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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 2010 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.

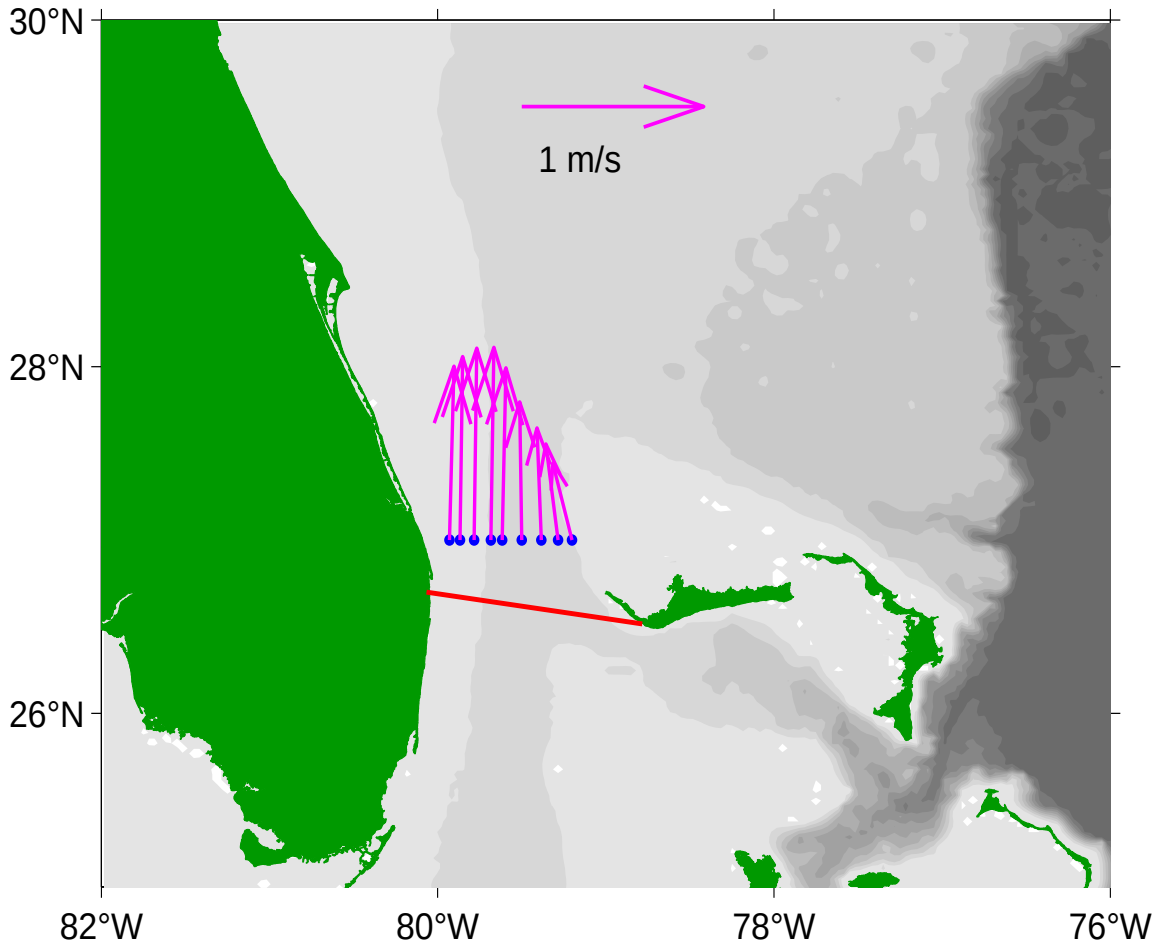

Figure 1: Map of the Straits of Florida study area. Blue dots indicate the locations of dropsonde, XBT and CTD/LADCP stations. Red line shows the approximate location of the telephone cable used for the voltage measurements. Magenta vectors illustrate the time mean vertically-averaged horizontal velocities 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).

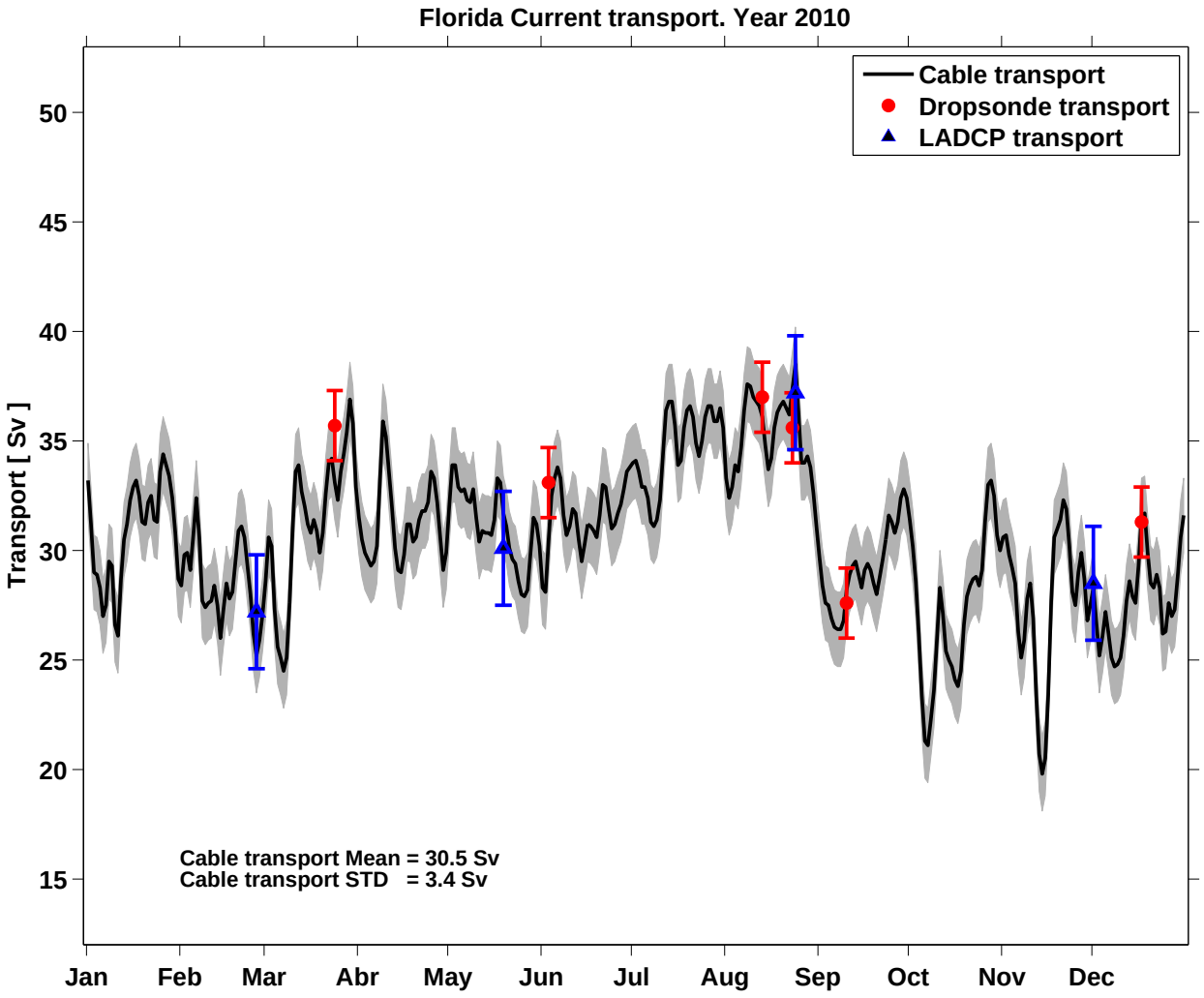

Figure 2: Observed Florida Current volume transports measured by cable voltage (black line), dropsonde sections (red dots) and LADCP sections (blue triangles). For each measurement system the estimated error bar is also shown. The annual mean and standard deviation (STD) from the cable voltage estimates 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	2010	3	24	15	34.6	35.7
2	2010	6	3	14	33.5	33.1
3	2010	6	16	16	NaN	NaN
4	2010	7	28	16	NaN	NaN
5	2010	8	5	13	NaN	NaN
6	2010	8	13	14	36.5	37.0
7	2010	8	23	16	36.4	35.6
8	2010	9	10	14	26.1	27.6
9	2010	12	17	15	29.6	31.3

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.

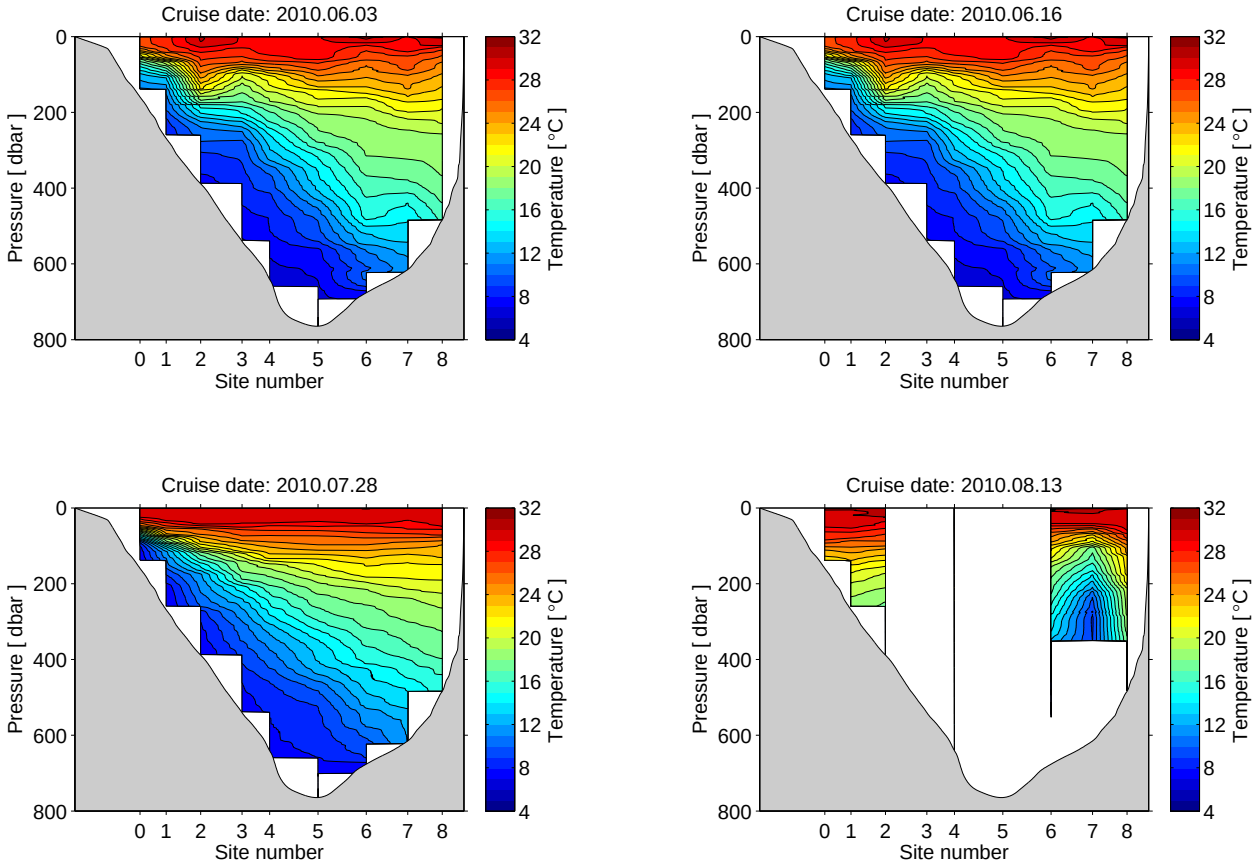

Figure 3: Temperature sections measured with XBT on the indicated dates. Date format is year, month, and day.

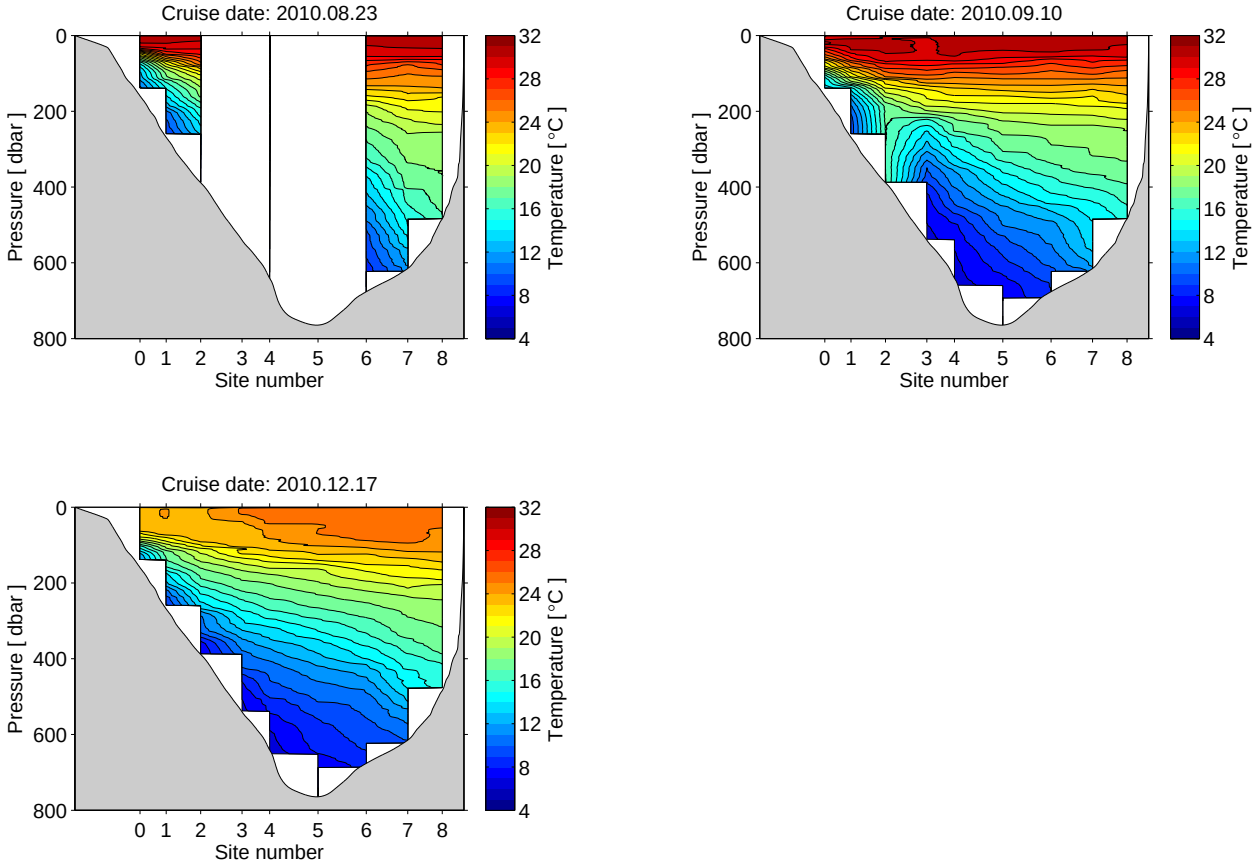

Figure 4: Same as Figure 3 for the data collected on the cruise date indicated.

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 5. 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
ws1002	2010	2	26	4	29.2	27.2
ws1009	2010	5	19	21	30.7	30.1
ws1016	2010	8	24	3	36.7	37.2
ws1021	2010	12	1	4	29.2	28.5

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.

