AD-A174 002 FRONTS CRUISE: LEG I: 11 JULY 1985 LEG II: 12-23 JULY 1985(U) SCRIPPS INSTITUTION OF OCEANOGRAPHY LA JOLLA CA L R HAURY ET AL. OCT 86 SIO-REF-86-23 N00014-85-C-0104 1/2

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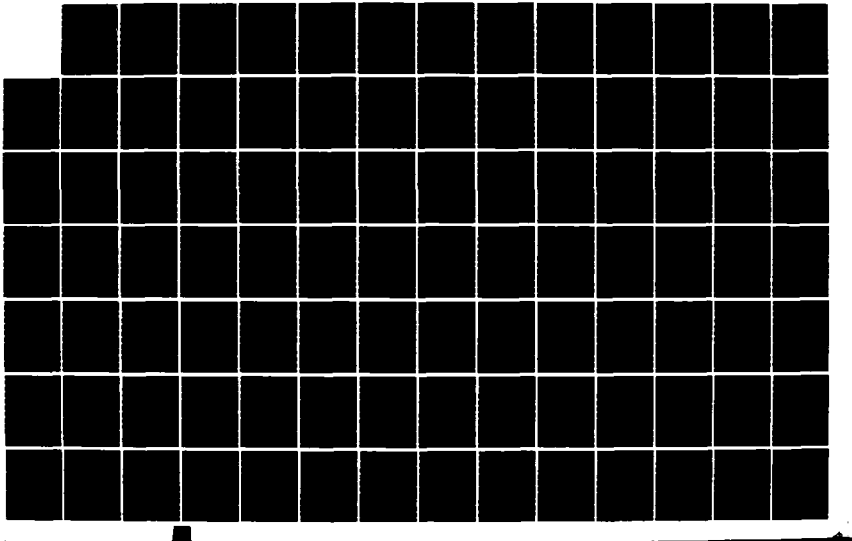

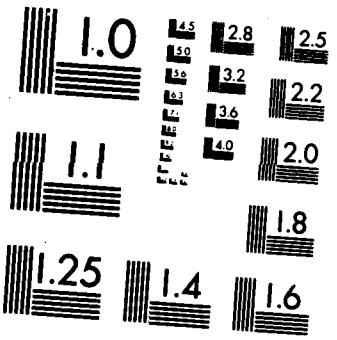

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data report

FRONTS CRUISE

Leg I: 1 - 11 July 1985

Leg II: 12 - 23 July 1985

NOV 1 2 1986

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SIO Reference 86-23
October 1986

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The data in this report were collected from 1 to 23 July 1985 on the two legs of the FRONTS cruise aboard RV New Horizon of the Scripps Institution of Oceanography. The data were collected and processed by personnel of the Ocean Research Division (ORD), the Marine Life Research Group (MLRG), the Instituto Nacional de Pesca (INP), the Secretaria de Marina, and the Centro de Investigacion Cientifica y de Educacion Superior de Ensenada (CICESE).

The purpose of the cruise was to describe the vertical and horizontal structure and dynamics of the physical, chemical, and biological properties...

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SCRIPPS INSTITUTION OF OCEANOGRAPHY

FRONTS CRUISE

LEG I: 1 - 11 July 1985

LEG II: 12 - 23 July 1985

L. R. Haury, P. M. Poulain, A. W. Mantyla, E. L. Venrick, and P. P. Niiler

Sponsored by

Office of Naval Research
and
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Scripps Institution of Oceanography

SIO Reference 86-23

October 1986

Approved for distribution:

Edward A. Frieman, Director

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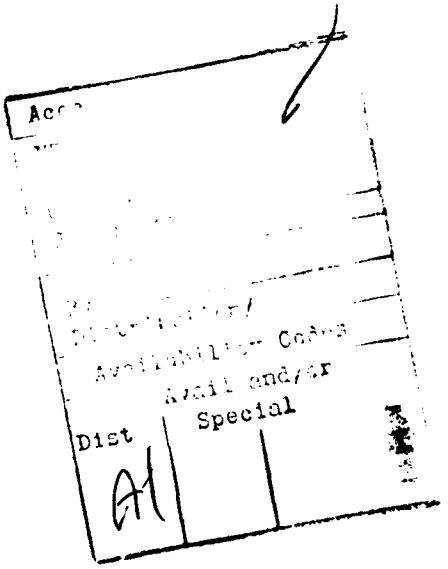

INTRODUCTION

The data in this report were collected from 1 to 23 July 1985 on the two legs of the FRONTS cruise aboard RV *New Horizon* of the Scripps Institution of Oceanography. The data were collected and processed by personnel of the Ocean Research Division (ORD), the Marine Life Research Group (MLRG), the Instituto Nacional de Pesca (INP), the Secretaria de Marina, and the Centro de Investigacion Cientifica y de Educacion Superior de Ensenada (CICESE).

The purpose of the cruise was to describe the vertical and horizontal structure and dynamics of the physical, chemical, and biological properties associated with a persistent, seasonally-recurring front in the California Current southwest of San Diego, California (Peláez and McGowan, in press).

STANDARD PROCEDURES

Conductivity/Temperature/Depth Recorder (CTD) Data

A Neil Brown Instrument Systems Mark III CTD was used during Leg I on 81 stations with lowerings to 300 m or 500 m. The second portion of the CTD survey made three cross-sections through a strong cold frontal area detected in satellite Advanced Very High Resolution Radiometer images sent to the ship. Temperature and salinity calibration samples were taken with Niskin bottles hung on the CTD wire on five of the CTD casts. Station position was determined from Loran C fixes. Wind speed and direction were derived from the S.A.I.L. data acquisition system; anemometer height was about 12 m above sea level. XBTs were dropped between CTD stations; these data are not presented here.

CTD data recording and monitoring used a Hewlett-Packard HP 9000, Series 200 computer. After conversion into digital form, the 25Hz-sampled data of conductivity, temperature (Platinum Resistance Thermometer), fast temperature, pressure and oxygen concentration were recorded on 9-track magnetic tapes. 10 m interpolated observations were recorded onto micro-floppy disks. Coarse profiles were plotted and, as a back-up, the Frequency Shift Key modulated signals were recorded onto audio cassettes.

In the laboratory, the raw data from the magnetic tapes were further processed in the following sequence:

(a) Bad points and frames were rejected. Pressure, temperature (PRT) and conductivity were decoded. The conductivity signal was lagged for despiking salinity; a simple recursive filter was applied:

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

where $C_0(n)$ is the observed conductivity value and $C(n)$ is the filtered value of the n^{th} scan, and α is a constant determined by successive despiking attempts on one chosen profile. A value of 0.830 was taken for α, corresponding to a time constant of 0.215 seconds.

Averages over 1 sec or 25 frames, whichever came first, were computed.

(b) Residual temperature dependence was corrected by substracting from the readings of pressure:

— for the downcast, a linear function of pressure varying from the initial offset at the surface to the after-cast offset at the bottom.

— for the upcast, the constant after-cast pressure offset.

Hysteresis and non-linearity of the sensors were not corrected, as they were negligible for these shallow water casts. Neil Brown sensor calibrations were used as there was no statistically significant difference between bottle calibration data and both temperature and salinity. After pressure-to-depth conversion, data were linearly interpolated every 1 meter.

(c) From the interpolated data set, downcast values were extracted at 20 standard depths. Potential temperature and density, and geopotential anomaly were computed. Details on the algorithms used can be found in Fofonoff (1985).

Remarks:

— Stations 26 and 78 could not be retrieved from the 9-track tapes. The 10 m interpolated downcast data from the floppy discs were substituted for these stations. Comparisons of the two casts with adjacent stations showed good agreement.

— The oxygen data are not presented in this report.

Hydrographic Cast Data

The hydrographic casts made on Leg II consisted of 20 Nansen bottles lowered to a maximum sampling depth of 1000 meters. Temperature, salinity, oxygen, and nutrients were determined for all depths sampled. Chlorophyll *a* and phaeopigments were determined from the top 12 depths.

Paired protected reversing thermometers were used to determine temperatures which are recorded to hundredths of a degree Celsius. Sampling bottles used below a depth of 100 meters were equipped with unprotected thermometers for determination of the depth of sampling.

Salinity samples were analyzed at sea using inductive-type salinometers. Salinometers were standardized with sub-standard seawater. The sub-standard water was prepared from filtered seawater collected in 30-liter Niskin bottles from a depth of 400 m, gently evaporated to increase the salinity to near 35‰. Periodic checks on the concentration of the substandard were made by comparison with Wormley Standard Seawater, batch P-78. The salinity values are reported to three decimal places.

Dissolved oxygen was determined by the Winkler method as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971). Percent oxygen saturation was calculated from the equations of Weiss (1970).

Silicate, phosphate, nitrate, and nitrite nutrients were determined at sea using an automated analyzer. The procedures used are similar to those described in Atlas *et al.* (1971).

Chlorophyll was measured with a fluorometric technique (Yentsch and Menzel, 1963; Holm-Hansen *et al.*, 1965). Subsamples were drawn from the Nansen bottles and filtered onto GF/C filters. The filters were placed in scintillation vials containing 10 ml of 90% acetone and the pigments were extracted in the dark in a refrigerator for a period of one to three days. The samples were then brought to room temperature and the fluorescence of the sample was determined, before and after acidification, with a Turner 111 fluorometer. The potential biases in the technique are discussed in Venrick and Hayward (1984).

The observed data have been evaluated using the methodology described by Klein (1973). This involves consideration of their variation as functions of density or depth and their relation to each other, and comparisons with adjacent observations.

Primary Productivity Casts

Primary production was estimated from ^{14}C uptake using a simulated *in situ* technique. Light penetration was estimated from the Secchi depth (assuming that the 1% light level is three times the Secchi depth). Vertical profiles of photosynthetically active radiation (PAR) were obtained just after the Secchi disk casts with a Biospherical Instruments quantum scalar irradiance meter, model QSP 170BR; these data are not presented here. Six depths, corresponding to predetermined levels of light penetration, were sampled with 5 l Niskin bottles. Triplicate subsamples were drawn from each depth into 125 ml polycarbonate incubation bottles which were innoculated with 10 μci of ^{14}C as

$NaHCO_3$. Two light and one dark (control) bottle were then incubated approximately from local apparent noon to civil twilight in sea water cooled incubators with neutral density screens which simulate the *in situ* light levels. At the end of the incubation, the samples were filtered onto HA milipore filters and placed in scintillation vials. One-half ml of 10% HCl was added to each sample, which was then allowed to sit without a cap, at room temperature for 12 hours (after Lean and Burnison, 1979). Following this, 10 ml of scintillation fluor were added to each sample and the samples were returned to S.I.O. where the radioactivity was determined with a scintillation counter.

Macrozooplankton Samples

Bongo Net Tows -- Macrozooplankton was sampled at each station during Leg II with a 71 cm mouth diameter paired net (bongo net) equipped with 0.505 mm plankton mesh. The nets were towed obliquely from 210 m to the surface; tow time for a standard tow was 21.5 minutes. Volumes filtered were determined from flowmeter readings and the mouth area of the net. Both samples were retained and preserved. The biomass, as wet displacement volume, after removal of large (> 5 ml) organisms, was determined in the laboratory ashore. These procedures are summarized in greater detail in Kramer *et al.* (1972).

MOCNESS Net Tows -- A Multiple Opening-Closing Net and Environmental Sensing System (MOCNESS) was used to sample vertical distributions of macrozooplankton at two geographic locations during the second leg of the cruise. This net system has an effective mouth area of 1 m^2 and was equipped with nets of 333 μm mesh aperture. The 20 nets mounted on the frame permit collections of zooplankton from 16 strata. A more complete description of the system and its operation is presented in Wiebe *et al.* (1985). Wet displacement volumes were measured as with the bongo net samples.

TABULATED DATA

CTD Cast Data

CTD cast dates are reported in Julian days and times in Greenwich Mean Time; date and time refer to the start time of the cast. Wind direction is presented using the World Meteorological Organization Code WMO 885/887, i.e., 1=[5 to 14 degrees],...,36=[355 to 4 degrees], 0=no wind.

The flag at each depth has the following meaning:

1 = normal

2 = data missing, nearest depth value(s) has(ve) been used

3 = downcast data missing, filled with upcast values

4 = extrapolated values

A factor of 0.1 is needed if one wants to have the geopotential anomaly in dynamic meters.

Plots of each CTD cast are presented with the tabulated data. Downcast and upcast values of temperature, salinity and potential density are represented by thick and thin lines respectively; station number is in upper right corner of each plot.

Hydrographic Cast Data

The reported hydrographic cast time is the Greenwich Mean Time (GMT) of the messenger release. Weather conditions have been coded using WMO Code 4051. Observed and interpolated standard depth data from hydrographic casts have been interspersed and are presented together sequentially by depth. Interpolated or extrapolated standard level data are noted by the footnote "ISL" printed after the depth. Density-related parameters have been calculated from the International Equation of State of Seawater 1980 (EOS80, UNESCO, 1981). Some of the differences between EOS80 and the older equations-of-state are discussed in the introduction to SIO Ref. 84-18. Computed values of potential temperature, sigma-theta, specific volume anomaly (SVA), dynamic height or geopotential anomaly, and pressure are included with both observed and interpolated standard depth levels.

Primary Productivity Casts

In addition to the normal hydrographic data, the tabulated data include: the light levels at which the samples were incubated, the uptake from each of the replicate light bottles (uptake 1 and uptake 2) which have been corrected for dark uptake by subtracting the dark value, the mean of the two uptake values, the dark uptake, chlorophyll and phaeophytin. The uptake values shown are the total for the incubation period. The times of local apparent noon (LAN), civil twilight, and the vertically integrated value of the mean uptake from the surface to the deepest sample depth (assuming that the shallowest measured value extends to the surface and that negative values are zero) are also shown for each experiment. The uptake data have been presented to two significant digits (values < 1.00) or one decimal (values > 1.00). The higher production values may not warrant all of the significant digits presented. Incubation time, LAN, and civil twilight are given in local Pacific Standard Time (PST); to convert to GMT, add eight hours to the PST time.

Macrozooplankton Data

Macrozooplankton biomass volumes are tabulated as total biomass volume ($cm^3/1000m^3$ strained) minus the volume of larger organisms. Net tow times are reported in Pacific Daylight Time (PDT, GMT = PDT +7 hours).

Acknowledgements

This cruise was sponsored by Office of Naval Research contract N00014-85-C-0104 to P. P. Niiler and L. R. Haury, and by the Marine Life Research Group of Scripps Institution of Oceanography. Special thanks for Leg I go to Dr. L. Armi for providing the Neil Brown CTD and computer equipment, R. Olsen for helping in data acquisition and processing, and P. Flament for providing the data processing software. The portions of the cruise conducted in Mexican waters were made under the authority of Mexican Secretariat of External Relations Note No. 302082. We thank our Mexican colleagues who participated in the cruise for their hard work and cooperation that helped make the cruise a success.

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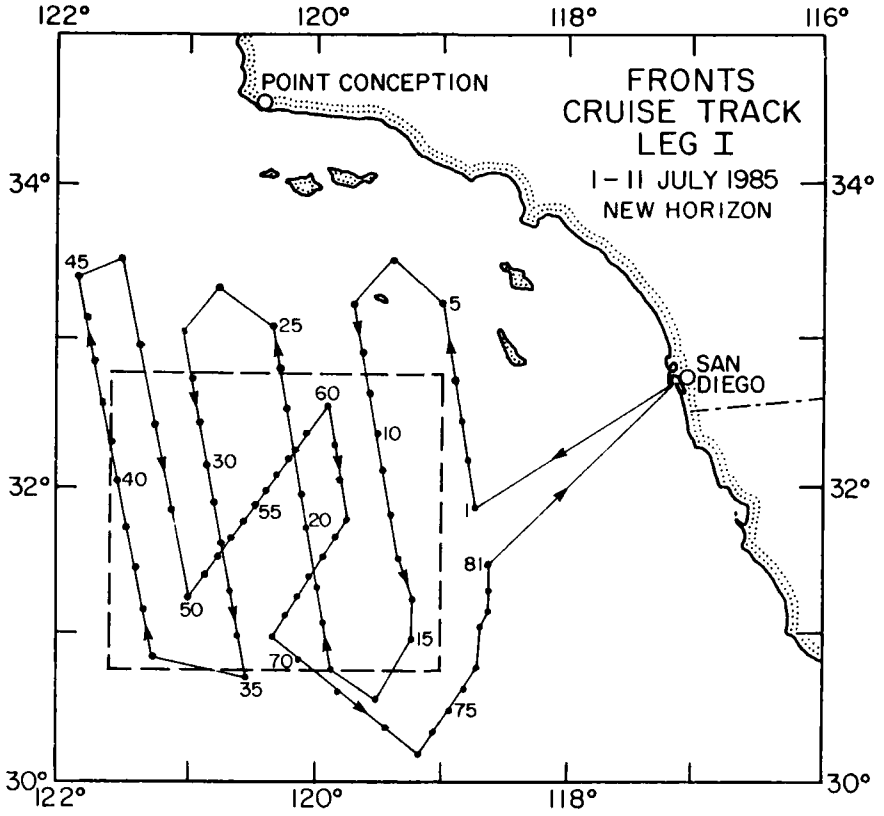
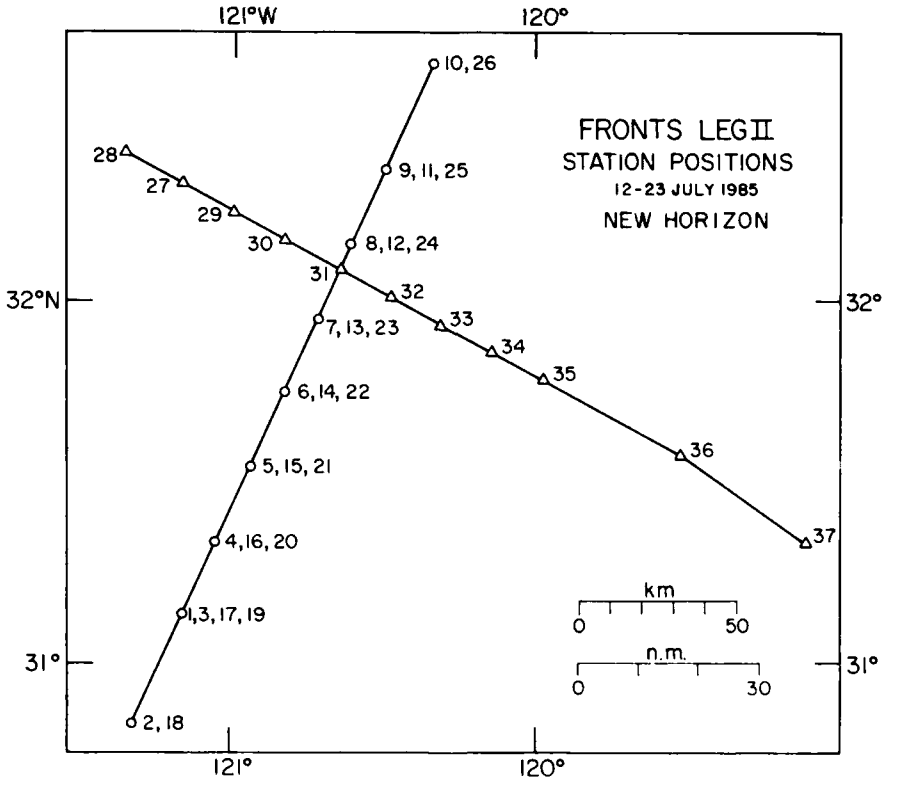
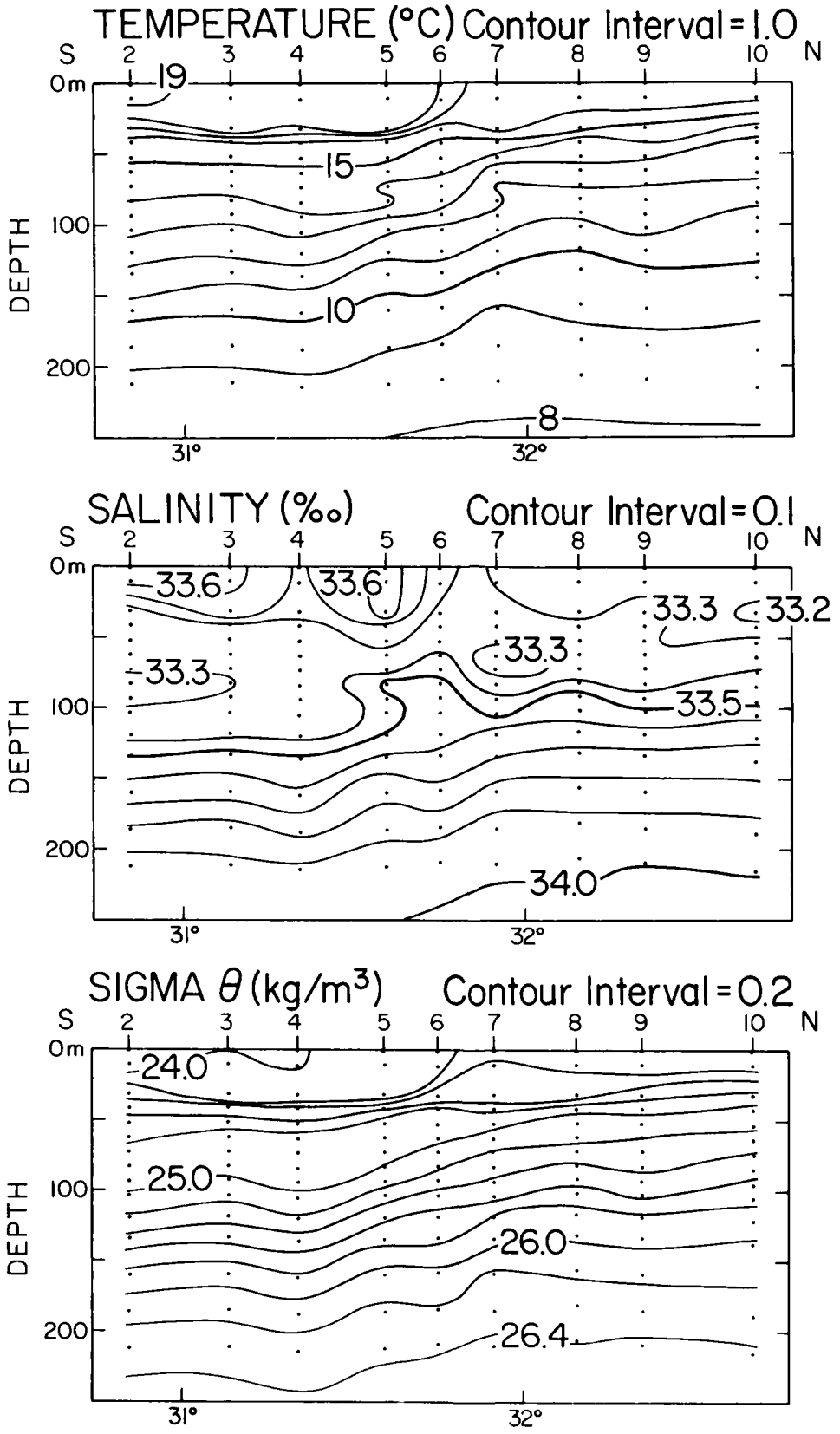
FIGURES

FRONTS Cruise


122°
120°
118°
116°
34°
32°
30°
POINT CONCEPTION
FRONTS
CRUISE TRACK
LEG I
1 - 11 JULY 1985
NEW HORIZON
SAN
DIEGO
45
25
5
60
10
30
40
55
20
1
81
50
15
70
35
75


121°W
120°
32°N
31°
FRONTS LEGII
STATION POSITIONS
12-23 JULY 1985
NEW HORIZON
10, 26
28
27
29
9, 11, 25
30
8, 12, 24
31
32
33
7, 13, 23
34
35
6, 14, 22
36
5, 15, 21
37
4, 16, 20
1, 3, 17, 19
2, 18
km
0
50
n.m.
0
30
121°
120°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0m
100
200
DEPTH
19
15
10
8
31°
32°
SALINITY (‰) Contour Interval = 0.1
S 2 3 4 5 6 7 8 9 10 N
0m
100
200
DEPTH
33.6
33.6
33.3
33.3
33.3
33.2
33.5
34.0
31°
32°
SIGMA θ (kg/m³) Contour Interval = 0.2
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100
200
DEPTH
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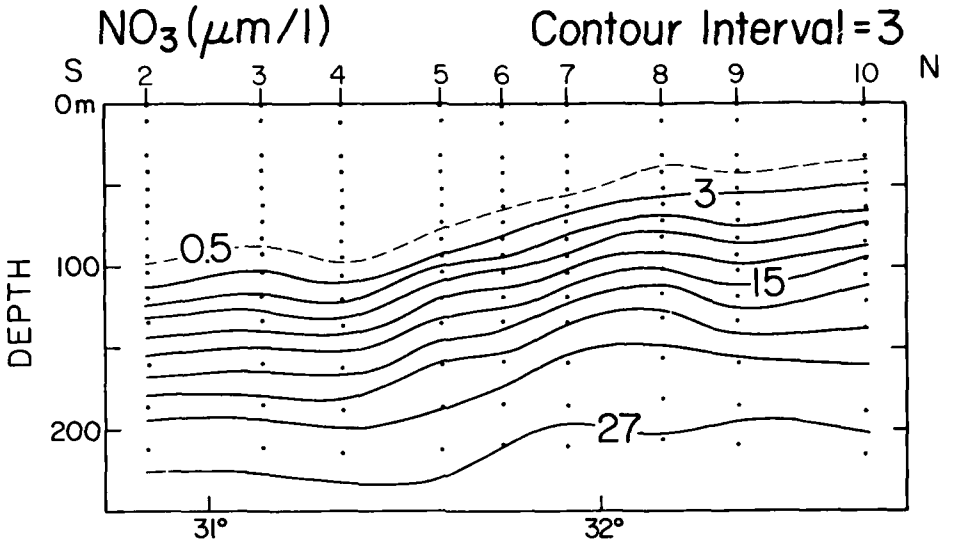
25.0
26.0
26.4
31°
32°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Contour Interval=3
S
2
3
4
5
6
7
8
9
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N
0m
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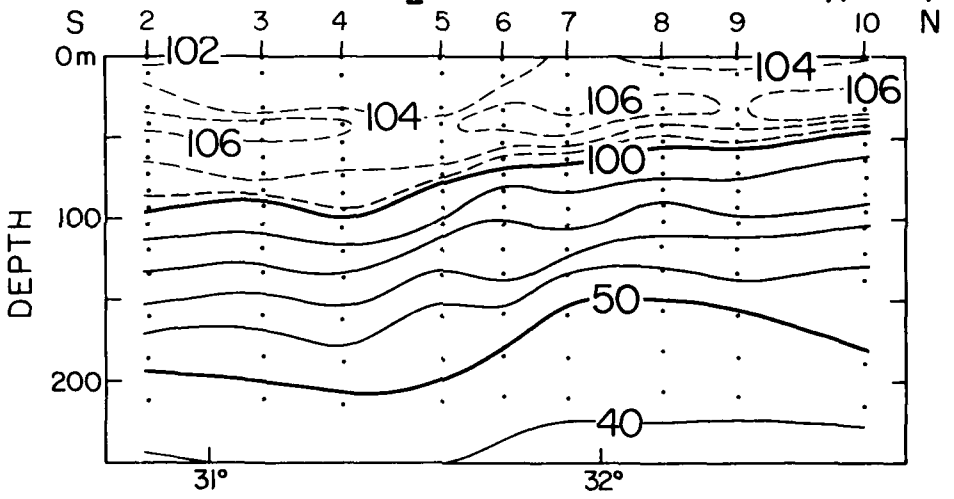
DEPTH
0.5
3
15
27
31°
32°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2
3
4
5
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7
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104
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31°
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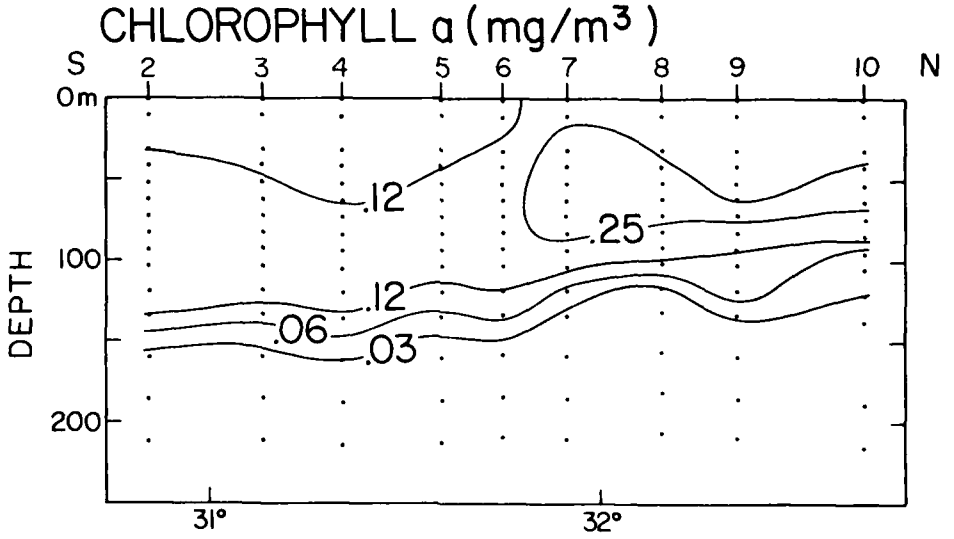
CHLOROPHYLL a (mg/m3)
S
2
3
4
5
6
7
8
9
10
N
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100
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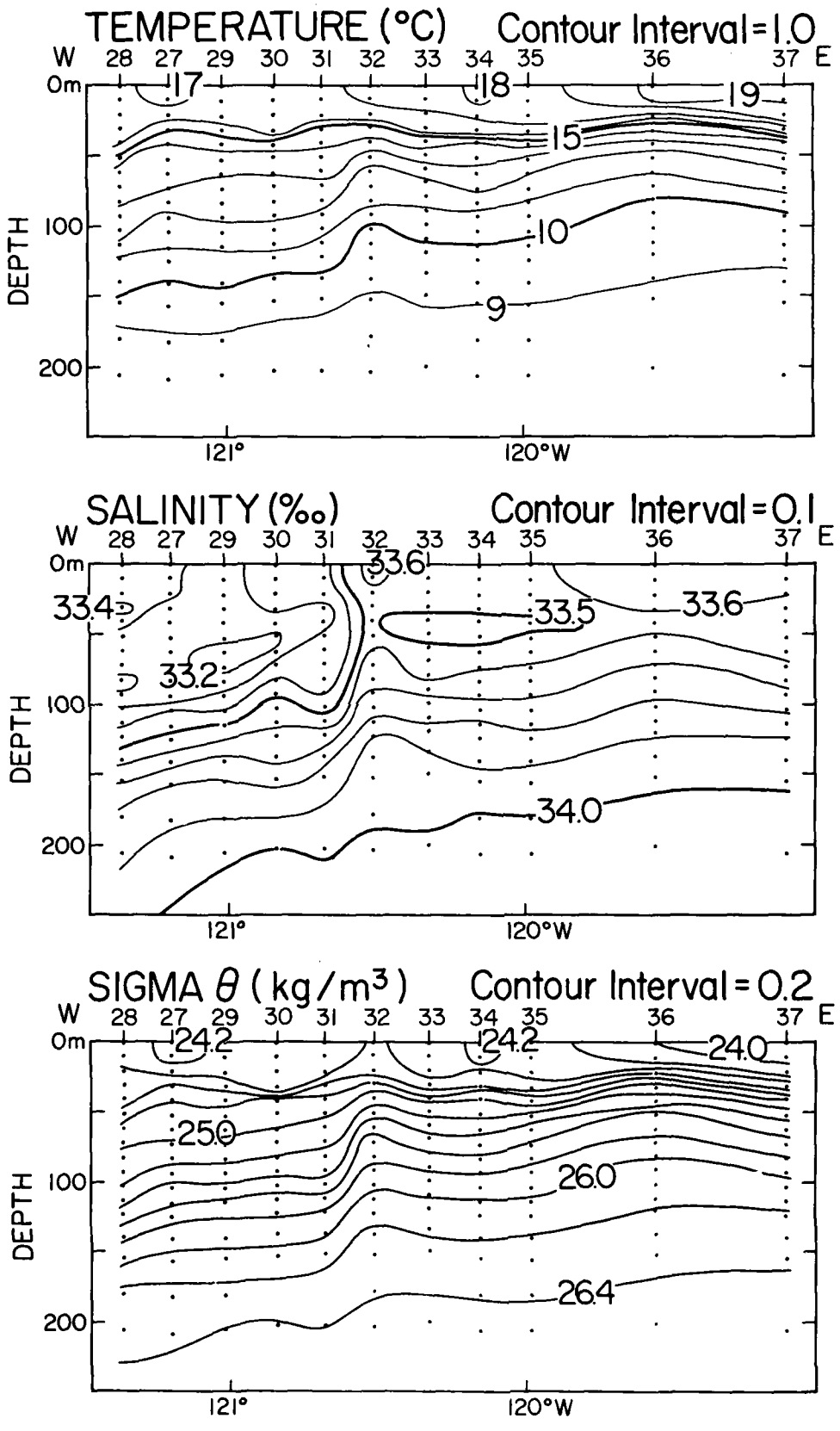
DEPTH
.12
.25
.12
.06
.03
31°
32°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100
200
DEPTH
17
18
19
15
10
9
121°
120°W
SALINITY (‰) Contour Interval=0.1
33.6
33.4
33.5
33.6
33.2
34.0
SIGMA θ (kg/m³) Contour Interval=0.2
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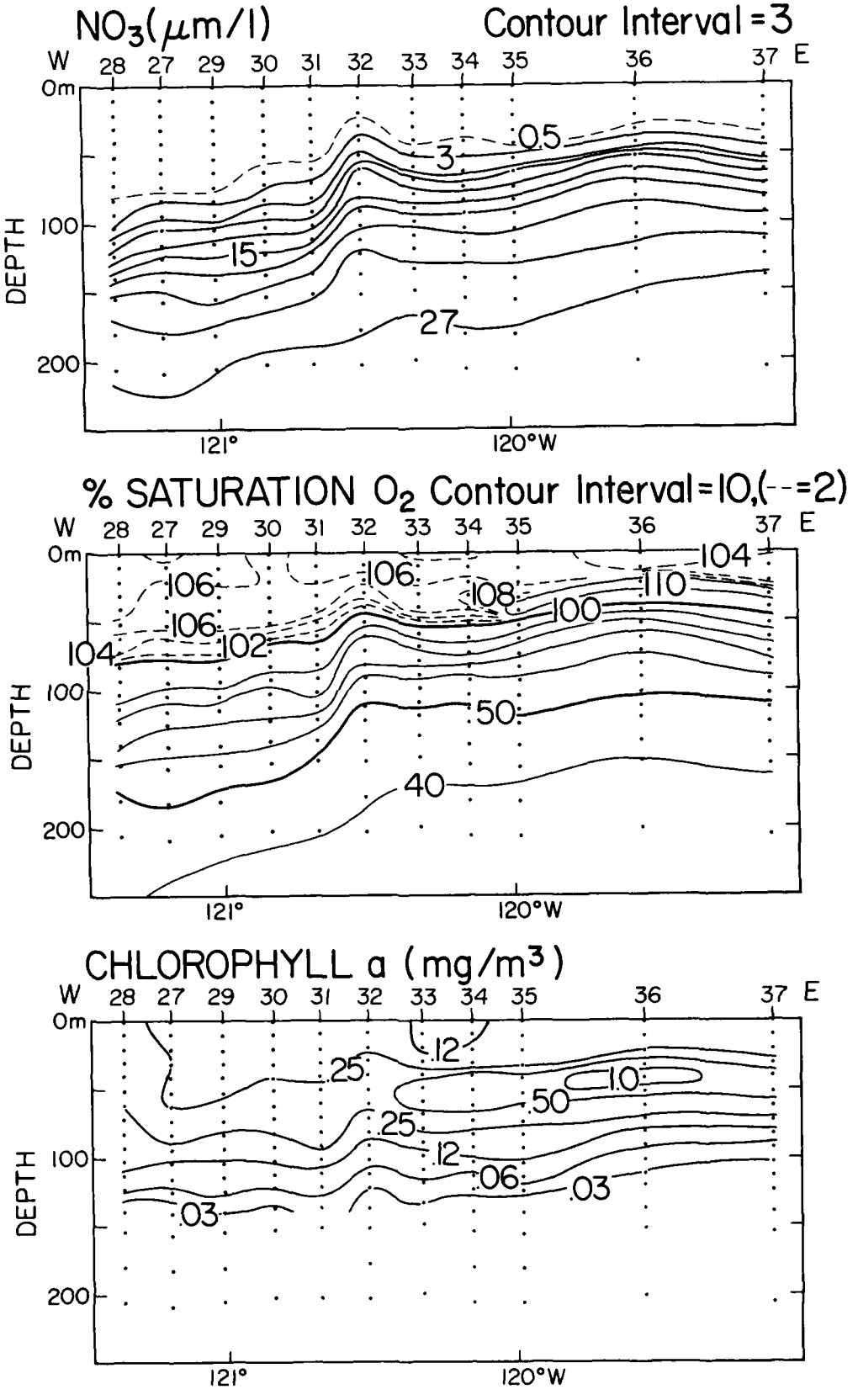
24.2
24.0
25.0
26.0
26.4


NO3(μm/l) Contour Interval=3
W 28 27 29 30 31 32 33 34 35 36 37 E
0m
100
200
DEPTH
0.5
3
15
27
121°
120°W
% SATURATION O2 Contour Interval=10,(--=2)
106
106
106
108
110
104
104
102
100
50
40
CHLOROPHYLL a (mg/m3)
12
25
1.0
50
25
12
06
03
03

PERSONNEL

FRONTS CRUISE

SHIP'S CAPTAIN

Munsch, Phillip L., RV *New Horizon*

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

LEG I: 1 - 11 July 1985

Niiler, Pearn P. (Co-Chief Scientist)	Professor, SIO
Haury, Loren R. (Co-Chief Scientist)	Assoc. Research Oceanographer, SIO
Bryan, Walter R.	Marine Technician, SIO
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Lee, Dong-Kyu	Programmer, SIO
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Pillard, Eugene	Marine Technician, SIO
Poulain, Pierre-Marie	Graduate Student, SIO
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Torres M., Guillermo	Research Aid, CICESE
Washington, Jean	Programmer, SIO
White, Henry J.	President, Technocean Assoc.

LEG II: 12 - 23 July 1985

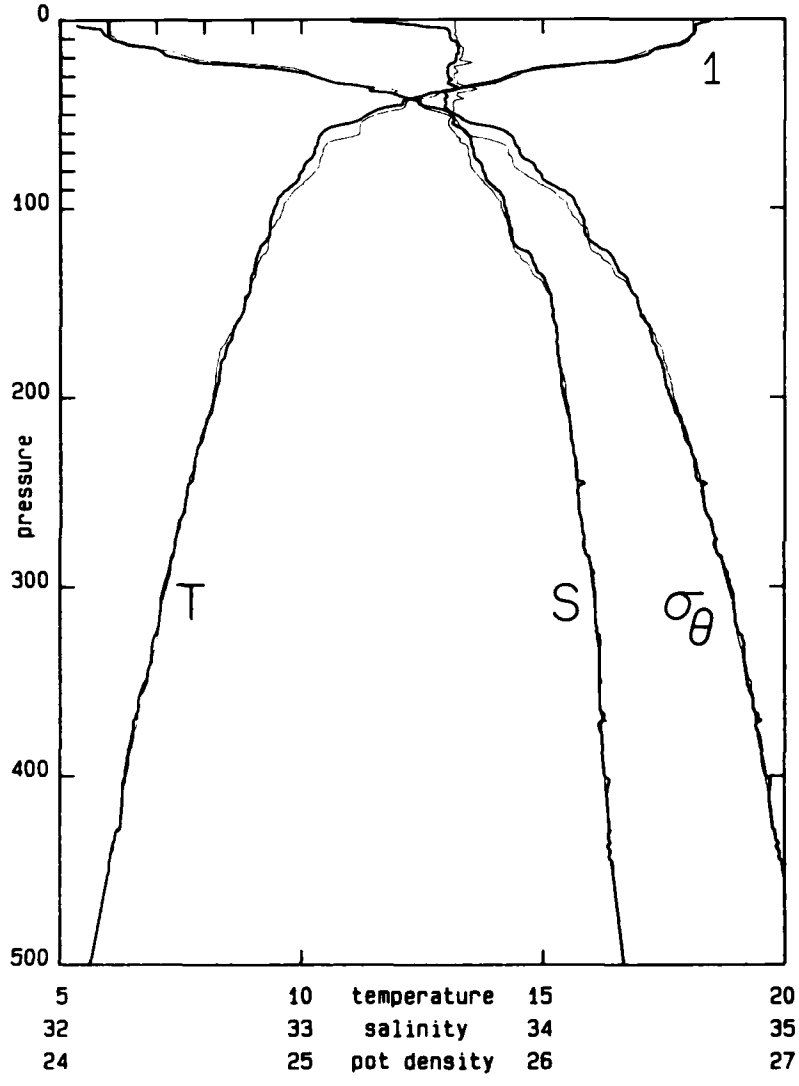
Haury, Loren R. (Chief Scientist)	Assoc. Research Oceanographer, SIO
Anderson, George C.	Staff Research Associate, SIO
Clemente J., Luis	Researcher, Secretaria de Marina
Fey, Connie L.	Staff Research Associate, SIO
Fuentes, Pedro A.	Volunteer
Gaxiola C., Gilberto	Assoc. Researcher, CICESE
McGowan, John A.	Professor, SIO
Sandoval T., Eliseo	Chief, Oceanographic Dept., INP
Schmitt, James A.	Senior Electronics Technician, SIO
Schmitt, Walter R.	Staff Research Associate, SIO
Silva C., Santos	Student, CICESE
Venrick, Elizabeth L.	Assoc. Research Oceanographer, SIO
Willhoite, Brian	Electronics Technician, SIO
Wilson, Robert C.	Marine Technician, SIO

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
1	183: 8:45	31 49.9 N	118 43.1 W	15	4

