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The findings and conclusion on this report are those of the authors and do not necessarily represent the views of the funding agency.

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Abstract

This report summarizes the Florida Current data collected along 27°N during calendar year 2002 as part of the NOAA-funded Western Boundary Time Series project. This includes the daily Florida Current volume transport values estimated from one-minute voltage data on an out-of-service telephone cable, as well as observations collected on cruises on R/V Walton Smith (i.e. full-water-column conductivity-temperature-depth, CTD, and shipboard and lowered acoustic Doppler current profiler, SADCP and LADCP, profiles). The report also includes dropsonde and expendable bathythermograph (XBT) data collected on small boat cruises. The data presented herein are in final processed and quality controlled form. The report also documents where the electronic files for these data can be obtained.

1 Introduction

The Florida Current is perhaps one of the most well observed oceanic flows in the world. This warm surface current flows northward through the Straits of Florida from the Gulf of Mexico to 27°N, where it exits the Straits and becomes the Gulf Stream. Along the way the Florida Current forms both the western boundary current of the subtropical gyre and the upper limb of the Meridional Overturning Circulation. Modern observation of the Florida Current at 27°N began in 1982, when the National Oceanic and Atmospheric Administration (NOAA) began funding a project to measure the volume transport and hydrographic structure of the flow between Florida and Grand Bahama Island. The project changed names several times over the next 20 years, and since the year 2000 the Florida Current observations have been a component of the Western Boundary Time Series (WBTS) project, with funding from the NOAA Climate Program Office - Climate Observations Division. The nominal locations where data are collected are shown in Figure 1 and Table 1.

This data report details all of the WBTS observations collected in the Florida Current over the calendar year. These data come in two categories:

1. Continuous time series observations made via an unused submarine telephone cable.

2. Ship-based observations made several times per year on either research vessels or small chartered boats.

Data presented in this report are organized by collection platform - either cable, research vessel, or small charter boat. Data are reported both graphically and via tables; a later section in the report provides web links to the electronic data files themselves. Further information about these data can be obtained either on the project web page (www.aoml.noaa.gov/phod/floridacurrent/) or from the contact personnel listed on that web page.

Station	Latitude	Longitude	Depth
0	27°00.00' N	79°55.80' W	139
1	27°00.00' N	79°52.00' W	261
2	27°00.00' N	79°47.00' W	389
3	27°00.00' N	79°41.00' W	540
4	27°00.00' N	79°37.00' W	661
5	27°00.00' N	79°30.00' W	783
6	27°00.00' N	79°23.00' W	708
7	27°00.00' N	79°17.00' W	624
8	27°00.00' N	79°12.00' W	485

Table 1: Nominal locations and depths (m) for the dropsonde/XBT and CTD/LADCP data collected in the Straits of Florida.

1.1 Continuous observations

Basic electromagnetic theory indicates that when charged particles move through a magnetic field, an electric field is created perpendicular to the motion of the particles. The continuous measurements of the Florida Current volume transport made as part of the WBTS project take advantage of this basic physics, as the charged salt ions in seawater move northward in the Florida Current through the magnetic field of the Earth and create an east-west electric field. This electric field can be measured as a voltage on an out-of-use submarine telephone cable between Florida and Grand Bahama Island (see Figure 1). The technique used to estimate transport from voltage will be briefly presented in Section 2.

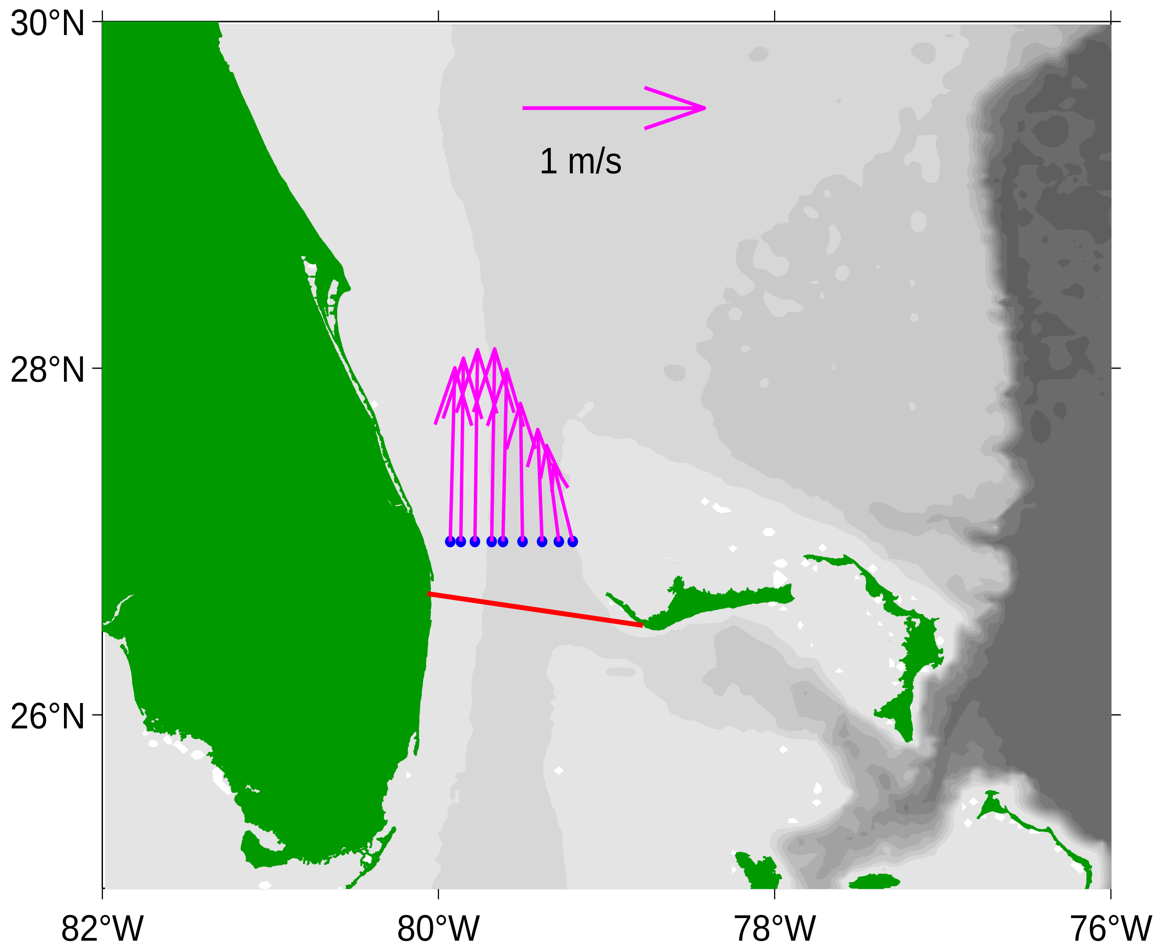

Figure 1: Map of the Straits of Florida study area. Blue dots indicate the locations of dropsonde, XBT and CTD/LADCP stations. Red line shows the approximate location of the telephone cable used for the voltage measurements. Magenta vectors illustrate the time mean vertically-averaged horizontal velocities from all dropsonde data collected between 1994 and 2014 to indicate observation locations relative to the Florida Current position.

1.2 Shipboard measurements

Ship sections collected in the Straits of Florida along 27°N as part of the WBTS project are used to calibrate the cable observations, and they also collect additional data sets that provide information about water properties and the velocity structure. Data are collected at nine stations along 27°N, and the same nine stations have been in use since the mid-1980s (see Figure 1 and Table 1). Two different types of ship sections are collected as part of the WBTS project: CTD/LADCP sections are collected via the R/V Walton Smith, and dropsonde/XBT sections are collected via small chartered boats. For more detail on how the data collected in these sections are used to calculate volume transport, please see Garcia and Meinen (2014).

2 Cable observations

As discussed in the Introduction, voltages induced on a submarine cable by the Florida Current have been shown to be proportional to the total current transport. These voltages are calibrated into volume transport using calibration coefficients originally derived in comparison to ship sections in the 1980s (e.g. Larsen and Sanford, 1985; Larsen, 1992), and the resulting calibrated volume transports are routinely verified by regular ship sections collected each year (see next section). Voltages are measured on the cable each minute by a voltmeter and computer; these voltages are then processed with a low-pass filter (2nd order Butterworth, passed both forward and backward to eliminate phase shifting) with a 3-day cut-off period to remove ionospheric noise from the record. The resulting volume transports are reported in units of Sverdrups (1 Sv = 10^6 m^3 s^{-1}). For further details on the cable observations and processing, please see Meinen et al., (2010).

Cable voltages have been monitored and daily total transport values obtained since 1982. A table listing the daily cable transport values is presented in Appendix A. The annual time series is presented graphically as Figure 2, with the estimated 'error bar' on each daily value indicated by the gray shading. Details on the estimation of the volume transport accuracy, i.e. the 'error bar', can be found in Garcia and Meinen (2014).

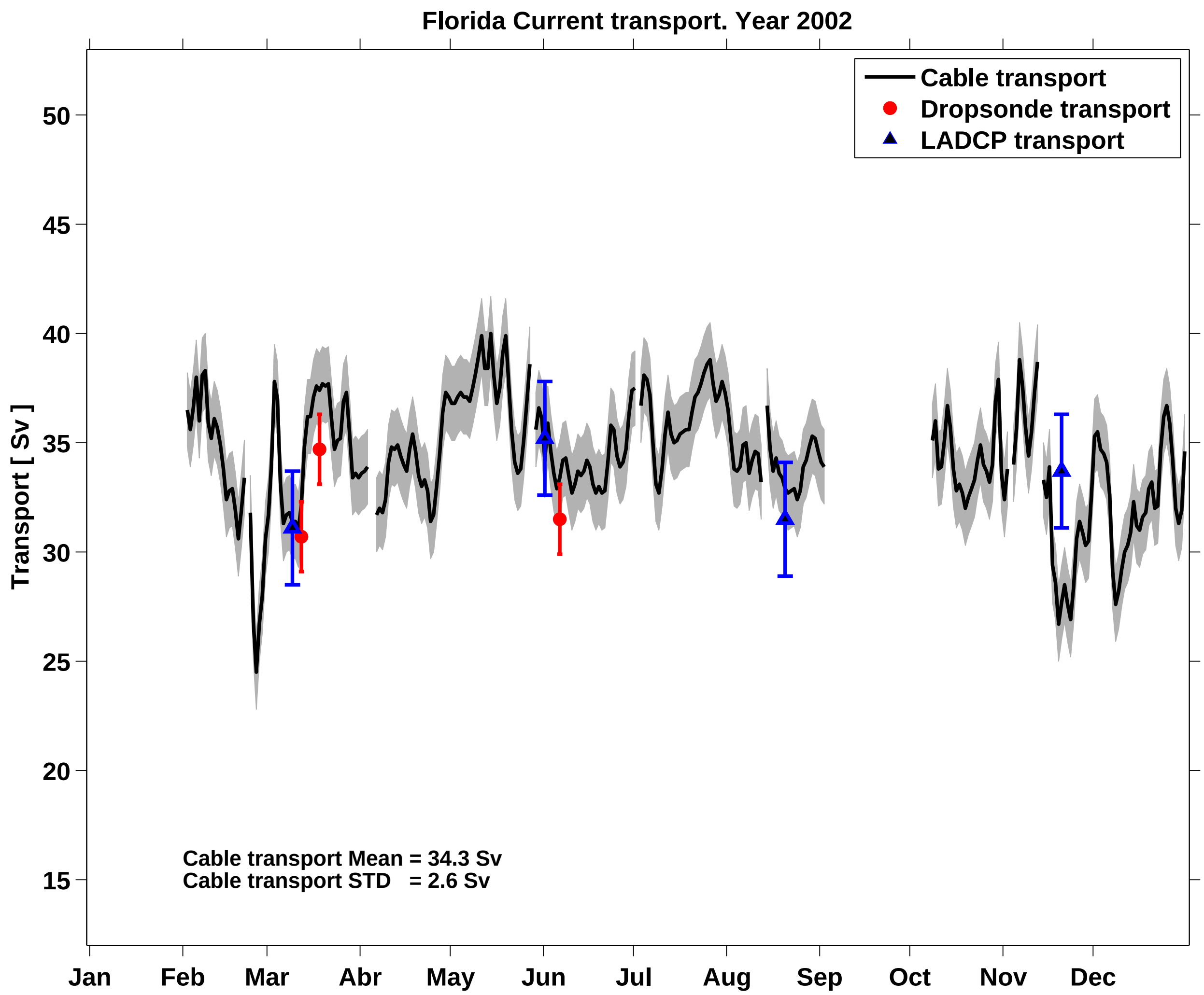

Figure 2: Observed Florida Current volume transports measured by cable voltage (black line), dropsonde sections (red dots) and LADCP sections (blue triangles). For each measurement system the estimated error bar is also shown. The annual mean and standard deviation (STD) from the cable voltage estimates are shown in the figure at lower left.

3 Dropsonde - XBT cruises

This section presents data collected on small boat charter cruises performed during the calendar year in the Straits of Florida at 27°N. These cruises involve the collection of measurements of vertically-averaged horizontal velocity, using dropsonde floats, and temperature profiles, using expendable bathythermographs (XBTs).

A dropsonde is a free-falling float that is deployed from a boat. Once deployed, it sinks to the bottom, drops a weight, and then rises back to the surface under its own buoyancy. Knowing the initial and final position of the dropsonde on the ocean surface at the start and end of the cast, and the elapsed time to complete the cast, it is possible to calculate the vertically-averaged horizontal velocity as the total distance traveled divided by the time required for the cast. For more detail on how the data are collected and used to estimate the volume transport of the Florida Current, please see Garcia and Meinen (2014).

The dates of the dropsonde/XBT cruises during the year, and the resulting estimated transports values, are shown in Table 2. The transport values are also plotted in Figure 2, where the corresponding error bars, as estimated by Garcia and Meinen (2014), are also shown. The individual dropsonde velocity measurements are listed in table form in Appendix B.

The XBT probes are launched at each of the same nine stations to obtain temperature profiles through the full water column (because the maximum depth along 27°N is roughly 750 m). Plots of the XBT temperature sections are shown in Figure 3 . The temperature profile data, organized by cruise, are shown in tabular form in Appendix C. Methods for the XBT processing and quality control can be found in Daneshzadeh et al. (1994).

Cruise No.	Year	Month	Day	Hour mean	Transport	Transport detided
1	2002	3	12	15	29.9	30.7
2	2002	3	18	14	34.1	34.7
3	2002	6	3	14	NaN	NaN
4	2002	6	6	13	32.9	31.5

Table 2: Dropsonde/XBT cruise information: cruise number, cruise date, and transport values estimated with and without the tide signals. NaN indicates insuficient data to estimate transport.

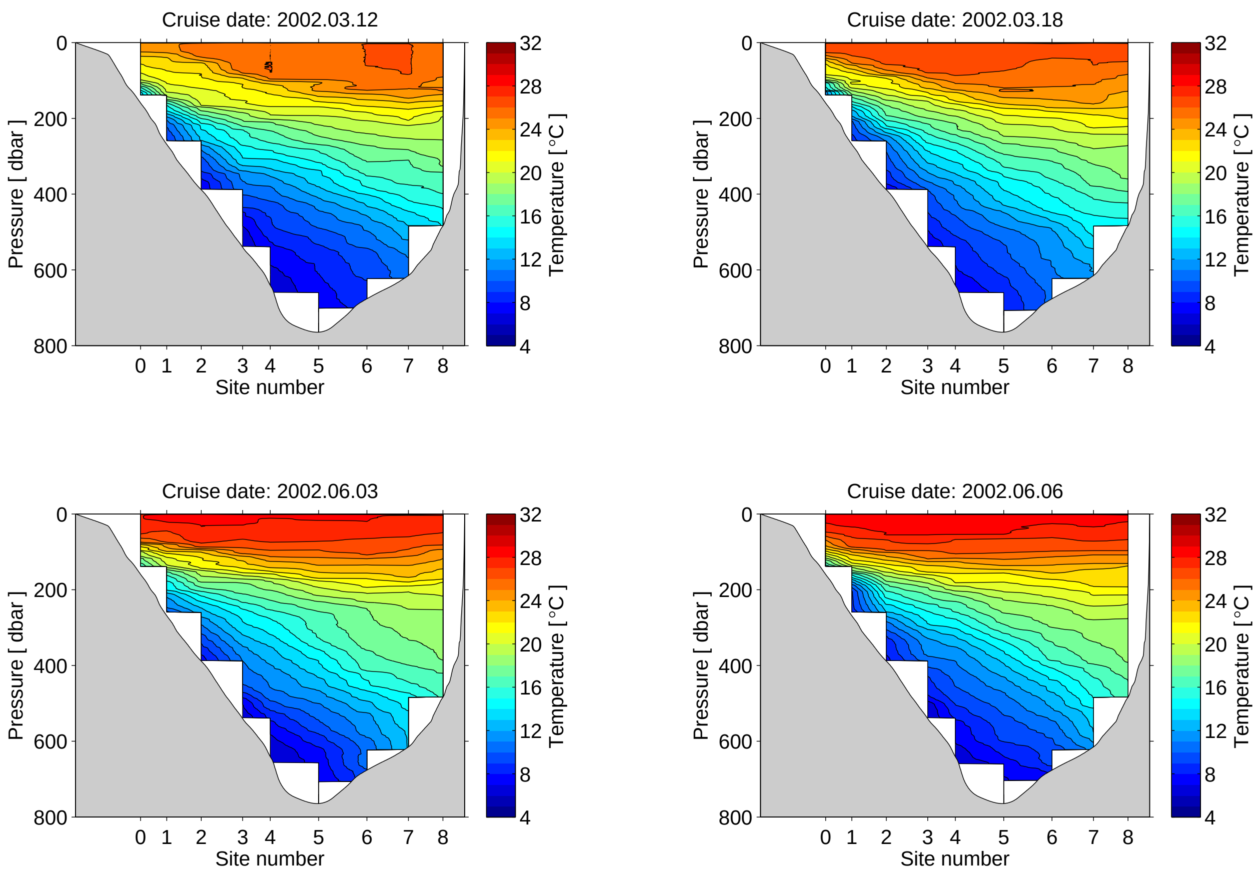

Figure 3: Temperature sections measured with XBT on the indicated dates. Date format is year, month, and day.