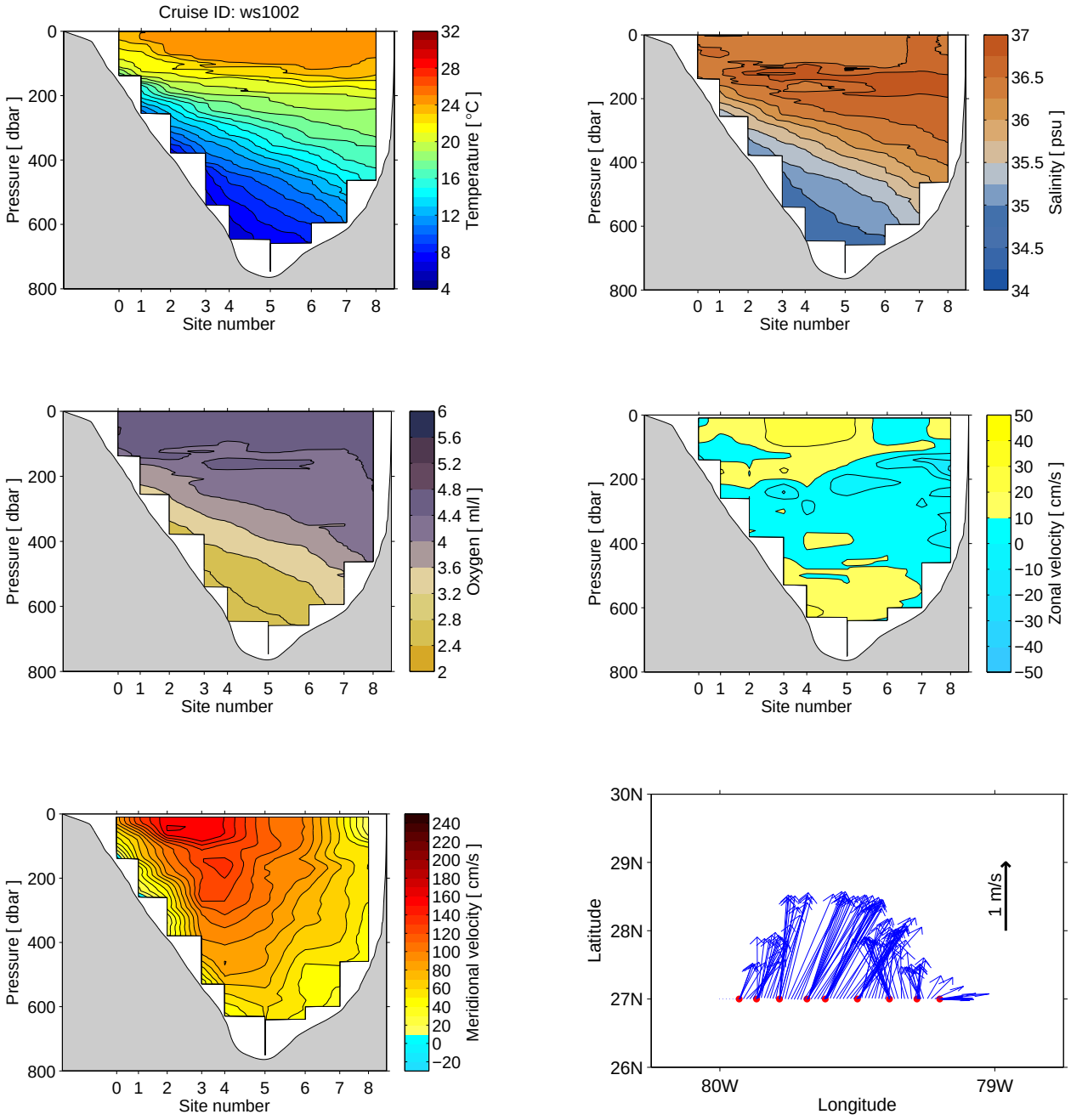

Figure 5: Sections of temperature, salinity, dissolved oxygen (all from CTD), velocity profile (LADCP) and vector velocity map at 50m (SADCP) collected by research vessel. Cruise ID noted above the temperature panel; cruise date are shown in Table 3.

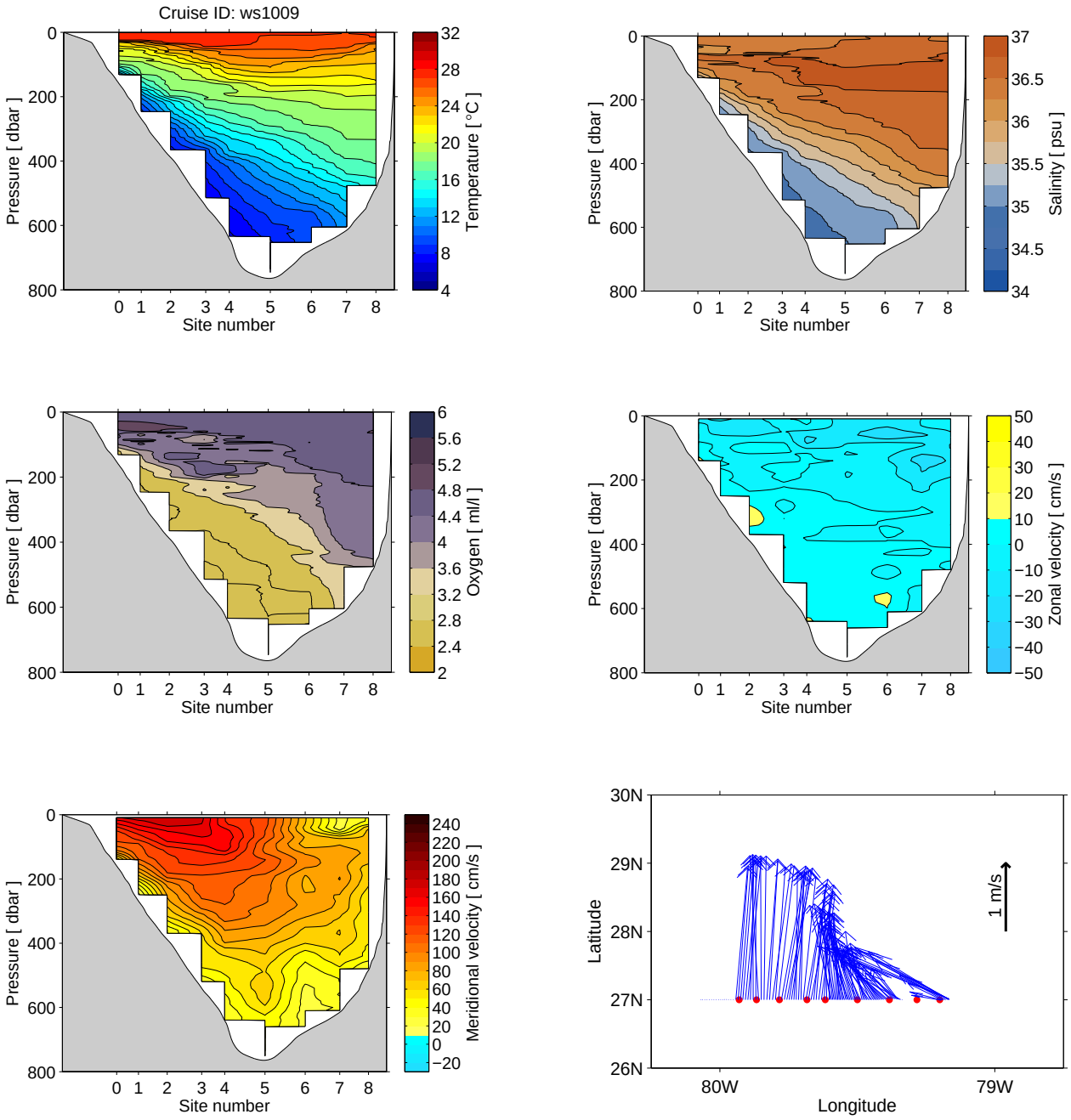

Figure 6: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

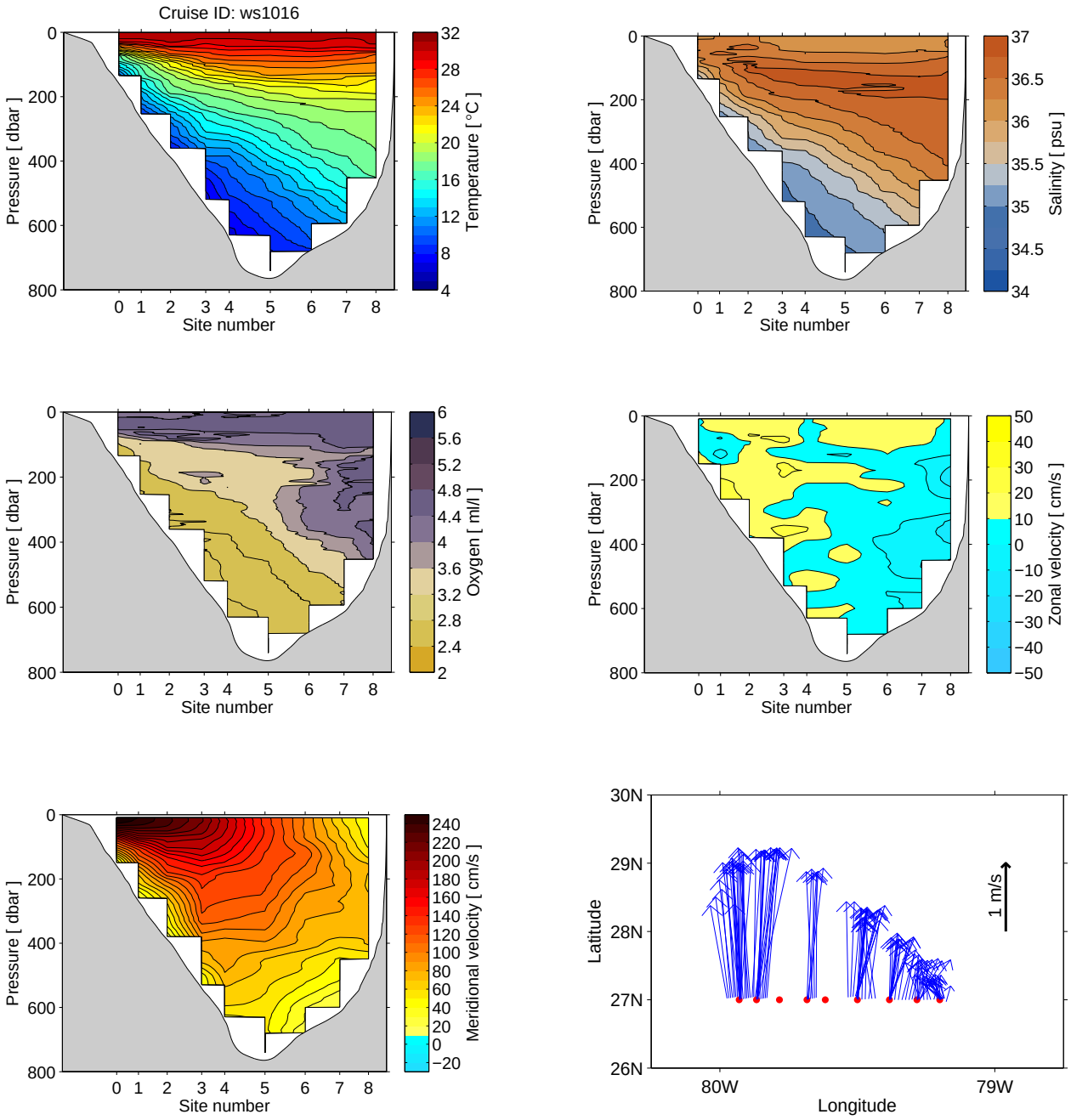

Figure 7: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

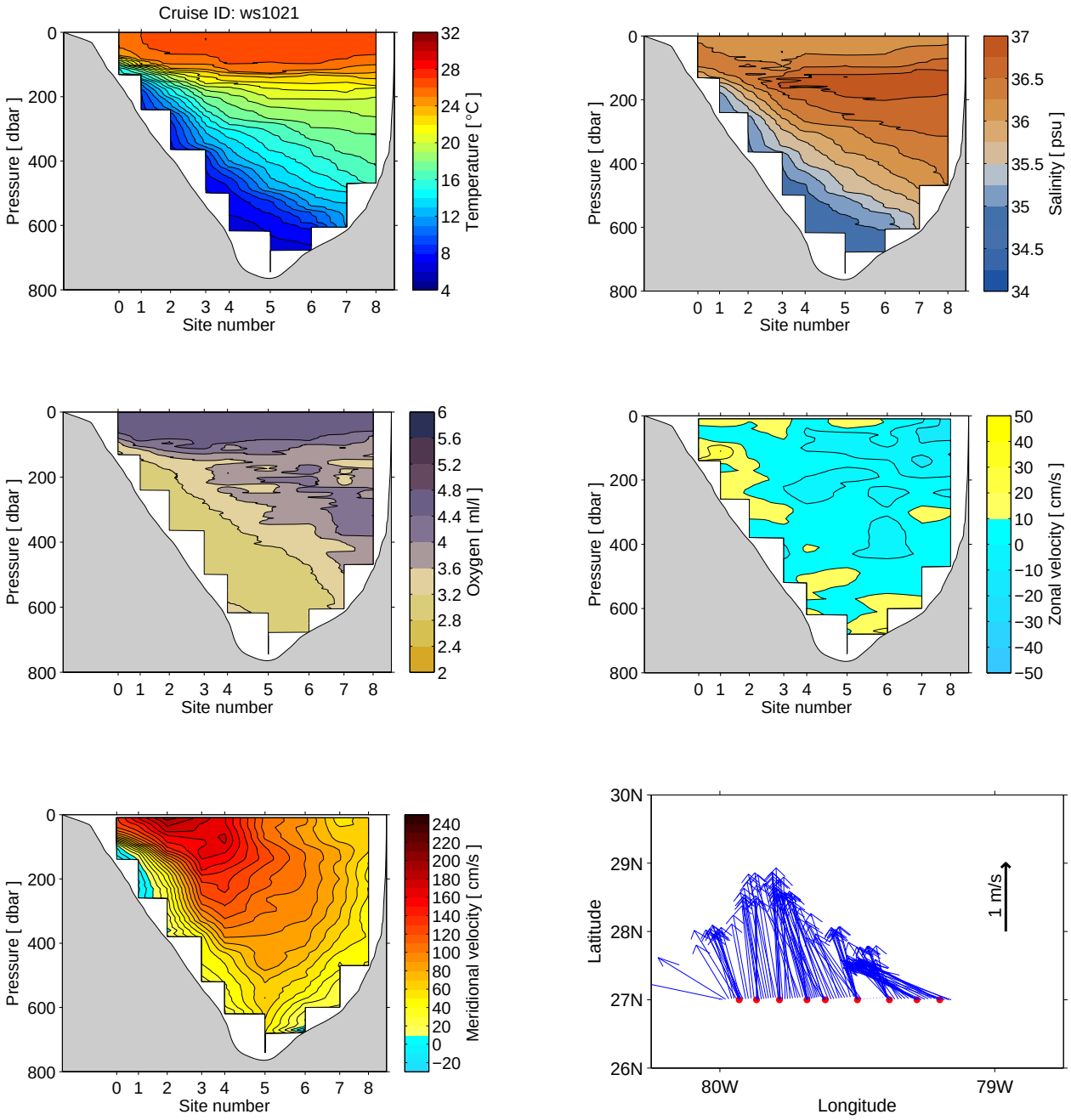

Figure 8: Same as Figure 5 for the data collected on the cruise ID indicated above the temperature panel.

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

No problems arose during the year involving the cable voltage recording system. Estimated transport values are available for all days throughout the year.

5.2 Dropsonde - XBT cruises

Several problems arose during the year involving both the dropsonde and XBT systems.

During this year on two cruises (June 16, 2010 and August 5, 2010) the dropsonde instrument failed, and we were not able to estimate the transport. Also, during the July 28, 2010 cruise the dropsonde instrument was lost on the last station.

The XBT system also failed during the cruises of March 3 and August 5 of 2010, and no XBT data were collected. During the August 13 and August 23 cruises, the XBT system failed in two stations during both cruises.

5.3 CTD - LADCP - SADCP cruises

No problems arose during the year involving the CTD/LADCP systems. Due to some technical issues with the SADCP system, the near-surface gap in data (which is a standard feature of all SADCP data systems) was a bit thicker than normal during the last three cruises this year. This did not cause a significant problem to the processed LADCP data.