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.446	33.208	18.446	23.792	0.	2
10	18.006	33.618	18.004	24.214	0.38	1
20	16.979	33.642	16.976	24.479	0.74	1
30	14.278	33.608	14.274	25.055	1.06	1
40	12.523	33.604	12.518	25.407	1.33	1
50	11.390	33.622	11.384	25.634	1.58	1
60	10.425	33.688	10.418	25.857	1.80	1
70	10.266	33.715	10.258	25.905	2.02	1
80	10.013	33.752	10.004	25.977	2.23	1
90	9.676	33.808	9.666	26.077	2.43	1
100	9.423	33.848	9.412	26.150	2.62	1
125	9.069	33.950	9.056	26.287	3.08	1
150	8.811	34.033	8.795	26.394	3.51	1
175	8.422	34.059	8.404	26.474	3.91	1
200	8.178	34.089	8.158	26.535	4.30	1
225	7.845	34.124	7.823	26.612	4.68	1
250	7.616	34.140	7.591	26.658	5.04	1
300	7.133	34.215	7.105	26.786	5.73	1
400	6.303	34.276	6.267	26.947	6.97	1
500	5.585	34.342	5.543	27.090	8.09	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
2	183:11:37	32 9.1 N	118 46.1 W	13	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.756	33.541	18.756	23.969	0.	2
10	18.760	33.607	18.758	24.019	0.39	1
20	17.045	33.800	17.042	24.585	0.77	1
30	15.677	33.487	15.672	24.658	1.10	1
40	14.001	33.474	13.995	25.010	1.42	1
50	13.299	33.521	13.292	25.190	1.70	1
60	12.655	33.611	12.647	25.387	1.98	1
70	11.788	33.584	11.779	25.531	2.22	1
80	11.339	33.612	11.329	25.636	2.47	1
90	10.732	33.708	10.721	25.819	2.70	1
100	10.199	33.725	10.187	25.925	2.91	1
125	9.477	33.828	9.463	26.126	3.41	1
150	8.962	33.959	8.946	26.312	3.87	1
175	8.610	34.041	8.592	26.432	4.29	1
200	8.377	34.086	8.356	26.503	4.69	1
225	8.149	34.115	8.126	26.560	5.08	1
250	7.867	34.163	7.842	26.640	5.45	1
300	7.376	34.195	7.347	26.736	6.15	1
400	6.439	34.239	6.403	26.900	7.42	1
500	5.896	34.321	5.852	27.035	8.58	4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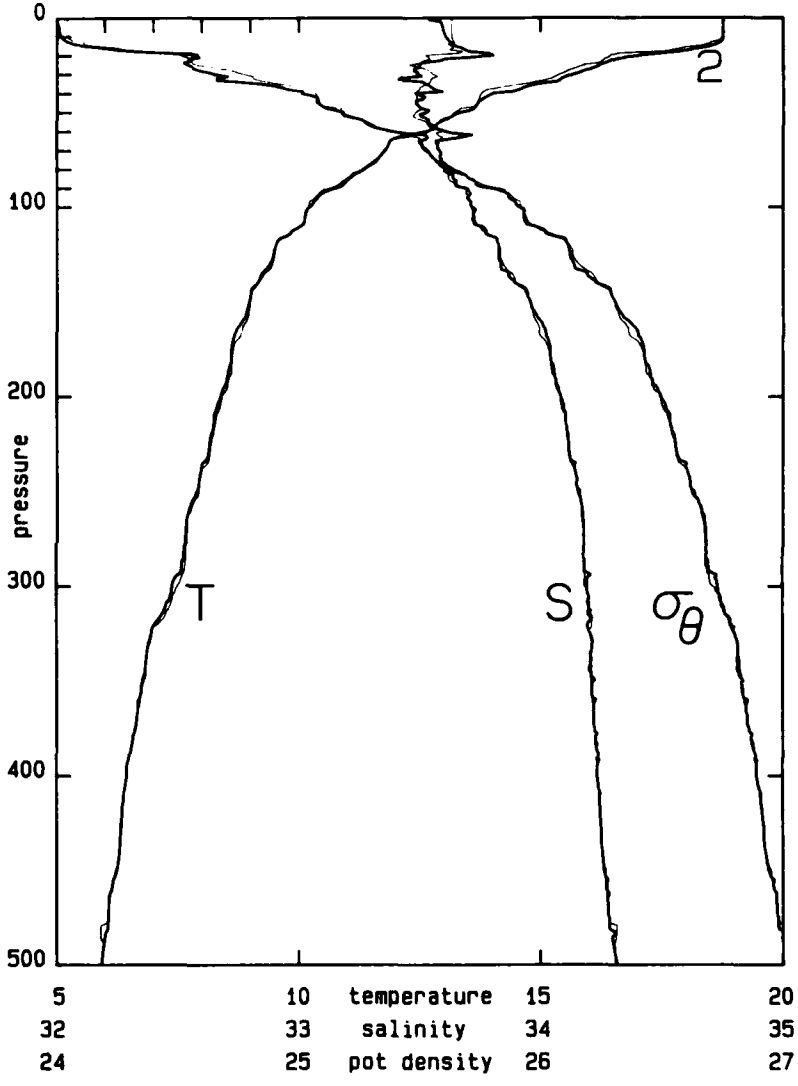
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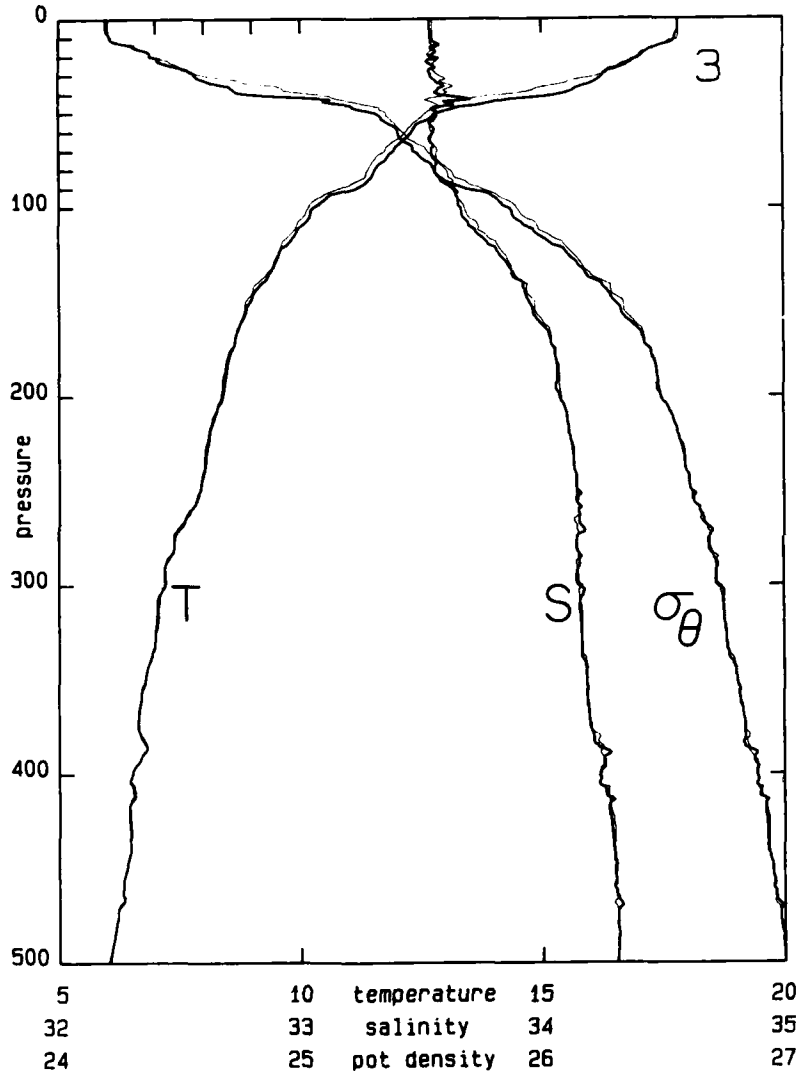
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
3	183:13:55	32 25.1 N	118 49.1 W	12	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.818	33.535	17.818	24.196	0.	2
10	17.746	33.538	17.744	24.216	0.37	1
20	17.048	33.535	17.045	24.380	0.74	1
30	16.263	33.543	16.258	24.569	1.08	1
40	15.367	33.578	15.361	24.797	1.41	1
50	12.830	33.565	12.823	25.317	1.69	1
60	12.305	33.552	12.297	25.409	1.96	1
70	11.924	33.542	11.915	25.473	2.21	1
80	11.535	33.557	11.525	25.557	2.46	1
90	11.115	33.634	11.104	25.694	2.70	1
100	10.259	33.668	10.247	25.870	2.92	1
125	9.552	33.828	9.538	26.114	3.44	1
150	8.940	33.950	8.924	26.308	3.89	1
175	8.531	34.054	8.513	26.454	4.31	1
200	8.356	34.074	8.335	26.497	4.71	1
225	8.039	34.126	8.016	26.585	5.09	1
250	7.876	34.156	7.851	26.633	5.46	1
300	7.158	34.170	7.129	26.747	6.16	1
400	6.468	34.239	6.432	26.896	7.46	1
500	5.972	34.304	5.928	27.012	8.62	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
4	183:16: 2	32 41.4 N	118 51.7 W	8	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.874	33.500	16.874	24.394	0.	2
10	16.789	33.552	16.787	24.454	0.35	1
20	16.308	33.633	16.305	24.628	0.69	1
30	14.779	33.658	14.775	24.987	1.01	1
40	13.627	33.649	13.621	25.222	1.30	1
50	12.822	33.660	12.815	25.392	1.57	1
60	11.790	33.646	11.782	25.579	1.82	1
70	11.274	33.659	11.265	25.684	2.06	1
80	11.138	33.729	11.128	25.763	2.29	1
90	10.672	33.756	10.661	25.867	2.51	1
100	10.381	33.758	10.369	25.920	2.72	1
125	9.572	33.824	9.558	26.108	3.22	1
150	9.067	33.964	9.051	26.299	3.68	1
175	8.890	34.036	8.871	26.384	4.11	1
200	8.557	34.095	8.536	26.482	4.52	1
225	8.296	34.114	8.273	26.537	4.91	1
250	8.110	34.181	8.085	26.618	5.28	1
300	7.623	34.208	7.593	26.712	5.99	1
400	6.751	34.247	6.714	26.865	7.31	1
500	5.902	34.302	5.858	27.019	8.48	4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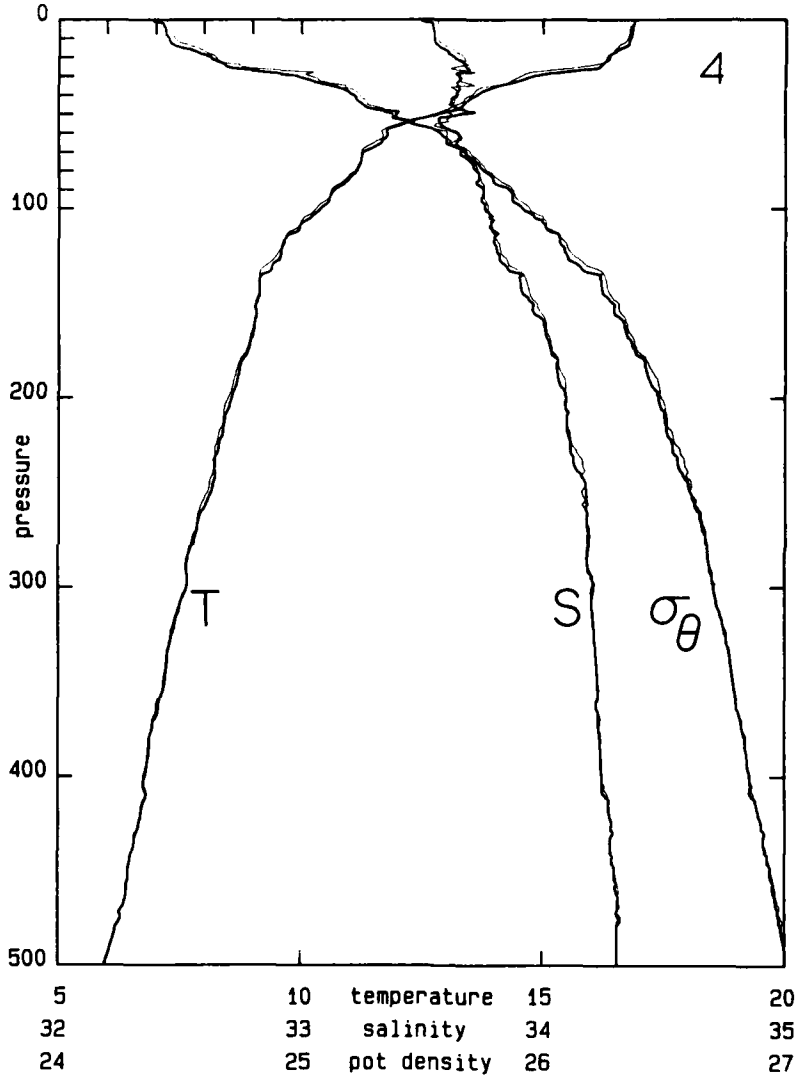
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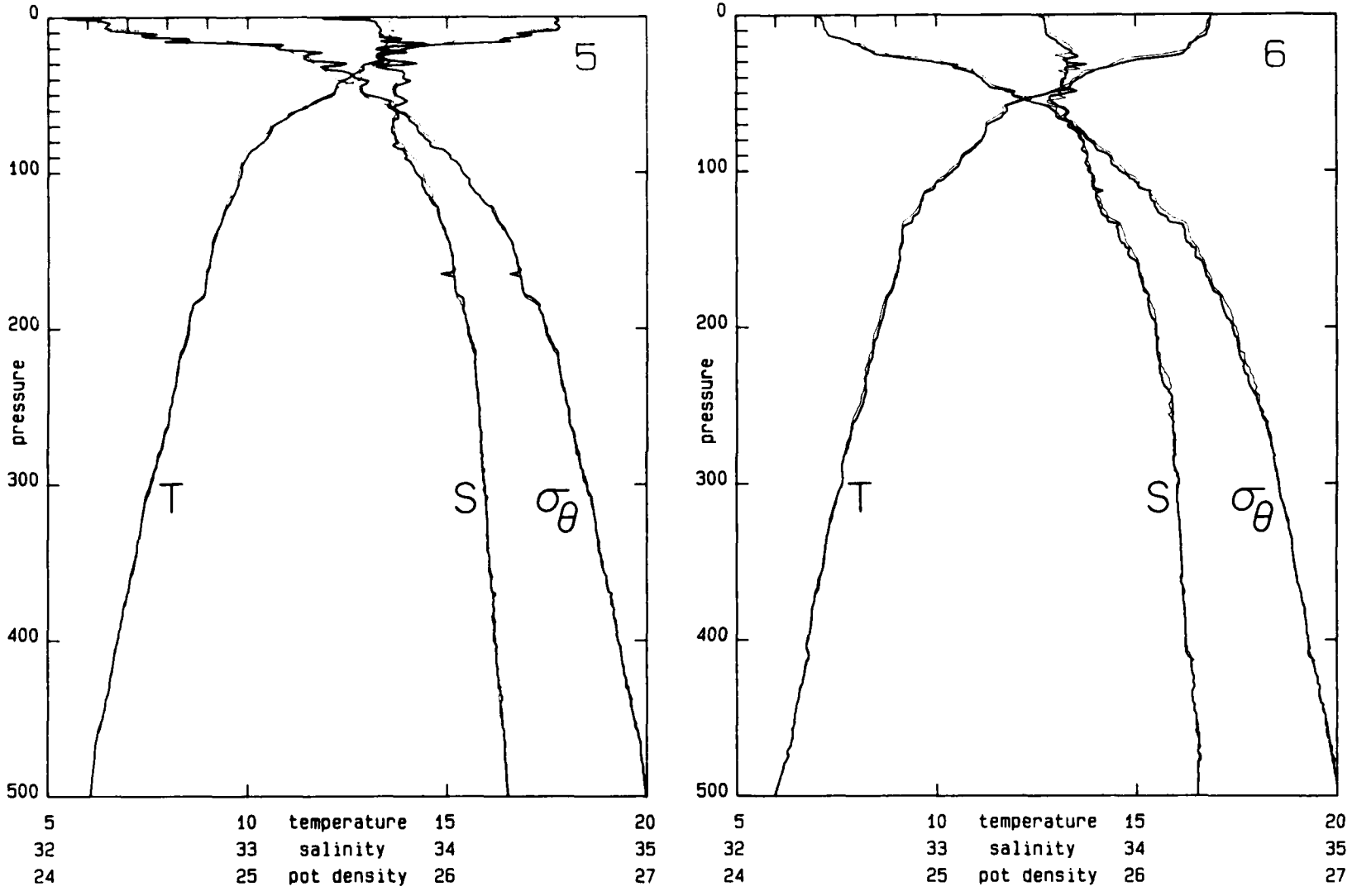
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
5	183:20:15	33 12.7 N	118 59.5 W	16	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.716	33.384	17.716	24.105	0.	2
10	17.187	33.657	17.185	24.441	0.36	1
20	13.999	33.659	13.996	25.152	0.68	1
30	13.008	33.846	13.004	25.499	0.95	1
40	12.430	33.795	12.425	25.573	1.20	1
50	12.049	33.739	12.043	25.602	1.44	1
60	11.242	33.742	11.235	25.754	1.67	1
70	10.622	33.719	10.614	25.847	1.89	1
80	10.376	33.754	10.367	25.917	2.11	1
90	9.965	33.786	9.955	26.012	2.32	1
100	9.833	33.845	9.822	26.080	2.51	1
125	9.411	33.952	9.397	26.234	2.99	1
150	9.094	34.018	9.078	26.337	3.43	1
175	8.923	34.042	8.904	26.384	3.85	1
200	8.488	34.106	8.467	26.502	4.25	1
225	8.239	34.142	8.216	26.568	4.64	1
250	8.045	34.160	8.020	26.611	5.01	1
300	7.554	34.190	7.525	26.707	5.73	1
400	6.731	34.245	6.694	26.866	7.05	1
500	6.052	34.307	6.008	27.004	8.23	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
6	184: 6:10	33 29.3 N	119 24.3 W	24	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.873	33.519	16.873	24.408	0.	2
10	16.788	33.551	16.786	24.453	0.35	1
20	16.310	33.633	16.307	24.627	0.69	1
30	14.791	33.655	14.787	24.982	1.01	1
40	13.644	33.650	13.638	25.219	1.30	1
50	12.827	33.652	12.820	25.385	1.57	1
60	11.781	33.641	11.773	25.577	1.82	1
70	11.281	33.663	11.272	25.686	2.06	1
80	11.136	33.727	11.126	25.762	2.29	1
90	10.673	33.756	10.662	25.867	2.51	1
100	10.383	33.758	10.371	25.919	2.72	1
125	9.573	33.824	9.559	26.108	3.22	1
150	9.067	33.964	9.051	26.299	3.68	1
175	8.890	34.037	8.871	26.385	4.11	1
200	8.557	34.094	8.536	26.482	4.52	1
225	8.296	34.113	8.273	26.537	4.91	1
250	8.110	34.181	8.085	26.618	5.28	1
300	7.622	34.208	7.592	26.712	5.99	1
400	6.752	34.246	6.715	26.864	7.31	1
500	5.902	34.302	5.858	27.019	8.48	4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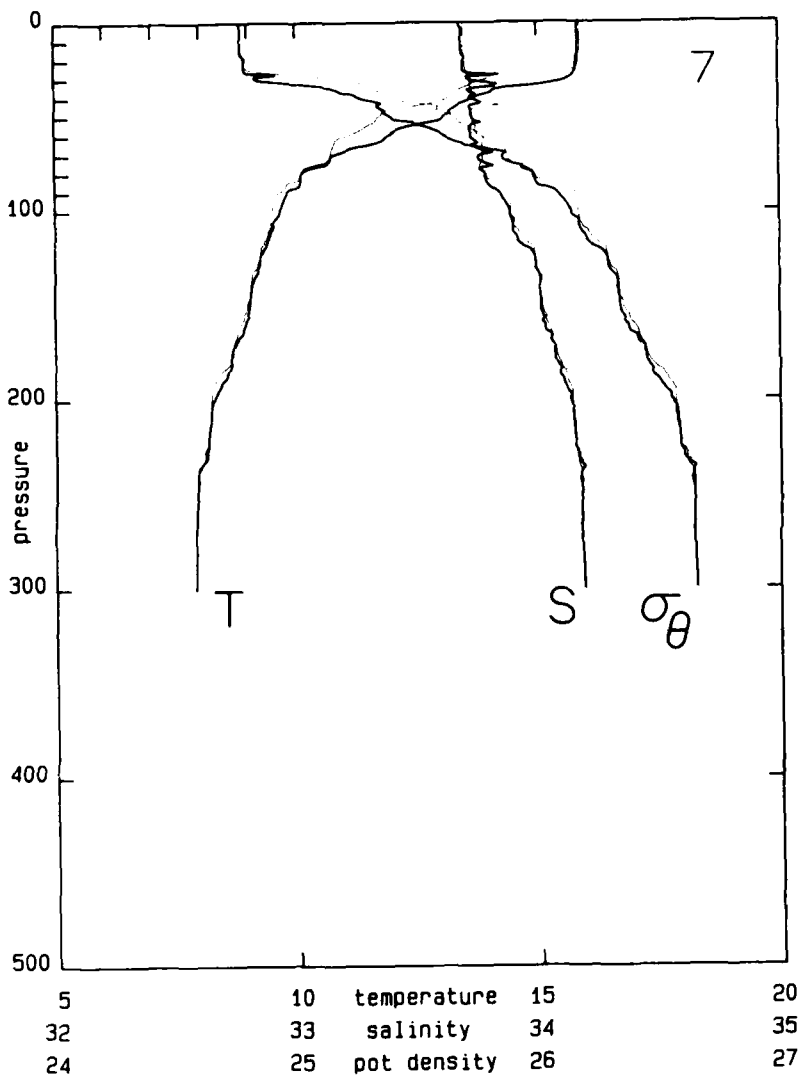
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code	
7	184:10:10	33 11.6 N	119 41.3 W	26	5	
depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	15.842	33.680	15.842	24.769	0.	2
10	15.849	33.685	15.847	24.772	0.32	1
20	15.807	33.696	15.804	24.790	0.64	1
30	15.646	33.711	15.641	24.838	0.95	1
40	13.651	33.715	13.645	25.268	1.24	1
50	13.058	33.730	13.051	25.400	1.50	1
60	11.897	33.719	11.889	25.616	1.75	1
70	10.751	33.763	10.743	25.859	1.98	1
80	10.118	33.785	10.109	25.985	2.19	1
90	9.803	33.840	9.793	26.081	2.39	1
100	9.655	33.883	9.644	26.140	2.58	1
125	9.248	33.991	9.234	26.291	3.04	1
150	9.026	34.012	9.010	26.343	3.47	1
175	8.648	34.068	8.630	26.447	3.89	1
200	8.247	34.136	8.226	26.562	4.28	1
225	8.140	34.154	8.117	26.592	4.66	1
250	7.906	34.173	7.881	26.642	5.02	1
300	7.889	34.188	7.859	26.657	5.74	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code	
8	184:12:18	32 53.8 N	119 36.3 W	16	3	
depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.379	33.531	17.379	24.298	0.	2
10	17.368	33.739	17.366	24.461	0.35	1
20	16.249	33.786	16.246	24.759	0.69	1
30	12.054	33.804	12.050	25.651	0.96	1
40	10.208	33.868	10.203	26.034	1.17	1
50	9.876	33.898	9.870	26.114	1.37	1
60	9.564	33.937	9.557	26.196	1.55	1
70	9.482	33.951	9.474	26.221	1.74	1
80	9.285	33.981	9.276	26.276	1.92	1
90	9.142	34.013	9.132	26.325	2.09	1
100	9.038	34.039	9.027	26.362	2.26	1
125	8.809	34.084	8.796	26.433	2.67	1
150	8.593	34.114	8.577	26.491	3.07	1
175	8.277	34.144	8.259	26.563	3.46	1
200	8.168	34.156	8.148	26.589	3.83	1
225	8.029	34.178	8.006	26.628	4.20	1
250	7.844	34.184	7.819	26.660	4.56	1
300	7.457	34.209	7.428	26.736	5.26	1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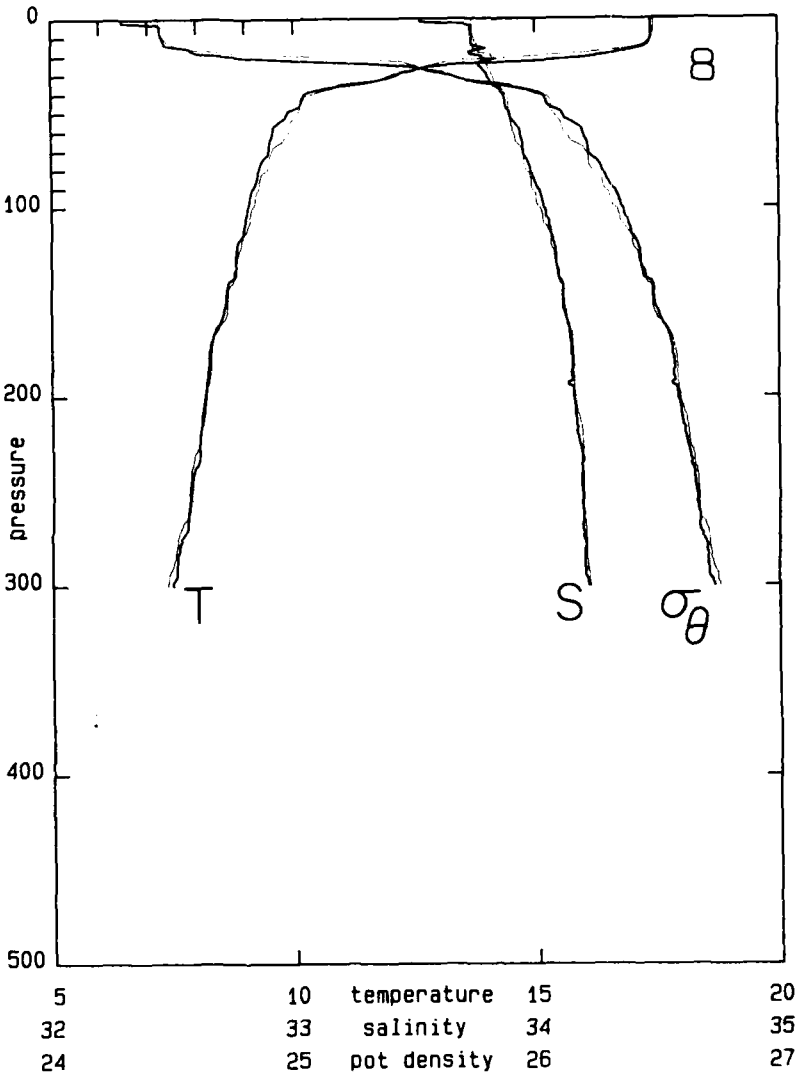
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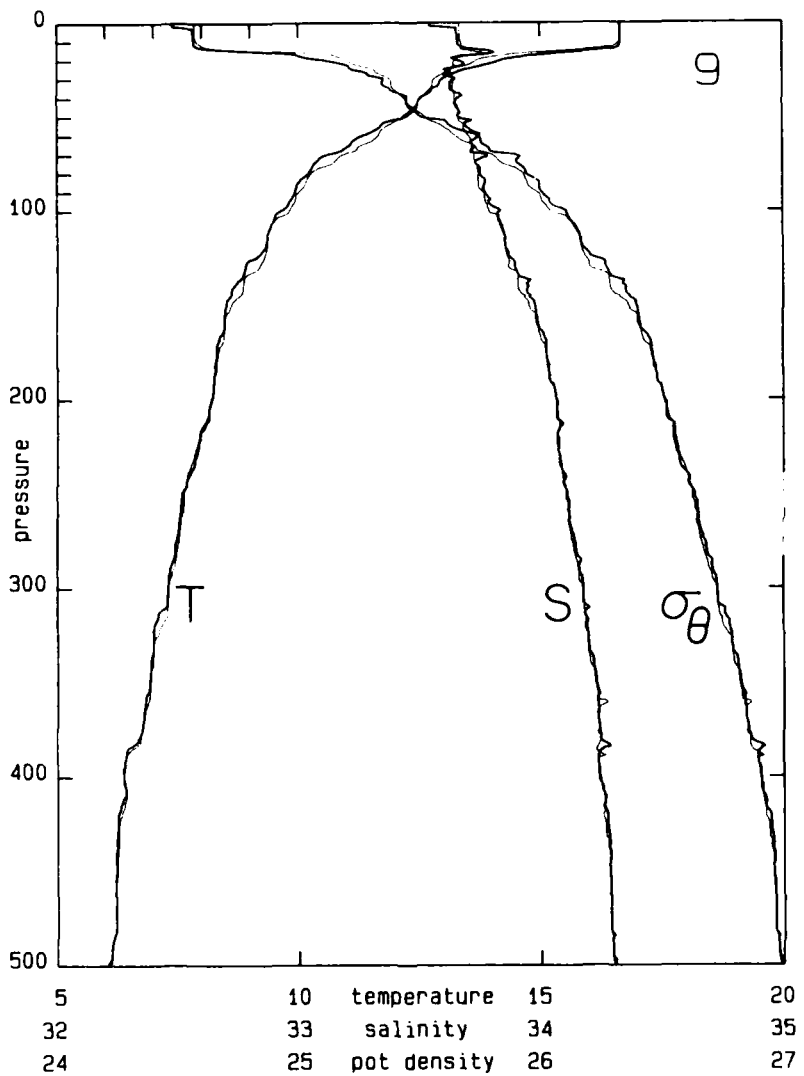
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
9	184:14:38	32 37.1 N	119 34.1 W	21	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.656	33.547	16.656	24.481	0.	2
10	16.656	33.660	16.654	24.568	0.34	1
20	14.195	33.655	14.192	25.108	0.65	1
30	12.973	33.648	12.969	25.352	0.93	1
40	12.532	33.662	12.527	25.450	1.19	1
50	12.195	33.658	12.188	25.512	1.44	1
60	11.304	33.745	11.297	25.745	1.68	1
70	10.603	33.745	10.595	25.870	1.90	1
80	10.197	33.752	10.188	25.946	2.11	1
90	9.920	33.774	9.910	26.010	2.31	1
100	9.579	33.826	9.568	26.108	2.51	1
125	9.015	33.873	9.002	26.236	2.98	1
150	8.488	33.976	8.472	26.399	3.41	1
175	8.299	34.025	8.281	26.466	3.82	1
200	8.176	34.068	8.156	26.519	4.22	1
225	7.902	34.071	7.879	26.562	4.60	1
250	7.581	34.107	7.557	26.637	4.97	1
300	7.287	34.174	7.258	26.732	5.67	1
400	6.384	34.245	6.348	26.911	6.95	1
500	6.035	34.307	5.991	27.006	8.11	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
10	184:17: 5	32 20.5 N	119 30.1 W	22	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.830	33.490	16.830	24.396	0.	2
10	16.800	33.586	16.798	24.478	0.35	1
20	16.635	33.635	16.632	24.554	0.69	1
30	14.118	33.564	14.114	25.054	1.01	1
40	13.673	33.651	13.667	25.214	1.29	1
50	12.932	33.572	12.925	25.302	1.56	1
60	12.302	33.531	12.294	25.393	1.83	1
70	11.666	33.527	11.657	25.510	2.08	1
80	11.084	33.591	11.074	25.666	2.33	1
90	10.433	33.609	10.422	25.794	2.55	1
100	10.075	33.669	10.064	25.902	2.77	1
125	9.361	33.832	9.347	26.148	3.26	1
150	8.607	33.952	8.591	26.362	3.71	1
175	8.392	33.995	8.374	26.429	4.12	1
200	8.262	34.114	8.241	26.542	4.52	1
225	7.897	34.146	7.874	26.622	4.89	1
250	7.675	34.173	7.650	26.676	5.26	1
300	7.021	34.224	6.993	26.809	5.94	1
400	6.391	34.281	6.355	26.939	7.17	1
500	6.015	34.315	5.971	27.015	8.30	1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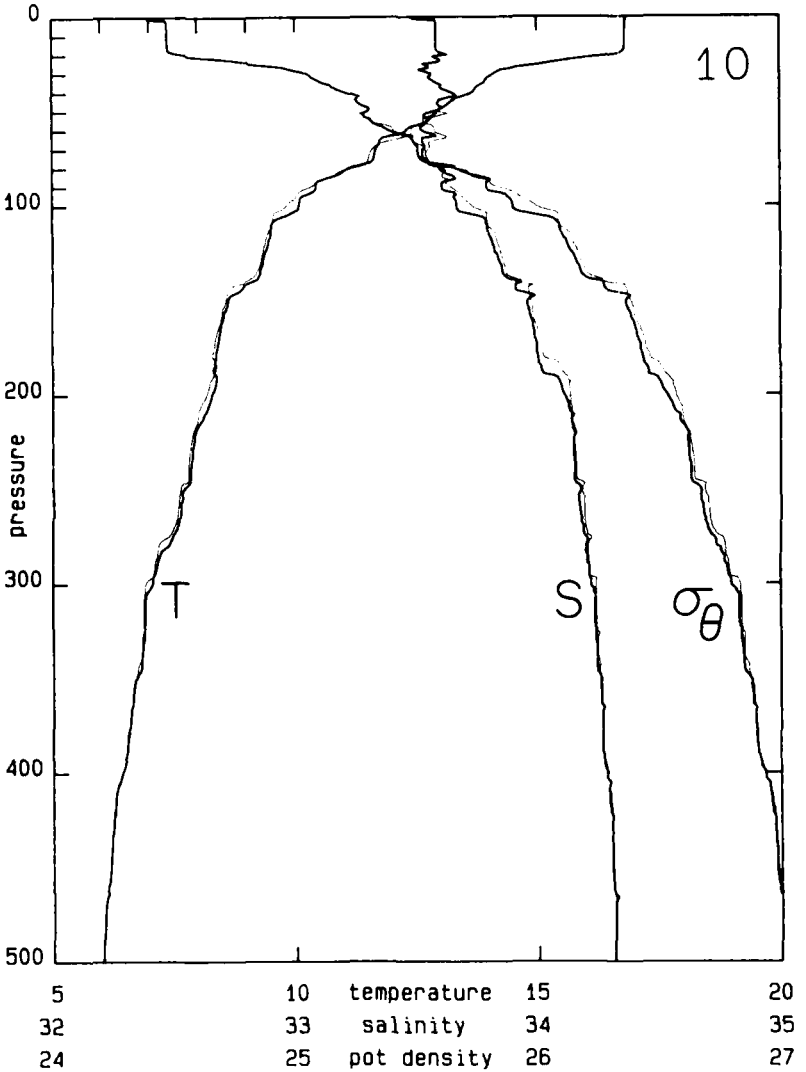
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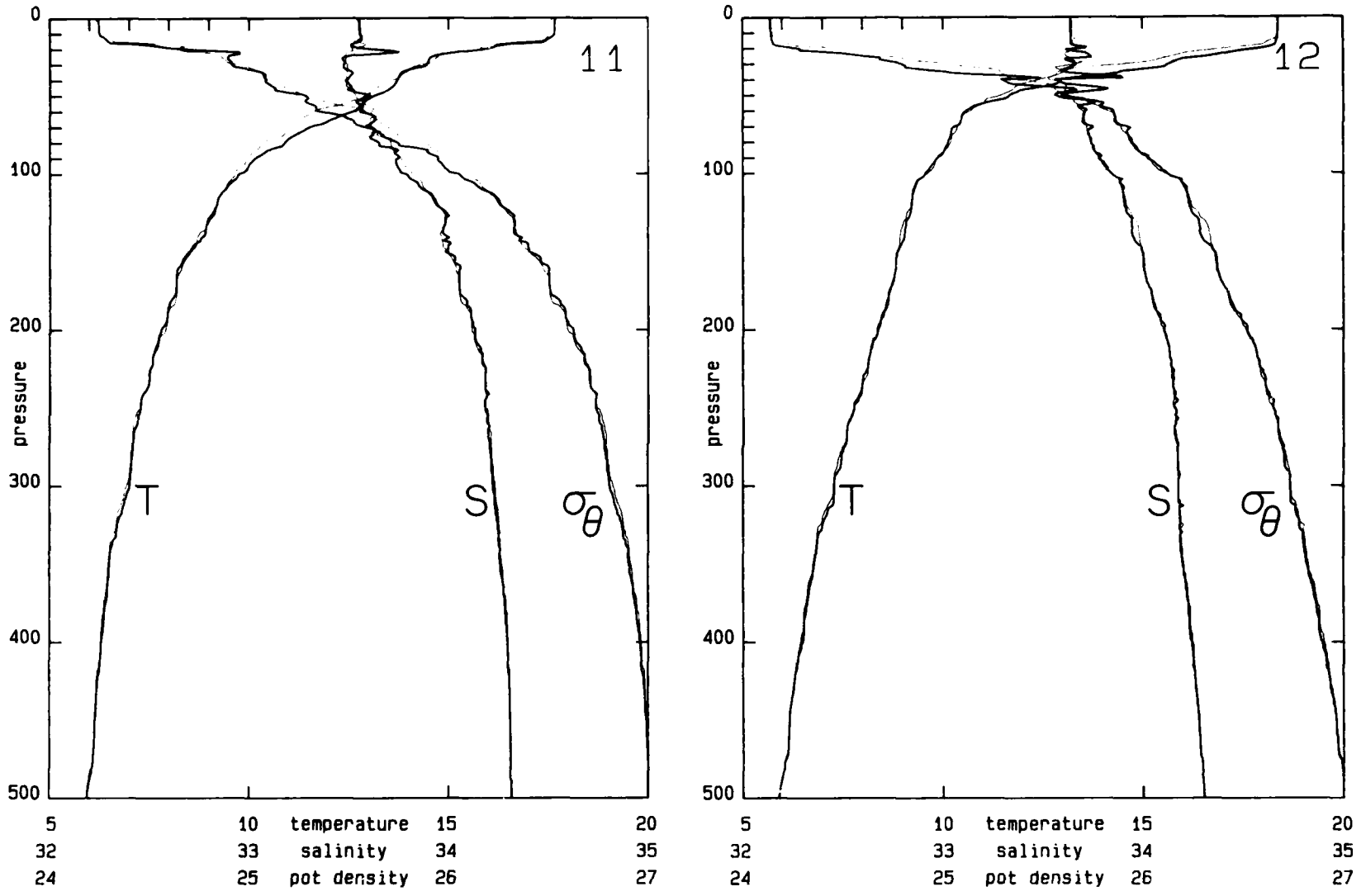
EV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
11	184:21: 5	32 5.0 N	119 27.5 W	20	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.675	33.547	17.675	24.240	0.	2
10	17.647	33.555	17.645	24.253	0.37	1
20	15.934	33.616	15.931	24.700	0.72	1
30	14.447	33.473	14.443	24.915	1.03	1
40	13.697	33.487	13.691	25.082	1.32	1
50	13.101	33.603	13.094	25.293	1.61	1
60	12.580	33.551	12.572	25.355	1.87	1
70	11.493	33.615	11.484	25.610	2.12	1
80	10.883	33.652	10.873	25.749	2.36	1
90	10.134	33.737	10.124	25.945	2.57	1
100	9.727	33.792	9.716	26.057	2.77	1
125	9.065	33.991	9.051	26.320	3.23	1
150	8.466	34.005	8.450	26.425	3.66	1
175	8.153	34.056	8.135	26.513	4.05	1
200	7.771	34.131	7.751	26.628	4.42	1
225	7.507	34.185	7.485	26.709	4.78	1
250	7.265	34.182	7.241	26.741	5.12	1
300	6.991	34.225	6.963	26.814	5.77	1
400	6.283	34.294	6.247	26.963	6.97	1
500	5.908	34.320	5.864	27.033	8.10	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
12	184:23:45	31 43.8 N	119 24.4 W	24	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.374	33.640	18.374	24.140	0.	2
10	18.358	33.641	18.356	24.145	0.38	1
20	17.996	33.713	17.993	24.289	0.76	1
30	15.661	33.667	15.656	24.800	1.09	1
40	13.000	33.616	12.995	25.323	1.38	1
50	11.661	33.596	11.655	25.564	1.63	1
60	10.566	33.717	10.559	25.855	1.86	1
70	10.269	33.757	10.261	25.937	2.07	1
80	10.125	33.740	10.116	25.949	2.28	1
90	9.852	33.776	9.842	26.023	2.48	1
100	9.548	33.844	9.537	26.127	2.68	1
125	9.178	33.921	9.164	26.247	3.14	1
150	8.855	34.000	8.839	26.361	3.57	1
175	8.641	34.042	8.623	26.427	3.99	1
200	8.350	34.104	8.329	26.521	4.39	1
225	8.077	34.155	8.054	26.602	4.77	1
250	7.764	34.164	7.739	26.656	5.13	1
300	7.274	34.176	7.245	26.736	5.83	1
400	6.447	34.240	6.411	26.899	7.11	1
500	5.871	34.306	5.828	27.026	8.27	4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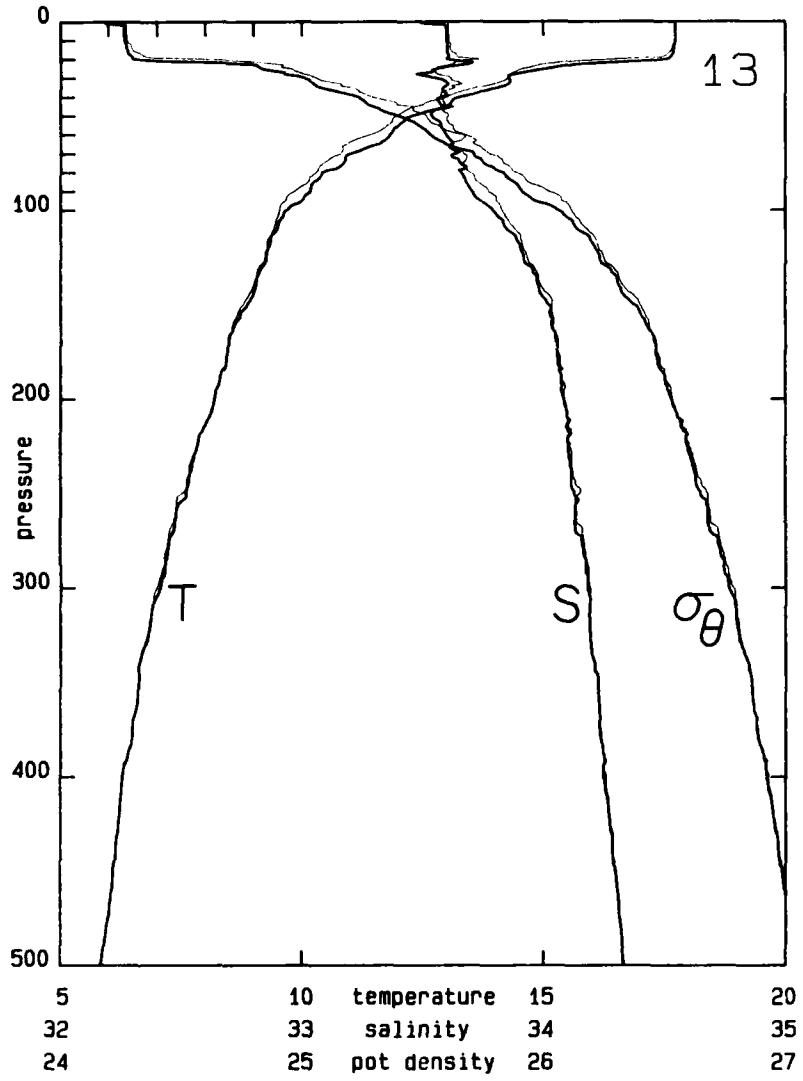
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
13	185: 1:57	31 27.4 N	119 20.2 W	17	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.723	33.497	17.723	24.190	0.	2
10	17.726	33.600	17.724	24.268	0.37	1
20	17.572	33.595	17.569	24.302	0.73	1
30	14.270	33.556	14.266	25.016	1.05	1
40	13.263	33.577	13.257	25.240	1.33	1
50	12.225	33.535	12.218	25.411	1.60	1
60	11.816	33.598	11.808	25.537	1.85	1
70	10.967	33.625	10.959	25.713	2.09	1
80	10.414	33.656	10.405	25.834	2.32	1
90	10.160	33.706	10.150	25.917	2.53	1
100	9.644	33.789	9.633	26.068	2.74	1
125	9.246	33.917	9.232	26.233	3.20	1
150	8.852	34.029	8.836	26.384	3.64	1
175	8.451	34.056	8.433	26.468	4.05	1
200	8.166	34.085	8.146	26.534	4.44	1
225	7.809	34.103	7.787	26.601	4.81	1
250	7.593	34.130	7.569	26.654	5.18	1
300	7.029	34.183	7.001	26.775	5.86	1
400	6.271	34.252	6.235	26.932	7.11	1
500	5.818	34.330	5.775	27.052	8.24	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
14	185: 4: 9	31 9.9 N	119 17.4 W	18	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.994	33.576	17.994	24.184	0.	2
10	18.002	33.594	18.000	24.197	0.37	1
20	15.226	33.546	15.223	24.803	0.70	1
30	14.215	33.522	14.211	25.002	1.01	1
40	12.945	33.489	12.940	25.235	1.29	1
50	12.330	33.550	12.323	25.402	1.56	1
60	11.876	33.521	11.868	25.466	1.81	1
70	11.171	33.567	11.162	25.631	2.06	1
80	10.755	33.605	10.745	25.735	2.29	1
90	10.497	33.672	10.486	25.832	2.52	1
100	10.006	33.740	9.995	25.969	2.73	1
125	9.320	33.819	9.306	26.145	3.22	1
150	8.998	33.956	8.982	26.304	3.68	1
175	8.804	34.052	8.785	26.410	4.10	1
200	8.450	34.062	8.429	26.473	4.51	1
225	8.023	34.106	8.000	26.572	4.90	1
250	7.708	34.130	7.683	26.637	5.27	1
300	7.366	34.192	7.337	26.735	5.97	1
400	6.241	34.206	6.205	26.899	7.25	1
500	5.745	34.273	5.702	27.016	8.42	4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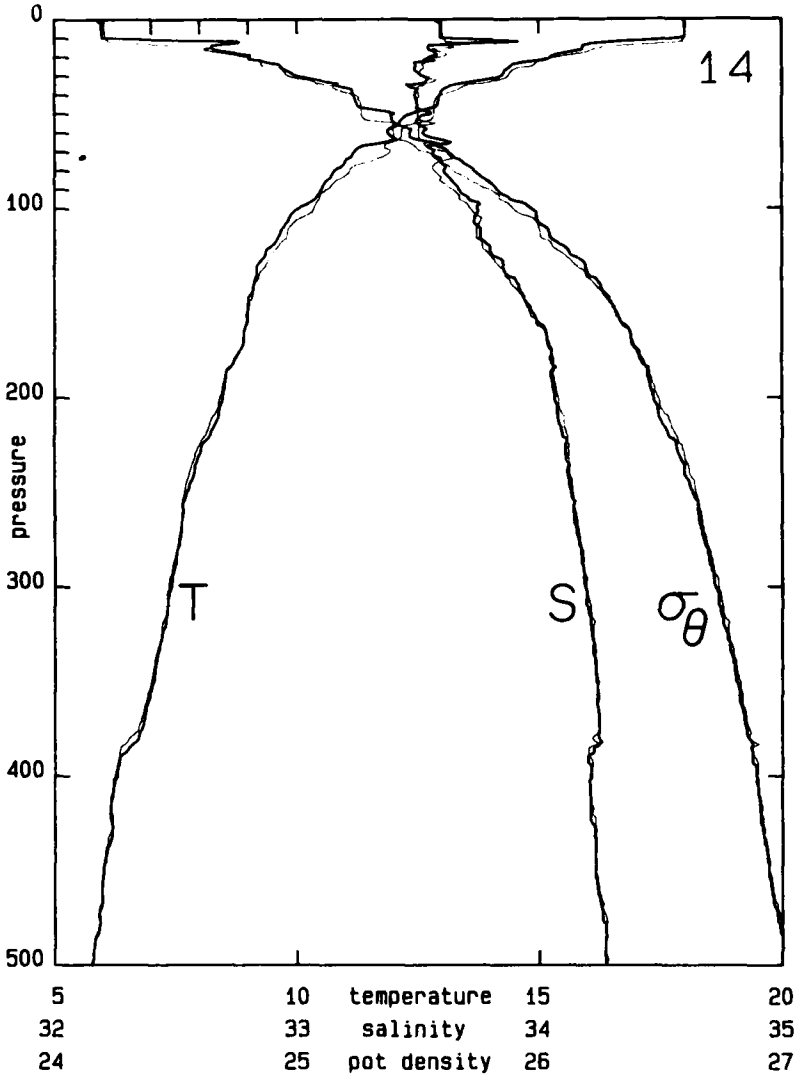
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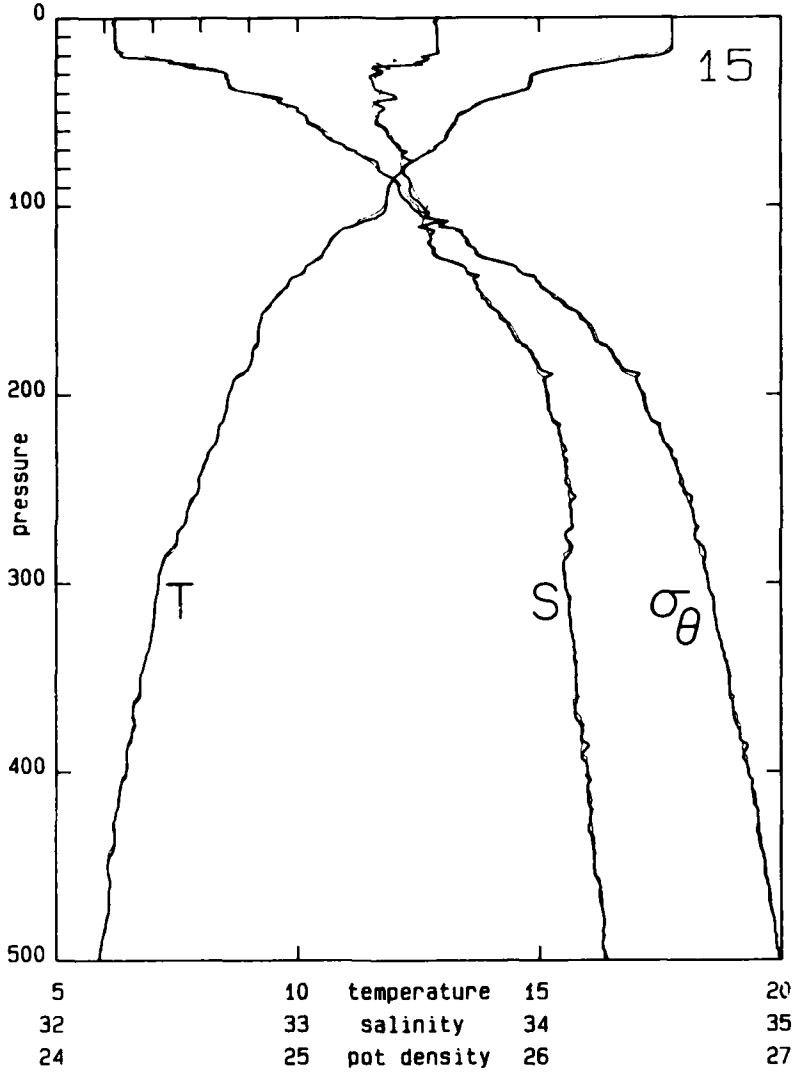
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
15	185: 6:44	30 52.3 N	119 13.4 W	11	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.758	33.579	17.758	24.244	0.	2
10	17.762	33.578	17.760	24.243	0.37	1
20	17.562	33.543	17.559	24.264	0.74	1
30	14.917	33.344	14.913	24.715	1.08	1
40	14.520	33.377	14.514	24.826	1.40	1
50	13.494	33.335	13.487	25.006	1.71	1
60	13.139	33.372	13.131	25.106	2.00	1
70	12.816	33.434	12.807	25.219	2.28	1
80	12.198	33.430	12.188	25.335	2.55	1
90	11.882	33.461	11.870	25.419	2.81	1
100	11.826	33.519	11.813	25.474	3.07	1
125	10.522	33.562	10.507	25.743	3.67	1
150	9.470	33.780	9.453	26.090	4.19	1
175	9.066	33.954	9.047	26.292	4.65	1
200	8.550	34.032	8.529	26.434	5.07	1
225	8.285	34.095	8.262	26.524	5.47	1
250	7.918	34.130	7.893	26.607	5.85	1
300	7.105	34.108	7.077	26.706	6.56	1
400	6.421	34.202	6.385	26.873	7.88	1
500	5.837	34.278	5.794	27.008	9.06	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
16	185:10: 2	30 30.3 N	119 28.9 W	14	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.134	33.406	18.134	24.020	0.	2
10	18.145	33.405	18.143	24.017	0.39	1
20	18.061	33.469	18.058	24.087	0.78	1
30	17.624	33.655	17.619	24.336	1.15	1
40	16.222	33.570	16.216	24.600	1.50	1
50	15.260	33.396	15.252	24.681	1.83	1
60	14.842	33.383	14.833	24.762	2.16	1
70	14.258	33.348	14.248	24.860	2.47	1
80	14.304	33.523	14.292	24.985	2.78	1
90	13.487	33.361	13.474	25.029	3.08	1
100	13.067	33.395	13.053	25.140	3.37	1
125	11.629	33.444	11.613	25.453	4.05	1
150	10.312	33.610	10.294	25.817	4.64	1
175	9.752	33.758	9.732	26.027	5.17	1
200	9.110	33.923	9.088	26.261	5.64	1
225	8.506	34.024	8.482	26.435	6.07	1
250	8.149	34.061	8.123	26.518	6.47	1
300	7.494	34.107	7.465	26.651	7.22	1
400	6.592	34.178	6.555	26.831	8.58	1
500	5.971	34.251	5.927	26.970	9.80	4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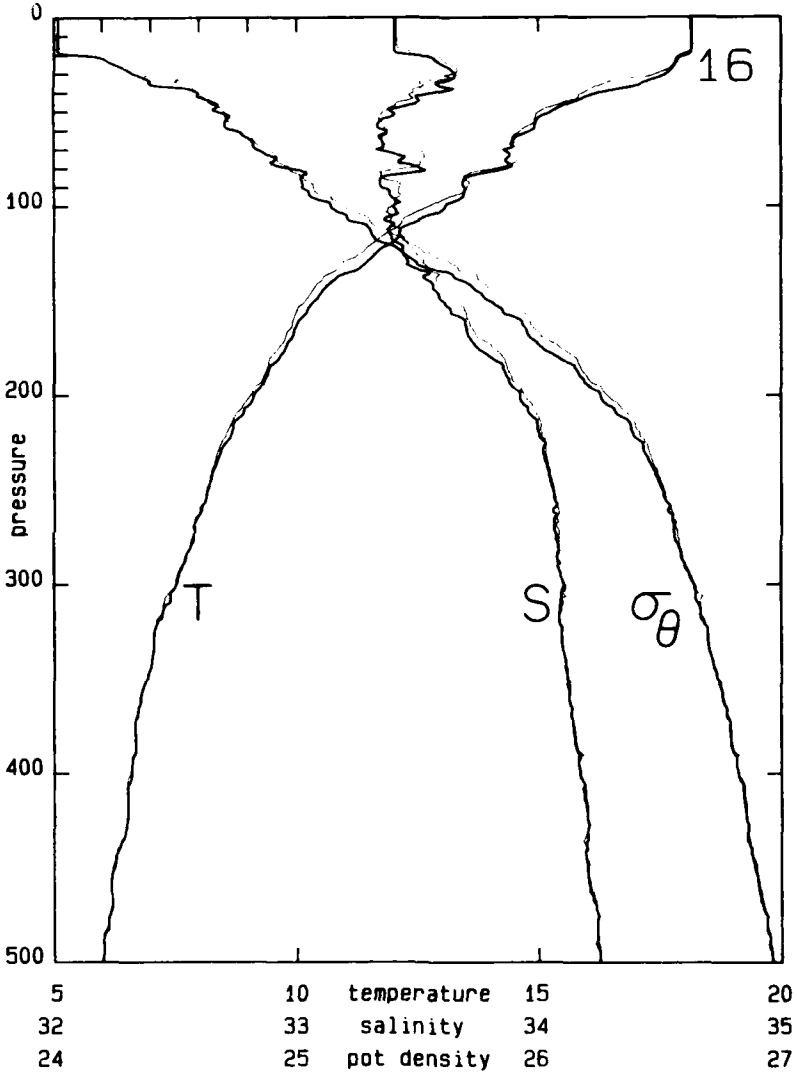
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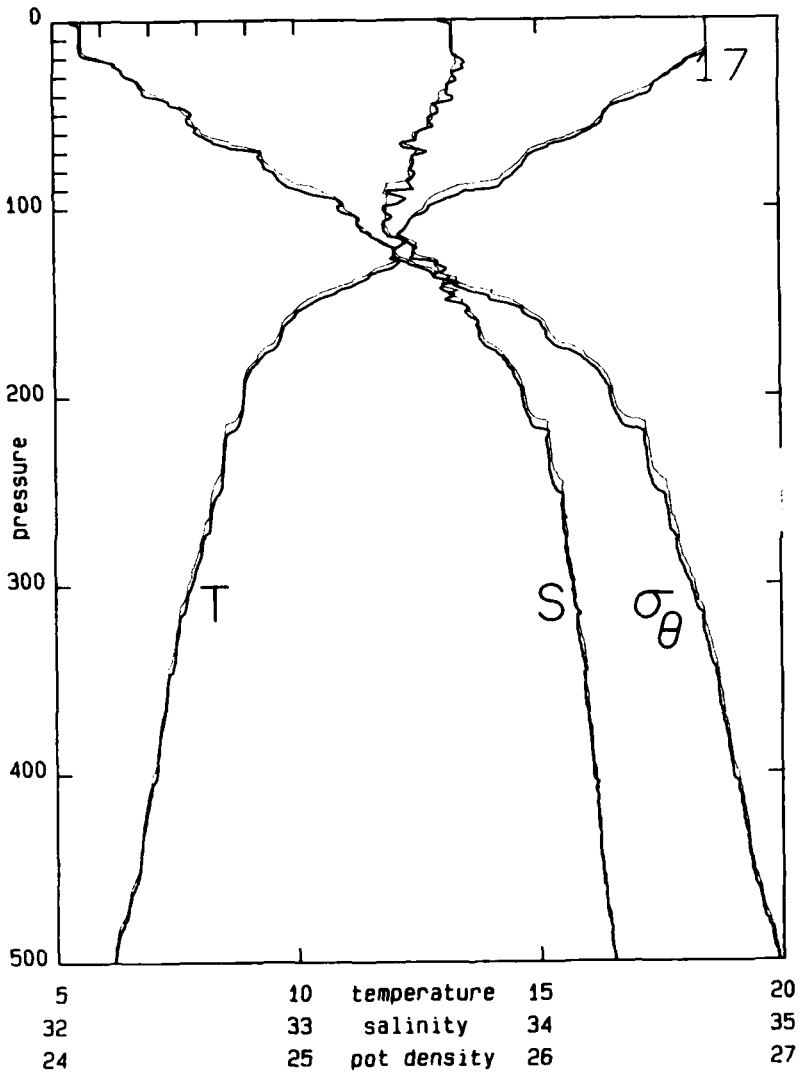
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
17	185:13:12	30 42.5 N	119 50.7 W	16	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.492	33.600	18.492	24.080	0.	2
10	18.520	33.648	18.518	24.110	0.38	1
20	18.364	33.676	18.361	24.171	0.76	1
30	17.733	33.657	17.728	24.311	1.13	1
40	17.303	33.629	17.296	24.393	1.49	1
50	16.382	33.583	16.374	24.573	1.84	1
60	16.013	33.507	16.004	24.599	2.18	1
70	14.945	33.547	14.935	24.867	2.50	1
80	14.568	33.486	14.556	24.901	2.81	1
90	13.860	33.433	13.847	25.009	3.12	1
100	12.740	33.366	12.727	25.182	3.40	1
125	12.023	33.485	12.007	25.412	4.08	1
150	10.308	33.671	10.290	25.865	4.68	1
175	9.451	33.820	9.432	26.125	5.19	1
200	8.897	33.934	8.876	26.303	5.64	1
225	8.508	34.034	8.484	26.442	6.07	1
250	8.370	34.082	8.344	26.501	6.47	1
300	7.791	34.139	7.761	26.633	7.23	1
400	7.048	34.222	7.010	26.805	8.60	1
500	6.144	34.306	6.100	26.992	9.83	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
18	185:16: 8	31 1.5 N	119 55.9 W	19	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.783	33.339	17.783	24.054	0.	2
10	17.784	33.339	17.782	24.054	0.39	1
20	17.510	33.656	17.507	24.363	0.76	1
30	17.086	33.629	17.081	24.444	1.12	1
40	16.089	33.581	16.083	24.638	1.46	1
50	15.556	33.539	15.548	24.726	1.79	1
60	15.210	33.526	15.201	24.793	2.11	1
70	14.468	33.435	14.458	24.883	2.42	1
80	13.677	33.360	13.666	24.989	2.72	1
90	13.521	33.567	13.508	25.182	3.01	1
100	12.756	33.581	12.743	25.345	3.29	1
125	10.714	33.547	10.699	25.698	3.91	1
150	10.084	33.688	10.067	25.917	4.46	1
175	9.177	33.860	9.158	26.201	4.96	1
200	8.742	33.934	8.721	26.328	5.41	1
225	8.457	34.056	8.434	26.467	5.82	1
250	8.135	34.095	8.109	26.547	6.22	1
300	7.556	34.155	7.527	26.679	6.95	1
400	6.782	34.222	6.745	26.841	8.28	1
500	6.127	34.295	6.083	26.985	9.49	1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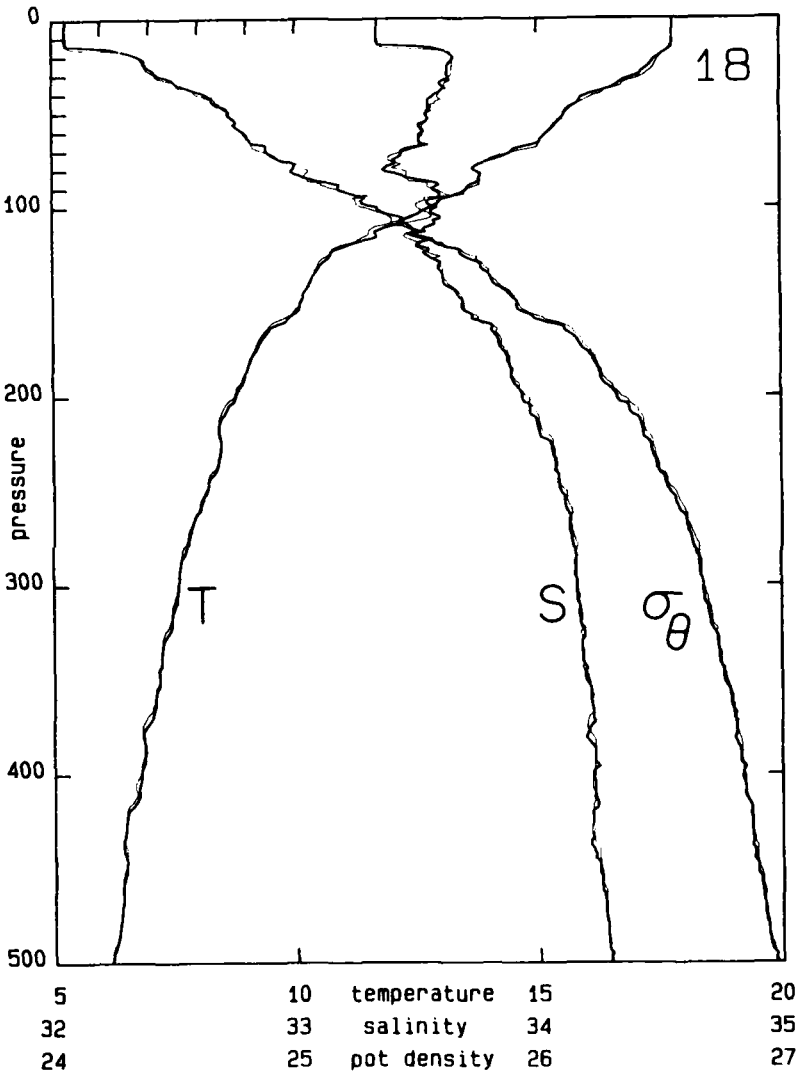
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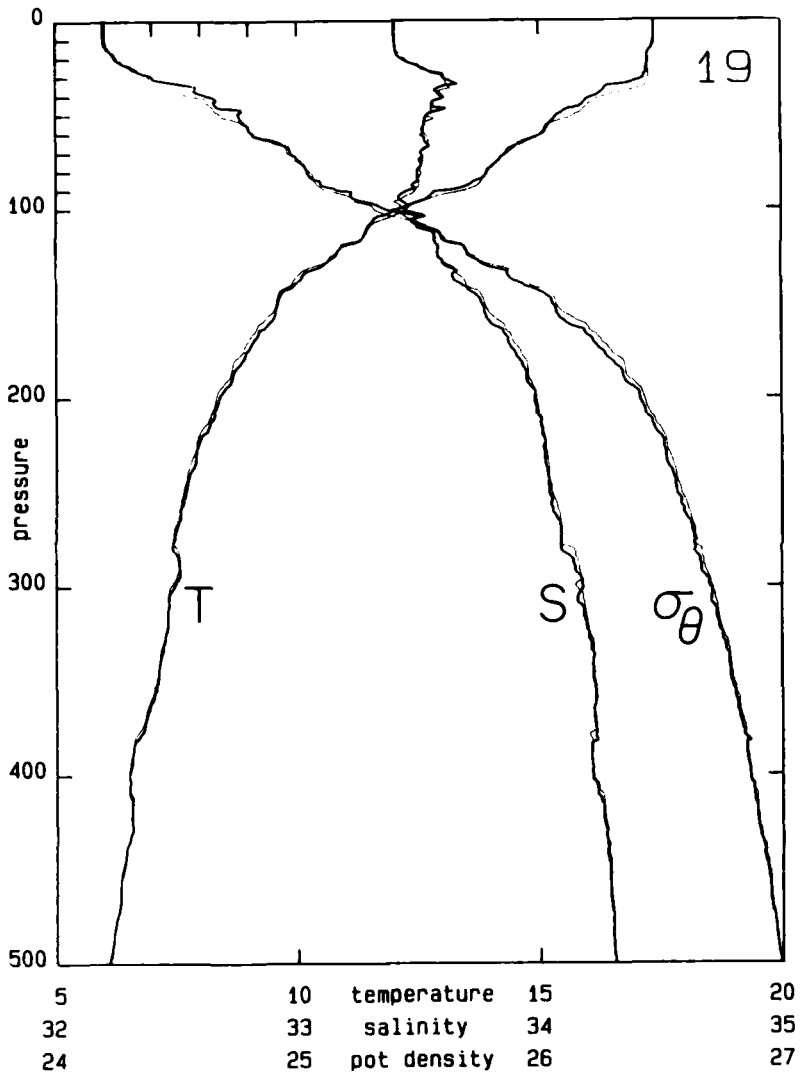
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
19	185:23:41	31 18.5 N	119 58.0 W	16	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.383	33.403	17.383	24.199	0.	2
10	17.380	33.403	17.378	24.200	0.37	1
20	17.251	33.429	17.248	24.251	0.75	1
30	17.167	33.605	17.162	24.406	1.11	1
40	16.143	33.605	16.137	24.645	1.45	1
50	15.368	33.536	15.360	24.765	1.78	1
60	15.051	33.524	15.042	24.826	2.09	1
70	14.301	33.508	14.291	24.974	2.40	1
80	13.917	33.494	13.906	25.044	2.70	1
90	13.067	33.443	13.055	25.177	2.99	1
100	12.026	33.440	12.013	25.376	3.26	1
125	10.747	33.578	10.732	25.716	3.87	1
150	9.581	33.765	9.564	26.061	4.40	1
175	8.933	33.900	8.914	26.271	4.87	1
200	8.361	33.979	8.340	26.421	5.30	1
225	7.908	34.013	7.886	26.516	5.70	1
250	7.661	34.038	7.636	26.572	6.08	1
300	7.395	34.175	7.366	26.718	6.80	1
400	6.513	34.216	6.477	26.872	8.11	1
500	6.082	34.306	6.038	27.000	9.29	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
20	186: 2:21	31 37.4 N	120 2.8 W	11	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.301	33.418	17.301	24.230	0.	2
10	17.297	33.440	17.295	24.248	0.37	1
20	17.184	33.503	17.181	24.324	0.74	1
30	14.287	33.236	14.283	24.766	1.07	1
40	13.543	33.303	13.537	24.971	1.38	1
50	13.159	33.302	13.152	25.048	1.68	1
60	12.954	33.421	12.946	25.181	1.97	1
70	11.859	33.355	11.850	25.340	2.24	1
80	11.897	33.445	11.887	25.403	2.50	1
90	11.807	33.524	11.796	25.482	2.76	1
100	11.363	33.545	11.351	25.580	3.01	1
125	10.326	33.627	10.311	25.827	3.58	1
150	9.686	33.756	9.669	26.036	4.10	1
175	9.035	33.889	9.016	26.246	4.57	1
200	8.467	33.967	8.446	26.396	5.01	1
225	8.181	34.005	8.158	26.469	5.42	1
250	7.796	34.050	7.771	26.562	5.81	1
300	7.266	34.107	7.237	26.683	6.54	1
400	6.353	34.177	6.317	26.862	7.86	1
500	5.553	34.227	5.511	27.002	9.03	1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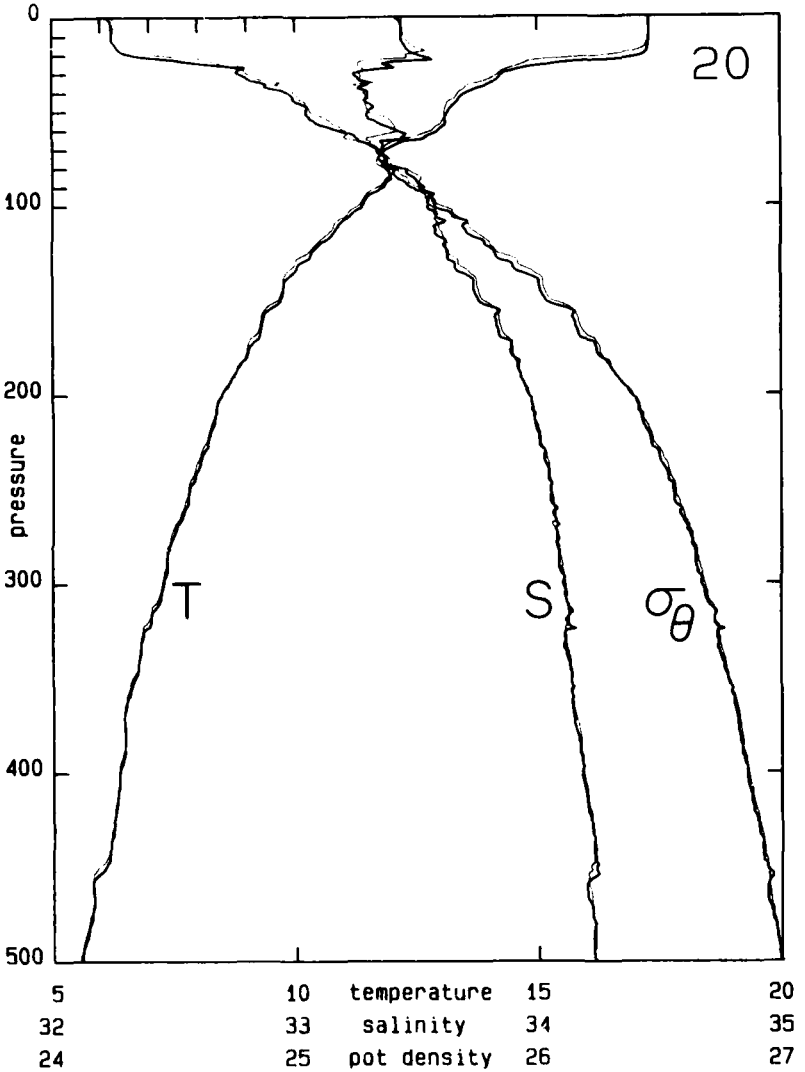
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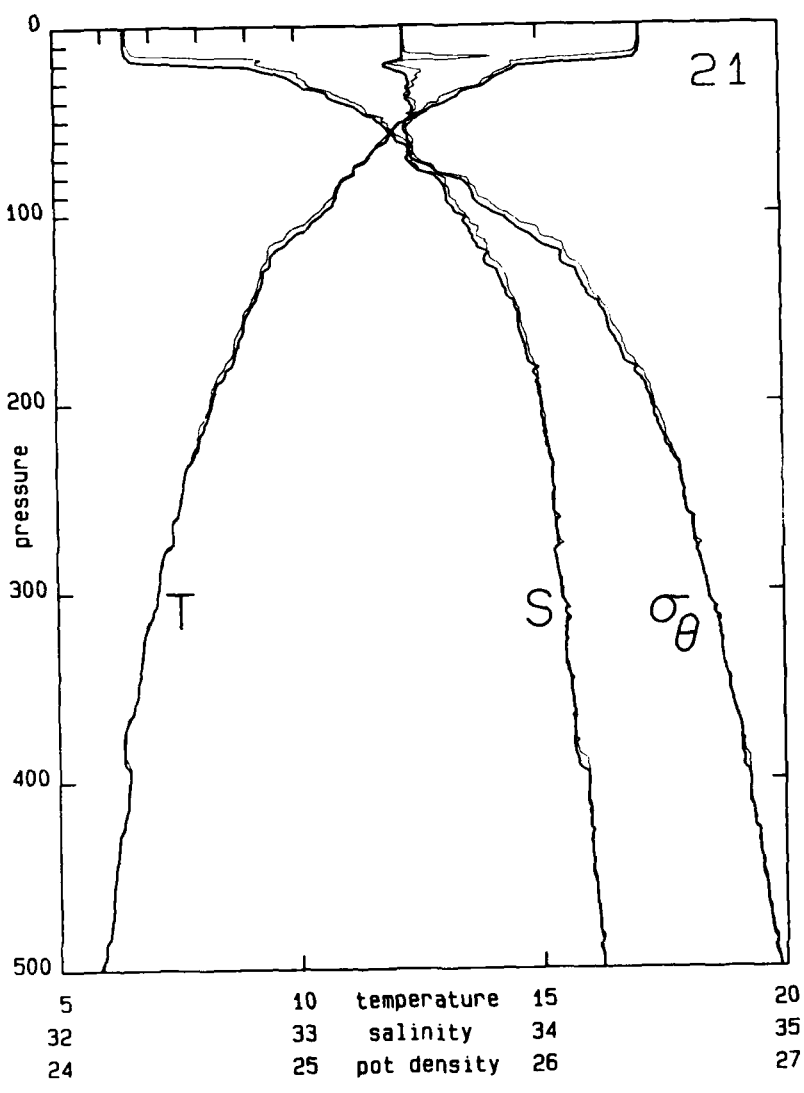
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
21	186: 4:39	31 53.6 N	120 6.7 W	11	0

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.130	33.450	17.130	24.295	0.	2
10	17.135	33.449	17.133	24.294	0.36	1
20	15.890	33.379	15.887	24.527	0.73	1
30	14.019	33.473	14.015	25.005	1.03	1
40	13.157	33.469	13.152	25.177	1.32	1
50	12.380	33.472	12.373	25.332	1.59	1
60	11.909	33.466	11.901	25.417	1.85	1
70	11.538	33.466	11.529	25.486	2.11	1
80	11.117	33.579	11.107	25.650	2.35	1
90	10.840	33.627	10.829	25.737	2.58	1
100	10.529	33.675	10.517	25.829	2.81	1
125	9.444	33.776	9.430	26.091	3.32	1
150	9.020	33.901	9.004	26.257	3.79	1
175	8.687	33.949	8.669	26.348	4.22	1
200	8.200	34.006	8.180	26.467	4.64	1
225	7.855	34.036	7.833	26.542	5.03	1
250	7.552	34.048	7.528	26.595	5.40	1
300	7.049	34.083	7.021	26.694	6.12	1
400	6.441	34.185	6.405	26.857	7.44	1
500	5.787	34.243	5.744	26.987	8.64	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
22	186: 8: 8	32 11.7 N	120 9.9 W	5	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.746	33.468	16.746	24.399	0.	2
10	16.747	33.468	16.745	24.399	0.35	1
20	16.030	33.559	16.027	24.634	0.70	1
30	14.047	33.561	14.043	25.067	1.01	1
40	13.279	33.472	13.273	25.155	1.29	1
50	12.551	33.443	12.544	25.277	1.57	1
60	12.217	33.500	12.209	25.385	1.84	1
70	11.952	33.499	11.943	25.435	2.10	1
80	11.671	33.602	11.661	25.567	2.35	1
90	11.475	33.572	11.464	25.580	2.59	1
100	10.965	33.597	10.953	25.692	2.83	1
125	9.850	33.717	9.836	25.978	3.38	1
150	9.052	33.910	9.036	26.259	3.86	1
175	8.648	33.960	8.630	26.362	4.30	1
200	8.193	33.997	8.173	26.461	4.71	1
225	7.764	34.026	7.742	26.547	5.10	1
250	7.497	34.039	7.473	26.596	5.48	1
300	6.986	34.078	6.958	26.698	6.19	1
400	6.350	34.197	6.314	26.878	7.50	1
500	5.715	34.251	5.672	27.002	8.68	1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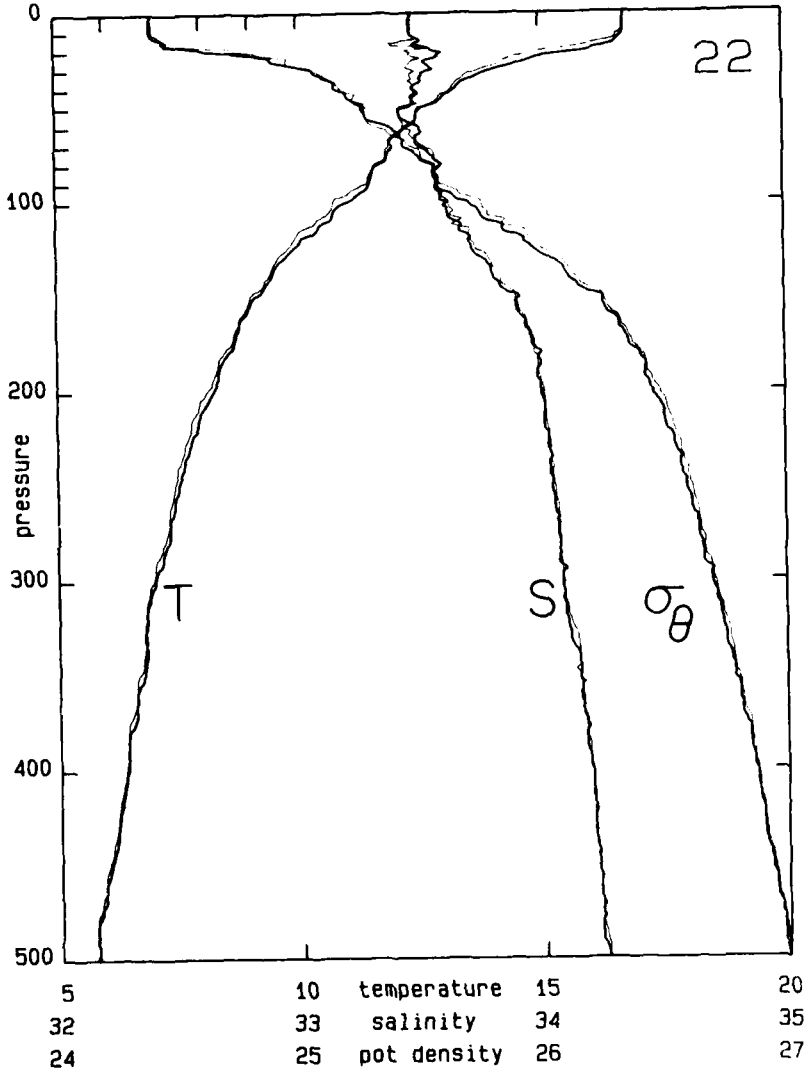
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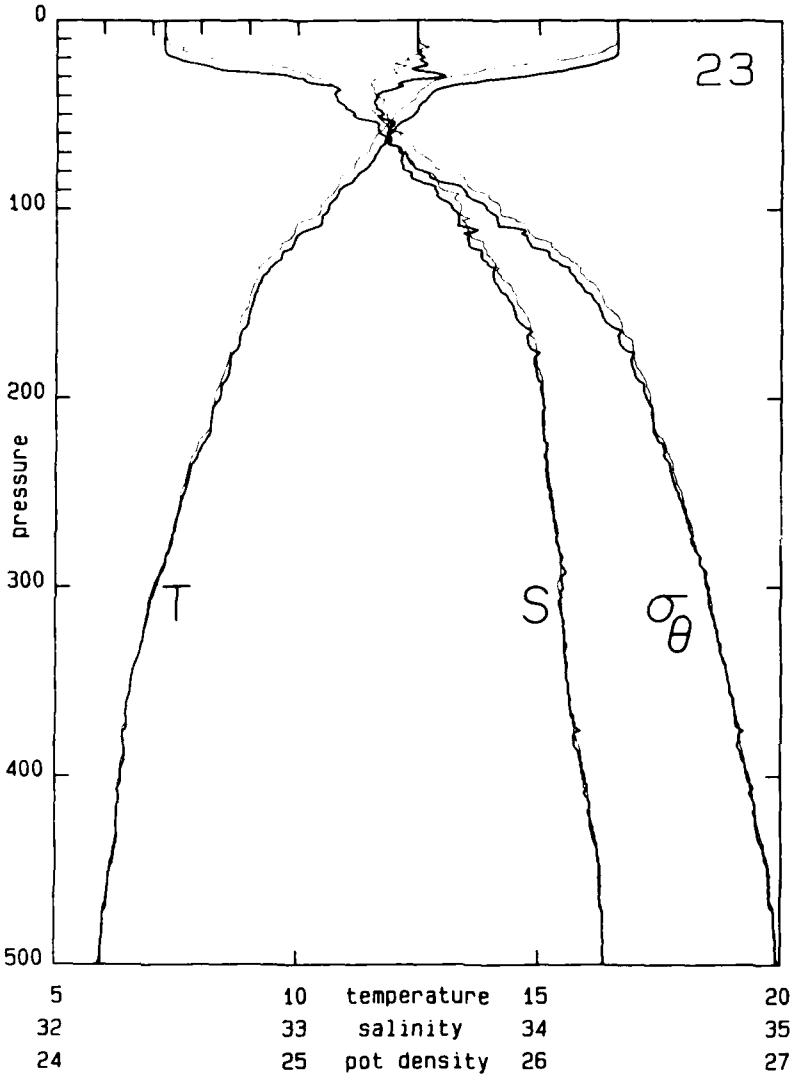
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
23	186:10:30	32 30.0 N	120 13.9 W	2	9

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.607	33.495	16.607	24.452	0.	2
10	16.620	33.493	16.618	24.448	0.35	1
20	16.484	33.521	16.481	24.501	0.70	1
30	14.623	33.608	14.619	24.982	1.03	1
40	12.700	33.322	12.695	25.154	1.31	1
50	12.385	33.346	12.378	25.233	1.59	1
60	11.903	33.365	11.895	25.340	1.86	1
70	11.623	33.418	11.614	25.433	2.12	1
80	11.286	33.462	11.276	25.529	2.37	1
90	10.852	33.569	10.841	25.690	2.62	1
100	10.628	33.641	10.616	25.786	2.84	1
125	9.650	33.756	9.636	26.042	3.37	1
150	9.039	33.884	9.023	26.241	3.84	1
175	8.657	34.002	8.639	26.394	4.28	1
200	8.382	34.017	8.361	26.448	4.69	1
225	7.994	34.028	7.971	26.515	5.09	1
250	7.636	34.045	7.611	26.581	5.48	1
300	7.033	34.085	7.005	26.698	6.20	1
400	6.362	34.189	6.326	26.870	7.51	1
500	5.908	34.273	5.864	26.995	8.69	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
24	186:12:50	32 47.0 N	120 16.8 W	5	16

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.765	33.458	16.765	24.387	0.	2
10	16.779	33.534	16.777	24.443	0.35	1
20	16.763	33.543	16.760	24.453	0.70	1
30	14.364	33.725	14.360	25.127	1.03	1
40	12.674	33.286	12.669	25.131	1.32	1
50	12.052	33.396	12.046	25.335	1.59	1
60	11.762	33.464	11.754	25.443	1.85	1
70	11.195	33.539	11.186	25.605	2.10	1
80	10.937	33.561	10.927	25.668	2.34	1
90	10.353	33.626	10.342	25.821	2.56	1
100	9.942	33.724	9.931	25.968	2.78	1
125	9.212	33.846	9.198	26.183	3.27	1
150	8.771	33.903	8.755	26.298	3.72	1
175	8.365	33.972	8.347	26.415	4.15	1
200	8.021	34.040	8.001	26.520	4.55	1
225	7.824	34.053	7.802	26.560	4.93	1
250	7.494	34.075	7.470	26.625	5.31	1
300	6.850	34.076	6.822	26.715	6.02	1
400	6.520	34.221	6.484	26.875	7.32	1
500	5.729	34.294	5.686	27.034	8.48	4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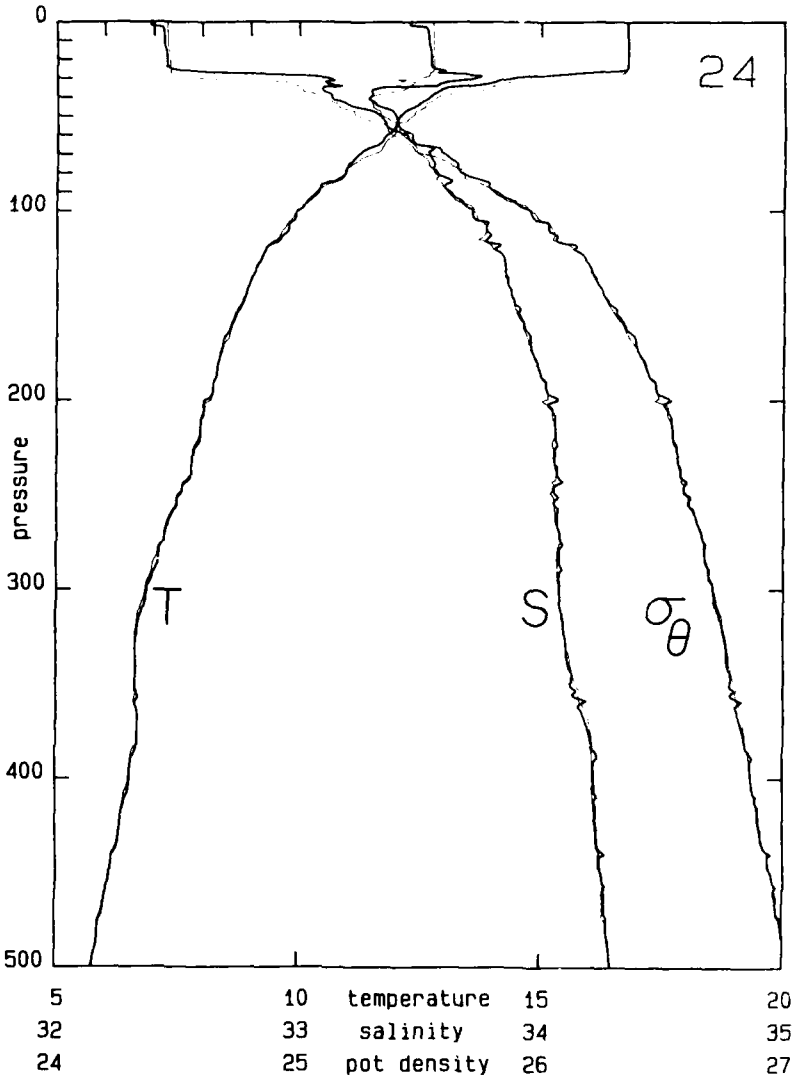
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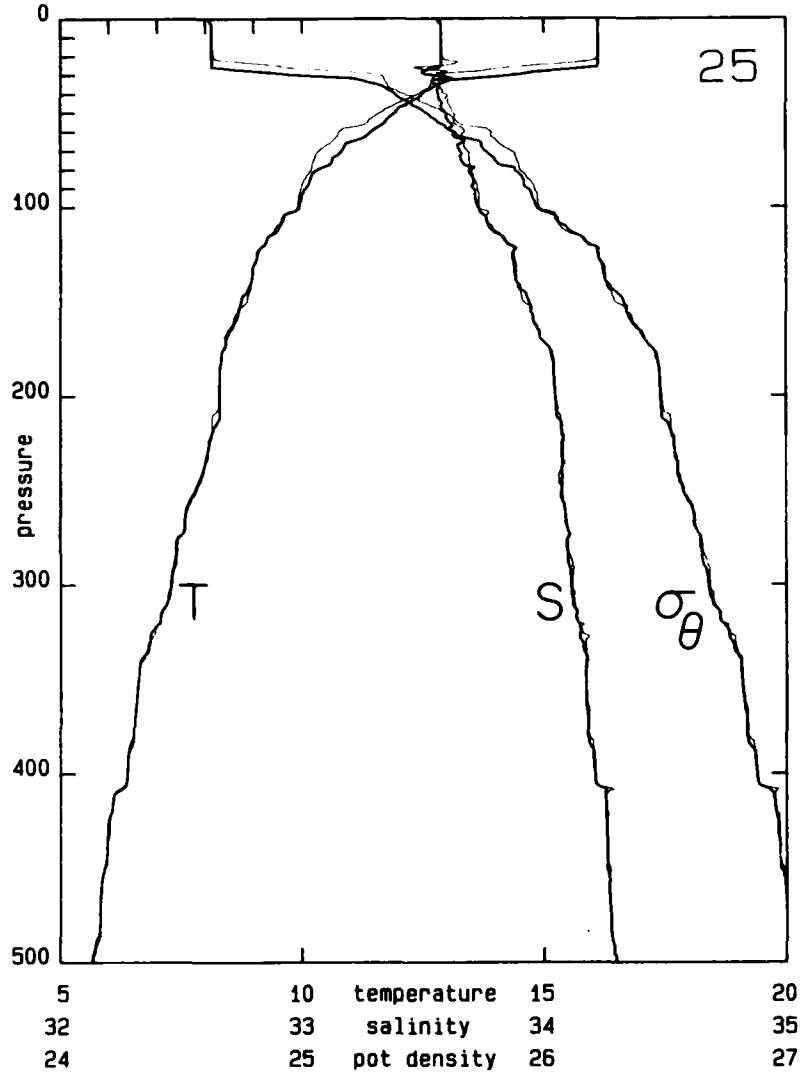
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
25	186:15: 8	33 4.2 N	120 20.8 W	5	12

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.123	33.563	16.123	24.615	0.	2
10	16.122	33.575	16.120	24.625	0.33	1
20	16.118	33.576	16.115	24.627	0.67	1
30	14.414	33.518	14.410	24.957	0.99	1
40	12.473	33.564	12.468	25.385	1.26	1
50	11.927	33.597	11.921	25.515	1.52	1
60	11.422	33.623	11.415	25.629	1.76	1
70	10.807	33.658	10.799	25.767	1.99	1
80	10.289	33.693	10.280	25.884	2.21	1
90	10.049	33.713	10.039	25.941	2.42	1
100	9.931	33.731	9.920	25.975	2.63	1
125	9.056	33.870	9.043	26.227	3.11	1
150	8.724	33.938	8.708	26.333	3.55	1
175	8.347	34.026	8.329	26.460	3.97	1
200	8.289	34.049	8.268	26.487	4.37	1
225	8.059	34.074	8.036	26.541	4.76	1
250	7.774	34.073	7.749	26.583	5.14	1
300	7.270	34.113	7.241	26.687	5.86	1
400	6.369	34.211	6.333	26.887	7.15	1
500	5.655	34.299	5.612	27.047	8.28	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
26	186:19: 8	33 18.4 N	120 46.4 W	2	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.127	33.430	16.127	24.512	0.	2
10	16.412	33.520	16.410	24.517	0.34	1
20	15.808	33.150	15.805	24.370	0.69	1
30	15.997	33.500	15.992	24.597	1.04	1
40	15.591	33.540	15.585	24.719	1.37	1
50	13.103	33.590	13.096	25.282	1.67	1
60	12.095	33.500	12.087	25.408	1.93	1
70	11.611	33.500	11.602	25.499	2.19	1
80	11.065	33.590	11.055	25.668	2.43	1
90	10.577	33.620	10.566	25.778	2.66	1
100	10.373	33.660	10.361	25.844	2.88	1
125	9.332	33.765	9.318	26.101	3.39	1
150	8.774	33.890	8.758	26.287	3.86	1
175	8.417	33.950	8.399	26.390	4.28	1
200	7.925	33.990	7.905	26.495	4.69	1
225	7.811	34.040	7.789	26.551	5.08	1
250	7.660	34.070	7.635	26.597	5.45	1
300	7.069	34.090	7.041	26.697	6.17	1
400	6.349	34.180	6.313	26.865	7.49	1
500	5.879	34.260	5.836	26.989	8.69	1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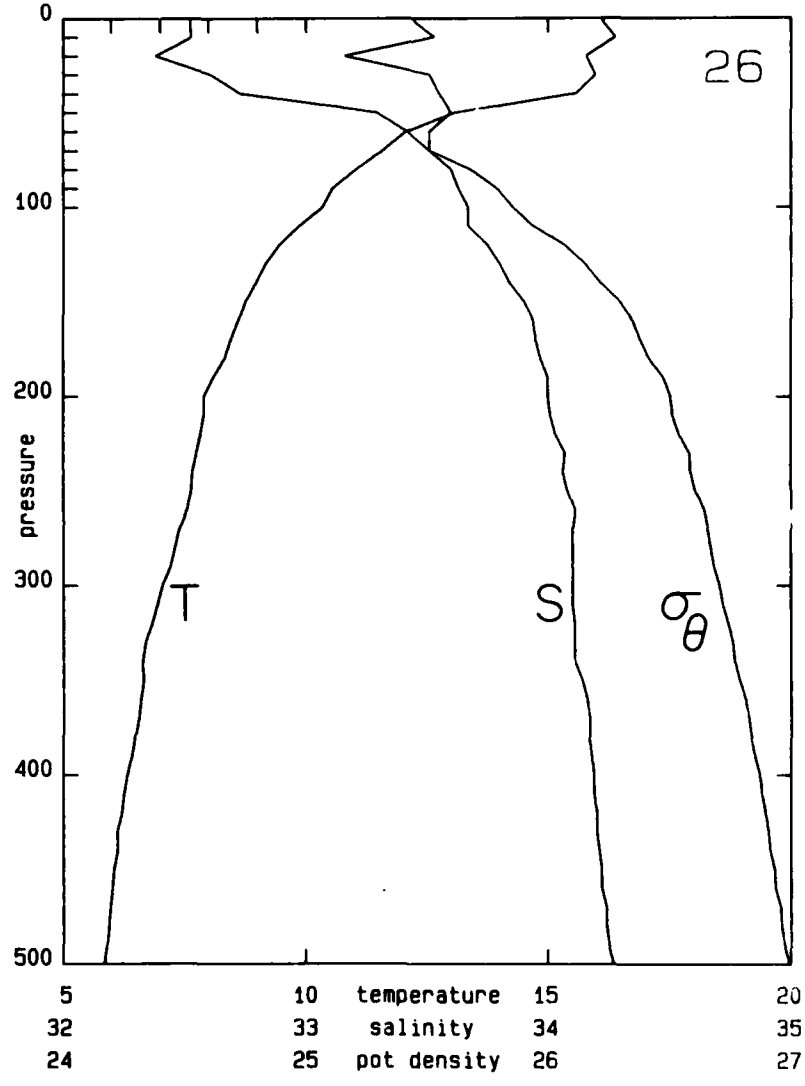
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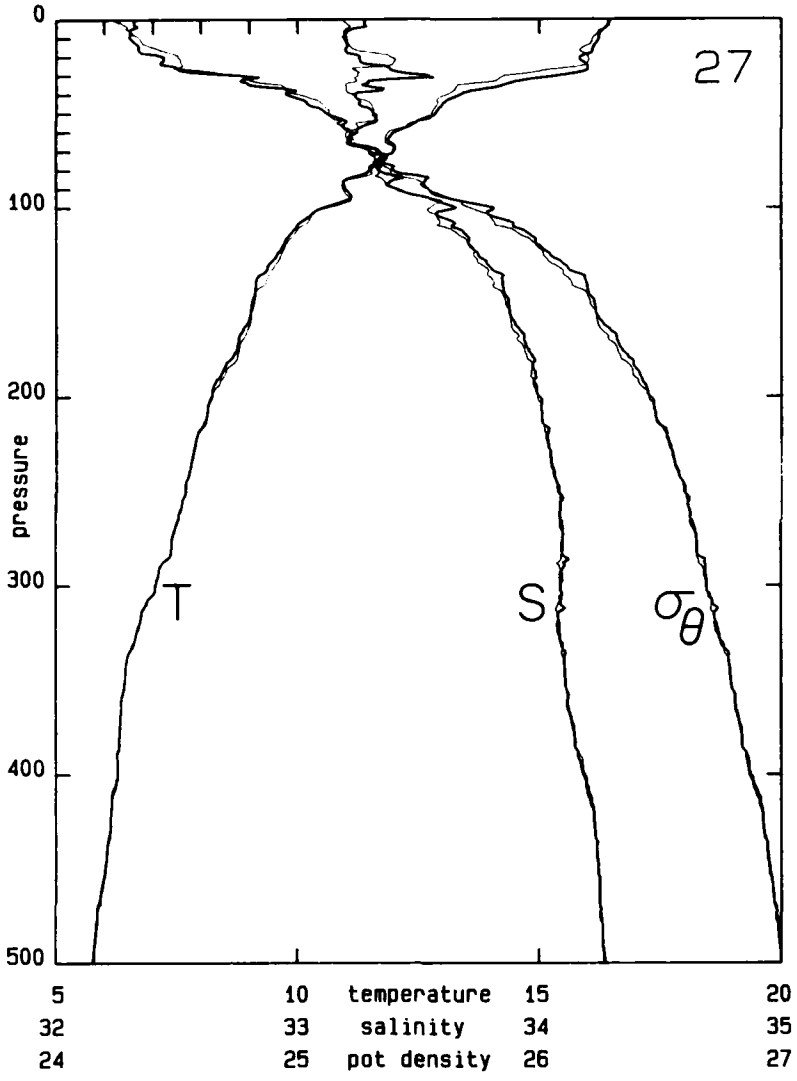
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
27	186:22:21	32 59.8 N	121 1.4 W	5	5