4 CTD - LADCP - SADCP cruises

This section includes data from cruises on the R/V Walton Smith. Each cruise collects CTD/LADCP profiles at the nine stations given in Table 1. Transports from these cruises are estimated by first vertically-averaging the LADCP profiles, and the resulting vertical mean velocities are horizontally-integrated in the same manner as the dropsonde observations - see Garcia and Meinen (2014) for more detail.

The cruise dates and the estimated section transports, are shown in Table 3, and are plotted in Figure 2 with the corresponding error bars. For each cruise the horizontal vertically-mean LADCP velocity measurements are listed in Appendix D.

Vertical property sections (temperature, salinity, dissolved oxygen, zonal and meridional velocity) for each cruise are shown in the figures in this section of the report, beginning with Figure 4. Tables listing the data profiles for each station on each cruise are presented in Appendix E. Details of the processing and quality control of the CTD data follow the methods shown in Hooper and Baringer (2015). The LADCP processing incorporates CTD and SADCP data when possible and follows the methods presented in Visbeck (2002) and Thurnherr (2010); the SADCP processing used the methods shown in Firing et al. (2012).

Cruise ID	Year	Month	Day	Hour mean	Transport	Transport detided
ws0202	2002	3	9	2	32.5	31.1
ws0208	2002	6	1	2	34.9	35.2
ws0216	2002	8	20	3	29.7	31.5
ws0224	2002	11	20	16	31.8	33.7

Table 3: CTD/LADCP/SADCP cruise information: cruise identification, cruise date, and transport values estimated using LADCP data, with and without the tide signals. Values of NaN indicate transport can not be estimated.

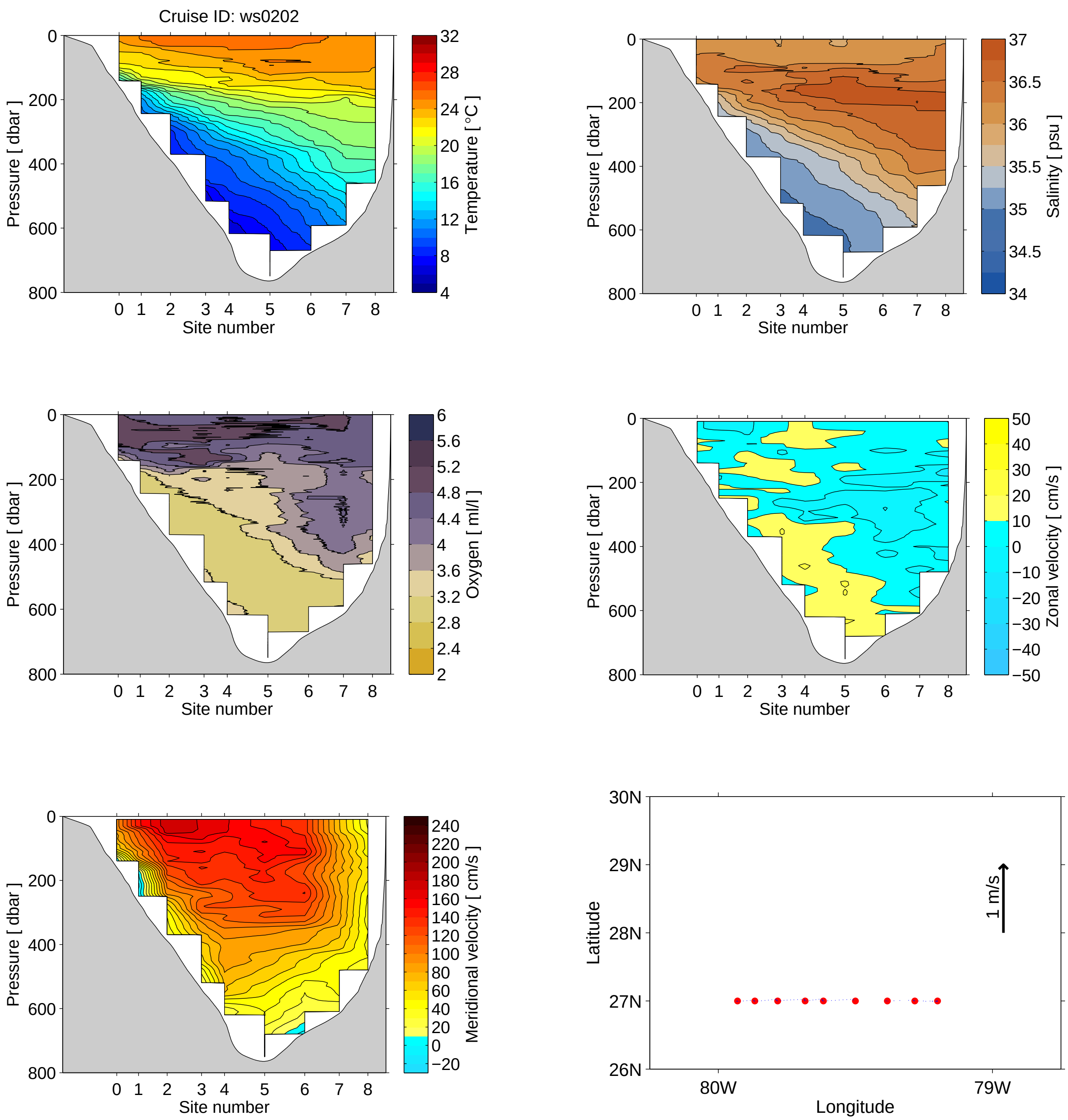

Figure 4: Sections of temperature, salinity, dissolved oxygen (all from CTD), velocity profile (LADCP) and vector velocity map at 50m (SADCP) collected by research vessel. Cruise ID noted above the temperature panel; cruise date are shown in Table 3.

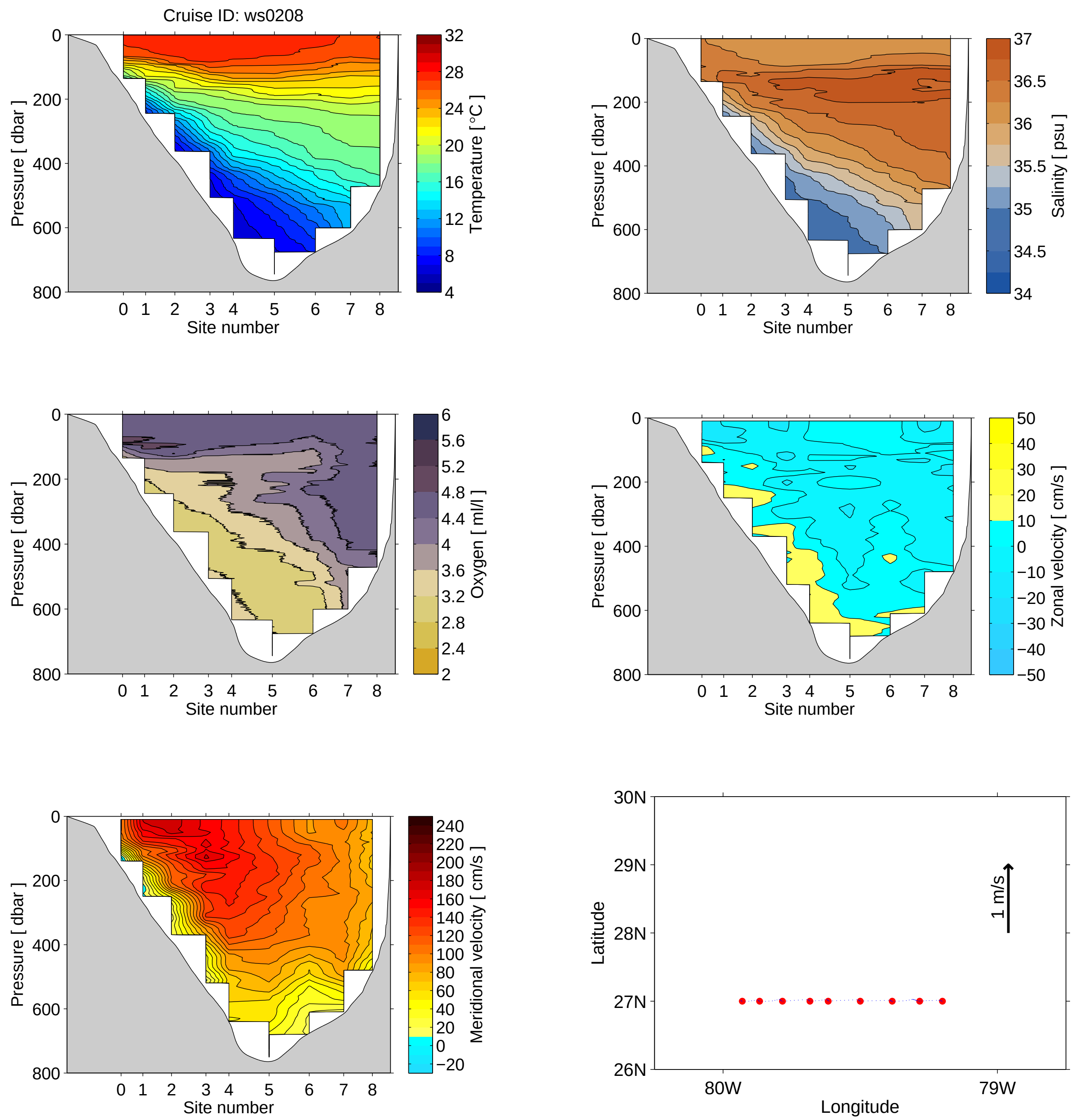

Figure 5: Same as Figure 4 for the data collected on the cruise ID indicated above the temperature panel.

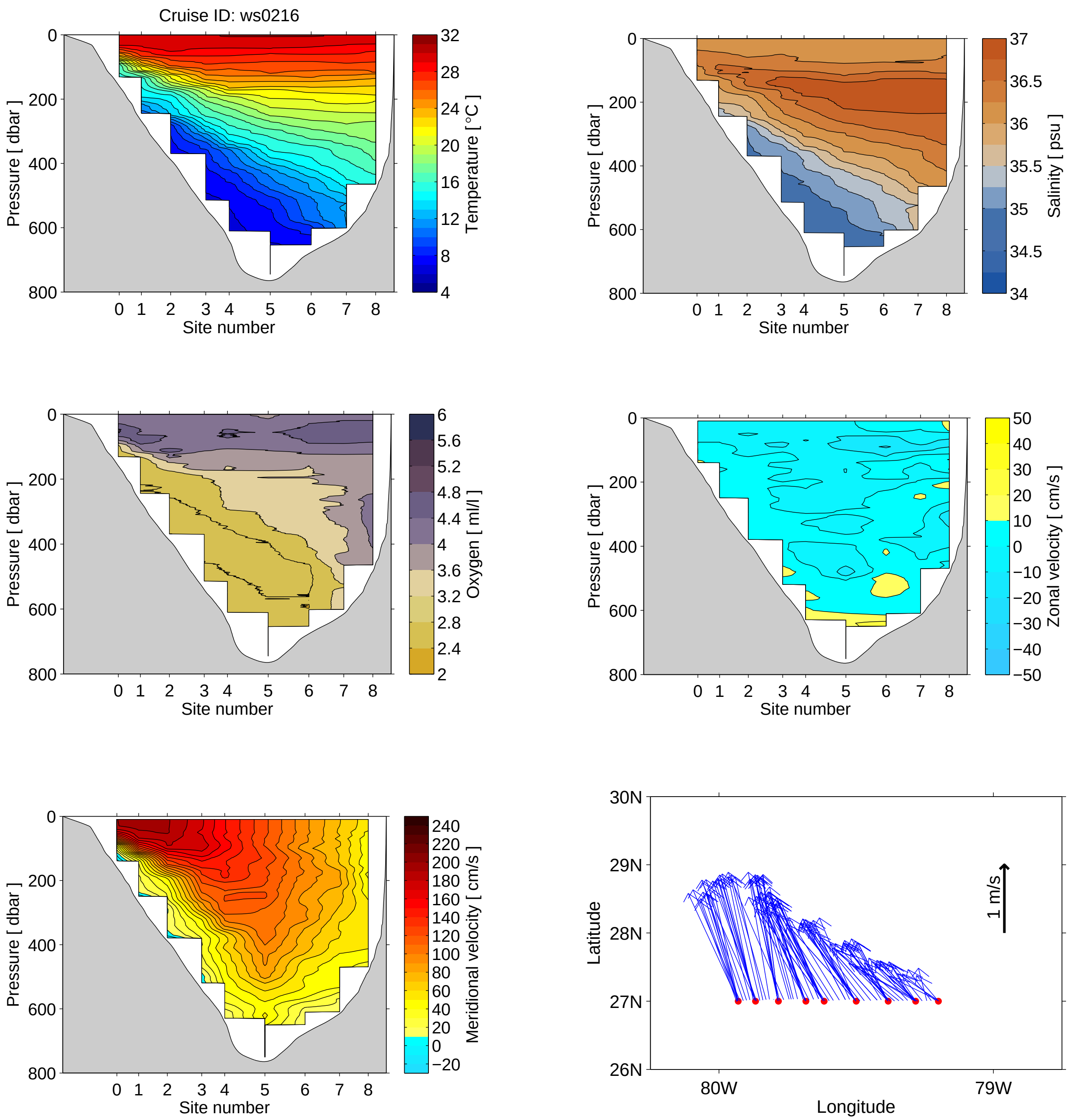

Figure 6: Same as Figure 4 for the data collected on the cruise ID indicated above the temperature panel.

