NOAA Data Report, OAR AOML - 57

doi:10.7289/V5J38QKF

Oceanographic data collected in the Straits of Florida at 27°N during the year 2015, including the estimated Florida Current transport

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noaa National Oceanic and Atmospheric Administration / Office of Oceanic and Atmospheric Research

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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 2015 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 the R/V Walton Smith (i.e. full-water-column conductivity-temperature-depth, CTD, and lowered acoustic Doppler current profiler, LADCP, profiles). The report also includes shipboard (i.e. hull-mounted) ADCP data collected on the R/V Walton Smith, and 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.

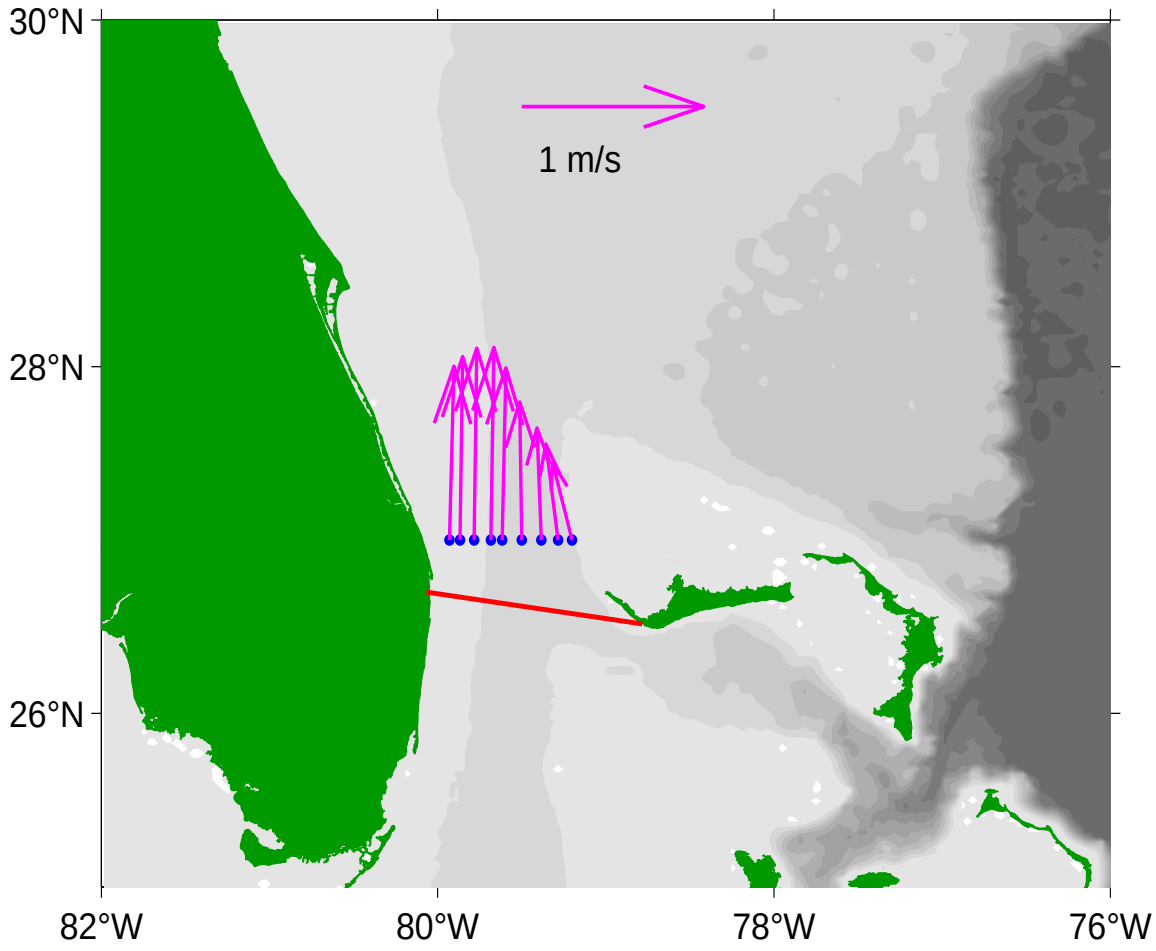

Figure 1: Map of the Straits of Florida study area. Blue dots indicate the locations of dropsonde, XBT and CTD/LADCP stations. Red line shows the approximate location of the telephone cable used for the voltage measurements. Magenta vectors illustrate the time mean vertically-averaged horizontal velocities 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 (2010).

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).

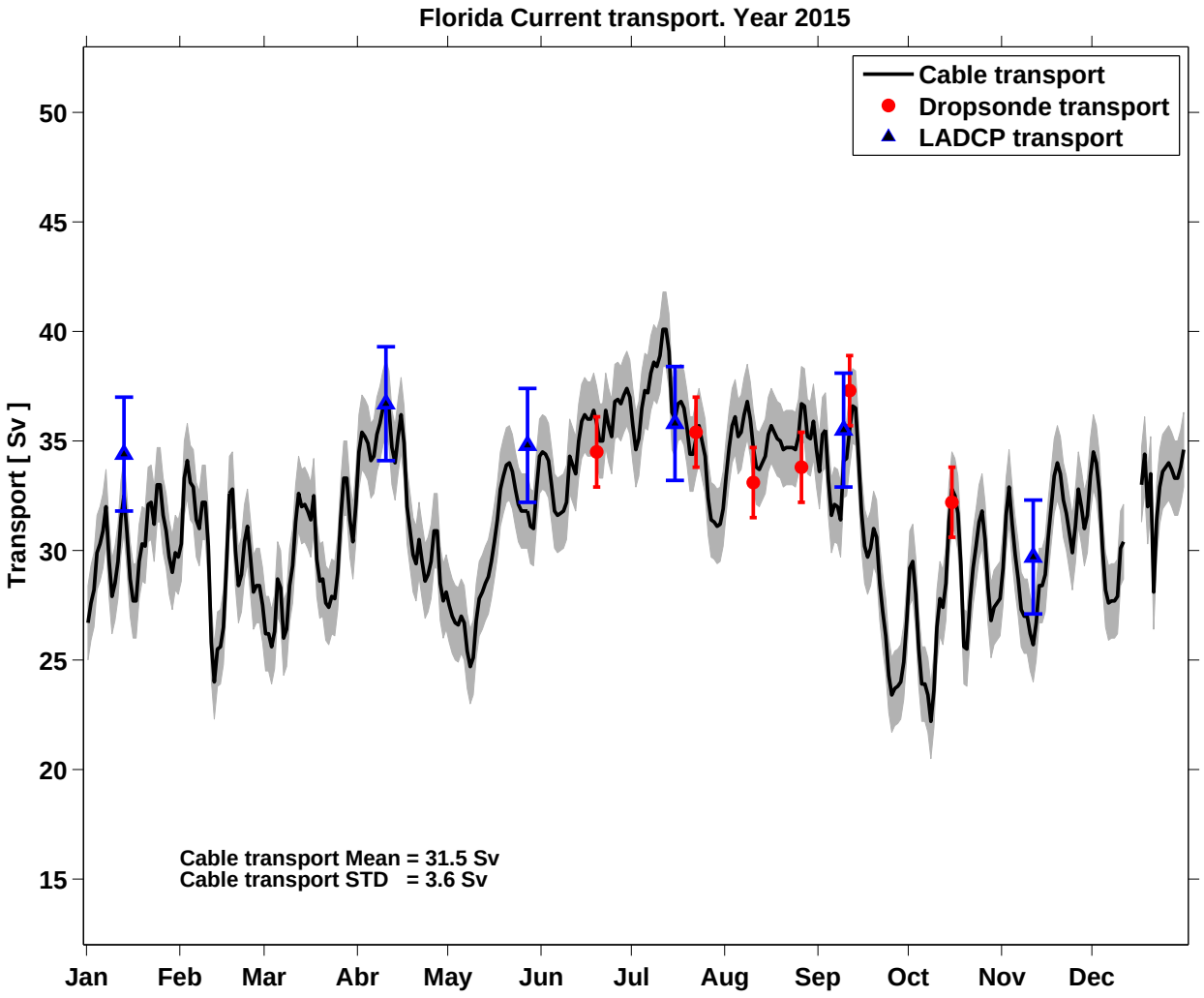

Figure 2: Observed Florida Current volume transports measured by cable voltage (black line), dropsonde sections (red dots) and LADCP sections (blue triangles). For each measurement system the estimated error bar is also shown. The annual mean and standard deviation (STD) from the cable voltage estimates 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	2015	3	24	16	NaN	NaN
2	2015	6	19	18	35.7	34.5
3	2015	7	22	15	36.1	35.4
4	2015	8	10	16	36.0	33.1
5	2015	8	26	16	36.4	33.8
6	2015	9	11	15	38.1	37.3
7	2015	10	15	16	30.3	32.2

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.

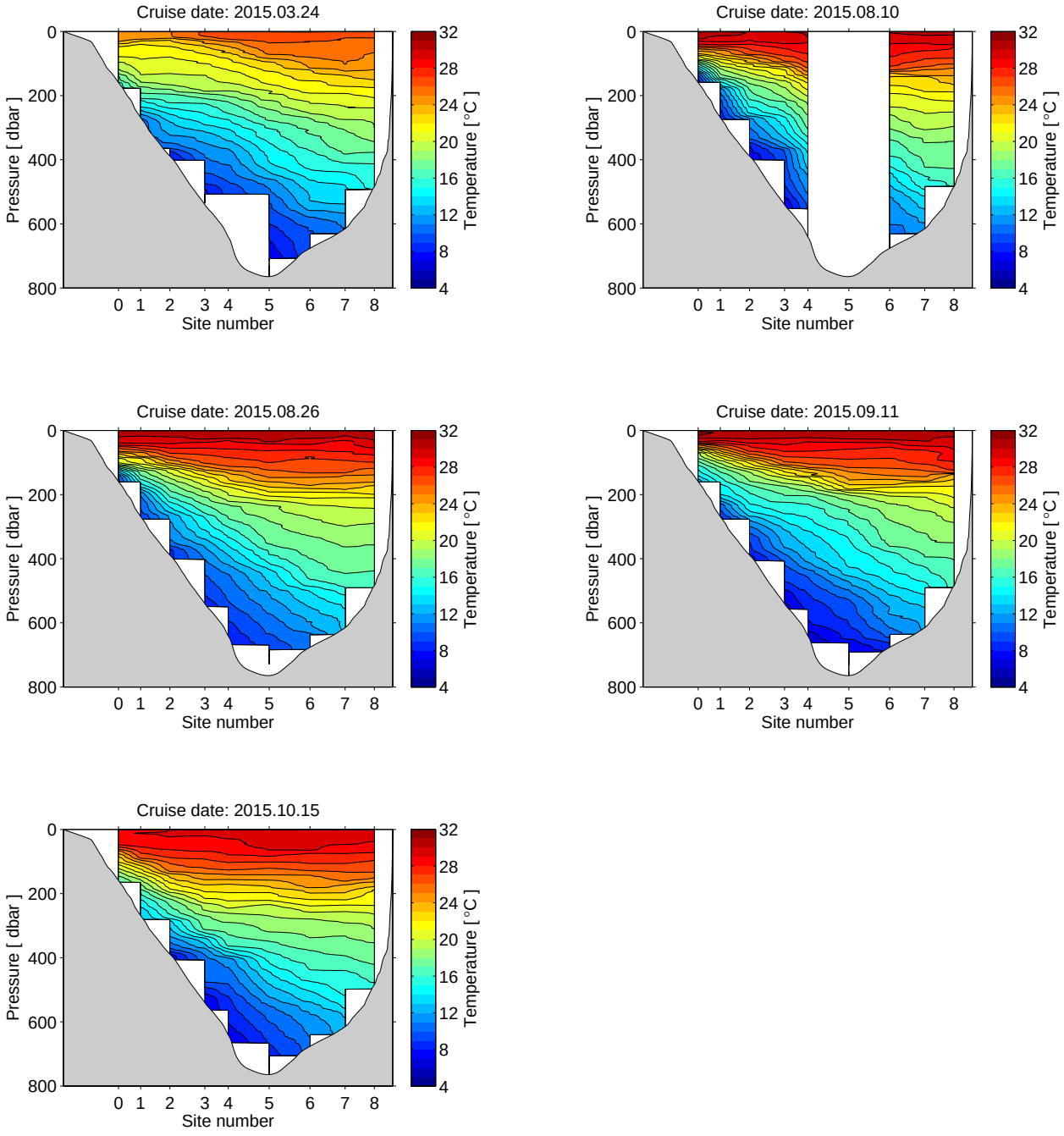

Figure 3: Temperature sections measured with XBT on the indicated dates. Date format is year, month, and day.

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 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
ws1501	2015	1	13	6	35.2	34.4
fc1504	2015	4	10	6	36.0	36.7
fc1505	2015	5	27	4	34.5	34.8
fc1507	2015	7	15	3	34.6	35.8
fc1509	2015	9	9	6	34.4	35.5
fc1511	2015	11	11	7	30.8	29.7

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.

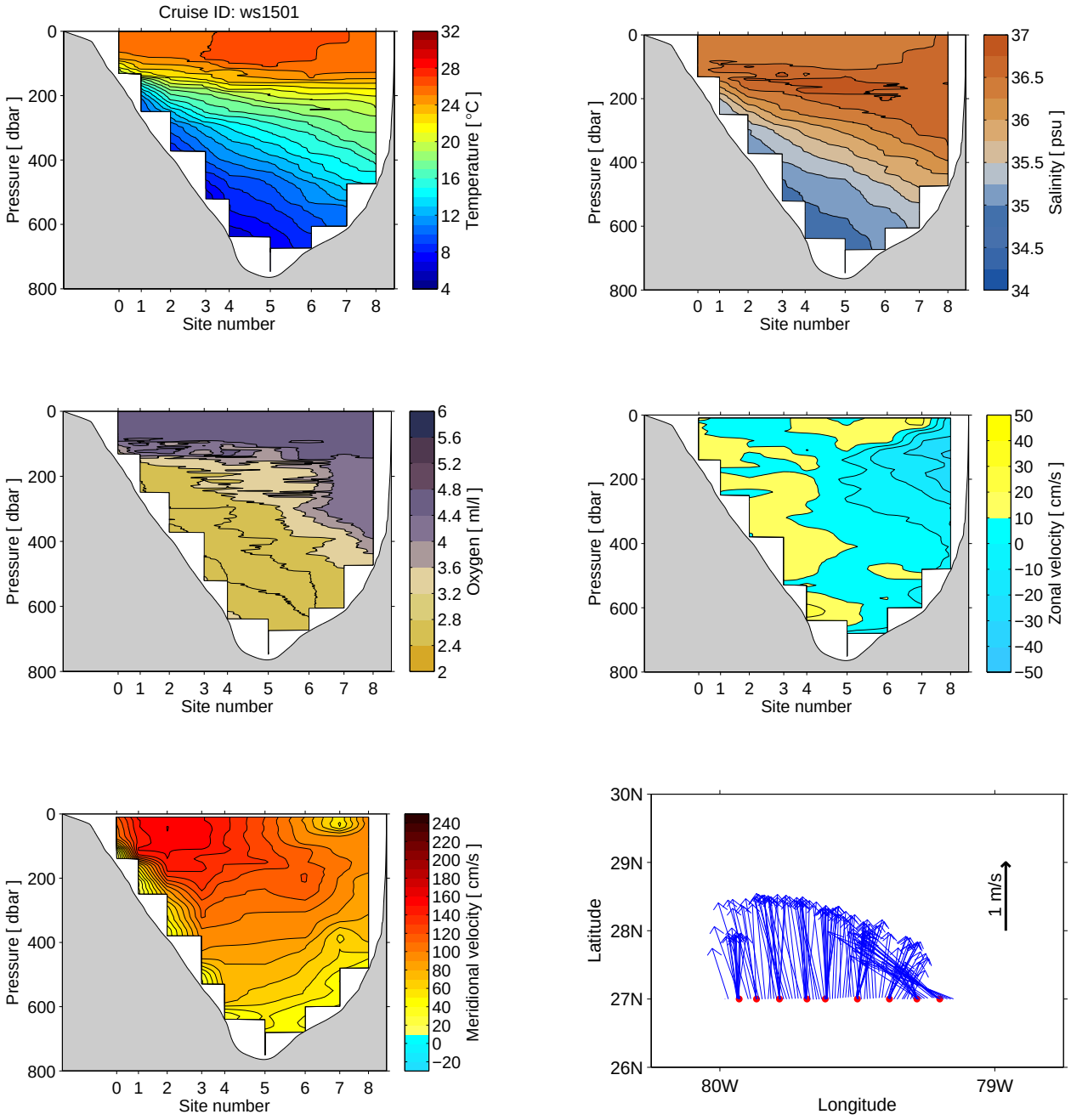

Figure 4: Sections of temperature, salinity, dissolved oxygen (all from CTD), velocity profile (LADCP) and vector velocity map at 50m (SADCP) collected by research vessel. Cruise ID noted above the temperature panel; cruise date are shown in Table 3.

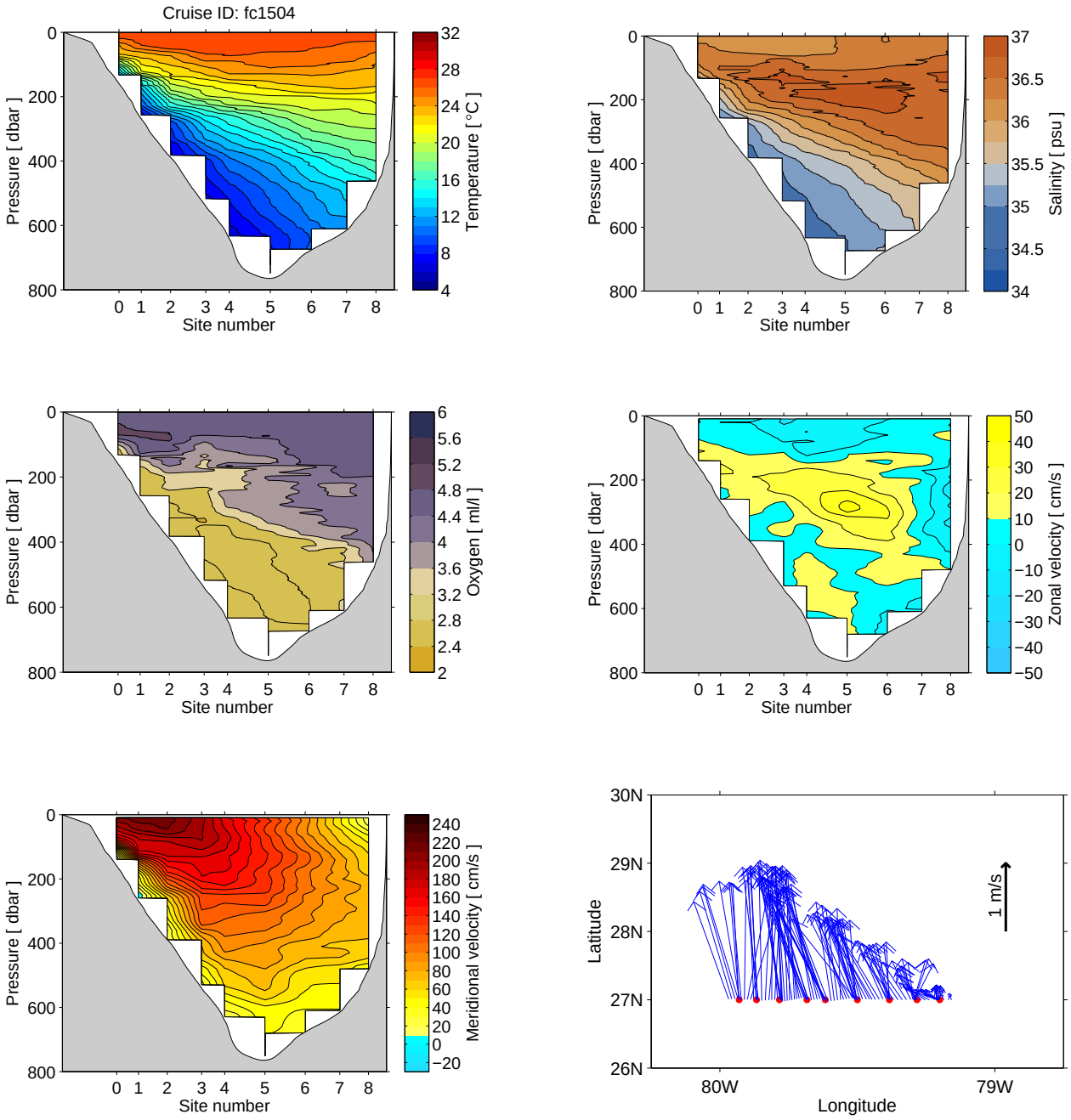

Figure 5: Same as Figure 4 for the data collected on the cruise ID indicated above the temperature panel.