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.437	33.277	16.437	24.324	0.	2
10	16.229	33.188	16.227	24.303	0.36	1
20	15.833	33.259	15.830	24.448	0.72	1
30	15.353	33.544	15.348	24.774	1.07	1
40	13.345	33.230	13.339	24.955	1.38	1
50	12.840	33.316	12.833	25.122	1.67	1
60	11.999	33.238	11.991	25.223	1.95	1
70	11.981	33.335	11.972	25.302	2.22	1
80	11.485	33.341	11.475	25.399	2.49	1
90	10.998	33.421	10.987	25.549	2.74	1
100	10.475	33.655	10.463	25.823	2.97	1
125	9.558	33.748	9.544	26.051	3.50	1
150	9.044	33.874	9.028	26.232	3.97	1
175	8.722	33.956	8.703	26.347	4.41	1
200	8.187	34.008	8.167	26.470	4.82	1
225	7.865	34.037	7.843	26.541	5.21	1
250	7.662	34.082	7.637	26.606	5.59	1
300	7.055	34.088	7.027	26.697	6.30	1
400	6.281	34.190	6.245	26.881	7.61	1
500	5.758	34.277	5.715	27.017	8.77	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
28	187: 0:48	32 41.1 N	120 59.0 W	8	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.587	33.576	18.587	24.038	0.	2
10	17.991	33.610	17.989	24.211	0.38	1
20	17.973	33.620	17.970	24.224	0.75	1
30	16.672	33.505	16.667	24.446	1.12	1
40	15.155	33.377	15.149	24.689	1.45	1
50	14.568	33.385	14.561	24.822	1.77	1
60	13.935	33.348	13.926	24.927	2.08	1
70	13.366	33.414	13.356	25.094	2.38	1
80	12.679	33.488	12.668	25.287	2.66	1
90	11.917	33.504	11.905	25.446	2.92	1
100	11.619	33.563	11.606	25.547	3.17	1
125	10.609	33.637	10.594	25.786	3.76	1
150	9.772	33.742	9.755	26.011	4.29	1
175	9.056	33.887	9.037	26.241	4.77	1
200	8.642	33.944	8.621	26.351	5.21	1
225	8.267	34.008	8.244	26.458	5.63	1
250	7.930	34.045	7.905	26.538	6.02	1
300	7.404	34.080	7.375	26.642	6.77	1
400	6.472	34.136	6.436	26.814	8.14	1
500	5.972	34.241	5.928	26.962	9.37	1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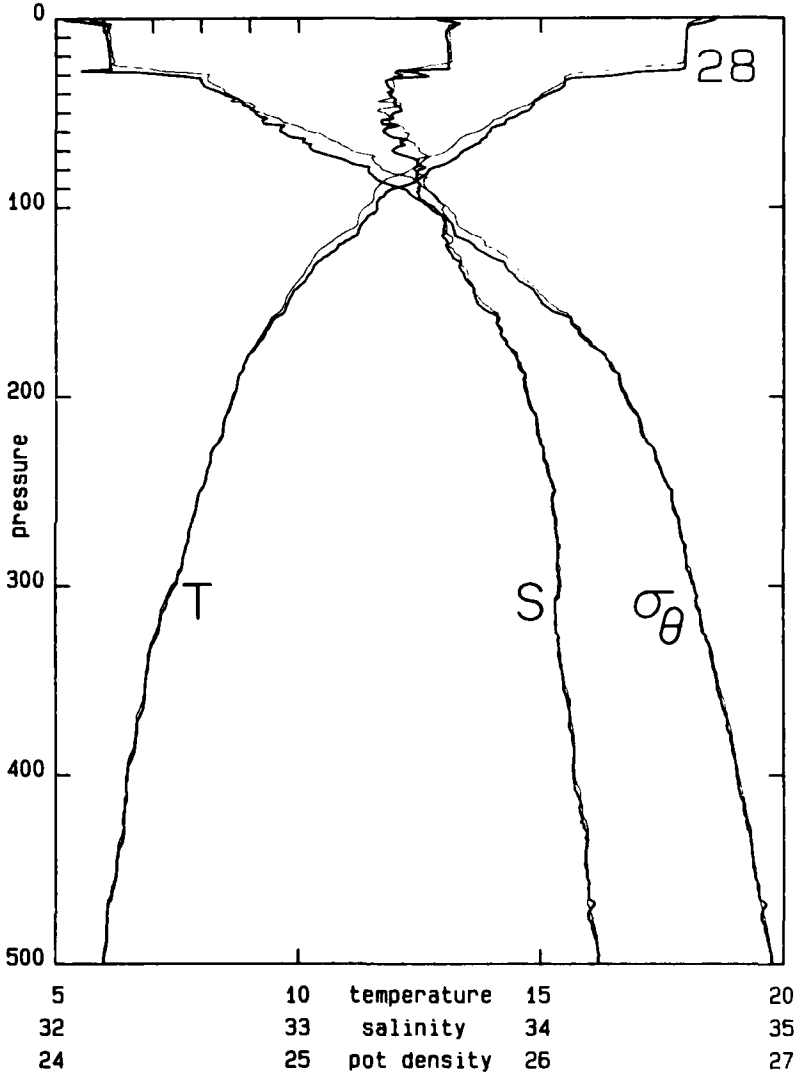
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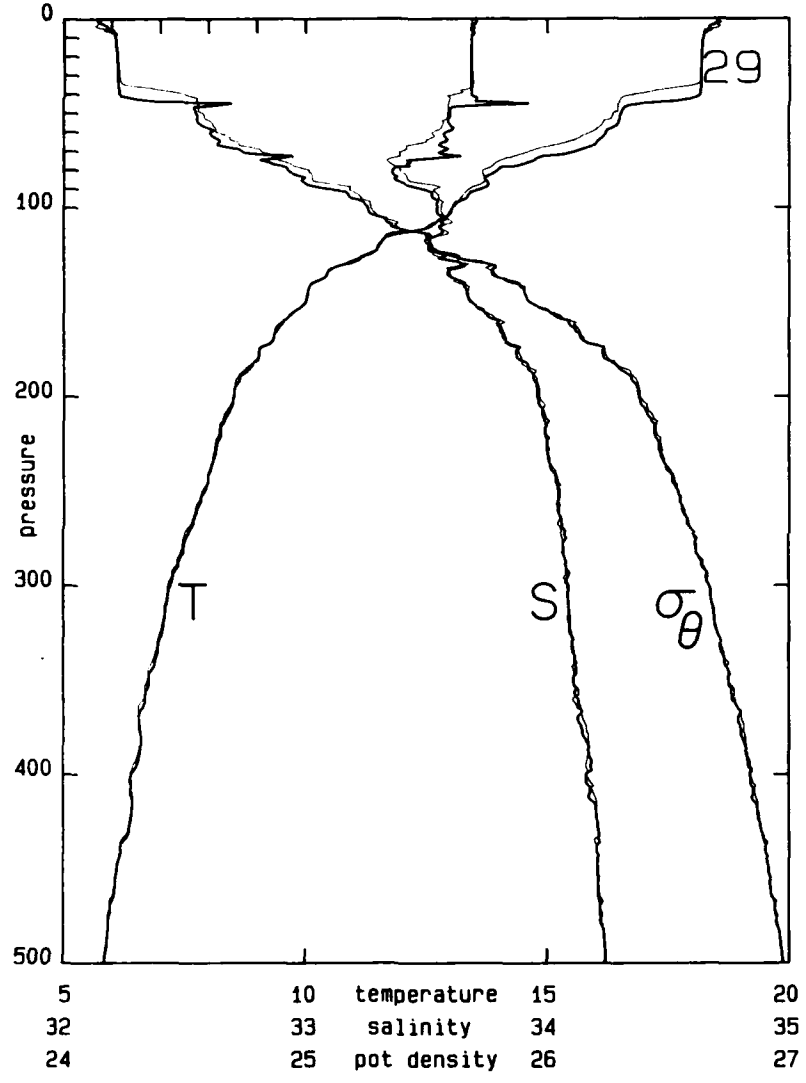
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
29	187: 3: 4	32 25.9 N	120 54.2 W	9	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.538	33.707	18.538	24.150	0.	2
10	18.222	33.686	18.220	24.213	0.38	1
20	18.184	33.685	18.181	24.222	0.75	1
30	[illegible].172	33.684	18.167	24.225	1.12	1
40	8.151	33.684	18.144	24.230	1.49	1
50	6.529	33.597	16.521	24.550	1.84	1
60	16.218	33.574	16.208	24.604	2.18	1
70	15.582	33.547	15.571	24.727	2.51	1
80	13.950	33.367	13.939	24.939	2.82	1
90	13.608	33.488	13.595	25.103	3.12	1
100	13.038	33.549	13.024	25.265	3.40	1
125	11.207	33.579	11.192	25.635	4.05	1
150	9.979	33.689	9.962	25.935	4.60	1
175	9.042	33.868	9.023	26.228	5.09	1
200	8.502	33.959	8.481	26.384	5.52	1
225	8.164	34.000	8.141	26.468	5.93	1
250	7.881	34.049	7.856	26.548	6.33	1
300	7.177	34.090	7.148	26.682	7.06	1
400	6.378	34.162	6.342	26.847	8.40	1
500	5.835	34.245	5.792	26.982	9.60	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
30	187: 5:18	32 7.9 N	120 51.2 W	8	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.994	33.309	16.994	24.219	0.	2
10	16.803	33.280	16.801	24.242	0.37	1
20	16.510	33.252	16.507	24.289	0.74	1
30	16.006	33.468	16.001	24.570	1.09	1
40	15.011	33.478	15.005	24.798	1.42	1
50	14.016	33.309	14.009	24.879	1.74	1
60	13.876	33.313	13.867	24.912	2.05	1
70	13.326	33.323	13.316	25.031	2.35	1
80	12.937	33.320	12.926	25.107	2.64	1
90	12.474	33.375	12.462	25.240	2.92	1
100	11.821	33.447	11.808	25.420	3.19	1
125	10.719	33.591	10.704	25.731	3.80	1
150	9.726	33.730	9.709	26.009	4.34	1
175	9.124	33.837	9.105	26.191	4.82	1
200	8.860	33.897	8.839	26.280	5.28	1
225	8.589	33.954	8.565	26.367	5.71	1
250	8.141	34.017	8.116	26.485	6.12	1
300	7.531	34.088	7.502	26.630	6.88	1
400	6.482	34.133	6.446	26.810	8.25	1
500	5.900	34.228	5.857	26.961	9.47	1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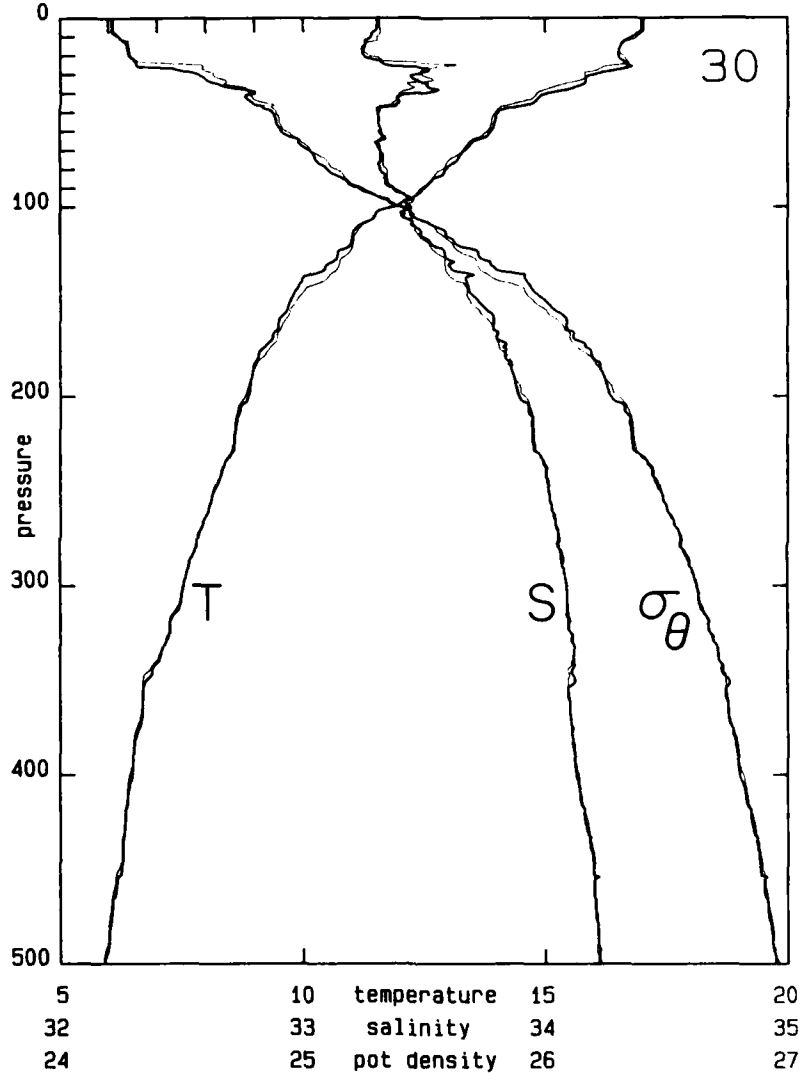
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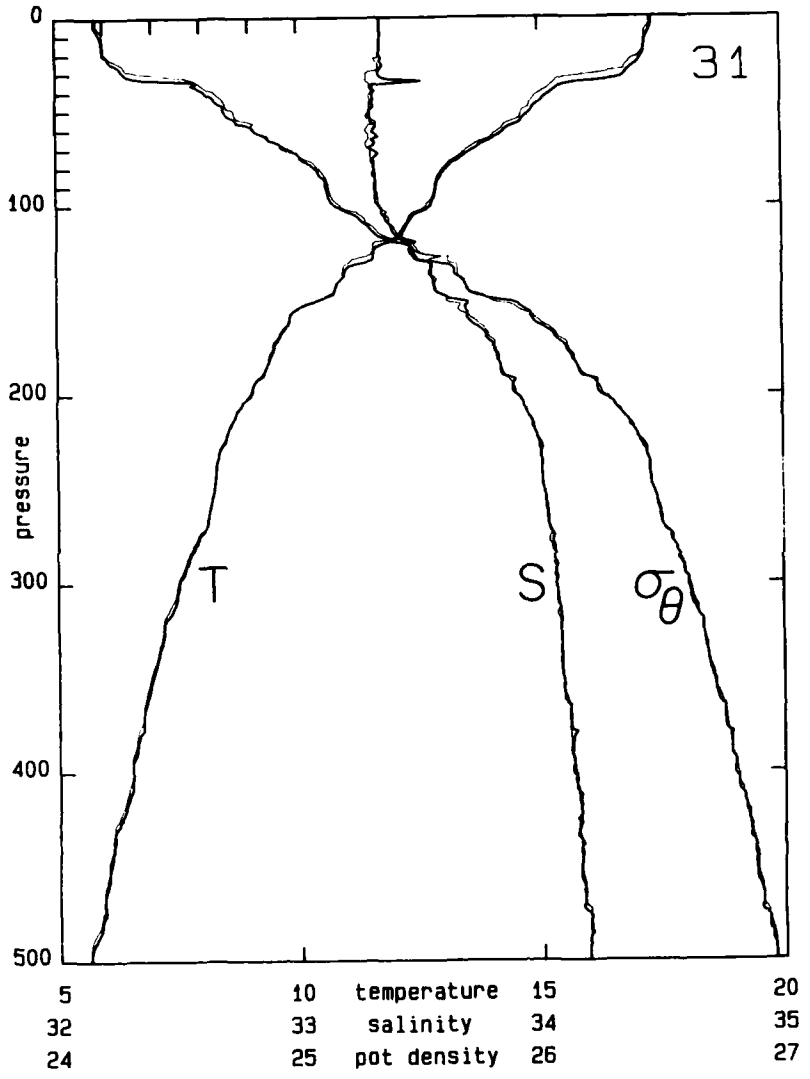
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code	
31	187: 7:33	31 51.0 N	120 48.2 W	5	4	
depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.343	33.347	17.343	24.166	0.	2
10	17.248	33.348	17.246	24.190	0.38	1
20	17.160	33.346	17.157	24.209	0.75	1
30	16.788	33.339	16.783	24.291	1.12	1
40	15.245	33.312	15.239	24.620	1.46	1
50	14.826	33.302	14.819	24.703	1.79	1
60	14.283	33.310	14.274	24.825	2.11	1
70	13.625	33.305	13.615	24.957	2.42	1
80	13.069	33.318	13.058	25.079	2.72	1
90	12.859	33.321	12.847	25.123	3.01	1
100	12.721	33.339	12.708	25.164	3.29	1
125	11.561	33.469	11.545	25.485	3.96	1
150	10.355	33.684	10.337	25.867	4.55	1
175	9.478	33.809	9.459	26.112	5.06	1
200	8.978	33.908	8.956	26.270	5.53	1
225	8.423	34.002	8.400	26.430	5.96	1
250	8.214	34.013	8.188	26.471	6.36	1
300	7.511	34.061	7.482	26.612	7.13	1
400	6.525	34.136	6.489	26.807	8.52	1
500	5.613	34.189	5.571	26.965	9.74	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code	
32	187: 9:50	31 31.3 N	120 44.0 W	6	5	
depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.749	32.310	17.749	23.275	0.	2
10	17.786	33.506	17.784	24.182	0.39	1
20	17.646	33.496	17.643	24.208	0.76	1
30	17.619	33.492	17.614	24.212	1.14	1
40	17.150	33.634	17.143	24.433	1.50	1
50	16.814	33.624	16.806	24.505	1.84	1
60	16.045	33.588	16.036	24.655	2.18	1
70	15.589	33.539	15.578	24.719	2.51	1
80	15.085	33.508	15.073	24.807	2.83	1
90	14.401	33.485	14.388	24.936	3.14	1
100	13.783	33.563	13.769	25.125	3.44	1
125	12.484	33.598	12.467	25.412	4.11	1
150	11.159	33.646	11.141	25.697	4.72	1
175	9.808	33.785	9.788	26.039	5.26	1
200	9.043	33.901	9.021	26.255	5.74	1
225	8.688	33.967	8.664	26.362	6.18	1
250	8.133	34.026	8.108	26.493	6.59	1
300	7.440	34.048	7.411	26.612	7.37	1
400	6.413	34.160	6.377	26.841	8.74	1
500	5.528	34.208	5.486	26.990	9.94	1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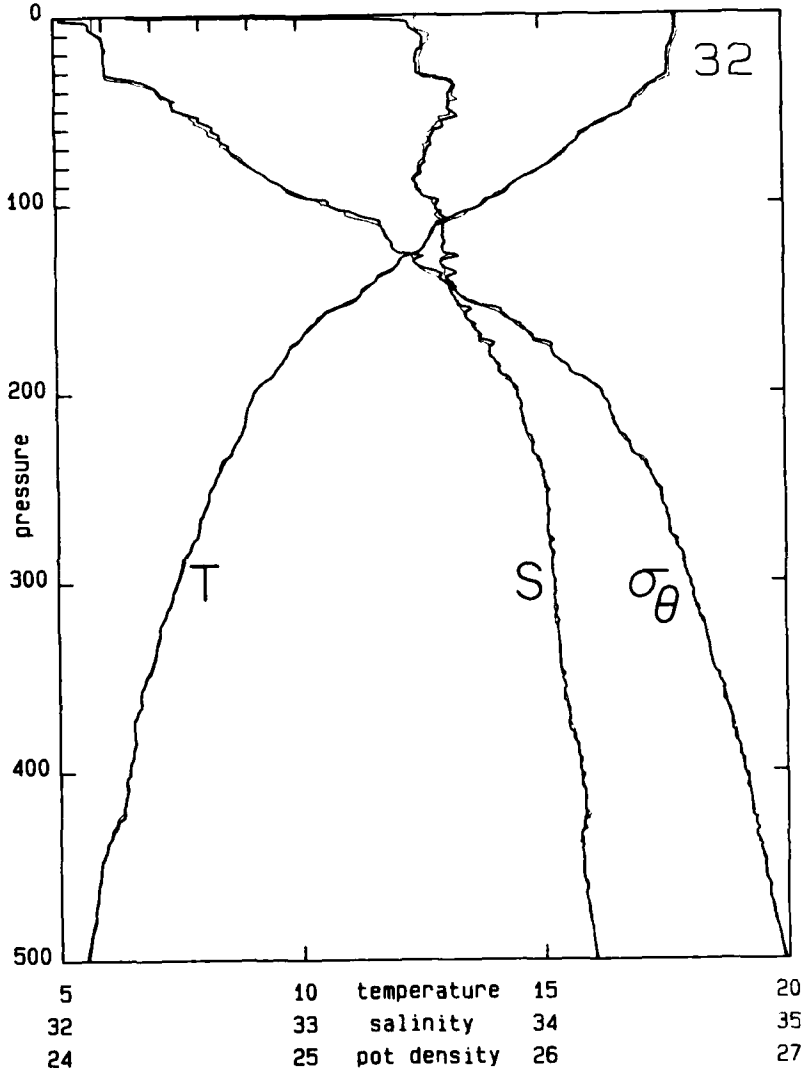
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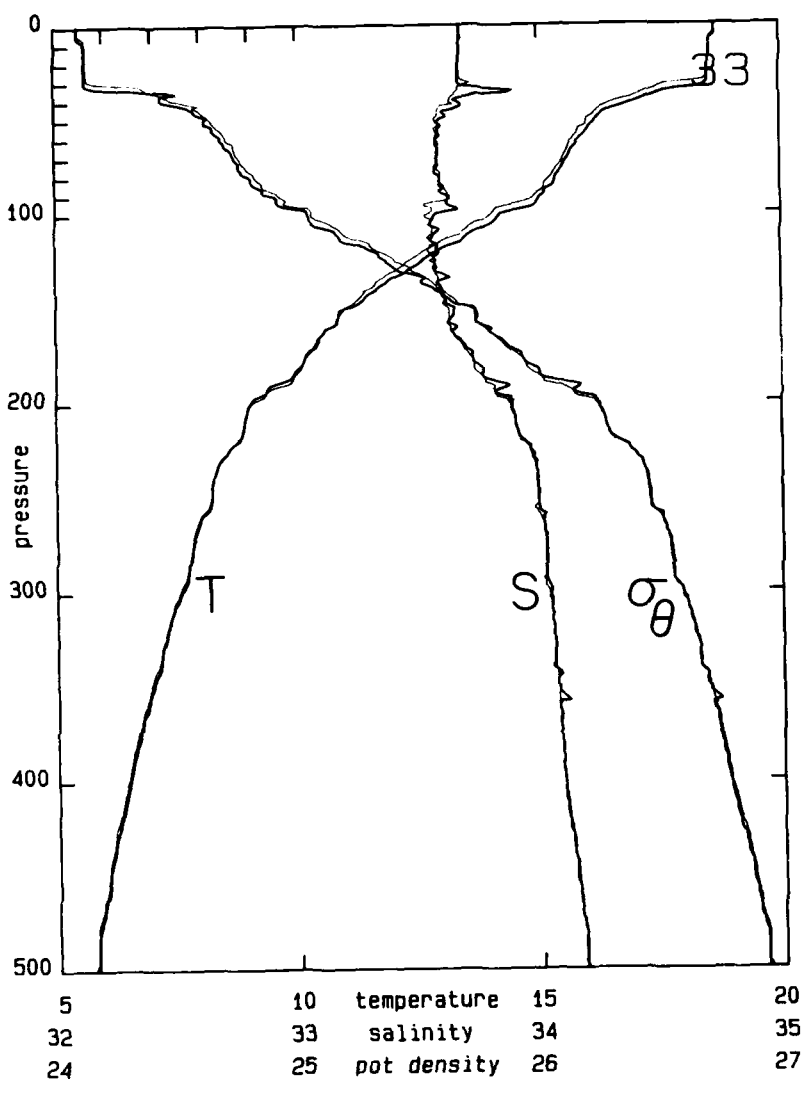
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
33	187:12: 5	31 14.8 N	120 40.5 W	3	15

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.660	33.680	18.660	24.099	0.	2
10	18.546	33.675	18.544	24.124	0.38	1
20	18.524	33.674	18.521	24.129	0.76	1
30	18.515	33.674	18.510	24.132	1.15	1
40	17.138	33.654	17.131	24.451	1.51	1
50	16.205	33.593	16.197	24.622	1.84	1
60	15.867	33.578	15.858	24.687	2.18	1
70	15.610	33.581	15.599	24.747	2.50	1
80	15.369	33.591	15.357	24.808	2.82	1
90	15.074	33.617	15.060	24.893	3.14	1
100	14.185	33.571	14.171	25.048	3.44	1
125	12.571	33.569	12.554	25.372	4.14	1
150	10.949	33.649	10.931	25.736	4.76	1
175	10.154	33.719	10.134	25.929	5.31	1
200	8.993	33.887	8.971	26.251	5.81	1
225	8.526	33.963	8.502	26.384	6.25	1
250	8.199	33.991	8.173	26.456	6.66	1
300	7.534	34.040	7.505	26.592	7.43	1
400	6.459	34.095	6.423	26.783	8.84	1
500	5.730	34.191	5.687	26.953	10.08	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
34	187:14:36	30 58.0 N	120 37.2 W	7	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.657	33.314	18.657	23.820	0.	2
10	18.608	33.674	18.606	24.108	0.39	1
20	18.531	33.661	18.528	24.118	0.77	1
30	17.604	33.572	17.599	24.277	1.14	1
40	17.023	33.587	17.016	24.427	1.50	1
50	16.647	33.528	16.639	24.470	1.86	1
60	15.958	33.482	15.949	24.593	2.20	1
70	14.945	33.354	14.935	24.718	2.53	1
80	14.724	33.345	14.712	24.759	2.85	1
90	14.360	33.321	14.347	24.818	3.17	1
100	13.728	33.310	13.714	24.941	3.48	1
125	13.233	33.593	13.216	25.260	4.21	1
150	11.929	33.604	11.910	25.522	4.87	1
175	10.372	33.666	10.351	25.851	5.46	1
200	9.415	33.799	9.393	26.115	5.97	1
225	8.912	33.897	8.888	26.272	6.44	1
250	8.434	33.990	8.408	26.420	6.87	1
300	7.581	34.039	7.552	26.585	7.66	1
400	6.439	34.095	6.403	26.786	9.07	1
500	5.792	34.195	5.749	26.948	10.32	4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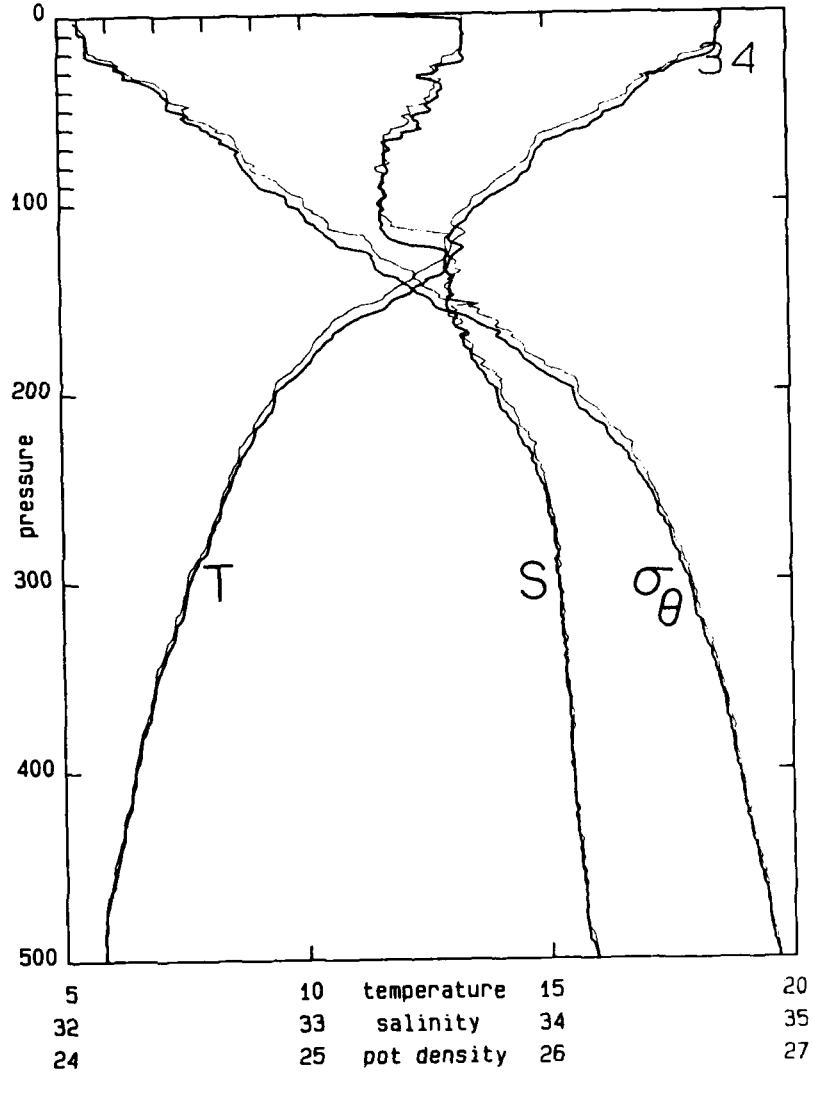
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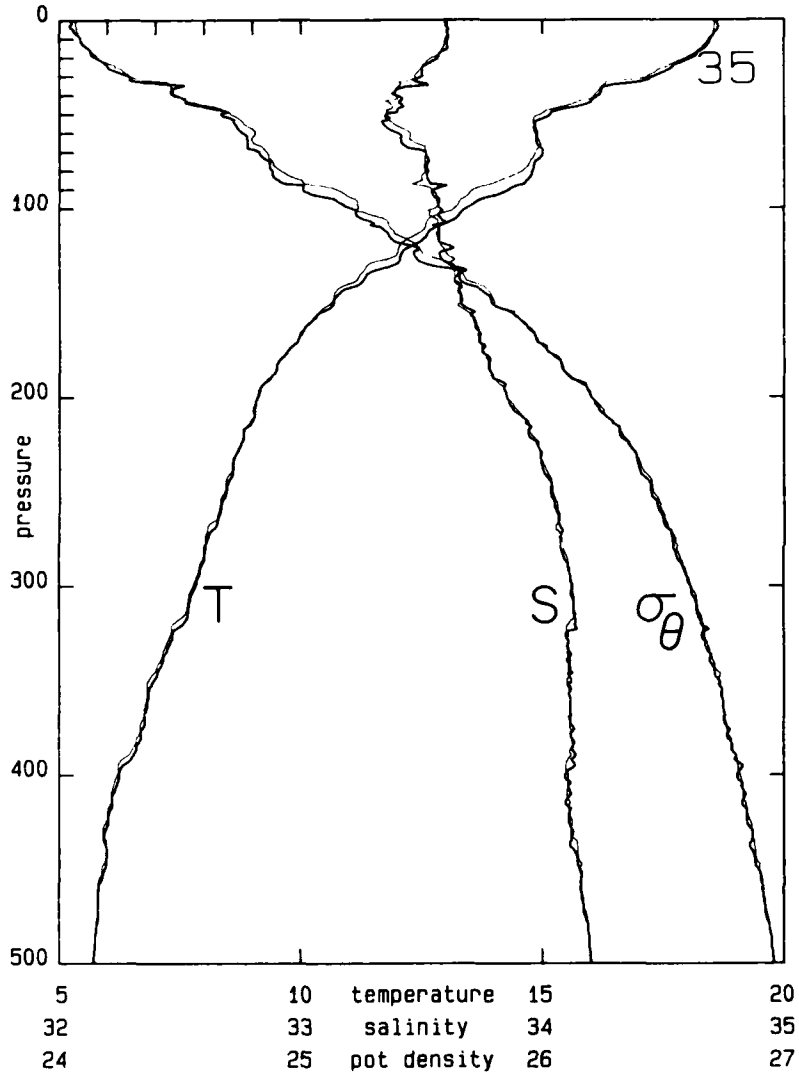
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
35	187:18:41	30 41.2 N	120 33.4 W	5	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.605	33.598	18.605	24.050	0.	2
10	18.486	33.610	18.484	24.089	0.39	1
20	18.099	33.568	18.096	24.153	0.77	1
30	17.302	33.508	17.297	24.300	1.14	1
40	16.173	33.395	16.167	24.476	1.49	1
50	15.145	33.376	15.137	24.691	1.83	1
60	14.901	33.402	14.892	24.764	2.16	1
70	15.003	33.518	14.992	24.832	2.47	1
80	14.778	33.526	14.766	24.887	2.79	1
90	14.280	33.548	14.267	25.010	3.09	1
100	13.391	33.581	13.377	25.219	3.38	1
125	12.055	33.575	12.039	25.476	4.04	1
150	10.676	33.662	10.658	25.795	4.63	1
175	9.721	33.747	9.701	26.024	5.16	1
200	9.090	33.856	9.068	26.212	5.64	1
225	8.738	33.981	8.714	26.365	6.09	1
250	8.437	34.035	8.411	26.454	6.50	1
300	7.791	34.123	7.761	26.620	7.27	1
400	6.242	34.097	6.207	26.813	8.65	1
500	5.696	34.206	5.653	26.969	9.87	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
36	188: 0:52	30 50.0 N	121 16.6 W	10	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.295	33.600	19.295	23.878	0.	2
10	18.951	33.694	18.949	24.037	0.40	1
20	18.591	33.578	18.588	24.039	0.79	1
30	16.455	33.383	16.450	24.402	1.16	1
40	15.837	33.405	15.831	24.560	1.51	1
50	15.162	33.365	15.154	24.679	1.84	1
60	14.774	33.357	14.765	24.757	2.17	1
70	14.414	33.325	14.404	24.809	2.48	1
80	14.053	33.312	14.042	24.875	2.80	1
90	13.695	33.330	13.682	24.963	3.11	1
100	13.191	33.336	13.177	25.069	3.40	1
125	12.328	33.409	12.312	25.295	4.11	1
150	10.794	33.532	10.776	25.673	4.74	1
175	10.074	33.677	10.054	25.910	5.30	1
200	9.481	33.788	9.459	26.096	5.82	1
225	8.888	33.906	8.864	26.283	6.28	1
250	8.426	33.996	8.400	26.426	6.71	1
300	7.612	34.064	7.582	26.600	7.49	1
400	6.648	34.142	6.611	26.796	8.89	1
500	5.765	34.158	5.722	26.922	10.14	1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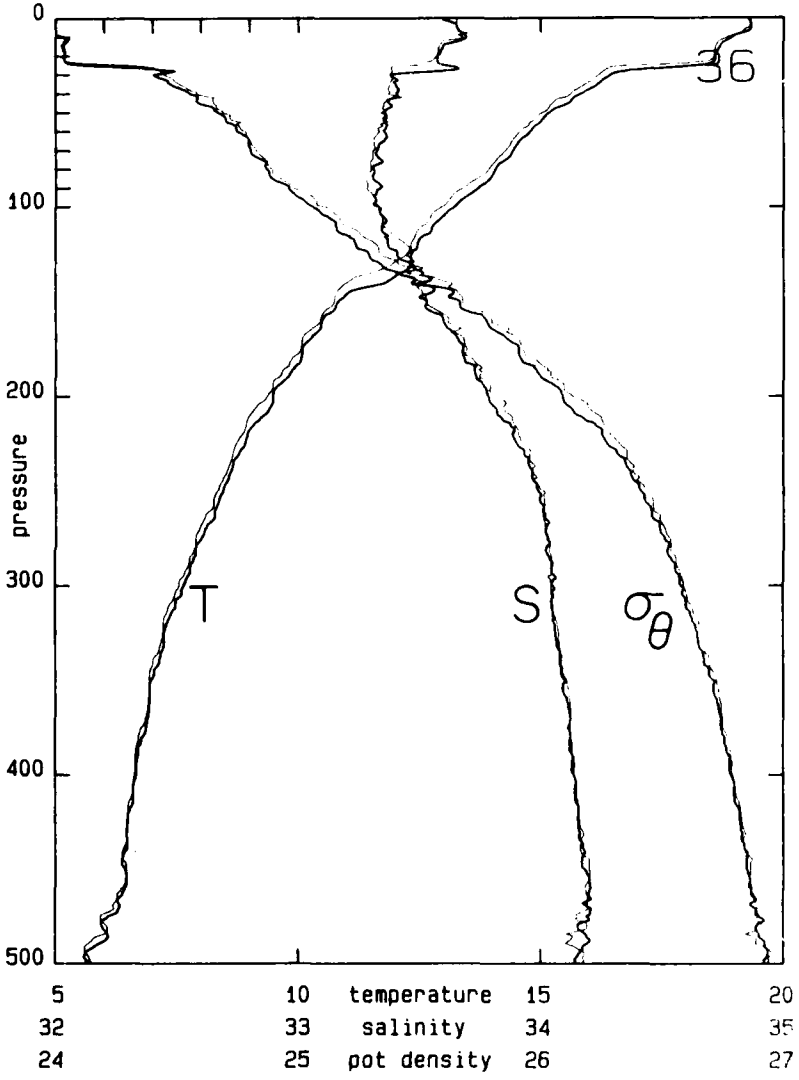
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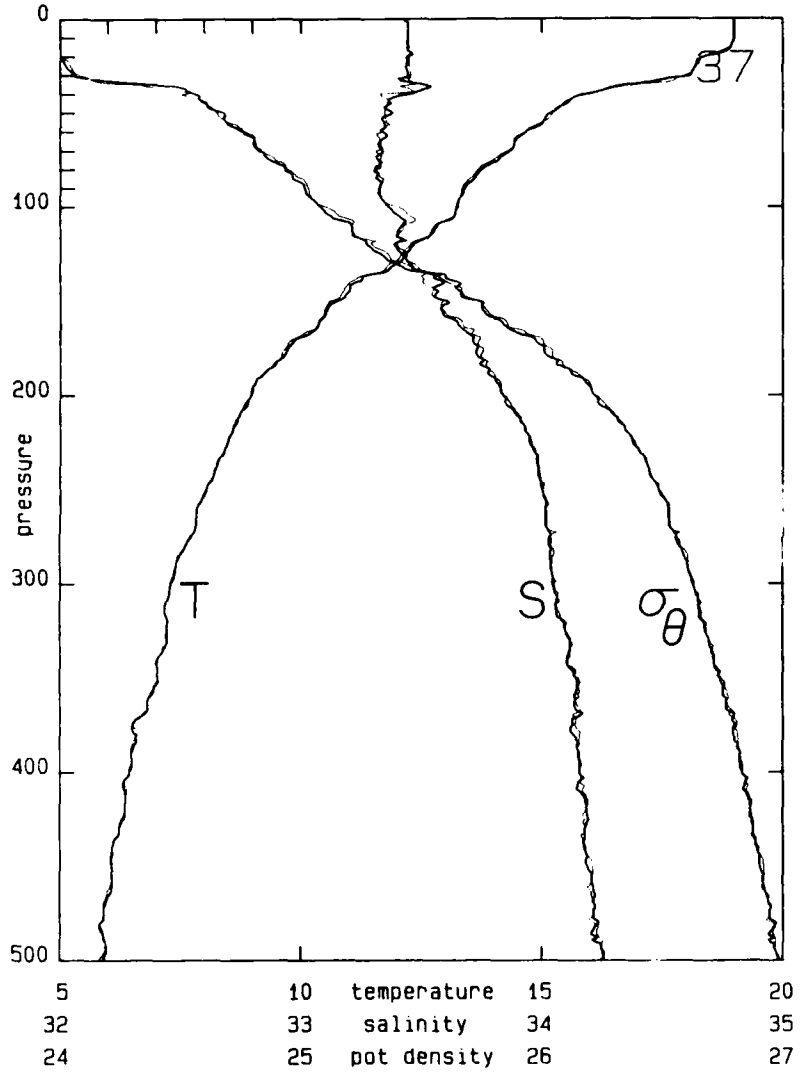
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
37	188: 4: 5	31 8.7 N	121 19.6 W	10	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.992	33.433	18.992	23.827	0.	2
10	18.988	33.445	18.986	23.838	0.41	1
20	18.385	33.441	18.382	23.986	0.81	1
30	18.106	33.447	18.101	24.059	1.20	1
40	15.956	33.450	15.950	24.568	1.56	1
50	15.189	33.379	15.181	24.684	1.90	1
60	14.668	33.338	14.659	24.765	2.22	1
70	14.327	33.341	14.317	24.840	2.54	1
80	13.728	33.305	13.717	24.936	2.85	1
90	13.384	33.322	13.372	25.020	3.15	1
100	13.220	33.370	13.206	25.090	3.45	1
125	12.149	33.426	12.133	25.342	4.14	1
150	10.688	33.625	10.670	25.764	4.76	1
175	9.705	33.731	9.685	26.014	5.30	1
200	8.930	33.843	8.909	26.227	5.78	1
225	8.462	33.949	8.439	26.383	6.22	1
250	8.000	34.004	7.975	26.496	6.63	1
300	7.286	34.047	7.257	26.633	7.39	1
400	6.406	34.165	6.370	26.846	8.75	1
500	5.938	34.265	5.894	26.985	9.95	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
38	188: 6:25	31 25.3 N	121 23.9 W	15	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.753	33.516	18.753	23.951	0.	2
10	18.768	33.516	18.766	23.947	0.40	1
20	18.504	33.537	18.501	24.030	0.79	1
30	17.360	33.824	17.355	24.528	1.18	1
40	16.192	33.461	16.186	24.523	1.53	1
50	15.180	33.424	15.172	24.720	1.86	1
60	14.433	33.381	14.424	24.848	2.17	1
70	13.607	33.314	13.597	24.968	2.48	1
80	12.950	33.373	12.939	25.145	2.77	1
90	12.682	33.393	12.670	25.214	3.05	1
100	12.209	33.460	12.196	25.357	3.32	1
125	11.384	33.557	11.368	25.586	3.96	1
150	10.662	33.630	10.644	25.772	4.55	1
175	10.194	33.742	10.174	25.941	5.09	1
200	10.521	34.045	10.497	26.121	5.60	1
225	10.350	34.183	10.323	26.259	6.07	1
250	10.759	34.493	10.728	26.430	6.50	1
300	9.218	34.507	9.185	26.703	7.26	1
400	7.167	34.427	7.129	26.950	8.55	1
500	5.614	34.308	5.572	27.059	9.66	1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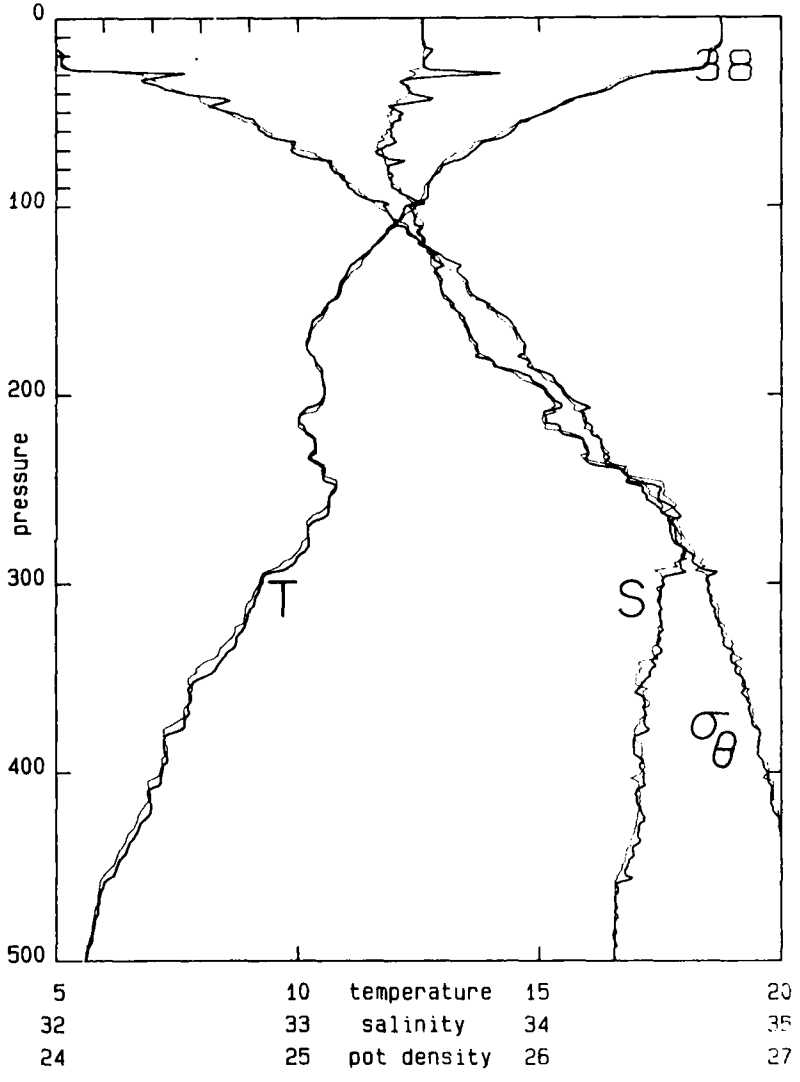
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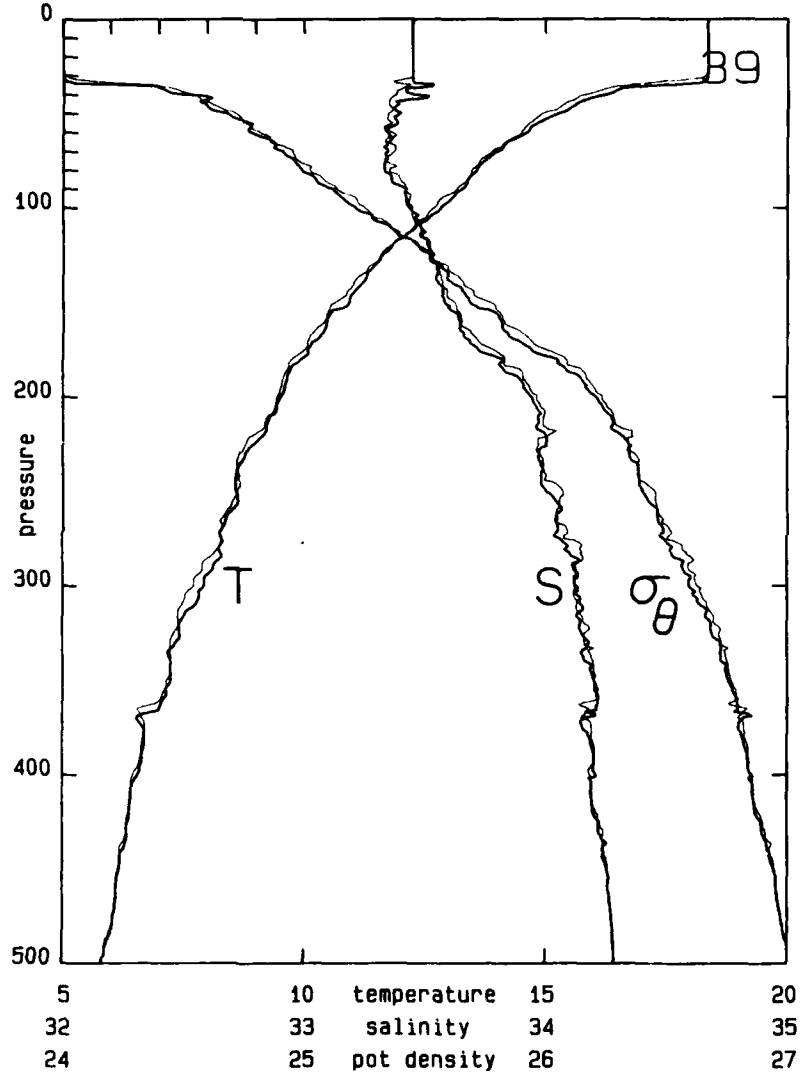
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
39	188: 8:50	31 43.1 N	121 27.5 W	17	4

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.339	33.454	18.339	24.006	0.	2
10	18.361	33.449	18.359	23.997	0.39	1
20	18.356	33.448	18.353	23.998	0.79	1
30	18.336	33.448	18.331	24.004	1.18	1
40	16.245	33.450	16.239	24.502	1.55	1
50	15.245	33.400	15.237	24.688	1.88	1
60	14.591	33.346	14.582	24.787	2.21	1
70	13.965	33.344	13.955	24.917	2.52	1
80	13.555	33.334	13.544	24.994	2.82	1
90	13.238	33.425	13.226	25.129	3.11	1
100	12.813	33.438	12.800	25.223	3.40	1
125	11.597	33.528	11.581	25.524	4.05	1
150	10.914	33.584	10.896	25.692	4.66	1
175	10.070	33.734	10.050	25.955	5.21	1
200	9.486	33.947	9.464	26.219	5.69	1
225	8.887	34.003	8.863	26.359	6.14	1
250	8.617	34.015	8.591	26.411	6.56	1
300	7.879	34.127	7.849	26.611	7.35	1
400	6.495	34.192	6.459	26.855	8.69	1
500	5.776	34.289	5.733	27.024	9.87	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
40	188:11: 7	32 0.2 N	121 31.1 W	9	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.066	33.553	18.066	24.149	0.	2
10	18.080	33.575	18.078	24.163	0.38	1
20	18.079	33.575	18.076	24.164	0.76	1
30	18.036	33.571	18.031	24.171	1.13	1
40	17.785	33.605	17.778	24.259	1.51	1
50	16.595	33.607	16.587	24.543	1.86	1
60	15.970	33.563	15.961	24.652	2.19	1
70	15.544	33.551	15.533	24.739	2.52	1
80	15.224	33.531	15.212	24.794	2.84	1
90	15.063	33.538	15.049	24.835	3.16	1
100	14.426	33.580	14.411	25.004	3.47	1
125	12.252	33.652	12.236	25.498	4.16	1
150	11.016	33.654	10.998	25.728	4.77	1
175	9.749	33.753	9.729	26.024	5.30	1
200	9.088	33.881	9.066	26.232	5.78	1
225	8.505	33.971	8.481	26.394	6.22	1
250	8.149	34.012	8.124	26.480	6.63	1
300	7.493	34.037	7.464	26.596	7.40	1
400	6.213	34.107	6.178	26.825	8.79	1
500	5.544	34.191	5.502	26.975	10.00	1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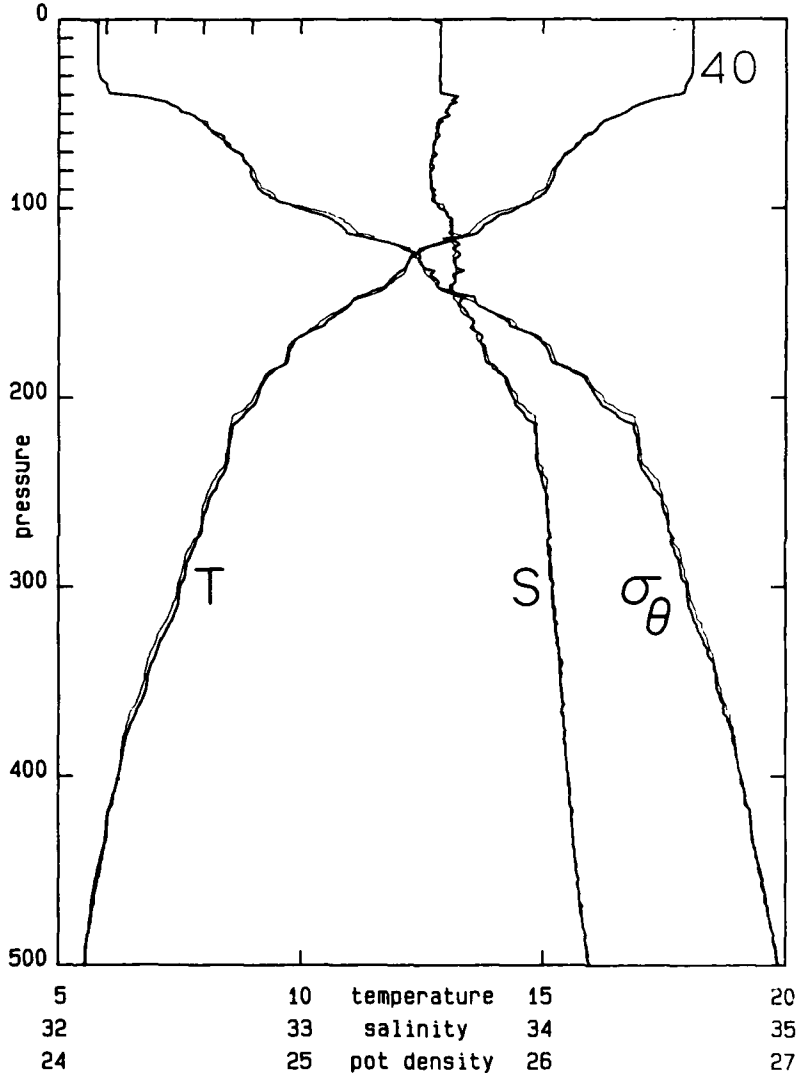
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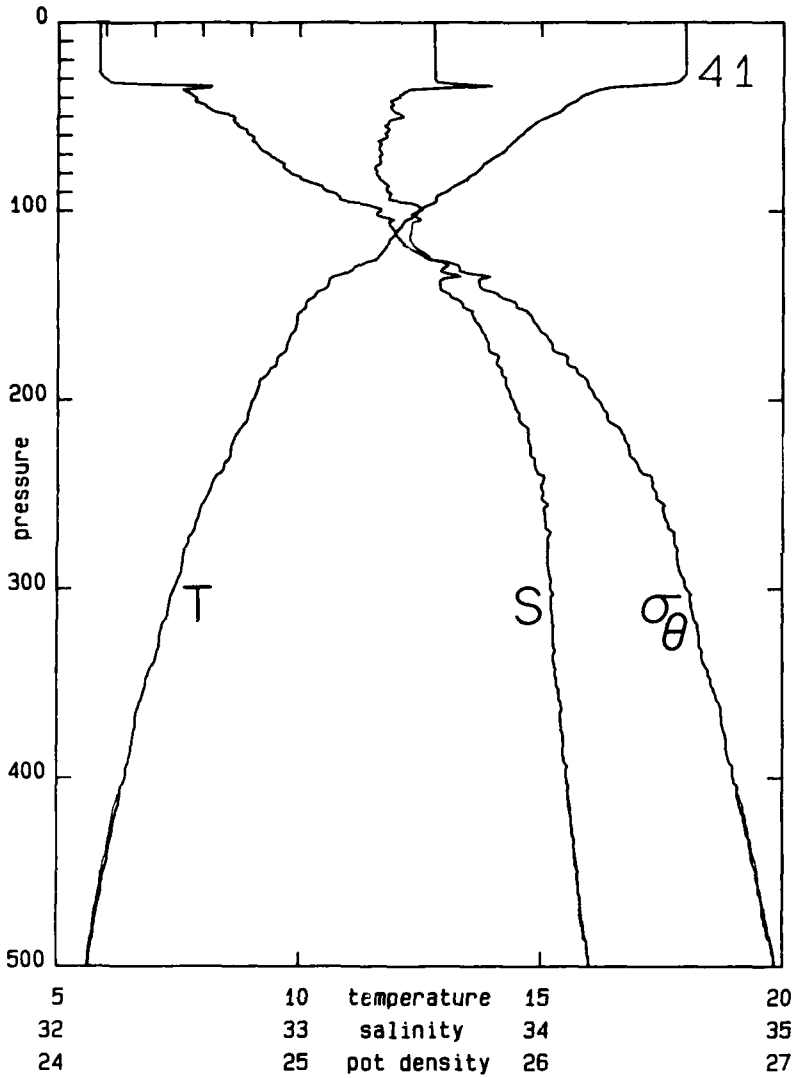
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
41	188:13:42	32 16.3 N	121 35.7 W	16	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.976	33.557	17.976	24.174	0.	2
10	17.983	33.557	17.981	24.173	0.38	1
20	17.988	33.556	17.985	24.171	0.75	1
30	17.896	33.561	17.891	24.198	1.13	1
40	15.789	33.411	15.783	24.575	1.48	1
50	15.136	33.427	15.128	24.732	1.81	1
60	14.561	33.364	14.552	24.808	2.13	1
70	14.112	33.337	14.102	24.882	2.45	1
80	13.613	33.313	13.602	24.966	2.75	1
90	12.994	33.372	12.982	25.136	3.04	1
100	12.453	33.488	12.440	25.332	3.32	1
125	11.603	33.538	11.587	25.531	3.97	1
150	10.119	33.674	10.102	25.900	4.54	1
175	9.624	33.816	9.604	26.094	5.05	1
200	9.010	33.886	8.988	26.248	5.52	1
225	8.588	33.954	8.564	26.367	5.96	1
250	8.089	34.001	8.064	26.480	6.37	1
300	7.390	34.048	7.361	26.619	7.14	1
400	6.371	34.107	6.335	26.804	8.52	1
500	5.623	34.203	5.581	26.975	9.74	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
42	188:15:56	32 33.4 N	121 38.7 W	14	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.807	33.219	16.807	24.194	0.	2
10	16.795	33.222	16.793	24.199	0.37	1
20	16.463	33.225	16.460	24.279	0.74	1
30	15.941	33.301	15.936	24.456	1.10	1
40	14.396	33.280	14.390	24.777	1.43	1
50	13.765	33.271	13.758	24.902	1.74	1
60	13.388	33.296	13.380	24.998	2.05	1
70	12.291	33.204	12.282	25.142	2.34	1
80	12.306	33.177	12.296	25.118	2.63	1
90	12.167	33.351	12.155	25.280	2.91	1
100	12.049	33.404	12.036	25.343	3.18	1
125	11.135	33.473	11.120	25.566	3.81	1
150	9.815	33.616	9.798	25.906	4.38	1
175	9.323	33.809	9.304	26.137	4.89	1
200	8.935	33.886	8.914	26.260	5.35	1
225	8.527	33.984	8.503	26.400	5.79	1
250	8.097	34.009	8.072	26.485	6.19	1
300	7.362	34.069	7.333	26.639	6.95	1
400	6.413	34.155	6.377	26.837	8.30	1
500	5.719	34.267	5.676	27.014	9.49	4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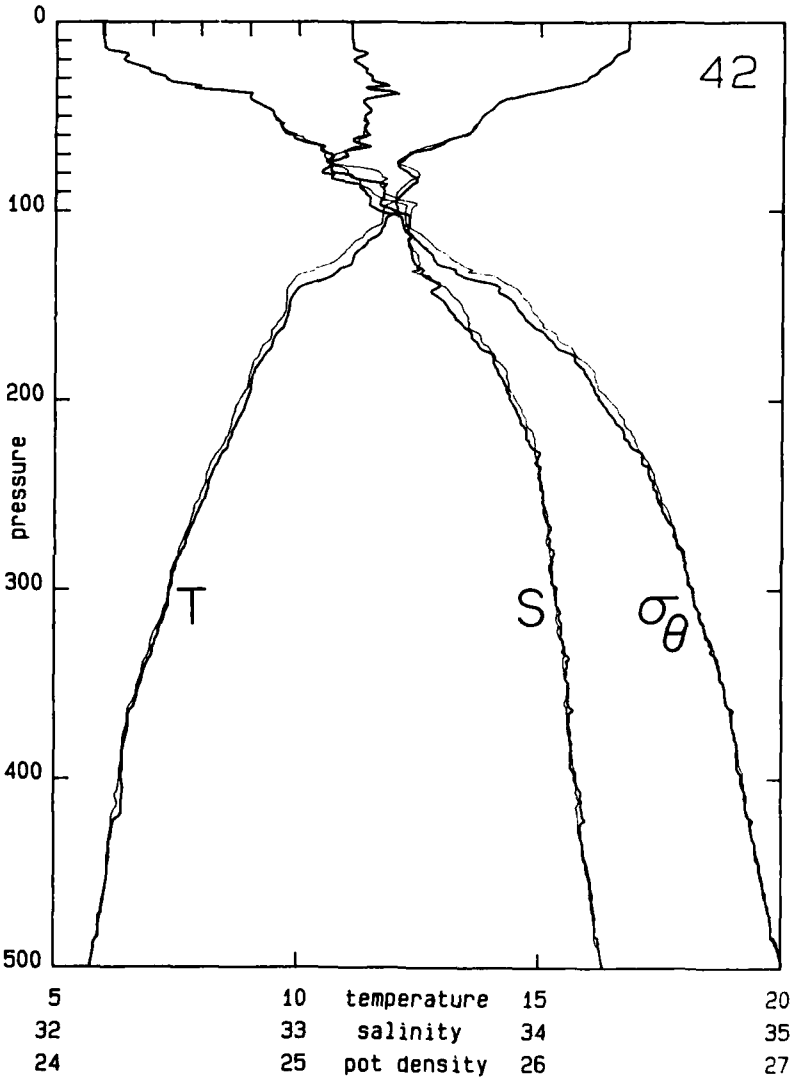
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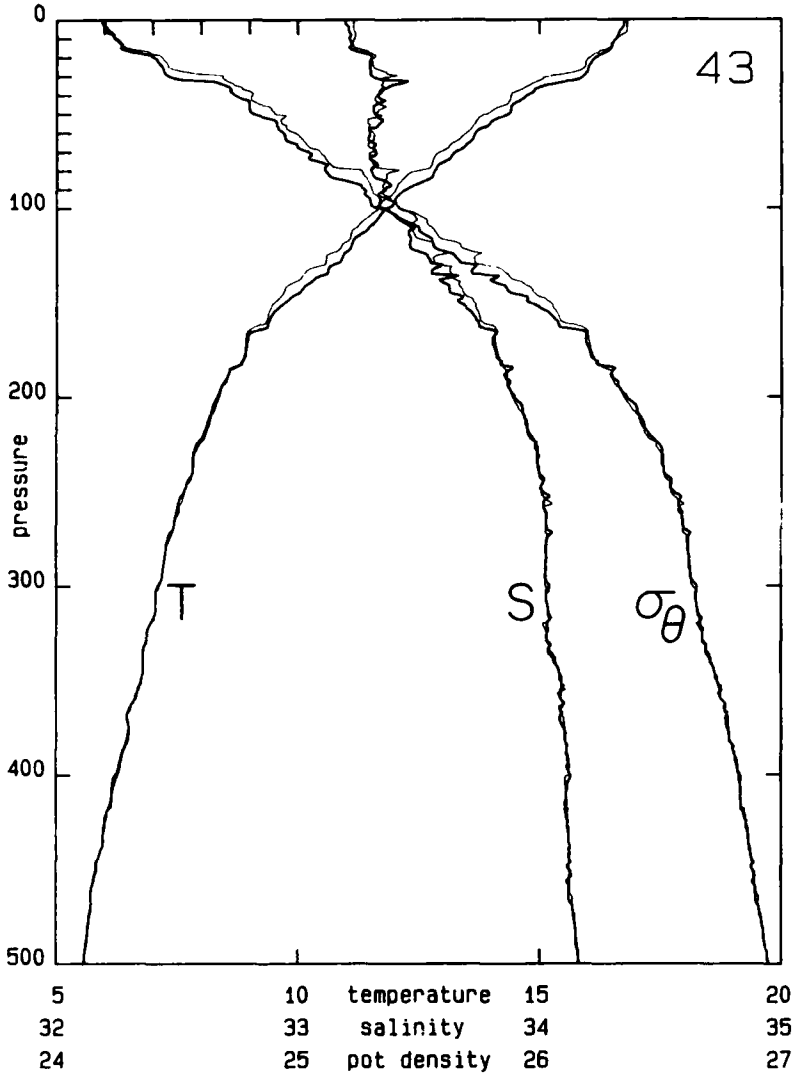
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
43	188:20:21	32 52.0 N	121 42.7 W	12	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.742	33.198	16.742	24.193	0.	2
10	16.576	33.214	16.574	24.244	0.37	1
20	16.173	33.305	16.170	24.406	0.74	1
30	15.906	33.303	15.901	24.466	1.09	1
40	14.762	33.336	14.756	24.743	1.42	1
50	14.351	33.325	14.344	24.822	1.73	1
60	13.660	33.297	13.652	24.944	2.04	1
70	13.243	33.324	13.233	25.049	2.34	1
80	12.815	33.301	12.804	25.116	2.63	1
90	12.197	33.359	12.185	25.280	2.91	1
100	11.813	33.366	11.800	25.358	3.18	1
125	10.917	33.536	10.902	25.653	3.81	1
150	9.690	33.678	9.673	25.975	4.36	1
175	8.903	33.815	8.884	26.209	4.85	1
200	8.292	33.899	8.271	26.369	5.29	1
225	7.861	33.988	7.839	26.503	5.70	1
250	7.612	34.023	7.588	26.567	6.08	1
300	7.064	34.032	7.036	26.652	6.82	1
400	6.232	34.124	6.197	26.836	8.18	1
500	5.555	34.165	5.513	26.953	9.41	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
44	189: 0:25	33 9.6 N	121 47.2 W	10	2

depth (m)	temperature (degre. C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.527	33.175	16.527	24.225	0.	2
10	16.185	33.194	16.183	24.318	0.37	1
20	15.999	33.196	15.996	24.362	0.73	1
30	16.005	33.207	16.000	24.370	1.09	1
40	16.079	33.255	16.073	24.390	1.44	1
50	14.348	33.252	14.341	24.766	1.79	1
60	13.160	33.134	13.152	24.918	2.10	1
70	12.490	33.122	12.481	25.040	2.40	1
80	12.221	33.074	12.211	25.054	2.69	1
90	11.870	33.085	11.859	25.129	2.98	1
100	11.748	33.266	11.735	25.292	3.26	1
125	10.636	33.546	10.621	25.711	3.88	1
150	9.778	33.677	9.761	25.959	4.43	1
175	9.035	33.825	9.016	26.196	4.93	1
200	8.565	33.930	8.544	26.352	5.37	1
225	8.225	33.970	8.202	26.435	5.79	1
250	7.813	34.001	7.788	26.521	6.18	1
300	6.922	34.010	6.894	26.653	6.93	1
400	6.062	34.091	6.027	26.831	8.28	1
500	5.505	34.183	5.463	26.973	9.49	4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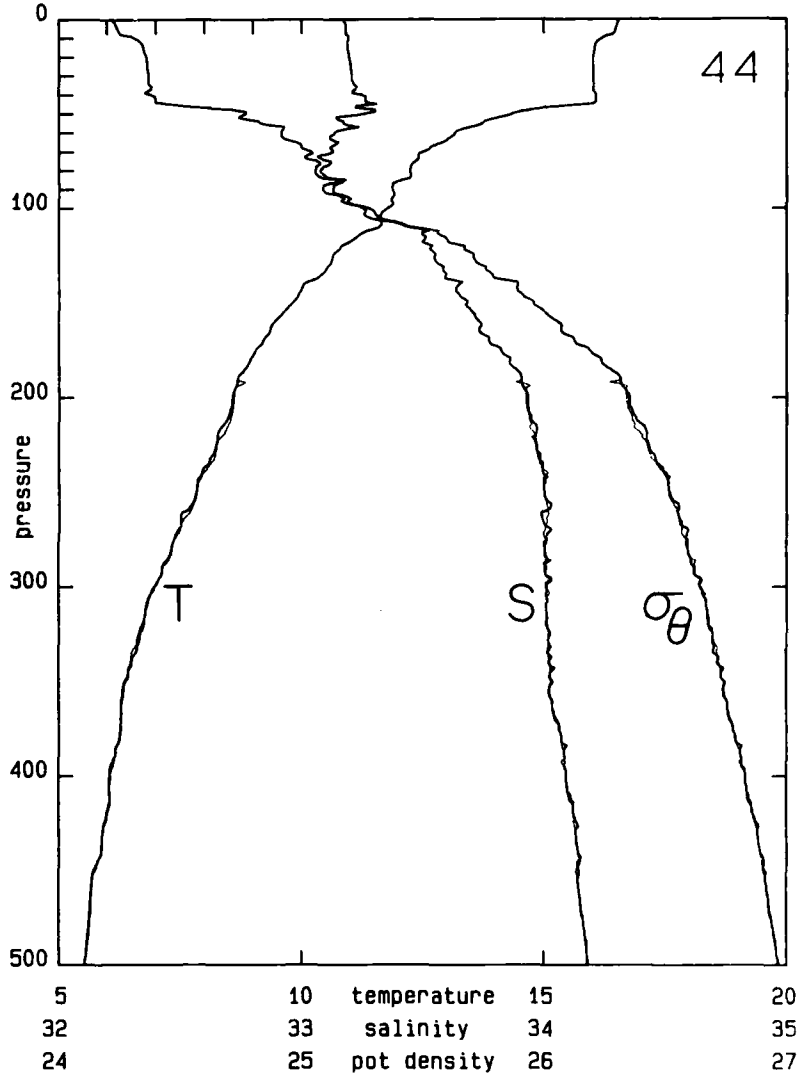
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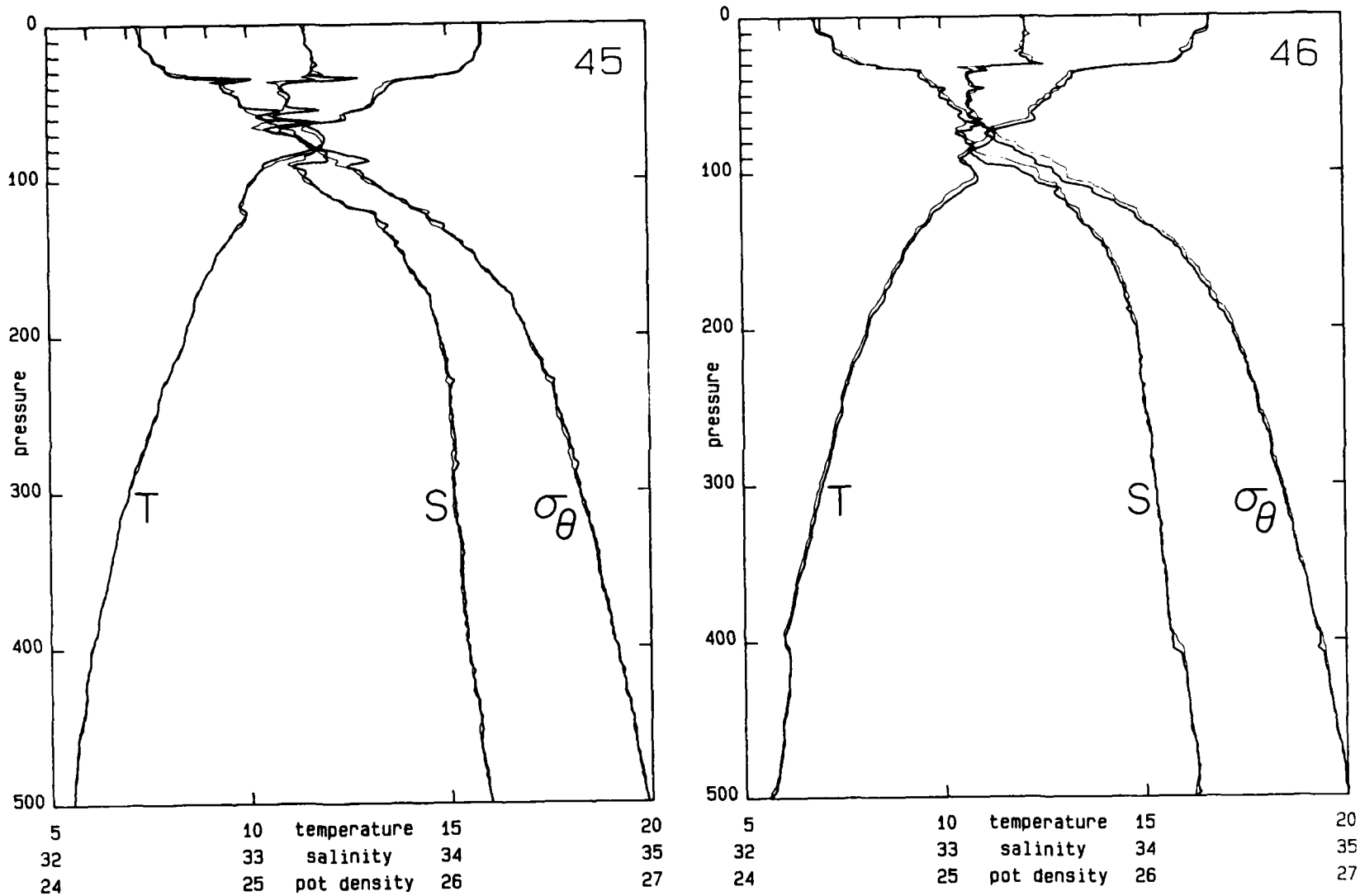
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
45	189: 2:28	33 24.1 N	121 49.9 W	12	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	15.888	33.275	15.888	24.447	0.	2
10	15.868	33.295	15.866	24.467	0.35	1
20	15.723	33.326	15.720	24.524	0.69	1
30	15.377	33.321	15.372	24.597	1.03	1
40	13.525	33.168	13.519	24.871	1.35	1
50	13.187	33.204	13.180	24.967	1.65	1
60	12.506	33.167	12.498	25.072	1.94	1
70	11.881	33.186	11.872	25.205	2.22	1
80	11.648	33.374	11.638	25.394	2.49	1
90	10.397	33.243	10.387	25.515	2.74	1
100	10.092	33.318	10.081	25.626	2.98	1
125	9.887	33.650	9.873	25.920	3.55	1
150	9.162	33.780	9.146	26.140	4.05	1
175	8.647	33.910	8.629	26.323	4.50	1
200	8.375	33.956	8.354	26.401	4.93	1
225	7.974	34.001	7.951	26.497	5.33	1
250	7.606	34.013	7.582	26.560	5.72	1
300	6.944	34.021	6.916	26.659	6.45	1
400	5.983	34.091	5.948	26.841	7.79	1
500	5.506	34.199	5.464	26.986	8.99	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
46	189: 4:49	33 29.4 N	121 30.9 W	15	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	16.691	33.406	16.691	24.364	0.	2
10	16.511	33.423	16.509	24.419	0.36	1
20	16.261	33.411	16.258	24.468	0.71	1
30	15.856	33.458	15.851	24.596	1.05	1
40	13.238	33.137	13.233	24.904	1.36	1
50	12.760	33.131	12.753	24.994	1.66	1
60	12.350	33.157	12.342	25.094	1.96	1
70	11.784	33.185	11.775	25.222	2.24	1
80	11.220	33.122	11.210	25.276	2.52	1
90	10.530	33.177	10.519	25.441	2.78	1
100	10.849	33.406	10.837	25.564	3.03	1
125	9.784	33.679	9.770	25.959	3.60	1
150	9.050	33.824	9.034	26.192	4.09	1
175	8.569	33.906	8.551	26.332	4.54	1
200	8.112	33.965	8.092	26.448	4.96	1
225	7.711	33.985	7.689	26.522	5.35	1
250	7.471	34.005	7.447	26.573	5.74	1
300	6.937	34.056	6.909	26.688	6.46	1
400	6.018	34.134	5.983	26.871	7.78	1
500	5.576	34.240	5.534	27.010	8.95	1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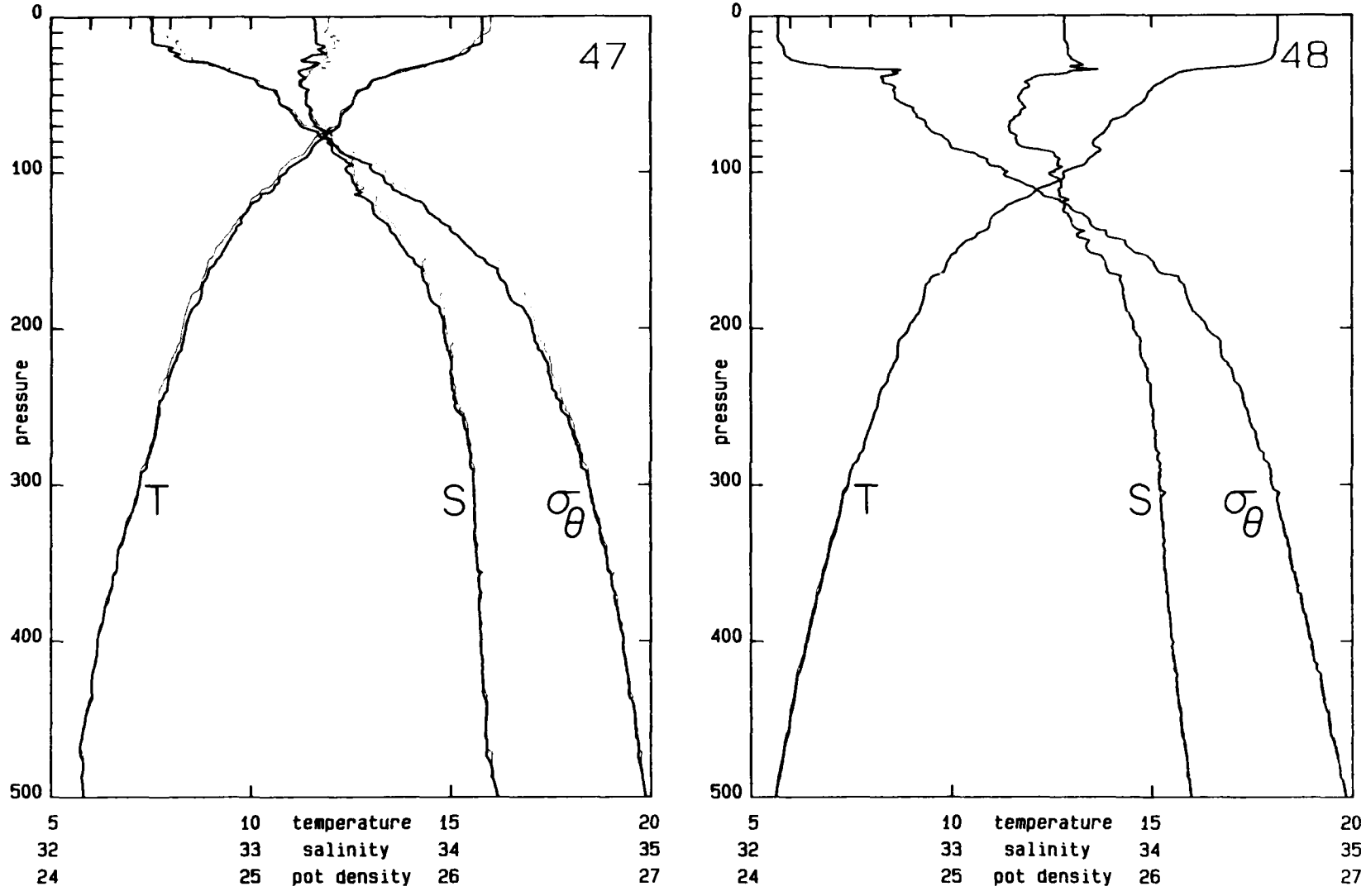
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
47	189: 8:43	32 56.9 N	121 22.0 W	14	4