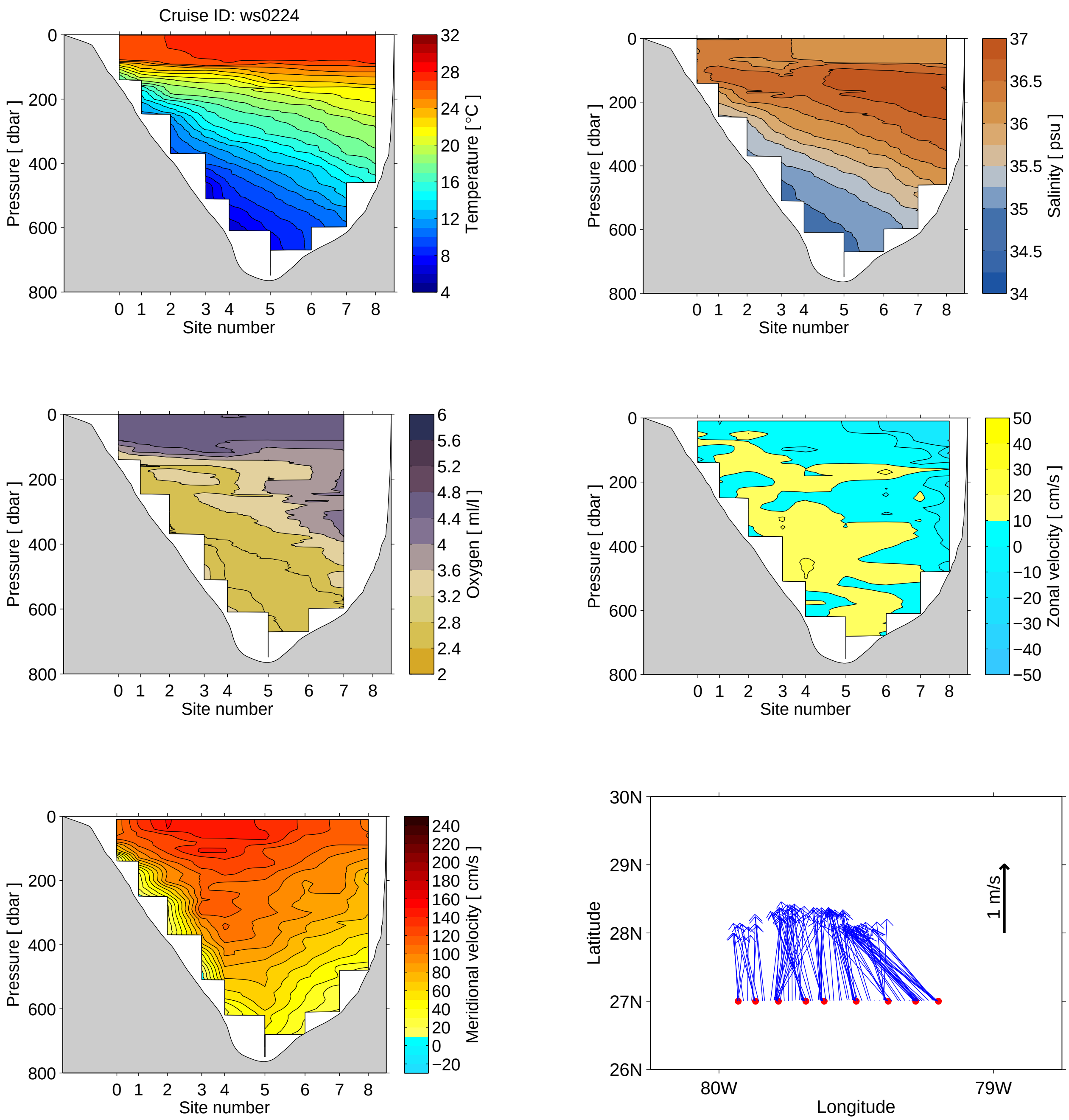

Figure 7: Same as Figure 4 for the data collected on the cruise ID indicated above the temperature panel.

5 Issues during the year

This section of the report is designed to list any issues or problems with the data collection during this calendar year which may affect data quality. This information is provided so that users of the data are aware of any limitations or issues with the data. In most years, data from all of these systems is collected successfully with few or no problems, so in most cases this section will be brief. The section is organized following the same order of data systems as in the body of the report.

5.1 Cable observations

The cable voltage recording system failed during 75 days total during this year. As a result, there are no cable transport estimates for the following dates: January 1 to February 1; February 22; April 4-5; May 28; July 2; August 13; September 3 to October 7; November 3; and November 13. Data are available for all other days throughout the year.

Note that during 2000-2005, a fairly primitive voltage recording system was used for the cable. Data quality from this system was good, but not as good as the subsequent systems used from January 1, 2006 and beyond.

5.2 Dropsonde - XBT cruises

Only one problem arose during the year involving the dropsonde system. During the cruise of June 3, the dropsonde instrument failed at four sites, and no transport estimate is available for that section.

No problems arose during the year involving the XBT system.

5.3 CTD - LADCP - SADCP cruises

While the on-station SADCP datasets for ws0202 and ws0208 were found suitable for use as ancillary data to improve the quality of the final LADCP profiles, overall these SADCP datasets had enough temporal coverage and data quality issues that they should not be used alone for scientific analysis.

Additionally, the following casts were found to exceed a 30 degree wire angle at some point during their deployment (ws0208: 1 and 2; ws0216: 0 and 1). As a result, the LADCP velocity profiles for these casts may not accurately represent the true ocean velocity. These profiles should be used with caution.

All other LADCP and SADCP data for 2002 were found to be suitable for scientific analysis.

During the ws0224 cruise, the oxygen sensor failed during one station. All other CTD data are suitable for scientific analysis.

6 Data availability

The electronic files for the data presented in this report can be obtained from the following sources:

Raw 1-minute voltage data can be obtained from the NOAA National Centers for Environmental Information (NCEI - formerly the NOAA National Oceanographic Data Center). See this web address (http://accession.nodc.noaa.gov/0088016).

The processed daily cable transports, and the dropsonde and LADCP section transports, can be obtained from the project web page (www.aoml.noaa.gov/phod/floridacurrent). See the "Data Access" subpage.

The processed CTD profile, LADCP profile, and SADCP profile data sets can be obtained from the WBTS project web page (www.aoml.noaa.gov/phod/wbts/) under the "Data and Results" subpage. The raw dropsonde observations and the XBT profiles at full vertical resolution can be found via the same page.

Other raw data are available upon request - please email/call the contact people listed on the www.aoml.noaa.gov/phod/floridacurrent web page.

7 Acknowledgements

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Appendix A:

Daily Florida Current transport data

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	NaN	NaN	31.7	33.6	36.8	34.2	37.5	36.5	34.1	NaN	32.4	35.3
2	NaN	36.5	34.0	33.7	36.8	35.9	NaN	35.1	33.9	NaN	33.8	35.5
3	NaN	35.6	37.8	33.9	37.1	34.6	36.7	33.8	NaN	NaN	NaN	34.7
4	NaN	36.6	37.0	NaN	37.3	33.6	38.1	33.7	NaN	NaN	34.0	34.5
5	NaN	38.0	33.1	NaN	37.1	32.9	37.9	33.9	NaN	NaN	35.7	34.1
6	NaN	36.0	31.3	31.7	37.1	33.4	37.2	34.9	NaN	NaN	38.8	32.6
7	NaN	38.1	31.7	32.0	36.9	34.2	35.0	35.0	NaN	NaN	37.6	29.1
8	NaN	38.3	31.8	31.8	37.5	34.3	33.1	33.6	NaN	35.1	35.7	27.6
9	NaN	35.9	31.4	32.4	38.2	33.5	32.7	34.2	NaN	36.0	34.4	28.2
10	NaN	35.2	31.4	34.1	39.0	32.7	33.8	34.6	NaN	33.8	35.5	29.2
11	NaN	36.1	31.0	34.8	39.9	33.1	35.4	34.5	NaN	33.9	37.3	30.0
12	NaN	35.7	32.2	34.7	38.4	33.7	36.4	33.2	NaN	35.1	38.7	30.3
13	NaN	34.9	34.8	34.9	38.4	33.5	35.4	NaN	NaN	36.7	NaN	30.9
14	NaN	33.8	36.2	34.4	40.0	33.7	35.0	36.7	NaN	35.7	33.3	32.3
15	NaN	32.4	36.2	34.0	38.1	34.2	35.1	34.7	NaN	33.8	32.5	31.2
16	NaN	32.8	37.1	33.7	36.8	33.9	35.4	33.7	NaN	32.8	33.9	31.0
17	NaN	32.9	37.6	34.7	37.5	33.1	35.5	34.3	NaN	33.1	29.4	31.6
18	NaN	31.9	37.4	35.4	39.1	32.7	35.6	33.6	NaN	32.7	28.6	31.8
19	NaN	30.6	37.7	34.6	39.9	33.0	35.6	33.4	NaN	32.0	26.7	32.9
20	NaN	31.9	37.6	33.5	37.7	32.7	36.4	32.9	NaN	32.5	27.7	33.2
21	NaN	33.4	37.7	33.0	35.5	32.8	37.1	32.7	NaN	32.9	28.5	32.0
22	NaN	NaN	36.1	33.3	34.1	34.1	37.3	32.8	NaN	33.3	27.6	32.1
23	NaN	31.8	34.7	32.8	33.6	35.8	37.7	32.9	NaN	34.2	26.9	34.7
24	NaN	26.8	35.1	31.4	33.8	35.6	38.2	32.4	NaN	34.9	28.4	36.2
25	NaN	24.5	35.2	31.7	35.1	34.4	38.6	32.8	NaN	34.0	30.6	36.7
26	NaN	26.7	36.9	33.0	36.8	33.9	38.8	33.9	NaN	33.7	31.4	35.9
27	NaN	28.0	37.3	34.5	38.6	34.1	37.7	34.2	NaN	33.2	30.9	34.2
28	NaN	30.6	35.5	36.4	NaN	34.7	36.9	34.8	NaN	34.0	30.3	32.0
29	NaN	–	33.4	37.3	35.6	36.3	37.2	35.3	NaN	36.9	30.5	31.3
30	NaN	–	33.6	37.1	36.6	37.4	37.8	35.2	NaN	37.9	32.7	31.9
31	NaN	–	33.4	–	36.1	–	37.3	34.6	–	33.6	–	34.6

Table 4: Florida Current daily transport estimated using voltage measurements on a telephone cable. Units are Sverdrups (1 Sv = 10^6 m^3 s^{-1}). NaN values indicate no data is available on that day; dashes indicate that day does not exist in that month/year. Table oriented such that each row is the day of the month and each column is the month.

Appendix B:

Dropsonde vertical mean velocities

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2002.03.12								
0	11:51:34	-79.9302	26.9990	11:57:45	-79.9303	27.0005	-9.12	38.45
1	12:18:52	-79.8665	27.0003	12:29:33	-79.8666	27.0041	-0.95	65.96
2	12:57:54	-79.7829	27.0007	13:13: 9	-79.7830	27.0086	-0.63	94.42
3	13:48:28	-79.6831	27.0006	14: 9:21	-79.6825	27.0119	4.28	99.19
4	14:30:12	-79.6164	26.9999	14:55:57	-79.6157	27.0122	4.71	87.83
5	15:20:16	-79.4999	27.0004	15:50: 3	-79.4996	27.0111	1.77	65.46
6	16:17:35	-79.3830	27.0000	16:44: 3	-79.3831	27.0084	-0.59	58.23
7	17: 2:45	-79.2831	27.0000	17:26:27	-79.2838	27.0066	-4.91	51.49
8	17:42:34	-79.1998	27.0002	18: 1:27	-79.2013	27.0054	-12.94	51.16
Cruise date: 2002.03.18								
0	11:48:56	-79.9299	27.0014	11:55: 3	-79.9300	27.0056	-2.56	124.17
1	12: 6:42	-79.8661	27.0006	12:17: 3	-79.8661	27.0070	1.39	113.10
2	12:31:42	-79.7828	27.0004	12:46:15	-79.7826	27.0093	2.88	111.05
3	13: 2:47	-79.6829	27.0003	13:23:39	-79.6826	27.0128	2.49	109.79
4	13:35:36	-79.6164	27.0001	14: 0:45	-79.6160	27.0131	2.39	94.19
5	14:20: 0	-79.4997	26.9998	14:51: 3	-79.4997	27.0121	0.30	72.68
6	15: 9:31	-79.3831	26.9997	15:35:39	-79.3831	27.0089	-0.31	64.87
7	15:52:11	-79.2827	26.9998	16:17:46	-79.2832	27.0069	-3.26	50.85
8	16:31:32	-79.2000	26.9990	16:50:52	-79.2010	27.0030	-8.67	38.07
Cruise date: 2002.06.03								
0	11:11:56	-79.9298	27.0001	11:17:54	-79.9300	27.0021	-6.49	60.54
1	–	–	–	–	–	–	NaN	NaN
2	11:58:25	-79.7830	27.0002	12:14:27	-79.7835	27.0091	-6.46	102.01
3	12:30:29	-79.6829	27.0008	12:51:27	-79.6835	27.0124	-3.81	101.40
4	–	–	–	–	–	–	NaN	NaN
5	–	–	–	–	–	–	NaN	NaN
6	–	–	–	–	–	–	NaN	NaN
7	15:41:39	-79.2832	27.0004	16: 6: 9	-79.2849	27.0090	-12.29	65.32
8	16:21:33	-79.1996	27.0001	16:42: 3	-79.2021	27.0072	-21.11	64.85

Table 5: Tables of dropsonde floats measurements made during the cruises on the indicated dates. Station numbers in left column are as shown in Table 1. Tables include information on where the dropsonde floats were deployed, where they surfaced, and the resulting estimated zonal (U) and meridional (V) vertically averaged velocity. NaN indicates no observation at that station.

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2002.06.06								
0	10:48:38	-79.9297	26.9992	10:55:28	-79.9293	27.0006	8.19	36.61
1	11:11: 6	-79.8664	27.0007	11:21:28	-79.8663	27.0048	1.42	70.85
2	11:38:29	-79.7833	27.0013	11:55:57	-79.7831	27.0105	2.52	96.66
3	12:14:57	-79.6836	27.0006	12:35:57	-79.6835	27.0124	1.02	103.12
4	12:52: 0	-79.6166	27.0004	13:17:52	-79.6162	27.0143	2.78	98.56
5	13:39:51	-79.4997	27.0004	14: 9:33	-79.4999	27.0126	-0.52	75.63
6	14:31:52	-79.3834	27.0001	14:58:40	-79.3840	27.0101	-3.14	68.46
7	15:18:13	-79.2833	27.0004	15:44: 9	-79.2844	27.0094	-7.35	64.12
8	16: 0:41	-79.2000	26.9999	16:20:15	-79.2014	27.0047	-11.08	45.28

Table 6: Same as Table 5 for dropsonde measurements during the cruises on the indicated dates.

Appendix C:

XBT temperature profiles

Cruise date: 2002.03.12									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	23.45	23.80	24.23	25.54	24.47	25.16	25.23	25.36	24.56
10	24.74	24.68	25.58	25.95	25.99	25.75	26.02	26.03	25.81
20	24.76	24.62	25.58	25.94	25.99	25.74	26.01	26.02	25.80
30	23.53	23.41	25.57	25.94	26.00	25.74	26.01	26.03	25.77
40	22.68	22.97	24.90	25.94	26.00	25.74	26.01	26.04	25.63
50	22.30	22.84	23.65	25.94	25.99	25.74	26.02	26.04	25.51
60	21.86	22.77	22.58	25.96	26.00	25.74	26.01	26.05	25.48
70	21.45	22.12	22.24	25.94	26.01	25.74	25.94	26.05	25.48
80	21.04	21.86	22.14	25.03	25.96	25.71	25.76	26.05	25.48
90	20.61	21.62	21.99	23.56	25.35	25.51	25.75	25.63	25.11
100	19.80	21.29	21.76	22.54	24.41	24.58	25.54	25.51	24.83
110	17.76	20.96	21.39	22.01	22.98	24.00	25.42	25.20	24.68
120	15.72	20.51	21.07	21.98	22.42	24.25	25.64	25.03	25.13
130	14.05	20.10	20.54	21.65	22.14	23.77	24.67	24.63	24.96
140	–	19.11	20.45	21.43	21.71	23.10	23.61	24.29	23.79
150	–	18.14	20.35	21.22	21.55	22.10	23.21	23.42	23.44
160	–	15.94	20.18	20.87	21.81	21.70	22.32	22.97	22.46
170	–	14.70	19.00	20.44	20.95	20.92	21.83	22.35	21.87
180	–	13.99	18.02	19.47	20.38	20.35	21.41	21.65	21.07
190	–	12.66	17.25	18.69	20.01	20.09	20.89	21.43	20.37
200	–	11.44	16.06	18.32	19.36	19.46	20.29	21.15	19.91
210	–	10.74	15.21	17.71	18.02	19.36	19.78	20.52	19.86
220	–	10.07	14.13	17.08	17.63	18.91	19.70	19.96	19.70
230	–	9.78	13.97	16.08	17.25	18.51	19.53	19.73	19.69
240	–	9.37	13.64	15.78	16.76	18.20	19.02	19.49	19.42
250	–	9.05	13.19	15.74	16.55	17.90	18.74	19.17	19.28
260	–	8.84	12.86	15.35	16.19	17.50	18.46	18.80	18.97
270	–	–	11.94	15.14	15.73	16.91	18.08	18.56	18.94
280	–	–	11.19	14.57	15.50	16.28	17.86	18.15	18.91
290	–	–	10.72	14.28	14.91	15.96	17.62	17.76	18.85
300	–	–	10.13	14.06	14.57	15.61	17.44	17.39	18.47
350	–	–	8.25	11.24	12.09	13.83	16.08	16.69	16.57
400	–	–	–	10.20	10.68	12.31	14.09	15.43	15.98
450	–	–	–	7.86	9.24	10.68	12.23	13.81	14.79
500	–	–	–	6.52	8.67	9.62	10.90	12.48	–
550	–	–	–	–	7.48	8.60	9.74	11.43	–
600	–	–	–	–	6.78	8.10	9.43	10.52	–
650	–	–	–	–	6.14	7.74	8.64	–	–
700	–	–	–	–	–	7.15	8.54	–	–
750	–	–	–	–	–	6.43	–	–	–

Table 7: Expendable bathythermograph (XBT) temperature profile data collected during the cruise on the date indicated at the top. Left column indicates the estimated depth in meters from the fall rate. Temperature units are degrees Celsius. NaN indicates missing values due to instrument failure, and dashes indicates depths below bottom for each station.