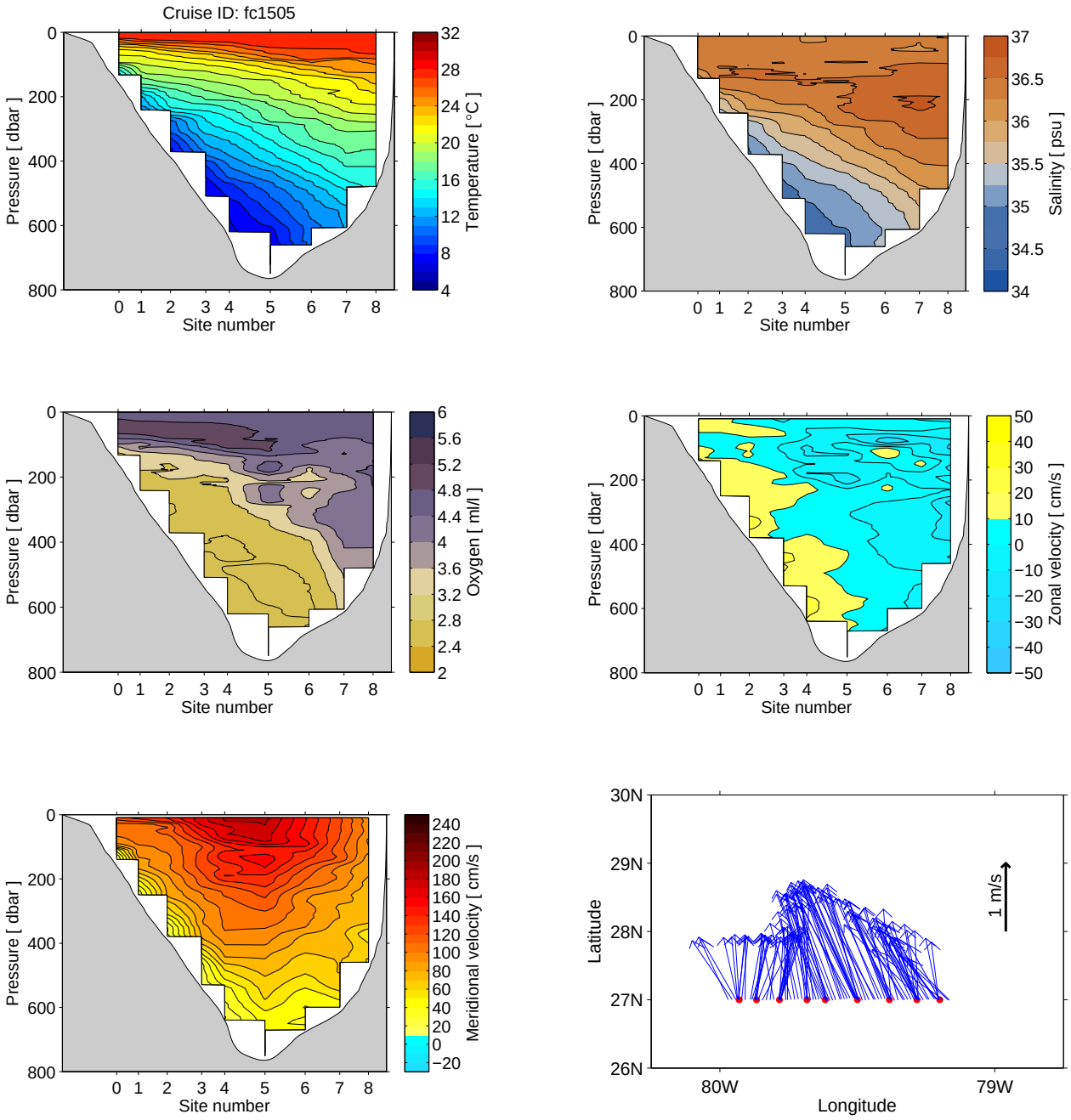

Figure 6: Same as Figure 4 for the data collected on the cruise ID indicated above the temperature panel.

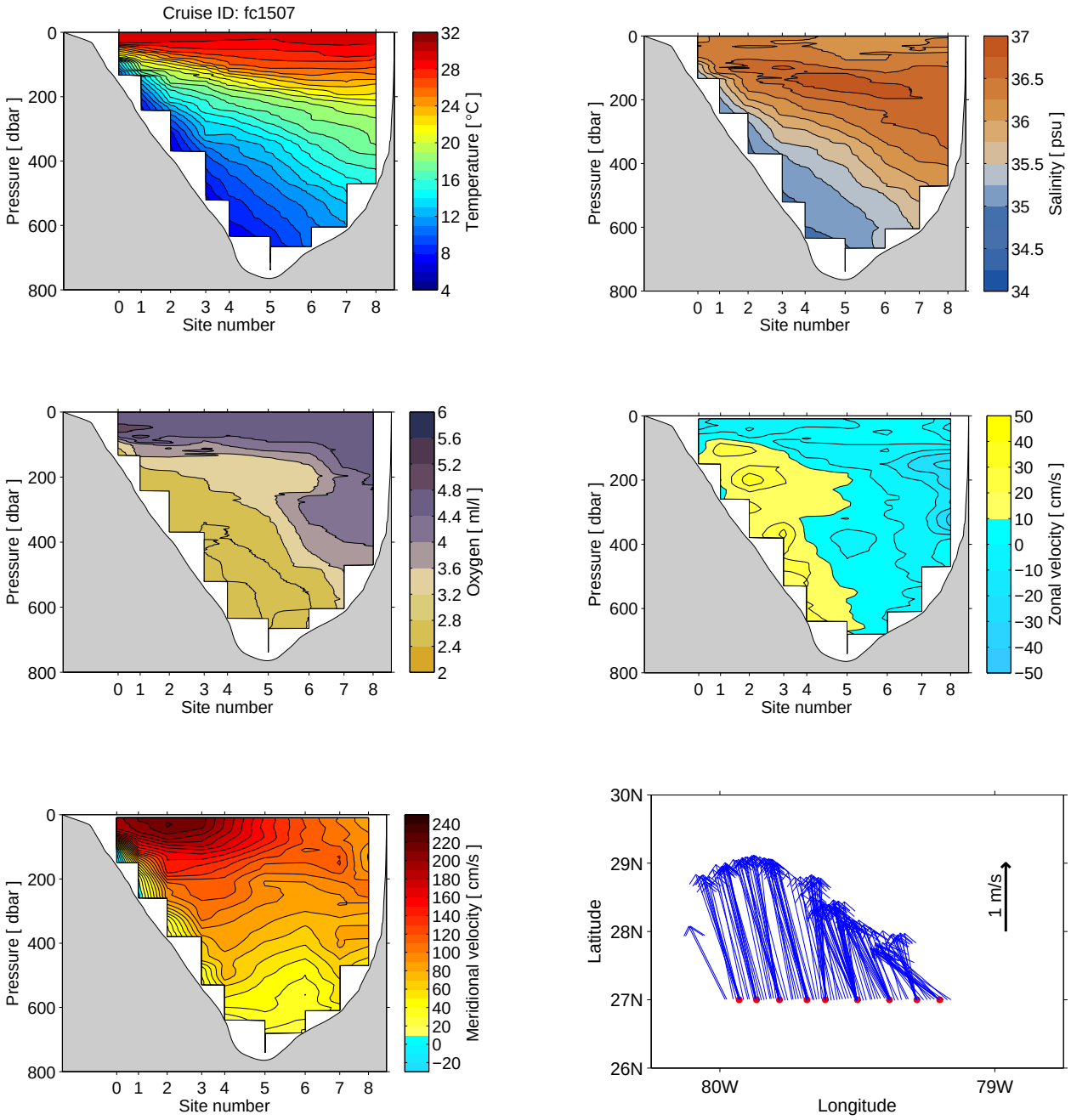

Figure 7: Same as Figure 4 for the data collected on the cruise ID indicated above the temperature panel.

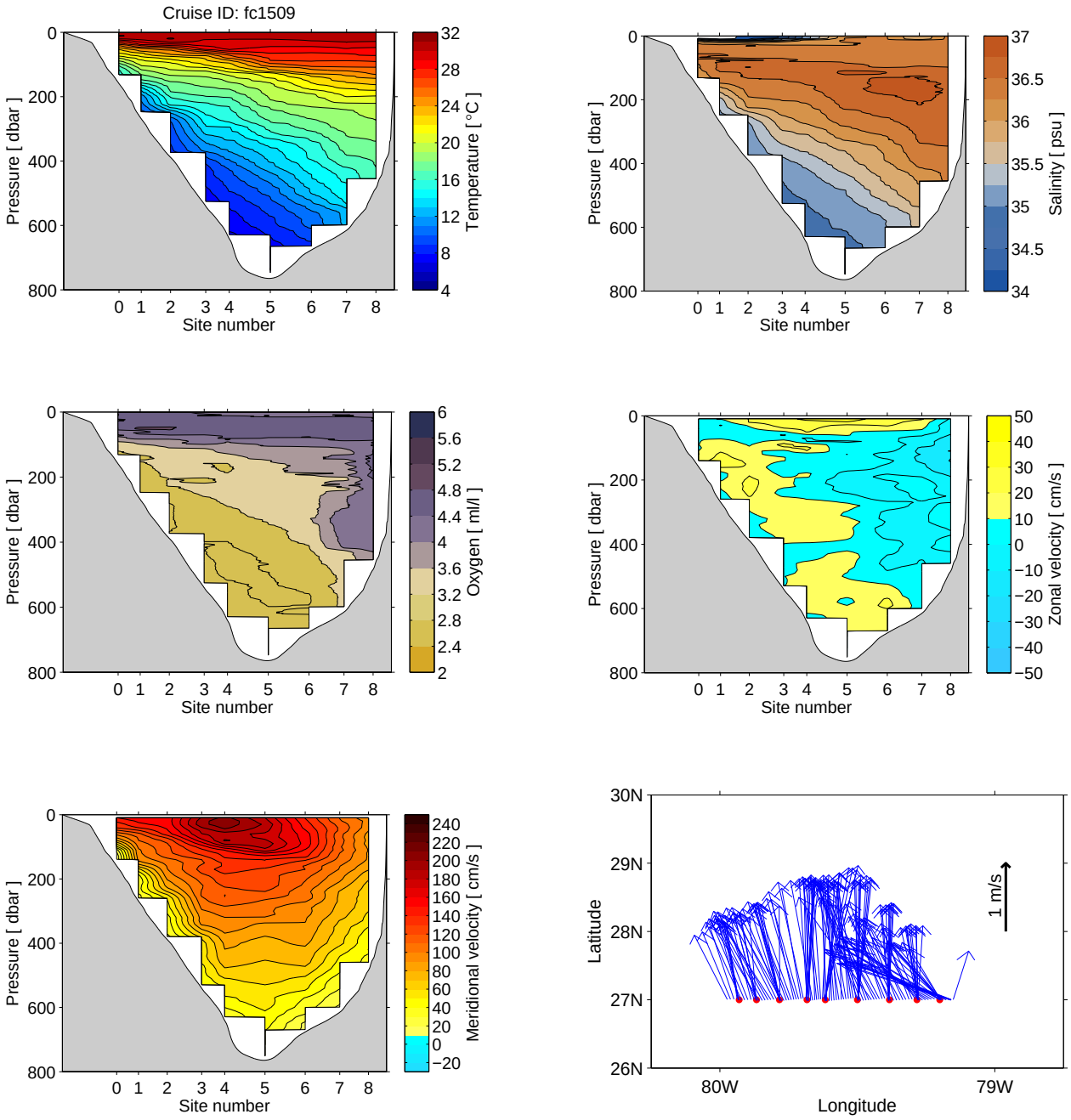

Figure 8: Same as Figure 4 for the data collected on the cruise ID indicated above the temperature panel.

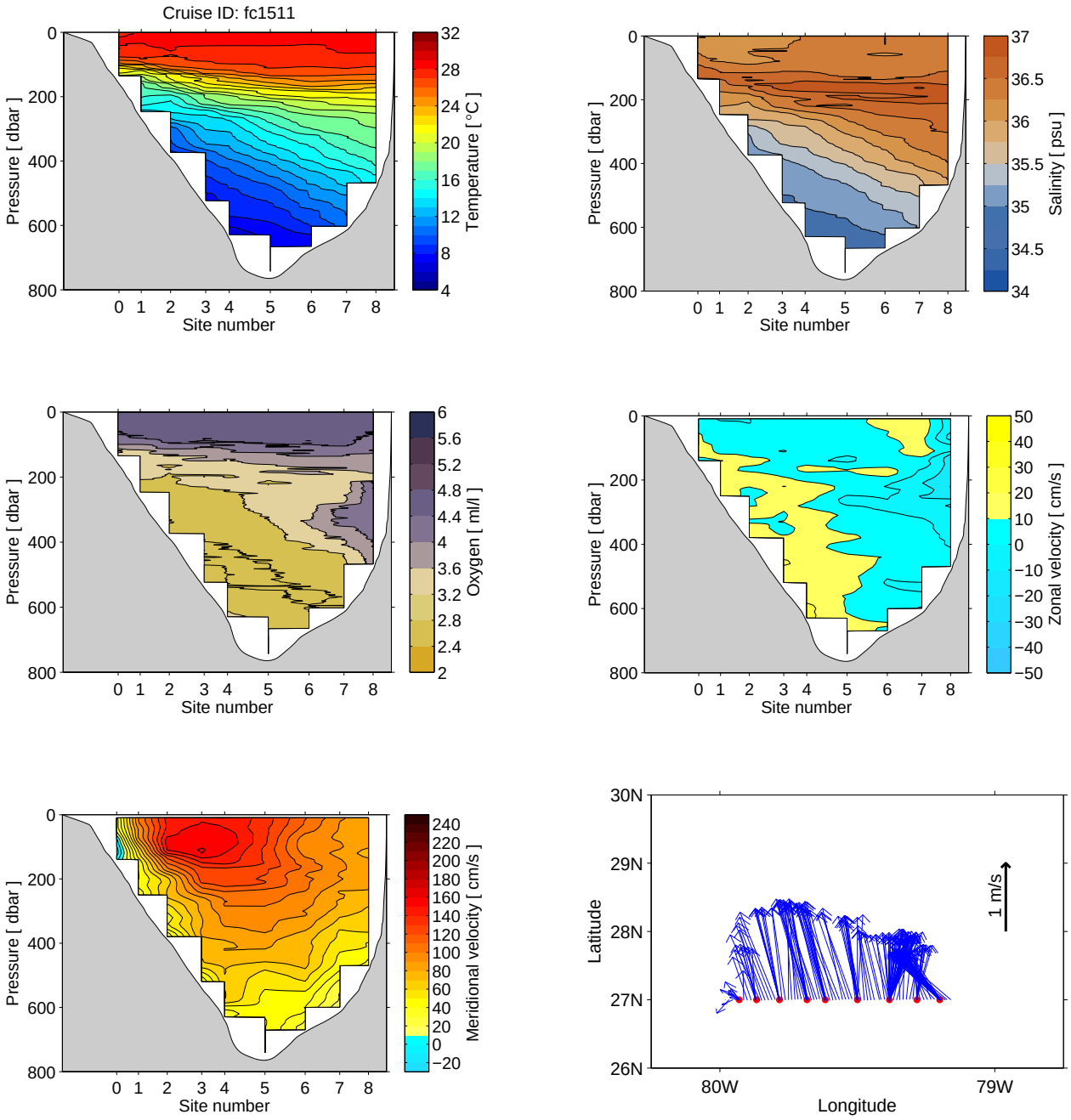

Figure 9: Same as Figure 4 for the data collected on the cruise ID indicated above the temperature panel.

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 did not record data during December 12-16 due to a power failure that occurred for unknown reasons. As a result, during those five days no estimates for the Florida Current volume transport are available. Data are available for all other days throughout the year.

5.2 Dropsonde - XBT cruises

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

The dropsonde floats used during the March 24, 2015 cruise both failed to record data due to electronics issues. All other dropsonde observations were successful.

During the cruises in June 19, 2015 and July 22, 2015, the XBT computer system suffered total failure, so no XBT data were collected. During the August 10, 2015 cruise, the XBT computer failed to record during one station only.

5.3 CTD - LADCP - SADCP cruises

Only one problem arose during the year involving the CTD/LADCP/SADCP systems.

On the fc1505 cruise (see Table 3), the downward-looking Teledyne RD Instruments 300 kHz Workhorse (wh300) LADCP failed during Station 8 (see Table 1). As a result, the ocean velocity profile produced for this station only incorporated LADCP data from the upward facing wh300 LADCP; combination with the SADCP data (standardly done for all stations) still yielded a profile of sufficient quality suitable for scientific analysis.

For detailed problems/issues with CTD sensors, water samples, and the calibration of the CTD data, see Hooper and Baringer (2015).

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/0140278).

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

The authors wish to sincerely thank the many people who have helped to collect the data presented in this report. Special thanks go to the engineers who have maintained the cable recording system (Ulises Rivero, Pedro Pena, and Tom Sevilla). Thanks also to Batelco for allowing the recording system to be housed in their facility on Grand Bahama Island. Great appreciation also to the scientists, engineers and technicians who participated in the small charter boat dropsonde/XBT cruises (Pedro Pena, Grant Rawson, Tom Sevilla, and Andy Stefanick) and on the R/V Walton Smith CTD/LADCP/SADCP cruises (Shaun Dolk, Ricardo Domingues, Shenfu Dong, Jay Hooper, Ciro Liutti, Pedro Pena, Grant Rawson, Robert Roddy, Allyson Rugg, Erik Valdes, and Vinny Webber). And many thanks to the fine captains and crews of the vessels used to collect this data. Finally, the authors also want to express their thanks to the technical support staff at AOML who have aided in the processing of these data including George Berberian, Yeun-Ho Daneshzadeh and Jay Hooper. The collection and processing of the data in this report was supported by the NOAA Climate Prediction Office - Climate Observations Division and the NOAA Atlantic Oceanographic and Meteorological Laboratory.