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	15.784	33.313	15.784	24.500	0.	2
10	15.786	33.329	15.784	24.512	0.34	1
20	15.473	33.365	15.470	24.610	0.69	1
30	14.518	33.341	14.514	24.798	1.02	1
40	13.151	33.265	13.146	25.021	1.32	1
50	12.623	33.278	12.616	25.135	1.61	1
60	12.382	33.308	12.374	25.205	1.90	1
70	12.187	33.326	12.178	25.256	2.17	1
80	11.658	33.385	11.648	25.401	2.44	1
90	11.369	33.453	11.358	25.507	2.69	1
100	10.849	33.493	10.837	25.631	2.94	1
125	9.879	33.611	9.865	25.890	3.50	1
150	9.286	33.772	9.270	26.114	4.01	1
175	8.760	33.887	8.741	26.287	4.47	1
200	8.346	33.963	8.325	26.411	4.89	1
225	8.007	33.999	7.984	26.490	5.30	1
250	7.708	34.024	7.683	26.554	5.69	1
300	7.204	34.115	7.175	26.698	6.41	1
400	6.160	34.151	6.125	26.866	7.73	1
500	5.842	34.240	5.799	26.977	8.92	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
48	189:13: 6	32 21.1 N	121 16.4 W	19	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.144	33.567	18.144	24.141	0.	2
10	18.152	33.564	18.150	24.137	0.38	1
20	18.094	33.587	18.091	24.169	0.76	1
30	17.832	33.632	17.827	24.268	1.13	1
40	15.406	33.389	15.400	24.643	1.47	1
50	14.887	33.343	14.880	24.721	1.80	1
60	14.503	33.351	14.494	24.810	2.12	1
70	13.948	33.290	13.938	24.879	2.43	1
80	13.551	33.328	13.540	24.990	2.74	1
90	13.517	33.523	13.504	25.148	3.03	1
100	12.822	33.494	12.809	25.265	3.31	1
125	11.218	33.561	11.203	25.619	3.95	1
150	10.125	33.686	10.108	25.908	4.52	1
175	9.340	33.857	9.321	26.172	5.01	1
200	8.916	33.910	8.895	26.281	5.47	1
225	8.495	33.981	8.472	26.403	5.90	1
250	8.137	34.006	8.112	26.477	6.31	1
300	7.413	34.045	7.384	26.613	7.08	1
400	6.381	34.100	6.345	26.797	8.47	1
500	5.596	34.196	5.554	26.973	9.70	1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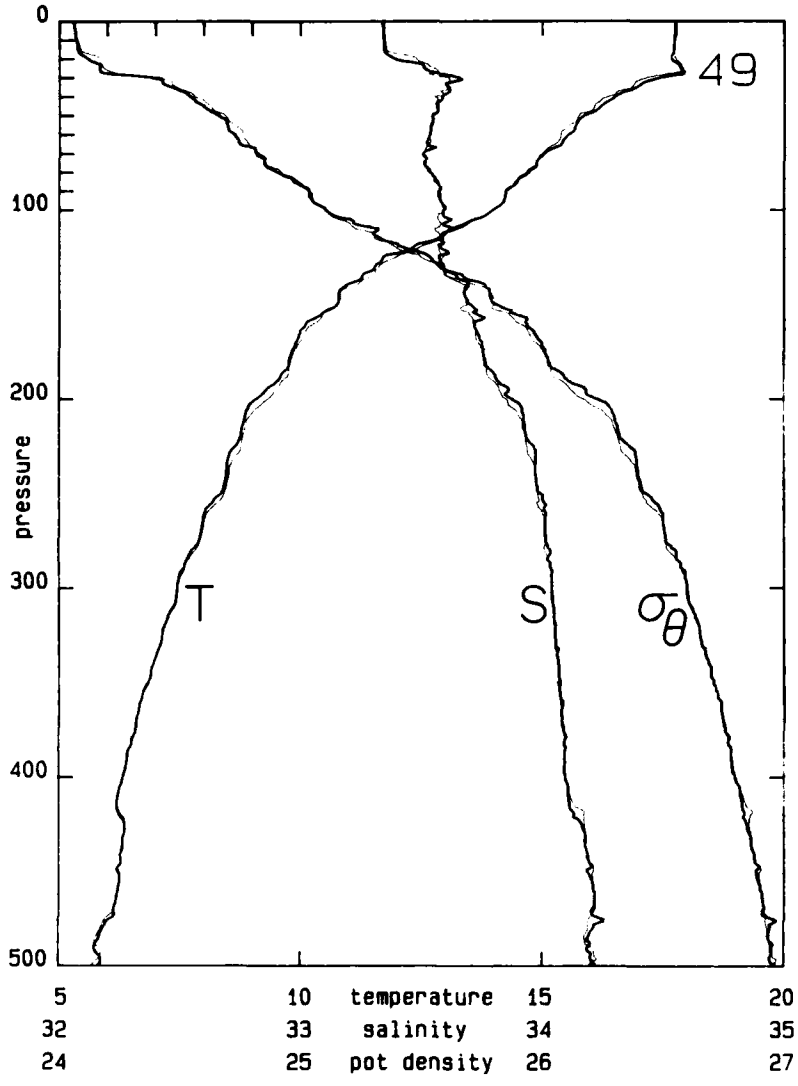
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
49	189:17:20	31 47.4 N	121 8.1 W	12	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.752	33.339	17.752	24.062	0.	2
10	17.723	33.344	17.721	24.073	0.39	1
20	17.669	33.391	17.666	24.122	0.77	1
30	17.416	33.656	17.411	24.386	1.15	1
40	16.499	33.583	16.493	24.546	1.49	1
50	15.847	33.540	15.839	24.662	1.83	1
60	15.520	33.532	15.511	24.729	2.16	1
70	15.005	33.504	14.994	24.821	2.48	1
80	14.696	33.539	14.684	24.915	2.79	1
90	14.232	33.571	14.219	25.038	3.09	1
100	13.941	33.591	13.927	25.114	3.38	1
125	11.694	33.574	11.678	25.542	4.05	1
150	10.717	33.702	10.699	25.819	4.63	1
175	9.809	33.756	9.789	26.016	5.16	1
200	9.015	33.885	8.993	26.246	5.64	1
225	8.600	33.967	8.576	26.376	6.08	1
250	8.303	34.004	8.277	26.450	6.50	1
300	7.441	34.040	7.412	26.605	7.27	1
400	6.304	34.101	6.268	26.808	8.66	1
500	5.698	34.200	5.655	26.963	9.88	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
50	189:22:25	31 12.0 N	121 0. W	13	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.109	33.703	19.109	24.004	0.	3
10	19.018	33.716	19.016	24.037	0.39	3
20	18.824	33.705	18.820	24.078	0.78	3
30	18.200	33.694	18.195	24.225	1.16	1
40	17.316	33.616	17.309	24.380	1.52	1
50	16.547	33.576	16.539	24.530	1.87	1
60	15.671	33.438	15.662	24.623	2.20	1
70	15.294	33.431	15.283	24.701	2.53	1
80	14.787	33.419	14.775	24.803	2.86	1
90	14.434	33.489	14.421	24.932	3.17	1
100	14.087	33.503	14.073	25.016	3.47	1
125	12.153	33.541	12.137	25.431	4.17	1
150	10.582	33.628	10.564	25.785	4.77	1
175	9.858	33.706	9.838	25.969	5.31	1
200	9.086	33.849	9.064	26.207	5.80	1
225	8.594	33.962	8.570	26.373	6.25	1
250	8.169	34.005	8.143	26.471	6.66	1
300	7.491	34.022	7.462	26.584	7.44	1
400	6.451	34.094	6.415	26.784	8.85	1
500	5.681	34.205	5.638	26.969	10.08	1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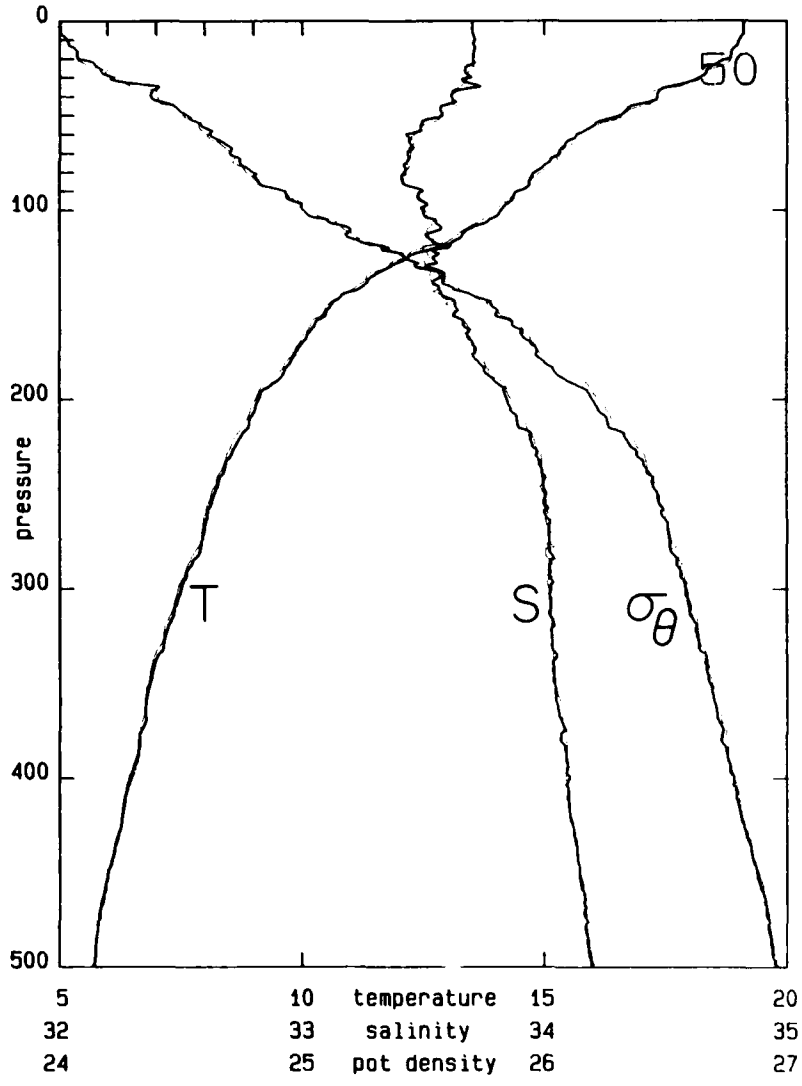
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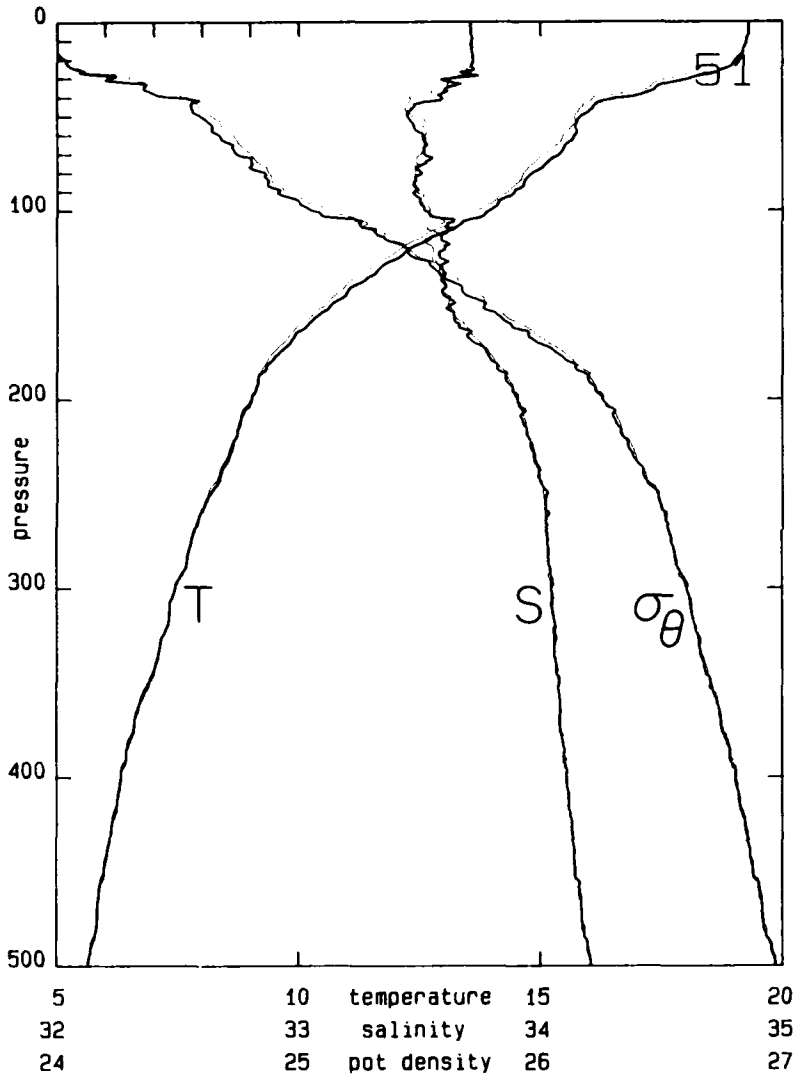
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
51	190: 1:43	31 19.4 N	120 52.7 W	12	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.312	33.710	19.312	23.957	0.	2
10	19.249	33.713	19.247	23.976	0.40	1
20	19.041	33.721	19.037	24.036	0.79	1
30	18.111	33.645	18.106	24.210	1.17	1
40	16.817	33.592	16.810	24.479	1.53	1
50	15.832	33.453	15.824	24.598	1.87	1
60	15.699	33.514	15.690	24.675	2.20	1
70	15.376	33.519	15.365	24.751	2.53	1
80	14.812	33.508	14.800	24.866	2.85	1
90	14.446	33.474	14.433	24.918	3.16	1
100	13.902	33.541	13.888	25.084	3.46	1
125	12.045	33.586	12.029	25.486	4.13	1
150	10.649	33.622	10.631	25.768	4.72	1
175	9.574	33.779	9.554	26.073	5.26	1
200	9.010	33.905	8.988	26.263	5.72	1
225	8.613	33.961	8.589	26.369	6.16	1
250	8.125	34.020	8.100	26.490	6.57	1
300	7.424	34.046	7.395	26.613	7.34	1
400	6.315	34.110	6.279	26.814	8.72	1
500	5.642	34.208	5.600	26.977	9.95	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
52	190: 3:28	31 28.8 N	120 45.5 W	9	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.967	33.629	18.967	23.983	0.	2
10	18.872	33.679	18.870	24.046	0.39	1
20	18.719	33.683	18.715	24.088	0.78	1
30	17.816	33.640	17.811	24.278	1.16	1
40	17.378	33.649	17.371	24.391	1.52	1
50	16.716	33.608	16.708	24.515	1.87	1
60	15.920	33.448	15.911	24.575	2.21	1
70	15.639	33.554	15.628	24.720	2.54	1
80	14.902	33.512	14.890	24.849	2.86	1
90	14.516	33.505	14.503	24.927	3.17	1
100	13.843	33.585	13.829	25.130	3.47	1
125	11.915	33.602	11.899	25.523	4.14	1
150	10.571	33.627	10.553	25.786	4.72	1
175	9.723	33.795	9.703	26.061	5.24	1
200	9.078	33.885	9.056	26.236	5.72	1
225	8.595	33.964	8.571	26.374	6.16	1
250	8.247	34.007	8.221	26.461	6.58	1
300	7.384	34.042	7.355	26.615	7.35	1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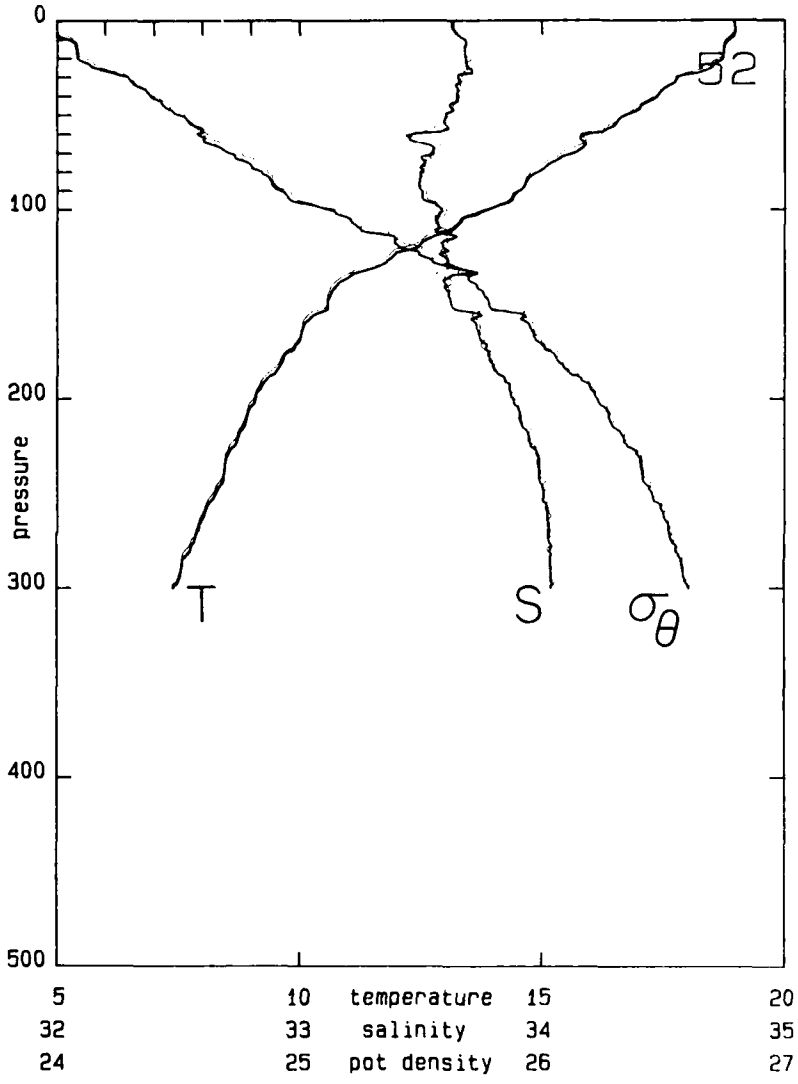
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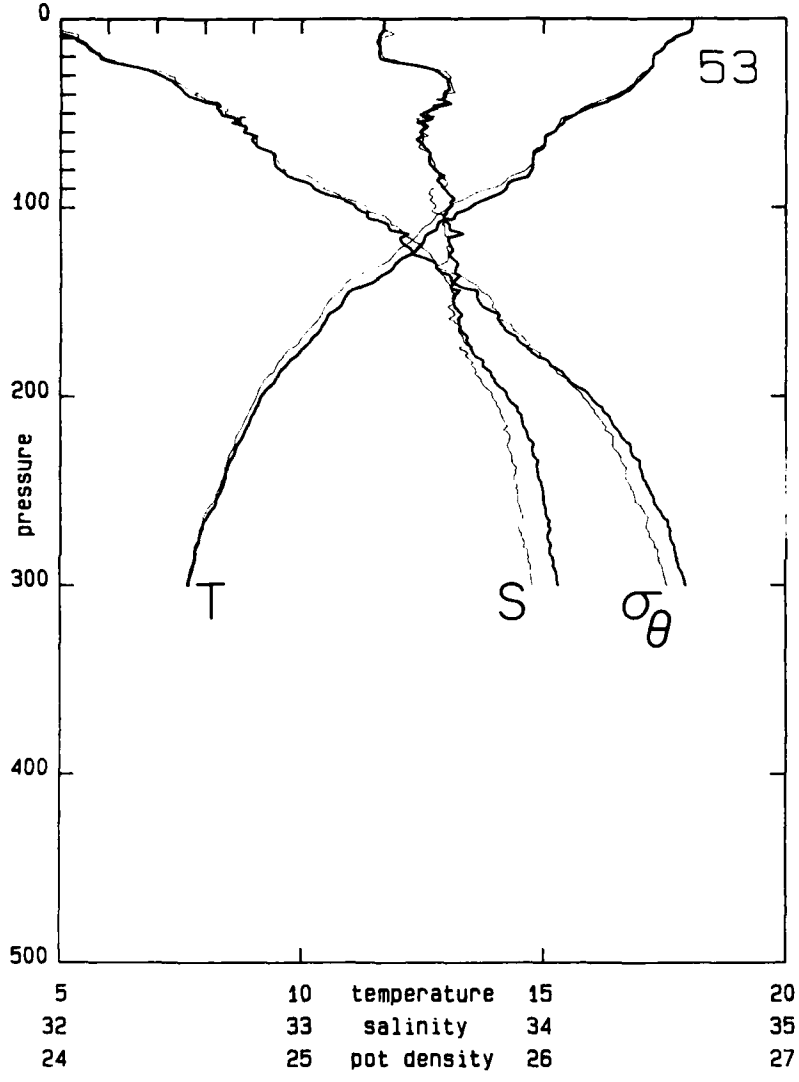
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
53	190: 4:44	31 35.5 N	120 39.6 W	11	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.058	33.337	18.058	23.986	0.	2
10	17.707	33.319	17.705	24.057	0.39	1
20	17.260	33.319	17.257	24.165	0.77	1
30	17.046	33.578	17.041	24.414	1.14	1
40	16.589	33.585	16.583	24.527	1.49	1
50	15.674	33.497	15.666	24.668	1.82	1
60	15.192	33.485	15.183	24.765	2.15	1
70	14.848	33.525	14.838	24.871	2.46	1
80	14.741	33.554	14.729	24.917	2.77	1
90	14.207	33.589	14.194	25.057	3.07	1
100	13.464	33.605	13.450	25.223	3.36	1
125	12.183	33.608	12.167	25.477	4.02	1
150	10.832	33.622	10.814	25.736	4.62	1
175	9.971	33.703	9.951	25.948	5.16	1
200	9.140	33.854	9.118	26.202	5.66	1
225	8.640	33.956	8.616	26.361	6.10	1
250	8.294	33.999	8.268	26.448	6.52	1
300	7.622	34.062	7.592	26.597	7.30	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
54	190: 6: 2	31 43.2 N	120 33.2 W	9	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.309	33.440	17.309	24.245	0.	2
10	16.416	33.255	16.414	24.312	0.37	1
20	16.288	33.383	16.285	24.440	0.72	1
30	15.218	33.382	15.213	24.679	1.07	1
40	14.379	33.272	14.373	24.775	1.39	1
50	13.901	33.257	13.894	24.863	1.70	1
60	13.620	33.337	13.612	24.983	2.01	1
70	13.021	33.316	13.011	25.087	2.31	1
80	12.673	33.339	12.662	25.173	2.59	1
90	12.313	33.363	12.301	25.261	2.87	1
100	11.746	33.388	11.733	25.388	3.14	1
125	10.514	33.597	10.499	25.771	3.76	1
150	9.651	33.745	9.634	26.033	4.29	1
175	9.039	33.863	9.020	26.225	4.77	1
200	8.564	33.955	8.543	26.372	5.21	1
225	8.174	34.022	8.151	26.484	5.62	1
250	7.869	34.037	7.844	26.541	6.01	1
300	7.216	34.074	7.187	26.664	6.74	1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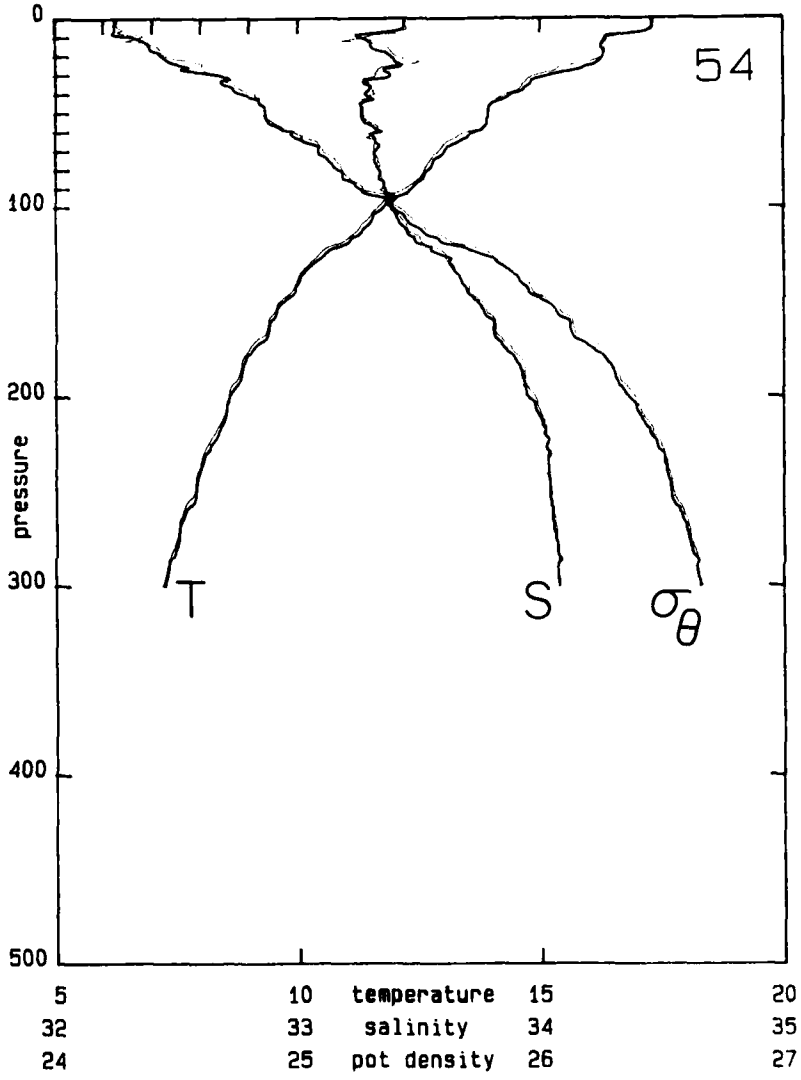
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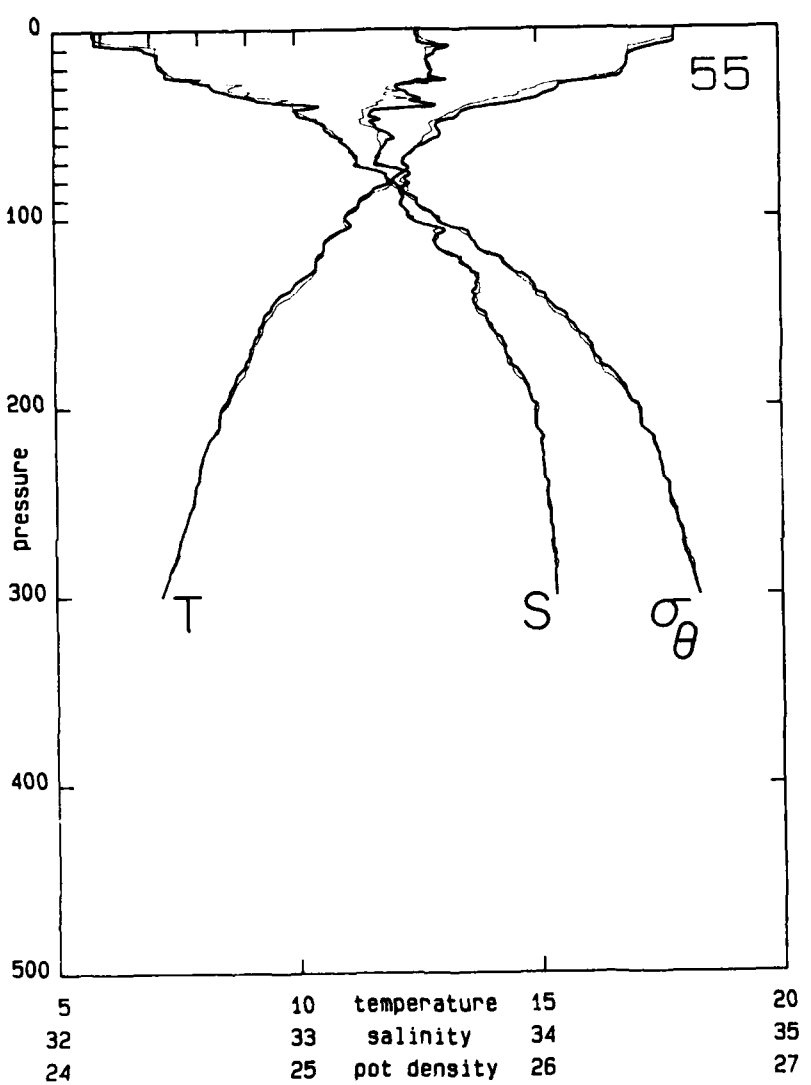
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
55	190: 7:31	31 50.1 N	120 27.5 W	11	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.842	33.508	17.842	24.169	0.	2
10	17.364	33.627	17.362	24.376	0.37	1
20	16.853	33.554	16.850	24.441	0.72	1
30	15.452	33.414	15.447	24.652	1.07	1
40	14.202	33.585	14.196	25.053	1.38	1
50	12.889	33.324	12.882	25.119	1.68	1
60	12.687	33.366	12.679	25.191	1.96	1
70	12.203	33.334	12.194	25.259	2.24	1
80	11.998	33.455	11.988	25.392	2.50	1
90	11.334	33.442	11.323	25.505	2.76	1
100	11.016	33.487	11.004	25.597	3.01	1
125	10.402	33.701	10.387	25.872	3.58	1
150	9.352	33.783	9.335	26.112	4.09	1
175	8.954	33.884	8.935	26.255	4.55	1
200	8.414	33.983	8.393	26.417	4.98	1
225	8.036	34.017	8.013	26.500	5.39	1
250	7.825	34.031	7.800	26.543	5.78	1
300	7.160	34.069	7.132	26.667	6.52	4

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
56	190: 8:46	31 57.2 N	120 22.0 W	12	4

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.907	33.467	17.907	24.122	0.	2
10	17.116	33.499	17.114	24.336	0.37	1
20	16.897	33.478	16.894	24.372	0.73	1
30	15.647	33.532	15.642	24.700	1.07	1
40	14.342	33.542	14.336	24.991	1.39	1
50	12.987	33.496	12.980	25.232	1.67	1
60	12.662	33.549	12.654	25.338	1.94	1
70	12.003	33.674	11.994	25.561	2.20	1
80	11.332	33.619	11.322	25.643	2.43	1
90	10.866	33.637	10.855	25.740	2.67	1
100	10.458	33.659	10.446	25.829	2.89	1
125	9.573	33.761	9.559	26.058	3.41	1
150	8.985	33.878	8.969	26.245	3.88	1
175	8.497	33.968	8.479	26.392	4.31	1
200	8.107	34.019	8.087	26.491	4.72	1
225	7.815	34.028	7.793	26.541	5.11	1
250	7.536	34.041	7.512	26.592	5.49	1
300	6.991	34.081	6.963	26.700	6.21	1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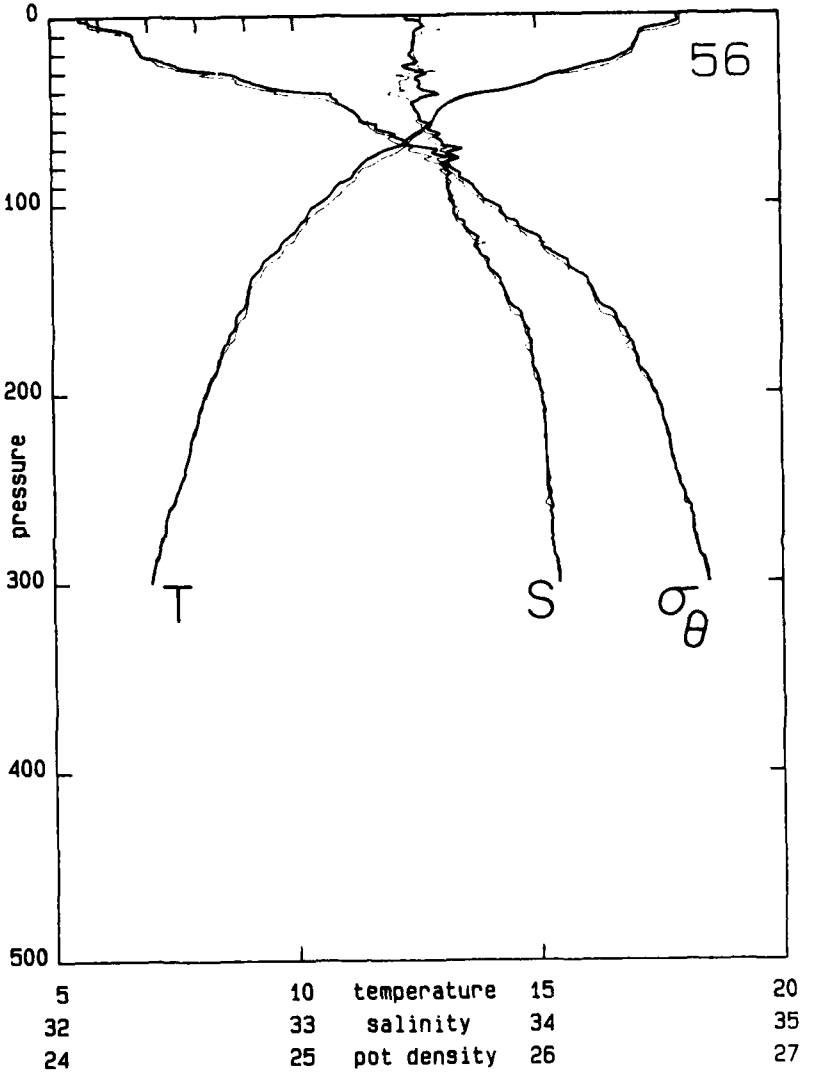
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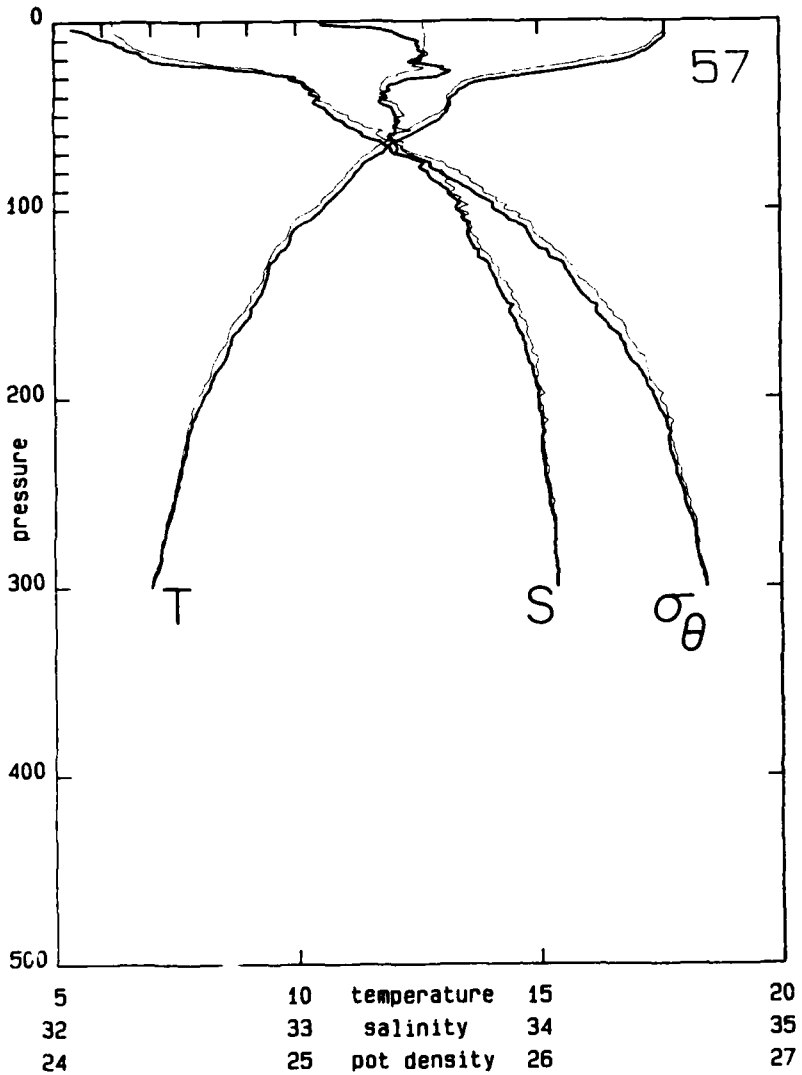
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
57	190:10:12	32 4.5 N	120 16.0 W	12	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.623	33.106	17.623	23.914	0.	2
10	17.575	33.491	17.573	24.221	0.38	1
20	16.916	33.511	16.913	24.393	0.75	1
30	14.403	33.563	14.399	24.994	1.07	1
40	13.241	33.375	13.236	25.088	1.37	1
50	13.056	33.405	13.049	25.148	1.65	1
60	12.379	33.400	12.371	25.277	1.93	1
70	11.759	33.421	11.750	25.410	2.20	1
80	11.225	33.542	11.215	25.602	2.44	1
90	10.895	33.630	10.884	25.730	2.68	1
100	10.522	33.664	10.510	25.822	2.90	1
125	9.579	33.754	9.565	26.052	3.42	1
150	9.096	33.880	9.080	26.229	3.90	1
175	8.565	33.951	8.547	26.368	4.33	1
200	8.033	34.001	8.013	26.488	4.74	1
225	7.705	34.013	7.683	26.545	5.13	1
250	7.463	34.040	7.439	26.602	5.50	1
300	6.977	34.077	6.949	26.699	6.22	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
58	190:11:41	32 12.8 N	120 9.2 W	13	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.347	33.481	17.347	24.268	0.	2
10	16.844	33.518	16.842	24.415	0.36	1
20	16.293	33.528	16.290	24.550	0.71	1
30	15.240	33.476	15.235	24.747	1.04	1
40	13.649	33.423	13.643	25.042	1.34	1
50	12.781	33.484	12.774	25.264	1.62	1
60	11.902	33.490	11.894	25.437	1.89	1
70	11.465	33.541	11.456	25.557	2.14	1
80	10.937	33.585	10.927	25.687	2.38	1
90	10.428	33.649	10.417	25.826	2.60	1
100	10.062	33.689	10.051	25.920	2.82	1
125	9.415	33.821	9.401	26.131	3.32	1
150	8.866	33.900	8.850	26.281	3.78	1
175	8.662	34.048	8.644	26.429	4.20	1
200	8.450	34.068	8.429	26.478	4.61	1
225	8.097	34.098	8.074	26.555	5.00	1
250	7.681	34.099	7.656	26.617	5.37	1
300	7.102	34.131	7.074	26.724	6.08	4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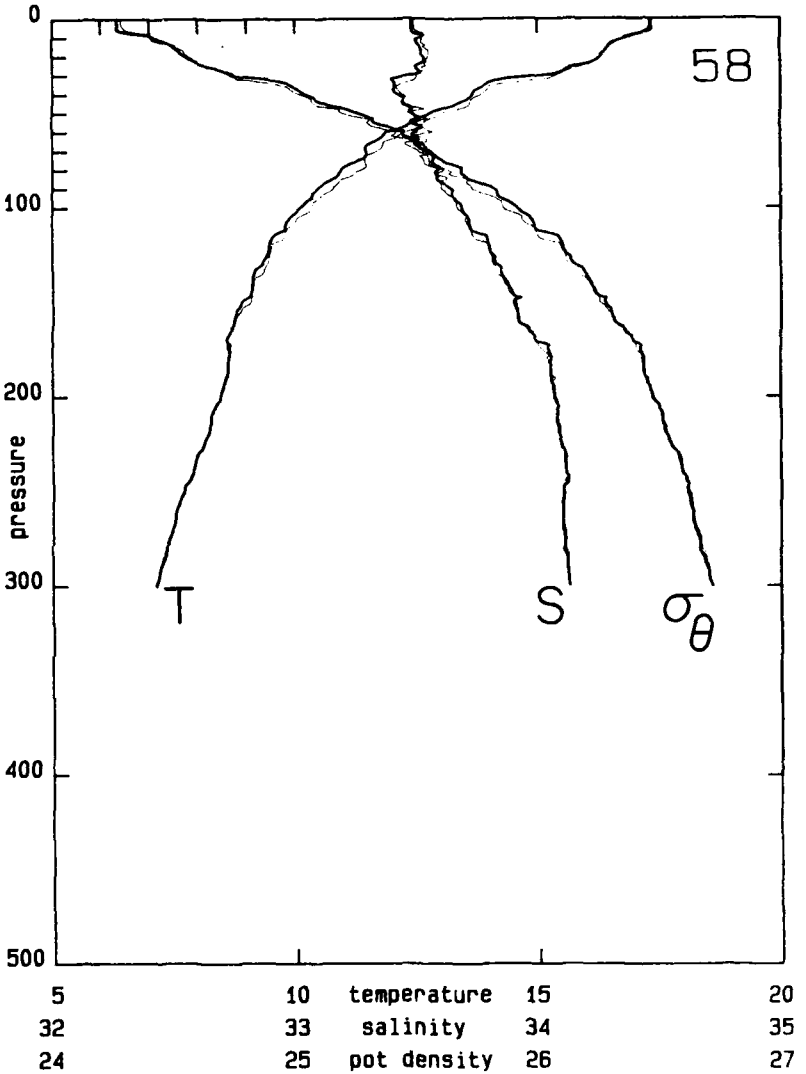
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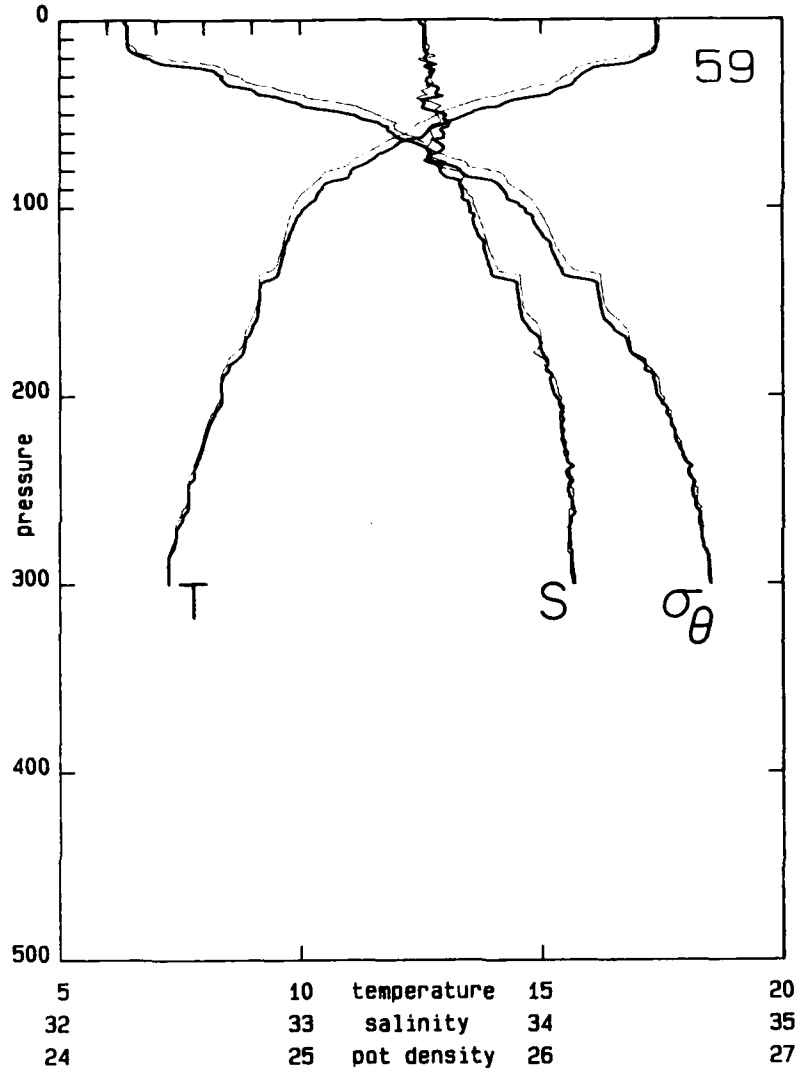
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
59	190:13:17	32 20.6 N	120 2.9 W	2	9

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.377	33.496	17.377	24.272	0.	2
10	17.393	33.514	17.391	24.282	0.37	1
20	17.101	33.513	17.098	24.351	0.73	1
30	15.799	33.547	15.794	24.677	1.07	1
40	15.134	33.566	15.128	24.839	1.39	1
50	13.515	33.590	13.508	25.199	1.69	1
60	12.605	33.592	12.597	25.382	1.96	1
70	11.726	33.578	11.717	25.538	2.21	1
80	11.039	33.576	11.029	25.662	2.45	1
90	10.427	33.667	10.416	25.840	2.68	1
100	10.073	33.712	10.062	25.936	2.89	1
125	9.628	33.769	9.614	26.055	3.40	1
150	9.127	33.907	9.111	26.245	3.87	1
175	8.806	33.998	8.787	26.367	4.31	1
200	8.355	34.061	8.334	26.487	4.72	1
225	7.958	34.092	7.935	26.570	5.10	1
250	7.664	34.109	7.639	26.627	5.47	1
300	7.255	34.139	7.226	26.709	6.18	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
60	190:15: 0	32 31.4 N	119 53.7 W	8	2

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.034	33.542	17.034	24.388	0.	2
10	17.010	33.548	17.008	24.399	0.35	1
20	14.792	33.551	14.789	24.901	0.69	1
30	13.785	33.592	13.781	25.145	0.98	1
40	13.208	33.621	13.203	25.285	1.26	1
50	12.697	33.625	12.690	25.389	1.52	1
60	12.618	33.619	12.610	25.400	1.78	1
70	12.366	33.626	12.357	25.455	2.04	1
80	11.696	33.778	11.686	25.699	2.29	1
90	10.689	33.680	10.678	25.805	2.52	1
100	10.011	33.741	10.000	25.969	2.73	1
125	9.304	33.866	9.290	26.184	3.22	1
150	8.884	33.979	8.868	26.340	3.67	1
175	8.620	34.021	8.602	26.414	4.09	1
200	8.227	34.045	8.207	26.493	4.49	1
225	8.043	34.054	8.020	26.528	4.88	1
250	7.685	34.093	7.660	26.611	5.26	1
300	7.168	34.139	7.139	26.722	5.97	1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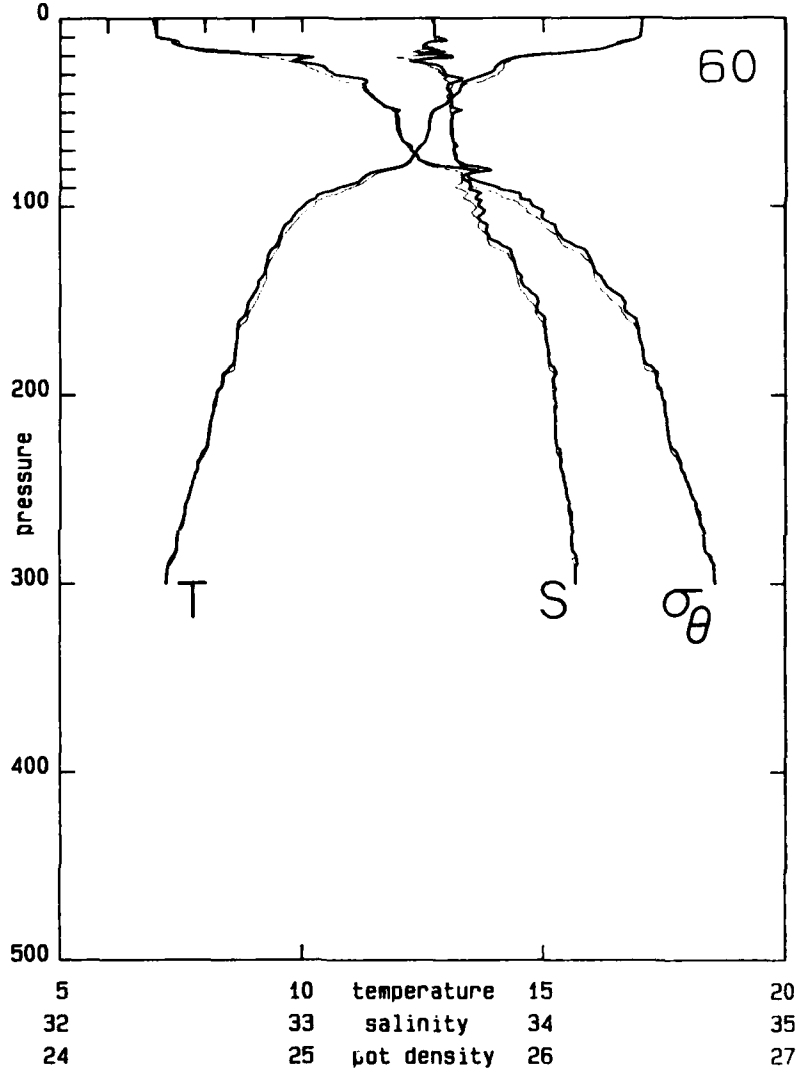
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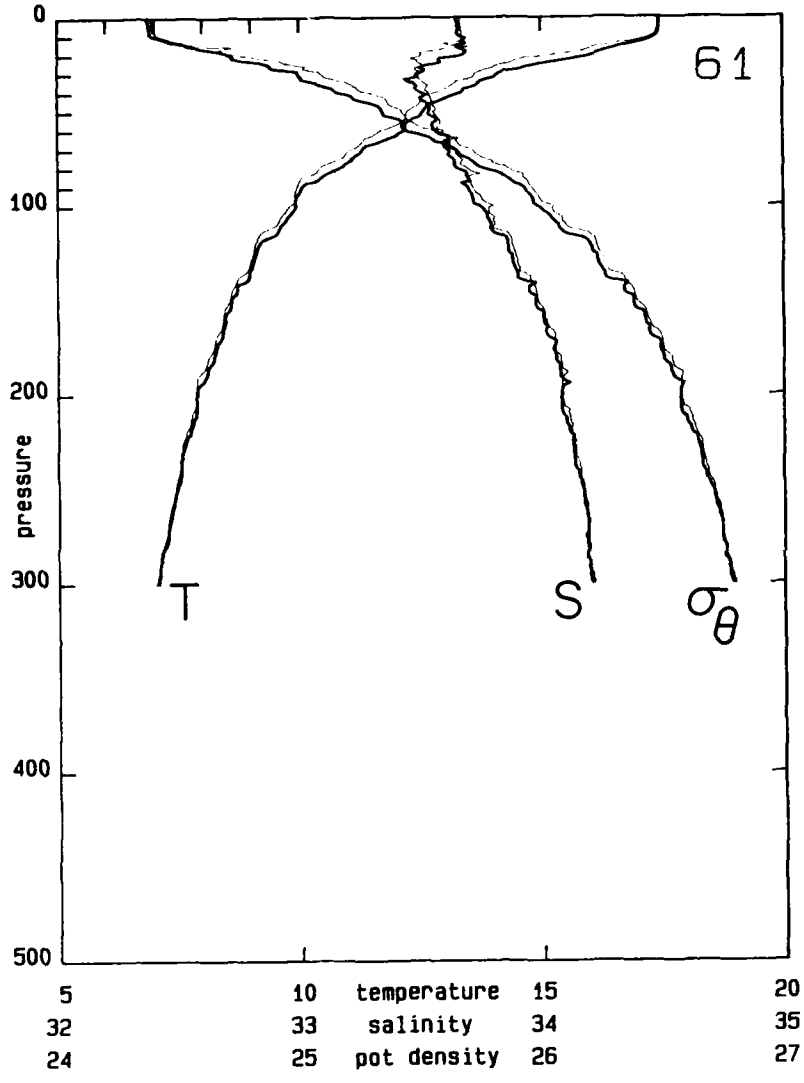
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
61	190:18:30	32 16.4 N	119 49.9 W	11	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.450	33.651	17.450	24.373	0.	2
10	17.381	33.661	17.379	24.398	0.36	1
20	16.065	33.674	16.062	24.715	0.69	1
30	14.094	33.480	14.090	24.995	1.01	1
40	13.337	33.506	13.331	25.170	1.30	1
50	12.563	33.535	12.556	25.346	1.57	1
60	12.179	33.568	12.171	25.445	1.83	1
70	11.300	33.618	11.291	25.647	2.07	1
80	10.796	33.655	10.786	25.767	2.30	1
90	10.046	33.696	10.036	25.928	2.52	1
100	9.923	33.747	9.912	25.989	2.72	1
125	9.074	33.879	9.061	26.231	3.20	1
150	8.582	33.976	8.566	26.384	3.64	1
175	8.248	34.046	8.230	26.490	4.05	1
200	7.861	34.080	7.841	26.575	4.43	1
225	7.603	34.127	7.581	26.650	4.80	1
250	7.414	34.172	7.390	26.712	5.15	1
300	7.001	34.210	6.973	26.800	5.82	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
62	190:21: 3	31 59.8 N	119 46.8 W	4	14

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.396	33.587	19.396	23.842	0.	2
10	19.259	33.614	19.257	23.898	0.40	1
20	17.061	33.939	17.058	24.687	0.79	1
30	13.241	33.550	13.237	25.223	1.09	1
40	12.931	33.539	12.926	25.276	1.37	1
50	12.199	33.554	12.192	25.430	1.63	1
60	11.641	33.597	11.633	25.568	1.88	1
70	10.863	33.614	10.855	25.723	2.11	1
80	10.702	33.646	10.692	25.776	2.34	1
90	10.224	33.698	10.214	25.900	2.56	1
100	10.130	33.719	10.118	25.932	2.77	1
125	9.363	33.872	9.349	26.179	3.26	1
150	8.807	33.970	8.791	26.345	3.70	1
175	8.366	34.060	8.348	26.484	4.12	1
200	8.102	34.087	8.082	26.545	4.51	1
225	7.895	34.113	7.872	26.596	4.88	1
250	7.633	34.156	7.608	26.668	5.25	1
300	7.185	34.203	7.156	26.770	5.93	1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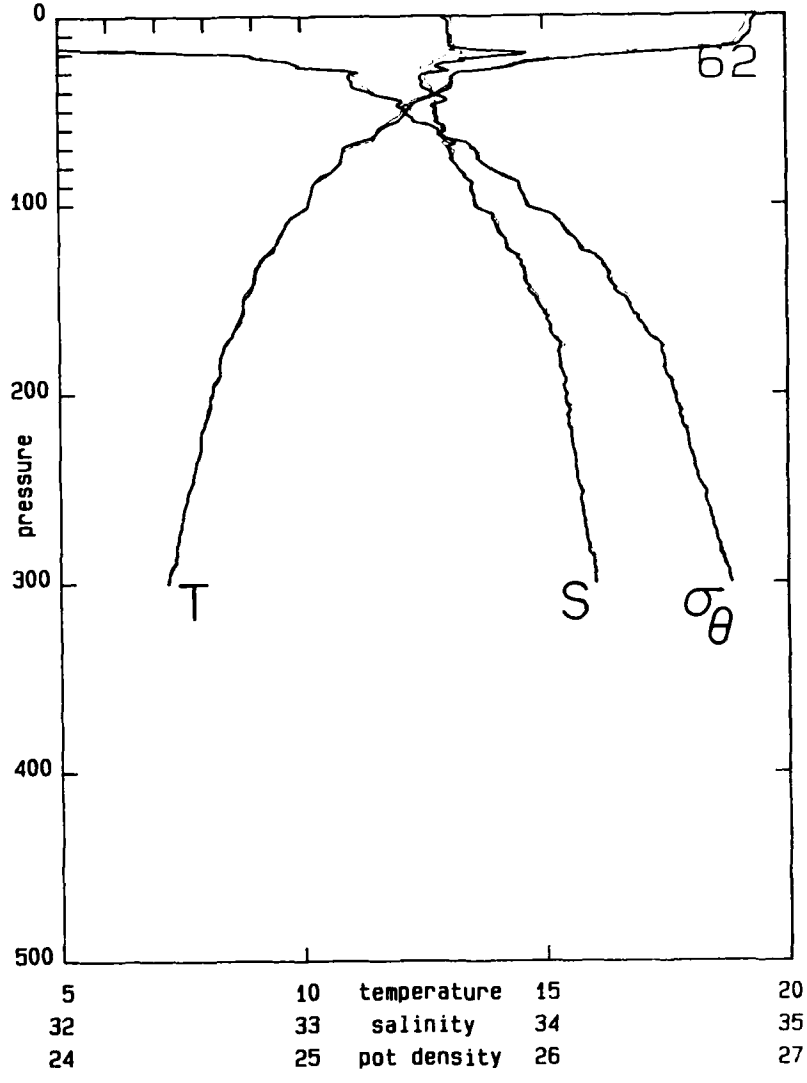
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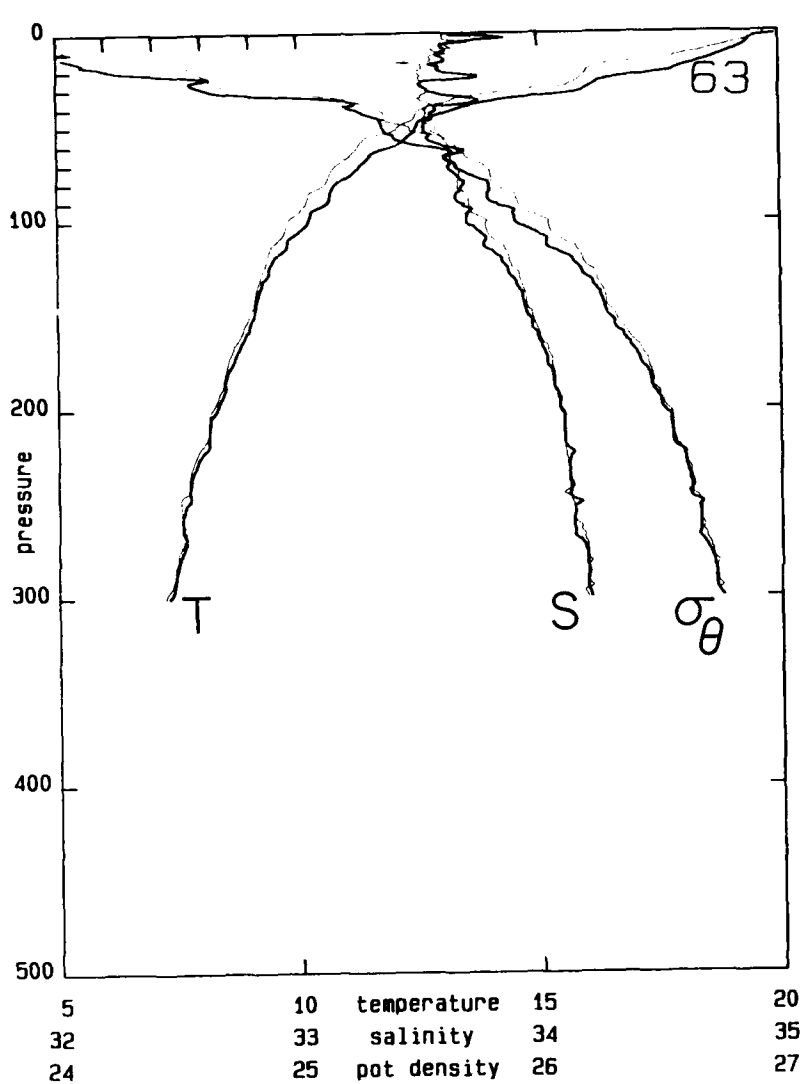
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
63	190:23: 5	31 43.3 N	119 42.9 W	2	11

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	20.262	33.635	20.262	23.653	0.	2
10	19.013	33.605	19.011	23.953	0.40	1
20	17.821	33.580	17.818	24.230	0.79	1
30	15.989	33.540	15.984	24.629	1.13	1
40	13.324	33.570	13.318	25.222	1.42	1
50	12.461	33.524	12.454	25.357	1.69	1
60	12.001	33.615	11.993	25.515	1.95	1
70	11.282	33.624	11.273	25.655	2.19	1
80	10.777	33.693	10.767	25.799	2.42	1
90	10.616	33.678	10.605	25.816	2.64	1
100	10.203	33.698	10.191	25.903	2.85	1
125	9.382	33.870	9.368	26.175	3.35	1
150	9.068	33.955	9.052	26.292	3.80	1
175	8.613	34.031	8.595	26.423	4.23	1
200	8.262	34.089	8.241	26.522	4.62	1
225	7.894	34.127	7.871	26.608	5.00	1
250	7.613	34.153	7.588	26.669	5.36	1
300	7.224	34.197	7.195	26.759	6.06	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
64	191: 0:35	31 35.6 N	119 48.8 W	1	26