Cruise date: 2002.03.18									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	25.05	24.73	25.32	25.37	25.10	24.96	24.75	25.62	24.93
10	26.29	26.34	26.40	26.43	26.48	26.39	26.05	26.06	26.12
20	26.28	26.35	26.39	26.43	26.48	26.37	26.02	26.04	26.09
30	25.38	26.16	26.39	26.42	26.47	26.37	26.04	26.04	26.08
40	24.27	25.76	26.40	26.42	26.48	26.37	26.02	26.03	26.06
50	22.67	25.23	26.22	26.39	26.49	26.38	25.68	26.01	26.00
60	21.81	23.87	25.76	26.35	26.48	26.37	25.49	25.99	25.92
70	21.11	23.04	25.26	26.20	26.42	26.13	25.47	25.97	25.70
80	21.13	21.98	24.46	25.96	26.11	25.88	25.41	25.30	25.30
90	20.13	21.36	22.29	25.29	25.81	25.70	25.28	25.21	24.90
100	18.21	20.86	21.58	24.42	25.31	25.31	25.16	25.06	24.80
110	15.24	20.94	21.38	23.50	24.91	25.13	25.05	25.01	24.67
120	14.72	20.00	21.20	23.15	24.42	24.99	24.96	24.96	24.53
130	11.66	18.76	20.51	22.12	23.45	24.94	24.90	24.84	23.83
140	–	17.63	19.78	21.49	22.59	24.28	24.44	24.43	23.42
150	–	16.32	19.26	20.63	22.37	23.81	24.01	24.38	23.36
160	–	15.47	18.47	19.81	21.31	23.28	23.54	24.16	23.17
170	–	13.85	17.81	19.56	20.46	22.37	23.11	23.38	22.97
180	–	12.65	17.43	18.98	19.68	21.48	22.11	22.72	22.28
190	–	12.10	17.12	18.48	19.27	21.08	21.38	22.07	22.16
200	–	11.31	16.45	17.96	18.70	20.47	20.84	21.60	22.07
210	–	9.79	15.54	17.29	18.25	20.29	20.35	21.36	21.58
220	–	9.48	14.97	16.88	17.95	19.78	20.09	21.21	21.01
230	–	9.31	13.63	16.44	17.87	19.41	19.86	20.77	20.51
240	–	9.10	12.73	16.02	17.28	19.16	19.46	20.08	20.13
250	–	8.75	11.54	15.65	16.73	18.75	19.19	19.64	19.88
260	–	8.49	10.98	15.26	16.21	18.30	18.78	19.49	19.47
270	–	–	10.61	14.78	15.77	17.79	18.42	19.35	19.15
280	–	–	10.36	14.36	15.24	17.67	17.96	19.01	18.86
290	–	–	9.96	13.92	14.87	17.27	17.81	18.67	18.76
300	–	–	9.78	13.61	14.55	16.87	17.45	18.41	18.65
350	–	–	8.64	11.75	12.89	15.05	16.23	17.42	18.18
400	–	–	–	9.78	11.21	13.76	15.07	16.23	16.80
450	–	–	–	8.98	10.20	11.95	13.92	15.33	15.43
500	–	–	–	7.91	9.25	10.59	11.83	14.36	–
550	–	–	–	–	8.47	9.89	11.39	12.75	–
600	–	–	–	–	7.92	9.26	10.92	12.10	–
650	–	–	–	–	7.04	8.61	10.37	–	–
700	–	–	–	–	–	8.04	10.35	–	–
750	–	–	–	–	–	7.74	–	–	–

Table 8: Same as Table 7 for the cruise on the indicated date.

Cruise date: 2002.06.03									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	27.10	27.89	28.11	27.63	27.23	27.77	27.77	27.47	27.84
10	27.93	28.51	28.47	28.24	28.14	28.17	28.06	27.83	27.70
20	27.65	28.05	28.25	28.22	27.82	27.90	28.00	27.57	27.52
30	27.28	27.41	28.01	27.98	27.78	27.80	27.67	27.42	27.35
40	27.10	27.15	27.89	27.91	27.75	27.69	27.54	27.28	27.19
50	27.07	26.83	27.84	27.84	27.64	27.61	27.21	27.23	26.99
60	26.57	26.46	27.72	27.79	27.59	27.47	27.12	27.01	26.76
70	25.48	26.28	27.45	26.80	27.41	27.17	26.74	26.73	26.60
80	23.25	24.45	26.86	26.30	26.83	26.74	26.82	26.41	26.07
90	21.20	23.94	25.36	25.94	26.40	26.32	26.92	26.08	25.35
100	19.72	22.82	23.05	25.51	25.75	25.80	26.64	25.73	24.42
110	19.18	21.40	22.34	24.27	25.17	25.15	25.97	25.21	24.08
120	17.65	20.64	21.96	23.20	24.41	24.73	24.95	24.59	23.97
130	16.94	20.19	21.42	22.89	23.63	24.13	24.08	24.18	23.74
140	–	19.37	21.20	22.16	23.18	23.65	23.93	23.71	23.47
150	–	17.48	19.83	21.42	22.12	23.20	23.41	23.39	22.88
160	–	16.20	19.15	20.19	20.75	22.73	22.74	23.24	22.45
170	–	15.21	18.56	19.15	19.94	21.94	22.04	22.87	22.13
180	–	14.63	18.00	18.05	18.93	20.70	21.53	21.96	21.00
190	–	14.32	17.40	17.65	18.49	20.23	21.11	21.02	20.82
200	–	14.02	16.63	17.35	18.15	19.69	20.68	20.10	20.56
210	–	12.79	15.49	17.09	17.52	19.30	19.99	19.92	20.32
220	–	11.99	14.78	16.77	17.17	18.77	19.51	19.63	19.90
230	–	11.47	14.18	16.16	16.91	18.10	19.21	19.47	19.52
240	–	11.33	13.50	15.52	16.47	17.52	18.42	19.24	19.18
250	–	10.64	12.94	15.07	16.21	17.29	18.00	19.04	19.05
260	–	9.52	12.58	14.57	15.68	16.87	17.92	18.87	18.94
270	–	–	12.19	14.22	15.30	16.57	17.90	18.70	18.88
280	–	–	11.49	14.05	14.93	16.49	17.89	18.56	18.80
290	–	–	11.13	13.91	14.62	16.48	17.81	18.44	18.66
300	–	–	10.71	13.61	14.37	16.51	17.60	18.33	18.54
350	–	–	8.84	11.97	13.03	15.33	17.27	17.80	18.18
400	–	–	–	10.85	11.94	13.82	16.45	16.97	17.49
450	–	–	–	9.98	11.08	12.58	14.93	15.84	16.43
500	–	–	–	7.07	9.77	11.02	12.79	14.32	–
550	–	–	–	–	7.80	9.92	11.54	13.71	–
600	–	–	–	–	6.62	8.58	10.58	13.10	–
650	–	–	–	–	6.13	7.37	10.57	–	–
700	–	–	–	–	–	7.03	9.48	–	–
750	–	–	–	–	–	6.46	–	–	–

Table 9: Same as Table 7 for the cruise on the indicated date.

Cruise date: 2002.06.06									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	28.02	28.22	28.25	27.84	27.49	27.32	27.39	27.44	26.41
10	28.16	28.33	28.48	28.31	28.34	28.37	28.29	28.23	28.07
20	28.14	28.33	28.47	28.30	28.34	28.35	28.25	28.25	28.01
30	27.77	28.33	28.46	28.21	28.31	28.24	27.83	28.11	27.77
40	27.26	27.78	28.30	28.07	28.19	28.11	27.82	27.72	27.66
50	26.87	27.30	28.00	28.08	28.12	28.09	27.43	27.58	27.62
60	25.92	27.06	27.52	27.89	27.18	27.56	27.04	27.46	27.30
70	24.95	26.68	26.95	27.67	26.91	26.97	26.78	27.14	26.89
80	24.46	26.44	26.77	26.89	26.55	26.80	26.50	26.53	26.80
90	23.30	25.68	26.40	26.38	26.45	26.59	26.24	26.19	26.22
100	21.74	24.06	25.40	25.77	26.18	26.08	25.93	25.80	25.60
110	20.13	22.77	24.07	25.49	25.59	25.72	25.19	24.93	24.84
120	18.21	22.11	23.17	24.74	24.45	24.97	24.81	24.47	24.51
130	16.76	20.94	22.26	23.65	23.86	24.33	24.30	24.02	24.22
140	–	19.22	21.19	22.57	23.10	23.56	23.88	23.50	22.88
150	–	17.80	20.49	22.43	22.81	22.67	23.31	22.74	22.79
160	–	15.19	19.48	21.05	21.88	21.77	22.79	22.51	22.60
170	–	13.63	18.56	19.94	21.33	21.38	22.23	22.33	22.31
180	–	11.84	17.72	19.20	21.07	21.00	21.55	22.24	22.23
190	–	10.32	16.90	18.35	20.10	20.62	21.22	22.05	22.08
200	–	9.35	16.30	17.91	19.31	20.22	20.76	21.36	21.75
210	–	8.86	15.66	17.17	18.18	19.78	20.23	21.07	21.16
220	–	8.80	15.20	16.91	17.57	19.35	19.97	20.92	20.36
230	–	8.77	14.45	16.46	17.14	18.90	19.41	20.79	20.06
240	–	8.75	13.79	15.71	16.55	18.66	19.05	20.28	19.97
250	–	8.66	13.35	15.34	16.24	18.46	18.76	19.59	19.69
260	–	8.15	12.72	14.87	15.90	18.09	18.66	19.34	19.28
270	–	–	11.97	14.50	15.35	17.64	18.44	19.23	19.19
280	–	–	11.17	14.26	14.90	17.45	18.33	18.96	18.86
290	–	–	10.57	13.99	14.56	17.08	18.19	18.61	18.79
300	–	–	10.21	13.32	14.13	16.80	17.98	18.47	18.68
350	–	–	8.25	11.49	12.05	14.45	16.85	17.80	18.40
400	–	–	–	10.06	10.88	12.92	15.41	16.76	17.83
450	–	–	–	8.65	10.06	11.57	13.51	15.66	16.92
500	–	–	–	6.52	9.08	10.42	12.25	14.76	–
550	–	–	–	–	7.66	9.64	10.75	13.27	–
600	–	–	–	–	7.12	9.08	9.91	12.10	–
650	–	–	–	–	6.35	7.61	9.43	–	–
700	–	–	–	–	–	6.89	8.03	–	–
750	–	–	–	–	–	6.53	–	–	–

Table 10: Same as Table 7 for the cruise on the indicated date.

Appendix D:

LADCP vertical mean velocities

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2002.03.09								
0	8: 0:45	-79.9297	26.9960	8: 6:38	-79.9308	26.9982	-3.90	54.51
1	7:12:57	-79.8686	26.9985	7:29: 0	-79.8704	27.0074	-4.38	53.98
2	6:14: 9	-79.7871	27.0073	6:32:54	-79.7896	27.0209	-1.54	96.70
3	4:51:25	-79.6845	27.0036	5:17:39	-79.6850	27.0213	1.49	96.70
4	3:46: 5	-79.6185	27.0024	4:14:33	-79.6208	27.0215	0.61	95.04
5	2:18:47	-79.5027	26.9994	2:56:48	-79.5088	27.0192	-0.12	83.27
6	1: 0:34	-79.3874	27.0003	1:30:17	-79.3899	27.0138	-6.79	77.50
7	23:52:60	-79.2846	27.0022	0:19: 3	-79.2879	27.0093	-8.50	55.88
8	22:53:45	-79.2023	26.9981	23:10: 7	-79.2057	26.9977	-7.64	30.94
Cruise date: 2002.06.01								
0	7:45:46	-79.9320	27.0019	7:52: 6	-79.9338	27.0047	-12.93	55.20
1	6:54: 9	-79.8681	27.0002	7: 6:30	-79.8701	27.0103	-9.67	75.19
2	5:48:21	-79.7863	27.0018	6: 7:46	-79.7911	27.0187	-5.24	84.20
3	4:43: 5	-79.6842	27.0023	5: 5:31	-79.6893	27.0203	-8.16	100.53
4	3:45:38	-79.6145	27.0027	4: 7:40	-79.6202	27.0195	-4.62	104.42
5	2:34:39	-79.5005	27.0018	2:59:36	-79.5067	27.0167	-8.37	84.59
6	1:23:31	-79.3839	26.9989	1:49:52	-79.3905	27.0116	-5.81	67.21
7	23:54:55	-79.2874	27.0029	0:20:55	-79.2996	27.0173	-14.19	75.31
8	22:46:37	-79.2042	27.0032	23: 3:36	-79.2113	27.0112	-14.33	59.49
Cruise date: 2002.08.20								
0	7:19:34	-79.9309	27.0061	7:29:39	-79.9316	27.0154	-8.98	83.90
1	6:23:48	-79.8675	27.0070	6:39:17	-79.8692	27.0202	-7.98	78.09
2	5:21:31	-79.7848	27.0060	5:42:57	-79.7866	27.0230	-8.22	74.89
3	4: 6: 4	-79.6853	27.0071	4:33:32	-79.6887	27.0279	-8.32	81.94
4	2:48: 6	-79.6196	27.0058	3:26:50	-79.6260	27.0353	-9.63	82.60
5	1:25: 6	-79.5011	27.0035	2: 0:38	-79.5049	27.0244	-10.02	80.35
6	0: 6: 4	-79.3844	27.0037	0:38:37	-79.3865	27.0187	-5.86	61.14
7	22:55:56	-79.2836	27.0014	23:23:18	-79.2849	27.0122	-8.55	48.16
8	21:56:27	-79.2005	27.0033	22:18:39	-79.2014	27.0098	-10.95	36.88

Table 11: Tables of vertically averaged velocity determined from lowered acoustic Doppler current profiler (LADCP) data collected during the indicated dates (see Table 3). Station numbers in left column are as shown in Table 1. Tables include information on where the LADCP cast was started (”Deployed”), where it ended (”Surfaced”), and the resulting estimated zonal (U) and meridional (V) vertically average velocity.

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2002.11.20								
0	19:54:47	-79.9308	27.0015	20: 1:21	-79.9328	27.0042	-2.82	69.47
1	19:17:46	-79.8689	27.0026	19:28:25	-79.8728	27.0082	-2.83	64.66
2	18:25:51	-79.7846	26.9995	18:43:10	-79.7895	27.0101	1.86	68.33
3	16:30:30	-79.6898	27.0027	16:53:28	-79.7001	27.0151	0.47	85.62
4	15:32:58	-79.6227	27.0006	15:57:53	-79.6325	27.0138	1.52	91.18
5	14:16:17	-79.5015	27.0020	14:46:56	-79.5130	27.0184	-0.80	79.40
6	13: 7:20	-79.3853	27.0010	13:35:33	-79.3977	27.0141	-2.03	65.71
7	12: 7:46	-79.2851	27.0005	12:32:46	-79.2962	27.0101	-6.28	61.76
8	10:40:16	-79.2055	27.0025	11: 3:46	-79.2171	27.0124	-16.54	63.90

Table 12: Same as Table 11 for LADCP data collected on the indicated dates.