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	33.2	28.4	28.6	31.5	32.0	28.3	34.0	33.3	29.7	31.4	30.6	28.3
2	31.2	29.8	30.6	30.5	33.9	28.1	34.1	32.4	28.4	30.2	30.7	26.7
3	29.0	29.9	30.2	29.9	33.9	30.4	33.6	32.9	27.6	28.6	29.8	25.2
4	28.9	29.1	27.3	29.6	32.9	32.5	32.9	33.9	27.5	26.2	29.2	26.1
5	28.3	30.7	25.6	29.3	32.7	33.3	32.9	33.6	26.9	23.4	28.5	27.2
6	27.0	32.4	25.1	29.5	32.8	33.8	32.4	34.7	26.5	21.3	26.3	26.2
7	27.5	30.6	24.5	30.2	32.3	33.3	31.3	36.4	26.4	21.1	25.1	25.1
8	29.5	27.7	25.1	33.2	32.2	31.6	31.1	37.6	26.4	22.3	25.9	24.7
9	29.3	27.4	27.6	35.9	32.8	30.7	31.4	37.5	26.8	23.6	27.8	24.8
10	26.6	27.6	31.0	35.2	31.5	31.1	32.3	37.0	28.2	25.9	28.5	25.1
11	26.1	27.7	33.6	33.6	30.4	31.9	34.4	36.8	28.9	28.3	26.9	26.1
12	28.7	28.4	33.9	32.0	30.9	31.7	36.4	36.6	29.3	27.1	23.4	27.7
13	30.5	27.5	32.7	30.1	30.8	30.5	36.8	36.1	29.5	25.4	20.7	28.6
14	31.2	26.0	32.0	29.1	30.8	29.5	36.8	34.8	28.9	25.0	19.8	27.9
15	32.3	27.3	31.2	29.0	30.7	30.3	35.7	33.7	28.3	24.7	20.5	27.6
16	32.9	28.5	30.8	29.8	31.4	31.2	33.9	34.2	29.1	24.1	23.4	29.3
17	33.2	27.8	31.4	31.2	33.3	31.1	34.1	35.6	29.4	23.8	27.7	31.6
18	32.5	28.1	30.9	31.2	33.1	30.9	35.6	36.3	29.1	24.5	30.6	31.7
19	31.3	29.5	29.9	30.4	31.7	30.6	36.4	36.6	28.5	26.6	31.0	29.9
20	31.2	30.9	30.8	30.6	31.1	31.6	36.6	36.8	28.0	27.9	31.4	28.5
21	32.2	31.1	32.6	31.4	30.1	33.0	36.1	36.5	28.8	28.4	32.3	28.3
22	32.5	30.6	34.0	31.8	29.6	32.9	34.9	36.2	29.6	28.7	31.9	28.9
23	31.4	29.3	34.2	31.8	29.4	31.9	34.3	37.4	30.5	28.8	30.2	28.3
24	31.3	28.0	33.1	32.2	28.6	31.0	35.0	38.5	31.6	28.4	28.1	26.2
25	33.6	26.2	32.3	33.6	28.0	31.2	36.1	36.3	31.3	29.1	27.5	26.3
26	34.4	25.2	33.6	33.3	27.9	31.7	36.6	34.0	30.8	31.3	29.0	27.6
27	33.9	25.9	34.4	32.2	28.2	32.1	36.6	34.0	31.3	33.0	29.9	27.0
28	33.4	27.1	35.4	30.6	29.9	32.8	35.9	34.3	32.4	33.2	28.7	27.3
29	32.4	–	36.9	29.1	31.5	33.6	35.9	33.8	32.8	32.5	26.8	28.8
30	30.8	–	35.8	29.9	31.2	33.8	36.5	32.6	32.4	30.7	27.5	30.6
31	28.7	–	32.9	–	30.2	–	35.6	31.1	–	30.0	–	31.6

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: 2010.03.24								
0	11:40:21	-79.9293	27.0012	11:46:43	-79.9292	27.0049	2.65	107.49
1	12:13:20	-79.8672	26.9996	12:24:37	-79.8670	27.0061	3.53	106.50
2	12:44:58	-79.7839	26.9993	13: 1: 1	-79.7839	27.0085	0.27	105.33
3	13:24:19	-79.6836	26.9996	13:45: 1	-79.6835	27.0110	1.22	101.24
4	14: 7:33	-79.6170	26.9998	14:34:25	-79.6171	27.0135	-0.01	93.88
5	15: 1:10	-79.5001	26.9990	15:31:25	-79.5009	27.0111	-4.02	73.73
6	15:56:31	-79.3835	26.9998	16:25: 0	-79.3846	27.0095	-6.24	62.95
7	16:48:52	-79.2829	26.9991	17:12:13	-79.2846	27.0074	-12.03	65.72
8	17:32:30	-79.2003	26.9991	17:52:49	-79.2022	27.0051	-14.97	55.86
Cruise date: 2010.06.03								
0	11:16:58	-79.9295	27.0007	11:23:25	-79.9295	27.0014	-1.69	18.64
1	11:39:13	-79.8660	27.0001	11:50: 0	-79.8660	27.0012	-0.88	18.22
2	12: 7:51	-79.7830	27.0004	12:23:55	-79.7833	27.0060	-2.67	64.18
3	12:43:51	-79.6822	27.0002	13: 5: 1	-79.6827	27.0115	-3.73	96.98
4	13:22: 9	-79.6170	27.0006	13:49: 1	-79.6176	27.0157	-3.57	102.26
5	14:17:24	-79.4995	26.9999	14:50:15	-79.4999	27.0172	-2.55	95.19
6	15:20:16	-79.3826	27.0001	15:53:36	-79.3834	27.0150	-4.47	82.16
7	16:12:53	-79.2842	27.0003	16:39: 6	-79.2858	27.0098	-10.31	66.62
8	16:57:46	-79.1990	27.0000	17:17:42	-79.2007	27.0057	-14.37	53.55
Cruise date: 2010.08.05								
0	11:18:26	-79.9299	27.0023	11:25:16	-79.9300	27.0049	-2.04	67.39
1	11:44:22	-79.8660	27.0015	11:56:46	-79.8659	27.0074	1.51	85.34
2	12:18:34	-79.7833	27.0013	12:38:56	-79.7832	27.0128	0.62	103.61
3	13: 4:39	-79.6834	27.0009	13:30:19	-79.6829	27.0164	3.36	111.04
4	13:59: 4	-79.6171	27.0089	14:34:16	-79.6164	27.0286	3.16	102.96
5	–	–	–	–	–	–	NaN	NaN
6	–	–	–	–	–	–	NaN	NaN
7	–	–	–	–	–	–	NaN	NaN
8	–	–	–	–	–	–	NaN	NaN

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: 2010.08.13								
0	11: 7: 4	-79.9298	27.0010	11:12:57	-79.9299	27.0043	-3.97	105.86
1	11:31:45	-79.8664	27.0003	11:41:56	-79.8665	27.0063	-1.66	107.71
2	12: 1:21	-79.7831	27.0001	12:16:13	-79.7836	27.0087	-5.88	106.15
3	12:37:23	-79.6824	27.0003	12:59:10	-79.6825	27.0128	-1.02	105.83
4	13:16:26	-79.6160	27.0009	13:42:24	-79.6164	27.0158	-3.10	105.31
5	14: 7: 6	-79.4996	27.0005	14:38: 0	-79.5000	27.0150	-2.42	86.64
6	15: 5:33	-79.3828	27.0003	15:33:21	-79.3833	27.0111	-3.74	71.07
7	16: 7:36	-79.2815	27.0007	16:32:23	-79.2829	27.0091	-10.38	62.90
8	16:51:43	-79.1987	27.0005	17:12: 1	-79.2001	27.0051	-11.51	42.12
Cruise date: 2010.08.23								
0	18: 7:15	-79.9298	27.0009	18:13:17	-79.9295	27.0050	6.16	124.23
1	17:42:43	-79.8665	27.0007	17:52:42	-79.8663	27.0071	3.87	116.18
2	17: 0:47	-79.7831	27.0011	17:15:32	-79.7828	27.0104	3.26	115.39
3	16:15: 0	-79.6828	27.0008	16:37: 9	-79.6825	27.0162	1.16	127.00
4	15:31:20	-79.6161	27.0005	15:57:15	-79.6158	27.0158	1.79	107.66
5	14:38:13	-79.5003	27.0003	15: 7:44	-79.5003	27.0139	-0.18	84.41
6	13:44:58	-79.3832	27.0002	14:12: 3	-79.3832	27.0103	-0.42	68.03
7	12:58: 2	-79.2836	27.0001	13:20:32	-79.2845	27.0057	-7.05	46.01
8	12:19: 8	-79.2001	26.9992	12:38:46	-79.2010	27.0022	-8.13	27.13
Cruise date: 2010.09.10								
0	11:25:10	-79.9302	27.0006	11:31:22	-79.9302	27.0025	-0.21	54.25
1	11:48:26	-79.8668	26.9996	11:59: 9	-79.8664	27.0031	5.68	58.87
2	12:20:18	-79.7829	26.9995	12:34:52	-79.7824	27.0046	6.86	62.99
3	12:56:28	-79.6837	27.0000	13:17:56	-79.6830	27.0105	5.53	89.92
4	13:34:28	-79.6171	26.9999	13:59:15	-79.6166	27.0110	3.80	82.46
5	14:23:43	-79.5000	26.9988	14:54: 7	-79.4997	27.0094	1.47	63.67
6	15:19:27	-79.3841	26.9986	15:46: 1	-79.3844	27.0062	-1.61	52.13
7	16: 5:49	-79.2831	27.0005	16:30:38	-79.2837	27.0062	-4.17	41.91
8	16:48: 8	-79.1996	26.9996	17: 8:45	-79.2005	27.0030	-7.64	30.16

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

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2010.12.17								
0	12:26:13	-79.9299	27.0012	12:32: 6	-79.9299	27.0043	-0.84	95.87
1	12:47:17	-79.8662	27.0003	12:57:22	-79.8660	27.0057	2.63	98.33
2	13:15:39	-79.7830	27.0001	13:30:16	-79.7828	27.0076	3.11	95.16
3	13:49:40	-79.6829	27.0006	14: 9:35	-79.6828	27.0102	1.22	88.11
4	14:27:27	-79.6164	26.9999	14:51:45	-79.6162	27.0098	1.93	74.12
5	15:13:57	-79.4994	27.0004	15:42:39	-79.4997	27.0099	-1.36	60.60
6	16:14: 3	-79.3832	26.9999	16:38:24	-79.3833	27.0069	-1.14	52.37
7	16:57: 2	-79.2828	26.9999	17:20:24	-79.2836	27.0066	-5.88	52.04
8	17:43:33	-79.1987	27.0015	18: 1:30	-79.2006	27.0073	-17.06	59.33

Table 7: Same as Table 5 for dropsonde measurements during the cruises on the indicated dates.

Appendix C:

XBT temperature profiles

Cruise date: 2010.06.03									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	26.59	27.39	29.75	28.38	28.56	28.62	30.78	28.84	32.94
10	26.60	27.58	30.06	28.87	28.82	28.85	29.65	28.73	29.66
20	26.44	27.58	29.63	28.79	28.98	28.83	28.25	28.71	29.52
30	25.56	27.08	28.76	27.89	28.88	28.81	27.39	28.77	27.75
40	23.19	26.72	28.17	27.24	28.80	28.67	26.90	28.04	26.73
50	20.79	24.81	27.46	27.08	27.93	28.64	26.66	27.17	26.00
60	17.85	22.62	27.05	26.59	27.47	28.18	26.16	26.70	25.55
70	16.20	19.26	26.43	25.81	26.28	27.05	25.39	26.49	24.85
80	14.88	17.40	25.99	23.92	25.24	26.47	24.96	26.32	24.65
90	13.91	16.04	25.71	21.69	23.88	25.95	24.64	25.90	24.34
100	12.72	14.54	24.73	20.11	22.44	25.19	24.42	25.10	23.92
110	12.10	12.93	23.94	19.90	21.50	24.82	23.90	24.88	23.60
120	11.87	12.41	23.30	19.22	21.13	23.79	23.67	24.42	23.28
130	11.31	11.93	22.41	18.59	20.92	23.21	23.12	24.10	23.02
140	–	11.38	21.55	18.22	20.50	22.03	22.65	23.82	22.84
150	–	11.05	20.13	17.87	19.67	21.41	21.99	23.30	22.45
160	–	10.74	18.37	17.49	19.28	21.16	21.22	22.91	22.21
170	–	10.45	17.82	17.13	19.00	20.88	20.52	22.27	21.84
180	–	10.18	15.41	16.43	18.06	20.35	20.25	21.81	21.38
190	–	10.06	14.80	15.30	17.49	19.89	19.63	21.74	21.05
200	–	9.67	14.13	15.04	16.90	19.30	19.37	20.97	20.88
210	–	9.23	13.44	14.37	16.60	18.84	19.12	20.40	20.35
220	–	8.83	12.33	13.56	16.35	18.58	18.95	19.88	20.06
230	–	8.67	11.51	12.62	15.67	18.37	18.76	19.67	19.99
240	–	8.39	10.99	11.91	15.16	18.08	18.62	19.34	19.66
250	–	8.29	10.75	11.03	14.52	17.96	18.59	18.91	19.25
260	–	8.28	10.46	10.74	14.00	17.76	18.51	18.79	18.96
270	–	–	10.14	10.36	13.70	17.45	18.37	18.59	18.70
280	–	–	9.89	9.77	13.37	16.86	18.29	18.47	18.62
290	–	–	9.52	9.45	13.09	16.61	18.23	18.35	18.44
300	–	–	9.22	9.33	12.89	15.83	18.13	18.29	18.33
350	–	–	8.20	8.87	10.47	14.13	17.47	17.64	18.11
400	–	–	–	8.59	9.55	13.19	16.38	16.38	17.64
450	–	–	–	7.92	8.56	11.12	15.56	14.85	16.76
500	–	–	–	7.30	8.02	9.90	14.08	13.77	–
550	–	–	–	–	7.58	8.52	11.90	12.81	–
600	–	–	–	–	6.91	7.42	10.17	11.74	–
650	–	–	–	–	6.40	6.97	9.78	–	–
700	–	–	–	–	–	6.72	NaN	–	–
750	–	–	–	–	–	6.46	–	–	–

Table 8: 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: 2010.06.16									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	26.59	27.39	29.75	28.38	28.56	28.62	30.78	28.84	32.94
10	26.60	27.58	30.06	28.87	28.82	28.85	29.65	28.73	29.66
20	26.44	27.58	29.63	28.79	28.98	28.83	28.25	28.71	29.52
30	25.56	27.08	28.76	27.89	28.88	28.81	27.39	28.77	27.75
40	23.19	26.72	28.17	27.24	28.80	28.67	26.90	28.04	26.73
50	20.79	24.81	27.46	27.08	27.93	28.64	26.66	27.17	26.00
60	17.85	22.62	27.05	26.59	27.47	28.18	26.16	26.70	25.55
70	16.20	19.26	26.43	25.81	26.28	27.05	25.39	26.49	24.85
80	14.88	17.40	25.99	23.92	25.24	26.47	24.96	26.32	24.65
90	13.91	16.04	25.71	21.69	23.88	25.95	24.64	25.90	24.34
100	12.72	14.54	24.73	20.11	22.44	25.19	24.42	25.10	23.92
110	12.10	12.93	23.94	19.90	21.50	24.82	23.90	24.88	23.60
120	11.87	12.41	23.30	19.22	21.13	23.79	23.67	24.42	23.28
130	11.31	11.93	22.41	18.59	20.92	23.21	23.12	24.10	23.02
140	–	11.38	21.55	18.22	20.50	22.03	22.65	23.82	22.84
150	–	11.05	20.13	17.87	19.67	21.41	21.99	23.30	22.45
160	–	10.74	18.37	17.49	19.28	21.16	21.22	22.91	22.21
170	–	10.45	17.82	17.13	19.00	20.88	20.52	22.27	21.84
180	–	10.18	15.41	16.43	18.06	20.35	20.25	21.81	21.38
190	–	10.06	14.80	15.30	17.49	19.89	19.63	21.74	21.05
200	–	9.67	14.13	15.04	16.90	19.30	19.37	20.97	20.88
210	–	9.23	13.44	14.37	16.60	18.84	19.12	20.40	20.35
220	–	8.83	12.33	13.56	16.35	18.58	18.95	19.88	20.06
230	–	8.67	11.51	12.62	15.67	18.37	18.76	19.67	19.99
240	–	8.39	10.99	11.91	15.16	18.08	18.62	19.34	19.66
250	–	8.29	10.75	11.03	14.52	17.96	18.59	18.91	19.25
260	–	8.28	10.46	10.74	14.00	17.76	18.51	18.79	18.96
270	–	–	10.14	10.36	13.70	17.45	18.37	18.59	18.70
280	–	–	9.89	9.77	13.37	16.86	18.29	18.47	18.62
290	–	–	9.52	9.45	13.09	16.61	18.23	18.35	18.44
300	–	–	9.22	9.33	12.89	15.83	18.13	18.29	18.33
350	–	–	8.20	8.87	10.47	14.13	17.47	17.64	18.11
400	–	–	–	8.59	9.55	13.19	16.38	16.38	17.64
450	–	–	–	7.92	8.56	11.12	15.56	14.85	16.76
500	–	–	–	7.30	8.02	9.90	14.08	13.77	–
550	–	–	–	–	7.58	8.52	11.90	12.81	–
600	–	–	–	–	6.91	7.42	10.17	11.74	–
650	–	–	–	–	6.40	6.97	9.78	–	–
700	–	–	–	–	–	6.72	NaN	–	–
750	–	–	–	–	–	6.46	–	–	–

Table 9: Same as Table 8 for the cruise on the indicated date.

Cruise date: 2010.07.28									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	29.21	29.23	29.08	29.12	29.37	29.72	29.92	29.88	29.98
10	29.57	29.54	29.50	29.56	29.63	29.47	29.77	29.59	29.78
20	29.36	29.43	29.47	29.47	29.54	29.38	29.45	29.38	29.54
30	27.89	29.30	29.46	29.43	29.46	29.36	29.37	29.17	29.45
40	26.07	27.83	29.37	29.00	28.96	28.56	29.26	28.65	29.29
50	23.76	26.71	27.32	28.18	27.67	27.94	27.89	28.14	28.93
60	19.46	24.89	25.62	26.83	26.95	26.96	27.41	27.59	27.46
70	15.78	23.64	24.97	26.19	26.13	26.44	26.76	26.95	27.04
80	12.97	19.32	23.70	25.42	25.61	25.62	25.87	25.66	25.37
90	9.48	17.55	22.87	24.55	24.99	25.42	25.38	24.96	24.62
100	7.97	14.55	21.50	23.65	24.19	24.78	24.82	24.37	23.95
110	7.59	12.72	19.44	22.82	23.54	24.21	24.14	23.73	23.71
120	7.36	11.72	17.47	20.92	23.12	23.19	23.55	23.11	23.40
130	7.26	11.43	16.55	19.99	22.48	22.30	23.12	22.42	23.09
140	–	10.88	15.51	19.02	20.99	21.66	22.50	22.16	22.68
150	–	10.72	14.36	18.46	19.58	21.05	22.04	21.92	21.95
160	–	9.95	13.72	18.35	19.01	20.76	21.88	21.63	21.76
170	–	9.38	12.55	17.87	18.54	20.21	21.64	21.59	21.68
180	–	8.80	11.81	17.22	18.09	19.78	21.15	21.24	21.49
190	–	8.29	11.66	16.82	17.55	19.26	20.41	20.89	21.07
200	–	7.84	11.36	15.76	17.26	18.82	19.88	20.53	20.62
210	–	7.34	11.21	14.57	16.57	18.46	19.30	20.12	20.46
220	–	7.15	11.06	14.15	16.28	18.26	18.90	19.82	20.27
230	–	7.11	10.76	13.63	15.94	17.84	18.69	19.54	19.79
240	–	7.06	10.52	13.00	15.38	17.64	18.45	18.88	19.64
250	–	7.01	10.33	12.42	15.09	17.47	18.20	18.63	19.43
260	–	7.01	10.06	12.13	14.91	17.21	17.88	18.48	19.12
270	–	–	9.05	11.77	14.25	16.89	17.70	18.46	18.78
280	–	–	8.52	11.48	14.10	16.72	17.62	18.38	18.66
290	–	–	8.35	11.25	13.68	16.33	17.40	18.20	18.53
300	–	–	8.02	10.97	13.39	15.94	17.29	18.01	18.43
350	–	–	7.57	10.12	11.55	13.95	16.28	17.10	17.86
400	–	–	–	9.14	10.42	13.15	15.33	16.01	16.70
450	–	–	–	8.26	9.26	11.39	13.81	14.97	15.77
500	–	–	–	7.65	8.51	9.57	12.63	13.72	–
550	–	–	–	–	8.01	8.80	11.35	12.48	–
600	–	–	–	–	7.86	8.52	10.24	12.06	–
650	–	–	–	–	7.17	8.17	9.11	–	–
700	–	–	–	–	–	7.09	7.04	–	–
750	–	–	–	–	–	6.46	–	–	–

Table 10: Same as Table 8 for the cruise on the indicated date.