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.053	33.467	19.053	23.838	0.	2
10	17.942	33.483	17.940	24.126	0.39	1
20	17.310	33.563	17.307	24.340	0.77	1
30	14.357	33.409	14.353	24.885	1.09	1
40	13.322	33.322	13.316	25.031	1.39	1
50	12.636	33.325	12.629	25.169	1.68	1
60	12.275	33.339	12.267	25.249	1.95	1
70	12.066	33.441	12.057	25.368	2.22	1
80	11.191	33.511	11.181	25.584	2.47	1
90	10.775	33.577	10.764	25.710	2.70	1
100	10.396	33.647	10.384	25.830	2.93	1
125	9.617	33.755	9.603	26.046	3.45	1
150	8.794	33.928	8.778	26.314	3.91	1
175	8.360	33.969	8.342	26.413	4.34	1
200	7.868	34.027	7.848	26.532	4.74	1
225	7.711	34.042	7.689	26.567	5.12	1
250	7.521	34.071	7.497	26.618	5.49	1
300	7.038	34.144	7.010	26.743	6.19	1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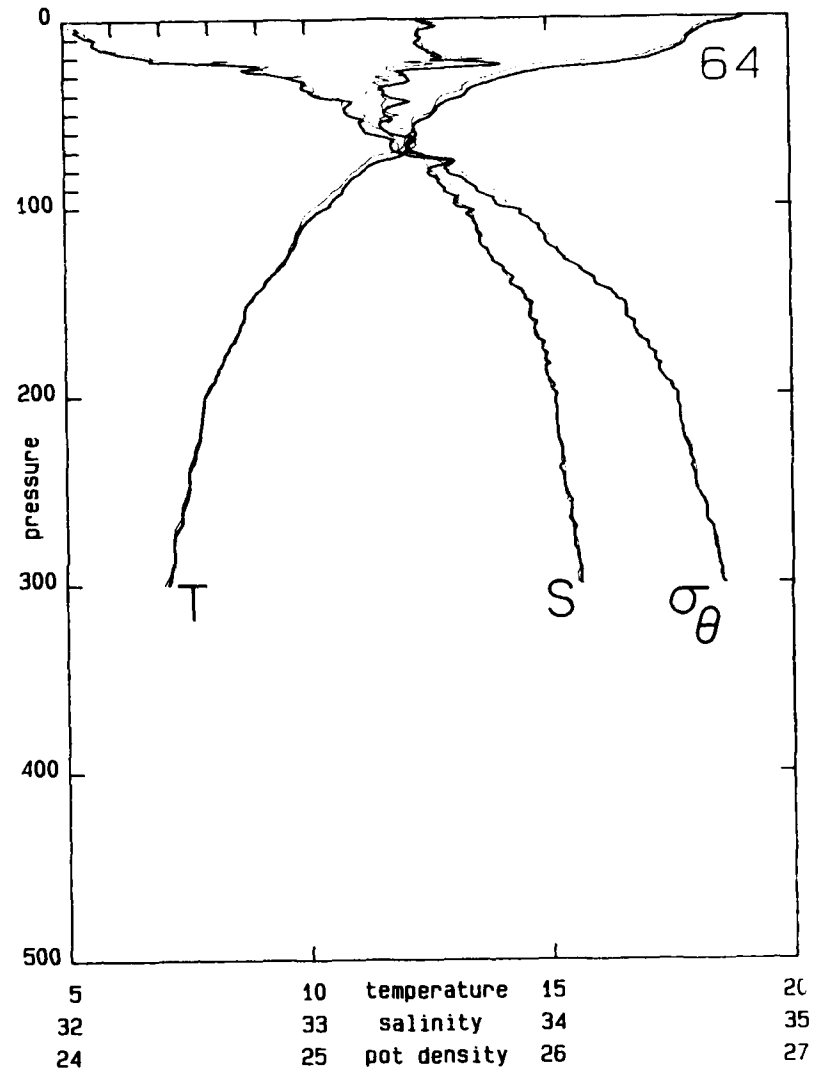
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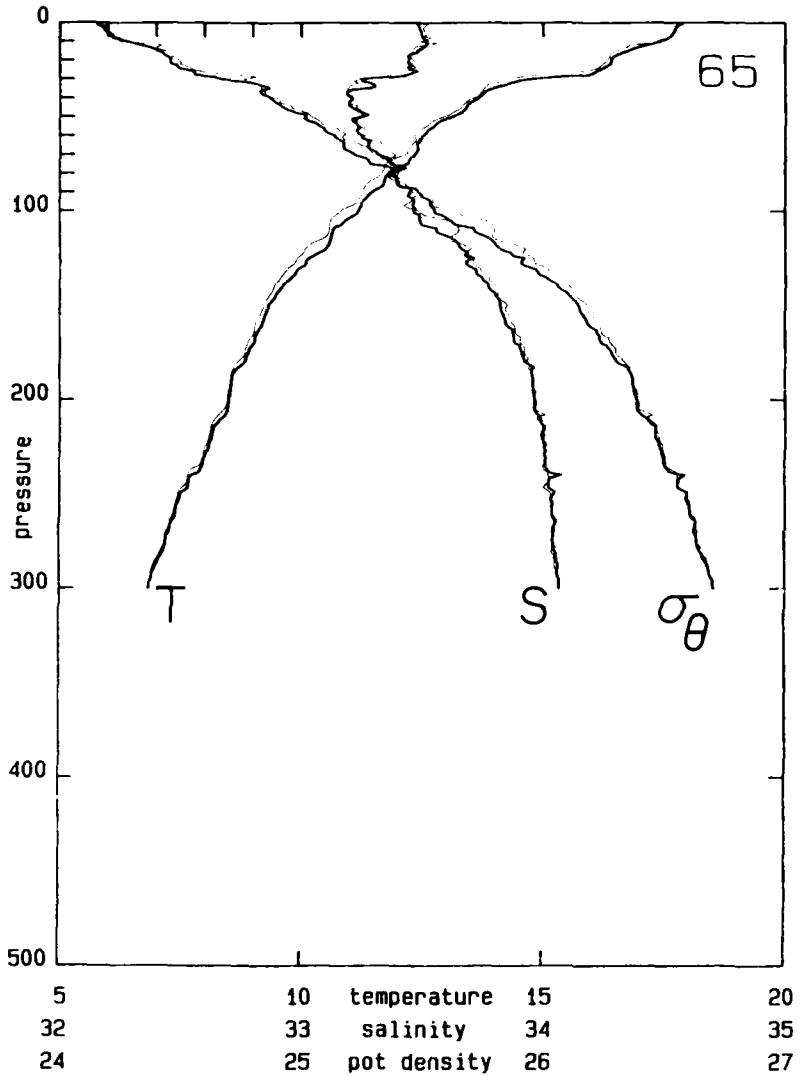
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
65	191: 2: 3	31 27.0 N	119 55.5 W	6	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.808	33.481	17.808	24.157	0.	2
10	17.413	33.519	17.411	24.281	0.37	1
20	16.407	33.443	16.404	24.459	0.73	1
30	14.775	33.231	14.771	24.659	1.07	1
40	13.645	33.205	13.639	24.875	1.38	1
50	13.102	33.257	13.095	25.025	1.68	1
60	12.506	33.249	12.498	25.135	1.98	1
70	12.334	33.323	12.325	25.226	2.26	1
80	11.800	33.378	11.790	25.369	2.52	1
90	11.430	33.446	11.419	25.490	2.78	1
100	11.172	33.462	11.160	25.550	3.03	1
125	10.122	33.702	10.108	25.921	3.60	1
150	9.303	33.824	9.287	26.152	4.10	1
175	8.880	33.912	8.861	26.288	4.56	1
200	8.486	33.966	8.465	26.392	4.99	1
225	8.064	34.008	8.041	26.489	5.39	1
250	7.482	34.036	7.458	26.596	5.78	1
300	6.842	34.068	6.814	26.710	6.49	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
66	191: 3:22	31 19.5 N	120 1.4 W	9	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.004	33.216	18.004	23.906	0.	2
10	17.629	33.250	17.627	24.023	0.40	1
20	17.200	33.279	17.197	24.148	0.78	1
30	15.714	33.334	15.709	24.532	1.14	1
40	14.888	33.340	14.882	24.719	1.47	1
50	14.112	33.303	14.105	24.855	1.79	1
60	13.499	33.302	13.491	24.980	2.09	1
70	12.969	33.302	12.960	25.086	2.39	1
80	12.681	33.339	12.670	25.172	2.68	1
90	12.070	33.400	12.058	25.336	2.95	1
100	11.835	33.420	11.822	25.396	3.22	1
125	11.034	33.693	11.019	25.755	3.84	1
150	9.716	33.746	9.699	26.023	4.38	1
175	9.155	33.863	9.136	26.207	4.86	1
200	8.597	33.947	8.576	26.360	5.30	1
225	8.059	33.996	8.036	26.480	5.71	1
250	7.750	34.055	7.725	26.572	6.11	1
300	7.511	34.146	7.482	26.679	6.84	1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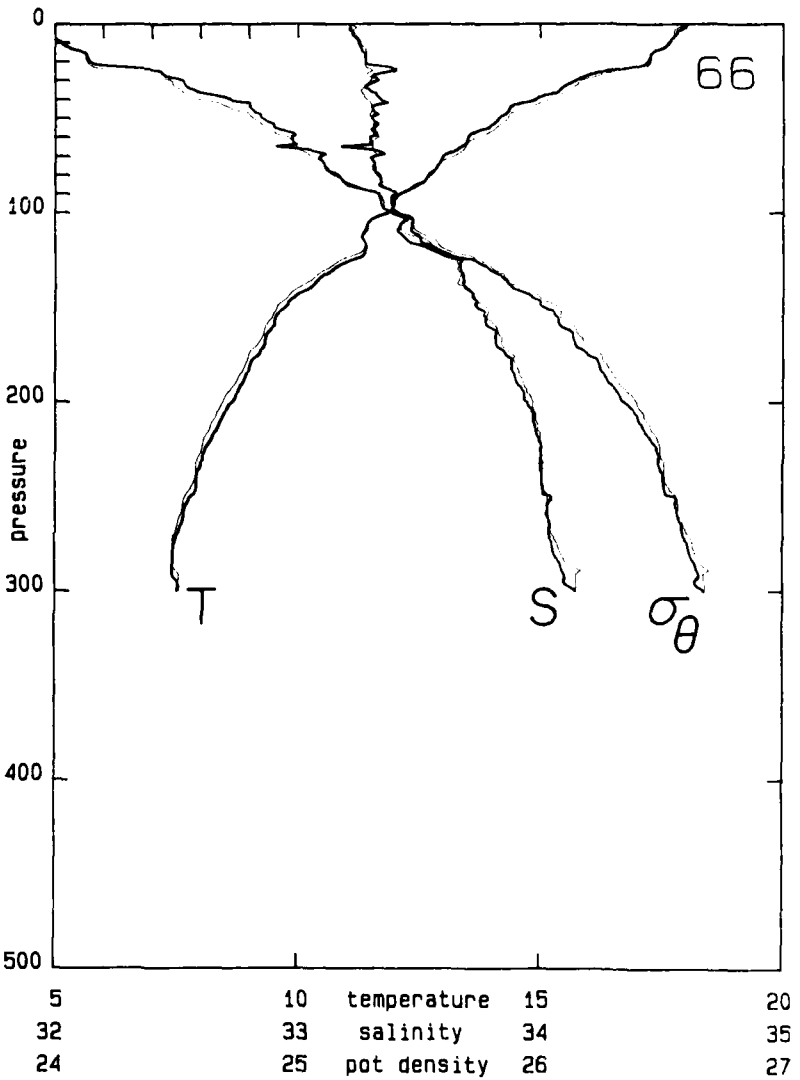
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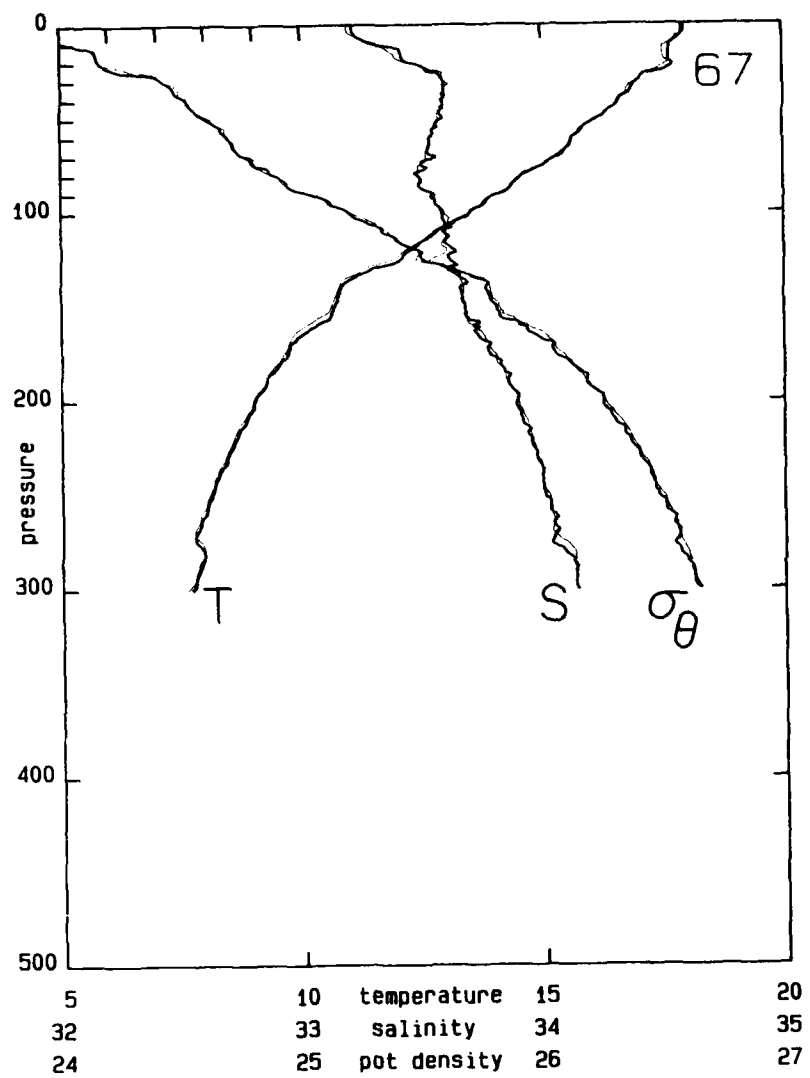
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
67	191: 4:37	31 11.5 N	120 7.8 W	6	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	17.926	33.218	17.926	23.927	0.	2
10	17.708	33.302	17.706	24.044	0.40	1
20	17.660	33.452	17.657	24.171	0.78	1
30	17.021	33.591	17.016	24.430	1.14	1
40	16.593	33.583	16.587	24.524	1.49	1
50	16.153	33.589	16.145	24.630	1.83	1
60	15.630	33.534	15.621	24.706	2.16	1
70	15.324	33.562	15.313	24.796	2.48	1
80	14.569	33.480	14.557	24.896	2.80	1
90	14.089	33.550	14.076	25.052	3.10	1
100	13.482	33.584	13.468	25.203	3.39	1
125	12.028	33.618	12.012	25.514	4.04	1
150	10.654	33.678	10.636	25.811	4.62	1
175	9.675	33.779	9.655	26.056	5.15	1
200	8.992	33.886	8.970	26.251	5.62	1
225	8.495	33.967	8.472	26.392	6.05	1
250	8.096	34.007	8.071	26.484	6.46	1
300	7.647	34.143	7.617	26.657	7.22	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
68	191: 6: 4	31 4.0 N	120 14.8 W	6	1

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.081	33.644	19.081	23.966	0.	2
10	19.000	33.654	18.998	23.994	0.40	1
20	18.657	33.682	18.653	24.102	0.78	1
30	18.156	33.725	18.151	24.260	1.16	1
40	17.106	33.656	17.099	24.460	1.52	1
50	16.518	33.604	16.510	24.558	1.86	1
60	15.995	33.584	15.986	24.663	2.20	1
70	15.538	33.541	15.527	24.732	2.53	1
80	15.031	33.550	15.019	24.851	2.85	1
90	14.344	33.482	14.331	24.946	3.16	1
100	13.809	33.512	13.795	25.080	3.45	1
125	12.371	33.611	12.355	25.443	4.14	1
150	11.214	33.651	11.195	25.691	4.76	1
175	9.677	33.798	9.657	26.071	5.30	1
200	9.169	33.870	9.147	26.210	5.78	1
225	8.544	33.962	8.520	26.380	6.22	1
250	8.020	34.010	7.995	26.497	6.63	1
300	7.332	34.042	7.303	26.622	7.39	1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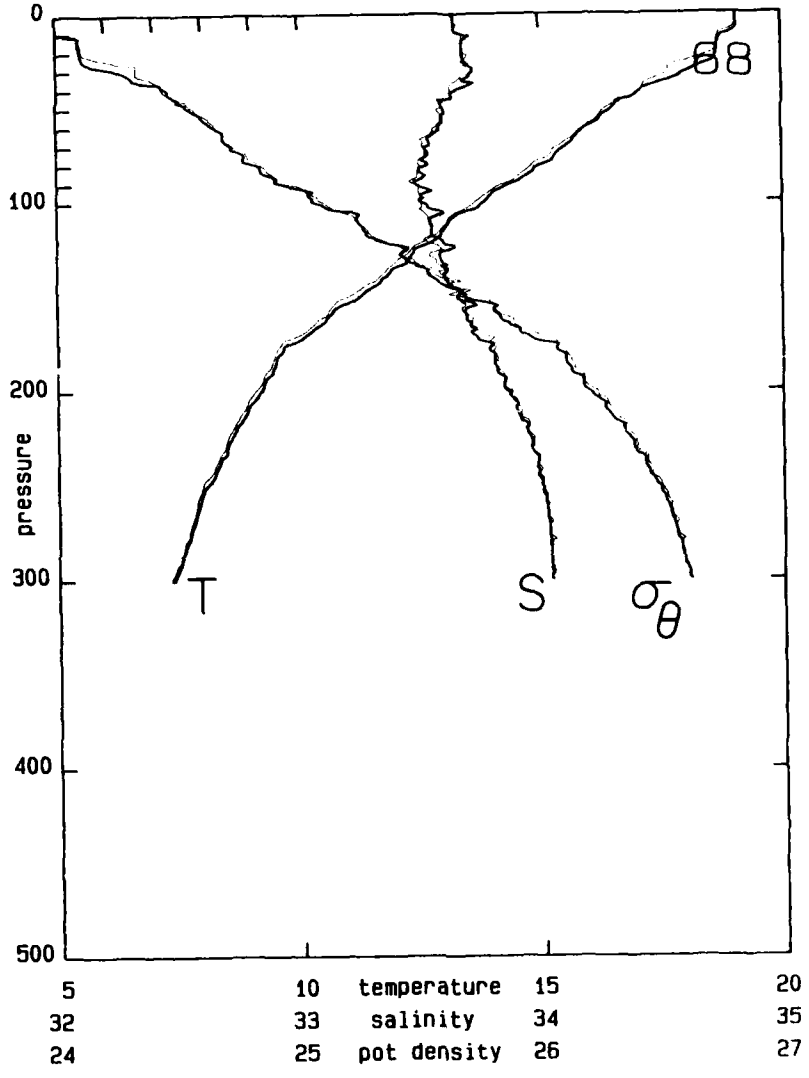
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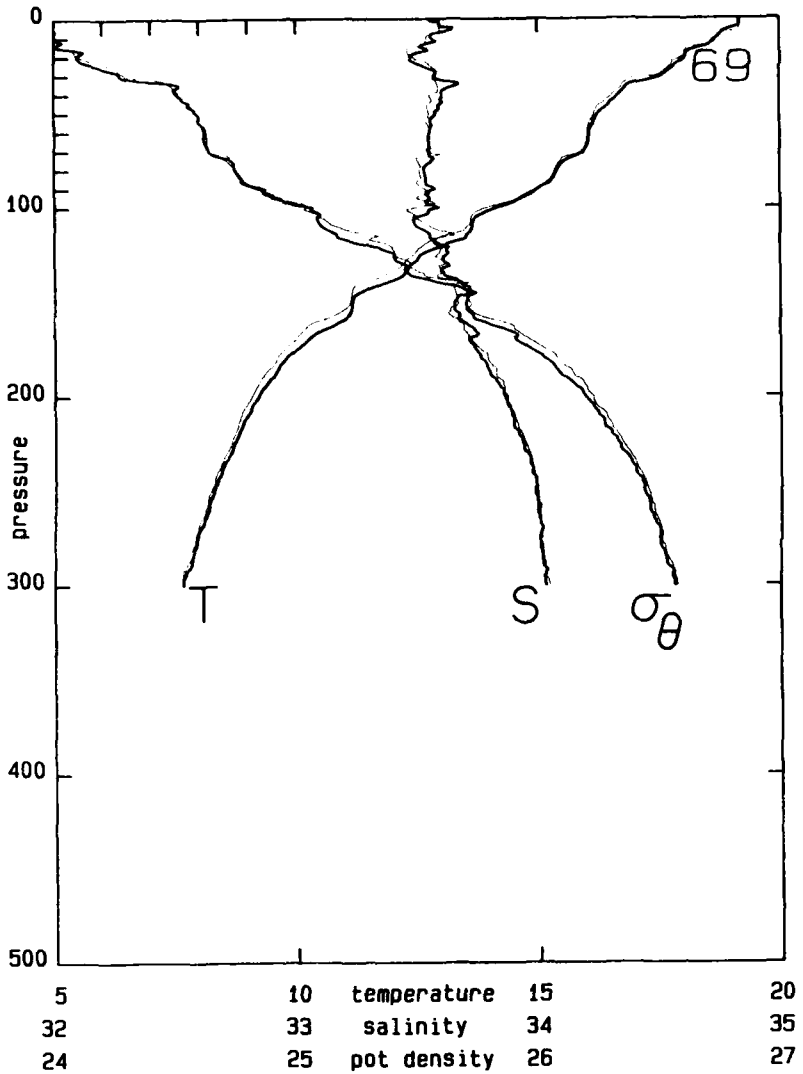
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
69	191: 7:22	30 56.4 N	120 21.0 W	7	9

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.166	33.557	19.166	23.878	0.	2
10	18.723	33.560	18.721	23.992	0.40	1
20	18.031	33.469	18.028	24.094	0.79	1
30	17.604	33.574	17.599	24.278	1.16	1
40	16.704	33.603	16.698	24.514	1.51	1
50	16.260	33.580	16.252	24.599	1.85	1
60	16.057	33.549	16.048	24.622	2.19	1
70	15.962	33.552	15.951	24.646	2.52	1
80	15.396	33.532	15.384	24.757	2.85	1
90	14.988	33.573	14.974	24.878	3.16	1
100	14.105	33.548	14.091	25.047	3.47	1
125	12.559	33.608	12.542	25.405	4.17	1
150	11.147	33.650	11.129	25.702	4.79	1
175	9.958	33.745	9.938	25.983	5.34	1
200	9.180	33.861	9.158	26.201	5.83	1
225	8.675	33.941	8.651	26.344	6.27	1
250	8.262	33.985	8.236	26.442	6.69	1
300	7.671	34.032	7.641	26.566	7.48	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
70	191: 9:22	30 48.3 N	120 8.1 W	6	25

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.146	33.578	19.146	23.899	0.	2
10	18.840	33.669	18.838	24.046	0.40	1
20	18.415	33.611	18.412	24.108	0.78	1
30	18.347	33.620	18.342	24.132	1.16	1
40	17.961	33.648	17.954	24.249	1.54	1
50	17.006	33.674	16.998	24.498	1.90	1
60	16.401	33.573	16.391	24.562	2.24	1
70	14.986	33.467	14.976	24.796	2.57	1
80	14.617	33.500	14.605	24.901	2.89	1
90	13.661	33.387	13.648	25.014	3.19	1
100	13.105	33.316	13.091	25.071	3.48	1
125	12.007	33.575	11.991	25.485	4.16	1
150	10.471	33.700	10.453	25.860	4.75	1
175	9.765	33.766	9.745	26.031	5.28	1
200	8.896	33.910	8.875	26.285	5.75	1
225	8.619	33.989	8.595	26.390	6.18	1
250	8.298	34.033	8.272	26.474	6.59	1
300	7.740	34.129	7.710	26.633	7.35	1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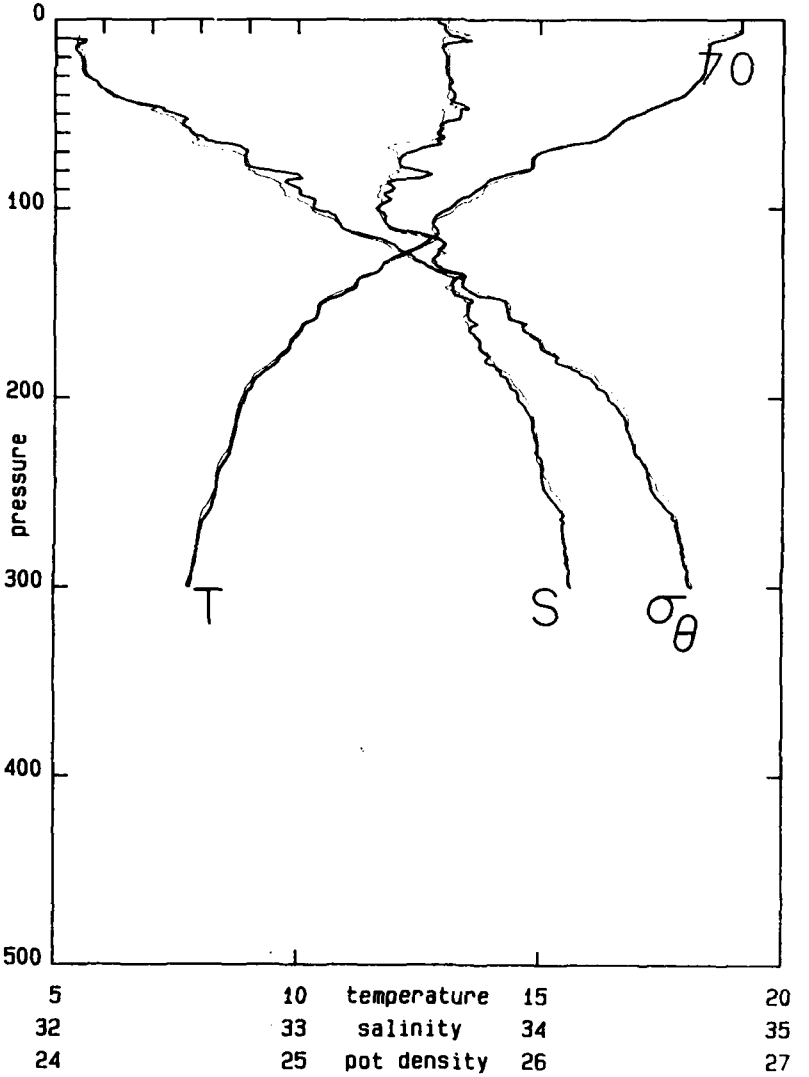
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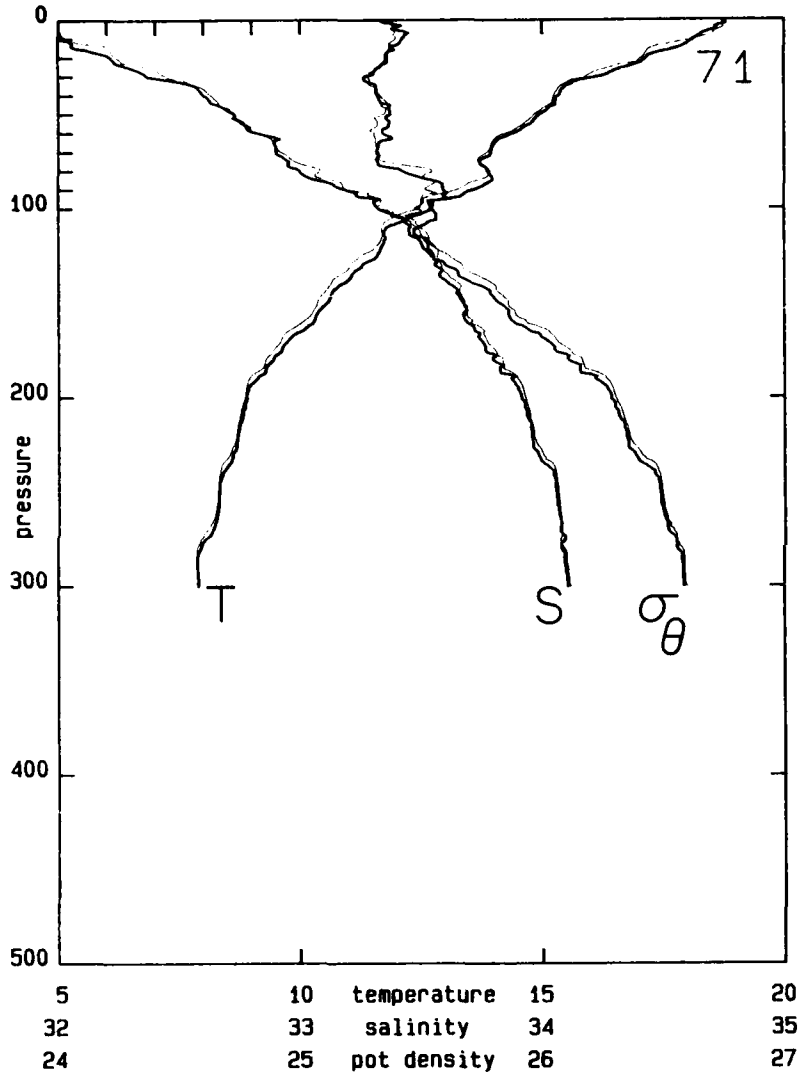
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
71	191:12: 1	30 33.9 N	119 46.8 W	3	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	18.787	33.336	18.787	23.805	0.	2
10	18.136	33.419	18.134	24.030	0.40	1
20	17.158	33.356	17.155	24.217	0.78	1
30	16.209	33.267	16.204	24.370	1.15	1
40	15.335	33.321	15.329	24.607	1.49	1
50	14.944	33.377	14.937	24.735	1.82	1
60	14.372	33.354	14.363	24.840	2.14	1
70	13.928	33.315	13.918	24.903	2.44	1
80	13.866	33.426	13.855	25.002	2.75	1
90	13.534	33.595	13.521	25.201	3.04	1
100	12.689	33.546	12.676	25.331	3.31	1
125	11.580	33.553	11.564	25.547	3.95	1
150	10.529	33.676	10.511	25.831	4.53	1
175	9.590	33.768	9.570	26.062	5.05	1
200	8.879	33.914	8.858	26.291	5.52	1
225	8.671	33.959	8.647	26.359	5.95	1
250	8.303	34.058	8.277	26.493	6.36	1
300	7.904	34.107	7.874	26.591	7.13	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
72	191:15: 6	30 18.5 N	119 21.1 W	11	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.501	33.450	19.501	23.710	0.	2
10	18.561	33.553	18.559	24.027	0.41	1
20	18.035	33.483	18.032	24.104	0.79	1
30	17.288	33.613	17.283	24.384	1.16	1
40	16.791	33.532	16.785	24.439	1.52	1
50	16.052	33.568	16.044	24.637	1.85	1
60	15.685	33.506	15.676	24.672	2.19	1
70	15.053	33.460	15.042	24.776	2.51	1
80	14.315	33.407	14.303	24.894	2.83	1
90	13.796	33.456	13.783	25.039	3.13	1
100	13.641	33.550	13.627	25.144	3.42	1
125	11.638	33.477	11.622	25.477	4.08	1
150	10.575	33.602	10.557	25.766	4.68	1
175	9.613	33.797	9.593	26.081	5.21	1
200	9.062	33.932	9.040	26.276	5.67	1
225	8.739	34.004	8.715	26.383	6.10	1
250	8.318	34.023	8.292	26.463	6.52	1
300	7.545	34.072	7.516	26.616	7.29	1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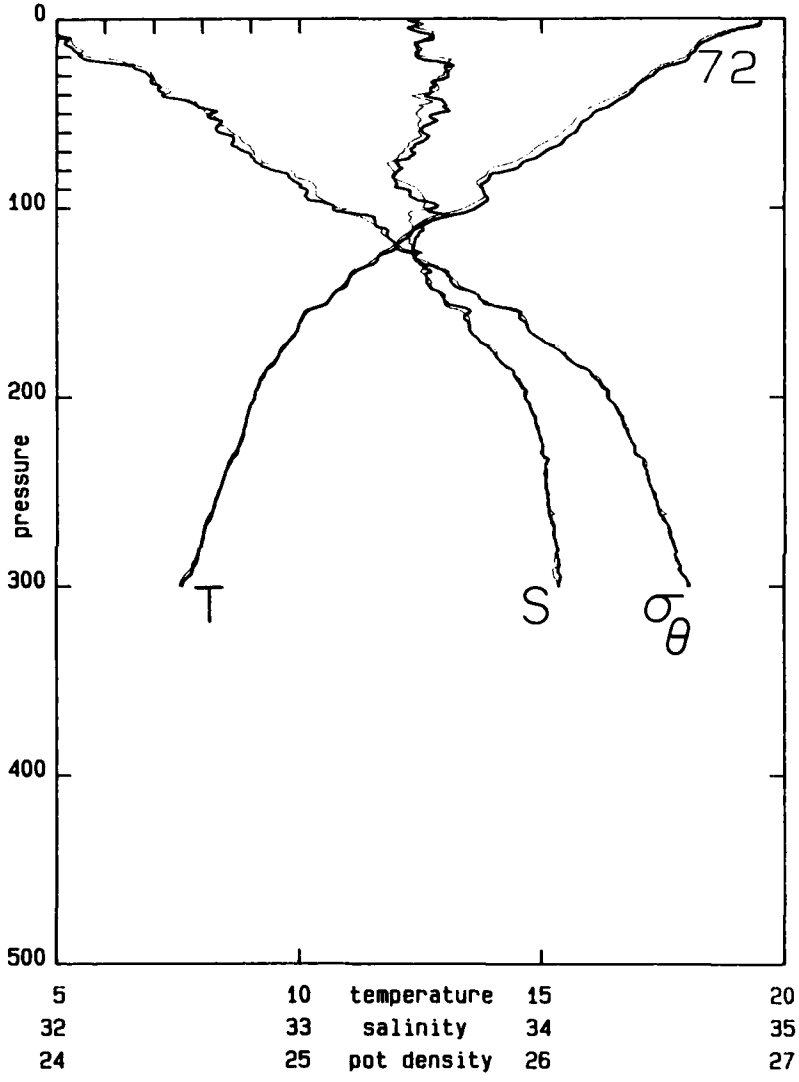
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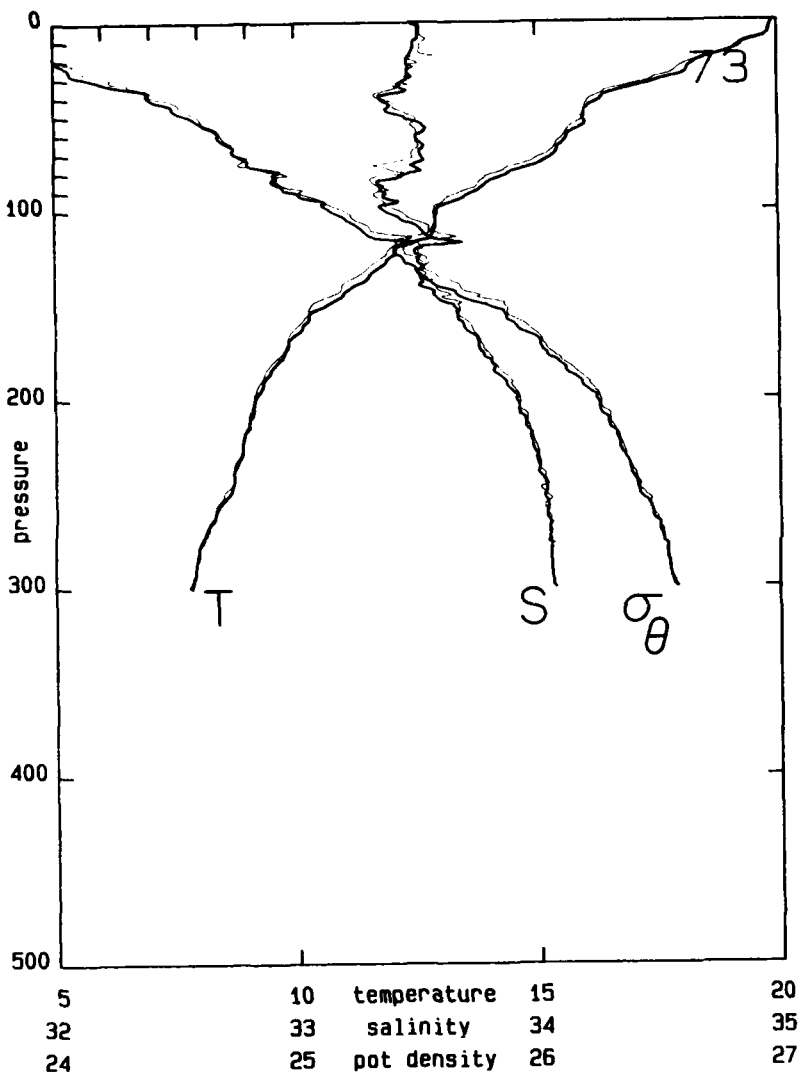
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
73	191:16:50	30 10.6 N	119 9.3 W	7	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.889	33.486	19.889	23.637	0.	2
10	19.573	33.495	19.571	23.727	0.42	1
20	18.474	33.463	18.471	23.981	0.83	1
30	17.795	33.495	17.790	24.172	1.22	1
40	16.369	33.353	16.363	24.399	1.58	1
50	15.987	33.459	15.979	24.568	1.93	1
60	15.628	33.497	15.619	24.678	2.26	1
70	15.358	33.519	15.347	24.755	2.59	1
80	14.420	33.471	14.408	24.921	2.90	1
90	13.686	33.380	13.673	25.003	3.21	1
100	12.939	33.376	12.925	25.150	3.50	1
125	11.910	33.510	11.894	25.452	4.17	1
150	10.607	33.656	10.589	25.802	4.78	1
175	9.755	33.775	9.735	26.040	5.30	1
200	9.135	33.916	9.113	26.252	5.78	1
225	8.867	33.978	8.843	26.343	6.22	1
250	8.562	34.024	8.536	26.427	6.64	1
300	7.769	34.079	7.739	26.589	7.42	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
74	191:18: 5	30 17.3 N	119 2.8 W	6	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.251	33.378	19.251	23.719	0.	2
10	18.674	33.449	18.672	23.920	0.41	1
20	18.239	33.473	18.236	24.046	0.81	1
30	17.172	33.487	17.167	24.315	1.18	1
40	16.824	33.552	16.817	24.447	1.54	1
50	15.882	33.473	15.874	24.603	1.88	1
60	15.315	33.435	15.306	24.700	2.21	1
70	14.426	33.353	14.416	24.828	2.53	1
80	14.315	33.426	14.303	24.908	2.84	1
90	13.861	33.536	13.848	25.088	3.14	1
100	13.120	33.447	13.106	25.169	3.43	1
125	11.492	33.465	11.476	25.495	4.10	1
150	10.591	33.613	10.573	25.771	4.70	1
175	9.684	33.790	9.664	26.064	5.23	1
200	9.080	33.929	9.058	26.271	5.70	1
225	8.498	33.995	8.475	26.413	6.13	1
250	8.200	34.024	8.174	26.482	6.54	1
300	7.595	34.092	7.566	26.624	7.30	1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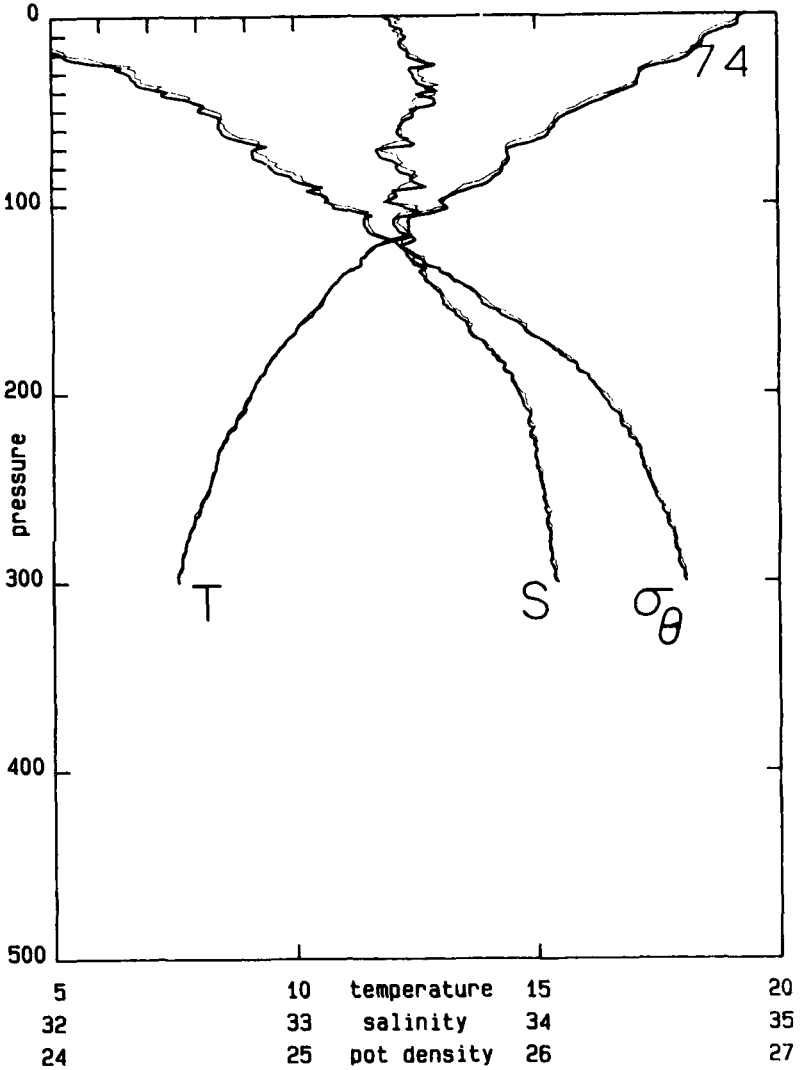
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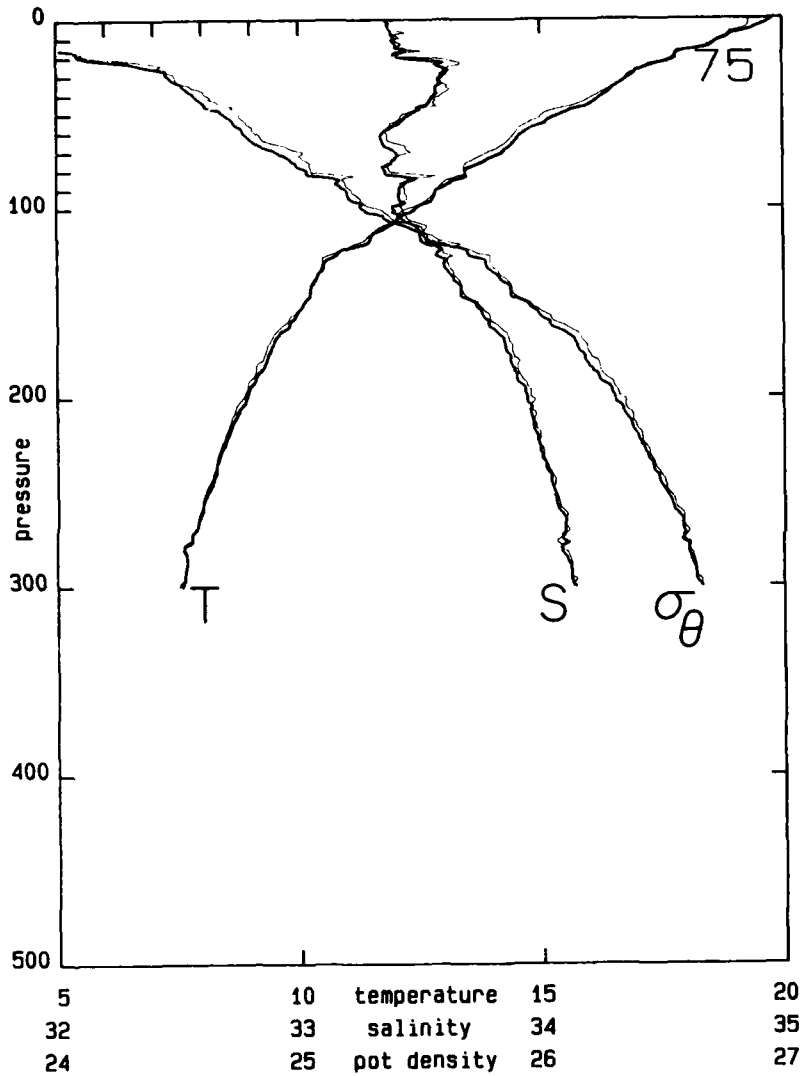
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
75	191:19:24	30 25.4 N	118 56.2 W	1	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.770	33.363	19.770	23.575	0.	2
10	18.844	33.399	18.842	23.839	0.42	1
20	17.801	33.419	17.798	24.112	0.82	1
30	16.880	33.593	16.875	24.465	1.17	1
40	16.294	33.560	16.288	24.576	1.52	1
50	15.423	33.461	15.415	24.695	1.85	1
60	14.625	33.345	14.616	24.780	2.17	1
70	14.196	33.402	14.186	24.914	2.49	1
80	13.432	33.360	13.421	25.039	2.79	1
90	12.852	33.416	12.840	25.198	3.08	1
100	12.394	33.391	12.381	25.268	3.35	1
125	10.724	33.570	10.709	25.714	3.98	1
150	10.082	33.730	10.065	25.950	4.53	1
175	9.395	33.858	9.376	26.164	5.02	1
200	8.899	33.942	8.878	26.309	5.48	1
225	8.427	33.995	8.404	26.424	5.90	1
250	8.081	34.055	8.056	26.524	6.30	1
300	7.508	34.146	7.479	26.679	7.05	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
76	191:20:54	30 34.5 N	118 50.0 W	4	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.667	33.183	19.667	23.464	0.	2
10	18.940	33.520	18.938	23.907	0.42	1
20	17.475	33.563	17.472	24.300	0.80	1
30	16.573	33.482	16.568	24.451	1.16	1
40	15.914	33.437	15.908	24.567	1.51	1
50	15.186	33.436	15.178	24.728	1.84	1
60	14.205	33.420	14.196	24.926	2.15	1
70	13.949	33.403	13.939	24.967	2.46	1
80	13.486	33.472	13.475	25.115	2.75	1
90	12.976	33.526	12.964	25.259	3.03	1
100	12.347	33.597	12.334	25.437	3.30	1
125	10.973	33.599	10.958	25.693	3.90	1
150	9.943	33.777	9.926	26.010	4.45	1
175	9.480	33.830	9.461	26.128	4.95	1
200	8.848	33.950	8.827	26.324	5.40	1
225	8.662	34.051	8.638	26.432	5.83	1
250	8.408	34.122	8.382	26.527	6.23	1
300	7.617	34.118	7.587	26.642	6.99	1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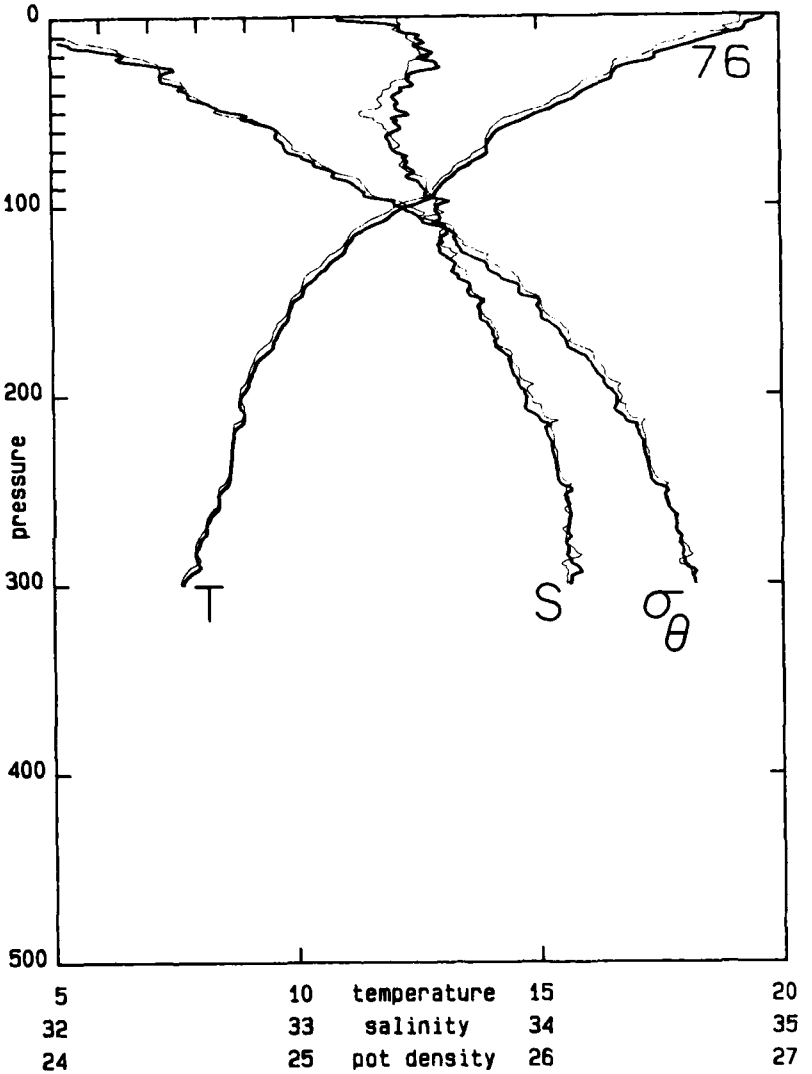
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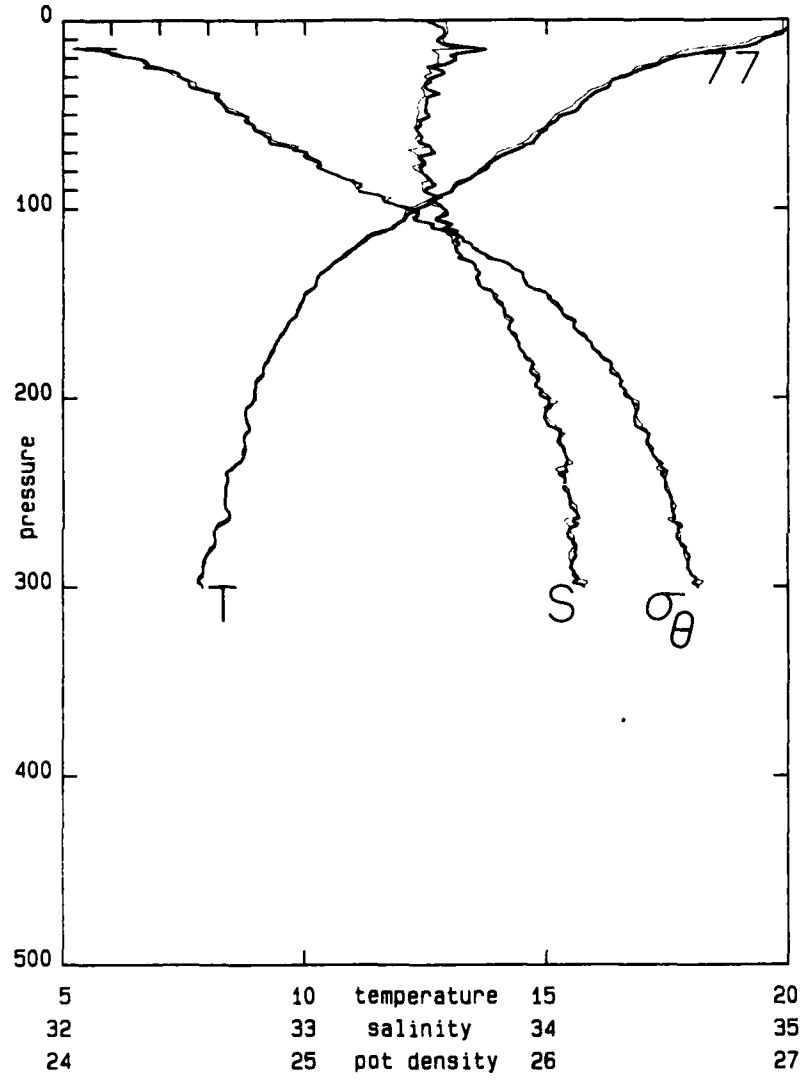
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
77	191:22:17	30 43.1 N	118 42.3 W	1	19

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	20.102	33.513	20.102	23.602	0.	2
10	19.504	33.550	19.502	23.786	0.42	1
20	17.684	33.622	17.681	24.296	0.81	1
30	16.606	33.532	16.601	24.482	1.17	1
40	15.918	33.519	15.912	24.629	1.51	1
50	15.353	33.524	15.345	24.759	1.84	1
60	14.849	33.475	14.840	24.832	2.15	1
70	14.208	33.542	14.198	25.020	2.46	1
80	13.629	33.489	13.618	25.099	2.76	1
90	13.028	33.490	13.016	25.221	3.04	1
100	12.276	33.577	12.263	25.435	3.30	1
125	10.801	33.645	10.786	25.759	3.91	1
150	9.880	33.817	9.863	26.052	4.44	1
175	9.312	33.900	9.293	26.210	4.92	1
200	8.925	34.011	8.904	26.359	5.36	1
225	8.761	34.069	8.737	26.431	5.78	1
250	8.340	34.089	8.314	26.512	6.18	1
300	7.891	34.154	7.861	26.630	6.94	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
78	192: 0:22	31 1.8 N	118 39.8 W	4	36

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.417	33.470	19.417	23.747	0.	2
10	18.711	33.440	18.709	23.903	0.41	1
20	17.754	33.470	17.751	24.162	0.80	1
30	16.541	33.390	16.536	24.388	1.17	1
40	15.200	33.370	15.194	24.674	1.51	1
50	14.544	33.380	14.537	24.823	1.83	1
60	14.061	33.430	14.052	24.964	2.14	1
70	13.147	33.420	13.137	25.142	2.43	1
80	12.777	33.560	12.766	25.324	2.71	1
90	12.169	33.550	12.157	25.434	2.97	1
100	11.543	33.590	11.530	25.582	3.22	1
125	10.423	33.695	10.408	25.864	3.79	1
150	9.618	33.850	9.601	26.121	4.30	1
175	9.260	33.965	9.241	26.270	4.77	1
200	8.985	34.060	8.963	26.388	5.20	1
225	8.784	34.110	8.760	26.459	5.61	1
250	8.656	34.180	8.629	26.535	6.01	1
300	8.211	34.220	8.180	26.635	6.76	1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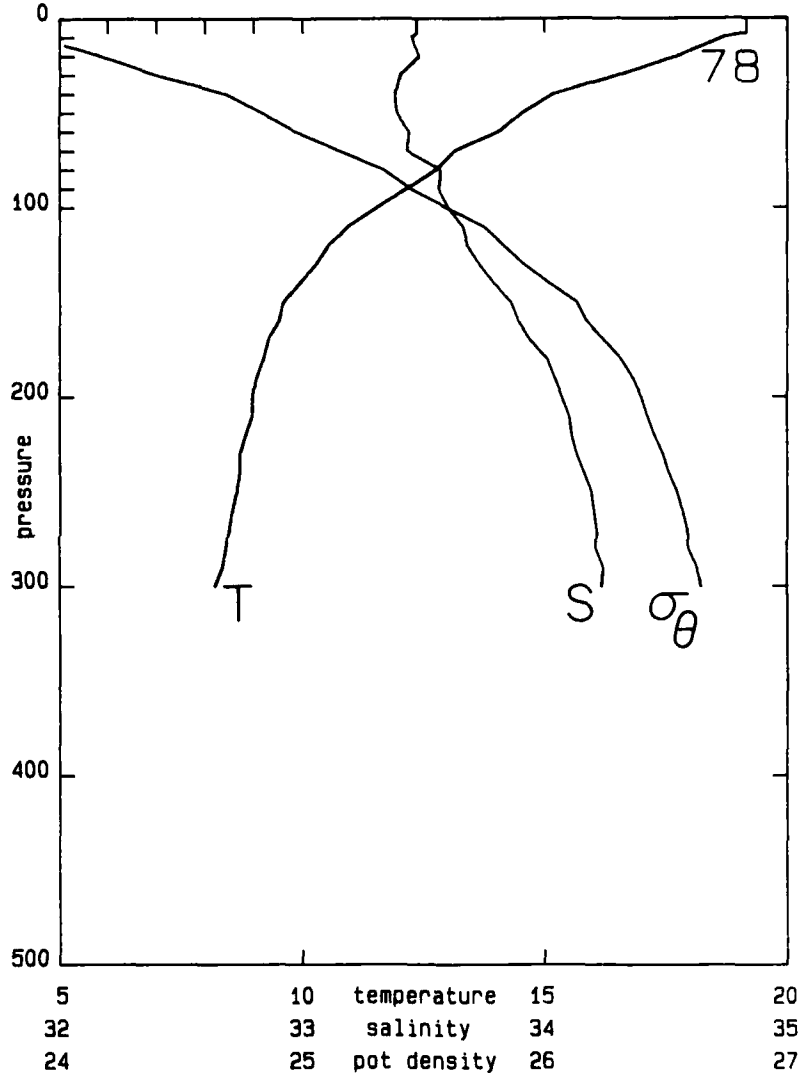
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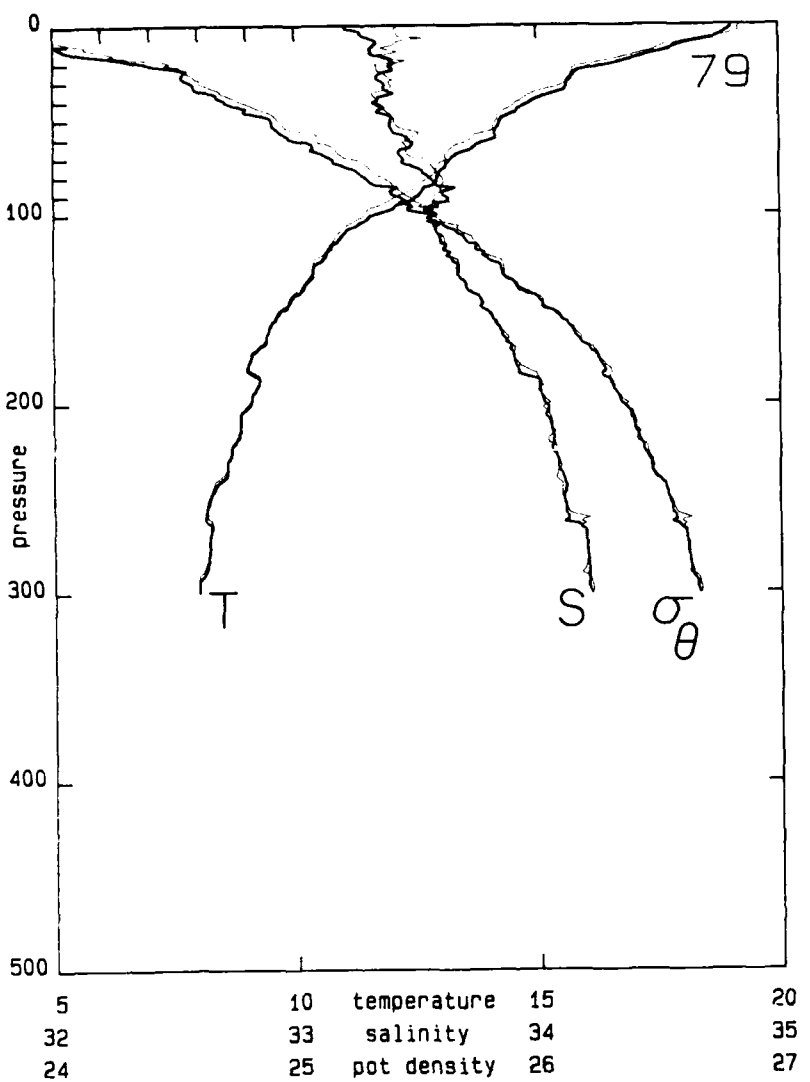
RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
79	192: 1:24	31 8.0 N	118 37.7 W	2	9

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.017	33.211	19.017	23.651	0.	2
10	18.005	33.331	18.003	23.995	0.41	1
20	16.650	33.411	16.647	24.378	0.79	1
30	15.650	33.363	15.645	24.569	1.13	1
40	14.892	33.333	14.886	24.712	1.47	1
50	14.224	33.394	14.217	24.902	1.78	1
60	14.110	33.455	14.101	24.973	2.09	1
70	13.220	33.446	13.210	25.148	2.38	1
80	12.928	33.554	12.917	25.290	2.66	1
90	12.532	33.623	12.520	25.421	2.92	1
100	11.590	33.592	11.577	25.575	3.17	1
125	10.474	33.662	10.459	25.829	3.76	1
150	9.697	33.799	9.680	26.068	4.28	1
175	9.050	33.898	9.031	26.251	4.75	1
200	9.043	34.038	9.021	26.362	5.19	1
225	8.642	34.065	8.618	26.446	5.61	1
250	8.195	34.109	8.169	26.549	6.01	1
300	7.967	34.219	7.937	26.670	6.74	1

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
80	192: 2:38	31 16.8 N	118 37.3 W	2	8

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.034	33.501	19.034	23.868	0.	2
10	17.683	33.454	17.681	24.167	0.40	1
20	15.638	33.405	15.635	24.604	0.75	1
30	14.608	33.327	14.604	24.768	1.08	1
40	13.971	33.318	13.965	24.895	1.39	1
50	13.547	33.365	13.540	25.019	1.70	1
60	12.669	33.417	12.661	25.234	1.98	1
70	12.112	33.491	12.103	25.398	2.25	1
80	11.637	33.524	11.627	25.513	2.50	1
90	10.857	33.545	10.846	25.670	2.74	1
100	10.584	33.594	10.572	25.757	2.98	1
125	9.699	33.790	9.685	26.060	3.49	1
150	9.258	33.911	9.242	26.227	3.97	1
175	8.611	33.966	8.593	26.373	4.40	1
200	8.383	33.999	8.362	26.434	4.82	1
225	8.167	34.041	8.144	26.499	5.22	1
250	7.862	34.061	7.837	26.561	5.61	1
300	7.980	34.201	7.950	26.654	6.35	1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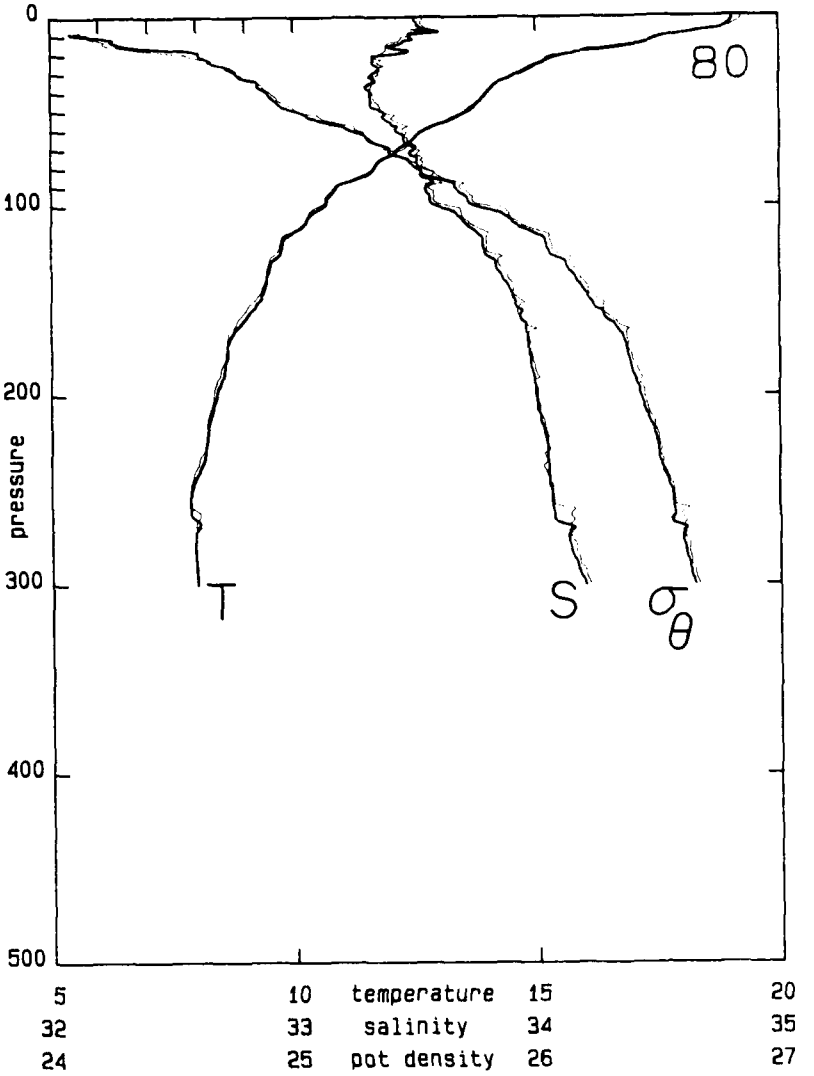
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AD-A174 002 FRONTS CRUISE: LEG I: 11 JULY 1985 LEG II: 12-23 JULY 1985(U) SCRIPPS INSTITUTION OF OCEANOGRAPHY LA JOLLA CA L R HAURY ET AL. OCT 86 SIO-REF-86-23 N00014-85-C-0104 2/2

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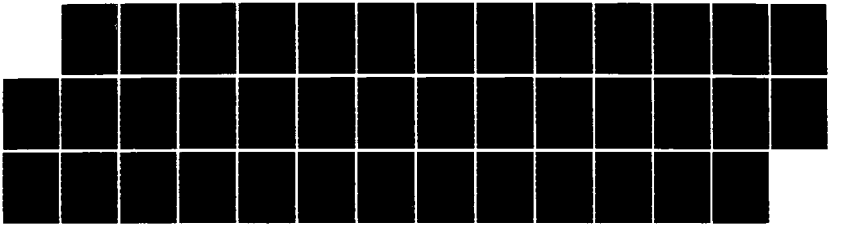
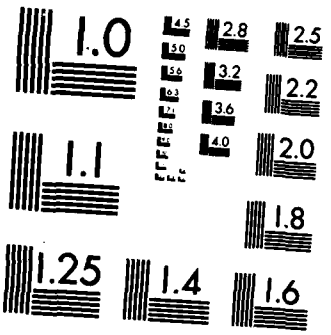


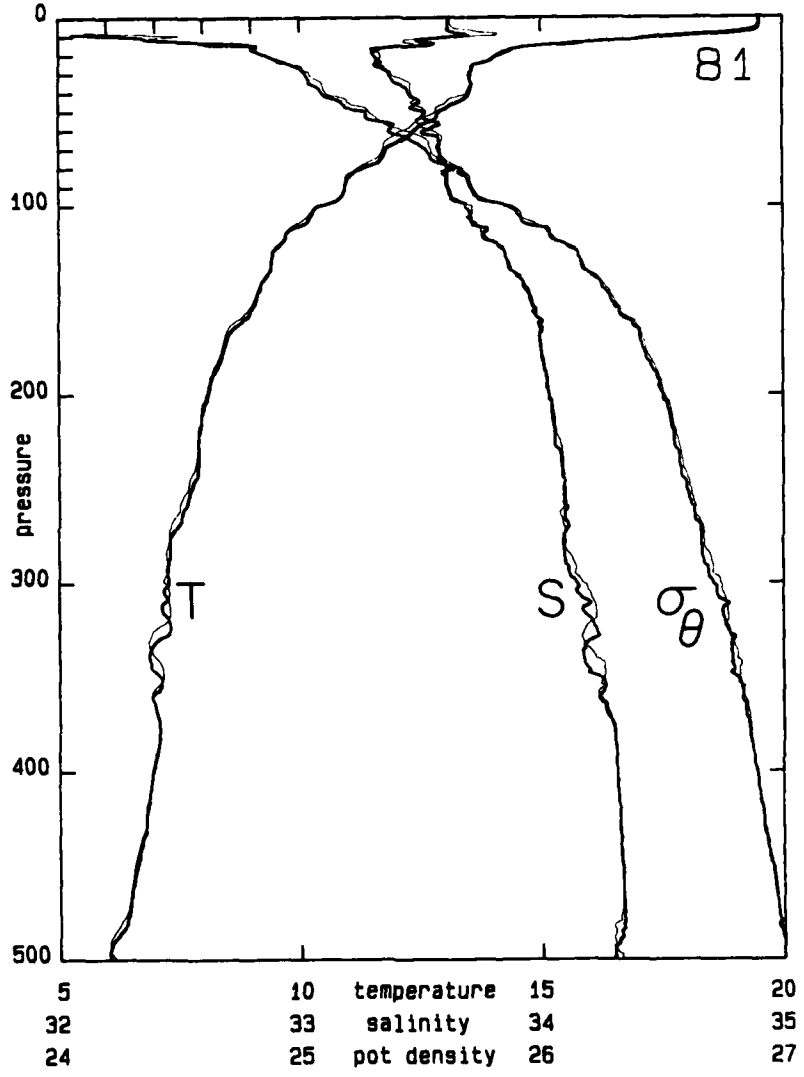


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

RV NEW HORIZON FRONTS I

station	date:time julian: GMT	latitude	longitude	wind speed knots	wind direction WMO code
81	192: 3:46	31 25.8 N	118 36.8 W	1	3

depth (m)	temperature (degree C)	salinity	potential temperature (degree C)	sigma-theta (kg/m^3)	geopotential anomaly $(m/s)^2$	flag
0	19.512	33.615	19.512	23.833	0.	2
10	18.123	33.700	18.121	24.248	0.40	1
20	14.073	33.305	14.070	24.864	0.73	1
30	13.535	33.371	13.531	25.025	1.03	1
40	13.507	33.452	13.501	25.094	1.32	1
50	12.892	33.502	12.885	25.256	1.60	1
60	12.353	33.519	12.345	25.374	1.87	1
70	11.766	33.573	11.757	25.527	2.12	1
80	11.253	33.644	11.243	25.676	2.37	1
90	10.926	33.613	10.915	25.711	2.60	1
100	10.361	33.707	10.349	25.883	2.82	1
125	9.419	33.849	9.405	26.152	3.33	1
150	9.062	33.956	9.046	26.294	3.79	1
175	8.425	33.995	8.407	26.424	4.21	1
200	8.074	34.031	8.054	26.505	4.61	1
225	7.884	34.054	7.862	26.552	4.99	1
250	7.703	34.093	7.678	26.609	5.37	1
300	7.225	34.152	7.196	26.724	6.08	1
400	6.903	34.308	6.865	26.892	7.38	1
500	6.123	34.314	6.079	27.001	8.55	1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FRONTS LEG II
STATION AND CAST DESCRIPTION