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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	26.7	30.3	26.2	34.5	27.5	34.5	35.7	33.4	33.6	29.2	29.2	34.5
2	27.6	33.3	26.2	35.4	27.0	34.4	34.6	34.7	35.3	29.5	31.6	34.0
3	28.2	34.1	25.6	35.2	26.7	34.1	35.1	35.7	35.5	28.0	32.9	32.7
4	29.9	33.1	26.3	34.9	26.6	33.0	36.5	36.1	33.2	25.5	31.2	30.1
5	30.3	32.9	28.7	34.1	27.0	31.8	37.3	35.2	31.6	23.9	29.8	28.2
6	30.9	31.4	28.3	34.3	26.7	31.6	37.2	35.4	32.1	23.9	28.7	27.6
7	32.0	31.0	26.0	35.3	25.4	31.7	38.1	36.2	32.0	23.4	27.3	27.7
8	29.6	32.2	26.4	35.8	24.7	31.8	38.6	36.8	31.4	22.2	27.0	27.7
9	27.9	32.2	28.4	36.5	25.1	32.2	38.4	36.0	34.1	23.6	27.0	27.9
10	28.5	30.2	29.3	37.0	26.8	34.3	38.9	34.7	34.2	26.5	26.2	30.1
11	29.5	25.8	31.3	36.5	27.8	33.9	40.1	33.8	35.5	27.8	25.7	30.4
12	31.5	24.0	32.6	34.7	28.1	33.5	40.1	33.7	36.6	27.4	26.7	NaN
13	32.5	25.5	32.0	34.0	28.5	35.0	39.1	34.0	36.5	28.5	28.4	NaN
14	30.8	25.6	32.1	35.2	28.8	35.9	36.3	34.3	34.2	31.3	28.4	NaN
15	28.7	26.5	31.8	36.2	29.5	36.2	36.0	35.3	31.7	32.8	28.9	NaN
16	27.7	29.3	31.4	34.9	30.4	36.0	36.7	35.7	30.2	32.5	30.6	NaN
17	27.7	32.6	32.5	32.0	31.4	36.0	36.8	35.4	29.7	31.7	32.0	33.0
18	29.5	32.8	29.6	30.9	32.8	36.4	36.5	35.1	30.1	29.3	33.4	34.4
19	30.3	30.0	28.6	29.8	33.4	35.8	35.6	35.0	31.0	25.6	34.0	32.0
20	30.2	28.4	28.7	29.4	33.9	35.0	34.4	34.6	30.6	25.5	33.5	33.5
21	32.1	28.9	27.6	30.5	34.0	35.0	34.4	34.7	28.5	27.7	32.3	28.1
22	32.2	30.4	27.4	29.5	33.6	36.4	35.1	34.7	27.2	29.2	31.7	31.4
23	31.2	31.1	27.9	28.6	32.8	35.7	35.7	34.7	26.1	30.2	30.8	32.9
24	33.0	29.7	27.8	28.9	32.1	35.2	35.0	34.6	24.3	31.3	29.9	33.6
25	33.0	28.1	29.0	29.5	31.8	36.8	34.3	35.2	23.4	31.8	31.1	33.8
26	31.6	28.4	31.5	30.9	31.8	36.9	32.4	36.7	23.7	30.5	32.8	34.0
27	30.9	28.4	33.3	30.9	31.8	36.7	31.4	36.6	23.8	28.3	32.0	33.7
28	29.7	27.5	33.3	28.5	31.1	37.1	31.3	35.2	24.0	26.8	31.0	33.3
29	29.0	–	31.4	27.7	31.0	37.4	31.1	35.1	24.9	27.4	31.6	33.3
30	29.9	–	30.4	28.1	32.8	37.0	31.2	35.9	26.8	27.6	33.4	33.8
31	29.7	–	32.1	–	34.3	–	31.9	34.6	–	27.8	–	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: 2015.06.19								
0	20:56: 2	-79.9307	27.0012	21: 3:40	-79.9307	27.0057	1.50	105.87
1	20:26:20	-79.8668	27.0016	20:39:31	-79.8664	27.0100	4.51	116.70
2	19:50:47	-79.7837	27.0019	20: 9:52	-79.7837	27.0137	0.90	113.90
3	18:59:46	-79.6834	27.0009	19:27:10	-79.6835	27.0167	-0.47	105.56
4	18: 1:25	-79.6166	27.0020	18:34:16	-79.6174	27.0183	-5.57	89.97
5	16:54:29	-79.5001	27.0017	17:33:24	-79.5014	27.0190	-5.10	82.05
6	15:58: 5	-79.3836	27.0010	16:31:36	-79.3860	27.0138	-11.68	70.36
7	15: 3:33	-79.2832	27.0007	15:35:16	-79.2864	27.0102	-16.62	55.73
8	14: 5: 1	-79.1998	27.0000	14:28:58	-79.2032	27.0073	-23.49	56.33
Cruise date: 2015.07.22								
0	12:11:23	-79.9299	27.0073	12:19: 7	-79.9299	27.0112	-0.33	92.73
1	12:39:59	-79.8664	27.0005	12:53:24	-79.8662	27.0078	1.10	100.16
2	13:16: 6	-79.7829	27.0010	13:36: 9	-79.7827	27.0124	0.75	103.73
3	13:59: 9	-79.6832	27.0006	14:28:50	-79.6829	27.0185	1.32	110.89
4	14:46: 8	-79.6165	27.0005	15:24: 0	-79.6160	27.0231	2.00	109.63
5	15:47:18	-79.5001	27.0016	16:25:38	-79.4999	27.0190	0.45	85.43
6	16:52:30	-79.3833	27.0002	17:27:14	-79.3839	27.0130	-2.82	67.79
7	17:48:53	-79.2832	27.0001	18:20:33	-79.2840	27.0096	-4.92	55.69
8	18:41:52	-79.1999	27.0001	19: 7: 6	-79.2016	27.0067	-12.05	48.88
Cruise date: 2015.08.10								
0	12:32:58	-79.9298	27.0020	12:40:34	-79.9294	27.0078	7.89	138.80
1	12:57:52	-79.8666	27.0004	13:11:11	-79.8660	27.0088	7.12	115.34
2	13:28:55	-79.7832	27.0004	13:49:17	-79.7824	27.0128	6.24	111.59
3	14:28:41	-79.6835	27.0008	14:55:28	-79.6829	27.0166	2.73	108.11
4	15:14:17	-79.6161	27.0017	15:47:25	-79.6155	27.0194	2.59	96.85
5	16:12: 3	-79.5000	27.0010	16:51:40	-79.4996	27.0191	1.19	83.36
6	17:21:53	-79.3831	27.0003	17:56:21	-79.3827	27.0132	1.24	68.69
7	19:26:53	-79.2831	27.0001	19:57:33	-79.2837	27.0094	-3.12	56.01
8	18:30:14	-79.1996	27.0004	18:55: 3	-79.2009	27.0055	-9.09	38.70

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.

Sta	Deployed			Surfaced			Mean Velocities	
	Time (GMT)	Lon	Lat	Time (GMT)	Lon	Lat	U cm/s	V cm/s
Cruise date: 2015.08.26								
0	12:26:54	-79.9299	27.0007	12:34:28	-79.9297	27.0069	3.29	152.96
1	12:57:11	-79.8661	27.0017	13:10:30	-79.8657	27.0108	3.97	125.03
2	13:39:21	-79.7832	27.0007	13:58:50	-79.7831	27.0135	0.48	120.24
3	14:22:49	-79.6833	27.0006	14:49:59	-79.6832	27.0162	0.57	104.72
4	15:10:41	-79.6167	27.0008	15:43:47	-79.6168	27.0166	-0.91	87.30
5	16:15:33	-79.4995	27.0023	16:53:31	-79.5005	27.0190	-4.62	80.86
6	17:21:31	-79.3827	27.0019	17:55:39	-79.3838	27.0149	-5.82	70.01
7	18:26: 0	-79.2833	27.0001	18:56:42	-79.2848	27.0111	-8.39	66.12
8	19:17: 9	-79.2000	27.0003	19:41:35	-79.2017	27.0057	-11.98	40.18
Cruise date: 2015.09.11								
0	12: 4:18	-79.9294	27.0015	12:11:57	-79.9294	27.0048	0.55	76.28
1	12:31: 4	-79.8663	27.0010	12:44: 6	-79.8663	27.0073	-0.46	88.26
2	13: 7: 6	-79.7831	27.0006	13:26:35	-79.7827	27.0116	3.57	102.72
3	14: 2:54	-79.6832	27.0006	14:31:54	-79.6817	27.0186	7.92	113.46
4	14:54:25	-79.6165	27.0004	15:29: 0	-79.6147	27.0212	8.45	110.49
5	15:54:40	-79.5001	27.0021	16:27:33	-79.4984	27.0200	8.15	100.15
6	16:50:43	-79.3830	27.0007	17:26:22	-79.3829	27.0153	-0.05	74.96
7	17:53:11	-79.2831	27.0004	18:23:25	-79.2840	27.0113	-5.51	66.60
8	19: 4:30	-79.2000	27.0004	19:29:50	-79.2013	27.0070	-8.97	48.28
Cruise date: 2015.10.15								
0	12:43:36	-79.9300	27.0006	12:51:32	-79.9298	27.0044	5.08	87.01
1	13:14:36	-79.8667	27.0006	13:27:59	-79.8661	27.0063	6.48	79.37
2	13:52:23	-79.7834	27.0003	14:12:39	-79.7820	27.0096	11.20	84.34
3	14:37:55	-79.6833	27.0003	15: 5:31	-79.6816	27.0159	9.56	103.87
4	15:26:27	-79.6167	27.0008	15:59:31	-79.6148	27.0185	9.21	98.60
5	16:28:49	-79.5000	27.0003	17: 7:31	-79.4985	27.0167	6.57	77.78
6	17:35:58	-79.3833	27.0000	18: 9:45	-79.3825	27.0104	4.22	56.39
7	18:33:25	-79.2833	27.0001	19: 4:38	-79.2834	27.0065	-1.03	38.15
8	19:24:56	-79.2000	26.9999	19:49:17	-79.2004	27.0025	-2.88	19.94

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

Appendix C:

XBT temperature profiles

Cruise date: 2015.03.24									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	24.85	24.86	24.87	25.74	26.45	27.02	27.46	26.45	26.55
10	24.84	24.73	24.93	26.23	26.34	26.31	26.22	26.02	26.23
20	24.83	24.71	24.37	25.73	26.29	26.29	26.16	26.00	26.02
30	24.15	22.97	22.94	24.16	25.39	26.18	26.02	25.97	25.91
40	22.60	22.03	22.33	23.57	24.45	25.98	25.92	25.90	25.78
50	21.87	21.65	21.78	22.88	23.84	25.70	25.87	25.77	25.71
60	21.54	21.55	21.42	22.30	23.21	25.38	25.54	25.42	25.37
70	21.30	21.22	21.14	22.02	22.79	25.16	25.11	25.42	24.91
80	20.85	21.12	20.99	21.64	22.28	24.61	25.03	25.36	24.79
90	20.61	20.93	20.74	21.29	21.87	23.43	24.47	25.25	24.59
100	19.71	20.63	20.43	21.01	21.64	22.72	24.30	25.03	24.36
110	19.26	20.45	20.27	20.72	21.44	22.45	24.10	24.55	24.22
120	18.89	20.27	20.17	20.38	21.01	22.20	23.02	24.20	23.98
130	18.16	20.06	20.01	20.23	20.69	21.69	22.85	23.75	23.78
140	–	19.83	19.86	19.95	20.54	21.48	22.49	22.89	23.48
150	–	19.35	19.59	19.82	20.29	21.29	22.35	22.69	23.04
160	–	18.87	19.22	19.79	20.00	21.20	21.54	22.55	22.60
170	–	18.40	18.78	19.62	19.49	20.78	21.59	22.10	22.17
180	–	17.73	18.05	19.32	19.29	20.35	21.60	21.40	21.95
190	–	17.04	17.42	18.51	18.62	19.96	21.23	21.33	21.73
200	–	16.72	16.68	17.46	18.10	19.57	20.68	20.71	21.23
210	–	15.83	16.36	16.96	17.50	19.45	20.46	20.27	20.94
220	–	14.73	16.20	16.44	16.98	18.70	20.03	20.13	20.47
230	–	14.27	15.60	15.82	16.60	18.61	19.95	20.01	20.12
240	–	13.44	14.99	15.56	16.32	18.18	19.70	19.95	19.94
250	–	12.75	14.48	15.15	16.24	17.62	19.26	19.80	19.79
260	–	11.85	13.91	14.90	15.79	17.49	18.63	19.62	19.54
270	–	–	13.65	14.71	15.21	17.17	18.02	19.42	19.47
280	–	–	13.09	14.28	14.88	16.86	17.92	18.52	19.16
290	–	–	12.85	14.02	14.62	16.32	17.58	18.37	19.02
300	–	–	12.72	13.45	14.28	16.16	17.37	18.20	19.00
350	–	–	10.78	11.95	12.60	14.95	16.64	17.42	17.86
400	–	–	–	10.92	11.30	14.10	15.48	16.36	16.32
450	–	–	–	9.58	10.48	12.59	14.31	14.68	15.53
500	–	–	–	7.81	9.43	10.88	13.14	13.78	–
550	–	–	–	–	NaN	9.84	12.39	12.53	–
600	–	–	–	–	NaN	8.97	10.47	11.15	–
650	–	–	–	–	NaN	8.14	9.83	–	–
700	–	–	–	–	–	7.15	9.82	–	–
750	–	–	–	–	–	6.30	–	–	–

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: 2015.08.10									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	29.65	29.99	29.97	29.93	31.80	NaN	30.45	31.14	30.87
10	30.40	30.10	29.96	29.75	30.04	NaN	29.92	30.04	30.03
20	30.25	29.63	29.66	29.63	29.88	NaN	29.47	29.96	29.93
30	29.05	29.30	28.95	29.46	29.14	NaN	29.17	29.75	29.90
40	27.93	28.27	27.96	28.90	28.82	NaN	28.94	28.91	29.32
50	25.95	26.34	27.29	28.18	28.57	NaN	28.86	28.68	27.97
60	24.24	24.59	26.88	27.74	28.53	NaN	28.64	28.04	27.60
70	22.90	24.06	26.28	27.37	28.04	NaN	28.34	27.31	27.45
80	20.64	22.77	24.69	26.51	27.57	NaN	27.92	27.18	27.19
90	19.04	21.53	23.28	26.21	27.29	NaN	27.72	26.90	26.79
100	16.54	20.63	22.55	24.36	26.96	NaN	27.36	26.32	26.59
110	14.71	19.69	21.63	23.23	26.45	NaN	26.92	25.99	25.36
120	13.01	18.79	20.68	22.01	25.77	NaN	26.04	24.92	24.90
130	10.95	18.18	19.97	21.73	24.73	NaN	23.97	24.38	24.59
140	–	17.50	19.30	20.96	23.51	NaN	23.04	23.09	23.96
150	–	15.77	18.69	20.39	22.82	NaN	22.89	22.57	23.55
160	–	14.58	18.26	19.38	22.07	NaN	22.68	22.54	23.22
170	–	13.69	17.46	19.21	21.67	NaN	21.77	22.41	22.55
180	–	11.63	17.11	18.77	21.16	NaN	21.55	22.18	22.12
190	–	10.98	16.88	18.53	20.59	NaN	21.12	21.67	21.94
200	–	10.59	16.63	18.16	20.12	NaN	20.87	21.05	21.70
210	–	10.18	16.16	17.92	19.69	NaN	20.62	20.97	21.34
220	–	9.64	15.57	16.95	19.20	NaN	20.38	20.81	20.88
230	–	9.56	15.22	16.77	18.98	NaN	20.22	20.37	20.61
240	–	9.03	14.64	16.32	18.55	NaN	19.71	20.30	20.49
250	–	8.66	14.45	16.01	18.37	NaN	19.33	20.10	20.16
260	–	8.51	13.66	15.36	18.06	NaN	18.98	19.92	19.92
270	–	–	12.00	14.80	17.88	NaN	18.79	19.77	19.82
280	–	–	11.60	14.55	17.67	NaN	18.61	19.56	19.45
290	–	–	11.35	14.28	17.42	NaN	18.17	19.53	19.18
300	–	–	11.00	13.97	17.17	NaN	18.04	19.35	18.87
350	–	–	8.54	12.04	15.13	NaN	16.62	17.88	17.91
400	–	–	–	9.68	13.72	NaN	15.36	17.15	17.31
450	–	–	–	9.43	12.01	NaN	13.77	16.04	16.46
500	–	–	–	8.43	11.26	NaN	12.23	14.68	–
550	–	–	–	–	10.15	NaN	11.42	13.21	–
600	–	–	–	–	9.20	NaN	11.22	11.86	–
650	–	–	–	–	8.54	NaN	10.52	–	–
700	–	–	–	–	–	NaN	NaN	–	–
750	–	–	–	–	–	NaN	–	–	–

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

Cruise date: 2015.08.26									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	30.48	30.30	30.32	30.40	30.41	30.55	30.89	30.82	31.17
10	30.47	30.23	30.35	30.35	30.26	30.29	30.32	30.19	30.34
20	30.07	29.56	30.06	30.35	30.22	30.29	30.29	29.93	30.28
30	29.53	29.46	29.52	29.51	29.02	30.28	29.48	29.08	30.03
40	28.94	29.01	29.11	28.67	28.51	29.22	29.20	28.61	29.88
50	27.10	27.59	28.45	28.15	28.41	28.45	28.47	28.60	29.29
60	25.48	26.26	27.70	27.80	27.94	28.06	28.07	28.21	28.73
70	23.82	24.62	27.10	27.36	27.53	27.87	27.74	27.96	28.12
80	22.12	24.18	26.19	26.94	27.06	27.45	27.16	27.50	27.94
90	20.70	21.74	25.33	26.67	26.84	27.27	26.90	27.14	27.17
100	20.11	21.50	24.38	26.19	26.53	27.01	26.70	26.81	26.94
110	17.67	20.08	22.66	25.44	26.08	26.57	26.56	26.70	26.54
120	15.18	18.80	20.99	24.34	25.32	26.17	26.38	26.50	25.70
130	12.94	17.38	20.22	22.97	24.15	25.84	26.10	26.07	25.29
140	–	16.96	19.64	22.09	23.34	25.43	25.70	25.05	24.94
150	–	16.31	18.93	21.19	23.00	24.80	24.87	24.78	24.63
160	–	15.25	18.50	20.61	22.76	24.03	24.32	24.42	24.22
170	–	14.66	17.63	20.18	21.59	23.54	24.06	23.53	23.18
180	–	13.34	17.28	19.55	20.71	22.70	23.10	23.14	22.74
190	–	12.18	16.92	18.97	20.22	22.11	22.06	22.68	22.31
200	–	11.28	16.31	18.51	20.02	21.26	21.63	21.57	21.90
210	–	10.73	15.82	17.79	19.52	20.49	21.10	20.97	21.00
220	–	10.30	15.30	17.62	19.03	19.80	20.56	20.53	20.80
230	–	9.98	14.48	17.12	18.10	19.34	20.08	20.28	20.54
240	–	9.97	13.96	16.73	17.67	18.72	19.71	19.97	20.22
250	–	9.91	13.46	16.34	17.56	18.78	19.50	19.67	19.76
260	–	9.62	12.65	15.88	17.47	18.70	19.21	19.57	19.42
270	–	–	12.14	15.10	17.03	18.27	19.05	19.36	19.14
280	–	–	12.07	14.87	16.84	18.04	18.87	19.27	19.13
290	–	–	11.78	14.64	16.51	17.85	18.76	19.19	18.98
300	–	–	11.72	14.49	16.04	17.79	18.50	18.98	18.78
350	–	–	10.75	12.51	14.28	17.22	17.75	18.14	18.10
400	–	–	–	11.10	12.70	15.55	17.00	17.70	17.63
450	–	–	–	10.00	10.96	13.42	16.32	16.84	16.71
500	–	–	–	9.31	10.28	12.21	14.06	15.45	–
550	–	–	–	–	9.77	11.28	13.05	14.07	–
600	–	–	–	–	8.83	10.48	11.95	13.19	–
650	–	–	–	–	8.18	9.80	10.73	–	–
700	–	–	–	–	–	9.07	NaN	–	–
750	–	–	–	–	–	NaN	–	–	–