Cruise date: 2010.08.13									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	30.25	30.36	30.08	NaN	29.84	NaN	29.67	29.61	30.22
10	29.87	29.89	30.14	NaN	30.16	NaN	29.96	30.10	29.66
20	29.80	29.94	30.12	NaN	31.92	NaN	29.81	29.90	29.69
30	29.70	29.79	29.87	NaN	32.09	NaN	29.53	29.78	29.65
40	29.43	29.58	28.86	NaN	32.30	NaN	29.06	29.29	29.58
50	29.07	29.21	28.28	NaN	31.83	NaN	27.67	27.34	29.31
60	28.14	28.37	27.56	NaN	30.62	NaN	26.66	25.34	28.78
70	27.87	27.53	26.96	NaN	29.74	NaN	25.37	23.10	27.52
80	27.52	26.94	26.46	NaN	28.77	NaN	24.71	21.73	27.00
90	26.46	25.70	25.76	NaN	28.14	NaN	24.03	20.80	25.84
100	25.53	25.32	25.08	NaN	27.12	NaN	22.76	18.84	24.81
110	24.10	24.47	23.87	NaN	26.44	NaN	22.05	17.34	24.29
120	23.46	23.75	23.60	NaN	26.25	NaN	21.55	16.98	24.03
130	22.68	23.34	22.58	NaN	25.58	NaN	21.12	16.67	22.69
140	–	22.89	21.69	NaN	24.44	NaN	20.28	16.33	22.56
150	–	22.04	21.12	NaN	24.13	NaN	19.34	15.70	22.53
160	–	21.39	20.64	NaN	23.37	NaN	18.83	15.23	22.44
170	–	21.04	20.33	NaN	23.17	NaN	18.43	14.63	22.44
180	–	20.70	19.68	NaN	22.89	NaN	18.14	13.82	21.70
190	–	20.42	19.44	NaN	22.53	NaN	17.84	13.32	21.64
200	–	19.94	19.23	NaN	22.22	NaN	17.56	12.59	21.12
210	–	19.57	19.03	NaN	21.98	NaN	17.29	11.97	20.28
220	–	19.40	18.63	NaN	21.79	NaN	17.17	11.02	19.70
230	–	19.14	18.37	NaN	21.42	NaN	16.92	10.50	19.58
240	–	18.94	18.15	NaN	21.13	NaN	16.48	9.93	19.51
250	–	18.87	17.94	NaN	20.79	NaN	16.17	9.64	19.44
260	–	18.73	17.71	NaN	20.53	NaN	15.70	9.52	19.40
270	–	–	17.56	NaN	20.34	NaN	15.48	9.14	19.29
280	–	–	17.37	NaN	20.06	NaN	15.08	9.02	19.24
290	–	–	17.18	NaN	19.57	NaN	14.67	8.85	18.71
300	–	–	17.01	NaN	19.40	NaN	14.40	8.84	18.66
350	–	–	15.56	NaN	18.26	NaN	12.93	9.00	17.88
400	–	–	–	NaN	16.46	NaN	11.51	NaN	17.56
450	–	–	–	NaN	15.32	NaN	9.30	NaN	17.28
500	–	–	–	NaN	14.01	NaN	7.85	NaN	–
550	–	–	–	–	12.47	NaN	6.94	NaN	–
600	–	–	–	–	11.15	NaN	NaN	NaN	–
650	–	–	–	–	10.25	NaN	NaN	–	–
700	–	–	–	–	–	NaN	NaN	–	–
750	–	–	–	–	–	NaN	–	–	–

Table 11: Same as Table 8 for the cruise on the indicated date.

Cruise date: 2010.08.23									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	30.50	29.88	30.03	NaN	30.09	NaN	29.85	29.59	29.83
10	30.69	30.45	30.25	NaN	30.27	NaN	30.20	30.35	30.26
20	30.01	30.04	29.73	NaN	29.98	NaN	30.15	30.32	30.24
30	28.95	29.50	29.23	NaN	29.63	NaN	29.80	30.28	30.20
40	25.71	28.52	28.78	NaN	28.92	NaN	29.59	29.67	29.71
50	21.51	26.78	28.02	NaN	27.96	NaN	29.37	29.33	29.30
60	18.59	24.22	26.93	NaN	27.04	NaN	28.61	28.33	28.76
70	15.99	21.69	26.08	NaN	26.31	NaN	27.60	26.91	27.20
80	14.17	20.36	24.64	NaN	25.79	NaN	27.02	25.80	26.86
90	13.30	18.95	22.74	NaN	25.37	NaN	26.39	25.38	26.03
100	12.77	18.15	21.35	NaN	24.34	NaN	25.69	25.04	25.23
110	12.50	17.82	20.47	NaN	23.35	NaN	25.19	24.82	24.79
120	11.81	16.39	19.95	NaN	22.27	NaN	24.80	24.53	24.72
130	11.09	15.60	19.33	NaN	21.27	NaN	24.31	24.17	24.23
140	–	15.05	18.68	NaN	20.30	NaN	23.20	23.63	23.95
150	–	14.37	18.39	NaN	20.09	NaN	22.21	23.06	23.20
160	–	13.92	18.21	NaN	19.69	NaN	21.87	22.76	22.04
170	–	13.43	17.49	NaN	19.42	NaN	21.06	22.07	21.91
180	–	12.79	16.75	NaN	19.09	NaN	20.26	21.67	21.63
190	–	11.89	16.15	NaN	18.54	NaN	19.46	21.22	21.27
200	–	10.85	15.70	NaN	18.12	NaN	19.12	20.86	21.14
210	–	10.18	15.31	NaN	17.71	NaN	18.86	20.54	20.94
220	–	10.00	14.71	NaN	17.56	NaN	18.60	20.01	20.69
230	–	9.70	14.26	NaN	17.45	NaN	18.38	19.53	20.38
240	–	9.61	13.96	NaN	17.12	NaN	17.99	19.35	19.49
250	–	9.21	13.69	NaN	16.62	NaN	17.66	19.15	19.16
260	–	8.96	13.13	NaN	16.22	NaN	17.46	18.97	18.80
270	–	–	12.28	NaN	15.85	NaN	17.18	18.80	18.62
280	–	–	11.34	NaN	15.42	NaN	16.96	18.62	18.51
290	–	–	10.98	NaN	15.03	NaN	16.72	18.44	18.45
300	–	–	10.80	NaN	14.48	NaN	16.57	18.37	18.37
350	–	–	8.02	NaN	12.46	NaN	14.87	17.84	18.10
400	–	–	–	NaN	10.97	NaN	13.27	17.31	17.81
450	–	–	–	NaN	9.68	NaN	11.93	15.93	17.25
500	–	–	–	NaN	8.85	NaN	10.43	15.03	–
550	–	–	–	–	8.27	NaN	9.50	13.64	–
600	–	–	–	–	7.53	NaN	8.76	12.22	–
650	–	–	–	–	6.65	NaN	8.10	–	–
700	–	–	–	–	–	NaN	7.61	–	–
750	–	–	–	–	–	NaN	–	–	–

Table 12: Same as Table 8 for the cruise on the indicated date.

Cruise date: 2010.09.10									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	29.96	29.55	29.84	29.90	29.91	30.07	30.37	30.50	30.76
10	29.93	30.11	30.01	29.98	30.11	30.06	30.10	30.11	30.17
20	29.92	30.28	30.10	29.96	30.06	30.05	30.08	30.10	30.02
30	29.20	30.09	30.06	29.97	30.05	30.05	30.07	30.06	29.93
40	27.22	29.71	30.09	29.97	30.06	29.97	30.07	29.90	29.93
50	26.01	28.85	29.98	29.94	30.06	29.52	29.69	29.34	29.88
60	24.45	27.84	29.67	29.77	29.46	28.90	28.30	28.36	28.65
70	22.01	26.17	28.91	28.54	28.79	28.22	27.31	28.03	27.55
80	21.01	25.11	27.69	27.84	27.61	27.52	26.72	27.39	26.92
90	18.77	23.26	26.43	27.11	26.76	26.77	26.19	26.64	26.09
100	16.80	21.91	25.78	26.56	25.73	26.17	25.80	26.10	25.78
110	15.12	20.70	24.84	25.46	25.13	25.29	25.29	25.29	25.36
120	14.13	19.11	22.29	24.52	24.32	24.82	24.55	24.76	24.39
130	13.97	16.68	21.83	23.37	23.68	24.11	24.15	23.81	24.22
140	–	14.50	20.80	22.20	22.80	23.34	23.53	23.06	23.53
150	–	13.63	20.08	21.48	22.47	22.69	23.00	22.49	23.29
160	–	12.58	19.33	21.08	21.86	21.93	22.43	21.99	22.93
170	–	11.76	18.51	20.91	21.27	21.36	21.64	21.88	22.58
180	–	11.23	17.72	20.38	20.87	20.98	20.94	21.51	21.87
190	–	10.72	17.29	19.36	20.07	20.67	20.64	20.79	21.08
200	–	10.31	17.07	18.82	19.46	20.21	20.28	20.37	20.74
210	–	9.90	17.24	17.63	18.57	19.73	19.90	20.02	20.62
220	–	9.67	17.14	16.10	18.01	19.21	19.55	19.72	20.12
230	–	9.52	17.17	15.31	17.39	18.74	19.28	19.47	19.59
240	–	9.43	17.03	14.62	17.13	18.38	18.88	18.89	19.19
250	–	9.43	17.02	14.08	17.12	18.20	18.46	18.71	19.04
260	–	9.43	17.05	13.73	16.56	18.05	18.20	18.54	18.87
270	–	–	17.04	13.46	15.56	17.57	18.09	18.42	18.68
280	–	–	17.01	12.96	15.47	17.40	18.04	18.33	18.28
290	–	–	16.98	12.73	15.27	17.24	17.97	18.12	18.11
300	–	–	17.00	12.36	14.69	17.11	17.52	18.05	18.17
350	–	–	16.96	9.98	12.53	15.37	16.81	17.52	17.83
400	–	–	–	8.46	11.08	13.77	15.31	16.19	16.79
450	–	–	–	7.40	9.89	11.98	13.41	14.64	15.87
500	–	–	–	6.98	7.77	11.02	11.68	13.91	–
550	–	–	–	–	7.26	9.65	11.06	13.43	–
600	–	–	–	–	6.76	8.71	10.34	12.18	–
650	–	–	–	–	6.65	7.61	9.19	–	–
700	–	–	–	–	–	7.00	NaN	–	–
750	–	–	–	–	–	6.53	–	–	–

Table 13: Same as Table 8 for the cruise on the indicated date.

Cruise date: 2010.12.17									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	23.15	22.43	22.20	24.40	24.55	24.70	24.87	25.17	24.96
10	23.94	24.02	23.77	25.12	25.23	25.29	25.23	25.31	25.13
20	23.94	24.02	23.76	24.96	25.22	25.29	25.23	25.31	25.12
30	23.93	23.99	23.76	24.69	25.22	25.13	25.23	25.31	25.12
40	23.94	23.86	23.76	23.94	25.23	25.03	25.23	25.31	25.12
50	23.94	23.77	23.76	23.70	24.44	24.96	25.22	25.31	25.11
60	23.49	23.76	23.73	23.66	24.14	25.00	25.19	25.31	24.80
70	21.85	23.66	23.69	23.65	24.11	25.02	25.38	25.47	24.70
80	20.64	21.99	23.64	23.65	24.06	24.64	25.36	25.46	24.68
90	18.86	20.99	23.14	23.65	23.86	24.61	24.94	25.24	24.68
100	16.60	19.70	21.98	23.57	23.69	24.11	24.47	24.75	24.67
110	14.74	18.80	20.80	21.79	23.31	23.36	23.87	24.42	24.48
120	13.27	17.44	20.13	22.19	22.23	23.15	23.49	23.79	23.81
130	12.28	17.12	19.50	21.43	21.99	22.80	22.85	23.31	23.38
140	–	16.95	19.22	20.54	21.25	22.03	22.50	22.72	23.19
150	–	16.33	18.58	19.96	20.69	20.93	22.09	22.15	22.86
160	–	15.78	18.08	19.33	20.11	20.29	21.47	21.78	22.45
170	–	14.75	17.62	18.84	19.56	19.79	20.97	21.52	21.85
180	–	13.70	17.16	18.36	18.84	19.64	20.68	21.29	21.54
190	–	13.30	16.95	18.04	18.43	19.28	20.25	20.81	21.05
200	–	12.85	16.47	17.76	18.04	18.95	19.80	20.36	20.46
210	–	11.88	15.93	17.42	17.80	18.69	19.47	20.05	19.71
220	–	10.75	15.31	17.09	17.51	18.32	19.04	19.86	19.48
230	–	10.35	14.92	16.59	17.29	18.04	18.63	19.24	19.39
240	–	9.46	14.47	16.19	17.02	17.74	18.44	18.90	19.20
250	–	9.20	14.01	15.78	16.66	17.39	18.07	18.56	18.81
260	–	8.69	13.61	15.38	16.36	17.26	17.80	18.44	18.38
270	–	–	12.71	15.13	16.06	16.87	17.56	18.21	18.38
280	–	–	11.58	14.58	15.59	16.59	17.30	18.11	18.37
290	–	–	10.85	14.27	15.26	16.29	17.04	18.00	18.24
300	–	–	10.77	13.94	14.73	15.88	16.75	17.89	18.15
350	–	–	8.31	11.87	12.96	13.97	15.57	16.85	17.70
400	–	–	–	10.48	11.23	12.59	14.01	15.55	16.47
450	–	–	–	8.57	10.03	11.22	11.97	14.64	15.71
500	–	–	–	7.07	9.09	10.17	10.63	13.22	–
550	–	–	–	–	7.76	9.15	10.06	11.75	–
600	–	–	–	–	6.82	8.58	9.39	10.29	–
650	–	–	–	–	6.36	8.01	8.89	–	–
700	–	–	–	–	–	7.28	NaN	–	–
750	–	–	–	–	–	6.88	–	–	–

Table 14: Same as Table 8 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: 2010.02.26								
0	22: 9:12	-79.9301	27.0034	22:22: 3	-79.9291	27.0026	-3.17	35.25
1	23: 6:22	-79.8654	27.0024	23:29: 3	-79.8585	27.0149	1.04	49.14
2	0:28:16	-79.7824	27.0032	0:53: 4	-79.7829	27.0047	0.13	71.56
3	1:56: 4	-79.6786	27.0005	2:27:21	-79.6793	27.0000	1.07	98.38
4	3: 9:34	-79.6169	26.9998	3:49:10	-79.6094	27.0076	3.12	94.55
5	4:50:35	-79.4982	27.0036	5:28:28	-79.4906	27.0131	0.05	75.56
6	6:30:28	-79.3832	27.0007	7: 4:31	-79.3826	27.0053	-2.59	61.59
7	7:59:54	-79.2822	27.0004	8:33:44	-79.2719	27.0028	-5.06	46.37
8	9:21: 8	-79.1971	26.9964	9:47:33	-79.1918	26.9933	-9.12	32.59
Cruise date: 2010.05.19								
0	5: 6:45	-79.9312	27.0047	5:16:41	-79.9322	27.0119	-10.47	106.82
1	3:37: 1	-79.8665	27.0079	3:51:30	-79.8677	27.0185	-12.57	91.96
2	1:52: 7	-79.7876	27.0046	2:12:14	-79.7887	27.0210	-10.07	97.31
3	23:54:42	-79.6850	27.0030	0:22: 4	-79.6888	27.0237	-8.41	91.33
4	22: 7:48	-79.6153	27.0040	22:36:21	-79.6177	27.0209	-9.08	83.40
5	20: 6:32	-79.5009	27.0049	20:41:14	-79.5050	27.0244	-11.10	71.78
6	18: 1:30	-79.3839	27.0022	18:42:33	-79.3905	27.0217	-12.60	50.47
7	16:14:30	-79.2854	27.0028	16:44: 1	-79.2886	27.0105	-16.81	52.31
8	15:10:36	-79.2043	27.0003	15:33:44	-79.2053	27.0038	-16.64	47.33
Cruise date: 2010.08.24								
0	10:31:13	-79.9273	27.0089	10:41:39	-79.9264	27.0219	-0.65	134.47
1	8:47: 4	-79.8646	27.0062	9: 2:57	-79.8632	27.0255	2.75	116.40
2	6:54:29	-79.7829	27.0063	7:18:16	-79.7827	27.0331	4.94	109.71
3	5: 1:41	-79.6809	27.0071	5:28:19	-79.6812	27.0339	3.25	115.71
4	3: 8:31	-79.6177	27.0074	3:40: 2	-79.6196	27.0356	0.23	102.66
5	1: 5:14	-79.4998	27.0086	1:41:11	-79.5019	27.0366	-1.12	82.89
6	23:14:53	-79.3826	27.0024	23:47: 2	-79.3783	27.0217	-4.32	64.22
7	21:27:42	-79.2807	27.0005	21:57:51	-79.2744	27.0125	-8.86	54.58
8	19:48:54	-79.1983	27.0032	20:13:10	-79.1918	27.0120	-14.16	52.63