Appendix E:

CTD and LADCP profiles

Cruise ID: ws0202. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.20	36.06	4.87	NaN	NaN
10	24.20	36.06	4.87	-7.7	84.8
20	23.96	36.12	4.95	-7.7	84.8
30	23.76	36.15	4.88	-7.7	84.8
40	23.29	36.21	4.92	-7.7	84.8
50	23.07	36.26	4.88	-4.5	70.9
60	22.91	36.30	4.90	-0.3	66.7
70	22.75	36.32	4.90	1.1	68.6
80	22.37	36.37	4.87	-0.1	65.2
90	21.69	36.45	4.78	3.1	54.1
100	21.05	36.47	4.82	1.2	54.3
110	19.75	36.36	4.37	-2.9	40.0
120	18.31	36.26	4.09	-5.6	15.2
130	17.00	36.18	3.68	-5.3	-2.6
140	15.66	36.03	3.32	-10.8	-8.2

Table 13: Profiles of temperature, salinity, dissolved oxygen, zonal (U) and meridional (V) velocity observed during the cruise ID and station indicated with the combined CTD and LADCP. NaN indicates missing values.

Cruise ID: ws0202. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.08	36.01	4.62	NaN	NaN
10	25.07	36.01	4.72	-15.4	137.7
20	24.65	36.02	4.82	-15.5	137.6
30	24.27	36.05	4.90	-15.6	137.5
40	23.65	36.18	4.90	-7.3	115.9
50	23.24	36.25	4.81	-1.9	107.8
60	22.75	36.32	4.91	-4.4	106.0
70	22.62	36.32	4.92	0.9	101.9
80	22.56	36.33	4.94	-5.0	100.0
90	22.28	36.39	4.88	-1.3	97.4
100	21.94	36.46	4.85	-0.9	89.4
110	21.76	36.47	4.78	-6.1	81.8
120	21.30	36.48	4.69	-5.8	84.4
130	20.91	36.47	4.56	-3.9	77.2
140	19.53	36.38	4.34	-2.5	62.1
150	18.73	36.30	4.11	-6.9	39.9
160	16.67	36.08	3.76	2.1	15.9
170	14.19	35.81	3.41	1.2	-3.5
180	13.02	35.68	3.04	-11.1	-11.5
190	12.35	35.58	3.00	-10.7	-12.5
200	11.61	35.48	3.01	-2.0	-16.3
210	11.17	35.42	2.99	1.5	-21.5
220	11.02	35.40	3.02	0.5	-22.0
230	10.88	35.38	2.96	-2.9	-18.8
240	10.69	35.36	2.98	-0.6	-17.3
250	NaN	NaN	NaN	4.0	-19.6

Table 14: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0202. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.64	36.01	4.70	NaN	NaN
10	25.65	36.01	4.70	-12.1	166.9
20	25.65	36.01	4.68	-12.1	166.8
30	25.58	36.01	4.72	-11.9	166.5
40	24.17	36.10	4.90	-11.6	166.1
50	23.94	36.13	4.82	-11.1	165.3
60	23.76	36.17	4.87	-1.9	149.6
70	23.43	36.24	4.84	-3.5	146.8
80	23.05	36.39	4.82	0.1	140.6
90	23.15	36.58	4.33	-2.2	137.2
100	22.75	36.63	4.24	-1.0	137.4
110	21.91	36.45	4.88	3.7	134.1
120	21.67	36.49	4.73	5.4	130.1
130	21.40	36.50	4.74	2.9	127.6
140	21.20	36.50	4.82	0.1	130.0
150	20.62	36.46	4.65	1.0	121.9
160	19.33	36.36	4.35	7.0	116.5
170	18.78	36.32	4.08	4.5	111.0
180	17.31	36.19	3.82	0.3	112.1
190	16.81	36.24	3.53	-1.9	105.7
200	16.34	36.20	3.32	-4.4	98.5
210	15.89	36.11	3.27	-2.6	92.5
220	15.00	35.97	3.20	0.4	91.3
230	13.77	35.78	3.13	-2.3	87.8
240	12.64	35.62	3.14	-1.3	84.9
250	11.79	35.51	3.06	4.5	73.4
260	11.16	35.42	3.06	7.9	61.3
270	10.27	35.30	3.06	6.3	52.2
280	9.93	35.26	3.03	3.3	45.1
290	9.19	35.18	3.07	-0.7	39.9
300	8.71	35.12	3.10	-1.8	34.3
350	8.30	35.08	3.16	-5.9	25.3

Table 15: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0202. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.48	36.00	4.76	NaN	NaN
10	25.50	36.00	4.77	-0.5	158.9
20	25.49	36.00	4.75	-0.6	158.9
30	25.47	36.00	4.74	-0.6	159.1
40	24.61	36.06	4.84	-0.5	159.3
50	24.32	36.07	4.79	6.7	158.2
60	24.09	36.09	4.85	3.0	153.6
70	23.95	36.13	4.78	5.4	151.6
80	23.68	36.17	4.87	-0.4	145.2
90	23.88	36.61	4.63	-1.4	132.9
100	22.89	36.56	4.54	-11.3	136.2
110	22.21	36.43	4.93	-12.1	141.8
120	22.08	36.46	4.95	-6.8	136.2
130	22.02	36.47	4.93	2.4	134.5
140	21.70	36.48	4.97	7.5	134.5
150	21.39	36.50	4.87	7.6	126.8
160	20.75	36.56	4.63	3.5	131.2
170	19.62	36.58	3.24	2.0	128.6
180	18.90	36.55	3.28	1.9	126.6
190	18.36	36.52	3.48	3.4	129.2
200	18.03	36.48	3.65	-0.7	126.5
210	17.32	36.35	3.44	-3.4	123.7
220	16.89	36.29	3.39	0.5	113.6
230	16.47	36.22	3.35	1.8	102.1
240	16.34	36.20	3.33	-3.3	95.7
250	15.44	36.05	3.42	-10.4	95.5
260	14.81	35.95	3.22	-16.8	103.9
270	13.99	35.82	3.21	-14.5	108.3
280	13.02	35.67	3.10	-7.2	109.7
290	12.84	35.65	3.03	-1.9	109.8
300	11.93	35.50	2.99	1.4	101.9
350	10.68	35.32	2.90	11.1	75.3
400	9.27	35.15	2.97	7.8	54.5
450	8.95	35.14	3.00	7.5	46.7
500	6.65	34.94	3.33	-1.7	17.1

Table 16: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0202. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.26	36.02	4.78	NaN	NaN
10	25.26	36.02	4.83	1.4	152.2
20	25.25	36.02	4.81	1.4	152.1
30	25.11	36.01	4.83	1.6	151.8
40	25.02	36.03	4.84	1.9	151.2
50	24.59	36.05	4.86	2.1	150.4
60	24.18	36.08	4.81	4.2	141.1
70	24.06	36.09	4.81	4.2	135.1
80	24.09	36.32	4.65	5.2	133.5
90	23.46	36.23	4.75	6.0	136.8
100	23.48	36.45	4.59	-3.7	135.6
110	23.38	36.67	4.20	-3.3	130.8
120	22.48	36.55	4.45	-1.6	125.6
130	21.98	36.46	4.92	-2.1	123.3
140	21.92	36.51	4.92	-5.8	122.0
150	22.27	36.88	3.75	-5.6	121.7
160	21.81	36.86	3.68	-6.5	126.5
170	20.87	36.78	3.59	0.5	125.2
180	20.37	36.73	3.53	3.5	124.0
190	19.30	36.56	3.38	7.5	122.9
200	18.59	36.50	3.35	6.5	117.3
210	18.13	36.44	3.23	0.7	114.2
220	18.01	36.46	3.41	-2.3	112.2
230	17.70	36.42	3.59	-3.2	110.6
240	17.36	36.37	3.53	-3.9	107.0
250	16.86	36.28	3.44	-6.4	104.9
260	16.32	36.20	3.38	-10.5	107.2
270	15.75	36.11	3.36	-13.9	110.9
280	15.42	36.06	3.37	-13.9	112.9
290	14.90	35.97	3.29	-10.4	108.1
300	14.44	35.90	3.22	-11.1	101.7
350	11.33	35.41	3.00	0.0	89.3
400	10.14	35.24	2.98	6.2	74.0
450	9.57	35.16	2.92	9.0	78.0
500	8.62	35.05	2.91	6.6	65.4
550	7.91	34.99	2.95	-1.3	60.0
600	6.49	34.93	3.36	2.1	16.4

Table 17: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0202. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.63	35.99	4.72	NaN	NaN
10	25.63	35.99	4.76	-6.0	133.6
20	25.39	35.99	4.79	-6.0	133.6
30	25.14	36.02	4.80	-6.0	133.6
40	25.05	36.02	4.81	2.0	140.0
50	24.93	36.03	4.80	1.5	142.4
60	24.83	36.04	4.79	-0.8	144.3
70	24.76	36.06	4.78	-4.1	147.1
80	25.03	36.29	4.50	-3.2	151.3
90	24.82	36.44	4.43	-1.7	145.0
100	24.50	36.54	4.19	-3.3	141.4
110	24.29	36.67	4.12	-5.7	141.8
120	24.15	36.82	3.96	-7.6	140.4
130	23.69	36.87	3.78	-7.8	143.8
140	23.19	36.89	3.75	0.8	142.1
150	22.28	36.88	3.79	2.9	137.9
160	21.83	36.87	3.62	2.2	133.7
170	21.46	36.86	3.62	-1.8	130.6
180	21.04	36.83	3.67	-9.8	131.3
190	20.69	36.80	3.62	-12.8	134.6
200	20.43	36.78	3.67	-10.7	134.9
210	19.78	36.71	3.72	-8.0	128.0
220	19.11	36.60	3.60	-7.9	128.4
230	18.40	36.49	3.39	-12.6	127.4
240	18.10	36.48	3.44	-16.2	124.6
250	17.55	36.38	3.45	-13.5	129.7
260	17.18	36.33	3.31	-12.6	123.6
270	16.98	36.31	3.46	-9.6	116.4
280	16.53	36.23	3.42	-7.4	109.1
290	16.20	36.18	3.37	-6.0	106.4
300	16.17	36.18	3.36	-6.7	110.4
350	13.79	35.83	3.60	3.9	85.0
400	12.10	35.53	3.11	-7.3	75.8
450	11.22	35.40	3.07	-5.5	66.2
500	9.67	35.17	2.93	7.8	55.2
550	8.82	35.07	2.93	10.5	41.5
600	8.12	35.00	2.95	3.9	32.1
650	7.51	34.97	3.04	7.9	21.3
700	7.06	34.95	3.19	4.7	21.4
750	NaN	NaN	NaN	6.8	14.5

Table 18: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0202. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.06	36.09	4.78	NaN	NaN
10	25.05	36.10	4.81	-2.0	124.9
20	25.03	36.10	4.84	-2.0	125.0
30	24.94	36.12	4.80	-2.0	125.0
40	24.94	36.13	4.79	-2.0	125.0
50	24.92	36.13	4.74	-2.0	125.0
60	24.91	36.13	4.72	-3.0	130.2
70	24.88	36.13	4.78	-6.1	132.5
80	24.95	36.18	4.77	-6.1	132.7
90	24.81	36.45	4.51	-8.5	135.2
100	24.63	36.49	4.38	-14.2	140.0
110	24.35	36.56	4.40	-9.4	144.4
120	23.67	36.59	4.31	-3.5	140.2
130	23.10	36.54	4.46	-1.6	129.2
140	22.81	36.57	4.63	-1.8	121.2
150	22.65	36.72	4.34	-5.0	114.9
160	22.40	36.86	3.74	-2.0	112.0
170	21.82	36.87	3.65	-6.8	110.2
180	21.51	36.86	3.63	-15.1	109.2
190	21.46	36.86	3.60	-17.2	112.1
200	20.68	36.80	3.66	-15.8	115.3
210	20.02	36.74	3.71	-11.1	120.1
220	19.44	36.68	3.76	-8.8	125.6
230	19.16	36.65	3.94	-10.5	129.5
240	19.11	36.66	4.04	-16.2	130.3
250	18.85	36.63	4.38	-18.2	128.4
260	18.64	36.59	4.45	-15.8	125.5
270	18.24	36.54	4.10	-18.2	119.1
280	18.09	36.52	4.24	-20.7	117.9
290	17.87	36.48	4.16	-19.9	114.9
300	17.62	36.44	4.09	-17.0	112.6
350	15.84	36.16	4.05	-11.4	79.9
400	14.87	36.02	3.85	-7.6	69.3
450	13.35	35.75	3.46	-6.7	47.6
500	11.76	35.48	3.04	-2.0	34.7
550	10.44	35.28	2.92	-2.9	20.0
600	10.02	35.22	2.93	-0.4	13.7
650	9.10	35.14	3.06	3.2	-2.9

Table 19: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0202. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.93	36.11	4.82	NaN	NaN
10	24.93	36.11	4.86	-5.9	60.7
20	24.92	36.11	4.85	-5.8	60.7
30	24.87	36.10	4.85	-5.4	60.9
40	24.86	36.10	4.82	-4.8	61.1
50	24.86	36.12	4.79	-1.9	62.0
60	24.80	36.30	4.71	-2.7	68.9
70	24.43	36.27	4.70	-6.6	70.4
80	24.57	36.34	4.67	-6.2	73.9
90	24.52	36.35	4.72	-7.3	76.5
100	24.32	36.41	4.72	-7.4	75.4
110	24.26	36.45	4.58	-8.5	72.9
120	24.00	36.42	4.49	-6.0	73.9
130	23.91	36.46	4.45	-6.9	74.8
140	23.54	36.58	4.37	-7.9	76.7
150	23.34	36.67	4.44	-10.8	74.1
160	22.68	36.60	4.46	-6.9	73.0
170	22.27	36.80	4.37	-12.6	75.4
180	21.46	36.82	4.44	-18.1	70.2
190	20.12	36.77	4.33	-13.4	67.6
200	19.88	36.75	4.30	-8.7	68.2
210	19.89	36.75	4.30	-9.5	70.1
220	19.89	36.75	4.31	-10.3	71.2
230	19.79	36.74	4.29	-13.4	70.7
240	19.68	36.73	4.34	-16.8	72.2
250	19.41	36.70	4.34	-13.8	74.9
260	19.13	36.67	4.45	-10.0	73.9
270	18.96	36.65	4.39	-10.7	73.2
280	18.78	36.63	4.39	-8.5	73.2
290	18.59	36.60	4.44	-8.4	72.9
300	18.48	36.59	4.42	-11.6	72.0
350	17.64	36.47	4.35	-9.7	62.0
400	16.84	36.34	4.14	-10.5	55.6
450	15.12	36.06	3.90	-6.9	34.2
500	13.92	35.83	3.42	-4.9	31.1
550	12.62	35.61	3.02	-11.7	31.2
600	NaN	NaN	NaN	2.9	15.0

Table 20: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0202. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.96	36.12	4.58	NaN	NaN
10	24.94	36.15	4.56	-10.1	17.7
20	24.62	36.29	4.56	-9.9	18.0
30	24.52	36.33	4.57	-9.0	18.9
40	24.54	36.34	4.53	-8.0	20.2
50	24.53	36.34	4.52	-4.0	26.5
60	24.45	36.35	4.57	-3.0	32.0
70	24.28	36.40	4.52	4.7	34.8
80	24.21	36.41	4.50	2.8	35.2
90	24.11	36.40	4.49	1.9	35.4
100	23.99	36.40	4.55	-8.9	35.9
110	23.94	36.41	4.56	-16.4	33.0
120	23.92	36.41	4.55	-10.5	36.1
130	23.91	36.51	4.43	-4.2	41.9
140	23.78	36.55	4.52	-6.4	42.6
150	23.71	36.58	4.51	-14.1	41.7
160	23.30	36.72	4.44	-24.2	38.7
170	22.62	36.86	4.23	-25.7	43.0
180	22.28	36.86	3.77	-20.3	44.2
190	21.80	36.86	3.85	-10.6	43.6
200	20.88	36.83	3.89	-9.8	40.7
210	20.41	36.79	3.98	-10.2	37.8
220	20.17	36.77	4.03	-8.4	36.0
230	19.88	36.74	4.07	-5.7	35.2
240	19.45	36.70	4.05	-5.9	30.9
250	19.30	36.69	4.11	-3.4	28.8
260	19.14	36.67	4.11	1.4	28.2
270	19.10	36.67	4.10	-1.5	28.3
280	18.82	36.63	4.13	-1.5	27.1
290	18.72	36.62	4.13	-0.3	26.7
300	18.63	36.61	4.12	-0.8	26.4
350	17.99	36.51	4.06	-5.9	28.9
400	16.60	36.29	3.75	-9.5	26.6
450	15.20	36.04	3.39	-8.2	28.4