Sta.	Cast	Date 1985	Cast Type	Latitude °N	Longitude °W	Time GMT	Remarks	CalCOFI Line (computed)	CalCOFI Station (computed)
1	1	13 Jul 85	Nis	31°08.2′	121°11.1′	1840	6 Btle prodo	92.9	83.3
2	4	14 Jul 85	Nan	30°49.7′	121°23.0′	0208	20 Btle sp chlor	93.8	87.9
2	8	14 Jul 85	Nan	30°49.2′	121°18.0′	1100	20 Btle hydro	94.0	87.0
2	9	14 Jul 85	Nan	30°50.2′	121°20.2′	1329	12 Btle phyto	93.9	87.3
2	10	14 Jul 85	Nan	30°50.3′	121°19.5′	1607	20 Btle hydro	93.9	87.1
2	11	14 Jul 85	Nis	30°50.2′	121°19.8′	1827	8 Btle prodo-CICESE	93.9	87.2
2	12	14 Jul 85	Nis	30°50.9′	121°19.9′	1906	6 Btle prodo	93.8	87.1
3	4	15 Jul 85	Nan	31°08.2′	121°10.8′	1103	20 Btle hydro	92.9	83.2
4	1	15 Jul 85	Nan	31°20.2′	121°03.4′	1358	20 Btle hydro	92.3	80.3
5	1	15 Jul 85	Nis	31°35.7′	120°55.2′	1709	8 Btle prodo-CICESE	91.5	76.8
5	2	15 Jul 85	Nan	31°35.6′	120°55.5′	1800	20 Btle hydro	91.5	76.9
5	3	15 Jul 85	Nis	31°35.8′	120°55.8′	1858	6 Btle prodo	91.5	76.9
6	1	15 Jul 85	Nan	31°44.8′	120°50.1′	2245	20 Btle hydro	91.0	74.7
7	4	16 Jul 85	Nan	31°54.8′	120°45.3′	0310	20 Btle hydro	90.5	72.6
8	1	16 Jul 85	Nan	32°08.9′	120°36.3′	0614	20 Btle hydro	89.8	69.1
9	4	16 Jul 85	Nan	32°20.8′	120°31.2′	1115	20 Btle hydro	89.1	66.7
10	1	16 Jul 85	Nan	32°40.1′	120°20.0′	1442	20 Btle hydro	88.1	62.2
10	2	16 Jul 85	Nis	32°38.7′	120°21.8′	1704	6 Btle prodo-CICESE	88.2	62.7
10	3	16 Jul 85	Nis	32°38.0′	120°21.7′	1813	6 Btle prodo	88.2	62.8
10	8	17 Jul 85	Nan	32°40.1′	120°19.8′	0137	12 Btle phyto	88.1	62.2
10	11	17 Jul 85	Nan	32°40.0′	120°20.5′	1006	20 Btle hydro	88.1	62.3
11	2	17 Jul 85	Nan	32°21.6′	120°32.0′	1413	20 Btle hydro	89.0	66.8
12	1	17 Jul 85	Nis	32°10.0′	120°36.7′	1647	8 Btle prodo-CICESE	89.7	69.1
12	2	17 Jul 85	Nan	32°09.8′	120°37.3′	1738	20 Btle hydro	89.7	69.2
12	3	17 Jul 85	Nis	32°09.7′	120°37.8′	1823	6 Btle prodo	89.7	69.3
13	2	17 Jul 85	Nan	31°54.6′	120°44.6′	2226	20 Btle hydro	90.5	72.5
14	2	18 Jul 85	Nan	31°44.7′	120°50.6′	0124	20 Btle hydro	91.0	74.8
15	2	18 Jul 85	Nan	31°34.9′	120°55.8′	0409	20 Btle hydro	91.5	77.0
16	2	18 Jul 85	Nan	31°21.1′	121°03.8′	0742	20 Btle hydro	92.3	80.3
17	2	18 Jul 85	Nan	31°08.2′	121°10.2′	1105	20 Btle hydro	93.0	83.1
18	1	18 Jul 85	Nan	30°49.7′	121°19.3′	1424	20 Btle hydro	93.9	87.2
18	2	18 Jul 85	Nis	30°49.6′	121°20.6′	1650	8 Btle prodo-CICESE	93.9	87.4
18	4	18 Jul 85	Nis	30°47.9′	121°19.2′	1904	6 Btle prodo	94.1	87.4
18	6	19 Jul 85	Nan	30°50.2′	121°20.5′	0123	11 Btle phyto	93.9	87.3
18	9	19 Jul 85	Nan	30°49.7′	121°19.9′	0903	20 Btle hydro	93.9	87.3
19	2	19 Jul 85	Nan	31°08.2′	121°10.5′	1308	20 Btle hydro	92.9	83.2
20	2	19 Jul 85	Nis	31°21.8′	121°03.2′	1636	8 Btle prodo-CICESE	92.2	80.1
20	3	19 Jul 85	Nan	31°22.0′	121°03.5′	1727	20 Btle hydro	92.2	80.1
20	4	19 Jul 85	Nis	31°22.4′	121°03.8′	1819	6 Btle prodo	92.2	80.1
21	1	19 Jul 85	Nan	31°35.3′	120°55.2′	2009	11 Btle phyto	91.5	76.9
21	3	19 Jul 85	Nan	31°35.0′	120°56.2′	2138	20 Btle hydro	91.5	77.1
22	1	19 Jul 85	Nan	31°44.8′	120°49.8′	2342	11 Btle phyto	91.1	74.7
22	3	20 Jul 85	Nan	31°44.8′	120°50.8′	0116	20 Btle hydro	91.0	74.9

FRONTS LEG II
STATION AND CAST DESCRIPTION

Sta.	Cast	Date 1985	Cast Type	Latitude °N	Longitude °W	Time GMT	Remarks	CalCOFI Line (computed)	CalCOFI Station (computed)
23	1	20 Jul 85	Nan	31°55.2′	120°44.3′	0321	11 Btle phyto	90.5	72.3
23	3	20 Jul 85	Nan	31°54.7′	120°46.0′	0448	20 Btle hydro	90.5	72.7
24	2	20 Jul 85	Nan	32°09.3′	120°38.3′	0835	20 Btle hydro	89.7	69.5

RV NEW HORIZON — FRONTS LEG II — STATION 2 >

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 49.2 N	121 18.0 W	14/07/85	1100 GMT		340	09 KT	340 07	2	1014.2 MB	16.7 C	15.6 C	7/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	19.01	19.01	33.579	23.935	396.3	.000	5.42	102.1							0
1	1		19.01	19.01	33.579	23.935	396.3	.004	5.42	102.1	2.3	.32	.3	.00	.08	.01	1
	10	ISL	19.01	19.01	33.581	23.936	396.5	.040	5.43	102.3							10
1	11		19.01	19.01	33.581	23.936	396.5	.043	5.43	102.3	2.3	.32	.3	.00	.08	.01	11
	20	ISL	18.60	18.60	33.537	24.005	390.2	.079	5.48	102.5							20
	30	ISL	18.15	18.14	33.491	24.082	383.3	.118	5.60	103.8							30
1	32		18.06	18.06	33.482	24.096	382.0	.125	5.63	104.1	2.1	.33	.3	.01	.09	.01	32
1	42		15.83	15.82	33.354	24.523	341.5	.161			2.2	.33	.2	.00	.09	.01	42
	50	ISL	15.30	15.29	33.356	24.642	330.6	.188	6.00	105.0							50
1	52		15.27	15.26	33.356	24.649	329.8	.194	6.02	105.3	2.1	.33	.2	.00	.10	.01	52
1	62		15.01	15.00	33.353	24.703	324.9	.227	6.03	105.0	2.1	.33	.2	.00	.12	.01	62
1	73		14.46	14.45	33.315	24.792	316.7	.262	6.02	103.6	2.1	.34	.2	.00	.14	.03	73
	75	ISL	14.35	14.34	33.310	24.812	314.9	.269	6.02	103.3							76
1	83		14.02	14.01	33.299	24.872	309.3	.293			2.5	.36	.2	.00	.19	.07	83
1	94		13.79	13.77	33.289	24.913	305.7	.327	5.97	101.3	2.4	.37	.2	.00	.19	.12	94
	100	ISL	13.58	13.57	33.286	24.952	302.3	.346	5.92	100.1							101
1	103		13.49	13.47	33.285	24.971	300.4	.354	5.89	99.3	2.6	.40	.3	.03	.29	.21	103
1	115		12.70	12.68	33.371	25.195	279.4	.400	5.43	90.1	4.8	.61	4.3	.05	.25	.20	119
	125	ISL	12.34	12.32	33.422	25.304	269.1	.418	5.23	86.1							126
1	133		11.88	11.86	33.485	25.439	256.3	.440	4.99	81.4	8.2	.84	8.7	.02	.13	.16	134
	150	ISL	11.19	11.17	33.527	25.599	241.3	.461	4.80	77.2							151
1	159		10.93	10.91	33.547	25.679	233.9	.504	4.68	74.7	12.9	1.12	13.4	.01	.05	.07	160
1	184		9.72	9.69	33.740	26.020	201.7	.558	3.67	57.2	22.7	1.57	21.1	.01			185
	200	ISL	9.29	9.21	33.869	26.199	184.9	.588	3.38	52.2							201
1	211		8.96	8.94	33.949	26.306	174.9	.608	3.26	50.1	31.2	1.89	25.5	.01			212
	250	ISL	8.27	8.24	33.974	26.433	163.3	.674	2.78	42.0							252
	300	ISL	7.63	7.60	34.062	26.595	148.4	.752	2.28	35.9							302
1	311		7.53	7.50	34.089	26.632	145.1	.769	2.18	32.4	49.8	2.40	32.4	.01			313
	400	ISL	6.91	6.88	34.114	26.817	129.0	.890	1.45	21.0							403
1	420		6.09	6.05	34.116	26.868	125.1	.914	1.33	19.1	71.8	2.90	39.0	.00			422
	500	ISL	5.53	5.49	34.173	26.962	114.9	1.011	1.09	15.5							504
1	521		5.43	5.39	34.189	26.987	112.6	1.034	1.06	15.0	86.1	3.15	41.8	.00			524
	600	ISL	5.06	5.03	34.264	27.088	103.7	1.120	.88	12.4							605
	700	ISL	4.72	4.66	34.351	27.199	93.8	1.219	.73	10.2							706
1	780		4.49	4.43	34.416	27.276	87.1	1.292	.67	9.3	110.9	3.41	44.7	.00			786
	800	ISL	4.43	4.37	34.426	27.291	85.7	1.309	.69	9.5							807
	1000	ISL	3.83	3.76	34.491	27.406	75.6	1.470	.89	12.2							1009
1	1045		3.71	3.64	34.493	27.420	74.4	1.504	.94	12.8		3.31	44.9	.00			1054

RV NEW HORIZON — FRONTS LEG II — STATION 2 10

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 50.3 N	121 19.5 W	14/07/85	1607 GMT		330	09 KT	330 05	2	1015.6 MB	16.7 C	15.6 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	19.08	19.08	33.623	23.949	394.9	.000	5.40	101.9							0
1	1		19.08	19.08	33.623	23.949	394.9	.004	5.40	101.9	2.5	.40	.1	.00	.11	.01	1
	10	ISL	19.08	19.08	33.619	23.947	395.5	.040	5.46	103.0							10
1	11		19.08	19.08	33.619	23.947	395.5	.043	5.47	103.2	2.5	.40	.1	.00	.11	.01	11
	20	ISL	18.17	18.17	33.513	24.094	391.8	.078	5.64	104.5							20
	30	ISL	16.98	16.98	33.398	24.314	361.1	.116	5.85	105.7							30
1	32		16.61	16.60	33.377	24.363	356.5	.122	5.89	105.8	2.5	.42	.1	.00	.12	.01	32
1	42		15.69	15.69	33.351	24.551	338.9	.157	6.03	106.4	2.4	.42	.1	.00			42
	50	ISL	15.19	15.19	33.334	24.648	329.8	.184	6.04	105.6							50
1	53		15.05	15.05	33.329	24.675	327.4	.193	6.05	105.4	2.4	.42	.2	.00			53
1	63		14.56	14.55	33.314	24.770	318.6	.226	6.05	104.3	2.4	.43	.1	.01	.13	.02	63
1	73		14.21	14.20	33.307	24.838	312.3	.257	6.01	102.9	2.4	.44	.1	.01	.18	.05	73
	75	ISL	14.16	14.15	33.302	24.844	311.8	.264	6.01	102.8							76
1	84		13.99	13.98	33.282	24.865	310.0	.291	6.00	102.2	2.3	.45	.1	.01	.19	.09	84
1	94		13.68	13.66	33.280	24.928	304.2	.322	5.95	100.7	2.4	.46	.1	.01	.23	.14	94
	100	ISL	13.40	13.39	33.296	24.996	298.0	.341	5.85	98.4							101
1	104		13.24	13.22	33.308	25.039	293.9	.352	5.77	96.8	3.3	.54	1.1	.11	.25	.22	104
1	120		12.43	12.42	33.379	25.251	273.9	.397	5.31	87.6	6.1	.76	5.3	.05	.22	.23	120
	125	ISL	12.20	12.18	33.426	25.333	266.3	.412	5.15	84.6							126
1	134		11.78	11.77	33.507	25.474	253.0	.436	4.88	79.5	9.0	.95	9.2	.04	.12	.13	135
	150	ISL	10.87	10.87	33.598	25.707	231.1	.474	4.47	71.5							151
1	160		10.31	10.29	33.651	25.849	217.6	.497	4.19	66.2	17.2	1.36	16.4	.02	.02	.03	161
1	186		9.38	9.36	33.815	26.133	190.9	.550	3.33	51.6	28.0	1.87	23.4	.01	.00	.02	187
	200	ISL	9.06	9.04	33.882	26.237	181.2	.575	3.13	48.1							201
1	212		8.84	8.81	33.930	26.310	174.4	.597	3.02	46.2	33.2	2.04	26.1	.01			213
	250	ISL	8.17	8.15	34.018	26.481	158.6	.660	2.60	39.2							252
	300	ISL	7.46	7.43	34.076	26.631	144.9	.736	2.08	30.9							302
1	315		7.28	7.25	34.080	26.660	142.3	.758	1.93	28.5	53.2	2.58	33.2	.01			317
	400	ISL	6.43	6.40	34.144	26.826	127.3	.872	1.07	15.5							403
1	423		6.26	6.22	34.159	26.860	124.3	.902	.97	12.6	71.9	3.05	38.9	.01			426
	500	ISL	5.90	5.85	34.238	26.969	114.7	.993	.49	7.0							504
1	527		5.80	5.75	34.265	27.003	111.7	1.023	.41	5.9	84.3	3.30	41.1	.02			530
	600	ISL	5.43	5.38	34.319	27.091	104.0	1.102	.38	5.5							605
	700	ISL	4.94	4.89	34.375	27.193	94.8	1.202	.35	4.9							706
1	787		4.54	4.48	34.410	27.266	88.1	1.281	.32	4.4	111.0	3.45	44.4	.01			793
	800	ISL	4.49	4.43	34.415	27.276	87.2	1.293	.33	4.5							807
	1000	ISL	3.84	3.77	34.482	27.398	76.4	1.456	.55	7.5							1009
1	1051		3.72	3.66	34.492	27.419	74.6	1.495	.65	8.8	128.5	3.44	44.9	.00			1060

RV NEW HORIZON — FRONTS LEG II — STATION 3 4

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 08.2 N	121 10.8 W	15/07/85	1103 GMT		330	07 KT	340 05	2	1013.2 MB	16.1 C	15.0 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.84	18.84	33.609	24.001	390.1	.000	5.44	102.2							0
1	2		18.84	18.84	33.609	24.001	390.0	.008	5.44	102.2	2.0	.40	.2	.00			2
	10	ISL	18.83	18.83	33.611	24.005	389.9	.039	5.46	102.5							10
1	11		18.83	18.82	33.611	24.005	389.9	.043	5.46	102.6	2.0	.41	.1	.00			11
	20	ISL	18.76	18.76	33.599	24.013	389.5	.078	5.47	102.7							20
	30	ISL	18.69	18.68	33.585	24.021	389.1	.117	5.49	102.8							30
1	32		18.67	18.67	33.582	24.022	389.0	.124	5.49	102.8	1.9	.41	.1	.00	.08	.01	32
1	42		15.86	15.86	33.476	24.532	340.7	.161	6.00	104.2	1.9	.42	.1	.00	.11	.02	42
	50	ISL	15.24	15.25	33.365	24.657	329.3	.188	6.05	105.0							50
1	52		15.23	15.22	33.362	24.661	328.6	.194	6.06	106.0	1.9	.43	.1	.00	.13	.03	52
1	63		14.72	14.71	33.332	24.749	320.5	.229	6.09	105.4	1.9	.45	.1	.01	.17	.04	63
1	73		14.28	14.27	33.313	24.827	313.4	.261	6.07	104.1	2.0	.45	.0	.01	.21	.04	73
	75	ISL	14.18	14.17	33.309	24.845	311.7	.268	6.07	103.9							76
1	83		13.90	13.79	33.299	24.917	305.1	.292	6.07	103.0	2.0	.48	.1	.01	.19	.03	83
1	93		13.16	13.14	33.305	25.052	292.3	.322	5.78	96.8	2.9	.58	1.4	.15	.21	.12	93
	100	ISL	12.95	12.94	33.334	25.115	286.6	.343	5.66	94.6							101
1	104		12.88	12.86	33.349	25.142	284.1	.353	5.60	93.3	4.0	.66	3.1	.19	.19	.22	106
1	119		12.22	12.21	33.396	25.305	268.8	.394	5.19	85.3	6.4	.83	6.5	.10	.15	.19	119
	125	ISL	11.82	11.80	33.449	25.422	257.7	.411	4.99	81.4							124
1	133		11.29	11.27	33.527	25.581	242.7	.432	4.74	76.4	10.8	1.07	11.1	.04	.09	.13	134
	150	ISL	10.52	10.50	33.631	25.797	222.4	.471	4.30	68.2							151
1	159		10.19	10.16	33.678	25.893	213.3	.491	4.07	64.1	18.6	1.43	17.5	.02	.02	.05	160
1	185		9.35	9.33	33.814	26.136	190.6	.543	3.62	57.9	26.7	1.79	23.0	.01	.00	.03	186
	200	ISL	8.96	8.94	33.881	26.252	179.8	.571	3.25	49.8							201
1	211		8.71	8.69	33.924	26.326	172.8	.590	3.16	48.2	33.4	2.02	25.9	.01			212
	250	ISL	8.04	8.03	34.012	26.493	157.4	.655	2.74	41.3							252
	300	ISL	7.49	7.45	34.069	26.623	145.7	.731	2.20	32.7							302
1	314		7.34	7.33	34.073	26.643	144.0	.751	2.06	30.2	51.4	2.50	52.5	.00			316
	400	ISL	6.46	6.43	34.150	26.826	127.3	.867	1.07	15.6							403
1	421		6.24	6.22	34.162	26.863	124.0	.894	.87	12.6	72.6	3.04	38.9	.00			424
	500	ISL	5.56	5.52	34.197	26.978	113.4	.988	.55	7.9							504
1	525		5.37	5.33	34.206	27.008	110.6	1.015	.51	7.2	89.6	3.22	42.1	.00			528
	600	ISL	5.02	4.97	34.246	27.097	102.7	1.096	.46	6.4							605
	700	ISL	4.49	4.43	34.347	27.200	93.7	1.194	.38	5.3							706
1	787		4.52	4.46	34.416	27.273	87.5	1.273	.32	4.4	111.8	3.44	44.2	.00			793
	800	ISL	4.49	4.42	34.423	27.283	86.6	1.284	.33	4.6							807
	1000	ISL	3.89	3.81	34.491	27.401	74.3	1.447	.21	9.8							1009
1	1053		3.77	3.65	34.495	27.420	74.6	1.487	.89	12.1	128.5	3.43	44.5	.00			1062

RV NEW HORIZON — FRONTS LEG II — STATION 4 1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 20.2 N	121 03.4 W	15/07/85	1358 GMT		330	09 KT	350 05	2	1013.9 MB	15.6 C	15.0 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.50	18.50	33.495	23.999	390.2	.000	5.47	102.0							0
1	1		18.50	18.50	33.495	23.999	390.3	.004	5.47	102.0	2.2	.34	.4	.00	.07	.01	1
	10	ISL	18.51	18.51	33.495	23.996	390.8	.039	5.49	102.5							10
1	12		18.51	18.51	33.496	23.996	390.9	.047	5.50	102.6	2.1	.34	.3	.00	.07	.01	12
	20	ISL	18.23	18.22	33.473	24.069	396.1	.078	5.57	103.3							20
	30	ISL	17.87	17.86	33.444	24.115	380.1	.116	5.65	104.0							30
1	33		17.76	17.76	33.436	24.134	379.4	.127	5.67	104.2	2.0	.35	.4	.00	.09	.02	33
1	43		15.95	15.95	33.369	24.507	343.1	.163	5.98	106.1	2.0	.36	.4	.00	.09	.02	43
	50	ISL	15.59	15.57	33.363	24.585	335.9	.187	6.00	105.6							53
1	54		15.50	15.49	33.361	24.602	334.4	.200	6.01	105.6	2.0	.35	.4	.00	.09	.02	54
1	64		14.84	14.83	33.342	24.732	322.2	.233	6.04	104.8	2.0	.36	.4	.00	.11	.02	64
1	74		14.27	14.26	33.302	24.823	313.8	.265	6.04	103.5	2.0	.38	.4	.00	.15	.04	74
	75	ISL	14.26	14.25	33.304	24.825	313.4	.269	6.04	103.5							76
1	85		14.22	14.21	33.316	24.843	312.2	.299	6.04	103.4	2.0	.39	.3	.00	.17	.05	85
1	95		13.82	13.81	33.301	24.914	305.6	.330	5.99	101.7	2.1	.40	.4	.00	.19	.11	95
	100	ISL	13.58	13.57	33.303	24.966	300.9	.346	5.93	100.2							101
1	106		13.31	13.29	33.314	25.030	294.9	.362	5.83	98.0	2.6	.48	1.0	.08	.21	.13	106
1	121		12.44	12.43	33.398	25.264	272.8	.405	5.35	88.3	5.3	.73	5.8	.09	.18	.15	121
	125	ISL	12.19	12.18	33.435	25.341	265.5	.417	5.20	85.5							126
1	136		11.56	11.56	33.528	25.529	247.8	.446	4.85	78.7	9.4	.99	10.5	.02	.11	.10	137
	150	ISL	10.89	10.87	33.585	25.697	232.0	.479	4.51	72.1							151
1	162		10.33	10.31	33.625	25.827	219.9	.507	4.23	66.8	16.9	1.34	16.9	.01	.03	.06	163
1	188		9.38	9.36	33.776	26.103	193.8	.560	3.57	55.3	25.0	1.69	22.3	.01	.00	.04	189
	200	ISL	9.09	9.07	33.842	26.201	184.7	.582	3.36	51.8							201
1	214		8.82	8.79	33.911	26.295	176.5	.608	3.16	48.4	31.3	1.90	25.5	.01			215
	250	ISL	8.17	8.14	34.008	26.474	159.3	.668	2.69	40.6							252
	300	ISL	7.42	7.39	34.069	26.632	144.9	.744	2.14	31.7							302
1	317		7.20	7.17	34.070	26.664	141.9	.769	1.97	29.1	52.7	2.49	33.3	.01			319
	400	ISL	6.22	6.19	34.114	26.830	126.7	.880	1.17	16.9							403
1	425		5.98	5.95	34.124	26.867	123.3	.912	.97	13.9	73.8	2.94	39.4	.00			428
	500	ISL	5.55	5.51	34.199	26.980	117.2	1.000	.59	8.4							504
1	530		5.43	5.38	34.230	27.020	109.7	1.033	.49	6.9	87.9	3.19	42.0	.00			533
	600	ISL	5.15	5.10	34.291	27.102	102.5	1.107	.45	6.4							605
	700	ISL	4.80	4.75	34.364	27.200	93.9	1.206	.41	5.7							706
1	791		4.54	4.47	34.416	27.271	87.7	1.288	.36	5.0	110.6	3.37	44.4	.00			797
	800	ISL	4.51	4.44	34.420	27.278	87.1	1.296	.36	5.0							807
	1000	ISL	3.96	3.78	34.489	27.402	74.0	1.459	.55	7.5							1009
1	1051		3.69	3.61	34.496	27.425	74.0	1.498	.64	8.7	127.9	3.32	44.8	.00			1060

RV NEW HORIZON FRONTS LEG II STATION 5 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 35.6 N	120 55.5 W	15/07/85	1900 GMT		340	08 KT	350 04	2	1014.9 MB	16.4 C	15.0 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.19	18.19	33.620	24.169	374.0	.000	5.50	102.1							0
1	1		18.19	18.19	33.620	24.169	374.0	.004	5.50	102.1	1.9	.31	.2	.00	.09	.00	1
	10	ISL	18.18	18.17	33.617	24.172	374.0	.037	5.50	102.0							10
1	11		18.17	18.17	33.617	24.172	374.0	.041	5.50	102.0	2.2	.31	.2	.00	.08	.01	11
	20	ISL	18.13	18.12	33.615	24.182	373.4	.075	5.52	102.3							20
	30	ISL	18.07	18.07	33.613	24.194	372.7	.112	5.55	102.7							30
1	32		18.06	18.06	33.612	24.196	372.5	.119	5.55	102.7	2.1	.31	.2	.00	.09	.01	32
1	42		15.72	15.71	33.456	24.626	331.7	.154	5.98	105.6	2.1	.32	.2	.00	.12	.02	42
	50	ISL	15.36	15.35	33.436	24.690	325.8	.181	6.00	105.3							50
1	53		15.24	15.23	33.429	24.712	323.8	.190	6.01	105.1	2.1	.33	.2	.00	.18	.03	53
1	63		14.57	14.56	33.372	24.812	314.6	.222	6.08	104.9	2.2	.36	.2	.00	.19	.14	63
1	73		13.96	13.95	33.359	24.930	303.5	.253	6.04	102.9	2.5	.39	.5	.01	.19	.10	73
	75	ISL	14.00	13.99	33.396	24.951	301.6	.260	5.95	101.5							76
1	84		14.07	14.06	33.520	25.032	294.2	.285	5.63	96.2	3.4	.44	1.1	.07	.22	.13	84
1	94		13.19	13.18	33.444	25.153	282.8	.314	5.61	94.1	4.3	.59	3.6	.21	.19	.12	94
	100	ISL	12.44	12.42	33.434	25.293	270.1	.332	5.38	88.8							101
1	104		12.03	12.02	33.428	25.365	262.7	.341	5.22	85.5	7.0	.84	8.2	.03	.16	.13	104
1	119		11.25	11.24	33.539	25.595	241.0	.381	4.64	76.8	11.3	1.08	12.3	.02	.09	.10	120
	125	ISL	11.01	10.99	33.570	25.664	234.6	.394	4.52	72.4							126
1	134		10.60	10.59	33.620	25.775	224.2	.416	4.33	68.8	15.3	1.25	15.5	.01	.05	.08	135
	150	ISL	9.89	9.86	33.719	25.975	205.3	.449	3.88	60.7							151
1	160		9.47	9.46	33.781	26.091	194.4	.470	3.61	56.0	24.3	1.64	21.8	.00	.01	.04	161
1	186		9.03	9.01	33.875	26.236	180.9	.518	3.39	52.1	28.9	1.92	24.0	.00	.00	.02	187
	200	ISL	8.76	8.74	33.923	26.316	173.6	.543	3.26	49.9							201
1	212		8.53	8.50	33.959	26.381	167.6	.563	3.15	47.9	33.7	1.95	26.1	.00			213
	250	ISL	7.92	7.90	34.021	26.520	154.8	.625	2.76	41.4							252
	300	ISL	7.27	7.24	34.059	26.644	143.6	.699	2.24	33.1							302
1	314		7.12	7.09	34.059	26.666	141.6	.720	2.09	30.8	52.9	2.48	33.1	.01			316
	400	ISL	6.27	6.23	34.104	26.815	128.1	.835	1.26	18.2							403
1	421		6.10	6.06	34.114	26.845	125.4	.863	1.08	15.5	71.0	2.94	32.6	.01			424
	500	ISL	5.59	5.55	34.195	26.972	114.0	.957	.60	8.6							504
1	524		5.47	5.43	34.221	27.008	110.8	.983	.50	7.1	87.1	3.24	41.7	.01			527
	600	ISL	5.15	5.10	34.289	27.101	102.5	1.065	.44	6.2							605
	700	ISL	4.79	4.74	34.365	27.201	93.7	1.163	.37	5.2							706
1	782		4.56	4.50	34.413	27.266	88.1	1.237	.31	4.3	109.1	3.43	44.2	.00			788
	800	ISL	4.50	4.44	34.423	27.281	86.8	1.253	.32	4.4							807
	1000	ISL	3.84	3.77	34.491	27.405	75.8	1.416	.54	7.4							1009
1	1041		3.71	3.64	34.495	27.422	74.2	1.447	.63	8.6	126.1	3.43	44.7	.00			1050

RV NEW HORIZON FRONTS LEG II STATION 6 1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 44.9 N	120 50.1 W	15/07/85	2245 GMT		340	06 KT	350 04	2	1014.6 MB	17.2 C	15.6 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	17.98	17.98	33.478	24.112	379.6	.000	5.54	102.3							0
1	2		17.98	17.98	33.478	24.112	379.4	.008	5.54	102.3	2.2	.34	.4	.00	.09	.00	2
	10	ISL	17.97	17.97	33.487	24.122	378.7	.038	5.58	103.0							10
1	12		17.97	17.97	33.489	24.125	378.6	.045	5.60	103.4	1.9	.32	.4	.00	.09	.01	12
	20	ISL	17.26	17.25	33.443	24.260	365.9	.075	5.78	105.2							20
	30	ISL	16.11	16.11	33.378	24.477	345.6	.111	6.00	106.9							30
1	33		15.73	15.73	33.361	24.549	338.8	.121	6.07	107.2	1.9	.34	.3	.00	.14	.02	33
1	43		14.84	14.84	33.335	24.724	322.4	.154	6.14	106.5	2.0	.34	.3	.00	.14	.03	43
	50	ISL	14.57	14.57	33.327	24.777	317.9	.177	6.12	105.5							50
1	53		14.50	14.49	33.324	24.790	316.3	.185	6.11	105.2	2.0	.34	.3	.00	.19	.06	53
1	63		14.12	14.11	33.424	24.947	301.6	.216	5.94	101.6	2.5	.37	.4	.00	.21	.08	63
1	73		13.57	13.56	33.417	25.056	291.5	.246	5.84	98.7	3.0	.43	.9	.04	.23	.09	73
	75	ISL	13.52	13.51	33.445	25.087	288.6	.252	5.73	96.7							76
1	83		13.36	13.35	33.537	25.191	278.9	.274	5.33	89.8	4.9	.56	3.6	.13	.24	.11	83
1	93		12.85	12.83	33.544	25.298	268.8	.301	5.12	85.3	6.4	.68	5.8	.13	.23	.13	93
	100	ISL	12.15	12.13	33.559	25.445	255.1	.321	4.87	80.0							101
1	104		11.82	11.80	33.566	25.513	248.6	.330	4.76	77.6	9.7	.92	10.1	.07	.18	.11	104
1	118		11.32	11.30	33.577	25.614	239.3	.366	4.69	75.7	12.0	1.08	12.8	.04	.12	.11	119
	125	ISL	11.06	11.04	33.589	25.670	234.1	.381	4.61	74.0							126
1	133		10.71	10.70	33.611	25.748	226.7	.401	4.47	71.2	15.3	1.31	16.2	.02	.07	.04	134
	150	ISL	10.00	9.99	33.682	25.926	210.0	.437	3.97	62.2							151
1	158		9.68	9.66	33.723	26.012	201.9	.454	3.70	57.7	23.4	1.63	21.6	.01	.01	.03	159
1	184		8.99	8.97	33.862	26.217	182.7	.504	3.25	49.9	29.9	1.85	25.2	.01	.01	.04	185
	200	ISL	8.67	8.65	33.917	26.326	172.6	.532	3.07	46.9							201
1	209		8.51	8.49	33.956	26.381	167.5	.547	2.99	45.4	34.9	1.99	27.0	.01			210
	250	ISL	7.89	7.87	34.038	26.539	153.1	.613	2.57	38.6							252
	300	ISL	7.29	7.26	34.058	26.640	142.9	.687	2.07	30.6							302
1	310		7.19	7.16	34.069	26.664	141.8	.702	1.97	29.1	53.4	2.48	33.5	.01			312
	400	ISL	6.34	6.30	34.139	26.834	126.4	.822	1.07	15.5							403
1	415		6.23	6.19	34.150	26.857	124.3	.841	.96	13.6	71.9	2.92	38.9	.01			418
	500	ISL	5.82	5.78	34.236	26.977	113.8	.942	.55	7.9							504
1	516		5.76	5.72	34.251	26.996	112.1	.960	.51	7.3	83.4	3.16	41.1	.01			519
	600	ISL	5.39	5.34	34.317	27.094	103.5	1.051	.44	6.2							605
	700	ISL	4.97	4.91	34.379	27.193	94.8	1.150	.36	5.0							706
1	772		4.69	4.62	34.413	27.253	89.5	1.216	.30	4.2	107.5	3.34	44.0	.01			778
	800	ISL	4.58	4.52	34.426	27.274	87.6	1.241	.31	4.3							807
	1000	ISL	3.93	3.86	34.486	27.392	77.2	1.406	.56	7.6							1009
1	1037		3.83	3.75	34.491	27.407	75.9	1.434	.64	8.7	125.8	3.34	44.6	.00			1046

RV NEW HORIZON — FRONTS LEG II — STATION 7 4

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 54.8 N	120 45.3 W	16/07/85	0310 GMT		320	08 KT	330 04	2	1010.2 MB	15.6 C	14.4 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.22	16.22	33.282	24.378	354.3	.000	5.87	104.6							0
1	1		16.22	16.22	33.282	24.378	354.1	.004	5.87	104.6	1.8	.47	.1	.00	.18	.05	1
	10	ISL	16.16	16.16	33.296	24.401	352.1	.035	5.90	105.0							10
1	11		16.16	16.16	33.297	24.403	351.9	.039	5.90	105.1	1.7	.48	.0	.01	.21	.08	11
	20	ISL	16.16	16.16	33.313	24.414	351.2	.070	5.91	105.3							20
	30	ISL	16.17	16.17	33.329	24.426	350.4	.106	5.93	105.6							30
1	32		16.17	16.17	33.332	24.428	350.3	.112	5.93	105.6	1.7	.47	.0	.01	.36	.13	32
1	42		14.95	14.96	33.332	24.699	324.7	.146	6.13	106.6	2.2	.45	.0	.00	.28	.07	42
	50	ISL	14.13	14.12	33.317	24.862	309.3	.172	6.19	105.8							50
1	53		13.95	13.82	33.304	24.914	304.4	.180	6.21	105.5	2.5	.49	.1	.01	.29	.07	53
1	63		12.37	12.36	33.213	25.134	283.6	.209	6.12	100.8	2.9	.66	2.0	.21	.34	.12	63
1	73		12.01	12.00	33.235	25.219	275.7	.237	5.95	97.2	3.6	.79	4.0	.37	.35	.12	73
	75	ISL	12.03	12.02	33.262	25.236	274.2	.244	5.86	95.8							76
1	83		12.09	12.08	33.356	25.298	268.5	.264	5.55	90.9	6.0	.88	6.4	.24	.27	.19	83
1	94		11.57	11.56	33.413	25.440	255.2	.293	5.37	87.0	9.7	1.07	10.0	.07	.19	.07	94
	100	ISL	11.29	11.28	33.446	25.516	248.1	.309	5.16	83.1							101
1	104		11.14	11.13	33.467	25.560	244.0	.318	5.03	80.8	11.3	1.22	12.5	.04	.14	.10	104
1	118		10.43	10.42	33.616	25.801	221.3	.353	4.59	72.7	17.1	1.52	17.8	.01	.05	.06	119
	125	ISL	10.12	10.11	33.653	25.893	213.6	.367	4.27	67.1							126
1	134		9.71	9.70	33.697	25.986	203.9	.386	3.79	59.1	23.0	1.71	20.8	.01	.02	.05	135
	150	ISL	9.21	9.19	33.813	26.159	187.7	.417	3.28	50.7							151
1	159		9.00	8.98	33.875	26.241	180.0	.434	3.10	47.6	31.2	2.00	25.2	.01	.01	.05	160
1	185		8.73	8.71	33.926	26.323	172.6	.479	2.99	45.7	33.8	2.10	26.2	.01	.01	.05	186
	200	ISL	8.46	8.44	33.965	26.396	165.9	.505	2.89	43.8							201
1	210		8.26	8.24	33.991	26.446	161.3	.521	2.81	42.5	38.2	2.17	27.9	.01			211
	250	ISL	7.72	7.69	34.047	26.571	149.9	.583	2.42	36.1							252
	300	ISL	7.21	7.17	34.083	26.673	140.8	.636	1.90	28.1							302
1	313		7.10	7.07	34.096	26.690	139.3	.675	1.76	25.9	55.7	2.67	33.9	.01			315
	400	ISL	6.36	6.34	34.141	26.831	126.8	.790	1.04	15.0							403
1	419		6.26	6.22	34.152	26.855	124.6	.813	.91	13.1	71.9	3.06	38.4	.01			421
	500	ISL	5.88	5.84	34.230	26.964	115.1	.911	.52	7.4							504
1	520		5.81	5.77	34.249	26.989	113.0	.933	.45	6.4	83.9	3.31	40.5	.01			523
	600	ISL	5.42	5.37	34.313	27.087	104.2	1.021	.42	5.9							605
	700	ISL	4.96	4.91	34.380	27.195	94.6	1.120	.37	5.2							706
1	775		4.63	4.57	34.420	27.264	88.4	1.189	.34	4.7	109.2	3.49	43.6	.00			781
	800	ISL	4.54	4.48	34.432	27.283	86.7	1.211	.35	4.8							807
	1000	ISL	3.92	3.86	34.489	27.396	76.8	1.374	.54	7.3							1009
1	1033		3.84	3.78	34.492	27.407	75.9	1.400	.59	8.0	125.4	3.49	44.2	.00			1042

RV NEW HORIZON — FRONTS LEG II — STATION 8 1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 08.9 N	120 36.3 W	16/07/85	0614 GMT		310	11 KT	330 04	2	1013.5 MB	14.4 C	13.9 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.53	16.53	33.266	24.294	362.2	.000	5.77	103.5							0
1	1		16.53	16.53	33.266	24.294	362.1	.004	5.77	103.5	1.5	.41	.3	.00	.13	.06	1
	10	ISL	16.49	16.49	33.265	24.304	361.4	.036	5.83	104.5							10
1	11		16.48	16.48	33.265	24.305	361.3	.040	5.84	104.6	1.5	.41	.3	.00	.14	.04	11
	20	ISL	16.00	16.00	33.250	24.402	352.4	.072	5.96	105.7							20
	30	ISL	15.44	15.47	33.235	24.509	342.4	.107	6.07	106.6							30
1	32		15.37	15.37	33.233	24.529	340.6	.113	6.09	106.7	1.5	.42	.3	.00	.22	.09	32
1	42		13.65	13.65	33.350	24.985	297.3	.145	6.11	103.4	2.8	.46	.7	.03	.29	.11	42
	50	ISL	13.29	13.28	33.341	25.053	291.9	.169	6.03	101.4							50
1	52		13.26	13.25	33.339	25.057	290.8	.174	6.01	100.9	3.1	.52	1.4	.08	.27	.13	52
1	62		12.68	12.67	33.321	25.158	281.4	.203	5.84	96.9	3.9	.64	3.3	.19	.27	.12	62
1	72		12.04	12.03	33.332	25.290	269.0	.230	5.61	91.8	5.2	.82	6.3	.28	.29	.14	72
	75	ISL	11.90	11.89	33.350	25.328	265.4	.239	5.53	90.3							76
1	82		11.70	11.69	33.401	25.406	258.1	.256	5.35	86.9	7.7	.97	9.3	.08	.23	.10	82
1	92		11.40	11.38	33.501	25.540	245.7	.281	4.94	79.8	10.5	1.12	12.0	.04	.17	.11	92
	100	ISL	10.83	10.81	33.520	25.657	234.6	.301	4.65	74.2							101
1	102		10.72	10.70	33.523	25.678	232.6	.305	4.60	73.2	14.0	1.30	14.8	.02	.11	.12	102
1	116		10.15	10.13	33.660	25.884	213.3	.338	4.34	68.5	20.0	1.61	19.9	.01	.03	.06	117
	125	ISL	9.90	9.87	33.687	25.948	207.3	.356	4.06	63.6							126
1	131		9.73	9.71	33.701	25.986	203.8	.369	3.83	59.7	23.1	1.76	21.5	.02	.02	.05	132
	150	ISL	9.36	9.35	33.808	26.130	190.5	.406	3.24	50.1							151
1	156		9.26	9.24	33.844	26.174	186.3	.418	3.09	47.7	29.4	1.99	24.7	.01	.01	.04	157
1	181		8.84	8.82	33.914	26.296	175.1	.463	2.98	45.6	32.8	2.13	26.3	.01	.01	.04	182
	200	ISL	8.55	8.53	33.955	26.373	168.2	.495	2.99	45.5							201
1	206		8.47	8.45	33.966	26.395	166.2	.505	2.99	45.4	35.4	2.17	27.1	.01			207
	250	ISL	7.87	7.84	34.029	26.534	153.5	.576	2.59	38.8							252
	300	ISL	7.28	7.25	34.081	26.660	142.1	.649	1.93	28.5							302
1	304		7.24	7.21	34.084	26.669	141.3	.655	1.86	27.5	54.3	2.67	33.6	.01			306
	400	ISL	6.46	6.43	34.178	26.848	125.2	.793	.88	12.8							403
1	406		6.42	6.38	34.183	26.858	124.3	.791	.83	12.0	70.8	3.11	38.4	.00			409
	500	ISL	5.73	5.69	34.227	26.981	113.3	.902	.52	7.5							504
1	504		5.70	5.66	34.229	26.985	112.9	.906	.52	7.4	83.5	3.35	41.1	.00			507
	600	ISL	5.24	5.19	34.294	27.094	103.3	1.011	.43	6.1							605
	700	ISL	4.88	4.82	34.362	27.190	94.9	1.110	.34	4.7							706
1	753		4.73	4.67	34.397	27.235	91.1	1.159	.29	4.0	106.4	3.54	43.8	.00			759
	800	ISL	4.57	4.50	34.418	27.270	87.9	1.201	.30	4.1							807
	1000	ISL	3.93	3.86	34.479	27.386	77.7	1.367	.52	7.1							1009
1	1016		3.89	3.81	34.481	27.393	77.2	1.379	.55	7.5	124.6	3.53	44.6	.00			1024

RV NEW HORIZON FRONTS LEG II STATION 9 4

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 20.8 N	120 31.2 W	16/07/85	1115 GMT			330 03	2	1013.2 MB	14.4 C	13.9 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.60	16.60	33.263	24.276	363.8	.000	5.76	103.4							0
1	1		16.60	16.60	33.263	24.276	363.8	.004	5.76	103.4	1.4	.43	.4	.00	.14	.03	1
	10	ISL	16.58	16.58	33.261	24.279	363.7	.036	5.80	104.1							10
1	11		16.58	16.58	33.261	24.279	363.7	.040	5.81	104.3	1.4	.42	.4	.00	.13	.03	11
	20	ISL	15.85	15.84	33.302	24.478	345.2	.072	5.96	105.5							20
	30	ISL	14.86	14.85	33.344	24.728	321.6	.105	6.11	105.9							30
1	32		14.65	14.64	33.352	24.779	316.8	.111	6.13	105.9	2.2	.49	.4	.00	.19	.03	32
1	42		14.04	14.04	33.325	24.886	306.8	.142	6.10	104.1	2.2	.43	.4	.00	.22	.05	42
	50	ISL	13.45	13.44	33.305	24.993	296.9	.167	6.08	102.5							50
1	52		13.30	13.30	33.301	25.019	294.4	.172	6.08	102.2	2.7	.50	1.0	.05	.22	.07	52
1	62		12.40	12.40	33.310	25.202	277.1	.201	5.84	96.3	4.2	.72	4.4	.32	.22	.13	62
1	72		12.07	12.06	33.314	25.269	271.0	.228	5.62	92.0	4.9	.75	5.2	.16	.26	.14	72
	75	ISL	11.99	11.98	33.317	25.287	269.4	.237	5.57	91.0							76
1	83		11.81	11.80	33.346	25.343	264.2	.257	5.43	88.4	6.5	.85	7.0	.09	.20	.13	83
1	93		11.57	11.56	33.468	25.482	251.2	.283	5.08	82.4	9.0	1.07	10.8	.04	.13	.16	93
	100	ISL	11.36	11.35	33.502	25.547	245.2	.301	4.89	78.9							101
1	103		11.25	11.24	33.510	25.569	243.1	.307	4.82	77.7	11.1	1.18	12.7	.03	.09	.10	103
1	113		10.53	10.52	33.645	25.806	220.8	.344	4.20	66.7	16.3	1.36	16.3	.03	.08	.09	113
	125	ISL	10.28	10.26	33.681	25.878	214.1	.359	4.05	64.0							126
1	133		9.99	9.97	33.720	25.958	206.6	.376	3.89	61.0	20.4	1.56	19.2	.02	.04	.04	134
	150	ISL	9.50	9.48	33.810	26.110	192.4	.409	3.43	53.2							151
1	159		9.27	9.25	33.855	26.181	185.7	.427	3.20	49.5	28.3	1.91	24.2	.01	.01	.05	160
1	185		8.79	8.77	33.936	26.322	172.7	.473	3.00	45.9	32.7	2.06	26.4	.01	.00	.02	186
	200	ISL	8.57	8.55	33.976	26.387	166.8	.499	2.91	44.3							201
1	209		8.45	8.43	33.997	26.422	163.6	.513	2.85	43.3	36.6	2.17	27.8	.01			210
	250	ISL	7.93	7.90	34.056	26.562	150.8	.578	2.37	35.5							252
	300	ISL	7.16	7.13	34.100	26.692	139.0	.650	1.72	25.4							302
1	311		7.03	7.00	34.106	26.715	136.9	.666	1.57	23.1	57.5	2.76	35.2	.01			313
	400	ISL	6.50	6.46	34.184	26.848	125.2	.782	.79	11.4							403
1	419		6.43	6.42				.805	.67	9.7	72.1	3.14	38.9	.01			421
	500	ISL	6.04	6.00	34.271	26.977	114.1	.902	.42	6.0							504
1	521		5.94	5.90	34.288	27.003	111.8	.926	.39	5.6	82.3	3.32	41.0	.01			525
	600	ISL	5.58	5.53	34.330	27.082	105.0	1.011	.36	5.1							605
	700	ISL	5.15	5.09	34.370	27.166	97.6	1.113	.32	4.5							706
1	780		4.82	4.76	34.394	27.222	92.7	1.189	.29	4.1	104.9	3.52	43.6	.00			786
	800	ISL	4.75	4.68	34.401	27.237	91.4	1.207	.30	4.1							807
	1000	ISL	4.07	3.99	34.470	27.365	80.0	1.379	.48	6.6							1009
1	1043		3.94	3.86	34.483	27.389	77.8	1.413	.55	7.5	123.0	3.51	44.6	.00			1052

RV NEW HORIZON FRONTS LEG II STATION 10 1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 40.1 N	120 20.0 W	16/07/85	1442 GMT			340 04	2	1014.2 MB	14.4 C	13.9 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.25	16.25	33.288	24.375	354.3	.000	5.83	104.0							0
1	1		16.25	16.25	33.288	24.375	354.4	.004	5.83	104.0	1.6	.38	.3	.01	.20	.12	1
	10	ISL	16.25	16.25	33.286	24.374	354.7	.035	5.84	104.1							10
1	11		16.25	16.25	33.286	24.373	354.8	.039	5.84	104.2	1.6	.39	.3	.01	.20	.10	11
	20	ISL	15.35	15.35	33.229	24.532	339.9	.070	6.09	106.7							20
	30	ISL	14.08	14.08	33.197	24.779	316.7	.103	6.30	107.5							30
1	33		13.67	13.66	33.195	24.863	308.8	.112	6.35	107.4	2.0	.43	.3	.01	.19	.08	33
1	43		12.77	12.77	33.264	25.095	286.9	.142	6.14	102.0	3.0	.52	1.6	.11	.26	.09	43
	50	ISL	12.55	12.54	33.296	25.164	280.5	.162	5.95	98.5							50
1	54		12.48	12.48	33.310	25.187	278.4	.173	5.84	96.5	4.1	.62	3.7	.25	.30	.15	54
1	64		12.18	12.17	33.367	25.289	268.9	.200	5.47	89.8	5.7	.70	5.6	.16	.32	.13	64
1	75		11.72	11.71	33.404	25.404	258.2	.229	5.41	88.0	7.3	.92	9.3	.05	.22	.11	75
1	85		11.26	11.25	33.409	25.492	249.9	.254	5.28	85.0	9.4	1.07	11.6	.03	.13	.12	85
1	96		10.63	10.62	33.484	25.662	234.0	.280	4.86	77.2	14.0	1.28	15.4	.02	.05	.07	96
	100	ISL	10.60	10.58	33.537	25.710	229.5	.291	4.61	73.2							101
1	104		10.55	10.54	33.591	25.760	224.9	.303	4.31	68.4	16.0	1.37	16.5	.02	.05	.06	106
1	121		10.15	10.13	33.680	25.899	212.0	.338	3.92	61.7	19.9	1.52	19.2	.01	.03	.05	122
	125	ISL	10.07	10.05	33.696	25.925	209.6	.346	3.87	60.9							126
1	137		9.79	9.77	33.742	26.008	201.8	.371	3.75	58.6	22.4	1.62	20.8	.01	.02	.03	138
	150	ISL	9.43	9.41	33.785	26.101	193.2	.396	3.56	55.2							151
1	163		9.10	9.09				.421	3.37	51.9	28.5	1.85	24.1	.01	.01	.07	164
1	189		8.88	8.86	33.911	26.288	176.1	.468	3.19	48.9	31.0	1.95	25.4	.01	.00	.03	190
	200	ISL	8.69	8.67	33.949	26.347	170.7	.487	3.05	46.5							201
1	215		8.42	8.39	33.996	26.427	163.3	.511	2.83	42.9	36.5	2.10	27.9	.01			216
	250	ISL	7.88	7.86	34.050	26.549	152.1	.567	2.40	36.0							252
	300	ISL	7.25	7.22	34.088	26.671	141.1	.640	1.86	27.4							302
1	318		7.05	7.02	34.089	26.698	138.5	.665	1.68	24.7	55.7	2.66	36.7	.01			320
	400	ISL	6.29	6.25	34.162	26.858	124.1	.773	.91	13.1							403
1	425		6.11	6.07	34.182	26.897	120.6	.804	.72	10.4	75.1	3.10	39.7	.01			428
	500	ISL	5.76	5.72	34.234	26.983	113.2	.891	.47	6.7							504
1	527		5.46	5.42	34.251	27.009	111.0	.922	.43	6.1	86.4	3.28	41.8	.01			531
	600	ISL	5.35	5.30	34.304	27.089	104.0	1.000	.40	5.7							605
	700	ISL	4.94	4.88	34.369	27.188	95.2	1.100	.36	5.1							706
1	788		4.61	4.55	34.419	27.266	88.3	1.180	.33	4.6	109.5	3.46	44.6	.01			794
	800	ISL	4.57	4.51	34.425	27.275	87.6	1.191	.33	4.6							807
	1000	ISL	3.99	3.92	34.483	27.383	78.1	1.357	.52	7.1							1009
1	1054		3.87	3.79	34.488	27.400	76.7	1.398	.61	8.3	125.0	3.48	44.8	.01			1063

RV NEW HORIZON FRONTS LEG II STATION 10 11

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 40.0 N	120 20.5 W	17/07/85	1006 GMT				310 03	2	1013.9 MB	15.0 C	13.9 C	8/8	ST

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.53	16.53	33.286	24.310	360.6	.000	5.80	104.0							0
1	2		16.53	16.53	33.286	24.310	360.6	.007	5.80	104.0	1.7	.44	.2	.01	.18	.05	2
	10	ISL	16.52	16.52	33.284	24.311	360.7	.036	5.85	104.9							10
1	12		16.52	16.52	33.284	24.311	360.8	.043	5.87	105.2	1.6	.45	.2	.01	.18	.05	12
	20	ISL	15.70	15.70	33.263	24.481	344.8	.072	6.03	106.4							20
	30	ISL	14.37	14.37	33.239	24.750	319.4	.105	6.22	106.8							30
1	33		13.92	13.92	33.234	24.840	310.9	.114	6.27	106.7	2.1	.46	.2	.00	.28	.06	33
1	43		12.85	12.84	33.215	25.042	291.9	.144	6.30	104.8	2.9	.58	1.0	.06	.28	.07	43
	50	ISL	12.72	12.72	33.255	25.097	286.9	.165	6.20	102.9							50
1	54		12.66	12.65	33.263	25.116	285.1	.175	6.13	101.6	3.2	.65	2.3	.17	.32	.08	54
1	65		12.19	12.18	33.303	25.238	273.8	.206	5.94	97.5	4.6	.79	4.8	.34	.33	.10	65
1	75		11.84	11.83	33.412	25.388	259.7	.232	5.37	87.6	7.7	.97	8.9	.13	.24	.12	75
1	85		10.99	10.98	33.431	25.558	243.7	.258	5.09	81.5	11.6	1.22	12.9	.03	.08	.08	85
1	96		10.43	10.42	33.521	25.726	227.9	.283	4.68	74.1	15.9	1.43	16.4	.02	.04	.06	96
	100	ISL	10.21	10.20	33.567	25.800	221.9	.293	4.45	70.2							101
1	106		9.97	9.96	33.624	25.885	212.9	.305	4.19	65.5	21.0	1.64	20.4	.01	.02	.06	106
1	121		9.73	9.72	33.751	26.024	200.0	.338	3.71	57.9	23.3	1.66	21.0	.01	.02	.06	122
	125	ISL	9.60	9.58	33.780	26.069	195.8	.345	3.61	56.1							126
1	136		9.15	9.13	33.862	26.207	182.8	.367	3.32	51.2	28.7	1.90	24.2	.01	.01	.02	137
	150	ISL	8.94	8.92	33.927	26.306	173.6	.391	3.11	47.6							151
1	163		8.65	8.63	33.967	26.367	168.0	.413	2.97	45.3	34.6	2.11	26.8	.01	.00	.02	164
1	188		8.35	8.33	34.019	26.454	160.2	.454	2.72	41.2	38.6	2.22	28.2	.00	.00	.03	189
	200	ISL	8.19	8.17	34.017	26.476	158.0	.473	2.72	41.1							201
1	214		8.01	7.99	34.014	26.501	156.0	.495	2.73	41.0	40.8	2.29	29.1	.01			215
	250	ISL	7.60	7.57	34.039	26.582	148.8	.550	2.40	35.7							252
	300	ISL	7.10	7.07	34.091	26.693	138.8	.622	1.77	26.1							302
1	316		6.96	6.93	34.111	26.728	135.6	.644	1.53	22.5	59.0	2.77	35.3	.00			318
	400	ISL	6.28	6.25	34.178	26.872	122.8	.753	.83	11.9							403
1	422		6.12	6.09	34.193	26.904	120.0	.780	.69	9.9	75.5	3.17	39.8	.00			425
	500	ISL	5.66	5.62	34.235	26.996	111.9	.870	.44	6.3							504
1	523		5.54	5.50	34.246	27.019	109.8	.896	.40	5.7	87.7	3.36	41.9	.00			527
	600	ISL	5.22	5.17	34.299	27.100	102.8	.977	.37	5.2							605
	700	ISL	4.57	4.51	34.365	27.193	94.6	1.076	.33	4.6							706
1	784		4.44	4.57	34.417	27.261	88.8	1.153	.29	4.0	108.8	3.54	44.1	.00			790
	800	ISL	4.59	4.52	34.424	27.273	87.8	1.167	.30	4.1							807
	1000	ISL	4.00	3.92	34.484	27.383	78.1	1.333	.48	6.6							1009
1	1053		3.46	3.38	34.490	27.403	76.5	1.374	.57	7.8	124.7	3.53	45.9	.00			1062

RV NEW HORIZON FRONTS LEG II STATION 11 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 21.6 N	120 32.0 W	17/07/85	1413 GMT		300	05 KT	310 03	2	1015.2 MB	15.6 C	13.9 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.96	16.96	33.262	24.192	371.8	.000	5.70	103.1							0
1	1		16.96	16.96	33.262	24.192	371.8	.004	5.70	103.1	1.6	.37	.3	.00	.13	.01	1
	10	ISL	16.96	16.95	33.260	24.191	372.1	.037	5.71	103.2							10
1	11		16.96	16.95	33.260	24.191	372.2	.041	5.71	103.2	1.6	.38	.3	.00	.12	.02	11
	20	ISL	16.13	16.12	33.318	24.427	350.0	.073	5.87	104.4							20
	30	ISL	14.92	14.91	33.365	24.732	321.2	.107	6.03	104.8							30
1	32		14.65	14.65	33.373	24.794	315.3	.113	6.06	104.7	2.5	.37	.3	.00	.14	.03	32
1	42		13.70	13.70	33.296	24.934	302.2	.144	6.03	102.2	2.6	.39	.3	.00	.20	.13	42
	50	ISL	13.37	13.37	33.348	25.040	292.5	.168	6.02	101.4							50
1	52		13.33	13.32	33.361	25.059	290.5	.173	6.02	101.2	3.2	.54	2.1	.11	.26	.09	52
1	63		12.78	12.77	33.342	25.155	281.7	.205	5.97	99.2	3.7	.63	3.5	.21	.29	.09	63
1	73		12.01	12.00	33.305	25.274	270.5	.232	5.71	93.4	4.7	.71	5.2	.15	.27	.12	73
	75	ISL	11.91	11.91	33.312	25.297	268.4	.238	5.64	92.1							76
1	83		11.74	11.73	33.357	25.365	262.2	.258	5.43	88.3	6.6	.83	7.4	.09	.21	.11	83
1	93		11.65	11.64	33.428	25.436	255.6	.284	5.18	84.1	8.3	.95	9.2	.06	.18	.11	93
	100	ISL	11.66	11.65	33.449	25.450	254.5	.303	5.12	83.2							101
1	104		11.67	11.66	33.461	25.460	253.6	.312	5.09	82.7	8.8	.99	9.7	.05	.16	.10	104
1	119		11.07	11.05	33.578	25.660	234.8	.349	4.54	72.9	13.3	1.23	14.2	.03	.10	.12	119
	125	ISL	10.69	10.68	33.635	25.770	224.5	.364	4.32	68.7							126
1	133		10.22	10.21	33.703	25.905	211.7	.382	4.05	63.9	18.9	1.46	17.8	.02	.05	.08	134
	150	ISL	9.60	9.58	33.794	26.080	195.3	.416	3.59	55.9							151
1	159		9.37	9.35	33.828	26.155	189.2	.433	3.39	52.5	26.6	1.81	23.2	.02	.01	.03	160
1	185		8.99	8.97	33.905	26.266	178.1	.481	3.10	47.6	30.7	2.00	25.5	.01	.00	.02	186
	200	ISL	8.71	8.69	33.948	26.344	171.0	.507	3.05	46.6							201
1	210		8.52	8.50	33.974	26.393	166.6	.524	3.03	46.1	34.7	2.09	26.9	.01			211
	250	ISL	7.90	7.88	34.038	26.537	153.2	.588	2.60	39.0							252
	300	ISL	7.30	7.27	34.090	26.665	141.7	.661	1.93	28.5							302
1	312		7.18	7.15	34.097	26.687	139.7	.679	1.74	25.7	54.4	2.67	34.4	.00			314
	400	ISL	6.60	6.56	34.205	26.852	124.9	.795	.86	12.6							403
1	420		6.51	6.47	34.227	26.882	122.4	.820	.71	10.3	70.7	3.14	38.6	.01			423
	500	ISL	6.14	6.10	34.277	26.969	114.9	.914	.44	6.4							504
1	522		6.05	6.00	34.287	26.989	113.2	.940	.41	5.9	80.8	3.34	40.6	.00			526
	600	ISL	5.67	5.62	34.323	27.065	106.6	1.025	.37	5.3							605
	700	ISL	5.20	5.14	34.365	27.155	98.7	1.128	.32	4.5							706
1	785		4.82	4.76	34.395	27.223	93.6	1.209	.28	3.9	104.2	3.53	44.0	.00			791
	800	ISL	4.76	4.70	34.401	27.235	91.6	1.223	.28	4.0							807
	1000	ISL	4.07	4.00	34.471	27.366	79.9	1.395	.46	6.4							1009
1	1053		3.93	3.85	34.488	27.395	77.4	1.437	.55	7.5		3.56	44.8	.00			1062

RV NEW HORIZON — FRONTS LEG II — STATION 12 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 09.8 N	120 37.3 W	17/07/85	1738 GMT			310 03	2	1015.6 MB	16.7 C	13.9 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.78	16.78	33.281	24.266	364.7	.000	5.78	104.0							0
1	1		16.78	16.78	33.281	24.266	364.7	.004	5.78	104.0	1.6	.43	.3	.00	.15	.04	1
	10	ISL	16.56	16.56	33.288	24.304	361.4	.036	5.83	104.7							10
1	11		16.54	16.54	33.290	24.311	360.7	.040	5.84	104.8	1.6	.42	.3	.00	.19	.07	11
	20	ISL	16.28	16.28	33.382	24.441	348.7	.072	5.90	105.4							20
	30	ISL	15.62	15.62	33.425	24.623	331.6	.106	6.02	106.1							30
1	32		15.45	15.45	33.426	24.662	328.0	.112	6.05	106.3	1.6	.42	.3	.01	.21	.06	32
1	42	●	14.06	14.06	33.260	24.832	312.0	.144	6.28	107.2	1.8	.43	.3	.00	.17	.08	42
	50	ISL	13.33	13.33	33.244	24.969	299.5	.169	6.26	105.3							50
1	52		13.20	13.19	33.241	24.993	296.8	.174	6.26	104.9	2.2	.51	.6	.03	.30	.10	52
1	63		12.33	12.33	33.237	25.159	281.3	.206	6.00	98.7	3.5	.64	2.8	.23	.26	.12	63
1	73		12.25	12.24	33.364	25.274	270.6	.233	5.57	91.6	5.2	.81	6.1	.25	.23	.15	73
	75	ISL	12.22	12.21	33.391	25.300	268.2	.240	5.46	89.8							76
1	83		12.13	12.12	33.483	25.389	259.9	.260	5.15	84.5	7.7	.92	8.5	.13	.18	.16	83
1	93		11.43	11.42	33.481	25.517	247.8	.285	4.96	80.2	9.9	1.11	11.5	.06	.13	.09	93
	100	ISL	11.15	11.14	33.498	25.581	241.9	.303	4.77	76.7							101
1	104		11.05	11.04	33.511	25.610	239.2	.312	4.69	75.2	12.2	1.24	13.5	.04	.10	.10	104
1	114		10.48	10.47	33.618	25.793	222.0	.346	4.63	73.4	23.1	1.74	22.1	.01	.05	.08	119
	125	ISL	10.12	10.10	33.664	25.892	212.7	.340	4.28	67.4							126
1	133		9.66	9.64	33.723	26.015	201.1	.378	3.77	58.7	22.9	1.77	22.3	.01	.01	.05	134
	150	ISL	9.18	9.16	33.843	26.187	185.0	.410	3.16	48.8							151
1	159		9.01	8.99	33.897	26.256	178.5	.426	2.98	45.8	30.4	2.04	26.3	.02	.00	.05	160
1	185		8.45	8.43	33.964	26.396	165.6	.471	2.99	45.4	34.2	2.15	27.3	.02	.00	.03	186
	200	ISL	8.27	8.25	33.994	26.448	160.9	.495	2.88	43.6							201
1	210		8.17	8.15	34.011	26.475	158.4	.511	2.79	42.1	38.2	2.27	28.5	.01			211
	250	ISL	7.70	7.68	34.050	26.576	149.4	.573	2.39	35.7							252
	300	ISL	7.15	7.12	34.080	26.678	140.3	.645	1.88	27.7							302
1	312		7.02	6.99	34.084	26.698	138.4	.662	1.75	25.7	54.8	2.74	34.6	.01			314
	400	ISL	6.28	6.25	34.154	26.853	124.6	.778	.96	13.8							403
1	417		6.16	6.12	34.167	26.879	122.3	.799	.83	12.0	71.8	3.15	39.3	.01			420
	500	ISL	5.67	5.63	34.219	26.982	113.1	.896	.53	7.5							504
1	519		5.59	5.53	34.230	27.002	111.3	.917	.49	7.0	83.1	3.36	41.5	.01			522
	600	ISL	5.22	5.17	34.287	27.091	103.6	1.005	.43	6.0							605
	700	ISL	4.85	4.80	34.353	27.186	95.3	1.104	.35	4.9							706
1	774		4.63	4.57	34.397	27.246	90.1	1.173	.29	4.0	104.8	3.56	45.0	.01			780
	800	ISL	4.55	4.49	34.409	27.265	88.4	1.196	.29	4.1							807
	1000	ISL	4.01	3.93	34.477	27.377	78.7	1.363	.48	6.6							1009
1	1042		3.91	3.83	34.495	27.394	77.4	1.396	.56	7.7	120.1	3.59	44.8	.00			1051

RV NEW HORIZON — FRONTS LEG II — STATION 13 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 54.6 N	120 44.6 W	17/07/85	2226 GMT		340 07 KT	310 03	2	1013.9 MB	19.4 C	16.1 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	17.14	17.14	33.271	24.155	376.6	.000	5.77	104.7							0
1	2		17.14	17.14	33.271	24.155	375.3	.007	5.77	104.7	1.5	.31	.2	.00	.11	.02	2
	10	ISL	16.75	16.75	33.265	24.242	367.2	.037	5.80	104.5							10
1	12		16.62	16.62	33.262	24.271	364.6	.044	5.81	104.4	1.6	.31	.2	.00	.12	.02	12
	20	ISL	15.72	15.72	33.219	24.442	349.5	.073	6.05	106.7							20
	30	ISL	14.60	14.60	33.215	24.683	326.7	.107	6.30	108.6							30
1	33		14.29	14.28	33.208	24.745	320.0	.116	6.36	109.0	1.6	.34	.2	.00	.16	.06	33
1	44		13.72	13.72	33.315	24.944	301.3	.150	6.23	105.6	2.5	.38	.5	.02	.24	.13	44
	50	ISL	13.59	13.57	33.395	25.036	292.8	.168	5.94	100.4							50
1	53		13.46	13.46	33.411	25.072	289.4	.177	5.83	98.4	3.5	.45	1.3	.07	.28	.19	53
1	63		12.20	12.19	33.243	25.189	278.3	.205	6.01	98.6	3.6	.64	3.6	.34	.37	.09	63
1	73		11.87	11.86	33.258	25.263	271.5	.232	5.85	95.3	4.2	.75	5.6	.33	.43	.10	73
	75	ISL	11.81	11.80	33.262	25.277	270.3	.238	5.81	94.6							76
1	83		11.66	11.65	33.285	25.323	266.0	.259	5.68	92.2	5.6	.85	7.4	.14	.25	.07	83
1	93		11.47	11.45	33.345	25.406	259.4	.285	5.48	88.6	7.6	.99	9.5	.10	.21	.06	93
	100	ISL	11.38	11.37	33.410	25.472	252.3	.304	5.32	85.9							101
1	104		11.33	11.32	33.444	25.507	249.0	.313	5.23	84.3	9.8	1.11	11.9	.07	.16	.11	104
1	119		10.86	10.85	33.595	25.709	230.1	.349	4.59	73.3	14.2	1.35	16.0	.05	.08	.06	119
	125	ISL	10.54	10.52	33.636	25.798	221.7	.363	4.29	68.1							126
1	133		10.11	10.10	33.680	25.906	211.6	.382	3.93	61.8	19.9	1.59	19.6	.03	.04	.04	134
	150	ISL	9.59	9.57	33.775	26.068	196.5	.415	3.40	52.9							151
1	158		9.40	9.39	33.817	26.130	190.6	.431	3.22	49.9	27.0	1.87	23.9	.01	.01	.12	159
1	183		8.91	8.89	33.902	26.276	177.1	.477	3.04	46.6	30.8	2.01	25.7	.01	.01	.03	184
	200	ISL	8.64	8.62	33.946	26.353	170.1	.506	2.97	45.3							201
1	208		8.53	8.50	33.963	26.384	167.2	.520	2.94	44.7	34.0	2.09	27.0	.01			209
	250	ISL	7.89	7.86	34.021	26.525	154.3	.587	2.57	38.5							252
	300	ISL	7.22	7.19	34.061	26.653	142.6	.662	2.02	29.8							302
1	307		7.13	7.10	34.065	26.668	141.3	.672	1.93	28.4	52.3	2.59	33.4	.01			309
	400	ISL	6.35	6.31	34.147	26.839	126.0	.796	1.01	14.6							403
1	411		6.27	6.24	34.156	26.856	124.5	.810	.91	13.1	69.4	3.07	38.7	.01			414
	500	ISL	5.75	5.71	34.246	26.993	112.3	.915	.46	6.5							504
1	511		5.70	5.66	34.256	27.008	110.9	.927	.42	6.0	83.2	3.32	41.3	.01			514
	600	ISL	5.29	5.24	34.322	27.111	101.8	1.022	.37	5.2							605
	700	ISL	4.89	4.83	34.381	27.204	93.7	1.120	.31	4.3							706
1	764		4.67	4.61	34.409	27.251	89.5	1.179	.27	3.8	104.9	3.52	44.2	.00			770
	800	ISL	4.54	4.48	34.424	27.278	87.2	1.210	.28	3.9							807
	1000	ISL	3.91	3.84	34.481	27.390	77.3	1.375	.50	6.8							1009
1	1029		3.44	3.76	34.485	27.401	76.3	1.397	.55	7.5	121.7	3.52	44.5	.00			1037

RV NEW HORIZON — FRONTS LEG II — STATION 14 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 44.7 N	120 50.6 W	18/07/85	0124 GMT			320 03	2	1013.5 MB	18.9 C	16.1 C	8/8 SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	17.46	17.46	33.261	24.071	384.4	.000	5.72	104.5							0
1	1		17.46	17.46	33.261	24.071	383.3	.004	5.72	104.5	1.8	.43	.3	.00	.13	.02	1
	10	ISL	16.99	16.99	33.239	24.166	374.6	.038	5.74	103.8							10
1	11		16.95	16.95	33.237	24.175	373.7	.042	5.74	103.8	1.7	.42	.3	.00	.11	.02	11
	20	ISL	16.66	16.65	33.243	24.248	367.1	.075	5.80	104.3							20
	30	ISL	16.33	16.33	33.249	24.328	359.8	.111	5.87	104.8							30
1	32		16.27	16.27	33.251	24.343	358.4	.118	5.88	104.9	1.6	.42	.3	.00	.18	.03	32
1	43		14.49	14.48	33.271	24.751	319.7	.155	6.30	108.4	1.8	.43	.3	.00	.12	.04	43
	50	ISL	13.96	13.95	33.267	24.859	309.7	.178	6.30	107.3							50
1	53		13.83	13.83	33.260	24.879	307.7	.186	6.30	107.0	2.1	.43	.3	.00	.17	.06	53
1	64		13.35	13.34	33.222	24.949	301.4	.220	6.32	106.2	2.4	.47	.4	.01	.19	.08	64
1	74		13.20	13.19	33.380	25.101	287.2	.249	5.84	98.0	3.5	.56	2.2	.11	.24	.13	74
	75	ISL	13.20	13.19	33.393	25.111	286.3	.253	5.78	96.9							76
1	84		13.21	13.20	33.475	25.173	280.6	.277	5.42	91.0	4.6	.62	1.5	.12	.22	.15	84
1	95		12.50	12.49	33.492	25.324	266.4	.307	5.14	85.0	6.8	.80	3.7	.13	.19	.14	95
	100	ISL	12.27	12.26	33.515	25.387	260.5	.322	4.99	82.2							101
1	105		12.09	12.08	33.535	25.437	255.8	.333	4.88	80.0	8.2	.91	8.8	.12	.19	.16	105
1	119		11.33	11.31	33.572	25.608	239.8	.370	4.63	74.7	11.8	1.11	12.5	.06	.11	.12	120
	125	ISL	11.04	11.03	33.573	25.659	235.3	.383	4.56	73.1							126
1	136		10.48	10.46	33.574	25.760	225.6	.410	4.37	69.2	15.4	1.34	16.4	.02	.06	.08	137
	150	ISL	9.82	9.80	33.669	25.946	208.0	.439	3.91	61.0							151
1	161		9.36	9.35	33.767	26.098	193.8	.462	3.50	54.2	23.6	1.73	23.0	.01	.01	.04	162
1	166		8.89	8.87	33.899	26.276	177.1	.508	3.01	46.1	30.7	1.96	26.2	.00	.00	.04	167
	200	ISL	8.66	8.64	33.949	26.351	170.2	.532	2.89	44.1							201
1	212		8.48	8.46	33.981	26.405	165.3	.552	2.82	42.9	35.7	2.08	27.8	.00			213
	250	ISL	7.93	7.91	34.039	26.533	153.7	.613	2.49	37.3							252
	300	ISL	7.31	7.28	34.073	26.650	142.0	.687	2.02	29.9							302
1	314		7.15	7.12	34.074	26.672	141.0	.707	1.88	27.7	52.6	2.52	33.9	.01			316
	400	ISL	6.34	6.31	34.133	26.829	127.0	.822	1.07	15.5							403
1	421		6.19	6.15	34.148	26.861	124.1	.849	.89	12.8	69.9	2.97	39.3	.01			424
	500	ISL	5.81	5.77	34.238	26.980	113.6	.942	.46	6.6							504
1	522		5.73	5.68	34.262	27.009	111.0	.966	.38	5.4	81.8	3.24	41.5	.01			525
	600	ISL	5.47	5.42	34.322	27.101	102.9	1.050	.36	5.0							605
	700	ISL	4.94	4.89	34.381	27.198	94.3	1.149	.33	4.6							706
1	781		4.62	4.56	34.413	27.260	88.8	1.223	.30	4.2	105.5	3.39	44.3	.00			787
	800	ISL	4.55	4.49	34.421	27.274	87.5	1.240	.31	4.3							807
	1000	ISL	3.90	3.84	34.484	27.392	77.2	1.404	.51	7.0							1009
1	1051		3.78	3.71	34.492	27.412	75.4	1.444	.60	8.2	122.4	3.39	44.9	.00			1060