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

Cruise date: 2015.09.11									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	30.66	30.39	30.09	30.46	30.61	30.97	30.97	30.92	31.15
10	31.29	30.68	30.11	30.51	30.45	30.62	30.48	30.22	30.37
20	30.53	30.14	30.12	30.35	30.15	30.56	30.16	30.14	29.98
30	29.74	29.24	29.78	29.70	29.34	29.55	29.94	30.12	29.57
40	27.64	27.73	28.91	29.27	28.81	28.84	28.83	29.70	29.42
50	24.33	25.95	28.02	28.70	28.53	28.37	28.10	28.87	29.07
60	21.63	24.56	27.50	28.19	28.33	27.88	27.77	28.18	29.01
70	19.26	23.10	26.44	27.74	27.70	27.50	27.47	27.54	28.42
80	18.56	21.53	25.26	27.16	27.22	27.26	27.30	27.64	28.37
90	17.54	20.59	23.61	26.61	26.70	27.00	26.82	27.72	28.38
100	16.68	19.35	22.22	25.78	26.24	26.51	26.50	27.44	28.00
110	15.81	18.45	21.58	24.18	25.59	26.19	26.36	26.58	27.78
120	15.14	17.44	20.18	22.82	23.99	25.55	25.90	26.14	27.32
130	14.68	16.97	19.00	21.94	23.15	24.98	25.36	25.67	26.22
140	–	16.24	18.61	21.02	22.78	24.45	25.06	25.22	23.71
150	–	15.84	18.23	19.99	20.86	24.13	24.25	24.59	23.18
160	–	15.47	17.87	19.28	20.14	23.73	23.54	23.43	22.55
170	–	14.80	17.01	18.43	19.34	22.96	22.81	22.33	22.07
180	–	14.31	16.56	17.86	18.41	22.34	21.59	21.49	21.85
190	–	14.10	16.13	17.43	17.95	20.39	21.29	21.31	21.54
200	–	13.94	15.85	17.04	17.22	19.13	20.32	20.47	21.28
210	–	12.94	15.59	16.77	16.57	18.54	19.62	19.90	21.00
220	–	11.96	15.31	16.55	16.38	17.95	19.40	19.65	20.72
230	–	10.79	14.96	15.81	15.99	17.75	18.89	19.42	20.27
240	–	10.30	14.63	15.57	15.56	17.41	18.60	19.29	20.05
250	–	9.88	14.03	15.33	15.30	17.01	18.35	19.01	19.83
260	–	9.52	13.47	14.93	15.28	16.87	18.25	18.55	19.69
270	–	–	12.52	14.48	15.03	16.67	18.18	18.34	19.46
280	–	–	12.00	14.09	14.85	16.12	18.01	18.32	19.34
290	–	–	11.35	13.83	14.76	16.02	17.89	18.31	18.88
300	–	–	10.91	13.23	14.47	15.88	17.71	18.26	18.78
350	–	–	8.94	12.33	13.30	14.85	17.26	17.94	18.01
400	–	–	–	10.43	12.43	14.31	15.43	16.71	17.03
450	–	–	–	9.19	10.20	13.35	14.50	15.55	16.65
500	–	–	–	7.72	9.17	10.93	13.35	14.41	–
550	–	–	–	–	8.43	9.59	12.03	13.06	–
600	–	–	–	–	7.92	9.01	11.34	12.15	–
650	–	–	–	–	6.44	8.13	9.88	–	–
700	–	–	–	–	–	7.28	NaN	–	–
750	–	–	–	–	–	6.55	–	–	–

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

Cruise date: 2015.10.15									
Depth	Sta. 0	Sta. 1	Sta. 2	Sta. 3	Sta. 4	Sta. 5	Sta. 6	Sta. 7	Sta. 8
0	28.89	28.51	28.89	29.14	29.34	29.74	30.08	29.96	30.19
10	28.86	28.94	29.17	29.10	29.14	29.51	29.54	29.48	29.45
20	28.66	28.92	29.03	29.04	29.14	29.45	29.51	29.45	29.44
30	28.55	28.84	28.95	28.72	28.90	29.47	29.47	29.43	29.37
40	28.52	28.75	28.88	28.67	28.75	29.43	29.27	29.25	28.89
50	27.77	28.44	28.71	28.63	28.81	29.20	29.24	28.78	28.68
60	26.33	27.69	28.34	28.62	28.69	29.04	29.25	28.30	28.47
70	24.44	27.19	27.64	27.77	28.31	28.61	28.45	28.07	28.04
80	23.25	26.69	27.34	27.48	27.95	28.07	27.84	27.86	27.75
90	22.44	25.99	26.95	27.14	27.47	27.62	27.43	27.56	27.22
100	22.21	24.41	26.37	26.81	27.12	27.11	27.20	27.28	26.88
110	20.93	23.37	25.89	26.45	26.82	26.50	26.87	26.81	26.68
120	20.17	22.36	25.70	26.01	26.49	26.03	26.44	26.67	26.47
130	19.26	21.62	25.10	25.43	25.80	25.54	25.92	26.09	26.12
140	–	20.64	23.67	24.81	25.06	25.10	25.18	25.86	25.68
150	–	19.61	23.00	24.51	24.41	24.53	24.75	25.40	25.06
160	–	18.82	22.55	23.80	23.69	23.83	24.50	25.08	24.41
170	–	18.08	21.74	23.27	23.04	23.40	24.39	24.24	23.39
180	–	17.47	21.28	22.63	22.49	22.95	24.16	23.87	22.75
190	–	16.67	20.65	22.19	22.13	22.38	23.23	23.33	21.89
200	–	15.94	19.46	21.61	21.93	21.87	22.95	22.97	21.58
210	–	15.49	18.70	21.17	21.45	21.63	22.64	22.53	21.45
220	–	14.92	17.72	20.73	21.06	21.07	21.88	21.95	21.26
230	–	14.45	17.20	19.99	20.77	20.25	21.65	21.37	21.10
240	–	14.21	16.94	19.22	20.25	19.68	20.93	20.69	20.80
250	–	13.51	16.51	19.15	19.69	19.35	20.28	20.27	20.46
260	–	13.17	16.30	18.72	19.05	19.21	19.96	19.86	20.04
270	–	–	15.72	17.94	18.64	18.98	19.53	19.61	19.70
280	–	–	14.66	17.77	18.38	18.83	18.96	19.28	19.50
290	–	–	13.64	17.61	17.99	18.46	18.74	19.02	19.14
300	–	–	13.32	17.42	17.68	18.21	18.53	18.76	19.04
350	–	–	11.08	13.26	16.52	16.95	17.78	17.73	18.12
400	–	–	–	10.82	12.06	15.50	16.72	16.87	17.48
450	–	–	–	10.22	10.55	13.89	15.77	15.61	16.55
500	–	–	–	8.43	9.63	12.55	14.17	15.33	–
550	–	–	–	–	8.68	11.01	12.44	14.21	–
600	–	–	–	–	7.98	10.00	11.47	12.67	–
650	–	–	–	–	7.10	9.27	10.81	–	–
700	–	–	–	–	–	8.53	10.35	–	–
750	–	–	–	–	–	7.92	–	–	–

Table 11: 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: 2015.01.13								
0	11: 4:42	-79.9309	26.9977	11:16:16	-79.9334	27.0024	2.53	65.57
1	10: 4:14	-79.8665	26.9973	10:18:22	-79.8681	27.0029	1.93	87.88
2	8:55: 0	-79.7833	26.9959	9:13:51	-79.7846	27.0042	0.79	99.56
3	7:31:53	-79.6857	26.9941	7:56:37	-79.6877	27.0051	2.42	103.31
4	6: 9:49	-79.6155	26.9952	6:41:37	-79.6098	27.0063	2.52	91.61
5	4:15:12	-79.5003	26.9997	4:52:48	-79.5024	27.0280	-3.61	78.58
6	2:27:35	-79.3827	26.9988	2:59:12	-79.3885	27.0149	-7.24	75.11
7	1: 9:18	-79.2796	26.9940	1:37:26	-79.2844	27.0000	-12.67	62.88
8	0: 5:39	-79.2030	27.0038	0:28:29	-79.2109	27.0154	-25.15	71.75
Cruise date: 2015.04.10								
0	10:41:18	-79.9299	26.9998	10:53:22	-79.9324	27.0126	2.01	111.46
1	9:48:14	-79.8627	26.9922	10: 6:27	-79.8679	27.0116	1.17	104.65
2	8:42:29	-79.7739	26.9815	9: 5:59	-79.7806	27.0065	-0.43	104.81
3	7:20:50	-79.6814	26.9958	7:49:46	-79.6919	27.0253	-1.67	112.64
4	6:14: 1	-79.6143	26.9824	6:46:48	-79.6262	27.0114	0.76	101.93
5	4:40: 6	-79.5040	27.0003	5:16:31	-79.5139	27.0237	3.60	83.68
6	3: 0:44	-79.3820	27.0013	3:34:27	-79.3892	27.0161	1.66	67.92
7	1:42:18	-79.2860	26.9972	2:13:13	-79.2938	27.0036	-3.32	58.96
8	0:39:34	-79.2052	26.9982	1: 3:33	-79.2105	26.9996	-12.21	50.31
Cruise date: 2015.05.27								
0	8:20: 9	-79.9307	26.9956	8:30:49	-79.9349	27.0014	1.93	71.24
1	7:33:55	-79.8671	26.9948	7:49: 0	-79.8727	27.0036	1.30	72.16
2	6:36: 3	-79.7800	26.9929	6:55:37	-79.7840	27.0054	4.89	70.40
3	4:55:59	-79.6793	26.9926	5:22:29	-79.6864	27.0119	-0.04	83.66
4	3:48:14	-79.6121	26.9878	4:18:28	-79.6201	27.0119	-1.32	88.54
5	2:14:17	-79.4965	26.9917	2:52:15	-79.5101	27.0234	-5.24	89.16
6	0:44:17	-79.3783	26.9928	1:19:55	-79.3891	27.0167	-9.05	79.01
7	23:25:55	-79.2787	26.9949	23:56:26	-79.2894	27.0109	-12.59	76.36
8	21:59:14	-79.2046	26.9993	22:24: 0	-79.2123	27.0099	-18.65	66.36

Table 12: 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: 2015.07.15								
0	9: 3: 0	-79.9306	26.9982	9:16:37	-79.9297	27.0106	-7.97	77.35
1	8: 5:18	-79.8681	26.9927	8:24: 2	-79.8673	27.0116	-0.44	88.65
2	6:44:55	-79.7848	26.9994	7: 9: 0	-79.7837	27.0247	6.08	111.35
3	5: 5:18	-79.6838	26.9911	5:34:11	-79.6817	27.0198	4.92	104.46
4	3:44:57	-79.6153	26.9867	4:18:52	-79.6148	27.0184	1.89	92.98
5	0:49:23	-79.5037	26.9865	1:28:42	-79.5017	27.0132	-4.05	66.95
6	22:59:16	-79.3842	26.9926	23:39:52	-79.3834	27.0248	-9.40	60.69
7	21:39:38	-79.2835	26.9956	22:10:10	-79.2870	27.0137	-14.93	74.96
8	20:36:47	-79.2025	26.9995	21: 1:31	-79.2055	27.0096	-23.58	73.34
Cruise date: 2015.09.09								
0	11:19:58	-79.9322	26.9969	11:32:10	-79.9328	27.0067	-0.62	70.51
1	10:24:20	-79.8667	26.9892	10:41: 6	-79.8685	27.0017	1.77	73.87
2	9: 7:54	-79.7811	26.9852	9:31:25	-79.7824	27.0048	2.99	77.36
3	7:33:17	-79.6827	26.9834	8: 3:38	-79.6853	27.0106	1.22	93.88
4	5:57:39	-79.6162	26.9828	6:33:38	-79.6185	27.0175	2.04	96.81
5	3:56:50	-79.4972	26.9879	4:37: 6	-79.4966	27.0201	-1.24	84.27
6	2: 7:59	-79.3854	26.9888	2:45:55	-79.3855	27.0152	-4.93	79.87
7	0:33:42	-79.2793	26.9943	1: 6:20	-79.2798	27.0124	-9.95	63.01
8	23:18:21	-79.1965	27.0014	23:43:36	-79.1978	27.0158	-15.46	57.67
Cruise date: 2015.11.11								
0	13:30:42	-79.9297	27.0003	13:40:47	-79.9302	27.0005	0.62	-4.59
1	12:36:40	-79.8684	26.9855	12:51:59	-79.8681	26.9913	-0.56	51.73
2	11:32:45	-79.7834	26.9920	11:52:41	-79.7838	27.0036	-1.09	82.23
3	10:13: 8	-79.6840	26.9921	10:39:56	-79.6822	27.0118	1.20	94.43
4	9: 2:26	-79.6182	26.9954	9:30:24	-79.6164	27.0143	2.91	91.24
5	7:18:59	-79.5010	26.9883	7:56:31	-79.4985	27.0126	-1.57	76.62
6	5:51: 6	-79.3853	26.9843	6:23:19	-79.3842	27.0053	-3.91	68.19
7	1: 0:42	-79.2838	26.9969	1:31:21	-79.2835	27.0118	-6.01	55.10
8	23:53:19	-79.1986	26.9964	0:16:23	-79.2028	27.0059	-17.99	60.15

Table 13: Same as Table 12 for LADCP data collected on the indicated dates.

Appendix E:

CTD and LADCP profiles

Cruise ID: ws1501. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.29	36.29	4.67	NaN	NaN
10	25.29	36.29	4.62	3.0	107.5
20	25.28	36.29	4.66	-0.8	103.8
30	25.27	36.29	4.69	1.3	100.2
40	25.28	36.29	4.67	0.6	98.0
50	25.27	36.30	4.65	1.2	95.8
60	25.12	36.30	4.60	0.5	95.5
70	24.62	36.29	4.57	2.1	94.8
80	24.23	36.35	4.54	4.5	87.3
90	23.50	36.37	4.48	3.2	68.5
100	21.85	36.40	4.19	4.4	49.0
110	21.13	36.39	3.90	4.2	17.3
120	19.83	36.34	3.55	0.6	2.7
130	19.01	36.31	3.40	4.3	-0.6
140	NaN	NaN	NaN	6.4	-1.9

Table 14: 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: ws1501. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.62	36.30	4.63	NaN	NaN
10	25.62	36.30	4.65	-2.8	142.8
20	25.63	36.30	4.67	-1.4	139.4
30	25.63	36.30	4.66	-2.2	139.4
40	25.63	36.30	4.63	-3.3	139.5
50	25.62	36.30	4.65	-1.7	138.3
60	25.42	36.27	4.65	-1.4	136.2
70	25.37	36.27	4.68	0.2	134.1
80	24.85	36.43	4.53	5.4	133.5
90	24.32	36.51	4.47	9.4	134.4
100	23.98	36.47	4.60	5.2	139.0
110	23.70	36.61	4.18	3.7	141.1
120	22.51	36.40	4.38	5.5	138.0
130	21.79	36.38	4.20	6.0	126.8
140	20.17	36.31	3.98	4.7	104.6
150	17.55	36.12	3.46	3.3	78.3
160	16.40	36.03	3.13	1.0	56.3
170	14.80	35.89	3.05	-1.5	45.3
180	13.85	35.77	2.96	0.3	36.9
190	12.66	35.60	2.89	3.3	29.0
200	11.83	35.48	2.89	4.9	21.5
210	11.08	35.37	2.84	8.0	9.8
220	10.45	35.28	2.79	5.0	7.9
230	10.20	35.25	2.76	0.8	9.9
240	10.16	35.26	2.78	-0.1	6.7
250	10.14	35.26	2.79	-4.1	8.0

Table 15: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: ws1501. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.77	36.29	4.61	NaN	NaN
10	25.77	36.28	4.60	-3.9	149.8
20	25.77	36.28	4.61	-3.9	149.8
30	25.77	36.28	4.65	-2.2	148.5
40	25.77	36.28	4.61	-2.9	150.2
50	25.77	36.28	4.63	-2.2	150.1
60	25.78	36.28	4.63	-1.7	149.9
70	25.78	36.29	4.59	-0.9	149.4
80	25.62	36.32	4.64	0.3	149.1
90	24.05	36.34	4.76	-0.8	147.2
100	24.62	36.79	3.76	0.0	144.1
110	23.62	36.58	4.55	1.6	140.7
120	22.95	36.49	4.67	-1.1	140.6
130	22.37	36.42	4.48	-1.8	140.6
140	22.40	36.80	3.37	-2.2	139.9
150	21.03	36.65	3.50	0.4	138.2
160	20.19	36.64	3.37	2.0	134.3
170	19.23	36.50	3.18	-4.5	132.0
180	18.27	36.42	2.98	-3.5	129.6
190	17.53	36.31	3.07	-1.1	123.4
200	16.82	36.21	3.10	1.2	115.8
210	16.29	36.13	3.07	7.2	107.1
220	15.27	35.96	3.06	7.7	96.0
230	14.53	35.85	3.00	0.4	86.0
240	13.70	35.74	2.95	-3.9	77.5
250	12.81	35.61	2.90	-1.9	72.3
260	12.47	35.57	2.86	0.6	68.0
270	11.86	35.49	2.86	2.9	61.9
280	11.47	35.44	2.86	5.0	53.8
290	10.53	35.30	2.83	5.3	47.5
300	10.06	35.22	2.79	4.9	44.2
350	8.77	35.07	2.82	5.6	28.9