Table 15: 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: 2010.12.01								
0	11:51:40	-79.9291	27.0051	12: 3:21	-79.9285	27.0134	1.85	47.96
1	10:33:59	-79.8639	27.0019	10:50:51	-79.8635	27.0138	5.05	37.57
2	8:55: 2	-79.7845	27.0052	9:17: 3	-79.7837	27.0253	-0.22	65.49
3	7: 7:45	-79.6850	27.0054	7:33:20	-79.6851	27.0286	-3.80	94.48
4	5:24:29	-79.6225	27.0079	5:53:36	-79.6248	27.0329	-5.15	92.27
5	3:20:30	-79.5009	27.0064	3:53:44	-79.5009	27.0289	-4.79	78.47
6	1:31:52	-79.3855	27.0059	2: 5:27	-79.3902	27.0287	-6.61	62.57
7	23:57:34	-79.2855	27.0044	0:25:47	-79.2888	27.0144	-7.90	47.75
8	22:35:21	-79.2032	27.0040	22:58:51	-79.2089	27.0131	-10.43	41.33

Table 16: Same as Table 15 for LADCP data collected on the indicated dates.

Appendix E:

CTD and LADCP profiles

Cruise ID: ws1002. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	23.25	36.46	4.79	NaN	NaN
10	23.25	36.46	4.78	-6.5	74.4
20	23.24	36.46	4.77	-6.7	74.3
30	22.72	36.50	4.77	-4.6	71.3
40	22.40	36.51	4.77	2.4	61.2
50	22.06	36.49	4.80	5.5	52.6
60	21.91	36.49	4.82	7.3	45.4
70	21.79	36.48	4.81	8.1	40.4
80	21.66	36.47	4.76	3.7	34.7
90	20.88	36.48	4.66	-1.7	30.5
100	20.41	36.45	4.54	-9.6	20.1
110	20.14	36.42	4.43	-9.7	12.3
120	18.71	36.35	4.28	-9.6	1.7
130	17.92	36.27	4.12	-10.5	-8.2
140	NaN	NaN	NaN	-12.4	-17.3

Table 17: 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: ws1002. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.01	36.23	4.75	NaN	NaN
10	24.05	36.40	4.72	8.6	118.5
20	24.06	36.40	4.74	8.5	118.1
30	23.81	36.41	4.74	8.5	115.0
40	22.77	36.50	4.76	8.1	101.4
50	22.34	36.53	4.75	3.8	88.9
60	22.14	36.56	4.66	-0.6	78.1
70	21.69	36.50	4.72	-2.8	67.4
80	21.51	36.49	4.76	-3.4	61.7
90	21.36	36.46	4.77	-2.5	60.6
100	21.31	36.46	4.75	-2.7	59.5
110	21.29	36.48	4.70	-3.6	58.5
120	21.06	36.45	4.66	-5.8	57.0
130	20.79	36.45	4.60	-5.1	55.4
140	19.99	36.46	4.48	-2.2	51.5
150	18.46	36.40	4.12	2.2	41.1
160	17.17	36.21	4.05	6.2	31.0
170	15.74	36.06	3.87	10.7	22.5
180	15.13	35.98	3.82	11.4	20.5
190	14.79	35.93	3.79	7.8	23.8
200	14.36	35.86	3.75	5.3	21.2
210	13.79	35.77	3.71	2.5	17.3
220	12.87	35.64	3.62	-2.2	12.2
230	12.24	35.54	3.56	-3.9	8.6
240	11.35	35.43	3.46	-6.4	7.2
250	10.76	35.34	3.37	-7.2	-4.6
260	NaN	NaN	NaN	-7.9	-14.9

Table 18: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1002. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.48	36.37	4.72	NaN	NaN
10	24.48	36.38	4.72	5.8	147.7
20	24.48	36.38	4.71	5.8	147.7
30	24.49	36.38	4.71	5.7	148.5
40	24.49	36.38	4.69	5.8	151.0
50	24.50	36.38	4.69	5.0	150.7
60	24.48	36.39	4.68	4.7	147.3
70	24.19	36.42	4.68	4.4	136.5
80	22.86	36.48	4.73	3.4	123.0
90	22.25	36.51	4.71	0.9	108.5
100	21.73	36.51	4.76	-2.1	99.7
110	21.77	36.66	4.56	-2.8	95.4
120	21.86	36.82	4.28	-0.8	95.7
130	21.00	36.58	4.63	-0.1	94.1
140	20.71	36.56	4.63	-0.1	91.8
150	20.58	36.64	4.28	-0.5	89.4
160	19.70	36.48	4.16	-0.3	87.2
170	19.16	36.46	4.07	0.1	85.3
180	18.77	36.44	4.00	-0.3	83.5
190	18.15	36.37	3.98	-0.0	78.3
200	16.99	36.22	3.97	1.3	67.8
210	15.88	36.07	3.89	2.4	57.8
220	14.95	35.93	3.81	2.2	49.6
230	14.34	35.85	3.74	-0.2	43.9
240	13.94	35.79	3.70	-1.0	39.9
250	13.41	35.71	3.65	-0.1	36.1
260	12.97	35.64	3.60	0.1	31.9
270	12.77	35.61	3.57	-0.9	30.3
280	12.55	35.57	3.54	-3.0	30.5
290	12.27	35.53	3.51	-2.7	32.8
300	11.60	35.44	3.44	-2.9	28.0
350	9.08	35.14	3.12	-3.8	13.5

Table 19: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1002. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.57	36.41	4.70	NaN	NaN
10	24.60	36.42	4.69	15.3	148.0
20	24.59	36.42	4.68	15.3	148.1
30	24.60	36.42	4.67	15.1	148.3
40	24.61	36.42	4.66	14.7	149.1
50	24.61	36.42	4.66	15.2	148.8
60	24.62	36.42	4.65	15.9	148.9
70	24.61	36.42	4.64	16.6	149.5
80	24.62	36.42	4.63	15.9	144.4
90	23.86	36.47	4.64	13.8	136.4
100	22.79	36.49	4.64	9.0	127.6
110	23.07	36.91	4.20	3.7	120.8
120	21.93	36.63	4.32	-1.0	118.2
130	21.96	36.87	4.25	-1.1	118.4
140	21.52	36.85	4.15	0.8	119.9
150	20.77	36.66	4.28	5.5	119.5
160	20.14	36.52	4.40	8.9	116.6
170	20.03	36.52	4.35	11.3	112.1
180	19.73	36.51	4.29	10.4	110.4
190	19.40	36.54	4.10	6.6	109.7
200	18.68	36.49	4.03	-0.7	109.6
210	18.13	36.45	4.01	-7.0	111.3
220	17.63	36.41	4.15	-12.8	113.6
230	16.90	36.30	4.10	-18.6	113.7
240	16.84	36.29	4.09	-21.0	115.2
250	16.66	36.25	4.06	-19.1	117.2
260	15.82	36.11	3.98	-11.3	114.7
270	15.07	35.98	3.92	-4.8	110.9
280	14.23	35.84	3.78	-2.2	105.3
290	13.69	35.75	3.72	-0.3	99.4
300	13.38	35.70	3.69	0.9	93.4
350	11.60	35.41	3.44	-6.5	86.4
400	10.35	35.23	3.25	-5.2	77.1
450	7.65	34.96	2.86	2.6	66.4
500	6.92	34.93	2.75	2.4	38.1

Table 20: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1002. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.58	36.40	4.59	NaN	NaN
10	24.57	36.40	4.59	16.9	139.7
20	24.58	36.42	4.66	16.9	139.6
30	24.60	36.43	4.64	16.8	139.3
40	24.60	36.43	4.65	17.7	139.3
50	24.60	36.43	4.65	17.8	139.9
60	24.58	36.42	4.64	17.3	140.0
70	24.59	36.42	4.64	17.5	137.9
80	24.59	36.43	4.63	16.4	130.9
90	24.36	36.69	4.49	14.4	122.5
100	23.66	36.90	4.24	8.7	115.7
110	23.04	36.89	4.20	4.5	112.7
120	22.72	36.85	4.22	2.9	114.6
130	22.34	36.89	4.19	2.4	117.8
140	21.52	36.72	4.24	2.2	121.2
150	20.50	36.45	4.66	3.4	126.2
160	20.23	36.44	4.74	4.1	127.7
170	20.09	36.43	4.71	4.4	126.4
180	19.74	36.51	4.36	6.3	124.5
190	19.26	36.55	4.06	6.8	122.5
200	18.86	36.52	4.02	4.5	120.1
210	18.45	36.53	4.10	2.8	117.3
220	17.99	36.48	4.19	1.0	114.9
230	17.78	36.45	4.17	-1.4	113.9
240	17.68	36.43	4.16	-3.3	113.0
250	17.28	36.36	4.13	-5.0	112.1
260	16.78	36.28	4.07	-8.6	111.0
270	16.18	36.17	4.01	-11.2	110.0
280	15.69	36.08	3.95	-12.2	109.8
290	14.95	35.96	3.86	-12.2	106.9
300	14.63	35.90	3.81	-11.8	103.8
350	12.48	35.55	3.54	-2.6	90.9
400	11.10	35.34	3.32	0.8	81.9
450	9.38	35.12	3.09	-5.5	78.6
500	8.38	35.01	2.93	-1.2	70.8
550	7.30	34.93	2.78	5.9	52.5
600	6.70	34.92	2.69	12.0	34.9

Table 21: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1002. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.52	36.41	4.70	NaN	NaN
10	24.53	36.41	4.70	14.5	101.2
20	24.52	36.41	4.69	14.5	101.2
30	24.53	36.41	4.69	14.4	101.2
40	24.53	36.41	4.68	15.1	101.3
50	24.53	36.41	4.68	15.0	101.6
60	24.53	36.41	4.66	14.2	102.2
70	24.53	36.41	4.66	12.3	103.3
80	24.54	36.43	4.64	9.4	105.1
90	24.49	36.45	4.61	6.1	107.3
100	24.22	36.52	4.55	3.3	108.0
110	23.07	36.50	4.61	3.2	106.5
120	22.53	36.54	4.60	7.2	103.1
130	22.75	36.87	4.23	6.2	98.4
140	22.23	36.83	4.24	3.5	93.9
150	21.36	36.66	4.37	0.9	91.4
160	20.87	36.58	4.45	-0.5	90.0
170	20.39	36.53	4.47	-1.9	89.8
180	20.39	36.70	4.21	-7.1	90.6
190	20.10	36.74	4.17	-13.1	90.7
200	19.32	36.64	4.15	-17.6	89.8
210	19.01	36.61	4.15	-18.6	91.2
220	18.91	36.61	4.22	-17.5	93.8
230	18.78	36.59	4.18	-16.1	94.1
240	18.61	36.57	4.20	-13.7	93.6
250	18.30	36.52	4.15	-10.5	93.0
260	17.81	36.45	4.17	-6.6	93.5
270	17.48	36.39	4.14	-3.1	93.2
280	17.12	36.33	4.10	-1.3	91.0
290	16.79	36.27	4.06	-0.9	87.9
300	16.30	36.19	4.02	-1.3	84.7
350	14.96	35.96	3.83	-4.3	82.2
400	12.81	35.60	3.57	0.3	73.2
450	10.88	35.31	3.28	0.0	72.3
500	9.73	35.16	3.12	0.0	65.3
550	8.88	35.05	2.98	2.7	57.2
600	8.14	34.98	2.86	5.1	50.8
650	7.40	34.95	2.76	0.2	50.4
700	7.30	34.94	2.73	-2.7	46.6
750	NaN	NaN	NaN	0.3	34.7

Table 22: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1002. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.24	36.48	4.71	NaN	NaN
10	24.26	36.48	4.68	-8.0	89.2
20	24.24	36.48	4.69	-8.0	89.2
30	24.25	36.48	4.69	-8.3	89.4
40	24.25	36.48	4.68	-9.1	89.9
50	24.26	36.48	4.67	-8.5	89.2
60	24.27	36.48	4.67	-7.5	88.8
70	24.27	36.48	4.66	-6.6	89.2
80	24.27	36.48	4.66	-4.5	89.4
90	24.27	36.49	4.65	-1.6	88.5
100	24.28	36.49	4.64	1.9	87.6
110	24.30	36.52	4.62	3.0	85.9
120	23.80	36.83	4.35	-0.9	82.9
130	23.37	36.89	4.24	-5.9	79.3
140	22.50	36.88	4.23	-10.9	77.5
150	22.34	36.89	4.41	-14.1	80.8
160	21.74	36.87	4.43	-13.2	84.7
170	21.18	36.84	4.38	-9.1	87.7
180	20.68	36.80	4.39	-5.7	85.9
190	20.26	36.77	4.38	-4.7	84.0
200	19.64	36.68	4.31	-10.1	79.6
210	19.48	36.66	4.15	-13.9	76.9
220	19.44	36.66	4.14	-10.5	74.4
230	19.32	36.65	4.14	-6.1	72.7
240	19.03	36.61	4.16	-2.8	70.5
250	18.57	36.55	4.14	-0.9	68.0
260	18.27	36.51	4.15	-3.4	66.0
270	18.10	36.49	4.15	-5.3	64.5
280	17.99	36.48	4.15	-5.8	63.8
290	17.81	36.46	4.16	-4.9	63.4
300	17.59	36.42	4.16	-3.8	63.5
350	16.26	36.18	4.01	-2.5	59.8
400	14.41	35.86	3.75	-2.4	52.8
450	12.73	35.59	3.50	0.1	42.3
500	11.43	35.39	3.32	4.2	37.4
550	10.09	35.20	3.14	6.9	37.0
600	9.01	35.07	2.98	3.5	39.3
650	8.12	34.99	2.85	NaN	NaN

Table 23: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1002. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.30	36.51	4.69	NaN	NaN
10	24.31	36.51	4.68	-1.8	46.5
20	24.31	36.51	4.67	-2.0	46.4
30	24.31	36.51	4.67	-2.0	46.6
40	24.31	36.51	4.66	-1.7	47.4
50	24.32	36.51	4.65	-1.8	48.6
60	24.32	36.51	4.64	-1.7	49.7
70	24.32	36.51	4.64	-0.8	49.6
80	24.32	36.51	4.63	0.2	49.5
90	24.32	36.51	4.62	2.0	48.8
100	24.31	36.52	4.61	3.6	45.9
110	24.03	36.69	4.52	0.5	43.7
120	23.71	36.80	4.38	-8.3	43.4
130	23.43	36.86	4.36	-17.6	46.6
140	23.40	36.85	4.26	-23.1	51.6
150	22.44	36.88	4.25	-17.4	57.6
160	21.60	36.84	4.19	-10.8	61.1
170	21.02	36.81	4.18	-4.7	60.8
180	20.58	36.77	4.14	-3.0	57.5
190	20.25	36.74	4.11	-2.7	54.3
200	19.99	36.72	4.12	-2.6	53.3
210	19.75	36.69	4.12	-4.0	53.0
220	19.53	36.67	4.11	-5.9	52.6
230	19.44	36.66	4.11	-7.0	52.1
240	19.18	36.63	4.12	-8.0	51.8
250	18.96	36.60	4.11	-9.4	51.9
260	18.72	36.57	4.13	-10.1	52.8
270	18.62	36.56	4.13	-10.5	54.1
280	18.37	36.53	4.14	-10.8	55.8
290	18.18	36.50	4.14	-9.7	55.6
300	18.06	36.49	4.14	-8.7	54.6
350	16.78	36.28	3.99	-2.0	55.0
400	15.99	36.18	4.06	-7.6	49.8
450	14.41	35.91	3.84	-7.7	42.7
500	13.38	35.74	3.61	-3.7	34.5
550	11.73	35.53	3.52	0.0	28.1
600	NaN	NaN	NaN	-5.0	20.7