Table 21: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0208. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.29	36.26	4.48	NaN	NaN
10	27.29	36.26	4.51	-26.0	88.4
20	27.30	36.26	4.55	-26.0	88.4
30	27.02	36.32	4.60	-26.2	88.4
40	26.95	36.32	4.65	-27.1	88.6
50	26.86	36.32	4.66	-25.1	89.8
60	26.25	36.33	4.72	-22.9	85.7
70	25.17	36.40	4.90	-18.5	85.0
80	23.88	36.46	4.94	-8.7	72.0
90	22.82	36.51	4.83	4.0	59.2
100	20.96	36.39	4.40	7.4	41.9
110	19.12	36.31	4.10	7.1	19.2
120	18.55	36.31	3.85	-3.3	1.2
130	17.08	36.20	3.59	-4.3	-14.8
140	NaN	NaN	NaN	-11.7	-20.2

Table 22: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0208. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.64	36.22	4.44	NaN	NaN
10	27.62	36.22	4.48	-19.0	160.2
20	27.53	36.24	4.53	-19.3	159.7
30	27.25	36.25	4.58	-20.5	157.8
40	27.02	36.28	4.61	-24.0	152.0
50	26.91	36.31	4.64	-24.5	143.3
60	26.60	36.33	4.70	-22.2	142.4
70	26.06	36.36	4.80	-28.7	134.6
80	24.45	36.43	4.80	-18.8	128.4
90	23.40	36.42	4.87	-11.0	113.9
100	22.58	36.48	4.85	-8.7	100.8
110	21.82	36.55	4.72	-4.8	94.9
120	21.23	36.56	4.42	-3.3	94.9
130	20.82	36.60	4.28	-10.2	83.6
140	19.62	36.43	3.91	-8.9	73.7
150	18.28	36.26	3.87	-5.0	60.2
160	16.60	36.06	3.64	-7.3	43.4
170	15.53	35.96	3.48	-11.2	31.8
180	14.65	35.87	3.41	-8.1	15.7
190	13.92	35.79	3.28	-9.2	7.7
200	12.70	35.64	3.20	-10.4	5.6
210	11.31	35.43	3.14	3.3	-0.4
220	10.39	35.32	3.08	9.0	-8.6
230	9.61	35.21	3.01	8.7	-9.1
240	8.78	35.09	2.92	10.0	-1.1
250	NaN	NaN	NaN	2.6	-5.5

Table 23: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0208. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.83	36.20	4.46	NaN	NaN
10	27.84	36.19	4.50	-19.0	165.5
20	27.84	36.19	4.56	-19.1	165.5
30	27.84	36.19	4.56	-19.2	165.3
40	27.81	36.19	4.55	-18.9	163.3
50	27.71	36.19	4.61	-17.8	163.5
60	27.44	36.20	4.62	-17.4	155.6
70	26.89	36.28	4.68	-17.8	138.6
80	26.61	36.29	4.70	-19.8	134.3
90	25.83	36.36	4.81	-18.2	130.4
100	23.69	36.46	4.76	-13.3	115.3
110	23.13	36.49	4.71	-11.4	112.4
120	21.89	36.50	4.80	-3.7	126.1
130	21.30	36.60	4.46	-4.0	123.1
140	20.17	36.55	3.98	-0.5	113.8
150	20.04	36.55	3.83	3.3	108.6
160	20.02	36.55	3.82	0.2	106.5
170	19.43	36.48	3.80	-1.5	104.3
180	18.78	36.48	3.49	-3.1	103.0
190	18.18	36.44	3.29	-3.5	100.5
200	17.94	36.42	3.32	-3.5	102.8
210	17.00	36.27	3.50	-5.4	98.6
220	16.38	36.16	3.40	-0.7	91.1
230	15.37	35.99	3.40	6.9	74.0
240	14.17	35.79	3.35	9.6	54.2
250	13.37	35.69	3.26	8.4	42.7
260	12.59	35.59	3.27	9.0	29.1
270	11.42	35.45	3.14	5.3	19.5
280	10.84	35.38	3.11	-0.2	14.2
290	10.26	35.32	3.12	-1.4	15.2
300	9.58	35.23	3.10	-2.0	11.5
350	7.17	34.95	3.06	2.5	12.6

Table 24: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0208. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.64	36.08	4.48	NaN	NaN
10	27.65	36.08	4.52	-21.1	146.9
20	27.67	36.09	4.58	-21.1	146.9
30	27.73	36.14	4.55	-20.9	146.9
40	27.70	36.14	4.58	-20.3	146.4
50	27.66	36.13	4.62	-19.1	153.3
60	27.61	36.12	4.63	-19.3	149.6
70	27.60	36.13	4.61	-14.3	149.8
80	27.54	36.14	4.62	-15.3	151.3
90	26.62	36.31	4.64	-14.5	153.4
100	26.18	36.39	4.53	-15.3	149.4
110	25.44	36.60	4.37	-23.5	152.3
120	24.44	36.72	4.19	-26.5	160.4
130	23.57	36.88	3.89	-22.7	162.1
140	22.80	36.89	3.76	-14.1	151.0
150	21.69	36.84	3.76	-15.8	145.5
160	21.24	36.80	3.69	-17.3	143.1
170	20.05	36.62	3.82	-5.3	135.5
180	19.24	36.55	3.63	-8.5	119.8
190	18.96	36.52	3.48	-18.7	121.6
200	18.80	36.57	3.51	-22.7	129.0
210	18.73	36.57	3.58	-20.3	134.2
220	18.29	36.49	3.63	-14.1	136.2
230	17.55	36.36	3.42	-5.6	136.0
240	17.07	36.30	3.32	-4.6	127.6
250	16.71	36.26	3.40	-7.1	120.7
260	16.27	36.19	3.52	-7.2	118.4
270	16.01	36.14	3.46	-10.3	116.2
280	15.87	36.12	3.36	-16.9	115.9
290	15.63	36.08	3.36	-17.0	115.8
300	15.07	35.99	3.26	-14.4	119.4
350	11.65	35.46	2.88	5.6	80.9
400	9.43	35.21	2.95	3.2	48.3
450	6.96	34.93	3.01	-0.5	25.9
500	6.32	34.91	3.31	2.5	8.9

Table 25: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0208. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.58	36.10	4.52	NaN	NaN
10	27.59	36.10	4.56	-9.7	136.8
20	27.60	36.10	4.56	-9.6	136.8
30	27.59	36.10	4.53	-9.4	136.7
40	27.51	36.11	4.58	-9.0	136.6
50	27.48	36.11	4.63	-7.7	136.4
60	27.46	36.10	4.64	-6.5	137.8
70	27.35	36.11	4.65	-9.4	136.9
80	26.83	36.20	4.61	-14.6	140.1
90	26.31	36.39	4.50	-11.6	138.7
100	25.82	36.54	4.41	-10.3	134.6
110	25.42	36.62	4.31	-11.2	139.5
120	24.82	36.73	4.19	-8.8	147.1
130	24.20	36.82	3.88	-8.9	146.3
140	23.54	36.88	3.80	-12.6	140.9
150	22.54	36.86	3.73	-11.7	139.2
160	21.25	36.72	3.73	-9.4	139.8
170	20.19	36.65	3.74	-7.6	135.2
180	20.12	36.72	3.62	-13.2	131.7
190	19.61	36.68	3.64	-13.4	133.6
200	19.10	36.61	3.62	-11.9	135.2
210	18.78	36.57	3.60	-11.5	134.5
220	18.60	36.55	3.58	-12.8	136.2
230	18.31	36.51	3.58	-11.7	134.3
240	18.08	36.48	3.66	-10.8	132.9
250	17.77	36.43	3.69	-12.6	133.3
260	17.59	36.41	3.71	-12.9	131.6
270	17.32	36.36	3.66	-12.9	132.2
280	17.05	36.32	3.66	-15.8	130.0
290	16.81	36.28	3.66	-16.4	128.2
300	16.34	36.20	3.60	-13.0	126.3
350	14.99	35.97	3.33	-12.5	115.9
400	12.66	35.61	3.16	-6.6	99.8
450	9.40	35.16	2.99	6.7	77.7
500	7.88	35.03	3.16	4.7	56.8
550	6.66	34.91	3.25	10.3	56.2
600	6.45	34.91	3.31	9.6	48.4

Table 26: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0208. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.52	36.09	4.48	NaN	NaN
10	27.53	36.09	4.50	-2.0	109.1
20	27.53	36.09	4.55	-2.0	109.1
30	27.41	36.09	4.56	-2.0	109.3
40	27.40	36.09	4.57	-1.9	109.9
50	27.38	36.09	4.60	-1.9	110.9
60	27.35	36.10	4.59	-1.2	111.9
70	26.78	36.21	4.55	-0.4	116.2
80	26.63	36.26	4.47	-9.0	114.1
90	26.20	36.41	4.41	-10.4	112.5
100	25.63	36.58	4.27	-15.6	115.8
110	25.39	36.63	4.18	-13.7	116.4
120	25.06	36.68	4.06	-8.0	119.9
130	24.33	36.77	3.89	-8.9	121.6
140	23.55	36.82	3.82	-13.4	122.3
150	22.81	36.85	3.72	-21.3	123.8
160	22.43	36.87	3.69	-20.4	125.8
170	21.97	36.90	3.82	-14.0	125.0
180	21.64	36.91	4.02	-10.6	128.1
190	20.94	36.87	4.13	-2.5	124.8
200	20.14	36.78	4.12	-1.4	121.9
210	19.28	36.64	3.82	-5.0	118.2
220	18.95	36.62	3.79	-8.9	114.6
230	18.50	36.55	4.03	-13.6	113.6
240	18.26	36.53	3.78	-16.9	115.1
250	18.22	36.54	4.19	-18.5	119.3
260	18.14	36.53	4.20	-18.6	118.4
270	17.93	36.48	4.24	-20.5	114.8
280	17.62	36.41	3.79	-21.6	110.8
290	17.41	36.38	3.72	-20.9	109.5
300	17.10	36.32	3.72	-21.0	110.6
350	16.09	36.15	3.53	-13.6	101.9
400	14.23	35.84	3.36	-16.6	90.8
450	12.42	35.55	3.10	-15.8	84.8
500	9.94	35.19	2.89	-11.4	74.3
550	8.51	35.03	2.90	-4.4	59.0
600	7.62	34.95	3.03	-3.8	46.6
650	7.14	34.93	3.13	5.7	37.0
700	6.68	34.91	3.24	5.8	21.7
750	NaN	NaN	NaN	6.6	3.3

Table 27: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0208. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.45	36.12	4.44	NaN	NaN
10	27.33	36.13	4.48	-2.2	78.2
20	27.28	36.13	4.52	-2.3	78.2
30	27.22	36.13	4.54	-2.9	78.2
40	26.98	36.18	4.60	-3.8	78.2
50	26.74	36.26	4.55	-4.7	78.3
60	26.59	36.36	4.46	-6.3	83.7
70	26.47	36.42	4.37	-4.0	87.6
80	26.37	36.46	4.32	-2.2	93.1
90	25.96	36.60	4.17	-0.1	100.5
100	25.54	36.78	4.04	-2.2	101.7
110	24.86	36.74	3.98	-8.7	104.9
120	24.20	36.80	3.86	-11.0	107.6
130	23.45	36.84	3.87	-19.3	105.2
140	23.03	36.86	3.80	-19.3	106.2
150	22.69	36.88	3.83	-12.5	104.5
160	22.16	36.92	4.03	-14.6	99.1
170	21.63	36.86	3.99	-18.9	96.7
180	21.30	36.85	4.02	-16.3	96.6
190	20.81	36.84	4.16	-14.2	93.8
200	20.24	36.76	4.25	-12.6	95.0
210	19.74	36.69	4.49	-11.7	97.5
220	19.30	36.66	4.47	-13.3	98.2
230	19.03	36.64	4.54	-13.1	97.7
240	18.78	36.61	4.57	-13.0	94.8
250	18.58	36.59	4.39	-11.6	91.1
260	18.43	36.57	4.33	-9.1	87.9
270	18.21	36.54	4.29	-7.5	85.7
280	18.07	36.51	4.23	-8.9	84.9
290	17.89	36.49	4.19	-9.9	88.1
300	17.88	36.48	4.21	-7.0	87.6
350	17.33	36.39	4.10	-6.5	89.9
400	16.60	36.25	3.77	-5.3	83.5
450	14.70	35.92	3.52	0.8	60.7
500	12.98	35.64	3.18	-4.1	45.9
550	10.87	35.33	2.97	-5.3	24.5
600	9.63	35.15	2.86	-1.1	12.4
650	8.46	35.03	2.93	0.8	7.8

Table 28: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0208. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.79	36.22	4.56	NaN	NaN
10	26.80	36.22	4.57	-24.8	94.2
20	26.78	36.23	4.59	-24.6	94.0
30	26.74	36.23	4.64	-23.6	93.0
40	26.71	36.23	4.62	-21.4	90.5
50	26.60	36.30	4.61	-18.3	86.8
60	26.48	36.32	4.57	-18.9	84.5
70	25.96	36.37	4.62	-18.3	83.9
80	25.36	36.44	4.66	-9.9	80.5
90	24.30	36.63	4.62	-8.9	84.9
100	24.39	36.83	4.57	-12.9	84.2
110	24.21	36.88	4.49	-10.2	83.9
120	23.69	36.81	4.53	-14.7	84.3
130	22.88	36.74	4.68	-23.1	86.2
140	22.63	36.74	4.67	-19.8	87.9
150	22.63	36.75	4.59	-15.0	85.7
160	22.18	36.69	4.67	-14.9	85.7
170	21.75	36.78	4.62	-18.5	86.3
180	21.50	36.80	4.55	-19.5	83.8
190	21.31	36.79	4.54	-17.7	83.7
200	20.72	36.75	4.61	-14.5	84.6
210	20.34	36.73	4.42	-13.2	84.1
220	19.89	36.70	4.44	-15.3	83.1
230	19.52	36.68	4.42	-16.6	86.8
240	19.32	36.66	4.48	-16.6	89.3
250	18.99	36.63	4.54	-17.9	88.3
260	18.84	36.61	4.56	-17.0	87.2
270	18.80	36.61	4.60	-15.5	87.9
280	18.72	36.60	4.56	-14.3	86.6
290	18.56	36.58	4.56	-15.9	84.5
300	18.46	36.57	4.57	-16.5	83.4
350	17.90	36.50	4.55	-15.0	83.3
400	17.10	36.37	4.41	-15.8	86.0
450	16.26	36.23	4.23	-9.3	81.5
500	14.16	35.89	3.96	-16.5	70.5
550	12.89	35.71	3.75	-9.4	40.2
600	12.67	35.67	3.72	5.0	11.6

Table 29: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0208. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.01	36.20	4.64	NaN	NaN
10	27.02	36.20	4.63	-16.4	64.9
20	26.86	36.20	4.66	-16.4	64.8
30	26.83	36.21	4.67	-16.5	64.4
40	26.78	36.22	4.73	-16.7	64.0
50	26.65	36.23	4.76	-13.6	58.6
60	26.54	36.26	4.74	-14.3	61.4
70	26.34	36.30	4.81	-13.4	59.3
80	25.71	36.35	4.82	-8.3	68.7
90	24.41	36.54	4.86	-17.0	61.5
100	24.18	36.78	4.72	-10.8	64.8
110	24.00	36.85	4.59	-3.4	63.7
120	23.60	36.81	4.60	-4.8	59.8
130	22.93	36.76	4.72	-7.7	57.1
140	22.56	36.74	4.79	-17.2	57.9
150	22.22	36.72	4.84	-23.6	56.8
160	21.94	36.74	4.85	-23.7	57.2
170	21.52	36.77	4.62	-24.8	61.9
180	21.21	36.76	4.57	-20.0	66.6
190	20.68	36.72	4.64	-17.1	66.9
200	20.26	36.71	4.71	-14.1	65.4
210	19.91	36.70	4.73	-10.1	66.3
220	19.50	36.67	4.68	-8.7	69.2
230	19.28	36.65	4.60	-10.1	72.3
240	19.16	36.64	4.68	-10.0	72.3
250	19.01	36.63	4.68	-13.0	70.4
260	18.89	36.62	4.69	-15.7	71.6
270	18.86	36.62	4.71	-19.1	69.6
280	18.74	36.61	4.69	-19.0	67.8
290	18.63	36.59	4.70	-18.0	67.0
300	18.57	36.59	4.67	-18.5	66.1
350	18.01	36.51	4.60	-12.9	59.9
400	17.59	36.45	4.58	-12.6	56.5
450	16.82	36.32	4.35	-13.2	34.9