RV NEW HORIZON — FRONTS LEG II — STATION 15 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT TYPE
31 34.9 N	120 55.8 W	19/07/85	0409 GMT			320 03	2	1010.5 MB	16.7 C	15.0 C	8/8 SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.00	18.00	33.337	24.000	390.7	.000	5.65	104.3							0
1	1		18.00	18.00	33.337	24.000	390.0	.004	5.65	104.3	2.2	.36	.4	.00	.09	.01	1
	10	ISL	18.12	18.12	33.458	24.062	384.5	.039	5.59	103.6							10
1	11		18.13	18.13	33.467	24.068	383.9	.042	5.59	103.5	2.3	.37	.4	.00	.08	.01	11
	20	ISL	18.19	18.18	33.542	24.117	379.6	.077	5.57	103.2							20
	30	ISL	18.21	18.20	33.624	24.171	374.8	.115	5.54	102.9							30
1	32		18.21	18.21	33.640	24.181	373.9	.122	5.54	102.9	2.6	.33	.4	.00	.09	.01	32
1	42		16.39	16.38	33.502	24.509	342.9	.157	5.93	106.2	2.7	.34	.4	.00	.12	.03	42
	50	ISL	15.54	15.54	33.446	24.657	329.0	.185	6.00	105.6							50
1	53		15.33	15.32	33.428	24.691	325.8	.194	6.02	105.5	2.6	.36	.4	.00			53
1	64		14.48	14.47	33.326	24.795	316.1	.229	6.08	104.7	2.6	.38	.4	.00			64
1	74		14.01	14.00	33.302	24.876	308.6	.260	6.03	103.8	2.6	.40	.4	.00	.18	.07	74
	75	ISL	13.95	13.94	33.302	24.889	307.6	.264	6.03	103.7							76
1	85		13.51	13.50	33.304	24.981	299.9	.294	6.04	103.9	2.8	.46	.6	.04	.32	.18	85
1	95		12.98	12.97	33.334	25.100	289.9	.323	5.84	97.5	3.9	.60	2.8	.29	.26	.29	95
	100	ISL	12.84	12.82	33.350	25.150	285.2	.338	5.80	96.4							101
1	104		12.65	12.64	33.368	25.200	279.5	.354	5.71	94.7	5.0	.69	5.0	.20	.24	.22	106
1	120		11.41	11.39	33.465	25.507	249.4	.493	4.88	78.8	10.4	1.04	11.1	.01	.10	.10	121
	125	ISL	11.17	11.16	33.502	25.580	242.6	.404	4.73	76.0							126
1	136		10.74	10.72	33.596	25.733	229.2	.431	4.43	70.6	14.6	1.24	14.8	.01	.05	.07	137
	150	ISL	10.25	10.23	33.661	25.867	217.6	.461	4.12	66.9							151
1	162		9.85	9.83	33.707	25.970	208.0	.487	3.87	60.5	21.2	1.55	19.7	.01	.01	.03	163
1	186		9.08	9.06	33.841	26.218	187.9	.537	3.42	52.6	28.2	1.79	23.8	.00	.00	.02	189
	200	ISL	8.74	8.74	33.916	26.311	179.1	.559	3.29	50.2							201
1	214		8.43	8.41	33.970	26.405	171.4	.582	3.15	47.8	34.3	1.98	26.5	.00			215
	250	ISL	7.73	7.72	34.038	26.555	159.5	.639	2.71	40.6							252
	300	ISL	7.11	7.08	34.081	26.661	150.3	.717	2.11	31.0							302
1	317		6.93	6.90	34.097	26.697	147.6	.736	1.90	27.9	54.8	2.54	34.1	.00			319
	400	ISL	6.33	6.29	34.115	26.844	135.3	.845	1.11	16.0							403
1	427		5.93	5.89	34.130	26.979	126.1	.927	.92	13.2	73.3	2.97	39.7	.00			428
	500	ISL	5.56	5.52	34.206	26.985	112.7	.966	.57	8.1							504
1	524		5.46	5.41	34.234	27.021	109.5	.996	.48	6.8	86.4	3.21	42.0	.00			533
	600	ISL	5.14	5.13	34.296	27.102	102.5	1.072	.44	6.1							605
	700	ISL	4.81	4.76	34.364	27.198	94.1	1.170	.37	5.2							706
1	789		4.53	4.47	34.411	27.267	89.0	1.251	.32	4.4	108.1	3.35	44.5	.00			795
	800	ISL	4.49	4.43	34.414	27.276	87.3	1.261	.32	4.5							807
	1000	ISL	3.93	3.87	34.482	27.394	76.9	1.425	.51	7.2							1009
1	1054		3.76	3.68	34.490	27.415	75.0	1.466	.63	8.6	124.1	3.37	44.8	.00			1063

RV NEW HORIZON — FRONTS LEG II — STATION 16 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 21.1 N	121 03.8 W	18/07/85	0742 GMT			320 03	2	1015.6 MB	16.7 C	15.0 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.99	18.99	33.603	23.958	394.5	.000	5.47	103.1							0
1	2		18.99	18.99	33.603	23.958	394.1	.008	5.47	103.1	2.4	.32	.8	.00	.08	.01	2
	10	ISL	18.98	18.98	33.622	23.974	392.9	.039	5.47	103.1							10
1	12		18.98	18.98	33.627	23.978	392.6	.047	5.47	103.1	2.4	.31	.8	.00	.08	.01	12
	20	ISL	17.95	17.95	33.526	24.157	375.8	.078	5.67	104.7							20
	30	ISL	16.42	16.41	33.402	24.425	350.5	.114	5.93	106.2							30
1	33		15.92	15.92	33.368	24.511	342.4	.124	6.01	106.6	2.4	.34	.8	.00	.10	.01	33
1	43		15.08	15.08	33.350	24.684	326.1	.158	6.06	105.6	2.3	.34	.8	.00	.12	.03	43
	50	ISL	14.84	14.84	33.342	24.730	322.0	.181	6.05	104.9							50
1	54		14.75	14.74	33.338	24.748	320.4	.193	6.04	104.6	2.3	.35	.8	.00	.14	.03	54
1	64		14.22	14.21	33.322	24.847	311.2	.224	6.05	103.6	2.3	.37	.8	.00	.20	.09	64
1	75		13.71	13.70	33.299	24.935	303.1	.258	6.04	102.3	2.5	.39	.8	.00	.28	.13	75
1	85		13.30	13.29	33.308	25.026	294.6	.288	5.88	98.8	2.9	.46	1.1	.10	.26	.14	85
1	95		12.77	12.75	33.358	25.170	281.1	.316	5.53	91.9	4.7	.61	4.1	.19	.21	.14	95
	100	ISL	12.61	12.59	33.378	25.217	276.7	.331	5.43	90.0							101
1	106		12.46	12.44	33.397	25.260	272.8	.347	5.36	88.5	5.6	.71	5.9	.11	.19	.13	106
1	120		11.83	11.81	33.450	25.422	257.7	.386	5.06	82.5	8.1	.88	9.0	.04	.13	.13	121
	125	ISL	11.65	11.63	33.473	25.472	252.9	.398	4.96	80.6							126
1	136		11.21	11.20	33.534	25.599	241.0	.426	4.71	75.8	11.3	1.06	12.2	.02	.09	.09	137
	150	ISL	10.64	10.62	33.595	25.749	227.0	.458	4.41	70.2							151
1	162		10.13	10.11	33.651	25.881	214.6	.485	4.14	65.1	18.3	1.39	17.9	.01	.02	.05	163
1	186		9.19	9.16	33.797	26.151	189.2	.537	3.51	54.1	26.3	1.74	23.3	.01	.00	.03	189
	200	ISL	8.91	8.89	33.869	26.250	179.9	.559	3.33	51.0							201
1	213		8.68	8.66	33.942	26.344	171.2	.582	3.17	48.4	32.0	1.91	25.9	.01			214
	250	ISL	8.13	8.11	34.038	26.503	156.6	.642	2.74	41.3							252
	300	ISL	7.52	7.49	34.051	26.603	145.4	.718	2.21	32.9							302
1	317		7.35	7.31	34.073	26.645	143.8	.743	2.05	30.4	50.3	2.40	32.7	.01			319
	400	ISL	6.30	6.26	34.112	26.818	127.9	.855	1.20	17.4							403
1	423		6.04	6.00	34.121	26.859	124.2	.885	1.00	14.4	71.0	2.87	39.3	.01			426
	500	ISL	5.56	5.52	34.196	26.977	113.5	.976	.59	8.3							504
1	527		5.45	5.40	34.224	27.013	110.3	1.006	.49	6.9	85.3	3.14	42.0	.01			530
	600	ISL	5.14	5.10	34.288	27.100	102.6	1.084	.44	6.2							605
	700	ISL	4.79	4.74	34.362	27.200	93.9	1.182	.38	5.3							706
1	787		4.55	4.48	34.413	27.268	88.0	1.261	.32	4.4	106.7	3.30	44.4	.00			793
	800	ISL	4.50	4.44	34.419	27.278	87.1	1.273	.32	4.5							807
	1000	ISL	3.89	3.81	34.487	27.398	76.5	1.436	.55	7.5							1009
1	1053		3.73	3.65	34.494	27.420	74.6	1.476	.66	9.0	123.8	3.30	44.8	.00			1062

RV NEW HORIZON — FRONTS LEG II — STATION 17 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 08.2 N	121 10.2 W	18/07/85	1105 GMT			320 02	2	1015.6 MB	16.7 C	15.0 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	19.01	19.01	33.610	23.957	394.4	.000	5.44	102.5							0
1	1		19.01	19.01	33.610	23.957	394.2	.004	5.44	102.5	2.6	.43	.4	.00	.08	.01	1
	10	ISL	18.91	18.91	33.605	23.979	392.4	.039	5.45	102.5							10
1	11		18.90	18.90	33.604	23.981	392.2	.043	5.45	102.5	2.6	.33	.4	.00	.09	.01	11
	20	ISL	18.13	18.13	33.511	24.102	381.1	.078	5.62	104.1							20
	30	ISL	17.01	17.00	33.405	24.291	363.3	.115	5.84	105.8							30
1	33		16.63	16.63	33.376	24.356	357.2	.126	5.91	106.3	2.6	.35	.4	.00	.08	.01	33
1	42		15.71	15.71	33.353	24.548	339.1	.157	6.03	106.4	2.5	.34	.4	.00	.09	.02	42
	50	ISL	15.23	15.23	33.337	24.642	330.4	.184	6.06	105.9							50
1	53		15.10	15.10	33.331	24.665	328.2	.193	6.07	105.8	2.5	.34	.4	.00	.11	.02	53
1	63		14.56	14.55	33.311	24.768	318.7	.226	6.05	104.3	2.6	.35	.3	.00	.13	.04	63
1	73		14.06	14.05	33.293	24.858	310.4	.257	5.99	102.2	2.7	.36	.3	.00	.16	.06	73
	75	ISL	13.96	13.95	33.288	24.875	308.9	.264	5.98	101.9							76
1	84		13.59	13.58	33.281	24.947	302.2	.290	5.96	100.7	2.9	.37	.3	.00	.23	.15	84
1	94		13.08	13.07	33.326	25.083	289.4	.320	5.70	95.3	3.9	.48	1.9	.15	.23	.16	94
	100	ISL	12.79	12.78	33.356	25.165	281.8	.338	5.52	91.8							101
1	104		12.61	12.60	33.374	25.212	277.3	.348	5.41	89.6	5.4	.63	4.8	.10	.20	.16	104
1	119		11.61	11.59	33.479	25.484	251.7	.390	4.85	78.7	9.4	.91	10.0	.04	.12	.12	120
	125	ISL	11.29	11.28	33.510	25.567	243.9	.404	4.72	76.1							126
1	135		10.76	10.74	33.568	25.707	230.6	.429	4.51	71.9	13.3	1.13	14.0	.02	.06	.07	136
	150	ISL	10.24	10.22	33.656	25.866	215.8	.461	4.13	65.2							151
1	160		9.93	9.92	33.713	25.961	206.8	.483	3.88	60.8	20.3	1.47	19.4	.01	.02	.16	161
1	186		9.03	9.01	33.823	26.196	184.8	.533	3.46	53.2	27.3	1.74	23.9	.01	.00	.02	187
	200	ISL	8.80	8.78	33.880	26.277	177.4	.559	3.31	50.6							201
1	212		8.67	8.65	33.925	26.332	172.3	.579	3.19	48.7	31.8	1.87	26.0	.01			213
	250	ISL	8.17	8.14	34.004	26.471	159.6	.643	2.79	42.1							252
	300	ISL	7.57	7.54	34.062	26.604	147.5	.719	2.26	33.7							302
1	315		7.41	7.38	34.069	26.633	144.9	.742	2.10	31.1	49.1	2.34	32.5	.01			317
	400	ISL	6.65	6.61	34.164	26.813	128.7	.858	1.11	16.2							403
1	423		6.45	6.41	34.183	26.854	124.9	.887	.88	12.8	67.9	2.85	38.3	.00			426
	500	ISL	5.66	5.61	34.217	26.982	113.1	.979	.57	8.1							504
1	527		5.40	5.35	34.227	27.021	109.5	1.008	.52	7.4	85.0	3.09	42.1	.00			530
	600	ISL	5.02	4.97	34.280	27.107	101.7	1.086	.46	6.5							605
	700	ISL	4.68	4.62	34.351	27.204	93.3	1.183	.38	5.3							706
1	790		4.53	4.46	34.413	27.270	87.8	1.265	.31	4.3	107.0	3.26	44.5	.00			796
	800	ISL	4.50	4.43	34.418	27.277	87.1	1.273	.31	4.3							807
	1000	ISL	3.87	3.79	34.489	27.401	76.2	1.437	.54	7.3							1009
1	1054		3.78	3.63	34.497	27.424	74.1	1.478	.65	8.8	123.7	3.23	44.9	.00			1063

RV NEW HORIZON — FRONTS LEG II — STATION 18 1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 49.7 N	121 19.3 W	18/07/85	1424 GMT			320 02	2	1015.9 MB	16.7 C	15.0 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	19.02	19.02	33.594	23.943	395.6	.000	5.44	102.5							0
1	1		19.02	19.02	33.594	23.943	395.5	.004	5.44	102.5	2.6	.29	.4	.00	.09	.01	1
	10	ISL	18.99	18.99	33.601	23.956	394.6	.040	5.45	102.7							10
1	11		18.99	18.99	33.602	23.958	394.5	.043	5.45	102.7	2.6	.29	.3	.00	.09	.01	11
	20	ISL	18.13	18.12	33.508	24.100	391.2	.078	5.65	104.6							20
	30	ISL	16.90	16.90	33.400	24.312	361.3	.115	5.90	106.6							30
1	32		16.64	16.63	33.380	24.358	357.0	.122	5.95	107.0	2.6	.31	.3	.00	.10	.01	32
1	42		15.72	15.71	33.353	24.547	339.2	.157	6.07	107.2	2.7	.30	.3	.00	.11	.01	42
	50	ISL	15.13	15.12	33.336	24.663	329.4	.184	6.08	106.0							50
1	52		15.02	15.02	33.332	24.683	326.5	.190	6.08	105.8	2.8	.30	.3	.00	.13	.02	52
1	64		14.56	14.55	33.312	24.767	319.8	.229	6.07	104.7	2.8	.31	.3	.00	.15	.03	64
1	73		14.23	14.21	33.305	24.834	312.7	.257	6.05	103.6	2.7	.30	.3	.00	.20	.06	73
	75	ISL	14.16	14.15	33.301	24.944	311.8	.264	6.05	103.4							76
1	83		13.94	13.93	33.287	24.880	308.6	.288	6.02	102.5	2.7	.33	.3	.00	.23	.13	83
1	93		13.48	13.47	33.276	24.964	300.8	.318	5.92	99.8	3.2	.37	.3	.01	.28	.19	93
	100	ISL	13.19	13.17	33.302	25.043	293.4	.340	5.74	96.2							101
1	104		13.04	13.03	33.320	25.087	289.3	.351	5.64	94.2	4.3	.48	2.3	.13	.27	.19	104
1	119		12.34	12.32	33.408	25.293	270.0	.392	5.22	86.0	6.7	.68	6.4	.05	.19	.16	119
	125	ISL	12.02	12.01	33.461	25.393	260.5	.409	5.05	82.7							126
1	133		11.62	11.60	33.529	25.522	248.4	.431	4.85	78.7	9.8	.86	10.0	.02	.11	.10	134
	150	ISL	10.80	10.78	33.603	25.727	229.2	.471	4.54	72.5							151
1	159		10.37	10.36	33.635	25.826	219.8	.491	4.35	68.8					.02	.04	160
1	185		9.51	9.51	33.776	26.079	196.2	.545	3.48	54.1	25.1	1.61	22.4	.01	.01	.02	186
	200	ISL	9.18	9.16	33.853	26.195	185.3	.573	3.22	49.6							201
1	211		8.96	8.94	33.904	26.270	178.3	.593	3.08	47.3	31.1	1.80	25.5	.01			212
	250	ISL	8.32	8.29	34.008	26.451	161.6	.660	2.66	40.2							252
	300	ISL	7.65	7.62	34.069	26.599	148.1	.737	2.22	33.2							302
1	313		7.50	7.47	34.080	26.621	146.1	.757	2.13	31.7	48.6	2.23	32.0	.01			315
	400	ISL	6.38	6.35	34.103	26.800	129.7	.876	1.33	19.2							403
1	421		6.15	6.12	34.107	26.832	126.7	.904	1.15	16.6	69.3	2.68	38.3	.01			424
	500	ISL	5.60	5.56	34.171	26.953	115.8	.999	.69	9.8							504
1	524		5.47	5.43	34.192	26.985	112.9	1.026	.59	8.4	84.5	2.97	41.4	.01			527
	600	ISL	5.14	5.09	34.262	27.079	104.6	1.109	.52	7.3							605
	700	ISL	4.79	4.73	34.343	27.184	95.3	1.209	.42	5.9							706
1	783		4.57	4.51	34.402	27.257	89.0	1.286	.34	4.7	107.5	3.13	44.0	.00			789
	800	ISL	4.51	4.45	34.411	27.270	87.8	1.301	.34	4.8							807
	1000	ISL	3.97	3.79	34.482	27.396	76.7	1.465	.56	7.6							1009
1	1044		3.77	3.65	34.487	27.414	75.0	1.498	.65	8.8	124.2	3.17	44.7	.01			1052

RV NEW HORIZON — FRONTS LEG II — STATION 18 9

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
30 49.7 N	121 19.9 W	19/07/85	0903 GMT		340 05 KT	320 03	2	1015.9 MB	17.2 C	15.6 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.93	18.93	33.490	23.886	401.8	.000	5.46	102.7							0
1	2		18.93	18.93	33.490	23.886	401.0	.008	5.46	102.7	2.8	.40	.1	.00	.07	.01	2
	10	ISL	18.77	18.77	33.482	23.922	397.9	.040	5.48	102.8							10
1	12		18.73	18.72	33.480	23.930	397.1	.048	5.49	102.8	2.8	.39	.1	.00	.08	.00	12
	20	ISL	17.82	17.82	33.436	24.120	379.4	.079	5.68	104.5							20
	30	ISL	16.55	16.54	33.382	24.381	354.7	.116	5.92	106.2							30
1	33		16.15	16.14	33.368	24.462	347.1	.126	5.99	106.7	2.7	.40	.0	.00	.09	.01	33
1	43		15.41	15.41	33.330	24.596	334.5	.160	6.06	106.3	2.7	.39	.0	.00	.10	.01	43
	50	ISL	15.00	14.99	33.322	24.681	326.7	.183	6.06	105.4							50
1	54		14.82	14.81	33.320	24.719	323.1	.196	6.06	105.0	2.6	.39	.0	.00	.14	.03	54
1	64		14.44	14.43	33.313	24.794	316.2	.228	6.06	104.2	2.7	.40	.0	.00	.17	.05	64
1	74		14.08	14.07	33.300	24.860	310.3	.259	5.70U	97.3U	2.7	.41	.1	.00	.20	.08	74
	75	ISL	14.05	14.04	33.299	24.865	309.8	.263	6.03								76
1	85		13.77	13.76	33.292	24.917	305.1	.293	5.95	100.9	2.9	.42	.1	.00	.25	.15	85
1	95		13.18	13.17	33.280	25.028	294.7	.322	5.76	96.5	3.5	.49	.6	.10	.28	.18	95
	100	ISL	12.98	12.96	33.214	25.095	288.4	.338	5.63	93.9							101
1	105		12.81	12.80	33.351	25.156	282.7	.351	5.50	91.5	4.9	.56	3.2	.11	.24	.16	105
1	121		11.95	11.93	33.446	25.396	260.2	.394	5.00	83.7	8.4	.87	8.1	.03	.14	.14	121
	125	ISL	11.77	11.75	33.473	25.450	255.1	.406	4.92	80.2							126
1	135		11.36	11.34	33.535	25.574	243.4	.432	4.74	76.5	10.9	1.01	10.9	.02	.09	.09	136
	150	ISL	10.52	10.50	33.636	25.802	221.9	.466	4.19	66.5							151
1	161		9.90	9.88	33.715	25.969	206.1	.490	3.75	58.7	21.6	1.57	20.0	.01	.01	.03	162
1	187		9.24	9.24	33.833	26.164	188.0	.541	3.28	50.7	27.8	1.83	23.7	.01	.00	.02	188
	200	ISL	9.01	9.99	33.891	26.252	179.8	.565	3.12	47.9							201
1	213		8.76	8.74	33.944	26.333	172.3	.587	2.98	45.6	33.3	1.97	26.1	.01			214
	250	ISL	8.15	8.12	34.016	26.483	159.4	.649	2.68	40.5							252
	300	ISL	7.45	7.42	34.036	26.601	146.2	.725	2.32	34.4							302
1	316		7.25	7.22	34.059	26.643	141.9	.748	2.21	32.7	50.4	2.39	32.2	.01			318
	400	ISL	6.29	6.25	34.105	26.813	126.3	.862	1.29	18.6							403
1	424		6.07	6.03	34.120	26.854	124.6	.893	1.03	14.8	70.8	2.89	39.0	.01			427
	500	ISL	5.63	5.59	34.201	26.972	114.0	.983	.57	8.1							504
1	528		5.52	5.47	34.232	27.011	110.6	1.014	.46	6.5	84.9	3.15	41.7	.00			531
	600	ISL	5.20	5.15	34.295	27.098	102.9	1.092	.42	5.9							605
	700	ISL	4.81	4.76	34.365	27.199	94.0	1.190	.36	5.0							706
1	790		4.51	4.45	34.412	27.271	87.6	1.272	.31	4.3	107.6	3.51	44.6	.00			796
	800	ISL	4.48	4.41	34.417	27.278	87.0	1.281	.31	4.3							807
	1000	ISL	3.86	3.78	34.484	27.368	78.4	1.444	.51	7.0							1009
1	1053		3.71	3.63	34.492	27.419	74.6	1.484	.61	8.3	124.5	3.27	44.7	.00			1062

RV NEW HORIZON FRONTS LEG II STATION 19 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 08.2 N	121 10.5 W	19/07/85	1308 GMT			330 03	2	1016.9 MB	17.2 C	15.6 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.85	18.85	33.541	23.945	395.3	.000	5.44	102.2							0
1	1		18.85	18.85	33.541	23.945	395.4	.004	5.44	102.2	2.7	.32	.1	.00	.08	.01	1
	10	ISL	18.87	18.87	33.537	23.939	396.3	.040	5.45	102.4							10
1	11		18.87	18.87	33.537	23.938	396.3	.043	5.45	102.4	2.6	.31	.0	.00	.09	.00	11
	20	ISL	18.57	18.56	33.526	24.006	390.2	.079	5.51	103.0							20
	30	ISL	18.23	18.22	33.514	24.091	383.4	.118	5.59	103.7							30
1	32		18.17	18.16	33.512	24.095	382.1	.125	5.60	103.8	2.6	.30	.0	.00	.10	.01	32
1	42		15.75	15.75	33.352	24.538	340.1	.161	6.05	106.9	2.5	.32	.0	.00	.10	.01	42
	50	ISL	15.19	15.19	33.332	24.647	330.0	.188	6.05	105.7							50
1	53		15.13	15.12	33.331	24.660	329.8	.197	6.05	105.5	2.5	.33	.0	.00	.12	.02	53
1	63		14.49	14.48	33.312	24.783	317.7	.230	6.05	104.2	2.4	.34	.0	.00	.15	.03	63
1	73		14.05	14.04	33.291	24.858	310.3	.261	5.99	102.2	2.5	.35	.0	.00	.18	.08	73
	75	ISL	13.98	13.97	33.287	24.870	309.3	.268	5.98	101.9							76
1	84		13.72	13.71	33.280	24.918	304.9	.294	5.93	100.5	2.6	.37	.0	.00	.22	.15	84
1	94		13.33	13.32	33.300	25.014	296.0	.324	5.82	97.8	3.4	.42	.5	.07	.26	.16	94
	100	ISL	12.97	12.96	33.341	25.116	286.4	.343	5.65	94.2							101
1	104		12.76	12.75	33.367	25.178	280.6	.353	5.53	91.9	4.8	.60	3.6	.19	.21	.13	104
1	120		11.92	11.91	33.457	25.409	258.8	.396	5.01	81.8	7.9	.84	7.9	.04	.14	.12	120
	125	ISL	11.60	11.58	33.505	25.506	249.7	.410	4.86	78.8							126
1	134		11.07	11.06	33.585	25.664	234.8	.433	4.62	74.2	12.4	1.08	12.1	.02	.07	.07	135
	150	ISL	10.47	10.45	33.652	25.823	219.9	.468	4.27	67.7							151
1	160		10.13	10.11	33.682	25.905	212.2	.490	4.06	63.9	18.8	1.40	17.3	.01	.02	.04	161
1	186		9.08	9.06	33.812	26.179	186.5	.562	3.50	53.8	27.1	1.76	23.0	.00	.00	.06	187
	200	ISL	8.85	8.83	33.870	26.260	178.9	.567	3.32	50.8							201
1	212		8.74	8.71	33.914	26.313	174.1	.588	3.19	48.7	31.8	1.91	25.2	.00			213
	250	ISL	8.14	8.11	34.000	26.472	159.5	.652	2.72	41.0							252
	300	ISL	7.40	7.37	34.068	26.633	144.7	.728	2.13	31.5							302
1	314		7.20	7.17	34.078	26.669	141.4	.748	1.96	28.9	52.3	2.48	32.8	.00			316
	400	ISL	6.59	6.54	34.171	26.828	127.2	.863	1.05	15.3							403
1	422		6.44	6.40	34.186	26.858	124.6	.892	.86	12.5	68.7	2.93	37.6	.00			425
	500	ISL	5.64	5.60	34.202	26.972	114.0	.984	.57	8.1							504
1	525		5.39	5.35	34.205	27.005	111.0	1.012	.53	7.5	86.6	3.14	41.2	.00			528
	600	ISL	5.00	4.95	34.262	27.096	102.7	1.092	.47	6.6							605
	700	ISL	4.65	4.59	34.344	27.201	93.5	1.191	.40	5.5							706
1	787		4.50	4.44	34.419	27.279	87.0	1.269	.33	4.6	109.4	3.32	43.6	.00			793
	800	ISL	4.46	4.40	34.426	27.288	86.1	1.280	.33	4.6							807
	1000	ISL	3.86	3.79	34.495	27.407	75.6	1.442	.54	7.4							1009
1	1053		3.71	3.63	34.500	27.426	73.9	1.482	.65	8.8	124.6	3.29	43.9	.00			1062

RV NEW HORIZON FRONTS LEG II STATION 20 3

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 22.0 N	121 05.5 W	19/07/85	1727 GMT		350 06 KT	330 03	2	1018.3 MB	17.8 C	15.6 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.81	18.81	33.480	23.909	398.9	.000	5.45	102.3							0
1	1		18.81	18.81	33.480	23.909	398.8	.004	5.45	102.3	2.4	.32	.1	.00	.08	.01	1
	10	ISL	18.78	18.78	33.480	23.917	398.4	.040	5.50	103.1							10
1	11		18.78	18.78	33.480	23.918	398.3	.044	5.51	103.3	2.3	.32	.1	.00	.08	.01	11
	20	ISL	17.90	17.90	33.434	24.099	381.3	.079	5.70	105.1							20
	30	ISL	16.69	16.68	33.386	24.351	357.6	.116	5.92	106.5							30
1	32		16.43	16.42	33.378	24.404	352.6	.123	5.96	106.7	2.4	.32	.1	.00	.10	.01	32
1	42		15.61	15.60	33.359	24.576	336.5	.157	6.04	106.4	2.5	.31	.1	.00	.10	.02	42
	50	ISL	15.13	15.12	33.344	24.670	327.7	.184	6.04	105.6							50
1	53		14.99	14.98	33.338	24.696	325.3	.193	6.04	105.1	2.5	.32	.1	.00	.12	.02	53
1	63		14.51	14.50	33.319	24.785	317.1	.225	6.03	103.9	2.4	.32	.1	.00	.15	.04	63
1	74		14.06	14.04	33.293	24.860	310.3	.259	5.98	102.0	2.4	.34	.1	.00	.19	.06	74
	75	ISL	14.00	13.99	33.291	24.870	309.3	.263	5.97	101.8							76
1	84		13.62	13.61	33.291	24.947	302.1	.290	5.91	99.9	2.6	.36	.1	.00	.22	.16	84
1	94		13.21	13.19	33.296	25.035	294.0	.320	5.78	96.9	3.5	.43	.6	.08	.29	.18	94
	100	ISL	12.98	12.97	33.321	25.099	288.0	.338	5.65	94.2							101
1	105		12.81	12.79	33.343	25.150	283.2	.351	5.53	92.0	4.6	.55	3.1	.13	.26	.16	105
1	119		12.04	12.03	33.421	25.358	263.7	.392	5.08	83.2	7.5	.78	7.4	.04	.19	.13	120
	125	ISL	11.86	11.85	33.449	25.414	258.6	.406	4.98	81.2							126
1	135		11.55	11.53	33.498	25.510	249.6	.433	4.82	78.1	9.7	.93	10.0	.02	.11	.11	136
	150	ISL	10.91	10.89	33.563	25.677	233.9	.468	4.55	72.8							151
1	161		10.39	10.37	33.619	25.812	221.2	.494	4.31	68.2	16.2	1.27	15.8	.01	.03	.05	162
1	186		9.47	9.45	33.727	26.089	195.1	.545	3.64	56.5	24.2	1.63	21.6	.01	.01	.02	187
	200	ISL	9.04	9.02	33.853	26.217	183.1	.572	3.41	52.4							201
1	212		8.72	8.70	33.911	26.313	174.1	.593	3.25	49.6	31.1	1.85	25.3	.01			213
	250	ISL	8.05	8.02	34.019	26.500	156.7	.656	2.70	40.6							252
	300	ISL	7.44	7.41	34.086	26.641	143.9	.731	2.08	30.8							302
1	315		7.32	7.29	34.088	26.661	142.2	.753	1.91	28.3	51.6	2.45	33.1	.01			317
	400	ISL	6.23	6.19	34.123	26.836	126.1	.867	1.34	19.3							403
1	422		5.98	5.94	34.128	26.871	122.9	.895	1.22	17.5	72.4	2.91	39.4	.01			425
	500	ISL	5.47	5.43	34.198	26.989	112.2	.986	.66	9.0							504
1	525		5.36	5.31	34.222	27.022	109.3	1.013	.47	6.6	87.2	3.14	42.3	.01			528
	600	ISL	5.07	5.02	34.287	27.108	101.8	1.093	.43	6.0							605
	700	ISL	4.76	4.70	34.361	27.203	93.5	1.190	.37	5.2							706
1	786		4.55	4.49	34.413	27.267	88.1	1.248	.32	4.4	105.8	3.28	44.4	.00			792
	800	ISL	4.51	4.45	34.420	27.277	87.2	1.281	.32	4.5							807
	1000	ISL	3.99	3.81	34.488	27.398	76.5	1.446	.53	7.3							1009
1	1051		3.72	3.65	34.494	27.420	74.5	1.483	.63	8.6	124.3	3.27	44.9	.00			1060

RV NEW HORIZON — FRONTS LEG II — STATION 21 3

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 35.0 N	120 56.2 W	19/07/85	2138 GMT			350 02	2		18.9 C	16.1 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.16	18.16	33.357	23.975	395.1	.000	5.59	103.5							0
1	2		18.16	18.16	33.357	23.975	392.5	.008	5.59	103.5	2.2	.34	.0	.00	.12	.01	2
	10	ISL	17.66	17.66	33.327	24.075	383.3	.039	5.66	103.7							10
1	12		17.56	17.56	33.323	24.096	381.3	.046	5.67	103.8	2.2	.34	.0	.00	.11	.01	12
	20	ISL	17.32	17.31	33.330	24.160	375.5	.077	5.72	104.1							20
	30	ISL	17.01	17.01	33.339	24.239	368.3	.114	5.77	104.6							30
1	33		16.93	16.92	33.342	24.261	366.2	.125	5.79	104.7	2.3	.34	.0	.00	.14	.02	33
1	42		15.43	15.43	33.341	24.600	334.1	.256	6.08	106.7	2.8	.35	.0	.00	.15	.03	42
	50	ISL	14.91	14.90	33.358	24.728	322.2	.183	6.07	105.5							50
1	54		14.81	14.80	33.362	24.753	319.9	.195	6.07	105.2	2.7	.34	.0	.00	.20	.05	54
1	64		14.45	14.44	33.356	24.825	313.3	.226	6.02	103.6	2.8	.34	.0	.00	.23	.07	64
1	75		13.86	13.85	33.322	24.921	304.4	.260	6.16	104.6	2.9	.39	.3	.01	.31	.10	75
1	85		13.58	13.57	33.462	25.088	288.7	.290	5.67	95.9	4.3	.50	1.7	.11	.24	.09	85
1	94		12.61	12.60	33.402	25.235	275.0	.321	5.63	93.3	5.2	.68	4.6	.25	.19	.09	96
	100	ISL	12.32	12.31	33.404	25.291	269.7	.333	5.53	91.1							101
1	106		12.02	12.00	33.422	25.364	262.8	.347	5.36	87.7	7.1	.85	7.9	.12	.14	.07	106
1	121		11.31	11.29	33.558	25.600	240.6	.387	4.66	75.2	11.9	1.07	12.0	.03	.09	.12	122
	125	ISL	11.16	11.14	33.568	25.635	237.3	.396	4.59	73.8							126
1	136		10.68	10.66	33.588	25.736	227.9	.422	4.42	70.3	14.9	1.25	14.8	.01	.05	.06	137
	150	ISL	10.11	10.10	33.645	25.878	214.5	.453	4.11	64.6							151
1	162		9.66	9.64	33.710	26.005	202.7	.478	3.82	59.5	22.1	1.56	20.1	.01	.01	.03	163
1	188		9.06	9.04	33.855	26.216	182.9	.528	3.34	51.4	28.6	1.81	23.8	.01	.00	.03	189
	200	ISL	8.79	8.77	33.907	26.300	175.2	.549	3.27	50.1							201
1	213		8.51	8.48	33.955	26.381	167.6	.571	3.24	49.2	33.6	1.92	25.8	.00			214
	250	ISL	7.85	7.83	34.026	26.534	153.5	.631	2.85	42.7							252
	300	ISL	7.16	7.13	34.068	26.651	141.5	.705	2.21	32.6							302
1	315		6.98	6.96	34.064	26.688	139.5	.726	1.99	29.2	54.6	2.50	33.4	.01			317
	400	ISL	6.14	6.11	34.115	26.840	125.7	.838	1.16	16.7							403
1	421		5.98	5.94	34.127	26.870	122.9	.865	.99	14.2	72.9	2.93	39.0	.00			424
	500	ISL	5.51	5.47	34.208	26.993	111.9	.957	.59	8.4							504
1	523		5.40	5.36	34.233	27.026	109.0	.982	.52	7.4	87.6	3.16	41.6	.00			526
	600	ISL	5.07	5.02	34.301	27.119	100.7	1.063	.48	6.7							605
	700	ISL	4.71	4.65	34.374	27.219	92.0	1.160	.42	5.8							706
1	782		4.46	4.40	34.420	27.283	86.4	1.233	.37	5.1	107.9	3.29	43.9	.00			788
	800	ISL	4.40	4.34	34.428	27.296	85.2	1.248	.38	5.2							807
	1000	ISL	3.83	3.75	34.490	27.406	75.6	1.409	.58	7.9							1009
1	1055		3.69	3.61	34.494	27.424	74.1	1.451	.68	9.2	125.1	3.26	44.1	.00			1064

RV NEW HORIZON — FRONTS LEG II — STATION 22 3

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 44.8 N	120 50.8 W	20/07/85	0116 GMT			340 02	1	1016.5 MB	18.9 C	16.7 C	7/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	17.52	17.52	33.274	24.067	384.4	.000	5.61	102.6							0
1	1		17.52	17.52	33.274	24.067	383.7	.004	5.61	102.6	2.2	.36	.1	.00	.12	.01	1
	10	ISL	17.20	17.20	33.270	24.140	377.0	.038	5.70	103.6							10
1	11		17.17	17.16	33.269	24.148	376.2	.042	5.71	103.7	2.2	.37	.0	.00	.12	.01	11
	20	ISL	16.73	16.73	33.256	24.240	367.8	.075	5.79	104.2							20
	30	ISL	16.25	16.25	33.245	24.342	358.4	.112	5.87	104.7							30
1	32		16.16	16.16	33.243	24.361	356.6	.118	5.89	104.8	2.0	.38	.0	.00	.14	.04	32
1	42		14.01	14.01	33.246	24.832	312.0	.252	6.32	107.7	2.4	.39	.0	.00	.19	.09	42
	50	ISL	13.00	12.99	33.154	24.965	299.4	.277	6.35	106.0							50
1	52		12.89	12.89	33.144	24.979	298.2	.282	6.36	105.8	2.9	.45	.1	.01	.23	.10	52
1	62		13.36	13.35	33.406	25.088	288.0	.311	5.86	98.6	4.0	.51	1.2	.08	.26	.14	62
1	73		13.16	13.15	33.470	25.178	279.8	.342	5.44	91.2	5.6	.61	3.1	.14	.33	.13	73
	75	ISL	12.99	12.98	33.462	25.206	277.2	.349	5.42	90.5							76
1	83		12.35	12.34	33.432	25.307	267.7	.369	5.38	88.7	6.9	.78	6.1	.17	.20	.11	83
1	93		11.82	11.81	33.468	25.435	255.6	.396	5.24	85.4	8.8	.96	9.4	.08	.15	.08	93
	100	ISL	11.44	11.43	33.464	25.503	249.4	.414	5.09	82.2							101
1	103		11.32	11.31	33.463	25.524	247.3	.421	5.03	81.1	11.0	1.09	11.5	.06	.12	.07	103
1	117		10.79	10.77	33.561	25.696	231.3	.456	4.80	76.6	14.2	1.32	15.7	.03	.05	.05	118
	125	ISL	10.44	10.42	33.607	25.793	222.2	.473	4.51	71.3							126
1	133		10.05	10.03	33.659	25.900	212.1	.492	4.13	64.9	20.4	1.57	19.5	.02	.03	.05	134
	150	ISL	9.49	9.48	33.768	26.077	195.5	.525	3.49	54.2							151
1	158		9.29	9.27	33.816	26.147	188.9	.541	3.24	50.1	28.3	1.85	24.0	.01	.01	.04	159
1	184		8.94	8.92	33.903	26.273	177.5	.589	2.97	45.6	31.7	1.97	25.8	.01	.00	.03	185
	200	ISL	8.56	8.54	33.954	26.371	168.3	.616	2.91	44.2							201
1	209		8.34	8.32	33.980	26.426	163.2	.631	2.88	43.6	36.7	2.07	27.4	.01			210
	250	ISL	7.75	7.72	34.042	26.562	150.7	.695	2.55	38.2							252
	300	ISL	7.27	7.25	34.064	26.647	142.4	.669	2.05	30.3							302
1	312		7.20	7.17	34.075	26.667	141.5	.686	1.91	28.2	53.4	2.52	33.3	.01			314
	400	ISL	6.25	6.22	34.133	26.840	125.8	.803	1.03	14.9							403
1	418		6.09	6.05	34.146	26.872	122.9	.826	.87	12.5	72.8	2.95	39.2	.01			421
	500	ISL	5.65	5.64	34.234	26.993	112.2	.922	.46	6.6							504
1	521		5.61	5.56	34.256	27.019	109.8	.945	.40	5.7	84.8	3.19	41.4	.01			524
	600	ISL	5.24	5.19	34.317	27.111	101.7	1.029	.38	5.3							605
	700	ISL	4.82	4.77	34.377	27.208	93.2	1.126	.35	4.9							706
1	778		4.53	4.47	34.410	27.267	87.9	1.197	.33	4.6	109.8	3.32	44.1	.00			784
	800	ISL	4.45	4.39	34.420	27.283	86.5	1.216	.34	4.7							807
	1000	ISL	3.90	3.83	34.483	27.393	77.0	1.380	.53	7.3							1009
1	1043		3.82	3.74	34.490	27.407	75.9	1.413	.60	8.2	123.9	3.31	44.5	.00			1052

RV NEW HORIZON — FRONTS LEG II — STATION 23 3

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 54.7 N	120 46.0 W	20/07/85	0448 GMT		330	11 KT	340 02	2	1017.3 MB	16.1 C	15.0 C	R/9	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	17.28	17.28	33.285	24.132	377.6	.000	5.72	104.1							0
1	1		17.28	17.28	33.285	24.132	377.5	.004	5.72	104.1	1.7	.38	.1	.00	.13	.02	1
	10	ISL	17.20	17.20	33.278	24.146	376.5	.038	5.84	106.1							10
1	11		17.20	17.19	33.277	24.147	376.3	.041	5.85	106.3	1.6	.39	.0	.01	.13	.02	11
	20	ISL	16.23	16.23	33.272	24.368	356.2	.074	5.98	106.6							20
	30	ISL	14.90	14.89	33.266	24.660	328.3	.109	6.13	106.4							30
1	32		14.61	14.61	33.265	24.720	322.4	.115	6.16	106.3	2.0	.39	.0	.01	.12	.05	32
1	42		13.65	13.65	33.267	24.922	303.4	.146	6.32	106.9	2.1	.42	.0	.02	.27	.10	42
	50	ISL	13.22	13.22	33.292	25.028	293.5	.170	6.16	103.4							50
1	52		13.15	13.14	33.298	25.047	291.7	.176	6.11	102.3	2.9	.47	.3	.06	.31	.08	52
1	63		12.65	12.64	33.313	25.157	281.4	.207	5.87	97.3	3.6	.57	1.8	.17	.29	.09	63
1	73		12.11	12.10	33.323	25.268	271.1	.234	5.76	94.4	4.9	.79	5.7	.32	.34	.13	73
	75	ISL	12.02	12.01	33.326	25.287	269.3	.241	5.73	93.8							76
1	83		11.78	11.77	33.345	25.347	263.8	.261	5.61	91.3	6.4	.91	7.9	.15	.28	.09	83
1	93		11.50	11.49	33.399	25.441	255.1	.287	5.33	86.3	8.7	1.02	9.9	.10	.21	.07	93
	100	ISL	11.28	11.26	33.472	25.539	246.0	.305	4.99	80.4							101
1	104		11.16	11.15	33.508	25.587	241.4	.314	4.83	77.6	11.8	1.16	12.6	.07	.13	.10	104
1	119		10.64	10.63	33.603	25.754	225.8	.349	4.45	70.8	16.6	1.40	16.8	.06	.08	.07	119
	125	ISL	10.32	10.30	33.672	25.864	215.5	.363	4.04	63.8							126
1	133		9.91	9.90	33.762	26.003	202.3	.381	3.69	54.7	24.9	1.71	21.6	.04	.06	.06	134
	150	ISL	9.43	9.42	33.863	26.161	187.6	.413	3.02	46.9							151
1	159		9.25	9.23	33.898	26.219	182.1	.430	2.91	45.0	31.3	1.95	25.1	.04	.01	.04	160
1	184		8.68	8.67	33.990	26.380	167.2	.474	2.63	40.1	37.0	2.12	27.5	.02	.00	.03	185
	200	ISL	8.47	8.45	34.023	26.440	161.8	.500	2.62	39.8							201
1	210		8.36	8.34	34.037	26.468	159.3	.516	2.61	39.6	39.9	2.17	28.3	.02			211
	250	ISL	7.84	7.81	34.064	26.567	150.4	.578	2.38	35.7							252
	300	ISL	7.23	7.20	34.071	26.659	141.8	.651	1.96	28.9							302
1	311		7.10	7.07	34.075	26.680	140.2	.667	1.84	27.1	56.2	2.54	33.7	.02			313
	400	ISL	6.27	6.24	34.132	26.837	126.1	.785	1.01	14.6							403
1	417		6.14	6.11	34.146	26.865	123.6	.807	.86	12.4	74.9	2.97	39.1	.02			420
	500	ISL	5.66	5.62	34.236	26.997	111.8	.904	.44	6.3							504
1	519		5.58	5.53	34.257	27.023	109.4	.924	.38	5.4	87.6	3.21	41.5	.02			522
	600	ISL	5.22	5.17	34.317	27.115	101.4	1.010	.35	5.0							605
	700	ISL	4.84	4.79	34.374	27.203	93.6	1.108	.32	4.5							706
1	778		4.60	4.54	34.404	27.255	89.2	1.179	.30	4.2	108.6	3.34	43.9	.01			784
	800	ISL	4.53	4.46	34.413	27.270	87.9	1.198	.31	4.3							807
	1000	ISL	3.96	3.89	34.478	27.382	79.2	1.364	.50	6.8							1009
1	1046		3.86	3.78	34.486	27.400	76.6	1.400	.57	7.8	122.6	3.32	44.4	.01			1055

RV NEW HORIZON — FRONTS LEG II — STATION 24 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 09.3 N	120 38.3 W	20/07/85	0835 GMT		340	08 KT	340 03	1	1017.6 MB	15.6 C	15.0 C	4/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	17.20	17.20	33.263	24.135	377.2	.000	5.70	103.6							0
1	2		17.20	17.20	33.263	24.135	377.2	.008	5.70	103.6	2.1	.36	.1	.00	.10	.02	2
	10	ISL	17.18	17.18	33.257	24.136	377.4	.038	5.71	103.7							10
1	12		17.17	17.17	33.256	24.137	377.4	.045	5.71	103.7	2.0	.37	.1	.00	.10	.02	12
	20	ISL	16.34	16.34	33.303	24.366	355.8	.075	5.87	104.9							20
	30	ISL	15.12	15.12	33.356	24.680	326.1	.109	6.06	105.8							30
1	33		14.73	14.73	33.371	24.776	317.0	.118	6.12	105.9	2.7	.35	.1	.00	.13	.03	33
1	43		14.06	14.05	33.317	24.877	307.7	.149	6.12	104.5	2.8	.37	.1	.00	.15	.06	43
	50	ISL	13.45	13.44	33.295	24.985	297.6	.171	6.10	102.8							50
1	53		13.20	13.19	33.291	25.031	293.2	.179	6.09	102.1	3.0	.39	.2	.01	.37	.13	53
1	63		12.41	12.40				.207	5.92	97.6	4.2	.64	3.3	.29	.37	.15	63
1	74		12.23	12.22	33.333	25.253	272.6	.237	5.68	93.3	5.3	.74	5.3	.32	.30	.13	74
	75	ISL	12.19	12.18	33.335	25.263	271.6	.241	5.66	93.0							76
1	84		11.87	11.86	33.369	25.350	263.6	.264	5.53	90.2	6.6	.89	8.2	.10	.24	.10	84
1	94		11.59	11.57	33.442	25.459	253.4	.290	5.15	83.5	9.3	1.12	10.1	.08	.19	.09	94
	100	ISL	11.37	11.36	33.477	25.525	247.2	.306	4.91	79.3							101
1	104		11.25	11.24	33.495	25.561	243.9	.315	4.79	77.2	11.5	1.11	12.2	.07	.14	.07	104
1	118		10.74	10.73	33.579	25.718	229.2	.350	4.49	71.6	15.0	1.30	15.5	.03	.08	.06	119
	125	ISL	10.51	10.50	33.604	25.777	223.7	.365	4.45	70.5							126
1	134		10.20	10.18	33.642	25.861	215.9	.385	4.33	68.2	19.2	1.52	19.2	.01	.04	.05	135
	150	ISL	9.75	9.73	33.769	26.037	199.5	.418	3.54	55.3							151
1	159		9.52	9.50	33.845	26.134	190.3	.436	3.05	47.4	28.1	1.85	23.9	.02	.01	.05	160
1	185		9.00	8.99	33.944	26.295	175.4	.483	2.77	42.6	33.3	2.00	26.2	.01	.01	.04	186
	200	ISL	8.65	8.63	33.988	26.384	167.1	.509	2.68	40.8							201
1	210		8.43	8.40	34.012	26.437	162.1	.525	2.62	39.8	37.3	2.13	28.0	.03			211
	250	ISL	7.96	7.93	34.074	26.557	151.4	.588	2.25	33.8							252
	300	ISL	7.62	7.59	34.118	26.641	144.1	.662	1.72	25.7							302
1	310		7.58	7.55	34.121	26.649	143.5	.676	1.61	24.0	48.9	2.52	32.4	.02			312
	400	ISL	6.67	6.63	34.209	26.845	125.7	.797	.80	11.7							403
1	416		6.52	6.48	34.224	26.878	122.7	.817	.68	9.9	69.6	2.97	37.9	.01			419
	500	ISL	6.06	6.02	34.296	26.994	112.5	.916	.39	5.6							504
1	517		5.99	5.95	34.308	27.013	110.9	.934	.36	5.2	80.7	3.16	40.1	.00			520
	600	ISL	5.59	5.54	34.352	27.098	103.4	1.024	.33	4.8							605
	700	ISL	5.14	5.08	34.391	27.183	96.1	1.123	.30	4.3							706
1	774		4.84	4.78	34.410	27.233	91.7	1.193	.28	3.9	102.0	3.29	42.9	.00			780
	800	ISL	4.74	4.67	34.419	27.252	90.1	1.216	.29	4.0							807
	1000	ISL	4.04	3.96	34.470	27.368	79.7	1.386	.48	6.5							1009
1	1041		3.92	3.84	34.477	27.387	78.0	1.419	.54	7.4	120.9	3.27	44.1	.00			1050

RV NEW HORIZON — FRONTS LEG II — STATION 25 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 21.2 N	120 32.1 W	20/07/85	1202 GMT		320	09 KT	340 03	7	1017.6 MB	15.? C	14.7 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.70	16.70	33.356	24.325	359.2	.000	5.82	104.8							0
1	1		16.70	16.70	33.356	24.325	359.1	.004	5.82	104.8	2.0	.37	.2	.00	.19	.05	1
	10	ISL	16.70	16.69	33.362	24.330	358.9	.036	5.84	105.1							10
1	11		16.70	16.69	33.363	24.331	358.9	.039	5.84	105.1	2.0	.37	.2	.00	.22	.05	11
	20	ISL	16.31	16.31	33.325	24.389	353.6	.072	5.93	105.9							20
	30	ISL	15.37	15.37	33.244	24.539	339.6	.106	6.09	106.7							30
1	32		15.13	15.13	33.226	24.579	336.0	.113	6.13	106.9	2.0	.36	.2	.00	.28	.11	32
1	42		13.45	13.44	33.131	24.858	309.5	.145	6.37	107.2	2.3	.37	.2	.00	.24	.06	42
	50	ISL	13.04	13.03	33.155	24.958	300.1	.170	6.30	105.1							50
1	53		13.00	13.00	33.172	24.979	298.2	.178	6.27	104.6	2.4	.40	.2	.01	.30	.07	53
1	64		12.78	12.77	33.245	25.079	289.0	.210	6.14	102.0	3.3	.46	.9	.06	.33	.05	64
1	74		11.74	11.73	33.132	25.189	278.5	.238	5.93	96.3	5.2	.72	4.4	.26	.22	.08	74
	75	ISL	11.82	11.81	33.164	25.199	277.6	.242	5.87	95.6							76
1	84		12.48	12.47	33.430	25.281	270.2	.266	5.42	89.6	5.8	.71	5.3	.18	.24	.10	84
1	95		11.91	11.79	33.534	25.490	250.5	.294	4.80	78.3	10.0	.93	9.7	.09	.14	.11	95
	100	ISL	11.53	11.52	33.557	25.559	244.1	.308	4.67	75.6							101
1	105		11.31	11.30	33.571	25.609	239.4	.318	4.59	74.1	12.0	1.07	11.9	.06	.11	.08	105
1	119		10.60	10.59	33.654	25.800	221.4	.353	4.22	67.1	16.5	1.27	15.6	.03	.08	.08	120
	125	ISL	10.26	10.25	33.689	25.886	213.3	.365	4.04	63.8							124
1	135		9.67	9.65	33.755	26.039	198.9	.386	3.71	57.8	22.9	1.58	20.3	.01	.02	.04	136
	150	ISL	9.24	9.23	33.842	26.175	186.1	.414	3.55	54.7							153
1	161		9.03	9.02	33.897	26.252	179.0	.435	3.16	48.6	29.7	1.86	24.5	.01	.00	.03	162
1	186		8.35	8.33	33.981	26.424	162.9	.477	3.05	46.2	35.4	1.98	26.5	.00	.00	.03	187
	200	ISL	8.09	8.06	34.005	26.486	157.4	.500	2.94	44.3							201
1	211		7.90	7.88	34.017	26.520	154.1	.517	2.84	42.6	40.0	2.09	28.1	.00			212
	250	ISL	7.41	7.39	34.065	26.629	144.2	.575	2.28	33.9							252
	300	ISL	6.98	6.95	34.120	26.732	135.1	.645	1.52	22.4							302
1	311		6.91	6.89	34.130	26.749	133.6	.660	1.35	19.8	59.5	2.68	35.2	.01			313
	400	ISL	6.47	6.40	34.221	26.886	121.6	.773	.65	9.5							403
1	416		6.37	6.33	34.235	26.906	119.9	.793	.58	8.4	72.8	3.00	39.4	.00			419
	500	ISL	6.01	5.97	34.284	26.992	112.7	.890	.39	5.6							504
1	516		5.95	5.90	34.291	27.005	111.5	.908	.38	5.5	81.4	3.14	40.0	.00			519
	600	ISL	5.55	5.50	34.331	27.086	104.5	.999	.35	4.9							605
	700	ISL	5.10	5.05	34.373	27.174	96.9	1.100	.31	4.3							706
1	770		4.80	4.74	34.400	27.230	91.9	1.166	.28	3.9	102.8	3.27	43.0	.00			776
	900	ISL	4.68	4.62	34.411	27.251	89.9	1.193	.29	4.1							907
	1000	ISL	4.03	3.96	34.476	27.374	79.1	1.362	.51	6.9							1009
1	1036		3.94	3.86	34.486	27.392	77.5	1.390	.57	7.8	121.4	3.28	43.7	.00			1045

RV NEW HORIZON — FRONTS LEG II — STATION 26 1

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 40.2 N	120 20.0 W	20/07/85	1525 GMT		320	10 KT	340 03	2	1018.0 MB	15.0 C	14.4 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.89	16.89	33.338	24.265	364.8	.000	5.79	104.6							0
1	1		16.89	16.89	33.338	24.265	364.8	.004	5.79	104.6	2.0	.37	.2	.00	.13	.04	1
	10	ISL	16.88	16.88	33.336	24.268	364.9	.036	5.79	104.6							10
1	11		16.88	16.87	33.336	24.268	364.9	.040	5.79	104.6	3.0	.37	.1	.00	.13	.04	11
	20	ISL	16.34	16.34	33.369	24.417	351.0	.077	5.99	107.2							20
	30	ISL	15.34	15.34	33.383	24.653	329.7	.106	6.21	108.8							30
1	33		14.97	14.97	33.384	24.735	321.0	.116	6.27	109.1	3.4	.43	.6	.03	.36	.12	33
1	49		12.56	12.56	33.255	25.129	283.8	.164	6.14	101.6	4.9	.60	2.5	.15	.30	.08	49
	50	ISL	12.51	12.51	33.270	25.150	281.8	.167	6.11	101.0							50
1	59		12.29	12.28	33.380	25.278	269.9	.191	5.89	96.9	7.2	.81	6.0	.27	.23	.08	59
1	71		11.64	11.63	33.374	25.396	259.9	.223	5.53	89.8	8.9	1.02	7.8	.24	.20	.09	71
	75	ISL	11.49	11.48	33.392	25.439	254.9	.234	5.39	87.2							76
1	86		11.12	11.11	33.448	25.548	244.6	.261	5.05	81.1	11.9	1.13	12.3	.07	.09	.08	86
1	96		10.63	10.61	33.489	25.667	233.5	.284	4.79	76.1	15.1	1.29	15.1	.03	.06	.07	96
	100	ISL	10.54	10.53	33.505	25.696	230.9	.295	4.70	74.6							101
1	107		10.41	10.40	33.536	25.742	226.6	.309	4.54	71.8	17.3	1.38	16.5	.02	.03	.05	107
1	116		9.92	9.91	33.629	25.897	212.0	.331	4.09	64.0	21.5	1.57	19.7	.01	.02	.05	117
	125	ISL	9.67	9.66	33.714	26.005	201.9	.349	3.74	58.3							126
1	126		9.64	9.62	33.727	26.021	200.4	.352	3.69	57.5	23.8	1.65	21.0	.01	.01	.05	127
1	147		9.16	9.14	33.862	26.205	183.2	.392	3.42	52.7	28.2	1.79	23.2	.01	.01	.03	148
	150	ISL	9.10	9.08	33.875	26.225	181.4	.397	3.39	52.2							151
1	174		8.62	8.60	33.950	26.358	169.0	.439	3.21	48.9	33.1	1.92	25.4	.01	.00	.05	175
	200	ISL	8.36	8.34	33.979	26.421	163.5	.482	3.10	46.9							201
1	204		8.33	8.31	33.981	26.428	162.9	.488	3.08	46.6	36.0	2.00	26.5	.01	.00	.02	205
1	230		7.91	7.89	34.013	26.515	154.9	.529	2.86	42.9	40.4	2.12	28.1	.01			231
	250	ISL	7.63	7.61	34.032	26.572	149.8	.560	2.60	38.8							252
	300	ISL	7.03	7.00	34.074	26.690	139.1	.633	1.97	29.0							302
1	347		6.58	6.55	34.103	26.774	131.5	.696	1.38	20.1	63.0	2.75	36.3	.01			349
	400	ISL	6.12	6.08	34.132	26.857	124.0	.764	.99	14.2							403
1	459		5.75	5.69	34.169	26.934	117.2	.835	.69	9.8	79.2	3.06	40.1	.00			462
	500	ISL	5.60	5.56	34.213	26.986	112.7	.882	.52	7.4							504
1	564		5.46	5.41	34.284	27.059	106.4	.952	.33	4.7	88.4	3.21	41.5	.00			568
	600	ISL	5.34	5.29	34.312	27.097	103.2	.990	.34	4.8							605
	700	ISL	4.98	4.92	34.376	27.190	95.1	1.089	.36	5.0							706
	800	ISL	4.62	4.55	34.427	27.268	88.3	1.181	.38	5.3							807
1	844		4.45	4.39	34.436	27.297	85.7	1.219	.39	5.4	110.2	3.30	43.6	.00			851
	1000	ISL	4.00	3.92	34.485	27.384	78.1	1.347	.50	6.9							1009
1	1133		3.67	3.59	34.505	27.434	73.7	1.448	.64	8.7	126.8	3.25	43.7	.00			1143

RV NEW HORIZON — FRONTS LEG II — STATION 26 9

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 34.7 N	120 20.4 W	21/07/85	0834 GMT		300	09 KT	340 03	2	1015.9 MB	14.4 C	13.9 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.89	16.89	33.346	24.271	364.3	.000	5.81	105.0							0
1	1		16.89	16.89	33.346	24.271	364.3	.004	5.81	105.0	2.4	.38	.1	.00	.16	.03	1
	10	ISL	16.88	16.88	33.345	24.273	364.3	.036	5.81	105.0							10
1	11		16.88	16.88	33.345	24.274	364.3	.040	5.81	105.0	2.5	.39	.1	.00	.15	.03	11
	20	ISL	16.23	16.23	33.348	24.426	349.2	.072	6.04	107.8							20
	30	ISL	15.02	15.02	33.350	24.697	324.3	.106	6.28	109.3							30
1	32		14.74	14.73	33.351	24.759	318.7	.112	6.32	109.4	2.9	.46	.7	.03	.40	.16	32
1	47		12.19	12.18	33.242	25.191	277.8	.156	6.13	100.6	5.1	.77	3.8	.20	.40	.12	47
	50	ISL	12.12	12.11	33.290	25.240	273.2	.165	6.02	98.6							50
1	58		11.95	11.95	33.376	25.338	266.0	.186	5.70	93.1	7.3	.91	7.7	.37	.35	.11	58
1	69		11.58	11.57	33.494	25.500	248.9	.214	5.25	85.2	10.8	1.13	12.0	.08	.20	.10	69
	75	ISL	11.47	11.46	33.534	25.551	244.1	.230	5.10	82.6							76
1	84		11.20	11.19	33.553	25.616	238.3	.250	4.93	79.3	13.8	1.28	14.5	.03	.10	.07	84
1	94		10.41	10.40	33.524	25.731	227.3	.274	4.63	73.2	17.0	1.43	16.8	.03	.05	.05	94
	100	ISL	10.23	10.21	33.550	25.784	222.4	.288	4.52	71.2							101
1	105		10.14	10.13	33.580	25.822	218.9	.298	4.42	69.5	19.6	1.55	18.7	.02	.03	.05	105
1	114		9.75	9.74	33.651	25.943	207.5	.319	3.96	61.8	23.3	1.72	21.3	.01	.02	.05	115
1	124		9.66	9.64	33.741	26.029	199.6	.339	3.68	57.3	24.1	1.70	21.2	.02	.01	.04	125
	125	ISL	9.65	9.63	33.745	26.033	199.2	.341	3.67	57.1							126
1	145		9.25	9.23	33.841	26.174	186.1	.380	3.40	52.5	27.9	1.84	23.3	.01	.01	.04	146
	150	ISL	9.17	9.16	33.856	26.198	184.0	.388	3.37	51.9							151
1	171		8.89	8.87	33.900	26.285	176.1	.426	3.28	50.3	30.8	1.92	24.5	.01	.00	.07	172
	200	ISL	8.48	8.46	33.965	26.393	166.3	.476	3.17	48.2							201
1	201		8.46	8.44	33.966	26.396	166.0	.477	3.17	48.1	34.4	2.03	25.9	.01	.00	.04	202
1	227		8.03	8.01	34.003	26.490	157.3	.519	3.02	45.4	39.0	2.14	27.5	.01			228
	250	ISL	7.71	7.68	34.022	26.552	151.7	.555	2.79	41.7							252
	300	ISL	7.11	7.08	34.054	26.662	141.8	.628	2.25	33.2							302
1	342		6.71	6.68	34.070	26.729	135.7	.687	1.74	25.4	58.4	2.71	34.6	.01			344
	400	ISL	6.15	6.12	34.116	26.840	125.7	.763	1.14	16.6							403
1	451		5.78	5.74	34.166	26.927	117.9	.825	.70	10.0	79.0	3.19	40.2	.00			454
	500	ISL	5.62	5.58	34.227	26.994	112.0	.881	.47	6.7							504
1	554		5.52	5.48	34.294	27.060	106.4	.940	.32	4.5	88.9	3.38	41.6	.00			558
	600	ISL	5.36	5.31	34.329	27.107	102.2	.988	.32	4.6							605
	700	ISL	5.00	4.94	34.390	27.199	94.3	1.086	.33	4.6							706
	800	ISL	4.61	4.55	34.426	27.271	87.9	1.177	.34	4.7							807
1	829		4.50	4.43	34.433	27.289	86.4	1.202	.34	4.7	110.4	3.48	43.8	.00			835
	1000	ISL	3.99	3.91	34.485	27.386	77.9	1.343	.49	6.6							1009
1	1108		3.70	3.62	34.503	27.430	74.1	1.425	.63	8.6	127.1	3.47	43.9	.00			1118

RV NEW HORIZON — FRONTS LEG II — STATION 27 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 21.3 N	121 11.0 W	21/07/85	1502 GMT		330	12 KT	320 03	2	1017.6 MB	15.0 C	13.9 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	17.25	17.25	33.310	24.160	374.8	.000	5.68	103.3							0
1	1		17.25	17.25	33.310	24.160	374.8	.004	5.68	103.3	2.5	.35	.2	.00	.17	.01	1
	10	ISL	17.24	17.24	33.308	24.160	375.1	.037	5.74	104.4							10
1	11		17.24	17.24	33.308	24.160	375.1	.041	5.75	104.6	2.4	.36	.2	.00	.17	.01	11
	20	ISL	16.67	16.66	33.319	24.303	361.6	.074	5.90	106.1							20
1	22		16.48	16.48	33.320	24.348	357.6	.081	5.94	106.4	2.5	.38	.2	.01	.24	.04	22
	30	ISL	15.46	15.45	33.273	24.543	335.2	.109	6.12	107.5							30
1	33		15.07	15.06	33.254	24.614	332.6	.119	6.19	107.6	2.6	.37	.2	.00	.25	.06	33
1	43		14.01	14.00	33.204	24.800	315.1	.151	6.27	106.8	2.4	.36	.2	.00	.16	.03	43
	50	ISL	13.75	13.74	33.206	24.856	310.0	.174	6.29	106.6							50
1	54		13.68	13.68	33.213	24.874	308.3	.185	6.30	106.6	2.5	.38	.1	.00	.19	.07	54
1	64		13.40	13.39	33.236	24.949	301.4	.216	6.17	103.8	2.7	.38	.1	.00	.25	.11	64
1	75		12.98	12.97	33.239	25.035	293.4	.248	6.10	101.8	3.0	.40	.1	.01	.45	.21	75
1	85		12.42	12.42	33.279	25.173	280.5	.277	5.91	97.5	4.2	.64	1.3	.30	.33	.11	85
1	96		11.62	11.61	33.277	25.324	266.3	.307	5.59	90.6	5.7	.75	6.0	.04	.19	.15	96
	100	ISL	11.48	11.47	33.337	25.396	259.5	.318	5.37	86.9							101
1	106		11.37	11.35	33.420	25.482	251.5	.333	5.10	82.3	8.9	.91	9.1	.04	.11	.12	106
1	116		11.02	11.00	33.480	25.592	241.2	.360	4.79	76.7	11.6	1.08	11.9	.03	.08	.09	117
	125	ISL	10.60	10.59	33.554	25.723	229.9	.380	4.46	70.9							126
1	126		10.53	10.51	33.566	25.745	228.8	.383	4.41	70.0	15.5	1.32	15.4	.02	.04	.05	127
1	142		9.96	9.94	33.642	25.902	212.2	.418	4.02	63.0	20.8	1.55	19.6	.01	.01	.05	143
	150	ISL	9.65	9.64	33.723	26.015	201.4	.434	3.77	58.7							151
1	159		9.35	9.34	33.810	26.133	190.4	.450	3.52	54.5	25.8	1.73	22.2	.01			159
1	186		8.98	8.96	33.895	26.260	178.7	.497	3.30	50.7	29.6	1.86	24.1	.01			185
	200	ISL	8.74	8.72	33.936	26.329	172.4	.525	3.18	48.7							201
1	210		8.60	8.58	33.958	26.369	168.7	.542	3.11	47.4	33.6	1.97	25.8	.00			211
	250	ISL	8.05	8.03	34.025	26.504	156.4	.607	2.62	39.5							252
	300	ISL	7.45	7.43	34.085	26.639	144.2	.683	1.97	29.2							302
1	314		7.30	7.27	34.097	26.670	141.3	.703	1.77	26.2	52.5	2.58	33.2	.00			316
	400	ISL	6.57	6.54	34.178	26.834	126.6	.818	.98	14.2							403
1	467		6.14	6.10	34.228	26.930	118.1	.900	.56	8.1	75.7	3.12	39.2	.00			470
	500	ISL	5.93	5.89	34.253	26.977	114.0	.938	.50	7.2							504
	600	ISL	5.40	5.35	34.318	27.094	103.5	1.047	.31	4.5							605
1	619		5.31	5.26	34.329	27.113	101.9	1.066	.28	4.0	92.0	3.34	41.8	.00			623