Table 16: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: ws1501. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.96	36.25	4.57	NaN	NaN
10	25.96	36.25	4.59	-1.9	141.0
20	25.97	36.25	4.58	-1.9	141.0
30	25.97	36.25	4.59	-2.1	143.6
40	25.98	36.25	4.58	-1.3	145.3
50	25.99	36.26	4.61	-0.1	146.0
60	25.98	36.25	4.58	-0.8	146.2
70	26.03	36.28	4.58	-1.1	145.7
80	26.04	36.28	4.54	-2.1	146.4
90	25.86	36.46	4.47	-3.1	146.9
100	24.76	36.54	4.27	0.9	144.5
110	24.23	36.57	4.27	5.0	139.8
120	24.15	36.77	3.81	2.6	132.8
130	23.85	36.82	3.68	2.3	129.4
140	22.72	36.72	3.93	-0.7	127.2
150	22.11	36.74	3.47	-3.2	130.1
160	20.78	36.64	3.46	-4.6	131.6
170	20.06	36.64	3.22	-2.3	132.8
180	18.77	36.48	3.22	1.2	129.8
190	18.24	36.43	3.21	3.5	126.6
200	17.65	36.36	3.01	3.3	125.6
210	17.37	36.33	3.21	2.1	124.9
220	17.06	36.29	3.23	1.1	124.4
230	16.95	36.28	3.33	1.2	123.2
240	16.54	36.21	3.06	1.8	119.7
250	16.18	36.15	3.17	3.8	115.9
260	15.48	36.04	3.11	5.0	113.0
270	14.85	35.94	3.06	6.0	109.5
280	14.29	35.85	2.97	6.7	106.1
290	13.22	35.67	2.96	5.7	103.4
300	12.69	35.59	2.76	2.9	101.8
350	11.33	35.39	2.69	5.7	92.0
400	10.28	35.23	2.72	1.7	81.3
450	8.26	35.00	2.82	7.9	70.8
500	6.74	34.92	3.13	4.9	24.7

Table 17: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: ws1501. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.04	36.29	4.59	NaN	NaN
10	26.07	36.28	4.55	4.8	132.9
20	26.08	36.28	4.61	4.8	132.9
30	26.08	36.28	4.58	5.0	133.3
40	26.09	36.28	4.62	2.6	133.1
50	26.08	36.28	4.61	1.4	132.9
60	26.08	36.28	4.59	-0.8	130.7
70	26.08	36.29	4.59	-2.3	129.6
80	26.07	36.29	4.54	-3.2	129.5
90	26.06	36.31	4.53	-5.4	128.8
100	25.95	36.55	4.18	-8.9	130.1
110	25.46	36.69	3.87	-10.4	133.3
120	23.95	36.50	4.55	-3.4	130.4
130	23.69	36.51	4.56	2.2	127.9
140	23.84	36.82	3.43	4.5	125.0
150	23.30	36.85	3.66	2.8	121.9
160	22.82	36.78	3.61	1.8	119.3
170	21.78	36.81	3.52	0.5	118.8
180	21.13	36.80	3.61	-0.9	118.7
190	19.46	36.54	3.26	0.4	115.8
200	18.83	36.52	3.25	3.1	113.7
210	18.20	36.43	3.26	3.3	110.8
220	17.49	36.34	3.15	3.1	103.9
230	17.12	36.29	3.20	2.7	101.2
240	17.04	36.28	3.22	3.1	100.9
250	16.90	36.26	3.23	4.3	101.7
260	16.40	36.19	3.21	3.3	100.3
270	15.39	36.03	3.17	0.2	98.9
280	15.05	35.97	3.05	-0.4	94.8
290	14.50	35.88	2.80	0.3	92.4
300	14.02	35.81	2.75	0.8	90.7
350	12.38	35.54	2.92	0.4	88.7
400	11.34	35.38	2.76	5.8	84.5
450	9.80	35.16	2.73	4.2	71.3
500	8.62	35.03	2.77	0.5	67.7
550	7.98	34.97	2.85	-0.1	64.3
600	7.30	34.93	2.96	14.5	47.8

Table 18: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: ws1501. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.12	36.30	4.60	NaN	NaN
10	26.14	36.30	4.59	-4.8	110.0
20	26.14	36.30	4.59	-1.4	109.2
30	26.14	36.30	4.59	-0.6	108.5
40	26.14	36.30	4.60	2.2	109.5
50	26.15	36.30	4.59	2.0	109.4
60	26.15	36.30	4.58	1.6	108.3
70	26.14	36.30	4.60	0.9	109.0
80	26.12	36.29	4.56	1.0	110.6
90	26.11	36.30	4.57	2.4	112.9
100	26.11	36.30	4.62	3.2	113.4
110	26.05	36.56	4.54	1.4	111.7
120	25.15	36.72	3.88	-3.3	112.1
130	24.57	36.75	3.71	-8.7	114.1
140	24.23	36.79	3.69	-12.1	119.0
150	23.62	36.81	3.66	-8.9	121.6
160	22.99	36.86	3.57	-4.0	118.0
170	21.75	36.81	3.57	-2.3	111.0
180	20.96	36.80	3.60	-4.1	105.0
190	20.40	36.71	3.43	-8.2	101.4
200	20.02	36.70	3.31	-13.5	101.7
210	19.71	36.67	3.41	-12.2	102.6
220	19.18	36.58	3.32	-8.8	101.7
230	18.66	36.53	3.32	-6.9	100.3
240	17.88	36.41	3.37	-7.8	99.4
250	17.45	36.38	3.52	-9.2	98.4
260	17.18	36.34	3.60	-10.8	97.2
270	16.67	36.26	3.55	-10.0	95.6
280	16.27	36.18	3.37	-7.5	95.0
290	15.83	36.10	3.08	-5.1	93.8
300	15.49	36.04	3.02	-4.8	91.5
350	13.88	35.78	3.04	-4.9	83.7
400	12.29	35.53	2.77	-0.1	79.5
450	10.59	35.28	2.79	-4.3	73.4
500	9.69	35.15	2.76	-3.3	65.1
550	8.86	35.06	2.79	-3.6	57.1
600	8.01	34.97	2.85	0.8	47.7
650	7.45	34.93	2.96	2.8	43.8
700	6.95	34.91	3.09	-6.5	34.3
750	NaN	NaN	NaN	-8.2	29.2

Table 19: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: ws1501. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.14	36.38	4.56	NaN	NaN
10	26.14	36.38	4.56	6.1	79.5
20	26.14	36.38	4.59	6.8	77.2
30	26.14	36.38	4.60	7.5	79.4
40	26.15	36.38	4.58	8.1	80.5
50	26.15	36.38	4.57	8.3	81.3
60	26.15	36.38	4.56	7.1	82.2
70	26.15	36.38	4.56	5.6	82.9
80	26.14	36.38	4.56	5.2	83.5
90	26.05	36.46	4.41	-3.0	86.0
100	25.50	36.55	4.56	-15.8	94.0
110	25.30	36.59	4.59	-25.2	102.5
120	25.14	36.62	4.64	-27.5	103.7
130	25.08	36.64	4.64	-27.8	102.4
140	25.06	36.65	4.64	-25.5	101.3
150	24.31	36.71	4.28	-25.3	100.6
160	22.87	36.75	4.05	-22.6	104.5
170	22.55	36.77	3.83	-17.8	109.0
180	21.75	36.72	3.52	-19.0	108.8
190	21.35	36.75	3.44	-18.6	111.0
200	20.79	36.76	3.49	-17.7	110.9
210	20.17	36.67	3.91	-15.7	110.7
220	19.60	36.63	3.65	-16.4	108.1
230	18.98	36.57	3.39	-15.7	108.2
240	18.95	36.57	3.47	-16.8	108.6
250	18.59	36.54	3.57	-16.2	105.5
260	18.23	36.50	3.62	-18.4	102.4
270	17.69	36.41	3.51	-18.1	99.6
280	17.22	36.35	3.62	-15.0	96.9
290	17.06	36.34	3.75	-13.7	94.0
300	16.77	36.31	3.93	-12.7	91.6
350	15.49	36.06	3.43	-5.4	87.1
400	14.06	35.81	3.05	-2.7	73.1
450	12.96	35.64	2.99	-4.2	63.9
500	11.41	35.39	2.80	0.7	58.4
550	10.31	35.23	2.76	-0.5	49.7
600	9.53	35.13	2.77	-1.6	36.5
650	8.63	35.04	2.85	-9.5	26.7

Table 20: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: ws1501. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.07	36.37	4.60	NaN	NaN
10	26.08	36.37	4.60	13.0	42.5
20	26.08	36.37	4.59	13.0	42.5
30	26.06	36.38	4.60	11.4	38.4
40	25.78	36.45	4.61	2.1	40.1
50	25.36	36.57	4.64	-13.5	55.0
60	25.17	36.61	4.62	-22.7	71.1
70	25.15	36.61	4.65	-27.5	80.3
80	25.12	36.62	4.66	-29.8	83.0
90	25.12	36.62	4.63	-30.1	84.3
100	25.11	36.62	4.60	-31.5	84.6
110	25.12	36.63	4.65	-32.6	85.4
120	25.11	36.63	4.62	-32.8	86.4
130	24.95	36.66	4.62	-28.5	89.3
140	24.29	36.71	4.27	-21.7	91.7
150	23.95	36.73	4.31	-22.8	92.6
160	23.27	36.73	4.30	-24.3	92.4
170	22.33	36.74	4.31	-28.0	93.2
180	21.85	36.74	4.31	-29.6	91.8
190	21.16	36.72	4.28	-29.0	91.0
200	20.71	36.71	4.26	-26.6	88.8
210	20.05	36.67	4.33	-23.7	88.3
220	19.62	36.65	4.33	-21.6	88.2
230	19.40	36.65	4.25	-20.6	87.6
240	19.06	36.63	4.26	-19.6	86.6
250	18.89	36.62	4.29	-18.2	85.8
260	18.71	36.60	4.33	-17.0	84.7
270	18.43	36.58	4.25	-16.5	83.2
280	18.27	36.56	4.33	-15.9	81.9
290	18.12	36.54	4.31	-14.6	81.0
300	17.98	36.53	4.29	-13.1	80.2
350	16.51	36.26	3.91	-9.0	61.8
400	15.21	36.02	3.34	-1.9	49.7
450	14.29	35.88	3.37	-0.8	48.9
500	12.80	35.63	3.15	2.8	35.1
550	10.91	35.35	2.96	-15.5	37.7
600	10.69	35.32	2.96	-9.6	28.3

Table 21: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: ws1501. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	25.17	36.60	4.67	NaN	NaN
10	25.17	36.60	4.66	-26.2	88.9
20	25.15	36.62	4.65	-30.1	88.9
30	25.15	36.62	4.64	-30.1	86.5
40	25.14	36.63	4.63	-28.5	88.8
50	25.14	36.63	4.63	-27.6	89.9
60	25.14	36.63	4.64	-28.7	89.3
70	25.14	36.63	4.63	-30.8	87.7
80	25.14	36.63	4.63	-33.2	86.5
90	25.14	36.63	4.62	-35.4	84.8
100	25.14	36.63	4.61	-37.0	83.9
110	25.13	36.63	4.64	-40.0	83.7
120	25.11	36.64	4.61	-43.5	84.2
130	24.81	36.66	4.61	-43.8	84.7
140	24.46	36.69	4.52	-36.8	85.1
150	23.59	36.75	4.39	-32.0	86.3
160	23.14	36.75	4.35	-31.6	86.1
170	22.47	36.74	4.35	-32.7	83.9
180	21.88	36.73	4.32	-32.9	81.9
190	21.48	36.73	4.29	-35.0	76.9
200	21.10	36.72	4.31	-33.8	72.6
210	20.50	36.70	4.27	-34.2	70.7
220	20.25	36.70	4.18	-34.4	71.4
230	20.05	36.68	4.31	-33.4	71.9
240	19.83	36.67	4.29	-30.4	72.4
250	19.42	36.65	4.29	-27.3	74.1
260	19.13	36.63	4.29	-24.7	74.0
270	18.80	36.60	4.31	-21.1	73.7
280	18.66	36.60	4.34	-19.8	73.2
290	18.42	36.58	4.33	-20.1	72.8
300	18.34	36.57	4.35	-19.8	71.8
350	17.79	36.50	4.28	-19.6	66.3
400	16.24	36.22	3.78	-13.5	59.5
450	14.48	35.92	3.47	-13.2	40.2

Table 22: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1504. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.09	36.24	4.64	NaN	NaN
10	26.08	36.24	4.65	-0.1	200.3
20	25.90	36.24	4.67	0.7	193.1
30	25.25	36.29	4.74	-3.1	180.9
40	24.23	36.38	4.83	-3.0	177.4
50	23.79	36.39	4.86	-5.3	168.5
60	23.49	36.42	4.86	-3.6	163.5
70	22.77	36.43	4.81	-0.6	150.4
80	21.22	36.38	4.45	1.2	131.1
90	19.05	36.25	4.02	2.1	104.9
100	17.48	36.17	3.65	6.6	73.0
110	15.62	36.04	3.22	12.2	25.6
120	14.34	35.87	3.04	6.5	7.2
130	13.04	35.67	2.91	6.3	-4.7
140	NaN	NaN	NaN	8.3	-10.7

Table 23: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1504. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.36	36.20	4.62	NaN	NaN
10	26.36	36.20	4.63	-6.4	201.6
20	26.36	36.20	4.63	-10.3	202.7
30	26.34	36.20	4.62	-6.9	198.0
40	26.01	36.23	4.66	-3.8	197.2
50	25.43	36.28	4.73	-3.3	188.9
60	24.14	36.39	4.83	-4.3	178.3
70	23.57	36.42	4.84	-6.4	172.0
80	23.03	36.46	4.78	-3.0	169.2
90	22.34	36.49	4.72	-0.3	166.7
100	21.99	36.51	4.58	0.8	165.8
110	21.28	36.46	4.58	4.0	161.8
120	20.99	36.44	4.52	6.9	153.2
130	19.48	36.31	4.33	7.6	133.0
140	17.50	36.11	3.90	6.9	105.6
150	15.51	35.97	3.46	10.1	85.2
160	14.85	35.90	3.23	12.6	68.5
170	13.32	35.69	3.10	14.0	53.9
180	12.54	35.59	2.96	10.8	38.4
190	11.94	35.52	2.86	4.4	28.8
200	11.47	35.45	2.83	1.2	23.9
210	10.81	35.35	2.81	-0.1	22.5
220	10.23	35.28	2.80	0.6	16.1
230	9.73	35.22	2.81	-1.6	6.4
240	8.67	35.10	2.87	-1.4	-1.1
250	7.85	35.01	2.92	-1.6	-9.4
260	NaN	NaN	NaN	-0.2	-6.3

Table 24: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1504. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.33	36.18	4.62	NaN	NaN
10	26.33	36.18	4.63	-4.1	205.0
20	26.35	36.18	4.62	-10.2	204.7
30	26.35	36.18	4.62	-8.0	201.9
40	26.34	36.18	4.63	-7.2	201.0
50	26.15	36.20	4.63	-4.0	199.1
60	25.17	36.29	4.74	-0.9	191.3
70	24.28	36.37	4.81	-1.5	180.1
80	23.83	36.40	4.85	-3.1	171.2
90	23.58	36.45	4.79	-5.4	167.6
100	23.08	36.54	4.48	-3.0	164.9
110	22.47	36.49	4.63	-3.9	162.9
120	22.36	36.60	4.48	-0.7	164.4
130	21.96	36.60	4.26	3.3	159.7
140	21.11	36.49	4.06	3.2	153.1
150	20.52	36.50	4.19	1.6	147.0
160	20.11	36.45	4.24	1.0	140.4
170	19.34	36.43	3.95	4.6	134.2
180	18.99	36.42	3.80	9.0	128.9
190	18.18	36.37	3.53	9.9	119.3
200	17.18	36.24	3.29	8.3	110.5
210	16.47	36.19	3.29	5.9	102.0
220	15.82	36.11	3.29	4.0	95.5
230	15.45	36.06	3.32	4.3	85.2
240	14.00	35.83	3.21	3.7	70.7
250	12.61	35.60	2.98	3.4	58.4
260	11.70	35.48	2.90	3.1	49.8
270	10.46	35.28	2.87	3.6	46.3
280	9.61	35.18	2.79	3.3	40.5
290	9.21	35.13	2.75	2.7	36.4
300	8.91	35.09	2.76	2.9	35.3
350	7.12	34.94	2.99	-5.3	13.4

Table 25: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1504. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.44	36.22	4.59	NaN	NaN
10	26.44	36.21	4.59	-21.5	183.4
20	26.44	36.21	4.60	-21.4	183.4
30	26.44	36.21	4.60	-19.4	182.3
40	26.44	36.21	4.61	-18.5	181.0
50	26.43	36.21	4.60	-17.9	181.2
60	26.41	36.24	4.57	-15.4	180.3
70	25.70	36.42	4.56	-12.0	180.8
80	25.42	36.59	4.10	-10.4	180.2
90	24.97	36.64	4.02	-7.9	178.7
100	24.36	36.72	3.85	-4.0	173.7
110	23.93	36.76	3.75	-0.7	169.5
120	23.44	36.79	3.73	1.3	166.7
130	23.04	36.84	3.60	3.2	160.9
140	22.49	36.76	3.60	5.3	153.9
150	21.78	36.76	3.54	5.9	152.0
160	21.60	36.74	3.52	5.6	152.5
170	20.74	36.70	3.52	7.9	152.3
180	20.19	36.59	3.80	10.7	150.8
190	20.21	36.73	3.33	10.8	150.3
200	19.86	36.69	3.29	12.9	145.7
210	18.70	36.43	3.40	13.7	138.6
220	17.98	36.38	3.32	14.0	134.7
230	16.88	36.22	3.22	15.3	130.0
240	16.15	36.13	3.09	11.8	122.7
250	15.49	36.04	3.04	6.8	117.2
260	14.87	35.94	3.02	2.2	114.7
270	14.32	35.86	3.01	-1.0	114.7
280	13.76	35.77	2.95	-2.4	113.5
290	13.32	35.70	2.96	-3.5	111.9
300	13.04	35.66	2.93	-4.7	108.9
350	11.09	35.35	2.77	5.3	96.0
400	8.47	35.02	2.75	-3.4	62.2
450	7.95	34.98	2.79	-2.9	52.1
500	7.01	34.93	3.02	-2.3	28.8

Table 26: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1504. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.27	36.21	4.64	NaN	NaN
10	26.27	36.21	4.63	-18.8	153.3
20	26.27	36.21	4.62	-17.2	156.8
30	26.28	36.21	4.63	-15.7	157.1
40	26.28	36.21	4.63	-17.4	159.5
50	26.19	36.21	4.64	-20.2	161.9
60	26.16	36.24	4.64	-18.2	165.3
70	26.07	36.31	4.57	-11.6	166.4
80	25.73	36.41	4.36	-8.9	165.4
90	24.94	36.49	4.27	-13.6	162.4
100	24.73	36.50	4.29	-17.6	162.3
110	24.52	36.56	4.29	-16.2	160.1
120	24.30	36.67	4.00	-11.5	155.2
130	23.91	36.74	3.85	-8.2	152.2
140	23.40	36.78	3.75	-4.5	152.6
150	22.26	36.69	3.85	1.8	153.5
160	21.78	36.60	4.16	8.0	154.4
170	21.46	36.80	4.02	14.4	152.8
180	21.25	36.82	3.35	15.6	149.1
190	20.77	36.78	3.31	14.4	147.7
200	20.23	36.70	3.34	13.7	147.3
210	19.73	36.65	3.37	14.4	144.1
220	19.39	36.63	3.39	17.6	140.1
230	18.44	36.49	3.41	17.4	132.5
240	17.83	36.48	3.54	17.6	125.7
250	16.62	36.30	3.94	17.0	118.8
260	15.75	36.16	3.82	16.1	114.7
270	15.37	36.10	3.72	13.4	111.4
280	15.15	36.06	3.69	11.5	108.8
290	14.85	36.00	3.66	8.7	107.4
300	14.50	35.94	3.52	7.5	104.4
350	12.57	35.58	2.80	-6.2	95.2
400	10.69	35.30	2.69	-1.3	85.9
450	9.41	35.13	2.67	4.0	70.0
500	8.33	35.01	2.74	3.0	56.2
550	7.69	34.96	2.83	4.8	42.3
600	6.93	34.93	3.05	1.4	23.8