Table 30: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0216. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.54	36.15	4.26	NaN	NaN
10	29.36	36.15	4.32	-13.5	179.8
20	29.29	36.15	4.36	-13.4	179.6
30	29.15	36.21	4.41	-13.3	179.4
40	28.02	36.31	4.58	-14.4	171.2
50	26.41	36.40	4.84	-13.2	155.1
60	24.39	36.46	4.66	-15.8	129.8
70	22.43	36.43	4.36	-14.4	103.5
80	19.70	36.33	4.02	-6.9	72.7
90	17.08	36.13	3.63	-4.2	34.9
100	16.24	36.10	3.12	-7.8	15.0
110	16.12	36.11	3.09	-9.3	3.9
120	15.95	36.14	2.99	-1.3	-9.4
130	15.52	36.06	3.01	-0.5	-15.7
140	NaN	NaN	NaN	2.1	-25.2

Table 31: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0216. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.56	36.21	4.14	NaN	NaN
10	29.45	36.19	4.19	-17.1	185.1
20	29.36	36.18	4.25	-16.9	185.1
30	29.10	36.19	4.29	-16.6	185.3
40	28.94	36.20	4.34	-11.8	181.0
50	28.08	36.30	4.39	-13.4	178.0
60	27.45	36.37	4.35	-11.9	176.0
70	26.47	36.45	4.54	-11.2	168.3
80	24.73	36.48	4.71	-9.2	152.2
90	23.60	36.55	4.46	-0.9	134.3
100	21.38	36.48	4.14	-0.0	116.9
110	20.79	36.51	3.97	-5.7	96.5
120	17.86	36.25	3.49	-4.4	62.4
130	16.60	36.11	3.24	-0.9	37.8
140	15.32	36.00	2.95	-4.4	23.9
150	15.22	35.99	2.92	-8.5	18.6
160	15.02	35.96	2.91	-12.3	16.5
170	14.78	35.93	2.90	-9.7	14.4
180	14.54	35.91	2.88	-7.4	10.7
190	14.19	35.85	2.87	-8.4	7.6
200	13.55	35.76	2.88	-8.9	8.1
210	12.63	35.62	2.86	-6.5	5.8
220	11.66	35.48	2.79	-4.4	5.0
230	11.37	35.45	2.76	-4.4	3.5
240	10.47	35.33	2.78	-4.7	-2.4
250	NaN	NaN	NaN	-0.0	-18.2

Table 32: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0216. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.48	36.20	4.08	NaN	NaN
10	29.49	36.19	4.11	-15.8	181.4
20	29.40	36.19	4.17	-15.7	181.4
30	29.39	36.19	4.20	-15.4	181.2
40	29.38	36.19	4.25	-15.0	181.0
50	29.16	36.20	4.30	-8.2	181.4
60	28.67	36.26	4.35	-11.2	177.7
70	27.39	36.38	4.37	-16.5	173.9
80	26.97	36.43	4.28	-17.7	171.3
90	26.48	36.50	4.22	-17.9	170.5
100	25.69	36.59	4.25	-16.2	162.9
110	23.69	36.51	4.61	-15.6	147.6
120	22.94	36.65	4.19	-10.7	137.8
130	21.09	36.53	4.09	-3.3	127.6
140	20.59	36.56	3.85	-5.2	117.0
150	19.57	36.49	3.58	-4.8	109.7
160	18.58	36.33	3.42	-3.6	91.1
170	17.00	36.14	3.30	-4.4	77.8
180	15.59	35.99	3.09	-2.7	61.5
190	14.76	35.89	2.97	-6.0	43.1
200	14.22	35.83	2.85	-5.2	35.6
210	14.02	35.80	2.86	-6.3	32.3
220	13.81	35.79	2.83	-5.8	28.3
230	13.48	35.73	2.83	-3.6	24.0
240	13.25	35.70	2.81	-4.0	20.9
250	12.91	35.66	2.82	-5.5	20.2
260	11.22	35.42	2.77	-6.9	17.6
270	10.04	35.27	2.75	-6.8	11.0
280	8.83	35.10	2.71	-4.7	2.7
290	8.39	35.04	2.66	-3.9	-1.8
300	8.14	35.00	2.65	-5.4	-1.2
350	7.69	34.97	2.73	-6.9	1.1

Table 33: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0216. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.86	36.21	4.09	NaN	NaN
10	29.62	36.20	4.12	-14.7	161.8
20	29.47	36.19	4.17	-14.6	161.7
30	29.20	36.14	4.21	-14.4	161.4
40	29.13	36.18	4.23	-13.9	160.3
50	28.63	36.25	4.32	-14.8	156.9
60	28.24	36.29	4.35	-17.2	161.0
70	27.83	36.32	4.32	-17.1	162.1
80	27.19	36.36	4.26	-22.5	163.5
90	27.05	36.40	4.23	-21.2	166.0
100	26.65	36.47	4.19	-13.8	163.8
110	26.01	36.59	4.04	-8.0	159.5
120	25.22	36.75	3.89	-2.1	156.6
130	24.77	36.82	3.83	-1.4	145.5
140	23.97	36.90	3.77	-12.8	139.9
150	22.93	36.81	3.73	-14.0	138.9
160	21.28	36.56	3.84	-7.4	130.5
170	19.96	36.51	3.77	-7.8	122.0
180	19.39	36.49	3.47	-12.5	120.6
190	18.98	36.49	3.21	-13.1	116.0
200	18.41	36.42	3.17	-9.9	112.8
210	17.78	36.35	3.14	-9.3	109.0
220	17.18	36.27	3.07	-13.3	105.7
230	16.82	36.24	3.01	-13.8	103.4
240	16.59	36.21	3.00	-13.0	99.0
250	16.16	36.14	2.99	-10.5	94.7
260	15.50	36.03	2.96	-10.4	88.9
270	14.96	35.96	2.93	-11.9	79.1
280	14.43	35.88	2.88	-12.8	75.7
290	13.64	35.77	2.85	-9.6	70.1
300	13.08	35.69	2.83	-6.2	59.0
350	9.27	35.13	2.65	-0.7	31.6
400	8.09	35.02	2.76	-7.5	19.1
450	7.37	34.94	2.77	-1.2	16.5
500	6.92	34.92	2.90	-1.0	-5.3

Table 34: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0216. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.09	36.22	4.12	NaN	NaN
10	29.88	36.20	4.17	-18.5	140.7
20	29.84	36.20	4.19	-18.5	140.6
30	29.82	36.21	4.23	-18.4	140.6
40	29.22	36.18	4.31	-18.2	140.7
50	28.47	36.20	4.42	-17.2	141.8
60	28.29	36.24	4.40	-14.2	138.8
70	27.70	36.20	4.44	-9.1	140.7
80	27.60	36.29	4.34	-13.3	145.0
90	26.95	36.36	4.28	-11.8	146.3
100	26.49	36.42	4.11	-15.1	144.4
110	25.90	36.58	3.96	-16.3	139.9
120	25.36	36.72	3.87	-16.5	135.9
130	24.82	36.80	3.81	-13.8	132.2
140	24.36	36.86	3.70	-15.4	130.5
150	23.81	36.89	3.65	-13.7	130.8
160	23.26	36.95	3.60	-14.0	133.0
170	22.52	36.87	3.56	-14.4	131.3
180	21.37	36.77	3.48	-13.2	132.2
190	20.05	36.56	3.46	-10.0	131.7
200	19.37	36.54	3.30	-7.2	125.4
210	18.89	36.54	3.34	-8.8	116.0
220	18.39	36.48	3.30	-9.9	112.4
230	17.89	36.42	3.29	-11.9	110.2
240	17.45	36.36	3.29	-15.4	109.5
250	17.14	36.32	3.29	-17.1	110.2
260	16.67	36.25	3.28	-18.3	110.7
270	16.35	36.20	3.25	-18.9	109.2
280	16.07	36.16	3.28	-18.5	108.7
290	15.71	36.10	3.22	-14.1	109.1
300	15.29	36.02	3.07	-9.0	104.1
350	12.11	35.55	2.82	-7.2	74.0
400	9.89	35.25	2.78	-17.0	50.2
450	8.14	35.00	2.71	-12.3	43.3
500	7.21	34.93	2.82	-1.5	35.9
550	6.93	34.91	2.91	1.1	27.9
600	6.74	34.91	3.01	0.5	10.4

Table 35: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0216. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.32	36.21	3.90	NaN	NaN
10	29.74	36.18	3.96	-10.9	112.5
20	29.49	36.16	4.05	-11.1	112.5
30	29.45	36.17	4.11	-11.6	112.4
40	29.10	36.16	4.20	-13.6	112.4
50	28.55	36.15	4.32	-16.6	112.6
60	27.96	36.17	4.33	-21.8	111.5
70	27.49	36.21	4.30	-21.6	109.7
80	27.14	36.26	4.25	-25.6	109.7
90	26.89	36.30	4.15	-24.8	108.8
100	26.60	36.36	4.16	-20.1	112.8
110	26.28	36.45	4.01	-15.3	115.5
120	25.99	36.51	3.93	-13.6	117.5
130	24.87	36.69	3.83	-10.8	119.0
140	24.26	36.79	3.82	-11.6	117.1
150	23.66	36.89	3.83	-17.5	112.8
160	23.05	36.94	3.85	-20.3	110.7
170	21.93	36.91	3.77	-20.2	112.2
180	21.37	36.85	3.47	-15.9	113.0
190	21.31	36.87	3.43	-11.2	111.4
200	20.84	36.82	3.52	-13.8	112.1
210	20.56	36.79	3.40	-17.2	110.1
220	20.19	36.75	3.41	-17.2	109.6
230	19.81	36.71	3.39	-18.7	108.0
240	19.54	36.68	3.39	-18.2	111.4
250	19.08	36.62	3.37	-13.9	111.7
260	18.53	36.54	3.43	-12.9	108.7
270	18.02	36.47	3.41	-11.3	105.2
280	17.58	36.40	3.40	-11.4	101.7
290	17.25	36.35	3.41	-8.7	98.9
300	16.64	36.24	3.29	-9.7	98.4
350	15.24	36.01	3.18	-15.2	96.6
400	13.03	35.66	2.78	-12.2	90.4
450	10.89	35.33	2.67	-19.1	82.0
500	9.14	35.11	2.71	-11.9	74.4
550	7.90	34.98	2.77	-4.1	47.5
600	7.44	34.94	2.85	-2.3	36.3
650	6.95	34.92	2.98	8.0	31.0
700	6.62	34.90	3.08	3.8	25.7
750	NaN	NaN	NaN	-2.9	9.2

Table 36: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0216. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.31	36.22	4.27	NaN	NaN
10	29.68	36.21	4.30	-6.6	82.6
20	29.39	36.21	4.34	-6.6	82.6
30	29.10	36.23	4.40	-6.7	82.6
40	28.91	36.23	4.44	-6.7	82.7
50	28.38	36.15	4.50	-14.6	83.8
60	28.05	36.22	4.49	-23.8	81.3
70	27.53	36.22	4.49	-25.5	82.5
80	27.12	36.28	4.44	-26.2	81.7
90	26.64	36.36	4.40	-31.1	76.1
100	26.42	36.49	4.25	-27.7	73.3
110	26.27	36.53	4.14	-22.1	79.6
120	25.71	36.66	4.02	-20.2	84.7
130	25.06	36.76	3.91	-13.0	87.3
140	24.59	36.79	3.81	-5.3	84.8
150	23.60	36.90	3.67	-1.1	86.3
160	23.07	36.91	3.59	-3.6	87.1
170	22.45	36.92	3.56	-2.2	89.6
180	21.99	36.90	3.57	-0.9	88.5
190	21.37	36.87	3.59	-9.1	84.2
200	21.06	36.83	3.55	-15.3	84.4
210	20.90	36.83	3.52	-15.7	82.3
220	20.51	36.78	3.45	-13.3	82.3
230	20.16	36.75	3.48	-7.9	80.9
240	19.76	36.70	3.45	-6.0	77.9
250	19.58	36.68	3.44	-5.8	75.5
260	19.23	36.64	3.46	-6.5	74.5
270	18.81	36.58	3.48	-8.0	76.0
280	18.61	36.55	3.48	-9.1	80.2
290	18.11	36.48	3.46	-6.3	81.9
300	17.76	36.43	3.49	-6.5	80.7
350	15.74	36.10	3.34	-3.5	69.5
400	14.77	35.94	3.22	-3.7	65.2
450	12.51	35.57	2.91	-1.6	47.7
500	11.24	35.38	2.73	6.5	39.7
550	10.68	35.30	2.80	2.2	36.1
600	8.80	35.06	2.80	-2.3	8.2
650	7.19	34.93	2.95	14.2	3.0

Table 37: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0216. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.45	36.18	4.38	NaN	NaN
10	29.37	36.18	4.37	-7.7	60.6
20	29.29	36.18	4.40	-7.9	60.5
30	29.01	36.19	4.46	-8.7	60.1
40	28.59	36.21	4.52	-11.0	58.7
50	28.36	36.22	4.54	-14.6	58.2
60	27.99	36.19	4.59	-13.6	60.4
70	27.85	36.26	4.55	-15.2	56.8
80	27.37	36.27	4.49	-18.0	60.9
90	26.86	36.34	4.41	-22.8	61.1
100	26.37	36.46	4.32	-23.0	58.3
110	25.72	36.58	4.24	-13.5	58.5
120	25.27	36.69	4.05	-7.1	59.7
130	24.63	36.83	3.94	-6.6	59.4
140	24.23	36.87	3.87	-9.9	59.1
150	23.57	36.89	3.79	-12.6	60.6
160	23.12	36.91	3.94	-16.1	66.2
170	22.61	36.94	3.87	-18.3	70.5
180	22.27	36.91	3.83	-14.8	71.4
190	21.51	36.88	3.68	-10.6	70.9
200	21.42	36.88	3.83	-9.2	72.0
210	21.24	36.86	3.81	-3.5	72.9
220	20.79	36.81	3.63	-1.8	69.3
230	20.57	36.79	3.60	-1.9	64.2
240	20.12	36.74	3.58	1.2	63.2
250	19.75	36.71	3.61	1.4	63.6
260	19.61	36.71	3.80	-2.0	62.2
270	19.13	36.63	3.64	-4.1	61.7
280	18.97	36.61	3.60	-6.2	59.9
290	18.62	36.56	3.78	-5.9	58.3
300	18.36	36.53	3.72	-6.8	56.6
350	16.63	36.25	3.56	-10.2	49.3
400	15.81	36.13	3.55	-17.1	43.0
450	15.00	36.02	3.77	-7.0	37.0
500	13.04	35.70	3.40	-5.6	33.2
550	12.06	35.58	3.39	-3.3	19.0
600	11.99	35.57	3.43	-3.2	5.7

Table 38: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0216. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.63	36.20	4.34	NaN	NaN
10	29.58	36.20	4.35	2.6	43.8
20	29.40	36.19	4.41	2.4	43.7
30	28.76	36.18	4.54	1.6	43.4
40	28.36	36.20	4.55	0.5	43.0
50	28.05	36.25	4.53	-17.5	37.2
60	27.78	36.26	4.50	-14.8	36.7
70	27.55	36.28	4.50	-23.1	33.1
80	27.19	36.33	4.42	-24.9	31.8
90	26.86	36.36	4.36	-20.3	32.9
100	26.52	36.42	4.28	-16.2	33.2
110	26.18	36.50	4.23	-11.6	33.8
120	25.25	36.69	4.11	-4.6	35.0
130	24.84	36.75	3.92	0.4	32.9
140	23.42	36.87	3.85	-4.1	31.3
150	23.31	36.88	3.78	-4.5	30.5
160	22.84	36.90	3.80	0.5	34.6
170	22.75	36.89	3.77	-8.0	31.7
180	22.34	36.90	3.76	-17.0	25.8
190	21.59	36.87	3.80	-8.1	29.2
200	21.15	36.84	3.76	1.9	31.2
210	20.96	36.83	3.70	5.1	32.9
220	20.64	36.80	3.67	0.4	33.2
230	20.36	36.77	3.68	-3.3	32.7
240	20.12	36.74	3.82	-5.4	35.0
250	19.66	36.69	4.12	-6.2	37.9
260	19.17	36.65	4.14	-9.3	39.9
270	18.95	36.62	4.17	-13.0	41.4
280	18.77	36.60	4.17	-16.0	41.8
290	18.62	36.59	4.16	-20.6	42.0
300	18.53	36.58	4.18	-25.5	40.9
350	17.65	36.46	4.12	-18.9	45.7
400	16.85	36.33	4.04	-11.6	41.2
450	15.84	36.16	3.90	-11.4	31.5