Table 24: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1002. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	24.23	36.50	4.70	NaN	NaN
10	24.21	36.49	4.70	5.3	1.6
20	24.22	36.49	4.68	5.4	1.4
30	24.22	36.50	4.68	5.9	1.3
40	24.22	36.49	4.68	8.3	0.6
50	24.22	36.49	4.67	8.4	3.0
60	24.23	36.50	4.65	6.3	6.5
70	24.21	36.57	4.62	1.4	11.0
80	24.06	36.65	4.52	-1.3	20.2
90	23.81	36.71	4.48	-2.5	31.8
100	23.58	36.73	4.51	-4.3	38.8
110	23.27	36.71	4.60	-7.1	42.0
120	23.20	36.71	4.62	-10.3	42.0
130	23.07	36.78	4.57	-14.2	42.5
140	22.90	36.80	4.56	-19.1	42.5
150	22.23	36.81	4.55	-26.7	40.7
160	21.62	36.80	4.53	-31.2	39.4
170	21.49	36.80	4.52	-32.3	39.1
180	21.12	36.79	4.52	-27.5	42.1
190	20.63	36.76	4.50	-19.6	44.1
200	20.33	36.74	4.48	-11.5	42.9
210	19.84	36.70	4.42	-7.6	42.3
220	19.72	36.70	4.36	-7.2	42.4
230	19.33	36.66	4.41	-12.0	42.0
240	19.07	36.65	4.41	-14.0	42.2
250	18.85	36.63	4.40	-11.7	43.6
260	18.57	36.60	4.39	-7.8	43.5
270	18.55	36.60	4.39	-5.7	41.6
280	18.49	36.59	4.38	-6.5	38.6
290	18.46	36.59	4.38	-7.4	37.4
300	18.42	36.58	4.37	-8.9	36.9
350	17.53	36.46	4.33	-11.7	33.8
400	16.47	36.27	4.18	-14.7	32.8
450	15.82	36.16	4.07	-3.3	37.0

Table 25: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1009. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.30	36.49	4.57	NaN	NaN
10	27.30	36.49	4.58	-22.6	158.0
20	27.21	36.49	4.60	-21.0	146.1
30	23.62	36.10	4.92	-15.7	138.2
40	22.15	36.10	5.06	-12.9	127.7
50	21.00	36.17	4.99	-14.1	120.1
60	20.82	36.61	4.60	-17.6	113.2
70	20.07	36.52	4.41	-17.4	110.1
80	19.66	36.47	4.40	-10.5	111.6
90	18.69	36.35	4.27	-5.0	106.6
100	17.76	36.25	3.99	-4.8	99.0
110	15.75	36.03	3.57	-5.8	91.8
120	14.45	35.86	3.17	-2.4	76.6
130	11.65	35.46	3.13	0.5	56.0
140	NaN	NaN	NaN	2.7	40.5

Table 26: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1009. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.58	36.49	4.56	NaN	NaN
10	27.58	36.49	4.57	-16.5	166.5
20	27.50	36.48	4.58	-22.2	157.7
30	25.16	36.39	4.79	-26.1	152.0
40	23.27	36.16	4.98	-29.4	145.0
50	21.53	36.17	5.11	-26.4	138.1
60	20.63	36.39	4.79	-20.2	130.7
70	20.56	36.60	3.94	-18.4	125.6
80	19.82	36.48	4.15	-14.8	119.2
90	19.53	36.55	3.82	-13.1	110.1
100	18.64	36.33	4.42	-13.1	106.9
110	18.47	36.34	4.27	-14.6	106.8
120	18.20	36.37	3.84	-14.0	106.6
130	17.99	36.36	3.62	-9.6	105.3
140	17.00	36.21	3.51	-9.9	99.1
150	16.47	36.14	3.46	-8.6	92.5
160	15.55	36.02	3.26	-10.9	83.8
170	14.95	35.93	3.16	-8.9	77.7
180	13.43	35.71	3.06	-5.3	67.4
190	12.43	35.57	2.90	-4.0	59.1
200	11.31	35.42	2.84	-7.8	48.4
210	10.64	35.33	2.82	-5.9	36.2
220	10.06	35.25	2.80	-3.8	27.4
230	9.51	35.17	2.79	-2.9	18.8
240	8.93	35.09	2.77	-3.6	11.8
250	NaN	NaN	NaN	-4.3	6.4

Table 27: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1009. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.83	36.48	4.56	NaN	NaN
10	27.81	36.48	4.57	-25.9	167.7
20	27.71	36.47	4.56	-25.3	168.0
30	27.67	36.47	4.57	-27.6	164.3
40	24.90	36.46	4.78	-26.9	157.2
50	24.25	36.46	4.90	-23.2	150.6
60	23.46	36.63	4.64	-21.6	147.2
70	22.21	36.61	4.30	-16.7	145.4
80	21.38	36.64	4.20	-11.2	141.8
90	20.64	36.57	4.22	-6.5	136.8
100	20.00	36.50	4.19	-3.6	129.5
110	19.45	36.47	4.21	-4.7	122.2
120	19.09	36.41	4.34	-11.2	120.1
130	18.75	36.32	4.56	-14.0	118.8
140	18.54	36.29	4.59	-15.2	117.9
150	18.37	36.28	4.30	-13.3	118.4
160	18.61	36.43	4.00	-13.0	117.0
170	18.21	36.38	3.72	-14.2	113.4
180	17.97	36.36	3.55	-17.0	110.4
190	17.36	36.25	3.57	-17.7	105.1
200	16.34	36.16	3.52	-15.0	97.0
210	14.95	35.96	3.13	-13.5	88.3
220	13.87	35.79	2.98	-12.1	81.5
230	13.61	35.75	2.94	-10.8	78.3
240	13.17	35.68	2.94	-9.2	74.4
250	12.75	35.61	2.87	-7.3	71.0
260	12.24	35.53	2.86	-4.6	69.6
270	11.55	35.44	2.85	-1.4	67.4
280	10.91	35.34	2.82	0.3	63.7
290	10.13	35.22	2.76	3.4	58.7
300	9.38	35.14	2.76	5.2	56.1
350	8.16	35.01	2.83	-4.5	27.8

Table 28: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1009. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.85	36.47	4.56	NaN	NaN
10	27.66	36.47	4.57	-10.8	162.6
20	27.46	36.45	4.60	-16.0	161.5
30	27.41	36.46	4.61	-16.1	159.6
40	27.29	36.47	4.60	-18.8	156.8
50	26.11	36.47	4.71	-19.8	154.1
60	24.45	36.51	4.86	-16.8	152.5
70	24.31	36.84	3.97	-13.7	149.9
80	23.92	36.88	3.65	-11.7	146.3
90	23.12	36.82	3.64	-6.8	142.5
100	21.43	36.53	4.37	-6.3	137.0
110	21.26	36.69	4.10	-8.6	132.8
120	20.52	36.53	4.36	-11.2	127.8
130	20.34	36.51	4.38	-13.4	124.3
140	20.15	36.49	4.36	-13.0	124.5
150	19.17	36.40	4.36	-7.3	123.0
160	18.83	36.34	4.65	-4.3	119.0
170	18.57	36.29	4.65	-6.0	118.3
180	18.39	36.27	4.69	-7.8	117.8
190	18.24	36.26	4.60	-5.8	108.2
200	17.98	36.29	4.12	-9.1	106.7
210	17.87	36.40	3.58	-10.4	106.9
220	17.51	36.36	3.39	-10.0	105.8
230	17.19	36.35	3.54	-9.5	106.6
240	16.79	36.28	3.62	-8.8	105.4
250	16.14	36.16	3.37	-9.2	102.2
260	15.48	36.04	3.21	-9.9	100.3
270	15.10	35.98	3.03	-12.4	98.2
280	14.80	35.93	3.02	-13.3	94.7
290	14.17	35.83	3.00	-12.4	91.4
300	13.80	35.77	2.94	-10.4	86.2
350	10.86	35.34	2.87	-7.3	57.4
400	9.03	35.07	2.73	-0.3	44.2
450	8.12	34.98	2.78	-3.1	43.3
500	7.13	34.93	2.99	-7.2	30.8

Table 29: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1009. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.75	36.48	4.57	NaN	NaN
10	27.54	36.46	4.60	-8.2	130.2
20	27.47	36.47	4.61	-8.2	130.3
30	27.36	36.47	4.62	-10.6	131.5
40	27.08	36.49	4.61	-16.9	138.8
50	26.55	36.61	4.62	-22.3	144.3
60	25.47	36.63	4.49	-28.7	146.6
70	25.31	36.79	4.64	-31.6	148.6
80	24.58	36.78	4.29	-31.7	146.8
90	24.22	36.81	4.34	-29.1	146.3
100	23.97	36.83	4.32	-21.7	147.1
110	23.38	36.84	4.03	-12.8	143.8
120	22.53	36.81	4.11	-8.7	134.0
130	21.91	36.87	4.14	-8.6	126.2
140	21.22	36.83	4.17	-8.7	122.6
150	20.79	36.78	3.99	-9.9	119.2
160	19.16	36.41	4.15	-9.6	116.4
170	18.84	36.34	4.56	-10.2	114.1
180	18.68	36.33	4.58	-10.8	110.2
190	19.23	36.60	4.24	-11.4	105.8
200	18.89	36.54	3.55	-11.7	105.5
210	18.22	36.42	3.78	-12.5	105.1
220	17.98	36.39	3.54	-11.0	103.2
230	17.41	36.33	3.18	-10.0	102.0
240	17.22	36.33	3.33	-6.7	101.9
250	17.00	36.32	3.64	-3.9	102.6
260	16.78	36.28	3.60	-4.3	102.1
270	16.31	36.19	3.53	-6.2	101.5
280	16.03	36.14	3.29	-6.6	100.0
290	15.35	36.02	3.09	-6.7	97.9
300	15.05	35.97	3.04	-6.6	96.5
350	13.28	35.69	2.96	-7.0	82.9
400	10.72	35.29	2.82	-7.8	69.5
450	9.58	35.14	2.75	-7.5	47.1
500	8.62	35.02	2.76	-5.8	39.6
550	7.71	34.94	2.85	-3.4	31.5
600	7.10	34.92	2.99	-4.7	25.0

Table 30: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1009. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.23	36.49	4.60	NaN	NaN
10	26.93	36.49	4.62	-27.1	115.0
20	26.80	36.51	4.63	-26.6	114.1
30	26.80	36.51	4.63	-25.8	114.0
40	26.79	36.52	4.64	-24.0	112.3
50	26.47	36.56	4.66	-27.7	110.1
60	25.75	36.66	4.59	-28.5	110.1
70	25.67	36.67	4.58	-24.8	108.7
80	25.26	36.70	4.65	-21.3	103.7
90	24.26	36.73	4.53	-19.3	99.8
100	24.13	36.76	4.27	-19.1	98.3
110	23.97	36.81	4.04	-19.9	97.3
120	23.60	36.91	3.97	-20.8	100.0
130	22.78	36.89	4.17	-16.6	105.4
140	21.98	36.85	4.07	-10.7	110.3
150	21.56	36.84	4.02	-11.9	109.1
160	21.24	36.82	4.00	-15.8	108.2
170	20.79	36.75	3.78	-19.7	107.4
180	20.36	36.73	3.80	-20.5	102.5
190	19.68	36.68	3.83	-20.2	97.2
200	19.15	36.62	3.80	-19.2	95.6
210	18.82	36.59	3.75	-17.4	94.5
220	18.46	36.54	3.81	-16.0	93.8
230	18.31	36.53	3.80	-15.3	93.9
240	18.12	36.51	3.91	-14.2	93.0
250	17.73	36.43	3.72	-14.0	91.7
260	17.64	36.42	3.67	-12.8	91.2
270	17.55	36.40	3.67	-9.4	91.0
280	17.45	36.39	3.67	-7.6	89.4
290	17.13	36.33	3.64	-7.0	87.0
300	16.67	36.25	3.43	-7.7	85.4
350	14.49	35.89	3.22	-14.4	78.3
400	13.34	35.69	3.06	-7.6	64.3
450	11.89	35.46	2.87	-6.6	56.4
500	10.45	35.26	2.78	-4.3	53.0
550	9.67	35.15	2.78	-5.9	56.1
600	8.84	35.05	2.77	-5.2	48.5
650	7.93	34.98	2.89	-3.9	37.9
700	7.35	34.93	3.00	-7.9	29.4
750	NaN	NaN	NaN	-2.3	18.8

Table 31: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1009. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.09	36.51	4.60	NaN	NaN
10	26.94	36.51	4.62	-25.4	61.2
20	26.82	36.51	4.63	-25.3	61.0
30	26.76	36.51	4.64	-27.5	59.8
40	26.50	36.51	4.64	-32.9	56.9
50	26.25	36.53	4.61	-34.7	59.3
60	25.89	36.57	4.59	-34.4	64.9
70	25.41	36.61	4.59	-32.1	69.0
80	24.73	36.70	4.63	-22.7	67.3
90	24.00	36.73	4.75	-14.2	64.6
100	23.28	36.78	4.78	-14.2	68.4
110	22.90	36.82	4.69	-15.7	73.8
120	22.66	36.81	4.63	-17.7	79.1
130	22.43	36.81	4.77	-19.5	81.8
140	22.00	36.81	4.61	-19.5	84.1
150	21.47	36.79	4.58	-17.3	84.6
160	21.18	36.78	4.51	-16.0	82.5
170	20.69	36.75	4.40	-16.3	77.7
180	19.99	36.71	4.33	-16.8	73.0
190	19.55	36.67	3.94	-16.5	69.7
200	19.51	36.67	3.91	-14.7	68.5
210	19.34	36.66	3.89	-13.5	68.1
220	18.99	36.61	3.78	-14.1	67.9
230	18.93	36.61	3.89	-15.0	68.4
240	18.93	36.61	3.94	-15.8	69.5
250	18.80	36.59	3.93	-17.9	71.6
260	18.33	36.54	3.86	-19.2	74.2
270	18.23	36.52	3.92	-19.3	76.2
280	18.15	36.51	3.86	-16.9	77.7
290	17.95	36.47	3.87	-13.2	77.4
300	17.72	36.43	3.76	-9.5	76.2
350	16.40	36.21	3.60	-8.9	60.0
400	15.49	36.05	3.36	-9.0	50.1
450	13.73	35.81	3.41	-8.9	31.2
500	12.20	35.55	3.15	-12.4	24.5
550	10.28	35.23	2.81	-0.2	16.6
600	9.27	35.09	2.75	-0.0	15.3
650	9.74	35.26	3.19	-3.9	16.7

Table 32: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1009. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.98	36.51	4.58	NaN	NaN
10	26.85	36.51	4.61	-19.9	15.5
20	26.84	36.51	4.61	-19.7	16.0
30	26.78	36.52	4.62	-19.7	14.8
40	26.53	36.52	4.62	-21.5	12.1
50	25.88	36.59	4.59	-28.1	21.7
60	25.26	36.66	4.56	-32.3	39.6
70	24.06	36.73	4.68	-26.8	55.8
80	23.75	36.73	4.78	-21.3	65.4
90	23.23	36.78	4.73	-18.7	69.3
100	23.07	36.81	4.57	-21.5	70.9
110	22.78	36.82	4.63	-26.4	73.2
120	22.46	36.82	4.59	-30.1	75.1
130	22.16	36.81	4.65	-34.0	74.6
140	21.69	36.80	4.61	-35.0	74.2
150	21.36	36.79	4.64	-31.9	74.3
160	21.16	36.78	4.63	-30.5	75.0
170	20.80	36.76	4.59	-30.4	76.4
180	20.57	36.75	4.49	-29.6	77.9
190	20.20	36.72	4.46	-27.4	79.7
200	19.98	36.71	4.42	-25.4	80.5
210	19.72	36.69	4.43	-23.1	79.1
220	19.57	36.68	4.39	-22.3	76.7
230	19.25	36.66	4.34	-21.9	73.8
240	18.97	36.64	4.31	-19.7	71.5
250	18.80	36.63	4.30	-17.0	69.7
260	18.58	36.61	4.31	-13.8	69.1
270	18.42	36.59	4.33	-11.4	69.1
280	18.36	36.59	4.32	-10.2	68.5
290	18.24	36.57	4.33	-9.6	67.7
300	18.17	36.57	4.34	-9.2	65.1
350	17.78	36.51	4.35	-12.1	59.4
400	16.75	36.32	4.13	-9.0	57.2
450	15.52	36.11	3.89	-7.3	47.2
500	13.50	35.79	3.58	-2.5	31.9
550	12.69	35.66	3.48	-16.9	29.6
600	11.73	35.53	3.38	-17.0	21.2