Table 27: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1504. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.26	36.27	4.65	NaN	NaN
10	26.27	36.26	4.64	-17.9	121.1
20	26.23	36.26	4.64	-19.8	126.4
30	26.14	36.26	4.65	-15.7	121.9
40	26.10	36.26	4.62	-13.3	119.5
50	26.09	36.26	4.63	-12.1	119.0
60	26.04	36.30	4.58	-13.3	121.2
70	25.84	36.36	4.43	-15.1	125.1
80	25.43	36.39	4.42	-14.6	125.9
90	25.37	36.42	4.29	-12.8	126.4
100	25.36	36.44	4.27	-9.7	127.5
110	25.02	36.50	4.19	-6.1	129.5
120	24.76	36.54	4.17	-0.2	132.2
130	23.92	36.55	4.21	-0.0	131.7
140	23.63	36.67	3.97	1.1	131.2
150	23.24	36.72	3.86	2.3	130.3
160	22.80	36.88	4.07	3.2	128.1
170	22.27	36.83	3.69	5.1	124.3
180	21.86	36.85	3.83	8.7	122.8
190	21.47	36.85	3.95	14.4	123.4
200	20.94	36.84	4.06	17.9	125.1
210	20.64	36.80	4.00	16.9	125.6
220	20.22	36.76	3.75	15.7	124.7
230	19.40	36.69	3.87	18.7	124.2
240	18.76	36.59	3.83	23.8	122.6
250	18.40	36.57	3.71	25.7	116.5
260	17.83	36.49	3.89	27.9	114.2
270	17.26	36.39	3.79	32.7	113.6
280	16.96	36.36	3.83	34.8	111.4
290	16.65	36.30	3.90	34.5	106.5
300	16.25	36.23	3.79	30.0	100.8
350	14.19	35.87	3.44	12.0	92.7
400	12.29	35.53	2.81	4.0	79.6
450	11.22	35.36	2.77	-9.7	77.6
500	10.28	35.23	2.75	-1.2	66.6
550	9.76	35.15	2.74	0.5	59.3
600	8.76	35.04	2.74	1.2	37.8
650	8.00	34.98	2.81	1.6	36.7
700	7.53	34.96	2.90	7.9	25.7
750	NaN	NaN	NaN	-2.3	14.5

Table 28: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1504. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.18	36.25	4.64	NaN	NaN
10	26.18	36.25	4.65	-10.4	85.4
20	26.18	36.25	4.65	-8.6	86.1
30	26.16	36.25	4.66	-5.8	84.0
40	26.14	36.26	4.65	-5.3	82.4
50	26.00	36.28	4.65	-8.1	81.7
60	25.98	36.31	4.66	-10.1	82.1
70	25.96	36.41	4.65	-7.9	87.0
80	25.81	36.45	4.67	-3.3	89.2
90	25.53	36.48	4.69	-3.2	91.0
100	25.17	36.51	4.69	-3.9	93.8
110	24.67	36.56	4.64	-1.2	97.4
120	24.47	36.69	4.72	3.6	103.5
130	24.13	36.71	4.63	3.2	104.7
140	23.93	36.76	4.60	-1.2	104.3
150	23.81	36.78	4.56	-0.3	103.0
160	23.45	36.72	4.55	3.5	99.6
170	22.83	36.78	3.84	1.2	93.9
180	22.41	36.84	4.08	-2.1	92.1
190	21.92	36.81	4.00	-1.9	92.8
200	20.93	36.83	4.08	4.9	93.7
210	20.76	36.81	4.10	7.0	93.6
220	20.51	36.80	4.09	4.6	92.6
230	20.38	36.79	4.09	4.0	94.4
240	20.07	36.76	4.08	6.0	93.0
250	19.60	36.71	4.11	12.2	88.5
260	19.28	36.69	4.14	15.5	88.3
270	18.94	36.65	4.17	17.0	88.7
280	18.78	36.63	4.18	19.4	86.7
290	18.48	36.59	4.12	20.4	84.0
300	18.06	36.51	3.92	21.6	82.7
350	16.40	36.27	3.92	15.0	77.8
400	14.36	35.87	3.14	5.5	63.2
450	13.33	35.70	3.03	4.7	59.7
500	11.90	35.47	2.86	2.2	41.3
550	11.35	35.38	2.82	-1.4	39.8
600	10.75	35.29	2.78	-9.2	32.3
650	10.06	35.22	2.80	-13.8	21.7

Table 29: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1504. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.19	36.26	4.62	NaN	NaN
10	26.19	36.26	4.63	-5.7	42.5
20	26.13	36.26	4.64	-2.3	41.6
30	26.01	36.30	4.65	-4.4	42.4
40	25.94	36.33	4.64	-3.4	47.8
50	25.86	36.38	4.63	-2.2	52.4
60	25.86	36.42	4.63	-4.0	54.2
70	25.75	36.45	4.62	-5.7	56.6
80	25.47	36.47	4.71	-6.2	58.5
90	25.23	36.51	4.70	-7.1	61.1
100	24.75	36.67	4.70	-8.3	65.0
110	24.24	36.72	4.70	-6.3	67.7
120	24.03	36.73	4.67	1.0	70.2
130	23.92	36.72	4.62	5.5	72.7
140	23.88	36.73	4.63	6.7	76.2
150	23.84	36.73	4.65	4.6	75.4
160	23.57	36.74	4.59	-2.7	74.6
170	23.31	36.72	4.55	-10.0	74.9
180	22.90	36.70	4.59	-8.6	77.0
190	22.18	36.70	4.50	-1.0	73.8
200	21.61	36.69	4.43	-0.1	70.8
210	20.80	36.69	4.26	-0.5	74.0
220	20.30	36.72	3.85	-2.3	78.4
230	20.20	36.71	3.81	-2.3	79.5
240	19.96	36.71	3.90	-2.6	76.9
250	19.85	36.73	3.90	-4.6	72.3
260	19.70	36.73	3.98	-5.5	71.5
270	19.62	36.72	4.10	-6.2	71.8
280	19.25	36.67	4.18	-5.1	72.9
290	19.01	36.65	4.19	-4.2	73.0
300	18.84	36.64	4.20	-3.4	71.3
350	17.40	36.44	4.06	-9.6	67.1
400	15.88	36.14	3.53	-0.3	58.6
450	14.55	35.90	3.17	6.2	58.7
500	13.20	35.69	3.03	1.0	44.9
550	12.84	35.62	2.97	-7.1	35.4
600	11.82	35.54	3.27	-10.7	31.0

Table 30: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1504. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	26.27	36.26	4.62	NaN	NaN
10	26.27	36.26	4.64	-0.1	2.7
20	26.13	36.25	4.65	-0.3	4.2
30	25.97	36.33	4.65	0.3	7.4
40	25.89	36.45	4.65	-1.6	13.3
50	25.63	36.51	4.67	1.0	19.8
60	25.25	36.51	4.73	5.9	27.4
70	24.74	36.58	4.56	3.7	33.8
80	24.43	36.58	4.56	-1.1	37.1
90	24.26	36.60	4.55	-5.0	40.8
100	23.96	36.65	4.54	-6.7	45.4
110	23.98	36.74	4.58	-6.9	47.8
120	23.85	36.79	4.55	-8.7	49.9
130	23.74	36.77	4.55	-9.9	50.3
140	23.70	36.77	4.55	-10.9	50.4
150	23.50	36.74	4.60	-10.7	51.5
160	23.27	36.74	4.56	-11.0	51.9
170	22.88	36.76	4.51	-13.2	52.3
180	22.39	36.73	4.47	-18.5	55.2
190	21.88	36.69	4.50	-21.0	59.8
200	21.20	36.69	4.37	-19.8	62.8
210	21.12	36.69	4.33	-21.6	65.1
220	21.01	36.69	4.33	-25.0	66.9
230	20.58	36.68	4.31	-26.5	66.0
240	20.21	36.66	4.35	-25.7	64.7
250	20.20	36.68	4.25	-22.2	63.2
260	19.88	36.68	4.11	-20.0	62.4
270	19.75	36.67	4.08	-19.8	63.8
280	19.56	36.65	4.15	-21.6	66.2
290	19.14	36.62	4.23	-19.6	68.0
300	18.99	36.61	4.23	-18.1	68.9
350	17.84	36.51	4.25	-18.9	62.4
400	17.01	36.37	4.17	-15.1	56.2
450	15.33	36.08	3.84	-3.0	48.6

Table 31: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1505. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.24	36.28	4.62	NaN	NaN
10	27.24	36.28	4.63	5.9	114.7
20	26.50	36.29	4.72	7.4	107.0
30	24.97	36.33	4.94	9.1	96.9
40	23.44	36.43	5.07	4.8	97.6
50	22.42	36.45	5.07	1.1	92.9
60	21.66	36.45	4.96	-4.3	93.0
70	21.05	36.46	4.73	-4.8	89.0
80	20.72	36.48	4.48	-3.0	84.9
90	20.37	36.49	4.29	-0.8	79.3
100	18.27	36.28	3.86	1.6	64.3
110	16.76	36.14	3.49	6.6	34.3
120	15.61	36.00	3.25	4.0	23.8
130	14.73	35.90	3.14	0.3	11.3
140	NaN	NaN	NaN	-0.6	8.3

Table 32: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1505. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.43	36.32	4.60	NaN	NaN
10	27.43	36.32	4.61	3.8	124.0
20	27.30	36.30	4.64	3.1	111.8
30	25.72	36.26	4.86	6.3	96.2
40	24.03	36.39	5.04	5.3	95.5
50	22.42	36.49	5.00	1.0	93.9
60	21.65	36.48	4.88	-3.7	94.9
70	21.14	36.45	4.79	-5.5	93.2
80	20.82	36.44	4.50	-4.5	93.1
90	20.17	36.46	4.11	-3.4	91.8
100	19.98	36.51	3.89	-1.7	86.9
110	19.54	36.48	4.02	-2.7	84.9
120	19.20	36.49	3.71	-4.2	85.9
130	18.80	36.48	3.37	-0.8	81.6
140	18.00	36.40	3.31	3.0	75.5
150	17.66	36.37	3.26	3.0	76.4
160	17.01	36.30	3.23	3.8	75.5
170	16.23	36.18	3.32	4.5	69.2
180	14.96	35.97	3.18	4.1	60.9
190	13.80	35.79	3.12	2.9	53.1
200	12.85	35.64	3.00	2.1	44.1
210	12.56	35.60	2.91	4.5	35.5
220	12.20	35.55	2.92	3.0	30.3
230	11.71	35.48	2.93	-0.0	21.6
240	10.90	35.36	2.87	3.0	15.5
250	NaN	NaN	NaN	5.5	12.6

Table 33: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1505. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.56	36.34	4.61	NaN	NaN
10	27.56	36.34	4.61	-4.6	130.7
20	27.27	36.31	4.65	-5.0	123.9
30	26.38	36.29	4.79	1.3	103.4
40	25.26	36.33	4.93	6.8	99.4
50	24.02	36.44	5.05	7.6	104.0
60	22.74	36.47	5.06	2.5	101.1
70	22.05	36.46	5.02	-1.6	94.8
80	21.46	36.48	4.87	-0.8	93.1
90	20.94	36.49	4.55	2.0	94.0
100	20.53	36.49	4.21	1.6	92.9
110	20.03	36.52	3.88	0.2	91.9
120	19.63	36.51	3.83	1.3	89.7
130	19.26	36.51	3.51	0.1	87.4
140	18.82	36.49	3.34	-1.6	86.8
150	18.37	36.45	3.22	1.2	86.7
160	17.80	36.39	3.19	4.9	88.0
170	17.29	36.32	3.18	9.2	87.6
180	16.70	36.24	3.20	9.4	83.8
190	16.41	36.21	3.27	8.5	79.2
200	16.17	36.17	3.27	6.2	77.2
210	15.69	36.09	3.17	5.5	75.8
220	15.46	36.05	3.13	4.7	73.7
230	15.18	36.01	3.11	5.6	72.7
240	14.68	35.92	3.10	5.5	71.4
250	13.55	35.75	3.14	5.5	71.8
260	12.42	35.59	3.07	5.4	67.3
270	11.13	35.39	2.95	3.7	59.2
280	10.46	35.28	2.81	2.7	52.7
290	10.37	35.27	2.76	4.0	48.8
300	10.26	35.26	2.75	5.4	45.4
350	8.03	34.99	2.82	12.0	9.4

Table 34: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1505. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.80	36.31	4.55	NaN	NaN
10	27.81	36.31	4.57	-12.5	156.2
20	27.73	36.33	4.60	-10.0	155.9
30	26.91	36.33	4.73	-7.5	152.7
40	25.70	36.29	4.88	-2.4	145.6
50	24.81	36.39	4.92	0.4	138.1
60	23.89	36.43	4.97	0.9	133.3
70	22.68	36.48	4.97	-2.0	129.3
80	22.41	36.49	4.86	-7.0	120.9
90	21.48	36.44	4.94	-11.2	112.3
100	21.02	36.48	4.70	-12.7	109.4
110	20.72	36.49	4.33	-11.1	111.0
120	20.03	36.49	4.08	-8.9	113.5
130	19.75	36.52	3.79	-8.3	114.3
140	19.34	36.49	3.71	-7.1	115.1
150	18.99	36.48	3.61	-6.9	114.9
160	18.60	36.46	3.44	-5.6	114.3
170	18.31	36.43	3.31	-3.7	112.3
180	18.05	36.41	3.24	0.7	110.3
190	17.50	36.35	3.22	2.2	106.6
200	17.11	36.30	3.18	-2.6	104.5
210	16.98	36.28	3.17	-2.9	103.9
220	16.38	36.19	3.20	2.3	101.7
230	15.57	36.07	3.19	8.0	97.1
240	15.34	36.03	3.14	8.9	91.5
250	14.74	35.93	3.03	5.8	89.0
260	14.28	35.86	3.02	4.7	89.0
270	14.05	35.82	2.99	5.4	87.2
280	13.88	35.79	2.98	3.2	84.0
290	13.78	35.78	3.00	-0.1	81.9
300	13.64	35.75	3.01	-3.7	79.1
350	11.94	35.49	2.85	-1.8	75.4
400	9.76	35.19	2.82	1.6	62.2
450	7.93	34.99	2.86	12.1	25.4
500	7.11	34.93	3.00	8.1	12.9

Table 35: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1505. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.91	36.23	4.56	NaN	NaN
10	27.92	36.23	4.57	-3.9	171.4
20	27.85	36.24	4.58	-2.6	170.2
30	27.01	36.33	4.73	-3.6	161.9
40	26.17	36.29	4.83	-10.2	157.7
50	25.47	36.29	4.91	-10.4	158.0
60	24.93	36.33	4.94	-8.8	159.7
70	23.77	36.43	4.97	-10.6	155.4
80	23.08	36.42	5.06	-12.4	147.2
90	22.09	36.45	4.98	-19.5	135.4
100	21.43	36.45	4.97	-22.8	128.6
110	20.98	36.47	4.85	-20.9	128.1
120	20.49	36.50	4.48	-21.8	134.9
130	20.17	36.48	4.18	-18.6	137.4
140	19.77	36.51	3.77	-12.3	134.0
150	19.49	36.51	3.73	-9.8	128.0
160	19.09	36.48	3.60	-11.9	122.8
170	18.76	36.46	3.54	-19.6	122.2
180	18.53	36.45	3.48	-20.2	127.9
190	18.33	36.44	3.34	-12.9	130.5
200	17.88	36.39	3.23	-4.0	126.1
210	17.05	36.29	3.19	1.4	117.5
220	16.58	36.23	3.21	2.8	110.3
230	16.23	36.17	3.20	3.1	105.1
240	15.97	36.13	3.19	0.7	101.5
250	15.45	36.05	3.15	-0.8	101.0
260	15.18	36.01	3.11	-2.8	98.4
270	14.86	35.95	3.09	-4.7	96.3
280	14.65	35.92	3.08	-4.5	94.0
290	14.40	35.88	3.12	-5.2	92.4
300	14.12	35.83	3.11	-5.8	92.9
350	12.67	35.59	2.99	-2.7	91.5
400	11.40	35.40	2.73	3.2	81.0
450	10.12	35.23	2.75	7.5	68.1
500	8.27	35.03	2.81	4.5	44.9
550	7.19	34.93	2.97	6.6	23.8
600	6.88	34.93	3.08	13.7	17.8

Table 36: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1505. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.98	36.27	4.56	NaN	NaN
10	27.99	36.27	4.57	-4.9	174.3
20	27.99	36.27	4.57	-5.3	171.2
30	27.94	36.26	4.56	-6.4	170.3
40	27.89	36.27	4.56	-11.8	168.8
50	26.86	36.37	4.68	-16.0	166.5
60	26.17	36.37	4.76	-20.2	164.6
70	25.65	36.41	4.71	-19.4	164.6
80	24.98	36.52	4.53	-12.0	163.6
90	23.42	36.43	4.90	-4.0	154.5
100	22.86	36.44	4.85	-4.6	140.2
110	22.23	36.45	4.82	-13.4	132.2
120	21.71	36.45	4.82	-21.4	137.9
130	21.25	36.47	4.63	-17.4	144.6
140	20.73	36.50	4.34	-10.8	146.6
150	19.92	36.48	4.35	-10.7	144.3
160	19.69	36.45	4.55	-13.4	141.0
170	19.62	36.44	4.72	-17.0	139.4
180	19.58	36.46	4.63	-20.5	134.7
190	19.53	36.51	4.15	-23.5	128.4
200	19.02	36.47	3.86	-26.7	126.3
210	18.79	36.48	3.71	-22.4	126.0
220	18.16	36.56	3.80	-14.3	122.0
230	17.92	36.54	4.23	-8.0	118.1
240	17.68	36.50	4.24	-5.1	114.2
250	17.52	36.48	4.21	-6.8	112.1
260	17.50	36.47	4.21	-7.1	109.8
270	17.34	36.44	4.20	-7.2	109.0
280	16.78	36.31	3.97	-6.4	107.0
290	15.84	36.12	3.42	-7.3	104.0
300	15.67	36.09	3.30	-9.2	100.0
350	14.64	35.92	3.17	-4.7	90.9
400	13.44	35.72	2.93	-4.2	81.5
450	11.51	35.41	2.83	-0.1	69.8
500	10.13	35.22	2.66	-3.1	60.7
550	9.25	35.10	2.68	-0.1	53.6
600	8.13	35.01	2.82	1.6	43.2
650	7.39	34.94	2.91	2.9	32.7
700	7.03	34.93	3.03	7.2	26.8
750	NaN	NaN	NaN	1.7	14.6