Table 39: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0224. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.43	36.25	4.57	NaN	NaN
10	26.43	36.25	4.57	-3.9	93.4
20	26.44	36.25	4.57	-3.7	93.5
30	26.44	36.25	4.57	-2.7	93.8
40	26.43	36.25	4.56	-1.4	94.1
50	26.43	36.25	4.56	4.2	94.5
60	26.39	36.25	4.56	-0.2	100.2
70	26.35	36.25	4.55	0.3	101.7
80	25.67	36.38	4.40	1.7	89.7
90	22.91	36.44	4.18	0.0	69.7
100	21.29	36.42	3.84	-1.0	62.0
110	19.54	36.35	3.63	-2.5	51.6
120	18.69	36.30	3.46	-8.2	21.5
130	17.59	36.25	3.35	-14.8	3.6
140	17.38	36.24	3.28	-7.2	3.4

Table 40: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0224. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.53	36.23	4.56	NaN	NaN
10	26.53	36.28	4.57	-10.4	122.2
20	26.49	36.27	4.55	-10.1	121.8
30	26.39	36.27	4.55	-9.0	120.2
40	26.39	36.27	4.56	-7.8	118.1
50	26.39	36.27	4.56	-5.2	111.7
60	26.39	36.27	4.58	-3.6	110.9
70	26.36	36.26	4.57	0.5	108.3
80	26.10	36.32	4.57	1.9	105.8
90	24.05	36.55	4.46	-3.8	102.3
100	23.41	36.65	4.19	-7.8	95.3
110	22.69	36.58	4.17	-2.3	88.9
120	21.33	36.63	3.85	3.2	83.9
130	20.56	36.64	3.54	4.4	79.0
140	19.30	36.47	3.33	1.0	65.2
150	18.00	36.32	3.25	1.0	53.0
160	16.05	36.06	3.23	3.7	36.0
170	15.21	35.97	3.12	4.4	23.0
180	14.09	35.82	3.08	0.8	16.9
190	13.91	35.80	3.05	-0.4	14.3
200	13.70	35.78	3.03	0.8	12.5
210	12.97	35.67	3.00	-3.6	10.9
220	12.37	35.58	2.97	-5.4	13.0
230	12.27	35.57	2.94	-7.1	7.0
240	11.86	35.51	2.92	-9.4	3.1
250	NaN	NaN	NaN	-6.5	-6.7

Table 41: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0224. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.12	36.26	4.46	NaN	NaN
10	27.12	36.26	4.47	-4.9	141.0
20	27.12	36.26	4.49	-4.4	140.9
30	27.11	36.26	4.48	-2.7	140.5
40	27.07	36.26	4.50	-0.4	140.0
50	26.87	36.26	4.50	10.2	125.7
60	26.68	36.24	4.52	2.5	118.0
70	26.59	36.24	4.54	-0.4	115.4
80	26.58	36.26	4.51	0.6	114.7
90	26.12	36.33	4.53	3.7	117.6
100	23.74	36.46	4.61	7.6	116.9
110	23.30	36.66	4.06	4.4	111.9
120	22.05	36.62	4.06	4.8	107.7
130	21.00	36.65	3.63	7.0	106.1
140	19.95	36.57	3.37	9.5	98.1
150	19.44	36.56	3.28	8.4	90.1
160	18.78	36.50	3.18	3.2	85.8
170	18.60	36.51	3.27	-1.6	82.0
180	18.22	36.46	3.36	-4.0	80.7
190	17.32	36.34	3.37	-4.8	82.5
200	16.72	36.24	3.33	-6.2	84.3
210	15.38	36.01	3.11	-3.1	74.4
220	14.60	35.89	3.07	2.5	59.9
230	13.87	35.79	3.03	5.0	48.8
240	13.36	35.72	2.99	5.6	40.9
250	12.45	35.59	2.97	5.9	31.9
260	11.63	35.47	2.93	5.6	20.2
270	11.42	35.45	2.90	3.6	12.7
280	10.85	35.36	2.89	2.1	7.3
290	10.63	35.34	2.83	2.5	6.9
300	10.55	35.32	2.82	4.3	5.9
350	9.95	35.24	2.80	-2.0	1.3

Table 42: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0224. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.26	36.27	4.45	NaN	NaN
10	27.26	36.27	4.46	-9.0	132.6
20	27.26	36.27	4.47	-8.9	132.6
30	27.26	36.27	4.47	-8.7	132.7
40	27.27	36.27	4.48	-8.5	132.8
50	27.27	36.27	4.47	-7.6	133.4
60	27.27	36.27	4.47	-5.3	133.5
70	27.20	36.26	4.46	-6.0	128.9
80	26.73	36.20	4.52	-8.2	120.9
90	26.52	36.20	4.52	-9.6	120.6
100	24.87	36.43	4.65	-10.7	131.1
110	23.05	36.47	4.67	-3.2	132.1
120	21.99	36.50	4.30	1.6	124.7
130	21.46	36.54	3.98	1.4	116.8
140	20.61	36.55	3.59	-0.6	114.9
150	19.92	36.57	3.37	2.2	115.3
160	19.35	36.53	3.13	5.7	111.6
170	18.97	36.50	3.02	5.2	105.6
180	18.69	36.51	3.14	4.5	100.8
190	18.20	36.47	3.35	2.1	101.5
200	17.60	36.39	3.39	1.9	100.8
210	16.99	36.30	3.41	1.4	102.3
220	16.45	36.20	3.12	1.3	101.6
230	16.04	36.14	3.10	-0.2	100.7
240	15.83	36.11	3.16	-0.9	103.0
250	15.49	36.06	3.29	-1.1	101.6
260	15.24	36.01	3.26	-2.1	98.9
270	14.92	35.96	3.23	-5.3	101.8
280	14.76	35.93	3.17	-4.0	108.2
290	14.36	35.87	3.05	-1.1	109.8
300	13.61	35.75	3.03	5.1	106.0
350	11.66	35.44	2.85	9.7	74.7
400	10.10	35.23	2.79	1.6	57.1
450	7.40	34.98	3.05	3.2	18.8
500	6.24	34.91	3.37	1.1	-3.8

Table 43: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0224. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.31	36.23	4.38	NaN	NaN
10	27.32	36.23	4.40	-5.0	133.6
20	27.32	36.23	4.44	-4.9	133.7
30	27.33	36.23	4.45	-4.8	133.8
40	27.33	36.23	4.45	-4.6	134.0
50	27.34	36.23	4.46	-2.7	135.2
60	27.34	36.23	4.47	-2.9	131.9
70	27.33	36.26	4.45	-3.8	129.5
80	27.15	36.36	4.41	-4.7	125.7
90	26.55	36.55	4.33	-9.9	125.4
100	24.73	36.60	4.20	-12.8	130.4
110	23.41	36.55	4.47	-8.6	131.3
120	22.59	36.55	4.37	-5.9	127.4
130	21.64	36.54	4.04	-2.0	121.4
140	20.73	36.56	3.78	-0.4	118.3
150	20.15	36.55	3.44	-0.5	114.7
160	19.82	36.55	3.33	0.1	111.2
170	19.54	36.54	3.19	-0.3	113.4
180	18.94	36.49	3.07	-0.3	111.9
190	18.45	36.46	3.04	2.2	106.1
200	18.10	36.43	3.06	3.9	102.3
210	17.70	36.38	3.09	5.0	97.7
220	17.28	36.32	3.05	2.9	96.0
230	16.96	36.28	3.02	0.1	98.5
240	16.61	36.23	3.11	-0.5	104.4
250	16.53	36.22	3.21	-1.4	104.7
260	16.28	36.19	3.32	0.7	102.1
270	15.97	36.13	3.34	5.5	102.1
280	15.59	36.07	3.30	8.7	103.0
290	15.23	36.01	3.35	7.8	104.5
300	14.95	35.96	3.21	5.6	102.7
350	12.55	35.57	2.98	3.9	101.2
400	10.96	35.34	2.78	7.6	88.6
450	9.34	35.12	2.70	12.5	75.7
500	8.69	35.05	2.73	10.4	62.2
550	7.30	34.94	2.94	-5.1	46.8
600	6.21	34.90	3.29	-5.9	19.4

Table 44: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0224. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.50	36.24	4.44	NaN	NaN
10	27.50	36.24	4.43	-10.6	128.7
20	27.51	36.24	4.43	-10.6	128.7
30	27.50	36.24	4.43	-10.3	128.9
40	27.51	36.24	4.43	-9.9	129.3
50	27.51	36.24	4.44	-8.6	130.9
60	27.51	36.24	4.43	-7.5	132.5
70	27.51	36.24	4.42	-7.4	131.3
80	26.67	36.59	4.40	-7.6	127.1
90	25.79	36.71	4.21	-3.8	117.1
100	25.13	36.81	4.03	-3.5	109.7
110	24.59	36.87	3.89	-2.0	108.7
120	24.04	36.92	3.78	-2.8	109.8
130	23.51	36.95	3.63	-2.9	111.0
140	23.09	36.96	3.61	-0.8	113.7
150	22.10	36.89	3.49	2.8	114.6
160	21.43	36.80	3.44	3.9	109.8
170	20.38	36.74	3.34	1.0	105.8
180	19.95	36.74	3.59	0.1	104.5
190	19.55	36.69	3.58	1.4	101.9
200	19.19	36.64	3.60	-0.3	99.2
210	18.84	36.60	3.64	-1.5	98.8
220	18.59	36.56	3.66	-1.6	96.7
230	18.18	36.51	3.65	-0.1	94.9
240	17.84	36.44	3.61	-1.1	92.6
250	17.18	36.31	3.11	-5.1	91.1
260	16.91	36.28	3.36	-8.5	91.1
270	16.74	36.26	3.37	-7.4	91.3
280	16.47	36.22	3.46	-6.8	92.4
290	16.29	36.19	3.45	-4.3	93.6
300	16.18	36.18	3.43	-0.8	93.8
350	14.28	35.85	3.19	1.2	85.0
400	12.74	35.60	2.97	4.6	84.4
450	11.09	35.35	2.75	1.4	69.1
500	9.84	35.17	2.73	-1.0	61.1
550	8.95	35.07	2.70	2.3	55.1
600	8.27	35.00	2.74	4.3	52.3
650	7.55	34.94	2.84	6.0	42.1
700	7.07	34.92	2.98	-1.2	33.6
750	NaN	NaN	NaN	-4.0	28.2

Table 45: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0224. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.47	36.17	4.46	NaN	NaN
10	27.48	36.16	4.45	-22.2	117.8
20	27.50	36.16	4.44	-22.1	117.8
30	27.50	36.16	4.45	-21.8	117.9
40	27.49	36.17	4.44	-21.0	117.8
50	27.47	36.18	4.44	-9.4	113.4
60	27.41	36.20	4.46	-3.9	109.4
70	27.29	36.23	4.46	-3.1	107.1
80	27.06	36.48	4.44	-6.8	104.0
90	26.52	36.59	4.28	-9.3	102.5
100	25.64	36.74	4.10	-6.7	103.3
110	25.04	36.79	3.91	-5.5	102.9
120	24.47	36.84	3.80	-2.5	102.1
130	23.81	36.92	3.67	-3.4	100.0
140	23.60	36.92	3.67	-2.4	98.7
150	22.61	36.81	3.70	3.1	95.6
160	22.32	36.93	3.58	9.7	93.4
170	21.57	36.89	3.57	12.5	88.5
180	21.05	36.85	3.54	9.0	83.8
190	20.47	36.80	3.56	1.8	81.4
200	20.06	36.75	3.57	-5.4	79.8
210	19.52	36.68	3.68	-8.2	78.3
220	19.01	36.62	3.73	-10.2	79.2
230	18.81	36.60	3.77	-9.6	79.8
240	18.46	36.56	3.69	-10.9	79.8
250	18.34	36.54	3.97	-9.1	78.8
260	18.08	36.50	3.85	-6.6	78.4
270	17.81	36.46	4.02	-5.8	75.7
280	17.55	36.40	3.61	-6.3	73.8
290	17.42	36.39	3.66	-9.2	77.4
300	17.16	36.36	3.83	-11.2	81.9
350	15.65	36.11	3.61	5.4	70.0
400	14.07	35.86	3.34	1.2	59.1
450	12.75	35.60	2.91	-1.3	52.1
500	11.40	35.39	2.80	3.7	41.9
550	10.16	35.22	2.73	0.9	31.8
600	9.43	35.13	2.70	2.5	24.3
650	9.29	35.11	2.69	2.0	18.4

Table 46: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0224. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.46	36.20	4.40	NaN	NaN
10	27.46	36.19	4.42	-26.8	106.7
20	27.46	36.19	4.42	-26.7	106.7
30	27.47	36.19	4.42	-26.5	106.9
40	27.48	36.19	4.44	-26.2	107.1
50	27.48	36.19	4.43	-25.7	107.4
60	27.48	36.19	4.44	-25.0	107.5
70	27.48	36.19	4.43	-24.2	106.7
80	26.80	36.52	4.43	-17.3	102.6
90	26.20	36.62	4.12	-12.4	99.7
100	25.91	36.69	4.07	-7.9	96.7
110	25.31	36.77	4.00	-0.2	94.3
120	24.68	36.84	3.86	-0.1	88.8
130	23.99	36.90	3.67	-9.1	84.8
140	23.59	36.94	3.68	-13.3	83.3
150	23.01	36.96	3.70	-6.7	82.0
160	22.17	36.93	3.85	3.6	82.6
170	21.32	36.89	4.00	-0.9	86.2
180	21.17	36.89	4.04	-9.0	85.8
190	21.11	36.88	4.05	-8.3	86.0
200	20.94	36.87	4.07	-7.5	85.9
210	20.77	36.85	4.08	-8.8	85.6
220	20.69	36.85	4.07	-5.5	84.9
230	20.13	36.79	4.11	0.3	82.3
240	19.82	36.74	4.04	1.3	80.4
250	19.36	36.68	4.02	2.4	75.2
260	18.82	36.61	3.94	0.3	71.4
270	18.75	36.60	3.96	-5.4	71.7
280	18.74	36.60	3.97	-9.6	72.5
290	18.71	36.60	3.98	-8.0	73.9
300	18.51	36.58	4.16	-4.7	72.1
350	17.34	36.41	4.10	-0.5	60.0
400	15.98	36.14	3.37	-4.3	50.6
450	14.34	35.89	3.39	-2.6	37.7
500	13.19	35.75	3.53	0.9	29.5
550	11.38	35.40	2.84	-3.5	9.9
600	NaN	NaN	NaN	-7.4	10.7

Table 47: Same as Table 13 for the cruise ID and the station number indicated.

Cruise ID: ws0224. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.45	36.20	NaN	NaN	NaN
10	27.45	36.20	NaN	-26.9	97.4
20	27.47	36.20	NaN	-26.9	97.5
30	27.47	36.20	NaN	-26.9	97.7
40	27.47	36.20	NaN	-27.1	98.4
50	27.47	36.20	NaN	-27.8	100.2
60	27.47	36.20	NaN	-28.6	99.4
70	27.48	36.20	NaN	-30.3	100.2
80	27.47	36.21	NaN	-29.4	103.6
90	26.99	36.47	NaN	-19.7	99.8
100	25.89	36.61	NaN	-23.8	89.0
110	25.23	36.73	NaN	-31.9	83.5
120	24.87	36.79	NaN	-25.8	80.8
130	24.16	36.88	NaN	-16.3	80.3
140	23.55	36.98	NaN	-8.5	78.4
150	23.23	36.98	NaN	-2.8	76.6
160	22.74	37.00	NaN	0.1	71.5
170	21.85	36.95	NaN	-3.9	61.7
180	21.71	36.94	NaN	-9.6	57.2
190	21.30	36.91	NaN	-15.1	56.8
200	21.27	36.90	NaN	-20.9	55.3
210	21.04	36.88	NaN	-21.9	58.2
220	20.75	36.85	NaN	-19.0	62.4
230	20.61	36.83	NaN	-15.0	61.7
240	20.40	36.80	NaN	-13.2	61.8
250	20.23	36.78	NaN	-12.4	62.9
260	19.84	36.72	NaN	-12.4	65.8
270	19.37	36.68	NaN	-12.7	65.7
280	19.11	36.66	NaN	-14.4	64.8
290	18.99	36.65	NaN	-16.3	60.3
300	18.72	36.60	NaN	-14.0	60.6
350	18.06	36.51	NaN	-17.7	53.7
400	17.04	36.33	NaN	-11.3	42.9
450	15.62	36.11	NaN	-11.6	32.2

Table 48: Same as Table 13 for the cruise ID and the station number indicated.

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