Table 33: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1009. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.19	36.48	4.61	NaN	NaN
10	27.05	36.47	4.62	-10.3	31.6
20	26.72	36.53	4.63	-10.3	31.9
30	25.99	36.60	4.66	-12.7	39.7
40	24.36	36.68	4.76	-18.3	57.4
50	24.03	36.70	4.78	-20.0	63.0
60	23.82	36.80	4.84	-21.1	63.4
70	23.46	36.79	4.62	-25.4	61.9
80	23.16	36.77	4.74	-28.6	62.0
90	23.10	36.79	4.73	-30.4	64.0
100	22.88	36.81	4.69	-30.3	66.3
110	22.77	36.81	4.66	-28.8	67.9
120	22.71	36.81	4.63	-27.8	68.0
130	22.66	36.82	4.64	-28.4	66.7
140	22.26	36.83	4.62	-29.0	64.9
150	21.99	36.80	4.64	-28.7	61.8
160	21.02	36.76	4.62	-28.7	56.1
170	20.76	36.75	4.53	-27.5	53.3
180	20.53	36.75	4.49	-23.5	54.4
190	20.30	36.74	4.46	-20.2	54.5
200	19.88	36.71	4.44	-17.2	53.1
210	19.58	36.69	4.43	-14.7	51.4
220	19.50	36.68	4.43	-13.7	50.5
230	19.32	36.67	4.39	-14.5	48.6
240	19.02	36.64	4.36	-14.9	46.4
250	18.88	36.63	4.32	-14.5	44.2
260	18.76	36.62	4.32	-14.2	42.9
270	18.76	36.62	4.32	-13.2	42.0
280	18.72	36.62	4.32	-12.1	42.6
290	18.61	36.61	4.32	-11.9	43.6
300	18.50	36.60	4.32	-11.3	44.3
350	17.77	36.51	4.37	-10.2	41.3
400	17.16	36.39	4.22	-13.9	40.4
450	16.07	36.20	4.01	-9.7	33.5

Table 34: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1016. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.34	36.17	4.36	NaN	NaN
10	30.37	36.19	4.38	-0.6	245.9
20	30.07	36.33	4.44	-1.7	245.9
30	28.78	36.44	4.58	-0.5	237.9
40	25.54	36.45	4.69	-3.7	218.8
50	23.54	36.40	4.54	-4.7	197.2
60	20.53	36.30	4.28	-2.9	171.9
70	17.90	36.18	3.77	-4.6	143.5
80	16.57	36.22	3.41	-4.6	122.3
90	16.03	36.13	3.23	-2.9	106.3
100	14.27	35.83	3.18	-1.2	94.1
110	13.55	35.73	3.05	-0.0	78.4
120	11.90	35.50	2.97	1.9	61.9
130	10.74	35.34	2.91	5.9	43.9
140	NaN	NaN	NaN	5.6	28.7
150	NaN	NaN	NaN	4.5	20.2

Table 35: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1016. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.52	36.28	4.36	NaN	NaN
10	30.55	36.30	4.35	5.3	239.8
20	30.02	36.45	4.46	5.5	237.4
30	29.03	36.41	4.58	6.1	232.3
40	27.14	36.42	4.56	9.7	222.8
50	25.79	36.52	4.57	1.4	210.4
60	24.07	36.49	4.35	-8.5	198.7
70	22.15	36.47	4.41	-11.1	184.1
80	19.99	36.49	3.82	-5.6	162.9
90	18.75	36.41	3.56	-0.8	145.9
100	17.60	36.27	3.57	-7.4	130.5
110	17.01	36.24	3.41	-13.3	118.5
120	16.73	36.25	3.32	-16.1	114.2
130	16.64	36.23	3.31	-11.9	107.4
140	16.23	36.17	3.31	-6.2	99.9
150	14.90	35.95	3.19	-0.5	90.6
160	14.35	35.86	3.08	1.3	80.9
170	14.12	35.83	3.08	1.0	71.9
180	13.26	35.69	3.07	4.2	64.4
190	12.28	35.56	3.00	8.3	58.2
200	11.96	35.52	2.94	11.9	54.0
210	11.75	35.49	2.92	15.7	51.6
220	11.17	35.41	2.90	16.4	45.4
230	10.45	35.31	2.86	16.4	36.9
240	9.64	35.18	2.82	15.4	28.1
250	9.12	35.12	2.78	15.9	22.3
260	NaN	NaN	NaN	18.4	16.9

Table 36: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1016. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.55	36.34	4.36	NaN	NaN
10	30.56	36.34	4.36	7.6	222.7
20	30.57	36.36	4.38	7.1	223.4
30	30.12	36.56	4.45	6.7	221.7
40	29.60	36.61	4.49	7.5	218.1
50	27.27	36.39	4.50	8.3	210.9
60	26.59	36.47	4.31	10.9	198.8
70	25.49	36.55	4.55	8.1	187.9
80	23.56	36.49	4.46	-0.5	182.1
90	22.08	36.79	3.49	0.0	178.1
100	21.16	36.76	3.30	1.9	172.3
110	20.64	36.78	3.37	5.2	162.0
120	19.71	36.66	3.27	9.8	150.8
130	18.95	36.55	3.31	7.5	141.5
140	18.61	36.52	3.34	3.8	135.4
150	18.20	36.47	3.36	1.1	131.4
160	17.97	36.44	3.42	0.4	128.6
170	17.80	36.43	3.45	0.6	124.5
180	17.61	36.41	3.55	1.8	119.3
190	17.09	36.32	3.51	3.8	111.0
200	16.12	36.17	3.37	3.8	98.3
210	15.23	36.02	3.22	3.6	89.7
220	14.60	35.91	3.08	2.6	83.3
230	13.74	35.77	3.00	3.9	74.5
240	13.43	35.72	2.97	6.1	68.0
250	12.59	35.58	2.95	7.5	62.2
260	12.19	35.54	2.93	7.2	58.0
270	11.69	35.48	2.91	7.7	53.8
280	11.03	35.39	2.89	6.0	48.4
290	10.66	35.33	2.87	5.6	46.1
300	10.11	35.25	2.80	5.8	43.3
350	8.45	35.04	2.79	4.2	28.8

Table 37: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1016. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.28	36.08	4.42	NaN	NaN
10	30.27	36.08	4.41	7.7	201.7
20	29.87	36.09	4.46	7.7	201.6
30	29.43	36.19	4.56	7.6	198.2
40	28.76	36.22	4.60	6.8	196.6
50	27.96	36.30	4.56	5.8	194.6
60	27.28	36.39	4.40	7.9	189.9
70	26.64	36.48	4.33	13.9	183.0
80	25.94	36.53	4.45	13.4	177.5
90	25.50	36.60	4.24	5.0	175.1
100	24.08	36.70	3.91	-1.2	172.5
110	23.37	36.79	3.63	-5.6	169.3
120	22.37	36.90	3.48	-6.8	164.7
130	22.03	36.89	3.43	-0.4	158.7
140	21.17	36.83	3.40	7.5	152.4
150	19.87	36.68	3.26	12.2	145.5
160	19.55	36.64	3.26	12.4	140.4
170	18.85	36.55	3.40	10.9	137.3
180	18.53	36.56	3.39	11.4	133.5
190	18.14	36.51	3.71	10.4	128.5
200	17.69	36.43	3.62	7.5	125.2
210	17.57	36.41	3.65	4.6	122.6
220	17.26	36.36	3.62	4.8	120.9
230	16.95	36.31	3.52	3.6	120.0
240	16.25	36.17	3.36	2.1	118.7
250	15.39	36.03	2.95	1.6	115.9
260	15.20	36.00	2.94	0.5	115.0
270	14.99	35.97	2.97	-1.2	112.6
280	14.69	35.92	2.94	-5.0	111.7
290	14.57	35.90	2.89	-7.6	111.2
300	14.34	35.86	2.88	-8.1	110.9
350	12.10	35.51	2.83	13.4	97.2
400	9.92	35.20	2.79	4.9	77.7
450	8.05	35.01	2.85	-3.9	65.0
500	6.82	34.94	3.03	-1.5	35.0

Table 38: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1016. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.30	36.11	4.40	NaN	NaN
10	30.32	36.11	4.41	-0.9	171.4
20	29.98	36.10	4.43	-1.1	174.4
30	29.50	36.13	4.53	-3.0	173.2
40	29.21	36.19	4.54	-3.8	173.0
50	28.42	36.25	4.52	-3.3	170.6
60	27.73	36.30	4.41	-4.0	168.8
70	27.26	36.39	4.45	-2.7	167.3
80	26.46	36.48	4.32	-1.9	164.0
90	25.77	36.61	4.16	-3.7	161.0
100	25.00	36.69	3.96	-4.8	157.5
110	24.35	36.82	3.76	-7.5	155.6
120	23.72	36.89	3.57	-8.7	151.4
130	22.75	36.91	3.48	-7.4	147.1
140	21.89	36.86	3.39	-2.7	142.5
150	21.13	36.80	3.34	2.1	139.1
160	19.96	36.67	3.28	6.7	131.4
170	19.68	36.69	3.48	9.8	124.6
180	19.09	36.62	3.54	6.3	120.3
190	18.71	36.57	3.56	4.4	114.8
200	18.38	36.49	3.53	2.8	116.1
210	17.93	36.44	3.40	-0.1	114.0
220	17.66	36.41	3.44	-2.4	114.5
230	17.55	36.40	3.59	-3.8	115.9
240	17.22	36.35	3.53	-3.0	114.7
250	16.86	36.29	3.47	-2.2	111.9
260	16.39	36.21	3.39	-1.1	111.2
270	15.89	36.12	3.17	-2.2	109.7
280	15.56	36.06	3.03	-1.3	108.2
290	15.13	35.99	2.94	1.0	105.9
300	14.69	35.92	2.99	2.8	104.3
350	12.32	35.54	2.86	10.6	92.7
400	10.69	35.30	2.74	-3.7	76.9
450	9.90	35.19	2.72	-5.4	74.8
500	9.16	35.09	2.70	5.0	67.7
550	8.09	34.99	2.74	-0.9	58.3
600	7.32	34.94	2.87	0.3	48.2

Table 39: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1016. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.20	36.13	4.37	NaN	NaN
10	30.23	36.13	4.39	4.7	125.3
20	30.22	36.13	4.41	6.6	125.9
30	29.82	36.12	4.46	4.0	125.8
40	29.45	36.15	4.53	3.7	128.3
50	28.36	36.23	4.50	6.6	129.1
60	27.60	36.34	4.42	8.0	128.8
70	27.08	36.41	4.36	6.6	127.7
80	26.60	36.46	4.30	5.1	126.2
90	26.01	36.53	4.13	2.1	123.9
100	25.50	36.64	4.12	-0.9	122.3
110	24.95	36.72	3.88	-5.4	121.0
120	24.63	36.79	3.72	-11.2	119.4
130	24.36	36.82	3.67	-9.5	118.6
140	23.32	36.85	3.59	-3.5	117.9
150	22.17	36.79	3.46	1.6	116.8
160	21.59	36.82	3.31	2.6	115.8
170	20.84	36.74	3.30	1.9	115.8
180	20.35	36.74	3.28	2.1	114.4
190	19.88	36.69	3.32	1.8	113.5
200	19.43	36.64	3.28	0.8	113.9
210	19.08	36.60	3.31	-0.0	112.9
220	18.73	36.56	3.33	-1.9	111.5
230	18.47	36.52	3.37	-2.0	110.4
240	18.08	36.47	3.39	-2.4	109.8
250	17.92	36.45	3.44	-2.6	109.7
260	17.54	36.39	3.45	-1.9	107.4
270	17.01	36.31	3.50	-2.9	104.5
280	16.80	36.28	3.49	-3.0	102.0
290	16.71	36.26	3.48	-2.5	100.8
300	16.39	36.21	3.46	-2.7	100.0
350	15.02	35.97	3.22	-8.2	92.3
400	13.53	35.72	3.07	0.1	78.5
450	11.45	35.40	2.84	2.4	59.8
500	10.81	35.32	2.76	-1.8	56.1
550	9.73	35.16	2.72	-1.5	50.7
600	9.05	35.08	2.71	1.4	47.0
650	8.34	35.01	2.73	-4.6	42.5
700	7.63	34.95	2.81	0.5	48.3

Table 40: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1016. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.24	36.11	4.43	NaN	NaN
10	30.24	36.11	4.44	5.8	88.5
20	30.23	36.11	4.44	6.2	88.5
30	29.94	36.13	4.48	6.3	88.6
40	29.52	36.12	4.53	7.0	87.6
50	29.07	36.18	4.55	5.4	88.3
60	27.85	36.29	4.50	4.8	89.2
70	27.36	36.36	4.34	8.1	88.8
80	26.68	36.45	4.27	7.7	91.3
90	26.09	36.52	4.20	4.6	96.1
100	25.61	36.59	4.09	2.4	100.6
110	25.09	36.66	3.99	0.9	104.7
120	24.40	36.71	3.87	-0.1	107.0
130	23.97	36.79	3.74	-2.2	106.0
140	23.31	36.82	3.64	-4.6	103.1
150	22.94	36.81	3.73	-5.9	101.4
160	21.77	36.73	3.78	-3.5	99.6
170	21.02	36.71	3.76	-0.8	97.8
180	20.89	36.79	3.47	-3.4	96.4
190	20.60	36.76	3.45	-4.0	93.6
200	20.40	36.72	3.51	1.0	91.2
210	19.60	36.55	3.77	6.2	89.4
220	19.07	36.60	3.38	7.0	86.9
230	18.93	36.64	4.12	2.8	84.0
240	18.82	36.63	4.18	-1.1	80.9
250	18.59	36.61	4.18	-2.6	78.7
260	18.34	36.57	4.16	-0.1	77.2
270	18.18	36.55	4.18	0.9	74.9
280	17.84	36.49	4.17	0.1	73.6
290	17.68	36.47	4.09	-1.0	72.8
300	17.66	36.47	4.10	-1.9	72.7
350	17.02	36.37	4.06	-5.9	68.4
400	15.58	36.09	3.47	-14.7	67.2
450	14.49	35.92	3.33	-9.5	50.2
500	12.78	35.62	3.01	-8.8	45.9
550	11.58	35.43	2.86	-10.3	35.2
600	10.58	35.28	2.77	-5.9	20.3
650	9.61	35.15	2.73	-8.1	18.4

Table 41: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1016. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.28	36.08	4.43	NaN	NaN
10	30.28	36.09	4.42	7.8	51.4
20	29.89	36.14	4.47	7.9	51.9
30	29.58	36.17	4.52	7.1	53.8
40	29.14	36.21	4.57	5.2	57.3
50	28.75	36.28	4.58	4.4	59.0
60	27.72	36.35	4.55	3.7	59.1
70	26.82	36.45	4.54	3.7	60.6
80	26.40	36.50	4.60	2.8	63.7
90	25.67	36.52	4.70	0.4	66.9
100	24.99	36.51	4.59	-4.2	66.8
110	24.62	36.52	4.43	-5.8	67.6
120	24.36	36.60	4.25	-5.3	69.6
130	23.86	36.76	3.93	-7.3	72.1
140	22.99	36.84	3.96	-10.5	73.1
150	22.67	36.86	4.27	-11.1	72.1
160	22.49	36.85	4.45	-9.4	71.9
170	22.00	36.83	4.48	-7.9	73.7
180	21.44	36.80	4.55	-6.7	76.2
190	20.67	36.76	4.55	-6.9	77.0
200	20.16	36.73	4.43	-7.1	77.0
210	19.89	36.72	4.43	-6.9	77.6
220	19.58	36.69	4.40	-7.1	78.8
230	19.45	36.68	4.36	-7.5	76.3
240	19.12	36.65	4.40	-6.8	73.6
250	18.96	36.64	4.44	-6.2	72.4
260	18.80	36.63	4.45	-6.7	70.6
270	18.64	36.62	4.47	-6.4	69.7
280	18.54	36.60	4.45	-5.9	71.3
290	18.44	36.59	4.45	-4.3	71.6
300	18.25	36.57	4.46	-3.5	70.2
350	17.64	36.49	4.34	-17.2	64.2
400	16.81	36.31	3.80	-14.7	53.2
450	15.93	36.14	3.55	-19.9	38.4
500	14.78	35.96	3.44	-12.0	31.9
550	13.41	35.75	3.20	-10.0	19.1
600	NaN	NaN	NaN	-14.9	10.7

Table 42: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1016. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.45	36.23	4.42	NaN	NaN
10	30.40	36.24	4.43	-2.1	31.2
20	30.26	36.26	4.45	-2.5	30.9
30	30.21	36.26	4.46	-4.0	31.2
40	29.42	36.19	4.53	-5.2	31.8
50	28.96	36.26	4.56	-4.7	32.8
60	27.63	36.37	4.55	-4.4	33.5
70	25.94	36.52	4.69	-5.7	34.5
80	25.59	36.52	4.63	-5.6	35.5
90	25.19	36.51	4.61	-5.0	36.7
100	24.85	36.51	4.53	-5.7	38.9
110	24.57	36.73	3.99	-6.8	42.3
120	24.18	36.78	3.88	-9.1	44.9
130	23.79	36.80	3.87	-13.2	48.0
140	22.62	36.86	4.45	-17.3	52.6
150	21.83	36.81	4.52	-18.5	58.8
160	21.55	36.79	4.55	-20.5	61.5
170	21.51	36.79	4.52	-23.1	61.6
180	21.40	36.79	4.52	-25.7	60.0
190	21.06	36.77	4.51	-27.2	59.0
200	20.63	36.75	4.49	-26.9	58.7
210	19.99	36.71	4.35	-23.9	58.1
220	19.49	36.68	4.49	-20.2	57.4
230	19.37	36.68	4.49	-17.9	58.6
240	19.09	36.66	4.46	-15.7	59.8
250	18.95	36.64	4.38	-13.2	61.0
260	18.86	36.63	4.32	-9.4	61.1
270	18.77	36.62	4.26	-6.5	60.4
280	18.52	36.60	4.21	-5.0	60.0
290	18.48	36.59	4.17	-5.6	60.1
300	18.42	36.58	4.17	-8.3	61.3
350	18.07	36.56	4.50	-22.5	66.3
400	17.96	36.54	4.44	-19.6	61.2
450	17.05	36.38	4.15	-8.8	42.1