Table 37: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1505. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.88	36.27	4.58	NaN	NaN
10	27.88	36.26	4.58	-5.6	140.7
20	27.89	36.26	4.57	-5.4	140.7
30	27.87	36.26	4.57	-2.3	139.6
40	27.82	36.26	4.57	-5.1	138.7
50	27.13	36.31	4.64	-13.1	137.3
60	26.79	36.32	4.61	-24.3	136.1
70	26.67	36.42	4.62	-32.5	136.9
80	26.46	36.42	4.62	-37.0	141.0
90	25.24	36.49	4.46	-23.8	145.1
100	24.24	36.51	4.34	-0.4	139.2
110	23.47	36.48	4.40	9.9	132.1
120	22.78	36.47	4.52	9.2	126.5
130	22.46	36.64	4.23	2.4	123.9
140	21.65	36.57	4.23	-6.6	120.5
150	21.56	36.58	4.19	-11.6	117.1
160	21.20	36.63	4.09	-12.4	111.9
170	21.02	36.73	3.63	-11.6	108.3
180	20.50	36.70	3.53	-9.7	104.8
190	20.47	36.71	3.49	-9.7	102.2
200	20.37	36.72	3.44	-6.2	100.5
210	19.91	36.63	3.51	-1.6	98.3
220	19.51	36.69	3.71	2.2	95.7
230	19.08	36.62	3.64	1.3	90.7
240	18.82	36.58	3.48	-1.7	86.1
250	18.77	36.58	3.45	-7.8	81.3
260	18.48	36.54	3.51	-8.2	80.6
270	17.78	36.45	3.67	-11.0	80.3
280	17.55	36.42	3.69	-13.3	82.4
290	17.22	36.39	3.75	-15.9	85.0
300	17.22	36.40	3.94	-18.6	84.7
350	16.53	36.26	3.73	-13.3	80.1
400	15.02	35.98	3.15	-14.3	64.8
450	13.47	35.72	3.00	-10.2	54.8
500	12.12	35.51	2.84	-6.1	49.0
550	11.32	35.40	2.80	-3.5	35.8
600	10.57	35.28	2.71	-3.5	29.4
650	10.51	35.36	3.07	-7.6	28.0

Table 38: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1505. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.86	36.25	4.56	NaN	NaN
10	27.87	36.25	4.57	-11.3	111.7
20	27.83	36.25	4.59	-8.1	112.3
30	27.78	36.25	4.59	-5.2	111.3
40	27.53	36.22	4.60	-7.0	110.9
50	27.04	36.29	4.64	-11.2	111.3
60	26.96	36.32	4.64	-17.4	110.1
70	26.66	36.37	4.61	-24.7	109.9
80	25.87	36.46	4.36	-25.6	108.9
90	24.38	36.52	4.19	-16.0	106.0
100	24.37	36.54	4.17	-14.4	104.1
110	24.37	36.56	4.14	-17.5	103.4
120	24.18	36.62	4.03	-17.5	105.8
130	23.48	36.65	4.00	-8.6	108.7
140	22.74	36.62	4.11	0.4	107.1
150	21.78	36.55	4.25	3.3	97.8
160	21.56	36.54	4.28	-0.4	90.0
170	21.49	36.54	4.28	-7.5	86.6
180	21.18	36.52	4.32	-13.2	85.3
190	21.60	36.87	4.05	-12.9	88.5
200	21.27	36.79	3.91	-13.9	88.9
210	20.95	36.79	3.72	-16.0	86.6
220	20.91	36.81	3.73	-12.6	84.8
230	20.53	36.77	3.71	-7.8	81.8
240	20.24	36.73	3.88	-6.6	77.4
250	19.94	36.68	4.15	-8.5	75.3
260	19.46	36.65	4.25	-11.6	75.0
270	19.13	36.63	4.25	-13.3	72.6
280	18.88	36.63	4.25	-14.3	69.6
290	18.59	36.60	4.27	-14.0	68.1
300	18.38	36.58	4.28	-13.0	69.5
350	17.21	36.42	4.23	-15.3	65.0
400	16.25	36.25	4.04	-14.1	67.1
450	15.37	36.09	3.89	-14.2	61.0
500	13.95	35.86	3.62	-6.8	58.7
550	12.37	35.62	3.43	-13.6	49.5
600	12.15	35.59	3.32	-14.2	33.3

Table 39: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1505. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	27.82	36.25	4.58	NaN	NaN
10	27.80	36.25	4.59	-14.2	83.0
20	27.65	36.27	4.61	-9.2	85.3
30	27.55	36.28	4.61	-4.4	83.1
40	27.46	36.28	4.62	-11.8	84.7
50	27.30	36.26	4.61	-15.4	85.9
60	27.18	36.28	4.61	-15.4	84.4
70	26.93	36.30	4.59	-17.3	81.0
80	26.17	36.46	4.53	-25.9	78.1
90	25.79	36.52	4.51	-31.0	79.4
100	24.97	36.64	4.37	-32.1	80.6
110	24.78	36.66	4.28	-27.0	81.0
120	24.70	36.67	4.22	-21.8	79.9
130	23.84	36.72	4.26	-16.1	76.1
140	23.67	36.72	4.34	-14.8	74.5
150	23.46	36.72	4.40	-19.0	73.1
160	23.06	36.72	4.38	-23.7	70.4
170	22.87	36.71	4.43	-20.8	70.6
180	22.54	36.68	4.47	-13.6	71.2
190	21.93	36.71	4.51	-6.9	70.4
200	21.70	36.71	4.43	-8.1	68.0
210	21.45	36.70	4.44	-9.7	65.5
220	21.20	36.70	4.43	-10.7	66.4
230	20.83	36.69	4.39	-10.0	65.4
240	20.72	36.69	4.36	-12.4	63.3
250	20.42	36.69	4.34	-18.9	61.9
260	19.51	36.65	4.30	-27.8	64.4
270	19.26	36.64	4.24	-33.8	66.5
280	18.89	36.62	4.25	-30.0	66.1
290	18.48	36.59	4.26	-26.9	63.9
300	18.22	36.56	4.27	-25.4	65.0
350	17.48	36.46	4.24	-24.5	53.5
400	16.42	36.28	4.06	-17.5	49.9
450	15.59	36.13	3.90	-12.3	49.1

Table 40: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1507. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.75	36.17	4.41	NaN	NaN
10	29.75	36.17	4.42	-23.3	185.1
20	29.76	36.24	4.45	-21.1	183.9
30	29.37	36.26	4.55	-22.2	184.8
40	27.67	36.28	4.82	-21.4	184.4
50	24.46	36.39	5.10	-16.1	173.8
60	22.83	36.31	4.86	-6.5	154.2
70	21.35	36.18	4.60	-5.5	123.8
80	18.97	35.95	4.19	-4.0	87.8
90	14.39	35.62	3.60	-5.7	45.6
100	12.83	35.52	3.34	-8.8	10.5
110	12.04	35.46	3.20	-5.1	-22.5
120	10.86	35.34	3.05	-0.0	-33.2
130	10.14	35.27	2.87	4.3	-36.2
140	NaN	NaN	NaN	7.9	-40.8
150	NaN	NaN	NaN	8.0	-40.9

Table 41: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1507. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.77	36.32	4.46	NaN	NaN
10	29.77	36.32	4.47	-17.2	200.9
20	29.71	36.31	4.48	-17.4	200.2
30	29.55	36.32	4.52	-19.7	193.7
40	28.03	36.32	4.76	-15.2	193.3
50	26.63	36.37	4.87	-10.0	192.4
60	25.04	36.46	4.73	-6.3	186.4
70	23.25	36.46	4.69	-1.7	175.0
80	22.08	36.45	4.84	7.6	161.6
90	21.23	36.45	4.68	12.1	152.8
100	20.07	36.49	3.77	17.1	142.9
110	19.56	36.43	3.79	18.0	131.3
120	17.26	36.01	3.82	13.4	113.8
130	16.20	35.84	3.78	7.9	89.4
140	13.27	35.56	3.51	5.1	71.3
150	12.76	35.54	3.37	0.7	55.2
160	12.01	35.48	3.26	0.2	42.3
170	11.23	35.41	3.18	1.0	30.9
180	10.72	35.35	3.13	0.5	18.8
190	9.83	35.25	3.08	0.7	5.5
200	9.29	35.19	3.03	-0.4	-0.9
210	8.77	35.13	3.01	0.6	-3.6
220	8.05	35.04	3.00	-0.7	-4.7
230	7.94	35.03	3.00	-3.0	-6.5
240	7.70	35.00	2.98	-2.2	-9.2
250	NaN	NaN	NaN	-1.3	-13.9
260	NaN	NaN	NaN	-1.3	-13.9

Table 42: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1507. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.59	36.32	4.44	NaN	NaN
10	29.59	36.32	4.47	-12.4	206.4
20	29.55	36.32	4.50	-12.7	209.4
30	28.96	36.29	4.63	-11.3	211.0
40	28.28	36.29	4.67	-9.3	209.9
50	27.95	36.36	4.67	-10.3	205.1
60	27.04	36.37	4.64	-12.4	200.5
70	25.66	36.47	4.56	-9.7	196.2
80	24.75	36.57	4.18	-2.7	188.2
90	22.95	36.51	4.41	6.3	175.2
100	21.68	36.49	4.26	11.8	163.7
110	20.71	36.60	3.60	12.6	153.8
120	19.71	36.46	3.91	9.4	146.9
130	19.19	36.43	3.70	9.2	141.3
140	18.76	36.42	3.59	8.1	140.0
150	18.41	36.41	3.50	8.5	139.5
160	17.75	36.34	3.37	11.7	137.4
170	16.90	36.27	3.41	16.0	135.8
180	15.95	36.12	3.21	20.4	131.5
190	15.56	36.06	3.12	25.2	122.3
200	15.14	35.99	3.09	26.8	112.2
210	14.60	35.90	3.05	24.8	101.4
220	13.59	35.74	3.01	19.1	93.7
230	12.61	35.59	2.95	12.3	89.0
240	12.14	35.51	2.91	8.9	86.3
250	11.27	35.38	2.90	7.1	87.7
260	10.52	35.28	2.88	8.9	83.8
270	10.04	35.23	2.89	10.4	78.0
280	9.40	35.16	2.96	12.2	69.5
290	9.05	35.14	2.99	13.7	60.3
300	8.52	35.09	3.03	11.4	48.4
350	6.98	34.96	3.14	-0.1	8.5

Table 43: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1507. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.64	36.30	4.42	NaN	NaN
10	29.62	36.29	4.44	-13.0	204.4
20	29.15	36.22	4.48	-14.9	203.9
30	28.95	36.26	4.51	-17.5	204.0
40	28.31	36.28	4.57	-15.1	201.3
50	28.02	36.33	4.58	-12.3	197.0
60	27.56	36.31	4.54	-7.7	191.1
70	26.92	36.41	4.49	-8.4	184.8
80	25.94	36.55	4.16	-13.4	180.7
90	25.37	36.72	3.98	-12.9	178.2
100	24.45	36.86	3.83	-8.4	169.4
110	22.86	36.65	3.98	0.2	159.8
120	21.53	36.56	4.12	3.8	151.5
130	20.29	36.52	3.53	3.3	145.8
140	20.32	36.72	3.36	5.4	139.6
150	19.38	36.56	3.36	7.3	133.4
160	18.66	36.50	3.37	9.7	128.5
170	17.83	36.38	3.32	8.2	125.6
180	17.60	36.40	3.43	8.5	123.7
190	17.14	36.32	3.42	9.5	118.5
200	16.42	36.20	3.27	10.6	110.2
210	16.10	36.14	3.20	10.8	105.7
220	15.86	36.11	3.16	6.3	106.4
230	15.74	36.09	3.16	3.8	108.3
240	15.63	36.07	3.15	4.8	107.8
250	15.10	35.98	3.13	6.4	105.7
260	14.61	35.90	3.02	6.0	102.2
270	14.18	35.83	2.92	4.3	99.2
280	13.78	35.77	2.89	2.9	97.3
290	13.40	35.70	2.87	2.9	96.0
300	13.22	35.68	2.83	3.0	96.4
350	11.29	35.38	2.77	18.9	81.3
400	9.46	35.16	2.82	13.1	57.7
450	8.55	35.06	2.84	11.0	54.6
500	7.34	34.98	3.09	6.2	20.6

Table 44: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1507. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.30	36.26	4.42	NaN	NaN
10	29.27	36.25	4.45	-15.6	180.1
20	29.07	36.24	4.49	-18.9	179.3
30	28.65	36.25	4.55	-14.4	178.6
40	28.25	36.27	4.61	-5.2	178.2
50	28.10	36.29	4.54	-2.8	175.7
60	27.70	36.31	4.53	-7.6	171.7
70	27.10	36.34	4.44	-10.4	167.2
80	26.84	36.46	4.36	-8.8	163.1
90	26.12	36.57	4.17	-12.1	160.3
100	25.98	36.61	4.06	-16.5	157.0
110	25.29	36.74	3.94	-15.9	149.9
120	24.13	36.90	3.80	-14.6	142.6
130	22.80	36.87	3.52	-10.5	136.6
140	21.72	36.84	3.37	-4.7	130.1
150	20.88	36.80	3.43	-2.8	125.3
160	20.23	36.73	3.38	0.1	121.6
170	19.43	36.65	3.38	1.8	117.8
180	18.80	36.58	3.42	1.9	115.2
190	18.34	36.52	3.48	1.6	111.4
200	17.82	36.43	3.51	2.6	108.5
210	17.40	36.36	3.42	2.9	106.6
220	17.04	36.31	3.40	3.2	106.8
230	16.75	36.26	3.36	3.3	106.9
240	16.31	36.18	3.34	4.5	106.2
250	15.70	36.08	3.14	7.0	102.6
260	15.24	36.00	3.10	6.9	99.8
270	14.75	35.92	3.15	7.8	96.8
280	14.52	35.89	3.07	8.0	94.4
290	14.03	35.81	3.00	8.1	91.4
300	13.53	35.72	2.90	5.5	87.5
350	11.92	35.47	2.81	-2.8	77.7
400	10.97	35.32	2.78	3.1	77.2
450	9.70	35.15	2.73	8.4	63.7
500	9.13	35.08	2.73	10.6	66.2
550	8.24	35.04	2.93	6.0	43.5
600	7.59	34.99	3.03	10.4	29.7

Table 45: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1507. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.23	36.24	4.43	NaN	NaN
10	29.08	36.23	4.47	-9.5	138.0
20	29.01	36.22	4.50	-10.8	137.4
30	28.86	36.21	4.52	-11.7	136.0
40	28.24	36.21	4.62	-10.0	135.3
50	28.06	36.22	4.60	-8.1	137.4
60	27.84	36.23	4.61	-6.8	139.0
70	27.53	36.24	4.56	-6.4	139.4
80	27.19	36.27	4.46	-8.2	136.7
90	26.95	36.31	4.41	-10.0	132.2
100	26.65	36.46	4.28	-12.3	127.5
110	26.16	36.60	4.12	-12.5	122.7
120	25.39	36.78	3.99	-11.9	116.8
130	24.54	36.85	3.86	-10.8	112.7
140	23.42	36.89	3.60	-14.9	106.1
150	22.71	36.85	3.47	-15.7	100.9
160	22.02	36.83	3.43	-10.8	98.3
170	21.65	36.81	3.41	-2.5	97.3
180	20.20	36.71	3.38	0.5	91.6
190	19.41	36.63	3.38	0.4	85.7
200	18.86	36.57	3.41	2.6	81.9
210	18.31	36.50	3.45	1.0	79.1
220	18.03	36.46	3.46	-0.6	79.8
230	17.79	36.43	3.53	-1.8	81.3
240	17.52	36.39	3.58	-1.1	82.2
250	17.02	36.31	3.53	-1.1	83.3
260	16.75	36.26	3.49	-0.7	83.1
270	16.60	36.24	3.47	1.1	82.7
280	16.22	36.18	3.47	0.9	79.5
290	15.78	36.10	3.40	-0.7	76.5
300	15.41	36.03	3.31	-1.9	75.9
350	13.33	35.69	3.03	-9.1	69.5
400	12.38	35.54	2.91	-14.5	58.7
450	11.45	35.40	2.82	-9.9	50.1
500	10.60	35.27	2.76	-5.6	41.3
550	9.81	35.16	2.73	2.7	37.1
600	9.11	35.08	2.73	1.1	32.4
650	8.47	35.01	2.75	5.0	24.5
700	7.50	34.94	2.90	5.3	13.1

Table 46: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1507. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.65	36.24	4.46	NaN	NaN
10	29.31	36.23	4.51	-6.2	107.0
20	29.24	36.23	4.48	-6.8	108.7
30	29.21	36.23	4.49	-6.3	109.5
40	28.74	36.17	4.58	-9.2	110.5
50	28.42	36.25	4.60	-11.1	107.9
60	27.91	36.23	4.61	-10.1	105.8
70	27.66	36.24	4.57	-8.4	106.6
80	27.27	36.28	4.50	-8.6	108.4
90	26.99	36.27	4.44	-10.0	107.9
100	26.42	36.37	4.27	-10.1	102.4
110	26.06	36.46	4.13	-9.5	97.7
120	25.85	36.51	4.06	-11.7	101.5
130	25.23	36.61	3.96	-12.4	104.2
140	24.70	36.68	3.84	-16.5	103.2
150	23.86	36.76	3.71	-21.0	99.8
160	23.33	36.80	3.63	-18.2	94.6
170	22.60	36.83	3.50	-14.8	92.9
180	21.72	36.82	3.44	-17.2	91.8
190	21.30	36.79	3.40	-17.8	88.8
200	20.18	36.70	3.39	-16.1	82.9
210	19.71	36.67	3.37	-13.6	79.9
220	19.07	36.60	3.39	-11.6	78.6
230	18.65	36.55	3.49	-10.7	77.9
240	18.23	36.49	3.52	-10.1	76.5
250	18.11	36.50	3.79	-9.8	76.3
260	18.00	36.52	4.06	-9.7	75.1
270	18.00	36.52	4.20	-10.8	73.7
280	17.69	36.48	4.16	-9.8	72.5
290	17.47	36.45	4.20	-9.5	71.7
300	17.35	36.43	4.19	-10.5	70.3
350	15.80	36.16	3.93	-5.9	59.0
400	14.82	36.00	3.74	-7.4	51.5
450	13.65	35.80	3.52	-7.6	39.6
500	12.14	35.50	2.90	-6.7	29.9
550	11.26	35.37	2.81	-7.5	20.3
600	10.73	35.29	2.77	-9.7	23.1
650	10.50	35.36	3.23	-7.1	16.7

Table 47: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1507. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.47	36.22	4.48	NaN	NaN
10	29.32	36.21	4.49	-1.8	89.1
20	29.21	36.19	4.52	-3.8	87.7
30	29.18	36.26	4.55	-9.5	89.8
40	29.03	36.27	4.58	-9.7	92.6
50	28.77	36.21	4.60	-3.6	93.9
60	28.69	36.37	4.59	-0.1	95.0
70	28.67	36.42	4.58	-0.7	93.4
80	27.77	36.47	4.49	-4.9	91.3
90	27.02	36.46	4.53	-12.1	96.0
100	26.59	36.55	4.65	-17.1	100.7
110	26.39	36.56	4.65	-20.4	103.3
120	25.50	36.62	4.61	-26.1	107.9
130	24.64	36.68	4.58	-31.7	110.4
140	24.47	36.70	4.55	-35.5	109.9
150	24.02	36.72	4.52	-36.1	110.8
160	23.94	36.72	4.49	-37.5	109.7
170	22.89	36.72	4.44	-33.7	105.2
180	22.49	36.73	4.35	-25.1	102.3
190	22.37	36.74	4.25	-22.8	96.3
200	21.55	36.73	4.17	-20.7	93.0
210	20.67	36.70	4.26	-18.0	89.8
220	19.93	36.68	4.21	-13.7	85.2
230	19.52	36.66	4.20	-12.0	83.9
240	19.38	36.65	4.20	-11.3	82.4
250	19.07	36.63	4.21	-10.4	79.7
260	18.72	36.60	4.24	-10.6	78.7
270	18.40	36.57	4.23	-10.3	79.5
280	18.25	36.55	4.25	-11.6	80.5
290	18.00	36.52	4.24	-12.8	78.4
300	17.82	36.50	4.22	-13.0	75.0
350	17.08	36.38	4.15	-14.6	70.3
400	16.14	36.22	4.00	-18.5	71.6
450	15.02	36.03	3.78	-15.9	60.2
500	13.93	35.85	3.58	-12.6	52.2
550	12.81	35.66	3.36	-13.4	44.6
600	11.97	35.55	3.32	-12.1	32.2