RV NEW HORIZON — FRONTS LEG II — STATION 28 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 25.5 N	121 21.2 W	21/07/85	1745 GMT		330	13 KT	330 03	1	1018.0 MB	15.6 C	13.9 C	7/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.84	16.84	33.317	24.261	365.3	.000	5.81	104.9							0
1	1	16.84	16.84	33.317	24.261	365.2	.004	5.81	104.9	2.6	.37	.2	.01	.32	.01	1
	10 ISL	16.84	16.84	33.329	24.270	364.6	.036	5.87	105.9							10
1	11	16.84	16.84	33.330	24.271	364.6	.040	5.87	106.0	2.4	.39	.2	.01	.33	.05	11
	20 ISL	16.43	16.43	33.371	24.398	352.8	.072	5.89	105.4							20
1	22	16.34	16.34	33.380	24.426	350.2	.079	5.89	105.3	2.6	.44	1.0	.03	.36	.06	22
	30 ISL	16.32	16.31	33.397	24.445	348.6	.107	5.88	105.1							30
1	32	16.31	16.30	33.401	24.450	348.2	.114	5.88	105.1	2.9	.48	1.4	.04	.30	.06	32
1	42	16.10	16.09	33.373	24.476	346.0	.149	5.86	104.3	2.7	.48	1.2	.03	.33	.07	42
	50 ISL	14.90	14.89	33.252	24.649	329.7	.176	6.16	106.9							50
1	53	14.45	14.44	33.215	24.717	323.3	.185	6.26	107.6	2.4	.42	.4	.01	.31	.08	53
1	63	13.72	13.71	33.200	24.857	310.1	.217	6.23	105.5	2.6	.38	.0	.00	.23	.07	63
1	73	13.30	13.29	33.212	24.952	301.3	.247	6.20	104.1	2.6	.39	.0	.00	.19	.10	73
	75 ISL	13.28	13.27	33.240	24.976	299.0	.254	6.14	103.0							76
1	84	13.19	13.17	33.332	25.069	290.5	.280	5.89	98.7	3.3	.43	.6	.09	.22	.14	84
1	94	12.59	12.57	33.295	25.156	282.3	.308	5.78	95.7	3.6	.49	1.7	.15	.19	.17	94
	100 ISL	12.44	12.43	33.298	25.187	279.6	.326	5.67	93.5							101
1	104	12.37	12.36	33.309	25.209	277.5	.336	5.59	92.1	4.7	.61	3.5	.13	.18	.16	104
1	114	11.83	11.82	33.399	25.380	261.5	.365	5.25	85.6	7.4	.82	7.4	.06	.10	.09	115
1	124	11.01	10.99	33.439	25.562	244.2	.391	4.96	79.4	10.4	1.00	10.6	.03	.06	.08	125
	125 ISL	10.98	10.96	33.443	25.570	243.4	.392	4.94	79.1							126
1	140	10.40	10.39	33.583	25.760	225.7	.428	4.44	70.2	17.3	1.44	17.5	.01	.01	.03	141
	150 ISL	10.02	10.00	33.661	25.907	211.8	.449	4.02	63.1							151
1	155	9.81	9.79	33.790	25.972	205.7	.460	3.80	59.4	23.2	1.67	21.3	.01			156
1	181	8.93	8.91	33.828	26.214	182.9	.510	3.17	48.6	30.4	1.92	25.4	.01			182
	200 ISL	8.70	8.68	33.872	26.285	176.5	.544	3.06	46.7							201
1	207	8.66	8.63	33.883	26.301	175.1	.556	3.05	46.5	33.1	2.00	26.5	.01			208
	250 ISL	8.08	8.03	33.957	26.450	161.5	.629	2.77	41.7							252
	300 ISL	7.37	7.34	34.031	26.608	147.0	.706	2.36	35.0							302
1	309	7.24	7.21	34.043	26.636	144.5	.719	2.28	33.7	50.7	2.41	31.9	.00			311
	400 ISL	6.49	6.45	34.149	26.823	127.6	.843	1.27	18.4							403
1	462	6.11	6.07	34.207	26.918	119.2	.919	.65	9.4	76.5	3.09	39.4	.00			465
	500 ISL	5.96	5.92	34.242	26.977	113.9	.963	.56	8.0							504
	600 ISL	5.27	5.22	34.320	27.111	101.8	1.071	.33	4.6							605
1	617	5.18	5.13	34.332	27.131	100.0	1.088	.29	4.1	97.3	3.34	42.6	.00			621

RV NEW HORIZON — FRONTS LEG II — STATION 29 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 15.2 N	121 01.0 W	21/07/85	2205 GMT		320	10 KT	330 03	2	1016.9 MB	17.8 C	15.6 C	9/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	16.87	16.87	33.276	24.223	368.8	.000	5.80	104.7							0
1	2	16.87	16.87	33.276	24.223	368.8	.007	5.80	104.7	2.7	.34	.1	.00	.14	.02	2
	10 ISL	16.86	16.86	33.276	24.225	368.9	.037	5.83	105.3							10
1	12	16.86	16.86	33.276	24.226	368.0	.044	5.84	105.4	2.6	.35	.1	.00	.13	.02	12
	20 ISL	16.82	16.81	33.273	24.233	369.5	.074	5.85	105.4							20
1	23	16.80	16.80	33.271	24.236	369.3	.085	5.85	105.5	2.7	.35	.1	.00	.13	.02	23
	30 ISL	15.81	15.81	33.269	24.461	347.0	.110	6.06	107.2							30
1	33	15.34	15.33	33.267	24.565	337.3	.120	6.16	107.9	3.0	.34	.1	.00	.13	.03	33
1	43	14.23	14.22	33.200	24.751	319.7	.152	6.29	107.7	3.2	.34	.1	.00	.16	.03	43
	50 ISL	13.88	13.87	33.218	24.838	311.6	.175	6.27	106.6							50
1	54	13.73	13.73	33.226	24.874	309.3	.187	6.26	106.1	3.3	.35	.1	.00	.21	.07	54
1	64	13.03	13.02	33.150	24.957	300.6	.217	6.28	104.8	3.4	.38	.1	.00	.31	.11	64
1	75	12.54	12.53	33.172	25.070	290.0	.249	6.16	101.8	3.9	.44	.3	.04	.32	.17	75
1	85	12.19	12.18	33.243	25.192	279.7	.278	5.89	96.6	4.8	.56	2.5	.18	.24	.12	85
1	95	12.22	12.21	33.345	25.265	272.0	.305	5.59	91.8	6.5	.71	5.1	.18	.20	.11	95
	100 ISL	11.85	11.84	33.377	25.360	263.0	.320	5.43	88.5							101
1	106	11.41	11.40	33.411	25.467	252.9	.334	5.23	84.5	10.0	.98	10.2	.04	.11	.08	106
1	115	11.08	11.06	33.511	25.605	240.0	.358	4.73	75.9	13.3	1.13	12.8	.02	.07	.11	116
1	125	10.66	10.65				.382	4.32	68.7	16.4	1.26	15.0	.02	.07	.13	126
1	141	10.07	10.05	33.723	25.947	207.9	.416	3.96	62.2	21.0	1.46	18.3	.01	.03	.06	142
	150 ISL	9.80	9.79	33.772	26.029	200.1	.434	3.78	59.0							151
1	156	9.63	9.61	33.802	26.092	195.3	.446	3.65	56.8	25.0	1.65	20.8	.01			157
1	182	8.93	8.91	33.902	26.273	177.4	.494	3.19	48.9	30.9	1.89	24.6	.00			183
	200 ISL	8.64	8.62	33.970	26.372	168.3	.525	2.93	44.7							201
1	207	8.55	8.53	33.994	26.404	165.3	.537	2.84	43.2	36.0	2.07	26.9	.00			208
	250 ISL	7.89	7.87	34.058	26.554	151.6	.605	2.35	35.3							252
	300 ISL	7.21	7.18	34.071	26.662	141.1	.678	1.88	27.7							302
1	309	7.10	7.08	34.078	26.682	140.0	.690	1.81	26.7	55.1	2.57	33.7	.01			310
	400 ISL	6.33	6.30	34.159	26.851	124.8	.811	1.00	14.5							403
1	462	5.96	5.93	34.213	26.939	117.0	.886	.59	8.5	78.7	3.13	39.9	.00			465
	500 ISL	5.75	5.71	34.246	26.993	112.2	.930	.52	7.4							504
	600 ISL	5.27	5.22	34.326	27.115	101.3	1.037	.32	4.6							605
1	618	5.20	5.15	34.339	27.134	99.7	1.054	.29	4.1	96.5	3.31	42.5	.00			622

RV NEW HORIZON — FRONTS LEG II — STATION 30 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 10.0 N	120 50.6 W	22/07/85	0050 GMT		320	11 KT	330 03	2	1016.3 MB	16.7 C	15.0 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.70	16.70	33.351	24.321	359.6	.000	5.91	106.4							0
1	2		16.70	16.70	33.351	24.321	359.5	.007	5.91	106.4	2.7	.39	.0	.00	.15	.04	2
	10	ISL	16.65	16.65	33.342	24.326	359.3	.036	5.99	107.6							10
1	12		16.63	16.63	33.338	24.327	359.3	.043	5.99	107.7	2.7	.40	.0	.00	.13	.04	12
	20	ISL	16.53	16.53	33.323	24.338	358.5	.072	5.94	106.5							20
1	22		16.50	16.50	33.320	24.343	358.1	.079	5.92	106.1	2.5	.39	.0	.00	.12	.03	22
	30	ISL	16.34	16.33	33.319	24.380	354.8	.108	5.95	106.3							30
1	33		16.28	16.27	33.318	24.393	353.7	.118	5.96	106.4	2.6	.40	.0	.00	.12	.04	33
1	43		14.26	14.25	33.276	24.803	314.8	.151	6.26	107.3	2.9	.38	.0	.00	.25	.09	43
	50	ISL	13.61	13.60	33.214	24.890	306.6	.173	6.32	106.8							50
1	53		13.46	13.45	33.197	24.906	305.1	.182	6.34	106.8	2.9	.41	.0	.00	.30	.09	53
1	63		13.02	13.01	33.282	25.060	290.7	.211	6.06	101.2	3.7	.44	1.2	.07	.33	.12	63
1	73		12.83	12.82	33.317	25.126	284.7	.240	5.91	98.3	4.4	.57	2.8	.17	.28	.14	73
	75	ISL	12.81	12.80	33.336	25.143	283.1	.247	5.85	97.3							76
1	84		12.72	12.71	33.422	25.228	275.3	.271	5.54	92.0	6.1	.68	4.7	.17	.25	.15	84
1	94		12.31	12.30	33.499	25.368	262.2	.297	5.09	83.9	8.1	.83	7.8	.14	.21	.14	94
	100	ISL	11.68	11.66	33.530	25.510	248.7	.314	4.82	78.4							101
1	104		11.35	11.34	33.543	25.580	242.1	.323	4.70	75.9	11.7	1.06	11.8	.08	.12	.16	104
1	113		11.22	11.21	33.575	25.629	237.7	.346	4.56	73.4	12.9	1.12	12.7	.07	.07	.09	114
1	123		10.63	10.61	33.636	25.783	223.1	.369	4.25	67.6	16.7	1.32	15.9	.03	.06	.10	124
	125	ISL	10.54	10.52	33.643	25.803	221.2	.373	4.21	66.7							126
1	138		9.94	9.92	33.690	25.942	208.2	.401	3.87	60.6	21.4	1.58	19.9	.02	.02	.05	139
	150	ISL	9.58	9.57	33.728	26.031	199.9	.425	3.66	56.9							151
1	154		9.47	9.46	33.743	26.061	197.1	.434	3.59	55.7	24.8	1.72	22.2	.01			155
1	179		8.92	8.81				.480	3.01	46.1	31.4	1.95	25.5	.02			180
	200	ISL	8.57	8.55	33.988	26.396	165.9	.516	2.74	41.7							201
1	204		8.54	8.52	34.008	26.417	164.0	.523	2.70	41.1	36.8	2.14	27.8	.03			205
	250	ISL	8.02	7.99	34.123	26.586	148.6	.595	2.04	30.8							252
	300	ISL	7.50	7.47	34.169	26.697	139.7	.666	1.39	20.7							302
1	304		7.46	7.43	34.168	26.704	138.2	.672	1.34	19.9	55.4	2.71	34.2	.01			306
	400	ISL	6.81	6.78	34.244	26.854	125.0	.798	.73	10.6							403
1	455		6.50	6.46	34.266	26.914	119.9	.866	.56	8.1	73.0	3.14	38.7	.01			458
	500	ISL	6.19	6.14	34.284	26.969	115.0	.918	.49	7.1							504
	600	ISL	5.45	5.40	34.306	27.079	105.0	1.029	.34	4.8							605
1	610		5.37	5.32	34.307	27.089	104.1	1.039	.32	4.5	92.5	3.32	42.3	.00			614

RV NEW HORIZON — FRONTS LEG II — STATION 31 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 05.2 N	120 41.2 W	22/07/85	0330 GMT		320	18 KT	330 03	2	1015.9 MB	15.0 C	14.4 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	16.93	16.93	33.387	24.293	362.1	.000	5.81	105.1							0
1	1		16.93	16.93	33.387	24.293	362.1	.004	5.81	105.1	2.5	.41	.1	.00	.15	.03	1
	10	ISL	16.93	16.93	33.384	24.292	362.6	.036	5.83	105.4							10
1	11		16.93	16.93	33.384	24.292	362.6	.040	5.83	105.4	2.4	.41	.0	.00	.14	.03	11
	20	ISL	16.55	16.55	33.361	24.362	356.2	.072	5.89	105.8							20
1	22		16.39	16.38	33.351	24.393	353.3	.079	5.92	105.9	2.3	.41	.0	.00	.15	.04	22
	30	ISL	14.95	14.95	33.291	24.667	327.4	.107	6.18	107.5							30
1	32		14.63	14.62	33.282	24.729	321.5	.113	6.24	107.7	2.6	.40	.0	.00	.17	.04	32
1	42		14.24	14.23	33.286	24.815	313.6	.144	6.24	106.9	2.7	.40	.0	.00	.20	.06	42
	50	ISL	13.80	13.79	33.339	24.947	301.2	.169	6.12	103.9							50
1	52		13.70	13.70	33.350	24.976	298.5	.175	6.09	103.2	3.4	.44	.1	.01	.34	.11	52
1	62		13.31	13.30	33.355	25.060	290.8	.204	6.00	100.9	3.8	.54	1.7	.09	.34	.13	62
1	72		12.71	12.70	33.348	25.173	280.3	.232	5.95	98.8	4.5	.67	3.6	.20	.35	.16	72
	75	ISL	12.57	12.56	33.348	25.200	277.7	.242	5.88	97.4							76
1	83		12.27	12.26	33.359	25.266	271.6	.263	5.67	93.3	5.7	.77	5.5	.21	.35	.16	83
1	93		11.80	11.79	33.400	25.386	260.3	.289	5.34	87.0	7.6	.93	8.3	.07	.26	.18	93
	100	ISL	11.46	11.45	33.449	25.488	250.8	.308	5.06	81.8							101
1	103		11.34	11.32	33.468	25.525	247.3	.314	4.96	80.0	10.9	1.11	11.6	.06	.17	.11	103
1	112		10.78	10.77	33.551	25.688	231.9	.338	4.60	73.4	14.5	1.31	15.0	.04	.10	.06	113
1	122		10.34	10.32	33.636	25.832	219.4	.361	4.29	67.8	18.7	1.54	18.5	.02	.06	.07	123
	125	ISL	10.26	10.24	33.659	25.865	215.3	.366	4.14	65.3							126
1	137		9.92	9.90	33.761	26.002	202.5	.392	3.45	54.1	24.6	1.78	21.7	.02	.06	.07	138
	150	ISL	9.56	9.55	33.824	26.110	192.4	.417	3.18	49.5							151
1	152		9.51	9.49	33.833	26.126	190.9	.421	3.16	49.1	28.1	1.93	23.7	.01			153
1	177		9.05	9.04				.467									178
	200	ISL	8.65	8.63	33.985	26.382	167.6	.507	2.70	41.2							201
1	207		8.60	8.58	33.994	26.396	166.0	.512	2.68	40.8	36.5	2.20	27.5	.01			204
	250	ISL	8.04	8.02	34.097	26.562	150.9	.586	2.05	30.8							252
	300	ISL	7.60	7.57	34.166	26.681	140.3	.659	1.35	20.1							302
1	301		7.59	7.56	34.167	26.684	140.1	.661	1.33	19.8	54.7	2.80	33.8	.01			303
	400	ISL	6.67	6.63	34.232	26.864	123.9	.791	.68	10.0							403
1	449		6.27	6.23	34.249	26.930	118.0	.851	.53	7.7	75.9	3.23	39.2	.01			452
	500	ISL	5.92	5.87	34.282	27.002	111.6	.909	.44	6.3							504
1	594		5.40	5.36	34.347	27.116	101.4	1.009	.28	4.0	93.0	3.44	42.0	.01			598

RV NEW HORIZON — FRONTS LEG II — STATION 32 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
32 01.0 N	120 30.9 W	22/07/85	0622 GMT		310	15 KT	330 04	2	1016.5 MB	14.4 C	13.9 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
1	0	17.06	17.06	33.605	24.431	349.0	.000	5.83	105.8	2.7	.34	.1	.03	.18	.06	0
1	10	17.06	17.06	33.606	24.432	348.2	.035	5.82	105.7	2.7	.36	.1	.03	.18	.04	10
	20 ISL	16.64	16.64	33.596	24.523	340.9	.069	5.90	106.2							20
1	21	16.56	16.56	33.593	24.539	339.4	.073	5.91	106.3	2.6	.36	.3	.05	.21	.05	21
	30 ISL	15.05	15.05	33.536	24.833	311.6	.102	6.04	105.4							30
1	31	14.89	14.89	33.531	24.866	308.5	.105	6.05	105.2	3.6	.51	1.9	.11	.31	.07	31
1	41	13.44	13.44	33.506	25.149	281.7	.134	5.96	100.6	5.0	.66	4.0	.12	.32	.07	41
	50 ISL	12.66	12.65	33.545	25.334	264.3	.159	5.63	93.6							50
1	52	12.53	12.52	33.555	25.367	261.2	.164	5.54	91.7	7.5	.86	7.4	.27	.32	.08	52
1	62	11.56	11.55	33.601	25.586	240.5	.189	4.78	77.6	12.3	1.14	12.1	.29	.28	.11	62
1	73	11.25	11.24	33.614	25.654	234.4	.219	4.51	72.7	14.1	1.23	13.9	.25	.19	.11	73
	75 ISL	11.23	11.22	33.615	25.657	234.0	.220	4.49	72.3							76
1	83	11.06	11.05	33.632	25.702	230.0	.238	4.35	69.8	15.6	1.30	15.1	.23	.16	.09	83
1	93	10.14	10.13	33.710	25.923	209.1	.260	3.75	59.0	21.5	1.58	19.8	.05	.09	.06	93
	100 ISL	9.95	9.94	33.717	25.961	205.5	.275	3.68	57.7							101
1	104	9.91	9.90	33.726	25.974	204.4	.282	3.65	57.2	22.7	1.61	20.5	.04	.07	.06	104
1	113	9.66	9.64	33.870	26.130	189.8	.302	3.03	47.2	27.6	1.85	23.5	.03	.03	.05	114
1	123	9.57	9.56	33.901	26.168	186.3	.321	2.91	45.3	29.0	1.89	24.1	.02	.03	.05	124
	125 ISL	9.55	9.53	33.905	26.175	185.7	.324	2.91	45.2							126
1	133	9.29	9.28	33.925	26.232	180.5	.348	2.89	44.7	30.5	1.95	24.9	.02	.02	.04	139
	150 ISL	8.97	8.97	33.941	26.294	174.9	.369	2.91	44.7							151
1	154	8.91	8.89	33.945	26.309	173.4	.374	2.91	44.6	32.9	1.99	25.9	.02			154
1	179	8.64	8.62	33.979	26.379	167.2	.418	2.75	41.9	35.4	2.06	26.7	.02			180
	200 ISL	8.32	8.30	34.038	26.473	158.5	.453	2.68	37.6							201
1	205	8.25	8.23	34.052	26.496	156.4	.460	2.61	36.4	41.4	2.22	28.9	.02			206
	250 ISL	7.82	7.79	34.123	26.616	145.7	.528	1.86	27.9							252
	300 ISL	7.48	7.45	34.162	26.697	138.8	.599	1.35	20.1							302
1	305	7.46	7.43	34.163	26.700	138.5	.604	1.32	19.6	55.4	2.66	33.9	.02			305
	400 ISL	6.7	6.66	34.229	26.857	124.6	.731	.71	10.4							403
1	450	6.33	6.29	34.256	26.928	118.3	.792	.53	7.7	74.9	3.06	39.0	.01			453
	500 ISL	5.99	5.95	34.290	26.998	112.1	.850	.45	6.5							504
1	59	5.46	5.45	34.356	27.124	100.7	.955	.30	4.2	92.8	3.25	41.8	.01			603

PL NEW HORIZON — FRONTS LEG II — STATION 33 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
33 54.3 N	120 12.4 W	22/07/85	1005 GMT		310	13 KT	330 04	2	1016.3 MB	14.4 C	13.9 C	8/8	SC

CAST	DEPTH M	TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0 ISL	17.72	17.72	33.588	24.260	365.3	.000	5.64	103.7							0
1	1	17.72	17.72	33.588	24.260	365.3	.004	5.64	103.7	2.6	.24	.1	.00	.11	.02	1
	10 ISL	17.72	17.72	33.587	24.259	365.7	.037	5.67	104.2							10
1	11	17.72	17.72	33.587	24.259	365.7	.040	5.67	104.3	2.5	.24	.1	.00	.11	.01	11
	20 ISL	17.69	17.68	33.587	24.268	365.2	.073	5.67	104.2							20
1	21	17.69	17.68	33.587	24.269	365.2	.076	5.67	104.2	2.4	.25	.1	.00	.11	.01	21
	30 ISL	16.37	16.37	33.525	24.530	340.5	.108	5.96	106.8							30
1	31	16.20	16.20	33.518	24.564	337.3	.112	6.00	107.1	2.5	.26	.1	.00	.15	.02	31
1	41	14.14	14.13	33.458	24.969	299.0	.143	6.32	108.1	2.8	.31	.2	.02	.45	.08	41
1	50	13.46	13.45	33.479	25.125	284.3	.169	6.12	103.3	4.0	.40	1.5	.05	.80	.14	50
1	60	12.73	12.72	33.510	25.294	268.3	.197	5.57	92.6	6.3	.61	4.9	.12	.67	.23	60
1	70	11.92	11.92	33.554	25.493	250.6	.223	4.92	80.4	10.2	.89	9.5	.21	.39	.17	70
	75 ISL	11.65	11.64	33.571	25.548	244.5	.236	4.69	76.2							76
1	80	11.43	11.42	33.588	25.602	239.5	.247	4.51	73.0	13.0	1.08	12.7	.27	.27	.19	80
1	90	10.84	10.83	33.642	25.749	225.7	.270	4.05	64.7	16.4	1.27	15.7	.20	.20	.19	90
1	100	10.27	10.26	33.768	25.946	207.1	.292	3.29	52.0	22.6	1.59	20.7	.04	.10	.11	100
1	109	10.12	10.10	33.789	25.989	203.1	.312	3.22	50.7	23.6	1.64	21.5	.03	.08	.10	110
1	119	9.85	9.83	33.844	26.078	194.9	.332	3.02	47.3	26.2	1.76	22.9		.05	.13	120
	125 ISL	9.73	9.71	33.868	26.116	191.3	.343	2.96	46.2							126
1	134	9.56	9.54	33.901	26.170	186.3	.360	2.88	44.8	28.7	1.86	24.4	.02	.03	.06	135
1	149	9.37	9.32	33.954	26.248	179.3	.387	2.74	42.4	31.2	1.94	25.6	.02			150
	150 ISL	9.32	9.31	33.956	26.252	179.9	.389	2.73	42.3							151
1	174	8.81	8.80				.431									175
1	200	8.42	8.40	34.035	26.456	160.2	.473	2.44	37.0	39.3	2.12	28.6	.01			201
	250 ISL	7.89	7.87	34.107	26.593	148.0	.550	1.89	28.4							252
1	300	7.49	7.47	34.167	26.698	138.7	.622	1.29	19.2	55.1	2.61	34.1	.01			302
	400 ISL	6.71	6.67	34.246	26.870	123.4	.753	.64	9.4							403
1	455	6.33	6.29	34.276	26.944	116.8	.819	.44	6.4	76.8	3.02	39.0	.00			458
	500 ISL	6.04	5.99	34.302	27.002	111.7	.871	.39	5.5							504
	600 ISL	5.48	5.43	34.348	27.109	102.3	.978	.26	3.7							605
1	612	5.42	5.37	34.353	27.119	101.3	.989	.25	3.5	93.2	3.33	41.8	.00			616

RV NEW HORIZON FRONTS LEG II STATION 34 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 50.7 N	120 09.8 W	22/07/85	1300 GMT		310	13 KT	340 04	2	1016.5 MB	15.6 C	14.4 C	8/8	CU

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	18.06	18.06	33.582	24.173	373.7	.000	5.61	103.8							0
1	1		18.06	18.06	33.582	24.173	373.6	.004	5.61	103.8	2.4	.26	.1	.00	.11	.01	1
	10	ISL	18.04	18.03	33.589	24.185	372.8	.037	5.64	104.3							10
1	11		18.03	18.03	33.590	24.186	372.7	.041	5.64	104.3	2.3	.25	.1	.00	.11	.01	11
	20	ISL	17.23	17.23	33.561	24.358	356.6	.074	5.82	106.0							20
1	22		17.01	17.01	33.453	24.403	352.4	.081	5.87	106.4	2.2	.27	.1	.00	.14	.02	22
	30	ISL	16.29	16.28	33.525	24.552	338.4	.109	6.04	108.0							30
1	32		16.04	16.04	33.518	24.600	333.9	.115	6.08	108.1	2.2	.27	.1	.00	.17	.01	32
1	42		13.71	13.71	33.476	25.071	289.2	.166	6.25	106.0	3.4	.36	.7	.02	.74	.11	42
	50	ISL	13.35	13.34	33.478	25.146	281.1	.169	6.04	101.6							50
1	52		13.27	13.26	33.478	25.163	280.7	.174	5.97	100.3	4.4	.45	2.6	.06	.40	.14	52
1	64		12.79	12.78	33.559	25.320	264.0	.204	5.72	95.2	6.4	.68	5.1	.16	.63	.23	64
1	74		12.06	12.05	33.596	25.491	250.0	.232	5.01	82.1	10.0	.94	9.4	.30	.37	.16	74
	75	ISL	11.94	11.93	33.599	25.514	247.7	.236	4.92	80.5							76
1	84		11.25	11.24	33.630	25.666	233.4	.256	4.32	69.6	14.4	1.20	14.4	.33	.19	.12	84
1	94		10.74	10.73	33.695	25.791	221.8	.279	3.62	57.9	18.3	1.45	18.2	.05	.16	.14	94
	100	ISL	10.57	10.55	33.729	25.865	214.8	.293	3.42	54.4							101
1	105		10.37	10.35	33.754	25.919	209.7	.303	3.34	52.9	22.0	1.57	20.5	.02	.10	.10	105
1	114		9.92	9.90	33.833	26.057	196.8	.323	3.11	48.8	26.0	1.74	22.9	.02	.05	.06	115
1	124		9.77	9.76	33.859	26.102	192.7	.342	2.99	46.7	26.9	1.79	23.5	.01	.04	.05	125
	125	ISL	9.76	9.74	33.860	26.105	192.4	.343	2.99	46.7							126
1	140		9.52	9.51	33.889	26.199	183.7	.372	2.92	45.2	30.1	1.88	25.0	.01	.01	.05	141
	150	ISL	9.11	9.10	33.922	26.259	179.1	.390	2.82	43.4							151
1	155		9.01	9.00	33.941	26.290	175.3	.399	2.76	42.4	32.4	1.97	26.3	.00			156
1	181		8.61	8.60	34.005	26.403	165.0	.443	2.54	38.7	36.2	2.08	27.2	.01			182
	200	ISL	8.25	8.23	34.073	26.511	154.9	.473	2.26	34.2							201
1	207		8.12	8.10	34.097	26.550	151.3	.484	2.15	32.4	43.2	2.31	30.2	.00			208
	250	ISL	7.63	7.61	34.165	26.676	140.0	.547	1.62	24.2							252
	300	ISL	7.27	7.26	34.182	26.741	133.7	.615	1.14	16.9							302
1	309		7.23	7.20	34.189	26.755	132.4	.626	1.08	16.0	59.5	2.74	35.4	.00			310
	400	ISL	6.50	6.47	34.243	26.895	120.9	.743	.59	9.6							403
1	462		6.09	6.05	34.273	26.973	114.0	.815	.43	6.2	79.7	3.09	40.0	.00			465
	500	ISL	5.87	5.82	34.294	27.017	110.1	.858	.39	5.6							504
	600	ISL	5.42	5.37	34.348	27.116	101.5	.966	.30	4.2							605
1	619		5.35	5.30	34.359	27.132	100.2	.983	.28	4.0	93.6	3.24	41.8	.00			623

RV NEW HORIZON FRONTS LEG II STATION 35 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 46.5 N	119 59.1 W	22/07/85	1540 GMT		310	13 KT	340 04	2	1016.9 MB	14.4 C	13.9 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	17.60	17.60	33.584	24.286	362.8	.000	5.70	104.6							0
1	2		17.60	17.60	33.584	24.286	362.9	.007	5.70	104.6	2.6	.27	.1	.00	.15	.02	2
	10	ISL	17.59	17.59	33.580	24.285	363.2	.036	5.74	105.2							10
1	12		17.59	17.59	33.580	24.286	363.2	.043	5.74	105.3	2.5	.27	.0	.00	.13	.01	12
	20	ISL	17.57	17.57	33.580	24.291	363.0	.073	5.73	105.1							20
1	23		17.57	17.56	33.581	24.293	363.0	.083	5.73	105.0	2.4	.26	.0	.00	.14	.01	23
	30	ISL	17.07	17.06	33.571	24.404	352.6	.109	5.94	107.9							30
1	33		16.69	16.68	33.559	24.483	345.1	.119	6.06	109.2	2.5	.27	.0	.00	.19	.03	33
1	43		14.30	14.20	33.475	24.969	299.0	.151	6.47	110.9	2.9	.30	.0	.00			43
	50	ISL	13.00	12.99	33.514	25.244	272.9	.171	5.98	100.0							50
1	54		12.56	12.55	33.564	25.354	262.5	.181	5.62	93.1	6.7	.67	5.1	.17	.66	.29	54
1	64		12.01	12.00	33.573	25.481	250.6	.207	5.00	81.9	10.3	.96	9.3	.29	.45	.18	64
1	75		11.49	11.48	33.618	25.613	239.3	.234	4.49	72.7	13.3	1.15	12.5	.39	.30	.18	75
1	85		10.83	10.82	33.669	25.771	223.5	.257	4.00	63.9	18.0	1.40	16.9	.13	.19	.10	85
1	95		10.45	10.44	33.696	25.859	215.2	.278	3.78	59.9	20.3	1.50	18.9	.06	.15	.10	95
	100	ISL	10.27	10.26	33.720	25.909	210.5	.290	3.63	57.3							101
1	106		10.10	10.09	33.747	25.959	205.9	.301	3.48	54.8	23.6	1.63	21.0	.02	.11	.09	106
1	115		9.82	9.80	33.789	26.039	198.5	.321	3.29	51.5	25.6	1.73	22.4	.01	.08	.06	116
1	125		9.54	9.52	33.835	26.122	190.8	.341	3.10	48.2	27.9	1.83	23.6	.01	.03	.05	126
1	141		9.26	9.25	33.895	26.214	182.3	.370	2.86	44.2	30.8	1.93	25.1	.01	.01	.04	142
	150	ISL	9.12	9.10	33.928	26.263	177.8	.386	2.77	42.7							151
1	157		9.00	8.98	33.952	26.300	174.3	.399	2.71	41.7	33.5	2.02	26.4	.01			158
1	182		8.67	8.66	34.003	26.392	166.1	.441	2.55	38.9	36.0	2.09	27.3	.03			183
	200	ISL	8.48	8.46	34.040	26.452	160.6	.470	2.42	36.7							201
1	207		8.41	8.38	34.054	26.474	158.7	.481	2.36	35.8	39.7	2.20	28.7	.02			208
	250	ISL	7.99	7.96	34.112	26.582	149.0	.548	1.93	29.0							252
	300	ISL	7.54	7.51	34.156	26.683	140.1	.620	1.42	21.2							302
1	308		7.47	7.44	34.161	26.696	138.9	.631	1.34	19.9	54.5	2.63	33.8	.01			310
	400	ISL	6.69	6.66	34.231	26.860	124.3	.752	.73	10.7							403
1	462		6.23	6.19	34.269	26.951	116.1	.827	.47	6.8	76.5	3.07	39.2	.01			465
	500	ISL	5.99	5.94	34.294	27.002	111.6	.870	.42	6.0							504
	600	ISL	5.47	5.42	34.351	27.111	102.0	.977	.28	4.0							605
1	616		5.41	5.36	34.359	27.125	100.8	.993	.26	3.7	93.8	3.24	41.7	.01			620

RV NEW HORIZON — FRONTS LEG II — STATION 36 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 35.2 N	119 33.8 W	22/07/85	1934 GMT		320	10 KT	340 04	2	1016.5 MB	16.7 C	15.6 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	19.09	19.09	33.691	24.000	390.1	.000	5.47	103.3							0
1	2		19.09	19.09	33.691	24.000	390.1	.008	5.47	103.3	2.4	.25	.2	.00	.16	.01	2
	10	ISL	19.08	19.08	33.690	24.002	390.2	.039	5.48	103.4							10
1	12		19.08	19.07	33.690	24.003	390.2	.047	5.48	103.5	2.4	.24	.2	.00	.16	.02	12
	20	ISL	16.93	16.93	33.645	24.493	343.8	.076	6.07	109.9							20
1	23		16.00	16.00	33.637	24.701	324.0	.086	6.28	111.7	2.9	.29	.2	.00	.26	.01	23
	30	ISL	14.55	14.55	33.616	25.004	295.3	.108	6.29	108.7							30
1	33		14.06	14.05	33.607	25.100	286.2	.116	6.30	107.7	4.6	.43	1.6	.05	.95	.07	33
1	43		12.66	12.65	33.566	25.351	262.6	.144	5.65	93.8	7.5	.69	5.7	.14	1.24	.25	43
	50	ISL	11.73	11.73	33.596	25.550	243.7	.162	4.83	78.7							50
1	53		11.44	11.43	33.613	25.618	237.3	.168	4.53	73.3	13.5	1.13	12.8	.26	.49	.15	53
1	64		10.96	10.95	33.657	25.739	226.1	.196	4.12	66.0	16.8	1.33	16.0	.23	.34	.16	64
1	73		10.45	10.44	33.701	25.862	214.4	.213	3.81	60.4	20.1	1.49	18.7	.07	.24	.11	73
	75	ISL	10.33	10.32	33.712	25.893	211.5	.218	3.74	59.1							76
1	83		9.98	9.97	33.748	25.980	203.4	.234	3.54	55.5	23.1	1.62	20.8	.02	.11	.09	83
1	92		9.79	9.78	33.779	26.036	198.3	.252	3.40	53.1	24.9	1.70	21.9	.02	.07	.04	92
	100	ISL	9.62	9.61	33.817	26.090	193.5	.269	3.26	50.8							101
1	103		9.56	9.56	33.821	26.104	191.9	.273	3.22	50.1	26.8	1.76	23.1	.02	.05	.05	103
1	112		9.46	9.45	33.849	26.145	188.3	.292	3.11	48.3	28.1	1.82	23.9	.01	.03	.04	113
1	121		9.26	9.25	33.892	26.211	182.2	.309	2.93	45.3	30.3	1.92	25.0	.01	.02	.04	122
	125	ISL	9.22	9.20	33.901	26.226	180.8	.315	2.90	44.8							126
1	137		9.09	9.07	33.928	26.268	177.0	.338	2.83	43.6	32.5	1.98	25.9	.01	.01	.04	138
	150	ISL	8.88	8.86	33.973	26.336	170.7	.360	2.64	40.5							151
1	152		8.84	8.82	33.981	26.348	169.6	.363	2.61	40.0	35.0	2.07	27.1	.01			153
1	175		8.53	8.52				.401									176
	200	ISL	8.25	8.23	34.064	26.505	155.5	.441	2.31	35.0							201
1	201		8.24	8.22	34.065	26.507	155.5	.442	2.31	34.9	41.7	2.22	29.2	.02			202
	250	ISL	7.68	7.66	34.121	26.634	143.9	.516	1.81	27.0							252
1	295		7.18	7.15	34.160	26.737	134.7	.583	1.25	18.5	58.8	2.69	34.8	.01			300
	300	ISL	7.16	7.13	34.162	26.741	134.4	.585	1.24	18.2							302
	400	ISL	6.40	6.37	34.238	26.904	119.9	.713	.60	8.7							403
1	447		6.12	6.08	34.269	26.965	114.6	.768	.43	6.2	78.2	3.09	39.6	.00			450
	500	ISL	5.82	5.78	34.304	27.031	108.7	.827	.38	5.4							504
	600	ISL	5.35	5.30	34.364	27.136	99.6	.931	.27	3.9							605
1	603		5.34	5.29	34.366	27.138	99.3	.934	.27	3.8	95.1	3.25	42.0	.00			607

RV NEW HORIZON — FRONTS LEG II — STATION 37 2

LATITUDE	LONGITUDE	DAY/MO/YR	MESSENGER	BOTTOM	WIND	SPEED	WAVES	WEATHER	BAROMETER	DRY	WET	CLOUD AMT	TYPE
31 20.5 N	119 09.5 W	22/07/85	2339 GMT		320	11 KT	330 04	2	1014.9 MB	17.8 C	14.7 C	8/8	SC

CAST	DEPTH M		TEMP DEG C	POT TEMP DEG C	SALINITY	SIGMA THETA	SVA	DYN HT	OXYGEN ML/L	OXY PCT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	CHL-A UG/L	PHAEO UG/L	PRESS D.BAR
	0	ISL	19.01	19.01	33.665	23.984	391.6	.000	5.50	103.7							0
1	1		19.01	19.01	33.665	23.984	391.7	.004	5.50	103.7	2.5	.24	.2	.00	.16	.01	1
	10	ISL	19.02	19.02	33.664	23.981	392.3	.039	5.56	104.8							10
1	11		19.02	19.02	33.664	23.980	392.3	.043	5.56	104.8	2.4	.25	.2	.00	.15	.01	11
	20	ISL	18.82	18.82	33.633	24.022	388.7	.078	5.58	104.9							20
1	22		18.78	18.78	33.629	24.031	387.9	.086	5.59	104.9	2.3	.25	.2	.00	.15	.01	22
	30	ISL	17.07	17.07	33.574	24.415	351.5	.116	6.04	109.5							30
1	32		16.50	16.49	33.558	24.527	340.9	.122	6.15	110.4	2.3	.30	.2	.01	.34	.05	32
1	42		13.61	13.59	33.417	25.049	291.3	.154	6.41	108.4	3.7	.46	2.2	.09	.74	.16	42
	50	ISL	12.79	12.77	33.483	25.263	271.1	.177	5.93	98.7							50
1	53		12.65	12.64	33.515	25.313	266.4	.184	5.71	94.8	6.6	.69	5.6	.18	.69	.18	53
1	63		11.83	11.82	33.572	25.514	247.4	.210	5.21	85.0	10.0	1.01	11.1	.29	.34	.03	63
1	74		11.13	11.12	33.611	25.674	232.5	.236	4.75	76.4	13.8	1.23	15.0	.10	.19	.04	74
	75	ISL	11.03	11.02	33.619	25.696	230.3	.239	4.66	74.7							76
1	84		10.45	10.44	33.674	25.842	216.6	.258	4.05	64.2	19.1	1.45	18.6	.04	.07	.03	84
1	94		9.92	9.91	33.725	25.973	204.3	.279	3.72	58.3	22.6	1.60	20.9	.02	.05	.05	94
	100	ISL	9.66	9.65	33.765	26.047	197.4	.292	3.51	54.7							101
1	105		9.52	9.51	33.795	26.092	193.1	.301	3.37	52.4	26.5	1.72	22.9	.01	.02	.03	105
1	114		9.38	9.36	33.865	26.172	185.8	.320	3.08	47.7	29.4	1.85	24.5	.01	.02	.03	115
1	124		9.18	9.16	33.906	26.236	179.9	.338	2.89	44.6	31.4	1.93	25.4	.01	.00	.04	125
	125	ISL	9.16	9.15	33.910	26.241	179.4	.339	2.88	44.4							126
1	140		8.82	8.81	33.973	26.345	169.7	.366	2.74	42.0	35.1	2.05	27.1	.01	.00	.03	141
	15	ISL	8.75	8.73	33.985	26.366	167.9	.382	2.71	41.5							151
1	155		8.72	8.70	33.990	26.373	167.4	.391	2.70	41.3	35.7	2.06	27.4	.01			156
1	181		8.39	8.38				.433									182
	200	ISL	8.25	8.23	34.038	26.523	153.8	.462	2.08	31.6							201
1	207		8.21	8.19	34.101	26.540	152.3	.473	1.97	29.8	43.5	2.35	30.7	.02			208
	250	ISL	7.77	7.76	34.161	26.637	142.7	.537	1.57	23.6							252
	300	ISL	7.22	7.19	34.159	26.729	134.4	.607	1.29	19.1							302
1	304		7.12	7.09	34.160	26.745	134.1	.619	1.26	18.6	58.5	2.71	35.2	.01			311
	400	ISL	6.47	6.43	34.230	26.889	121.5	.735	.73	10.5							403
1	465		6.12	6.08	34.277	26.972	114.1	.809	.45	6.5	78.7	3.10	39.8	.01			466
	500	ISL	5.91	5.86	34.301	27.018	110.1	.851	.41	5.8							504
	600	ISL	5.40	5.35	34.356	27.125	100.7	.956	.28	4.0							605
1	621		5.30	5.25	34.366	27.144	99.0	.977	.26	3.7	94.5	3.27	42.4	.00			625

RV NEW HORIZON — FRONTS I — STATION 7

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°12.7'N	118°59.5'W	07/02/85	2049 GMT	15 m	1312 - 2034 PST	1300 PST	2034 PST	805.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	17.84	33.709	24.324	6.06	111.8	1.8	0.23	0.3	0.02	0.60	0.03	91	10.4	10.6	10.5	0.24
10	17.46	33.708	24.415	6.37	116.6	1.7	0.23	0.2	0.01	0.60	0.04	34	31.6	31.8	31.7	0.36
13	15.83	33.689	24.779	6.74	119.5	1.8	0.34	0.7	0.00	0.88	0.08	24	-	-	-	-
20	13.78	33.637	25.181	6.47	110.0	2.1	0.38	2.7	0.11	1.10	0.03	12	23.0	23.3	23.2	0.40
22	13.60	33.670	25.243	6.25	105.9	3.1	0.47	3.7	0.14	1.14	0.16	10	16.7	15.6	16.2	0.24
55	11.32	33.735	25.734	4.45	71.9	9.8	1.06	11.3	0.37	0.68	0.25	0.4	0.7	1.1	0.9	0.17

RV NEW HORIZON — FRONTS I — STATION Prodo XBT

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°13.9'N	119°31.4'W	07/03/85	2030 GMT	16 m	1302 - 2036 PST	1302 PST	2036 PST	390.5 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	17.09	33.562	24.391			1.8	0.41	0.8	0.00	0.25	0.04	91	5.0	6.3	5.6	0.19
10	16.95	33.575	24.434			1.8	0.30	0.5	0.01	0.26	0.04	34	15.9	16.4	16.1	0.21
14	16.74	33.596	24.499			1.5	0.25	0.5	0.01	0.41	0.02	24	-	-	-	-
21	16.18	33.615	24.643			1.1	0.24	0.5	0.01	0.38	0.08	12	14.8	14.4	14.6	0.25
23	15.99	33.626	24.695			1.0	0.31	0.7	0.04	0.46	0.09	10	4.7	4.4	4.6	0.26
58	11.60	33.616	25.591			6.6	0.86	8.6	0.18	0.40	0.21	0.4	0.58	0.95	0.77	0.15

RV NEW HORIZON — FRONTS I — STATION 20

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°01.4'N	119°56.7'W	07/04/85	1845 GMT	24 m	1304 - 2035 PST	1304 PST	2035 PST	140.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	17.71	33.335	24.069	6.01	110.3	1.6	0.27	0.1	0.00	0.11	0.01	91	2.1	1.1	1.6	0.16
17	17.72	33.439	24.146	5.94	109.1	1.2	0.27	0.1	0.00	0.10	0.02	34	5.1	5.0	5.0	0.17
22	17.43	33.636	24.367	5.93	108.5	1.3	0.22	0.0	0.00	0.06	0.01	24	-	-	-	-
34	16.60	33.596	24.532	5.88	105.8	1.0	0.21	0.1	0.00	0.06	0.01	12	1.7	1.7	1.7	0.19
37	16.41	33.588	24.570	6.17	110.6	0.8	0.21	0.1	0.00	0.06	0.01	10	0.09	0.47	0.28	0.19
88	13.31	33.565	25.222	5.36	90.2	2.2	0.52	2.2	0.02	0.38	0.14	0.4	0.56	0.9	0.73	0.10

RV NEW HORIZON — FRONTS I — STATION 28

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
33°18.6'N	120°46.4'W	07/05/85	1953 GMT	23 m	1305 - 2036 PST	1305 PST	2036 PST	651.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	16.03	33.510	24.596	6.54	116.3	2.5	0.41	1.0	0.00	0.48	0.03	91	7.4	7.2	7.3	0.16
15	15.97	33.501	24.603	6.24	110.8	2.0	0.51	1.4	0.00	0.55	0.03	34	19.1	23.6	21.3	0.25
21	15.96	33.502	24.606	6.33	112.4	1.9	0.39	1.0	0.03	0.51	0.10	24	-	-	-	-
32	15.93	33.501	24.613			1.5	0.36	1.0	0.00	0.58	0.10	12	14.3	13.6	14.0	0.21
34	15.82	33.496	24.634	6.39	113.1	1.4	0.32	1.0	0.02	0.65	0.13	10	4.6	3.8	4.2	0.19
84	10.90	33.608	25.712	4.76	76.1	9.9	1.27	14.7	0.00	0.18	0.13	0.4	0.64	0.48	0.56	0.14

* Dark uptake exceeded light uptake.

RV NEW HORIZON — FRONTS I — STATION 37

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°41.0'N	120°33.2'W	07/06/85	1925 GMT	39 m	1307-2035 PST	1307 PST	2035 PST	267.1 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	18.74	33.606	24.022	5.84	109.5	1.6	0.28	0.4	0.00	0.07	0.01	91	1.1	0.61	0.85	0.16
26	17.71	33.508	24.202	5.61	103.3	1.7	0.27	0.4	0.00	0.08	0.01	34	3.9	4.1	4.0	0.17
35	16.21	33.403	24.474	6.16	109.9	1.7	0.30	0.2	0.00	0.10	0.01	24	-	-	-	-
54	15.38	33.521	24.751	6.10	107.1	1.6	0.25	0.2	0.00	0.13	0.03	12	3.8	3.7	3.7	0.16
58	15.30	33.509	24.760	5.94	104.1	1.8	0.28	0.3	0.02	0.14	0.03	10	1.9	1.8	1.8	0.15
141	11.20	33.637	25.682	4.53	72.9	7.3	0.73	7.3	0.00	0.09	0.07	0.4	0.19	0.27	0.23	0.12

RV NEW HORIZON — FRONTS I — STATION 45

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°51.6'N	121°42.5'W	07/07/85	2022 GMT	22 m	1311 - 2046 PST	1311 PST	2046 PST	349.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
0	16.66	33.228	24.235	6.13	110.2	0.8	0.20	0.4	0.00	0.17	0.01	91	3.8	3.7	3.7	0.16
14	16.24	33.273	24.366	6.28	112.0	1.6	0.34	0.5	0.02	0.27	0.03	34	12.2	12.0	12.1	0.19
20	16.12	33.300	24.415	6.30	112.1	1.8	0.39	0.5	0.01	0.28	0.04	24	-	-	-	-
30	14.45	33.241	24.736	6.56	112.8	1.6	0.28	0.3	0.00	0.34	0.06	12	8.5	8.5	8.5	0.19
33	14.48	33.299	24.774	6.56	112.9	2.2	0.35	0.3	0.01	0.25	0.05	10	1.7	1.8	1.8	0.21
80	11.92	33.353	25.327	5.88	96.0	6.1	0.74	6.8	0.19	0.38	0.15	0.4	0.92	0.49	0.71	0.12

RV NEW HORIZON — FRONTS I — STATION 51

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°48.2'N	121°08.3	07/08/85	1907 GMT	30 m	1307 - 2038 PST	1310 PST	2033 PST	148.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	17.78	33.350	24.063	5.91	108.6	1.6	0.26	0.2	0.00	0.07	0.01	91	1.1	1.1	1.1	0.26
21	17.65	33.441	24.165	5.91	108.4	1.6	0.27	0.3	0.01	0.06	0.01	34	3.6	3.5	3.5	0.17
28	17.82	33.527	24.190	6.08	112.0	1.2	0.22	0.3	0.00	0.07	0.01	24	-	-	-	-
41	16.60	33.589	24.528	6.17	111.0	1.9	0.24	0.3	0.00	0.06	0.01	12	2.2	2.2	2.2	0.18
45	16.40	33.571	24.560	6.18	110.7	1.1	0.17	0.2	0.00	0.06	0.01	10	0.83	0.75	0.79	0.18
110	13.81	33.584	25.136	5.76	98.0	2.7	0.31	1.4	0.07	0.30	0.19	0.4	0.31	0.50	0.40	0.13

RV NEW HORIZON — FRONTS I — STATION 63

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°15.6'N	119°50.2'W	07/09/85	1944 GMT	15 m	1305 - 2038 PST	1305 PST	2038 PST	281.4 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	17.46	33.655	24.374	6.04	110.6	1.5	0.41	0.90	0.00	0.34	0.08	91	5.3	5.4	5.3	0.28
11	17.39	33.651	24.388	5.95	108.8	1.4	0.24	0.8	0.02	0.33	0.07	34	12.6	15.1	13.9	0.22
14	16.79	33.643	24.524	6.18	111.6	1.4	0.25	0.8	0.02	0.35	0.10	24	-	-	-	-
22	15.00	33.515	24.829	6.36	110.8	1.6	0.30	1.1	0.04	0.21	0.05	12	9.2	9.9	9.5	0.23
23	14.72	33.522	24.895	6.42	111.2	1.8	0.32	1.4	0.05	0.19	0.04	10	2.4	2.0	2.2	0.21
56	11.86	33.597	25.528	5.21	85.1	7.1	0.79	8.0	0.24	0.44	0.23	0.4	0.37	0.76	0.56	0.13

RV NEW HORIZON — FRONTS II — STATION 1 1

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°08.2'N	121°11.1'W	07/13/85	1840 GMT	26 m	1255 - 2030 PST	1311 PST	2035 PST	115.8 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	19.04	33.657	23.985	5.43	102.4	2.4	0.28	0.2	0.01	0.09	0.01	91	1.4	1.1	1.3	0.21
17	19.06	33.661	23.984	5.43	102.5	2.4	0.27	0.2	0.00	0.09	0.01	34	3.5	3.6	3.6	0.18
24	19.07	33.658	23.981	5.42	102.3	2.4	0.27	0.2	0.01	0.09	0.01	24	-	-	-	-
36	16.56	33.403	23.985	5.93	106.5	2.4	0.30	0.2	0.01	0.10	0.00	12	2.2	2.0	2.1	0.22
39	16.16	33.399	24.482	5.97	106.4	2.4	0.29	0.2	0.00	0.09	0.01	10	0.40	0.38	0.39	0.24
96	13.14	33.307	25.056	5.80	97.1	3.4	0.43	1.5	0.15	0.20	0.08	0.4	0.15	0.30	0.22	0.14

RV NEW HORIZON — FRONTS II — STATION 2 12

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°50.9'N	121°19.9'W	07/14/85	1906 GMT	30 m	1412 - 2030 PST	1311 PST	2035 PST	97.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	18.70	33.502	23.953	5.47	102.4	2.1	0.35	0.2	0.00	0.08	0.00	91	1.7	1.6	1.6	0.21
23	18.73	33.514	23.957	5.42	101.5	2.1	0.36	0.2	0.00	0.09	0.00	34	2.3	2.3	2.3	0.21
29	16.29	33.366	24.426	5.94	106.1	2.2	0.36	0.2	0.00	0.09	0.01	24	-	-	-	-
42	15.26	33.339	24.637	6.06	106.0	2.0	0.40	0.2	0.00	0.10	0.01	12	1.3	1.2	1.2	0.20
46	15.05	33.337	24.681	6.05	105.4	2.1	0.38	0.1	0.00	0.12	0.01	10	0.31	0.29	0.30	0.20
111	12.44	33.376	25.247	5.34	88.1	5.6	0.68	5.1	0.05	0.23	0.20	0.4	0.13	0.33	0.23	0.12

RV NEW HORIZON — FRONTS II — STATION 5 3

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°35.8'N	120°55.8'W	07/15/85	1858 GMT	30 m	1305 - 2030 PST	1306 PST	2030 PST	134.0 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	18.19	33.611	24.163	5.50	102.1	2.3	0.32	0.2	0.00	0.10	0.02	91	2.1	1.9	2.0	0.19
22	18.18	33.615	24.170	5.52	102.4	2.2	0.32	0.2	0.00	0.08	0.01	34	3.4	3.0	3.2	0.19
29	18.18	33.615	24.170	5.51	102.2	2.2	0.32	0.2	0.00	0.09	0.00	24	-	-	-	-
42	16.32	33.501	24.524	5.91	105.7	2.2	0.32	0.2	0.00	0.11	0.02	12	2.0	2.0	2.0	0.21
46	15.70	33.446	24.624	5.99	105.8	2.5	0.33	0.2	0.00	0.12	0.01	10	0.51	0.43	0.47	0.22
111	12.15	33.476	25.381	5.14	84.4	7.2	0.79	7.9	0.04	0.18	0.12	0.4	0.16	0.28	0.22	0.12

RV NEW HORIZON — FRONTS II — STATION 10 3

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°38.0'N	120°21.7'W	07/16/85	1813 GMT	23 m	1307 - 2035 PST	1309 PST	2039 PST	272.2 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	16.64	33.288	24.285	5.78	103.9	1.7	0.39	0.5	0.01	0.20	0.05	91	5.7	5.7	5.7	0.19
16	16.41			5.82		1.7	0.41	0.5	0.01	0.21	0.08	34	8.6	7.7	8.2	0.22
22	16.02	33.296	24.434	5.89	104.6	1.7	0.39	0.4	0.01	0.23	0.08	24	-	-	-	-
33	14.40	33.329	24.815	6.25	107.4	2.1	0.44	0.8	0.03	0.23	0.07	12	5.5	4.9	5.2	0.17
35	14.03	33.302	24.871	6.30	107.5	2.2	0.47	0.9	0.03	0.29	0.07	10	1.7	1.5	1.6	0.19
46	11.21	33.463	25.543	4.92	79.2	10.6	1.06	12.1	0.03	0.12	0.13	0.4	0*	0.06	0.03	0.32

* Dark uptake exceeded light uptake.

RV NEW HORIZON — FRONTS II — STATION 12 3

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°09.7'N	120°37.8'W	07/17/85	1823 GMT	23 m	1310-2030 PST	1303 PST	2033 PST	322.2 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	16.80	33.283	24.244	5.78	104.2	1.6	0.28	0.3	0.00	0.15	0.04	91	3.3	3.0	3.1	0.32
17	16.32	33.337	24.397	5.88	105.1	1.6	0.30	0.3	0.01	0.28	0.15	34	14.0	13.3	13.6	0.32
21	16.02	33.406	24.519	5.97	106.1	1.6	0.29	0.3	0.01	0.22	0.08	24	-	-	-	-
33	15.29	33.384	24.664	6.09	106.6	1.7	0.30	0.3	0.01	0.18	0.06	12	4.1	4.6	4.4	0.18
35	15.20	33.372	24.675	6.11	106.8	1.8	0.31	0.3	0.01	0.16	0.06	10	1.1	1.0	1.1	0.25
86	12.02	33.480	25.408	5.16	84.5	7.5	0.78	8.4	0.13	0.21	0.15	0.4	0.20	0.42	0.31	0.14

RV NEW HORIZON | FRONTS II | STATION 18 4

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
30°47.9'N	121°19.2'W	07/18/85	1904 GMT	31 m	1310 - 2040 PST	1311 PST	2035 PST	131.9 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	19.09	33.603	23.931	5.43	102.5	2.6	0.33	0.3	0.00	0.10	0.00	91	1.1	0.98	1.1	0.19
23	18.84	33.568	23.971	5.45	102.4	2.6	0.33	0.3	0.00	0.10	0.01	34	2.5	3.0	2.7	0.20
30	16.54	33.364	24.368	5.94	106.6	2.5	0.35	0.3	0.00	0.11	0.01	24	-	-	-	-
44	15.41	33.340	24.606	6.05	106.1	2.5	0.34	0.3	0.00	0.12	0.02	12	2.1	1.9	2.0	0.22
47	15.26	33.332	24.633	6.08	106.3	2.5	0.34	0.3	0.00	0.14	0.02	10	0.75	0.68	0.71	0.21
115	12.46	33.390	25.255	5.30	87.5	5.8	0.68	5.5	0.05	0.16	0.25	0.4	0.26	0.45	0.36	0.10

RV NEW HORIZON | FRONTS II | STATION 20 4

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
31°22.4'N	121°03.8'W	07/19/85	1819 GMT	31 m	1242 - 2030 PST	1311 PST	2035 PST	158.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
2	18.83	33.485	23.909	5.44	102.1	3.0	0.33	0.0	0.00	0.08	0.01	91	0.76	0.62	0.69	0.15
23	18.69	33.557	23.998	5.48	102.6	3.0	0.32	0.0	0.00	0.09	0.12	34	3.4	2.9	3.1	0.18
30	16.86	33.394	24.317	5.87	106.0	3.1	0.34	0.0	0.00	0.12	0.02	24	-	-	-	-
44	15.46	33.359	24.609	6.06	106.4	3.0	0.34	0.0	0.00	0.12	0.02	12	2.8	3.0	2.9	0.20
47	15.19	33.348	24.660	6.04	105.5	3.0	0.34	0.0	0.00	0.14	0.02	10	1.0	1.0	1.0	0.23
115	12.10	33.417	25.345	5.10	83.6	6.6	0.79	7.0	0.03	0.19	0.19	0.4	0.34	0.53	0.43	0.12

RV NEW HORIZON | FRONTS II | STATION 26 4

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°40.6'N	120°19.4'W	07/20/85	1823 GMT	21 m	1308 - 2039 PST	1307 PST	2034 PST	332.6 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1		33.339		5.79		2.1	0.39	0.1	0.00	0.14	0.04	91	3.1	1.6	2.3	0.23
15		33.398		5.96		2.6	0.41	0.2	0.02	0.22	0.10	34	12.3	9.8	11.1	0.24
20		33.411		6.03		2.4	0.44	0.3	0.02	0.19	0.10	24	-	-	-	-
29		33.402		6.32		2.7	0.53	1.0	0.04	0.36	0.13	12	9.8	9.3	9.6	0.21
30		33.414		6.30		2.9	0.49	1.1	0.05	0.36	0.13	10	3.9	3.3	3.6	0.24
75		33.430		5.15		10.2	1.11	11.3	0.09	0.12	0.07	0.4	0.12	0.23	0.18	0.12

RV NEW HORIZON | FRONTS II | STATION 28 3

LATITUDE	LONGITUDE	MO/DAY/YR	MESSENGER	SECCHI DEPTH	INCUBATION TIME	LAN	CIVIL TWILIGHT	INTEGRATED VALUE
32°25.5'N	121°21.4'W	07/21/85	1817 GMT	13 m	1257 - 2031 PST	1304 PST	2035 PST	208.7 mg C/m2

DEPTH m	TEMP DEG C	SALINITY	SIGMA THETA	DISS O2 ml/L	OXY PCT	SIO3 um/l	PO4 um/l	NO3 um/l	NO2 um/l	CHL ug/l	PHAEO ug/l	LIGHT %	UPTAKE (mgC/m3) 1	2	MEAN	DARK
1	16.80	33.306	24.261	5.80	104.6	2.8	0.37	0.2	0.01	0.31	0.04	91	3.0	3.3	3.1	0.19
9	16.83	33.319	24.267	5.82	105.0	2.8	0.38	0.2	0.01	0.32	0.02	34	13.4	11.8	12.6	0.20
12	16.82	33.326	24.273	5.83	105.2	2.9	0.38	0.3	0.02	0.33	0.1	24	-	-	-	-
19	16.57	33.358	24.357	5.90	105.9	3.2	0.40	0.5	0.02	0.33	0.05	12	7.0	7.1	7.0	0.24
21	16.36	33.371	24.414	5.92	105.9	3.3	0.43	0.9	0.03	0.35	0.06	10	2.6	2.1	2.4	0.21
48	14.69	33.240	24.685	6.14	106.1	3.2	0.43	0.6	0.01	0.33	0.08	0.4	0.12	0.32	0.22	0.16

FRONTS LEG II MACROZOOPLANKTON BIOMASS
BONGO Nets 71 cm mouth diameter
Net Mesh Size 0.505 mm

Station	Date 1985	Time (local) Start	Stop	Water Volume Strained (m^3) Port	Stbd	Volume (cm^3) per 1000 m^3 Filtered Port	Stbd
2	7/13	1546	1608	347	334	35	36
2	7/13	1637	1659	330	329	46	36
2	7/13	1703	1725	338	339	36	32
2	7/14	0015	0038	322	322	102	78
2	7/14	0044	0106	321	321	78	78
2	7/14	0113	0135	318	324	69	93
3	7/15	0133	01[illegible]3	266	266	113	105
3	7/15	0202	0224	315	315	98	95
3	7/15	0230	0253	336	342	92	88
5	7/15	1236	1259	297	296	98	101
5	7/15	1303	1325	312	310	96	87
5	7/15	1330	1353	308	305	101	92
7	7/15	1737	1759	311	309	263	214
7	7/15	1807	1829	304	301	198	183
7	7/15	1835	1857	300	298	173	171
9	7/16	0120	0143	342	338	161	151
9	7/16	0149	0211	343	341	119	141
9	7/16	0219	0242	358	356	140	132
10	7/16	1621	1642	295	293	227	212
10	7/16	1653	1714	300	297	206	189
10	7/16	1723	1744	299	296	227	206
10	7/17	0016	0039	319	315	251	228
10	7/17	0047	0109	322	319	221	213
10	7/17	0118	0140	350	346	243	254
11	7/17	0552	0614	321	317	109	110
12	7/17	1209	1230	321	318	162	179
13	7/17	1405	1426	319	315	135	143
14	7/17	1708	1729	292	288	175	177
15	7/17	2001	2023	303	297	99	104
16	7/17	2320	2342	312	308	119	114
17	7/18	0249	0310	297	292	94	93
18	7/18	1016	1038	313	310	70	71
18	7/19	0044	0106	305	301	88	100
19	7/19	0454	0516	301	297	86	84
20	7/19	0811	0832	314	311	70	74
21	7/19	1325	1346	296	301	91	96
22	7/19	1659	1720	287	284	157	137
23	7/19	2034	2055	286	284	154	159
24	7/20	0018	0040	317	312	180	176
25	7/20	0344	0406	323	318	152	129
26	7/20	1000	1021	288	285	260	253
26	7/21	0018	0040	335	319	209	197

FRONTS LEG II MACROZOOPLANKTON BIOMASS
BONGO Nets 71 cm mouth diameter
Net Mesh Size 0.505 mm

Station	Date 1985	Time (local) Start	Stop	Water Volume Strained (m^3) Port	Stbd	Volume (cm^3) per 1000 m^3 Filtered Port	Stbd
27	7/21	0617	0628	320	316	194	177
28	7/21	1129	1150	313	309	144	123
29	7/21	1402	1423	333	316	201	193
30	7/21	1645	1707	312	302	144	126
31	7/21	1925	1947	349	347	146	115
32	7/21	2216	2238	312	332	195	154
33	7/22	0102	0122	239	240	113	96
33	7/22	0138	0200	334	326	120	129
34	7/22	0501	0523	327	325	128	129
35	7/22	0737	0759	312	304	164	148
36	7/22	1130	1153	334	330	93	106
37	7/22	1507	1549	363	343	88	90

FRONTS LEG II MACROZOOPLANKTON BIOMASS
MOCNESS 1 m^2 mouth area
Net Mesh Size 0.333 mm

Station	Tow No.	Date 1985	Time (Local) Start	Stop	Sample No.	Depth (m)	Water Volume Strained (m^3)	Volume (cm^3) per 1000 m^3 Filtered
2	MOC-1	7/14	1324	1608	MOC 1-1	1000-850	520	89
					MOC 1-2	850-700	422	70
					MOC 1-3	700-550	473	36
					MOC 1-4	550-400	812	20
					MOC 1-5	400-300	277	62
					MOC 1-6	300-250	216	91
					MOC 1-7	250-225	146	101
					MOC 1-8	225-190	154	138
					MOC 1-9	190-0	1650	57
					MOC 1-11	190-175	164	122
					MOC 1-12	175-150	356	81
					MOC 1-13	150-125	173	88
					MOC 1-14	125-100	263	72
					MOC 1-15	100-72	223	81
					MOC 1-16	72-50	154	179
					MOC 1-17	50-25	178	102
					MOC 1-18	25-0	139	92
2	MOC-2	7/14	2028	2317	MOC 2-1	1000-845	608	50
					MOC 2-2	845-700	390	62
					MOC 2-3	700-545	525	46
					MOC 2-4	545-400	530	44
					MOC 2-5	400-300	377	74
					MOC 2-6	300-250	283	76
					MOC 2-7	250-225	148	101
					MOC 2-8	225-200	209	100
					MOC 2-9	200-0	1409	83
					MOC 2-11	192-175	225	85
					MOC 2-12	175-150	170	122
					MOC 2-13	150-125	235	112
					MOC 2-14	125-100	214	120
					MOC 2-15	100-75	138	165
					MOC 2-16	75-50	155	197
					MOC 2-17	50-25	131	161
					MOC 2-18	25-0	141	162
10	MOC-3	7/16	1220	1502	MOC 3-1	975-820	371	81
					MOC 3-2	820- 700	522	125
					MOC 3-3	700-550	503	121
					MOC 3-4	550-400	773	84
					MOC 3-5	400-300	386	64
					MOC 3-6	300-250	259	104
					MOC 3-7	250-225	191	118
					MOC 3-8	225-200	162	184
					MOC 3-9	200-0	1277	195
					MOC 3-11	195-165	165	132
					MOC 3-12	165-150	122	171

FRONTS LEG II MACROZOOPLANKTON BIOMASS
MOCNESS 1 m^2 mouth area
Net Mesh Size 0.333 mm

Station	Tow No.	Date 1985	Time (Local) Start	Stop	Sample No.	Depth (m)	Water Volume Strained (m^3)	Volume (cm^3) per 1000 m^3 Filtered
					MOC 3-13	150-125	212	169
					MOC 3-14	125-100	146	237
					MOC 3-15	100-	*	*
					MOC 3-16	-50	312	473
					MOC 3-17	50-25	173	598
					MOC 3-18	25-0	147	344
							* Samples combined due to net failure	
10	MOC-4	7/16	2023	2250	MOC 4-1	1000-825	557	63
					MOC 4-2	825-700	442	109
					MOC 4-3	700-550	405	143
					MOC 4-4	550-400	404	123
					MOC 4-5	400-300	335	90
					MOC 4-6	300-250	142	154
					MOC 4-7	250-225	156	163
					MOC 4-8	225-200	160	255
					MOC 4-9	200-0	893	199
					MOC 4-11	190-175	64	289
					MOC 4-12	175-150	153	239
					MOC 4-13	150-125	95	331
					MOC 4-14	125-100	117	392
					MOC 4-15	100-75	130	341
					MOC 4-16	75-50	82	620
					MOC 4-17	50-25	111	856
					MOC 4-18	25-0	141	571
18	MOC-5	7/18	1222	1506	MOC 5-1	1000-850	427	61
					MOC 5-2	850-700	892	43
					MOC 5-3	700-550	528	37
					MOC 5-4	550-400	602	34
					MOC 5-5	400-300	435	68
					MOC 5-6	300-250	243	97
					MOC 5-7	250-225	183	110
					MOC 5-8	225-200	177	115
					MOC 5-9	200-0	1390	51
					MOC 5-11	200-175	174	97
					MOC 5-12	175-150	196	152
					MOC 5-13	150-125	181	111
					MOC 5-14	125-100	172	130
					MOC 5-15	100-75	150	285
					MOC 5-16	75-50	157	119
					MOC 5-17	50-25	190	83
					MOC 5-18	25-0	170	75
18	MOC-6	7/18	2108	0002	MOC 6-1	1000-812	814	27
					MOC 6-2	812-700	382	33
					MOC 6-3	700-550	605	27

FRONTS LEG II MACROZOOPLANKTON BIOMASS
MOCNESS 1 m^2 mouth area
Net Mesh Size 0.333 mm

Station	Tow No.	Date 1985	Time (Local) Start	Stop	Sample No.	Depth (m)	Water Volume Strained (m^3)	Volume (cm^3) per 1000 m^3 Filtered
					MOC 6-4	550-400	578	34
					MOC 6-5	400-300	485	56
					MOC 6-6	300-250	255	102
					MOC 6-7	250-225	135	132
					MOC 6-8	225-200	168	131
					MOC 6-9	200-0	1546	72
					MOC 6-11	200-175	260	96
					MOC 6-12	175-150	231	114
					MOC 6-13	150-125	149	133
					MOC 6-14	125-100	183	136
					MOC 6-15	100-75	166	209
					MOC 6-16	75-50	228	**
					MOC 6-17	50-25	176	153
					MOC 6-18	25-0	153	231
								** Cod end lost
26	MOC-7	7/20	1213	1502	MOC 7-1	1000-830	598	50
					MOC 7-2	830-700	471	76
					MOC 7-3	700-550	767	47
					MOC 7-4	550-400	614	58
					MOC 7-5	400-300	505	89
					MOC 7-6	300-250	179	126
					MOC 7-7	250-225	112	
					MOC 7-8	225-200	128	278
					MOC 7-9	200-0	1183	199
					MOC 7-11	200-175	262	148
					MOC 7-12	175-150	154	161
					MOC 7-13	150-120	125	324
					MOC 7-14	120-100	81	386
					MOC 7-15	100-75	129	389
					MOC 7-16	75-50	149	565
					MOC 7-17	50-25	120	765
					MOC 7-18	25-0	163	188
26	MOC-8	7/20	2011	2315	MOC 8-1	1000-820	676	48
					MOC 8-2	820-700	496	51
					MOC 8-3	700-540	449	54
					MOC 8-4	540-400	587	93
					MOC 8-5	400-300	420	94
					MOC 8-6	300-250	367	127
					MOC 8-7	250-210	257	169
					MOC 8-8	227-192	360	163
					MOC 8-9	200-0	1141	218
					MOC 8-11	190-175	76	250
					MOC 8-12	175-150	168	199
					MOC 8-13	150-125	241	268
					MOC 8-14	125-100	105	387

FRONTS LEG II MACROZOOPLANKTON BIOMASS
MOCNESS 1 m^2 mouth area
Net Mesh Size 0.333 mm

Station	Tow No.	Date 1985	Time (Local) Start	Stop	Sample No.	Depth (m)	Water Volume Strained (m^3)	Volume (cm^3) per 1000 m^3 Filtered
					MOC 8-15	100-75	111	511
					MOC 8-16	75-50	191	497
					MOC 8-17	50-25	133	744
					MOC 8-18	25-0	116	1079

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