Table 43: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1021. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.61	36.22	4.65	NaN	NaN
10	25.62	36.22	4.65	2.0	117.7
20	25.62	36.23	4.64	2.1	117.1
30	25.45	36.31	4.64	0.2	115.8
40	25.06	36.31	4.62	-5.2	109.8
50	24.83	36.29	4.54	-7.8	99.4
60	24.56	36.30	4.44	-6.3	85.2
70	24.06	36.32	4.29	1.1	66.8
80	21.72	36.41	4.00	5.5	39.8
90	19.46	36.31	3.65	7.7	9.8
100	17.58	36.20	3.45	4.6	-7.1
110	15.92	36.04	3.28	1.0	-14.8
120	14.71	35.89	3.22	0.1	-15.8
130	14.07	35.80	3.21	9.1	-22.7
140	NaN	NaN	NaN	11.7	-29.6

Table 44: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1021. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.00	36.08	4.62	NaN	NaN
10	26.01	36.08	4.63	8.1	150.7
20	25.99	36.08	4.63	4.4	143.8
30	25.96	36.09	4.63	1.4	132.7
40	25.74	36.22	4.64	-2.1	126.9
50	25.65	36.24	4.63	-3.4	121.1
60	25.37	36.31	4.64	-8.0	113.6
70	25.26	36.35	4.60	-7.9	105.0
80	25.15	36.36	4.62	-2.4	92.1
90	23.72	36.33	4.32	9.0	78.2
100	23.06	36.33	4.17	17.9	50.3
110	19.03	36.27	3.77	20.2	30.9
120	17.29	36.19	3.42	18.8	14.8
130	15.80	36.04	3.30	14.6	6.1
140	14.41	35.85	3.22	6.5	1.2
150	12.56	35.59	3.17	-0.8	-3.0
160	11.23	35.40	3.04	-2.3	-7.0
170	10.44	35.30	2.98	-1.9	-10.1
180	9.70	35.19	2.96	1.3	-15.1
190	9.02	35.08	2.88	4.2	-16.5
200	8.84	35.06	2.84	5.2	-19.1
210	8.83	35.06	2.83	6.3	-21.7
220	8.72	35.04	2.83	8.5	-19.5
230	8.64	35.03	2.83	6.4	-21.6
240	8.63	35.03	2.82	8.7	-20.7
250	NaN	NaN	NaN	9.7	-18.2
260	NaN	NaN	NaN	9.1	-18.3

Table 45: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1021. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.91	36.02	4.53	NaN	NaN
10	26.91	36.02	4.55	5.0	185.8
20	26.92	36.02	4.56	-0.2	177.6
30	26.92	36.02	4.56	-0.8	172.5
40	26.93	36.02	4.56	-0.1	168.3
50	26.89	36.02	4.56	-0.7	163.6
60	26.19	36.08	4.59	-3.2	152.9
70	25.86	36.16	4.56	-3.8	146.6
80	25.79	36.28	4.49	-3.2	143.4
90	25.79	36.51	4.02	-3.7	138.0
100	24.76	36.38	4.24	-4.2	130.8
110	24.20	36.42	4.33	-2.7	124.4
120	22.37	36.53	4.04	-2.2	110.4
130	20.39	36.37	3.82	-0.8	94.7
140	19.05	36.33	3.60	2.1	81.8
150	18.25	36.28	3.50	3.6	68.4
160	16.69	36.13	3.35	3.7	60.3
170	15.69	36.02	3.29	1.2	50.9
180	14.71	35.89	3.19	2.2	43.0
190	14.43	35.86	3.16	2.5	36.9
200	13.57	35.73	3.14	2.3	34.7
210	12.66	35.60	3.08	2.1	30.9
220	12.04	35.52	3.05	0.7	26.5
230	11.79	35.48	3.02	-1.1	20.3
240	10.96	35.36	2.99	-2.2	20.5
250	10.13	35.24	2.95	0.3	17.7
260	9.34	35.14	2.91	2.1	18.3
270	9.11	35.11	2.89	2.7	15.1
280	8.73	35.07	2.90	1.8	14.1
290	8.44	35.03	2.90	2.1	14.0
300	8.28	35.00	2.87	2.5	12.0
350	7.81	34.96	2.94	-3.5	2.1

Table 46: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1021. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.99	36.02	4.55	NaN	NaN
10	27.00	36.02	4.56	4.5	165.5
20	27.00	36.02	4.57	3.3	162.5
30	27.00	36.02	4.56	2.8	159.0
40	26.98	36.02	4.57	1.7	158.5
50	26.89	36.00	4.56	1.4	158.8
60	26.69	36.10	4.51	1.9	157.5
70	25.98	36.18	4.54	0.4	154.2
80	25.40	36.20	4.59	-0.8	148.1
90	25.34	36.22	4.61	-1.6	147.4
100	24.90	36.15	4.59	-2.8	149.9
110	24.46	36.35	4.52	-0.3	152.9
120	23.38	36.47	4.19	-0.8	154.6
130	22.39	36.60	3.95	-3.9	152.8
140	21.68	36.61	3.73	-8.3	149.1
150	21.57	36.80	3.57	-8.5	145.7
160	20.94	36.79	3.47	-9.1	143.4
170	19.91	36.58	3.55	-8.6	141.8
180	18.99	36.48	3.49	-4.8	135.6
190	18.43	36.46	3.35	-2.3	128.8
200	17.88	36.43	3.46	-1.7	123.5
210	17.38	36.35	3.58	-5.0	120.1
220	16.96	36.28	3.54	-10.1	116.2
230	16.63	36.23	3.51	-9.9	114.5
240	16.10	36.14	3.47	-8.7	113.2
250	15.54	36.05	3.41	-6.4	109.7
260	15.04	35.96	3.33	-3.0	107.5
270	14.66	35.90	3.21	-1.6	103.2
280	14.19	35.82	3.22	1.6	99.4
290	13.96	35.78	3.14	3.6	94.0
300	13.32	35.68	3.12	3.4	87.9
350	11.55	35.43	3.03	-1.1	56.2
400	8.31	35.00	2.86	-9.9	30.6
450	7.67	34.95	2.93	-8.5	31.4
500	6.85	34.91	3.15	-2.4	20.5

Table 47: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1021. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.84	36.00	4.54	NaN	NaN
10	26.84	36.00	4.57	-7.9	151.4
20	26.85	36.00	4.57	-7.4	151.1
30	26.85	36.01	4.58	-7.9	151.4
40	26.80	36.17	4.55	-10.5	154.8
50	26.65	36.24	4.54	-11.5	158.2
60	26.57	36.27	4.55	-10.6	160.0
70	26.53	36.30	4.53	-8.4	162.3
80	26.49	36.33	4.53	-8.5	162.4
90	26.39	36.36	4.50	-10.6	160.1
100	25.91	36.56	4.06	-12.5	156.5
110	25.36	36.66	3.92	-10.2	152.8
120	25.05	36.75	4.07	-4.1	149.7
130	23.48	36.72	3.81	-1.0	146.6
140	22.72	36.78	3.72	-0.7	143.8
150	22.15	36.83	3.54	-1.9	140.2
160	20.90	36.71	3.61	-1.9	135.8
170	20.06	36.70	3.70	-3.1	130.9
180	19.52	36.67	3.86	-7.0	128.1
190	19.03	36.62	3.99	-10.5	125.3
200	18.43	36.52	3.80	-13.1	123.5
210	18.27	36.49	3.68	-16.3	122.0
220	18.11	36.47	3.71	-18.3	121.8
230	17.77	36.42	3.60	-17.8	122.3
240	17.67	36.41	3.70	-17.0	120.5
250	17.42	36.36	3.60	-16.8	118.6
260	17.14	36.31	3.57	-14.9	116.5
270	16.65	36.23	3.52	-11.5	113.9
280	16.23	36.16	3.47	-7.8	110.5
290	15.86	36.10	3.42	-5.4	109.2
300	15.24	35.99	3.34	-5.0	108.3
350	13.27	35.67	3.10	-3.4	91.4
400	11.89	35.49	3.06	-0.1	69.6
450	9.10	35.10	2.89	-2.3	41.9
500	7.62	34.94	2.91	1.7	35.0
550	7.14	34.91	3.04	0.6	26.4
600	6.42	34.90	3.30	0.1	18.0

Table 48: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1021. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.77	36.16	4.54	NaN	NaN
10	26.77	36.16	4.53	6.8	96.7
20	26.77	36.16	4.53	6.7	96.6
30	26.77	36.16	4.56	4.8	95.8
40	26.74	36.18	4.55	-0.6	94.9
50	26.72	36.19	4.53	-9.1	96.8
60	26.63	36.25	4.51	-14.9	98.6
70	26.51	36.29	4.49	-16.2	97.9
80	26.41	36.32	4.45	-16.8	101.4
90	26.15	36.46	4.25	-17.8	106.0
100	25.78	36.51	4.24	-15.2	110.1
110	25.58	36.60	4.17	-12.1	112.3
120	25.23	36.66	4.08	-10.1	113.1
130	23.85	36.89	4.23	-9.4	115.2
140	23.03	36.87	3.75	-8.7	115.3
150	22.53	36.86	3.67	-7.2	111.9
160	21.71	36.84	3.80	-9.8	108.9
170	21.33	36.82	3.49	-15.5	106.4
180	20.73	36.78	3.49	-17.3	103.9
190	20.51	36.76	3.87	-15.9	101.9
200	20.19	36.75	3.82	-11.7	101.3
210	19.94	36.71	4.03	-8.8	102.2
220	19.41	36.61	3.66	-9.7	101.8
230	19.11	36.59	3.45	-7.8	100.0
240	18.61	36.53	3.49	-6.4	95.4
250	18.29	36.51	3.69	-6.5	90.7
260	18.22	36.50	3.81	-5.5	90.1
270	17.93	36.46	3.89	-4.9	90.1
280	17.06	36.30	3.65	-3.6	90.8
290	16.35	36.19	3.59	-4.4	91.9
300	16.19	36.17	3.57	-5.4	92.1
350	15.34	36.03	3.54	-2.1	84.4
400	14.24	35.84	3.23	-5.1	76.3
450	13.02	35.62	3.05	-6.3	79.7
500	10.65	35.31	3.02	3.3	63.7
550	8.30	35.02	2.92	-3.5	58.8
600	7.28	34.93	3.02	-3.4	55.6
650	6.84	34.90	3.12	0.5	46.8
700	6.52	34.90	3.25	-0.7	38.9

Table 49: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1021. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.67	36.16	4.52	NaN	NaN
10	26.67	36.16	4.53	-1.4	82.3
20	26.67	36.17	4.54	-0.6	82.7
30	26.70	36.18	4.52	-2.0	80.4
40	26.71	36.21	4.50	-6.5	75.5
50	26.66	36.23	4.48	-8.8	75.4
60	26.60	36.25	4.46	-8.6	76.8
70	26.56	36.27	4.46	-5.1	77.9
80	26.43	36.31	4.45	-5.3	78.6
90	26.28	36.36	4.36	-7.6	79.4
100	25.84	36.55	3.98	-10.8	83.3
110	25.52	36.62	3.88	-12.7	87.7
120	24.44	36.77	3.82	-13.2	89.8
130	23.28	36.85	3.69	-12.3	90.1
140	22.80	36.86	3.95	-9.0	90.2
150	22.45	36.87	3.77	-6.9	89.5
160	21.98	36.86	3.83	-6.6	89.6
170	21.71	36.87	4.18	-6.4	90.0
180	21.08	36.82	4.21	-7.6	90.4
190	20.68	36.78	4.07	-8.5	90.3
200	20.29	36.75	4.10	-7.7	89.7
210	19.80	36.71	4.21	-8.3	89.4
220	19.39	36.67	4.11	-10.0	88.8
230	19.17	36.65	4.00	-11.9	88.1
240	19.07	36.64	4.23	-13.2	87.6
250	18.67	36.55	3.75	-13.1	87.7
260	18.61	36.57	3.93	-12.2	87.6
270	18.35	36.50	3.64	-11.6	87.3
280	18.22	36.50	3.85	-10.9	86.2
290	18.07	36.48	3.70	-8.9	85.3
300	17.78	36.43	3.83	-7.7	84.6
350	16.24	36.16	3.52	-16.3	75.4
400	15.48	36.03	3.36	-13.9	71.0
450	14.43	35.86	3.27	-7.5	60.5
500	13.12	35.65	3.13	-9.4	51.9
550	11.35	35.37	2.92	-1.2	39.5
600	8.43	35.04	3.01	2.6	14.6
650	7.09	34.91	3.05	8.2	2.1

Table 50: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1021. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.72	36.04	4.57	NaN	NaN
10	26.73	36.04	4.57	-8.5	43.0
20	26.49	36.13	4.58	-9.3	43.9
30	26.26	36.24	4.57	-13.8	46.6
40	26.19	36.30	4.53	-22.0	51.4
50	26.20	36.34	4.49	-22.4	52.6
60	26.18	36.36	4.45	-21.4	53.9
70	26.12	36.40	4.36	-21.3	54.9
80	26.03	36.46	4.26	-21.2	57.6
90	25.62	36.54	4.15	-19.1	62.1
100	25.29	36.67	4.03	-15.4	67.0
110	24.96	36.78	4.02	-14.2	69.7
120	24.62	36.84	3.87	-19.1	70.1
130	23.62	36.82	3.80	-23.1	70.9
140	22.80	36.86	3.65	-24.5	70.9
150	22.24	36.87	3.48	-22.7	67.5
160	21.70	36.84	3.43	-20.2	65.7
170	21.36	36.82	3.66	-18.0	65.7
180	21.11	36.80	3.53	-14.3	66.2
190	20.73	36.77	3.59	-10.8	68.4
200	20.33	36.73	3.47	-8.6	69.9
210	19.96	36.69	3.45	-6.5	68.2
220	19.93	36.69	3.51	-5.9	66.7
230	19.47	36.67	3.81	-8.2	66.0
240	19.27	36.65	4.16	-8.2	65.5
250	18.93	36.62	4.12	-6.3	65.7
260	18.77	36.60	4.15	-3.6	66.1
270	18.66	36.58	4.13	-1.8	65.8
280	18.58	36.57	4.10	-0.1	63.6
290	18.29	36.54	4.09	2.7	61.6
300	18.06	36.51	4.19	5.1	60.9
350	17.55	36.42	4.11	-1.3	54.4
400	16.41	36.20	3.61	-6.6	45.5
450	15.55	36.08	3.77	-5.1	32.4
500	13.95	35.83	3.58	-6.6	24.3
550	12.72	35.65	3.42	-3.0	11.6
600	12.11	35.56	3.35	7.0	7.5

Table 51: Same as Table 17 for the cruise ID and the station number indicated.

Cruise ID: ws1021. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.38	36.23	4.54	NaN	NaN
10	26.39	36.23	4.56	-26.4	57.8
20	26.42	36.24	4.55	-26.4	57.8
30	26.43	36.26	4.55	-24.4	53.6
40	26.44	36.27	4.53	-25.0	53.5
50	26.44	36.27	4.53	-26.8	53.7
60	26.34	36.36	4.36	-27.9	56.9
70	25.97	36.50	4.06	-23.9	59.2
80	25.52	36.58	3.96	-18.1	57.2
90	25.44	36.58	3.94	-15.7	52.6
100	25.06	36.64	3.88	-15.3	50.6
110	24.48	36.75	3.70	-11.6	50.5
120	24.17	36.77	3.65	-9.2	49.2
130	23.89	36.83	3.59	-10.7	46.0
140	23.35	36.80	3.64	-12.2	42.3
150	22.77	36.84	3.57	-13.9	39.5
160	22.42	36.87	3.50	-13.1	40.0
170	21.40	36.82	3.48	-11.6	38.7
180	20.62	36.76	3.78	-10.8	37.3
190	20.20	36.73	3.83	-9.8	36.2
200	20.04	36.72	3.92	-8.1	36.5
210	19.88	36.70	3.99	-5.9	39.6
220	19.84	36.70	3.89	-6.1	40.7
230	19.64	36.68	3.98	-10.4	39.2
240	19.40	36.65	3.99	-12.8	39.8
250	19.36	36.64	3.85	-11.5	39.8
260	19.18	36.62	3.90	-7.5	38.7
270	18.84	36.60	4.09	-3.2	36.5
280	18.73	36.59	4.13	-2.2	34.7
290	18.45	36.56	4.14	0.1	33.2
300	18.35	36.55	4.13	1.9	32.2
350	17.74	36.45	4.02	-2.6	35.7
400	17.26	36.36	3.94	-9.2	34.8
450	16.87	36.28	3.71	-6.7	35.9

Table 52: Same as Table 17 for the cruise ID and the station number indicated.


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