Table 48: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1507. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	29.39	36.23	4.47	NaN	NaN
10	29.46	36.32	4.50	-20.5	72.0
20	29.48	36.37	4.49	-19.2	72.9
30	29.47	36.36	4.47	-22.3	74.0
40	28.69	36.16	4.60	-23.8	75.4
50	28.52	36.18	4.59	-19.2	78.6
60	28.15	36.47	4.59	-16.1	81.2
70	27.96	36.48	4.62	-13.5	80.7
80	27.15	36.49	4.65	-9.4	80.8
90	26.92	36.50	4.60	-9.6	79.7
100	26.19	36.57	4.61	-15.7	76.5
110	25.89	36.58	4.57	-23.9	73.0
120	25.49	36.62	4.61	-33.4	69.6
130	25.03	36.67	4.62	-37.3	68.6
140	24.26	36.71	4.59	-28.8	69.5
150	23.79	36.72	4.50	-21.2	70.4
160	23.06	36.71	4.50	-24.0	71.3
170	22.36	36.70	4.47	-33.5	74.6
180	22.18	36.70	4.46	-35.8	80.7
190	21.98	36.70	4.45	-35.1	83.9
200	21.68	36.69	4.44	-38.1	87.3
210	21.09	36.67	4.45	-38.4	94.5
220	20.58	36.65	4.48	-35.4	99.7
230	19.97	36.65	4.38	-30.0	96.0
240	19.88	36.65	4.40	-26.9	96.5
250	19.43	36.64	4.25	-27.3	95.9
260	19.11	36.62	4.28	-29.9	87.7
270	18.93	36.61	4.24	-30.9	81.5
280	18.84	36.60	4.27	-28.7	78.3
290	18.54	36.58	4.24	-30.8	74.6
300	18.28	36.55	4.25	-38.5	71.5
350	18.01	36.51	4.25	-35.6	72.6
400	16.39	36.26	4.04	-2.6	62.6
450	15.44	36.10	3.86	-3.3	48.1

Table 49: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1509. Station: 0					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.66	33.89	4.40	NaN	NaN
10	31.06	34.98	4.46	-1.4	139.6
20	30.11	36.08	4.70	-1.5	132.4
30	27.31	36.35	4.72	-0.7	124.5
40	25.23	36.39	4.75	-6.0	121.1
50	23.70	36.49	4.53	-3.2	107.4
60	22.32	36.51	4.23	-0.6	93.1
70	21.47	36.56	4.01	-0.6	82.6
80	20.07	36.35	3.90	-0.6	70.1
90	18.84	36.23	3.63	-0.2	51.8
100	17.55	36.23	3.37	-1.2	37.0
110	16.56	36.16	3.26	0.1	15.5
120	15.82	36.10	3.20	-0.1	7.3
130	15.54	36.05	3.17	1.8	2.3
140	NaN	NaN	NaN	5.5	2.4

Table 50: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1509. Station: 1					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.63	33.82	4.42	NaN	NaN
10	30.76	34.11	4.45	0.3	147.6
20	30.41	35.81	4.61	-5.3	141.6
30	29.09	36.32	4.63	-10.5	138.1
40	27.32	36.38	4.69	-6.3	130.5
50	25.01	36.40	4.88	-7.7	118.3
60	23.85	36.52	4.32	-6.5	106.9
70	22.61	36.50	4.32	-1.3	101.3
80	21.37	36.48	4.17	5.5	100.0
90	20.83	36.54	3.78	7.9	95.5
100	20.21	36.55	3.57	7.7	92.2
110	19.37	36.51	3.34	9.0	88.4
120	18.69	36.44	3.28	12.2	87.6
130	18.07	36.37	3.22	13.6	85.6
140	17.47	36.31	3.17	15.6	83.0
150	16.63	36.19	3.21	15.4	75.9
160	15.61	36.01	3.17	10.9	62.6
170	14.33	35.84	3.12	1.9	47.1
180	13.10	35.68	3.08	-3.0	36.5
190	12.16	35.53	3.01	-3.4	26.9
200	11.44	35.41	2.91	-1.2	22.7
210	11.07	35.35	2.87	3.0	21.1
220	10.77	35.31	2.84	0.5	24.8
230	10.38	35.26	2.83	-0.4	26.3
240	10.07	35.22	2.81	-2.9	25.0
250	NaN	NaN	NaN	-4.4	17.4
260	NaN	NaN	NaN	-4.4	17.4

Table 51: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1509. Station: 2					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.57	34.13	4.41	NaN	NaN
10	30.64	34.20	4.42	10.4	144.6
20	31.09	35.94	4.46	10.4	144.6
30	30.15	36.25	4.59	1.0	143.5
40	28.34	36.33	4.74	-1.8	141.6
50	25.85	36.37	4.83	-5.2	138.9
60	24.57	36.45	4.63	-4.4	135.2
70	23.88	36.50	4.42	-5.9	123.1
80	22.42	36.53	4.18	-4.4	113.1
90	21.33	36.57	3.78	-0.9	109.6
100	20.61	36.50	3.84	1.0	107.4
110	20.29	36.51	3.61	1.8	107.6
120	19.84	36.52	3.44	2.5	107.4
130	19.29	36.52	3.27	4.9	103.5
140	18.66	36.46	3.25	8.1	96.7
150	18.23	36.42	3.23	9.3	92.9
160	17.68	36.37	3.30	9.5	90.7
170	17.28	36.32	3.31	9.1	89.7
180	17.11	36.30	3.30	8.9	87.5
190	16.79	36.25	3.28	10.5	85.1
200	16.11	36.14	3.28	12.3	81.0
210	15.75	36.08	3.24	12.4	77.1
220	15.55	36.05	3.23	12.6	74.0
230	14.39	35.87	3.17	13.3	68.2
240	13.26	35.71	3.13	12.1	59.8
250	12.16	35.54	3.04	10.7	48.7
260	11.27	35.40	2.94	6.3	41.7
270	10.41	35.27	2.87	1.2	38.8
280	9.88	35.19	2.81	0.1	37.0
290	9.69	35.16	2.76	0.3	35.7
300	9.54	35.14	2.76	-0.2	31.9
350	8.96	35.07	2.77	-3.3	22.5

Table 52: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1509. Station: 3					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.62	34.27	4.39	NaN	NaN
10	30.93	35.25	4.42	16.8	181.2
20	30.18	36.03	4.59	15.7	185.7
30	29.82	36.27	4.45	15.0	187.1
40	29.39	36.30	4.58	8.9	179.8
50	28.56	36.37	4.59	-1.9	172.2
60	26.33	36.35	4.64	-10.6	169.8
70	24.44	36.50	4.43	-6.9	165.2
80	23.08	36.52	4.23	6.2	156.6
90	22.78	36.53	4.18	12.6	145.4
100	22.11	36.57	3.98	8.8	134.6
110	20.91	36.57	3.77	-3.2	128.1
120	20.07	36.56	3.42	-4.1	123.2
130	19.49	36.52	3.29	0.7	117.6
140	18.86	36.49	3.23	0.1	110.0
150	18.55	36.47	3.21	-5.6	108.3
160	18.28	36.44	3.20	-9.9	111.7
170	17.92	36.40	3.22	-6.0	113.5
180	17.69	36.39	3.24	-2.9	110.9
190	17.29	36.32	3.24	-0.6	107.1
200	16.87	36.26	3.31	3.6	103.7
210	16.49	36.20	3.15	3.8	101.5
220	15.95	36.12	3.23	2.1	99.3
230	15.66	36.08	3.28	-2.8	99.7
240	15.53	36.05	3.27	-4.3	100.7
250	15.20	36.00	3.26	-1.2	101.4
260	14.84	35.94	3.20	4.2	98.7
270	14.58	35.90	3.08	7.2	96.3
280	14.34	35.86	3.05	7.1	93.9
290	14.01	35.80	3.03	4.7	91.6
300	13.59	35.73	3.06	4.3	88.7
350	11.75	35.45	2.93	6.6	75.0
400	9.30	35.11	2.79	-0.1	45.2
450	8.52	35.03	2.83	-2.3	44.0
500	7.71	34.95	2.87	-0.3	35.8

Table 53: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1509. Station: 4					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.57	35.10	4.37	NaN	NaN
10	30.65	35.55	4.38	22.3	193.4
20	30.02	36.13	4.43	17.0	199.1
30	29.91	36.25	4.45	13.4	196.3
40	29.61	36.33	4.49	12.4	192.6
50	29.23	36.33	4.51	10.7	185.8
60	27.78	36.39	4.59	-2.2	173.2
70	26.18	36.39	4.67	-10.8	176.8
80	25.28	36.46	4.52	-10.1	181.3
90	23.64	36.59	4.04	6.1	172.8
100	22.70	36.60	3.91	12.3	156.8
110	22.35	36.60	3.88	9.6	140.5
120	21.31	36.56	3.82	-6.2	133.2
130	20.19	36.54	3.57	-9.0	131.2
140	19.78	36.55	3.37	-1.4	128.1
150	19.12	36.50	3.23	-1.8	122.0
160	18.69	36.47	3.19	-6.9	121.4
170	18.43	36.44	3.17	-4.7	125.4
180	17.89	36.39	3.18	1.6	121.9
190	17.57	36.36	3.22	1.0	116.7
200	17.13	36.30	3.25	-4.1	115.9
210	16.80	36.26	3.27	-5.1	115.2
220	16.40	36.19	3.26	-2.0	111.8
230	16.04	36.13	3.27	-2.7	108.4
240	15.92	36.12	3.23	-4.1	107.5
250	15.68	36.08	3.31	-2.4	110.1
260	15.59	36.06	3.33	0.0	110.0
270	15.41	36.03	3.31	3.3	108.1
280	14.94	35.95	3.27	5.0	102.4
290	14.34	35.85	3.20	4.4	97.5
300	13.89	35.78	3.13	5.2	94.2
350	12.58	35.56	2.99	5.4	85.6
400	10.90	35.32	2.79	-2.8	71.8
450	9.62	35.14	2.72	-0.7	66.5
500	8.77	35.04	2.76	3.9	54.5
550	7.95	34.97	2.87	2.2	43.1
600	7.29	34.93	2.98	4.0	30.2

Table 54: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1509. Station: 5					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.91	36.21	4.35	NaN	NaN
10	30.67	36.25	4.38	24.4	170.1
20	30.25	36.25	4.52	19.4	174.0
30	29.31	36.25	4.71	7.8	178.4
40	29.08	36.42	4.55	3.3	175.9
50	28.62	36.37	4.58	0.5	173.1
60	28.37	36.39	4.59	0.7	168.1
70	27.82	36.39	4.49	-5.1	167.0
80	27.10	36.47	4.38	-11.2	171.5
90	26.85	36.56	4.38	-6.5	176.0
100	25.80	36.61	4.03	-9.9	173.3
110	24.34	36.76	3.83	-7.8	167.0
120	23.46	36.77	3.73	0.1	149.9
130	21.50	36.56	3.90	-1.0	137.1
140	21.18	36.55	3.85	-3.1	130.2
150	20.71	36.59	3.58	-0.8	129.2
160	19.91	36.60	3.46	-1.0	123.5
170	19.70	36.66	3.39	-9.1	118.1
180	19.37	36.63	3.40	-13.5	114.4
190	19.31	36.62	3.40	-15.0	113.5
200	19.13	36.60	3.40	-15.8	115.0
210	18.99	36.58	3.40	-15.7	115.5
220	18.78	36.55	3.41	-13.9	115.9
230	18.41	36.50	3.42	-14.1	113.6
240	17.96	36.44	3.46	-10.7	109.6
250	17.64	36.40	3.47	-5.7	106.0
260	17.53	36.39	3.47	-2.6	101.6
270	17.23	36.34	3.49	-0.5	98.1
280	16.97	36.30	3.47	2.4	95.4
290	16.52	36.22	3.43	1.3	92.6
300	16.28	36.18	3.39	-0.5	91.7
350	14.22	35.83	3.17	2.5	75.5
400	13.13	35.65	3.04	-3.4	67.2
450	11.53	35.41	2.83	4.1	60.7
500	10.35	35.23	2.79	-0.5	54.5
550	9.31	35.10	2.74	2.2	44.7
600	8.70	35.04	2.81	3.7	42.6
650	7.82	34.95	2.86	5.2	34.6
700	7.23	34.92	2.99	-3.7	22.6
750	NaN	NaN	NaN	-14.5	14.5

Table 55: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1509. Station: 6					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.74	36.29	4.35	NaN	NaN
10	30.73	36.29	4.38	14.8	129.4
20	30.61	36.31	4.43	13.4	132.5
30	29.86	36.33	4.54	10.8	135.0
40	29.32	36.33	4.59	6.0	137.2
50	28.74	36.33	4.59	-2.6	141.1
60	28.30	36.34	4.60	-8.1	145.5
70	27.70	36.36	4.49	-8.5	146.4
80	27.33	36.40	4.37	-7.7	146.4
90	27.00	36.44	4.28	-4.9	146.8
100	26.31	36.54	4.11	-2.3	144.9
110	25.27	36.74	3.90	-6.9	138.9
120	24.84	36.75	3.84	-15.5	135.8
130	23.64	36.73	3.82	-12.2	132.5
140	22.59	36.88	3.89	-7.2	121.8
150	22.17	36.87	3.86	-10.0	114.1
160	21.91	36.86	3.79	-13.0	109.2
170	21.44	36.83	3.84	-12.4	110.0
180	20.78	36.78	3.81	-10.4	107.0
190	20.08	36.71	3.48	-7.3	103.5
200	19.78	36.68	3.45	-9.7	101.0
210	19.56	36.66	3.40	-12.9	99.5
220	19.36	36.63	3.41	-12.5	98.3
230	19.06	36.60	3.42	-13.3	95.2
240	18.80	36.57	3.42	-18.1	93.8
250	18.58	36.53	3.43	-19.2	95.7
260	18.20	36.48	3.44	-14.5	95.5
270	17.96	36.45	3.45	-7.5	90.7
280	17.63	36.40	3.45	-5.1	85.5
290	17.45	36.37	3.45	-8.9	82.8
300	17.16	36.32	3.45	-11.8	83.4
350	15.43	36.04	3.33	-15.5	78.0
400	14.85	35.94	3.26	-7.0	71.9
450	13.98	35.79	3.12	-12.5	64.9
500	13.03	35.64	3.00	-5.9	51.1
550	11.12	35.34	2.82	5.2	39.0
600	10.28	35.23	2.80	10.1	25.3
650	8.96	35.08	2.84	4.5	7.5

Table 56: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1509. Station: 7					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.76	35.76	4.37	NaN	NaN
10	30.69	35.83	4.40	11.4	99.6
20	30.40	36.31	4.42	5.7	101.1
30	30.00	36.34	4.51	4.6	105.9
40	29.75	36.36	4.54	1.0	108.3
50	29.02	36.37	4.61	-2.4	108.0
60	28.29	36.31	4.62	-9.0	103.4
70	27.90	36.34	4.54	-12.9	102.7
80	27.60	36.41	4.48	-14.8	104.3
90	26.85	36.47	4.26	-14.2	103.5
100	26.36	36.54	4.09	-22.2	101.3
110	25.82	36.57	4.02	-23.0	103.1
120	25.00	36.69	3.85	-20.2	99.9
130	24.44	36.76	3.83	-22.1	98.4
140	23.80	36.77	4.15	-22.5	96.7
150	23.46	36.88	3.74	-18.9	93.4
160	22.79	36.80	3.94	-18.0	90.2
170	22.30	36.85	3.67	-15.1	89.3
180	21.84	36.83	3.77	-13.9	86.2
190	21.49	36.84	3.73	-10.1	83.5
200	21.00	36.80	3.63	-7.5	82.2
210	20.53	36.76	3.51	-4.2	79.5
220	19.98	36.70	3.77	-0.8	75.9
230	19.36	36.64	3.64	-3.6	72.1
240	19.02	36.60	3.52	-4.8	69.2
250	18.82	36.59	3.80	-5.1	68.7
260	18.75	36.59	3.95	-9.1	68.1
270	18.71	36.59	3.97	-10.8	68.4
280	18.68	36.58	3.95	-13.0	67.8
290	18.49	36.55	3.94	-13.2	67.4
300	18.34	36.54	4.07	-11.9	66.5
350	17.56	36.46	4.28	-14.1	56.4
400	16.69	36.31	4.12	-13.5	52.8
450	15.35	36.03	3.41	-9.8	38.6
500	14.57	35.90	3.28	-6.8	27.5
550	12.76	35.65	3.35	-8.2	17.6
600	NaN	NaN	NaN	-4.8	7.5

Table 57: Same as Table 14 for the cruise ID and the station number indicated.

Cruise ID: fc1509. Station: 8					
Pressure	Temperature	Salinity	Oxygen	U speed	V speed
[db]	[deg. C]	[psu]	[ml/l]	[cm/s]	[cm/s]
1	30.51	36.32	4.38	NaN	NaN
10	30.41	36.32	4.37	-11.4	83.1
20	30.11	36.32	4.42	-14.8	87.2
30	29.91	36.36	4.45	-20.0	85.4
40	29.44	36.44	4.47	-16.5	84.4
50	28.74	36.33	4.57	-16.4	80.1
60	28.46	36.40	4.55	-20.8	77.2
70	28.17	36.40	4.53	-24.0	76.1
80	27.74	36.38	4.49	-26.7	77.1
90	27.05	36.42	4.37	-27.5	75.8
100	26.37	36.54	4.20	-21.0	78.4
110	25.94	36.60	4.29	-19.7	79.6
120	25.53	36.64	4.40	-26.2	78.7
130	25.07	36.68	4.42	-29.7	79.0
140	24.38	36.71	4.45	-30.5	78.7
150	23.61	36.71	4.51	-29.1	76.6
160	23.16	36.72	4.51	-29.0	73.9
170	22.70	36.73	4.47	-29.2	71.0
180	22.06	36.72	4.42	-22.7	66.6
190	21.36	36.69	4.51	-19.7	64.0
200	20.89	36.69	4.48	-17.9	61.1
210	20.51	36.70	4.30	-17.3	58.6
220	20.04	36.68	4.26	-18.3	56.6
230	19.85	36.66	4.31	-18.6	56.2
240	19.42	36.63	4.36	-15.7	55.1
250	19.32	36.63	4.32	-11.0	55.4
260	19.20	36.62	4.33	-12.9	54.4
270	19.02	36.61	4.31	-10.1	54.4
280	18.96	36.62	4.29	-6.9	53.5
290	18.85	36.61	4.29	-4.8	52.9
300	18.70	36.60	4.30	-5.1	50.2
350	17.43	36.43	4.29	-9.1	40.0
400	17.04	36.37	4.14	-5.9	31.9
450	16.81	36.31	3.90	-13.4	27.3

Table 58: Same as Table 14 for the cruise ID and the station number indicated.


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