	34.656	36.894	41.295	45.596	6.086	13.6	1.26	0.00	18.10	0.444	0.854

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